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- ★Лекции по прикладной математике. (Russian) Lectures on applied mathematics. Дифференциальные уравнения. Функциональный анализ. Асимптотические методы. Специальные функции. [Differential equations. Functional analysis. Asymptotic methods. Special functions] Taganrog. Radiotekh. Inst., Taganrog, 1975. 385 pp. (Editors) **52** #13051 00A05
- Letter to the editors: "The solvability of the Dirichlet problem for an elliptic equation of order $2l$ in the class $W_2^{(2l)}$ " (Differentsial'nye Uravnenija **9** (1973), 2048-2051). (Russian) *Differentsial'nye Uravnenija* **11** (1975), no. 9, 1713. (Ja. A. Roitberg) **52** #6177 35J40
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- The solution of the Cauchy problem for a Dirac system of order $2n$. (Russian) *Collection of scientific works of graduates, No. 7: Mathematics, mechanics, physics (Russian)*, pp. 68-99. Univ. Družby Narodov, Moscow, 1970. (A. G. Kartsatos) **45** #7163 34B25 (35P10, 47A99)
- (with Sargsjan, I. S.) The asymptotic behavior of the spectral matrix of a Dirac system of order $2n$. (Russian) *Some boundary value problems of ordinary differential equations (Russian)*, pp. 14-35. Univ. Družby Narodov, Moscow, 1970. (M. Kakabadze) **51** #10777 34D05
- Saakjan, S. G.** Propagation of three-dimensional nonstationary pressure waves in a half-space of ideal compressible fluid. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* **28** (1975), no. 6, 3-13. (J. P. Guiraud) **52** #16269 76.30
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- The *N*-body problem of celestial mechanics. *Proceedings of the Fifth Conference on Mathematical Methods in Celestial Mechanics (Oberwolfach, 1975)*, Part I. *Celestial Mech.* **14** (1976), no. 1, 11-17. (E. Leimanis) **55** #13911 70.34
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- Solution by the finite difference method of a boundary value problem for a differential equation with deviating argument. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 2, 372-384, 540. (R. Kodnár) **54** #4119 65L10
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- (with Rasulov, M. K.) On the theory of the propagation of an elastic transversal wave in an elastic medium. (Russian) *Taškent. Politehn. Inst. Naučn. Trudy (N.S.)* **56** (1970), 109-111. (See RŽMeh **1971** #5 V121) 73.35
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- ★Optimization in integers and related extremal problems. From a course given at the University of California, Los Angeles, and at the George Washington University. *McGraw-Hill Book Co., New York-London-Sydney*, 1970. xv + 295 pp. (Editors) **50** #9356 90C10
- The number of intersections in complete graphs. *Izv. Akad. Nauk SSSR Tekhn. Kibernet.* **1971**, no. 6, 151-154. (Russian); translated as *Engrg. Cybernetics* **9** (1971), no. 1102-1104 (1972). (R. K. Guy) **58** #21749 05C10 (55A15)
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- ★Целочисленные методы оптимизации и связанные с ними экстремальные проблемы. (Russian) [Integer optimization methods and related extremal problems] Translated from the English by V. N. Veselov. Edited by I. A. Ušakov. *Izdat. "Mir", Moscow*, 1973. 302 pp. (Editors) **50** #9357 90C10
- ★Topics in behavioral mathematics. Lectures given at the 1973 MAA Summer Seminar, Williams College, Williamstown, Mass. *Mathematical Association of America, Washington, D. C.*, 1973. iv + 465 pp. (S. E. Goodman) **53** #7525 92-02
- (with Busacker, Robert G.) ★Конечные графы и сети. (Russian) [Finite graphs and networks] Translated from the English by V. N. Burkov, S. E. Loveckii and V. Sokolov. Edited by A. I. Teiman. *Izdat. "Nauka", Moscow*, 1974. 366 pp. (Editors) **49** #10585 05Cxx
- (with Alexander, Joyce M.) Optimization and the geometry of numbers: packing and covering. *SIAM Rev.* **17** (1975), 475-519. (W. J. Firey) **51** #3062 10E05 (52A40)
- (with Kainen, Paul C.) ★The four-color problem. Assaults and conquest. *McGraw-Hill International Book Co., New York-Bogotá-Auckland*, 1977. ix + 217 pp. (V. T. Tutte) **58** #246 05-02 (05C15)
- A scaling method for priorities in hierarchical structures. *J. Mathematical Psychology* **15** (1977), no. 3, 234-281. (Zbl 372 #62084) **58** #33170 62P15
- Exploring the interface between hierarchies, multiple objectives and fuzzy sets. *Fuzzy Sets and Systems* **1** (1978), no. 1, 57-68. (V. D. Dimitrov) **58** #20637 92A25
- Saavedra, I.** Nonexistence of massless zero-spin particles in relativistic quantum mechanics. *Internat. J. Theoret. Phys.* **14** (1975), no. 3, 193-205. (George Leibbrandt) **54** #1951 81.35
- Saavedra Rivano, Neantro** Polarisations des catégories tannakiennes. *Cas homogène*. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A1144-A1147. (P. Abellanas) **45** #1923 14L99 (18H40)
- Polarisations des catégories tannakiennes: Cas gradué. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A1246-A1248. (P. Abellanas) **45** #1924 14L99 (18H40)
- ★Catégories Tannakiennes. *Lecture Notes in Mathematics*, Vol. 265. *Springer-Verlag, Berlin-New York*, 1972. ii + 418 pp. (P. Abellanas) **49** #2769 14L99 (18D10, 20G05)
- Catégories tannakiennes. *Bull. Soc. Math. France* **100** (1972), 417-430. (S. Kleiman) **47** #8556 20G05
- Finite geometries in the theory of theta characteristics. *Enseignement Math.* (2) **2** (1976), no. 3-4, 191-218. (Jerome F. Myers) **56** #5576 14K25
- Şabac, Mihaela** Injective and projective objects in the category of coherent sheaves (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 1359-1363. (L. Bădescu) **49** #8991 14F15 (18G05)
- Şabac, Mihai** On a closed graph theorem. (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 1223-1229. (R. Cristescu) **48** #11976 46A30
- On a theorem of P. P. Zabrejko. (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 1509-1512. (G. Marinescu) **48** #11977 46A30
- (with Foiş, C.) A generalisation of Lie's theorem. IV. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 605-607. (Editors) **57** #17308c 46L99 (17B65)
- A generalisation of Lie's theorem. III. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 825-830. (Editors) **57** #17308b 46L99 (17B65)
- Infinite-dimensional versions of Lie's theorem for solvable Lie algebras. (Romanian. French summary) *Stud. Cerc. Mat.* **26** (1974), no. 9, 1241-1278. (Y. Lehrer-Ilame) **52** #10821 17B10 (46L99)
- A generalisation of Lie's theorem. II. *Rev. Roumaine Math. Pures Appl.* **20** (1975), no. 8, 961-970. (Editors) **57** #17308a 46L99 (17B65)
- Solvable Lie algebras of operators on a Banach space. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 3, 489-493. (F.-H. Vasilescu) **58** #815 17B65 (46H99, 47D99)
- Şabad, A. E.** (with Batalin, I. A.) Green's function of a photon in a constant homogeneous electromagnetic field of general form. *Ž. Èksper. Teoret. Fiz.* **60** (1971), 894-900. (Russian. English summary); translated as *Soviet Physics JETP* **33** (1971), 483-486. (I. Veselić) **46** #4885 81.47
- (with Serebrennikov, V. B.) SU(3) as a group of broken symmetry in the problem with arbitrary central dynamics. *Internat. J. Theoret. Phys.* **15** (1976), no. 10, 745-755. (Pierre Hillion) **56** #1995 81.22
- (with Serebrennikov, V. B.) Group-induced quantization in central problems of mechanics. *Internat. J. Theoret. Phys.* **16** (1977), no. 7, 517-531. (A. H. Klotz) **58** #14523 81.22
- Sabad, O. P.** (with Lomsadze, Ju. M.; Agranovskii, B. O.) The representability of the δ -operator in a strong normal form. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 172-180, 284. (Authors' summary) **58** #20016 81.47
- Sabadaş, N. G.** (with Litvinov, V. V.; Rjakin, O. M.) Use of the notion of symmetry in the synthesis of circuits on threshold elements. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 4, 35-38. (Authors' summary) **45** #8419 94A20
- Scheme diagnosis of arithmetic apparatus. (Russian) *Questions of the theory of electronic digital mathematical machines (Proc. Sem., Kiev, 1967/1969)*, No. 1 (Russian) pp. 54-75. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (W. Kwasowicz) **46** #2921 68A20
- Şabadikov, K. H.** Existence and uniqueness. Continuous dependence on a parameter of the solution of a mixed problem for a certain quasilinear hyperbolic equation. (Russian)

- Boundary value problems for differential equations*, 3 (Russian), pp. 74-83, 185-186. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1973. (A. M. Nahušev) **52** #1035 35L60
- badis, Al.** À propos d'un théorème de point fixe pour des applications multivoques dans les espaces vectoriels topologiques. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **18**(22) (1972), no. 3-4, sec. I, 61-63. (M. Kamenskii (RŽMat **1974** #5 B914)) **51** #11211 47H10
- On the continuity of multifunctions. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **19**(23) (1973), no. 1-2, part I, 67-70. (G. L. Cain, Jr.) **49** #1473 54C60
- The set of fixed points for linear multifunctions. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **19**(23) (1973), no. 3-4, sec. I, 41-43. (L. E. Ward, Jr.) **48** #12497 54H25
- (with Florea, Gh.) A remark on the theorem of Schauder. (Romanian. French summary) *Bul. Inst. Politehn. Iași (N.S.)* **20**(24) (1974), no. 1-2, part I, 35-39. (I. A. Rus) **50** #5561 47H10
- (with Florea, Gh.) Fixed point theorems for certain classes of multifunctions. (Romanian. French summary) *Bul. Inst. Politehn. Iași (N.S.)* **20**(24) (1974), no. 3-4, sec. I, 23-26. (I. A. Rus) **54** #3683 54H25
- (with Florea, Gh.) Birth and death processes in reliability theory. (Romanian. French summary) *Bul. Inst. Politehn. Iași (N.S.)* **21**(25) (1975), no. 1-2, part I, 71-73. (A. Spătaru) **52** #9403 60J85
- baev, E. F.** (with Bezdovinskaja, T. A.) Stability conditions in the large for variable structure systems. *Avtomat. i Telemekh.* **1974**, no. 10, 64-68 (Russian. English summary); translated as *Automatic Remote Control* **35** (1974), no. 10, part 1, 1596-1599 (1975). (Authors' summary) **56** #11333 93D99
- Application of differential inequalities in studies of the stability of nonlinear systems. (Russian) *Dinamika Sistem Vyp. 2* (1974), 108-134. (Editors) **58** #6433 34A25 (34D20)
- Solution estimates and stability of a class of nonlinear dynamical systems. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. Vyp. 174 Prikl. Zadachi Teorii Dinamiki Sistem Vyp. 1* (1974), 5-15, 97. (V. Komkov) **57** #6658 34C35
- Estimates of solutions and the stability of certain nonlinear systems. (Russian) *Problems of analytical mechanics, stability and control theories (Proc. Second Cetaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 280-290, 413. Kazan. Aviacion. Inst., Kazan, 1976. (Author's summary) **58** #9622 93D05*
- (with Sabaeva, T. A.) Conditions of exponential stability of variable structure control systems. *Avtomat. i Telemekh.* **1976**, no. 6, 180-181 (Russian. English summary); translated as *Automatic Remote Control* **37** (1976), no. 6, part 2, 969-970. (Shinzo Kitamura) **55** #10117 93D05
- (with Kuznecov, Ju. A.) Estimates of the solutions of nonlinear differential equations in a phase space, and the stability of invariant sets. (Russian) *Differentsial'nye Uravnenija* **14** (1978), no. 2, 212-222, 385. (Wolfgang Hahn) **58** #1455 34G05 (58F10)
- (with Kuznecov, Ju. A.) The calculation of Ljapunov values for differential equations in a Banach space in certain critical cases. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1978), no. 4, 778-781. (A. I. Kir'janen) **58** #22855 34D20 (34G05)
- baeva, T. A.** (with Sabaev, E. F.) Conditions of exponential stability of variable structure control systems. *Avtomat. i Telemekh.* **1976**, no. 6, 180-181 (Russian. English summary); translated as *Automatic Remote Control* **37** (1976), no. 6, part 2, 969-970. (Shinzo Kitamura) **55** #10117 93D05
- bah, Gérard** (with Roche, Claude) Définition d'une mesure de l'information utile d'un opérateur de reconnaissance. Génération automatique d'opérateurs de reconnaissance. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A501-A504. (Jana Zvárová) **45** #4893 94A15 (68A45)
- Génération automatique de propriétés d'un ensemble de données, à l'aide d'opérateurs logiques, pour définir la représentation la mieux adaptée à un problème de reconnaissance de formes. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A707-A709. (F. W. Stallmann) **48** #1546 68A45
- baladin, V. N.** (with Nepomnjaščih, I. A.) On the construction of optimal computational schemes for problems of interpretation of gravitational and magnetic fields. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* **1976**, no. 1, 58-70. (Authors' summary) **58** #25848 86.65 (68A10)
- balaiuskas, L.** (with Petrauskas, A. K.; Perkauskas, D. Č.) Basis functions of the unitary scheme in collective variables. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **14** (1974), 5-9, 169 (Authors' summary) **57** #2246 81.22
- (with Perkauskas, D. Č.; Petrauskas, A. K.) Basis functions for the investigation of the collective motion of nuclei. (Russian. English summary) *Teoret. Mat. Fiz.* **20** (1974), 274-281. (Authors' summary) **57** #8573 81.22
- (with Petrauskas, K. I.; Petrauskas, A. K.) Computation of the density distribution and of the charged formfactors of nuclei with account taken of many-quanta excitations. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **15** (1975), no. 4, 509-515, 671. (Authors' summary) **54** #14600 81.22
- (with Petrauskas, A. K.) The many-particle Schrödinger equation in collective variables. *Jadernaja Fiz.* **20** (1974), 658-665 (Russian); translated as *Soviet J. Nuclear Phys.* **20** (1975), 353-356. (Rainer Dirl) **52** #16391 81.47
- abalín, P. L.** The univalence of the general solution of an interior inverse boundary value problem. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 12 (153), 92-95 (1976). (G. S. Litvinčuk and I. M. Spitkovskii) **55** #8371 30A88
- abaljauskas, L. Ju.** See **Sabaljauskas, L.**
- abalski, Bogdan** Some remarks about continuous Boolean algebras. *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* **2** (1973), 192-194. (Timothy Cramer) **52** #10531 06A40
- (with Rauszer, Cecylia) Representation theorem for distributive pseudo-Boolean algebra. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **3** (1974), no. 3/4, 17-23. (A. Tauts) **53** #2673 02J05 (02C15)
- (with Rauszer, Cecylia) Remarks on distributive pseudo-Boolean algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 2, 123-129. (Stephen L. Bloom) **51** #7978 06A35 (02J99)
- (with Rauszer, Cecylia) Notes on the Rasiowa-Sikorski lemma. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **4** (1975), no. 3, 109-114. (R. Balbes) **52** #5505 06A35
- (with Rauszer, Cecylia) Notes on the Rasiowa-Sikorski lemma. *Studia Logica* **34** (1975), no. 3, 265-268. (Daniel Ponasce) **53** #221 06A35
- Saban, Giacomo** A characteristic property of a developable surface. (Turkish summary) *Comm. Fac. Sci. Univ. Ankara Sér. A* **16** (1967), 93-96. (K. K. Gorowara) **45** #2587 53A05
- (with Du Val, Patrick) Archimedes in n dimensions. *Math. Gaz.* **58** (1974), 202-205. (Editors) **57** #7347 50A30
- Šabanov, L. V.** (with Galkin, L. I.; Kalabekov, B. A.) A certain method of search for summable collections of Boolean functions. (Russian) *Digital computer technology and programming, No. 8 (Russian), pp. 147-155, 191. Sovetskoe Radio, Moscow, 1974. (Authors' summary) **51** #15206 94A20*
- Šabanov-Kušnarenko, Ju. P.** (with Maistrovskaja, L. M.) Conditions for the existence of a multidimensional scale of equidivision. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 3, 146-147. (A. Rapoport) **56** #11105 92A25
- ben-Sabar, E.** See **Ben-Sabar, E.**
- Šabašova, L. P.** (with Šor, N. Z.) The solution of minimax problems by the method of the generalized gradient descent with stretching of the space. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 1, 82-88. (W. W. Breckner) **46** #6595 65K05
- Sabašvili, Š. A.** (with Ivanov, V. V.) Multiple scattering of light in semiinfinite atmospheres. (Russian. English summary) *Astrofizika* **9** (1973), 333-345. (Alexej Sitenko) **49** #4541 85.45
- Šabat, A. B.** A one-dimensional scattering theory. I. (Russian) *Differentsial'nye Uravnenija* **8** (1972), 164-178. (O. Horáček) **45** #5577 35P25 (47A40)
- A certain class of Wiener-Hopf type equations. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 546-549. (S. G. Samko) **46** #7956 47B35 (45E10, 47G05)
- (with Zaharov, V. E.) Exact theory of two-dimensional self-focusing and one-dimensional self-modulation of waves in nonlinear media. *Ž. Eksper. Teoret. Fiz.* **61** (1971), no. 1, 118-134 (Russian. English summary); translated as *Soviet Physics JETP* **34** (1972), no. 1, 62-69. (Authors' summary) **53** #9966 81.35
- The Korteweg-de Vries equation. (Russian) *Dokl. Akad. Nauk SSSR* **211** (1973), 1310-1313. (E. Zeidler) **48** #9137 35Q99
- (with Zaharov, V. E.) A plan for integrating the nonlinear equations of mathematical physics by the method of the inverse scattering problem. I. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 3, 43-53. (D. Naylor (Zbl **303** #35024)) **58** #1768 35Q99 (58F05)
- The inverse scattering problem for a system of differential equations. (Russian) *Funkcional. Anal. i Priložen.* **9** (1975), no. 3, 75-78. (S. T. Kuroda) **53** #934 34B25 (35P25)
- One-dimensional perturbations of a differential operator, and the inverse scattering problem. (Russian) *Problems in mechanics and mathematical physics (Russian), pp. 279-296, 298. Izdat. "Nauka", Moscow, 1976. (R. C. Gilbert) **56** #16043 34B25*
- Šabat, B. V.** ★ Введение в комплексный анализ. (Russian) [Introduction to complex analysis] *Izdat. "Nauka", Moscow, 1969. 576 pp. (Jan Chmielowski) **58** #28443a 30-01 (32-01)*
- Hyperbolic quasiconformal mappings. (Russian) *Certain problems of mathematics and mechanics (on the occasion of the seventieth birthday of M. A. Lavrent'ev) (Russian), pp. 251-266. Izdat. "Nauka", Leningrad, 1970. (J. Ławrynowicz) **45** #5352 30A60*
- (with Lavrent'ev, M. A.) ★ Проблемы гидродинамики и их математические модели. (Russian) [Problems of hydrodynamics and their mathematical models] *Izdat. "Nauka", Moscow, 1973. 416 pp. (Št. I. Gheorghijă) **55** #7071 76.00*
- ★ Wstęp do analizy zespolonej. (Polish) [Introduction to complex analysis] Translated from the Russian by Krystyna Linder and Ryszard Kopiciecki. *Państwowe Wydawnictwo Naukowe, Warsaw, 1974. 572 pp. (errata insert) (Jan Chmielowski) **58** #28443b 30-01 (32-01)*
- ★ Введение в комплексный анализ. Часть I. Функции одного переменного. (Russian) [Introduction to complex analysis. Part I. Functions of a single variable] Second edition, revised and augmented. *Izdat. "Nauka", Moscow, 1976. 320 pp. (Jan Chmielowski) **58** #28443c 30-01*
- ★ Введение в комплексный анализ. Часть II. Функции нескольких переменных. (Russian) [Introduction to complex analysis. Part II. Functions of several variables] Second edition, revised and augmented. *Izdat. "Nauka", Moscow, 1976. 400 pp. (Jan Chmielowski) **58** #28443d 32-01 (30-01)*
- (with Lavrent'ev, M. A.) ★ Проблемы гидродинамики и их математические модели. (Russian) [Problems of hydrodynamics and their mathematical models] Second edition. *Izdat. "Nauka", Moscow, 1977. 407 pp. (Editors) **56** #17392 76.00*
- (with Ahiezer, N. I.; Efimov, N. V.; Krein, M. G.; Lavrent'ev, M. A.; Marčenko, V. O.; Ostrovskii, I. V.) Boris Jakovlevič Levin (on the occasion of his seventieth birthday). (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 5(197), 211-213. (Editors) **58** #10149 01A70
- See also **Die Hilbertschen Probleme**, **49** #10488 and **Wu, Hung Hsi**, **49** #10907
- Šabat, G. B.** The complex structure of domains that cover algebraic surfaces. (Russian) *Funkcional. Anal. i Priložen.* **11** (1977), no. 2, 67-75, 96. (A. L. Oniščik) **56** #12304 32C10 (14J99, 32M05)
- Sabata, Hideki** Oscillators and ergodicity. (Japanese. English summary) *Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci.* **20** (1971), 87-92. **48** #1565 70.60 (82.60)
- de Sabata, I.** See **De Sabata, I.**
- Šabat-Fedak, I. G.** (with Gupalo, G. V. S.) The exterior generalized Dirichlet problem. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1973**, no. 8, 44-48, 147. (M. A. Atahodžev) **53** #839 31B20
- Sabatier, Pierre C.** Complete solution of the inverse scattering problem at fixed energy. *J. Mathematical Phys.* **13** (1972), 675-699. (N. Nakanishi) **45** #6313 81.34
- (with Jean, C.) On an inverse scattering problem of quantum theory. (Italian and Russian summaries) *Nuovo Cimento A* (11) **18** (1973), 105-150. (Michael Tortorella) **52** #4838 81.34
- Discrete ambiguities and equivalent potentials. *Phys. Rev. A* (3) **8** (1973), 589-601. (Author's summary) **52** #7360 81.34
- Remarks on approximate methods in geophysical inverse problems. *Proc. Roy. Soc. (London) Ser. A* **337** (1974), 49-71. (Jifi Nedoma) **55** #2056 86.65
- Approche des problèmes inverses. *Conférences sur les problèmes inverses (Colloq.*

- National Anal. Numér., Grande-Motte, 1975), Exp. No. 3, 24 pp. Cahiers Math., No. 5, U. E. R. Math., Univ. Sci. Tech. Languedoc, Montpellier, 1975. (Editors) 57 #18566 81.34 (34B25)*
- Construction of potentials from the scattering amplitude at a given energy. *Conférences sur les problèmes inverses (Summer Sem. Inverse Problems, Univ. California, Los Angeles, Calif., 1974), Exp. No. 2, 30 pp. Cahiers Math., No. 5, U. E. R. Math., Univ. Sci. Tech. Languedoc, Montpellier, 1975. (Editors) 57 #15033 81.35*
- Construction of the scattering amplitude from the elastic cross section at a given energy. *Conférences sur les problèmes inverses (Summer Sem. Inverse Problems, Univ. California, Los Angeles, Calif., 1974), Exp. No. 1, 35 pp. Cahiers Math., No. 5, U. E. R. Math., Univ. Sci. Tech. Languedoc, Montpellier, 1975. (J. S. Joel) 57 #15002 81.31 (81.45)*
- (with Chadan, K.) ★Inverse problems in quantum scattering theory. With a foreword by R. G. Newton. Texts and Monographs in Physics. Springer-Verlag, New York-Berlin, 1977. xxii + 344 pp. ISBN 0-387-08092-9 (L. A. Takhtajan) 58 #25578 81.47 (47A40, 81.45)
- (with Martin, André) Impedance, zero energy wavefunction, and bound states. *J. Mathematical Phys.* 18 (1977), no. 8, 1623-1626. (A. Terry Amos) 56 #2030 81.35
- See also **Conférences: Problèmes Inverses**, 51 #12161
- Sabău, A.** On the solution of a transportation problem on an interval. *Univ. Braşov Lucrari Ştiinţ.* 17 (1975), 39-41. (Author's summary) 56 #2357 90C05
- Sabbadini, A.** (with Lanz, L.; Lugiatto, Luigi A.; Ramella, G.) The embedding of unstable non-relativistic particles into Galilean quantum field theorems. *Internat. J. Theoret. Phys.* 9 (1974), 1-17. (Authors' summary) 53 #12322 81.46
- Sabbagh, Gabriel** Sous-modules purs, existentiellement clos et élémentaires. *C. R. Acad. Sci. Paris Sér. A-B* 272 (1971), A1289-A1292. (I. L. Gaal) 46 #3296 02H15 (13L05)
- (with Eklof, Paul C.) Definability problems for modules and rings. *J. Symbolic Logic* 36 (1971), 623-649. (Angus J. Macintyre) 47 #1605 02H15 (02B25, 16A64)
- A note on the embedding property. *Math. Z.* 121 (1971), 239-242. (U. Felgner) 45 #45 02H99
- The epimorphisms of the ϵ -relation. *Z. Math. Logik Grundlagen Math.* 18 (1972), 289-290. (D. Pincus) 46 #3306 02K05
- Yet another remark on the Poincaré-Birkhoff-Witt theorem. *J. London Math. Soc.* (2) 6 (1973), 553-554. (J. R. Isbell) 47 #5067 17B05
- Coherence of polynomial rings and bounds in polynomial ideals. *J. Algebra* 31 (1974), 499-507. (J. T. Arnold) 50 #297 13B25
- Catégoricité en κ_0 et stabilité: constructions les préservant et conditions de chaîne. *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A531-A533. (John T. Baldwin) 51 #7848 02G20 (02H05)
- Catégoricité et stabilité: quelques exemples parmi les groupes et anneaux. (English summary) *C. R. Acad. Sci. Paris. Sér. A-B* 280 (1975), A603-A606. (John T. Baldwin) 51 #7849 02G20 (13L05, 20A10)
- Sur les groupes que ne sont pas réunion d'une suite croissante de sous-groupes propres. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A1, A763-A766. (Paul C. Eklof) 51 #3270 20A10
- Caractérisation algébrique des groupes de type fini ayant un problème de mots résoluble (théorème de Boone-Higman, travaux de B. H. Neumann et Macintyre). *Séminaire Bourbaki* (1974/1975: Exposés Nos. 453-470), Exp. No. 457, pp. 61-80. *Lecture Notes in Math., Vol. 514, Springer, Berlin, 1976. (R. C. Lyndon) 56 #5258 02F47 (20F10)*
- See also **Conference: Mathematical Logic**, 48 #5804
- Sabbagh, Harold A.** (with Krile, Thomas F.) Application of one-dimensional finite elements to normal mode analysis of ferroelectric cylindrical shells. *J. Acoust. Soc. Amer.* 61 (1977), no. 1, 2-10. (David F. Griffiths) 55 #1954 78.65
- Sabbagh, L. D.** Global weak asymptotic stability for dynamical polysystems. *Applicable Anal.* 6 (1976/77), no. 2, 133-138. (Peter A. Cook) 55 #5275 93D05 (54H20)
- (with Neumann, Dean A.) Periodic solutions of Liénard systems. *J. Math. Anal. Appl.* 62 (1978), no. 1, 148-156. (G. Bojadjiev) 57 #6641 34C25
- Sabbah, Claude** Fonctions de Morse sur une variété analytique complexe. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 4, A191-A193. (Author's summary) 57 #16677 32C40 (57D70)
- Sabba-Stefanescu, I.** (with Ciulli, S.; Pomponiu, C.; Steinbrecher, G.) CDD poles, inelasticities and optimization of N/D equations. *Nuclear Phys.* B71 (1974), 269-291. (Authors' summary) 50 #9212 81.30
- (with Ciulli, S.; Pomponiu, C.) Some mathematical aspects of the problem of analytic continuation in elementary particle theory. (Russian. English summary) *Fiz. Elementar. Chast. i Atom. Jadra* 6 (1975), no. 1, 72-131. (Authors' summary) 57 #14994 81.30
- de Sabbata, V.** See **De Sabbata, V.**
- Sabel'fel'd, V. K.** A locality criterion for transformations of operator schemes. (Russian. English summary insert) *Kibernetika (Kiev)* 1971, no. 5, 59-62. (A. A. Mullin) 47 #9885 68A10
- Transformation of unary linear recursive schemes. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 5, 56-63; *erratum, ibid.* 1975, no. 5, 160. (See Zbl 326 #02024) 68A05
- See also **Bauer, Friedrich L.; et al.**, 58 #3598
- Sabella, Ralph R.** Convergence properties of neighboring sequences. *Proc. Amer. Math. Soc.* 38 (1973), 405-409. (Joe A. Guthrie) 47 #1036 54E35
- A note on the metrizable spaces with countably based closed sets. *J. Res. Nat. Bur. Standards Sect. B* 79B (1975), no. 1-2, 63-64. (C. E. Aull) 52 #15392 54E35
- Properties of neighboring sequences in stratifiable spaces. *J. Res. Nat. Bur. Standards Sect. B* 79B (1975), no. 3-4, 103-105. (Jacob Kofner) 55 #6371 54E20 (54E35)
- Spaces in which compact sets have countable local bases. *Proc. Amer. Math. Soc.* 48 (1975), 499-504. (Joe A. Guthrie) 51 #6749 54E35
- Šabel'nikova, D. G.** (with Andreev, K. K.) Characteristic subalgebras of relatively free algebras. (Russian) *Sibirsk. Mat. Ž.* 14 (1973), 1336-1337, 1368. (J. S. Joel) 48 #6202 17E05 (20E10)
- Sabeti, Houshang** Optimal selection of service rates in queueing with different cost. *J. Operations Res. Soc. Japan* 16 (1973), 15-35. (F. Weinberg) 48 #7928 90B05
- Sabharwal, C. L.** S -distribution theory. *Rend. Mat. (6)* 6 (1973), 337-349. (G. Marinescu) 50 #5257 40A05
- Sabharwal, Ranjit S.** Infinite Hughes planes. *Math. Student* 41 (1973), no. 3-4, 307-311 (1974). (T. G. Ostrom) 51 #11276 50D35
- Infinite planar left near-fields. *Math. Student* 41 (1973) no. 3-4, 322-324 (1974). (L. Zemmer) 51 #12814 12K05
- Sabidussi, Gert** Idempotency of circuit-induced exchange operators. *Monatsh. Math.* (1970), 330-335. (M. Las Vergnas) 45 #1797 05C99
- Meshes on 3-connected graphs. *Discrete Math.* 1 (1971/72), no. 3, 269-276. (R. Hemminger) 45 #101 05C99
- Subdirect representations of graphs. *Infinite and finite sets (Colloq., Keszthely, 1971, dedicated to P. Erdős on his 60th birthday), Vol. III, pp. 1199-1226. Colloq. Math. Sz. János Bolyai, Vol. 10, North-Holland, Amsterdam, 1975. (Pavol Hell) 51 #10168 05C99 (08A05)*
- Weak separation lattices of graphs. *Canad. J. Math.* 28 (1976), no. 4, 691-721. (William T. Trotter, Jr.) 55 #10322 05C35
- Sabin, G. C. W.** (with Graham, G. A. C.) The correspondence principle of linear viscoelasticity for problems that involve time-dependent regions. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* 11 (1973), no. 1, 123-141. (Maria Comninou) 56 #13957 73.45
- Sabin, Malcolm Arthur** (with Powell, M. J. D.) Piecewise quadratic approximations of triangles. *ACM Trans. Math. Software* 3 (1977), no. 4, 316-325. (Authors' summary) 58 #3319 65D15
- The use of piecewise forms for the numerical representation of shape. *Tanulmányok-MTA Számítástechn. Automat. Kutató Int. Budapest No. 60* (1977), 125 pp. (Wolfgang Böhm) 58 #31723 65D05 (41A15, 69.00)
- Sabina, Federico J.** (with Herrera, Ismael) Connectivity as an alternative to boundary integral equations: construction of bases. *Proc. Nat. Acad. Sci. U.S.A.* 75 (1978), no. 20, 2059-2063. (U. Tippenhauer) 58 #12257 45L05 (65R05)
- Sabinin, L. V.** Homogeneous Riemannian spaces with $(n-1)$ -dimensional mirrors. (Russian) *Some boundary value problems of ordinary differential equations (Russian), pp. 116-126. Univ. Družby Narodov, Moscow, 1970. (K. Radziszewski) 51 #4111 53C25*
- Reductive spaces with absolute projective connection. (Russian) *Some boundary value problems of ordinary differential equations (Russian), pp. 127-139. Univ. Družby Narodov, Moscow, 1970. (K. Radziszewski) 51 #4112 53C30*
- Nonclassical solutions of Pfaffian systems, and geometries with functional affinity connection. (Russian) *Some boundary value problems of ordinary differential equations (Russian), pp. 140-154. Univ. Družby Narodov, Moscow, 1970. (A. Švec) 51 #4078 53B05 (58A15)*
- Principal involomorphisms of compact Lie algebras. (Russian) *Trudy Sem. Vekt. Tenzor. Anal.* 15 (1970), 188-226. (K. Strambach) 45 #5279 22E60
- On the equivalence of category of loops and the category of homogeneous spaces. (Russian) *Dokl. Akad. Nauk SSSR* 205 (1972), 533-536. (H.-J. Hoehnke) 46 #9220 20N05 (22E20)
- The geometry of loops. (Russian) *Mat. Zametki* 12 (1972), 605-616. (H. Pflugfelder) 49 #5216 20N05
- Trisymmetric spaces with simple compact groups of motions. (Russian) *Trudy Sem. Vektor. Tenzor. Anal.* 16 (1972), 202-226. (E. Vinberg) 48 #1110 53C35
- (with Sharma, Bhagirath Lal) On the existence of half-Bol loops. *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* 22 (1976), no. 2, 147-148. (R. Artzy) 55 #3112 20N05
- Odules as a new approach to geometry with a connection. (Russian) *Dokl. Akad. Nauk SSSR* 233 (1977), no. 5, 800-803. (A. Goetz) 57 #1340 53C05
- Sabirov, A.** (with Džuraev, T. D.) A boundary value problem for composite type equations. (Russian) *Boundary value problems for differential equations, 5 (Russian), pp. 19-27, 183. Izdat. "Fan" Uzbek. SSR, Tashkent, 1975. (Authors' summary) 58 #17505 35M05*
- A boundary value problem for the equation $(\partial/\partial x)\Delta u = f(x, y; u, u_x, u_y, u_{xy}, u_{xx}, u_{yy})$. (Russian) *Boundary value problems for differential equations and their applications (Russian), pp. 28-36, 156. Fan, Uzbek. SSR, Tashkent, 1976. (Author's summary) 58 #29136 35G99*
- (with Džuraev, T. D.) Boundary value problems for nonlinear equations of composite type. (Russian) *Partial differential equations and their applications (Russian), pp. 27-33, 181. Izdat. "Fan" Uzbek. SSR, Tashkent, 1977. (Authors' summary) 58 #23124 35M05*
- (with Džuraev, T. D.) Certain boundary value problems for equations of composite type. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 1, 36-43, 187. (A. P. Soldatov) 57 #13225 35M05
- Sabirov, I.** A certain inequality. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadzhik. SSR* 14 (1971), no. 9, 15-18. (J. Albrycht) 45 #2448 46A40 (47B99)
- The spectrum of a certain class of a second order ordinary differential operator. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadzhik. SSR* 15 (1972), no. 2, 7-10. (J. Butler, Jr.) 46 #725 47E05
- Sabirov, K.** Certain theorems on the oscillatoriness of the solutions of linear homogeneous differential equations of order n . (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1967, no. 3, 3-6. (V. Kondrat'ev (RŽMat 1967 #11 B285)) 46 #5739 34C10
- The zeros of the solutions of the equation $y^{(2n)} + p(x)y = 0$ on a finite interval. (Russian) *Vsesoyuz. Zaočn. Politehn. Inst. Sb. Trudov No. 73 Ser. Mat. Meh.* (1972) 21-25. (See RŽMat 1972 #10 B149) 34C10
- Sabirov, M. A.** ★Математикадан русча-ўзбекча луғат. (Uzbek) [A Russian-Uzbek dictionary of mathematics] For secondary schools, universities and technical high schools. Second edition, revised, augmented and corrected. "Ўқитувчи" Naşriyoti, Tashkent, 1973. 344 pp. (Editors) 50 #4200 00A20
- (with Ahmedov, A.) Certain achievements of al-Birūnī in astronomy and mathematics. (Russian) *Taşkent. Gos. Univ. Naučn. Trudy No. 460 Voprosy Mat.* (1974) 113-119, 177. (A.-A. P. Youschkevitch (Juškevič)) 52 #7775 01A30
- On the types of terminological dictionaries. (Uzbek. Russian summary) *Taşkent. Gos. Univ. Naučn. Trudy Vyp. 490 Voprosy Matematiki* (1976), 178-184, 269. (Editor) 57 #12004 00A20

irov, M. S. Certain questions on Fermat's problem. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.)* No. 181 (1970), 107-110. (K. Szymiczek) **45** #5078 10B15

Certain properties of the functions $\varphi(Z, X)$. (Russian) Questions on differential equations. *Trudy Samarkand. Gos. Univ. (N.S.) Vyp.* 191 (1970), 158-164. (Editors) **56** #15599 10N05

A certain property of the symmetric polynomial $f_p(x)$. (Russian) Questions on differential equations, number theory, algebra and geometry. *Trudy Samarkand. Gos. Univ. (N.S.) Vyp.* 202 (1972), 170-171. (Editors) **56** #15600 10M05

irov, P. Correcting capabilities of the iterative Elias code. (Russian) *Voprosy Kibernet. (Tashkent)* No. 54 (1972), 152-156, 171-172. (See RŽMat **1973** #8 V439) 94A10

Distribution of the values of multiplicative functions by numbers with "large" prime divisors. (Russian) *Taškent. Gos. Univ. Naučn. Trudy* No. 548 *Voprosy Mat.* (1977), 78-82, 144. (Editors) **58** #27878 10K20

irov, T. S. (with Muhamadiev, È. M.) On the question of the computation of the rotation of completely continuous vector fields. (Russian) *Seventh Mathematical Summer School (Kaciveli, 1969)*, pp. 306-321. *Izdanie Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (L. Górniewicz) **51** #11209 47H10

(with Imomnazarov, B.) A certain boundary value problem for systems of differential equations that contain a small parameter. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **13** (1970), no. 8, 9-12. (P. C. Das) **45** #5485 34C15

(with Muratov, Ju.) Some theorems on the perturbation of the spectrum of a holomorphic matrix pencil, and their applications in the theory of the stability of systems with aftereffect. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 4 (1970), 60-70. **56** #9042 34K20 (47A55)

Estimates of Green's function of a differential operator with a small parameter and almost periodic coefficients. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **14** (1971), no. 6, 14-17. (K. R. Schneider) **45** #2230 34A10

(with Muhamadiev, È. M.) The index of the singular point of a finite-dimensional vector field. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **14** (1971), no. 7, 3-6. (L. Reiziš) **45** #3880 34C40 (58F99)

(with Muratov, Ju.) Perturbation of the spectrum of a matrix that depends analytically on a parameter. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **15** (1972), no. 1, 3-7. (B. V. Loginov) **45** #9184 47A55 (15A18)

(with Vizelis, J.) The almost periodicity of the integral of an almost periodic function, and the reducibility of linear systems with almost periodic coefficients. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **15** (1972), no. 7, 11-14. (A. Halanay) **49** #3269 34C20

(with Muhamadiev, È. M.; Stecenko, V. Ja.) Existence of second positive eigenvalues of positive linear operators. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak. Vyp.* 2 (1972), 17-32. (Constantin Niclescu) **53** #14213 47B55

(with Raupov, I. Š.) Production of small periodic solutions in systems of ordinary differential equations with a nonlinear principal part. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak.* **1972**, no. 7, 89-94. (B. A. Ščerbakov) **55** #783 34C25 (34D20)

The positive invertibility of a family of linear operators. (Russian) *Functional analysis*, No. 2 (Russian), pp. 123-128. *Ul'janovsk. Gos. Univ., Ulyanovsk*, 1973. Constantin Niclescu) **56** #3674 47B55 (47B10)

(with Muratov, Ju.) Stability of linear systems with aftereffect, with periodic coefficients that contain a small parameter. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **16** (1973), no. 2, 10-13. (L. J. Grimm) **50** #2653 34K20

(with Zaidenberg, M. G.) Certain global properties of matrix-valued functions. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **16** (1973), no. 5, 8-11. (Alan Weinstein) **48** #7310 58C25

On the question of the continuability with respect to a parameter of the solutions of boundary value problems for differential equations in Banach spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 10(137), 59-68. (C. Corduneanu) **48** #9023 34G05

On the asymptotic theory of small solutions of nonlinear equations. (Russian) *Functional analysis*, No. 3 (Russian), pp. 176-185. *Ul'janovsk. Gos. Univ., Ulyanovsk*, 1974. (E. Zeidler) **56** #3696 47H15

The method of normalizing transformations in the theory of the branching of the periodic solutions of nonlinear singularly perturbed systems of differential equations. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 37-50, 140. (D. Bobrowski) **49** #5478 34C25

(with Zaidenberg, M. G.) The global reduction of matrix-valued functions to canonical form. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Drogobych, 1973)*, *Functional analysis and its applications* (Russian), pp. 148-169. *Akad. Nauk SSSR Central, Ekonom.-Mat. Inst., Moscow*, 1975. (P. S. Landweber) **57** #6054 15A21 (15A60, 58C99)

(with Ilolov, M.) On the problem of the branching of periodic solutions in certain classes of differential-difference systems of neutral type. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **18** (1975), no. 12, 3-6. (Zbl **324** #34073) **58** #1482 34K15

Some problems in the analytic theory of one-parameter perturbation of linear operators. (Russian) *Trudy Moskov. Mat. Obšč.* **33** (1975), 67-106 (1976). (F. H. Vasilescu) **58** #2382 47A55 (47A70)

(with Jusupov, S.) On the problem of equivalence in the spectral theory of a holomorphic operator-valued function. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **19** (1976), no. 9, 7-10. (P. A. Kučment) **55** #11079 47A55

(with Tučinskii, M. R.) Method for the calculation of the mean value of small periodic solutions of differential equations in Banach spaces. Remarks on the application to chemical reactors. (Russian) *Functional analysis*, No. 8: *Operator theory* (Russian), pp. 131-142. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk*, 1977. (Editors) **58** #22895 34G05

(with Ilolov, M.) Continuability with respect to the parameter of the periodic solutions of differential equations of neutral type in a Hilbert space. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 3, 3-6. (From the text) **58** #6609 34K15 (34G05)

(with Ilolov, M.) Conditions for the continuability with respect to the parameter of the periodic solutions of certain classes of equations of neutral type. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 7, 7-10. (R. R. Ahmerov) **58** #1469 34K05

On the question of the continuability with respect to a parameter of the solutions of boundary value problems for differential equations in Banach spaces. II. Positive solutions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1978**, no. 1(188), 97-109. (C. Corduneanu) **58** #11759 34G05

Sabitov, I. H. Formal solutions of the Hilbert problem for an annulus. (Russian) *Mat. Zametki* **12** (1972), 221-232. (S. Gogonea) **50** #2515 30A88

The rigidity of "corrugated" surfaces of revolution. (Russian) *Mat. Zametki* **14** (1973), 517-522. (C. Simionescu) **50** #8385 53C45

Infinitesimal bendings of troughs of revolution. I. (Russian) *Mat. Sb. (N.S.)* **98(140)** (1975), no. 1 (9), 113-129, 159. (A. Urban) **53** #9093 53C45

(with Perlova, N. G.) Second order rigidity of troughs of revolution of class C^2 . (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 5, 47-52. (A. Urban) **53** #1488 53C45

Infinitesimal bendings of troughs of revolution. II. (Russian) *Mat. Sb. (N.S.)* **99(141)** (1976), no. 1, 49-57, 135. (A. Urban) **53** #9094 53C45

Possible generalizations of the Minagawa-Rado lemma on the rigidity of a surface of revolution with a fixed parallel. (Russian) *Mat. Zametki* **19** (1976), no. 1, 123-132. (V. T. Fomenko) **54** #8536 53C45

Regularity of convex domains with a metric that is regular on Hölder classes. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 4, 907-915. (A. V. Pogorelov) **54** #13804 53C45

(with Šefel', S. Z.) Connections between the order of smoothness of a surface and that of its metric. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 4, 916-925. (A. V. Pogorelov) **54** #13805 53C45

On the question of imbedding two-dimensional metrics in E^4 . (Russian) *Mat. Zametki* **21** (1977), no. 2, 137-140. (Aurel Bejancu) **56** #1234 53C40

See also Hartman, Philip, **50** #5061

Sabitov, K. B. A boundary value problem of Tricomi type for an equation with a BN operator. (Russian) *Differencial'nye Uravnenija (Rjazan')* No. 10 (1977), 140-145. (Editors) **58** #11983 35M05

A local extremum principle for an equation of the second kind in an infinite domain. (Russian) *Differencial'nye Uravnenija (Rjazan')* No. 10 (1977), 146-148. (Editors) **58** #11984 35M05

tougeron-Sablé, M. See Tougeron-Sablé, M.

Šablickaja, L. N. (with Krein, S. G.) Necessary conditions for the stability of difference schemes, and the eigenvalues of difference operators. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 647-657, 812. (I. M. Sheffer) **48** #10137 65M10

(with Gončarova, A. G.) Application of the steepest gradient descent to the solution of boundary value problems. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* 19 (1975), 42-45. (R. Kodnár) **57** #8040 65L10

Determination of the periodic solutions of differential equations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 1, 223-226, 270. (D. Bainov) **58** #3494 65L10

Sablík, Maciej (with Baron, Karol) On the uniqueness of continuous solutions of a functional equation of n -th order. *Aequationes Math.* **17** (1978), no. 2-3, 295-304. (M. Kuczma) **58** #29525 39A15

Sablin, N. I. (with Bersenev, S. M.; Dejneženko, A. L.) A numerical algorithm for finding an approximate L -pseudosolution for systems of linear algebraic equations. (Russian) *Numerical methods of linear algebra (Proc. Third All-Union Conf. on Numerical Methods of Linear Algebra, Novosibirsk, 1973)* (Russian), pp. 86-94. *Vyčisl. Centr Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1973. (Jan Zitko) **54** #14338 65F20

(with Dejneženko, A. L.) A method for estimating the parameter α in a regularizing algorithm for the solution of ill-conditioned systems of linear algebraic equations. (Russian) *Izv. Tomsk. Politehn. Inst.* **277** (1977), 3-5, 197. (Authors' summary) **58** #31774 65F10

(with Bersenev, S. M.) Locally optimal sequential designs in the dual formulation. (Russian) *Izv. Tomsk. Politehn. Inst.* **277** (1977), 6-10, 197. (Authors' summary) **58** #31650 62L05

Sablonnière, Paul Système différentiel associé à certaines équations intégrales de type Hammerstein. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A605-A607. (H. Amann) **48** #7638 65R05

Utilisation des déterminants de Fredholm dans la résolution numérique des équations intégrales linéaires à noyau continu. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 337-340. (P. M. Anselone) **51** #4701 65R05 (47G05)

Une méthode de résolution numérique de certaines équations intégrales de type Hammerstein. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge Anal. Numér.* **9** (1975), no. R-1, 105-118. (Author's summary) **58** #25044 65R05

Bases de type Schauder de $C[0, 1]$ et applications à l'intégration numérique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 17, A1077-A1080. (Author's summary) **55** #6795 65D30

Étude de l'équation de Fredholm au voisinage d'une borne critique. *RAIRO Anal. Numér.* **11** (1977), no. 3, 287-305. (K. N. Srivastava) **57** #7062 45A05

Bases de type Schauder de $C[0, 1]$ et formules de quadrature associées. (English summary) *Numer. Math.* **30** (1978), no. 2, 227-240. (W. J. Kotzé) **58** #12138 41A55 (65D30)

Šablov, V. L. (with Komarov, V. V.; Popova, A. M.) On the unique solution of the quantum mechanical problem of four and more particles. *Lett. Nuovo Cimento* (2) **20** (1977), no. 18, 649-654. (Tuan W. Chen) **58** #14580 81S5

Šablovskii, Ju. G. Method of determination of stationary state probabilities for queueing systems. *Automat. i Telemekh.* **1977**, no. 6, 12-17 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 6, part 1, 785-788. (Author's summary) **58** #18788 60K25

Šablovskii, V. K. (with Bondaros, Ju. G.) Analytical construction of control loops for discrete systems with piecewise-linear characteristics. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 1, 211-216, 239 (Russian); translated as *Engrg. Cybernetics* **12** (1974), 176-182. (Zdeněk Ertinger) **53** #15483 93C55

Sabo, Arpad See Szabó, Árpád K.

Sabo, D. Permutations of summable numerical series. (Russian) *Mat. Zametki* **13** (1973), 13-20. (E. Stipančić) **54** #8074 40C05

Sabo, D. W. (with Coope, J. A. R.) A new approach to the determination of several

- eigenvectors of a large Hermitian matrix. *J. Computational Phys.* **23** (1977), no. 4, 404-424. (A. S. Householder) **56** #4130 65F15
- Šabo, Michal On an extension of finite functionals by the transfinite induction. (Russian summary) *Math. Slovaca* **26** (1976), no. 3, 193-200. (D. W. Bressler) **56** #8785 28A30
- Sabodaš, P. F. (with Čeban, V. G.) Solution of the heat equation with a finite velocity of heat diffusion for domains with variable boundaries. (Russian) *Bul. Akad. Štiinca RSS Moldoven.* **1971**, no. 2, 11-16. (K.-H. Hauer) **45** #741 35K05 (8035)
- (with Čeban, V. G.) Cylindrical and spherical thermo-elastic waves in an unrestricted medium taking into account the finite velocity of heat distribution. (Russian) *Bul. Akad. Štiinca RSS Moldoven.* **1971**, no. 2, 16-22. (L. Jentsch) **45** #1447 73.35
- (with Čeban, V. G.) The excitation of plane thermoelastic waves in a layer with a finite speed of heat propagation. (Russian) *Prikl. Mat. i Programirovanie* No. 4 (1971), 104-111. (J. L. Nowinski) **45** #4725 73.35
- The action of a mobile load on an elastic plate that covers an acoustic half-space. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* No. 5 (1971), 145-154. (See RŽMeh **1972** #2 V333) 73.35
- (with Čeban, V. G.; Naval, I. K.; Čeredničenko, R. A.) ★Численные методы решения задач динамической теории упругости. (Russian) [Numerical methods for the solution of problems in the dynamical theory of elasticity] *Izdat. "Štiinca", Kishinev*, 1976. 226 pp. (Raičo Lazarov) **57** #11282 73.65
- (with Čeban, V. G.) The impact of a viscoelastic rod of varying cross-section on a rigid barrier. (Russian) *Bul. Akad. Štiinca RSS Moldoven.* **1977**, no. 1, 35-38, 94. (V. P. Kalašnikov) **56** #4331 73.35
- Saboia, Joao L. M. (with Barlow, Richard E.) Bounds and inequalities on the rate of population growth. *Reliability and biometry: statistical analysis of lifelength (Proc. Conf., Florida State Univ., Tallahassee, Fla., 1973)*, pp. 129-162. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1974. (N. Keyfitz) **52** #5085 92A15
- Sabotka, E. F. (with McAllister, Gregory T.) Discrete Green's functions. *Math. Comp.* **27** (1973), 59-80. (R. B. Simpson) **49** #6655 65P05
- Sabouni, Raja (with MacFarlane, A. G. J.) Functional-matrix theory for the general linear electrical network. III. Eigenvector method for inversion of the general functional matrix. *Proc. Inst. Elec. Engrs.* **113** (1966), 1268-1276. (Authors' summary) **47** #4728 94A20
- (with MacFarlane, A. G. J.) Functional-matrix theory for the general linear electrical network. IV. Bounds on eigenvalues and network reduction. *Proc. Inst. Elec. Engrs.* **115** (1968), 755-757. (Authors' summary) **47** #4729 94A20
- Šabozov, O. Š. (with Videnskii, V. S.) Generalized S. N. Bernstein polynomials with respect to the system of functions $\{(1+x/\lambda_n)^{-1}\}$. (Russian) Questions of modern mathematics and methods of teaching it at institutions of higher learning. *Leningrad. Gos. Ped. Inst. Učen. Zap.* **404** (1971), 322-334. (Editors) **55** #10914 41A10
- Monotonicity conditions for a sequence of rational operators that generalize the Bernstein polynomials. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **17** (1974), no. 11, 12-15. (D. D. Stancu) **52** #3811 41A20
- Sabra, A. I. A twelfth-century defence of the fourth figure of the syllogism. *J. Warburg and Courtauld Inst.* **28** (1965), 14-28. (Not reviewed) 01A35 (02-03)
- Thābit ibn Qurra on Euclid's parallels postulate. *J. Warburg and Courtauld Inst.* **31** (1968), 12-32. (Not reviewed) 01A30
- Simplicius's proof of Euclid's parallels postulate. *J. Warburg and Courtauld Inst.* **32** (1969), 1-24. (I. plate) (H. L. L. Busard) **56** #8275 01A35 (01A30, 01A20)
- Šabranskii, V. A. (with Kartašov, Ju. V.) The relative distribution of random points on a line. (Russian. French summary) *Vyčisl. Prikl. Mat. (Kiev)* No. 21 (1973), 145-151, 161. (E. M. Klimko) **48** #9798 60E05
- Sabri, M. Shaker (with Steenaart, Willem) Discrete Hilbert transform filtering. *Proceedings of the Eighteenth Midwest Symposium on Circuits and Systems (Concordia Univ., Montreal, Que., 1975)*, pp. 449-455. *Western Periodicals, North Hollywood, Calif.*, 1975. (Sudhakar M. Reddy) **55** #2307 93E10 (94A05)
- al-Sabti, George See Al-Sabti, George
- Sabuncuoğlu, Arif (with Hacısalıhoğlu, H. Hilmi) Higher curvatures of a strip. *Comm. Fac. Sci. Univ. Ankara Sér. A₁ Math.* **24** (1975), no. 4, 25-33. (J. Hoschek) **57** #17519 53A05 (53C45)
- (with Hacısalıhoğlu, H. Hilmi) On higher curvatures of a curve. (Turkish summary) *Comm. Fac. Sci. Univ. Ankara Sér. A₁ Math.* **24** (1975), no. 5, 33-46. (Punyapat Jha) **58** #12742 53A05 (53C70)
- Šabunin, L. V. The consistency of certain calculi of combinatory logic. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **26** (1971), no. 6, 71-75. (A. Sochor) **46** #3273 02C20
- A variant of combinatory logic with discriminators. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **27** (1972), no. 4, 53-58. (H. B. Curry) **47** #3102F43 (02C20)
- The undecidability of certain formal systems of combinatory logic. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 5, 36-40. (R. A. Di Paola) **49** #8846 02G05 (02G20)
- Simple combinatory calculi. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 6, 30-35. (H. B. Curry) **49** #2277 02C20
- Certain mass problems of the calculi of combinatory logic. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 6, 36-41. (H. B. Curry) **52** #2834 02C20
- Combinatory calculi. I. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 1, 12-17. (H. B. Curry) **52** #7863 02C20 (02G05)
- Combinatory calculi. II. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 2, 10-14. (H. B. Curry) **52** #7864 02C20 (02G05)
- On an interpretation of α -words that is connected with simple combinatory calculi. I. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 6, 3-9. (H. B. Curry) **54** #7210a 02C20 (68A05)
- On an interpretation of α -words that is connected with simple combinatory calculi. II. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **36** (1976), no. 1, 12-17. (H. B. Curry) **54** #7210b 02C20 (68A05)
- Šabunin, M. I. (with Evgrafov, M. A.; Bežanov, K. A.; Sidorov, Ju. V.; Fedorjuk, M. V.) ★Recueil de problèmes sur la théorie des fonctions analytiques. Traduit du russe. So la direction de M. Evgrafov. *Éditions Mir, Moscow*, 1974. 445 pp. (Editors) **51** #3406 30-01
- (with Vladimirov, V. S.; Mihaïlov, V. P.; Vašarin, A. A.; Karimova, H. H.; Sidorov, Ju. V.) ★Сборник задач по уравнениям математической физики. (Russian) [Collection of problems on the equations of mathematical physics] *Izdat. "Nauka", Moscow*, 1974. 271 pp. (Editors) **52** #14556 35-02
- (with Naumov, N. P.) Taking into account phase constraints in linear programming problems with a free right hand endpoint. (Russian) *Optimization methods and their applications (All-Union Summer Sem., Khakusy, Lake Baikal, 1972)* (Russian), pp. 46-179-180. *Sibirsk. Energet. Inst. Sibirsk. Otdel. Akad. Nauk SSSR, Irkutsk*, 1974. (Ja. Al'ber) **56** #1179 49D35
- (with Vladimirov, V. S.; Mihaïlov, V. P.; Karimova, H. H.; Sidorov, Ju. V.; Vašarin, A. A.) ★Recueil de problèmes d'équations de physique mathématique. Traduit du russe par Irina Pétrouva. *Éditions Mir, Moscow*, 1976. 264 pp. (Editors) **55** #5988 35-01
- Saburov, M. S. The boundedness of the solutions of a second order differential equation with periodic coefficients. (Russian) *Differencial'nye Uravnenija* **7** (1971), 2019-2020. (D. Izumova) **45** #2250 34C10
- Saburova, T. N. Superpositions of functions, and their series with respect to the Faber-Schauder system. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 401-404. (J. Musielak) **46** #5921 42A56
- A certain imbedding theorem for functions of the class Lip 1. (Russian) *Moskov. Zametki* **18** (1975), no. 3, 357-366. (J. Musielak) **55** #10955 42A56
- Certain properties of Fourier coefficients with respect to a Faber-Schauder system. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* (1976), no. 2, 297-300. (F. Schipp) **55** #8678 42A56
- Šabykeev, B. Approximate solution of a boundary value problem for an integrodifferential equation of Barbašin type with deviating argument. (Russian) *Collection of candidates' works of Kirgiz State University (physico-mathematical and natural sciences)*, No. 1. (Russian), pp. 46-51. *Kirgiz. Gos. Univ., Frunze*, 1969. (C. Corduneanu) **53** #14057 45K05
- Approximate solution of a nonlinear partial integrodifferential equation with deviating argument. (Russian) *Collection of candidates' works of Kirgiz State University (physico-mathematical and natural sciences)*, No. III (Russian), pp. 52-55. *Kirgiz. Gos. Univ., Frunze*, 1969. (C. Corduneanu) **53** #14058 45K05
- Approximate solution of a class of integro-partial differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk*, No. 7 (1970), 156-162. (See RŽMat **1971** #B326) 45K05
- (with Bektenov, A.) On the solution of the Goursat problem for a certain class of integro-partial differential equations with deviating argument. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk*, No. 9 (1974), 58-64. (See RŽMat **1974** #9 B488) 45K05
- Approximate solution of a boundary value problem for ordinary integrodifferential equations with retarded argument. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp.* **10** (1974), 75-79. (Editors) **54** #3330 45J05
- Solution of the initial value problem for partial integrodifferential equations by the reduction method. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp.* **10** (1974), 103-106. (Editors) **54** #3337 45K05
- Closeness of the solutions of certain integral equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk*, No. 12 (1976), 89-94. (Not reviewed) 45D05
- Sabziev, N. M. Best approximation of functions by means of entire functions in a domain of the form of a strip. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 1 (1975), 66-74. (D. A. Brannan) **55** #672 30A82
- Šac, Ė. M. (with Levin, M. I.) The increase in the number of nodes for a quadrature formula that is best on a set of functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 10(125), 46-52. (Walter Gautschi) **47** #6072 65D30
- Saccheri, Gerolamo See Hoormann, Cyril F. A., Jr., **55** #5378 and Angelelli, Ignazio **58** #15911
- Sacchetti, D. (with Campanato, Sergio; Tarsia, A.) Risultati di regolarità per la soluzione del problema di Cauchy in spazi di Hilbert. (English summary) *Boll. Un. Mat. Ital.* **12** (1975), no. 1-2, 56-65. (Sadakazu Aizawa) **53** #960 34G05
- Sacchi, G. (with Brezzi, Franco) A finite element approximation of a variational inequality related to hydraulics. *Calcolo* **13** (1976), no. 3, 257-273. (Authors' summary) **58** #24999 65N30 (49D99)
- Sacchi, M. T. (with Bosco, B.) On the conditions that a vector field vanish outside a given radius. *J. Mathematical Phys.* **15** (1974), 225-229. (C. M. Ablow) **48** #10312 78A05
- Sacco, William John On mixture distributions in pattern recognition. *Information Sci.* (1972), 101-120. (Terrence Fine) **46** #4811 68A45
- Sačenkov, A. V. (with Babadžanjan, V. G.; Galin's, A. K.) On V. Z. Vlasov's method of initial functions. (Russian) *Prikl. Meh.* **11** (1975), no. 1, 15-21, 140. (From the author's summary) **56** #10274 73.35
- (with Galimov, K. Z.; Artjuhın, Ju. P.; Karasev, S. N.; Daragan, V. I.; Kostin, A.; Jakušev, N. Z.) ★Теория оболочек с учетом поперечного сдвига. (Russian) [Theory of shells with account taken of transverse shift] *Izdat. Kazan. Univ., Kazan*, 1971. 211 pp. (Editors) **58** #25229 73.00
- (with Al'tsuler, G. V.) Solution of a three-dimensional problem of elasticity theory for a transversally isotropic layer. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 10(185), 122-133. (From the introduction) **58** #19592 73.35
- See also Studies in the theory of plates and shells, **48** #3343 and Collection: Al'muhamedov, M. I., **50** #1795
- Sacerdote, George S. On a problem of Boone. *Math. Scand.* **31** (1972), 111-117. (R. Lyndon) **47** #6871 20F05 (02F47)
- Some undecidable problems in group theory. *Proc. Amer. Math. Soc.* **36** (1972), 231-238. (R. C. Lyndon) **47** #8660 20A10 (02F47, 02G05)
- Almost all free products of groups have the same positive theory. *J. Algebra* (1973), 475-485. (A. Majeed) **48** #11323 20E30
- Elementary properties of free groups. *Trans. Amer. Math. Soc.* **178** (1973), 127-131. (R. C. Lyndon) **47** #8686 20E05 (02H15, 20F10)
- (with Schupp, Paul E.) SQ-universality in HNN groups and one relator groups. *London Math. Soc. (2)* **7** (1974), 733-740. (Stephen Meskin) **51** #718 20F05

- Projective model completeness. *J. Symbolic Logic* **39** (1974), 118-123. (G. Cherlin) **49** #8854 02H05
- Projective model theory and coforcing. *Model theory and algebra (A memorial tribute to Abraham Robinson)*, pp. 276-306. *Lecture Notes in Math.*, Vol. 498, Springer, Berlin, 1975. (G. Cherlin) **53** #10580 02H05
- Infinite coforcing in model theory. *Advances in Math.* **17** (1975), no. 3, 261-280. (J. M. Plotkin) **57** #9528 02H13 (02H15, 20E05)
- (with Fried, Michael D.) Solving Diophantine problems over all residue class fields of a number field and all finite fields. *Ann. of Math.* (2) **104** (1976), no. 2, 203-233. (J. Browkin) **58** #10722 10B15 (02H15, 12L99)
- A characterization of the subgroups of finitely presented groups. *Bull. Amer. Math. Soc.* **82** (1976), no. 4, 609-611. (C. R. J. Clapham) **54** #2814 20F10 (02F47)
- On the groups of Britton's Theorem A. *Canad. J. Math.* **28** (1976), no. 3, 635-639. (Leo P. Comerford, Jr.) **54** #2815 20F10
- Some logical problems concerning free and free product groups. *Rocky Mountain J. Math.* **6** (1976), no. 3, 401-408. (A. I. Kokorin) **54** #4958 02G05 (02F47, 20E30)
- (with Tenney, Richard L.) The decidability of the reachability problem for vector addition systems (preliminary version). *Conference Record of the Ninth Annual ACM Symposium on Theory of Computing (Boulder, Colo., 1977)*, pp. 61-76. *Assoc. Comput. Mach., New York*, 1977. (L. H. Landweber) **58** #8477 68A10 (94A30)
- The Boone-Higman theorem and the conjugacy problem. *J. Algebra* **49** (1977), no. 1, 212-221. (R. C. Lyndon) **56** #8350 02F47 (20F10)
- Subgroups of finitely presented groups. *Proc. London Math. Soc.* (3) **35** (1977), no. 2, 193-212. (R. C. Lyndon) **56** #5728 20F10 (02F47)
- See also **Conference: Group Theory**, **51** #658
- Pham Hū'u Säch** See **Pham Hū'u Säch**
- cha, Krzysztof** Discontinuities in an address machine. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **20** (1975), no. 3, 311-320. (Author's summary) **56** #18187 94A30 (68A99)
- Multiprogramming in an address machine. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **21** (1976), no. 3, 357-369. (Author's summary) **57** #1972 68A25
- Interruptions in computing machines: a formal description. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 12, 1145-1152. (R. N. Goss) **55** #4788 68A25
- Indirect addressing and program modification. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **23** (1978), no. 1-2, 159-170. (From the summary) **58** #26614 94A30 (68A05)
- char, Howard E.** (with Assmus, Edward F., Jr.; Mattson, Harold F., Jr.) A new form of the square root bound. *SIAM J. Appl. Math.* **30** (1976), no. 2, 352-354. (Authors' summary) **55** #12286 94A10
- (with Assmus, Edward F., Jr.) Ovals from the point of view of coding theory. *Higher combinatorics (Proc. NATO Advanced Study Inst., Berlin, 1976)*, pp. 213-216. *NATO Adv. Study Inst. Ser., Ser. C: Math. and Phys. Sci.*, 31. Reidel, Dordrecht, 1977. (J.-M. Goethals) **58** #27562 05B25 (94A10)
- chdev, P. L.** (with Prasad, Phoolan) Recent developments in the mathematical theory of Korteweg-de Vries equation. *J. Mathematical and Physical Sci.* **9** (1975), 203-244. (G. L. Lamb, Jr.) **53** #3520 35Q99
- Some exact solutions of Burgers-type equations. *Quart. Appl. Math.* **34** (1976), no. 1, 118-122. (Author's summary) **56** #6074 35C05
- (with Seshadri, V. S.) Quasi-simple wave solutions for acoustic gravity waves. *Phys. Fluids* **20** (1977), no. 6, 888-894. (L. M. Hocking) **56** #1930 7635
- chdev, S.** (with Jain, R. K.) Higher order repeated quadrature methods. *Z. Angew. Math. Mech.* **52** (1972), 55-56. (V. Pereyra) **45** #7988 65D30
- chdev, B. K.** (with Kanwal, Ram P.) Approximate solutions of certain integral equations for the diffraction by two strips. (French summary) *Z. Angew. Math. Phys.* **24** (1973), 111-119. **47** #9959 7845
- (with Kanwal, Ram P.) The solution of some integral equations and their connection with dual integral equations over a multiple interval. *IJAA Internat. J. Appl. Anal.* **1** (1977), no. 1, 71-86. (Editors) **58** #29916 45E10
- chdeva, S. K.** (with Tembharey, D. J.) A note on the two-point tensors in a generalized Finsler space. *Math. Education* **5** (1971), A49-A51. (S. Golab) **46** #4423 53B40
- chdeva, Usha** On finite invariant measure for semigroups of operators. *Canad. Math. Bull.* **14** (1971), 197-206. (A. T.-M. Lau) **50** #578 28A70 (47D05)
- On category of mixing in infinite measure spaces. *Math. Systems Theory* **5** (1971), 319-330. (Michael Weiss) **46** #5585 28A65
- cher, R.** (with Fischer, G.) ★Einführung in die Algebra. Teubner Studienbücher Mathematik. B. G. Teubner, Stuttgart, 1974. 238 pp. (L. A. Skornjakov) **55** #12380 00A05
- cher, Richard S.** (with Cottle, Richard W.) On the solution of large, structured linear complementarity problems: the tridiagonal case. *Appl. Math. Optim.* **3** (1976/77), no. 4, 321-340. (Jacques Dubois) **57** #1845 65F10
- cheti, N. C.** (with Bhatt, B. S.) Unsteady motion of a second order fluid between parallel plates. *Indian J. Pure Appl. Math.* **6** (1975), no. 9, 996-1006. (M. N. L. Narasimhan) **57** #2143 7644
- (with Bhatt, B. S.) Unsteady motion of a particular class of Rivlin-Ericksen fluid in a rectangular channel. *Univ. Nac. Tucumán Rev. Ser. A* **25** (1975), no. 1-2, 173-180 (1976). (Jacques Mauss) **54** #14554 7635
- Plane Couette flow of two immiscible incompressible non-Newtonian fluids with uniform suction at the stationary plate. *Indian J. Pure Appl. Math.* **7** (1976), no. 5, 527-540. (From the summary) **58** #25349 7635
- See also **Collection: Bhatnagar, Prabhu L.**, **52** #10304
- cheti, Shailendra** (with Shieh, Leang San) A matrix in the block Schwarz form and the stability of matrix polynomials. *Internat. J. Control* **27** (1978), no. 2, 245-259. (H. R. Schwarz) **57** #5310 93D05
- chidananda, S. V.** (with Jain, R. K.) Universal stability in hydromagnetics. *J. Mathematical and Physical Sci.* **8** (1974), 355-362. (L. G. Chambers) **54** #11970 7649
- (with Jain, R. K.) Benard problem with a porous boundary. *Pure Appl. Math. Sci.* **7** (1978), no. 1-2, 67-76. (Authors' summary) **57** #2123 7635
- Sachish, Arie** (with Roll, Yaakov) Combined overhaul and replacement policies for deteriorating equipment. *J. Oper. Res. Soc. Japan* **21** (1978), no. 2, 274-286. (Andor Dobó) **58** #9197 90B25
- Sachrajda, C. T.** (with Weldon, H. Arthur; Blankenbecler, Richard) New lower bounds for quantum Hamiltonians. *Phys. Rev. D* (3) **17** (1978), no. 2, 507-513. (Authors' summary) **57** #2282 8135
- Sachs, Albert** (with Neugebauer, Otto) Some atypical astronomical cuneiform texts. I. *J. Cuneiform Studies* **21** (1967), 183-218 (1969). (Editors) **58** #9989a 01A15
- (with Neugebauer, Otto) Some atypical astronomical cuneiform texts. II. *J. Cuneiform Studies* **22** (1968/69), no. 3-4, 92-113. (Editors) **58** #9989b 01A15
- Iterationsverfahren für elliptische (nichtlineare) Differenzenoperatoren in Divergenzform. (English summary) *Numerische Lösung nichtlinearer partieller Differential- und Integrodifferentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1971)*, pp. 305-322. *Lecture Notes in Math.*, Vol. 267, Springer, Berlin, 1972. (J. Mikliček) **50** #1500 65J05
- Iterationsverfahren für monotone, nicht notwendig Lipschitz-beschränkte Operatoren im Hilbert-Raum. (English summary) *Numer. Math.* **20** (1972/73), 356-363. (B. Jankó) **47** #6085 65J05
- Lineare Randinterpolation bei elliptischen Operatoren in Divergenzform unter Dirichlet-Randbedingungen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), T207-T209. (Ulrich Kosel) **50** #3600 65N05 (47H10)
- Zur Struktur eines Algorithmus zur Lösung freier Randwertprobleme parabolischer Differentialoperatoren. (English summary) *Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 223-233. *Lecture Notes in Math.*, Vol. 395, Springer, Berlin, 1974. (G. H. Meyer) **51** #4693 65N10
- (with Geistbeck, F.) Optimale Fehlerabschätzungen mit dualen Funktionalen bei semilinearen Randwertaufgaben gewöhnlicher Differentialgleichungen. (English summary) *Numer. Math.* **22** (1974), 127-136. (J. Hersch) **52** #2223 65L10
- Zur globalen Konvergenz eines impliziten Differenzenverfahrens für ein freies Randwertproblem der Wärmeleitungsgleichung. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Munich, 1973). *Z. Angew. Math. Mech.* **54** (1974), T232-T233. (I. M. Sheffer) **50** #6174 65N10
- Zur numerischen Behandlung freier Randwertprobleme parabolischer Differentialgleichungen. *Numerische Methoden der Approximationstheorie, Band 2 (Vortragsauszüge einer Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 119-125. *Internat. Schrift. Numer. Math.*, Band 26, Birkhäuser, Basel, 1975. (G. H. Meyer) **54** #9103 65M05 (8065)
- Numerische Simulation von Diffusionsprozessen. (English summary) *Numerische Behandlung von Differentialgleichungen, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1975)*, pp. 191-198. *Internat. Ser. Numer. Math.*, Vol. 31, Birkhäuser, Basel, 1976. (Author's summary) **58** #25029 65P05 (8065)
- See also **Numerische Methoden bei Differentialgleichungen und mit funktionalanalytischen Hilfsmitteln**, **49** #11758 and **Place of astronomy in the ancient world**, **57** #15838
- Sachs, B. K.** See **General relativity and cosmology**, **49** #8567
- Sachs, David** A note on geometric mappings. *Rend. Sem. Mat. Univ. Padova* **47** (1972), 23-28. (K. A. Baker) **47** #8334 05B35 (50A20)
- See also **Möbius algebras**, **49** #4875
- Sachs, Ekkehard** Computation of bang-bang-controls and lower bounds for a parabolic boundary-value control problem. *Optimization and operations research (Proc. Conf., Oberwolfach, 1975)*, pp. 247-257. *Lecture Notes in Econom. Math. Systems*, Vol. 117, Springer, Berlin, 1976. (Siegfried Filippi) **56** #11288 93C99
- Computation of lower bounds of an optimal control problem via homogeneous programming. *First Symposium on Operations Research (Univ. Heidelberg, Heidelberg, 1976)*, Teil 1, pp. 406-414. *Operations Research Verfahren, XXV. Hain, Meisenheim*, 1977. (Author's summary) **58** #32972 90C30 (65K05, 93C99)
- (with Glashoff, Klaus) On theoretical and numerical aspects of the bang-bang-principle. *Numer. Math.* **29** (1977/78), no. 1, 93-113. (Rémi Vaillancourt) **57** #7301 49A35 (90C25)
- Sachs, Hans** Ein isotropes Analogon zu einem Satz von Abramescu und einige Grenzwertformeln. *Arch. Math. (Basel)* **23** (1972), 661-668. (H. Brauner) **47** #4164 53A40
- Einige Kennzeichnungen der Edlinger-Flächen. *Monatsh. Math.* **77** (1973), 241-250. (F. Semin) **48** #9569 53A05
- Projektiv-metrische Kennzeichnungen konstant gedrahter Regelflächen. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **182** (1974), 155-175. (P. Drăgăliă) **50** #1143 53A40
- Edlinger-Flächen in isotropen Räumen. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B.* **1975**, 59-86 (1976). (Walter O. Vogel) **54** #3600 53A05
- Kreisflächen im zweifach isotropen Raum. (English summary) *J. Geometry* **8** (1976), no. 1/2, 33-47. (P. Drăgăliă) **57** #17529 53A40
- Zur Geometrie der Sphären im einfach isotropen Raum. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **186** (1977), no. 4-7, 241-261. (Walter O. Vogel) **58** #18207 53A40
- Sachs, Horst** (with Petersdorf, M.) Spektrum und Automorphismengruppe eines Graphen. *Combinatorial Theory and its Applications, III (Proc. Colloq., Balatonfüred, 1969)*, pp. 891-907. *North-Holland, Amsterdam*, 1970. (A. J. Schwenk) **46** #8897 05C25
- ★Einführung in die Theorie der endlichen Graphen. Unter Mitarbeit von H.-J. Finck, H. Hutschenreuther, E. Kaiser, R. Lang, M. Schäuble, H.-J. Voß und H. Walther. *Carl Hanser Verlag, Munich*, 1971. 182 pp. (Editors) **49** #10587 05Cxx
- (with Baumann, Horst; Burosch, Gustav; Dück, Werner; Eilhauer, Rolf; Elster, Karl-Heinz; Freier, Manfred; Gärtner, Karl-Heinz; Körth, Heinz; Lang, Rainer; Otto, Carl; Patzer, Heiko; Runge, Walter; Schoch, Manfred; Strohe, Hans-Gerhard; Weiß, Manfred) ★Mathematik für ökonomische und ingenieurökonomische Fachrichtungen. Teil I: Mathematische Grundlagen. Herausgegeben von Heinz Körth, Carl Otto, Walter Runge und Manfred Schoch. *Verlag Die Wirtschaft, Berlin*, 1971. 997 pp. (Editors) **50** #6240 69.00

- ★Einführung in die Theorie der endlichen Graphen. Teil II. Mathematisch-Naturwissenschaftliche Bibliothek, No. 44. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1972. 272 pp. (W. Moser) 51 #216 05Cxx
(with Finck, Hans-Joachim) Über Beziehungen zwischen Struktur und Spektrum regulärer Graphen. *Wiss. Z. Techn. Hochsch. Ilmenau* 19 (1973), no. 3-4, 83-99. (Rudolf Halin) 48 #5899 05C20
(with Runge, Fritz) Berechnung der Anzahl der Gerüste von Graphen und Hypergraphen mittels deren Spektren. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 529-536. (Frank W. Owens) 52 #2933 05C05
(with Schäuble, M.) The construction of uniquely k -colorable graphs without cycles of length three—a remark on a paper of Ja. Nešetřil: "On uniquely colorable graphs without short cycles" (*Časopis Pěst. Mat.* 98 (1973), 122-125). (Russian) *Math. Nachr.* 63 (1974), 387-391. (D. Cvetković) 51 #5372 05C15
Die Renaissance der Mathematik der diskreten Gebilde im Lichte des wissenschaftlich-technischen Fortschritts. *Wiss. Z. Techn. Hochsch. Ilmenau* 20 (1974), no. 4-5, 21-31. (Editors) 58 #26680 01-01
On some investigations in the theory of the four-colour problem. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. III, pp. 1227-1234. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (F. Bernhart) 52 #10476 05C15
On the number of spanning trees. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 529-535. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, Man., 1976. (P. K. Stockmeyer) 55 #167 05C30
See also **Papers: Balkan Mathematical Congress**, 51 #2824
- Sachs, Lothar** ★Statistische Auswertungsmethoden. Zweite, neubearbeitete und erweiterte Auflage. Springer-Verlag, Berlin-New York, 1972. xxii + 677 pp. (Editors) 47 #1165a 65-02
★Statistische Auswertungsmethoden. Dritte, neubearbeitete und erweiterte Auflage mit neuer Bibliographie. Springer-Verlag, Berlin-New York, 1972. xx + 545 pp. (Editors) 47 #1165b 65-02
★Статистическое оценивание. (Russian) [Statistical estimation] Translated from the German third edition by V. N. Varygin. Edited, and with a foreword by Ju. P. Adler and V. G. Gorskiĭ. "Statistika", Moscow, 1976. 599 pp. (Editors) 55 #4437 62-01
- Sachs, M. W.** See **Stochastic point processes: statistical analysis, theory, and applications**, 48 #10008
- Sachs, Mendel** Comments on: "The clock paradox as a cosmological problem" (*Internat. J. Theoret. Phys.* 14 (1975), no. 3, 161-168) by K. Y. Fu. *Internat. J. Theoret. Phys.* 16 (1977), no. 7, 555-560. (Dieter Ebner) 56 #14517 83.53
On the quantization of electrical charge from general relativity. *Lett. Nuovo Cimento* (2) 21 (1978), no. 4, 123-126. (Not reviewed) 83.22
- Sachs, Rainer Kurt** (with Berezdivin, R.) A lemma on the Einstein-Liouville equations. *Relativity (Proc. Conf. Midwest, Cincinnati, Ohio, 1969)*, pp. 125-131. Plenum, New York, 1970. (H. S. Green) 49 #12026 83.53
(with Olson, D. W.) The production of vorticity in an expanding, self-gravitating fluid. *Astrophys. J.* 185 (1973), 91-104. (François Ronday) 48 #10426 85.62
Spacetime b -boundaries. *Comm. Math. Phys.* 33 (1973), 215-220. (R. I. Pimenov) 48 #13163 83.53 (53B30)
(with Eardley, Douglas M.) Space-times with a future projective infinity. *J. Mathematical Phys.* 14 (1973), 209-212. (J. Charles-Renaudie) 49 #6879 83.53
(with Berezdivin, R.) Matter symmetries in general relativistic kinetic theory. *J. Mathematical Phys.* 14 (1973), 1254-1257. (J. Ławrynowicz) 48 #13135 83.53
(with Hawking, Stephen W.) Causally continuous spacetimes. *Comm. Math. Phys.* 35 (1974), 287-296. (H. Rund) 48 #13180 83.57
(with Budic, Robert) Causal boundaries for general relativistic space-times. *J. Mathematical Phys.* 15 (1974), 1302-1309. (J. K. Beem) 50 #9287 83.53
(with Budic, Robert) Scalar time functions: differentiability. *Differential geometry and relativity*, pp. 215-224. *Mathematical Phys. and Appl. Math.*, Vol. 3, Reidel, Dordrecht, 1976. (M. A. H. MacCallum) 56 #2173 83.53
(with Budic, Robert) Deterministic space-times. The riddle of gravitation—on the occasion of the 60th birthday of Peter G. Bergmann (*Proc. Conf., Syracuse Univ., Syracuse, N. Y., 1975*). *General Relativity and Gravitation* 7 (1976), no. 1, 21-29. (Murray Cantor) 56 #4648 83.53 (58D05)
(with Wu, Hung Hsi) ★General relativity for mathematicians. Graduate Texts in Mathematics, Vol. 48. Springer-Verlag, New York-Heidelberg, 1977. xii + 291 pp. ISBN 0-387-90218-X (F. J. Flaherty) 58 #20239a 83.53 (53-02)
(with Wu, Hung Hsi) General relativity and cosmology. *Bull. Amer. Math. Soc.* 83 (1977), no. 6, 1101-1164. (F. J. Flaherty) 58 #20239b 83.53 (53-02)
- Sachsenmaier, W.** (with Tyson, John J.) Is nuclear division in Physarum controlled by a continuous limit cycle oscillator? *J. Theoret. Biol.* 73 (1978), no. 4, 723-738. (H. A. DeKleine) 58 #26148 92A05
- Sachsse, Hans** See **Wissenschaftstheorie**, (Not reviewed) and **Wissenschaftstheorie**, 53 #2579
- Sack, I. Howard** Prefilter consequence operators and their realizations by logical matrices with multi-valued truth sets. *Rep. Math. Logic* No. 5 (1975), 91-92. (Mieczysław Omyła) 57 #9481 02C05
- Sack, R. A.** A fully stable rational version of the QR algorithm for tridiagonal matrices. *Numer. Math.* 18 (1971/72), 432-441. (B. Levinger) 46 #10187 65F15
(with Donovan, A. F.) An algorithm for Gaussian quadrature given modified moments. *Numer. Math.* 18 (1971/72), 465-478. (Walter Gautschi) 46 #2829 65D30
Variational solutions for eigenvalues of single and coupled Lamé equations. *J. Inst. Math. Appl.* 10 (1972), 279-288. (C. J. Bouwkamp) 49 #8279 65D20
(with Maskell, S. J.) Generalised Lobatto quadrature formulas for contour integrals. *Studies in numerical analysis (papers in honour of Cornelius Lanczos on the occasion of his 80th birthday)*, pp. 295-310. Academic Press, London, 1974. (Sven-Åke Gustafson) 50 #8924 65D30
(with Balmer, D. W.; Boulton, M.) Optimal solutions in parameter estimation problems for the Cauchy distribution. *J. Amer. Statist. Assoc.* 69 (1974), 238-242. (S. K. Katti) 51 #11774 62F10
- Generating functions for spherical harmonics. I. Three-dimensional harmonics. *SIAM J. Math. Anal.* 5 (1974), 774-796. (H. Hochstadt) 50 #5055 33A45
Generalization of Mehler's formula on Hermite polynomials to an arbitrary number of variables. *Jñānabha Sect. A* 5 (1975), 105-110. (From the author's introduction) 57 #12942 33A65
Comments on some quadrature formulas by F. Stenger. *J. Inst. Math. Appl.* 2 (1978), no. 3, 359-361. (David K. Kahaner) 58 #13644 65D30
- Sacker, Robert J.** (with Sell, George R.) The existence of periodic solutions on two-manifolds. *Advances in differential and integral equations (Conf. Qualitative Theory of Nonlinear Differential and Integral Equations, Univ. Wisconsin, Madison, Wis., 1968; memorial Rudolph E. Langer (1894-1968))*, pp. 117-118. *Studies in Appl. Math.*, No. 1, Soc. Indust. Appl. Math., Philadelphia, Pa., 1969. (Roger C. McCann) 51 #913 58F20 (34C35)
The homology of invariant sets of flows. *Ordinary differential equations (Proc. Conf. Math. Res. Center, Naval Res. Lab., Washington, D. C., 1971)*, pp. 265-275. Academic Press, New York, 1972. (A. A. Reinfelds) 54 #8729 58F10 (54H20, 34C35)
(with Sell, George R.) On the existence of periodic solutions on 2-manifolds. *Differential Equations* 11 (1972), 449-463. (F. W. Wilson, Jr.) 45 #7755 57D20 (34C35)
(with Sell, George R.) A note on almost periodic differential equations. *Équations différentielles et fonctionnelles non linéaires (Actes Conf. Internat. "Equa-Diff 73", Brussels/Louvain-la-Neuve, 1973)*, pp. 93-96. Hermann, Paris, 1973. (T. Yoshizawa) 53 #8569 34C35 (54H20)
(with Sell, George R.) Skew-product flows, finite extensions of minimal transformation groups and almost periodic differential equations. *Bull. Amer. Math. Soc.* 79 (1973), 802-805. (J. Auslander) 51 #9040 54H20
(with Sell, George R.) On the existence of nontrivial recurrent motions. *Duke Math. J.* 40 (1973), 815-819. (Karl Petersen) 48 #7237 54H20
(with Sell, George R.) A note on Anosov diffeomorphisms. *Bull. Amer. Math. Soc.* 80 (1974), 278-280. (Waldyr M. Oliva) 48 #9765 58F15
(with Sell, George R.) Existence of dichotomies and invariant splittings for linear differential systems. I. *J. Differential Equations* 15 (1974), 429-458. (A. Morimoto) 49 #6209 54H20 (58F15)
Asymptotic approach to periodic orbits and local prolongations of maps. *Pacific Math.* 51 (1974), 273-287. (J. D. Baum) 49 #11569 58F20 (54H20)
(with Sell, George R.) Finite extensions of minimal transformation groups. *Trans. Amer. Math. Soc.* 190 (1974), 325-334. (J. Auslander) 50 #3207 54H20
(with Sell, George R.) A spectral theory for linear almost periodic differential equations. *International Conference on Differential Equations (Proc., Univ. Southern California, Los Angeles, Calif., 1974)*, pp. 698-708. Academic Press, New York, 1975. (Walter Eberhard) 54 #656 34D05 (34E10, 34C25)
Linear skew-product dynamical systems. *Differential equations (Third Mexico-U.S. Sympos., Mexico City, 1975) (Spanish)*, pp. 87-105. *Math. Notes and Sympos., Vol. Fondo de Cultura Económ., Mexico City, 1976*. (W. L. Reddy (Zbl 361 #3404)) 58 #24369 58F10
Skew-product dynamical systems. *Dynamical systems (Proc. Internat. Sympos. Brown Univ., Providence, R.I., 1974)*, Vol. II, pp. 175-179. Academic Press, New York, 1976. (Prem Bajaj) 58 #31014 54H20
(with Sell, George R.) Existence of dichotomies and invariant splittings for linear differential systems. II. *J. Differential Equations* 22 (1976), no. 2, 478-496. (A. Morimoto) 55 #13494 58F10 (34D35)
(with Sell, George R.) Existence of dichotomies and invariant splittings for linear differential systems. III. *J. Differential Equations* 22 (1976), no. 2, 497-522. (A. Morimoto) 55 #13495 58F10 (34D35)
(with Sell, George R.) Lifting properties in skew-product flows with applications to differential equations. *Mem. Amer. Math. Soc.* 11 (1977), no. 190, iv + 67 pp. (L. Jancsó) 56 #6632 54H20 (34K05, 58F10)
Existence of dichotomies and invariant splittings for linear differential systems. IV. *J. Differential Equations* 27 (1978), no. 1, 106-137. (A. Morimoto) 57 #16849 34D05 (34C35, 54H20)
(with Sell, George R.) A spectral theory for linear differential systems. *J. Differential Equations* 27 (1978), no. 3, 320-358. (F. W. Wilson, Jr.) 58 #18604 58F99 (34B25, 54H20)
- Sackett, Gary G.** Numerical solution of a parabolic free boundary problem arising in statistical decision theory. *Math. Comp.* 25 (1971), 425-434. (J. D. Hwang) 45 #9519 65N35
- Sackfield, A.** (with Frost, M. G.) Polynomials of the form ${}_2F_0$ as determinants. *J. Inst. Math. Appl.* 16 (1975), no. 3, 389-392. (R. A. Askey) 53 #13670 33A30
- Sačkov, E. G.** The solution of boundary value problems of finding eigenvalue by the method of fixing. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 16 (1976), no. 1, 119-130, 27. (Jan Bochenek) 54 #14397 65N25
- Sačkov, G. P.** (with Rjabov, B. A.) The accumulation of disturbances in invariant dynamical systems. (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 549-551. (Djordje Djukic) 47 #10101 93B05
(with Rjabov, B. A.) The structural stability of invariant systems. (Russian) *Dokl. Akad. Nauk SSSR* 217 (1974), 24-26. (J. Jarník) 50 #13767 34D30
(with Rjabov, B. A.) The requirements for correctness in invariant control systems. (Russian) *Dokl. Akad. Nauk SSSR* 227 (1976), no. 3, 588-591. (RZMat 1976 #8 V31) 58 #9589 93C45
- Sačkov, Ju. S.** See **Poincaré, Henri**, 52 #2804
- Sačkov, V. N.** The distribution of the number of the various elements of a symmetric basis in a random mA -sample. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* (1971), 504-513. (From the author's summary) 54 #1336 60C05 (05A17)
Distribution of the number of fixed points of the elements of a symmetric semigroup that satisfy the condition $\sigma^{h+1} = \sigma^h$, and the number of trees of height not greater than h . (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 16 (1971), 676-687. (From the author's summary) 53 #13027 05C30 (60C05)
Mappings of a finite set with constraints on contours and height. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 17 (1972), 679-694. (D. A. Darling) 47 #10100 60C05 (05C99)

- Random partitionings of sets with marked subsets. (Russian) *Mat. Sb. (N.S.)* **92**(134) (1973), 491-502, 504. (J. B. Roberts) **49** #1551 60C05
- Random mappings of bounded height. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 122-132. (D. A. Darling) **47** #1096 60C05 (05C99)
- (with Galuškín, A. I.; Degtjarev, Ju. I.; Kalinin, B. N.; Kostjuk, G. A.; Markov, V. N.; Pupkov, K. A.; Šimko, N. A.) ★Основы кибернетики. (Russian) [Foundations of cybernetics] Математические основы кибернетики. [Mathematical foundations of cybernetics] Edited by K. A. Pupkov. "Vysšaja Škola", Moscow, 1974. 416 pp. (Editors) **50** #9089 69.00
- Random partitions of sets. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **19** (1974), 187-194. (M. Skalsky) **49** #1552 60C05
- The extreme points of the space of symmetric stochastic matrices. (Russian) *Mat. Sb. (N.S.)* **96**(138) (1975), 447-457, 504. (E. Seneta) **51** #8149 15A51 (60J10)
- Systems of distinct representatives for random sets. (Russian) *Mat. Sb. (N.S.)* **97**(139) (1975), no. 3(7), 395-402, 464. (Ju. D. Burtin) **52** #2905 05A05
- (with Bolotnikov, Ju. V.; Tarakanov, V. E.) Asymptotic normality of certain quantities that are related to the cyclic structure of random permutations. (Russian) *Mat. Sb. (N.S.)* **99**(141) (1976), no. 1, 121-133, 136. (T. C. Brown) **54** #3793 60C05 (05A10)
- Sackrowitz, Harold B.** A note on approachability in a two-person game. *Ann. Math. Statist.* **43** (1972), 1017-1019. (Author's summary) **45** #9705 90D05
- (with Strawderman, W.) On the admissibility of the M.L.E. for ordered binomial parameters. *Ann. Statist.* **2** (1974), 822-828. (I. V. Romanovskii) **51** #4483 62C15
- (with Cohen, Arthur) On estimating the common mean of two normal distributions. *Ann. Statist.* **2** (1974), 1274-1282. (C. J. Park) **51** #2103 (E **54** #3926) 62F10
- (with Samuel-Cahn, Ester) Inspection procedures for Markov chains. *Management Sci.* **21** (1974/75), no. 3, 261-270. (Authors' summary) **55** #11541 62N10 (90B30)
- (with Cohen, Arthur) Unbiasedness of the chi-square, likelihood ratio, and other goodness of fit tests for the equal cell case. *Ann. Statist.* **3** (1975), no. 4, 959-964. (V. P. Bhapkar) **52** #1984 62F05 (62G10)
- (with Cohen, Arthur) Correction to: "On estimating the common mean of two normal distributions" (Ann. Statist. **2** (1974), 1274-1282). *Ann. Statist.* **4** (1976), no. 6, 1294. (Editors) **54** #3926 62F10
- (with Cohen, Arthur) Admissibility of chi-square, likelihood ratio, and other goodness of fit tests. *Sankhyā Ser. B* **38** (1976), no. 4, 350-355. (James Berger) **58** #31499 62C15
- (with Cohen, Arthur) Hypothesis testing for the common mean and for balanced incomplete block designs. *Ann. Statist.* **5** (1977), no. 6, 1195-1211. (E. J. Williams) **56** #6970 62F05 (62K10, 62C15)
- Sacks, Gerald E.** Recursion in objects of finite type. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1*, pp. 251-254. Gauthier-Villars, Paris, 1971. (Peter G. Hinman) **56** #15391 02F29
- On the reducibility of Π_1^1 sets. *Advances in Math.* **7**, 57-82 (1971). (R. Platek) **45** #4976 02F25
- ★Saturated model theory. Mathematics Lecture Note Series. *W. A. Benjamin, Inc., Reading, Mass.*, 1972. xii + 335 pp. (P. Štěpánek) **53** #2668 02H05 (02H13)
- (with Simpson, Stephen G.) The α -finite injury method. *Ann. Math. Logic* **4** (1972), 343-367. (H. Luckhardt) **51** #5277 02F27
- (with Lerman, Manuel) Some minimal pairs of α -recursively enumerable degrees. *Ann. Math. Logic* **4** (1972), 415-442. (Viggo Stoltenberg-Fischer) **55** #12491 02F27
- The differential closure of a differential field. *Bull. Amer. Math. Soc.* **78** (1972), 629-634. (U. Felgner) **45** #8514 02H25 (12H05)
- The 1-section of a type n object. *Generalized recursion theory (Proc. Sympos., Univ. Oslo, Oslo, 1972)*, pp. 81-93. *Studies in Logic and the Foundations of Math.*, Vol. 79, North-Holland, Amsterdam, 1974. (Peter G. Hinman) **53** #2662 02F29
- Remarks against foundational activity. *Proceedings of the American Academy Workshop on the Evolution of Modern Mathematics (Boston, Mass., 1974)*. *Historia Math.* **2** (1975), no. 4, 523-528. (I. Grattan-Guinness) **58** #127 02A05 (01A60)
- ★Теория насыщенных моделей. (Russian) [Saturated model theory] Translated from the English by L. L. Maksimova and E. A. Paljutin. Edited by A. D. Taimanov. Izdat. "Mir", Moscow, 1976. 190 pp. (Editors) **53** #114 02Hxx
- Countable admissible ordinals and hyperdegrees. *Advances in Math.* **20** (1976), no. 2, 213-262. (Stephen G. Simpson) **55** #2536 02F27
- (with Abramson, Fred G.) Uncountable Gandy ordinals. *J. London Math. Soc.* (2) **14** (1976), no. 3, 387-392. (J. M. Plotkin) **55** #5419 02F27 (04A10)
- R.E. sets higher up. *Logic, foundations of mathematics and computability theory (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975), Part I*, pp. 173-194. *Univ. Western Ontario Ser. Philos. Sci.*, Vol. 9, Reidel, Dordrecht, 1977. (K. J. Barwise) **57** #12196 02F29
- The k -section of a type n object. *Amer. J. Math.* **99** (1977), no. 5, 901-917. (S. S. Wainer) **58** #21543 02F29
- (with Friedman, S. D.) Inadmissible recursion theory. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 255-256. (Stephen G. Simpson) **58** #21536 02F27
- See also **Reminiscences of logicians**, **52** #17
- Sacks, J. E.** (with Sorenson, Harold W.) Recursive fading memory smoothing. *Information Sci.* **5** (1973), 45-61. (D. D. Sworder) **47** #10112 93E10
- Sacks, Jerome** (with Ylvisaker, Donald) A note on Huber's robust estimation of a location parameter. *Ann. Math. Statist.* **43** (1972), 1068-1075. (P. J. Huber) **47** #6023 62G05
- An asymptotically efficient sequence of estimators of a location parameter. *Ann. Statist.* **3** (1975), 285-298. (J. Wolfowitz) **50** #11629 62G20
- (with Marcus, Michael B.) Robust designs for regression problems. *Statistical decision theory and related topics. II (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976)*, pp. 245-268. Academic Press, New York, 1977. (P. J. Huber) **56** #4049 62G35
- (with Uhlenbeck, Karen) The existence of minimal immersions of two-spheres. *Bull. Amer. Math. Soc.* **83** (1977), no. 5, 1033-1036. (A. J. Tremba) **56** #6715 58E15
- (with Ylvisaker, Donald) Linear estimation for approximately linear models. *Ann. Statist.* **6** (1978), no. 5, 1122-1137. (Farhad Mehran) **58** #18922 62J05 (62G35)
- Sacks, Jonathan** (with Gilkey, Peter B.) Spectral geometry and manifolds of constant holomorphic sectional curvature. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973), Part 2*, pp. 281-285. *Amer. Math. Soc., Providence, R.I.*, 1975. (Samuel I. Goldberg) **52** #1799 58G99 (32C10)
- Sacks, Susan T.** (with Chiang, Chin Long) A transition-probability model for the study of chronic diseases. *Math. Biosci.* **34** (1977), no. 3-4, 325-346. (Authors' summary) **58** #33156 92A15 (62P10)
- Sacks-Davis, R.** A real norm-reducing Jacobi-type eigenvalue algorithm. *Austral. Comput. J.* **7** (1975), no. 2, 65-69. (J. Segethová) **52** #9582 65F15
- Error estimates for a stiff differential equation procedure. *Math. Comp.* **31** (1977), no. 140, 939-953. (J. D. Lambert) **57** #14465 65L05
- Solution of stiff ordinary differential equations by a second derivative method. *SIAM J. Numer. Anal.* **14** (1977), no. 6, 1088-1100. (W. H. Enright) **57** #11059 65L05
- Sacksteder, Richard** On the structure and properties of statistical systems. *Trans. New York Acad. Sci.* (2) **28** (1965/66), 998-1004. (D. R. Truax) **45** #7853 62A99
- Strongly mixing transformations. *Global Analysis (Proc. Sympos. Pure Math., Vol. XIV, Berkeley, Calif., 1968)*, pp. 245-252. *Amer. Math. Soc., Providence, R. I.*, 1970. (From the author's introduction) **54** #3764 58F15 (28A65)
- (with Auslander, Louis; Brezin, Jonathan) A method in metric Diophantine approximation. Collection of articles dedicated to S. S. Chern and D. C. Spencer on their sixtieth birthdays. *J. Differential Geometry* **6** (1972), 479-496. (W. J. LeVeque) **48** #3908 10K15 (42A20, 60F20)
- Abelian semi-groups of expanding maps. *Recent advances in topological dynamics (Proc. Conf. Topological Dynamics, Yale Univ., New Haven, Conn., 1972; in honor of Gustav Arnold Hedlund)*, pp. 235-248. *Lecture Notes in Math.*, Vol. 318, Springer, Berlin, 1973. (L. A. Bunimovič) **54** #11398 58F10
- The measures invariant under an expanding map. *Géométrie différentielle (Colloq., Univ. Santiago de Compostela, Santiago de Compostela, 1972)*, pp. 179-194. *Lecture Notes in Math.*, Vol. 392, Springer, Berlin, 1974. (R. V. Chacon) **53** #11024 28A65 (58F15)
- A remark on Thurston's stability theorem. *Ann. Inst. Fourier (Grenoble)* **25** (1975), no. 2, xiii, 219-220. (Robert Roussarie) **52** #11948 57D30
- The infinitesimal stability of semigroups of expanding maps. *Trans. Amer. Math. Soc.* **221** (1976), no. 2, 281-288. (M. C. Irwin) **54** #6208 58F15 (58F10)
- On oscillatory flows. *Math. Intelligencer* **1** (1978/79), no. 1, 45-51. (A. Pozzi) **57** #18446 76.35
- Sacksteder, William** Logics. *Logique et Anal. (N.S.)* **20** (1977), no. 77-78, 42-66. (From the text) **58** #4999 02A05
- Sacolic, S.** (with Churchill, Richard C.; Pecelli, Giampiero; Rod, David L.) Coexistence of stable and random motion. *Proceedings of the Regional Conference on the Application of Topological Methods in Differential Equations (Boulder, Colo., 1976)*. *Rocky Mountain J. Math.* **7** (1977), no. 3, 445-456. (V. Staikos) **58** #13162 58F05 (34C25)
- Šacova, R. B.** Analytic approximation for the velocity function of stars when the random process is purely discontinuous. (Russian. English summary) *Astrofizika* **10** (1974), 593-610. (D. ter Haar) **51** #5777 85.62
- Săcu, Ion** On a generalization of Hölder's inequality. (Romanian. French summary) *Stud. Cerc. Mat.* **21** (1969), 1429-1433. (M. Iosifescu) **46** #6414 60E05
- On the reduction of a positive definite quadratic form to a sum of squares. (Romanian. English summary) *Stud. Cerc. Mat.* **22** (1970), 1351-1357. (Ion Enescu) **48** #11171 15A63
- (with Stoicescu, V.; Bădin, V.) Cumulative-sums control maps for conventional distributions. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1971**, no. 1, 45-66. (Vijendra P. Singh) **46** #4672 62N10
- (with Istrătescu, Vasile I.) Fixed point theorems for contraction mappings on probabilistic metric spaces. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 1375-1380. (H. Sherwood) **48** #9690 54H25
- Sacuk, V. V.** (with Amangel'diev, B. R.) A combined algorithm of random search. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1971**, no. 3, 6-11. (Authors' summary) **52** #9599 65K05
- See also **Coding theory and information modeling**, **49** #6994
- Săcunev, Ju. V.** (with Suharev, Ju. P.) Projection by rays of congruences (K_4). (Russian) *Penz. Politehn. Inst. Učen. Zap. Mat. Meh.* **1969**, no. 2, 80-84. **54** #11198 53A25
- Sadallah, Boubaker Khaled** Régularité de la solution de l'équation de la chaleur dans un domaine plan non rectangulaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 22, A1523-A1526. (L. A. Peletier) **52** #14653 35K05
- Régularité de la solution de l'équation de la chaleur dans un domaine plan non rectangulaire. (Italian summary) *Boll. Un. Mat. Ital. B* (4) **13** (1976), no. 1, 32-54. (W. F. Ames) **53** #13836 35K05
- Régularité de la solution de l'équation de la chaleur dans un domaine plan sans condition de corne. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 11, A599-A602. (Author's summary) **55** #6013 35K05
- Sadamatsu, Takashi** On the energy inequality of mixed problem for some hyperbolic system. *Mem. Ehime Univ. Sect. III Engrg.* **8** (1974), no. 1, 1-7. **58** #29351 35L99
- (with Kitagawa, Keiichiro) A remark on a necessary condition of the Cauchy-Kowalevski theorem. *Publ. Res. Inst. Math. Sci.* **11** (1975/76), no. 2, 523-534. (J. Vanžura) **57** #13114 35A10
- (with Kitagawa, Keiichiro) Sur une condition suffisante pour que le problème de Cauchy faiblement hyperbolique soit bien posé. Cas de multiplicité de caractéristiques au plus triple. *J. Math. Kyoto Univ.* **17** (1977), no. 3, 465-499. (Authors' review (Zbl) **383** #35044) **58** #29318 35L30
- (with Kitagawa, Keiichiro) Sur une condition suffisante pour que le problème de Cauchy faiblement hyperbolique soit bien posé. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 5, 167-170. (J. Kisyński) **58** #17545 35L30
- Sadanaga, Ryoichi** (with Ito, Tei-ichi) On the crystallographic space groupoid. *Proc. Japan Acad. Ser. A* (1976), no. 3, 119-121. (J. J. Burckhardt) **53** #3068 18H15
- Sadananda, K.** (with Marcinkowski, M. J.) The differential geometry of disclinations: twist disclinations. (German summary) *Acta Mech.* **29** (1978), no. 1-4, 7-20. (Authors' summary) **58** #20106 82.53
- Sadat, Said Azizula** Certain solutions of the Beltrami equation with prescribed $\mu(z)$. (Russian) *Tashkent. Gos. Univ. Naučn. Trudy No. 460 Voprosy Mat.* (1974), 110-112, 177.

- (D. A. Brannan) **52** #11037 30A52
Topological and quasiconformal mappings of abstract two-color charts onto many-sheeted ones. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 9, 5-6. (P. Caraman) **57** #3385 30A60
(with Radžabov, I. Š.) Some quasiconformal mappings with degeneracy. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 12, 5-7. (R. Kühnau) **57** #16584 30A60
(with Jakubov, Ė. H.) The extremal quasiconformal mapping of bichromatic circular charts. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR. Ser. Fiz.-Mat. Nauk* **1976**, no. 1, 25-28, 91. (G. V. Kuz'mina) **55** #10679 30A60 (30A38)
A counterexample to an extremal problem of maps. (Russian) *Metric questions of the theory of functions and mappings (Russian)*, 122-125, 168. *Naukova Dumka*, Kiev, 1977. (Author's summary) **58** #28476 30A40
(with Zahirov, M.) h -quasiconformal mappings with folds. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR. Ser. Fiz.-Mat. Nauk* **1978**, no. 1, 8-11, 91. (E. Grassmann) **57** #16585 30A60
- Šadčín, S. A. (with Harčenko, V. F.) Angular momentum reduction in the four-body problem. *Czechoslovak J. Phys.* **27B** (1977), no. 3, 255-279. (Authors' summary) **56** #10553 81.45
- Sadd, Martin H. Finite amplitude acceleration waves in incompressible BKZ viscoelastic fluids—the propagation condition. (French and German summaries) *Internat. J. Non-Linear Mech.* **10** (1975), no. 5, 237-244. (Author's summary) **57** #8395 76.35
The growth and decay of acceleration waves of arbitrary form in BKZ viscoelastic fluids. (French and German summaries) *Internat. J. Non-Linear Mech.* **12** (1977), no. 2, 71-80. (M. N. L. Narasimhan) **57** #2124 76.35
- Sade, Albert Morphismes sur le système des opérateurs propositionnels. *Math. Nachr.* **44** (1970), 231-251. (A. Rose) **45** #1724 02B05
Sur les axiomes de Götlind. *Notre Dame J. Formal Logic* **11** (1970), 81-88. (M. Stojaković) **45** #25 02B05
Morphismes de quasigrupos. *Tables. Univ. Lisboa Revista Fac. Ci. A* (2) **13**, 149-172 (1970/71). (Charles C. Lindner) **47** #3586 20N05
Univers des axiomes implicationnels. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 357-380 (1971), 15-19. (M. Stojaković) **48** #1876 02B10
Métrique du plan affin. II. Goniométrie élargie. (Italian summary) *Boll. Un. Mat. Ital.* (4) **6** (1972), 331-350. (R. Artzy) **57** #7365 50D30
Métrique du plan affin. *Math. Japon.* **18** (1973), 187-202. (R. Artzy) **50** #1110 50D05
Indice de vérité, fonctions implicationnelles accessibles, recensement des thèses. *Notre Dame J. Formal Logic* **15** (1974), 353-369. (Constantin Milici) **51** #2857 02B05
See also Mitrinović, Dragoslav S.; et al., **48** #1862
- Sádecký, B. A definition of the Fourier coefficients of a periodic distribution. (Czech. English and Russian summaries) *Scripta Fac. Sci. Natur. UJEP Brunensis—Math.* **1** (1971), 5-8. (M. Dostál) **48** #4724 46F10
- Sadeh-Zadeh, Kazem On the limits of the statistical-causal analysis as a diagnostic procedure. *Theory and Decision* **9** (1978), no. 1, 93-107. (Bradford R. Crain) **58** #4424 92A05 (60A05, 62A99)
- Sadeh, E. (with Kameda, Tsunehiko) Bounds on the number of fuzzy functions. *Information and Control* **35** (1977), no. 2, 139-145. (Masaharu Mizumoto) **56** #15184 94A20
- Šadiev, R. A certain nonlinear singular equation in a Banach space. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1972**, no. 4, 55-58, 62. (S. Fučik) **53** #3815 47H15
A certain regularization of a linear singular equation, with two distinct singular operators, in a Banach space. (Russian) Questions on differential equations, number theory, algebra and geometry. *Trudy Samarkand. Gos. Univ. (N.S.) No.* 202 (1972), 212-217. (See RŽMat **1972** #7 B616; MR **52** #7763) 47A50
A certain generalized-singular equation that depends polynomially on a parameter, in a Banach space with involution. (Russian) Questions on differential equations, number theory, algebra and geometry. *Trudy Samarkand. Gos. Univ. (N.S.) No.* 202 (1972), 218-228. (See RŽMat **1972** #7 B617; MR **52** #7763) 47A50
- Sadiju, J. (with Oji, Akin) Erratum: *Table of integrals, series, and products* (English translation of the fourth Russian edition, Academic Press, New York, 1965) by I. S. Gradshteyn and I. M. Ryzhik. *Math. Comp.* **27** (1973), 451-452. (Editors) **54** #4049 65A05
- Sadikov, N. M. Certain properties of the one-sided weighted shift operator. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1975**, no. 5, 8-12. (N. K. Nikol'skii) **54** #8343 47B37
The algebra that is generated by two unilateral weighted shift operators. (Russian) *Spectral theory of operators (Russian)*, pp. 241-262. *Izdat. "Ėlm", Baku*, 1977. (V. Istrătescu) **58** #7192 47B37 (47C05)
Crossed products of the algebra $A(\Delta)$. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1977**, no. 1, 30-35. (J. Benkö) **57** #7184 46J15 (30A98)
- Sadiq Zia, M. Characterizations of upper radical classes of simple rings. *Studia Sci. Math. Hungar.* **10** (1975), 1-2, 87-91. (W. G. Leavitt) **55** #8085 16A21
- Sadka, Efraim Social welfare and income distribution. *Econometrica* **44** (1976), no. 6, 1239-1251. (Prasanta K. Pattanaik) **57** #18772 90A15 (92A20)
- Sadkov, Ju. N. (with Kuznecov, N. N.) Sharpening of gas-dynamical calculations with the aid of minimization of the entropy functional. (Russian) *Vychisl. Metody i Programirovanie No.* 23 (1974), 141-150. (From the text) **58** #32398 76.65 (35L65, 65P05)
- Šadkovski, Andželj See Szadkowski, Andrzej
- Šadkovski, Eži See Szadkowski, Jerzy
- Sadkowski, Wawrzyniec Boundedness of the solutions of a certain mixed problem with nonlinear boundary conditions. (Russian) *Demonstratio Math.* **7** (1974), 197-205. (M. Kopáčeková) **50** #2702 35L20
Boundedness of the solutions of a certain mixed problem with linear boundary conditions. (Russian) *Demonstratio Math.* **7** (1974), 207-212. (M. Kopáčeková) **50** #2703 35L20
Boundedness and asymptotic convergence of solutions of some mixed boundary-value problem. *Demonstratio Math.* **8** (1975), 77-88. (M. Kopáčeková) **51** #8643 35L20
The behavior of the solutions of a certain multidimensional mixed problem with nonlinear boundary conditions. (Russian. Bulgarian and English summaries) Conference on Differential Equations and Applications (Ruse, 1975). *Godišnik Vuz. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 2, 191-199 (1977). (Author's summary) **58** #29083 35B35 (35G30)
Behaviour of solutions of some non-linear hyperbolic equation. *Demonstratio Math.* **9** (1976), no. 3, 393-408. (R. Glassey) **55** #3496 35B40 (35L60)
Properties of solutions of some mixed boundary value problems. *Demonstratio Math.* **10** (1977), no. 3-4, 589-603. (R. Glassey) **57** #3655 35L60 (35B40)
- Sadlej, Andrzej J. (with Dodds, Janet L.; McWeeny, Roy) Self-consistent perturbative theory. Generalization for perturbation-dependent non-orthogonal basis set. *Molecular Phys.* **34** (1977), no. 6, 1779-1791. (Authors' summary) **56** #14302 81.47
- Sadler, Charles Étude des bouts des trajectoires des champs de vecteurs holomorphes sur les espaces projectifs complexes. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1215-A1217. (U. D'Ambrosio) **46** #915 34C40 (32L10, 57D25, 58A30)
Champs de vecteurs holomorphes et trajectoires sur les espaces projectifs complexes. *Fonctions de plusieurs variables complexes (Sém. François Norguet, 1970-1973; à la mémoire d'André Martineau)*, pp. 223-241. *Lecture Notes in Math.*, Vol. 409, Springer, Berlin, 1974. (D. Lieberman) **50** #8550 57D25 (14M15, 32C10)
- Sadlok, Z. (with Tyc, Z.) On Hermite expansions of x^k and $\ln|x|$. *Ann. Polon. Math.* **3** (1977), no. 1, 63-68. (Z. Zielezny) **55** #12974 33A65 (41A30)
- Šadmanov, Dž. Upper and lower functions for martingales. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 8, 6-9. (R. J. Tomkins) **55** #1450 60G45
(with Kučkarov, Ja. H.) A generalization of Feller's theorem for martingale. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 3, 12-14. (Ștefan P. Niculescu) **56** #9654 60F15 (60G45)
- Sadohin, Ju. N. (with Sedelev, B. V.) A probabilistic model of the reproduction of the physical volume of basic resources. (Russian) *Ėkonom. i Mat. Metody* **5** (1969), 13-21. (From the authors' introduction) **45** #8249 90B05
- Sadosky, Cora (with Cotlar, Mischa) On quasi-homogeneous Bessel potential operators. *Singular integrals (Proc. Sympos. Pure Math., Chicago, Ill., 1966)*, pp. 275-287. *Amer. Math. Soc., Providence, R.I.*, 1967. (Toader Jucan) **52** #4037 47G05 (46E35)
(with Cotlar, Mischa) A moment theory approach to the Riesz theorem on the conjugate function with general measures. *Studia Math.* **53** (1975), no. 1, 75-101. (D. Muckenhoupt) **53** #1142 42A40
(with Cotlar, Mischa) Transformée de Hilbert, théorème de Bochner et le problème des moments. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 1, A433-A436. (Authors' summary) **57** #10344 42A40 (44A25)
(with Cotlar, Mischa) Transformée de Hilbert, théorème de Bochner et le problème des moments. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 1, A661-A664. (Authors' summary) **57** #7012 42A40 (44A50)
- Sadoun-Goupil, Michelle Esquisse de l'oeuvre d'Ampère en chimie. (English summary) *Rev. Histoire Sci. Appl.* **30** (1977), no. 2, 125-141. (Editors) **58** #27041 01A57 (50-03)
- Sadoury, Robert (with Basdevant, Claude) Une méthode lagrangienne pour le traitement numérique de l'équation d'Euler en dimension 2. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 25, A1247-A1250. (Authors' summary) **58** #13798 65N99
See also Computing methods in applied sciences and engineering, **49** #4198
- Sadovjak, A. M. (with Buikis, M.; Car'kov, E. F.) Continuity with respect to a parameter of the solutions of stochastic functional-differential equations. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 12 (Russian), pp. 39-49. *Izdat. "Zinatne", Riga*, 1973. (G. S. Ladde) **49** #6352 60H10 (34F05)
(with Car'kov, E. F.) An analogue of the Cauchy formula for stochastic differential equations. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 415-417. (A. T. Bharucha-Reid) **47** #7814 60H10
An analogue of the Cauchy formula for linear stochastic differential equations without aftereffect. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **1** (1974), no. 3, 173-178, 241. (A. Ja. Dorogovcev) **52** #6873 60H10
- Sadovnichii, V. A. Uniqueness of the solution of the inverse problem in the case of a second order equation with indecomposable boundary conditions. Regularized sums of partial eigenvalues. Factorization of the characteristic determinant. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 293-296. (G. Biriuk) **47** #7111 34B25 (47E05)
A uniqueness theorem for the solution of the inverse problem of spectral analysis in the case of a differential equation with periodic boundary conditions. (Russian) *Differentsial'nye Uravneniya* **9** (1973), 271-277, 394. (P. Talpalaru) **47** #5355 34B25 (47E05)
Regularized sums of half-integral powers of the Sturm-Liouville operator. (Russian) *Mat. Zametki* **14** (1973), 279-290. (G. N. Mil'shtein) **49** #9323 34B25
The zeta-function and eigenvalues of differential operators. (Russian) *Differentsial'nye Uravneniya* **10** (1974), 1276-1285, 1341. (Z. Nehari) **50** #7657 34B25 (30A64)
Traces with a weight, and the asymptotic behavior of the spectral function. (Russian) *Differentsial'nye Uravneniya* **10** (1974), 1808-1818, 1917. (Ștefan Balint) **51** #6028 34B25 (30A08)
Uniqueness of the solution of the inverse problem for a second order equation with nonsplitting boundary conditions. (Russian. English summary) (Russian) Collection of articles dedicated to the memory of Ivan Georgievich Petrovskii. *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 1, 143-151. (Leo F. Boron) **49** #5457 34B25
Analytic properties of the solutions of systems of equations with singularities of the form segments. (Russian) *Trudy Sem. Petrovsk. Vyp.* **2** (1976), 211-221. (L. Reizin) **56** #742 34C05
(with Dubrovskii, V. V.) Unbounded perturbations of spectral operators. (Russian) *Problems in mathematical physics and numerical mathematics (Russian)*, pp. 137-144, 32. *Nauka, Moscow*, 1977. (Authors' summary) **58** #30463 47B40 (35P05, 47A55)
(with Dubrovskii, V. V.) An abstract theorem of perturbation theory, regularization, trace formulas, and the zeta function of operators. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 7, 1264-1271, 1348. (H. Baumgärtel) **57** #13550 47A55 (35P99)

- (with Dubrovskii, V. V.) Some relations for the eigenvalues of discrete operators. Trace formulas for partial differential operators. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 11, 2033-2042, 2109. (H. Triebel) 58 #2396 47A70 (47F05)
- (with Dubrovskii, V. V.) Properties of the spectrum of discrete operators. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 1977, no. 5, 37-44. (T. Andó) 57 #13567 47B40
- Sadovnikov, B. I.** (with Sorokina, E. M.) Absence of crystalline ordering in quantum systems of one dimension. *Indian J. Pure Appl. Phys.* 8 (1970), 61-63. (Authors' summary) 51 #14841 82.47
- (with Fedjanin, V. K.) N. N. Bogolubov's inequalities in systems of many interacting particles with broken symmetry. (Russian. English summary) *Teoret. Mat. Fiz.* 16 (1973), 368-393. (Authors' summary) 57 #8798 82.47
- (with Bogolubov, N. N. (ml.)) ★Некоторые вопросы статистической механики. (Russian) Some questions of statistical mechanics. *Izdat. "Vysšaja Škola", Moscow*, 1975. 352 pp. (D. ter Haar) 58 #14841 82.60
- (with Inozemceva, N. G.) The study of the Boltzmann-Enskog equation in acoustic approximation. (Russian) *Dokl. Akad. Nauk SSSR* 235 (1977), no. 1, 61-63. (Authors' summary) 56 #17639 82.45
- Sadovnikov, B. N.** (with Inozemceva, N. G.) The Boltzmann-Enskog equation and the asymptotics of time autocorrelation functions. (Russian. English summary) *Teoret. Mat. Fiz.* 31 (1977), no. 2, 260-272. (G. A. Skorobogatov) 58 #32698 82.60
- Sadovnikov, E. G.** A certain criterion for the absence of limit cycles. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 9(124), 95-98. (C. E. Langenhop) 47 #5365 34C05
- A certain modification of Šilov's method. (Russian) *Differentsial'nye Uravneniya* 9 (1973), 2097-2098, 2119. (K. R. Schneider) 48 #8952 34C05
- Sadovnikov, E. M.** The amalgamation of the nuclei of a loop. (Russian) Nets and quasigroups. *Mat. Issled. Vyp.* 39 (1976), 152-171, 234. (G. Čupona) 55 #12856 20N05
- Sadovnikov, Ju. Ju.** (with Tatarenko, G. M.) Recurrent schemes for the interpolation of functions of several variables. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 4, 308-311. (A. Lupas) 57 #957 41A05
- (with Tatarenko, G. M.) Interpolation of functions of several variables by the method of undetermined coefficients. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 12, 1075-1077, 1150. (C. de Boor) 57 #13327 41A63 (41A05)
- (with Tatarenko, G. M.) Recurrent schemes of discrete mean square approximation. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1978, no. 6, 497-498, 572. (Authors' summary) 58 #24855 65D10
- Sadovoi, A. A.** (with Simonov, Ju. A.) Account of higher harmonics in the method of hyperspherical functions. *Jadernaja Fiz.* 13 (1971), 990-1004 (Russian); translated as *Soviet J. Nuclear Phys.* 13 (1971), 569-576. (P. Pascual) 48 #10381 81.47
- Sadovoi, N. N.** (with Dodonov, A. G.; Černyšev, Ju. O.; Ščetinin, A. M.) Solution of the assignment problem by reducing it to the problem of finding the optimal path on a graph. (Russian) *Elektronika i Modelirovanie* No. 15 (1977), 77-80, 125. (Editors) 58 #25961 90C05 (90C50)
- Sadovskii, A. L.** Queueing systems with periodic intensity of arrival of demands. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy Vyp.* 433 *Mat. Metody i Primenen. v Zadačah* (1973), 72-84, 154. (Author's summary) 54 #8925 60K25
- The solution of linear programming problems by numerical methods of game theory. (Russian) Applied mathematics and transportation problems. *Moskov. Inst. Inž. Železnodorož. Transporta Trudy Vyp.* 473 (1974), 166-170. (O. N. Bondareva) 56 #17801 90C05 (90D99)
- A monotone iterative algorithm for the solution of matrix games. (Russian) *Dokl. Akad. Nauk SSSR* 238 (1978), no. 3, 538-540. (Irinel Dragan) 57 #5127 90D05
- Sadovskii, A. P.** The problem of distinguishing the center and the focus. (Russian) *Differentsial'nye Uravneniya* 9 (1973), 650-659, 783. (R. F. Datko) 47 #7122 34C05
- Holomorphic integrals of a certain system of differential equations. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 558-560, 575-576. (Z. Nehari) 49 #9299 34A20
- Solution of the problem of the center and focus for a Liénard system with polynomial coefficients. (Russian) *Differentsial'nye Uravneniya* 11 (1975), no. 11, 2102-2104, 2112. (M. Bertolino) 53 #11148 34C05
- The problem of distinguishing the center and a focus for systems with nonzero linear part. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 7, 1238-1246, 1341. (H. I. Freedman) 55 #12999 34C05
- On the problem of distinguishing the center and focus for systems of nonlinear oscillations. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 12, 2273-2274, 2303. (M. Bertolino) 56 #741 34C05
- See also **Proceedings: Republican Conference of Belorussian Mathematicians**, 48 #3669
- Sadovskii, B. N.** (with Vainikko, G.) The rotation of condensing vector fields. (Russian) *Problemy Mat. Anal. Slož. Sistem* No. 2 (1968), 84-88. (W. V. Petryshyn) 45 #2546 47H10
- Measures of noncompactness and condensing operators. (Russian) *Problemy Mat. Anal. Slož. Sistem* No. 2 (1968), 89-119. (W. V. Petryshyn) 46 #740 47H10 (54H25)
- (with Rodkina, A. E.) On the Krasnosel'skii-Perov principle of connectedness. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 4 (1970), 89-103. (Alfonso Vignoli) 53 #8978 47H10
- Differential equations with uniformly continuous right hand side. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU Vyp. 1 Sb. statei po teorii operatornykh uravnenii* (1970), 128-136. (Ja. Mamedov (RŽMat 1971 #5B946)) 55 #797 34C05
- Application of topological methods to the theory of periodic solutions of nonlinear differential-operator equations of neutral type. (Russian) *Dokl. Akad. Nauk SSSR* 200 (1971), 1037-1040. (J. K. Hale) 46 #9819 47H10 (34K15)
- (with Averina, L. M.) Local solvability of a functional-differential equation of neutral type. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 1-12. (See RŽMat 1972 #1 B358) 34K05
- (with Muhamadiev, È. M.; Nažmiddinov, H.) Application of the Schauder-Tihonov principle to the problem of bounded solutions of differential equations. (Russian) *Funktsional. Anal. i Priložen.* 6 (1972), no. 3, 83-84. (J. K. Hale) 46 #9492 34K15 (47H10)
- Limit-compact and condensing operators. (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 1(163), 81-146. (J. Daneš) 55 #1161 47H10 (58G10)
- (with Nepomnjaščaja, E. M.) The method of successive approximations for functional differential equations of neutral type. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 6 (1972), 59-68. (RŽMat 1973 #3 B281) 58 #1470 34K05
- (with Muhamadiev, È. M.) Estimation of the spectral radius of a certain operator that is connected with equations of neutral type. (Russian) *Mat. Zametki* 13 (1973), 67-78. (G. B. Gustafson) 47 #9020 34K15 (47B99)
- (with Rodkina, A. E.) Differentiation of the operator of translation along the trajectories of an equation of neutral type. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 12 *Sb. Rabot po Nelineinym Operator. Uravn. i Primenen.* (1974), 31-37. (A. Potapov (RŽMat 1975 #7 B885)) 58 #28991 34K05 (34G05)
- (with Rodkina, A. E.) On the theory of generalized solutions of neutral type equations. (Russian) *Collection of articles on applications of functional analysis* (Russian), pp. 161-166. *Voronež. Tehnolog. Inst., Voronezh*, 1975. (Erwin Kozakiewicz) 57 #6723 34K05
- (with Potapov, A. S.) The distinctness of the classes K_n . (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 16 *Sb. Statei po Nelineinym Operator. Uravn. i Priložen.* (1975), 40-44. (S. Fučík) 58 #2481 47H10
- (with Gerštein, V. M.; Erofeev, A. A.; Kucovskii, A. I.) An approach to the mathematical study of discrete systems with thyristors. (Russian) *Mathematical simulation and the theory of electrical circuits*, No. 15 (Russian), pp. 41-56, 99. *Izdat. "Naukova Dumka", Kiev*, 1977. (From the authors' introduction) 57 #2683 93C55 (93C10)
- Sadovskii, G. A.** (with Parnev, I. V.; Petuhov, V. I.) Estimation of the errors of empirical distribution laws of random processes. (Russian) *Trudy Rjazan. Radiotehn. Inst. No. 28 (Differentsial'nye Uravneniya)* (1971), 248-261. 51 #11897 62M99
- Sadovskii, L. E.** On the question of the structural definability of a mixed nilpotent group. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy* No. 385 (1971), 118-124. (G. Pic) 46 #5438 20D15
- (with Lifšic, V. N.) Certain methods of formal description of mathematical machines. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy* No. 385 (1971), 155-249. (Horst Reichel) 50 #1566 68A25
- (with Lifšic, V. N.) Algebraic models of computers. (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 3(165), 79-125. (C.-J. Hamann) 53 #4624 68A25 (68A05)
- (with Aršinov, M. N.) Some lattice-theoretic properties of groups and semigroups. (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 6(168), 139-180. (J. Wiegold) 53 #8202 20-02
- (with Andrunakievich, V. A.; Baranovič, T. M.; Belousov, V. D.; Berman, S. D.; Gluskin, L. M.; Golovin, O. N.; Zavalo, S. T.; Kalužnin, L. A.; Plotkin, B. I.; Skornjakov, L. A.; Suprunenko, D. A.; Ševrin, L. N.; Šmel'kin, A. L.) In memoriam Aleksandr Gennadijevič Kuroš (January 19, 1908-May 18, 1971). (Russian) Collection of articles commemorating Aleksandr Gennadijevič Kuroš. *Trudy Moskov. Mat. Obšč.* 29 (1973), 3-4. (Editors) 51 #7787 01A70
- (with Aršinov, M. N.) The lattice definability of wreath products. (Russian) Collection of articles commemorating Aleksandr Gennadijevič Kuroš. *Trudy Moskov. Mat. Obšč.* 29 (1973), 207-213. (G. Pic) 52 #3347 20F25
- (with Ioffe, L. Š.; Kleiner, G. B.) The study of large-scale systems by means of the apparatus of general algebra. (Russian) Applied mathematics and transportation problems. *Moskov. Inst. Inž. Železnodorož. Transporta Trudy Vyp.* 473 (1974), 79-87. (From the author's text) 56 #14855 93A10
- (with Lifšic, V. N.) The cascade composition of mathematical machines. (Russian) *Problemy Kibernet.* No. 29 (1974), 221-241, 246. (H. Jürgensen) 52 #9690a (E 52 #9690b) 68A25
- (with Lifšic, V. N.) Erratum: "The cascade composition of mathematical machines" (Problemy Kibernet. No. 29 (1974), 221-241, 246). (Russian) *Problemy Kibernet.* No. 30 (1975), 342. (H. Jürgensen) 52 #9690b 68A25
- (with Ioffe, L. Š.; Kleiner, G. B.) ★Алгебраические методы в теории больших систем (информационных, транспортных, управляющих). (Russian) [Algebraic methods in the theory of large-scale systems (information systems, transport systems, control systems)] *Moskov. Inst. Inž. Železnodorož. Transporta, Moscow*, 1976. 180 pp. (Jerzy Jarón) 58 #20639 93-01
- (with Lifšic, V. N.) Parallel composition of mathematical machines of the same type. (Russian) *Latviisk. Mat. Ežegodnik Vyp.* 18 (1976), 113-127, 222. (Heinrich Seidel) 58 #9914 94A30
- (with Lapko, A. F.; Rumšiskii, L. Z.; Simonov, M. I.) Conference of Chairmen of Departments of General and Special Mathematics of National Institutions of Higher Education. (Russian) Held in Moscow, June 2-12, 1975. *Uspehi Mat. Nauk* 31 (1976), no. 2 (188), 255-262. (Editors) 53 #5215 00A10
- (with Ioffe, L. Š.; Kleiner, G. B.) Questions regarding simulation of hierarchical systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1977, no. 2, 14-22, 219 (Russian); translated as *Engng. Cybernet.* 15 (1977), no. 2, 12-19 (1978). (Authors' summary) 58 #20652 93A15 (90B10)
- See also **Transactions of the Moscow Mathematical Society**, 52 #10313 and **Applied mathematics and transportation problems**, 52 #13064
- Sadovskii, M. A.** (with Bulanže, Ju. D.; Magnickii, V. A.; Rizničenko, Ju. V.; Savarenskii, E. F.) The significance of the works of A. N. Tihonov for the development of geophysics. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1977, no. 1, 5-9. (Editors) 55 #5364 01A70 (86.01)
- Sadovskii, V. N.** Problems of a general systems theory as a metatheory. *Ratio* 16 (1974), 33-50. (Editors) 58 #26210 93A05 (02A05)
- (with Smirnov, Vladimir A.) Definability and identifiability: certain problems and hypotheses. *Basic problems in methodology and linguistics* (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Part III, Univ. Western Ontario, London, Ont., 1975), pp. 63-80. *Univ. Western Ontario Ser. Philos. Sci., Vol. 11, Reidel, Dordrecht*, 1977. (Editors) 58 #21568 02G99
- Sadovskiy, L. Ye.** See **Sadovskii, L. E.**

- Sadovskiy, V. N. See Sadovskii, V. N.
- Sadovskiy, Zoltán Rectangular thin elastic plate with edges "remaining straight" during the deformation. (Czech summary) *Apl. Mat.* **20** (1975), no. 5, 378-386. (J. W. Craggs) **53** #9813 73.35
- Sadowska, E. (with Bittner, Ryszard) Elements of finite variation. *Demonstratio Math.* **9** (1976), no. 2, 203-216. (R. Cristescu) **53** #14073 46A40
- marek-Sadowska, Małgorzata See Marek-Sadowska, Małgorzata
- Sadowski, E. (with McKnight, J. D., Jr.) The kernel of the wreath product of semigroups. *Semigroup Forum* **4** (1972), 232-236. (J. B. Kim) **45** #5261 20M10
- Sadowski, Horst (with Kleinmichel, Helmut) Der verallgemeinerte RG-Algorithmus bei linearen Restriktionen, die Behandlung des Entartungsfalls und die Konvergenz des Verfahrens. *Beiträge Numer. Math.* **3** (1975), 37-55. (W. C. Rheinboldt) **54** #14367 65K05 (90C30)
- Der RG-CD-Algorithmus für quadratische Optimierungsaufgaben. *Beiträge Numer. Math.* **3** (1975), 131-147. (Ju. M. Ermol'ev) **55** #9536 65K05
- Sadowski, M. Bott periodicity theorem for the KU_G -theory and Wiener-Hopf complexes. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 3, 299-304. (Czes Kosniowski) **51** #11592 58G10
- (with Guścióra, H.) ★ Repetitorium z algebry liniowej. (Polish) [Repetitorium in linear algebra] Edited by Barbara Dalba-Bañkowska. *Państwowe Wydawnictwo Naukowe, Warsaw*, 1977. 267 pp. (loose errata) (M. Stojaković) **58** #10949 15-01
- Sadowski, P. (with Pawlik, B.) On a construction of the maximal additive field of v. Neumann algebras in quantum field theory. *Rep. Mathematical Phys.* **4** (1973), 223-225. (H. Araki) **48** #13066 81.46
- Šadrin, G. A. A study of the existence of the completeness and closedness of V. A. Steklov's fundamental functions. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap. No. 277* (1971), 244-250. (H. Triebel) **46** #4013 35P10 (46E35)
- Estimation from above of exact constants in inequalities of Poincaré type. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap.* **460** (1972), 33-37. (G. B. Gustafson) **48** #609 34A40
- (with Stakun, N. S.) Construction of the fundamental solution and its asymptotic behavior for a certain fourth order differential equation. (Russian) *Differential equations and inequalities* (Russian), pp. 14-25. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1973. (R. Guenther) **53** #13879 35Q99
- (with Stakun, N. S.) Two approaches to the construction of the fundamental solution for a certain fourth order differential equation. (Russian) *Differential equations and inequalities* (Russian), pp. 26-32. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1973. (R. Guenther) **53** #13880 35Q99
- A study of the solution of the wave equation with variable coefficients in the neighborhood of a caustic surface. (Russian) *Differential equations and inequalities* (Russian), pp. 62-81. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1973. (A. Haimovici) **54** #739 35L05
- (with Marenich, A. S.) Representation of the solutions of a functional equation in the form of series, convergent for $-\infty < t < +\infty$. (Russian) *Mathematical physics, No. 3* (Russian), pp. 174-182. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1976. (T. Canturija) **58** #6432 34A25
- See also Differential equations and inequalities, **51** #1077 and Mathematical physics, **56** #1652
- Šadrina, N. H. (with Popel, A. S.; Regirer, S. A.) Equations of kinetics for aggregation processes in suspensions. *Prikl. Mat. Meh.* **39** (1975), no. 1, 130-143 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 1, 118-131. (V. P. Milantiev) **52** #4904 82.45
- Šadrov, A. F. Questions of the basis property for spaces of functions analytic in multiple Hartogs domains. (Russian) *Volž. Mat. Sb. No. 13* (1972), 144-154. (R. O. Wells, Jr.) **48** #9368 46E10 (32A07)
- Lacunary Hartogs series. (Russian) *Volž. Mat. Sb. No. 13* (1972), 155-174. (R. O. Wells, Jr.) **48** #8830 32A05
- Sadullaev, A. On Fatou's example. (Russian) *Mat. Zametki* **6** (1969), 437-441. (Editors) **54** #3036 32H25
- A criterion for the algebraicity of analytic sets. (Russian) *Funkcional. Anal. i Priložen.* **6** (1972), no. 1, 85-86. (O. Stănăşilă) **45** #3766 32B15
- An analogue of the F. and M. Riesz theorem. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 7, 8-10. (L. I. Ronkin) **51** #918 32A10
- Continuation of analytic sets. (Russian) *Taškent. Gos. Univ. Naučn. Trudy Vyp. 460 Voprosy Mat.* (1974), 120-123, 178. (J. S. Joel) **55** #5893 32D15
- The canonical expansion of entire functions of n complex variables. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 21* (1974), 107-121, 128. (A. I. Heifich) **54** #7830 32A15
- (with Mansurov, H.) Approximation of functions that depend on a complex parameter. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1975**, no. 7, 3-5. (M. Tomić) **53** #13586 30A82 (41A30)
- An analogue of Jensen's formula for functions of several variables. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 2, 19-22. (L. I. Ronkin) **52** #14348 32A30
- A boundary uniqueness theorem in C^n . (Russian) *Mat. Sb. (N.S.)* **101(143)** (1976), no. 4, 568-583, 639. (Jan Chmielowski) **58** #6341 32D99
- Inner functions in C^n . (Russian) *Mat. Zametki* **19** (1976), no. 1, 63-66. (I. I. Bavrin) **53** #13619 (EA 54) 32A10 (32F15)
- A boundary uniqueness theorem in C^n . (Russian) *Taškent. Gos. Univ. Naučn. Trudy Vyp. 490 Voprosy Matematiki* (1976), 174-177, 269. (J. S. Joel) **57** #12903 32D05
- Some properties of good inner functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 5, 41-43, 103. (L. I. Ronkin) **58** #1227 32A30
- Sady, Richard H. Free involutions of complex projective spaces. *Michigan Math. J.* **24** (1977), no. 1, 51-64. (Laurence R. Taylor) **57** #13996 57E25
- Sadyhov, A. E. Boundary value problems in (B) -algebras. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1976**, no. 2, 64-69. (N. K. Karapetjanc) **58** #17480 35G99 (30A88, 32A30)
- Sadyhov, F. S. (with Guseinov, I. I.) On the computation of the overlap integrals of atomic orbitals. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser.*
- Fiz.-Mat. Nauk* **1971**, no. 2, 73-83. (Z. Janković) **53** #7313 81.65
- Sadyhov, G. S. Certain questions in the theory of growth of functions defined by series the system $\{f(n^k)\}$. (Russian) *Sibirsk. Mat. Ž.* **11** (1970), 597-617. (A. Peyerimhoff) **45** #7053 30A64
- On the problem of the growth of functions in a strip that are defined by series Dirichlet polynomials. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. No. 1* (1971), 113-121. (C. Tanaka) **48** #2358 30A16
- Sadyhov, M. M. Differential-extremal equations with a self-regulating lag. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1977**, no. 3, 29-35. (K. Schmitt) **45** #7220 34K99
- Sadyhov, R. H. (with Čegolin, P. M.; Poïda, V. N.; Končak, V. S.) Invariants of the Walsh transform. (Russian) *Vychisl. Tehn. v Mašinostroen.* **1974**, no. 1 (32), 148-151. (Authors' summary) **56** #2623 94A05
- Sadyhova, D. A. Theorems on the equismutability of Fourier series. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1967**, no. 6, 18-22. (S. Aljančić) **46** #4101a 42A92
- Theorems on the equismutability of Fourier integrals. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1968**, no. 2, 64-66. (S. Aljančić) **46** #4101b 42A92
- Approximation of functions by Riesz means. I. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1972**, no. 1, 71-78. (R. P. Boas, Jr.) **50** #10658 42A08
- Sadyhova, N. Dž. (with Gasilov, V. T.) The solution of the Dirichlet problem for a class loaded partial differential equations of a special form. (Russian) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1977**, no. 5, 56-68. (From the introduction) **58** #11857 35G15
- Sadykov, A. (with Aržanyh, I. S.) General rings of second rank complexes and products of these rings. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. Geolog.-Him. Nauk* **1970**, no. 3(37), 3-7. (A. J. Lohwater) **47** #2075 30A97
- The ring product of a Boolean ring and a Clifford ring $(B \times K_r)$. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak. Vyp. 2* (1972), 146-159. (T. T. Tonkov) **55** #5875 30A97
- Sadykov, A. S. (with Müminov, I. M.; Faizullaev, A. F.; Juškevič, A. P.) Tašmuhamed Nijazović Kary-Nijazov. (Russian) *Voprosy Istor. Estestvoznani. i Tehn. Vyp. 2(3)* (1971), 108-109. (Editors) **58** #16034 01A70
- Sadykov, I. H. Synthesis of optimal control for linear stochastic systems. (Russian) *Trudy Kazan. Aviacion. Inst. No. 130* (1971), 71-78. (K. Wickwire) **46** #8736 93E20
- The Lie transformation group that is admissible by a certain class of differential equations. (Russian) *Trudy Kazan. Aviacion. Inst. Vyp. 169* (1975), 68-72, 93. (I. Kolář) **54** #14021 58H05 (35A30)
- (with Kokotov, V. M.) A certain problem for compiling an optimal schedule of freight shipments. (Russian) *Ekonom. i Mat. Metody* **12** (1976), no. 1, 170-173. (L. Krassin) **56** #4790 90B10
- Group properties of a correlation equation of optimal filter for linear systems with distributed parameters. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* **1976**, no. 135-139, 150. (Author's summary) **58** #9685 93E10
- Sadykov, M. K. Solution of a one-dimensional boundary value problem of filtration in fissured-porous media by the method of lines. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) No. 47* (1977), 33-45, 161. (Editors) **58** #19808 76.65
- Sadykov, R. H. (with Čegolin, P. M.; Poïda, V. N.; Končak, V. S.) Time and spectral invariants in multiplicative bases. (Russian) *Kibernet. i Vychisl. Tehn. Vyp. 38* (1977), 29-34, 113. (Authors' summary) **58** #15640 94A05
- Sadykov, U. S. A solution of the Cauchy problem for the equation $y' = cy^2 + dx^m$ by the method of P. F. Fil'čakov. (Russian. Karakalpak summary) *Vestnik Karakalpak. Fak. Akad. Nauk UzSSR* **1971**, no. 4, 13-16. (See RŽMat **1972** #7 B886) **65L05**
- Solution of the Cauchy problem for the equivalent equation $W'' = 2M^3 + ZW +$ when $\alpha = \pm 1/2$, by the power series method. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 15* (1971), 146-150. (Nicolae Luca) **46** #3880 34A25
- (with Dobra, I. D.) Solution of higher order nonlinear differential equations by the power series method, and estimation of its error. (Russian) *Ukrain. Mat. Ž.* **25** (1977), 554-558, 576. (D. E. Langenhof) **48** #8926 34A45
- Sadykova, M. Ju. The edge-vertex function without the α -operation. (Russian) *Voprosy Kibernet. Vychisl. Mat. No. 24* (1969), 102-113. (H. Sachs) **48** #5924 05C99
- Sadykova, S. B. The traces of functions of the Besov class $B_p^{1, \dots, 1, n}$ on smooth surfaces. (Russian) *Trudy Sem. Kaf. Teoret. Meh. I Vysš. Mat. No. 5* (1973), 139-148. (N. reviewed) **46E35**
- (with Uspenskii, S. V.) Some problems of integral geometry. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 2, 295-298. (W. J. Firey) **52** #1592 53C65
- Traces of functions of the Besov class $B_p^{1, \dots, 1, n}$ on smooth surfaces. (Russian) *Imbedding theorems and their applications (Proc. All-Union Sympos., Alma-Ata, 1976)* (Russian), pp. 131-135, 192-193. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1976. (Author's summary) **57** #17268 46E35
- (with Uspenskii, S. V.) Some problems of integral geometry. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 2, 414-425, 480. (G. I. Ol'sanskii) **54** #866 43A85
- Sadyrbaev, F. Ž. The existence of solutions for a system of two first order differential equations with linear boundary conditions. (Russian) *Latviisk. Mat. Ežegodnik Vyp. 1* (1977), 94-98, 236. (C. Avramescu) **57** #12972 34B10
- Sadyrhanov, R. S. (with Babaev, A. A.) A certain quadrature process for a singular integral, and its application. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 743-746. (Maloň) **50** #1471 65D30
- Approximate solution by the method of quadratures of nonlinear singular integral equations with Cauchy kernel. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **31** (1975), no. 3, 3-7. (J. Milota) **52** #9656 65R05
- Sadyrina, G. S. (with Napar'in, Ju. A.) The construction of the Ljapunov functions in certain critical case. (Russian) *Perm. Gos. Univ. Učen. Zap.* **1968**, no. 186, 99-103. (C. Brauer) **46** #464 34D20
- Sadžaja, R. I. (with Gjuntner, A. F.; Džohadze, O. Š.; Dumbadze, P. N.) The splitting force in I. N. Vekua's shell theory. (Russian. Georgian summary) *Studies in the theory plates and shells* (Russian), pp. 69-76. Izdat. Tbilis. Univ., Tbilisi, 1977. (From the introduction) **58** #14160 73.35

- Saegrove, M. J.** Pairwise complete regularity and compactification in bitopological spaces. *J. London Math. Soc.* (2) **7** (1973), 286-290. (G. L. Cain, Jr.) **49** #11483 54E55
(with Mathews, Jerold) Quasi-uniform spaces and generalized quasi-pseudo-metric spaces. *Nanta Math.* **7** (1974), no. 2, 102-104. (H. Buchwalter) **51** #6744 54E15
- Saeki, Sadahiro** Factorizations in function algebras. *Tôhoku Math. J.* (2) **20** (1968), 368-383. (Zbl **303**, 132) **58** #23610 46J10
- The ranges of certain isometries of tensor products of Banach spaces. (Russian) *J. Math. Soc. Japan* **23** (1971), 27-39. (J. Gil de Lamadrid) **46** #7924 46M05 (43A45, 46B99)
- On the union of two Helson sets. *J. Math. Soc. Japan* **23** (1971), 636-648. (D. E. Ramirez) **45** #2413 43A45
- Homomorphisms of tensor algebras. *Tôhoku Math. J.* (2) **23** (1971), 173-199. (J. D. Stegeman) **45** #7479 46J05 (43A20, 46M05)
- On strong Ditkin sets. *Ark. Mat.* **10**, 1-7 (1972). (B. R. Gelbaum) **46** #9652 43A45
- Tensor products of Banach algebras and harmonic analysis. Collection of articles dedicated to Gen-ichiro Sunouchi on his sixtieth birthday. *Tôhoku Math. J.* (2) **24** (1972), 281-299. (Colin C. Graham) **48** #2672 43A45 (46M05)
- (with Pigno, Louis) Measures whose transforms vanish at infinity. *Bull. Amer. Math. Soc.* **79** (1973), 800-801. (D. E. Ramirez) **47** #5522 43A25
- On restriction algebras of tensor algebras. *J. Math. Soc. Japan* **25** (1973), 506-522. (Colin C. Graham) **47** #7335 43A45
- Certain elements in quotients of measure algebras. *Proc. Amer. Math. Soc.* **38** (1973), 437-440. (R. Rigelhof) **49** #3453 43A10
- Symmetric maximal ideals in $M(G)$. *Pacific J. Math.* **54** (1974), no. 1, 229-243. (Edwin Hewitt) **51** #6287 43A10
- On the sum of two Kronecker sets. *Illinois J. Math.* **19** (1975), 127-130. (C. R. Dunkl) **52** #1174 43A45
- (with Pigno, Louis) Fourier-Stieltjes transforms which vanish at infinity. *Math. Z.* **141** (1975), 83-91. (Colin C. Graham) **53** #1174 43A25 (43A46)
- Helson sets which disobey spectral synthesis. *Proc. Amer. Math. Soc.* **47** (1975), 371-377. (Kelly McKennon) **50** #14070 43A45
- (with Pigno, Louis) Interpolation by transforms of discrete measures. *Proc. Amer. Math. Soc.* **52** (1975), 156-158. (Ron C. Blei) **51** #13589 43A25
- Extremely disconnected sets in groups. *Proc. Amer. Math. Soc.* **52** (1975), 317-318. (D. E. Ramirez) **51** #8748 43A45
- Infinite tensor products in Fourier algebras. *Tôhoku Math. J.* (2) **27** (1975), no. 3, 355-379. (Colin C. Graham) **55** #10968 43A45
- Most symmetric sets are of synthesis. *Illinois J. Math.* **20** (1976), no. 1, 171-176. (Colin C. Graham) **52** #8800 43A45
- (with Pigno, Louis) On the spectra of almost periodic functions. *Indiana Univ. Math. J.* **25** (1976), no. 2, 191-194. (Ron C. Blei) **53** #11312 43A60
- Tensor products of $C(X)$ -spaces and their conjugate spaces. *J. Math. Soc. Japan* **28** (1976), no. 1, 33-47. (Eggert Briem) **52** #15040 46M05 (43A45)
- Convolutions of continuous measures and sets of nonsynthesis. *Proc. Amer. Math. Soc.* **60** (1976), 215-220 (1977). (D. L. Salinger) **55** #3685 43A45 (43A05)
- (with Lin, Chung) Bernoulli convolutions in LCA groups. *Studia Math.* **58** (1976), no. 2, 165-177. (Colin C. Graham) **54** #13462 43A10
- Measure algebras of groups. (Japanese) Function algebras and their applications. *Sûgaku* **28** (1976), no. 1, 67-76, 87-95. (Satoru Igari) **58** #29834 43A10
- Norm approximations of unity. (Japanese) Approximation theory in functional analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sûrikaiseikenkyûsho Kôkyûroku No.* 265 (1976), 58-66. (Kiyoko Nishizawa) **58** #30265 46J05
- Asymmetric maximal ideals in $M(G)$. *Trans. Amer. Math. Soc.* **222** (1976), 241-253. (Ron C. Blei) **54** #3292 43A10
- Singular measures having absolutely continuous convolution powers. *Illinois J. Math.* **21** (1977), no. 2, 395-412. (J. H. Williamson) **58** #6917 43A05
- On infinite convolution products of discrete probability measures. *J. London Math. Soc.* (2) **16** (1977), no. 1, 172-176. (J. H. Williamson) **56** #12767 43A05 (43A15)
- Saeks, Richard** Causality in Hilbert space. *SIAM Rev.* **12** (1970), 357-383. (Author's summary) **54** #1014 47B99 (94A20)
- (with Liu, Ruey Wen; Leake, Richard Jeffrey) On global linearization. *Mathematical aspects of electrical network analysis* (Proc. SIAM-AMS Sympos. Appl. Math., New York, 1969), pp. 93-102. *SIAM-AMS Proc.*, Vol. III, Amer. Math. Soc., Providence, R.I., 1971. (Guy Jumarie) **48** #13498 94A20
- (with Winslow, L.) Lossless nonlinear networks. *IEEE Trans. Circuit Theory* **CT-19** (1972), 392. (From the introduction) **52** #2770 94A20
- (with Goldstein, Ronald A.) Cauchy integrals and spectral measures. *Indiana Univ. Math. J.* **22** (1972/73), 367-378. (W. Hackenbroch) **47** #435 28A45 (46G10)
- ★Resolution space operators and systems. Lecture Notes in Economics and Mathematical Systems, Vol. 82. Springer-Verlag, Berlin-New York, 1973. x+267 pp. (From the author's preface) **57** #5211 93-02 (47A99)
- Causal factorization, shift operators and the spectral multiplicity function. *Vector and operator valued measures and applications* (Proc. Sympos., Alta, Utah, 1972), pp. 319-335. Academic Press, New York, 1973. (W. Hackenbroch) **50** #1042 47B15 (93C05)
- (with Goldstein, Ronald A.) Trace class, widths and the finite approximation property in Banach space. *Bull. Amer. Math. Soc.* **79** (1973), 57-60. (A. Pelczyński) **47** #5562 46B99 (47B10)
- State in Hilbert space. *SIAM Rev.* **15** (1973), 283-308. (Editors) **57** #7249 47B99 (93B05)
- Fourier analysis in Hilbert spaces. *SIAM Rev.* **15** (1973), 604-638. (Editors) **57** #7250 47B99 (93B05)
- (with Goldstein, Ronald A.) Compact operators and the minimax principle. *Global analysis and its applications* (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972), Vol. II, pp. 225-232. Internat. Atomic Energy Agency, Vienna, 1974. (From the authors' introduction) **56** #6446 47B10
- (with DeSantis, Romano M.; Leake, Richard Jeffrey) On causal decomposition. *IEEE Trans. Automatic Control* **AC-19** (1974), 152-153. (From the authors' text)
- 55** #12212 93C05 (93C45)
- (with DeCarlo, R. A.) Variations on the nonlinear Nyquist criteria. *Proceedings of the Eighteenth Midwest Symposium on Circuits and Systems* (Concordia Univ., Montreal, Que., 1975), pp. 116-119. *Western Periodicals*, North Hollywood, Calif., 1975. (Peter A. Cook) **55** #5276 93D15
- On the encirclement condition and its generalization. *IEEE Trans. Circuits and Systems* **CAS-22** (1975), no. 10, 780-785. (Ethelbert N. Chukwu) **52** #12915 93D10
- (with Strauss, Martin) A perturbation theorem for partial differential operators. *Proc. Amer. Math. Soc.* **50** (1975), 189-197. (Authors' review (Zbl **275** #47028)) **58** #30383 47A50 (35A35, 94A20)
- (with Sangani, S. H.; Liberty, Stanley R.) A spectral theoretic approach to fault analysis in linear sequential circuits. *J. Franklin Inst.* **302** (1976), no. 3, 239-258. (See Zbl **354** #94022) 94A20
- Reproducing kernel resolution space and its applications. *J. Franklin Inst.* **302** (1976), no. 4, 331-355. (Author's summary) **57** #19035 93E20 (60G35)
- (with DeCarlo, R. A.) Representation of weakly additive operators. *Proc. Amer. Math. Soc.* **59** (1976), no. 1, 55-61. (Jean Mawhin) **54** #1038 47H99
- The factorization problem—a survey. Recent trends in system theory. *Proc. IEEE* **64** (1976), no. 1, 90-95. (Elwyn L. Jones) **53** #14161 47-02 (49-02)
- (with DeCarlo, R. A.; Murray, J.) Multivariable Nyquist theory. *Internat. J. Control* **25** (1977), no. 5, 657-675. (Peter A. Cook) **56** #8130 93D10
- (with DeCarlo, R. A.) The encirclement condition. An approach using algebraic topology. Routh centenary issue. *Internat. J. Control* **26** (1977), no. 2, 279-287. (V. M. Popov) **58** #26389 93D10
- See also **Special issue: Mathematical foundations of system theory**, **58** #26207
- Saelli, Donato** Problemi di decisione per algebre connesse a logiche a più valori. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 3-4, 219-223 (1976). (Flavio Previale) **57** #5722 02G05 (02C05)
- (with Lacava, Francesco) Proprietà e model-completamento di alcune varietà di algebre di Łukasiewicz. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **60** (1976), no. 4, 359-367. (Annalisa Marcja) **57** #97 02H13 (02J05)
- (with Lacava, Francesco) Sul model-completamento della teoria delle \mathcal{L} -catene. (English summary) *Boll. Un. Mat. Ital. A* (5) **14** (1977), no. 1, 107-110. (Gabriel Lolli) **55** #12509 02H15 (02J99)
- Saely, R.** Calculation of switch-on transients at the telegraphic equation by means of generalized Lie-series. *Rend. Mat.* (6) **3** (1970), 657-681 (1971). **45** #6277 78.35
- Sáenz, A. W.** (with Zachary, W. W.) Two-magnon bound states in Heisenberg ferromagnets. *J. Mathematical Phys.* **14** (1973), 1837-1852; erratum, *ibid.* **15** (1974), 1819. (Nicola Angelescu) **53** #10083 82.47
- (with Zachary, W. W.) On the equality of S operators corresponding to unitarily equivalent Hamiltonians in single channel scattering. *J. Mathematical Phys.* **17** (1976), no. 3, 409-418. (John D. Dollard) **53** #2210a (E **53** #2210b) 81.47
- (with Zachary, W. W.) Wave operators for long-range hard-core potentials. *J. Mathematical Phys.* **17** (1976), no. 6, 954-957. (John D. Dollard) **54** #1996 81.47
- (with Zachary, W. W.) Erratum: "On the equality of S operators corresponding to unitarily equivalent Hamiltonians in single channel scattering" (J. Mathematical Phys. **17** (1976), 409-418). *J. Mathematical Phys.* **17** (1976), no. 8, 1616. (John D. Dollard) **53** #2210b 81.47
- (with Zachary, W. W.) Unitarily equivalent multiparticle Hamiltonian systems yielding equal scattering for corresponding states. *J. Math. Phys.* **19** (1978), no. 8, 1688-1698. (Lawrence E. Thomas) **58** #20024 81.47 (47A55)
- Sáenz, J. F.** ★El functor Tor y la sucesión espectral de Eilenberg-Moore. (Spanish) [The Tor functor and the Eilenberg-Moore spectral sequence] With an English summary. Publicaciones del Seminario Matemático García de Galdeano, No. 18. *Facultad De Ciencias de Zaragoza, Consejo Superior de Investigaciones Científicas, Zaragoza*, 1973. (Editors) **50** #3228 55H20
- The functor Tor and the Eilenberg-Moore spectral sequence. (Spanish. English summary) *Rev. Acad. Ci. Zaragoza* (2) **28** (1973), 381-412. (S. Gitler) **49** #8016 55H20
- Sáenz, Rolando** On the K -completion of a Hilbert module. (Spanish) *Rev. Colombiana Mat.* **8** (1974), 253-265. (Mohammed Akkar) **51** #3905 46H25
- Sáenz García, Clemente** Introduction to the study of the Pythagorean figures. (Spanish) *Proceedings of the Tenth Conference of Spanish Mathematicians* (La Laguna, 1969) (Spanish), pp. 130-145. *Inst. "Jorge Juan" Mat., Madrid*, 1972. (C. Ballester Pereyra) **50** #5602 50B10
- Sáenz Lorenzo, José Félix** The spectral sequence of homology. (Spanish) *Proceedings of the Eleventh Annual Conference of Spanish Mathematicians* (Murcia, 1970) (Spanish), pp. 155-179. Univ. Complutense de Madrid, Madrid, 1973. (S. Gitler) **50** #3226 55H05 (18G40)
- Fibrations associated with real singularities. (Spanish) *Proceedings of the First Conference of Portuguese and Spanish Mathematicians* (Lisbon, 1972) (Spanish), pp. 275-278. *Inst. "Jorge Juan" Mat., Madrid*, 1973. (R. E. Stong) **49** #11542 (EA **50**) 57D45
- Saet, Ju.-A. I.** A comparison of the solutions of differential equations and of inequalities in a Banach space with a cone. (Russian) *Functional analysis*, No. 2 (Russian), pp. 129-140. *Uljansovsk. Gos. Univ., Ulyanovsk*, 1973. (K. Goebel) **56** #9026 34G05 (47H99)
- Saethre, Audun** (with Solheim, Ole A.) Optimal control of a class of distributed parameter systems. *Automatic and remote control III* (Proc. Third Congr. Internat. Federation Automatic Control (IFAC), London, 1966), Vol. 1, p. 13, Paper 6G, 9 pp. *Inst. Mech. Engrs., London*, 1967. (Authors' summary) **51** #9895 93C20
- See also **Proceedings: International Congress of the International Federation of Automatic Control (IFAC)**, **51** #12360a
- Šaevič, A. B.** (with Leonov, V. V.; Firsanov, V. A.) An estimate of the error of gauge dependence. (Russian) *Avtometrija* **1974**, no. 5, 97-99. (Authors' introduction) **50** #11640 62H99
- prieto Sáez, Emilio** See Prieto Sáez, Emilio
- Sáez S., E.** (with Friedlein, Heinz-Reiner) Immersion of a metric geometry of arbitrary dimension in a projective geometry. (Spanish) *Gac. Mat. (Madrid)* (1) **29** (1977), no. 3-4, 53-60. (Authors' introduction) **58** #30717 50C25 (50D35)
- Safaeva, K.** A certain design problem. (Russian) *Tashkent. Inst. Narod. Hoz. Naučn. Zap.*

- No. 34 *Mat. v Priložen.* (1970), 19-32. (I. Gh. Ciobanu) **52** #16574 90B10 (90C10)
- Safanov, Michael G.** (with Athans, Michael) Gain and phase margin for multiloop LQG regulators. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 361-368. *Inst. Electr. Electron. Engrs., New York*, 1976. (Authors' summary) **56** #18068 93E15 (93E10)
- Šafář, Jan** Experience with employment of Wilkinson-Peterson method to the problem of thin layers. (Czech and Russian summaries) *Acta Polytech. Práce ČVUT* (4) **1978**, no. 1, 83-90. (Ludwig Elsner) **58** #3365 65F15
- Safarbaev, I.** A certain random walk scheme. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 2, 30-33. (B. I. Penkov) **47** #2670 60J15
(with Siradžinov, S. H.) A random walk scheme in k -dimensional space. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 4, 23-28, 84. (D. A. Darling) **57** #10831 60J15
(with Siradžinov, S. H.) The random walk of a particle between reflecting barriers. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 2, 78. (D. A. Darling) **58** #7862 60J15
- Šafarevič, I. R.** On some infinite-dimensional groups. *Rend. Mat. e Appl.* (5) **25** (1966), no. 1-2, 208-212. (T. Kambayashi) **58** #5697 14L20 (14E10)
★Алгебраическая геометрия. (Russian) [Algebraic geometry] *Moskov. Gosudarst. Univ., Moscow*, 1968. 250 pp. (Editors) **50** #2161 14-XX
Le théorème de Torelli pour les surfaces algébriques de type K3. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 1, pp. 413-417. Gauthier-Villars, Paris, 1971. (J. S. Joel) **54** #7480 14J25
★Grundzüge der algebraischen Geometrie. Übersetzung aus dem Russischen von Rudolf Fragel. Logik und Grundlagen der Mathematik, Band 12. *Friedr. Vieweg + Sohn, Braunschweig*, 1972. 224 pp. (Editors) **50** #2162 14-XX
(with Borevič, Z. I.) ★Теория чисел. (Russian) [The theory of numbers] Second edition. *Izdat. "Nauka", Moscow*, 1972. 495 pp. (Editors) **50** #4526 12-XX (10-XX)
★Основы алгебраической геометрии. (Russian) [Foundations of algebraic geometry] *Izdat. "Nauka", Moscow*, 1972. 567 pp. (errata insert) (P. E. Newstead) **51** #3162 14-XX
(with Pietetski-Shapiro, I. I.) The arithmetic of surfaces of type K3. (Russian) *Proceedings of the International Conference on Number Theory (Moscow, 1971)*. *Trudy Mat. Inst. Steklov.* **132** (1973), 44-54, 264. (J. S. Joel) **49** #302 14G13 (14J25)
★Basic algebraic geometry. Translated from the Russian by K. A. Hirsch. Die Grundlehren der mathematischen Wissenschaften, Band 213. *Springer-Verlag, New York-Heidelberg*, 1974. xv+439 pp. (Editors) **51** #3163 14-XX
The foundations of algebraic geometry. (Hungarian) Translated from the Russian by Károly Buzási. *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **22** (1974), 79-184. (Editors) **50** #9860 14-XX
Foundations of algebraic geometry. II. (Hungarian) Translated from the Russian (Uspehi Mat. Nauk **24** (1969), no. 6(150), 1-184) by Károly Buzási. *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **22** (1974), no. 3-4, 283-360. (Editors) **53** #413 14-XX
(with Rudakov, A. N.) Inseparable morphisms of algebraic surfaces. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 6, 1269-1307, 1439. (P. E. Newstead) **57** #338 14J25 (14E99, 14J10)
★Basic algebraic geometry. Translated from the Russian by K. A. Hirsch. Revised printing of Grundlehren der mathematischen Wissenschaften, Vol. 213, 1974. Springer Study Edition. *Springer-Verlag, Berlin-New York*, 1977. xv+439 pp. (Editors) **56** #5538 14-01
(with Rudakov, A. N.) Remarks on the paper: "Inseparable morphisms of algebraic surfaces" (Izv. Akad. Nauk SSSR Ser. Mat. **40** (1976), no. 6, 1269-1307). (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 2, 466. (P. E. Newstead) **57** #12528 14J25 (14E99, 14J10)
(with Rudakov, A. N.) Quasi-elliptic K3 surfaces. (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 1(199), 227-228. (P. E. Newstead) **57** #16316 14J25
See also Koch, Helmut, **45** #233; Koch, Helmut, **49** #10666 and *Proceedings: International Conference on Number Theory*, **51** #5463
- Safarjan, L. P.** On the projective differential geometry of one-parameter families of quadric cones. (Russian. Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I. a Mat. (N.S)* **19** (1973), no. 2, 395-410. (Adrain C. Albu) **54** #8472 53A20
(with Akivis, M. A.) On the differential geometry of the manifold of quadric cones. (Russian) *Collection of articles on differential geometry (Russian)*, pp. 3-10. Kalinin. Gos. Univ., Kalinin, 1974. (Adrian C. Albu) **54** #8465 53A20
- Safarjan, M. N.** The approximation of an integro-differential equation by an equation of Fokker-Planck type. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1977**, no. 5, 16-24, 180. (M. Lawrence Glasser) **57** #2358 8241
- Safarjevics, I. R.** See Šafarevič, I. R.
- Safarov, D. H.** A mixed boundary value problem for systems of three equations of composite type. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **17** (1974), no. 3, 8-12. (V. L. Makarov) **49** #9437 35M05
Problems of Sjöstrand type for a system of three equations of composite type. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geol.-Him. Nauk* **1975**, no. 3 (57), 3-15, 123. (S. A. Tersenov) **56** #9099 35M05
A general problem of Sjöstrand type for a system of three equations of composite type. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 5, 15-19. (V. L. Makarov) **57** #13231 35M05
Boundary value problems for a system of equations of composite type in three-dimensional domains. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 12, 8-11. (V. V. Kovrizkin) **58** #1716 35M05 (35F15)
- Safarov, T. M.** Complex Tauberian theorems of the type $A \rightarrow (R, n, \beta)$. (Russian) *Baškir. Gos. Univ. Učen. Zap. Vyp. 74 Tauberovy Teoremy* (1973), 70-85. (R. P. Boas, Jr.) **56** #16199a 40E05
(with Subhankulov, M. A.) Complex Tauberian theorems with a remainder term for the one-sided Stieltjes transform. (Russian) *Baškir. Gos. Univ. Učen. Zap. Vyp. 74 Tauberovy Teoremy* (1973), 86-98. (E. Reimers) **56** #16200 40E05
Complex Tauberian theorems of the type $(A, \lambda) \rightarrow (R, \lambda, \beta)$ with a remainder. (Russian) *Baškir Gos. Univ. Učen. Zap. Vyp. 74 Tauberovy Teoremy* (1973), 99-108. (R. P. Boas, Jr.) **56** #16199b 40E05
(with Subhankulov, M. A.) Complex Tauberian theorems with remainder term for the one-sided Stieltjes transform. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **16** (1973), 11, 6-8. (E. Reimers) **49** #7643 40E05
Complex Tauberian theorems with a remainder term for general Dirichlet series. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR. Dokl.* **30** (1974), no. 2, 12-15. (G. Halász) **51** #8672 40E05 (30A10)
- Safarova, G. H.** (with Valeev, Kim G.) The construction of periodic solutions of a system of integro-differential equations. (Russian) *Studies in integro-differential equations in Kirgizia (Russian)*, pp. 155-175, 432. *Izdat. "Ilim", Frunze*, 1977. (From the introduction) **58** #23442 45J05 (34K15)
- Safavi-Naini, R.** (with Blake, Ian F.) On designs from codes. *Utilitas Math.* **14** (1978), 49-63. (F. J. MacWilliams) **58** #26523 94A10 (05B30)
- Šafeev, A. I.** (with Ivanov, V. T.) The field of disc and spherical electrodes in electrolyte. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1974**, no. 2, 123-129, 224. (J. E. Rosenthal) **51** #7487 7835
- Saff, E. B.** An extension of Montessus de Ballore's theorem on the convergence of interpolating rational functions. Collection of articles dedicated to J. L. Walsh on his 75th birthday. *V. J. Approximation Theory* **6** (1972), 63-67. (J. L. Fields) **50** #4962 30A80
The convergence of rational functions of best approximation to the exponential function. II. *Proc. Amer. Math. Soc.* **32** (1972), 187-194. (K. R. Unni) **45** #3724 30A82
On the degree of best rational approximation to the exponential function. *J. Approximation Theory* **9** (1973), 97-101. (K. R. Unni) **50** #10274 30A82
On the zeros of the error function for Tchebycheff approximation on a disk. *J. Approximation Theory* **9** (1973), 112-117. (T. Kövari) **50** #10275 30A82
(with Walsh, J. L.) On the convergence of rational functions which interpolate in the roots of unity. *Pacific J. Math.* **45** (1973), 639-641. (Authors' summary) **53** #13583 30A80
(with Kartsatos, Athanassios G.) Hyperpolynomial approximation of solutions of nonlinear integro-differential equations. *Pacific J. Math.* **49** (1973), 117-125. (W. T. Reid) **48** #11958 45J05
(with Mukherjee, Arunava) Behavior of convolution sequences of a family of probability measures on $[0, \infty)$. *Indiana Univ. Math. J.* **24** (1974/75), 221-226. (Editors) **50** #5892 60B15 (60J15)
(with Sheil-Small, T. B.) Coefficient and integral mean estimates for algebraic and trigonometric polynomials with restricted zeros. *J. London Math. Soc.* (2) **9** (1974/75), 16-22. (Z. Rubinstein) **52** #3491 30A06 (42A04)
(with Poreda, S. J.; Šapiro, G. S.) Fundamental constants for rational functions. *Trans. Amer. Math. Soc.* **189** (1974), 351-358. (G. D. Taylor) **50** #13542 30A82
(with Varga, Richard S.) Convergence of Padé approximants to $e - \Theta$ on unbounded sets. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. IV. *J. Approximation Theory* **13** (1975), 470-488. (G. Meinardus) **53** #5892 30A82 (41A20)
(with Varga, Richard S.) On the zeros and poles of Padé approximants to e . *Numer. Math.* **25** (1975/76), no. 1, 1-14. (M. Nassif) **53** #3273 (E 54 #558) 30A08
(with Schönhaage, Arnold; Varga, Richard S.) Geometric convergence to e^{-z} by rational functions with real poles. *Numer. Math.* **25** (1975/76), no. 3, 307-322. (W. Fraser) **57** #3704 41A20 (65D99)
(with Varga, Richard S.) The behavior of the Padé table for the exponential. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 519-531. Academic Press, New York, 1976. (Michael F. Barnsley) **55** #6069 41A20
(with Varga, Richard S.) Angular overconvergence for rational functions converging geometrically on $[0, +\infty)$. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 238-256. Academic Press, New York, 1976. (G. D. Taylor) **54** #804 41A20
(with Varga, Richard S.; Ni, Wei Ch'eng) Geometric convergence of rational approximations to e^{-z} in infinite sectors. *Numer. Math.* **26** (1976), no. 2, 211-225. (W. Fraser) **56** #16212 41A20
(with Varga, Richard S.) Erratum: "On the zeros and poles of Padé approximants to e^z " (Numer. Math. **25** (1975/76), no. 1, 1-14). *Numer. Math.* **26** (1976), no. 2, 226. (M. Nassif) **54** #558 30A82
(with Schönhaage, Arnold; Varga, Richard S.) Errata: "Geometric convergence to e^{-z} by rational functions with real poles" (Numer. Math. **25** (1975/76), no. 3, 307-322). *Numer. Math.* **26** (1976), no. 2, 226. (W. Fraser) **57** #3705 41A05 (65D99)
(with Varga, Richard S.) On the sharpness of theorems concerning zero-free regions for certain sequences of polynomials. *Numer. Math.* **26** (1976), no. 4, 345-354. (D. A. Brannan) **56** #5848a 30A08 (65E05)
(with Varga, Richard S.) Geometric overconvergence of rational functions in unbounded domains. *Pacific J. Math.* **62** (1976), no. 2, 523-549. (M. E. Noble) **53** #13587 30A82
(with Varga, Richard S.) Zero-free parabolic regions for sequences of polynomials. *SIAM J. Math. Anal.* **7** (1976), no. 3, 344-357. (J. L. Fields) **54** #3060 33A70 (30A82)
(with Varga, Richard S.) On the zeros and poles of Padé approximants to e^z . II. *Padé and rational approximation (Proc. Internat. Sympos., Univ. South Florida, Tampa, Fla., 1976)*, pp. 195-213. Academic Press, New York, 1977. (A. Meir) **58** #11432 30A82 (41A20)
(with Varga, Richard S.) Some open problems concerning polynomials and rational functions. *Padé and rational approximation (Proc. Internat. Sympos., Univ. South Florida, Tampa, Fla., 1976)*, pp. 483-488. Academic Press, New York, 1977. (J. Szabados) **57** #13314 41A20
(with Varga, Richard S.) Nonuniqueness of best approximating complex rational functions. *Bull. Amer. Math. Soc.* **83** (1977), no. 3, 375-377. (Myron S. Henry) **55** #6087 41A50 (41A20)
(with Varga, Richard S.) Erratum: "On the sharpness of theorems concerning zero-free regions for certain sequences of polynomials" (Numer. Math. **26** (1976), no. 4, 345-354). *Numer. Math.* **28** (1977), no. 1, 119. (D. A. Brannan) **56** #5848b 30A08 (65E05)
(with Goodman, A. W.) On the definition of a close-to-convex function. *Internat.*

- J. Math. Math. Sci.* **1** (1978), no. 1, 125-132. (K. S. Padmanabhan) **58** #1118 30A32
(with Varga, Richard S.) On the zeros and poles of Padé approximants to e^x . III. *Numer. Math.* **30** (1978), no. 3, 241-266. (A. Meir) **58** #11433 30A82 (41A20)
See also **Padé and rational approximation**, **56** #16213
- Saffari, Bahman** An Ω -theorem of the "non-effective" type. *Two papers on analytic number theory*, no. 1, 22 pp. *Publ. Math. Orsay*, No. 177, Univ. Paris XI, Orsay, 1976. (W. Haneke (Zbl 361 #10036)) **58** #27854 10H25
Sur un théorème de Titchmarsh. *Two papers on analytic number theory*, No. 2, 26 pp. *Publ. Math. Orsay*, No. 177, Univ. Paris XI, Orsay, 1976. (Editors) **58** #27855 10H25
(with Vaughan, Robert-C.) On the fractional parts of x/n and related sequences. I. (French summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 4, vi, 115-131. (M. Mendès France) **56** #2948 10K05
Existence de la densité asymptotique pour les facteurs directs de N^* . (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 5, A1, A255-A258. (E. Grosswald) **52** #13686 10H25 (10L10)
On the asymptotic density of sets of integers. *J. London Math. Soc.* (2) **13** (1976), no. 3, 475-485. (J. B. Kelly) **54** #269 10L10
(with Vaughan, Robert-C.) On the fractional parts of x/n and related sequences. II. (French summary) *Ann. Inst. Fourier (Grenoble)* **27** (1977), no. 2, v, 1-30. (H. G. Meijer) **58** #554a 10H25 (10K05)
(with Vaughan, Robert-C.) On the fractional parts of x/n and related sequences. III. (French summary) *Ann. Inst. Fourier (Grenoble)* **27** (1977), no. 2, v, 31-36. (H. G. Meijer) **58** #554b 10H25 (10K05)
An Ω -theorem of the "non-effective" type. *Proc. London Math. Soc.* (3) **35** (1977), no. 1, 181-192. (Dieter Leitmann) **56** #8508 10H05 (10H25)
- Saffer, S. I.** (with Anderson, David H.; Eisenfeld, Jerome; Reisch, J. S.; Mize, C. E.) The mathematical analysis of a four-compartment stochastic model of Rose Bengal transport through the hepatic system. *Nonlinear systems and applications (Proc. Internat. Conf., Univ. Texas, Arlington, Tex., 1976)*, pp. 353-371. *Academic Press, New York*, 1977. (Ajit K. Thakur) **56** #11056 92A05
- Saffern, W.** (with Berger, C. A.) Dirichlet subalgebras of the disc algebra. *Amer. J. Math.* **94** (1972), 755-770. (N. L. Alling) **47** #2375 46J15
- Saffman, Philip** On the formation of vortex rings. *Studies in Appl. Math.* **54** (1975), no. 3, 261-268. (Author's summary) **56** #10383 7635
(with Moore, D. W.) The instability of a straight vortex filament in a strain field. *Proc. Roy. Soc. London Ser. A* **346** (1975), no. 1646, 413-425. (R. C. Ackerberg) **55** #13948 7635
Brownian motion in thin sheets of viscous fluid. *J. Fluid Mech.* **73** (1976), no. 4, 593-602. (L. I. Rubinstein) **53** #12212 7660 (92A05)
(with Milinazzo, F.) Turbulence model predictions for the inhomogeneous mixing layer. *Studies in Appl. Math.* **55** (1976), no. 1, 45-63. (Authors' summary) **56** #10425 7665
(with Scheffeld, J. S.) Flow over a wing with an attached free vortex. *Studies in Appl. Math.* **57** (1976/77), no. 2, 107-117. (W. F. Ames) **57** #2125 7635
Development of a complete model for the calculation of turbulent shear flows. *Papers from the Duke Turbulence Conference (Duke Univ., Durham, N.C., 1976)*, Paper No. 2, 25 pp. *Duke Univ. Math. Ser., Vol. III, Duke Univ., Durham, N.C., 1977*. (Author's summary) **57** #4826 7660
A phenomenological theory for the computation of turbulent shear flows. *Turbulence Seminar (Univ. Calif., Berkeley, Calif., 1976/77)*, pp. 71-82. *Lecture Notes in Math., Vol. 615, Springer, Berlin*, 1977. (J. L. Lumley) **58** #32389 7660
(with Milinazzo, F.) The calculation of large Reynolds number two-dimensional flow using discrete vortices with random walk. *J. Computational Phys.* **23** (1977), no. 4, 380-392. (R. Manohar) **56** #10426 7665 (7660)
The number of waves on unstable vortex rings. *J. Fluid Mech.* **84** (1978), no. 4, 625-639. (Author's summary) **57** #4810 7635
(with Ferguson, Warren E.; Yuen, Henry C.) A model equation to study the effects of nonlinearity, surface tension and viscosity in water waves. *Studies in Appl. Math.* **58** (1978), no. 2, 165-185. (Clarence M. Ablow) **57** #14844 7635
- Saffren, M. M.** (with Ng, Edward W.) Recursive algorithms for the summation of certain series. *SIAM J. Math. Anal.* **2** (1971), 31-36. (W. A. Al-Salam) **45** #760 39A15 (40C99)
- Safiev, R. A.** (with Lika, Dionis) The continuous analogues of certain iteration methods of solving equations. (Russian) *Bul. Akad. Štiinse RSS Moldoven.* **1970**, no. 2, 13-18. (A. I. Šchiop) **45** #2912 65L99 (47H15)
(with Lika, Dionis) A certain generalized method of chords. (Russian) *Prikl. Mat. i Programirovanie* No. 3 (1970), 30-41. (Z. V. Kovarik) **45** #4627 65H05
(with Kerimova, D. N.) The continuous analogue of a certain class of iteration methods. (Russian. Azerbaijani summary) *Akad. Nauk Azerbaidžan. SSR Dokl.* **27** (1971), no. 5, 3-8. (G. Vainikko) **46** #6611 65M99
The method of chords. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 7(122), 107-112. (H. Zegeling) **47** #2815 65J05 (47H15)
(with Lika, Dionis) The strengthened Newton-Kantorovič method with successive approximation in Hilbert space. (Russian) *Approximate solution of equations (Russian)*, pp. 40-53, 77. "Štiinca", Kishinev, 1973. (Ulrich Kosel) **48** #12186 47H15 (65J05)
The method of chords with successive approximation of the inverse operator. (Russian) *Approximate solution of equations (Russian)*, pp. 53-62, 78. "Štiinca", Kishinev, 1973. (J. Kolomý) **49** #8342 65J05 (47H15)
(with Lika, Dionis) The method of chords for the solution of operator equations, and an approximate analogue of it. (Russian) *Approximate solution of equations (Russian)*, pp. 62-70, 78. "Štiinca", Kishinev, 1973. (J. Kolomý) **49** #8343 65J05 (47H15)
(with Lika, Dionis) The method of chords with a divided difference operator whose range is the whole space. (Russian) *Prikl. Mat. i Programirovanie* No. 9 (1973), 82-94, 146. (G. Vainikko) **48** #5367 65H05 (65J05)
A certain general iteration method for the solution of equations. (Russian) *Prikl. Mat. i Programirovanie* No. 11 (1974), 117-125, 132. (J. W. Schmidt) **49** #8340 65J05 (47H15)
- An approximation analogue of the improved Newton-Kantorovič method. (Russian) *Bul. Akad. Štiinse RSS Moldoven.* **1975**, no. 3, 16-23, 92. (Boro Döring) **54** #1595 65J05 (47H15, 65H05)
One-sided inversions and the Newton-Kantorovič method. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1976**, no. 5, 32-36. (V. Veržbickii (RZMat 1977 #9 B939)) **58** #24923 65J05
Formulae for the computation of a pseudoinverse operator. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **33** (1977), no. 11, 3-6. (Ju. I. Petunin) **58** #7153 47A55
Methods for the computation of a pseudoinverse operator. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **34** (1978), no. 1, 6-9. (K. Veselič) **58** #23658 47A05 (65J05)
- Safin, R. I.** (with Bodnar', T. A.; Golovastikov, M. P.) Analysis of the approximate integral method of the solution of a thermoconductivity problem. (Russian) *Čisl. Metody Meh. Šplošn. Sredy* **8** (1977), no. 6, 22-29. (From the text) **58** #32461 8065 (8035)
- Safir, Orin** Concrete forms—their application to the logical paradoxes and Gödel's theorem. *J. Philos. Logic* **5** (1976), no. 1, 133-154. (Jan Berg) **58** #16105 02A05
- Šafiro, A. A.** Examples of locally finite groups. (Russian) *Mat. Zametki* **13** (1973), 103-106. (David McDougall) **47** #8688 20E25
(with Pavljuk, I. I.; Šunkov, V. P.) Locally finite groups with the primary minimality condition for subgroups. (Russian) *Algebra i Logika* **13** (1974), 324-336, 364. (B. Hartley) **54** #10417 20E25
(with Šunkov, V. P.) Locally finite groups with Černikov centralizers of involutions. (Russian) *Studies in group theory (Russian)*, pp. 128-146, 150. *Inst. Fiz. im. Kirenskogo Sibsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1975. (B. Hartley) **55** #3095 20F50
- Safiliulina, A. G.** (with Giorgadze, A. H.) Iterative decomposition of finite probabilistic automata. *Avtomat. i Telemekh.* **1974**, no. 9, 81-85. (Russian. English summary); translated as *Automat. Remote Control* **35** (1974), no. 9, part 1, 1448-1451 (1975). (P. Turakainen) **53** #7657 94A35
(with Giorgadze, A. H.) Methods for the decomposition of probabilistic automata. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1974**, no. 5, 1-5. (V. V. Anisimov) **56** #11661 94A35
(with Giorgadze, A. H.) The decomposition of probabilistic automata. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 2, 6-11. (R. Shirtladze) **55** #12351 94A30
(with Giorgadze, A. H.; Kistauri, Ė. I.) Whirl decomposition of stochastic systems. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 2, 142-143. (Authors' summary) **58** #15752 94A35
- Safiliulina, Ė. N.** Certain types of Lie nilalgebras of arbitrary order with $\dim L/M=2$. (Russian) *Kazan. Him.-Tehnolog. Inst. Trudy* No. 43, part 2 (1969), 8-12. (V. Barbaumov (RZMat 1970 #3 A322)) **56** #1864a 17B30
Lie nilalgebras with $\dim L^2=c$. (Russian) *Kazan. Him.-Tehnolog. Inst. Trudy* No. 43, part 2 (1969), 13-15. (V. Barbaumov (RZMat 1970 #3 A322)) **46** #1864b 17B30
- Safko, John L.** (with Elston, Fredrick) Lagrange multipliers and gravitational theory. *J. Mathematical Physics* **17** (1976), no. 8, 1531-1537. (J. D. Logan) **54** #4521 8349
(with Tsamparlis, Michael; Elston, Fredrick) Variational methods with torsion in general relativity. *Phys. Lett. A* **60** (1977), no. 1, 1-2. (Andrzej Trautman) **57** #8927 8353
A "superposition" of static, cylindrically symmetric solutions of the Einstein-Maxwell field. *Phys. Rev. D* (3) **16** (1977), no. 6, 1678-1687. (N. V. Mickevič) **57** #15257 8353
(with Carlson, George T., Jr.) An investigation of some of the kinematical aspects of plane symmetric space-times. *J. Math. Phys.* **19** (1978), no. 7, 1617-1624. (From the summary) **58** #20195 8353
- Safocv, M. D.** (with Širinbekov, M.) The convergence of Newton series in three complex variables. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **19** (1976), no. 1, 8-12. (E. Reimers) **54** #13363 40A05
The domain of convergence for a multiple Newton series. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **21** (1978), no. 1, 11-15. (I. P. Ramadanov) **58** #17171 32A05
- Safonkin, V. I.** A study of special systems with relay characteristics. (Russian) *Problems of analytical mechanics, stability and control theories (Proc. Second Četaev Conf., Kazan, 1973)*, Vol. 2 (Russian), pp. 290-296, 413. *Kazan. Aviacion. Inst., Kazan*, 1976. (Author's summary) **58** #14066 7034
- Safonov, A. N.** Application of Kummer and Markov transformations to divergent series. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 82 Anal. i Algebra* (1971), 64-72. (See RZMat 1972 #5 B41) **40A05**
A certain theorem of F. I. Haršiladze. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 82 Anal. i Algebra* (1971), 73-75. (See RZMat 1972 #5 B42) **40G05**
- Safonov, I. V.** The application of the theory of multidimensional stochastic matrices to the investigation of random processes. (Russian) *Cybernetics (Proc. Sem., Donetsk, 1969)*, No. 1 (Russian), pp. 78-86. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (V. Ivnickii (RZMat 1970 #7 V238)) **46** #10089 60K15
A certain algorithm for the unification of operational blocks of digital computers. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1972**, no. 4, 69-73. (J. Morávek) **47** #9878 68A05
- Safonov, M. O.** (with Anikeenko, O. M.; Litvin, O. M.; Rvačov, V. L.) The decomposition formula in the neighborhood of an angle. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1972**, 99-101, 186. (V. A. Popov) **46** #4065 41A05
- Safonov, M. V.** The control of a Wiener process by a limited number of corrections. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 3, 607-612. (T. Tobias) **54** #12334 93E20
The Dirichlet problem for Bellman's equation in a plane domain. (Russian) *Mat. Sb. (N.S.)* **102(144)** (1977), no. 2, 260-279, 327. (A. Friedman) **56** #3455 35J25 (93E20)
- Safonov, Michael G.** (with Athans, Michael) Robustness and computational aspects of nonlinear stochastic estimators and regulators. *Proceedings of the 1977 IEEE Conference*

- on Decision and Control (New Orleans, La., 1977), Vol. 1, pp. 1229-1238. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) **58** #20735 93E10
(with Athans, Michael) Gain and phase margin for multiloop LQG regulators. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 2, 173-179. (Takashi Yahagi) **57** #2721 93E20 (93D99)
(with Sandell, Nils R., Jr.; Varaiya, Pravin P.; Athans, Michael) Survey of decentralized control methods for large scale systems. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 2, 108-128. (Peter A. Cook) **58** #9465 93A15
- Safonov, V. F.** Construction of an optimal regulator for a special class of automatic control systems. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp. 146 Vys. Mat.* (1972), 155-166. (V. Blagodatskih) **53** #14286 49E99
Regularized asymptotic solutions of singularly perturbed systems with a weak polynomial nonlinearity. (Russian) *Studies in differential equations and their applications. Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 201 (1974), 142-150. (Editors) **57** #16875 34E15
Analytic solutions of a problem of the nonlinear theory of the regularization method. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 292 (1976), 103-107. (J. Muszyński) **58** #6630 35A20 (65M30)
Regular asymptotic solutions of nonlinear singularly perturbed systems of differential equations. (Russian) *Dokl. Akad. Nauk SSSR* **235** (1977), no. 6, 1274-1276. (R. S. Levitin) **58** #17373 34E15
- Safrai, V. M.** (with Apyhtin, N. G.; Piontkovskii, A. A.) On a Liapunov function in the problem of motion of a rigid body. *Prikl. Mat. Meh.* **37** (1973), 346-349 (Russian); translated as *J. Appl. Math. Mech.* **37** (1973), 325-328. (William B. Heard) **51** #7408 70.34
- Safran, E. Ju.** (with Kaljaev, A. V.; Platonov, V. A.) Interpolation formulas for numerical Stieltjes integration on the basis of the values of the functions. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vys. Shkoly Ser. Tehn. Nauk* **1975**, no. 2, 58-61, 117. (Gheorghe Coman) **54** #14307 65D05
- Safranov, G. Ja.** Generation of periodic motions from an equilibrium state with purely imaginary roots. (Russian) *Differentsial'nye Uravneniya* **10** (1974), 860-872, 956. (K. R. Schneider) **50** #2610 34C20
- Safranskiĭ, Ja. M.** (with Gordon, V. S.) Optimal ordering under serial-parallel precedence constraints. (Russian. English summary) *Dokl. Akad. Nauk BSSR* **22** (1978), no. 3, 244-247, 286. (Bruce D. Craven) **58** #15114 90B35 (05C20)
- Safranskiĭ, V. V.** An algorithm for the computation of networks from given priority rules. (Russian) *The programmed method of control, No. 1 (Russian)*, pp. 59-94. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1971. (P. Vondráček) **49** #6903 90B10
Minimization of the time of execution of a work program when constraints are imposed on the resources. (Russian) *The programmed method of control, No. 2, Some software questions for programmed control (Russian)*, pp. 63-99, 101. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1973. (M. Mañas) **49** #2108 90C35
(with Šeinkman, L. Ė.) Some models of planning a processing complex. (Russian) *The programmed method of control, No. 3 (Russian)*, pp. 4-18, 173. *Akad. Nauk SSSR Vychisl. Centr, Moscow*, 1976. (Authors' summary) **58** #9180 90B10 (90A05)
(with Čebotarev, A. S.) The problem of scheduling a complex of performances that is represented by a resource network model of special form. (Russian) *The programmed method of control, No. 3 (Russian)*, pp. 19-28, 173. *Akad. Nauk SSSR Vychisl. Centr, Moscow*, 1976. (Authors' summary) **58** #4281 90B35
(with Kozlov, M. K.) Time scheduling of operation complexes with limited intensities of execution of component operations. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* (1977), no. 5, 38-43 (Russian); translated as *Engrg. Cybernet.* **15** (1977), no. 5, 25-30. (John C. Gittins) **58** #25934 90B35
- Safro, V. M.** A certain variational problem. (Russian) *Moskov. Inst. Inzh. Železnodorož. Transporta Trudy* No. 413 (1972), 43-52, 165. (Russell D. Rupp) **48** #7061 49A30
The solvability of a minimax problem. (Russian) *Moskov. Inst. Inzh. Železnodorož. Transporta Trudy* No. 433 *Mat. Metody i Primenen. v Zadačah Transporta* (1973), 10-34, 153. (V. F. Dem'janov) **50** #3053 49A40
Solution of a certain minimax problem. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 1, 3-11. (M. M. Cvetanov) **49** #7874 49A40
Necessary conditions in a multi-dimensional minimax problem. (Russian) *Moskov. Inst. Inzh. Železnodorož. Transporta Trudy Vyp. 510 Prikl. Mat. i Zadači Železnodorož. Transporta* (1976), 62-67, 131-132. (Author's summary) **56** #13055 49B40
The rate of convergence of certain gradient methods. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **16** (1976), no. 2, 496-499, 542. (Ulrich Eckhardt) **54** #14372 65K05
Extremum conditions for minimax problems. (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 2(200), 205-206. (V. F. Dem'janov) **58** #9262 90C25 (49B40)
- Safronenko, V. A.** (with Veduta, N. I.) A mathematical scheduling model of mass production. (Russian) *Ėkonom. i Mat. Metody* **6** (1970), 894-909. (A. Prékopa) **47** #3001 90B35
(with Roitburd, L. M.) On the question of the stability of the performance of a quasianalog model for the solution of mathematical programming problems. (Russian) *Computer science in mechanical engineering (Russian)*, pp. 131-142. *Akad. Nauk Beloruss. SSR Inst. Tehn. Kibernet., Minsk*, 1971 (1972). (Authors' summary) **51** #15017 90C50
★Математическое и электронное моделирование задачи оптимального календарного планирования. (Russian) [Mathematical and electronic simulation of the problem of optimal scheduling] *Izdat. "Nauka i Tehnika", Minsk*, 1972. 182 pp. (From the author's introduction) **55** #2111 90B35
Optimal work schedule for a machine tool that is attached to the assembly belt. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 5, 70-75. (Author's summary) **55** #12033 90B35
- Safonov, A. M.** (with Drozdov, N. D.) Approximating the true value with an increase in the number of redundant measurements in the least squares method. (Russian) *Izv. Vys. Učebn. Zaved. Geod. i Aerofot.* **1977**, no. 2, 10-20, 151. (O. Pokorná) **58** #24851 65D10 (65F20)
- Safonov, A. N.** (with Blohincev, L. D.) A study of singularities of non-relativistic Feynman graphs. *Nuclear Phys.* **A180** (1972), 363-375. (R. Piziaki) **46** #10315 81.06
- Safonov, V. S.** O. Ju. Šmidt and cosmogony. (Russian) *Ukrain. Mat. Ž.* **23** (1977) 707-716. (Kenneth May) **45** #6562 01A70 (86.00)
- Safonov, V. V.** (with Kathanov, M. N.; Burlakov, E. A.) An algorithm for the optimization of tolerances on a parameter of the elements of a complex system. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* **1977**, no. 3, 49-53, 93. (Ju. K. Dem'janov) **58** #4356 90C50
- Safonova, V. Ja.** (with Šmul'jan, Ju. L.) Holomorphic operator-valued functions whose values are collinear to semi-unitary operators. (Russian) *Sibirsk. Mat. Ž.* **13** (1977) 1347-1357, 1421. (J. L. B. Cooper) **48** #6987 47A65
- el-Safty, Ahmad E.** See El-Safty, Ahmad E.
- Sag, T. W.** (with Wamsley, J. W.) Minimal presentations for groups of order 2^n , $n \leq 6$. *Austral. Math. Soc.* **15** (1973), 461-469. (Edward Cline) **49** #406 20D15
(with Wamsley, J. W.) On computing the minimal number of defining relations of finite groups. *Math. Comp.* **27** (1973), 361-368. (S. Oates Macdonald) **51** #719 20F05
- Sagadeev, A. V.** See al-Fārābī, Abū Naṣr Muḥammad ibn Muḥammad ibn Tarkhān, 57 #5573
- Sagaidak, M. I.** An example of a differential game with fixed time. (Russian) *Prikl. Mat. Programirovanie* No. 3 (1970), 49-59. (R. Petrović) **45** #1614 90D25
Differential games with fixed time. *J. Cybernet.* **1** (1971), no. 1, 117-135. (Editor) **45** #9713 90D25
The choice of control in linear games with fixed time. *Prikl. Mat. i Programirovanie* No. 4 (1971), 70-83. (A. B. Kuržanskiĭ) **45** #3091 90D25
(with Prodan, N. V.; Čebotaru, I. S.) Necessary and sufficient optimality conditions in multistage games with fixed time. (Russian) *Prikl. Mat. i Programirovanie* No. 1 (1973), 102-112, 153. (A. Halanay) **50** #15947 90D20
(with Prodan, N. V.; Čebotaru, I. S.) Optimality conditions in multistage games with fixed time. (Russian) *Prikl. Mat. i Programirovanie* No. 11 (1974), 72-87, 130. (G. Gol'shtein) **49** #8676 90D15
(with Naval, Ė. S.; Čebotaru, I. S.) The maximum principle for a certain minimax problem. (Russian) *Prikl. Mat. i Programirovanie* No. 12 (1974), 95-103, 139. (Russell D. Rupp) **52** #4075 49B10
- Sagal, Paul T.** On how best to make sense of Leśniewski's ontology. *Notre Dame J. Formal Logic* **14** (1973), 259-262. (J. J. E. Gracia) **52** #2808 02A05 (02B15)
- Sagalović, Ju. D.** Complexity of the scheme realization of the Reed algorithm, and decoding in an automaton. (Russian) *Problemy Peredači Informacii* **7** (1971), no. 23-28. (J. Černý) **48** #13465 94A10
- Sagalović, Ju. L.** Methods of introducing redundancy for raising the reliability of a finite automaton. *Problemy Peredači Informacii* **4** (1968), no. 3, 62-72 (Russian); translated as *Problems of Information Transmission* **4** (1968), no. 3, 49-57 (1971). (Author's summary) **56** #11621 94A20
(with Kadyrov, U. S.) Complexity of a linear decoder. (Russian) *Voprosy Kibernet. (Tashkent) Vyp.* **43** (1970), 165-172. **55** #2343 94A10
(with Pinski, M. S.) A lower bound for the size of a code of the states of an automaton. (Russian) *Problemy Peredači Informacii* **8** (1972), no. 3, 58-66. (J. Černý) **50** #4166 94A30
An upper bound for the power of the code of the states of an automaton. (Russian) *Problemy Peredači Informacii* **9** (1973), no. 1, 73-83. (Heinrich Seidel) **48** #13466 94A10
(with Kadyrov, U. S.) Modifications of an algorithm for the decoding of Reed-Muller codes. (Russian) *Voprosy Kibernet. (Tashkent) No.* **57** (1973), 122-123. (See RŽKibernet **1973** #3 G187) **94A10**
Some differences and a connection between automata state codes and ordinary error-correcting codes. (Russian) *Coding and discrete information transmission in communication systems (Russian)*, pp. 86-94, 195. *Izdat. "Nauka", Moscow*, 1976. (Author's summary) **58** #15683 94A10
Sequences of maximal length as codes of automaton states. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 4, 70-73. (Author's summary) **58** #20873 94A20
See also Cybernetics—in the service of Communism, **48** #10432 and Proceedings IEEE-USSR Joint Workshop on Information Theory, **56** #8153
- Sagalović, M. E.** (with Levitin, R. S.) A local phase portrait of a generalized Briot and Bouquet equation. (Russian) *Dokl. Akad. Nauk BSSR* **18** (1974), 991-994, 1052. (I. Reiziņš) **51** #998 34C05
The topological structure of a neighborhood of a singular point of a differential equation. (Russian) *Differentsial'nye Uravneniya* **11** (1975), no. 11, 2011-2018, 2108. (G. E. Langenhop) **53** #3415 34C05
- Sagalovich, Yu. L.** See Sagalović, Ju. L.
- Sagan, Hans** Calculus of variations and optimal control theory. *J. Franklin Inst.* **29** (1971), no. 4, 305-313. (See Zbl **306** #49008) 49-01
★Advanced calculus of real-valued functions of a real variable and vector-valued functions of a vector variable. *Houghton Mifflin Co., Boston, Mass.-London*, 1977. xv+671 pp. (Editors) **53** #8338 26-01
- Šaganova, T.** (with Kivistik, L. A.) Modification of the Gomory method for partial integer problems. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised* No. 281 (1971), 211-222. (K. Zimmermann) **47** #1460 90C10
- Sagara, Setsuo** (with Sugisaka, Masanori) A non-linear filter with higher-order weighting functions via invariant imbedding. *Internat. J. Control* **21** (1975), 801-823. (A. I. Schwarzkopf) **54** #2308 93E10
- Sagaspe, Jean-Pierre** Principe d'une méthode d'identification d'un système linéaire, partir de sa réponse impulsionnelle. *C. R. Acad. Sci. Paris Sér. A-B* **272** (1971) A1533-A1536. (Author's summary) **45** #7951 93B30 (65K05)
- Sagat'jan, K. V.** Markov processes on complexes. (Russian. Armenian summary) *Učebn. Zap. Erivan. Gos. Univ. Estestven. Nauki* **1971**, no. 3, 3-7. (G. Niculescu) **54** #8883 60J25
Games with Markov memory. *Advances in game theory (Proc. Second All-Union Conf., Vilnius, 1971)* (Russian), pp. 187-189. *Izdat. "Mintis", Vilnius*, 1973. (M. Iosifescu) **50** #12310 90D99
Operations over antagonistic games. (Russian. German and English summaries) *Math. Operationsforsch. Statist.* **4** (1973), no. 5, 371-377. (Author's summary) **58** #33065 90D99

- gateljan, V. V.** (with Grigor'jan, A. T.; Juškevič, A. P.) G. B. Petrosjan (on the occasion of his seventieth birthday). (Russian) *Voprosy Istor. Estestvozn. i Tehn. Vyp.* 4 (45) (1973), 83-84. (Editors) 56 #5173 01A70
- Artasēs Liparitovič Šaginjan** (on the occasion of his seventieth birthday). (Russian) *Mat. v Škole* 1977, no. 2, 83-84. (Editors) 57 #12133 01A70
- gatelov, V. S.** Spectral and correlation properties of composite binary sequences. *Radiotekh. i Elektron.* 18 (1973), 201-205 (Russian); translated as *Radio Engr. Electron. Phys.* 1973, 151-155. (G. Robert Redinbo) 53 #7596 94A05
- gawa, Kiichi** (with Nakayama, Kiyoshi) Simulation of heart muscle contraction. *Simulation* 27 (1976), no. 3, 173-176. (Uwe an der Heiden) 58 #9392 92A05
- gdar, D.** A note on a certain approximate criterion for testing of hypotheses on the mean value of a Gaussian process. (Russian. English summary insert) *Kibernetika (Kiev)* 1970, no. 5, 103-105. (N. L. Johnson) 45 #4535 62F05
- ge, Andrew P.** (with Melsa, James L.) ★System identification. Mathematics in Science and Engineering, Vol. 80. Academic Press, New York-London, 1971. xi + 221 pp. (W. L. Root) 47 #3052 93B30
- (with Melsa, James L.) ★Estimation theory with applications to communications and control. McGraw-Hill Series in Systems Science. McGraw-Hill Book Co., New York-Düsseldorf-London, 1971. xi + 529 pp. (From the preface) 58 #18799 62-01 (93E10, 94A05)
- Variational methods in adaptive filtering. *Optimizing methods in statistics (Proc. Sympos., Ohio State Univ., Columbus, Ohio, 1971)*, pp. 179-209. Academic Press, New York, 1971. (I. M. Stojanov) 49 #10417 93E10
- Estimation and identification. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 4: Education, feedback, regulators, linear and non-linear systems, Identification, differential games, discrete and stochastic systems, Paper No. C-38, 6 pp.* Internat. Fed. Automat. Control, Düsseldorf, 1971 [1972]. (Hsi-han Yeh) 51 #12395 93B10
- (with Lin, Jin L.) Algorithms for discrete sequential maximum likelihood bias estimation and associated error analysis. *IEEE Trans. Systems Man, Cybernet.* SMC-1 (1971), 314-324. (Authors' summary) 53 #15539 94A05 (93C40, 93E10)
- (with Lin, Jin L.) Algorithms for continuous sequential maximum likelihood bias estimation and associated error analysis. *Information Sci.* 3 (1971), 291-313. (R. N. P. Singh) 46 #5016 93E20
- (with Kumar, G. R. V.) Error analysis algorithms for distributed parameter filtering. (French, German and Russian summaries) *Automatica—J. IFAC* 8 (1972), 363-366. (Peter Stavroulakis) 48 #13407 93E10
- (with Kumar, G. R. V.) The innovations approach to space-time filtering and smoothing. *Information Sci.* 4 (1972), 193-215. (Yaakov Yavin) 46 #5027 94A05
- (with Wakefield, C. D.) Maximum likelihood identification of time varying and random system parameters. *Internat. J. Control* (1) 16 (1972), 81-100. (Authors' summary) 56 #8142 93E10
- (with Smith, N. J.) A sequential method for system identification in hierarchical structure. (French, German and Russian summaries) *Automatica—J. IFAC* 9 (1973), 677-688. (Authors' summary) 58 #4504 93B30
- (with Melsa, James L.) ★Идентификация систем управления. (Russian) [Control system identification] Translated from the English by V. A. Lotockii and A. S. Mandel'. Edited by N. S. Raibman. Theoretical Foundations of Engineering Cybernetics Series. Izdat. "Nauka", Moscow, 1974. 246 pp. (Editors) 50 #6581 93B30 (93E10)
- (with Smith, N. J.) Hierarchical structuring for system identification. *Information Sci.* 7 (1974), 49-72. (T. Kaczorek) 48 #13352 93B30
- (with Fry, C. M.) On hierarchical structure adaptation and systems identification. *Internat. J. Control* 20 (1974), 433-452. (N. U. Ahmed) 53 #2448 93B30
- (with Arafteh, S. A.) Multilevel discrete time system identification in large scale systems. *Internat. J. Systems Sci.* 5 (1974), 753-791. (S. P. Bingulac) 50 #4018 93B30
- (with Farris, Donald R.) Introduction and survey of group decision making with applications to worth assessment. *IEEE Trans. Systems Man Cybernet.* SMC-5 (1975), no. 3, 346-358. (Authors' summary) 57 #9137 90A20 (90A05)
- (with Carlock, G. W.) Sensitivity and error analysis algorithms for combined estimation and control systems. *Internat. J. Control* 21 (1975), 417-441. (Edward J. Davison) 52 #2663 93B35
- (with Cole, Joseph D.) Multi person decision analysis in large-scale hierarchical systems—team decision theory. *Internat. J. Control* 22 (1975), no. 1, 1-28. (R. N. Bhattacharya) 52 #7575 (E 53 #12655) 90D35 (93C99)
- (with Farris, Donald R.) On decision making and worth assessment. *Internat. J. Systems Sci.* 6 (1975), no. 12, 1135-1178. (From the summary) 52 #7477 90-01 (90A05)
- (with Cole, Joseph D.) Multi-person decision analysis in large scale systems—group decision making. *J. Franklin Inst.* 299 (1975), 245-268. (Authors' summary) 51 #12293 90A05 (12A20)
- (with Cole, Joseph D.) On assessment of utility and worth of multi-attributed consequences in large-scale systems. *Information Sci.* 10 (1976), no. 1, 31-57. (P. L. Yu) 54 #4573 90A05 (90A10)
- ★Methodology for large-scale systems. McGraw-Hill Book Co., New York-Auckland-Bogota, 1977. xix + 445 pp. ISBN 0-07-054438-7 (From the preface) 58 #26223 93A15 (90-XX)
- See also **System identification and time-series analysis**, 50 #4006 and **Ho, Yu Chi**; et al., 53 #12655
- gagiev, Gershon** An independence result concerning the axiom of choice. *Ann. Math. Logic* 8 (1975), 1-184. (Andreas Blass) 51 #2915 02K20 (02K05, 04A10)
- ager, H. W.** See **Späth, Helmuth**, 50 #11722
- ager, Thomas W.** Consistency in nonparametric estimation of the mode. *Ann. Statist.* 3 (1975), 698-706. (W. J. Conover) 51 #9344 62G05
- agher, Yoram** On certain hypersingular integrals. *Studia Math.* 37 (1970/71), 289-309. (G. O. Okikiolu) 45 #9070 44A25 (26A33)
- (with Cwikel, Michael) $L(p, \infty)$. *Indiana Univ. Math. J.* 21 (1971/72), 781-786. (G. I. Gaudry) 45 #4139 46E30
- Interpolation of r -Banach spaces. *Studia Math.* 41 (1972), 45-70. (Jörgen Löfström) 46 #6016 46E35 (46M35)
- An application of interpolation theory to Fourier series. *Studia Math.* 41 (1972), 169-181. (Jörgen Löfström) 46 #5914 42A16 (46E35)
- Some remarks on interpolation of operators and Fourier coefficients. Collection of articles honoring the completion by Antoni Zygmund of 50 years of scientific activity, III. *Studia Math.* 44 (1972), 239-252. (H. Triebel) 46 #7884 46E35 (42A16)
- (with Rivière, Néstor M.) Interpolation between L^∞ and H^1 , the real method. *J. Functional Analysis* 14 (1973), 401-409. (A. Kufner) 50 #14204 46E35
- Norm inequalities on Fourier coefficients and interpolation theory. *Linear operators and approximation, II (Proc. Conf., Math. Res. Inst., Oberwolfach, 1974)*, pp. 169-180. *Internat. Ser. Numer. Math., Vol. 25*, Birkhäuser, Basel, 1974. (Colin Bennett) 52 #8906 46E30 (42A18)
- (with Rivière, Néstor M.) On two theorems of Paley. *Proc. Amer. Math. Soc.* 42 (1974), 238-242. (J. H. Hedlund) 49 #9518 42A16
- (with Fefferman, Charles L.; Rivière, Néstor M.) Interpolation between H^p spaces: the real method. *Trans. Amer. Math. Soc.* 191 (1974), 75-81. (Alberto Torchinsky) 52 #8909 46E35 (46M35)
- Integrability conditions for the Fourier transform. *J. Math. Anal. Appl.* 54 (1976), no. 1, 151-156. (Hans P. Heinig) 53 #6222 (EA 54) 42A68
- On the Fejér-F. Riesz inequality in L^p . *Studia Math.* 61 (1977), no. 3, 269-278. (Jöran Bergh) 57 #6469 31B05
- Šaginjan, R. R.** The axiomatizability of one projection of a universally axiomatizable class of algebraic systems. (Russian) *Issled. Prikl. Mat. Vyp.* 1 (1973), 23-27. (RŽMat 1974 #8 A106) 57 #9516 02G10 (02H05)
- Šaginjan, A. A.** The cluster sets of harmonic and gradient mappings. II. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 6 (1971), no. 2-3, 235-245. (G. Piranian) 45 #5387 31B25 (30A72)
- The uniform and tangent harmonic approximation of continuous functions on arbitrary sets. (Russian) *Mat. Zametki* 9 (1971), 131-142. (M. Zerner) 45 #2375 41A30
- Šaginjan, A. L.** See **Sagateljan, V. V.**, 57 #12133
- Šaginjan, L. A.** The summability of series in the Haar system by the methods (C, α) and (H, k) . (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 57 (1973), 206-211. (F. Móricz) 49 #9529 42A56
- The summability to $+\infty$ by the Abel method of series in the Haar system. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 58 (1974), 3-9. (M. Božejko) 50 #10675 42A56
- The limits of indeterminacy and the set of limit functions of series in the Walsh system. (Russian) *Mat. Sb. (N.S.)* 95(137) (1974), 263-271, 328. (D. P. Gupta) 50 #7939 42A56
- Summability of series in the Haar system by the $(C, 1)$ method. (Russian) *Mat. Zametki* 15 (1974), 393-404. (F. Móricz) 50 #2801 42A56
- Šaginjan, S. S.** Some contact problems for an infinite plate with a circular opening that is reinforced with elastic facings. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 59 (1974), 154-161. (Z. Kączkowski) 51 #12088 73A5
- Certain contact problems for a plane with a circular opening that is reinforced on its boundary by elastic stiffeners. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* 27 (1974), no. 1, 3-17, 89. (Author's summary) 56 #17354 73A45
- Šaginjan, T. B.** A class of Köthe spaces. (Russian) *Theory of functions. Differential equations and their applications, No. 1 (Russian)*, pp. 128-137, 218. *Kalmyck. Gos. Univ., Elista*, 1976. (Author's summary) 58 #30039 46A45
- Sagintaev, A.** (with Kogan, L. A.) Certain formulas of Bulygin-Mordell type. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1971, no. 4, 6-8. (J. S. Joel) 50 #12919 10C15
- Modular forms and formulae of Bulygin-Mordell type. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 15 (1971), no. 6, 31-33. (M. Peters (Zbl 234 #10018)) 51 #359 10D05 (10C15)
- (with Kogan, L. A.) Modular forms and quadratic forms in six variables. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1972, no. 1, 3-4. (R. A. Rankin) 49 #2540 10C05
- Modular and quadratic forms in six variables. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 17 (1973), no. 3, 96-98. (J. S. Joel) 50 #2079 10C15
- See also **Kogan, L. A.**, 49 #8934
- Sagirov, Peter S.** The stability of a satellite with parametric excitation by the fluctuations of the geomagnetic field. *Stability of stochastic dynamical systems (Proc. Internat. Sympos., Univ. Warwick, Coventry, 1972)*, pp. 311-316. *Lecture Notes in Math., Vol. 294*, Springer, Berlin, 1972. (Cataldo Agostinelli) 54 #4227 70.34 (93E15)
- Zur Abschliessung der Momentengleichungen linearer Systeme mit stochastischer Parametererregung. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* 56 (1976), no. 3, T75-T76. (C. E. Langenhof) 54 #5572 34F05 (93E99)
- See also **Control in space**, 48 #13319
- Sagisaka, Yoshinori** (with Ishii, Hitoshi; Tsutsumi, Masayoshi) Some uniqueness theorems for first order hyperbolic systems. *Publ. Res. Inst. Math. Sci.* 11 (1975/76), no. 2, 403-415. (Maria Cinquini-Cibrario) 57 #6860 35L50
- Šagi-Sultan, I. Z.** Differential equations of motion of analytical mechanics in the relative components of an orthonormal frame. (Russian) *Differential equations and their application (Russian)*, pp. 132-140, 214. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1970. (Author's summary) 51 #14695 70.53
- Sagitova, N. H.** See **Studies in the theory of plates and shells**, 48 #3343
- Sagle, Arthur A.** (with Walde, Ralph E.) ★Introduction to Lie groups and Lie algebras. Pure and Applied Mathematics, Vol. 51. Academic Press, New York-London, 1973. ix + 361 pp. (N. R. Wallach) 50 #13374 22Exx (17Bxx)
- (with Schumi, J. R.) Multiplications on homogeneous spaces, nonassociative algebras and connections. *Pacific J. Math.* 48 (1973), 247-266. (K. Nomizu) 51 #11361 53C30 (17E05)
- Jordan algebras and connections on homogeneous spaces. *Trans. Amer. Math. Soc.* 187 (1974), 405-427. (U. Hirzebruch) 49 #3776 53C30
- Power-associative algebras and Riemannian connections. *Pacific J. Math.* 65 (1976), no. 2, 493-498. (U. Hirzebruch) 54 #11224 53C05 (17A05)

- (with Schumi, J. R.) Anti-commutative algebras and homogeneous spaces with multiplications. *Pacific J. Math.* **68** (1977), no. 1, 255-269. (J. L. Koszul) **57** #10647 53C30 (55D45)
- (with Holmes, John P.) Problems in H -spaces and nonassociative algebras. *Kumamoto J. Sci. (Math.)* **13** (1978/79), no. 1, 1-5. (J. Stasheff) **58** #13010 55D45 (17E05)
- Sagomonjan, A. Ja.** Axial impact on an elastic cylindrical shell filled with a compressible fluid. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **26** (1971), no. 6, 87-99. (Simona Popp) **46** #4850 76.35
- Axial impact of a cylindrical shell on the surface of a compressible fluid. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **27** (1972), no. 1, 81-89. (Simona Popp) **46** #4851 76.35
- Sagraloff, Boris** (with Mennicken, Reinhard) Störungstheoretische Untersuchungen über Semi-Fredholmpaare und -operatoren in lokalkonvexen Vektorräumen. I. *J. Reine Angew. Math.* **280** (1976), 1-36. (Harro Heuser) **52** #8979 47A55
- (with Mennicken, Reinhard) Eine Verallgemeinerung des Satzes vom abgeschlossenen Wertebereich in lokalkonvexen Räumen. (English summary) *Manuscripta Math.* **18** (1976), no. 2, 109-146. (A. McIntosh) **53** #6274 46A30 (47A55)
- Eine Ergänzung zum Satz vom abgeschlossenen Wertebereich in lokalkonvexen Räumen. (English summary) *Manuscripta Math.* **22** (1977), no. 3, 213-224. (Author's summary) **58** #23476 46A30 (47A05)
- Sagretti, C.** (with Turchetti, G.; Ortolani, F.) Variational bounds to the excited states from a generalized Brillouin-Wigner equation. (Italian and Russian summaries) *Nuovo Cimento A* (11) **44** (1978), no. 2, 211-229. (H. S. P. Grässer) **58** #8947 81.49
- Saguez, C.** Integer programming applied to optimal control. *Progress in operations research, Vols. I, II (Proc. Sixth Hungarian Conf., Eger, 1974)*, pp. 779-800. *Colloq. Math. Soc. János Bolyai, Vol. 12, North-Holland, Amsterdam, 1976.* (E. G. Gol'shtein) **56** #2373 90C10
- (with Mignot, Fulbert; Van de Wiele, J. P.) Contrôle optimal de systèmes gouvernés par des problèmes aux valeurs propres. (English summary) *Appl. Math. Optim.* **3** (1976/77), no. 4, 291-320. (L. D. Berkovitz) **57** #7296 49A20
- A variational inequality associated with a Stefan problem simulation and control. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977)*, Part 1, pp. 362-369. *Lecture Notes in Control and Information Sci.*, Vol. 6, Springer, Berlin, 1978. (Author's summary) **58** #19138 65K05 (65C99)
- Sagui, C. L.** See *Philosophers and machines*, **52** #5275
- Sagunov, V. I.** (with Garkavenko, S. I.) On fault diagnosis in continuous objects. *Automat. i Telemekh.* **1976**, no. 9, 177-185 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 9, part 2, 1445-1452 (1977). (Takao Ozawa) **56** #8192 94A20
- (with Garkavenko, S. I.) Completing a minimal set of test points for detecting failures of any multiplicity in continuous systems subject to checking. *Automat. i Telemekh.* **1977**, no. 7, 175-179 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 7, part 2, 1088-1092. (S. L. Hakimi) **58** #9836 94A20
- Sagyndykov, K.** See *al-Farabi, Abū Naṣr Muḥammad ibn Muḥammad ibn Tarkhān*, **56** #5132
- Sagyngaliev, K. S.** (with Ašimov, A.) The scheduling of batch production. *Automat. i Telemekh.* **1975**, no. 1, 104-115 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 1, 93-103. (Authors' summary) **56** #10903 90B35
- Sah, Chih Han** Symmetric bilinear forms and quadratic forms. *J. Algebra* **20** (1972), 144-160. (J. S. Hsia) **45** #3448 15A63
- Alternating and symmetric multilinear forms and Poincaré algebras. *Comm. Algebra* **2** (1974), 91-116. (D. B. Shapiro) **54** #7506 15A69
- Cohomology of split group extensions. *J. Algebra* **29** (1974), 255-302. (L. R. Vermani) **52** #14083 20J10 (18H10)
- (with Wagoner, John B.) Second homology of Lie groups made discrete. *Comm. Algebra* **5** (1977), no. 6, 611-642. (Editors) **58** #31128 57F10 (18F25, 57C10)
- "Automorphisms of finite groups" (*J. Algebra* **10** (1968), 47-68): addendum. *J. Algebra* **44** (1977), no. 2, 573-575. (M. F. Newman) **55** #8172 20D45
- Cohomology of split group extensions. II. *J. Algebra* **45** (1977), no. 1, 17-68. (L. R. Vermani) **57** #3217 18H10 (20Jxx, 18G40, 18H10)
- Saha, Bibhuti Bhusan** On some generating relations of Hermite and analogous polynomials. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **15**(63) (1971), no. 4, 467-471 (1973). (B. M. Agrawal) **48** #2458 33A65
- On a generating function of generalized Hermite polynomials. *C. R. Acad. Bulgare Sci.* **27** (1974), 889-892. (L. R. Bragg) **53** #911 33A65
- A bilinear generating function for Bessel polynomials. *Mat. Vesnik* **11**(26) (1974), 289-291. (Mourad E. H. Ismail) **50** #13658 33A40
- A new bilateral generating function for the function generated by $(1-t)^{-1/2} \exp [x\{(1-t)^{-1/2}-1\}]$. *Math. Balkanica* **5** (1975), 258-261. (Not reviewed) **33A70**
- (with Chatterjee, Santi Kumar) Quelques fonctions génératrices des polynômes de Gegenbauer, du point de vue des groupes de Lie. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 17, A1057-A1060. (Authors' summary) **55** #5923 33A65 (33A75)
- (with Chatterjee, Santi Kumar) Quelques fonctions génératrices des polynômes de Laguerre, du point de vue des groupes de Lie. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 18, A1121-A1124. (Authors' summary) **55** #8439 33A65
- Saha, G. M.** (with Kulshreshtha, A. C.; Dey, A.) On circular designs. *Ann. Inst. Statist. Math.* **23** (1971), 491-497. (Authors' summary) **47** #1211 62K05
- (with Mishra, A. K.) A class of three-replicate three-associate p.b.i.b. designs. *Ann. Inst. Statist. Math.* **23** (1971), 499-505. (I. M. Chakravarti) **47** #7870 62K10
- (with Dey, A.; Kulshreshtha, A. C.) Three symbol partially balanced arrays. *Ann. Inst. Statist. Math.* **24** (1972), 525-528. (Authors' summary) **48** #3199 62K10
- (with Kulshreshtha, A. C.; Dey, A.) Balanced designs with unequal replications and unequal block sizes. *Ann. Math. Statist.* **43** (1972), 1342-1345. (I. M. Chakravarti) **47** #7868 62K10
- (with Dey, A.) On construction and uses of balanced n -ary designs. *Ann. Inst. Statist. Math.* **25** (1973), 439-445. (D. A. Sprott) **49** #8240 62K99
- On construction of T_m -type PBIB designs. *Ann. Inst. Statist. Math.* **25** (1973), 605-616. (K. Sarkadi) **50** #3480 62K10
- (with Kulshreshtha, A. C.; Dey, A.) On a new type of m -class cyclic associative scheme and designs based on the scheme. *Ann. Statist.* **1** (1973), 985-990. (Nobuo Hamada) **55** #6727 62K10
- (with Dey, A.) An inequality for tactical configurations. *Ann. Inst. Statist. Math.* **2** (1974), 171-173. (Damaraju Raghavarao) **51** #211 05B30 (62K10)
- (with Banerjee, Asit K.; Dey, A.) Some main effect plans for 3^n factorials. *Ann. Inst. Statist. Math.* **27** (1975), 159-165. (Authors' summary) **56** #16950 62K15
- A note on relations between incomplete block and weighing designs. *Ann. Inst. Statist. Math.* **27** (1975), no. 2, 387-390. (M. Atiqullah) **53** #1874 62K10
- On construction of balanced ternary designs. *Sankhyā Ser. B* **37** (1975), no. 220-227. (Author's summary) **58** #31636 62K10
- Some results in tactical configurations and related topics. *Utilitas Math.* **7** (1977), 223-240. (R. C. Mullin) **51** #10132 05B30
- (with Das, A. D.) On construction of neighbor designs. *Calcutta Statist. Assoc. Bull.* **25** (1976), no. 97-100, 151-163 (1977). (Damaraju Raghavarao) **56** #16947 62K10
- On Caliński's patterns in block designs. *Sankhyā Ser. B* **38** (1976), no. 4, 383-397. (Author's summary) **58** #31638 62K10
- (with Shanker, Gauri) On a generalized group-divisible family of association schemes and PBIB designs based on the schemes. *Sankhyā Ser. B* **38** (1976), no. 4, 393-404. (Authors' summary) **58** #31637 62K10
- Saha, J. L.** An algorithm for bus scheduling problems. *Operational Res. Quart.* **21** (1970), 463-474. (Author's summary) **45** #1579 90B35
- Saha, N. G.** (with Ray, K. C.) On sets under certain transformations in R_q . *Publ. Inst. Math. (Beograd) (N.S.)* **22**(36) (1977), 237-244. (T. Neubrunn) **58** #6127 28A05
- Saha, Rajat K.** (with Gupta, Someshwar C.) Frequency domain pattern classification. *Information Sci.* **6** (1973), 285-300. (J. Capon) **48** #3316 68A45
- Duality of linear fixed-point smoothing and fixed-time control. *Internat. J. Systems Sci.* **7** (1976), no. 8, 863-877. (See Zbl 336 #93040) **93E10**
- Sahab, Salem** (with Al-Rashed, Abdullah) On the zeros of solutions of quasilinear differential equations of the fifth order. *Arabian J. Sci. Engrg.* **1** (1975/76), no. 2, 124-126. (M. E. Muldoon) **55** #8466 34C10
- Sahabedinov, M. A.** Recursion relations for orthogonal polynomials of two variables (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. No. 75* (1970), 22-25. (Author's introduction) **45** #7927 65Q05
- Sahabedinova, L. A.** See *Control of large-scale systems*, **57** #18909a; *Control of large-scale systems*, **57** #18909b; *Control of large-scale systems*, **58** #11b; *Automatic control systems*, **58** #33173a; *Automatic control systems*, **58** #33173b and *Automatic control systems*, **58** #33174b
- Sahabieva, G. A.** The Goursat boundary value problem for an equation of hyperbolic type in three-dimensional space. (Russian) *Differentsial'nye Uravneniya (Ryazan) No. 6* (1975), 200-207. (RZhMat 1977 #9 B390) **58** #29298 35L10
- Solution of the Goursat problem for an equation of hyperbolic type in three-space (Russian) *Differentsial'nye Uravneniya (Ryazan') Vyp. 8* (1976), 196-202. **56** #12611 35L15
- Solution of the Dirichlet problem in an unbounded domain that contains a line of singularity of the coefficients. (Russian) *Differentsial'nye Uravneniya (Ryazan') No. 1* (1977), 149-161. (Editors) **58** #11908 35J70
- Sahadevan, P. V.** Evolution of 'N' polar curves by extension of focal points (by more than two) of an ellipse. *Proc. Indian Acad. Sci. Sect. A* **79** (1974), 269-281. (J. F. Rigby) **50** #8260 50B05
- Sahaev, I. I.** (with Čirkov, G. V.) The projectivity of finitely generated flat modules (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 1(116), 85-93. (G. M. Bergman) **45** #5158 16A50
- (with Dolotkazin, A. H.; Dorodnov, A. V.; Ermolaev, Ju. B.; Norden, A. P.; Stolov, E. L.; Sul'din, A. V.; Čibrikova, L. I.; Eskin, L. D.) Vladimir Vladimirovich Morozov. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 2(153), 140-141. (Editors) **51** #10010 01A70
- Finite generation of projective modules. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 9(184), 69-79. (Petr Němec) **58** #784 16A50
- Sahaev, Š.** The computation of the amplitude of electromagnetic stationary oscillations (Russian) *Differential equations and their application (Russian)*, pp. 69-92 (errata insert) 212-213. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1970. (From the introduction) **51** #14755 78.35
- Solution of the first initial-boundary value problem for nonstationary systems of Maxwell's equations (potential theory). I. (Russian) *Akad. Nauk Kazah. SSR Trudy Inst. Mat. i Meh.* **2** (1971), 69-77, 340-341. (Author's summary) **56** #12675 35Q99
- Solvability of a certain nonlinear nonstationary boundary value problem of magnetohydrodynamics in the spaces $W_{pi}^{2,1}(Q_T)$, $p > 1$, and $C_x^{2+\alpha, 1+\alpha/2}(Q_T)$. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 815-818. (S. Kaliski) **49** #4421 76.35 (35Q99)
- An estimate of the solution of the first initial-boundary value problem for Maxwell's equation in the space $W_{pi}^{2,1}(Q_T)$, $p > 1$. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1973**, no. 1, 83-85, 96. (M. I. Imanaliev) **51** #13484 35Q99
- Estimation of the solution of a certain overdetermined parabolic initial-boundary value problem. (Russian) *Boundary value problems of mathematical physics, 9. Trudy Mat. Inst. Steklov.* **127** (1975), 58-75, 155. (V. Ju. Ljapidevskii) **56** #16174 35Q99 (35N05)
- (with Solonnikov, V. A.) Estimations of the solutions of a certain boundary value problem of magnetohydrodynamics. (Russian) *Boundary value problems of mathematical physics, 9. Trudy Mat. Inst. Steklov.* **127** (1975), 76-92, 155. (V. Ju. Ljapidevskii) **56** #16175 35Q99 (76.35)
- Solvability of certain nonstationary boundary value problems of electrodynamic and of magnetohydrodynamics in the spaces $W_{pi}^{2,1}(Q_T)$, $p > 1$, and $C_x^{2+\alpha, 1+\alpha/2}(Q_T)$. (Russian) *Imbedding theorems and their applications (Proc. All-Union Sympos., Alma-Ata, 1973) (Russian)*, pp. 140-145, 193. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1976. (Author's summary) **57** #14935 78.46
- The differential properties of the solutions of a certain free convection problem (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1977**, no. 3, 80-82, 92. (Author's summary) **57** #18447 76.35 (35Q99)

- The conjugation problem of electrodynamics. I. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1978**, no. 3, 60-66, 93. (Erich Miersemann) **58** #19837 78.35
- Shai, Bhagwan** (with Sinha, K. S.) Asymptotic expansions of the solutions for small and large Rossby numbers. *Indian J. Pure Appl. Math.* **9** (1978), no. 1, 34-46. (From the authors' summary) **57** #8422 76.41
- Shai, Gopal Ji** (with Mehra, A. N.) A generalization of the Meijer transform of two variables. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **36** (1971), 41-52 (1974). (B. S. Tavathia) **52** #1190 44A30
- An expansion formula for the generalized function of two variables. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **16(64)** (1972), no. 1, 83-92 (1973). (S. Saran) **48** #6493 33A35
- (with Mehra, A. N.) On product of hypergeometric series associated with P -function of two variables. *Ganita* **24** (1973), no. 1, 75-82. (Y. L. Luke) **50** #5050 33A35
- Integrals involving P -function of two variables and Gauss's hypergeometric function. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 443-448. (S. Saran) **52** #8515 33A30
- A generalization of Laplace transform. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 61-65 (1974). (R. G. Buschman) **51** #3810 44A15 (33A35)
- On a generalization of Meijer transform. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **20** (1974), no. 2, 395-399. (R. N. Pandey) **55** #6136 44A15
- On Coulomb wave function. *C. R. Acad. Bulgare Sci.* **27** (1974), 15-18. (C. J. Eliezer) **50** #15661 81.33
- On certain double integrals involving Fox H -function. *Ranchi Univ. Math. J.* **5** (1974), 14-20. (P. Anandani) **55** #10743 33A35
- Shai, Hardeo** (with Govindarajulu, Z.) Estimation of the parameters of a normal distribution with known coefficient of variation. (French summary) Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 2. *Bull. Inst. Internat. Statist.* **44** (1971), no. 2, 198-201. (Rasul A. Khan) **51** #7110 62F10
- (with Govindarajulu, Z.) Estimation of the parameters of a normal distribution with known coefficient of variation. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **19** (1972), no. 3, 1-14. (D. A. Sprott) **48** #5236 (E 54 #3929) 62F10
- (with Anderson, R. L.) Confidence regions for variance ratios of random models for balanced data. *J. Amer. Statist. Assoc.* **68** (1973), 951-952. (Mir Ali) **51** #9337 62F25
- Some formal Bayes estimators of variance components in the balanced three-stage nested random effects model. *Comm. Statist.* **3** (1974), 233-242. (E. S. Keeping) **49** #1665 62F15
- Simultaneous confidence intervals for variance components in some balanced random effects models. *Sankhyā Ser. B* **36** (1974), no. 3, 278-287. (U. B. Paik) **52** #15873 62J10
- On negative estimates of variance components under finite population models. *South African Statist. J.* **8** (1974), 157-166. (M. Atiqullah) **52** #15872 62J10
- Non-negative maximum likelihood and restricted maximum likelihood estimators of variance components in two simple linear models. *Utilitas Math.* **5** (1974), 151-160. (R. H. Rodine) **49** #10083 62J10
- Bayes equivariant estimators in a crossed classification random effects model. *Ann. Inst. Statist. Math.* **27** (1975), no. 3, 501-505. (I. Guttman) **53** #4401 62J10 (62F15)
- (with Ramirez Martinez, Alcedo A.) Some formal Bayes estimators of variance components in a crossed classification random effects model. *Austral. J. Statist.* **17** (1975), no. 1, 43-48. (Bruce M. Hill) **53** #11862 62F15 (62J10)
- Bayes equivariant estimators in high order hierarchical random effects models. *J. Roy. Statist. Soc. Ser. B* **37** (1975), 193-197. (I. Guttman) **51** #11851 62J10 (62F15)
- (with Govindarajulu, Z.) Correction to: "Estimation of the parameters of a normal distribution with known coefficient of variation" (Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. **19** (1972), no. 3, 1-14). *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **22** (1975), no. 3, 1-2. (Editors) **54** #3929 62F10
- A comparison of estimators of variance components in the balanced three-stage nested random effects model using mean squared error criterion. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 435-444. (George W. Williams) **55** #1652 62J15 (62C15)
- Shaidarova, N.** (with Zuparov, T. M.) On an estimate of the remainder term in a local limit theorem. (Russian) *Random processes and statistical inference*, No. 5 (Russian), pp. 182-186, 205. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1975. (F. N. Galstjan) **54** #6239 60F05
- Shaidarova, P. Š.** (with Šazijatov, Š.) The integration of equations of the motion of holonomic nonconservative systems with pulse multipliers of connections. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 7, 9-11. (Gh. Silas) **47** #7981 70.35
- Shai, Devendra** Elements of an emerging theory of complexity per se. *Cybernetica* **19** (1976), no. 1, 5-38. (Mario Bunge) **53** #12656 93A10 (68A20)
- Homeoerthetic regulation and structural stability. *Cybernetica* **19** (1976), no. 4, 305-315. (Author's introduction) **58** #20578 92A05 (58F10)
- Shanenko, A. I.** (with Borovkov, A. A.) Remarks on the convergence of random processes in nonseparable metric spaces and on the nonexistence of a Borel measure for processes in $C(0, \infty)$. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 812-815. (W. A. Woyczyński) **48** #7326 60B10
- Estimates of the rate of convergence in the invariance principle. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1974), 1076-1078. (R. M. Dudley) **51** #6932 60F05 (60B10)
- The convergence of the distributions of functionals of processes that are defined on the whole axis. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 102-119, 237. (V. V. Anisimov) **49** #9940 60G50 (60F05)
- The rate of convergence in a boundary problem. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **19** (1974), 416-421. (P. Révész) **49** #8092 60F05
- (with Mosjagin, V. E.) The rate of convergence of the distribution of the likelihood ratio statistic. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 5, 1168-1175, 1208. (A. L. Rukhin) **57** #4401 62E20 (62F10)
- Saharukov, N. A.** (with Čistjakov, S. F.) On the question of certain linearization methods. (Russian) *Differencial'nye Uravneniya* **10** (1974), 671-675, 765. (M. Kakabadze) **51** #10753 34C05
- Saharov, A. S.** (with Vainberg, D. V.; Gorodeckii, A. S.; Kiričevskii, V. V.) The finite element method in the mechanics of deformable bodies. (Russian) *Prikl. Meh.* **8** (1972), no. 8, 3-28, 140. (P. P. Teodorescu) **50** #11964 73.65
- Saharov, Ju. P.** A method for the synthesis of a complete verifying test for logical schemes with memory. (Russian) *Vychisl. Sistemy No. 54* (1973), 76-89, 155. (Horst Reichel) **50** #16140 94A20
- Saharov, M. P.** See *Proceedings: IFAC World Congress*, **50** #12338
- Sahasrabudhe, S. C.** (with Kulkarni, A. D.) On solving Fredholm integral equations of the first kind. *J. Assoc. Comput. Mach.* **24** (1977), no. 4, 624-629. (Authors' summary) **58** #24951 65R05
- Sabay, B.** (with Prasad, Tribhuan) Interacting models for some stochastic physiological structures. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Unio. Patras, Patras, 1976)*, Vol. 3, pp. 787-790. Hemisphere, Washington, D.C., 1977. (Authors' summary) **58** #20579 92A05
- Šahbajjan, R. L.** The Cauchy problem for hyperbolic pseudodifferential equations. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **7** (1972), no. 4, 287-299, 311. (J. S. Joel) **49** #865 35L30 (35S10, 47G05)
- A boundary value problem in a half-space for second order elliptic operators with an infinite number of independent variables. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **11** (1976), no. 1, 82-96, 98. (From the introduction) **58** #6774 35R15 (35J99, 46G05)
- An elliptic problem with a parameter for second order equations with an infinite number of independent variables. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **12** (1977), no. 4, 252-261, 326. (H. Marcinkowska) **58** #1771 35R15 (35J99)
- Šahbazjan, K. H.** (with Tairjan, V. M.) The construction of a generalized pantograph. (Russian. Armenian summary) *Erevan. Gos. Univ. Učen. Zap. Estestv. Nauki* **1976**, no. 3(133), 26-33. (Authors' summary) **58** #32194 70.50 (50D15)
- Šahbazjan, K. V.** The diagram languages of programming. *Dokl. Akad. Nauk SSSR* **188** (1969), 45-48. (See RŽMat **1970** #2 V595) 68A30 (68A05)
- (with Lebedinskii, M. M.; Smirnova, T. N.) Specialization of the A -language for linear algebra problems. *Trudy Mat. Inst. Steklov.* **96** (1968), 48-58 (Russian); translated in *Proc. Steklov Inst. Math.*, No. 96 (1968): *Automat. Programming, Numer. Methods and Functional Anal.*, pp. 57-70. Amer. Math. Soc., Providence, R.I., 1970. (A. A. Grau) **45** #2951 68A30
- (with Benkova, N. B.; Tuškina, T. A.) The schedule that minimizes the number of processors of a homogeneous computer system. (Russian) *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 5, 115-117. (V. V. Ivanov) **48** #10191 68A20 (94A20)
- (with Tuškina, T. A.) Parallel ordering of several processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 5, 38-42. (V. Spiridonov) **47** #1447 90B35
- (with Tuškina, T. A.; Lebedinskaja, N. B.) An algorithm for compiling an optimal schedule for a parallel-sequential network. (Russian) Numerical methods and automatic programming. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **48** (1974), 200-204, 213-214. (I. Gh. Ciobanu) **53** #7439 90B35 (90C35)
- (with Tuškina, T. A.; Lebedinskaja, N. B.) The problem of parallel ordering on graphs with a structure of parallel sequential networks. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 5, 81-85. (Authors' summary) **57** #14586 68A05 (94A20)
- (with Tuškina, T. A.; Lebedinskaja, N. B.) The optimal execution of computing processes by two processors. (Russian. English summary) *US i M—Upravljajušie Sistemy i Mašiny* **1975**, no. 1(15), 93-97, ii. (Authors' summary) **58** #25188 68A99
- (with Tuškina, T. A.) A survey of methods for compiling schedules for multiprocessor systems. (Russian) Computational methods of linear algebra. Parallel computations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov.* **54** (1975), 229-258, 265. (I. Gh. Ciobanu) **53** #7440 90B35 (68A99)
- (with Lebedinskaja, N. B.) Minimization of the total penalty in the problem of the parallel ordering of n independent tasks. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 4, 790-792. (I. Marusciac) **58** #15120 90B35 (90C50)
- (with Tuškina, T. A.) The statistical efficiency of algorithms for the solution of a problem on partitioning the vertices of a graph. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 38-43. (D. Ja. Kesel'man) **57** #18785 90B10
- (with Lebedinskaja, N. B.) Optimal schedulings with gaps for independent tasks in a queueing system with N servers. (Russian) Numerical methods and questions on organization of computations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **70** (1977), 205-231, 294. (Authors' summary) **58** #25942 90B35
- See also *Automatic programming and numerical methods of analysis*, **46** #8464; *Numerical methods and automatic programming*, **48** #7522 and *Theory of languages and methods of construction of programming systems*, **48** #7682
- Šahbazov, A. A.** A certain application of the Bernoulli scheme with variable probabilities in approximation theory. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **28** (1972), no. 11-12, 11-14. (T. Bojanov) **47** #9134 41A35
- Servicing with warm-up and with dependence of the servicing time on the length of the queue. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1974**, no. 1, 39-43. (From the author's introduction and summary) **54** #8926 60K25
- Proof of the ergodicity of certain special queueing processes. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 10* (1974), 167-172, 178. (H. T. Tašmanov) **54** #8927 60K25
- A certain duality relation in queueing theory. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1975**, no. 3, 14-18. (H. T. Tašmanov) **53** #11803 (E A 54) 60K25
- (with Ešov, I. I.) On a class of branching processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **20** (1975), 182-187. (A. V. Nagaev) **51** #1988 60J80
- Sahgal, R.** (with Webb, R. P.) Smoothing algorithms for nonlinear distributed parameter systems. *Automatica—J. IFAC* **12** (1976), no. 3, 237-244. (N. U. Ahmed) **54** #7075 93E10

- Sahin, İzzet** Equilibrium behavior of a stochastic system with secondary input. *J. Appl. Probability* **8** (1971), 252-260. (P. R. Milch) **45** #6096 60K25
On the single server queue with preemptive service interruptions. *J. Appl. Probability* **8** (1971), 835-837. (P. R. Milch) **45** #6097 60K25
(with Perrakis, Stylianos) Resource allocation and scale of operations in a monopoly firm: a dynamic analysis. *Internat. Econom. Rev.* **13** (1972), 399-407. (G. Tintner) **52** #2545 90A15
(with Achou, Oussama) On the limiting behaviour of a basic stochastic process. *J. Appl. Probability* **9** (1972), 202-207. (L. Takács) **45** #1279 60K99
(with Perrakis, Stylianos) On risky investments with random timing of cash returns and fixed planning horizon. *Management Sci.* **22** (1975/76), no. 7, 799-809. (A. L. Nagar) **54** #2143 90A05
(with Perrakis, Stylianos) Moment inequalities for a class of single server queues. (French summary) *INFOR—Canad. J. Operational Res. and Information Processing* **14** (1976), no. 2, 144-152. (Frank A. Haight) **54** #3881 60K25
Cumulative constrained sojourn times in semi-Markov processes with an application to pensionable service. *J. Appl. Probab.* **15** (1978), no. 3, 531-542. (Jacques Janssen) **58** #13591 62P05 (60K15)
- Šahin, Mezen** Differential operators that are defined on continuous functions. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1973**, no. 8, 66-71, 148. (J. B. Butler, Jr.) **53** #11143 47E05 (34B25)
- Sähleanu, Victor** See *Recherches sur la philosophie des sciences*, **52** #7764
- Sahlquist, Henrik** (with Hansson, Bengt) A proof technique for social choice with variable electorate. *J. Econom. Theory* **13** (1976), no. 2, 193-200. (Andrew P. Sage) **56** #8089 92A20
- Sahlqvist, Henrik** Completeness and correspondence in the first and second order semantics for modal logic. *Proceedings of the Third Scandinavian Logic Symposium (Univ. Uppsala, Uppsala, 1973)*, pp. 110-143. *Stud. Logic Found. Math.*, Vol. 82, North-Holland, Amsterdam, 1975. (Kit Fine) **52** #7855 02C10
- Šahmatov, V. M.** (with Bagrov, V. G.; Klimenko, Ju. I.; Šapovalov, V. N.; Èkle, G. G.) New exact solutions of the Dirac equation. I. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1973**, no. 7, 95-101. (Editors) **58** #32526a 81.35
(with Gitman, D. M.; Švarcman, Š. M.) The completeness and orthogonality on the zero plane of a certain class of solutions of relativistic wave equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 8, 43-49. (Authors' summary) **58** #25525 81.35
(with Bagrov, V. G.; Byzov, N. N.; Gitman, D. M.; Klimenko, Ju. I.; Meškov, A. G.; Šapovalov, V. N.) New exact solutions of the Dirac equation. V. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 9, 106-112. (Editors) **58** #32526f 81.35
- Šahmundes, L. Ju.** Properties of prices that result from the principle of the mutual benefit of exchange. (Russian) *Ekonom. i Mat. Metody* **9** (1973), 317-327. (A. Aganbegian) **48** #7919 90A15
- Šahmurov, V. B.** (with Jakubov, S. Ja.) Imbedding theorems and trace theorems in anisotropic spaces of vector-valued functions. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **33** (1977), no. 11, 16-18. (Authors' summary) **58** #12334 46E35
(with Jakubov, S. Ja.) Imbedding theorems for anisotropic spaces of vector-valued functions. (Russian) *Mat. Zametki* **22** (1977), no. 2, 297-301. (Alexander Doktor) **57** #17253 46E35
- Sahnhenko, P. M.** Linear summability methods for orthogonal series in $L^2[0,1]$. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 5(156), 52-66. (Naza Tanović-Miller) **53** #33592 42A60
- Sahney, Badri N.** (with Venugopal Rao, V.) On a sequence of Fourier coefficients. *Bull. Austral. Math. Soc.* **5** (1971), 343-349. (Yung-ming Chen) **45** #806 42A16
On the degree of approximation of continuous functions by Norlund means of their Fourier series. *Ranchi Univ. Math. J.* **2** (1971), 57-62. (H. P. Dikshit) **48** #4609 42A24
(with Venugopal Rao, V.) Error bounds in the approximation of functions. *Bull. Austral. Math. Soc.* **6** (1972), 11-18. (G. Sunouchi) **45** #2393 (E 46 #2334) 42A08
(with Venugopal Rao, V.) Corrigenda and an acknowledgement: "Error bounds in the approximation of functions". *Bull. Austral. Math. Soc.* **6** (1972), 480. (Editors) **46** #2334 42A08
(with Kuttner, Brian) On the absolute matrix summability of Fourier series. *Pacific J. Math.* **43** (1972), 407-419. (S. Izumi) **47** #9147 42A28
(with Goel, D. S.) On the absolute Norlund summability of a Fourier series. *Canad. Math. Bull.* **16** (1973), 599-602. (F. C. Hsiang) **49** #11127 42A28
(with Goel, D. S.) On the degree of approximation of continuous functions. *Ranchi Univ. Math. J.* **4** (1973), 50-53. (S. Izumi) **50** #5332 42A24
(with Goel, D. S.; Holland, A. S. B.; Nasim, C.) On best simultaneous approximation in normed linear spaces. *Canad. Math. Bull.* **17** (1974), no. 4, 523-527. (F. Deutsch) **51** #13556 41A65
(with Gupta, Devendra) Approximation of a function by ultraspherical expansions. *Math. Student* **42** (1974), 337-343 (1975). (H. P. Dikshit) **55** #8677 42A56
(with Goel, D. S.; Holland, A. S. B.; Nasim, C.) Best approximation by a saturation class of polynomial operators. *Pacific J. Math.* **55** (1974), 149-155. (John A. Roulier) **51** #8700 41A40
(with Holland, A. S. B.; Tzimbalario, Jean) A criterion for Euler summability of Fourier series. (Italian summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, 315-320. (Prem Chandra) **53** #13976 (EA 54) 42A24
(with Holland, A. S. B.; Tzimbalario, Jean) Summability of a class of Fourier series by the Norlund method and applications. *Jhānabha Sect. A* **5** (1975), 89-96. (From the authors' introduction) **58** #1965 42A24
(with Holland, A. S. B.) Some remarks on best simultaneous approximation. *Theory of approximation with applications (Proc. Conf., Univ. Calgary, Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 332-337. Academic Press, New York, 1976. (Mogens Esrom Larsen) **54** #816 41A50
(with Phillips, George M.) Best simultaneous approximation in the L_1 and L_2 norms. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 213-219. Academic Press, New York, 1976. (Mogens Esrom Larsen) **54** #815 41A50
- (with Holland, A. S. B.; Tzimbalario, Jean) On degree of approximation of a class of functions by means of Fourier series. *Acta Sci. Math. (Szeged)* **38** (1976), no. 1, 69-72. (J. S. Byrnes) **53** #13966 42A08
(with Holland, A. S. B.; Tzimbalario, Jean) On best simultaneous approximation. *J. Approximation Theory* **17** (1976), no. 2, 187-188. (Ralph L. James) **54** #3250 41A50
(with Holland, A. S. B.; Tzimbalario, Jean) On best simultaneous approximation. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 69-73 (1977). (E. W. Cheney) **57** #10331 41A65
(with Kathal, P. D.; Holland, A. S. B.) A class of continuous functions and the degree of approximation. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 3-4, 227-233. (Manfred v. Golitschek) **57** #7002 42A08
(with Holland, A. S. B.; Tzimbalario, Jean) On the $[F, d_n]$ summability of Fourier series. (Italian summary) *Boll. Un. Mat. Ital. A* (5) **14** (1977), no. 1, 126-130. (G. Sunouchi) **55** #10946 42A24
(with Chui, Charles K.; Rahman, Qazi Ibadur; Smith, Philip W.) On simultaneous Chebyshev approximation. *J. Approximation Theory* **22** (1978), no. 4, 350-351. (G. I. Taylor) **57** #13319 41A50
(with Kuttner, Brian) On non-uniqueness of the order of saturation. *Math. Proc. Cambridge Philos. Soc.* **84** (1978), no. 1, 113-116. (G. Sunouchi) **57** #13342 42A08
See also *Theory of approximation, with applications*, **52** #14742
- Sahney, Vinod K.** Scheduling data transmission under an $\{S_i; 0\}$ policy. *Naval Res. Logistics Quart.* **19** (1972), 725-735. (M. Rössler) **47** #4625 90B35
Single-server, two-machine sequencing with switching time. *Operations Res.* **20** (1972), 24-36. (George Weiss) **47** #1448 (E 54 #4626) 90B35
Errata: "Single-server, two-machine sequencing with switching time" (*Operations Res.* **20** (1972), 24-36). *Operations Res.* **22** (1974), no. 5, 1120. (Editors) **54** #4626 90B35
- Sahni, D. C.** Neutron transport problems in a spherical shell. *J. Mathematical Phys.* **16** (1975), no. 11, 2260-2270. (Carlo Cercignani) **54** #9524 82.45
- Sahni, Sartaj K.** (with Gonzalez, Teofilo) P-complete problems and approximate solutions. *15th Annual Symposium on Switching and Automata Theory (Univ. New Orleans, New Orleans, La., 1974)*, pp. 28-32. *IEEE Comput. Soc., Long Beach, Calif.*, 1974. (Thomas G. Szymanski) **54** #4189 68A20
(with Horowitz, Ellis) Computing partitions with applications to the knapsack problem. *J. Assoc. Comput. Mach.* **21** (1974), 277-292. (F. Giannessi) **50** #6488 90C10 (65K05)
Computationally related problems. *SIAM J. Comput.* **3** (1974), 262-279. (R. E. Brent) **55** #6955 68A20
(with Ibarra, Oscar H.) Polynomially complete fault detection problems. *IEEE Trans. Computers* **C-24** (1975), no. 3, 242-249. (Chantal Robach) **54** #9863 94A20 (68A20)
(with Horowitz, Ellis) On computing the exact determinant of matrices with polynomial entries. *J. Assoc. Comput. Mach.* **22** (1975), 38-50. (Ahmed H. Sameh) **58** #31767 65F05
Approximate algorithms for the 0/1 knapsack problem. *J. Assoc. Comput. Mach.* **22** (1975), 115-124. (M. M. Syslo) **57** #9064 90C10 (65K05)
(with Ibarra, Oscar H.) Hierarchies of Turing machines with restricted tape alphabet size. *J. Comput. System Sci.* **11** (1975), no. 1, 56-67. (Pavel Strnad) **51** #1464 68A20
(with Horowitz, Ellis) The computation of powers of symbolic polynomials. *SIAM J. Comput.* **4** (1975), 201-208. (N. J. Patterson) **51** #14637 68A15 (65D20)
(with Horowitz, Ellis) Fundamentals of data structures. Computer Science Engineering Series. *Computer Science Press, Inc., Woodland Hills, Calif.*, 1976. xii + 566 pp. (Bernard H. Rosman) **54** #6540 68A05
Algorithms for scheduling independent tasks. *J. Assoc. Comput. Mach.* **23** (1976), no. 1, 116-127. (Thomas L. Magnanti) **55** #7365 90B35
(with Horowitz, Ellis) Exact and approximate algorithms for scheduling nonidentical processors. *J. Assoc. Comput. Mach.* **23** (1976), no. 2, 317-327. (Stratton C. Jaquette) **52** #16593 90B35 (68A99)
(with Gonzalez, Teofilo) P-complete approximation problems. *J. Assoc. Comput. Mach.* **23** (1976), no. 3, 555-565. (M. Mañas) **53** #12078 68A20
(with Gonzalez, Teofilo) Open shop scheduling to minimize finish time. *J. Assoc. Comput. Mach.* **23** (1976), no. 4, 665-679. (Trần-Quốc-Tê) **55** #2108 90B35
(with Ibarra, Oscar H.; Kim, Chul E.) Finite automata with multiplication. *Theoret. Comput. Sci.* **2** (1976), no. 3, 271-294. (S. Ginsburg) **54** #1722 68A30
(with Gonzalez, Teofilo; Franta, W. R.) An efficient algorithm for the Kolmogorov-Smirnov and Lilliefors tests. *ACM Trans. Math. Software* **3** (1977), no. 1, 60-64. (Hannah Chen) **55** #11561 65C99
General techniques for combinatorial approximation. *Operations Res.* **25** (1977), no. 6, 920-936. (Zbl 386 #90048) **58** #32937 90C10
(with Gonzalez, Teofilo; Ibarra, Oscar H.) Bounds for LPT schedules on uniform processors. *SIAM J. Comput.* **6** (1977), no. 1, 155-166. (C. L. Liu) **55** #9928 90B35 (68A50)
(with Gonzalez, Teofilo) Preemptive scheduling of uniform processor systems. *J. Assoc. Comput. Mach.* **25** (1978), no. 1, 92-101. (Jacek Blaźewicz) **57** #5056 90B35 (68A10)
(with Horowitz, Ellis) Combinatorial problems: reducibility and approximation. *Oper. Res.* **26** (1978), no. 5, 718-759. (Authors' summary) **58** #19360 68A20 (68A10, 90Bxx)
(with Gonzalez, Teofilo) Flowshop and jobshop schedules: complexity and approximation. *Operations Res.* **26** (1978), no. 1, 36-52. (Andrew Yao) **57** #5057 90B35
- Sahnjuk, M. A.** See *Theory of languages and methods of construction of programming systems*, **48** #7682
- Šahno, K. U.** ★Элементы теории функций комплексной переменной и операционного исчисления. (Russian) [Elements of the theory of functions of a complex variable and operational calculus] *Izdat. "Vyšėiśaja Škola", Minsk*, 1975. 400 pp. (R. P. Boas, Jr.) **56** #15889 30-01 (44-01)
- Šahnov, I. F.** (with Pospelov, G. S.) Certain questions of the formation of long-term

- development programs. (Russian) *Problems in applied mathematics and mechanics* (dedicated to A. A. Dorodnitsyn on his sixtieth birthday) (Russian), pp. 44-54, 279. Izdat. "Nauka", Moscow, 1971. (Editors) **58** #20316 90A15
- See also **Questions on analysis and decision-making procedures**, **57** #11656
- Sahnović, A. L.** A certain method of inverting Toeplitz matrices. *Mat. Issled.* **8** (1973), no. 4(30), 180-186, 199. (D. Przeworska-Rolewicz) **49** #11306 47B35
- Sahnović, L. A.** Generalized wave operators. (Russian) *Mat. Sb. (N.S.)* **81**(123) (1970), 209-227. (Editors) **54** #3446 47A40
- Generalized wave operators and regularization of the perturbation expansion. (Russian. English summary) *Teoret. Mat. Fiz.* **2** (1970), no. 1, 80-86. (Author's summary) **57** #10456 47A40 (81.47)
- The similarity of linear operators. (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), 541-544. (F. H. Szafraniec) **45** #7510 47A45
- Similarity of operators. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 868-883. (S. Suljagić) **47** #7486 47A65
- On taking into account all scattering channels in the N -body problem with Coulomb interaction. (Russian. English summary) *Teoret. Mat. Fiz.* **13** (1972), no. 3, 421-427. (From the author's summary) **57** #8701 81.47
- An integral equation with a kernel dependent on the difference of the arguments. (Russian) *Mat. Issled.* **8** (1973), no. 2(28), 138-146, 193. (D. Przeworska-Rolewicz) **48** #9463 47G05 (45E10)
- The J -unitary group of a bounded operator. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 3, 83-84. (T. Ja. Azizov) **50** #10863 47A20
- A certain class of integral equations that are solvable in closed form. (Russian) *Mat. Issled.* **9** (1974), no. 1(31), 157-164. (C. Corduneanu) **50** #14118 45H05
- The factorization of an operator-valued transmission function. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 4, 781-784. (M. S. Livšic) **53** #11427 47B99 (94A20)
- The operator Bézoutiant in the theory of the separation of roots of entire functions. (Russian) *Funkcional. Anal. i Priložen.* **10** (1976), no. 1, 54-61. (G. K. Kalisch) **55** #3847 47A99 (30A66)
- The representation of the kernel of an invertible operator. (Russian) *Funkcional. Anal. i Priložen.* **11** (1977), no. 2, 89-90. (F. Smithies) **57** #3917 47G05
- Triangular integro-differential operators with a difference kernel. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 4, 871-877, 956. (Georg Heinig) **58** #12530 47G05 (45C05, 45H05)
- Sahnovskii, B. L.** (with Dikii, N. A.) A method for isolating loops in a directed graph. *Avtomat. i Telemekh.* **1975**, no. 4, 167-168 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 4, part 2, 674-675. (Authors' summary) **56** #11560 94A20
- Sahobov, O.** Some two-sided estimates for the probability of the failure of a system at a single period of regeneration. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 11, 10-12. (Z. Khali) **55** #13598 60K10
- (with Solov'ev, A. D.) Two-sided estimates of the reliability of repairable systems. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 5, 28-33, 83-84. (Z. Khali) **55** #1521 60K10 (62N05)
- (with Solov'ev, A. D.) Two-sided estimates of reliability in a general standby model with one renewal unit. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 4, 94-99 (Russian); translated as *Engrg. Cybernet.* **15** (1977), no. 4, 58-63 (1978). (Authors' summary) **58** #18766 60K10 (62N05)
- (with Solov'ev, A. D.) Two-sided estimates for the probability of the failure of a system over a single period of regeneration. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 2, 41-46, 95. (Z. Khali) **58** #31433 60K10
- Sahonenko, V. M.** Mixed problem for a wedge. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 1, 56-62, 140. (J. Ignaczak) **53** #9802 73.30
- The method of conjugacy in the solution of the first fundamental problem for a wedge. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1976**, no. 2, 49-51, 80. (G. S. Litvinčuk) **54** #2986 30A88
- Action of a concentrated force on a wedge with fixed edges. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1976**, no. 3, 53-56, 87. (Author's summary) **56** #13959 73.45
- Sahoo, B.** (with Parida, J.) On the complex nonlinear complementary problem. *Bull. Austral. Math. Soc.* **14** (1976), no. 1, 129-136. (C. B. Garcia) **53** #7488 90C30
- (with Parida, J.) Existence theory for the complex nonlinear complementarity problem. *Bull. Austral. Math. Soc.* **14** (1976), no. 3, 417-423. (Suresh Chandra) **54** #2212 90C30
- (with Parida, J.) On an application of the complex nonlinear complementarity problem. *Bull. Austral. Math. Soc.* **15** (1976), no. 1, 141-148. (Authors' summary) **55** #9991 90C25 (65K05)
- (with Parida, J.) A note: "On converse duality in complex nonlinear programming" (Bull. Austral. Math. Soc. **13** (1975), no. 3, 421-427) by Parida. *Z. Angew. Math. Mech.* **57** (1977), no. 8, 491. (Editors) **57** #11771 90C30
- (with Parida, J.) A note on generalised linear complementarity problems. *Bull. Austral. Math. Soc.* **18** (1978), no. 2, 161-168. (Jon W. Tolle) **58** #9310 90C99
- (with Parida, J.) Existence theory for symmetric dual nonlinear programs in complex space. (German and Russian summaries) *Z. Angew. Math. Mech.* **58** (1978), no. 1, 51-53. (M. Rössler) **58** #4340 90C30
- Sahoo, Debendranath** Tensor product composition of algebras in Bose and Fermi canonical formalism. *Pramāṇa* **8** (1977), no. 6, 545-562. (Author's summary) **56** #10485 81.17 (17B05)
- Sahoo, Doia Govinda** (with Mishra, Shankar Prasad) Flow engendered by the time-varying motion of a porous plate in the presence of a magnetic field. *Proc. Indian Acad. Sci. Sect. A* **86** (1977), no. 6, 549-556. (S. I. Pai) **57** #14862 76.35 (78.35)
- Sahov, E. M.** Numerical methods for the solution of approximate kinetic equations. (Russian) *Numerical methods in the dynamics of rarefied gases*, No. 2 (Russian), pp. 35-76, 170. *Akad. Nauk SSSR Vyčisl. Centr, Moscow*, 1975. (Author's summary) **58** #14356 76.65
- See also **Numerical methods in the dynamics of rarefied gases**, **48** #5509
- Sahov, Ju. A.** Certain questions on the computation of quadratures by means of two-sided formulas. (Russian) *Sakharth. SSR Mecn. Akad. Gamotshv. Centr. Šrom.* **9** (1970), no. 3, 75-90. (J. Kofron) **46** #1058 65D30
- A solution of the Cauchy problem with a preassigned number of correct digits for an ordinary differential equation. (Russian) *Questions of computational mathematics* (A collection dedicated to the memory of M. B. Gagua). *Sakharth. SSR Mecn. Akad. Gamotshv. Centr. Šrom.* **12** (1973), no. 1, 105-117. (From the author's introduction) **54** #1619 65L05
- Šahov, Ju. N.** Certain estimates in the construction of Bernoulli-normal sequences of symbols. (Russian) *Mat. Zamecki* **10** (1971), 501-510. (J. Galambos) **45** #8612 10F40
- The construction of a sequence of signs that is normal in the sense of Markov. (Russian) *Algebra and number theory. Moskov. Gos. Ped. Inst. Učen. Zap. No. 375* (1971), 143-155. (B. Volkman) **49** #2640 10K25 (10A30, 60J10)
- The error in the reconstruction of a certain class of functions from parallelepipedal nets. (Russian) *Mat. Zamecki* **15** (1974), 749-756. (B. Bojanov) **53** #11283 41A63
- Šahova, L. V.** The limit cycles of a certain differential equation. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.)* No. 181 (1970), 95-107. (C. E. Langenhop) **45** #5470 34C05
- See also **Proceedings: International Conference on Nonlinear Oscillations**, **47** #8969
- Šahova, N. G.** The nilpotency class of the free groups of certain product varieties. (Russian) *Mat. Zamecki* **19** (1976), no. 1, 91-98. (Robert G. Burns) **54** #401 20E10
- The nilpotency class of some groups. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1977**, no. 2, 69-76. (K. A. Hirsch) **56** #5729 20F15
- Šaharin, B. I.** Statistical characteristics of a class of nonlinear systems. *Avtomat. i Telemekh.* **1971**, no. 6, 55-64 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 6, part 1, 903-911. (Author's summary) **53** #10433 93E10 (94A05)
- (with Zavarikin, V. M.) Regions of asymptotic stability of Liénard's equation. *Prikl. Mat. Meh.* **36** (1972), 924-926 (Russian); translated as *J. Appl. Math. Mech.* **36** (1972), 872-874 (1973). (R. Liu) **48** #4434 34D05
- (with Vorob'ev, B. F.) Time until loss of tracking in nonlinear systems with periodic characteristic. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 3, 162-168 (Russian); translated as *Engrg. Cybernetics* **12** (1974), no. 3, 122-128. (Peter A. Cook) **53** #10434 93E10 (94A05)
- Stability of motions of a nonlinear system with a periodic characteristic. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 5, 174-182 (Russian); translated as *Engrg. Cybernet.* **15** (1977), no. 5, 114-123 (1978). (V. M. Popov) **58** #33385 93D05
- Sahu, Kailas C.** (with Mohapatra, Pratap K. J.) Near optimal production policies for a discrete production-inventory system with stochastic demand. *Internat. J. Systems Sci.* **8** (1977), no. 8, 943-952. (D. Hochstädter) **57** #9020 90B05
- Sahu, R. B.** On the polynomials of Sheffer A -type generated by $A(t)\Psi[xH(t)+g(t)]$. *Ranchi Univ. Math. J.* **3** (1972), 63-66. (I. M. Sheffer) **47** #7086 33A70
- A generalisation of Laguerre polynomials. *Bull. Calcutta Math. Soc.* **65** (1973), no. 2, 95-100. (V. L. Deshpande) **52** #6070 33A65
- Some polynomials related to a generalization of Laguerre polynomials. *Ranchi Univ. Math. J.* **6** (1975), 85-94. (W. Witschel) **57** #6546 33A65
- Šahunjan, T. G.** (with Danilenko, S. E.; Kagan, B. M.) The gradient projection method for the solution of optimal design problems. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1976**, no. 3, 31-36. (Authors' summary) **57** #13645 49D10 (90B40)
- (with Danilenko, S. E.; Kagan, B. M.) Discrete algorithms in optimization problems. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1977**, no. 2, 39-42, 93. (Authors' summary) **58** #9271 90C30
- Šahurin, A. P.** (with Sosulin, Ju. G.) Analysis of Bayesian algorithms for simultaneous detection and estimation. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 1, 130-137 (Russian); translated as *Engrg. Cybernetics* **15** (1977), no. 1, 107-114. (Authors' summary) **57** #15732 94A05
- Šahverdjan, A. Ju.** Hyperbolic capacity and the decrease of functions that are meromorphic in the disc. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **66** (1978), no. 2, 76-79. (Z. Rubinstein) **58** #17097 30A70
- Harmonic functions that are continuous on a singular set of zero capacity. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **13** (1978), no. 2, 100-106, 171. (Vadim Komkov) **58** #11462 31A15
- Šahverdjan, S. V.** Optimizing a control system with restrictions on the phase coordinates. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 5, 199-204 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 5, 158-163. (Author's summary) **58** #15450 93C15
- Saičev, A. I.** A certain method of finding the time characteristics of Markov processes. (Russian. English summary). *Izv. Vysš. Učebn. Zaved. Radiofizika* **17** (1974), 864-868. (Not reviewed) **60J99** (62M05)
- (with Malahov, A. N.) Certain statistical properties of random waves considered in the approximation of geometric optics. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **17** (1974), no. 12, 1817-1826. (Authors' summary) **56** #17518 78.60
- The statistics of wave intensity behind a random phase screen in the approximation of geometrical optics. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **19** (1976), no. 3, 418-425. **56** #17519 78.60
- (with Gurbatov, S. N.) The diffusion of wave packets in a medium with space-time inhomogeneities. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **19** (1976), no. 9, 1359-1367. (Authors' summary) **56** #17513 78.45
- (with Malahov, A. N.) The Lagrangian and Eulerian description of the statistical properties of light waves. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **19** (1976), no. 9, 1368-1377. (Authors' summary) **58** #32428 78.60
- (with Malahov, A. N.; Molodcov, S. N.) On the hypothesis of a logarithmically normal distribution law for the amplitude fluctuations of a light wave that is propagated in a randomly inhomogeneous medium. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **20** (1977), no. 2, 250-259. (Vadim Komkov) **58** #14404 78.60
- A statistical variant for the analysis of the two-point boundary value problem. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **21** (1978), no. 7, 996-1003. (Author's summary) **58** #19958 81.34 (34B10, 35R30)
- Said, Tanios** Opérateur "temps de retard" en théorie de la diffusion par un potentiel du type "presque coulombien". (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 21, B1-B24. (Paul F. Zweifel) **52** #9910 (EA 53) 81.47

- Said, Y. A.** Some results concerning the hyperbolic triangle. (Arabic summary) *Bull. College Sci. (Baghdad)* **12-13** (1972/73), 47-52. (L. Gyarmathi) **50** #10991 50C05
- Šaīdaeva, D. M.** Dual C^* -algebras. (Russian) *Mathematical analysis and the theory of functions*, No. 7 (Russian), pp. 109-117. *Moskov. Oblast. Ped. Inst., Moscow*, 1976. (From the introduction) **58** #30307 46L05
- Saidan, Ahmad Salim** The arithmetic of Abū'l-Wafā'. *Isis* **65** (1974), 367-374. (B. Rozenfeld) **58** #4816 01A30
- See also *History of Arabic arithmetic*, **58** #15851
- Saīdaev, L. M.** See *Abstracts: Conference of the Faculties on Advances in Research*, **48** #3665
- Saidel, Gerald M.** (with Liotta, Lance A.; Kleinerman, Jerome) Stochastic model of metastases formation. (French summary) *Biometrics* **32** (1976), no. 3, 535-550. (William H. Olson) **54** #14806 92A05
- Šaīdenko, A. V.** (with Aleksandrov, A. D.; Kopylov, A. P.; dekte 8492; Kuz'minyh, A. V.) Mappings of families of cones. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 4, 932-935. (W. J. Firey) **54** #13714 50D05 (53C45)
- Saidov, A.** (with Berkinov, H. B.) Analytic solution of some multidimensional boundary value problems for hyperbolic equations that have an application in gas dynamics computations of multiple gas conduits. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* No. 44 (1976), 69-88, 187-188. (From the introduction) **58** #29344 35L20 (35C99)
- Šaīdukov, G. M.** (with Šaīdukov, K. M.) Matrix solution of a certain boundary value problem. (Russian) *Trudy Kazan. S.-h. Inst. Vyp.* **63** (1970), 283-288. (Editors) **56** #17155 65N99
- (with Manevič, Š. S.) ★ *Предельные теоремы теории вероятностей*. (Russian) [Limit theorems of probability theory] *Kazan. Sel'skhozjaistvo. Inst., Kazan*, 1974. 39 pp. (Editors) **55** #6536 60F05
- Šaīdukov, K. M.** (with Šaīdukov, G. M.) Matrix solution of a certain boundary value problem. (Russian) *Trudy Kazan. S.-h. Inst. Vyp.* **63** (1970), 283-288. (Editors) **56** #17155 65N99
- See also *Studies in the theory of plates and shells*, **48** #3343
- Šaīdurov, V. V.** A certain method for increasing the accuracy of difference solutions. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* **3** (1972), no. 2, 96-104. **50** #6175 65N10
- Continuation with respect to the parameter in the method of regularization. (Russian) *Numerical methods of linear algebra (Proc. Third All-Union Conf., Novosibirsk, 1973)* (Russian), pp. 77-85. *Vyčisl. Centr Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1973. (A. S. Householder) **55** #4636 65F20
- (with Marčuk, G. I.) Increase of accuracy of projective-difference schemes. *Computing methods in applied sciences and engineering (Proc. Internat. Sympos., Versailles, 1973)*, Part 2, pp. 240-260. *Lecture Notes in Comput. Sci., Vol. 11, Springer, Berlin*, 1974. (H. Brunner) **55** #11647 65N30 (65N15)
- (with Urvancev, A. L.) A sharpening method for a one-dimensional quasilinear diffusion equation. (Russian) *Numerical mathematics and programming (Russian)*, pp. 81-90. *Vyčisl. Centr Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1974. (Authors' summary) **57** #11090 62N05
- Regularization of systems with a symmetric matrix. (Russian) *Numerical mathematics and programming (Russian)*, pp. 91-98. *Vyčisl. Centr Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1974. (Author's summary) **57** #1855 65F25
- (with Marčuk, G. I.) The numerical solution of an evolution problem with a bounded operator. (Russian) *Dokl. Akad. Nauk SSSR* **216** (1974), 39-41. (Russell C. Thompson) **50** #11770 65J05
- (with Marčuk, G. I.) A variational method for increasing the accuracy of the difference scheme. *Computing methods in applied sciences and engineering (Second Internat. Sympos., Versailles, 1975)*, Part 1, pp. 193-205. *Lecture Notes in Econom. and Math. Systems*, Vol. 134, *Springer, Berlin*, 1976. (V. Thomée) **56** #17129 65N10
- (with Urvancev, A. L.) Sharpening an approximate solution of the quasilinear Poisson equation. (Russian) *Variational-difference methods for the solution of problems of mathematical physics (Proc. Second All-Union Sem., Novosibirsk, 1975)* (Russian), pp. 137-144. *Vyčisl. Centr Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1976. (E. G. D'jakonov) **57** #11099 65N15
- ★ *Методы повышения точности приближенных задач*. (Russian) [Methods to increase the accuracy of approximate problems] *Novosibirsk. Gos. Univ., Novosibirsk*, 1977. 90 pp. (Publisher's description) **58** #19012 65-01 (65L05, 65L99)
- See also *Numerical mathematics and programming*, **56** #7096 and *Strang, Gilbert*; et al., **56** #16985
- Saifuddin** (with Rashid, Muneer A.) Identity satisfied by the d -type coefficients of $SU(n)$. *J. Mathematical Phys.* **14** (1973), 630-631. (M. Carmeli) **48** #3388 81.22
- Saifullin, Ė. G.** See *Collection: Al'muhamedov, M. I.*, **50** #1795
- Saigal, Romesh** Lemke's algorithm and a special linear complementarity problem. *Opsearch* **8** (1971), 201-208. (J. Falk) **46** #8655 90C05
- On the modularity of a matrix. *Linear Algebra and Appl.* **5** (1972), 39-48. (R. J. Plemmons) **45** #3236 05B20 (15A57)
- (with Eaves, B. Curtis) Homotopies for computation of fixed points on unbounded regions. *Math. Programming* **3** (1972), 225-237. (Torrence D. Parsons) **47** #2580 54H25 (54C60)
- A characterization of the constant parity property of the number of solutions to the linear complementarity problem. *SIAM J. Appl. Math.* **23** (1972), 40-45. (K. G. Murty) **52** #16645 90C30
- On the class of complementary cones and Lemke's algorithm. *SIAM J. Appl. Math.* **23** (1972), 46-60. (B. Levinger) **48** #3490 90C05
- (with Simon, Carl P.) Generic properties of the complementarity problem. *Math. Programming* **4** (1973), 324-335. (R. W. Cottle) **48** #3504 90C30 (54C99)
- (with Netravali, Arun N.) Optimum quantizer design using a fixed-point algorithm. *Bell System Tech. J.* **55** (1976), no. 9, 1423-1435. (Authors' summary) **56** #11494 94A05 (94A15, 90Cxx)
- (with Adler, Ilan) Long monotone paths in abstract polytopes. *Math. Oper. Res.* **1** (1976), no. 1, 89-95. (Jacques A. Ferland) **56** #4810 90C05 (52A40)
- Extension of the generalized complementarity problem. *Math. Oper. Res.* **1** (1976), no. 3, 260-266. (Pierre Loridan) **56** #9516 54H25 (90C99)
- On paths generated by fixed point algorithms. *Math. Oper. Res.* **1** (1976), no. 4, 359-380. (Author's summary) **56** #6709 58C99 (65J05, 65K05)
- Investigations into the efficiency of the fixed point algorithms. *Fixed points: algorithms and applications (Proc. First Internat. Conf., Clemson Univ., Clemson, S.C., 1974)*, pp. 203-223. *Academic Press, New York*, 1977. (Bernard Lemaire) **56** #9962 65H05 (65K05, 55C20, 68A20)
- On the accuracy attained by the fixed point algorithms. *IJAA Internat. J. Appl. Anal.* **1** (1977), no. 1, 44-47. (Author's summary) **58** #31796 65H05 (65J05)
- On the convergence rate of algorithms for solving equations that are based on methods of complementary pivoting. *Math. Oper. Res.* **2** (1977), no. 2, 108-124. (Jacques Dubois) **58** #8223 65H10 (65B99)
- Saigo, Megumi** On the solutions of the modified Frankl' problem. *Kumamoto J. Sci. (Math.)* **9** (1972), 41-54. (S. Delache) **46** #2269 35Q99
- On uniqueness and estimations for solutions of modified Frankl' problem for linear and nonlinear equations of mixed type. *Proc. Japan Acad.* **48** (1972), 28-33. (S. Delache) **46** #2256 35M05
- A weak solution for the modified Frankl' problem. *Proc. Japan Acad.* **51** (1975), no. 6, 415-418. (Luigi Cerofolini) **52** #3750 35M05
- Šaībet, L. E.** (with Dvornikov, V. Ī.) The stability of the solution of a second order linear differential equation with a periodic coefficient. (Russian) *Prikl. Meh.* **10** (1974), no. 4, 119-122, 143. (Authors' summary) **54** #7970 34D05
- Stability of linear stochastic differential equations in Hilbert space. (Russian) *Theory of random processes*, No. 3 (Russian), pp. 131-134, 160. *Izdat. "Naukova Dumka" Kiev*, 1975. (A. T. Bharucha-Reid) **52** #1887 60H10 (34G05)
- (with Dvornikov, V. Ī.) A test for the stability of a system of linear differential equations with periodic coefficients. (Russian) *Prikl. Meh.* **11** (1975), no. 7, 120-123, 144. (I. Kiguradze) **57** #806a 34D20
- (with Dvornikov, V. Ī.) A remark on the paper: "A test for the stability of a system of linear differential equations with periodic coefficients" (Prikl. Meh. **11** (1975), no. 7, 120-123). (Russian) *Prikl. Meh.* **11** (1975), no. 10, 137. (I. Kiguradze) **57** #806b 34D20
- A study of the stability of stochastic systems with lag by the method of Ljapunov functionals. (Russian) *Problemy Peredači Informacii* **11** (1975), no. 4, 70-76. (Author's summary) **57** #19024 93E15
- Stability in probability of stochastic systems with aftereffect. (Russian) *Behavior of systems in random media (Russian)*, pp. 48-55. *Akad. Nauk Ukrain. SSR Inst. Kibernet. Kiev*, 1976. (Z. Schuss) **57** #5361 93E15
- Solution of the problem of stabilizing controllable stochastic systems with lag by the method of Ljapunov functionals. (Russian) *Theory of random processes*, No. 4 (Russian), pp. 98-105, 118. *Izdat. "Naukova Dumka", Kiev*, 1976. (T. Tobias) **55** #7546 93E15
- Stability of linear stochastic systems. (Russian) *Theory of random processes*, No. 5 (Russian), pp. 99-105, 115. *Izdat. "Naukova Dumka", Kiev*, 1977. (Z. Schuss) **57** #5362 93E15 (93D10, 93D05)
- (with Kolmanovskii, V. B.) A method for the construction of approximate synthesis of optimal control. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 8, 737-741, 769. (Authors' summary) **58** #26494 93E25
- Šaīkarev, Ilja A.** Conditions under which the roots of a third degree algebraic equation are particular integrals of a second order linear differential equation. (Macedonian. German summary) *Bull. Soc. Math. Phys. Macédoine* **24** (1973), 45-49 (1974). (D. Bobrowski) **51** #10765 34C20
- Saikawa, Chozo** (with Aoki, Nobuo) Ergodic properties of expansive automorphisms. *Michigan Math. J.* **22** (1975), no. 4, 337-341. (James R. Brown) **55** #3155 22D40
- Šaīkevič, V. D.** (with Stepanov, A. E.; Paško, D. I.; Počman, Ju. M.) ★ *Квасианалоговые методы моделирования краевых задач для дифференциальных уравнений в частных производных*. (Russian) [Quasianalog methods of simulation of boundary value problems for partial differential equations.] *Izdat. "Naukova Dumka" Kiev*, 1973. 174 pp. (R. N. Goss) **48** #10238 68A55 (65N05)
- See also *Calculation of three-dimensional constructions*, **48** #7754
- Saikin, A. D.** See *Anwendung der Mathematik bei ökonomischen Untersuchungen*, **48** #10434
- Šaīkin, M. E.** Group-theoretic approach to determination of statistically optimal systems. *Proceedings of the IFAC Fifth World Congress (Paris, 1972)*, Part 4: *Education, feedback regulators, linear and non-linear systems, Identification, differential games, discrete and stochastic systems*, Paper No. 41.5, 6 pp. *Internat. Fed. Automat. Control, Düsseldorf*, 1972. (Author's summary) **51** #2744 93E20
- Invariant estimates in the statistical theory of optimal systems. (Russian. English summary) *Problems of Control and Information Theory / Problemy Upravlennja i Teorija Informacii* **1** (1972), no. 2, 135-152. (Author's summary) **58** #4567 93E10
- Optimal estimates for covariance matrices. *Automat. i Telemekh.* **1973**, no. 1, 62-69. (Russian. English summary); translated as *Automat. Remote Control* **34** (1973), no. 1, part 1, 53-60. (Author's summary) **56** #18057 93E10
- (with Dubenko, T. I.; Sysoev, L. P.) Symmetry properties and characterization of covariance matrices in the experiment design problem with randomized blocks. *Automat. i Telemekh.* **1976**, no. 3, 73-82. (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 3, part 1, 378-386. (A. Hedayat) **55** #6726 62K10
- (with Dubenko, T. I.; Sysoev, L. P.) Sufficient statistics and estimates of specially structured covariance matrices for two experimental design models. *Automat. i Telemekh.* **1976**, no. 4, 25-34. (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 4, part 1, 492-500. (I. M. Chakravarti) **55** #9431 62K10
- (with Sysoev, L. P.) Algebraic methods of investigating the correlation connections in incompletely balanced block-schemes for experiment design. I. Characterization of covariance matrices in the case of asymmetric block-schemes. *Automat. i Telemekh.* **1976**, no. 5, 64-73. (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 5, part 1, 696-704. (I. M. Chakravarti) **55** #11516a 62K10
- (with Sysoev, L. P.) Algebraic methods of investigating the correlation connections in incompletely balanced block-schemes for experiment design. II. Relationship algebra and characterization of covariance matrices in the case of symmetric block-schemes. *Automat. i Telemekh.* **1976**, no. 7, 57-67. (Russian. English summary); translated as

- Automat. Remote Control* 37 (1976), no. 7, part 1, 1022-1031. (I. M. Chakravarti) 55 #11516b 62K10
- Aikin, S. F.** (with Romanov, Ja. P.) Equations of nonholonomic constraints and the process of deriving equations of motion. (Russian) *Questions of applied mathematics and mechanics*, No. 4 (Russian), pp. 235-253, 258. Čuvas'. Gos. Univ., Cheboksary, 1975. (Editors) 58 #32175 70.34 (01A60)
- See also *Questions of applied mathematics and mechanics*, 57 #9384; *Questions of applied mathematics and mechanics*, 58 #25194 and *Questions of applied mathematics and mechanics*, 58 #26655
- Aillen, P.** Fibrés vectoriels holomorphes homogènes et J -représentations. *Comment. Math. Helv.* 47 (1972), 437-448. (Shoshichi Kobayashi) 47 #7069 32M10 (32C05)
- Ailior, V. L.** See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, 52 #9427
- Aimon, B.** See *Simon, Barry*
- Aimuhambetova, G.** On the question of al-Fārābī's relation to the philosophy of Plato. (Russian) *Vestnik Akad. Nauk Kazah. SSR* 1974, no. 4, 75-77. (E. S. Kennedy) 54 #7167 01A30 (02-03)
- Ain, B. M.** See *Schein, Boris M.*
- Ain, Michael K.** (with Massey, James L.; Geist, John M.) Certain infinite Markov chains and sequential decoding. *Discrete Math.* 3 (1972), 163-175. (Giuseppe Longo) 52 #10223 94A10
- Minimal torsion spaces and the partial input/output problem. *Information and Control* 29 (1975), no. 2, 103-124. (Author's summary) 56 #2643 94A10
- The growing algebraic presence in systems engineering: an introduction. Recent trends in system theory. *Proc. IEEE* 64 (1976), no. 1, 96-111. (Steven I. Marcus) 54 #2264 93B25
- (with Seshadri, V.) Pole assignment and a theorem from exterior algebra. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 1, pp. 291-295. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) 58 #20670 93B20 (15A75)
- See also *Panda, S. P.*, 47 #1507 and *Key papers in the development of coding theory*, 52 #5176
- Ainai, G. L.** Some basic results on relativistic fluid mechanics and shock waves. *J. Math. Anal. Appl.* 56 (1976), no. 3, 711-717. (Editors) 55 #7271 83.35
- Strong shock waves in infinitely electrically conducting relativistic fluids. *J. Math. Anal. Appl.* 56 (1976), no. 3, 718-735. (Takayuki Nōno) 56 #4685 83.53 (76.53)
- Hodograph transformations of the equations of one-dimensional relativistic fluids. *J. Mathematical and Physical Sci.* 10 (1976), no. 3, 243-253. (A. Raychaudhuri) 54 #6681 76.53
- Ainai, Jagdish** (with Agrawal, S. C.) Thermal instability of compressible fluids. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* 40 (1972), 158-172 (1974). (D. A. Nield) 53 #2130 76.35
- (with Agrawal, S. C.) Thermal instability of Couette flow. *J. Austral. Math. Soc.* 18 (1974), 359-371. (Wei Lai) 52 #9785 76.35
- Sainouchi, Yoshikazu** On the meromorphic differentials with an infinite number of polar singularities on open Riemann surfaces. *J. Math. Kyoto Univ.* 14 (1974), 499-532. (I. Kra) 50 #10239 30A46
- Saint-André, Michel** Calcul de la moyenne d'une fonction presque-périodique application au calcul d'intégrales. *Rev. Française Informat. Recherche Opérationnelle* 4 (1970), Sér. R-3, 141-146. (H. Burkill) 45 #9055 42A84
- Détermination d'un vecteur optimal pour le calcul d'intégrales (simples ou multiples). *Rev. Française Informat. Recherche Opérationnelle* 5 (1971), Sér. R-2, 141-149. (S. J. Taylor) 47 #3886 41A55
- ★Équipartition et analyse harmonique commutative. *Séminaire d'Analyse Moderne*, No. 11. *Département de Mathématiques, Université de Sherbrooke, Sherbrooke, Que.*, 1972, iv + 89 pp. (Editors) 57 #3742 43-02 (10K05)
- Saint-André, Richard** A classification of ultrafilters. *Amer. Math. Monthly* 78 (1971), 1126-1127. (M. G. Murdeshwar) 45 #4344 54H05 (04A15)
- (with Chaffer, Robert A.; Eggen, Maurice; Smith, Douglas B., Jr.) Strong finite embeddability for classes of quasigroups. *Algebra Universalis* 5 (1975), no. 2, 257-262. (Charles C. Lindner) 52 #10939 20N05
- Saint-Donat, Bernard** (with Kempf, George R.; Knudsen, Finn; Mumford, David) ★Toroidal embeddings. I. *Lecture Notes in Mathematics*, Vol. 339. *Springer-Verlag, Berlin-New York*, 1973. viii + 209 pp. (G. Harder) 49 #299 14E15 (14D20, 14E05, 14M20, 20G15)
- On Petri's analysis of the linear system of quadrics through a canonical curve. *Math. Ann.* 206 (1973), 157-175. (H. H. Martens) 49 #2752 14H45 (14J25)
- Projective models of K -3 surfaces. *Amer. J. Math.* 96 (1974), 602-639. (G. Horrocks) 51 #518 14J25
- Variétés de translation et théorème de Torelli. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 23, Aii, A1611-A1612. (J. S. Joel) 57 #9705 14H40
- See also *Théorie des topos et cohomologie étale des schémas*, 50 #7131 and *Théorie des topos et cohomologie étale des schémas*, 50 #7132
- Sainte-Beuve, Marie-France** See *Nougues-Sainte-Beuve, Marie-France*
- Saint-Loup, Bernard** Un théorème d'image directe en géométrie analytique complexe. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 555-556. (R. Michael Range) 49 #9253 32C15 (32H99, 58B10)
- Saint-Pierre, Jean** Somme d'un compact et d'un fermé localement compact dans un groupe topologique. *Travaux du Séminaire d'Analyse Convexe*, Vol. 4, Exp. No. 17, 5 pp. *U. E. R. de Math., Univ. Sci. Tech. Languedoc, Montpellier*, 1974. (Editors) 58 #22375 22A05
- Désintégration d'une mesure non donnée. *Travaux du Séminaire d'Analyse Convexe*, Vol. 4, Exp. No. 14, 16 pp. *U. E. R. de Math., Univ. Sci. Tech. Languedoc, Montpellier*, 1974. (Editors) 58 #28421 28A50 (60A10)
- Théorème de Strassen et intégration de sous-différentiels pour des fonctions à valeurs dans un espace vectoriel ordonné. *Travaux du Séminaire d'Analyse Convexe*, Vol. 4, Exp. No. 7, 23 pp. *U. E. R. de Math., Univ. Sci. Tech. Languedoc, Montpellier*, 1974. (Editors) 58 #22471 28A45 (46G10)
- Une extension du théorème de Strassen. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 5-8. (Tim Traynor) 51 #1393 46G10 (28A45)
- Génération monotone du graphe et profil d'une multiapplication à valeurs convexes. *Travaux du Séminaire d'Analyse Convexe*, Vol. V, Exp. No. 6, 29 pp. *U. E. R. Math., Univ. Sci. Tech. Languedoc, Montpellier*, 1975. (Editors) 58 #24213 54H05 (28A05)
- Désintégration d'une mesure non bornée. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* 11 (1975), no. 3, 275-286. (Miloslav Jiřina) 52 #14227 28A50 (60A10)
- Désintégration d'une mesure non bornée. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 7, Aii, A427-A429. (S. J. Taylor) 52 #8378 28A50 (60A10)
- Génération monotone d'une multiapplication borélienne à valeurs convexes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 10, Aii, A323-A326. (F. S. Van Vleck) 53 #11001 28A05
- Profil d'un multiapplication borélienne à valeurs convexes. *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 23, Aii, A1019-A1021. (J. P. R. Christensen) 52 #14226 28A45 (54H05)
- Multiapplications boréliennes à valeurs convexes de \mathbb{R}^n . (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* 12 (1976), no. 2, 163-180. (J. P. R. Christensen) 54 #10542 28A20 (54C60)
- Une remarque sur les espaces sousliniens réguliers. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 24, Aii, A1425-A1427. (John E. Jayne) 53 #14454 54H05 (28A05)
- Caractérisation des F -sousliniens d'un produit. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 8, Aii, A583-A585. (D. W. Bressler) 54 #11300 54H05
- Borel convex-valued multifunctions. *Convex analysis and its applications (Proc. Conf., Muret-le-Quaire, 1976)*, pp. 180-190. *Lecture Notes in Econom. and Math. Systems*, Vol. 144, *Springer, Berlin*, 1977. (D. W. Bressler) 58 #18377 54H05
- Séparation simultanée d'un ensemble analytique de suites d'ensembles \mathfrak{F} -sousliniens. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 285 (1977), no. 15, A933-A936. (Author's summary) 57 #16518 28A05
- Caractérisation des \mathfrak{F} -sousliniens d'un produit et théorèmes de sections. *Travaux Sémin. Anal. Convexe* 7 (1977), no. 2, Exp. No. 8, 46 pp. (J. P. R. Christensen) 58 #6134 28A20
- Séparation d'un schéma de Souslin. *Travaux Sémin. Anal. Convexe* 7 (1977), no. 3, Exp. No. 16, 26 pp. (D. W. Bressler) 58 #5235 04A15
- Saint-Pierre, Patrick** Sur la convergence numérique de différentes méthodes de décomposition pour une classe de problèmes elliptiques. (English summary) *Numer. Math.* 19 (1972), 439-449. (J. G. Herriot) 48 #5397 65N10
- Saint-Raymond, Jean** (with Mastrangelo-Dehen, Michèle; Dermenjian, Yves) Rabotages sur un treillis. *Séminaire Choquet: 1969/70, Initiation à l'analyse, Fasc. 2, Exp. 22, 24 pp. Secrétariat Math., Paris*, 1970. (E. S. Boylan) 46 #2725 60G05 (28A05)
- Prolongement d'une distance. *Séminaire Choquet, 10e année (1970/71), Initiation à l'analyse, Fasc. 2, Commun. No. 4, 5 pp. Secrétariat Mathématique, Paris*, 1971. (Editors) 58 #2740 54E35
- Une caractérisation des $F_{\sigma\delta}$ d'un espace métrisable. *Séminaire Choquet, 10e année (1970/71), Initiation à l'analyse, Fasc. 2, Commun. No. 3, 4 pp. Secrétariat Mathématique, Paris*, 1971. (Editors) 57 #17602 54E35
- Convergence d'une suite de fonctions. *Bull. Sci. Math. (2)* 96 (1972), 145-150. (S. M. Mazhar) 48 #748 40A05
- Groupes topologiques localement abéliens. *C. R. Acad. Sci. Paris Sér. A-B* 275 (1972), A695-A696. (R. Rao Chivukla) 47 #1994 22A05
- Sur une conjecture de Fakhoury. *Séminaire Choquet, 11e-12e années (1971-1973), Initiation à l'analyse, Commun. No. C2, 3 pp. Secrétariat Mathématique, Paris*, 1973. (Zbl 336 #46003) 57 #17214 46A99
- Nature de l'image linéaire continue d'un espace de Banach dans un espace de Banach séparable. *Séminaire Choquet, 11e-12e années (1971-1973), Initiation à l'analyse, Commun. No. C1, 3 pp. Secrétariat Mathématique, Paris*, 1973. (Zbl 341 #46018) 57 #17229 46B99 (28A05)
- Caractérisation d'espaces polonais. D'après des travaux récents de J. P. R. Christensen et D. Preiss. *Séminaire Choquet, 11e-12e années (1971-1973), Initiation à l'analyse, Exp. No. 5, 10 pp. Secrétariat Mathématique, Paris*, 1973. (Zbl 319 #54023) 57 #12811 28A32 (28A05, 54H05)
- Séparation des mesures de Radon sur un convexe par les fonctions convexes continues bornées. *Séminaire Choquet, 13e année (1973/74), Initiation à l'analyse, Commun. No. C1, 2 pp. Secrétariat Mathématique, Paris*, 1975. (Editors) 58 #2206 46E27 (28A30)
- Espaces à modèle séparable. *Séminaire Choquet, 14e année (1974/75), Initiation à l'analyse, Exp. No. 19, 5 pp. Secrétariat Mathématique, Paris*, 1975. (Editors) 58 #30000 46A05
- Points extrémaux d'un simplexe compact métrisable. D'après R. Haydon (Bull. London Math. Soc. 7 (1975), 97-100). *Séminaire Choquet, 14e année (1974/75), Initiation à l'analyse, Exp. No. 3, 6 pp. Secrétariat Mathématique, Paris*, 1975. (Zbl 336 #46002) 57 #17216 46A99
- Dérivation par rapport à une application. Existence d'exaves markoviens. *Séminaire Choquet, 13e année (1973/74), Initiation à l'analyse, Commun. No. C2, 9 pp. Secrétariat Mathématique, Paris*, 1975. (Zbl 352 #46012) 57 #13840 54C65 (46E99)
- Représentation intégrale dans certains convexes. *Séminaire Choquet, 14e année (1974/75), Initiation à l'analyse, Exp. No. 2, 11 pp. Secrétariat Mathématique, Paris*, 1975. (Zbl 336 #46004) 57 #17215 46A99 (46G10)
- Espaces à modèle séparable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 25, Ai, A1727-A1729. (M. Valdivia) 52 #14894 46A05
- Approximation des sous-ensembles analytiques par l'intérieur. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 2-3, Aii, A85-A87. (D. W. Bressler) 51 #14009 54H05 (57C55)
- Espaces à modèle séparable. (English summary) *Ann. Inst. Fourier (Grenoble)* 26 (1976), no. 3, xi, 211-256. (J. P. R. Christensen) 54 #13515 46A05 (54H05)
- Fonctions boréliennes sur un quotient. *Bull. Sci. Math. (2)* 100 (1976), no. 2, 141-147. (J. C. Oxtoby) 57 #571 28A20
- Boréliens à coupes K_σ . *Bull. Soc. Math. France* 104 (1976), no. 4, 389-400. (John E. Jayne) 55 #6394 54H05
- Sélections mesurables pour la structure borélienne d'Effros. *Bull. Sci. Math. (2)* 101

- (1977), no. 4, 353-355. (Author's summary) **58** #11312 28A20
- Saint-Val** (with Gauthier, J.-P.; Nougaret, M.) Commande optimale avec erreur statique spécifiée. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* **10** (1976), no. J-3, 23-40. (L. Mikolajczyk) **57** #5277 93C15
- de Saint-Vincent, Grégoire** See **Naux, Ch.** **57** #12038
- Saïpe, Alan L.** Solving a (0,1) hyperbolic program by branch and bound. *Naval Res. Logist. Quart.* **22** (1975), no. 3, 497-515. (See Zbl 335 #90042) 90C30
- (with Cook, Wade D.) Commitée approach to priority planning: the median ranking method. *Cahiers Centre Études Recherche Opér.* **18** (1976), no. 3, 337-351. (Maurice Sallès) **55** #11930 90A05
- Saitô, Hiroko** Fonctions entières qui se réduisent à certains polynômes. I. *Osaka J. Math.* **9** (1972), 293-332. (J. Kajiura) **49** #3187 32A15
- Fonctions entières qui se réduisent à certains polynômes. II. *Osaka J. Math.* **14** (1977), no. 3, 649-674. (J. Kajiura) **57** #679 32A15
- Saito, Hiroshi** On Eichler's trace formula. *J. Math. Soc. Japan* **24** (1972), 333-340. (M. Eichler) **46** #1707 10D15
- On the trace formula of Eichler. (Japanese) *Sûgaku* **24** (1972), no. 3, 227-231. (Editors) **58** #27782 10D15 (10D05)
- (with Hijikata, Hiroaki) On the representability of modular forms by theta series. *Number theory, algebraic geometry and commutative algebra, in honor of Yasuo Akizuki*, pp. 13-21. *Kinokuniya, Tokyo*, 1973. (Kuang-yen Shih) **50** #9800 10D05
- ★ Automorphic forms and algebraic extensions of number fields. Department of Mathematics, Kyoto University, Lectures in Mathematics, No. 8. *Kinokuniya Book-Store Co., Ltd., Tokyo*, 1975. iv + 183 pp. (Takuro Shintani) **53** #10721 10D20 (14D20)
- On the representation of $SL_2(\mathbb{F}_q)$ in the space of Hilbert modular forms. *J. Math. Kyoto Univ.* **15** (1975), 101-128. (K.-B. Gundlach) **52** #5579 10D20
- Automorphic forms and algebraic extensions of number fields. *Proc. Japan Acad.* **51** (1975), no. 4, 229-233. (Stephen Gelbart) **52** #5576 10D15
- Automorphic forms and algebraic extensions of number fields. (Japanese) *Sûgaku* **29** (1977), no. 1, 28-38. (Editors) **58** #27796 10D20 (12A65)
- Saitô, Kazuyuki** On the algebra of measurable operators for a general AW^* -algebra. II. *Tôhoku Math. J. (2)* **23** (1971), 525-534. (S. K. Berberian) **46** #4223 46L10
- On the embedding as a double commutator in a type I AW^* -algebra. *Tôhoku Math. J. (2)* **23** (1971), 541-557. (S. K. Berberian) **46** #4224 46L10
- Automorphism groups of von Neumann algebras and ergodic type theorems. *Acta Sci. Math. (Szeged)* **36** (1974), 119-130. (M. Takesaki) **49** #11271 46L10
- On the embedding as a double commutator in a type I AW^* -algebra. II. *Tôhoku Math. J. (2)* **26** (1974), 333-339. (S. K. Berberian) **50** #1011 46L10 (46K15)
- Groups of *-automorphisms and invariant maps of von Neumann algebras. *Pacific J. Math.* **57** (1975), no. 2, 553-558. (E. Størmer) **52** #1342 46L10
- A note on the continuity of automorphic representations of groups. *Tôhoku Math. J. (2)* **28** (1976), no. 2, 305-310. (G. K. Pedersen) **53** #13470 22D25
- Saito, Kenji** Behavior of a circular prismatic dislocation loop in a thin plate. *Mem. Fac. Indust. Arts Kyoto Tech. Univ. Sci. and Tech.* **26** (1977), 13-28. (Author's summary) **57** #14753 73J35
- Saito, Kichi-Suke** A characterization of double centralizer algebras of Banach algebras. *Sci. Rep. Niigata Univ. Ser. A No. 11* (1974), 5-11. (Pak-Ken Wong) **49** #5844 46H05
- On maximality of $H^\infty(\alpha)$ in finite von Neumann algebras. *Sci. Rep. Niigata Univ. Ser. A No. 14* (1977), 1-3. (Richard I. Loeb) **56** #6417 46L10
- The Hardy spaces associated with a periodic flow on a von Neumann algebra. *Tôhoku Math. J. (2)* **29** (1977), no. 1, 69-75. (E. Størmer) **55** #13256 46L10
- On non-commutative Hardy spaces associated with flows on finite von Neumann algebras. *Tôhoku Math. J. (2)* **29** (1977), no. 4, 585-595. (Richard I. Loeb) **57** #3870 46L10
- Saito, Kyoji** Quasihomogene isolierte Singularitäten von Hyperflächen. *Invent. Math.* **14** (1971), 123-142. (S. Hitotumatu) **45** #3767 32C40
- (with Brieskorn, E.) Artin-Gruppen und Coxeter-Gruppen. *Invent. Math.* **17** (1972), 245-271. (D. E. Cohen) **48** #2263 20F05
- Calcul algébrique de la monodromie. *Singularités à Cargèse (Rencontre Singularités Géom. Anal. Inst. Études Sci., Cargèse, 1972)*, pp. 195-211. *Astérisque, Nos. 7 et 8, Soc. Math. France, Paris*, 1973. (Helmut Hamm) **51** #12845 14D05 (14B05)
- (with Lê Dũng Tráng) La constance du nombre de Milnor donne des bonnes stratifications. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A793-A795. (J. S. Joel) **50** #2556 32C40 (14B05, 14D05)
- Regularity of Gauss-Manin connection of flat family of isolated singularities. *Quelques journées singulières, i + 16 pp. Centre Math. École Polytechnique, Paris*, 1974. (G. M. Greuel) **51** #12846 14D05 (14B05, 32C40, 32G20)
- Einfach-elliptische Singularitäten. *Invent. Math.* **23** (1974), 289-325. (H. B. Laufer) **50** #7147 14E15 (32C40)
- On a generalization of de-Rham lemma. (French summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 2, vii, 165-170. (D. B. Fuks) **54** #1276 58A10
- On boundary values of hypergeometric functions of several variables. Proceedings of the Oji Seminar on Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., Kyoto, 1976). *Publ. Res. Inst. Math. Sci.* **12** (1976/77), supplement, 377-385. (Richard Randell) **58** #11505 32C40 (33A30)
- See also **Mathematics: Periodical collection of translations of foreign articles**, **50** #12535 and **Conference: Singular Points of Hypersurfaces and b-functions**, **54** #578
- Saito, Masahiko** Représentations unitaires des groupes symplectiques. *J. Math. Soc. Japan* **24** (1972), 232-251. (H. Leptin) **45** #8776 22E45 (43A10)
- Représentations unitaires du groupe modulaire. *Proc. Japan Acad.* **48** (1972), 381-383. (D. Miličević) **47** #6946 22E45
- Représentations unitaires du groupe modulaire. II. *Proc. Japan Acad.* **48** (1972), 641-642. (D. Miličević) **49** #3035 22E45 (22E40)
- Représentations unitaires monomiales d'un groupe discret, en particulier du groupe modulaire. *J. Math. Soc. Japan* **26** (1974), 464-482. (D. Miličević) **51** #13141 22E45
- Saito, Masakatsu** Constitutive equations of polarizable thermo-plastic materials. *Tech. Rep. Osaka Univ.* **27** (1977), no. 1364-1393, 457-462. (V. P. Madan) **57** #2072 73J53
- Saito, Masao** (with Kato, Fumio; Okoshi, Takanori) Computer-aided synthesis of planar circuits. *IEEE Trans. Microwave Theory Tech. MTT-25* (1977), no. 10, 814-819. (Alwyn
- C. Scott) **57** #2763 94A20
- Saito, Noboru** On the absolute stability of direct control systems. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **27** (1973), 201-210. (Wolfdietrich Müller) **51** #8569 34D25 (93D10)
- Saitô, Nobuhiko** (with Moro, Keiji) Quasi-elastic light scattering by a spherical particle immersed in a viscoelastic medium. *J. Phys. Soc. Japan* **40** (1976), no. 5, 1415-1422. (Authors' summary) **56** #1959 78J60
- Saito, Nobuji** (with Nishizeki, Takao) Three-terminal series-parallel graphs. *Electron. Commun. Japan* **56** (1973), no. 10, 78-85. (Narsingh Deo) **51** #5193 94A20
- (with Nishizeki, Takao) Necessary and sufficient conditions for a graph to be three-terminal series-parallel in the narrow sense. *Electron. Commun. Japan* **58** (1975), no. 5, 1-8. (D. P. Geller) **54** #10084 05C99 (94A20)
- (with Nishizeki, Takao) Necessary and sufficient condition for a graph to be three-terminal series-parallel. *IEEE Trans. Circuits and Systems CAS-22* (1975), no. 6, 648-653. (M. Aigner) **53** #7867 05C99 (94A20)
- (with Nishizeki, Takao; Asano, Takao) On the maximal even matroids. *Electron. Commun. Japan* **60** (1977), no. 2, 60-66. (Authors' summary) **58** #10534 05B35
- (with Nishizeki, Takao) Necessary and sufficient conditions for a graph to be three-terminal series-parallel-cascade. *J. Combin. Theory Ser. B* **24** (1978), no. 3, 344-361. (Authors' summary) **58** #27591 05C10 (94A20)
- Saito, Nobuo** On the implementation of synchronization primitives. *Information Processing in Japan* **15** (1975), 41-46. (Rüdiger Valk) **58** #13874 68A05
- Correctness of co-operating sequential programs. Proceedings of the Third Symposium on Basic Theory of Programs (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1973) and of the Workshop for Proof Theory about Algorithms (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1974). *Sûrikaiseikenkyûsho Kôkyûroku No. 236* (1975), 131-152. (From the introduction) **58** #8457 68A05
- Mathematical theories on operating system. Proceedings of the Third Symposium on Basic Theory of Programs (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1973) and of the Workshop for Proof Theory about Algorithms (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1974). *Sûrikaiseikenkyûsho Kôkyûroku No. 236* (1975), 153-173. (Editors) **58** #3638 68A05
- Saito, Osami** Effect of errors due to incorrect covariance function on an optimal filter for coloured noise. *Internat. J. Control* (1) **18** (1973), 197-208. (R. S. Bucy) **48** #1795 94A05
- Saitô, Ryô** (with Okada, Tadashige) A generalization of P. Roquette's theorems. *Hokkaido Math. J.* **1** (1972), 197-205. (Lindsay N. Childs) **47** #4987 13B05 (13A20)
- (with Okada, Tadashige) A note on twisted polynomial rings. *Hokkaido Math. J.* **1** (1972), 206-210. (Tadayuki Matsuoka) **47** #6674 13B25
- Saito, Sadao** (with Hayasaka, Takanori) The existence of perfect 4-sequences of playing cards. *Res. Rep. Miyagi Tech. College No. 12* (1975), 87-92. (S. Hitotumatu) **54** #10405-04 (05A05)
- (with Hayasaka, Takanori) The generalized Langford sequence. *Res. Rep. Miyagi Tech. College No. 12* (1975), 93-98. (S. Hitotumatu) **54** #10505-04 (05B30, 10A40)
- (with Hayasaka, Takanori) Some notes on the (s, n) -sequence. *Res. Rep. Miyagi Tech. College No. 13* (1976), 129-132. (Authors' summary) **58** #26105A15
- (with Hayasaka, Takanori) The extension of the generalized Langford sequence. *Res. Rep. Miyagi Tech. College No. 13* (1976), 133-135. (Authors' summary) **58** #27305A99
- (with Hayasaka, Takanori) A perfect (s, n) -sequence based on $F(k, i)$. *Res. Rep. Miyagi Tech. College No. 14* (1977), 101-108. (D. P. Roselle) **58** #1070610A40 (05A19)
- Saito, Satoru** A dual resonance model as a Brownian process. *Nuclear Phys. B* **94** (1975), no. 2, 344-364. (Author's summary) **54** #12098 82G60
- Multi dimensional nonlinear equations with exact solutions. *Phys. Lett. A* **58** (1976), no. 2, 79-80. (Author's summary) **53** #15178 81J35
- Saito, Seiji** Hadron electromagnetic and weak form factors in the minimal boosted SU(6) scheme of the relativistic quark model. *Progr. Theoret. Phys.* **58** (1977), no. 6, 1802-1810. (Author's summary) **58** #14591 81J35
- Saito, Setsuo** Modality and preference relation. *Notre Dame J. Formal Logic* **14** (1973), 387-391. (F. R. Drake) **49** #4755 02C10
- Saito, Shiroshi** Notes on co-H-spaces. *J. Fac. Sci. Shinshu Univ.* **6** (1971), 101-106. (C. M. Naylor) **47** #5867 55D45
- On higher coassociativity. *Hiroshima Math. J.* **6** (1976), no. 3, 589-617. (J. Stasheff) **55** #9078 55D45
- Note on A_n -maps. *J. Fac. Sci. Shinshu Univ.* **11** (1976), no. 2, 47-52. (J. Stasheff) **55** #9079 55D45
- On higher coassociativity. *Proc. Japan Acad.* **52** (1976), no. 5, 221-223. (J. Stasheff) **54** #11323 55D45
- Saito, Shizuaki** (with Nakamura, Osamu; Sugimoto, Takashige; Okuno, Haruo) On "variation" and "memory efficiency" in learning network models. *Systems-Comput.-Controls* **8** (1977), no. 1, 34-43 (1978). (Authors' summary) **58** #1572194A20 (68A45)
- Saito, Takeshi** Equivalence of linear systems with stochastic initial states. *Systems-Computers-Controls* **1** (1970), no. 6, 80-88 (1971). (R. L. Kashyap) **46** #142993E10
- Saito, Takesi** (with Konisi, Gaku) Eigenchannels and unitary separation of background parts in Regge-pole theory. *Progr. Theoret. Phys.* **44** (1970), 230-242. (P. Achuthan) **46** #1232 81J30
- (with Konisi, Gaku) Operator formalism of the dual resonance model with different trajectories. *Progr. Theoret. Phys.* **46** (1971), 1501-1515. (George Zipfel, Jr.) **46** #858814J7
- (with Konisi, Gaku) Physical states satisfying supergauge conditions in dual resonance models. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 184-186. *Lecture Notes in Phys.*, 39. Springer Berlin, 1975. (From the introduction) **58** #32587 81J47
- (with Konisi, Gaku; Miyata, Hidenori; Shigemoto, Kazuyasu) Collective excitations in local-gauge invariant superconductivity models. *Progr. Theoret. Phys.* **57** (1977), no. 6, 2116-2126. (J. E. Lowther) **58** #8946 81J49
- Saito, Tatsuhiro** A note on normal ideals of Asano orders. *Proc. Japan Acad. Ser. A Math. Sci.* **54** (1978), no. 1, 21-23. (L. A. Koifman) **58** #76216A08 (16A18)

- 16, Teishirō Generation of von Neumann algebras. (Japanese) *Sūgaku* 22 (1970), no. 4, 292-298. (Z. Takeda) 57 #13520 46L10
Generations of von Neumann algebras. *Lectures on operator algebras (dedicated to the memory of David M. Topping; Tulane Univ. Ring and Operator Theory Year, 1970-1971, Vol. II)*, pp. 435-531. *Lecture Notes in Math.*, Vol. 247, Springer, Berlin, 1972. (Warren R. Wogen) 51 #13713 46L10
Hypnormal operators and related topics. *Lectures on operator algebras (dedicated to the memory of David M. Topping; Tulane Univ. Ring and Operator Theory Year, 1970-1971, Vol. II)*, pp. 533-664. *Lecture Notes in Math.*, Vol. 247, Springer, Berlin, 1972. (C. R. Putnam) 50 #14329 47B20
A theorem on boundary spectra. *Acta Sci. Math. (Szeged)* 33 (1972), 101-104. (E. R. Deal) 46 #4240 47A25
Factorization of a hyponormal operator. *Proc. Japan Acad.* 51 (1975), no. 7, 552-553. (Lawrence Fialkow) 52 #4010 47B20
On a theorem by S. M. Patel. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 10, 1407-1409. (J. P. Williams) 54 #13610 47A65
- aitō, Tōru Note on the lexicographic product of ordered semigroups. *Proc. Japan Acad.* 46 (1970), 413-416. (J. Karásek) 50 #12849 06A50
Note on the category of binary relations. *Bull. Tokyo Gakugei Univ.* (4) 23 (1971), 1-4. (M. L. Laplaza) 46 #7347 18B05
The orderability of idempotent semigroups. *Séminaire P. Dubreil, 25e année (1971/72), Algèbre, Fasc. 2: Journées d'Algèbre, Exp. No J8, 7 pp. Secrétariat Mathématique, Paris, 1973.* (Thérèse Merlier) 52 #10534 06A50
Ordered semigroups generated by two elements of finite order II. *Bull. Tokyo Gakugei Univ.* (4) 25 (1973), 24-37. (J. A. H. Shepperd) 49 #2485 (EA 49) 06A50
On semigroups which are semilattices of left simple semigroups. *Math. Japon.* 18 (1973), 95-97. (M. Friedberg) 50 #2377 20M10
Note on quasi-inverse semigroups. *Semigroup Forum* 6 (1973), no. 2, 129-132. (M. Yamada) 47 #5155 20M10
Ordered semigroups generated by two elements of finite order II. *Bull. Tokyo Gakugei Univ.* (4) 26 (1974), 4-21. (J. A. H. Shepperd) 50 #12848 06A50
Elements of finite order in an ordered semigroup whose product is of infinite order. *Proc. Japan Acad.* 50 (1974), 268-270. (R. McFadden) 50 #12851 06A50
No free inverse semigroup is orderable. *Proc. Japan Acad.* 50 (1974), 837-838. (L. Fuchs) 53 #2793 06A50
The orderability of idempotent semigroups. Collection of articles dedicated to Alfred Hobbitzelle Clifford on the occasion of his 65th birthday and to Alexander Doniphan Wallace on the occasion of his 68th birthday. *Semigroup Forum* 7 (1974), no. 1-4, 264-285. (R. McFadden) 52 #222 06A50
The orderability of completely regular semigroups. *Semigroup Forum* 10 (1975), no. 3, 269-272. (T. S. Blyth) 52 #5511 06A50
Archimedean classes in an ordered semigroup. I. (Loose Russian summary) *Czechoslovak Math. J.* 26(101) (1976), no. 2, 218-238. (Thérèse Merlier) 53 #10683 06A50
Archimedean classes in an ordered semigroup. II. (Loose Russian summary) *Czechoslovak Math. J.* 26(101) (1976), no. 2, 239-247. (Thérèse Merlier) 53 #10684 06A50
Archimedean classes in an ordered semigroup. III. (Loose Russian summary) *Czechoslovak Math. J.* 26(101) (1976), no. 2, 248-251. (Thérèse Merlier) 53 #10685 06A50
There are 18 linearly ordered semigroups of order 3. *Bull. Tokyo Gakugei Univ.* (4) 29 (1977), 79. (T. S. Blyth) 56 #15527 06A55
Archimedean classes in an ordered semigroup. IV. Seminar on Semigroup Theory (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikenkyūsho Kōkyūroku No. 292* (1977), 20-39. (Zbl 376 #06018) 58 #21889 06A50 (20M10)
- Saito, Tosiya A note on nonsaddle attractors. *Proc. Japan Acad.* 49 (1973), 588-590. (J. Auslander) 50 #3206 54H20 (34C35)
On the flow outside a nonsaddle compact invariant set. *Keio Engrg. Rep.* 29 (1976), no. 6, 61-71. (Gustav A. Hedlund) 54 #8598 54H20
Nonwandering set and minimal sets. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* 24 (1977), no. 2, 295-301. (T. Ura) 57 #17610 54H20 (34C35)
On the flow outside a compact invariant set. *Keio Math. Sem. Rep. No. 2* (1977), 69-74. (J. Auslander) 58 #2765 54H20
Nonwandering set and minimal sets. Local dynamical systems: integral and differential equations (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikenkyūsho Kōkyūroku No. 303* (1977), 31-38. (B. A. Ščerbakov) 58 #24219 54H20
On bounded solutions of $x'' = t^{\beta} x^{1-\alpha}$. *Tokyo J. Math.* 1 (1978), no. 1, 57-75. (H. A. DeKleine) 50 #22776 34C10
- Saitō, Yoshimi Eigenfunction expansions associated with second-order differential equations for Hilbert space-valued functions. *Publ. Res. Inst. Math. Sci.* 7 (1971/72), 1-55. (J. B. McLeod) 47 #892 47E05 (34G05)
The principle of limiting absorption for second-order differential equations with operator-valued coefficients. *Publ. Res. Inst. Math. Sci.* 7 (1971/72), 581-619. (R. R. D. Kemp) 46 #7658 34G05 (47A50)
(with Ikebe, Teruo) Limiting absorption method and absolute continuity for the Schrödinger operator. *J. Math. Kyoto Univ.* 12 (1972), 513-542. (Stanly L. Steinberg) 47 #628 35J10 (47F05)
Spectral and scattering theory for second-order differential operators with operator-valued coefficients. *Osaka J. Math.* 9 (1972), 463-498. (J. B. McLeod) 49 #1224 47E05
The principle of limiting absorption for the nonselfadjoint Schrödinger operator in R^N ($N \geq 2$). *Publ. Res. Inst. Math. Sci.* 9 (1973/74), 397-428. (K.-J. Eckardt (Zbl 287 #35032)) 57 #17026 35P25 (35J10)
The principle of limiting absorption for the non-selfadjoint Schrödinger operator in R^2 . *Osaka J. Math.* 11 (1974), 295-306. (J. R. Schulenberger) 51 #6183 35P25
Eigenfunction expansions for differential operators with operator-valued coefficients and their applications to the Schrödinger operators with long-range potentials. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 476-482. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (W. D. Evans (Zbl 327 #35057)) 58 #28819 34B25 (34G05, 35P99, 81.35)
Spectral theory for second-order differential operators with long-range operator-valued coefficients. I. Limiting absorption principle. *Japan. J. Math. (N.S.)* 1 (1975), no. 2, 311-349. (M. S. P. Eastham) 55 #13031a 34G05 (34B25, 47E05)
Spectral theory for second-order differential operators with long-range operator-valued coefficients. II. Eigenfunction expansions and the Schrödinger operators with long-range potentials. *Japan. J. Math. (N.S.)* 1 (1975), no. 2, 351-382. (M. S. P. Eastham) 55 #13031b 34G05 (34B25, 47E05)
Eigenfunction expansions for Schrödinger operators. (The case of a general long-range potential.) (Japanese) *Sūgaku* 28 (1976), no. 4, 311-322. (Teruo Ikebe) 58 #23160 35P10 (81.35)
On the asymptotic behavior of the solutions of the Schrödinger equation $(-\Delta + Q(y) - k^2)V = F$. *Osaka J. Math.* 14 (1977), no. 1, 11-35. (C. A. Swanson) 56 #891 35P20 (35B40)
Eigenfunction expansions for the Schrödinger operators with long-range potentials $Q(y) = O(|y|^{-\epsilon})$, $\epsilon > 0$. *Osaka J. Math.* 14 (1977), no. 1, 37-53. (C. A. Swanson) 56 #887 35P10
- Saito, Yukio (with Kubo, Ryogo) Nonlinearity in cooperative systems—dynamical Bethe-Ising model. *J. Statist. Phys.* 15 (1976), no. 3, 233-253. (Authors' summary) 58 #9021 82.60
Saito, Yukio Relations between hypergeometric functions having parameters that differ by an integer. (Japanese) *J. Tsuda College No. 4* (1972), 19-25. (C. Tanaka) 48 #8867 33A30
Saitoh, Kenji (with Nishi, Mico) On Dedekind domains. *Hiroshima Math. J.* 7 (1977), no. 2, 575-582. (C. R. Fletcher) 56 #15632 13F05
Saitoh, Saburo The kernel functions of Szegő type on Riemann surfaces. *Kōdai Math. Sem. Rep.* 24 (1972), 410-421. (G. G. Weill) 48 #525 30A46
The Rudin kernel and the extremal functions in Hardy classes. *Kōdai Math. Sem. Rep.* 25 (1973), 37-47. (G. G. Weill) 48 #526 30A46
On some completeness of the Bergman kernel and the Rudin kernel. *Pacific J. Math.* 56 (1975), no. 2, 581-596. (I. P. Ramadanov) 54 #10584 30A31
The exact Bergman kernel and the kernels of Szegő type. *Pacific J. Math.* 71 (1977), no. 2, 545-557. (Author's summary) 56 #12258 30A52
Saitoh, Yutaka (with Maeda, Hajime; Kodama, Shinzo) Structure and state equations of composite linear sampled-data systems—comparison with continuous-time systems. (Japanese, English summary) *Systems and Control* 21 (1977), no. 10, 579-584. (Authors' summary) 58 #9595 93C55
Saitoi, George Loop spaces and K-theory. *J. London Math. Soc.* (2) 9 (1974/75), 423-428. (M. Arkowitz) 51 #14038 55D35
A note on the homology of a differential graded algebra. *Nigerian J. Sci.* 8 (1974), no. 1-2, 127-130. (L. Bican) 53 #10892 18H15
Mod 2 K_* -theory fundamental classes. *Demonstratio Math.* 8 (1975), no. 4, 365-377. (Richard R. Patterson) 53 #4043 55B20
Homology of a differential algebra. *Publ. Math. Debrecen* 23 (1976), no. 3-4, 235-237. (Donald M. Davis) 56 #13218 55G10
A remark on Mod 2 K_* -theory fundamental classes. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys.* 3 (1977), no. 1, 61-63. (J. W. Vick) 58 #7606 55B15
Sáiz Zaldo, F. (with Arrate Peña, Manuel) Some consequences of Krasnosel'skii's theorem. (Spanish) *Gac. Mat. (Madrid)* (1) 29 (1977), no. 1-2, 3-6. (A. de Castro Brzezicki) 56 #8764 26A18
Sajaniemi, Jorma The safety of a coroutine system. *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 440-452. *Lecture Notes in Comput. Sci.*, Vol. 52, Springer, Berlin, 1977. (Author's summary) 58 #25082 68A05 (68A15)
Šajask, S. G. The spectrum and resolvent of a nonselfadjoint operator in a space of vector-valued functions. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Fiz., Him. i Meh.-Mat.* 1968, 160-164. (T. Ja. Azizov) 49 #5934 47E05
Šajda, Josef On an algorithm in the domain of evaluated graphs. (Slovak. Russian summary, loose English summary) *Mat. Časopis Sloven. Akad. Vied* 19 (1969), 63-87. (J. Sedláček) 46 #3378 05C99 (94-04)
An iterative algorithm for solving the realization problem of a Boolean function by a single threshold element. *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* 26 (1972), 1-18. (Author's summary) 49 #12187 94A20
Šajusupov, M. The numerical solution of a boundary value problem for the general equations of aqueous flow with variable discharge along part of the channel. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Vyp.* 35 (1975), 96-110, 214-215. (Author's summary) 58 #8796 76.65 (65N99)
- Sajutin, Ju. V. (with Andreev, N. I.; Dostupov, B. G.; Kazakov, I. E.; Kozlov, Ju. M.; Kočetkov, V. T.; Pocoluev, A. V.; Smirnov, V. I.; Sotskii, N. M.; Tihonov, V. I.; Černeckii, V. I.) ★Статистические методы в проектировании нелинейных систем автоматического управления. (Russian) [Statistical methods in the design of nonlinear automatic control systems] Edited by B. G. Dostupov. Nonlinear Automatic Control Systems, Vol. 6. Izdat. "Mašinostroenie", Moscow, 1970. 407 pp. (errata insert) (V. N. Igolkin) 50 #9403 93E20
- fam hyu Šak See Fam Hyu Šak
- Saka, E. V. A certain method of estimating the domain of applicability of the small parameter method in the theory of difference equations. (Russian) *Collection of scientific works of graduates, No. 7: Mathematics, mechanics, physics* (Russian), pp. 130-134. *Univ. Družby Narodov, Moscow*, 1970. (I. M. Šeffler) 45 #2344 39A10
(with Rjabov, Ju. A.) An application of the Ljapunov-Poincaré small parameter method to the construction and estimation of the domain of existence of almost periodic solutions of quasilinear difference equations. (Russian) *Bul. Akad. Štiințe RSS Moldoven.* 1973, no. 1, 81-83, 93. (A. Halanay) 48 #6742 39A12
(with Rjabov, Ju. A.) The construction and structure of the periodic solution for difference equations with a small step. (Russian) *Bul. Akad. Štiințe RSS Moldoven.* 1975, no. 2, 10-21, 92. (B. Crstici) 52 #6228 39A10
- Saka, Koichi A note on subalgebras of a measure algebra vanishing on non-symmetric homomorphisms. *Tōhoku Math. J.* (2) 25 (1973), 333-338. (B. R. Gelbaum) 50 #10686 43A10
On a characterization of some L-subalgebras in measure algebras. *J. London Math. Soc.* (2) 9 (1974/75), 261-271. (Colin C. Graham) 53 #1167 43A10

- Measure algebras on some topological groups. *Tôhoku Math. J. (2)* **27** (1975), 1-12. (Colin C. Graham) **51** #1277 43A10
- The L -structure of measure algebras. (Japanese) *Sûgaku* **28** (1976), no. 4, 289-298. (M. Hasumi) **58** #6922 43A10
- The representation theorem and the H^p space theory associated with semigroups on Lie groups. *Tôhoku Math. J. (2)* **30** (1978), no. 1, 131-151. (Norman J. Weiss) **58** #29839 43A15 (22E30)
- Sakabe, Toshiaki** (with Inagaki, Yasuyoshi; Fukumura, Teruo) Addressable approximations to nonaddressable data graphs. *2nd USA-Japan Computer Conference Proceedings* (Tokyo, 1975), pp. 343-346. *AFIPS Press, Montvale, N.J.*, 1975. (Bernard H. Rosman) **57** #4708 68A50
- (with Inagaki, Yasuyoshi; Fukumura, Teruo) A characterization of data graphs by right congruence relations over the set of link symbol sequences. *Systems-Computers-Controls* **7** (1976), no. 2, 79-87 (1977). (A. L. Rosenberg) **58** #8458 68A05
- (with Inagaki, Yasuyoshi; Fukumura, Teruo) Addressable approximations to nonaddressable data graphs. *Systems-Computers-Controls* **7** (1976), no. 6, 76-84 (1977). (Fabrizio Luccio) **58** #19317a 68A05
- (with Inagaki, Yasuyoshi; Fukumura, Teruo) Infinite hierarchy of algebraic and graphical uniformities of data graphs. *Systems-Comput.-Controls* **8** (1977), no. 1, 69-75 (1978). (Bernard H. Rosman) **58** #3639 68A05
- (with Inagaki, Yasuyoshi; Fukumura, Teruo) Addressable approximations to nonaddressable data graphs. *J. Comput. System Sci.* **17** (1978), no. 1, 1-34. (Fabrizio Luccio) **58** #19317b 68A05
- Sakaguchi, Koichi** A certain property of convex functions and its application to a condition for univalence. (Japanese) *Sûgaku* **23** (1971), no. 4, 296-298. **58** #28470 30A36
- A property of convex functions and an application to criteria for univalence. *Bull. Nara Univ. Ed. Natur. Sci.* **22** (1973), no. 2, 1-5. (S. M. Shah) **50** #13486 30A32
- Sakaguchi, Michio** A note on graded Gorenstein modules. *Hiroshima Math. J.* **4** (1974), 339-341. (J. L. Dawson) **49** #8981 13H10
- A note on the polynomial grade and the valuative dimension. *Hiroshima Math. J.* **8** (1978), no. 2, 327-333. (J. T. Arnold) **58** #645 13C15
- Sakaguchi, Minoru** Information system in finite zero-sum two-person games and linear programming. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **19** (1972), no. 1, 10-19. (M. Iosifescu) **51** #5113 93E05
- A sequential assignment problem for randomly arriving jobs. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **19** (1972), no. 3, 15-25. (K. Hinderer) **48** #3480 90B35
- Optimal stopping in sampling from a bivariate distribution. *J. Operations Res. Soc. Japan* **16** (1973), 186-200. (Author's summary) **54** #9005 62L15
- Two-sided search games. *J. Operations Res. Soc. Japan* **16** (1973), 207-225. (Author's summary) **54** #9694 90D15
- A note on the dowry problem. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **20** (1973), no. 1, 11-17. (Adhir K. Basu) **48** #7502 62L15 (49A30)
- An information search. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **20** (1973), no. 3, 1-12. (V. D. Dimitrov) **53** #7442 90B40
- A maximization for Markov chains related to traffic flow problems. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **22** (1975), no. 3, 20-23. (S. P. Aggarwal) **55** #9911 90B20
- An information theoretic consideration on an optimal search. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **22** (1975), no. 4, 28-35. (Suguru Arimoto) **54** #9830 94A05
- A sequential allocation problem for randomly appearing targets. *Math. Japon.* **21** (1976), no. 1, 89-103. (Olavi Hellman) **55** #6732 62L10 (90B99)
- Optimal stopping problems for randomly arriving offers. *Math. Japon.* **21** (1976), no. 2, 201-217. (W. T. Rasmussen) **54** #14793 90C40 (62L15)
- Disparate information in finite two-person games and linear programming. *Math. Japon.* **21** (1976), no. 3, 311-326. (G. Duru) **57** #18850 90D05
- Some entropy results in brand selection behavior. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **23** (1976), no. 1, 14-24. (S. P. Aggarwal) **56** #2259 90A15
- A sequential allocation game for targets with varying values. *J. Operations Res. Soc. Japan* **20** (1977), no. 3, 182-193. (Kåre M. Mjelde) **56** #14789 90D25
- Marksmanship contests—non-zero-sum game of timing. *Math. Japon.* **22** (1977/78), no. 5, 585-596. (Ulrich Rieder) **58** #4371 90D05
- Entropy in brand selection behavior—brand-store model. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **24** (1977), no. 1, 5-14. (B. W. Stuck) **58** #9170 90B05
- When to stop: randomly appearing bivariate target values. (Japanese summary) *J. Operations Res. Soc. Japan* **21** (1978), no. 1, 45-58. (H. Taylor) **57** #14295 62L15
- Sakaguchi, Takako** (with Kasahara, Isamu) A note on nuclear operators in Hilbert space. *Proc. Japan Acad.* **47** (1971), suppl. II, 1012-1014. (S. R. Caradus) **47** #872 47B10
- Sakaguchi, Toshio** Some topological properties of certain Riemannian manifolds with positive curvature. *Hokkaido Math. J.* **2** (1973), 93-97. (C. B. Allendoerfer) **47** #5779 53C20 (53C30)
- On the holomorphically projective correspondence between Kählerian spaces preserving complex structure. *Hokkaido Math. J.* **3** (1974), 203-212. (K. T. Hahn) **51** #6638 53B35
- On complex semi-symmetric metric F -connection. *Hokkaido Math. J.* **5** (1976), no. 2, 218-226. (Jacek Gancarzewicz) **54** #6011 53B35
- Sakai, Akira** Localization theorem for holomorphic approximation on open Riemann surfaces. *J. Math. Soc. Japan* **24** (1972), 189-197. (J. Garnett) **45** #8824 30A52
- Uniform algebra generated by $z_1, \dots, z_n, f_1(z), \dots, f_r(z)$. *Osaka J. Math.* **12** (1975), 33-39. (S. Hitotumatu) **51** #13287 32E30
- Function algebras and approximation problems. (Japanese) Function algebras and their applications. *Sûgaku* **28** (1976), no. 1, 25-34, 87-95. (Donna Kumagai) **58** #22661 32E25
- Sakai, Eiichi** (with Akaza, Tohru) Singular sets of some infinitely generated Kleinian groups. *Kôdai Math. Sem. Rep.* **26** (1975), no. 4, 485-497. (C. Earle) **53** #5856 30A58
- Sakai, Fumio** Degeneracy of holomorphic maps with ramification. *Invent. Math.* **26** (1974), 213-229. (Shoshichi Kobayashi) **50** #7595 32H25
- Defect relations and ramification. *Proc. Japan Acad.* **50** (1974), 723-728. (James A. Carlson) **54** #10683 32H25
- Defect relations for equidimensional holomorphic maps. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **23** (1976), no. 3, 561-580. (Hirotaka Fujimoto) **54** #10684 32H25
- Kodaira dimensions of complements of divisors. *Complex analysis and algebraic geometry*, pp. 239-257. *Iwanami Shoten, Tokyo*, 1977. (From the text) **58** #28689 32H25
- Sakai, Hidehisa** On numerations of a formal system. *Ann. Japan Assoc. Philos. Sci.* **4**, 227-230 (1974). (Y. Kakuda) **56** #100 02D99 (02F99)
- On necessary but not-sufficient conditions. *Arch. Math. Logik Grundlagenforsch.* **16**, 143-146 (1974). (A. Kino) **51** #2881 02D99 (02G20)
- Sakai, Katsuro** On embeddings of infinite-dimensional manifold pairs. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **12**, 202-213 (1974). (R. R. Summerhill) **51** #11522 57A20
- An embedding of l^2 -manifold pairs in l^2 . *J. Math. Soc. Japan* **27** (1975), no. 557-560. (D. E. Sanderson) **53** #4070 57A20
- Embeddings of infinite-dimensional manifold pairs and remarks on stability and deficiency. *J. Math. Soc. Japan* **29** (1977), no. 2, 261-280. (R. R. Summerhill) **56** #16636 57A20
- Replacing maps by embeddings between $\{0, 1\}$ -stable Q -manifold pairs. *Math. Japon.* **22** (1977), no. 1, 93-98. (R. R. Summerhill) **56** #16637 57A20
- An embedding theorem of infinite-dimensional manifold pairs in the model space. *Fund. Math.* **100** (1978), no. 1, 83-87. (Stiere Ianus) **58** #7640 57A35 (57A20)
- Sakai, Kôkichi** Extremely amenable transformation semigroups. *Proc. Japan Acad.* **49** (1973), 424-427. (Peter Mah) **49** #447 20M20
- Amenable transformation groups. II. *Proc. Japan Acad.* **49** (1973), 428-431. (Peter Mah) **51** #11009 43A07
- Amenable transformation groups. *Sci. Rep. Kagoshima Univ.* No. 22 (1973), 1-7. (Peter Mah) **51** #11008 43A07
- Extremely amenable transformation semigroups. II. *Proc. Japan Acad.* **50** (1974), 374-377. (Peter Mah) **51** #768 20M20 (43A07)
- Følner's conditions for amenable transformation semigroups. *Sci. Rep. Kagoshima Univ.* No. 23 (1974), 7-13. (Peter Mah) **51** #13583 43A07
- Some remarks on locally compact transformation groups with invariant means. *Sci. Rep. Kagoshima Univ.* No. 24 (1975), 11-15. (T. S. Liu) **52** #11468 43A07 (54H15)
- On amenable transformation semigroups. I. *J. Math. Kyoto Univ.* **16** (1976), no. 3, 555-595. (Carroll O. Wilde) **55** #6111 43A07
- On amenable transformation semigroups. II. *J. Math. Kyoto Univ.* **16** (1976), no. 3, 597-626. (Carroll O. Wilde) **55** #6112 43A07
- On amenable transformation semigroups. III. *Sci. Rep. Kagoshima Univ.* No. 25 (1976), 31-51. (Carroll O. Wilde) **55** #6113 43A07
- On linear representations of amenable groups. *Sci. Rep. Kagoshima Univ.* No. 25 (1976), 53-68. (Carroll O. Wilde) **55** #6114 43A07
- On the existence of invariant functions for Markov representations of amenable semigroups. *Proc. Japan Acad.* **53** (1977), no. 3, 132-134. (Shlomo Horowitz) **56** #5838 28A65 (60J35)
- Applications of the invariant mean on $WAP(G)$. *Sci. Rep. Kagoshima Univ.* No. 26 (1977), 27-32. (I. Glicksberg) **57** #17132 43A60 (22A10)
- On J -unitary representations of amenable groups. *Sci. Rep. Kagoshima Univ.* No. 26 (1977), 33-41. (Pierre Eymard) **58** #6057 22D12
- (with Horinouchi, Sôichi) Some remarks on ergodic theory of Markov operators. I, II. *Sci. Rep. Kagoshima Univ.* No. 26 (1977), 43-50. (Authors' summary) **58** #31410 60J05 (47A35)
- Sakai, Manabu** (with Ishikawa, Saneaki) On approximate solutions of nonlinear integral equations by Chebyshev series. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **25** (1971), 244-252. (G. F. Miller) **46** #8459 65R05
- Piecewise cubic interpolation and two-point boundary value problems. *Publ. Res. Inst. Math. Sci.* **7** (1971/72), 345-362. (F. Perrin) **47** #4453 65L10
- Piecewise cubic interpolation and deferred correction. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **26** (1972), no. 2, 339-350. (Ian Gladwell) **53** #14922 65L10
- Ritz method for two-point boundary value problem. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **27** (1973), 83-97. (Jacob Steinberg) **48** #3260 65L10
- Cubic spline function and difference method. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **28** (1974), 43-58. (Jacob Steinberg) **51** #2299 65L10
- Numerical solution of boundary value problems for second order functional differential equations by the use of cubic splines. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **29** (1975), no. 1, 113-122. (Ian Gladwell) **51** #9498 65L10
- Approximate methods for the integration of singular perturbation problems. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **29** (1975), no. 1, 185-191. (W. H. Enright) **51** #14595 65L10
- An investigation of difference method for two-point boundary value problems. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **29** (1975), no. 2, 287-301. (I. Norman Katz) **53** #7044 65L10
- Some difference scheme for singular boundary value problems. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **30** (1976), no. 1, 1-6. (Robert D. Russell) **54** #9095 65L10
- Cubic spline interpolation and two-sided difference methods to two-point boundary value problems. *Rep. Fac. Sci. Kagoshima Univ.* No. 9 (1976), 31-38. (Author's summary) **58** #8307 65L10
- Two-sided quintic spline approximations for two-point boundary value problems. *Rep. Fac. Sci. Kagoshima Univ.* No. 10 (1977), 1-17. (P. G. Ciarlet) **58** #3495 65L10
- Sakai, Masao** On countably R -closed spaces. I, II. *Proc. Japan Acad.* **47** (1971), suppl. I, 803-806; *ibid.* **47** (1971), suppl. I, 807-809. (O. T. Alas) **47** #2548 54D20 (54D30)
- On weakly compact spaces. *Proc. Japan Acad.* **47** (1971), suppl. I, 821-823. (G. L. Cain, Jr.) **47** #7692 54D30
- Sakai, Mokoto** Univalence of analytic mappings of a Riemann surface into itself. *Kôdai Math. Sem. Rep.* **23** (1971), 248-254. (M. H. Heins) **45** #542 30A48
- On basic domains of extremal functions. *Kôdai Math. Sem. Rep.* **24** (1972), 251-258. (J. G. Krzyż) **47** #8838 30A40
- On the vanishing of the span of a Riemann surface. *Duke Math. J.* **41** (1974), 497-510. (M. Goldstein) **52** #3513 30A48 (31C05)
- Continuous linear functionals on the space of bounded harmonic functions. *Kôdai Math. Sem. Rep.* **26** (1974/75), 115-131. (From the author's introduction) **56** #639

- 30A98 (30A48, 30A50)
On extremal sets of parallel slits. *Hiroshima Math. J.* **5** (1975), no. 3, 499-516. (N. Suita) **55** #12907 30A40
A moment problem on Jordan domains. *Proc. Amer. Math. Soc.* **70** (1978), no. 1, 35-38. (Horst Tietz) **57** #9974 30A80
- akai, Ryozi A problem of monotone approximation. *Sci. Rep. Kanazawa Univ.* **19** (1974), 9-12. (E. W. Cheney) **51** #13525 41A10
- akai, Ryozi (with Tohma, Yoshihiro; Ohyama, Yasuyoshi) Realization of fail-safe sequential machines by using a k -out-of- n code. *IEEE Trans. Computers* **C-20** (1971), 1270-1275. (Authors' summary) **54** #7139 94A25
- akai, Shōichirō On the Stone-Weierstrass theorem of C^* -algebras. *Tōhoku Math. J. (2)* **22** (1970), 191-199. (J. R. Ringrose) **46** #678 46L05
★ C^* -algebras and W^* -algebras. *Ergebnisse der Mathematik und ihrer Grenzgebiete*, Band 60. Springer-Verlag, New York-Heidelberg, 1971. xii + 253 pp. (Richard I. Loeb) **56** #1082 46L05 (46L10)
Derivations of simple C^* -algebras. II. *Bull. Soc. Math. France* **99** (1971), 259-263. (R. H. Herman) **45** #2491 46L05
On the Stone-Weierstrass theorem of C^* -algebras. *Proceedings of an International Symposium on Operator Theory* (Indiana Univ., Bloomington, Ind., 1970). *Indiana Univ. Math. J.* **20** (1971), no. 10, 941. (Editors) **53** #3720 46L05
On global type Π_1 W^* algebras. *J. Functional Analysis* **8** (1971), 95-100. (S. Anastasio) **45** #2492 46L10
Derivations of simple C^* -algebras. III. *Tōhoku Math. J. (2)* **23** (1971), 559-564. (T. W. Palmer) **47** #7448 46L05
On global type Π_1 W^* -algebras. *Hilbert space operators and operator algebras* (Proc. Internat. Conf., Tihany, 1970), pp. 493-497. *Colloq. Math. Soc. János Bolyai*, **5**, North-Holland, Amsterdam, 1972. (J. Ernest) **51** #13714 46L10
Recent topics on examples of Π_1 -factors. (Japanese) *Sūgaku* **24** (1972), no. 2, 81-89. (From the text) **58** #30317 46L10
Derived C^* -algebras of primitive C^* -algebras. *Tōhoku Math. J. (2)* **25** (1973), 307-316. (László Zsidó) **49** #5862 46L05
(with Powers, Robert T.) Existence of ground states and KMS states for approximately inner dynamics. *Comm. Math. Phys.* **39** (1974/75), 273-288. (H. Araki) **50** #12075 81.47 (81.46)
On automorphism groups of Π_1 -factors. *Tōhoku Math. J. (2)* **26** (1974), 423-430. (William Paschke) **52** #1343 46L10
Automorphisms and tensor products of operator algebras. *Amer. J. Math.* **97** (1975), no. 4, 889-896. (J. W. Bunce) **52** #11610 46L05
On commutative normal $*$ -derivations. *Comm. Math. Phys.* **43** (1975), 39-40. (Johan F. Aarnes) **51** #8838 46L05
(with Powers, Robert T.) Unbounded derivations in operator algebras. *J. Functional Analysis* **19** (1975), 81-95. (G. A. Elliott) **52** #3974 46L05
Unbounded derivations in C^* -algebras. *Symposia Mathematica*, Vol. XX (Convegno sulle Algebre C^* e loro Applicazioni in Fisica Teorica, Convegno sulla Teoria degli Operatori Indici e Teoria K, INdAM, Rome, 1975), pp. 233-239. Academic Press, London, 1976. (J. W. Bunce) **56** #9274 46L05 (81.46)
On one-parameter subgroups of $*$ -automorphisms on operator algebras and the corresponding unbounded derivations. *Amer. J. Math.* **98** (1976), no. 2, 427-440. (M. Takesaki) **54** #945 46L05
On commutative normal $*$ -derivations. II. *J. Functional Analysis* **21** (1976), no. 2, 203-208. (Johan F. Aarnes) **54** #8301 46L05 (81.46)
Commutative normal $*$ -derivations. III. *Tōhoku Math. J. (2)* **28** (1976), no. 4, 583-590. (Johan F. Aarnes) **58** #12404 46L05 (81.46)
- Sakai, Shozo Relations between spaces defined by compactness operator. *Rep. Fac. Sci. Shizuoka Univ.* **7** (1972), 1-5. (G. L. Cain, Jr.) **52** #1630 54D30
- Sakai, Syitji (with Yoshida, Kiyoshi) Note on the Cauchy problem for linear hyperbolic partial differential equations with constant coefficients. *Hiroshima Math. J.* **1** (1971), 445-459. (D. L. Colton) **46** #9544 35L30
- Sakai, Takashi Three remarks on fundamental groups of some Riemannian manifolds. *Tōhoku Math. J. (2)* **22** (1970), 249-253. (T. Suguri) **45** #2617 53C20
On closed geodesics of lens spaces. *Tōhoku Math. J. (2)* **23** (1971), 403-411. (Jerry Ludden) **46** #9898 (E **58** #30914) 53C20
On eigen-values of Laplacian and curvature of Riemannian manifold. *Tōhoku Math. J. (2)* **23** (1971), 589-603. (Y. Katsurada) **46** #2602 53C20
(with Shiohama, Katsuhiko) On the structures of positively curved manifolds with certain diameter. *Math. Z.* **127** (1972), 75-82. (E. Bompiani) **47** #987 53C20
The contact structures on $(\text{SU}(n+1) \times \text{R}/\text{SU}(n) \times \text{R})_a$ and $(\text{Sp}(n) \times \text{SU}(2)/\text{Sp}(n-1) \times \text{SU}(2))_a$ of Berger. *Collection of articles dedicated to Shigeo Sasaki on his sixtieth birthday. Tōhoku Math. J. (2)* **25** (1973), 145-155. (O. Kowalski) **48** #9605 53C15
On Pu's theorem for odd dimensional real projective spaces. *Collection of articles dedicated to Shigeo Sasaki on his sixtieth birthday. Tōhoku Math. J. (2)* **25** (1973), 219-224. (Shūkichi Tanno) **50** #3148 53C20
On the local version of Pu's problem. *Kōdai Math. Sem. Rep.* **26** (1974/75), 152-159. (Shūkichi Tanno) **51** #9124 58E99
On the index theorem of Ambrose. *Hokkaido Math. J.* **4** (1975), no. 2, 227-233. (M. Klingmann) **53** #1642 58E10
On the riemannian structure all of whose geodesics are closed and of the same length. *J. Math. Soc. Japan* **27** (1975), 239-247. (J. R. Vanstone) **53** #9291 58E10 (58H05, 53C20)
On the index theorem for isometry-invariant geodesics. *Japan. J. Math. (N.S.)* **1** (1975), no. 2, 383-391. (Y. Muto) **56** #9575 58E10
Correction and supplement to: "On closed geodesics of lens spaces" (Tōhoku Math. J. (2) **23** (1971), 403-411). *Tōhoku Math. J. (2)* **27** (1975), no. 3, 319-320. (From the text) **58** #30914 53C20 (58G99)
- On the spectrum of lens spaces. *Kōdai Math. Sem. Rep.* **27** (1976), no. 1-2, 249-256. (Harold Donnelly) **53** #1663 58G99 (53C20)
On cut loci of compact symmetric spaces. *Hokkaido Math. J.* **6** (1977), no. 1, 136-161. (H. Karcher (Zbl **361** #53048)) **58** #30922 53C35
The index theorem for geodesics. (Japanese) *Sūgaku* **29** (1977), no. 1, 14-27. (Midori Goto) **58** #7699 58E10
On the structure of cut loci in compact Riemannian symmetric spaces. *Math. Ann.* **235** (1978), no. 2, 129-148. (H. R. Gluck) **58** #18272 53C20
- Sakai, Tsuyoshi A remark on the Alexander polynomials of knots. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 3, 451-456. (J. P. Levine) **58** #12998 55A25
- Sakai, Yasuhiro An axiomatic approach to input demand theory. *Internat. Econom. Rev.* **14** (1973), 735-752. (Vladimir Strnad) **50** #6442 90A15
★ Equivalence of the weak and strong axioms of revealed preference without demand contonuity assumptions: a "regularity condition" approach. *J. Econom. Theory* **8** (1974), no. 3, 292-304. (Author's summary) **57** #2467 90A05
Substitution and expansion effects in production theory: The case of joint production. *J. Econom. Theory* **9** (1974), no. 3, 255-274. (Trout Rader) **57** #11712 90B30
Revealed favorability, indirect utility, and direct utility. *J. Econom. Theory* **14** (1977), no. 1, 113-129. (Wilhelm Neufeind) **58** #9117 90A05 (90A15)
- Sakai, Yūji (with Shimogaki, Tetsuya) Equimeasurability of functions and doubly stochastic operators. *Kōdai Math. Sem. Rep.* **24** (1972), 203-211. (J. V. Ryff) **46** #7945 47A35 (28A65, 46E30)
- Sakaki, Hiroshi Graph-theoretical consideration on node elimination method and its application to feedback amplifier design. *Electron. Commun. Japan* **58** (1975), no. 6, 1-8. (W.-K. Chen) **54** #2353 94A20
- Sakakibara, Toichiro (with Sasaki, Masafumi; Matsui, Kineo) A new condition of the feasibility of two-commodity flows in a communication network. *Proceedings of the Ninth Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1976), pp. 80-82. *Western Periodicals*, North Hollywood, Calif., 1976. (Kenji Onaga) **58** #9181 90B10
- Sakalauskas, V. An estimate in the multidimensional central limit theorem. (Russian. Lithuanian and English summaries) *Lietuvsk. Mat. Sb.* **17** (1977), no. 4, 195-201, 224. (L. A. Anorina) **57** #4301 60F05
- Sakamoto, Akio (with Shirakawa, Isao; Ozaki, Hiroshi) Ordering of pivotal operations on sparse systems of equations. *Information Processing in Japan* **12** (1972), 84-89. (R. P. Tewarson) **47** #7906 65F05
(with Shirakawa, Isao; Ozaki, Hiroshi) Sparsity-oriented ordering of pivotal operations on network equations. *SIAM J. Appl. Math.* **24** (1973), 121-129. (Authors' summary) **55** #14435 94A20 (65F20)
- Sakamoto, Hiroshi Holomorphic vector fields and Chern numbers. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **12**, 119-122 (1974). (James B. Carrell) **51** #9079 57D25 (32C10)
(with Higuchi, Teiichi) On a harmonic function with respect to the Bergman metric. *Sci. Rep. Yokohama Nat. Univ. Sect. I No. 23* (1976), 15-20. (John E. Fornæss) **58** #6371 32H99
(with Higuchi, Teiichi; Watanabe, Kimio) On certain rational singularities in dimensions > 2 . *Sci. Rep. Yokohama Nat. Univ. Sect. I No. 23* (1976), 21-25. (Jonathan M. Wahl) **57** #3437 32C40
- Sakamoto, Jiro (with Utiyama, Ryōyū) Canonical quantization on non-abelian gauge fields. *Progr. Theoret. Phys.* **55** (1976), no. 5, 1631-1648. (K. T. Mahanthappa) **54** #9392 81.22
- Sakamoto, Kentaro (with Ikeda, Mineo) On the concept of symmetry in Pontryagin's maximum principle. *SIAM J. Control* **13** (1975), 389-399. (Djordje Djukic) **52** #4061 49A10
- Sakamoto, Koichi The Seifert matrices of Milnor fiberings defined by holomorphic functions. *J. Math. Soc. Japan* **26** (1974), 714-721. (Alan H. Durfee) **50** #14771 57D15 (14B05, 32C40, 57C45)
Milnor fiberings and their characteristic maps. *Manifolds—Tokyo 1973* (Proc. Internat. Conf., Tokyo, 1973), pp. 145-150. Univ. Tokyo Press, Tokyo, 1975. (I. N. Iomdin) **51** #8460 32C40 (57C45)
(with Matsumoto, Yukio) On the Milnor fiber, monodromy, and the characteristic polynomial. (Japanese) Conference on Singular Points of Hypersurfaces and b -Functions (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1973). *Sūrikaiseikikenkyūsho Kōkyūroku* No. 225 (1975), 235-247. (Masahisa Adachi) **57** #16676 32C40 (57C45)
- Sakamoto, Kunio Submanifolds satisfying the condition $K(X, Y) \cdot K = 0$. *Kōdai Math. Sem. Rep.* **25** (1973), 143-152. (M. do Carmo) **47** #7664 53C40
On the topology of quaternion Kähler manifolds. *Tōhoku Math. J. (2)* **26** (1974), 389-405. (Y. Muto) **51** #6675 53C55
Complex submanifolds with certain conditions. *Kōdai Math. Sem. Rep.* **27** (1976), no. 3, 334-344. (Y. Katsurada) **54** #6047 53C55
On planar geodesic immersions. (Japanese) *Sūgaku* **29** (1977), no. 2, 124-134. (K. Nomizu) **58** #30924 53C50 (83.53)
Planar geodesic immersions. *Tōhoku Math. J. (2)* **29** (1977), no. 1, 25-56. (O. Kowalski) **57** #10657 53C40
- Sakamoto, Reiko Iterated hyperbolic mixed problems. *Publ. Res. Inst. Math. Sci.* **6** (1970), 1-42. (From the author's introduction) **54** #744 35L35
 L^2 -well-posedness for hyperbolic mixed problems. *Publ. Res. Inst. Math. Sci.* **8** (1972), 265-293. (J. Conlan) **47** #644 35L35
On energy inequalities for mixed problems for hyperbolic equations. (Japanese) *Sūgaku* **24** (1972), no. 3, 174-187. (Editors) **58** #29327 35L35
 \mathcal{E} -well posedness for hyperbolic mixed problems with constant coefficients. *J. Math. Kyoto Univ.* **14** (1974), 93-118. (T. Kal'menov) **49** #11058 35L35
On a class of hyperbolic mixed problems. *J. Math. Kyoto Univ.* **16** (1976), no. 2, 429-474. (N. D. Kazarinoff) **54** #10876 35L35
See also **Mathematics: Periodical collection of translations of foreign articles**, **50** #12531 (EA **58**)
- Sakamoto, Yukio (with Nagashima, Hidetake; Yajima, Kin'ichi) On the sets of points in the ranked space. IV. *Proc. Japan Acad.* **46** (1970), 420-421. (S. A. Naimpally) **50** #8442 54D30
- Sakan, Ken-ichi Boundary groups of a Fuchsian group of the second kind. *Tōhoku Math. J. (2)* **28** (1976), no. 1, 99-104. (Troels Jørgensen) **52** #14280 30A58
- Sakanaka, P. H. (with Goedbloed, J. P.) New approach to magnetohydrodynamic stability. I. A practical stability concept. *Phys. Fluids* **17** (1974), 908-918. (Djordje Djukic) **51** #14730 76.35
(with Goedbloed, J. P.) New approach to magnetohydrodynamic stability. II.

- Sigma-stable diffuse pinch configurations. *Phys. Fluids* **17** (1974), 919-929. (Djordje Djukic) **51** #14731 7635
- Sakane, Yusuke** On compact complex parallelisable solvmanifolds. *Osaka J. Math.* **13** (1976), no. 1, 187-212. (Y. Matsushima) **54** #10692 32M10 (22E40)
- On compact complex affine manifolds. *J. Math. Soc. Japan* **29** (1977), no. 1, 135-149. (C. Teleman) **58** #1234 32C10 (32M10)
- A theorem on lattices of a complex solvable Lie group. *Osaka J. Math.* **14** (1977), no. 1, 201-206. (M. S. Raghunathan) **56** #5787 22E40
- (with Kodama, Akio) Remarks on compact complex hypersurfaces of compact complex parallelisable nilmanifolds. *Tôhoku Math. J. (2)* **29** (1977), no. 1, 57-60. (Gerd Fischer) **56** #8925 32M10 (22E25)
- Sakano, Hiroshi** The degree of mixing for completely randomized mixture of particulate solids. *Keio Engrg. Rep.* **27** (1974), 43-61. (F. C. Auluck) **52** #9941 82.60
- Sakarovich, Jacques** (with Perrot, Jean-François) Languages algébriques déterministes et groupes abéliens. *Automata theory and formal languages (Second GI Conf., Kaiserslautern, 1975)*, pp. 20-30. *Lecture Notes in Comput. Sci.*, Vol. 33, Springer, Berlin, 1975. (Ronald E. Prather) **52** #16161 68A30 (94A30)
- Un cadre algébrique pour l'étude des monoïdes syntactiques. *Séminaire P. Dubreil, F. Aribaud et M.-P. Malliauin (28e année: 1974/75), Algèbre, Exp. No. 14*, 10 pp. *Secrétariat Mathématique, Paris*, 1975. (J. Lambek) **53** #2044 68A30 (20M35)
- (with Perrot, Jean-François) A theory of syntactic monoids for context-free languages. *Information processing 77 (Proc. IFIP Congr., Toronto, Ont., 1977)*, pp. 68-72. *IFIP Congr. Ser.*, Vol. 7, North-Holland, Amsterdam, 1977. (P. Dömösi) **57** #4663 68A30
- Sur les groupes infinis, considérés comme monoïdes syntaxiques de langages formels. *Séminaire d'Algèbre Paul Dubreil, 29ème année (Paris, 1975-1976)*, pp. 168-179. *Lecture Notes in Math.*, 586. Springer, Berlin, 1977. (From the text) **58** #32114 68A30 (20E99)
- On deterministic commutative context-free languages. *Proceedings of a Conference on Theoretical Computer Science (Univ. Waterloo, Waterloo, Ont., 1977)*, pp. 88-93. *Comput. Sci. Dept., Univ. Waterloo, Waterloo, Ont.*, 1978. (S. A. Greibach) **58** #13981 68A30
- Sakarovich, Joel** Systèmes normaux d'ensembles de conditions de "forcing" et applications aux suites décroissantes de modèles de ZFC. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 9, A589-A592. (Author's summary) **56** #5289 02K05 (02K15)
- Sakarovich, M.** (with Abadie, Jean) Two methods of decomposition for linear programming. *Proceedings of the Princeton Symposium on Mathematical Programming (Princeton Univ., 1967)*, pp. 1-23. Princeton Univ. Press, Princeton, N.J., 1970. (R. F. Albrecht) **50** #6476 90C05
- Two commodity network flows and linear programming. *Math. Programming* **4** (1973), 1-20. (I. T. Frisch) **48** #10456 90B10
- (with Payan, Charles) Ensembles cycliquement stables et graphes cubiques. Colloque sur la Théorie des Graphes (Paris, 1977). *Cahiers Centre Études Recherche Opér.* **17** (1975), no. 2-4, 319-343. (G. Laman) **54** #5027 05C05
- Quasi-balanced matrices. *Math. Programming* **8** (1975), 382-386. (O. Pokorná) **52** #439 15A36 (05C99)
- Quasi balanced matrices—an addendum. *Math. Programming* **10** (1976), no. 3, 405-407. (O. Pokorná) **54** #7289 05B20
- (with MacAllister, J. D.) Classification de certaines matrices 0-1. (English summary) *Discrete Math.* **20** (1977/78), no. 2, 133-142. (R. A. Brualdi) **57** #5785 05B20
- Sakasegawa, Hirotaka** (with Takahashi, Koiti) Effects of repetition and finite population corrections in randomized response models. (Japanese. English summary) *Proc. Inst. Statist. Math.* **22** (1974/75), no. 1, 59-67. (Authors' summary) **58** #24648 62D05
- (with Yamazaki, Genji) Properties of duality in tandem queueing systems. *Ann. Inst. Statist. Math.* **27** (1975), no. 2, 201-212. (J. G. C. Templeton) **53** #14722 (E 57 #7811) 60K25 (90B30)
- Orthogonal mesh sampling method. A new Monte Carlo technique. *Ann. Inst. Statist. Math.* **28** (1976), no. 1, 1-7. (George Marsaglia) **55** #11557 65C05
- (with Suzuki, Tatsuzo; Takahashi, Koiti) Some notes on randomized response techniques. (Japanese. English summary) *Proc. Inst. Statist. Math.* **24** (1976/77), no. 1, 1-13. (C. Hayashi) **55** #1558 62D05
- (with Takahashi, Koiti) A randomized response technique without making use of any randomizing device. *Ann. Inst. Statist. Math.* **29** (1977), no. 1, 1-8. (Victor K. T. Tang) **55** #13627 62D05
- An approximation formula $L_q \approx \alpha \rho^q / (1 - \rho)$. *Ann. Inst. Statist. Math.* **29** (1977), no. 1, 67-75. (Jacqueline Loris-Teghem) **56** #6931 60K25
- (with Yamazaki, Genji) Inequalities and an approximation formula for the mean delay time in tandem queueing systems. *Ann. Inst. Statist. Math.* **29** (1977), no. 3, 445-466. (William Henderson) **57** #7808 60K25
- (with Yamazaki, Genji) Correction to: "Properties of duality in tandem queueing systems" (Ann. Inst. Statist. Math. 27 (1975), no. 2, 201-212). *Ann. Inst. Statist. Math.* **29** (1977), no. 3, 509. (Editors) **57** #7811 60K25
- ★Numerical tables of the queueing systems. I. $E_k/E_2/s$. Computer Science Monographs, No. 10. Institute of Statistical Mathematics, Tokyo, 1978. 106 pp. (Editors) **57** #14185 60K25 (65A05)
- Sakashita, Hideo** Notes on the over-convergence on the circle of convergence. *Bull. Kyoto Univ. Ed. Ser. B No. 39* (1971), 1-6. (M. E. Noble) **46** #5594 30A12
- (with Sasaya, Fumio) A note on Newton-Raphson's method. (Japanese. English summary) *Bull. Kyoto Univ. Ed. Ser. B No. 42* (1973), 1-2. (H. Shintani) **47** #9820 65H05
- Sakashita, Noboru** (with Kamoike, Osamu) National growth and regional income inequality: a consistent model. *Internat. Econom. Rev.* **14** (1973), no. 2, 372-382. (Authors' summary) **55** #14143 90A15
- Sakata, Atsushi** Development of a program for logical function processing. (Japanese) *Res. Rep. Kushi Tech. College* **8** (1974), 95-101. (Not reviewed) 68A05
- Sakata, Hiroshi** On convexity theorems for Riesz means. Collection of articles dedicated to Gen-ichirô Sunouchi on his sixtieth birthday. *Tôhoku Math. J. (2)* **24** (1972), 301-307. (D. C. Russell) **50** #829 40G99
- Sakata, Isao** A general method for obtaining the characters of space groups. *Progr. Theoret. Phys.* **45** (1971), 1106-1111. (Philip H. Butler) **46** #1226 81.22
- A general method for obtaining Clebsch-Gordan coefficients of finite groups. I. Application to point and space groups. *J. Mathematical Phys.* **15** (1974), 1702-1709. (J. Zak) **52** #9855 81.20
- A general method for obtaining Clebsch-Gordan coefficients of finite groups. II. Extension to antiunitary groups. *J. Mathematical Phys.* **15** (1974), 1710-1711. (J. Zak) **52** #9856 81.20
- Sakata, S.** See Commemorative volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, 48 #15
- Sakata, Sadahisa** A note on the classification of stability. *Proc. Japan Acad.* **52** (1976), no. 8, 424-427. (I. D. Hsu) **54** #7971 34D05
- Sakata, Toshio** Two characterization theorems of normal density function. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **31** (1977), no. 2, 215-219. (A. L. Rukhin) **58** #3150 62E10
- A test of normality based on some characterization theorem. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **31** (1977), no. 2, 221-225. (A. L. Rukhin) **58** #3151 62E10 (62F05)
- Sakauchi, Masao** (with Inose, Hiroshi) Synthesis of fault diagnosable logic circuits by function conversion method. *Systems-Computers-Controls* **4** (1973), no. 1, 32-39. (Authors' summary) **56** #11622 94A20
- Sakawa, Masatoshi** (with Sawaragi, Yoshikazu) Multiple-objective optimization for environment development systems. *Internat. J. Systems Sci.* **6** (1975), 157-164. (Authors' summary) **51** #5106 93C99
- (with Sawaragi, Yoshikazu) Multiple-criteria optimization of pollution control model. *Internat. J. Systems Sci.* **6** (1975), no. 8, 741-748. (Claude Carasso) **53** #5003 90C50
- (with Sawaragi, Yoshikazu) State-space constrained optimal control problems with control variables appearing linearly. *Internat. J. Systems Sci.* **6** (1975), no. 12, 1185-1194. (Authors' summary) **57** #2679 93C15
- (with Sawaragi, Yoshikazu) Multiple-criteria optimization for environment development system—constrained case. *Mem. Fac. Engrg. Kyoto Univ.* **37** (1975), no. 3, 176-183. (A. B. Kuržanskiĭ) **53** #2392 90C50
- (with Sawaragi, Yoshikazu) Optimal control problems for state-constrained nonlinear systems with the control variables appearing linearly. (Japanese. English summary) *Systems and Control* **19** (1975), no. 6, 323-331. (Kimio Kanai) **53** #10397 93C10 (93C50)
- (with Narutaki, Ryonosuke; Sawada, Kazuya) Multiobjective optimization in a nonlinear dynamic production model. (Japanese) *Systems and Control* **20** (1976), no. 7, 388-390. (Nobuo Sannomiya) **54** #4618 90B30
- (with Narutaki, Ryonosuke; Suwa, Tatsumi) Optimal control of linear systems with several cost functionals through a multicriteria simplex method. *Internat. J. Control* **25** (1977), no. 6, 901-914. (Kailash C. Kapur) **56** #14932 93C05 (90C05)
- An approximate solution of linear multicriteria control problems through the multicriteria simplex method. *J. Optimization Theory Appl.* **22** (1977), no. 3, 417-427. (Albert Buckley) **56** #14931 93C05 (65K05)
- Solution of multicriteria control problems in certain types of linear distributed-parameter systems by a multicriteria simplex method. *J. Math. Anal. Appl.* **64** (1978), no. 1, 181-188. (S. G. Tzafestas) **58** #4521 93C20 (90C50)
- Sakawa, Yoshiyuki** On pursuit and evasion problems. *Japan-United States Seminar on Ordinary Differential and Functional Equations (Kyoto, 1971)*, pp. 193-207. *Lecture Notes in Math.*, Vol. 243, Springer, Berlin, 1971. (N. N. Petrov) **57** #15519 90D25
- Control problems of distributed-parameter systems. (Japanese) *Systems and Control* **15** (1971), 379-387. **47** #1513 93C99
- Optimal filtering in linear distributed-parameter systems. *Internat. J. Control* **(1)** 16 (1972), 115-127. (Author's summary) **56** #15056 93E10 (93E20)
- A matrix Green's formula and optimal control of linear distributed-parameter systems. *J. Optimization Theory Appl.* **10** (1972), 290-299. (D. F. Lawden) **50** #8194 49A20
- (with Fujii, Nobuo) Controllability for nonlinear differential equations in Banach space. (Japanese. English summary) *Systems and Control* **17** (1973), 523-525. **55** #3930 49E15
- (with Fujii, Nobuo) Controllability for nonlinear differential equations in Banach space. (French summary) *Automatic Control Theory Appl.* **2** (1974), 44-46. (H. O. Fattorini) **50** #6590 93C20 (93B05)
- Controllability for partial differential equations of parabolic type. *SIAM J. Control* **12** (1974), 389-400. (R. Showalter) **50** #3085 49E15
- (with Matsushita, Toshihiro) Feedback stabilization of a class of distributed systems and construction of a state estimator. *IEEE Trans. Automatic Control* **AC-20** (1975), no. 6, 748-753. (P. K. C. Wang) **52** #16785 93D15
- Observability and related problems for partial differential equations of parabolic type. *SIAM J. Control* **13** (1975), 14-27. (F. M. Kirillova) **51** #5081 (E 55 #11137) 93B05
- (with Hashimoto, Yasukazu) Control of environmental pollution and economic growth: modelling and numerical solution. *Appl. Math. Optim.* **4** (1977/78), no. 4, 385-400. (N. Keyfitz) **58** #25892 90A15 (92A15)
- (with Nambu, Takao) Asymptotic behavior of solutions of a class of nonlinear differential equations in Banach space. *Osaka J. Math.* **14** (1977), no. 2, 333-354. (J. A. Donaldson) **58** #11755 34G05
- Nonzero sum differential games and their applications. (Japanese) *Systems and Control* **21** (1977), no. 2, 106-113. **58** #26095 90D25
- (with Ueda, Yoshikatsu) The optimal investment for the control of environmental pollution and economic growth. *Internat. J. Systems Sci.* **9** (1978), no. 2, 193-203. (Andrew P. Sage) **58** #9150 90A15 (92A15)
- See also Martin, Jean-Claude E., 55 #11137
- Sakellariou, John** (with Lekatsas, Evangelos) Transmission line distance protection using pattern recognition. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 3, pp. 770-775. Hemisphere, Washington, D.C., 1977. (Authors' summary) **58** #15651 94A05 (68A45)
- Sakemi, Yasuhiro** Minimal realizations of implicit λ -machines. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **32** (1978), no. 1, 137-143. (E. G. Manes) **58** #832 18B20 (94A30)
- Šakenko, N. I.** The permutability of set-theoretic operations. (Russian) *Bul. Akad. Štiinca*

- RSS Moldoven. 1976, no. 2, 37-41, 94. (D. V. Čudnovskii) **54** #7267 04A15
- inovskii, B. L. See Sahnovskii, B. L.
- obov, O. See Sahobov, O.
- baliev, R. Š. (with Grebenikov, E. A.) The existence of periodic solutions of systems of partial differential equations in the critical case. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1971, no. 5, 34-37. (Editors) **45** #7234 (EA 52) 35B10
- (with Tažimuratov, I.) The existence of periodic solutions of a certain system of partial differential equations. (Russian) *Collection of scientific works of postgraduates, No. XI: Mathematics and physics (Russian)*, pp. 67-72. Univ. Družby Narodov, Moscow, 1972. (O. Vejvoda) **48** #11741 35B10
- On the question of the existence of periodic solutions of a certain system of partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1972, no. 3, 74-76. (L. Pintér) **47** #607 35B10
- A modified C. Siegel method for certain systems of nonlinear partial differential equations. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1973, no. 3, 78-81, 96. (O. Vejvoda) **51** #3658 35B10
- (with Grebenikov, E. A.) The existence of asymptotic solutions of a certain class of partial differential equations. (Russian) *Differentsial'nye Uravnenija* **11** (1975), 505-511, 589. (O. Vejvoda) **51** #8595 35B10
- irov, K. S. On the question of the random libration of the moon. (Russian) *Differential equations (Russian)*, pp. 104-109, 114. Udmurt. Gos. Univ., Izheusk, 1976. (Author's summary) **58** #8626 70.60
- irov, N. V. (with Pozdeev, A. A.) Certain problems of the flow of a highly viscous fluid. (Russian) *Prikl. Meh.* 7 (1971), no. 12, 124-128, 135. (Authors' summary) **52** #9792 76.35
- irova, Ju. S. (with Al'muhamedov, M. I.) Cycles of accumulations of higher classes of the second kind on a cylindrical phase surface. (Russian) *Collection of articles dedicated to the memory of Mazit Ifatovič Al'muhamedov. Volž. Mat. Sb. No. 16* (1973), 5-10. (A. A. Reinfelds) **50** #10418 34C05
- An inverse problem on limit cycles of the second kind on a cylindrical phase space. (Russian) *Collection of articles dedicated to the memory of Mazit Ifatovič Al'muhamedov. Volž. Mat. Sb. No. 16* (1973), 311-313. (I. Muntean) **51** #1000 34C05
- ita, B. (with Gervais, J.-L.) Generalizations of dual models. *Nuclear Phys.* **B34** (1971), 477-492. (S. Deser) **45** #9625 81.53
- (with Gervais, J.-L.) Functional-integral approach to dual-resonance theory. *Phys. Rev. D* (3) **4** (1971), 2291-2308. (N. Nakanishi) **49** #4465 81.30
- (with Gervais, J.-L.; Wadia, Spenta R.) The surface term in gauge theories. *Phys. Lett. B* **63** (1976), no. 1, 55-58. (J. V. Greenman) **53** #15205 81.49
- (with Gervais, J.-L.) WKB wave function for systems with many degrees of freedom: a unified view of solitons and pseudoparticles. *Phys. Rev. D* (3) **16** (1977), no. 12, 3507-3514. (Authors' summary) **58** #14563 81.34
- (with Gervais, J.-L.) Gauge degrees of freedom, external charges, and quark confinement criterion in the $A_0=0$ canonical formalism. *Phys. Rev. D* (3) **18** (1978), no. 2, 453-462. (Authors' summary) **58** #19928 81.22
- kleina, T. A. (with Kozel, P. T.) The number of isotropic subspaces in a space with an orthogonal metric. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1975**, no. 1, 11-15, 88. (George P. Barker) **51** #5633 15A63
- koda, William J. (with Blum, Manuel) On the capability of finite automata in 2 and 3 dimensional space. *18th Annual Symposium on Foundations of Computer Science (Providence, R.I., 1977)*, pp. 147-161. IEEE Comput. Soc., Long Beach, Calif., 1977. (W. Woohler) **58** #32071 68A25 (02Fxx, 94A30)
- kojan, S. K. (with Nagaev, A. V.) Limit theorems in R_k that take into account large deviations. (Russian) *Dokl. Akad. Nauk SSSR* **204** (1972), 554-556. (D. Szász) **46** #8284 60F10
- Certain estimates for the distribution functions of sums of random variables. (Russian) *Random processes and statistical inference, No. 4 (Russian)*, pp. 136-151, 212. Izdat. "Fan" Uzbek. SSR, Tashkent, 1974. (From the author's summary) **56** #16746 60F10
- Certain limit theorems for sums of independent random variables. (Russian) *Random processes and statistical inference, No. 55 (Russian)*, pp. 132-140, 204. Izdat. "Fan" Uzbek. SSR, Tashkent, 1975. (J. Galambos) **53** #4184 60F05 (60F10)
- (with Nagaev, S. V.) An estimate for the probability of large deviations. (Russian) *Limit theorems and mathematical statistics (Russian)*, 132-140, 190. Izdat. "Fan" Uzbek. SSR, Tashkent, 1976. (Werner Wolf) **55** #9237 60F10
- kosky, Cora The problem of moments and the Hilbert transform. (Spanish. English summary) *Acta Cient. Venezolana* **29** (1978), no. 2, 69-72. (L. Arteaga) **58** #2050 44A15 (44A50)
- ikoto, Moussa (with Pigeaud, Pierre) Transformations infinitésimales conformes fermées des variétés riemanniennes. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1406-A1408. (Ngô van Quê) **45** #5931 53C50
- Transformations infinitésimales conformes fermées des espaces cosmologiques de de Sitter et de Robertson-Walker. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 1, A179-A182. (F. J. Flaherty) **54** #2110 83.53
- Transformations infinitésimales conformes fermées des espaces cosmologiques de Tolman-Omer et de Gödel. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 11, A633-A636. (Author's summary) **55** #7284 83.53
- uković, G. N. The characteristic functions of concave distributions. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist.* No. 6 (1972), 103-108. (E. Lukacs) **46** #8278 60E05
- uković, V. A. (with Hručič, E. A.) Some questions on the interconnected planning of production and supply. (Russian) *Ekonom. i Mat. Metody* **14** (1978), no. 1, 96-111. (M. Mañás) **58** #9139 90A15
- ukr, Laila Asymptotische Eigenschaften von Wartesystemen mit periodischer Eingangintensität. (English and Russian summaries) *Math. Operationsforsch. Statist.* **2** (1971), no. 3, 227-236. (H. L. Seal) **46** #977 60K25
- ukr, M. F. (with Seif, A. A.; Hanafy, A. A. R.) Real-time least-squares estimation using successive integrations. *Information and Control* **36** (1978), no. 1, 42-55. (I. M. Stojanov) **57** #15720 93E25 (93B05, 93E10)
- Sakrison, David J. (with Algazi, V. Ralph) Comparison of line-by-line and two-dimensional encoding of random images. *IEEE Trans. Information Theory* **IT-17** (1971), 386-398. (A. D. Wyner) **50** #12452 94A15 (68A50)
- Worst sources and robust codes for difference distortion measures. *IEEE Trans. Information Theory* **IT-21** (1975), 301-309. (N. Zierler) **51** #12414 94A10
- Rate distortion theory: the influences of the source and distortion measure in structuring source coding. *Communication systems and random process theory (Proc. 2nd NATO Advanced Study Inst., Darlington, 1977)*, pp. 295-317. NATO Advanced Study Inst. Ser., Ser. E: Appl. Sci., No. 25, Sijthoff & Noordhoff, Alphen aan den Rijn, 1978. (From the introduction) **58** #20819 94A15
- See also Key papers in the development of information theory, **52** #5177
- Saks, Dž. E. See Saks, Gerald E.
- Saks, Ė. (with Lepik, Ü.; Soonets, K.) The dynamics of axially symmetric bodies under high stress. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimeised Vih.* 374 (1975), 280-292. (N. Cristescu) **54** #4277 73.65
- Saks, R. S. Boundary value problems for a certain nonclassical system. (Russian) *Application of functional methods to the boundary value problems of mathematical physics (Proc. Third Soviet-Czechoslovak Conf., Novosibirsk, 1971) (Russian)*, pp. 213-223. Inst. Mat. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk, 1972. (B. Bojarski) **54** #8013 35J55
- Boundary value problems for the system $\text{rot } u + \lambda u = h$. (Russian) *Differentsial'nye Uravnenija* **8** (1972), 126-133. (E. Ungureanu-David) **47** #9095 35Q99
- Boundary value problems for certain systems that are reducible to elliptic systems. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 1067-1070. (M. Craioveanu) **49** #9880 58G15 (35F15, 35Jxx)
- Boundary value problems for certain systems that can be reduced to elliptic systems. (Russian) *Differentsial'nye Uravnenija* **10** (1974), 132-142, 182. (A. S. Dynin) **49** #9881 58G15 (35F15, 35Jxx)
- Boundary value problems for certain equations connected with the operator of exterior differentiation. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1974), 39-41. (J. Chrastina) **50** #8610 58G05 (35N05)
- Determination of conjugate harmonic functions for certain elliptic and weakly elliptic systems. (Russian) *Theory of cubature formulas and applications of functional analysis to some problems in mathematical physics (Russian)*, pp. 189-211, 254. Inst. Mat., Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk, 1975. (Author's summary) **58** #29181 35J45
- Boundary value problems for some systems of differential equations that may be reduced to elliptic ones. (Russian) *Imbedding theorems and their applications (Proc. All-Union Sympos., Alma-Ata, 1973) (Russian)*, pp. 135-140, 193. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1976. (Author's summary) **58** #31148 58A10 (35J99)
- On the theory of systems of one-dimensional singular integro-differential equations that may be reduced to systems of normal type. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 3, 544-547. (A. Džuraev) **56** #1001 45J05
- Boundary value problems for weakly elliptic systems of differential equations. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 6, 1311-1314. (Author's review (RŽMat 1978 #3 B374)) **58** #29186 35J55 (35H05)
- Weakly elliptic systems of pseudodifferential equations on a manifold without boundary. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1978), no. 4, 786-789. (József Dodziuk) **58** #13226 58G15
- Saks, S. (with Zygmund, Antoni) ★ Analytic functions. Translated from the Polish by E. J. Scott. Third edition. Elsevier Publishing Co., Amsterdam-London-New York; PWN—Polish Scientific Publishers, Warsaw, 1971. xiv + 504 pp. (Editors) **50** #2456 30-02
- Saks, Victor (with Comfort, W. W.) Countably compact groups and finest totally bounded topologies. *Pacific J. Math.* **49** (1973), 33-44. (K. A. Ross) **51** #8321 22A05
- (with Ginsburg, John) Some applications of ultrafilters in topology. *Pacific J. Math.* **57** (1975), no. 2, 403-418. (W. W. Comfort) **52** #1633 54D35
- (with Ginsburg, John; Rajagopalan, M.) On the density character of closed subgroups. *Proc. Amer. Math. Soc.* **57** (1976), no. 1, 148-150. (K. A. Ross) **53** #8315 22A05 (54A25)
- Saksena, C. P. (with Cole, A. J.) Errata: "The bounding hyperplane method of linear programming". *Operations Res.* **19** (1971), 1543. (Editors) **46** #3069 90C05
- Saksena, R. K. See Saxena, Ram Kishore
- Saksena, V. N. Markovian deterioration of a structure. *J. Indian Statist. Assoc.* **14** (1976), 113-131. (Peter Franken) **56** #9722 60K20 (90B25)
- Asymptotic studies in replacement policies under Markovian deterioration. *Opsearch* **14** (1977), no. 4, 229-243. (Santosh Kumar) **57** #15386 90B25
- Saksonov, A. I. The decomposition of permutation groups over a characteristic field. (Russian) *Dokl. Akad. Nauk SSSR* **198** (1971), 293-296. (József Pelikán) **47** #6828 20C05
- Group rings of finite groups. I. (Russian) *Publ. Math. Debrecen* **18** (1971), 187-209 (1972). (R. Kochendörffer) **46** #5425 20C05
- Group rings of finite groups. II. (Russian) *Publ. Math. Debrecen* **19** (1972), 65-86 (1973). (R. Kochendörffer) **48** #2238 20C05
- Sakuda, Kyohiei (with Palóc, István) Boundary problem of anisotropic fluid plasma. *Phys. Fluids* **16** (1973), 259-269. (M. G. Hall) **47** #1384 78.35
- Sakuma, Itsuo Closedness of convex hulls. *J. Econom. Theory* **14** (1977), no. 1, 223-227. (B. G. Mirkin) **57** #4000 52A05 (90A05)
- Sakuma, Koiti (with Iwamura, Tsurane; Kakehi, Katsuhiko; Simauti, Takakazu; Wada, Eiiti; Yoneda, Nobuo) ALGOL N. *Comment. Math. Univ. St. Paul.* **21** (1972/73), no. 1, 1-72. (A. A. Grau) **47** #9897 68A30
- Sakuma, M. Some topics of the Betti series. *Mélanges d'algèbre pure et appliquée*, pp. 59-65. Université de Montpellier, Montpellier, 1970. (L. J. Ratliff, Jr.) **45** #3397 13H99
- Sakuma, Tetsuro (with Yoshida, Fumio) Scattering of lattice solitons and the excitation of impurity modes. *Progr. Theoret. Phys.* **60** (1978), no. 2, 338-352. (Pierre Hillion) **58** #25548 81.35 (35Q99, 65P05)
- Sakunova, I. A. (with Jarovic'ki, M. V.) A circular route problem. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 3, 128-133. (E. Ja. Gabovič) **49** #6912 90B99

- Šakuov, S. N. The linear acceleration of the performance time of single-tape Turing machines. (Russian) *Dokl. Akad. Nauk SSSR* **230** (1976), no. 4, 792-794. (Max I. Kanovich) **54** #7223 02F15
- Fast Turing calculations, and their linear speed-up. (Russian) *Dokl. Akad. Nauk SSR* **236** (1977), no. 3, 556-557. (Pavel Strnad) **57** #5708 02F15 (68A20)
- Sakurada, Kunioiri. A remark on the depth of the spaces. *J. Hokkaido Univ. Ed. Sect. II A* **27** (1976), no. 1, 1-4. (Mary Powderly) **56** #13140 54A25
- On the Baire category theorem in ranked spaces. *J. Hokkaido Univ. Ed. Sect. II A* **28** (1977/78), no. 1, 1-9. (John C. Morgan, II) **58** #18378 54H05
- Sakurai, Hidekazu (with Kajitani, Yoji) Distribution of freedom in a linear network. *Electron. Commun. Japan* **58** (1975), no. 5, 19-26. (W.-K. Chen) **54** #12385 94A20
- Sakvarelidze, M. I. (with Beljaev, V. B.; Wrzeczonko, J.; Eliava, A. T.) Separable expansion of potential in multidimensional space. Three-body problem. *J. Computational Phys.* **20** (1976), no. 4, 495-501. (From the authors' introduction) **56** #4473 81J1
- Salaam, U. (with Sandhu, Ranbir S.) A finite element Galerkin formulation and its numerical performance. *Internat. J. Numer. Methods Engrg.* **10** (1976), no. 5, 1077-1095. (Authors' summary) **56** #13722 65N30
- Šalabin, G. V. See Lasdon, Leon S., **53** #2355
- Salaev, V. V. (with Jagub-zade, R. I.) A quadrature formula for a singular integral along a closed rectifiable curve. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **27** (1971/72), no. 11-12, 14-18. (Walter Gautschi) **46** #2830 65D30
- (with Babaev, A. A.; Mal'sagov, S. M.) Justification of the quadrature method for nonlinear singular integral equations with a Hilbert kernel. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1971**, no. 1, 13-33. (G. F. Miller) **45** #4684 65R05
- (with Babaev, A. A.) A one-dimensional singular operator with continuous density along a closed curve. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 1257-1260. (L. Janos) **47** #9355 47G05
- (with Radžabov, B. H.) The complete continuity of a certain singular operator. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **16** (1973), no. 12, 7-11. (N. K. Karapetjanč) **49** #1236 47G05
- (with Radžabov, B. H.) The singular Cauchy-Stieltjes operator. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geol.-Him. Nauk* **1973**, no. 2(48), 14-21, 120. (S. G. Samko) **51** #13573 42A40
- (with Čerkasov, A. I.) A certain type of singular integral. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **30** (1974), no. 8, 7-11. (N. K. Karapetjanč) **50** #14093 44A25
- The behavior of an integral of Cauchy type with continuous density along a closed curve near the line of integration. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1974**, no. 1 *Voprosy Prikl. Mat. i Kibernet.*, 174-178. (S. V. Hruščev) **53** #13589 30A86 (42A40)
- (with Ismailov, A. Ja.; Mansurov, M.) A singular integral of the theory of analytic functions in the sense of Vekua. (Russian) *Dokl. Akad. Nauk SSSR* **215** (1974), 1041-1044. (N. K. Karapetjanč) **50** #3010 47G05
- (with Muradov, B.) A new approach to the study of the properties of singular integrals with continuous density along open curves. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **17** (1974), no. 1, 3-7. (N. K. Karapetjanč) **51** #11201 47G05 (44A25)
- A generalization of S. G. Mihlin's theorem on the behavior of a multidimensional singular operator in the classes $A_{\alpha,k}$. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 40-46. (S. G. Samko) **56** #6476 47G05 (44A25)
- (with Radžabov, B. H.) Estimation of a certain singular integral. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1975**, no. 2, 85-94. (L. G. Mihailov) **57** #651 30A86
- (with Halikov, K. S.) A singular integral with an infinite number of singular points. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 2, 23-27. (N. K. Karapetjanč) **52** #6339 44A25
- (with Nazarov, A.) Certain properties of a singular operator over a complex contour, and their applications. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 3, 38-43, 96. (N. K. Karapetjanč) **52** #6344 45E05 (44A25)
- The singular Cauchy operator over an open curve. N. I. Mushelišvili's theorem. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1976**, no. 1, 45-52. (G. S. Litvinčuk) **57** #7055 44A25 (47G05)
- Direct and inverse estimates for a singular Cauchy integral along a closed curve. (Russian) *Mat. Zametki* **19** (1976), no. 3, 365-380. (S. G. Samko) **53** #13984 42A40
- Certain properties of the Cauchy type integral with continuous density. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **82** (1976), no. 2, 289-292. (V. G. Kravčenko) **55** #674 30A86
- Particular (singular) integrals with continuous density. (Russian) *The theory of the approximation of functions* (Proc. Internat. Conf., Kaluga, 1975) (Russian), pp. 315-322. Nauka, Moscow, 1977. (Editors) **58** #29877 44A15
- (with Issa, R. B.) A class of spaces of continuous functions that are connected with a singular Cauchy integral along a closed curve. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1977**, no. 1 *Fiz. i Mat.*, 66-73. (Ju. I. Karlovič and G. S. Litvinčuk) **58** #12320 46E15 (30A86)
- (with Seifullae, R. K.) A singular Cauchy operator along an open curve. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1977**, no. 3, 5-11. (M. Z. Berkolaiko) **58** #17724 45E05 (47G05)
- Šalaev, V. V. Estimate of the oscillations of Fejér sums on the classes $W^r H^p_C$ and $W^r H^p_L$. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications* (Russian), pp. 66-70, 157-158. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1976. (Author's summary) **58** #29666 41A45
- Salaeva, B. G. Reciprocal normalization of line congruences of three-dimensional projective space. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1974**, no. 2, 105-110. (From Marcus)
- 50** #5651 53A25
- Šalaevskii, O. V. (with Kalinin, V. M.) χ^2 as a test for independence in a contingency table. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **2** (1972), 88-117. (S. Kotz) **45** #4571 62D05
- (with Kalinin, V. M.) χ^2 as a test of homogeneity. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **26** (1972), 118-123. (S. Kotz) **45** #4572 62D05
- (with Makšanov, A. V.) Approximation on the tails of certain distributions of mathematical statistics. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 2, 264-266. (Sándor Csörgő) **58** #18840 62E01
- (with Makšanov, A. V.) Some problems of the asymptotic approximation of distributions. (Russian. English summary) *Studies in statistical estimation theory, Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **74** (1977), 118-138, 149. (M. Hušková) **58** #13459 62E20
- An approximate procedure for the equalization of observations with unknown weights. (Russian. English summary) *Studies in statistical estimation theory, I. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **74** (1977), 139-144, 147, 149. (M. Hušková) **58** #13460 62E20
- See also *Studies in mathematical statistics*, **48** #1352; Hennequin, P. L.; et al. **50** #11336 and *Studies in the classical problems of probability theory and mathematical statistics*, **51** #2038
- Salaff, Stephen. A biography of Hua Lo-keng. *Isis* **63** (1972), no. 217, 142-183. (Editors) **58** #21323 01A70
- Salahiev, G. G. A boundary value problem for a quasilinear system of first order equations of mixed type. (Russian) *Trudy Sem. Kraev. Zadačam Vyp. 7* (1970), 232-238. (Zbl 221) **58** #35069 **58** #17577 35M05
- Salahitdinov, M. S. (with Samatov, T. S.) Certain mixed problems of the type of the Gellerstedt problem. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 8, 6-8. (D. K. Gvazava) **51** #10893 35M05
- (with Samatov, T. S.) Boundary value problems of the Gellerstedt problem type for a certain equation of mixed type. (Russian) *Boundary value problems for differential equations*, **1** (Russian), pp. 58-67. Izdat. "Fan" Uzbek SSR, Tashkent, 1971. (A. M. Nahušev) **45** #2332 35M05
- (with Džuraev, T. D.) A certain mixed problem for third order equations of parabolic-hyperbolic type. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 4, 26-31. (M. Kopáčeková) **45** #5588 35M05
- (with Samatov, T. S.) Boundary value problems for an equation of mixed type. (Russian) *Boundary value problems for differential equations*, No. 2 (Russian), pp. 164-174, 188. Izdat. "Fan" Uzbek. SSR, Tashkent, 1972. (Authors' summary) **56** #16158 35M05
- (with Tolipov, A.) Certain boundary value problems for equations of mixed type with one and two curves of degeneracy. (Russian) *Differencial'nye Uravnenija* **8** (1972), 134-142. (S. A. Tersenov) **45** #7297 35M05
- (with Monov, Borislav) Boundary value problems for an equation of mixed-composite type in an unbounded domain. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1972**, no. 3, 3-5. (V. Đuriković) **48** #725 35M05
- (with Tolipov, A.) Certain boundary value problems for equations of mixed type with one or two lines of degeneracy. (Russian) *Boundary value problems for differential equations*, **3** (Russian), pp. 3-17, 184. Izdat. "Fan" Uzbek. SSR, Tashkent, 1973. (S. A. Tersenov) **52** #11351 35M05
- (with Tolipov, A.) Certain boundary value problems for a certain class of equations of mixed type. (Russian) All-Union Symposium on Selected Questions of Partial Differential Equations (Priëlbrus, 1972). *Differencial'nye Uravnenija* **9** (1973), 142-148. 197. (J. F. Heyda) **49** #881 35M05
- ★Уравнения смешанно-составного типа. (Russian) [Equations of mixed-composite type] Izdat. "Fan" Uzbek. SSR, Tashkent, 1974. 156 pp. (From the preface) **58** #29397 35M05
- (with Tolipov, A.) On the theory of boundary value problems for an equation of mixed elliptic-hyperbolic-parabolic type. (Russian) *Boundary value problems for differential equations*, **4** (Russian), pp. 3-22, 190. Izdat. "Fan" Uzbek. SSR, Tashkent, 1974. (Authors' summary) **57** #13232 35M05
- (with Tolipov, A.) On the problem of mixed type equations with two perpendicular curves of degeneracy. (Russian) *Boundary value problems for differential equations*, (Russian), pp. 3-18, 183. Izdat. "Fan" Uzbek. SSR, Tashkent, 1975. (Authors' summary) **58** #23141 35M05
- (with Mengziyaev, B.) Boundary value problems for a certain mixed type equation with two lines of degeneracy. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 5, 11-18. (D. K. Gvazava) **54** #3180 35M05
- (with Sirazdinov, S. H.; Vinokurov, V. G.) On the occasion of the sixtieth birthday of Tašmuhamed Alievich Sarymsakov. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 5, 61-62. (Editors) **53** #2599 01A70
- (with Mengziyaev, B.) Problems of Gellerstedt problem type for an equation of mixed type with two lines of degeneracy. (Russian) *Boundary value problems for differential equations and their applications* (Russian), pp. 3-16, 156. Fan, Uzbek. SSR, Tashkent, 1976. (Authors' summary) **58** #29398 35M05
- (with Tašmirzaev, Ju. U.) A boundary value problem for an equation of mixed type with two lines of degeneracy. (Russian) *Partial differential equations and their applications* (Russian), pp. 3-14, 181. (errata insert) Izdat. "Fan" Uzbek. SSR, Tashkent, 1977. (From the summary) **58** #23142 35M05
- (with Mengziyaev, B.) A certain boundary value problem with shift for a mixed type equation with two lines of degeneracy. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 1, 133-139, 190. (N. N. Janenko) **58** #11985 35M05
- (with Hasanov, A.) Some boundary value problems with displacement for a class of equations of mixed type. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 5, 44-49, 103. (Megumi Saigo) **58** #1717 35M05
- (with Isamuhamedov, S. S.) Boundary value problems for an equation of mixed type of the second kind. (Russian) *Serdica* **3** (1977), no. 3, 181-188. (B. Nicolaenko) **58** #23143 35M05
- See also *Boundary value problems for differential equations*, **50** #13833; *Boundary value problems for partial differential equations*, **55** #3485; *Boundary value problems for*

- differential equations, 56 #808; Boundary value problems for differential equations, 57 #6760; Partial differential equations and their applications, 58 #17441 and Boundary value problems for differential equations and their applications, 58 #20930
- hutinov, R. (with Bařurov, H.) A uniform local theorem for the densities of symmetric distributions. (Russian) *Taškent. Gos. Ped. Inst. Učen. Zap.* 100 *Voprosy Teor. Verojatnost.* (1972), 32-39, 135-136. (Editors) 57 #4289 60F05
- Approximation of the distributions of sums of a random number of non-identically distributed summands by infinitely divisible laws. (Russian) *Taškent. Gos. Ped. Inst. Učen. Zap.* 100 *Voprosy Teor. Verojatnost.* (1972), 79-89, 137-138. (Editors) 57 #4302 60F05
- (with Manevič, D. V.) The approximation of the distribution of the sums of a random number of terms by infinitely divisible laws. (Russian) *Random processes and statistical inference*, No. 3 (Russian), pp. 117-124. Izdat. "Fan" Uzbek. SSR, Tashkent, 1973. (G. K. Eagleson) 51 #9163 60F05
- im, Abdus Breaking of conformal symmetry and renormalization of non-polynomial theories. With discussion by F. Rohrlich, K. Hepp, R. E. Marshak, E. P. Wigner and the author. *Fields and Quanta* 1 (1970/71), no. 1, 1-32. (A. K. Kapoor) 57 #4870 81.22
- (with Isham, C. J.; Strathdee, J.) Spontaneous breakdown of conformal symmetry. *Phys. Lett.* 31B (1970), 300-302. (A. Corciovei) 48 #7857 81.53
- (with Isham, C. J.; Strathdee, J.) f -dominance of gravity. *Phys. Rev. D* (3) 3 (1971), 867-873. (R. L. Ingraham) 48 #5587 83.35
- (with Isham, C. J.; Strathdee, J.) Infinity suppression in gravity-modified quantum electrodynamics. *Phys. Rev. D* (3) 3 (1971), 1805-1817. (M. Carmeli) 49 #4488 81.53
- Nonpolynomial Lagrangians, infinities and gravity theory. *Developments in high-energy physics (Proc. Internat. School Phys. "Enrico Fermi", Course LIV, Varenna, 1971)*, pp. 386-422. Academic Press, New York, 1972. (V. Komkov) 57 #8594 81.30
- (with Isham, C. J.; Strathdee, J.) $SL_{6,C}$ gauge invariance of Einstein-like Lagrangians. *Lett. Nuovo Cimento* (2) 5 (1972), 969-972. (Authors' introduction) 57 #18739 83.53
- (with Isham, C. J.; Strathdee, J.) Is quantum gravity ambiguity-free? *Phys. Lett.* 46B (1973), 407-411. (Authors' summary) 50 #12083 81.53
- (with Strathdee, J.) Super-gauge transformations. *Nuclear Phys.* B76 (1974), 477-482. (Authors' summary) 50 #9206 81.22
- (with Strathdee, J.) Unitary representations of super-gauge symmetries. *Nuclear Phys.* B80 (1974), 499-505. (Authors' summary) 50 #12029 81.22
- (with Strathdee, J.) Super-symmetry and non-Abelian gauges. *Phys. Lett.* 51B (1974), 353-355. (Authors' summary) 50 #12028 81.22
- (with Strathdee, J.) A theorem concerning Goldstone fermions. *Lett. Math. Phys.* 1 (1975/76), no. 1, 3-6. (E. Kyriakopoulos) 53 #7306 81.53
- (with Strathdee, J.) Feynman rules for superfields. *Nuclear Phys. B* 86 (1975), 142-152. (Authors' summary) 50 #12058 81.46
- (with Strathdee, J.) Superfields and Fermi-Bose symmetry. *Phys. Rev. D* (3) 11 (1975), 1521-1535. (Authors' summary) 53 #12394 81.53
- (with Strathdee, J.) Supersymmetry and superfields. *Fortschr. Phys.* 26 (1978), no. 2, 57-142. (U. Cattaneo) 58 #14521 81.22
- (with Chameddine, Ali H.; Strathdee, J.) Strong gravity and supersymmetry. *Nuclear Phys. B* 136 (1978), no. 2, 248-258. (Martine J. Perrin) 58 #4011 81.22
- (with Pati, Jogesh C.; Rajpoot, Subhash) Neutral-current phenomena within the left-right-symmetric unified theory of quarks and leptons. *Phys. Rev. D* (3) 17 (1978), no. 1, 131-150. (Authors' summary) 57 #8571 81.22
- See also *Developments in high energy physics*, 48 #3376; *Nonpolynomial Lagrangians, renormalisation and gravity*, 52 #9853; *Quantum gravitation and topology*, 52 #16462; *Deser, Stanley*, 56 #10712 and *Quantum gravity (Oxford Sympos., Chilton, 1974)*, 56 #17537
- Salam, Waleed A. See Al-Salam, Waleed A.
- lama, Ahmed I. A. (with Gourishankar, V.) A computational algorithm for solving a system of coupled algebraic matrix Riccati equations. *IEEE Trans. Computers* C-23 (1974), 100-102. (I. H. Mufti) 51 #2273 65F30 (65L99)
- (with Ryžov, Ju. M.) The quadratic variation of Gaussian processes, and a certain limit theorem. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist. Vyp.* 10 (1974), 134-138, 177. (M. I. Jadrenko) 54 #1361 60G15
- (with Stein, Richard A.) Resistance and capacitance minimization in low-pass RC ladder networks. *IEEE Trans. Circuits and Systems* CAS-22 (1975), 27-32. (G. Berman) 53 #5183 94A20
- alam, H. A. (with Ryžov, Ju. M.) The oscillation of a Gaussian process. (Russian) *Theory of random processes. Questions of statistics and control (Russian)*, pp. 166-173. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (R. M. Dudley) 57 #4315 60G15
- alama, Ibrahim A. (with Quade, Dana) A note on minimum chi-square statistics in contingency tables. (French summary) *Biometrics* 31 (1975), no. 4, 953-956. (Jiří Anděl) 52 #15791 62F05
- rodriguez-ponga y Salamanca, Pedro See Rodriguez-Ponga y Salamanca, Pedro
- alamatin, A. N. (with Volkov, I. K.; Čugunov, V. A.) A generalization of the method of integral relations and its application to some heat transfer problems. (Russian) *Issled. Prikl. Mat. Vyp.* 2 (1974), 18-34. (RZMat 1975 #1 B1313) 57 #11119 65N99
- alamatin, M. N. See *Mathematics and mechanics*, 48 #595
- alamatov, Dž. A formula of summary stream representations for the Stokes function. (Russian) *Trudy Prževal'sk. Gos. Ped. Inst.* 15 (1969), 3-10. (From the author's introduction) 49 #6764 76.35
- alamín, Eugene Computation of π using arithmetic-geometric mean. *Math. Comp.* 30 (1976), no. 135, 565-570. (I. John Zucker) 53 #7928 10A30 (10A40, 33A25)
- alamó, S. (with Cordero, Patricio) A spectrum-generating algebra for particles of spin 1/2. *Internat. J. Theoret. Phys.* 13 (1975), no. 4, 265-269. (A. O. Barut) 53 #7248 81.22
- alamon, Peter F., Jr. (with Orner, Peter A.; Yu, Wanyoung) Least squares simulation of distributed systems. *IEEE Trans. Automatic Control* AC-20 (1975), 75-83. (R. N. P. Singh) 55 #1748 65M99 (93C20)
- alamon, Y. See Gillings, Richard J., 58 #26694b
- Salandi, Dana (with Krivošeín, L. E.; Mangeron, Dumitru Ion; Oğuztörelí, Mehmet Namık) *Analisi matematica. Studi concernenti certe estensioni delle equazioni integrodifferenziali di Vito Volterra.* (English summary) *Atti Accad. Sci. Ist. Bologna Cl. Sci. Fis. Rend.* (13) 1 (1973/74), no. 2, 95-102. (Authors' summary) 50 #14126 45J05
- (with Krivošeín, L. E.; Leung, Kin Vinh; Oğuztörelí, Mehmet Namık) Sur l'extension du problème de Goursat pour une classe d'équations integro-différentielles d'Urysohn-Mangeron. (Italian summary) *Rend. Accad. Naz. XL* (4) 24/25 (1973/74), 129-134 (1975). 53 #11328 45K05
- (with Krivošeín, L. E.; Mangeron, Dumitru Ion; Oğuztörelí, Mehmet Namık) Sistemi differenziali di struttura composta. Problema non lineare di valori iniziali per una classe di equazioni integro-differenziali alle derivate parziali del primo ordine, avente per limiti funzionali integrali non lineari. (English summary) *Boll. Un. Mat. Ital.* (4) 11 (1975), no. 1, 76-83. (From the authors' summary) 51 #6334 45K05
- (with Krivošeín, L. E.; Mangeron, Dumitru Ion; Oğuztörelí, Mehmet Namık) Problèmes concernant différentes classes d'équations integro-différentielles non linéaires aux opérateurs polyvibrants. (English summary) *Arch. Math. (Brno)* 12 (1976), no. 2, 75-80. (Hans Kaper) 55 #3718 45K05
- (with Băinov, Drumi D.; Chaléat, Raymond; Krivošeín, L. E.) Problèmes concernant différentes classes d'équations integrodifferentielles non linéaires de Mangeron. II. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* 22(26) (1976), no. 1-2, secq. I, 27-31. (Editors) 55 #6153 45K05
- Salanova, Francine ★Espaces hyperboliques. D. E. A. de Mathématiques Pures: Option Algèbre et Géométrie. U. E. R. de Mathématiques, 1970-1971. Secrétariat des Mathématiques, Université des Sciences et Techniques du Languedoc, Publication No. 101. *Université des Sciences et Techniques du Languedoc, Montpellier*, 1971. iii + 67 pp. (E. Hornix) 50 #9921 15A63
- Salanova, M. A. The spectral sequence in the characterization of singularities. (Spanish. English summary) *Rev. Acad. Ci. Zaragoza* (2) 29 (1974), no. 3-4, 253-285. (M. Sebastiani) 54 #5229 14B05 (57C45)
- husam ad-din as-Salar See Husam ad-Din as-Salar
- Salas, Carlos (with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Spindola, Patricia; Tomé, Bertha) Stable Gabriel filters. I. Relative finiteness conditions. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 135-154. (P. Abellanas) 58 #28050a 16-XX
- (with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Spindola, Patricia; Tomé, Bertha) Stable Gabriel filters. II. Relative semisimplicity conditions. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 155-173. (P. Abellanas) 58 #28050b 16-XX
- (with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Spindola, Patricia; Tomé, Bertha) Stable Gabriel filters. III. The relative radical of Jacobson, and some examples. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 175-191. (P. Abellanas) 58 #28050c 16-XX
- martinez Salas, José See Martinez Salas, José
- Salas-La Cruz, J. D. (with Boes, D. C.) On the expected range and expected adjusted range of partial sums of exchangeable random variables. *J. Appl. Probability* 10 (1973), 671-677. (D. J. Emery) 50 #11530 60K30
- Šalašov, V. K. Lipschitz spaces, and interpolation. (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 6(168), 255-256. (Jóran Bergh) 53 #3681 46E35 (46M35)
- (with Brudnyi, Ju. A.) Lipschitzian function spaces. (Russian) *Metric questions of the theory of functions and mappings, No. IV (Russian)*, pp. 3-60. Izdat. "Naukova Dumka", Kiev, 1973. (S. D. Riemschneider) 52 #3949 46E35 (41A65)
- Imbedding theorems for Lipschitz spaces constructed over $L_p(\mathbb{R}^n)$, $1 < p < \infty$. (Russian) *Studies in the theory of functions of several real variables (Russian)*, pp. 72-86. *Jaroslavl. Gos. Univ., Yaroslavl*, 1976. (Editors) 58 #30150 46E35
- Šalašova, L. Ja. Approximation in the mean of functions that are given on a finite interval. (Russian) *Sibirsk. Mat. Ž.* 13 (1972), 679-687. (T. Bojanov) 46 #584 41A10
- Salas Palenzuela, Isidoro See *Proceedings: Conference of Portuguese and Spanish Mathematicians*, 49 #7047
- Salat, A. (with Rebhan, E.) Simplified treatment of the electrical boundary value problem for the vectorial Poisson equation. *Z. Angew. Math. Mech.* 57 (1977), no. 5, T254-T255. (Shawky Shamma) 57 #2196 78.35
- Šalát, Tibor (with Znáň, Štefan) On the average order of an arithmetical function. *Mat. Časopis Sloven. Akad. Vied* 20 (1970), 233-238; errata, *ibid.* 20 (1970), 280. (L. Mirsky) 46 #3476 10K20
- Quotientbasen und (R) -dichte Mengen. *Acta Arit.* 19 (1971), 63-78. (B. Volkmann) 45 #1870 10L10
- Remarks on Denjoy property and \mathfrak{N}_2 property of real functions. (Czech summary) *Časopis Pěst. Mat.* 96 (1971), 391-397, 431. (T. A. Botts) 46 #1973 26A21
- Generalization of the notion of the Banach indicatrix. *Fund. Math.* 73 (1971/72), no. 1, 29-36. (J. G. Ceder) 45 #469 26A21 (54C50)
- Einige metrische Ergebnisse in der Theorie der Cantorsche Reihen und Bairesche Kategorien von Mengen. *Studia Sci. Math. Hungar.* 6 (1971), 49-53. (Dharam Singh Khassa) 54 #5157 10K10
- (with Franek, Miloš) Remarks on the fundamental theorem of arithmetic. *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* 27 (1972), 101-106. (I. Danicic) 48 #2036 10A05
- (with Lipiński, Jan Stanisław) On the generalized Banach indicatrix. *Mat. Časopis Sloven. Akad. Vied* 22 (1972), 219-225. (D. Preiss) 47 #3605 26A21
- On certain classes of sets of natural numbers. *Mat. Časopis Sloven. Akad. Vied* 22 (1972), 291-296. (H. G. Meijer) 47 #1770 10K99
- (with Kostyrko, Pavel; Neubrunn, Tibor) Density of one graph along another and some classes of closure spaces of functions. *Rev. Roumaine Math. Pures Appl.* 17 (1972), 721-730. (S. Marcus) 47 #4200 54C05 (26A21)
- Bemerkung über die Verteilung von Ziffern in Cantorsche Reihen. *Czechoslovak Math. J.* 23(98) (1973), 497-499. (O. P. Stackelberg) 47 #8469 10K05
- On transfinite sequences of B -measurable functions. *Fund. Math.* 78 (1973), no. 2, 157-162. (C. E. Aull) 48 #4991 54C35 (54A20)
- Some generalizations of the notion of continuity and Denjoy property of functions.

- (Czech summary) *Časopis Pěst. Mat.* **99** (1974), 380-385, 410. (S. A. Naimpally) **50** #13394 26A15 (54C10)
 (with Neubrunnová, Anna) Remarks on open everywhere discontinuous functions. (Slovak and Russian summaries) *Acta Fac. Rerum Natur. Univ. Comenian. Math.* **31** (1975), 115-120. (D. C. Benson) **52** #14187 26A21
 On convergence fields of regular matrix transformations. *Czechoslovak Math. J.* **26(101)** (1976), no. 4, 613-627. (G. M. Petersen) **55** #3596 40C05
 (with Meijer, H. G.) On a class of arithmetical sets. *Časopis Pěst. Mat.* **102** (1977), no. 1, 42-49. (B. Garrison) **55** #12680 10L10
 (with László, V.) The structure of some sequence spaces, and uniform distribution (mod 1). *Period. Math. Hungar.* **10** (1979), no. 1, 89-98. (L. Kuipers) **58** #16573 10K05 (28A05)
 See also Mišik, Ladislav, **54** #34 and Kostyrko, Pavel; et al., **58** #10185
- Salaudi, D.** (with Krivoščin, L. E.; Kutanov, A.; Leung, Kin Vinh; Oğuztörel, Mehmet Namık) Systèmes différentiels possédant la structure complexe. Problèmes à la frontière pour certaines classes d'équations intégral-différentielles non linéaires de Mangeron. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **20(24)** (1974), no. 1-2, part I, 111-115. (Stefan Balint) **50** #2849 45K05
- Salavová, Katarína** Radicals of rings with involution. I. (Russian) *Comment. Math. Univ. Carolinae* **18** (1977), no. 2, 367-381. (B. J. Gardner) **58** #5754 16A21
 Radicals of rings with involution. II. (Russian) *Comment. Math. Univ. Carolinae* **18** (1977), no. 3, 455-466. (B. J. Gardner) **58** #5755 16A21 (16A28)
- Salazar, A.** (with Oakford, R. V.) A graph formulation of a school scheduling algorithm. *Comm. ACM* **17** (1974), 696-698. (I. Gh. Ciobanu) **51** #12313 90B35
- Salazar, Andres C.** (with Brophy, Francis) Recursive digital filter synthesis in the time domain. *IEEE Trans. Acoust. Speech Signal Processing ASSP-22* (1974), no. 1, 45-55. (Tohru Katayama) **52** #7118 65K05 (94A05)
 (with Foschini, Gerard J.) Data pulse design—intersymbol interference aspects. *J. Inst. Math. Appl.* **15** (1975), 225-237. (Authors' summary) **51** #7698 94A05
- Salbany, Sergio** Paracompactness of pseudo-metric spaces. *Math. Colloq. Univ. Cape Town* **6** (1970/71), 53-55. (Peter J. Nyikos) **56** #6601 54D20
 Quasi-uniformities and quasi-pseudometrics. *Math. Colloq. Univ. Cape Town* **6** (1970/71), 88-102. (Ivan L. Reilly) **54** #13862 54E15
 Compactifications of bitopological spaces. *Math. Colloq. Univ. Cape Town* **7** (1971/72), 1-3. (H. J. Biesterfeldt, Jr.) **55** #6365 54D35
 Lifting functors defined on separated subcategories. *Math. Colloq. Univ. Cape Town* **7** (1971/72), 33-38 (1972). (Marta C. Bunge) **55** #453 18A40
 Quasi-metrization of bitopological spaces. *Arch. Math. (Basel)* **23** (1972), 299-306. (M. G. Murdeshwar) **47** #5838 54E55 (54E35)
 Completions and triples. *Math. Colloq. Univ. Cape Town* **8** (1973), 55-61. (R. Fritsch) **55** #8137 18C15
 ★Bitopological spaces, compactifications and completions. Mathematical Monographs of the University of Cape Town, No. 1. Department of Mathematics, University of Cape Town, Cape Town, 1974. xi+99 pp. (Ivan L. Reilly) **54** #13869 54E55 (54D35)
 Realcompactness of zero-set spaces. *Math. Colloq. Univ. Cape Town* **9** (1974), 17-18. (A. R. Pears) **57** #7536 54D60
 On compact* spaces and compactifications. *Proc. Amer. Math. Soc.* **45** (1974), 274-280. (W. W. Comfort) **50** #8443 54D30 (54C35)
 A note on the isomorphism $C(X)/M \cong R$. *Math. Colloq. Univ. Cape Town* **10** (1975/76), 18-20. (Thomas E. Gantner) **55** #9018 54C40
 Reflective subcategories and closure operators. *Categorical topology (Proc. Conf., Mannheim, 1975)*, pp. 548-565. *Lecture Notes in Math.*, Vol. 540, Springer, Berlin, 1976. (L. Skula) **56** #9473 54A99
 (with Brümmer, Guillaume C. L.) On the notion of realcompactness for bitopological spaces. *Math. Colloq. Univ. Cape Town* **11** (1977), 89-99. (James C. Smith) **57** #7534 54D60
- Salce, Luigi** Sull'anello degli endomorfismi dei gruppi abeliani, ridotti e liberi da torsione. *Ist. Veneto Sci. Lett. Arti Atti Cl. Sci. Mat. Natur.* **128** (1969/70), 401-410. (G. Michler) **46** #9100 16A42 (20K20)
 Classi di gruppi abeliani chiuse rispetto alle immagini omomorfe ed ai limiti proiettivi. *Rend. Sem. Mat. Univ. Padova* **49** (1973), 1-7. (G. Michler) **50** #10121 20K99
 (with Metelli, Claudia) A note on the well ordering of cardinals. *Amer. Math. Monthly* **81** (1974), 501-502. (John K. Truss) **49** #2379 02K20
 Moduli slender su anelli di Dedekind. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **20** (1975), 59-63. (D. Kirby) **51** #5583 13F05
 (with Metelli, Claudia) The endomorphism ring of an abelian torsionfree homogeneous separable group. *Arch. Math. (Basel)* **26** (1975), no. 5, 480-485. (David M. Arnold) **52** #5827 20K15
 (with Menegazzo, Federico) Abelian groups whose endomorphism ring is linearly compact. *Rend. Sem. Mat. Univ. Padova* **53** (1975), 315-325. (Wolfgang Liebert) **54** #429 20K45
 (with Fuchs, László) Almost totally injective p -groups. *Quaestiones Math.* **1** (1976), no. 2, 225-234. (L. Procházka) **57** #6226 20K10 (20K40)
 (with Fuchs, László) Gruppi monotoni di successioni intere. *Rend. Sem. Mat. Univ. Padova* **56** (1976), 147-160 (1978). (Delmar L. Boyer) **57** #12722 20K25 (20K45)
 (with Fuchs, László) Abelian p -groups of not limit length. *Comment. Math. Univ. St. Paul.* **26** (1977/78), no. 1, 25-33. (L. Bican) **57** #12719 20K10
- Salceda, Bernardo del Río** See Ventcel', É. S., **58** #9111
- Salčev, L. Z.** (with Popov, V. B.) Determination of the zeros of a cross-product Bessel function. *Proc. Cambridge Philos. Soc.* **74** (1973), 477-483. (F. W. J. Olver) **48** #2449 33A40
 Determination by nomograms of the zeros of a cross product of derivatives of Bessel functions. *Serdica* **2** (1976), no. 3, 191-196. (L. Bal) **57** #11143 65S05
 (with Popov, V. B.) A property of the zeros of cross-product Bessel functions of different orders. *Z. Angew. Math. Mech.* **56** (1976), no. 2, 120-121. (S. Saran) **54** #7907 33A40
- Šal'da, L. M.** (with Kil'čevskii, M. O.; Nečiporenko, G. D.) ★Основы аналитической механики. (Ukrainian) [Foundations of analytic mechanics] *Vidavn. "Naukova Dumka", Kiev*, 1975. 219 pp. (Djordje Djukic) **56** #1862 70.53
- Saldña, R. L.** (with Resnikoff, H. L.) Some properties of Fourier coefficients of Eisenstein series of degree two. *J. Reine Angew. Math.* **265** (1974), 90-109. (K. B. Gundlach) **50** #4497 10D20
 (with Resnikoff, H. L.) An analogue of a conjecture of Sato and Tate for a Hilbert modular form. *Glasgow Math. J.* **16** (1975), no. 2, 69-87. (William F. Hammond) **52** #13649 10D20
- Saldanha, J. S. V.** (with Jain, R. K.; Jain, M. K.) Some multistep methods for stiff ordinary differential equations. *J. Mathematical and Physical Sci.* **10** (1976), no. 4, 449-456. (Frank G. Hagin) **55** #6859 65L05 (34A50)
 (with Jain, M. K.; Iyengar, Satteluri R. K.) Numerical solution of a fourth-order ordinary differential equation. *J. Engrg. Math.* **11** (1977), no. 4, 373-380. (Authors' summary) **56** #10017 65L05
- Šaldyryan, G. G.** (with Kosmodamians'kii, O. S.) A periodic problem of the bending of a thick piecewise homogeneous plate. (Russian) *Meh. Tverd. Tela Vyp. 7* (1974), 171-176. (Authors' summary) **58** #8655 73.35
- Šaldyryan, V. A.** (with Mysovskii, Ju. V.; Žitnaja, V. G.; Kosenko, Z. I.) ★Гекторопы задачи математического анализа. (Russian) [Some problems of mathematical analysis]. *Doneck. Gos. Univ., Donetsk*, 1974. 87 pp. (E. L. Albasiny) **58** #8130 65-01
 (with Mysovskii, Ju. V.; Storožev, V. Ĭ.) Homogeneous solutions of three-dimensional problems on the forced oscillations of transtropic plates. (Russian) *Teoret. i Prikl. Meh. Vyp. 8* (1977), 66-73, 129. (M. Mišicu) **57** #4765 73.35
 See also Mathematical physics, **46** #1530
- Saleem, M.** (with Saleemi, B. A.; Rafique, M.) Geometrical interpretation of Lagrange multipliers in mechanics. *Punjab Univ. J. Math. (Lahore)* **4** (1971), 55-60. (J. Hoschek) **46** #4822 70.53
- Saleemi, B. A.** (with Tirmizi, R. H.) On generating sets of integers. *Punjab Univ. J. Math. (Lahore)* **4** (1971), 7-12. (A. Peluso) **46** #3329 05A99
 (with Tirmizi, R. H.) On the number of generating sets. *Punjab Univ. J. Math. (Lahore)* **4** (1971), 13-19. (A. Peluso) **46** #3330 05A99
 (with Tirmizi, R. H.) An elementary approach to partition theory. *Punjab Univ. J. Math. (Lahore)* **4** (1971), 21-36. (George E. Andrews) **46** #3439 10A45
 (with Rafique, M.; Saleem, M.) Geometrical interpretation of Lagrange multiplier in mechanics. *Punjab Univ. J. Math. (Lahore)* **4** (1971), 55-60. (J. Hoschek) **46** #4822 70.53
- Saleh, A. A. M.** (with Arnaud, J. A.) Comments on "Theorems of bianisotropic media" (Proc. IEEE **60** (1972), 1036-1046) by Jin Au Kong. With a reply by Kong. *Proc. IEEE* **61** (1973), 667-668. (I. M. Longman) **50** #9175 78.35
- Saleh, A. E.** (with Choudhry, G. H.) On fitting exponential regressions. *Statist. Hefte (N.F.)* **16** (1975), no. 3, 213-222. (Authors' summary) **56** #4065 62J05 (62A99)
- Saleh, A. K. Md. Ehsanes** (with Srivastava, Muni S.) On a class of non-parametric estimates for regression parameters. *J. Statist. Res.* **4** (1970), 133-139. (S. Blumenthal) **51** #4539 62G10
 (with Rahim, M. A.) Distribution of the sum of variates from truncated discrete populations. *Canad. Math. Bull.* **15** (1972), 395-398. (J. D. Mason) **47** #1099 60E05
 Tolerance limits based on structural theory. *J. Statist. Res.* **7** (1973), 12-18. (Lionel Weiss) **49** #11710 62F25
 (with Rahman, Mizan) Explicit form of the distribution of the Behrens-Fisher d -statistic. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 54-60; corrigendum, *ibid.* **36** (1974) 466. (M. L. Tiku) **50** #8788 62E15
 Extended tables of critical-values of Behrens-Fisher d -statistic. *J. Statist. Res.* (1974), no. 1, 29-51. (Authors' summary) **52** #12166 62E15 (62Q05)
 (with Chan, Katherine Wen-Kao) A linear estimate of location parameter of logist distribution. *Proceeding of the Symposium on Statistics and Related Topics (Carleton Univ., Ottawa, Ont., 1974), Paper No. 12, 7 pp.* Carleton Univ., Ottawa, Ont., 1975. (Stanley L. Sclove) **51** #14388 62F20
 (with Scott, Christine) The effect of truncation on the size of the t -test. *J. Statist. Comp. and Simulation* **3** (1975), no. 4, 345-368. (Steven Arnold) **51** #14363 62F01
 (with Scott, Christine; Jinkins, D. Bruce) Exact first and second order moments of order statistics from the truncated exponential distribution. *Naval Res. Logist. Quart.* **2** (1975), 65-77. (Mir Ali) **52** #4522 62G30
 Hodges-Lehmann estimate of the location parameter in censored samples. *Ann. Inst. Statist. Math.* **28** (1976), no. 2, 235-247. (P. J. Huber) **54** #14234 62G35
 Characterization of distributions using expected spacings between consecutive order statistics. *J. Statist. Res.* **10** (1976), no. 1, 1-13. (Authors' summary) **58** #24654 62E10
 (with Dionne, J.-P.) On a further generalization of the Savage test. *Comm. Statist.—Theory Methods* **A6** (1977), no. 12, 1213-1221. (I. R. Savage) **58** #8012 62G10
 (with Sen, Pranab Kumar) Nonparametric estimation of location parameter after preliminary test on regression. *Ann. Statist.* **6** (1978), no. 1, 154-168. (Vijaya Prakash Gupta) **57** #7860 62G05
 See also Proceedings: Symposium on Statistics and Related Topics, **51** #2037
- Salehi, Habib** (with Mandrekar, Vidyadhar) On singularity and Lebesgue type decomposition for operator-valued measures. *J. Multivariate Anal.* **1** (1971), no. 1, 167-185. (Authors' summary) **46** #323 28A45 (46G10, 60G10)
 (with Scheidt, John K.) Interpolation of q -variate weakly stationary stochastic processes over a locally compact abelian group. *J. Multivariate Anal.* **2** (1972), 307-333. (J. B. Robertson) **48** #5175 60G25
 Stone's theorem for a group of unitary operators over a Hilbert space. *Proc. Amer. Math. Soc.* **31** (1972), 480-484. (J. Gil de Lamadrid) **45** #9176 47A60 (46G99)
 (with Mandrekar, Vidyadhar) On the structure of $L_{2,M}$. Vector and operator valued measures and applications (Proc. Sympos., Alta, Utah, 1972), pp. 207-215. Academic Press, New York, 1973. (John N. Welch) **49** #1096 46E40 (60G10)
 A note on minimality and interpolation of harmonizable Hilbert sequences. *Bo. Soc. Mat. Mexicana*, (2) **18** (1973), 70-71. (R. M. Dudley) **50** #11414 (EA 53) 60G25 (60G10)
 The spectrum and the law of large numbers for infinite-dimensional nonstationary stochastic processes. *J. Math. Anal. Appl.* **41** (1973), 575-582. (J. B. Robertson) **48** #7359 60G20 (60F15)

- (with Nashed, M. Zuhair) Measurability of generalized inverses of random linear operators. *SIAM J. Appl. Math.* **25** (1973), 681-692. (A. Mukherjea) **48** #12124 7A99 (60H99)
- (with Miamée, A. G.) Factorization of positive operator valued functions on a anach space. *Indiana Univ. Math. J.* **24** (1974/75), 103-113. (J. B. Robertson) **0** #2970 47A65 (60G25)
- (with Miamée, A. G.) Necessary and sufficient conditions for factorability of onnegative operator-valued functions on Banach space. *Proc. Amer. Math. Soc.* **46** (1974), 43-50. (B. R. Gelbaum) **50** #1325 60G10 (47A65)
- On the bilateral linear predictor for minimal stationary stochastic processes. *SIAM Appl. Math.* **26** (1974), 502-507. (S. Cambanis) **52** #4395 60G25
- (with Kannan, Rangachary) Random solutions of nonlinear differential equations. (Italian summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 1-2, 209-213. (J. A. Goldstein) **2** #15148 47H15 (60H99)
- (with Kannan, Rangachary) Mesurabilité du point fixe d'une transformation latoire séparable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 5, A663-A664. (A. T. Bharucha-Reid) **52** #4413 60H99 (47H10)
- (with Kannan, Rangachary) Measurability of solutions of nonlinear equations. *Nonlinear functional analysis and differential equations* (Proc. Conf., Mich. State Univ., East Lansing, Mich., 1975), pp. 227-244. *Lecture Notes in Pure and Appl. Math.*, Vol. 19, Marcel Dekker, New York, 1976. (G. Hetzer (Zbl 341 #47044)) **58** #12555 47H15 (60H10)
- (with Miamée, A. G.) Positive operators on a Banach space and the Fejér-Riesz theorem. *Proc. Amer. Math. Soc.* **56** (1976), 189-192. (J. B. Robertson) **53** #3788 7B99 (42A04, 60G10)
- (with Kannan, Rangachary) Random nonlinear equations and monotonic nonlinearities. *J. Math. Anal. Appl.* **57** (1977), no. 1, 234-256. (Ludwig Arnold) **5** #1468 60H99 (47H15)
- (with Miamée, A. G.) On the square root of a positive $B(X, X^*)$ -valued function. *J. Multivariate Anal.* **7** (1977), no. 4, 535-550. (S. A. Cobanjan) **57** #7747 60G10
- (with Miamée, A. G.) The factorization problem for positive operator valued functions on a Banach space and regularity of Banach space valued stationary stochastic processes. *Sankhyā Ser. A* **39** (1977), no. 3, 211-222. (Franz Schmidt) **58** #13309 60G10 (47A99, 60G25)
- (with Miamée, A. G.) Harmonizability, V -boundedness and stationary dilation of stochastic processes. *Indiana Univ. Math. J.* **27** (1978), no. 1, 37-50. (Hannu Niemi) **57** #1642 60G99 (60G10)
- ni, S. V. On the state-space realizations of matrix fraction description for multivariable systems. *IEEE Trans. Automat. Control* **23** (1978), no. 6, 1054-1058. (Author's summary) **58** #26257 93B15
- ov, D. V. The Lebesgue-Orlicz points of functions of symmetric spaces. (Russian) *Voronež. Gos. Univ. Trudy Sem. Funkcional. Anal. Vyp.* **10**, 114-121 (1968). (J. Peetre) **54** #913 46E30
- ov, G. S. See *Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region*, **46** #1532
- ov, L. G. (with Čibrikova, L. I.) On the solution of a general problem of linear conjugation of analytic functions in the case of algebraic contours. (Russian) *Trudy Sem. Kraev. Zadačam No. 5* (1968), 224-249. (Not reviewed) **30A88**
- On a problem of linear conjugation. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **6** (1969), 179-188. (Zbl 208, 345) **58** #17134 30A88
- (with Čibrikova, L. I.) On the solution of the Hilbert boundary value problem. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **8** (1971), 155-175. (Zbl 243 #30030) **58** #17121 30A88
- The Riemann problem for a countable set of contours. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **11** (1974), 149-154. (P. Ju. Alekna) **56** #12279 30A88
- Linearly meromorphic functions in the unit disc. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **12** (1975), 177-181. (P. Ju. Alekna) **56** #12280 30A88
- ova, I. G. (with Čibrikova, L. I.) The Riemann problem in the case of a countable set of contours. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **9** (1972), 216-233. (Zbl 285 #30034) **58** #17122 30A88
- The solution of the Riemann problem in the case of a countable set of contours in certain special cases. (Russian) *Trudy Sem. Kraev. Zadačam No. 10* (1973), 112-121. (S. G. Samko) **50** #7548 30A88
- The Riemann problem with discontinuous coefficients in the case of an infinite contour. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **11** (1974), 155-160. (P. Ju. Alekna) **56** #12281 30A88
- The homogeneous Riemann problem in the case of a countable set of open arcs. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 6(157), 124-135. (G. S. Litvinčuk and A. V. Aizenštat) **52** #14315 30A88
- The homogeneous Riemann problem in the case of a countable set of intervals on the real line. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **12** (1975), 182-190. (RŽMat **1976** #5 B129) **58** #6274 30A88
- (with Kulagina, M. F.) The Riemann problem in the case of a countable set of contours that are periodically spaced in the right half-plane. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **13** (1976), 175-183. **58** #22587 30A88
- The behavior of an integral of Cauchy type over an infinite contour at the singular points of the density. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **13** (1976), 231-238. **58** #22581 30A86
- š, S. V. (with Daniljuk, Ī. Ī.) A certain version of the two-phase Stefan problem in the presence of heat sources. (Ukrainian, English and Russian summaries) *Dopovidi Akad. Nauk Ukraїn. RSR Ser. A* **1975**, no. 11, 972-975, 1050. (V. P. Kalašnikov) **53** #7239 80.35
- m, S. M. (with Boutros, Y. Z.) An asymptotic formula for the confluent hypergeometric function. (Arabic summary) *Proc. Math. Phys. Soc. A.R.E. No.* **34** (1970), 63-67 (1972). (L. J. Slater) **48** #11592 33A30
- mi, Franco Sulla stabilizzazione con vincoli impropriamente anolonomi. *Ricerche Mat.* **19** (1970), 179-184. (N. D. Sengupta) **46** #2941 70.35
- onçon, J. (with Delbecq, J. M.; Frémond, Michel; Pecker, A.) Éléments finis en plasticité et visco-plasticité. (English summary) *J. Méc. Appl.* **1** (1977), no. 3, 267-304. (A. D. Ljaško) **58** #19655 73.65
- Salenius, Tauno Rotations of a rigid body. (Swedish. English summary) *Nordisk Mat. Tidskr.* **22** (1974), 118-120, 135. (D. ter Haar) **50** #11907 70.50
- Salerno, S. (with Viola, C.) Sieving by almost-primes. *J. London Math. Soc.* (2) **14** (1976), no. 2, 221-234. (Dieter Leitmann) **58** #16568 10H30
- Saleski, Alan On induced transformations of Bernoulli shifts. *Math. Systems Theory* **7** (1973), 83-96. (B. Weiss) **48** #8755 28A65
- Entropy of self-homeomorphisms of statistical pseudo-metric spaces. *Pacific J. Math.* **51** (1974), 537-542. (W. Szlenk) **51** #6770 54H20
- Stopping times for Bernoulli automorphisms. *Pacific J. Math.* **52** (1974), 547-551. (Nathaniel Friedman) **50** #13451 28A65
- A note on a differentiation type property of the entropy of an automorphism. *Advances in Math.* **15** (1975), 157-161. (V. Drobot) **51** #3398 28A65
- A conditional entropy for the space of pseudo-Menger maps. *Pacific J. Math.* **59** (1975), no. 2, 525-533. (B. Schweizer) **54** #8585 54E99 (28A65)
- Sequence entropy and mixing. *J. Math. Anal. Appl.* **60** (1977), no. 1, 58-66. (Nathaniel Friedman) **56** #8812 28A65
- An entropy-theoretic proof of the Sucheston zero-one law. *J. Math. Anal. Appl.* **61** (1977), no. 3, 689-690. (Kenneth R. Berg) **57** #590 28A65
- de Sales Luis, Antônio Carvalho Le tenseur antisymétrique température et potentiel chimique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aiii, A1337-A1340. (Alan Barnes) **52** #2521a 83.53 (80.53)
- Le tenseur d'impulsion-énergie chimique et thermique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aiii, A1413-A1415. (Alan Barnes) **52** #2521b 83.53 (80.53)
- de Sales McNabb, Mary See *Primer for the Fibonacci numbers*, **50** #12906
- Sales Vallés, Francisco de A. On a class of non-distributive lattices. (Spanish) *Proceedings of the Ninth Annual Conference of Spanish Mathematicians (Granada, 1968)* (Spanish), pp. 201-210. *Inst. "Jorge Juan" Mat., Madrid*, 1971. (R. J. Bumcrot) **49** #4879 06A20
- Ordering operations and algebras of Hilbert. (Spanish) *Proceedings of the Eleventh Annual Conference of Spanish Mathematicians (Murcia, 1970)* (Spanish), pp. 196-200. *Univ. Complutense de Madrid, Madrid*, 1973. (R. S. Pierce) **50** #1879 02J99 (02C15)
- Saletan, E. J. (with Currie, D. G.) Canonical transformations and quadratic Hamiltonians. (Italian summary) *Nuovo Cimento B* (11) **9** (1972), 143-153. (P. Havas) **48** #7715 70.35
- (with Marmo, G.) Other symmetries and constants of the motion. *Group theoretical methods in physics* (Proc. Fifth Internat. Colloq., Univ. Montréal, Montréal, Que., 1976), pp. 379-384. *Academic Press, New York*, 1977. (J. S. Joel) **58** #24356a 58F05 (70.58)
- (with Marmo, G.) Q -symmetries and equivalent Lagrangians. *Group theoretical methods in physics* (Proc. Fifth Internat. Colloq., Univ. Montréal, Montréal, Que., 1976), pp. 385-391. *Academic Press, New York*, 1977. (J. S. Joel) **58** #24356b 58F05 (70.58)
- (with Marmo, G.) Ambiguities in the Lagrangian and Hamiltonian formalism: transformation properties. (Italian and Russian summaries) *Nuovo Cimento B* (11) **40** (1977), no. 1, 67-89. (Tudor S. Ratiu) **58** #7709 58F05 (70.58)
- Saletan, Eugene J. (with Cromer, A. H.) A variational principle for nonholonomic systems. *Amer. J. Phys.* **38** (1970), 892-897. (E. Tonti) **45** #2958 70.49
- See also Gelfand, I. M.; et al., **55** #8786a and Gelfand, I. M.; et al., **55** #8786e
- Salfi, Robert See *Comstat*, **49** #9990
- ruiz Salguero, Carlos See *Ruiz Salguero, Carlos*
- Saliba, George A. The meaning of al-jabr wa'l-muqābalah. *Centaurus* **17** (1972), no. 3, 189-204. (B. Rozenfel'd) **57** #15848 01A30
- (with Gingerich, Owen; King, David A.) The 'Abd al-A'imma astrolabe forgeries. *J. Hist. Astronom.* **3** (1972), no. 3, 188-198. (Bruno Poizat) **58** #15838 01A30
- The double-argument lunar tables of Cyriacus. *J. Hist. Astronom.* **7** (1976), no. 1, 41-46. **58** #26709 01A30
- Saliba, Michael S. See *Sparse matrices and their applications*, **48** #10075
- Salicrup López, Graciela (with Vázquez, Roberto) Fibrations and coreflections. (Russian) *An. Inst. Mat. Univ. Nac. Autónoma México* **10** (1970), 67-95. (From the introduction) **58** #2683 54B30 (55F05, 57A65)
- (with Vázquez, Roberto) Fibrations and coreflections. II. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* **11** (1971), 81-130. (M. L. Laplaza) **50** #7281 18A40
- (with Vázquez, Roberto) Connection categories. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* **12** (1972), 47-87. (M. L. Laplaza) **48** #377 18F15
- (with Vázquez, Roberto) T -quotients. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* **13** (1973), 53-159. (M. L. Laplaza) **50** #7278 18A20
- (with Vázquez, Roberto) Reflexivity and co-connectedness in TOP. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* **14** (1974), 159-230. (J. R. Isbell) **51** #4137 (E **53** #9129) 54B30
- (with Vázquez, Roberto) A -connected expansions and subspaces of A -maximal spaces. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* **15** (1975), no. 1, 97-111. (C. R. Borges) **53** #9117 54A10 (54D05)
- (with Vázquez, Roberto) Errata to "Reflexivity and co-connectedness in TOP" (An. Inst. Mat. Univ. Nac. Autónoma México **14** (1974), 159-230). (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* **15** (1975), no. 1, 113-115. (J. R. Isbell) **53** #9129 54B30
- (with Vázquez, Roberto) Maximal objects in connection categories of Top. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* **15** (1975), no. 2, 117-131. (J. R. Isbell) **53** #14407 54D05 (54B30)
- (with Vázquez, Roberto) On functors with quasi-small fibres. *An. Inst. Mat. Univ. Nac. Autónoma México* **17** (1977), no. 1, 109-124. (Eric Nummela) **58** #5823 18A05
- Salié, Nikolaus Allgemeinrelativistisches Variationsprinzip für Flüssigkeiten und Festkörper in Eulerschen Koordinaten. (English summary) *Czechoslovak J. Phys.* **24B** (1974), 831-845. (Author's summary) **53** #9869 76.49
- Struktur der beschleunigungs-, rotations- und scherungsfreien Lösungen der Einsteinschen Feldgleichungen für den allgemein-relativistischen Festkörper. (Russian and English summaries) *Wiss. Z. Friedrich-Schiller-Universität Jena Math.-Naturwiss. Reihe* **24** (1975), no. 5/6, 555-563. (C. B. Collins) **54** #14733 83.53
- (with Günther, Bernd) Einwirkung von Gravitationswellen auf elastische Festkörper. (Russian and English summaries) *Wiss. Z. Friedrich-Schiller-Universität Jena*

- Math.-Natur. Reihe* 27 (1978), no. 2-3, 319-327. (Authors' summary) 58 #25746 83.35
- Saliev, A.** A study of the generalized time-periodic solution of a multidimensional boundary value problem for a certain class of second order parabolic equations with nonlinear operator right-hand side. (Russian) *Proceedings of the Sixth Scientific Conference of the Professorial and Teaching Staff of the Faculty of Mathematics and Physics of the Samarkand State Pedagogical Institute (Samarkand, 1972)* (Russian), pp. 53-67. Samarkand. Gos. Univ., Samarkand, 1972. (Piero Bassanini) 54 #13320 35K20
- A study of the time-periodic solution almost everywhere of a multidimensional boundary value problem for a certain class of second order parabolic equations with nonlinear right-hand side. (Russian) *Proceedings of the Sixth Scientific Conference of the Professorial and Teaching Staff of the Faculty of Mathematics and Physics of the Samarkand State Pedagogical Institute (Samarkand, 1972)* (Russian), pp. 67-79. Samarkand. Gos. Univ., Samarkand, 1972. (Piero Bassanini) 54 #13321 35K20
- A study of the time-periodic classical solution of a class of second order parabolic equations with a nonlinear operator-valued right-hand side. (Russian) *Taškent. Gos. Ped. Inst. Sb. Naučn. Trudov* 166 *Nekotorye Voprosy Fiz. Kristal. i Differentsial. Uraženii* (1976), 65-79, 91. (J. S. Joel) 57 #13201 35K60 (47H15)
- A study of the time-periodic solution almost everywhere of a certain class of second order parabolic equations with nonlinear operator right-hand side. (Russian) *Proceedings of the Sixth Scientific Conference of the Professorial and Teaching Staff of the Faculty of Mathematics and Physics of the Samarkand State Pedagogical Institute (Samarkand, 1972)* (Russian), pp. 47-53. Samarkand. Gos. Univ., Samarkand, 1977. (Piero Bassanini) 54 #737 35K55 (47H15)
- See also Questions on differential equations, number theory, algebra and geometry, 52 #7763
- Saliev, Š. T.** (with Siraždinov, S. H.; Gafurov, M. U.) The limit behavior of the distribution of sums of a random number of random variables. (Russian) *Random processes and statistical inference*, No. 5 (Russian), pp. 141-157, 204. Izdat. "Fan" Uzbek. SSR, Tashkent, 1975. (Dominik Szynal) 53 #11712 60F05
- Limit theorems for the maximum of sums of a random number of independent random variables. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 1978, no. 1, 24-29, 92. (Gábor J. Székely) 57 #14112 60F05
- Sharpening of limit theorems for the time of the first attainment of a random level. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 1978, no. 2, 76-77. (S. A. Book) 58 #7861 60J15
- Salihov, G. N.** A way of raising the efficiency of S. L. Sobolev's cubature formulas on the sphere. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* No. 8 (1971), 3-9. (Not reviewed) 65D30
- On the theory of groups of regular polyhedra. (Russian) *Dokl. Akad. Nauk SSSR* 205 (1972), 33-35. (E. Jucović) 46 #1921 20H15
- (with Šariphodževa, F.) Cubature formulae for the computation of integrals over the surface of a hypersphere. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1974, no. 4, 8-9. (I. Šelihova (RŽMat 1974 #B1228)) 54 #2801 20D99 (65D30)
- Studies in the theory of cubature formulas. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Vyp.* 28 (1974), 3-30, 179. (Author's summary) 58 #13645 65D30
- Cubature formulae for a hypersphere that are invariant with respect to the group of the regular 600-gon. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 5, 1075-1078. (A. Coțiu) 53 #11978 65D30 (50B30)
- Error estimation of cubature formulae in the space $L^m(S)$. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 6, 1318-1321. (A. Coțiu) 53 #11979 65D30
- On the estimation of the error of cubature formulas on hyperspheres. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 1976, no. 4, 23-28, 86. (A. Coțiu) 57 #7958 65D30
- Salihov, M. V.** The historical and the logical in mathematics. (Russian) *Baškir. Gos. Univ. Učen. Zap. Vyp.* 47 (1969), Ser. Obščestv. Nauk no. 5, 59-81. (Editors) 57 #5556 00A25 (01A55, 02A05)
- Salihov, N. P.** Asymptotic properties of error probabilities of tests for distinguishing between several multinomial testing schemes. (Russian) *Dokl. Akad. Nauk SSSR* 209 (1973), 54-57. (T. Nemetz) 50 #8797 62F05
- Proof of a conjecture of I. Vajda. (Russian) *Problemy Peredači Informacii* 10 (1974), no. 3, 114-115. (Author's summary) 57 #4406 62F05
- Salihov, R. M.** (with Sunčeev, R. Ja.) Determining temperature stresses in a bounded viscoelastic cylinder. (Russian) *Prikl. Meh.* 13 (1977), no. 8, 8-15, 140. (From the introduction) 58 #8686 73A5
- Salihov, Š. N.** (with Atahodžev, M. A.) On the uniqueness question in the inverse problem of potential theory. (Russian) *Boundary value problems for differential equations*, 4 (Russian), pp. 94-98, 191. Izdat. "Fan" Uzbek. SSR, Tashkent, 1974. (Authors' summary) 57 #12874 31A25
- Salihov, V. H.** The algebraic independence of the values of E -functions that satisfy first order linear differential equations. (Russian) *Mat. Zametki* 13 (1973), 29-40. (K. Mahler) 47 #4939 10F35
- The differential irreducibility of a certain class of differential equations. (Russian) *Dokl. Akad. Nauk SSSR* 235 (1977), no. 1, 30-33. (S. V. Kotov) 56 #8503 10F35
- Salihov, Z. M.** (with Paiziev, E.; Burkov, V. N.; Kacnel'son, M. B.) An aggregated algorithm for the solution of a transportation problem. (Russian) *Voprosy Kibernet. (Tashkent) Vyp.* 40 (1970), 23-29. 55 #2161 90C50
- Salii, V. N.** Equationally normal varieties of universal algebras. (Russian) *Works of young scientists: mathematics and mechanics*, No. 2 (Russian), pp. 124-130. Izdat. Saratov. Univ., Saratov, 1969. (Rainer Miltz) 50 #206 08A15
- Semigroups of random relations. (Russian. Loose English summary) *Mat. Časopis Sloven. Akad. Vied* 20 (1970), 122-134. (V. Havel) 47 #4895 08A05 (20M20)
- A theorem on homeomorphisms of rigid commutative connections of semigroups. (Russian) *Theory of semigroups and its applications*, No. 2 (Russian), pp. 69-74. Izdat. Saratov. Univ., Saratov, 1971. (Anna Ja. Aizenštat) 53 #10959 20M15 (08A15)
- A compactly generated lattice with unique complements is distributive. (Russian) *Mat. Zametki* 12 (1972), 617-620. (E. T. Schmidt) 47 #6575 06A35
- Boolean-valued algebras. (Russian) *Mat. Sb. (N.S.)* 92(134) (1973), 550-563, 647. (A. Preller) 49 #2345 02H05 (08A05)
- Reduced extensions of models. (Russian) *Ordered sets and lattices*, No. 2 (Russian), pp. 85-90. Izdat. Saratov. Univ., Saratov, 1974. (O. V. Belegadek) 58 #205 02H05 (with Kozyr', N. P.)
- Geometric lattices, and idempotent algebras. (Russian) *Ordered sets and lattices*, No. 2 (Russian), pp. 91-98. Izdat. Saratov. Univ., Saratov, 1974. (V. Havel) 58 #463 08A25
- Homomorphisms of lattices on Boolean lattices and groupoids of lattice transformations. (Russian) *Studies in algebra*, No. 4 (Russian), pp. 102-109, 126. Izdat. Saratov. Univ., Saratov, 1974. (O. Kopecek) 56 #5378 06A25
- Generalized Clifford groups and associations. (Russian) *Theory of semigroups and its applications*, No. 3 (Russian), pp. 99-106, 154. Izdat. Saratov. Univ., Saratov, 1971. (Anna Ja. Aizenštat) 57 #498 20M10
- Lattices of varieties. Lattice relations. Ordered sets. (Russian) *Ordered sets and lattices*, No. 3 (Russian), pp. 75-100, 103. Izdat. Saratov. Univ., Saratov, 1975. (Katriňák) 55 #10358 08A15 (06A20)
- Some remarks on quasi-Boolean lattices. (Russian) *Ordered sets and lattices*, No. 3 (Russian), pp. 104-112, 135. Izdat. Saratov. Univ., Saratov, 1977. (Manfred Stein) 58 #5430 06A23 (06A35)
- See also Works: Young scientists: mathematics and mechanics, 49 #7; Ordered sets and lattices, 50 #9716; Ordered sets and lattices, 54 #2552; Ordered sets and lattices, 54 #5058 and Ordered sets and lattices, 57 #5840
- Salija, R. N.** (with Cipurija, I. E.; Čubinišvili, T. N.) A certain problem of the theory of control systems. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 64 (1971), 545-548. (V. Polák) 46 #4980 93A10
- (with Cipurija, I. E.; Čubinišvili, T. N.) The choice of the mode of operation of control systems. (Russian. Georgian and English summaries) *Gamogeneb. Math. In Sem. Mohsen. Anotacie*. No. 7 (1973), 27-31. (S. Krčevinač) 48 #1759 93C99
- (with Dokvadze, K. A.; Kodua, D. M.; Cipurija, I. E.; Čubinišvili, T. N.) A certain approach to the problem of the short-term prediction of demand. (Russian. Georgian summary) *Math. Kibernet. Zogieth. Sakith. Gamokw.* No. 1 (1973), 15-23. (Obradović) 52 #12752 90B30
- (with Dokvadze, K. A.; Kodua, D. M.; Cipurija, I. E.; Čubinišvili, T. N.) An algorithm for the short-term prediction of demand. (Russian. Georgian summary) *Math. Kibernet. Zogieth. Sakith. Gamokw.* No. 1 (1973), 25-38. (D. Obradović) 52 #12753 90B30
- The choice of the form of operation in queueing systems. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 78 (1975), no. 1, 61-64. (H. Tašmanov) 53 #14721 60K25
- Displacement laws for the optimal number of channels in queueing. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 83 (1976), no. 1, 61-64. (Author's summary) 54 #14768 90B35
- See also Mathematical methods for the solution of economic problems, 48 #7951 (EA 51)
- Salikov, L. M.** (with Mihaïlov, F. A.; Terjaev, E. D.; Bulekov, V. P.; Dikanova, L. M.) ★Динамика непрерывных линейных систем с детерминированными и случайными параметрами. (Russian) [Dynamics of continuous linear systems with deterministic and random parameters] Izdat. "Nauka", Moscow, 1971. 561 pp. (errata insert) (K. Magnan) 47 #4681 93C05
- (with Jagodin, V. M.) Structural transformations and the invariance of linear nonstationary automatic control systems. (Russian) *Complex control systems (Russian)* pp. 92-103. Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev, 1972. (Stanislav K. Myškov) 49 #4616 93C50 (93C05)
- Salim, J. M.** (with Novello, Mario; Soares, I. Damião) On Jacobi fields. *General Relativity and Gravitation* 8 (1977), no. 2, 95-102. (Mauro Francaviglia) 57 #8946 83.58 (58E10)
- (with Novello, Mario; Galvão, Carlos A. P.; Scares, I. Damiao) Electric and magnetic gravitational monopoles. I. The equation of motion of poles. *Proceedings of the International Symposium on Relativity and Unified Field Theory (Calcutta, 1975-1976)*, pp. 129-138. S. N. Bose Inst. Phys. Sci., Calcutta, 1978. (Authors' summary) 58 #19878 80.53
- Salimov, F. G.** (with Orudžev, G. A.) The domain of convergence of Dirichlet and Taylor-Dirichlet series with complex exponents. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1969, no. 2, 53-66. (C. Tanal) 46 #2016 30A16
- The order of entire functions of several complex variables that are defined by Dirichlet series. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 5(120), 74-78. (C. Tanaka) 46 #3824 32A15
- Salimov, F. I.** The organization of calculations of elementary functions into tables. (Russian) *Probabilistic methods and cybernetics*, Vol. 12-13, pp. 77-90. Kazan. Univ., Kazan, 1976. (Editors) 58 #31706 65A05
- On the question of the optimal construction of tables. (Russian) *Probabilistic methods and cybernetics*, Vol. 12-13, pp. 134-156. Kazan. Univ., Kazan, 1976. (Editors) 58 #31707 65A05
- (with Zaharov, V. M.) A contribution to the theory of structural synthesis of determinate converter. (Russian. Loose English translation) *Problems of Control and Information Theory / Problemy Upravlenija i Teorii Informacii* 6 (1977), no. 1, 137-148. (R. Shirladze) 58 #9945 94A35
- Šalimov, G. E.** (with Ter-Martirosjan, Z. G.; Ahpatelov, D. M.) Stress state in semi-infinite regions subject to volume and surface forces. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* 30 (1977), no. 4, 34-39. (Authors' summary) 58 #14183 73A5
- Salimov, Ja. Š.** A certain regularization of a singular equation with different singular operators that act in a normed ring. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1970, no. 2, 44-49. (B. R. Gelbaum) 45 #7473 46H05 (47B99)
- Single-valued continuation of nonlinear singular operator equations in normed rings. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1973, no. 2, 49-53. (D. Przeworska-Rolewicz) 51 #1442 47A10 (46H05, 47H15)
- A certain boundary value problem for the Laplace equation. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* 31 (1975), no. 3, 13-

(V. I. Ševčenko) 52 #5999 31B20 (46H05)

The behavior of the solution with respect to the parameter of a class of nonlinear singular operator equations in a normed ring with involution. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1976, no. 5, 87-90. (From the text) 58 #7265 47H99 (46H99)

mov, N. B. (with Avhadiev, F. G.) Univalent solvability of the inverse problem of blast theory. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* 13 (1976), 24-29. (From the text) 58 #25223 30A36 (35R30, 7630)

(with Il'inskii, N. B.; Fatkullov, R. G.; Jakimov, N. D.) The problem of filtration in an earth dam on a permeable foundation that has a different coefficient of filtration. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* 13 (1976), 93-111. (From the text) 58 #25360 76.41

mov, R. B. Various cases of inverse boundary value problems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1968 no. 8(75), 73-79. (Editors) 55 #8372 30A88

On the computation of Cauchy type integrals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 10(125), 81-87. (V. I. Mel'nik) 47 #7046 30A86

(with Il'inskii, N. B.) The inverse problem of blast theory. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 2 (141), 51-57. (L. Dragoš) 52 #2371 76.30

On the computation of the derivatives of singular integrals with Cauchy kernel. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 4(143), 69-77. (I. I. Bavrin) 51 #3466 30A86

On the computation of integrals of Cauchy type taken along the real axis. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 5(156), 40-46. (C. Tanaka) 52 #11063 30A86

(with Il'inskii, N. B.) On the solution of a certain boundary value problem of blast theory. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 6 (157), 44-50. (S. K. Aslanov) 55 #7073 76.30 (73.30)

(with Il'inskii, N. B.; Labutkin, A. G.) A case of detonation of a symmetric surface charge of variable thickness. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* 1976, no. 3, 154-161. 56 #17396 76.30

On the question of the behavior of the derivative of a function that realizes a conformal mapping near a corner point of the boundary of the domain. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 2(177), 100-110. (R. Kühnau) 58 #11347 30A30

inari, Serenella A. M. See Sensitivity, adaptivity and optimality, 49 #8697

riguez-Salinas, Baltasar See Rodriguez-Salinas, Baltasar

inas, David (with Nguyen, Dong H.; Southworth, Thomas W.) Finite element solutions of a nonlinear nuclear reactor dynamics problem. *Computational methods in nonlinear mechanics* (Proc. Internat. Conf., Austin, Tex., 1974), pp. 541-550. *Texas Inst. Comput. Mech., Austin, Tex.*, 1974. (N. N. Janenko) 53 #12036 (EA 54) 65N30

inas, Norberto On the η function of Brown and Percy and the numerical function of an operator. *Canad. J. Math.* 23 (1971), no. 4, 565-578. (J. Ernest) 56 #12929 47A10

(with Brown, Arlen; Percy, Carl M.) Ideals of compact operators on Hilbert space. *Michigan Math. J.* 18 (1971), 373-384. (N. K. Nikol'skii) 45 #909 46L99 (47B10)

Operators with essentially disconnected spectrum. *Acta Sci. Math. (Szeged)* 33 (1972), 193-205. (Berrien Moore, III) 50 #2942 47A10

(with Herrero, Domingo Antonio) Operators with disconnected spectra are dense. *Bull. Amer. Math. Soc.* 78 (1972), 525-526. (H. A. Gindler) 46 #693 47A55

Ideal sets and ideals of compact operators on Hilbert space. *Indiana Univ. Math. J.* 22 (1972/73), 505-521. (P. A. Fillmore) 47 #5642 47B10 (46L15)

(with Percy, Carl M.) Compact perturbations of seminormal operators. *Indiana Univ. Math. J.* 22 (1972/73), 789-793. (P. A. Fillmore) 47 #2404 47A55

Invariant subspaces and operators of class (S). *Pacific J. Math.* 42 (1972), 497-513. (J. Rovnyak) 47 #7470 47A15

(with Herrero, Domingo Antonio) Analytically invariant and bi-invariant subspaces. *Trans. Amer. Math. Soc.* 173 (1972), 117-136. (H. A. Gindler) 47 #856 47A15

Reducing essential eigenvalues. *Duke Math. J.* 40 (1973), 561-580. (P. A. Fillmore) 52 #11639 47A65

(with Morris, David) Semiprime ideals and irreducible ideals of the ring of bounded operators on Hilbert space. *Indiana Univ. Math. J.* 23 (1973/74), 575-589. (P. A. Fillmore) 48 #4758 46L15 (16A66, 47D99)

(with Percy, Carl M.) An invariant-subspace theorem. *Michigan Math. J.* 20 (1973), 21-31. (P. A. Fillmore) 47 #5623 47A15

(with Douglas, Ronald G.; Percy, Carl M.) Hyperinvariant subspaces via topological properties of lattices. *Michigan Math. J.* 20 (1973), 109-113. (P. A. Fillmore) 49 #5885 47A15

A characterization of the Browder spectrum. *Proc. Amer. Math. Soc.* 38 (1973), 369-373. (A. McIntosh) 47 #2405 47A55

(with Brown, Arlen; Percy, Carl M.) Perturbations by nilpotent operators on Hilbert space. *Proc. Amer. Math. Soc.* 41 (1973), 530-534. (D. A. Herrero) 51 #11151 47A55

Ideals of commutators of compact operators. *Acta Sci. Math. (Szeged)* 36 (1974), 131-144. (Thomas Hoover) 50 #10891 47B47

(with Percy, Carl M.) Finite-dimensional representations of separable C^* -algebras. *Bull. Amer. Math. Soc.* 80 (1974), 970-972. (S. Strătilă) 51 #13699 46L05 (47A65)

(with Percy, Carl M.) Operators with compact self-commutator. *Canad. J. Math.* 26 (1974), 115-120. (P. A. Fillmore) 49 #1210 47B47 (47A55)

(with Percy, Carl M.; Ringrose, John R.) Remarks on the invariant-subspace problem. *Michigan Math. J.* 21 (1974), 163-166. (Thomas Hoover) 49 #7806 47A15

Symmetric norm ideals and relative conjugate ideals. *Trans. Amer. Math. Soc.* 188 (1974), 213-240. (J. D. Gray) 49 #1146 46L15

Subnormal limits of nilpotent operators. *Acta Sci. Math. (Szeged)* 37 (1975), 117-124. (Hong W. Kim) 52 #4011 47B20

(with Percy, Carl M.) The reducing essential matricial spectra of an operator. *Duke Math. J.* 42 (1975), no. 3, 423-434. (P. A. Fillmore) 52 #1354 47A10

(with Apostol, Constantin) Nilpotent approximations and quasinilpotent operators. *Pacific J. Math.* 61 (1975), no. 2, 327-337. (Lawrence Fialkow) 54 #3461 47A65

(with Percy, Carl M.) Finite dimensional representations of C^* -algebras and the reducing matricial spectra of an operator. *Rev. Roumaine Math. Pures Appl.* 20 (1975), no. 5, 567-598. (J. Ernest) 52 #11609 46L05 (47A65)

Extensions of C^* -algebras and essentially n -normal operators. *Bull. Amer. Math. Soc.* 82 (1976), no. 1, 143-146. (Zbl 331 #46055) 58 #30297 46L05 (47B15)

(with Bunce, John W.) Completely positive maps on C^* -algebras and the left matricial spectra of an operator. *Duke Math. J.* 43 (1976), no. 4, 747-774. (R. G. Douglas) 55 #3798 46L05 (47A10)

(with Percy, Carl M.) Extensions of C^* -algebras and the reducing essential matricial spectra of an operator. *K-theory and operator algebras* (Proc. Conf., Univ. Georgia, Athens, Ga., 1975), pp. 96-112. *Lecture Notes in Math.*, Vol. 575, Springer, Berlin, 1977. (From the authors' introduction) 57 #7193 46L05 (46M20, 47A10)

Homotopy invariance of $\text{Ext}(\otimes)$. *Duke Math. J.* 44 (1977), no. 4, 777-794. (Jerome Kaminker) 58 #23645 46M20 (46L05)

(with Apostol, Constantin; Percy, Carl M.) Spectra of compact perturbations of operators. *Indiana Univ. Math. J.* 26 (1977), no. 2, 345-350. (P. A. Fillmore) 55 #3834 47A55

Salinas, S. R. (with Rauh, A.; Menezes, L. C.) Analytical wave functions for crystalline electrons in a magnetic field. *Phys. Rev. B* (3) 17 (1978), no. 2, 591-597. (Authors' summary) 56 #17580 81.35 (78.35)

Salinetti, Gabriella Programmazione lineare con più funzioni obiettivo. (English summary) *Calcolo* 9 (1972), 293-322 (1973). (F. Giannessi) 49 #10359 90C05

The generalized inverse in parametric programming. *Calcolo* 11 (1974), 351-363 (1975). (E. A. Nurminskii) 55 #12061 90C05 (15A09)

(with Wets, Roger J.-B.) On the relations between two types of convergence for convex functions. *J. Math. Anal. Appl.* 60 (1977), no. 1, 211-226. (J. J. Moreau) 57 #18828 90C25 (46G99)

Salingier, D. L. Ensembles d'analyticité dans les algèbres tensorielles. *Séminaire d'Analyse Harmonique (année 1968/1969), Exp. No. 7*, 8 pp. *Fac. Sci., Univ. Paris, Orsay*, 1969. (J. D. Stegeman) 54 #861 43A46

Large squares and sets of analyticity in tensor algebras. *Studia Math.* 36 (1970), 259-267. (Y. Katznelson) 46 #4232 43A20

Salii, Lucian (with Tătaru, Liviu) The Dashen's theorems in a classical approach. *An. Univ. Craiova Ser. A V-a No. 2*, 145-147 (1974). (Authors' summary) 58 #19936 81.22

Models for $SU(4) \otimes SU(4)$ breaking with extremum constraints. *An. Univ. Craiova Mat. Fiz.-Chim. No. 5* (1977), 27-32. (Author's summary) 58 #32513 81.22

Šaljuhin, Ju. N. The plane problem of elasticity theory for an elliptical plate. *Izv. Akad. Nauk SSSR Meh. Tverd. Tela* 1975, no. 6, 145-147 (Russian); translated as *Mechanics of Solids* 10 (1975), no. 6, 129-131. (Clarence M. Ablow) 54 #6627 73.35

(with Perlin, P. I.) On the numerical solution of the integral equations of plane elasticity theory. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1976, no. 1, 86-88, 94. 56 #14017 73.65

Salkauskas, K. Almost-interpolatory Čebyšev quadrature on $[-1, 1]$. *Proceedings of the Second Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1972), pp. 333-334. *Congressus Numerantium*, No. VII, Utilitas Math., Winnipeg, Man., 1973. (Sven-Åke Gustafson) 50 #6122 65D30

Almost-interpolatory Chebyshev quadrature. *Math. Comp.* 27 (1973), 645-654. (R. E. Barnhill) 49 #5658 41A55 (65D30)

On weight functions for Chebyshev quadrature. *Numer. Math.* 24 (1975), 13-18. (T. I. Seidman) 51 #14538 65D30

Salkin, G. R. (with Kornbluth, J. S. H.) A note on the economic interpretation of the dual variables in linear fractional programming. *Z. Angew. Math. Mech.* 52 (1972), 175-178. (M. Rössler) 46 #1350 90C30

(with Kornbluth, J. S. H.) The optimal dual solution in linear fractional decomposition problems. *Operations Res.* 22 (1974), no. 1, 183-189. (R. N. Kaul) 53 #12571 90C05

(with Flavell, R.) An approach to sensitivity analysis. *Operational Res. Quart.* 26 (1975), no. 4, part 2, 857-866. (J. A. Tomlin) 54 #6941 (E 55 #9937) 90C05

(with Kornbluth, J. S. H.) A note on returns to scale in linear fractional programming. *Z. Angew. Math. Mech.* 55 (1975), no. 12, 757-758. (Bruce D. Craven) 53 #2375 90C30

See also Anderson, Oliver D. 55 #9937

Salkin, Harvey M. (with Breining, Patrice) Integer points on the Gomory fractional cut (hyperplane). *Naval Res. Logist. Quart.* 18 (1971), 491-496. (R. W. Cottle) 46 #4934 90C10

(with Lemke, C. E.; Spielberg, Kurt) Set covering by single-branch enumeration with linear-programming subproblems. *Operations Res.* 19 (1971), 998-1022. (Ju. Finkel'shtein (RŽMat 1972 #2 V579)) 54 #6949 90C10

A note comparing Glover's and Young's simplified primal algorithms. *Naval Res. Logist. Quart.* 19 (1972), 399-402. 47 #3009 90C10

A brief survey of algorithms and recent results in integer programming. *Opsearch* 10 (1973), 81-123. (R. W. Cottle) 49 #10363 90C10

(with de Kluyver, Cornelis A.) The knapsack problem: a survey. *Naval Res. Logist. Quart.* 22 (1975), 127-144. (Csaba Fabian) 53 #7469 90C10

Sal'ko, D. S. On the theory of the existence of smooth implicit functions in locally convex spaces. (Russian) *Moskov. Oblast. Ped. Inst. Učen. Zap.* 269, 173-188 (1969). (G. Marinescu) 46 #6026 46G05

Sallantin, Jean Systèmes de propositions et informations. *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A986-A988. (D. E. Catlin) 46 #3386 06A30 (94-XX)

Informations pures sur un système de propositions. *C. R. Acad. Sci. Paris Sér. A-B* 275 (1972), A65-A68. (D. E. Catlin) 47 #6571 06A30 (94A15)

Informations et trajectoires sur un système de propositions. *Théories de l'information* (Colloq. Information et Questionnaires, Marseille-Luminy, 1973), pp. 76-89. *Lecture Notes in Math.*, Vol. 398, Springer, Berlin, 1974. (R. Piziak) 51 #5182 94A15

Sur la représentation de processus d'interrogation. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 4, A219-A222. (Author's summary) 56 #5060 94A15

(with Van der Pyl, Thierry) Entropies, dimensions et représentations d'observations.

- (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 6, A469-A472. (Authors' summary) **58** #26542 94A15
- Sallay, Melanie** Über eine lokale Variante des Priwalowschen Satzes. *Studia Sci. Math. Hungar.* **6** (1971), 427-429. (Yung-ming Chen) **45** #4043 42A40
(with Freud, Géza) Über ein Saturationsproblem. *Acta Math. Acad. Sci. Hungar.* **23** (1972), 419-423. (Karl Scherer) **47** #688 41A40 (42A56)
- Sallaz, Alain** Une extension d'un théorème de K. Hoffman et J. Wermer aux algèbres de champs continus d'opérateurs. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 17, A1049-A1051. (Author's summary) **55** #6203 46L99 (46J10)
- Sallé, H. J. A.** A maximum value for the rank of apparition of integers in recursive sequences. *Fibonacci Quart.* **13** (1975), 159-161. (E. Frank) **50** #12897 10A35
- Sallee, G. T.** Reuleaux polytopes. *Mathematika* **17** (1970), 315-323. (J. B. Wilker) **45** #5872 52A25
A non-continuous "Steiner point". *Israel J. Math.* **10** (1971), 1-5. (K.-A. Schmitt) **45** #5873 52A05
Minkowski decomposition of convex sets. *Israel J. Math.* **12** (1972), 266-276. (L. A. Santaló) **47** #2494 52A20
Stretching chords of space curves. *Geometriae Dedicata* **2** (1973), 311-315. (J. Verdina) **49** #1334 53A05
Circuits and paths through specified nodes. *J. Combinatorial Theory Ser. B* **15** (1973), 32-39. (M. E. Watkins) **48** #3802 05C35
On the indecomposability of the cone. *J. London Math. Soc.* (2) **9** (1974/75), 363-367. (G. Ewald) **51** #6583 52A20
A Helly-type theorem for widths. *The geometry of metric and linear spaces* (Proc. Conf., Michigan State Univ., East Lansing, Mich., 1974), pp. 227-232. *Lecture Notes in Math.*, Vol. 490, Springer, Berlin, 1975. (N. Poláková) **53** #6425 52A35
Tiling convex sets by translates. *Israel J. Math.* **24** (1976), no. 3-4, 368-376. (P. McMullen) **54** #5979 52A45
- Sallee, H. Bruce** (with Panton, Ronald L.) Spline function representations for computer solutions to fluid problems. *Internat. J. Comput. & Fluids* **3** (1975), 257-269. (B. I. Kvasov) **52** #2251 65N30 (65N35)
- Sallee, Tom** See **Problems: Geometry of metric and linear spaces**, **53** #6419
- Saller, H.** Quantized metric on locally flat space-time and spontaneous dilatation asymmetry. (Italian and Russian summaries) *Nuovo Cimento A* (11) **42** (1977), no. 2, 189-206. (M. Carmeli) **57** #2339 81J3
- Salles, Danièle** Une généralisation de la notion de module cofini. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1033-A1036. (H. H. Storrer) **45** #3462 16A64
Sur les modules qui sont extension essentielle de leur socle. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A417-A419. (H. H. Storrer) **46** #5396 16A64
Anneaux semi-artinien non commutatifs. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A1223-A1225. (H. H. Storrer) **46** #9113 16A52
Anneaux semi-artinien non commutatifs. *Séminaire P. Dubreil (26e année: 1972/73), Algèbre, Exp. No. 2, 6 pp.* Secrétariat Mathématique, Paris, 1973. (M. Djabali) **53** #3012 16A48
Anneaux semi-artinien non commutatifs. *Séminaire d'Algèbre Non Commutative (année 1973/1974), Deuxième partie, Exp. No. 13, 6 pp.* Publ. Math. Orsay, No. 107-7523, Univ. Paris, XI, Orsay, 1974. (Marie-Paule Malliavin) **52** #13931 16A46
Décomposition primaire sur un anneau semi-artinien non commutatif. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 129-131. (H. H. Storrer) **48** #11217 16A64
Anneaux de groupe semi-artinien, anneaux de groupe cohérents. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 16, A1073-A1076. (Author's summary) **55** #398 16A26
- Salles, Maurice** A note on Ken-ichi Inada's "Majority rule and rationality" (J. Econom. Theory **2** (1970), 27-40). *J. Econom. Theory* **8** (1974), no. 4, 539-540. (Editors) **58** #9118 90A05 (92A20)
A general possibility theorem for group decision rules with Pareto-transitivity. *J. Econom. Theory* **11** (1975), no. 1, 110-118. (Prasanta K. Pattanaik) **54** #4580 90A05
Characterization of transitive individual preferences for quasi-transitive collective preference under simple games. *Internat. Econom. Rev.* **17** (1976), no. 2, 308-318. (Prasanta K. Pattanaik) **54** #6898 90A05
(with Wendell, Richard E.) A further result on the core of voting games. *Internat. J. Game Theory* **6** (1977), no. 1, 35-40. (David Schmeidler) **56** #11045 90D35
- Sallet, Gauthier** Une condition suffisante de complète contrôlabilité dans le groupe des déplacements de \mathbb{R}^n . (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 1, A41-A44. (Author's summary) **58** #12645 49E30
- Sallinen, E. V.** Extremal problems on classes of quasiconformal homeomorphisms. (Russian) *Mat. Sb. (N.S.)* **105(147)** (1978), no. 1, 109-120, 144. (V. G. Šeretov) **58** #6230 30A60
- Salloum, R. M.** (with Naoum, Adil G.) On annihilators of ideals in commutative rings. (Arabic summary) *Bull. College Sci.* **15** (1974), 195-208. (William James Lewis) **51** #12817 13A15
(with Naoum, Adil G.) Annihilators of ideals in commutative Artinian rings. *J. Math. and Sci.* **1** (1974), 171-174. (M. B. Boisen, Jr.) **51** #3149 13E10
- Sally, Judith D.** A note on integral closure. *Proc. Amer. Math. Soc.* **36** (1972), 93-96. (Melvin Hochster) **47** #201 13B20
Regular overrings of regular local rings. *Trans. Amer. Math. Soc.* **171** (1972), 291-300. (Tadayuki Matsuoka) **46** #9033 (E **52** #3143) 13H05
On the number of generators of ideals of dimension zero. *Conference on Commutative Algebra* (Univ. Kansas, Lawrence, Kan., 1972), pp. 239-242. *Lecture Notes in Math.*, Vol. 311, Springer, Berlin, 1973. (J. L. Dawson) **49** #286 13H15
(with Vasconcelos, Wolmer V.) Stable rings and a problem of Bass. *Bull. Amer. Math. Soc.* **79** (1973), 574-576. (Joseph Lipman) **47** #205 13C05 (13H10)
(with Vasconcelos, Wolmer V.) Stable rings. *J. Pure Appl. Algebra* **4** (1974), 319-336. (L. J. Ratliff, Jr.) **53** #13185 13A15
A characterization of local rings of dimension at most two. *Conference on Commutative Algebra-1975* (Queen's Univ., Kingston, Ont., 1975), pp. 260-261. *Queen's Papers on Pure and Applied Math.*, No. 42, Queen's Univ., Kingston, Ont., 1975. (Hamet Seydi) **52** #13821 13H99
(with Vasconcelos, Wolmer V.) Flat ideals I. *Comm. Algebra* **3** (1975), 531-543. (J. Ohm) **52** #371 13C05
- Some results on multiplicity with applications to bounded and two dimensional prime bounded rings. *J. Algebra* **35** (1975), 224-234. (J. L. Dawson) **52** #389 13H15
On the number of generators of powers of an ideal. *Proc. Amer. Math. Soc.* **52** (1975), no. 1, 24-26. (M. Nagata) **52** #13782 13A15
Erratum to: "Regular overrings of regular local rings" (Trans. Amer. Math. Soc. **17** (1972), 291-300). *Trans. Amer. Math. Soc.* **213** (1975), 429. (Tadayuki Matsuoka) **52** #3143 (EA **53**) 13H05
(with Glaz, Sarah; Vasconcelos, Wolmer V.) Lüroth's problem for rings. *J. Algebra* **43** (1976), no. 2, 699-708. (J. Ohm) **55** #2942 14M20 (13B25)
Bounds for numbers of generators of Cohen-Macaulay ideals. *Pacific J. Math.* **6** (1976), no. 2, 517-520. (Johnny A. Johnson) **53** #13208 13H15
On the associated graded ring of a local Cohen-Macaulay ring. *J. Math. Kyoto Univ.* **17** (1977), no. 1, 19-21. (Hamet Seydi) **56** #8555 13H10
★Numbers of generators of ideals in local rings. *Marcel Dekker, Inc., New York-Basel*, 1978. ix + 93 pp. ISBN 0-8247-6645-8 (M. Nagata) **58** #5654 13H99
Boundedness in two dimensional local rings. *Amer. J. Math.* **100** (1978), no. 3, 579-584. (D. Kirby) **58** #5652 13H15 (13H99, 14B05)
- Sally, Paul J., Jr.** Invariant subspaces and Fourier-Bessel transforms on the \mathbb{P} -adic plane. *Math. Ann.* **174** (1967), 247-264. (Author's review Zbl **184**, 363) **58** #28317 22E50
(with Shalika, Joseph A.) The Plancherel formula for $SL(2)$ over a local field. *Proc. Nat. Acad. Sci. U.S.A.* **63** (1969), 661-667. (G. I. Ol'shanskii) **51** #813 22E50
Intertwining operators and the representations of $SL(2, \mathbb{R})$. *J. Functional Analysis* **6** (1970), 441-453. (R. D. Ogden) **45** #8775 22E45
(with Warner, Garth) The Fourier transform of invariant distributions. *Conference on Harmonic Analysis* (Univ. Maryland, College Park, Md., 1971), pp. 297-320. *Lecture Notes in Math.*, Vol. 266, Springer, Berlin, 1972. (G. A. Reid) **53** #702 22D10 (22E45)
(with Warner, Garth) Fourier inversion for semisimple Lie groups of real rank one. *Bull. Amer. Math. Soc.* **78** (1972), 251-254. (G. A. Reid) **45** #8781 43A30
Character formulas for SL_2 . *Harmonic analysis on homogeneous spaces* (Proc. Sympos. Pure Math., Vol. XXVI, Williams Coll., Williamstown, Mass., 1972), pp. 395-400. *Amer. Math. Soc., Providence, R.I.*, 1973. (Roger Howe) **49** #3047 22E50
(with Warner, Garth) The Fourier transform on semisimple Lie groups of real rank one. *Acta Math.* **131** (1973), 1-26. (G. L. Litvinov) **56** #8755 22E45 (22E30, 43A30)
(with Gelbart, Stephen S.) Intertwining operators and automorphic forms for the metaplectic group. *Proc. Nat. Acad. Sci. U.S.A.* **72** (1975), 1406-1410. (G. I. Ol'shanskii) **52** #3063 10D15 (22E50)
Harmonic analysis and group representations. *Studies in harmonic analysis* (Proc. Conf., DePaul Univ., Chicago, Ill., 1974), pp. 224-256. *MAA Stud. Math.*, Vol. 13, Math. Assoc. Amer., Washington, D.C., 1976. (Jonathan M. Rosenberg) **56** #12169 22D10 (22E30, 22E45)
(with Herb, Rebecca A.) Singular invariant eigendistributions as characters. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 252-254. (H. Kraljević) **58** #1024 22E45
- Salmanov, Ju. D.** A certain inequality for functions belonging to weight classes. (Russian) *Imbedding theorems and their applications* (Proc. Sympos., Baku, 1966) (Russian), pp. 234-240. Izdat. "Nauka", Moscow, 1970. (G. C. Barozzi) **47** #7415 46E35
A study of the minimum of a certain nonlinear functional, and its application to the first boundary value problem for a nonlinear differential equation. (Russian) *Studies of special questions in the theory of differential equations* (Russian), pp. 171-184. Izdat. "Elm", Baku, 1974. (V. Komkov) **57** #10541 49A20
- Salmanova, D. G.** (with Maksudov, F. G.) A mixed problem for a second order parabolic equation in an unbounded domain. (Russian) *Functional analysis and its application* (Russian), pp. 128-143. Izdat. "Elm", Baku, 1971. (I. Łojczyk-Królikiewicz) **51** #13458 35K20
- Salmen, Rainer** (with Kayser, Gerhard; Neumann, Peter) Kritische Werte für den X -Test von van der Waerden. (English and Russian summaries) *Math. Operationsforsch. Statist.* **3** (1972), no. 5, 389-400. (J. V. Deshpande) **49** #10040 62G10
- Salmin, S. P.** A certain method for the coding of words in a dictionary. (Russian) *Software of electronic digital computers* (Proc. Sem. Automation of Programming, Kiev, 1970/1971) (Russian), pp. 127-137. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1971. (R. N. Goss) **51** #14679 68A50 (94A10)
A certain algorithmic problem for classes of Chomsky languages. (Russian) *Gor'koe Gos. Univ. Učen. Zap. No. 166 Teorija Koblebanii, Prikl. Mat. i Kibernet.* (1973), 224-230. (E. Stockii) **52** #4731 68A30
A formalization of certain elements of the information base of automatic control systems. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 3, 27-32. (B. L. Ovsievich) **55** #2257 93C99
- Salmistraro, F.** (with Calvani, M.; de Felice, Fernando; Muchotrzeb, B.) Time machine and geodesic motion in Kerr metric. *General Relativity and Gravitation* **9** (1978), no. 2, 155-163. (Edward N. Glass) **58** #9053 83J3
(with Catenacci, Roberto) Classical geometrodynamics revisited. (Italian summary) *Nuovo Cimento B* (11) **46** (1978), no. 1, 167-178. (L. K. Patel) **58** #14906 83J3
- Salmon, Lydia S.** (with Birss, Fraser W.; Ruedenberg, Klaus) New aspects of the bipolar expansion and molecular multicenter integrals. *J. Chem. Phys.* **49** (1968), 4293-4300. (C. J. Eliezer) **49** #1964 81J33
- Salmon, M.** See **Lyttkens, Ejnar**, **56** #4104
- Salmon, Merrill E.** Consistency proofs for applied mathematics. Hans Reichenbach, logical empiricist. Part III. *Synthese* **34** (1977), no. 3, 301-312. (S. Bhargava) **58** #16251 02G99 (00A25, 69.00)
- Salmon, Paolo** Applicazioni della teoria K all'algebra commutativa. *Univ. Genova Pubbl. Ist. Mat.* (2) No. 1 (1971), ii + 35 pp. (Editors) **52** #13813 13F15 (13D15)
Metodi omologici in algebra commutativa. *Univ. Genova Pubbl. Ist. Mat.* (2) No. 2 (1971), i + 14 pp. (Editors) **52** #13802 13D05 (13D15)
Sulle algebre graduate relative ad un ideale. *Symposia Mathematica, Vol. VIII* (Convegno sulle Algebre Associative, INDAM, Rome, 1970), pp. 269-293. *Academic Press, London*, 1972. (D. Kirby) **48** #11092 13C10
Applicazioni della K -teoria all'algebra commutativa. *Categories and commutative algebra* (C.I.M.E., III Ciclo, Varenna, 1971), pp. 211-247. *Edizioni Cremonese, Rome*,

1973. (Editors) 50 #7121 13F15 (13D15)
Metodi omologici in algebra commutativa. *Boll. Un. Mat. Ital.* (4) 7 (1973), suppl. no. 1, 10-17. (J.-P. Lafon) 49 #278 13D05 (13D15)
See also **Categories and commutative algebra**, 50 #2287
- almon, Wesley C.** The philosophy of Hans Reichenbach. Hans Reichenbach, logical empiricist, Part I. *Synthese* 34 (1977), no. 1, 5-88. (Mario Bunge) 56 #8318 02A05 (01A65)
Laws, modalities and counterfactuals. Hans Reichenbach, logical empiricist. Part V. *Synthese* 35 (1977), no. 2, 191-229. (I. Ruzza) 57 #15972 02C10 (02A05)
See also **Historical and philosophical perspectives of science**, 50 #6717; **Hans Reichenbach, logical empiricist**, 55 #12442a; **Hans Reichenbach, logical empiricist**, 55 #12442b; **Hans Reichenbach, logical empiricist**, 55 #12442c; **Hans Reichenbach, logical empiricist**, 55 #12442d; **Hans Reichenbach, logical empiricist**, 55 #12442e; **Reichenbach, Hans**, 56 #5181 and **Reichenbach, Hans**, 57 #9466
- al'nikov, G. M.** See **Studies in the theory of plates and shells**, 48 #3343
- alo, Seppo** Minimum loss of maximum power in xenon shutdown. *Ann. Acad. Sci. Fenn. Ser. A VI* No. 375 (1971), 24 pp. (Author's summary) 55 #14324 93C15
- alogub, V. A.** (with Fušič, V. I.; Nikitin, A. G.) On the equations of motion for particles with arbitrary spin in nonrelativistic mechanics. *Lett. Nuovo Cimento* (2) 14 (1975), no. 13, 483-488. 56 #2024 81.35
(with Nikitin, A. G.) Transformation of the Hagen-Hurley equations to a form that does not contain "unnecessary" components. (Russian) *Ukrain. Fiz. Ž.* 20 (1975), no. 10, 1730-1732, 1756. (V. Komkov) 56 #10546 81.35
Generalization of the Feynman-Gell-Mann-Zaicev equation to the case of arbitrary spin. (Russian. English summary) *Boundary value problems of the electrodynamics of conducting media* (Russian), pp. 232-239. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1976. (M. Martinis) 56 #7578 81.35
Hamiltonian form of Hagen-Hurley equations. (Russian. English summary) *Ukrain. Fiz. Ž.* 21 (1976), no. 5, 846-849, 876. (Author's summary) 57 #2283 81.35
- aloma, Arto** Introduction to formal languages and automata theory with special reference to probabilistic and time-variant automata. *Proceedings of the First Scandinavian Logic Symposium* (Åbo, 1968), pp. 115-133. *Filosofiska Studier*, No. 8, *Filosof. Föreningen och Filosof. Inst., Uppsala Univ., Uppsala*, 1970. (K. S. Fu) 50 #11870 68A30 (68A25)
On a homomorphic characterization of recursively enumerable languages. *Ann. Acad. Sci. Fenn. Ser. A I* No. 525 (1972), 10 pp. (Ronald V. Book) 50 #6223 68A30
Matrix grammars with a leftmost restriction. *Information and Control* 20 (1972), 143-149. (J.-F. Perrot) 49 #1837 68A30
★Formal languages. ACM Monograph Series. *Academic Press [Harcourt Brace Jovanovich, Publishers]*, New York-London, 1973. xiii + 322 pp. (Tadao Takaoka) 55 #11661 68-01
On some recent problems concerning developmental languages. *Erste Fachtagung der Gesellschaft für Informatik über Automatentheorie und Formale Sprachen* (Bonn, 1973), pp. 23-34. *Lecture Notes in Computer Science*, Vol. 2, *Springer, Berlin*, 1973. (Jürgen Dassow) 55 #6981 68A30
L-systems: a device in biologically motivated automata theory. *Mathematical foundations of computer science* (Proc. Sympos. and Summer School, Štrbské Pleso, 1973), pp. 147-151. *Math. Inst., Slovak Acad. Sci., Bratislava*, 1973. (Roland Vollmar) 53 #7151 68A30
On sentential forms of context-free grammars. *Acta Inform.* 2 (1973), no. 1, 40-49. (P. Deussen) 48 #3311 68A30
(with Nielsen, Mogens; Rozenberg, Grzegorz; Skyum, Sven) Nonterminals, homomorphisms and codings in different variations of OL-systems. II. Nondeterministic systems. *Acta Inform.* 3 (1973/74), 357-364. (S. Ginsburg) 50 #11867b 68A30
(with Paz, Azaria) Integral sequential word functions and growth equivalence of Lindenmayer systems. *Information and Control* 23 (1973), 313-343. (S. A. Greibach) 48 #3309 68A30
On exponential growth in Lindenmayer systems. *Nederl. Akad. Wetensch. Proc. Ser. A* 76 = *Indag. Math.* 35 (1973), 23-30. (A. Paz) 47 #6134 68A25 (92A05)
Parallelism in rewriting systems. *Automata, languages and programming* (Second Colloq., Univ. Saarbrücken, Saarbrücken, 1974), pp. 523-533. *Lecture Notes in Comput. Sci.*, Vol. 14, *Springer, Berlin*, 1974. (K. P. Lee) 55 #6982 68A30
Iteration grammars and Lindenmayer AFL's. *L systems* (Third Open House, Comput. Sci. Dept., Aarhus Univ., Aarhus, 1974), pp. 250-253, 327-338. *Lecture Notes in Computer Science*, Vol. 15, *Springer, Berlin*, 1974. (Jan van Leeuwen) 54 #1730 68A30
(with Nielsen, Mogens; Rozenberg, Grzegorz; Skyum, Sven) Nonterminals, homomorphisms and codings in different variations of OL-systems. I. Deterministic systems. *Acta Inform.* 4 (1974/75), 87-106. (S. Ginsburg) 50 #11867a 68A30
Solution of a decision problem concerning unary Lindenmayer systems. *Discrete Math.* 9 (1974), 71-77. (Branislav Rován) 49 #8435 68A30
Formal power series and growth functions of Lindenmayer systems. *Mathematical foundations of computer science* 1975 (Fourth Sympos., Mariánské Lázně, 1975), pp. 101-113. *Lecture Notes in Comput. Sci.*, Vol. 32, *Springer, Berlin*, 1975. (Mogens Nielsen) 53 #2051 68A30
Comparative decision problems between sequential and parallel rewriting. *Proceedings of the International Symposium on Uniformly Structured Automata and Logic* (Internat. Inst. Advanced Study Soc. Inform. Sci., Tokyo, 1975), pp. 62-66. *IEEE Computer Soc., New York*, 1975. (K. P. Lee) 58 #8541 68A30
On some decidability problems concerning developmental languages. *Proceedings of the Third Scandinavian Logic Symposium* (Univ. Uppsala, Uppsala, 1973), pp. 144-153. *Stud. Logic Found. Math.*, Vol. 82, *North-Holland, Amsterdam*, 1975. (Derick Wood) 52 #7218 68A30
(with Rozenberg, Grzegorz; Ruohonen, Keijo) Developmental systems with fragmentation. *Internat. J. Comput. Math.* 5 (1975/76), no. 3, 177-191. (Jürgen Dassow) 55 #11731 68A30
(with Rozenberg, Grzegorz) The mathematical theory of L systems. *Advances in information systems science*, Vol. 6, pp. 161-206. *Plenum Press, New York*, 1976. (Jan van Leeuwen) 57 #11196 68A30
Growth functions of Lindenmayer systems: some new approaches. *Automata, languages, development*, pp. 271-282. *North-Holland, Amsterdam*, 1976. (Derick Wood) 58 #19365 68A25
Sequential and parallel rewriting. *Formal languages and programming* (Proc. Sem., UAM-IBM Sci. Center, Univ. Autónoma Madrid, Madrid, 1975), pp. 111-129. *North-Holland, Amsterdam*, 1976. (Sven Skyum) 56 #7354 68A30
L systems: a parallel way of looking at formal languages. New ideas and recent developments. *Foundations of computer science, II* (Lectures, 2nd Advanced Course, Univ. Amsterdam, Amsterdam, 1976), Part 2, pp. 65-107. *Math. Centre Tracts*, No. 82, *Math. Centrum, Amsterdam*, 1976. (K. P. Lee) 58 #8540 68A30
Undecidable problems concerning growth in informationless Lindenmayer systems. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 12 (1976), no. 7, 331-335. (A. Paz) 54 #4203 68A30 (94A35, 02G05)
(with Rozenberg, Grzegorz) Context-free grammars with graph-controlled tables. *J. Comput. System Sci.* 13 (1976), no. 1, 90-99. (Matti Penttonen) 55 #6980 68A30
(with Maurer, Hermann A.; Wood, Derick) EOL forms. *Acta Inform.* 8 (1977), no. 1, 75-96. (Stephen Itoga) 56 #4255 68A30 (02F10)
(with Maurer, Hermann A.; Ottmann, Thomas) On the form equivalence of L-forms. *Theoret. Comput. Sci.* 4 (1977), no. 2, 199-225. (P. Ochsenšläger) 57 #4655 68A30
(with Rozenberg, Grzegorz; Penttonen, Matti) Bibliography of L systems. *Theoret. Comput. Sci.* 5 (1977/78), no. 3, 339-354. (Editors) 58 #19391 68A30 (00A15, 92-XX)
(with Soittola, Matti) ★Automata-theoretic aspects of formal power series. *Texts and Monographs in Computer Science. Springer-Verlag, New York-Heidelberg*, 1978. x + 171 pp. ISBN 0-387-90282-1 (P. W. Baker) 58 #3698 68A25
(with Maurer, Hermann A.; Wood, Derick) Uniform interpretations of L forms. *Information and Control* 36 (1978), no. 2, 157-173. (Gheorghe Păun) 57 #8187 68A30
(with Maurer, Hermann A.; Wood, Derick) ETOL forms. *J. Comput. System Sci.* 16 (1978), no. 3, 345-361. (K. P. Lee) 58 #3735 68A30
(with Maurer, Hermann A.; Wood, Derick) On good EOL forms. *SIAM J. Comput.* 7 (1978), no. 2, 158-166. (Juhani Karhumäki) 57 #18258 68A30
(with Culik, Karel, II; Maurer, Hermann A.; Ottmann, Thomas; Ruohonen, Keijo) Isomorphism, form equivalence and sequence equivalence of PDOL forms. *Theoret. Comput. Sci.* 6 (1978), no. 2, 143-173. (K. P. Lee) 57 #11186 68A30
See also **L systems**, 53 #1996 and **Automata, languages and programming**, 56 #4210
- Salomatin, O. I.** The problem of diffraction by a half-space in the presence of a soft boundary condition. (Russian. English summary) *Linear boundary value problems of mathematical physics* (Russian), pp. 165-173. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (S. Kaliski) 50 #13895 35L05
A problem of diffraction by a slit. (Russian) *Mathematics collection* (Russian), pp. 277-281. *Izdat. "Naukova Dumka"*, Kiev, 1976. (V. M. Babič) 57 #18498 78.35
- Salomon, Kenneth B.** An efficient algorithm which determines the output from a sequential machine for regular inputs. *Comput. J.* 17 (1974), 349-354. (I. Meznik) 51 #15239 94A25 (68A25)
The decidability of a mapping problem for generalized sequential machines with final states. *J. Comput. System Sci.* 10 (1975), 200-218. (S. Ginsburg) 52 #2292 68A30
String and graph grammar characterizations of bounded regular languages. *Internat. J. Comput. Information Sci.* 7 (1978), no. 1, 1-10. (Václav Rajlich) 57 #8197 68A30
- Salomon, Y.** (with Bruckheimer, M.) Some comments on R. J. Gillings' analysis of the 2/n table in the Rhind Papyrus. *Historia Math.* 4 (1977), no. 4, 445-452. (L. Guggenbuhl) 58 #26694a 01A15
- Salomonsen, Hans Anton** On the homotopy groups of Thom-complexes and unstable bordism. *Proceedings of the Advanced Study Institute on Algebraic Topology* (1970), Vol. III, pp. 476-494. *Various Publ. Ser.*, No. 13, *Mat. Inst., Aarhus Univ., Aarhus*, 1970. (A. Ljulevicius) 50 #8572 57D90 (55E10)
Bordism and geometric dimension. *Math. Scand.* 32 (1973), 87-111. (R. De Sapio) 48 #3068 57D90
- Salonen, E.-M.** An iterative penalty function method in structural analysis. *Internat. J. Numer. Methods Engrg.* 10 (1976), no. 2, 413-421. (Author's summary) 56 #14019 73.65
- Saloni, Zygmunt** Gentzen rules for the m-valued logic. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 20 (1972), 819-826. (J. Corcoran) 47 #13 02C05
- The sequent Gentzen system for m-valued logic. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 2 (1973), no. 1, 30-37. (János Demetrovics) 53 #5256 02C05 (02D99)
- A topological representation of Post algebras and free Post algebras. *Colloq. Math.* 31 (1974), 1-9. (Ph. Dwinger) 52 #2997 06A35
Two examples of chain-based lattices. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 2, 89-90. (R. Beazer) 53 #2789 06A35
- Salop, S. C.** Wage differentials in a dynamic theory of the firm. *J. Econom. Theory* 6 (1973), no. 4, 321-344. (Author's summary) 56 #10842 90A15
- Salov, G. I.** A method of stochastic approximation for the integral equations of detection, filtering and prediction of random processes. (Russian. English summary insert) *Kibernetika* (Kiev) 1973, no. 2, 127-132. (A. I. Ponomarenko) 50 #3506 62M20 (93E10)
On a stochastic approximation method for integral equations in the theory of random processes. (Russian. English summary insert) *Kibernetika* (Kiev) 1974, no. 2, 141-143. (A. T. Bharucha-Reid) 53 #6743 60H99 (45B05)
- Šalov, V. M.** Equations of continuum mechanics. (Russian) *Differencial'nye Uravneniya* 9 (1973), 912-921, 978. (S.-F. Sburian) 47 #9924 73.35
A variational principle in game theory and in optimal control problems. (Russian) *Theory of functions and its applications* (collection of articles dedicated to Sergei Mihalovič Nikol'skii on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov* 134 (1975), 370-388, 412. (Editors) 58 #2549 49B40 (90D25)

- See also Bežanov, K. A., 56 #2754
- Salovaara, Sampo** Parametrisation of relations in the system theory. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966), Vol. 1, p. 70, Paper 36E, 5 pp. Inst. Mech. Engrs., London, 1967.* (Edward J. Davison) 52 #12888 93B99
- See also Proceedings: International Congress of the International Federation of Automatic Control (IFAC), 51 #12360a
- Salow, Edzard** Singuläre Hjelmlev-Gruppen. *Geometriae Dedicata* 1 (1973), no. 4, 447-467. (A. Cronheim) 49 #7343 20B25
- Einbettung von Hjelmlev-Gruppen in orthogonale Gruppen über kommutativen Ringen. *Math. Z.* 134 (1973), 143-170. (R. Lingenberg) 51 #6560 50B35 (20H15)
- Fixpunktmengen von Drehungen in Hjelmlev-Gruppen. *Abh. Math. Sem. Univ. Hamburg* 41 (1974), 37-63. (A. Cronheim) 50 #8255 50A15
- Ketten homogener Fleck-Überdeckungen von Prä-Hjelmlev-Gruppen. *Abh. Math. Sem. Univ. Hamburg* 41 (1974), 64-71. (A. Cronheim) 50 #8256 50A15
- Die zweite Kommutatorgruppe endlicher Hjelmlev-Gruppen. *Arch. Math. (Basel)* 25 (1974), 35-38. (A. Cronheim) 51 #725 20F35
- Recent results on pre-Hjelmlev groups. *Foundations of geometry (Proc. Conf., Univ. Toronto, Toronto, Ont., 1974), pp. 206-214. Univ. Toronto Press, Toronto, Ont., 1976.* (G. Zappa) 54 #3566 50A15
- Endliche Prä-Hjelmlev-Gruppen. *Math. Z.* 159 (1978), no. 3, 215-233. (Manfred Dugas) 58 #12680 50B35
- Salpekar, V. Y.** (with Sathe, Y. S.) Inequalities for the normal probability integral. *J. Indian Statist. Assoc.* 9 (1971), 38-44. (S. Panchapakesan) 55 #1565 62E15
- Salpeter, Edwin E.** (with Bethe, Hans A.) ★Quantum mechanics of one- and two-electron atoms. Reprint of the 1957 original. A Plenum/Rosetta Edition. *Plenum Publishing Corp., New York, 1977. xii + 370 pp. (Editors)* 55 #13968 81.00
- Salsa, Sandro** Un problema di Cauchy per un operatore parabolico con coefficienti costanti a tratti. (English summary) *Matematiche (Catania)* 31 (1976), no. 1, 126-146 (1977). (V.-V. Olariu) 58 #17516 35K15
- Equazioni integrali di Wiener-Hopf in spazi di Besov e applicazioni. (English summary) *Boll. Un. Mat. Ital. B* (5) 14 (1977), no. 3, 745-760. (Manfred Kremer) 57 #10400 45N05 (47G05)
- Salsburg, David S.** See Perspectives in biometrics, 58 #31689
- Salsburg, Zevi W.** (with Langeberg, John C.; McLellan, Rex B.) The effect of monovacancies on the elastic properties of rigid disk solids. *J. Computational Phys.* 7 (1971), 445-464. (Z. Derzko) 46 #6767 82.06
- See also Lectures: Statistical physics, 48 #5565
- Salse, B.** See Bouroche, Jean-Marie, 55 #7298
- Saltanov, M. V.** (with Tkalič, V. S.) Certain integrals of electromagnetic hydrodynamics. (Russian) *Mathematical physics, No. 9 (Russian), pp. 95-100. Naukova Dumka, Kiev, 1971.* (L. Dragoš) 46 #1193 76.35
- (with Tkalič, E. F.; Tkalič, V. S.) On a Lorentz-invariant model of multi-component magnetohydrodynamics. (Russian) *Analytic and qualitative methods of the theory of differential equations (Russian), pp. 247-257. Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1972.* (Yu. S. Sayasov) 51 #2451 76.35
- An asymptotic model of a canonical system. (Russian) *Asymptotic methods in systems theory, No. 6 (Russian), pp. 135-137. Irkutsk. Gos. Univ., Irkutsk, 1974.* (From the introduction) 58 #33231 93A99
- (with Tkalič, V. S.) Canonical programming in differential game theory. (Russian) *Asymptotic methods in systems theory, No. 7 (Russian), pp. 162-167. Irkutsk. Gos. Univ., Irkutsk, 1974.* (Editors) 57 #15520 90D25 (90C50)
- (with Gorban', V. A.) Riemann waves in a nonadiabatic medium. (Ukrainian. English and Russian summaries) *Dopovidni Akad. Nauk Ukrain. RSR Ser. A* 1974, 877-880, 956. (Authors' summary) 50 #9149 76.35
- (with Gorban', V. A.) Nonlinear spatial oscillations of a flexible string in a transverse flow. (Russian) *Gidromeh. (Kiev) Vyp.* 29 (1974), 80-85, 103. (V. Komkov) 56 #10301 73.41
- A generalization of the variational principle of hydrodynamics in Eulerian representation. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1976, no. 11, 1008-1011, 1053. (Author's summary) 56 #10403 76.49
- A variational principle for spatial gasdynamical flows with energy and mass intake in the Eulerian formulation. (Russian) *Gidromeh. (Kiev) Vyp.* 34 (1976), 9-14, 114. (V. Komkov) 56 #10404 76.49
- A variational principle for three-dimensional flows of a charged gas with a mass, pulse and energy sources. (Russian) *Mat. Fiz. Vyp.* 23 (1978), 84-87, 115. (Author's summary) 58 #19780 76.49
- See also Questions in applied mathematics, 48 #5448 and Asymptotic methods in systems theory, 57 #4790
- Šaltenis, Vydūnas** (with Varnaitė, Alina) A method for decreasing the dimension in the solution of multiextremal problems. (Russian. Lithuanian and English summaries) *Teor. Optimal. Rešenii—Trudy Sem. Processy Optimal. Upravlenija VI Sekcija Vyp.* 1 (1975), 23-42. (J. Mockus) 56 #7193 65K05
- (with Varnaitė, Alina) Questions on the structure of multiextremal optimization problems. (Russian. Lithuanian and English summaries) *Teor. Optimal. Rešenii—Trudy Sem. Processy Optimal. Upravlenija VI Sekcija Vyp.* 2 (1976), 67-78. (J. Mockus) 56 #7192 65K05
- (with Radvilavičiūtė, Janina) Picking out the essential variables in optimization problems. (Russian. Lithuanian and English summaries) *Teor. Optimal. Rešenii—Trudy Sem. Processy Optimal. Upravlenija VI Sekcija Vyp.* 3 (1977), 57-71, 74. (Authors' summary) 58 #9724 93E20
- Salter, K.** See Kanal, Laveen N.; et al., 54 #11874
- Saltiel, Léon** Les méthodes asymptotiques en acoustique sous-marine. (English summary) *Rev. CETHEDC No. 42* (1975), 3-59. (R. R. Long) 52 #7305 76.41 (76.35)
- Modèles asymptotiques uniformes et non uniformes de la propagation acoustique au voisinage d'une caustique régulière ou cuspidée. (English summary) *Rev. CETHEDC no. 48* (1976), 35-74. (E. G. Broadbent) 57 #14889 76.41
- Šalt'janis, Vidūnas** See Šaltenis, Vydūnas
- Saltman, David J.** (with Knus, Max-Albert; Ojanguren, Manuel) On Brauer groups in characteristic p . *Brauer groups (Proc. Conf., Northwestern Univ., Evanston, Ill., 1975), pp.*
- 25-49. *Lecture Notes in Math., Vol. 549, Springer, Berlin, 1976.* (F. DeMeyer) 55 #2513A20
- Splittings of cyclic p -algebras. *Proc. Amer. Math. Soc.* 62 (1977), no. 2, 223-228. (Gerald S. Garfinkel) 55 #8006 12A80
- (with Amitur, S. A.) Generic Abelian crossed products and p -algebras. *J. Algebra* 51 (1978), no. 1, 76-87. (G. Krause) 58 #10988 16A18
- Noncrossed product p -algebras and Galois p -extensions. *J. Algebra* 52 (1978), no. 302-314. (M. E. Keating) 58 #796 16A74 (12A80, 12G05)
- Noncrossed products of small exponent. *Proc. Amer. Math. Soc.* 68 (1978), no. 165-168. (Louis Rowen) 57 #16348 16A40
- Salton, Gerard** ★A theory of indexing. Regional Conference Series in Applied Mathematics, No. 18. *Society for Industrial and Applied Mathematics, Philadelphia, 1975. v + 56 pp.* (K. H. V. Booth) 56 #13842 68A50
- (with Yu, Clement T.) Precision weighting—an effective automatic indexing method. *J. Assoc. Comput. Mach.* 23 (1976), no. 1, 76-88. (Lee J. White) 56 #17257 68A50
- (with Yu, Clement T.) Effective information retrieval using term accuracy. *Comm. ACM* 20 (1977), no. 3, 135-142. (Fujio Nishida) 55 #7012 68A50
- (with Yu, Clement T.; Siu, Man Keung) Effective automatic indexing using term addition and deletion. *J. Assoc. Comput. Mach.* 25 (1978), no. 2, 210-225. (K. H. Booth) 57 #8227 68A50
- See also Cybernetics collection, 52 #16085 and Cybernetics collection, 52 #16086
- Saltykov, E. G.** On the justification of short-wave approximations in the problem of the diffraction of waves by a plane screen. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 145-156, 268. (S. Kaliski) 48 #13012 78.35
- Salter, Walter G.** ★Theorien und Ansätze in der griechischen Astronomie. Im Kontext benachbarter Wissenschaften betrachtet. Collection des Travaux de l'Académie Internationale d'Histoire des Sciences, No. 23. *Franz Steiner Verlag GMBH, Wiesbaden, 1976. viii + 162 pp. ISBN 3-515-02508-1* (G. J. Toomer) 58 #26710 01A20
- Saluäär, T.** (with Tümpu, H.; Lõhmus, K.) The almost everywhere strong summability function series. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised* No. 342 (1974), 193-213. (F. Móricz) 51 #8730 42A60
- Saluja, Kewal K.** (with Reddy, Sudhakar M.) Easily testable two-dimensional cellular logic arrays. *IEEE Trans. Computers C-23* (1974), 1204-1207. (Authors' summary) 57 #15767 94A20
- (with Reddy, Sudhakar M.) On minimally testable logic networks. *IEEE Trans. Computers C-23* (1974), no. 5, 552-554. (Authors' summary) 55 #12337 94A20
- (with Reddy, Sudhakar M.) Fault detecting test sets for Reed-Muller canonical networks. *IEEE Trans. Computers C-24* (1975), no. 10, 995-998. (Jürgen Dassow) 53 #2541 94A20
- Salujaär, T.** See Saluäär, T.
- Saluk, M. I.** Normalizer condition in finite groups. (Russian) *Dokl. Akad. Nauk BSSR* (1973), 981-983, 1065. (N. Ito) 49 #10778 20D25
- Tests for the solvability of finite groups. (Russian) *Finite groups (Proc. Gomel Sem. 1973/1974) (Russian), pp. 143-150, 230-231. Izdat. "Nauka i Tehnika", Minsk, 1974.* (Ja. G. Berkovič) 53 #13388 20D10
- Salukvadze, Mindia E.** On optimization of control systems according to vector-value performance criteria. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Paper 4: Education, feedback, regulators, linear and non-linear systems, Identification, differential games, discrete and stochastic systems, Paper No. 40.5, 7 pp. Internat. Fed. Automat. Control, Düsseldorf, 1971 [1972].* (Werner Krabs) 51 #15085 93C15
- Linear programming problem with a vector-valued performance criterion. *Avtomat. i Telemekh.* 1972, no. 5, 99-105. (Russian. English summary); translated as *Automatic Remote Control* 33 (1972), no. 5, part 1, 794-799. (F. Giannessi) 51 #14974 90C15
- On the existence of solutions in problems of optimization under vector-value criteria. *J. Optimization Theory Appl.* 13 (1974), 203-217. (Author's summary) 54 #13675 49B10
- Salusti, Ettore** (with de Mottoni, Piero) On a differential equation approach to quantum field theory: Causality property for the solutions of Thirring's model. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* 15 (1971), 351-360. (P. Federbush) 45 #6319 81.46
- (with de Mottoni, Piero) Einstein's causality as a consequence of equal-time commutation relations in some soluble models. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* 18 (1973), 241-250. (Authors' summary) 48 #3410 81.47
- (with de Mottoni, Piero) On a nonlinear evolution equation describing the unidimensional motion of a viscous fluid. (Italian and Russian summaries) *Nuovo Cimento B* (11) 16 (1973), 127-138. (Clarence M. Ablow) 50 #6302 76.35
- (with Bardos, Claude) On the pressure in the sea: a simple model. (Italian and Russian summaries) *Nuovo Cimento B* (11) 17 (1973), 320-331. (Jerome Eisenfeld) 49 #6768 76.35
- (with Malvestuto, Vincenzo; Zirilli, Francesco) On a semigroup approach to oceanography: the treatment of the linearized equations for non viscous sea. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 56 (1974), 237-247. (Authors' summary) 54 #9600 86.35
- (with Pulvirenti, Mario; Tirozzi, Brunello) On Eckart's approach to the hydrodynamic evolution of oceans and atmosphere. (Italian summary) *Nuovo Cimento B* (11) 25 (1975), 295-307. (Radu Bădescu) 51 #4841 76.35
- Salut, Gérard** Identifiabilité d'un système dynamique linéaire invariant. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 181-184. (M. Aoki) 48 #13351 93B30
- (with Aguilar-Martin, Joseph) On adaptive estimation of nonstationary linear discrete models. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 1, pp. 235-239. Hemisphere Publishing Corp., Washington, D.C., 1977.* (Yaakov Yavin) 58 #33406 93E10
- (with Hassan, Mohammed F.; Singh, Madan G.; Titli, André) A decentralized computational algorithm for the global Kalman filter. *IEEE Trans. Automatic Control AC-23* (1978), no. 2, 262-268. (Authors' summary) 58 #15566 93E10 (93A15, 93E25)
- Salvador, Michael S.** A solution to a special class of flow shop scheduling problems. *Symposium on the Theory of Scheduling and its Applications (North Carolina State Univ., Raleigh, N. C., 1972), pp. 83-91. Lecture Notes in Econom. and Math. Systems, Vol. 8*

- Springer, Berlin, 1973. (Nimrod Megiddo) **53** #2346 90B35
- Salvadori, Luigi Sulla stabilità del movimento. *Matematiche (Catania)* **24** (1969), 218-239. (Editors) **54** #663 34D20
- (with Gambardella, Lucia) On the asymptotic stability of sets. *Ricerche Mat.* **20** (1971), 143-154. (N. Onuchic) **48** #6569 34D05
- Sul problema della stabilità asintotica. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **53** (1972), 35-38 (1973). (P. Hagedorn) **48** #9011 34D20
- Some contributions to asymptotic stability theory. (French summary) *Ann. Soc. Sci. Bruxelles Sér. I* **88** (1974), 183-194. (J. Kato) **50** #5112 34D20
- (with Marchetti, Federico; Negrini, Piero; Scalia, M.) Liapunov direct method in approaching bifurcation problems. *Ann. Mat. Pura Appl.* (4) **108** (1976), 211-226. (Marshall Slemrod) **56** #3421 34D20 (58F10)
- (with Lakshmikantham, V.) On Massera type converse theorem in terms of two different measures. (Italian summary) *Boll. Un. Mat. Ital. A* (5) **13** (1976), no. 2, 293-301. (T. Yoshizawa) **55** #13016 34D20
- (with Schiaffino, Andrea) On the problem of total stability. *Nonlinear Anal.* **1** (1976/77), no. 3, 207-213. (Wolfgang Hahn) **58** #22856 34D20
- (with Visentin, F.) Su un concetto di stabilità totale assoluta. *Ricerche Mat.* **25** (1976), no. 2, 201-210. (U. D'Ambrosio) **57** #6659 34C35 (54H20)
- See also Stability problems, **52** #14495
- Salvemini, T. Su alcuni tipi di momenti delle variabili k -dimensionali. (English summary) *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompili*, pp. 379-393. Edizioni Oderisi, Gubbio, 1971. (Author's summary) **50** #6052 62H10
- Salvi, Rodolfo Sui moti periodici dei fluidi di Bingham. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **108** (1974), 778-788 (1975). (P. C. Fife) **52** #1065 35Q99
- Su una generalizzazione degli operatori decomponibili. I. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 2, 236-242. (Author's summary) **57** #10488 47B40
- Su una generalizzazione degli operatori decomponibili. II. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **110** (1976), no. 1, 19-23. (Zbl 323 #47022) **58** #23738 47B40
- Restrizione e quoziente di operatori quasi-decomponibili in spazi di Banach. *Istit. Lombardo Accad. Sci. Lett. Rend. A* **111** (1977), no. 1, 12-17 (1978). (Tetz Yoshimura) **58** #17943 47B40
- Salvini, M. (with Bonsignori, F.) A physico-mathematical analysis of elliptical nerve and muscle fibres. (Italian summary) *Nuovo Cimento B* (11) **41** (1977), no. 2, 375-386. (Authors' summary) **56** #14809 92A05
- Salvioli, Sarah E. On the theory of geometric objects. *J. Differential Geometry* **7** (1972), 257-278. (H. Osborn) **47** #9455 53A55
- Salvitti, Reinaldo Solutions d'un système non linéaire abstrait de Goursat et dépendance des données initiales. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 19, A1155-A1158. (Jacques Robert) **53** #8693 35R20 (47H15)
- Salvi Zagaglia, Norma Grafi autocomplementari e grafi auto-opposti. *Istit. Lombardo Accad. Sci. Lett. Rend. A* **111** (1977), no. 1, 163-172 (1978). (R. C. Read) **58** #21775 05C20
- Di Salvo, E. See Di Salvo, E.
- Salwach, Chester J. (with Assmus, Edward F., Jr.; Mezzaroba, Joseph A.) Planes and biplanes. *Higher combinatorics (Proc. NATO Advanced Study Inst., Berlin, 1976)*, pp. 205-212. NATO Adv. Study Inst. Ser., Ser. C: Math. and Phys. Sci., 31. Reidel, Dordrecht, 1977. (Henry Beker) **58** #27548 05B05 (94A10)
- (with Mezzaroba, Joseph A.) The four biplanes with $k=9$. *J. Combinatorial Theory Ser. A* **24** (1978), no. 2, 141-145. (Peter J. Cameron) **58** #10497 05B05
- Salwen, Harold (with Grosch, Chester E.) The continuous spectrum of the Orr-Sommerfeld equation. I. The spectrum and the eigenfunctions. *J. Fluids Mech.* **87** (1978), no. 1, 33-54. (Authors' summary) **58** #14268 76.35 (35Q99)
- Salwicki, Andrzej An algorithmic approach to set theory. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 499-510. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (P. Štěpánek) **58** #3640 68A05
- Algorithmic logic, a tool for investigations of programs. *Logic, foundations of mathematics and computability theory (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975)*, Part I, pp. 281-295. Univ. Western Ontario Ser. Philos. Sci., Vol. 9, Reidel, Dordrecht, 1977. (Author's summary) **57** #18199 68A05
- (with Banachowski, Lech; Kreczmar, Antoni; Mirkowska, Grażyna; Rasiowa, Helena) An introduction to algorithmic logic. *Metamathematical investigations in the theory of programs. Mathematical foundations of computer science*, pp. 7-99. Państw. Wydawn. Nauk., Warsaw, 1977. (Authors' review (Zbl 358 #68035)) **58** #16198 02E10 (02F50, 68A05)
- Applied algorithmic logic. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatrská Lomnica, 1977)*, pp. 122-134. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (Steven S. Muchnick) **57** #8168 68A30
- Applied algorithmic logic. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatrská Lomnica, 1977)*, pp. 122-134. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (From the summary) **58** #13875 68A05 (02F10)
- (with Müldner, Tomasz) Computational processes generated by programs with (recursive) procedures and block structures. *Fund. Inform.* (4) **1** (1977/78), no. 3, 305-323. (errata insert) (V. Căzănescu) **58** #32014 68A05 (68A30)
- Salychev, A. S. (with Žolkov, S. Ju.) Arrows and the hereditary Suslin number in squares of topological spaces. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 1, 27-32. (Authors' summary) **57** #13819 54A25
- Salyga, B. O. (with Ptašník, B. Ľ.; Poliščuk, V. N.) Small denominators in boundary value problems for hyperbolic equations. (Russian) *Theoretical and applied questions of algebra and differential equations (Russian)*, pp. 108-111, 124 (errata). *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Authors' summary) **58** #29325 35L35
- (with Bernik, V. I.; Ptašník, B. Ľ.) An analogue of the multipoint problem for a hyperbolic equation with constant coefficients. (Russian) *Differencial'nye Uravneniya* **13** (1977), no. 4, 637-645, 772. (Genowefa Majcher) **58** #6724 35L35
- Salyga, V. I. (with Sirodža, I. B.) Identification of dynamic objects by using R-functions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1972**, no. 3, 51-55. (P. Neumann) **46** #10453 93B30
- See also Control of complex technological and economic systems, **56** #2486
- Salyga, Valerij (with Korablev, Nikolaĭ; Čebotarev, Aleksandr) A stable algorithm for the solution of a parameter identification problem. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 23* (1977), 115-120, 129. (Authors' summary) **58** #24891 65F30
- Šalys, A. S. (with Dobrin, L. B.) An estimate of the efficiency of methods of search for the extremum based on cost criteria in a noise situation. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1974**, no. 3, 55-61. (V. Fabian) **51** #9480 65K05 (93E20)
- Salz, Jack (with Foschini, Gerard J.; Gitlin, R. D.) Optimum direct detection for digital fiber-optic communication systems. *Bell System Tech. J.* **54** (1975), no. 8, 1389-1430. (J. J. Stiffler) **52** #10203 94A05
- (with Mazo, James E.) On the transmitted power in generalized partial response. *IEEE Trans. Comm. COM-24* (1976), no. 3, 348-351. (Jerzy Seidler) **53** #12740 94A05 (93E10, 60G35)
- Salzberg, Pablo M. (with Seibert, Peter) A necessary and sufficient condition for the existence of a Liapunov function. *Funkcial. Ekvac.* **16** (1973), 97-101. (W. Skrapek) **50** #7705 34D20
- (with Seibert, Peter) Remarks on a universal criterion for Liapunov stability. *Funkcial. Ekvac.* **18** (1975), no. 1, 1-4. (J. Auslander) **53** #6521 54H20 (34C35)
- Existence and continuity of Liapunov functions in general systems. *Dynamical systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974)*, Vol. II, pp. 211-216. Academic Press, New York, 1976. (L. Janos) **58** #31015 54H20
- On the existence of continuous and semicontinuous Liapunov functions. *Funkcial. Ekvac.* **19** (1976) no. 1, 19-26. (S. Ahmad) **54** #8599 54H20 (34D20)
- Absolute stability of general systems. *Applied general systems research (Internat. Conf., State Univ. New York, Binghamton, N.Y., 1977)*, pp. 361-370. *NATO Conf. Ser.: Systems Sci.*, Vol. 5, Plenum, New York, 1978. (From the introduction) **58** #9623 93D05
- (with Seibert, Peter) Asymptoticity in general systems. *Applied general systems research (Internat. Conf., State Univ. New York, Binghamton, N.Y., 1977)*, pp. 371-379. *NATO Conf. Ser.: Systems Sci.*, Vol. 5, Plenum, New York, 1978. (From the introduction) **58** #9624 93D05
- Salzborn, J. M. Break minimization. *Math. Programming* **8** (1975), 43-53. (M. Rössler) **51** #4999 90C10 (90B35)
- Salzer, Herbert E. Formulas for best extrapolation. *Numer. Math.* **18** (1971/72), 144-153. (R. Franke) **49** #11097 41A05 (65D05)
- Lagrangian interpolation at the Chebyshev points $X_{n,v} \equiv \cos(v\pi/n)$, $v=0(1)n$; some unnoted advantages. *Comput. J.* **15** (1972), 156-159. (H. H. Goldstine) **47** #4414 (E 48 #1429) 65D05
- Table errata: *The numerical treatment of differential equations* (third edition, Springer, Berlin, 1960) by L. Collatz. *Math. Comp.* **26** (1972), no. 118, 597. (Editors) **53** #4466 65A05 (65Lxx)
- A recurrence scheme for converting from one orthogonal expansion into another. *Comm. ACM* **16** (1973), no. 11, 705-707. (Author's summary) **52** #15956 65D05 (65Q05)
- Correspondence: "Lagrangian interpolation at $\cos(v\pi/n)$, $v=0(1)n$ " (*Comput. J.* **15** (1972), 156-159). *Comput. J.* **16** (1973), 190. (H. H. Goldstine) **48** #1429 65D05
- Two letters from Einstein concerning his distant parallelism field theory. *Arch. History Exact Sci.* **12** (1974), 89-96. (H. Treder) **58** #27083 01A60 (83.01)
- Some problems in optimally stable Lagrangian differentiation. *Math. Comp.* **28** (1974), 1105-1115. (F. Pecka) **51** #4632 65D25
- Some remarks on Riesel's series. *Nordisk Tidskr. Informationsbehandling (BIT)* **14** (1974), 252-253. (Editors) **58** #24842 65B10 (65G05)
- Note on Laplace transforms of osculatory and hyperosculatory interpolation polynomials. *J. Computational Phys.* **17** (1975), 420-424. (Christopher T. H. Baker) **51** #2257 65D30
- A new form of trigonometric orthogonality and Gaussian-type quadrature. *J. Comput. Appl. Math.* **2** (1976), no. 4, 241-248. (Roland Bulirsch) **55** #6796 65D30 (65L05)
- Inverse Laplace transforms of osculatory and hyperosculatory interpolation polynomials. *J. Computational Phys.* **20** (1976), no. 4, 480-491. (David R. Hill) **53** #14865 65D15
- Converting interpolation series into Chebyshev series by recurrence formulas. *Math. Comput.* **30** (1976), no. 134, 295-302. (Thomas A. Atchison) **52** #15957 65D05 (65Q05)
- Inverse Laplace transforms of osculatory and hyperosculatory interpolation polynomials using "near-Chebyshev" nodes. *J. Comput. Appl. Math.* **3** (1977), no. 3, 217. (David R. Hill) **57** #4475 65D05 (41A05)
- Minimal error difference formulas. *J. Comput. Appl. Math.* **3** (1977), no. 4, 263-267. (G. I. Sulhanišvili) **58** #19262 65Q05
- A variable coefficient extension of a formula for series conversion. *J. Computational Phys.* **23** (1977), no. 1, 82-85. (M. R. Occorsio) **58** #13604 65B10
- Osculatory and hyperosculatory cubature formulas. *Math. Comp.* **31** (1977), no. 137, 230-234. (M. M. Chawla) **54** #14324 65D30
- Some extensions of Prony approximation. *Z. Angew. Math. Mech.* **57** (1977), no. 4, 269-271. (Zbl 364 #65005) **58** #31757 65D99
- Salzman, W. R. Quantum mechanics of systems periodic in time. *Phys. Rev. A* (3) **10** (1974), 461-465. **53** #12370 81.47
- Salzmann, Frank L. A note on eigenvalues of nonnegative matrices. *Linear Algebra and Appl.* **5** (1972), 329-338. (Marvin Marcus) **47** #8575 15A48
- Salzmann, Helmut Zur Axiomatik der euklidischen Ebene. (Auszug) Collection of articles dedicated to Joseph Ehrenfried Hofmann on the occasion of his seventieth birthday. *Mitt. Math. Sem. Giessen No. 90* (1971), 48-50. (Editors) **52** #15228 50D35 (57E10)
- Baer-Unterebenen 4-dimensionaler Ebenen. *Arch. Math. (Basel)* **23** (1972), 337-341. (G. Pickert) **47** #7588 50D35
- 4-dimensional projective planes of Lenz type III. *Geometriae Dedicata* **1** (1972), no. 1, 18-20. (F. C. Piper) **47** #2491 50D35
- Homogeneous 4-dimensionale affine Ebenen. *Math. Ann.* **196** (1972), 320-322. (D. Betten) **46** #787 50D35
- In memoriam: Peter Dembowski. *Proceedings of the International Conference on Projective Planes (Washington State Univ., Pullman, Wash., 1973)*, pp. 1-6. Washington

- State Univ. Press, Pullman, Wash., 1973. (Editors) **50** #6764 01A70
 Elations in four-dimensional planes. *General Topology and Appl.* **3** (1973), 121-124. (R. Lingenberg) **48** #4912 50D35 (54H15)
 Reelle Kollineationen der komplexen projektiven Ebene. *Geometriae Dedicata* **1** (1973), no. 3, 344-348. (K. Strambach) **47** #5711 50D25
 Kompakte, vier-dimensionale projektive Ebenen mit 8-dimensionaler Kollineationsgruppe. *Math. Z.* **130** (1973), 235-247. (K. Strambach) **48** #4913 50D35 (54H15)
 Compact planes of Lenz type III. *Geometriae Dedicata* **3** (1974), 399-403. (J. Yaqub) **51** #4039 50D25
 Homogene affine Ebenen. *Abh. Math. Sem. Univ. Hamburg* **43** (1975), 216-220. (F. D. Veldkamp) **52** #1517 50D35
 Homogene kompakte projektive Ebenen. *Pacific J. Math.* **60** (1975), no. 2, 217-234. (E. W. Ellers) **53** #3878 50D35
 Zur nicht-euklidischen Geometrie. Festschrift zur 200. Wiederkehr des Geburtstages von Carl Friedrich Gauss. *Abh. Braunschweig. Wiss. Gesellsch.* **27** (1977), 119. (Editors) **58** #15974 01A55 (50A10)
 (with Schneider, Manfred) Schwache Lösungen des Frankl-Morawetz-Problems im \mathbb{R}^3 . (English summary) *Monatsh. Math.* **84** (1977), no. 3, 237-246. (N. N. Janenko) **57** #6880 35M05
 See also *Geometrie*, **50** #8251
- Samaan, Jacob Eshak** On the maximum of likelihood estimation of the number of servers for the $M/M/m$ queueing system. (Russian summary) *Közlemények—MTA Számítástech. Automat. Kutató Int. Budapest No. 12* (1974), 29-51. (Author's summary) **51** #2018 60K25
 An estimation problem in the process of servicing machines. *Közlemények—MTA Számítástech. Automat. Kutató Int. Budapest No. 14* (1975), 47-61. (Brian Conolly) **51** #9777 90B25
 On the estimation of a parameter of a convolution with an application to queueing theory. (Hungarian and Russian summaries) *Közlemények—MTA Számítástech. Automat. Kutató Int. Budapest No. 17* (1976), 7-16. (G. S. Lingappaiah) **57** #7853 62F10 (60K25)
- abdus Samad, Sk.** See **Abdus Samad, Sk.**
- Samaddar, S. N.** Some integrals involving associated Legendre functions. *Math. Comp.* **28** (1974), 257-263. (Author's summary) **48** #6499 33A45
- Samadov, K.** On the theory of the Newton-Kantorovič method. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **14** (1971), no. 8, 10-13. (Z. V. Kovarik) **45** #927 47B55 (65J05)
 The existence of positive eigenvectors of homogeneous u_0 -positive operators. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak. Vyp. 2* (1972), 33-45. (Constantin Niculescu) **53** #14215 47B55
 The estimate of the solutions of some equations. (Russian) *Mathematics and the methodology of its teaching, Part II (Russian)*, pp. 46-54. *Tadžik. Gos. Univ., Dushanbe*, 1974. (A. Ramm) **58** #30384 47A50
- Samaga, Hans-Joachim** Dreidimensionale Kettengeometrien über \mathbb{R} . (English summary) *J. Geometry* **8** (1976), no. 1-2, 61-73. (G. J. Schellekens) **58** #18132 50D45
- Samal, G.** (with Mishra, M. N.) Continuity property of a random Fourier-Stieltjes series. *Bull. Calcutta Math. Soc.* **63** (1971), 97-100. (J. N. Pandey) **46** #4095 42A36
 (with Mishra, M. N.) On the lower bound of the number of real roots of a random algebraic equation with infinite variance. *Proc. Amer. Math. Soc.* **33** (1972), 523-528. (R. R. Coveyou) **45** #4477 60E05
 (with Mishra, M. N.) On the lower bound of the number of real roots of a random algebraic equation with infinite variance. II. *Proc. Amer. Math. Soc.* **36** (1972), 557-563. (R. R. Coveyou) **47** #4334 60G99
 (with Mishra, M. N.) On the upper bound of the number of real roots of a random algebraic equation with infinite variance. *J. London Math. Soc.* (2) **6** (1973), 598-604. (J. E. A. Dunnage) **55** #11384a 60G50
 (with Mishra, M. N.) On the lower bound of the number of real roots of a random algebraic equation with infinite variance. III. *Proc. Amer. Math. Soc.* **39** (1973), 184-189. (R. R. Coveyou) **47** #4335 60G99
 (with Mishra, M. N.) Real zeros of a random algebraic polynomial. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 169-175. (R. R. Coveyou) **48** #7377 60H99
 (with Mishra, M. N.) Real zeros of a random algebraic polynomial with infinite variance. *J. London Math. Soc.* (2) **8** (1974), 113-121. (R. R. Coveyou) **49** #9944 60G99
 (with Mishra, M. N.) On the upper bound of the number of real roots of a random algebraic equation with infinite variance. II. *Proc. Amer. Math. Soc.* **44** (1974), 446-448. (J. E. A. Dunnage) **55** #11384b 60G55 (92A10)
 (with Mishra, M. N.) Continuity property of a random Fourier-Stieltjes series. *Bull. Calcutta Math. Soc.* **67** (1975), no. 4, 201-206. (J. E. A. Dunnage) **56** #6827 60G17 (42A36)
 (with Pratihari, D.) Strong result for real zeros of random polynomials. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 223-234 (1977). (A. C. Offord) **58** #18718 60G99
- Samal, M.** (with Ray, Brajakishore) On the absolute summability of Fourier integral by Abel-type method. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 207-215 (1977). (Not reviewed) **42A28**
- Samal, P. C.** (with Pradhan, G. K.) Stability criteria for time-dependent flows. *Indian J. Pure Appl. Math.* **8** (1977), no. 7, 801-807. (Salvatore Rionero) **57** #18459 76.35
 (with Pradhan, G. K.) Stability of axisymmetric flows. *J. Math. Phys. Sci.* **12** (1978), no. 4, 347-354. (D. M. Sloan) **58** #14291 76.35 (93D05)
- Samandarov, E. G.** A system with moving servicing apparatus. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **14** (1971), no. 12, 11-15. (D. Stoyan (Zbl 238 #60079)) **48** #5208 60K25
 A system with a moving server. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **19** (1976), no. 12, 3-6. (R. H. Rodine) **55** #13607 60K25
 (with Muminov, A. M.) A probability problem of "absorption". (Russian) *Limit theorems for random processes (Russian)*, pp. 91-99, 165. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1977. (From the introduction) **58** #24622 60K99
- Samaniego, Francisco J.** Estimating a binomial parameter with finite memory. *IEEE Trans. Information Theory* **IT-19** (1973), 636-643. (R. L. Kashyap) **53** #2560 94A (62C99)
 On tests with finite memory in finite time. *IEEE Trans. Information Theory* **IT** (1974), 387-388. (O. Gulyas) **52** #10185 93E10
 On T-minimax estimation. *Amer. Statist.* **29** (1975), no. 4, 168-169. (James Berg) **56** #9795 62F15 (62C99)
 Completeness and admissibility. Comment on: "Admissibility and completeness (Amer. Statist. **29** (1975), 93) by M. F. Driscoll and D. Morse. *Amer. Statist.* **29** (1975), no. 4, 173. (Not reviewed) **62C15**
 Completeness and admissibility. *Amer. Statist.* **29** (1975), no. 4, 173. (B. Zehnwein) **52** #6937 62C07
 On testing simple hypotheses in finite time with Hellman-Cover automata. *IEEE Trans. Information Theory* **IT-21** (1975), 157-162. (K. S. Fu) **50** #16171 94A (62F05)
 Mode identification with finite statistics. *IEEE Trans. Information Theory* **IT** (1976), no. 5, 588-590. (R. L. Kashyap) **54** #4791 93E10
 A characterization of convoluted Poisson distributions with applications to estimation. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 475-479. (S. Kotz) **53** #6822 62E10 (62F10)
- Šamanov, Z.** (with Škil', M. I.) Asymptotic solutions of systems of second order linear differential equations. (Russian) *Approximate methods of mathematical analysis (Russian)*, pp. 189-199. *Kiev. Gos. Ped. Inst., Kiev*, 1976. (A. Elbert) **57** #16870 34E05
- Šamanskii, V. E.** Minimization of the number of boreholes in problems of lowering the water level. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1971**, 1079-1082, 1149. (Št. I. Gheorghii) **45** #6262 76.35
 (with Grin'kova, G. V.) The application of a modification of Newton's method to the solution of a certain quasilinear equation. (Russian) *Ukrain. Mat. Ž.* **23** (1978), 844-848. (E. M. Bruins) **45** #2932 65M10
 The design of a system of optimal wells in the problem of lowering the water level. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser.* **1972**, 720-723, 766. (J. Ławrynowicz) **47** #1451 90B99
 The solution of boundary value problems in domains with moving boundaries. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser.* **1974**, 724-727, 767. (V. Djurikovič) **51** #1129 35K35 (65N10)
 The construction of a depression surface from the values of the Girinskii potential. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser.* **1974**, 1078-1081, 1149. (Author's summary) **50** #11983 76.35
 See also *Questions in applied mathematics*, **48** #5448
- Samant, V. S.** (with Sorenson, Harold W.) On reducing computational burden in the Kalman filter. (French, German and Russian summaries) *Automatica—J. IFAC* **10** (1974), 61-68. (Authors' summary) **58** #4568 93E10
 (with Sorenson, Harold W.) Stochastic optimal control via stochastic programming. *Modeling and simulation (Proc. Sixth Annual Pittsburgh Conf., Univ. Pittsburgh, Pittsburgh, Pa., 1975)*, Vol. 6, Part 1, pp. 175-180. *Instrument Soc. Amer., Pittsburgh, Pa.*, 1975. (Jean-Michel Bismut) **57** #2723 93E20
- Samanta, M.** Optimum nonparametric inference of the partial regression coefficients. *Calcutta Statist. Assoc. Bull.* **20** (1971), 109-133. (J. V. Deshpande) **49** #10036 62G05
 (with Kale, B. K.) Nonparametric estimation of the regression matrix in a bivariate multiple regression. *J. Indian Statist. Assoc.* **10** (1972), 63-86. (G. Manija) **51** #4529 62G05 (62J05)
 Characterisation of the Pareto distribution. *Skand. Aktuarietidskr.* **1972**, 191-199 (1973). (A. M. Mathai) **55** #9360 62E10
 Efficient estimation of the location parameters in the bivariate two sample problem. *Ann. Inst. Statist. Math.* **25** (1973), 301-319. (B. Raja Rao) **48** #12714 62G05
 Nonparametric estimation of the mode of a multivariate density. *South African Statist. J.* **7** (1973), 109-117. (G. E. Noether) **48** #9950 62G05
 A note on comparing the means of a multivariate normal population. *Statist. Hefte (N.F.)* **14** (1973), 282-286. (E. J. Williams) **50** #15160 62H15
 A note on uniform strong convergence of bivariate density estimates. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **28** (1973/74), 85-88. (E. F. Schuster) **51** #9345 62G05
 Efficient nonparametric estimation of a shift parameter. *Sankhyā Ser. A* **36** (1974), no. 3, 273-292. (Rudolph J. Beran) **53** #4358 62G05 (62G20)
 Efficient non-parametric estimation in the analysis of variance. (German, French and Russian summaries) *Statist. Hefte (N.F.)* **17** (1976), no. 3, 154-172. (Author's summary) **58** #31564 62G05 (62J10)
- Samantray, U. N.** (with Kishore, Nand) A note on the relative strength of two absolute summability methods. *Indian J. Math.* **15** (1973), 65-72. (G. U. Brauer) **50** #7887 40F05
- Samar, M. S.** (with Nair, V. C.) The product of two H -functions expressed as a finite integral of the sum of a series of H -functions. *Math. Education* **5** (1971), A45-A48. (R. G. Buschman) **46** #410 33A35
 (with Nair, V. C.) An integral involving the product of three H functions. *Math. Nachr.* **49** (1971), 101-105. (M. Dutta) **50** #10352 33A35
 (with Nair, V. C.) Integral equations involving the H -function, for which the solution involves integration with respect to a parameter. *Univ. Nac. Tucumán Rev. Ser. A* **22** (1972), 37-42. (K. C. Gupta) **48** #6853 45H05
 Integrals involving the H -function, the integration being with respect to a parameter. *J. Indian Math. Soc. (N.S.)* **37** (1973), 323-328 (1974). (R. G. Buschman) **51** #10711 33A35
 (with Nair, V. C.) Mellin transform of the H function having the argument $p+bt+ct^a$. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 187-192 (1974). (S. D. Bajpai) **51** #11031 44A20
 Some definite integrals. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 7-11. (K. C. Sharma) **56** #8929 33A30
 A relation between Laplace transform and integral equation involving the H -function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 147-154. (B. M. Agrawal) **51** #11035 45H05 (44A10)

- Integrals involving Fox's H -function and Kampé De Fériet function. *Univ. Nac. Tucumán Rev. Ser. A* **24** (1974), no. 1-2, 7-12 (1975). (R. G. Buschman) **52** #8522 33A35
- Finite integral involving the H -function having the argument $Z(\sin \phi)^{e^{i\lambda\phi}}$. *Univ. Nac. Tucumán Rev. Ser. A* **24** (1974), no. 1-2, 63-65 (1975). (S. D. Bajpai) **52** #11140 33A35
- Double integrals involving the product of Bessel F and H -functions. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), 89-95. (Brij Mohan) **50** #13659 33A40
- (with Nair, V. C.) A relation between the Laplace transform and the Mellin transform with applications. *Portugal. Math.* **34** (1975), no. 3-4, 149-155. (R. P. Soni) **54** #8174 44A10
- Samarai, S. Kh. El.** See El' Samarai, S. X.
- Samarin, Ju. V.** The minimax standardization problem in conditions of uncertain demand. (Russian) Optimal processes (Proc. Third All-Union Conf. Problems of Theoretical Cybernetics, Novosibirsk, 1974). *Upravljayemye Sistemy Vyp.* **14** (1975) 59-68, 76. (Josef Kaška) **57** #15481 90C40
- Samaržiski, Aleksandar** Independence of systems of axioms for finite pseudoternaries. (Macedonian. English summary) *Bull. Soc. Math. Phys. Macédoine* **21** (1970), 31-36 (1972). (V. Havel) **47** #5720 50D35
- (with Madevski, Živko) A certain procedure for the formation of inequalities for angles in a triangle. (Macedonian) *Fac. Sci. Univ. Skopje Annuaire* **21** (1971), 13-25. (V. Volenec) **50** #11037 52A40
- A class of finite Sperner spaces. *Abh. Math. Sem. Univ. Hamburg* **42** (1974), 205-211. (Stanley E. Payne) **50** #10998 50D05 (05B25)
- 3-(ν , 4, 1) block designs and 3-quasigroups. (Macedonian. German summary) *Bull. Soc. Math. Phys. Macédoine* **26** (1975/76), 15-18 (1977). (Author's summary) **57** #5782 05B05 (20N05)
- Samarin, A. F.** (with Voinov, S. V.; Gabrunner, G. M.; Zaezdnyĭ, A. M.; Zaharov, A. A.) System identification from structural properties of test signals. *Avtomat. i Telemekh.* **1977**, no. 6, 48-56 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 6, part 1, 813-821. (Authors' summary) **56** #14909 93B30
- Samarin, Ju. P.** (with Belikov, K. V.; Gleibman, B. Ja.) The formulation of boundary value problems of heat conduction associated with vibrational contraction of materials. (Russian) *Differential equations and their applications*, No. 2 (Russian), pp. 21-27, 175-176. Kuibyshev. Gos. Ped. Inst., Kuibyshev, 1975. (Authors' summary) **58** #32437 80.35 (35K05)
- The application of control theory to the description of the deformation of rheonomic materials. (Russian) *Differential equations and their applications*, No. 2 (Russian), pp. 146-154, 179. Kuibyshev. Gos. Ped. Inst., Kuibyshev, 1975. (Author's summary) **58** #32245 73.35
- See also **Differential equations and their applications**, **58** #26645
- Samarin, M. K.** Some properties of inverse mappings. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 4, 1040-1044, 1087. (C. Ilioi) **54** #11085 47A50 (65J05)
- A packet of macromodules for the solution of problems of the mean square approximation of functions of several variables. (Russian) *Vyčisl. Metody i Programirovanie Vyp.* **26** (1977), 155-167. (Jan Zitko) **57** #18028 65D15
- Samarov, A. M.** A minimax bound for the risk of nonparametric density estimates. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 3, 108-111. (O. Gulyás) **57** #17931 62G05 (62C99)
- A lower bound of the risk in estimates of the spectral density. (Russian) *Problemy Peredači Informacii* **13** (1977), no. 1, 67-72. (M. A. Mirzamedov) **58** #13577 62M15
- (with Zjablov, V. V.; Has'minskii, R. Z.) Problems of estimation when the resources of a statistic are limited. (Russian) *Problemy Peredači Informacii* **13** (1977), no. 3, 32-44. (S. Kotz) **57** #14239 62F10
- (with Has'minskii, R. Z.) Estimation by means of statistics that take a finite number of values. (Russian) *Problemy Peredači Informacii* **13** (1977), no. 4, 22-28. (L. A. Anorina) **58** #3163 62F10
- Samarov, K. L.** Regularization of the isosceles three body problem in the case of a nonzero area vector. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 6, 1261-1264. (Djordje Djukic) **55** #11767 70.58
- Regularization of the isosceles three-body problem with zero area vector. (Russian) *Dokl. Akad. Nauk SSSR* **233** (1977), no. 6, 1049-1052. (P. Ungar) **57** #2023 70.34
- Shams ad-din as-Samarqandi** See **Shams ad-Din as-Samarqandi**
- Samsarkaja, E. A.** (with Popov, Ju. P.) The convergence on Newton's iterative method for the solution of difference equations for gas dynamics (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 1, 276-280, 288. (Jakub Siemek) **57** #2168 76.65
- Samsarkii, A. A.** ★Лекции по теории разностных схем. (Russian) [Lectures on the theory of difference schemes] *Vyčisl. Centr Akad. Nauk SSSR, Moscow*, 1969. 447 pp. (Editors) **55** #11632 65M05 (65N05)
- Certain questions of the general theory of difference schemes. (Russian) *Partial differential equations (Proc. Sympos. dedicated to the 60th birthday of S. L. Sobolev)* (Russian), pp. 191-223. Izdat. "Nauka", Moscow, 1970. (V. Thomée) **47** #2816 65J05
- ★Введение в теорию разностных схем. (Russian) [Introduction to the theory of difference schemes] Izdat. "Nauka", Moscow, 1971. 552 pp. (N. N. Janenko) **49** #11822 65M05 (65N05)
- Conservative difference schemes. (Russian) *Problems in applied mathematics and mechanics (dedicated to A. A. Dorodnitsyn on his sixtieth birthday)* (Russian), pp. 129-136, 281. Izdat. "Nauka", 1971. (Editors) **58** #19208 65N20
- (with Budak, B. M.; Tihonov, A. N.) ★Сборник задач по математической физике. (Russian) [A collection of problems in mathematical physics] Second edition, corrected. Izdat. "Nauka", Moscow, 1972. 687 pp. (Editors) **49** #9376 35-01 (69.00)
- (with Tihonov, A. N.) ★Уравнения математической физики. (Russian) [The equations of mathematical physics] Fourth edition, corrected. Izdat. "Nauka", Moscow, 1972. 735 pp. (Editors) **49** #9377 35-01 (69.00)
- On current research in the theory of difference schemes. *International Congress of Mathematicians (Nice, 1970), Papers of Soviet mathematicians (Russian)*, pp. 276-289. Izdat. "Nauka", Moscow, 1972. (See Zbl **284** #65082; MR **54** #6) 65-02
- Certain questions on the theory of difference schemes. (Russian) *Software of electronic digital computers (Proc. Second Math. School Optimization Organization Comput., Kaciveli, 1971)* (Russian), pp. 18-46. Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev, 1972. (Editors) **51** #14607 65N05
- Iterative difference schemes. (Russian) *Software of electronic digital computers (Proc. Second Math. School Optimization Organization Comput., Kaciveli, 1971)* (Russian), pp. 47-59. Akad. Nauk Ukrain SSR Inst. Kibernet., Kiev, 1972. (Murli M. Gupta) **52** #9629 65M10
- (with Nikolaev, E. S.) Methods of numerical solution of the Dirichlet problem for Poisson's equation in an arbitrary number of dimensions. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 815-818. (G. W. Hedstrom) **47** #6105 65N20
- (with Gulín, A. V.) The stability of difference schemes with nonselfadjoint operators. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 1280-1283. (J. S. Shipman) **47** #2814 65J05 (47A50, 65N05)
- (with Nikolaev, E. S.) Choice of the iteration parameters in the Richardson method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 960-973, 1085. (J. Segethova) **48** #5373 65J05
- (with Tihonov, A. N.; Arsen'ev, A. A.) A certain method of asymptotic integral estimations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 1005-1012, 1086. (E. Rieksstigs) **47** #3891 41A60
- (with Nikolaev, E. S.) The computing stability of two-layer and three-layer iteration schemes. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 1197-1207, 1364. (J. Segethova) **49** #8338 65J05 (47A50)
- (with Tihonov, A. N.; Svečnikov, A. G.; Berezin, I. S.; Vasil'ev, F. P.; Uspenskii, A. B.; Sretenskii, L. N.) In memoriam Boris Mihailovič Budak. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 4, 106-112. (Editors) **48** #1865 01A70
- (with Popov, Ju. P.) ★Разностные схемы газовой динамики. (Russian) [Difference schemes for gas dynamics] Izdat. "Nauka", Moscow, 1975. 351 pp. (Jakub Siemek) **57** #2169 76.65
- Theory of the stability of difference schemes, and iteration methods. (Russian) *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974), Vol. 2*, pp. 417-421. *Canad. Math. Congress, Montreal, Que.*, 1975. (C. Ilioi) **55** #4666 65J05
- (with Frjazinov, I. V.) The method of summary approximation. (Russian) *Beiträge Numer. Math.* **4** (1975), 191-203. (G. I. Sulhanišvili) **57** #11089 65N05
- (with Tihonov, A. N.; Il'inskii, A. S.) Aleksei Georgievich Svečnikov (on the occasion of his fiftieth birthday). (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 5, 942-945. (Editors) **51** #12469 01A70
- (with Andreev, V. B.) ★Разностные методы для эллиптических уравнений. (Russian) [Difference methods for elliptic equations] Izdat. "Nauka", Moscow, 1976. 352 pp. (Editors) **58** #19209a 65N20
- (with Kurdjumov, S. P.; Zmitrenko, N. V.; Mihailov, A. P.) ★Нелинейные процессы в плотной плазме и особенности термодинамики режимов обострения. (Russian) [Nonlinear processes in dense plasma and singularities of the thermodynamics of aggravation regimes] Preprint IPM-1976, No. 109. *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1976. 35 pp. **58** #32459 80.60
- (with Bicadze, A. V.; Il'in, V. A.; Svečnikov, A. G.) Andrei Nikolaevič Tihonov (on the occasion of his seventieth birthday). (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 10, 1731-1735. (Editors) **54** #9929 01A70
- (with Gulín, A. V.) Some results and problems in the theory of the stability of difference schemes. (Russian) *Mat. Sb. (N.S.)* **99(141)** (1976), no. 3, 299-330, 479. (Murli M. Gupta) **53** #9630 65J05
- (with Bicadze, A. V.; Il'in, V. A.; Svečnikov, A. G.) Andrei Nikolaevič Tihonov (on the occasion of his seventieth birthday). (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 6(192), 3-12. (1 plate) (Editors) **57** #9429 01A70
- (with Frjazinov, I. V.) Difference methods for the approximation of problems of mathematical physics. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 6(192), 167-197 (E. Schechter) **56** #13685 65N05 (65N10)
- (with Popov, Ju. P.) Methods for the numerical solution of homogeneous nonstationary problems of gas dynamics. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 6, 1503-1518, 1627. (Jakub Siemek) **57** #2167 76.65
- ★Теория разностных схем. (Russian) [Theory of difference schemes] Izdat. "Nauka", Moscow, 1977. 656 pp. (M. Zlámal) **58** #3288 65-01 (65Mxx, 65Nxx, 69.00)
- (with Goloviznin, V. M.; Favorskii, A. P.) ★Об аппроксимации вариационно-разностных уравнений гидродинамики. (Russian) [Approximation of variational-difference equations of hydrodynamics] Preprint No. 34 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1977. 16 pp. (From the introduction) **58** #14349 76.65 (65Q05)
- (with Goloviznin, V. M.; Koršija, T. K.; Favorskii, A. P.) ★О вариационно-разностных схемах двумерной магнитной гидродинамики. (Russian) [Variational-difference schemes of two-dimensional magnetohydrodynamics] With an English summary. Preprint No. 57 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1977. 67 pp. (Authors' summary) **58** #25380 76.65
- The role of numerical methods in plasma physics. (Russian) *Numerical methods in plasma physics (Russian)*, pp. 3-7, 259. Izdat. "Nauka", Moscow, 1977. (See RZMat **1978** #3 B890; MR **57** #18654) 78.65
- Numerical methods in plasma physics. (Russian) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No.* **107** (1977), 19 pp. (L. G. Chambers) **57** #14946 78.65 (78.35)
- (with Goloviznin, V. M.; Favorskii, A. P.) A variational approach to the construction of finite-difference mathematical models in hydrodynamics. (Russian) *Dokl. Akad. Nauk SSSR* **235** (1977), no. 6, 1285-1288. (From the authors' text) **56** #14119 76.65
- (with Andreev, V. B.) ★Méthodes aux différences pour équations elliptiques. Traduit du russe par Djilali Embarek. *Éditions Mir, Moscow*, 1978. 308 pp. (Georges A. Lebaud) **58** #19209b 65N20
- (with Bicadze, A. V.; Vladimirov, V. S.; Erugin, N. P.; Nikol'skii, S. M.; Tihonov, A. N.) Vladimir Aleksandrovič Il'in (on the occasion of his fiftieth birthday). (Russian) *Differencial'nye Uravnenija* **14** (1978), no. 5, 947-954. (Editors) **58** #16013 01A70

- See also Congress: Mathematicians, 54 #6; Nikiforov, A. F.; et al., 57 #730;
 Numerical methods in plasma physics, 57 #18654 and Problems in mathematical physics and computational mathematics, 58 #26648
- Samartin, Avelino** (with Distéfano, José Néstor) A dynamic programming approach to the formulation and solution of finite element equations. *Comput. Methods Appl. Mech. Engrg.* 5 (1975), 37-52. (I. Norman Katz) 51 #9531 65N99 (65K05)
- Samatov, T. S.** (with Salahitdinov, M. S.) Certain mixed problems of the type of the Gellerstedt problem. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1970, no. 8, 6-8. (D. K. Gvazava) 51 #10893 35M05
 (with Salahitdinov, M. S.) Boundary value problems of the Gellerstedt problem type for a certain equation of mixed type. (Russian) *Boundary value problems for differential equations*, 1 (Russian), pp. 58-67. Izdat. "Fan" Uzbek SSR, Tashkent, 1971. (A. M. Nahušev) 45 #2332 35M05
 (with Salahitdinov, M. S.) Boundary value problems for an equation of mixed type. (Russian) *Boundary value problems for differential equations*, No. 2 (Russian), pp. 164-174, 188. Izdat. "Fan" Uzbek. SSR, Tashkent, 1972. (Authors' summary) 56 #16158 35M05
- Sambandham, M.** Maxima of a random algebraic curve. *Indian J. Pure Appl. Math.* 6 (1975), no. 4, 423-431. (J. E. A. Dunnage) 55 #11370 60G17
 Real zeros of a random polynomial with hyperbolic elements. *Indian J. Pure Appl. Math.* 7 (1976), no. 5, 553-556. (G. Samal) 58 #31389 60G99
 On random trigonometric polynomials. *Indian J. Pure Appl. Math.* 7 (1976), no. 8, 841-849. (Author's summary) 58 #31390 60G99 (42A36)
 On a random algebraic equation. *J. Indian Math. Soc. (N.S.)* 41 (1977), no. 1-2, 83-97. (J. E. A. Dunnage) 58 #31391 60G99
 On the number of real zeros of a random trigonometric polynomial. *Trans. Amer. Math. Soc.* 238 (1978), 57-70. (J. E. A. Dunnage) 57 #1633 60G17
- Sambin, Giovanni** *o*-filtri. I. Sui filtri di composizione il cui filtro associato è principale. (English summary) *Boll. Un. Mat. Ital.* (4) 6 (1972), 432-439. (H. Lausch) 47 #6921 20M20
o-filtri. II. Aspetti topologici degli *o*-filtri. (English summary) *Boll. Un. Mat. Ital.* (4) 8 (1973), 217-229. (H. Lausch) 49 #5212 20M20
 Un'estensione del teorema di Löb. (English summary) *Rend. Sem. Mat. Univ. Padova* 52 (1974), 193-199 (1975). (Manfred Armbrust) 52 #5378 02D99
 An effective fixed-point theorem in intuitionistic diagonalizable algebras. The algebraization of the theories which express Theor. IX. *Studia Logica* 35 (1976), no. 4, 345-361. (D. Monk) 57 #112 02J99
- de Samblanckx, S.** See De Samblanckx, S.
creangă-Sâmboan, Anca See Creangă-Sâmboan, Anca
- Sâmboan, Gavril** Statistical metric spaces. (Romanian. English summary) *Stud. Cerc. Math.* 28 (1976), no. 3, 365-368. (Serban Grigorescu) 53 #11694 60B99
- See also Selected translations in mathematical statistics and probability, 49 #4728
- Samborskaja, A. N.** (with Čurikov, V. A.; Drogovoz, Z. I.) The unique solvability of two-point boundary value problems for ordinary differential equations. (Russian) *Differencial'nye Uravnenija* 8 (1972), 995-1003. (I. Kiguradze) 46 #5718 34B10
 (with Čurikov, V. A.) Boundary value problem for systems of fourth order ordinary differential equations. (Russian) *Mathematical physics*, No. 16 (Russian), pp. 44-51, 196. Izdat. "Naukova Dumka", Kiev, 1974. (I. Kiguradze) 50 #671 34B05
- Sambors'kii, S. M.** The existence of solutions of linear differential equations in Banach spaces and bundles. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 827-831, 863. (P. A. Kučment) 51 #6079 34G05 (58B99, 58G99)
 Dependence on parameters of the solutions of evolution equations. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 10, 1891-1893, 1911. (V. Komkov) 56 #16093 34G05 (35R20)
 The weak solvability of systems of nonlinear differential equations in Banach spaces. (Russian) *Ukrain. Mat. Ž.* 29 (1977), no. 5, 685-689, 711. (S. Buryšek) 57 #3550 34G05
- Samčenko, K. V.** See Mathematical methods for the study and optimization of systems, 50 #12146
- Samedov, N. I.** A boundary value problem for a fourth order equation of mixed type in the case of a doubly connected domain. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1972, no. 4, 9-17. (J. Kopáček) 47 #7239a 35M05
 A certain boundary value problem for a fourth order equation of mixed type for a doubly connected domain. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1972, no. 4, 73-77. (J. Kopáček) 47 #7239b 35M05
 A certain boundary value problem for a fourth order equation of mixed type in the case of an unbounded domain. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1972, no. 6, 109-114. (Megumi Saigo) 51 #10894a 35M05
 A certain boundary value problem for a fourth order equation of mixed type. (Russian. Turkmen and English summary) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1973, no. 1, 3-12. (Megumi Saigo) 51 #10894b 35M05
 A boundary value problem for a fourth order equation of mixed type. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1973, no. 3, 7-16. (Megumi Saigo) 51 #10894c 35M05
 The uniqueness of the solution of certain boundary value problems for fourth order equations of mixed type. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1975, no. 3, 9-12. (V. V. Kovrizkin) 53 #8676 35M05
 The Dirichlet problem for a certain fourth order equation of mixed type. (Russian) *Dinamika Splošn. Sredy Vyp.* 25 *Dinamika Toerd. Tela* (1976), 158-160, 166-167. (Author's summary) 56 #12643 35M05
 The uniqueness of the solutions of a certain boundary value problem for fourth order equations of mixed type. (Russian) *Dinamika Splošn. Sredy Vyp.* 27 *Dinamika Neodnorodn. Židkosti* (1976), 131-134, 163. (Author's summary) 56 #16159 35M05
 The solvability of a certain boundary value problem in space for a quasilinear system of fourth order equations of mixed type. (Russian) *Dokl. Akad. Nauk SSSR* 230 (1976), no. 4, 785-788. (A. Džuraev) 54 #10883 35M05
- Certain boundary value problems for fourth order equations of mixed-complex type. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1976, no. 2, 14-21. (Editors) 58 #17578 35M05
- Samedova, S. G.** A difference method for finding the solution of a mixed problem for a certain quasilinear equation. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1974, no. 6, 72-75. (G. I. Sulhanišvili) 52 #7150 65N05 (92A05)
 (with Jakubov, S. Ja.) The correctness of the Cauchy problem for parabolic equations. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* 31 (1975), no. 2, 17-20. (Leo F. Boron) 52 #936 34G05
- Sameh, Ahmed H.** On Jacobi and Jacobi-like algorithms for a parallel computer. *Math. Comp.* 25 (1971), 579-590. (Author's summary) 45 #6189 65D30
 (with Kuck, David J.) Parallel computation of eigenvalues of real matrices. *Information processing 71 (Proc. IFIP Congr., Ljubljana, 1971), Vol. 2: Applications*, 1266-1272. North-Holland, Amsterdam, 1972. (Authors' summary) 56 #17037 65F15 (68A10)
 (with Lermitt, J.; Noh, K.) On the intermediate eigenvalues of symmetric sparse matrices. *Nordisk Tidskr. Informationsbehandling (BIT)* 15 (1975), no. 2, 185-191. (J. Kuck) 306 #65019 58 #19077 65F15
 (with Chen, Shyh Ching; Kuck, David J.) Parallel Poisson and biharmonic solvers. (German summary) *Computing* 17 (1976/77), no. 3, 219-230. (L. W. Ehrlich) 55 #11644 65N20
 (with Kuck, David J.) A parallel QR algorithm for symmetric tridiagonal matrices. *IEEE Trans. Computers* C-26 (1977), no. 2, 147-153. (Jozef Miklosko) 56 #7306 68A10 (68A20, 65F15)
 (with Kuck, David J.; Parker, Douglass S., Jr.) Analysis of rounding methods floating-point arithmetic. *IEEE Trans. Computers* C-26 (1977), no. 7, 643-650. (V. Ivanov) 57 #7979 65G05
 (with Kuck, David J.) Parallel direct linear system solvers—a survey. *Math. Comput. Simulation* 19 (1977), no. 4, 272-277. (J. Vandergraft) 57 #14366 65F05
 (with Brent, Richard P.) Solving triangular systems on a parallel computer. *SIAM J. Numer. Anal.* 14 (1977), no. 6, 1101-1113. (A. S. Householder) 56 #17026 65F05
 (with Kuck, David J.) On stable parallel linear system solvers. *J. Assoc. Comput. Mach.* 25 (1978), no. 1, 81-91. (Jozef Miklosko) 58 #3347 65F05
- Samejima, Fumiko** A general model for free-response data. *Psychometrika* 37 (1972), supplement no. 18, iv+68 pp. (From the author's introduction) 46 #10435 92A25
 Normal ogive model on the continuous response level in the multidimensional latent space. *Psychometrika* 39 (1974), 111-121. (Viorel Gh. Vodă) 50 #15239 62P15
- Samelson, Hans** Note on vector fields in manifolds. *Proc. Amer. Math. Soc.* 36 (1972), 272-274. (P. L. Antonelli) 47 #2620 57D25
 ★An introduction to linear algebra. Pure and Applied Mathematics. Wiley-Interscience [John Wiley & Sons], New York-London-Sydney, 1974. xi+265 pp. (George P. Barker) 51 #3191 15-02
 To *v* via convexity. *Amer. Math. Monthly* 81 (1974), 1012-1013. (Editors) 50 #2408 26-01
 Heinz Hopf zum Gedenken. II. Zum wissenschaftlichen Werk von Heinz Hopf. *Jber. Deutsch. Math.-Verein.* 78 (1976/77), no. 3, 126-146. (Editors) 55 #38 01A1
 On Darboux's lemma. *Proc. Amer. Math. Soc.* 70 (1978), no. 2, 126-128. (R. Palais) 57 #14009 58A10
- Samet, Hanan** A canonical form algorithm for proving equivalence of conditional forms. *Information Processing Lett.* 7 (1978), no. 2, 103-106. (G. E. Peterson) 58 #5009 02B05 (68A40)
- Samet, P. A.** (with Godwin, H. J.) Corrigendum: "A table of real cubic fields" (*J. London Math. Soc.* 34 (1959), 108-110). *J. London Math. Soc.* (2) 9 (1974/75), 624. (Editors) 50 #12962 12-04 (12A30)
- Samgina, T. I.** (with Perov, A. I.) Periodic solutions of a second order equation. (Russian) *Voroněž. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* 7 (1973), 57-64. (Author's introduction) 58 #11671 34C25
- Šamgunov, N. K.** *Q*-refinable spaces. (Russian) *C. R. Acad. Bulgare Sci.* 30 (1977), no. 167-170. (R. Engelking) 56 #9488 54D20
- Šami, Zoran** On the *M*-hypothesis of Dj. Kurepa. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of the birth. *Math. Balkanica* 3 (1973), 530-532. (J. B. Roberts) 50 #6993 10A05
- Samilenko, I. S.** A certain formulation of boundary value problems for differential equations of elliptic type. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* 1974, 712-715, 766. (Ja. A. Roitberg) 50 #2692 35J55
- Šamilov, A. H.** The boundedness of the solutions of linear differential equations with variable delays of the argument. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1970, no. 4, 24-27. (G. S. Ladde) 45 #8963 34K15
 (with Ahmedov, K. T.) The boundedness of the solutions of a certain class of nonlinear equations with variable lags. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1971, no. 2, 3-9. (Authors' introduction) 53 #13782 34K15
 (with Ahmedov, K. T.) An application of the quasilinearization method to a certain system with nonlinear boundary conditions. (Russian. Azerbaijani summary) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1972, no. 3, 109-113. (R. S. Levitin) 51 #3594 34B15
 (with Ahmedov, K. T.) The existence and stability of the solutions of functional-differential equations. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1976, no. 4, 3-10. 58 #1466 34K05
- Samir, J.-Cl.** (with Boland, P.; Willems, P. Y.) Stability analysis of interconnected deformable bodies in a topological tree. *AIAA J.* 12 (1974), 1025-1030. (Q. K. Ghori) 49 #11887 7034
 Criteria for pervasive damping of mechanical systems with first integrals of motion. (German and Russian summaries) *Z. Angew. Math. Mech.* 55 (1975), no. 7/8, 381-386. (Q. K. Ghori) 52 #12457 7034
- Šamina, V. A.** Determination of the displacement vector from the components of the deformation tensor in nonlinear continuum mechanics. *Izv. Akad. Nauk SSSR Me-*

- Toerd. Tela 1974, 14-22 (Russian); translated as *Mechanics of Solids* 9 (1974), no. 1, 9-16. (M. Mişicu) 50 #6283 73.53
(with Novožilov, V. V.) Kinematic boundary conditions in nonlinear elasticity theory problems. *Izv. Akad. Nauk SSSR Meh. Toerd. Tela* 1975, no. 5, 63-71 (Russian); translated as *Mechanics of Solids* 10 (1975), no. 5, 54-61. (A. J. M. Spencer) 54 #11933 73.35
- Amiuddin, M. On a test for an assigned value of correlation in a bivariate normal distribution. *Biometrika* 57 (1970), no. 2, 461-464. (Author's summary) 52 #9497 62H10
(with Mallick, S. A.) On the log-it transformation of binomial variate. *J. Natur. Sci. and Math.* 10 (1970), 59-63. (D. S. Adorno) 45 #2837 62E20
(with Atiqullah, M.) A test for equality of variances. *Biometrika* 63 (1976), no. 1, 206-208. (B. K. Ghosh) 53 #9471 62F05
Bayesian test of homogeneity of variance. *J. Amer. Statist. Assoc.* 71 (1976), no. 354, 515-517. (George T. Duncan) 54 #3941 62F15
- Amiullah, M. (with Rezvan, Y.) An $O(3, 1)$ approach to Maxwell's equations. *Internat. J. Theoret. Phys.* 16 (1977), no. 8, 591-601. (J. S. Joel) 58 #14520 81.22
- Amko, S. G. Integral equations of the first kind with a kernel of potential type. (Russian) *Proceedings of a Conference on Boundary Value Problems (Kazan, 1969)* (Russian), pp. 216-220. *Izdat. Kazan. Univ., Kazan*, 1970. (M. Cotlar) 51 #6314 45E05 (47G05)
(with Karapetjanc, N. K.) A certain new approach to the investigation of singular integral equations with a shift. (Russian) *Dokl. Akad. Nauk SSSR* 202 (1972), 273-276. (T. G. Gegelia) 45 #9207 47G05 (45E99)
(with Karapetjanc, N. K.) Singular integral operators with shift on an open contour. (Russian) *Dokl. Akad. Nauk SSSR* 204 (1972), 536-539. (F. Smithies) 46 #7814 45E05 (47B30, 47G05)
(with Karapetjanc, N. K.) Singular integral operators on the axis with a fractional linear shift of Carleman type and the Noether property for operators containing an involution. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 7 (1972), no. 1, 68-77. (D. Przeworska-Rolewicz) 46 #733 47G05 (45E05)
(with Karapetjanc, N. K.) A certain boundary value problem with a shift in the theory of analytic functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 11(126), 18-22. (A. D. Solomon) 47 #3689 30A88
(with Karapetjanc, N. K.) Singular integral equations with Carleman shift in the case of discontinuous coefficients, and a study of whether a certain class of linear operators with involution is Noetherian. (Russian) *Dokl. Akad. Nauk SSSR* 211 (1973), 281-284. (D. Przeworska-Rolewicz) 48 #12165 47G05 (45E05)
(with Gahov, F. D.; Zvirovič, E. I.) Increment of the argument, logarithmic residue and a generalized principle of the argument. (Russian) *Dokl. Akad. Nauk SSSR* 213 (1973), 1233-1236. (E. Ungureanu-David) 48 #11485 30A42
(with Karapetjanc, N. K.) The index of certain classes of integral operators. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 8 (1973), no. 1, 26-40, 88. (D. Przeworska-Rolewicz) 48 #9457 47G05 (45E10)
The space $L^q(L_p)$ of fractional integrals, and operators of potential type. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 8 (1973), no. 5, 359-383, 425. (N. K. Karapetjanc) 49 #1237 47G05
Singular integral and integrodifferential equations with analytic kernels. (Russian) *Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk.* 1974, no. 4, 86-94, 138-139. (R. V. Dudučava) 55 #6143 45E05 (45J05)
(with Karapetjanc, N. K.) Convolution operators and singular integral operators with reflection. (Russian. Georgian summary) A collection of articles on the equations of mathematical physics. 4. *Sakharth. SSR Mecn. Akad. Math. Inst. Šrom.* 44 (1974), 100-112. (G. S. Litvinčuk) 53 #14039 44A35
(with Karapetjanc, N. K.) Singular convolution operators with a discontinuous symbol. (Russian) *Dokl. Akad. Nauk SSSR* 221 (1975), no. 6, 1260-1263. (D. Przeworska-Rolewicz) 53 #3797 47G05 (45E10)
(with Karapetjanc, N. K.) Singular integral operators with Carleman shift in the case of piecewise continuous coefficients. I, II. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 2(153), 43-54; *ibid.* 1975, no. 3(154), 34-42. (F. Smithies) 53 #3616 45E05
Integral equations of convolution type of the first kind with a power kernel. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 4(155), 60-67. (G. S. Litvinčuk and N. L. Vasilevskii) 53 #3618 45E10
Proof of the Babenko-Stein theorem. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 5(156), 47-51. (R. P. Boas, Jr.) 52 #8816 44A25
(with Karapetjanc, N. K.) Singular convolution operators with discontinuous symbol. (Russian) *Sibirsk. Mat. Ž.* 16 (1975), 44-61, 195. (D. Przeworska-Rolewicz) 51 #6500 47G05 (45E05)
(with Gahov, F. D.; Zvirovič, E. I.) A generalized argument principle. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1975, no. 1, 5-16, 139. (I. N. Baker) 51 #8428 30A86
Integral equations of the first kind with a logarithmic kernel. (Russian) *Mapping methods* (Russian), pp. 41-69. *Čečenno-Inguš. Gos. Univ., Groznyi*, 1976. (T. G. Gegelia) 58 #17725 45E05
Generalized Riesz potentials. (Russian. Georgian and English summaries) *Gamogeneb. Math. Inst. Sem. Mohsen. Anotacie. Vyp.* 11 (1976), 35-44. (Pavel Doktor) 55 #1144 47G05 (31-XX)
Spaces of Riesz potentials. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 40 (1976), no. 5, 1143-1172, 2000. (M. Cotlar) 56 #1057 46E35 (31C15)
The spaces $L^q_p(R^n)$, and hypersingular integrals. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1976, no. 2, 34-41, 140. (R. V. Dudučava) 54 #8270 46E35 (47G05)
(with Kilbas, A. A.) Integral operators with homogeneous kernels in Hölder H^q spaces. (Russian) *Dokl. Akad. Nauk BSSR* 21 (1977), no. 1, 5-8, 91. (Authors' summary) 56 #16459 47G05
Generalized Riesz potentials and hypersingular integrals, their symbols and inversion. (Russian) *Dokl. Akad. Nauk SSSR* 232 (1977), no. 3, 528-531. (M. Cotlar) 56 #9193 44A25 (47G05)
The classes $C^k(R^n)$, and multipliers in the space $L^q(L_p)$ of Riesz potentials. (Russian) *Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk.* 1977, no.
- 3, 13-17, 115. (Author's summary) 58 #12157 42A18
Spherical potentials, spherical Riesz differentiation, and their applications. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 2 (177), 135-139. (R. L. Cooke) 58 #2004 42A76
(with Karapetjanc, N. K.) A study of the Noethericity of operators with an involution of order n , and its application. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 11(186), 15-26. (Authors' introduction) 58 #29917 45E10 (47B30)
Test functions that vanish on a given set, and division by a function. (Russian) *Mat. Zametki* 21 (1977), no. 5, 677-689. (Author's summary) 58 #2256 46F10 (46E99)
(with Karapetjanc, N. K.) Discrete convolution operators with coefficients that become almost stable. (Russian) *Mat. Zametki* 22 (1977), no. 3, 339-344. (M. Cotlar) 58 #23729 47B37 (47G05)
The spaces $L^q_p(R^n)$ and hypersingular integrals. (Russian. English summary) *Studia Math.* 61 (1977), no. 3, 193-230. (M. Cotlar) 58 #23548 46E35 (44A25, 47G05)
A criterion for the harmonicity of polynomials. (Russian) *Differencial'nye Uravnenija* 14 (1978), no. 5, 938-939, 960. (Ü. Kuran) 58 #6294 31B05
- Šamkolovič, L. See Szamkolowicz, Lucjan
- de Sam Lazaro, José (with Meyer, Paul-André) Une remarque sur le flot du mouvement brownien. *Séminaire de Probabilités, V (Univ. Strasbourg, année universitaire 1969-1970)*, pp. 278-282. *Lecture Notes in Math., Vol. 191, Springer, Berlin*, 1971. (Zbl 217, 209.) 57 #14165 60J65
(with Meyer, Paul-André) Un gros processus de Markov. Application à certains flots. *Séminaire de Probabilités, VI (Univ. Strasbourg, année universitaire 1970-1971)*, pp. 109-112. *Lecture Notes in Math., Vol. 258, Springer, Berlin*, 1972. (Zbl 231 #60059) 58 #18745 60J40 (60J05)
Sur les hélices du flot spécial sous une fonction. *Z. Wahrscheinlichkeitstheorie und Verv. Gebiete* 30 (1974), 279-302. (A. Benveniste) 52 #15632 (EA 57) 60G10 (28A65)
(with Meyer, Paul-André) Questions de théorie des flots. I. Généralités. Flot sous une fonction. *Séminaire de Probabilités, IX (Première Partie: Questions de théorie des flots, Univ. Strasbourg, Strasbourg, année universitaire 1972/1973)*, pp. 2-14. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (A. Benveniste) 55 #1426 60G10 (28A65)
(with Meyer, Paul-André) Questions de théorie des flots. II. Mesures de Palm, théorème d'Ambrose-Kakutani. *Séminaire de Probabilités, IX (Première Partie: Questions de théorie des flots, Univ. Strasbourg, Strasbourg, année universitaire 1972/1973)*, pp. 15-29. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (A. Benveniste) 55 #1427 (E 56 #6817) 60G10 (28A65)
(with Meyer, Paul-André) Questions de théorie des flots. III. Exemples de K -flots. *Séminaire de Probabilités, IX (Première Partie: Questions de théorie des flots, Univ. Strasbourg, Strasbourg, année universitaire 1972/1973)*, pp. 30-37. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (A. Benveniste) 55 #1428 60G10 (28A65)
(with Meyer, Paul-André) Questions de théorie des flots. IV. Hélices croissantes et mesures de Palm. *Séminaire de Probabilités, IX (Première Partie: Questions de théorie des flots, Univ. Strasbourg, Strasbourg, année universitaire 1972/1973)*, pp. 38-51. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (A. Benveniste) 55 #1429 60G10 (28A65)
(with Meyer, Paul-André) Questions de théorie des flots. V. Hélices à accroissements orthogonaux et prédiction. *Séminaire de Probabilités, IX (Première Partie: Questions de théorie des flots, Univ. Strasbourg, Strasbourg, année universitaire 1972/1973)*, pp. 52-72. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (A. Benveniste) 55 #1430 60G10 (60G25)
(with Meyer, Paul-André) Questions de théorie des flots. VI. Multiplicité spectrale, nombre d'hélices HAO. *Séminaire de Probabilités, IX (Première Partie: Questions de théorie des flots, Univ. Strasbourg, Strasbourg, année universitaire 1972/1973)*, pp. 73-88. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (A. Benveniste) 55 #1431 60G10
(with Meyer, Paul-André) Questions de théorie des flots. VII. Le théorème de Nisio. *Séminaire de Probabilités, IX (Première Partie: Questions de théorie des flots, Univ. Strasbourg, Strasbourg, année universitaire 1972/1973)*, pp. 89-96. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (A. Benveniste) 55 #1432 60G10
See also Meyer, Paul-André, 56 #6817
- Sammon, Peter H. A discrete least squares method. *Math. Comp.* 31 (1977), no. 137, 60-65. (Frank G. Hagin) 55 #4694 65L10
- Samn, Sherwood Existence of a seminormal basis in $C[0, 1]$. *Proc. Amer. Math. Soc.* 35 (1972), 183-186. (Z. Čanturija) 45 #7456 46E15
A bounded Hilbertian basis in $C[0, 1]$. *Proc. Amer. Math. Soc.* 40 (1973), 465-469. (Z. Čanturija) 47 #9253 46B15
A note on w_C -bases. *Studia Math.* 51 (1974), 35-38. (N. J. Kalton) 50 #952 46B15
- Samochwałow, K. See Samohvalov, K. F.
- Samodurov, A. A. (with Lukaševič, N. A.) Integrability of Abel equations of general form by means of functions that are solutions of second order linear equations. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 5, 859-863, 965. (B. S. Popov) 57 #16760 34A05
- Samofalov, K. G. Synthesis of many-valued circuits in a class of systems with functional redundancy. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1973, 231-234, 286. (A. A. Mulin) 51 #7744 94A20
- Samohin, A. B. A modified method of successive approximations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 1402-1408, 1635. (C. Iliei) 48 #12821 65J05 (47A50)
- Samohin, A. P. (with Slavnov, D. A.) Quantization of a free boson field of arbitrary spin (case $m \neq 0$). (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 15 (1974), no. 5, 553-562. (Tetz Yoshimura) 55 #7203 81A7
(with Logunov, A. A.; Mestvirišvili, M. A.; Rčelišvili, G. L.) Does the u -channel in the t -plane influence the behavior of the forward scattering differential cross-section at high energies? (Russian. English summary) *Teoret. Mat. Fiz.* 28 (1976), no. 2, 147-156. (Authors' summary) 56 #7546 81.30
(with Rčelišvili, G. L.) Influence of the singularities of the amplitude on the

- behavior of the differential scattering cross-section. (Russian. English summary) *Teoret. Mat. Fiz.* **30** (1977), no. 3, 322-332. (Richard Kerner) **56** #10504 8130
- Samohin, G. S.** (with Silin, R. A.) Quadrature formulae of Gaussian type for a triangle. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. SSR Ser. A* **1973**, 703-705, 764. (F. Pecka) **48** #1439 65D30
- Samohin, Ju. A.** (with Fomin, V. N.) A method for studying the stability of the oscillations of linear systems that are subject to the action of parametric loads with continuous spectrum. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 4, 926-931. (Wolfdietrich Müller) **54** #10767 34D05
- Samohin, M. V.** Extremal problems for multiple-valued analytic functions with a single valued modulus. (Russian) *Moskov. Inž.-Stroitel. Inst. Sb. Trudov No. 130* (1975), 47-54. (RŽMat **1976** #6 B130.) **58** #28446 30A40
- Extremal problems and automorphic functions with a given modulus of boundary values. (Russian) *Some problems in modern function theory (Proc. Conf. Modern Problems of Geometric Theory of Functions, Inst. Math., Acad. Sci. USSR, Novosibirsk, 1976)* (Russian), pp. 131-137. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Mat., Novosibirsk, 1976*. (Editors) **58** #22538 30A58 (30A40)
- Some properties of functions that are strict extreme points of the unit ball of the algebra H^∞ . (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Ser. Mat.* **11** (1976), no. 6, 503-513, 571. (T. W. Gamelin) **56** #1077 46J15 (30A98)
- Automorphic analytic functions with a given modulus for the boundary values. (Russian) *Mat. Sb. (N.S.)* **101(143)** (1976), no. 2, 189-203. (S. V. Hruščev) **55** #3240 30A58 (46J15)
- Samohin, V. N.** Equations for the boundary layer for a pseudoplastic fluid in the neighborhood of a stopping point. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 6(168), 249-250. (J. W. Thomas) **56** #6161 35Q99 (7635)
- The system of equations of a boundary layer of a pseudoplastic fluid. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 1043-1046. (E. Ungureanu-David) **51** #9653 7635
- Development of a plane-parallel symmetric boundary layer when a sudden motion arises. (Russian) *Trudy Moskov. Mat. Obšč.* **28** (1973), 117-133. (L. A. Mysak) **51** #2459 7641
- The system of boundary layer equations on non-Newtonian fluids. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 2, 46-51. (J. P. Guiraud) **52** #4810 7635
- See also *Transactions of the Moscow Mathematical Society*, **50** #9479
- Samohvalov, E. A.** (with Vavilov, E. M.; Lobanov, L. P.) An algorithm for coding the internal states of automata. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 1, 104-108 (Russian); translated as *Engrg. Cybernetics* **9** (1971), no. 1, 88-93. (C. Reischer) **45** #8455 94A30
- Samohvalov, K. F.** The theory of empirical predictions. (Russian) *Vychisl. Sistemy No. 55* (1973), 3-35, 139. (A. Rapoport) **49** #10200 68A45 (92A25)
- The impossibility theorem for universal theory of prediction. Translated from the Russian (Vychisl. Sistemy Vyp. 55 (1973), 3-35). *Conference for Formal Methods in the Methodology of Empirical Sciences (Jablonna, June 17-21, 1974; Reports of the Seminar on Formal Methodology of Empirical Sciences (March 1974-May 1974))*, 19 pp. *Inst. Philos. and Sociology, Polish Acad. Sci., Wrocław, 1974*. (Evandro Agazzi) **54** #7197 02A05 (68A10)
- The impossibility theorem for universal theory of prediction. *Formal methods in the methodology of empirical sciences (Proc. Conf., Warsaw, 1974)*, pp. 417-430. *Synthese Library*, 103, Reidel, Dordrecht, 1976. (Editors) **58** #27376 02E10
- Samohvalov, M.** See *Boltjanskii, V. G.*, **56** #12190
- Samohyl, I.** Rational thermodynamics of a nonreacting binary linear fluid. *Inž.-Fiz. Ž.* **25** (1973), no. 2, 271-285 (Russian); translated as *J. Engrg. Phys.* **25** (1973), no. 2, 1001-1012 (1975). (Peter J. Chen) **51** #12155 8035
- Samoilenko, A. M.** (with Mitropol'skii, Ju. O.; Strizhak, T. G.) The reduction to standard form. (Russian) *Trudy Sem. Mat. Fiz. Nelinein. Koleban.* **1** (1968), no. 2, 4-20. (D. Bañov) **46** #455 34C30
- The conservation of an invariant torus under a perturbation. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **34** (1970), 1219-1240. (P. C. Das) **45** #8958 34C35
- (with Mitropol'skii, Ju. O.) Asymptotic expansions of quasiperiodic solutions in second order quasilinear systems. (Russian) *Asymptotic and qualitative methods in the theory of nonlinear oscillations (Russian)*, pp. 104-112. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971*. (S. D. Miluševa) **54** #10760 34C30 (34E05)
- The method of averaging in intermittent systems. (Russian) *Mathematical physics, No. 9 (Russian)*, pp. 101-117. *Naukova Dumka, Kiev, 1971*. (A. Halanay) **45** #5490 34C30
- (with Mitropol'skii, Ju. O.) Conditionally periodic oscillations in nonlinear systems. (Russian) *Mathematical physics, No. 12 (Russian)*, pp. 86-105, 168. *Izdat. "Naukova Dumka", Kiev, 1972*. (W. S. Loud) **49** #738 34C25
- The reduction of dynamical system in a neighborhood of a smooth invariant torus to canonical form. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 209-233. (L. Reizņš) **45** #3883 34C35
- (with Mitropol'skii, Ju. O.) Quasiperiodic oscillations in nonlinear systems. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 179-193. (J. W. Macki) **46** #3911 34C25 (34C15)
- Investigation of dynamical systems by means of functions of constant sign. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 374-384. (Tadeusz Dłotko) **47** #7151 34C35
- (with Momot, I. P.) Stationary quasiperiodic oscillations in second order nonlinear autonomous systems. (Russian) *Dynamical systems, and questions on the stability of the solutions of differential equations (Russian)*, pp. 104-121. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973*. (D. Bobrowski) **54** #10758 34C25
- (with Oleinik, S. G.) The solutions of systems of differential equations. (Russian) *Nonlinear oscillations and stability of motion (Russian)*, pp. 259-272. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973*. (Editors) **58** #1408 34C30
- (with Perest'juk, M. O.) On the question of the justification of the averaging method for second order differential equations with pulses. (Russian) *Nonlinear oscillations and stability of motion (Russian)*, pp. 273-282. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973*. (Editors) **58** #1409 34C30
- (with Mitropol'skii, Ju. O.) Multifrequency oscillations of nonlinear systems. (Russian. Polish and English summaries) *Nonlinear vibration problems, No. 14 (P. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part I)*, pp. 27-38. *PWN-Polish Sci. Publ., Warsaw, 1973*. (Authors' summary) **56** #8997 34C30
- (with Perest'juk, M. O.) The existence of invariant toroidal sets of systems with instantaneous change. (Russian) *The method of integral manifolds in nonlinear differential equations (Russian)*, pp. 262-273. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973*. (C. S. Coleman) **52** #910 34C30
- (with Martinjuk, D. I.; Perest'juk, M. O.) Existence of invariant tori for systems with difference equations. (Russian) *Differencial'nye Uravnenija* **9** (1973), 1904-1910, 19 (E. Leimanis) **49** #9458 39A10
- (with Perest'juk, M. O.) Invariant sets of systems with instantaneous change standard form. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 129-134, 144. (D. Bobrowski) **47** #7142 34C30
- (with Perest'juk, M. O.) N. N. Bogoljubov's second theorem for systems of differential equations with impulse action. (Russian) *Differencial'nye Uravnenija* (1974), 2001-2009, 2083. (Authors' summary) **57** #13010 34C10
- (with Perest'juk, M. O.) The averaging method in systems with impulsive action. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 411-418, 431. (G. B. Gustafson) **49** #9343 34C30
- (with Martinjuk, D. I.) Existence of invariant manifolds of systems with lag. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 611-620, 715. (G. B. Gustafson) **50** #5143 34K15
- Quasiperiodic solutions of a system of linear algebraic equations with quasiperiodic coefficients. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations (Russian)*, pp. 5-26. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1975*. (B. A. Ščerbakov) **54** #3096 34C25
- (with Sarafova, Galina H.) The existence and properties of a bounded solution of system of nonlinear integrodifferential equations in the neighborhood of an equilibrium point of the unperturbed system. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations (Russian)*, pp. 139-146. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1975*. (Editors) **54** #3331 45J05
- The exponential stability of an invariant torus of a dynamical system. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 5, 820-834, 947. (A. A. Reinfelds) **52** #6112 (E 52) #6112b 34C30 (34D35)
- (with Polesja, I. V.) Occurrence of invariant sets in the neighborhood of the equilibrium position. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 8, 1409-1411, 1530. (L. Reizņš) **52** #911 34C30
- Correction to: "The exponential stability of an invariant torus of a dynamical system" (*Differencial'nye Uravnenija* **11** (1975), no. 5, 820-834). (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 9, 1713. (A. A. Reinfelds) **52** #6112b 34C30 (34D35)
- (with Polesja, I. V.) The existence of separatrix surfaces for systems in standard form. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 10, 1827-1831, 1909. (S. I. Miluševa) **54** #10748 34C05 (34E05)
- (with Perest'juk, M. O.) On the question of the justification of the averaging principle in systems with impulsive action. (Russian. Bulgarian and English summaries) *Conference on Differential Equations and Applications (Ruse, 1975). Godišnik Visš. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 1, 215-220 (1977). (K. Seitz) **57** #17167 45J05 (34K20)
- (with Martinjuk, D. I.) Invariant tori of systems with aftereffect. (Russian. Bulgarian and English summaries) *Conference on Differential Equations and Applications (Ruse, 1975). Godišnik Visš. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 3, 47-54 (1977). (Authors' summary) **57** #13094 34K15
- (with Kulik, V. L.) On the question of the existence of the Green's function for the invariant torus problem. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 3, 348-359, 430. (L. Reizņš) **51** #13367 34C20
- (with Bogoljubov, N. N.; Mitropol'skii, Ju. O.) ★ Methods of accelerated convergence in nonlinear mechanics. Translated from the Russian by V. Kumar and edited by I. N. Sneddon. *Hindustan Publishing Corp., Delhi; Springer-Verlag, Berlin-New York, 1976*. viii + 291 pp. (Editors) **53** #11156 34C15 (34C30, 34C35)
- (with Mitropol'skii, Ju. O.) ★ Исследование колебательных систем второго порядка. (Russian) [A study of second order oscillatory systems] Preprint of the Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR, IM-76-6. *Akad. Nauk Ukrain. SSR Inst. Mat., Kiev, 1976*. 50 pp. (E. Leimanis) **56** #12431 34C30 (34E05)
- (with Ronto, N. I.) ★ Численно-аналитические методы исследования периодических решений. (Russian) [Numerical-analytic methods for the study of periodic solutions] *Izdat. Obe"d. "Višča Škola" Izdat. pri Kiev. Gosudarst. Univ., Kiev, 1976*. 180 pp. ((RŽMat **1976** #11 B1109K)) **58** #22817 34C25 (65L99)
- (with Mitropol'skii, Ju. O.) Asymptotic investigation of weakly nonlinear oscillatory systems. (Russian) *Akad. Nauk Ukrain. SSR Inst. Mat. Preprint No. 1* (1976). (Authors' summary) **58** #28927 34E05 (34C15)
- (with Bañov, Drumi D.; Miluševa, S. D.) The application of the averaging method to systems of integrodifferential equations of standard type with discontinuous right hand side. (Russian) *C. R. Acad. Bulgare Sci.* **29** (1976), no. 1, 13-15. (A. Corduneanu) **53** #8836 45J05
- (with Mitropol'skii, Ju. O.) The asymptotic integration of weakly nonlinear systems. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 4, 483-500, 574. (E. Leimanis) **54** #13236 34E05
- (with Mitropol'skii, Ju. O.) Multifrequency oscillations of second order weakly nonlinear systems. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 6, 745-762, 861. (W. S. Loud) **56** #8976 34C15
- (with Mitropol'skii, Ju. O.; Cidilo, K. V.) Invariant toroidal manifolds of nonlinear systems with lag. (Russian) *Differential equations with deviating argument (Proc. Fourth*

- All-Union Conf., Kiev, 1975* (Russian), pp. 207-214, 303. *Izdat. "Naukova Dumka", Kiev, 1977*. (Authors' summary) **57** #13095 34K15
- Invariant toroidal manifolds of systems with slowly varying variables. (Russian) *Problems of the asymptotic theory of nonlinear oscillations* (Russian), pp. 181-191, 278. *Naukova Dumka, Kiev, 1977*. (Author's summary) **58** #28934 34E15
- (with Mitropol'skii, Ju. O.) Some problems of the theory of multifrequency oscillations. (Russian) *VII. Internationale Konferenz über Nichtlineare Schwingungen* (Berlin, 1975), *Band I, Teil 2*, pp. 107-116. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn.*, No. 4N, Akademie-Verlag, Berlin, 1977. (W. S. Loud) **58** #22810 34C25
- (with Baïnov, Drumi D.; Miluševa, S. D.) On the application of the averaging method for systems of integro-differential equations of standard type with discontinuous right-hand side. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 1-2, 31-48. (G. S. Jordan) **55** #10986 45J05 (45D05)
- (with Mitropol'skii, Ju. O.) Some questions on the theory of multifrequency oscillations. (Russian) *Akad. Nauk Ukrain. SSR Inst. Mat. Preprint No. 14* (1977), 47 pp. (J. S. Joel) **58** #28928 34E05 (34C35, 70.34)
- (with Perest'juk, M. O.) Stability of the solutions of differential equations with impulsive action. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 11, 1981-1992, 2108. (A. Somolinos) **58** #11703 34D05
- (with Parasjuk, I. O.) Galerkin's method in the perturbation theory of invariant tori. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 2, 112-115, 192. (Authors' summary) **58** #6525 34C35
- (with Dvorak, O. V.) The splitting of a dynamical system in the vicinity of a stable invariant manifold. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 4, 555-560, 566. (A. D. Brjuno) **56** #16057 34C20 (58F10)
- (with Mitropol'skii, Ju. O.; Perest'juk, M. O.) On the question of the justification of the averaging method for a second order equation with impulsive interaction. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 6, 750-762, 851. (Stefan Balint) **57** #16836 34C30
- (with Bogoljubov, N. N.; Koroljuk, V. S.) Jurii Alekseevič Mitropol'skii (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 1 (193), 217-228. (Editors) **55** #5349 01A70
- Quasiperiodische Lösungen linearer Systeme algebraischer Gleichungen. *Untersuchungen zur asymptotischen Theorie nichtlinearer Differentialgleichungen*, pp. 41-56. *Schriftenreihe des Zentralinst. für Math. und Mech., Heft 26*, Akademie-Verlag, Berlin, 1978. (James A. Murdock) **58** #17342 34C25 (58F99)
- (with Sarafova, Galina H.; Baïnov, Drumi D.) An application of the integral manifold method to the study of the bounded solutions of a class of systems of integrodifferential equations. (Russian) *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **22**(70) (1978), no. 1, 75-85. (K. Seitz) **58** #12252 45J05
- (with Perest'juk, M. O.) Periodic solutions of weakly nonlinear systems with impulse action. (Russian) *Differencial'nye Uravnenija* **14** (1978), no. 6, 1034-1045, 1149. (A. I. Perov) **58** #11674 34C25
- See also **Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics**, **47** #4666 (EA 47); **Proceedings: International Conference on Nonlinear Oscillations**, **47** #8968; **Mathematical physics**, **48** #5769; **Method of integral manifolds in nonlinear differential equations**, **48** #11625; **Analytic methods for the study of the solutions of nonlinear differential equations**, **53** #8531; **Methods for the study of nonlinear systems**, **55** #7660; **Oscillations of nonlinear systems**, **55** #7661; **Summer School: Mathematical**, **55** #12390 and **Nonlinear oscillations and stability of motion**, **57** #12950
- Samoilenko, I. S.** A certain boundary value problem for the biharmonic equation. (Russian) *Mathematical physics*, No. 8 (Russian), pp. 145-149. *Naukova Dumka, Kiev, 1970*. (M. A. Atahodžaez) **45** #583 31B30
- Polynomial factorization of elliptic systems of differential equations and boundary value problems. (Russian) *Mathematical physics*, No. 11 (Russian), pp. 129-133. *Naukova Dumka, Kiev, 1972*. (P. Szeptycki) **46** #7702 35J55
- (with Ševčenko, V. I.) The Riemann-Hilbert problem for a holomorphic vector with pseudoboundary boundary conditions. (Russian) *Mathematical physics*, No. 13 (Russian), pp. 153-159, 194. "Naukova Dumka", Kiev, 1973. (S. A. Tersenov) **48** #9077 35F15 (30A88)
- Boundary value problems for M. Z. Solomjak's system. (Russian) *Mat. Fiz. Vyp.* **17** (1975), 175-182, 192. (Ju. V. Kostarčuk) **56** #12551 35F15 (35J55)
- Regular pseudodifferential boundary value problems for the Lamé system of the static theory of elasticity. (Russian) *Mat. Fiz. Vyp.* **18** (1975), 139-149, 168. (Piero Bassanini) **56** #13934 73.35
- Samoilenko, Ju. I.** Methods of the theory of linear representations of symmetry groups and the application of these methods in the analysis of discrete systems. (Russian) *Cybernetics and computer technology*, No. 2: *Discrete control systems* (Russian), pp. 37-66. *Naukova Dumka, Kiev, 1969*. (Author's summary) **45** #9738 93C55
- Distributed electromagnetic control of processes in continuous media. (Russian) *Cybernetics and computer technology*, No. 1: *Complex control systems* (Russian), pp. 63-72. *Naukova Dumka, Kiev, 1969*. **45** #9766 93C99
- Reduction to an elementary cell of linear systems with a discrete symmetry group. (Russian) *Cybernetics and computer technology*, No. 6: *Discrete control systems* (Russian), pp. 22-40. *Naukova Dumka, Kiev, 1970*. (B. Popović) **45** #8326 93A10
- (with Kolomicev, V. I.) Decomposition of a representation of the group $SL(2, C)$, of the type of the regular representation, into indecomposable representations. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 4, 464-470, 572. (A. J. Coleman) **52** #8340 22E45
- (with Košmanenko, V. D.) The isomorphism between Fok space and a space of functions of infinitely many variables. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 5, 669-674, 718. (Richard Kerner) **52** #7377 81.46 (46G99)
- See also **Distributed control of processes in complex systems**, **56** #6868
- Samoilenko, Ju. S.** Matrix kernels of Wightman type functionals. (Russian. English summary) *Methods of functional analysis in problems of mathematical physics* (Russian), pp. 201-251. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev, 1971*. (Editors) **58** #32562 81.46 (46N05)
- Decomposition of invariant operator valued measures into elementary ones. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk. Ukrain. RSR Ser.*
- A* **1971**, 427-429, 478. (See Zbl **216**, 412) 28A70
- (with Dalec'kii, Ju. L.) Spectral decomposition of positive definite bidistributions. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 515-518. (B. S. Mitjagin) **50** #5469 46G99 (47A70)
- (with Berezans'kii, Ju. M.) Nuclear spaces of functions of an infinite number of variables. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 723-737, 860. (E. Gerlach) **58** #30093 46E10 (46G99)
- (with Kondrat'ev, Ju. G.) Integral representation of generalized positive definite kernels of an infinite number of variables. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 4, 800-803. (Authors' review (RŽMat **1976** #8 B987)) **58** #17845 46G99
- (with Gorbačuk, V. I.; Us, G. F.) Spectral theory of selfadjoint operators, and infinite-dimensional analysis. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 1(187), 203-216. (D. Ja. Petrina) **55** #8792 46G99 (47B99, 81.46)
- (with Berezans'kii, Ju. M.; Us, G. F.) Selfadjoint operators in spaces of functions of an infinite number of variables. (Russian) *Operator theory in function spaces* (Proc. School, Novosibirsk, 1975) (Russian), pp. 20-41, 341. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1977*. (From the introduction) **58** #17947 47B99 (81.47)
- (with Kolomicev, V. I.) Irreducible representations of inductive limits of groups. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 4, 526-531, 565. (J. Niederle) **57** #6282 22D10 (81.22)
- Samoilenko, L. G.** A certain class of grammars of direct components. (Russian) *Kibernetika (Kiev)* **1968**, no. 2, 102-103. (E. Stockaja (RŽMat **1968** #10 V611)) **45** #8483 68A30
- A certain class of grammars that is intermediate to the phrase-structure grammars and the context-free ones. (Russian) *Automata theory* (Proc. Seminar, Kiev, 1969), No. 2 (Russian), pp. 48-53. *Akad. Nauk Ukrain. SSR, Kiev, 1969*. **45** #8484 68A30
- A certain class of phrase-structure grammars. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 2, 94-96. (Author's summary) **46** #1147 68A30
- Certain subclasses of phrase-structure grammars that are weakly equivalent to context-free grammars. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 4, 48-55. (E. Stockaja (RŽMat **1970** #2 V690)) **46** #4799 68A30
- A certain method of constructing left-context grammars and languages. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 6, 8-20. (J. Gruska) **46** #1146 68A30
- The method of construction and the properties of context-dependent grammars and languages. (Russian) *Mathematical foundations of computer science* (Proc. Sympos. and Summer School, Širské Pleso, 1973), pp. 307-311. *Math. Inst., Slovak Acad. Sci., Bratislava, 1973*. (E. Stockii) **53** #9738 68A30
- Context properties of index grammars. (Russian. English summary insert) *Kibernetika (Kiev)* **1978**, no. 1, 31-35. (P. Dömösi) **58** #19392 68A30
- Samoilenko, N. I.** (with Kuz'min, I. V.; Kuz'menko, V. M.) Determination of the minimal disjunctive normal form of logical functions of k -valued logic. (Russian) *Avtomat. Sistemy Upravlenija i Pribory Avtomat. Vyp.* **37** (1976), 3-6, 1. (M. Stojaković) **56** #15365 02C05 (94A20)
- Samoilenko, Stanislav I.** Binoidal noiseproof codes. (Russian. English summary) *Problems of Control and Information Theory / Problemy Upravlenija i Teorii Informacii* **1** (1972), no. 3-4, 239-246. (C. Reischer) **48** #13467 94A10
- Binoid error-correcting codes. *IEEE Trans. Information Theory* **IT-19** (1973), no. 1, 95-101. (J. J. Stiffler) **54** #4816 94A10
- Suboptimal programming. (Russian. English summary) *Semiotics and information science*, No. 8 (Russian) pp. 3-44, 212. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1977*. (Author's summary) **57** #1890 65K05 (90C99)
- See also **Cybernetics—in the service of Communism**, **48** #10432; **Computer systems**, **57** #4560; **Coding in complex systems**, **57** #9286; **Design of experiments**, **57** #17980; **Theory of decision making**, **57** #18754; **Proceedings: All-Union Seminar on Combinatorial Mathematics**, **58** #247; **Proceedings: All-Union Seminar on Combinatorial Mathematics**, **58** #248; **Proceedings: Seminar on Combinatorial Mathematics**, **58** #249; **Adaptive systems**, **58** #9586; **Problems of air and space cybernetics**, **58** #9587 and **Proceedings: International Joint Conference on Artificial Intelligence**, **58** #32144
- Samoilov, A. A.** See **Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics**, **47** #4666 (EA 47)
- Samoilov, S. N.** (with Nekrasov, A. G.) The value of the metric tensor and the energy-momentum tensor components at the boundary of R - and T -regions. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1978**, no. 3, 94-98. (Authors' summary) **58** #20230 83.53
- Samoilov, V. D.** See **Mathematical simulation and the theory of electrical circuits**, **48** #3287
- Samoilov, V. E.** (with Geraščenko, E. I.; Erman, V. L.; Il'in, I. P.; Kozlov, Ju. M.; Korotaeva, I. P.; Makar'ev, B. M.; Pal'tov, I. P.; Popov, E. P.; Sidorov, I. M.; Favorskii-Pavlovskii, S. S.; Fedorov, S. M.; Hlypalo, E. I.; Ščerbakov, V. A.) ★Методы синтеза нелинейных систем автоматического управления. (Russian) [Methods for the synthesis of nonlinear automatic control systems.] Edited by S. M. Fedorov. *Nonlinear Automatic Control Systems*, Vol. 3. *Izdat. "Mašinostroenie", Moscow, 1970*. 416 pp. (Stanislav K. Myškov) **52** #7629 93C10
- Samoilov, I. I.** (with Saul'ev, V. K.) Approximate methods of unconditional optimization of functions of several variables. (Russian) *Mathematical analysis*, Vol. 11 (Russian), pp. 91-128, 180. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1973*. (S.-F. Šburlan) **51** #14585 65K05
- Samoilova, I. P.** (with Brona, I. I.) An approach to the combining of functional elements. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 6, 65-73. (Authors' summary) **57** #5439 94A20
- ščerbina-Samoilova, I. S. See Ščerbina-Samoilova, I. S.
- Šamojan, F. A.** Description of closed ideals and certain factorization questions in algebras of growing functions that are analytic in the disc. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **5** (1970), no. 5, 419-433. (N. K. Nikol'skii) **45** #905 46J15 (30A98, 42A96)
- Construction of a certain special sequence, and the structure of closed ideals in certain algebras of analytic functions. (Russian. Armenian summary) *Akad. Nauk*

- Armjan. SSR Dokl.* **55** (1972), 207-210. (J. Benkö) **49** #7784 46J15
- Construction of a certain special sequence, and structure of the closed ideals in certain algebras of analytic functions. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **7** (1972), no. 6, 440-470, 479. (B. Korenblum) **49** #5852 46J15
- The boundedness of a certain class of operators that are connected with the divisibility of analytic functions. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **8** (1973), no. 6, 474-490, 510. (B. Korenblum) **50** #2984 47B37 (30A98, 46E15)
- A certain class of operators connected with the factorization of analytic functions. (Russian) Investigations on linear operators and the theory of functions, IV. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1974), 200-205. (L. I. Hedberg) **51** #3452 30A78 (46E15)
- The structure of closed ideals in certain algebras of functions analytic in the disc and smooth up to its boundary. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **60** (1975), no. 3, 133-136. (Boris Korenblum) **52** #11604 46J15 (30A98)
- A theorem on imbedding in spaces of n -harmonic functions, and some applications. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **62** (1976), no. 1, 10-14. (J. Albrecht) **58** #30151 46E35 (32A99)
- Imbedding theorems that are connected with the multiple interpolation problem in H^p spaces. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **11** (1976), no. 2, 124-131, 184. (V. Kabaila) **54** #5472 30A80
- See also Investigations in linear operators and function theory, **46** #7927 and Investigations in linear operators and function theory, **49** #5761
- Samojlenko, A. M.** See **Samoilenko, A. A.**
- Samokhvalov, Ye. A.** See **Samohvalov, E. A.**
- Samokis, B. A.** (with Gavurin, M. K.) Remarks on the definition of the stability of computational algorithms. (Russian) *Metody Vyčisl.* **6** (1970), 13-21. (H. Schwetlick) **46** #4715 65J05 (47A50)
- Estimates for the sweep method in a certain special case. (Russian) *Metody Vyčisl.* **7** (1971), 27-39. (Josef Mikliček) **46** #4760 65Q05
- The problem of finding the eigenvalues of ordinary differential equations. (Russian) *Metody Vyčisl.* **10** (1976), 35-47, 185. (K. Najzar) **58** #3502 65L15
- aristarchos of Samos** See **Aristarchos of Samos**
- Samovol, V. S.** Linearization of a system of differential equations in the neighborhood of a singular point. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 545-548. (L. Reizinš) **47** #3751 34C05
- (with Zorič, V. A.) Certain conditions for the mapping of the space onto cylindrical domains. (Russian) *Mat. Zametki* **11** (1972), 459-462. (I. Ivancic) **46** #902 58C05
- (with Kondrat'ev, V. A.) The linearization of an autonomous system in the neighborhood of a singular point of "knot" type. (Russian) *Mat. Zametki* **14** (1973), 833-842. (E. Leimanis) **49** #3267 34C20
- The linearization of an autonomous system on the plane in the neighborhood of a singular point. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 1, 39-46. (K. R. Schneider) **48** #11676 34C20
- Samoilenko, Stanislav I.** See **Samoilenko, Stanislav I.**
- Sampaio, Rubens** An axiomatic theory of mixtures with diffusion. *Arch. Rational Mech. Anal.* **62** (1976), no. 2, 99-116. (Hilmi Demiryay) **54** #6820 82.53 (73.53)
- Sampathkumar, E.** (with Gudugudi, Bhalachandra) On the minimum number of line-disjoint paths in a finite tree. *J. Karnatak Univ. Sci.* **17** (1972), 257-258. (D. R. Lick) **51** #224 05C05
- On the line graph of subdivision graph. *J. Karnatak Univ. Sci.* **17** (1972), 259-260. (D. R. Lick) **51** #282 05C99
- On duplicate graphs. *J. Indian Math. Soc. (N.S.)* **37** (1973), 285-293 (1974). (Neil Robertson) **51** #5415 05C99
- (with Kulli, Veerabhadra R.) On the interchange graph of a finite planar graph. *J. Indian Math. Soc. (N.S.)* **37** (1973), 339-341 (1974). (L. W. Beineke) **51** #7920 05C10
- (with Kulkarni, K. H.) Transitive digraphs and topologies on a set. *J. Karnatak Univ. Sci.* **18** (1973), 266-273. (Paul C. Kainen) **50** #12793 05C20
- (with Chikkodimath, S. B.) Semi-total graphs of a graph. I, II, III. *J. Karnatak Univ. Sci.* **18** (1973), 274-280; *ibid.* **18** (1973), 281-284; *ibid.* **18** (1973), 285-296. (M. Behzad) **50** #9712 05C99
- (with Nanjundaswamy, L.) Complete signed graphs and a measure of rank correlation. *J. Karnatak Univ. Sci.* **18** (1973), 308-311. (Helen Marcus-Roberts) **54** #11649 62G10
- Characterizations of connected graphs. *J. Karnatak Univ. Sci.* **18** (1973), 312-314. (J. Mitchem) **50** #1987 05C99
- (with Bhavé, V. N.) Group valued graphs. *J. Karnatak Univ. Sci.* **18** (1973), 325-328. (A. T. White) **50** #177 05C25
- On tensor product graphs. *J. Austral. Math. Soc.* **20** (1975), no. 3, 268-273. (F. Harary) **52** #10512 05C99
- L -graphical partitions of an even number. *J. Karnatak Univ. Sci.* **20** (1975), 266-269. (G. Chartrand) **56** #15500 05C99
- (with Bhavé, V. N.) Partition graphs of a graph. *Progr. Math. (Allahabad)* **9** (1975), no. 2, 33-42. (D. E. Daykin) **56** #185 05C99
- (with Bhavé, V. N.) Partition graphs and coloring numbers of a graph. *Discrete Math.* **16** (1976), no. 1, 57-60. (Authors' summary) **58** #21763 05C15
- (with Kundu, Sukhamay; Bhavé, V. N.) Reconstruction of a tree from its homomorphic images and other related transforms. *J. Combinatorial Theory Ser. B* **20** (1976), no. 2, 117-123. (B. Manvel) **54** #5025 05C05
- See also Gudugudi, Bhalachandra, **58** #21846
- Sampathkumar, E.** ★Some studies in Boolean algebra. Karnatak University Research Series, No. 9. *Karnatak University, Dharwar*, 1967. v+ii+78 pp. (F. M. Yaqub) **50** #12846 06A40
- Sampford, M. R.** See **Kish, Leslie; et al.**, **51** #2064 and **Smith, T. M. F.**, **56** #4005
- Samplawski, H.** On bilinear series in Banach spaces. II, III. *Comment. Math. Prace Mat.* **16** (1974/75), 77-83; *ibid.* **18** (1974/75), 85-94. (D. R. Arterburn) **50** #14180 46B99
- On convergence of bilinear integrals. *Comment. Math. Prace Mat.* **18** (1974/75), 95-112. (D. R. Arterburn) **50** #14181 46B99
- dold-Samplonius, Yvonne** See **Dold-Samplonius, Yvonne**
- Sampson, Allan R.** (with Olkin, Ingram) Jacobians of matrix transformations and induced functional equations. *Linear Algebra and Appl.* **5** (1972), 257-276. (David Carlsson) **46** #9063 15A15
- A tale of two regressions. *J. Amer. Statist. Assoc.* **69** (1974), 682-689. (R. Pfaffenberger) **51** #11846 62J05
- A note on a new matrix decomposition. *Linear Algebra and Appl.* **8** (1974), 459-462. (H. Ratschek) **50** #349 15A15
- Characterizing exponential family distributions by moment generating functions. *Ann. Statist.* **3** (1975), 747-753. (D. N. Shanbhag) **51** #9296 62E10
- (with Kimeldorf, George S.) One-parameter families of bivariate distributions with fixed marginals. *Comm. Statist.* **4** (1975), 293-301. (A. K. Md. Ehsanes Saleh) **51** #7084 62E10
- (with Kimeldorf, George S.) Uniform representations of bivariate distributions. *Comm. Statist.* **4** (1975), no. 7, 617-627. (Henry W. Block) **53** #1844 62H05
- (with Spencer, Bruce) Sufficiency, minimal sufficiency, and the lack thereof. *Amer. Statist.* **30** (1976), no. 1, 34-35. (Daniel Solomon) **56** #9760 62B05 (62-01)
- Stepwise BAN estimators for exponential families with multivariate normal applications. *J. Multivariate Anal.* **6** (1976), no. 1, 167-175. (Madanlal T. Wasar) **53** #11858 62F10 (62L20)
- Sampson, Anthony A.** A model of optimal depletion of renewable resources. *J. Economic Theory* **12** (1976), no. 2, 315-324. (Colin W. Clark) **53** #10216 90A99
- Sampson, Gary** Sharp estimates of convolution transforms in terms of decreasing function. *Pacific J. Math.* **38** (1971), 213-231. (P. G. Rooney) **47** #712 42A96 (44A35)
- Two-sided L_p estimates of convolution transforms. *Pacific J. Math.* **45** (1973), 347-356. (P. G. Rooney) **47** #7352 44A35
- (with Naparstek, Abraham; Drobot, Vladimir) (L_p, L_q) mapping properties of convolution transforms. *Studia Math.* **54** (1975/76), no. 1, 41-70. (R. A. Askey) **53** #3802 47G05 (44A35)
- (with Zielezny, Z.) Hypoelliptic convolution equations in $K', p > 1$. *Trans. Amer. Math. Soc.* **223** (1976), 133-154. (Philip Heywood) **54** #13561 46F10 (47G05)
- (with Tuy, H.) Fourier transforms and their Lipschitz classes. *Pacific J. Math.* **71** (1978), no. 2, 519-537. (Hans P. Heinig) **58** #23338 42A68 (42A20)
- Sampson, J. H.** (with Kuga, Michio) A coincidence formula for locally symmetric spaces. *Amer. J. Math.* **94** (1972), 486-500. (J. A. Wolf) **47** #6943 22E40 (53C35)
- On a theorem of Chern. *Trans. Amer. Math. Soc.* **177** (1973), 141-153. (P. Molino) **47** #5768 53C10
- Sous-groupes conjugués d'un groupe linéaire. (English summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 2, ix, 1-6. (J. E. Humphreys) **54** #473 22E40
- Sampson, Jeffrey R.** ★Adaptive information processing. An introductory survey. Texts and Monographs in Computer Science. *Springer-Verlag, New York-Heidelberg*, 1976. x+214 pp. (Jill Humphries) **55** #6903 68-01 (68A35)
- Sampson, P. D.** (with Freiburger, Walter; Grenander, Ulf) Patterns in program references. Papers on system performance evaluation. *IBM J. Res. Develop.* **19** (1975), 230-243. (K. Vairavan) **52** #9661 68A05
- Sampson, P. F.** (with Jennrich, Robert I.) Newton-Raphson and related algorithms for maximum likelihood variance component estimation. *Technometrics* **18** (1976), no. 1, 11-17. (M. Atiqullah) **52** #15870 62J10
- See also Multivariate statistical methods: within-groups covariation, **52** #2028
- Šamraeva, L. V.** Primary ideals of rings of functions that are regular in a disc and differentiable on its boundary. (Russian) *Trudy Moskov. Inst. Radiotekh. Elektron. i Avtomat.* **1971**, no. 52 Mat., 92-104. (RZhMat **1972** 55 B810) **58** #30275 46J15
- Šamrikov, B. M.** (with Kuncević, V. M.; Letov, A. M.; Naumov, B. N.; Nelepin, R. A.; Petrov, B. N.; Platon, V. Ja.; Popov, E. P.; Pospelov, G. S.; Rozenvasser, E. N.; Šelenkov, V. M.; Jusupov, R. M.) ★Точные методы исследования нелинейных систем автоматического управления. (Russian) [Exact methods for investigating nonlinear automatic control systems] Edited by R. A. Nelepin. *Nonlinear Automatic Control Systems, Vol. 4. Izdat. "Mašinostroenie", Moscow*, 1971. 323 pp. (Ljubomir Lilov) **50** #4040 93C10
- A certain method of solving the problem of stability "in the large". (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics (Tbilisi, 1968), Vol. 2: Theory of automatic control (Russian)*, pp. 65-72, 475. *Izdat. "Nauka", Moscow*, 1972. (Alan Weinstein) **48** #9526 49E20
- Qualitative study of nonlinear sampled-data systems by the method of point mappings. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 3, 198-203 (Russian); translated as *Engrg. Cybernetics* **10** (1972), no. 3, 539-544. (Author's summary) **53** #12682 93C10
- (with Stepan'janc, G. A.) The existence of optimal Ljapunov functions of dynamical systems. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 1040-1042. (V. M. Popov) **51** #1039 34D20 (93D05)
- On classes of steady state motions in relay impulse automatic systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 5, 155-162 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 5, 846-854. (I. H. Mufti) **51** #5108 93D05
- Classification of singular points in discrete dynamic systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 3, 212-216 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 3, 163-166. (K. B. Datta) **55** #7519 93C55
- Investigation of the dynamics of nonlinear pulse systems by the method of Ljapunov functions. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 4, 170-180 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 4, 128-137. (Author's summary) **56** #18013 93D05 (93C10)
- (with Petrov, B. N.; Terjaev, E. D.) Conditions for the parametric identifiability of control objects in closed automatic systems. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 6, 1281-1284. (Not reviewed) **93B30**
- (with Petrov, B. N.; Terjaev, E. D.) Conditions for parametric identifiability of controllable objects in open-loop and closed-loop automatic systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 2, 160-175, 223 (Russian); translated as *Engrg. Cybernetics* **15** (1977), no. 2, 137-152 (1978). (Agostino Villa) **58** #20677 93B30 (93E10)
- Šamroni, S. K.** (with Geršanov, A. M.) Randomized estimation in problems with a discrete parameter space. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **21** (1976),

- no. 1, 195-200. (W. Hoeffding) **53** #14766 62F10 (62C07)
- Samrov, M. I.** (with Gramolin, V. V.) Construction of time-optimal summators on integral elements. (Russian) *Avtomat. i Vychisl. Tehn.* **1972**, no. 3, 82-86. (Authors' summary) **46** #6646 68A20
- Sams, W. Neal** (with Kouri, Donald J.) Noniterative solutions of integral equations for scattering. I. Single channels. *J. Chem. Phys.* **51** (1969), 4809-4814. (Editors) **58** #7006 45L10 (81.45)
- Samsa, B. V.** See **Control of complex technological and economic systems**, **56** #2486
- Samsiev, T. B.** (with Berkinov, H. B.) Analytic solution of a nonstationary gas transportation problem that is connected with the gas-dynamical computations of gas mains. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) Vyp.* **34** (1975), 147-154, 201. (From the text) **57** #18480 76.65
- Samsiev, T. G.** The optimal control of a linear dynamical system that is given in the form of a convolution integral. (Russian) *Voprosy Kibernet. (Tashkent) No.* **52** (1972), 97-102, 198. (See RZMat **1973** #3 B570) **49A99**
- Samsiev, U. S.** (with Buzina, T. E.) The unstable motions of a twisted rod. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1973**, no. 3, 14-15. (Alan Weinstein) **47** #7989 73.35
- Samsky, Stanley R.** Immersions of complex hypersurfaces. *Trans. Amer. Math. Soc.* **211** (1975), 171-184. (Robert Wells) **52** #9252 57D40
- Samson, A. M.** (with Rogovcov, N. N.) Nonstationary radiation transfer in scattering media. (Russian. English summary) *Astrofizika* **11** (1975), no. 3, 439-454. (Not reviewed) **82.45**
- Samsonadze, E. T.** The nature of an irreducible representation of the orthogonal Lie algebra D_3 . (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **62** (1971), 273-275. (E. Porada) **46** #1862 17B10
- The interdependence of the characters of irreducible representations of the symplectic Lie algebra C_n and the orthogonal Lie algebra D_n . (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **63** (1971), 537-540. (Octavian Ruján) **46** #3695 22E45
- The relation between the characters of the irreducible representations of the orthogonal Lie algebras B_n and D_n . (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* **5**(147) (1972), 37-40. (Juri A. Bahturin) **52** #13957 17B10
- The character of an irreducible representation of a symplectic Lie algebra of rank two. (Georgian. Russian summary) *Tbilis. Univ. Šrom. A* **6-7**(149-150) (1973), 65-67. (J. S. Joel) **50** #4822 22E70 (17B10, 81.22)
- Determination of the number of integer solutions of systems of linear inequalities and equations. (Russian) *Fifth Works of Young Scientists at Tbilisi State University of the Order of the Red Star (Russian)*, pp. 21-27. *Tbilis. Univ., Tbilisi*, 1976. (From the introduction) **58** #27755 10B45 (90C10)
- Samsonadze, G. T.** Local theorems for certain classes of groups. (Russian. Georgian summary) Collection of articles dedicated to Academician V. D. Kupradze on the occasion of his 70th birthday. *Tbilis. Univ. Šrom. A* **8**(153) (1974), 57-61. (Richard E. Phillips) **54** #407 20E25
- Samsionija, Z. V.** (with Kveselava, D. A.) The conformal moduli of doubly connected domains close to each other. (Russian) *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* **9** (1969), no. 1, 5-12. (S. Kas'janjuk (RZMat **1970** #2 B181)) **46** #2026 30A30
- A certain problem of conformal mapping of doubly connected domains. (Russian) *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* **9** (1969), no. 1, 55-58. (S. Kac'janjuk (RZMat **1970** #2 B182)) **46** #2022 30A24
- Conformal moduli of nearby doubly connected domains. (Russian) Problems of applied mathematics—Mushelishvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* **11** (1972), no. 1, 87-98. (E. Reich) **48** #11463 30A30
- Doubly connected domains with prescribed conformal moduli. (Russian) Problems of applied mathematics—Mushelishvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* **11** (1972), no. 1, 99-109. (E. Reich) **48** #11464 30A30
- (with Dekanosidze, C. A.) On the approximate conformal mapping of simply connected domains onto the disc. (Russian) *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* **15** (1975), no. 1 *Vychisl. Mat. i Programirovanie*, 103-122. (J. G. Krzyż) **55** #637 30A28
- On the quasiconformal mapping of simply connected domains. (Russian) *Some problems in modern function theory (Proc. Conf. Modern Problems of Geometric Theory of Functions, Inst. Math., Acad. Sci. USSR, Novosibirsk, 1976)* (Russian), pp. 137-139. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Mat., Novosibirsk*, 1976. (Editors) **58** #22548 30A60
- A certain homeomorphism of the Beltrami equation. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **81** (1976), no. 2, 273-276. (P. Caraman) **53** #5863 30A60
- Samsonova, I. V.** Purities with absolute closure. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 2, 48-51. (L. Bican) **53** #653 20K40
- Samsonova, L. F.** See **Optimization, Operations research, Bionics**, **48** #1846
- Samsutdinov, M. M.** (with Caljuk, Z. B.) The existence of a limit as $t \rightarrow \infty$ of the solution of a nonlinear Volterra equation. (Russian) *Differentsial'nye Uravnenija* **7** (1971), 2253-2258. (J. Kolomý) **45** #839 45D05 (45M05)
- (with Caljuk, Z. B.) The boundedness of the solutions of a certain class of nonlinear Volterra equations. (Russian) *Kuban. Gos. Univ. Naučn. Trudy No.* **148 Mat. Anal. (1971), 63-71. (A. Corduneanu) **49** #3476 45D05**
- See also **Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region**, **46** #1532
- Samudinov, I.** (with Ved', Ju. A.) Holomorphic solution of the limit boundary value problem for second order integro-differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk No.* **7** (1970), 25-32. (Not reviewed) **45J05**
- (with Ved', Ju. A.) The limit Cauchy problem for integrodifferential equations of Volterra-Fredholm type. (Russian) *Studies in integro-differential equations in Kirgizia, No. 10 (Russian)*, pp. 57-66, 288. *Izdat. "Ilim", Frunze*, 1974. (Authors' summary) **57** #13427 45J05
- Samuel, Christian** Sur les espaces de Banach dont le dual contient un sous-espace isomorphe à l_1 . *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 705-706. (G. J. O. Jameson)
- 49** #1076a 46B10
- Sur les espaces de Banach dont le dual contient un sous-espace isomorphe à l_1 . *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 765-766. (G. J. O. Jameson) **49** #1076b 46B10
- Sur les espaces de fonctions continues. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aii, A97-A99. (G. J. O. Jameson) **51** #3879 46E15
- Samuel, Isaac** Éléments graphiques polygonaux. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A1067-A1069. (C. Tartia) **49** #7172 05C20
- Application des éléments graphiques polygonaux à l'étude de la structure d'une table de groupe. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 1315-1317. (C. Tartia) **50** #6913 05C20 (20-01)
- Diagramme de la table d'un groupe fini. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 5, Aii, A289-A292. (Author's summary) **55** #9589 65S05 (05C25)
- Étude graphique de la table d'un groupe fini. *Match No.* **3** (1977), 39-49. (R. A. Melter) **58** #27658 05C99 (05C25, 20B20)
- Samuel, Iudita** (with Grindea, S.) An economic growth model with objective function depending explicitly on the level of capital. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1976**, no. 2, 19-39. (Anjan Mukherji) **57** #5013 90A15
- (with Grindea, S.) The influence of the discount rate on the optimal trajectories in a model of economic growth. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1977**, no. 4, 93-106. (Authors' summary) **58** #32860 90A15
- See also **Ermakov, S. M.**, **56** #7101
- Samuel, M. T.** (with Gruber, Bruno) Semisimple subalgebras of semisimple Lie algebras: the algebra $\mathfrak{g}_2(\text{SU}(6))$ as a physically significant example. *Group theory and its applications, Vol. III*, pp. 95-141. *Academic Press, New York*, 1975. (Jiri Patera) **58** #803 17B20 (81.17)
- Samuel, Pierre** Méchants anneaux de séries formelles. *Ann. Fac. Sci. Univ. Clermont-Ferrand No.* **24** (1964), 109-111. (Tadayuki Matsuoaka) **46** #1781 13J05
- Séminaire sur l'Équivalence Rationnelle. Rédigé par Marguerite Flexor et Jean-Jacques Risler. *Séminaire sur l'Équivalence Rationnelle (Paris-Orsay, 1971)*, pp. 1-17. *Publ. Math. Orsay*, No. 425. *Dép. Math. Fac. Sci., Univ. Paris, Orsay*, 1971. (T. Oda) **53** #2941 14C10
- Anneaux euclidiens. *Colloque d'Algèbre Commutative (Rennes, 1972)*, Exp. No. 3, 4 pp. *Publ. Sémin. Math. Univ. Rennes, Année 1972, Univ. Rennes, Rennes*, 1972. (R. M. Fossum) **50** #7119 13F10
- (with Macrae, R. E.) Subfields of index 2 of elliptic function fields. *Conference on Commutative Algebra (Univ. Kansas, Lawrence, Kan., 1972)*, pp. 171-193. *Lecture Notes in Math.*, Vol. 311, *Springer, Berlin*, 1973. (K. Kiyek) **49** #2748 14H05 (14K10)
- (with Zariski, O.) ★Commutative algebra. Vol. 1. With the cooperation of I. S. Cohen. Corrected reprinting of the 1958 edition. *Graduate Texts in Mathematics*, No. 28. *Springer-Verlag, New York-Heidelberg-Berlin*, 1975. xi + 329 pp. (Editors) **52** #5641 13-02
- (with Zariski, O.) ★Commutative algebra. Vol. II. Reprint of the 1960 edition. *Graduate Texts in Mathematics*, Vol. 29. *Springer-Verlag, New York-Heidelberg*, 1975. x + 414 pp. (Editors) **52** #10706 13-02 (12Jxx, 14-02)
- Samuel, Stuart** Functional integrals over anticommuting variables and the one-dimensional scattering problem. *J. Mathematical Phys.* **19** (1978), no. 6, 1438-1444. (M. J. Goovaerts) **57** #18552 81.28 (28A40, 58D99)
- Samuel-Cahn, Ester** Asymptotic distributions for occupancy and waiting time problems with positive probability of falling through the cells. *Ann. Probability* **2** (1974), 515-521. (C. J. Park) **51** #1920 60F05
- Two kinds of repeated significance tests, and their application for the uniform distribution. *Comm. Statist.* **3** (1974), 419-431. (R. H. Farrell) **52** #15903 62L10
- Repeated significance test II, for hypotheses about the normal distribution. *Comm. Statist.* **3** (1974), 711-733. (J. H. Kučkarov) **50** #15200 62L05
- Repeated significance tests I and II. Generalizations. *Comm. Statist.* **3** (1974), 735-744. (A. Ja. Dorogovcev) **51** #11770 62F05
- (with Sackrowitz, Harold B.) Inspection procedures for Markov chains. *Management Sci.* **21** (1974/75), no. 3, 261-270. (Authors' summary) **55** #11541 62N10 (90B30)
- Remark on a formula by Fisher. *J. Amer. Statist. Assoc.* **70** (1975), no. 351, part 1, 720. (M. Bertrand-Retali) **52** #15771 (E 54 #1444) 62E20
- Asymptotic distribution for the coupon-collector's and sampling-tagging problems, when tagging affects catchability. *J. Appl. Probability* **12** (1975), no. 3, 625-628. (Colin L. Mallows) **51** #11761 62E20
- Acknowledgment of priority: "Remark on a formula by Fisher" (J. Amer. Statist. Assoc. **70** (1975), no. 1, 720). *J. Amer. Statist. Assoc.* **71** (1976), no. 353, 255. (M. Bertrand-Retali) **54** #1444 62E20
- (with Zamir, Shmuel) Algebraic characterization of infinite Markov chains where movement to the right is limited to one step. *J. Appl. Probability* **14** (1977), no. 4, 740-747. (Serban Grigorescu) **57** #1654 60J10
- Samuëlides, Manuel** (with Sauvageot, Jean-Luc) Une classe de représentations des groupes commutatifs non localement compacts: les représentations spéciales. *Bull. Sci. Math.* (2) **97** (1973), 65-80. (J. Ernest) **48** #4189 22A25
- (with Sauvageot, Jean-Luc) Représentations des algèbres de Lie localement convexes. Application aux relations de commutation. *Bull. Sci. Math.* (2) **98** (1974), no. 1, 3-16. (Wayne J. Holman, III) **56** #3077 17B15 (22E45)
- (with Sauvageot, Jean-Luc) Algèbre de Krieger d'un système dynamique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Ai, A709-A712. (Douglas Lind) **54** #7753 28A65 (46L10)
- Analyticité vectorielle et champ scalaire neutre. *Séminaire de Théorie du Potentiel (Paris, 1972-1974)*, pp. 254-265. *Lecture Notes in Math.*, Vol. 518, *Springer, Berlin*, 1976. (J.-P. Antoine) **58** #8875 81.22 (22E45, 47D10)
- See also **Guichardet, Alain**, **50** #5483
- Samuels, M. L.** Distribution of the branching-process population among generations. *J. Appl. Probability* **8** (1971), 655-667. (L. Takács) **45** #1274 60J80
- Samuels, P.** Maximum Hausdorff dimension of certain exceptional sets. *J. London Math. Soc.* (2) **5** (1972), 260-262. (A. Lelek) **47** #5186 26A15 (30A72)

- (with Davies, Roy O.) Density theorems for measures of Hausdorff type. *Bull. London Math. Soc.* **6** (1974), 31-36. (D. G. Larman) **50** #2446 28A75
- A topology formed from a given topology and ideal. *J. London Math. Soc.* (2) **10** (1975), no. 4, 409-416. (J. Dugundji) **51** #11396 54A10
- Samuels, Stephen M.** A characterization of the Poisson process. *J. Appl. Probability* **11** (1974), 72-85. (Olav Kallenberg) **50** #8740 60K05 (60G55)
- The classical ruin problem with equal initial fortunes. *Math. Mag.* **48** (1975), no. 5, 286-288. (Hans Bühlmann) **54** #1412 60K10
- (with Gianini-Pettitt, Jacqueline) The infinite secretary problem. *Ann. Probability* **4** (1976), no. 3, 418-432. (W. T. Rasmussen) **54** #1503 62L15
- (with Rubin, Herman) The finite-memory secretary problem. *Ann. Probability* **5** (1977), no. 4, 627-635. (Authors' summary) **58** #24527 60G40 (62L15)
- The Radon-Nikodým theorem as a theorem in probability. *Amer. Math. Monthly* **85** (1978), no. 3, 155-165. (H. Bergström) **57** #17746 60A10 (28A15)
- Samuelson, Åke** See **Samuelsson, Åke**
- Samuelson, D. James** On the conversion of binary algebras into semi-primal algebras. *Ann. Scuola Norm. Sup. Pisa* (3) **25** (1971), 249-267. (Alden Pixley) **48** #8353 08A25
- Independent classes of semiprimal algebras. *Rocky Mountain J. Math.* **2** (1972), no. 4, 631-639. (Alden Pixley) **46** #7131 08A25
- Samuelson, Paul A.** (with Liviatan, Nissan) Notes on turnpikes: stable and unstable. *J. Econom. Theory* **1** (1969), 454-475. (Trout Rader) **53** #7388 90A15
- (with von Weizsäcker, C. C.) A new labor theory of value for rational planning through use of the bourgeois profit rate (golden-rule state/Marxian values/technical progress). *Proc. Nat. Acad. Sci. U.S.A.* **68** (1971), 1192-1194. (G. Tintner) **46** #6793 90A99
- The "fallacy" of maximizing the geometric mean in long sequences of investing or gambling. *Proc. Nat. Acad. Sci. U.S.A.* **68** (1971), 2493-2496. (G. Morton) **45** #4804 90A99
- Mathematics of speculative price. With an appendix by Robert C. Merton. *Mathematical topics in economic theory and computation (Sympos. Math. Econom., SIAM Fall Meeting, Univ. Wisconsin, Madison, Wis., 1971)*, pp. 1-42. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1972. (Author's summary) **55** #14144 65K05 (90A10)
- The general saddlepoint property of optimal-control motions. *J. Econom. Theory* **5** (1972), no. 1, 102-120. **56** #7870 90A15 (93C99)
- Proof that unsuccessful speculators confer less benefit to society than their losses. *Proc. Nat. Acad. Sci. U.S.A.* **69** (1972), 1230-1233. (I. M. Stancu-Minasian) **45** #6383 90A99
- Unification theorem for the two basic dualities of homothetic demand theory. *Proc. Nat. Acad. Sci. U.S.A.* **69** (1972), 2673-2674. (A. C. Williams) **46** #10372 90A10
- Proof that properly discounted present values of assets vibrate randomly. *Bell. J. Econom. and Management Sci.* **4** (1973), 369-374. (H. Wold) **48** #7920 90A15
- Optimality of profit-including prices under ideal planning. *Proc. Nat. Acad. Sci. U.S.A.* **70** (1973), 2109-2111. (Ion Dobre) **49** #4548 90A15
- Mathematics of speculative price. With an appendix on continuous-time speculative processes by Robert C. Merton. *SIAM Rev.* **15** (1973), 1-42. (G. Tintner) **48** #1672 90A99
- A biological least-action principle for the ecological model of Volterra-Lotka. *Proc. Nat. Acad. Sci. U.S.A.* **71** (1974), 3041-3044. (S. Levin) **49** #12105 92A05
- The optimum growth rate for population. *Internat. Econom. Rev.* **16** (1975), no. 3, 531-538. (From the author's introduction) **55** #12172 (E 55 #12174) (E 55 #12173) 92A15
- Optimum social security in a life-cycle growth model. *Internat. Econom. Rev.* **16** (1975), no. 3, 539-544. (From the author's introduction) **55** #11984 90A15
- Maximum principles in analytical economics. *Mathematical methods of the social sciences. Synthese* **31** (1975), no. 2, 323-344. (Editors) **58** #20320 90A15
- Optimality of sluggish predictors under ergodic probabilities. *Internat. Econom. Rev.* **17** (1976), no. 1, 1-7. (Leonard J. Mirman) **54** #12179 90A15
- Agreement and evaluations: "The optimum growth rate for population" (*Internat. Econom. Rev.* **16** (1975), no. 3, 531-538). *Internat. Econom. Rev.* **17** (1976), no. 2, 516-525. (Editors) **55** #12174 92A15
- The periodic turnpike theorem. *Nonlinear Anal.* **1** (1976), no. 1, 3-13. (G. Chichilnisky) **55** #11983 90A15
- Is real-world price a tale told by the idiot of chance? *Rev. Econom. Statist.* **58** (1976), no. 1, 120-123. (Anjan Mukherji) **57** #18773 90A15
- Time symmetry and asymmetry in population and deterministic dynamic systems. *Theoret. Population Biology* **9** (1976), no. 1, 82-122. (K. Gopalsamy) **57** #9134 92A15
- Balanced-growth equilibrium in the general multi-class saving model. *Quantitative Wirtschaftsforschung*, pp. 569-577. Mohr, Tübingen, 1977. (Author's summary) **58** #32871 90A15
- Generalizing Fisher's "reproductive value": linear differential and difference equations of "dilute" biological systems. *Proc. Nat. Acad. Sci. U.S.A.* **74** (1977), no. 11, 5189-5192. (Niels Keiding) **57** #11840 92A15
- (with Yellin, Joel) Comparison of linear and nonlinear models for human population dynamics. *Theoret. Population Biology* **11** (1977), no. 1, 105-126. (Authors' summary) **58** #9431 92A15
- Generalizing Fisher's "reproductive value": overlapping and nonoverlapping generations with competing genotypes. *Proc. Nat. Acad. Sci. U.S.A.* **75** (1978), no. 8, 4062-4066. (Author's summary) **58** #20593 92A10
- See also **Deardorff, Alan V.**, **55** #12173 (E 55 #12174)
- Samuelsson, Åke** (with Halberg, Charles J. A., Jr.) On the fine structure of spectra. *Math. Scand.* **29** (1971), 37-49. (H. A. Gindler) **46** #6065 47A10
- A local mean value theorem for analytic functions. *Amer. Math. Monthly* **80** (1973), 45-46. (A. K. Agarwal) **47** #8822 30A02
- Samuelsson, Haakon M.** (with Balas, Egon) A node covering algorithm. *Naval Res. Logist. Quart.* **24** (1977), no. 2, 213-233. (I. T. Frisch) **56** #8424 05C35 (90B10)
- (with Narula, Subhash C.; Ogbu, Ugonnaya I.) An algorithm for the p -median problem. *Operations Res.* **25** (1977), no. 4, 709-713. (James G. Morris) **56** #4857 90C99
- Samū'il ibn Yahyā, Abū Nasr ibn Yahya ibn 'Abbās el-Māğēbi el-Andalusī** See **Rozent**, B. A., **58** #4815 and **al-Bāhīr en algèbre d'As-Samaw'al**, **58** #15850
- Samuilov, A. Z.** Certain properties of the polynomial solutions of higher order differential equations. (Russian) *Differentsial'nye Uravneniya* **7** (1971), 2287-2289. (A. D. Zienkiewicz) **45** #2244 34C99
- A certain application of Picard's theorem to higher order differential equations. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 734-736. (Jozef Moravčík) **46** #2133 34A20
- The polynomial solutions of a first order differential equation. (Russian) *Vysk. Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1972**, no. 1, 121-124. (O. Borůvka) **46** #3340 34A05
- Samus', V. M.** (with Žaicev, Ė. K.) On the question of the solutions of a certain class systems of nonlinear algebraic equations. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1973**, 490-492, 571. (Ulrich Kosel) **51** #14577 65J05
- Samusenka, A. M.** (with Adzeriho, K. S.) On the theory of radiation transfer in spectral lines. (Russian) *Dokl. Akad. Nauk BSSR* **20** (1976), no. 4, 308-311, 380. (D. ter Haar) **55** #14065 85A5
- Samusenka, A. V.** Multilayer schemes of increased accuracy for the method of integral relations. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1970**, no. 1, 23-31, 98-99. (E. Albasiny) **51** #4694 65N10
- An investigation of the convergence of schemes of improved accuracy for method of integral relations. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1970**, no. 3-9, 74. (Murli M. Gupta) **49** #1793 65M10
- The uniform convergence of certain difference schemes that are obtained by method of integral relations. (Russian) *Dokl. Akad. Nauk BSSR* **16** (1972), 293-295. (L. Makarov) **45** #9515 65N10
- The use of the method of integral relations for the construction of difference schemes in the case of the Poisson equation. (Russian) *Vysk. Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1972**, no. 1, 81-85. (T. Styš) **45** #4668 65N05
- Samylovskii, A. I.** (with Suškov, B. G.) The construction of the characteristic function of nonconvex set and the quadratic integer programming problem that is connected with it. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 2, 322-337, 524. (Jürgen Guden) **58** #15149 90C10 (90C20)
- Šamyrkanov, S.** Solution of a fractional quadratic programming problem. (Russian) *Soviet mathematical optimization methods and their application in the economy of Kirghizia (Russian)*, pp. 55-65, 104-105. Izdat. "Ilim", Frunze, 1973. (I. Maruşciac) **49** #10375 90C30
- do Šan' See Do Šan'**
- Sanada, Hidehiko** On the scheduling of cyclic production. (Japanese) *Systems and Control* **17** (1973), 282-286. **47** #4623 90B35
- (with Komatsu, Masaharu; Ouchi, Yasuhiro; Nakanishi, Hikaru; Tezuka, Yoshikazu) Optimum route assignment theorem and its application to adaptive routing procedure in message switching networks. *Electron. Comm. Japan* **60** (1977), no. 1, 78-86. (From the summary) **58** #32905 90B35 (90B10)
- Sanada, Katsuhiko** The generation of pseudo-random numbers on computers. *Bull. Fac. Ed. Univ. Kagoshima* **21** (1969), 1-7. (J. Pickands, III) **47** #2779 65C10
- On stability criteria of explicit difference schemes for heat equations. *Bull. Fac. Ed. Univ. Kagoshima* **23** (1971), 6-11. (J. L. Morris) **48** #3266 65N10
- (with Kinoshita, Takuma) On the series of independent functions. *Bull. Fac. Ed. Univ. Kagoshima* **24** (1972), 1-2. (G. U. Brauer) **48** #3084 60A10
- Numerical solution of block tridiagonal form. *Bull. Fac. Ed. Univ. Kagoshima* **25** (1973), 1-4. (François Robert) **55** #9503 65F05
- Sanadze, D. K.** (with Heladze, Š. V.) The convergence of multiple Fourier-Walsh series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **8** (1975), no. 2, 285-288. (A. Oleviskii) **54** #5728 42A56
- (with Heladze, Š. V.) Convergence and divergence of multiple Fourier-Walsh series. (Russian) Collection of articles on the theory of functions, 8: Boundary problems of the theory of functions. Problems of convergence of multiple Fourier series. *Sakharth. SSR Mecn. Akad. Math. Inst. Šrom.* **55** (1977), 93-106. (J. Németh) **58** #23332 42A56
- Some estimates of multidimensional singular integral operators. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **87** (1977), no. 1, 45-48. (Editors) **58** #23383 44A25 (47G05)
- Šananin, N. A.** Some properties of the Schrödinger operator with strongly singular potentials. (Russian) *Moskov. Inst. Elektron. Mašinstroenija—Trudy MIEM Vyp. 2* **1977**, no. 1, 143. (Editors) **57** #3612 35J05 (35P25)
- The local solvability of equations of quasiprincipal type. (Russian) *Mat. Sb. (N.S.)* **97(139)** (1975), no. 4 (8), 503-516, 633. (Author's summary) **57** #13112 35A05
- An example of a locally unsolvable differential equation of quasiprincipal type with a real-valued weighted principal symbol. (Russian) *Mat. Zametki* **19** (1976), no. 5, 755-761. (V. S. Rabinovič) **54** #13269 35A05 (35A30)
- (with Grušin, V. V.) Some theorems on the singularities of the solutions of differential equations with weighted principal symbols. (Russian) *Mat. Sb. (N.S.)* **103(145)** (1977), no. 1, 37-51, 143. (V. S. Rabinovič) **56** #832 (E 55 #56) 35G05
- On necessary conditions for the local solvability of equations of quasiprincipal type. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 2 (194), 235-236. (Toader Jucan) **57** #6763 35A05
- Sanasarjan, K. M.** Application of dispatch control operators in the simulation of operative situations. (Russian) *Mathematical methods for the study and optimization of systems (Proc. Sem. Appl. Math. Methods Econom. Res. Planning, Kiev-Lvov, 1971)* (Russian), pp. 340-347. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (D. Obradović) **53** #7444 90B99 (68A99)
- Sanathanan, Lalitha** On an allocation problem with multistage constraints. *Operations Res.* **19** (1971), 1647-1663. (Author's summary) **46** #1296 90B05
- Estimating the size of a multinomial population. *Ann. Math. Statist.* **43** (1972), 142-152. (E. H. Lehman) **45** #7864 62F10
- Estimating the size of a truncated sample. *J. Amer. Statist. Assoc.* **72** (1977), no. 359, 669-672. (S. Blumenthal) **56** #16893 62F10

- Sanborn, Jon** (with Doležal, Václav) Extendability of operators defined on testing function spaces. *Rev. Roumaine Math. Pures Appl.* **20** (1975), 33-53. (C. W. Swartz) **51** #8809 46F10 (47A20)
- Sancaktar, Selim** (with Larsen, Edward W.; Zweifel, Paul F.) Extension of the Case formulas to L_p . Application to half and full space problems. *J. Mathematical Phys.* **16** (1975), 1117-1121. (J. P. Guiraud) **51** #9727 82.47
(with Bowden, Robert L.; Zweifel, Paul F.) Multigroup neutron transport. I. Full range. *J. Mathematical Phys.* **17** (1976), no. 1, 76-81. (J. P. Guiraud) **52** #9926 82.45
(with Bowden, Robert L.; Zweifel, Paul F.) Multigroup neutron transport. II. Half range. *J. Mathematical Phys.* **17** (1976), no. 1, 82-86. (J. P. Guiraud) **52** #9927 82.45
(with Greenberg, William) Solution of the multigroup transport equations in L^p spaces. *J. Mathematical Phys.* **17** (1976), no. 11, 2092-2097. (Edward W. Larsen) **54** #6814 82.47
(with Baird, L. C.; Zweifel, Paul F.) The Poincaré-Bertrand formula: a derivation and a generalization. *SIAM J. Math. Anal.* **8** (1977), no. 4, 580-591. (S. Foglio) **56** #8766 26A42
- Sancenko, N. I.** (with Šul'gin, A. M.) Averaging over the fast variables in quasi-Stäckel systems. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 11, 21-23. (Ljubomir Lilov) **56** #13871 70.41
- Sanches Fernandes, K.** See **Sánchez-Fernández, C.**
- Sánchez, Clara H.** (with Albis González, Victor S.) Mathematical journals in Colombia. (Spanish) *Bol. Mat.* **7** (1973), 325-330. (Editors) **50** #9484 01A05
- Sánchez, Cristian U.** Actions of compact, connected Lie groups on spin manifolds. *Rev. Un. Mat. Argentina* **27** (1974/75), no. 1, 53-57. (Theodore Chang) **52** #1746 57E15
Actions of groups of odd order on compact, orientable manifolds. *Proc. Amer. Math. Soc.* **54** (1976), 445-448. (Theodore Chang) **53** #11641 57E15
- Sánchez, David A.** Characteristic multipliers and the Riccati equation. *Analytic theory of differential equations (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1970)*, pp. 42-44. *Lecture Notes in Math.*, Vol. 183, Springer, Berlin, 1971. (R. A. Struble) **52** #6110 34C25
(with Cesari, Lamberto; La Palm, J. R.) An existence theorem for Lagrange problems with unbounded controls and a slender set of exceptional points. *SIAM J. Control* **9** (1971), 590-605. (L. D. Berkovitz) **46** #8001 (E **49** #5983) 49A05
On compactness in control problems. (Spanish) *Bol. Soc. Mat. Mexicana* (2) **17** (1972), 1-5. (A. Kósa) **51** #11234 49A50
(with Hannsgen, Kenneth B.) A note on solutions of orientor fields for periodic systems. *J. Optimization Theory Appl.* **12** (1973), 325-327. (F. Odeh) **48** #7053 49A05
(with Cesari, Lamberto; La Palm, J. R.) Erratum: "An existence theorem for Lagrange problems with unbounded controls and a slender set of exceptional points" (*SIAM J. Control* **9** (1971), 590-605). *SIAM J. Control* **11** (1973), 677. (L. D. Berkovitz) **49** #5983 49A35
An iteration scheme for boundary value/alternative problems. *Numer. Math.* **23** (1974/75), 223-230. (B. Jankó) **51** #11978 65L10 (47H15, 65N10)
(with Borges, C. A.; Cesari, Lamberto) Functional analysis and the method of harmonic balance. *Quart. Appl. Math.* **32** (1974/75), 457-464. (L. Lorch) **57** #17407 47H15 (34C25)
(with Brauer, Fred) Some models for population growth with harvesting. *International Conference on Differential Equations (Proc., Univ. Southern California, Los Angeles, Calif., 1974)*, pp. 53-64. Academic Press, New York, 1975. (Anthony Leung) **54** #2249 92A15 (34K05)
An iteration scheme for Hilbert space boundary value problems. (Italian summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 1, 1-9. (L. Cesari) **52** #16013 65J05 (34B15, 47H15)
(with Brauer, Fred) Constant rate population harvesting: equilibrium and stability. *Theoret. Population Biology* **8** (1975), no. 1, 12-30. (Colin W. Clark) **52** #2643 92A15
(with Brauer, Fred) Harvesting of competing populations. *Mathematical Notes and Symposia*, Vol. 2: *Differential equations (Third Mexico-U.S. Sympos., Mexico City, 1975)*, pp. 171-176. Fondo de Cultura Económ., Mexico City, 1976. (Editors) **56** #8081 92A15
(with Sweet, Daniel) An iteration scheme for determining equations of dynamical systems. *Applicable Anal.* **6** (1976/77), no. 3, 223-228. (M. Rama Mohana Rao) **56** #7158 65H05 (34C25)
Linear age-dependent population growth with harvesting. *Bull. Math. Biology* **40** (1978), no. 3, 377-385. (Author's summary) **57** #18884 92A15
(with Kyner, Walter T.) Asymptotic and numerical approximation of roots of Lotka's equation. *Theoret. Population Biology* **13** (1978), no. 1, 112-120. (Gilbert Walter) **57** #9131 92A15
See also *Advances in differential and integral equations*, **50** #10389
- Sánchez, Elie** Resolution of composite fuzzy relation equations. *Information and Control* **30** (1976), no. 1, 38-48. (Michio Sugeno) **55** #10340 06A20 (94A15)
Solutions in composite fuzzy relation equations: application to medical diagnosis in Brouwerian logic. *Fuzzy automata and decision processes*, pp. 221-234. North-Holland, New York, 1977. (Aldo De Luca) **57** #16151 06A23
Inverses of fuzzy relations. Application to possibility distributions and medical diagnosis. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 2, pp. 1384-1389. Inst. Electrical Electron. Engrs., New York, 1977. (Author's summary) **58** #21630 04A99 (92A05)
- bueno Sánchez, Eramis** See **Bueno Sánchez, Eramis**
- martínez Sánchez, G.** See **Martínez Sánchez, G.**
- Sánchez, J. M.** (with de Fontaine, D.) The fcc Ising model in the cluster variation approximation. *Phys. Rev. B* (3) **17** (1978), no. 7, 2926-2936. (Authors' summary) **58** #14859 82.60
- martín-Sánchez, Jaun M.** See **Martin-Sánchez, Jaun M.**
- gómez Sánchez, Jesús** See **Gómez Sánchez, Jesús**
- martínez Sánchez, José M.** See **Martínez Sánchez, José M.**
- Sánchez, Julián** The analysis of two-dimensional neutron transport problems by means of singular integral equations in two complex variables. (Spanish summary) *Rev. Mexicana Fis.* **22** (1973), no. 3, 231-255. (Masatsugu Minami) **54** #14657 82.32
- Sánchez, Manuel** (with Strutt, Max J. O.) On the solution of Laplace's and Poisson's equations with rotational symmetry using SOR. (German summary) *AEÜ—Arch. Elek. Übertragungstechn. Electron. Commun.* **25** (1971), 337-343. (Bracha-Barak) **47** #2834 65N20
- Sanchez, Pedro Pablo** On automorphism groups of finite dimensional modules. *Compositio Math.* **28** (1974), 21-31. (K. Faltings) **49** #9093 20F55
- Sanchez, V. M.** (with Pipkin, A. C.) Existence of solutions of plane traction problems for ideal composites. *SIAM J. Appl. Math.* **26** (1974), 213-220. (J. Murzewski) **50** #1603 73.35
- Sanchez-Anton, J. M.** (with Wilde, Douglass J.) Multivariable monotonic optimization over multivalued logics and rectangular design lattices. *Discrete Math.* **1** (1971/72), no. 3, 277-294. (G. Berman) **45** #4612 65K05
(with Wilde, Douglass J.) Discrete optimization on a multivariable Boolean lattice. *Math. Programming* **1** (1971), 301-306. (S. Rudeanu) **45** #4823 90C10
- Sánchez-Crespo, J. L.** A new sampling scheme: selection with graduated variable probabilities without replacement. (Spanish. French summary) *Estadist. Española No.* 70-71 (1976), 5-12. (Author's summary) **58** #3149 62D05
- Sánchez-Dehesa, Jesus** On the conditions for a Hamiltonian matrix to have an eigenvalue density with some prescribed characteristics. *J. Comput. Appl. Math.* **2** (1976), no. 4, 249-254. (Alan L. Andrew) **55** #8062 15A18
The asymptotical spectrum of Jacobi matrices. *J. Comput. Appl. Math.* **3** (1977), no. 3, 167-171. (Daniel P. Maki) **57** #11021 65F15 (41A60, 44A50)
- Sánchez del Río, Carlos** In memoriam Werner Heisenberg. *Rev. Real Acad. Ci. Exact. Fis. Natur. Madrid* **70** (1976), no. 1, 11-13. (Editors) **53** #7688 01A70
- Sánchez Faba, Francisco** In the fifth centenary of the birth of Copernicus (1473-1543). (Spanish) *Gac. Mat. (Madrid)* (1) **26** (1974), 22-36. (Editors) **50** #12564 01A40 (01A70)
- Sánchez-Fernández, C.** (with Gorin, E. A.) Transcendental equations in commutative Banach algebras. (Russian) *Funkcional. Anal. i Prilozhen.* **11** (1977), no. 1, 63-64. (T. W. Gamelin) **57** #12897 32B99 (46J05)
- Sánchez García, Miguel** Determination of the maximal words of an alphabet. (Spanish) *Trabajos Estadist. Investigación Oper.* **26** (1975), no. 1-3, 319-330. (E. Peinado) **56** #17929 92A99 (68A30)
Conglomerates and their applications. (Spanish) *Trabajos Estadist. Investigación Oper.* **27** (1976), no. 1-3, 159-173. (Editors) **58** #26120 92-XX (62P99)
- Sánchez-Giralda, Thomas** Categories of diagrams and properties of limits and colimits. (Spanish) *Proceedings of the Tenth Conference of Spanish Mathematicians (La Laguna, 1969)* (Spanish), pp. 237-264. *Inst. "Jorge Juan" Mat., Madrid*, 1972. (M. L. Laplaza) **50** #2293 18A30
A way of introducing the tangent space at a point of a differentiable manifold. (Spanish) *Rev. Mat. Hisp.-Amer.* (4) **33** (1973), 54-58. (J. P. Wilson) **50** #5835 58A05
- ★Teoría de singularidades de superficies algebroides sumergidas. (Spanish) [Theory of singularities of embedded algebroid surfaces] Doctoral thesis, Univ. Madrid, Madrid, 1976. Colección de Monografías y Memorias de Matemática, No. IX. [Collection of Monographs and Memoirs in Mathematics, No. IX] *Instituto Jorge Juan de Matemáticas, Madrid*, 1976. xii + 128 pp. (Augusto Nobile) **54** #7466 14E15 (14E35)
Caractérisation des variétés permises d'une hypersurface algébroides. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 16, A1073-A1075. (Author's summary) **58** #27980 14E15
- Sánchez González, Juan Luis** Construction of the field of real numbers from the decimal sequences (also called decimal expansions). (Spanish) *Gac. Mat. (Madrid)* (1) **27** (1975), 18-31. (L. Carlitz) **51** #3130 12D99
- Sánchez Guillén, Joaquín** See **Berberian, Sterling K.**, **51** #8799
- Sánchez H., José Dario** Orientable surfaces. (Spanish) *Bol. Mat.* **9** (1975), no. 4-6, 203-216. (Carlos E. Harle) **57** #13705 53-01
- Sanchez-Hubert, Jacqueline** (with Sánchez-Palencia, Enrique) Sur certains problèmes physiques d'homogénéisation donnant lieu à des phénomènes de relaxation. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 20, A903-A906. (Authors' summary) **58** #22970 35B40 (73.35)
- Sánchez-Lafuente Fernández, Juan** The history of statistics as a science in Spain (1500-1900). (Spanish) *Estadist. Española No.* 58-59 (1973), 15-162. (J. S. Joel) **57** #7822b 62-03 (01A45, 01A50, 01A55)
History of statistics as a science in Spain (1500-1900). II. (Spanish) *Estadist. Española No.* 60-61 (1973), 5-133. (J. S. Joel) **57** #7822c 62-03 (01A45, 01A50, 01A55)
- ★Historia de la estadística como ciencia en España (1500-1900). (Spanish) [The history of statistics as a science in Spain (1500-1900)] *Instituto Nacional de Estadística, Madrid*, 1975. 296 pp. (J. S. Joel) **57** #7822a 62-03 (01A45, 01A50, 01A55)
- Sánchez López, Miguel** Numerical solution of ordinary differential equations. I. (Spanish) *Gac. Mat. (Madrid)* (1) **27** (1975), no. 1-2, 32-44. (F. J. Murray) **52** #16034a 65L05
Numerical solution of ordinary differential equations. II. (Spanish) *Gac. Mat. (Madrid)* (1) **27** (1975), no. 5-6, 136-157. (F. J. Murray) **52** #16034b 65L05
- Sanchez Magro, C.** See *Proceedings: Annual Conference of Spanish Mathematicians*, **49** #7045
- Sanchez Martinez, F.** See *Proceedings: Annual Conference of Spanish Mathematicians*, **49** #7045
- Sánchez-Mazas, Miguel** Arithmetical calculus of propositions. (Spanish) *Teorema No.* 3 (1971), 63-92. (G. E. Mine) **47** #8195 94A10
Calcul arithmétique des propositions. *Internat. Logic Rev. No.* 6 (1972), 222-245. (H. B. Curry) **50** #4237 02B05
Calcul automatique des normes et propositions juridiques. *Teorema No.* 6 (1972), 25-56. (B. Brainerd) **47** #6152 68A40 (02D99)
- ★Cálculo de las normas. (Spanish) [Calculus of norms] Colección "Convivium", No. 16. [Collection "Convivium", No. 16] *Ediciones Ariel, Barcelona*, 1973. 194 pp. (Editors) **58** #5065 02C10
- Sánchez-Palencia, Enrique** (with Ene, Horia I.) Équations et conditions aux limites pour un modèle de milieu poreux. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A257-A259.

- (Colin Rogers) 47 #9942 76.35
 Amortissement des oscillations d'un type de problèmes hyperboliques et application à l'électromagnétisme. *J. Math. Anal. Appl.* 41 (1973), 725-737. (N. D. Sengupta) 49 #11960 78.35
 On certain perturbation problems and singular equations of magnetohydrodynamics. *J. Math. Anal. Appl.* 44 (1973), 1-27. (R. M. Gundersen) 48 #3358 76.35
 (with Hartmann, Christian) Limiting behavior of a certain class of MHD flows in a strong magnetic field. *Magnit. Gidrodinamika* 9 (1973), no. 1, 3-11 (Russian); translated as *Magnetohydrodynamics* 9 (1973), 1-8 (1974). (S. A. Berger) 51 #2462 76.46
 (with Lobo Hidalgo, Miguel) Sur certains problèmes bien posés en théorie de la couche limite. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 1457-1460. (R. Nardini) 50 #1623 76.35
 Comportements local et macroscopique d'un type de milieux physiques hétérogènes. (English, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* 12 (1974), 331-351. (René Hayart) 55 #13925 73.35
 (with Pham Huy Hung) Phénomènes de transmission à travers des couches minces de conductivité élevée. *J. Math. Anal. Appl.* 47 (1974), 284-309. (M. G. F. Boella) 53 #4746 78.35
 Problèmes de perturbations liés aux phénomènes de conduction à travers des couches minces de grande résistivité. *J. Math. Pures Appl.* (9) 53 (1974), 251-269. (P. C. Fife) 51 #1171 35Q99
 (with Tsinober, A. B.) Comportement limite et stabilité de certains écoulements magnétohydrodynamiques. (English summary) *J. Mécanique* 13 (1974), 623-637. (Colin Rogers) 50 #15577 76.35
 Méthode de centrage et comportement des trajectoires dans l'espace des phases. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A105-A107. (Prem Bajaj) 51 #8553 34C15
 (with Levy, Thérèse) On boundary conditions for fluid flow in porous media. *Internat. J. Engrg. Sci.* 13 (1975), no. 11, 923-940. (M. N. L. Narasimhan) 57 #2114 76.35
 (with Ene, Horia I.) Équations et phénomènes de surface pour l'écoulement dans un modèle de milieu poreux. (English summary) *J. Mécanique* 14 (1975), 73-108. (Colin Rogers) 51 #7463 76.35
 (with Cerneau, Simone) Sur les oscillations libres des corps élastiques légèrement viscoélastiques. (English summary) *J. Mécanique* 15 (1976), no. 2, 237-263. (D. Işan) 54 #4260 73.41
 (with Cerneau, Simone) Sur les vibrations libres des corps élastiques plongés dans des fluides. (English summary) *J. Mécanique* 15 (1976), no. 3, 399-425. (Cataldo Agostinelli) 55 #1904 73.35
 (with Ene, Horia I.) Solutions périodiques par rapport aux variables d'espace pour les équations de Navier-Stokes et applications. *Proceedings of the Conference on Differential Equations and their Applications (Univ. Iaşi, Iaşi, 1973)*, pp. 131-133. *Editura Acad. R.S.R., Bucharest*, 1977. (W. Velle) 58 #1747 35Q10
 Perturbations spectrales liées à la vibration d'un corps élastique dans l'air. *Singular perturbations and boundary layer theory (Proc. Conf., École Centrale, Lyon, 1976)*, pp. 437-455. *Lecture Notes in Math.*, Vol. 594, Springer, Berlin, 1977. (W. Kec) 57 #18394 73.41 (35R99)
 (with Levy, Thérèse) Equations and interface conditions for acoustic phenomena in porous media. *J. Math. Anal. Appl.* 61 (1977), no. 3, 813-834. (Authors' summary) 58 #25335 76.35
 (with Aurault, Jean-Louis) Étude du comportement macroscopique d'un milieu poreux saturé déformable. (English summary) *J. Mécanique* 16 (1977), no. 4, 575-603. (Authors' summary) 56 #13976 73.53
 Justification de la méthode des échelles multiples pour une classe d'équations aux dérivées partielles. (English summary) *Ann. Mat. Pura Appl.* (4) 116 (1978), 159-176. (G. Paria) 58 #25265 73.35 (35K25)
 Phénomènes de relaxation dans les écoulements des fluides visqueux dans des milieux poreux. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 3, A185-A188. (Author's summary) 57 #8396 76.35
 (with Sanchez-Hubert, Jacqueline) Sur certains problèmes physiques d'homogénéisation donnant lieu à des phénomènes de relaxation. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 20, A903-A906. (Authors' summary) 58 #22970 35B40 (73.35)
Sánchez-Palencia-Hubert, Jacqueline Étude asymptotique de l'écoulement sonique d'un fluide dissipatif à grande distance d'un obstacle plan. (English summary) *J. Mécanique* 12 (1973), 657-704. (Author's summary) 54 #1859 76.41 (76.35)
 Étude asymptotique au voisinage de l'infini de l'écoulement axisymétrique supersonique d'un fluide dissipatif. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 429-432. (Colin Rogers) 51 #2460 76.41
Sánchez-Ron, José M. Approximate solutions of predictive relativistic mechanics for the gravitational interaction. *J. Phys. A* 9 (1976), no. 11, 1877-1885. (Author's summary) 57 #11596 83.35 (81.35)
martínez Sanchez y A Santos, J. See Martínez Sanchez y A Santos, J.
Sánchez, Luis E. Cut elimination, consistency and completeness in classical logic. *Logique et Analyse (N.S.)* 14 (1971), 715-723. (E. W. Chapin, Jr.) 47 #4771 02D99 (02B05)
 A generalization of the Gentzen Hauptsatz. *Notre Dame J. Formal Logic* 12 (1971), 499-504. (A. S. Troelstra) 46 #30 02D99
 Formally defined operations in Kripke models. *Notre Dame J. Formal Logic* 14 (1973), 467-480. (John Staples) 48 #10770 02C15 (02G20)
 Logical completeness of directed resolution. *Logique et Analyse (N.S.)* 17 (1974), no. 67-68, 335-341. (G. E. Minc) 55 #10251 02D99 (68A40)
 Data types as lattices: retractions, closures and projections. (French summary) *RAIRO Informat. Théor.* 11 (1977), no. 4, 329-344, i. (Claude Benzaken) 58 #13876 68A05 (06A20)
 Hyperenumeration reducibility. *Notre Dame J. Formal Logic* 19 (1978), no. 3, 405-415. (John W. Berry) 58 #10374 02F30
Sancho, N. G. F. (with Mitchell, C. R.) Economic optimization in controlled fisheries. *Math. Biosci.* 27 (1975), no. 1-2, 1-7. (Colin W. Clark) 52 #4958 90A99 (92A15)
 (with Howson, H. R.) A new algorithm for the solution of multi-state dynamic programming problems. *Math. Programming* 8 (1975), 104-116. (A. Aganbegian) 51 #1551 90C15
 (with Ng, K. Y. K.) A new algorithm for solving certain variational problems. *Optimization Theory Appl.* 22 (1977), no. 3, 389-397. (Tsuneo Yoshikawa) 57 #1364 49D25
Sancho de San Román, Juan A characterization of the equivalence of affine matrices (Spanish) *Proceedings of the Ninth Annual Conference of Spanish Mathematicians (Granada, 1968)* (Spanish), pp. 261-264. *Inst. "Jorge Juan" Mat., Madrid*, 1971. (J. Moré) 49 #7276 15A21
 Canonical forms in the euclidean group. (Spanish) *Proceedings of the Tenth Conference of Spanish Mathematicians (La Laguna, 1969)* (Spanish), pp. 233-236. *Inst. "Jorge Juan" Mat., Madrid*, 1972. (H. W. Guggenheim) 50 #355 15A21
 A brief proof of the relation that connects the ordinary and dual Grassmann coordinates. (Spanish) *Proceedings of the Eleventh Annual Conference of Spanish Mathematicians (Murcia, 1970)* (Spanish), pp. 240-242. *Univ. Complutense de Madrid, Madrid*, 1973. (B. d'Orgeval) 50 #4638 15A75
 Sur des groupes associés à certaines variétés tridimensionnelles. *Géométrie différentielle (Colloq., Univ. Santiago de Compostela, Santiago de Compostela, 1972)*, pp. 175-178. *Lecture Notes in Math.*, Vol. 392, Springer, Berlin, 1974. (Wilbur Whittle) 52 #9233 57A10
Sancin, Sergio (with Nicolich, Rinaldo) Filtri numerici e loro applicazione. *Rend. Sem. Fac. Sci. Univ. Cagliari* 44 (1974), no. 1-2, 71-82. (H. T. Croft) 52 #16804 93E (94A05)
Sandakov, E. B. The stabilization of the solution of the Cauchy problem for a higher order parabolic equation with one space variable. (Russian) *Differentsial'nye Uravneniya* 11 (1975), no. 5, 869-882, 948. (V. Djuriković) 52 #11330 35K30 (35B40)
 Stabilization of the solution of the Cauchy problem for a higher order parabolic equation. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 12, 2256-2264, 2303-2304. (Author's summary) 57 #16995 35K30
Šandarin, S. F. (with Doroškevič, A. G.) Statistical problems of the theory of galaxy formation. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 73* (1977), 36 pp. (Authors' summary) 58 #14983 85.60
Sandberg, Irwin W. Theorems on the computation of the transient response of nonlinear networks containing transistors and diodes. *Bell System Tech. J.* 49 (1970), 1739-1776. (G. Zames) 45 #9817 94A20 (65H10)
 Some properties of a nonlinear model of a system for synchronizing digital transmission networks. *Mathematical aspects of electrical network analysis (Proc. Sympos. Appl. Math., New York, 1969)*, pp. 119-139. *SIAM-AMS Proc.*, Vol. III, American Math. Soc., Providence, R.I., 1971. (P. N. Rathie) 49 #2193 94A05
 On the solvability of the equations of networks containing semiconductor devices and reverse-bias breakdown phenomena. *IEEE Trans. Circuit Theory* CT-18 (1971), 475-476. (Mike Sablatash) 48 #5735 94A20
 (with Willson, Alan N., Jr.) Existence of solutions for the equations of transistor-resistor-voltage source networks. *IEEE Trans. Circuit Theory* CT-18 (1971), 619-625. (T. N. Bhargava) 46 #10512 94A20
 Theorems on the analysis of nonlinear transistor networks. *Network theory (Proc. Second NATO Advanced Inst., Knokke, 1969)*, pp. 333-359. *Gordon and Breach, New York*, 1972. (I. T. Frisch) 51 #7745 94A20
 Conditions for the existence of a global inverse of semiconductor-device nonlinear-network operators. *IEEE Trans. Circuit Theory* CT-19 (1972), 34-36. (Jagdish Chandra) 48 #8125 94A20
 (with Willson, Alan N., Jr.) Existence and uniqueness of solutions for the equations of nonlinear DC networks. *SIAM J. Appl. Math.* 22 (1972), 173-186. (Authors' summary) 46 #3224 94A20
 A nonlinear input-output model of a multisector economy. *Econometrica* 41 (1973), 1167-1182. (Author's summary) 55 #14145 90A15
 Some notes on the optimization of the gross national product of economies with nonlinear input-output technology. *IEEE Trans. Automatic Control* AC-19 (1974), 543-546. (Yieh Hei Wan) 54 #4600 90A15
 A theorem on consequences of planned demand changes in a partially fixed-price environment. *IEEE Trans. Systems Man Cybernet. SMC-4* (1974), 213-215. (W. F. Tyndall) 54 #4583 90A10
 On the mathematical theory of interaction in social groups. *IEEE Trans. Systems Man Cybernet. SMC-4* (1974), 432-445. (D. Vaida) 52 #16731 92A20
 A global non-linear extension of the Le Chatelier-Samuelson principle for linear Leontief models. *J. Econom. Theory* 7 (1974), no. 1, 40-52. (Author's summary) 56 #17742 90A15
 Some comparative-static results for nonlinear input-output models of a multisector economy, and related results for nonlinear price-demand relations. *J. Econom. Theory* 8 (1974), no. 2, 248-258. (Author's summary) 57 #15349 90A15
 Proof of convergence for a nonlinear SOR-type process. *Modeling and simulation (Proc. Sixth Annual Pittsburgh Conf., Univ. Pittsburgh, Pittsburgh, Pa., 1975)*, Vol. 6, Part 2, pp. 997-999. *Instrument Soc. Amer., Pittsburgh, Pa.*, 1975. (Author's summary) 58 #8224 65H10
 A note on market equilibrium with fixed supply. *Modeling and simulation (Proc. Sixth Annual Pittsburgh Conf., Univ. Pittsburgh, Pittsburgh, Pa., 1975)*, Vol. 6, Part 2, pp. 1001-1003. *Instrument Soc. Amer., Pittsburgh, Pa.*, 1975. (Ronald W. Shephard) 56 #7871 90A15
 Some theorems concerning multifirm alternatives to the single regulated multiservice firm. *IEEE Trans. Systems Man Cybernet. SMC-5* (1975), no. 2, 201-208. (Author's summary) 55 #9880 90A15
 A note on market equilibrium with fixed supply. *J. Econom. Theory* 11 (1975), no. 3, 456-461. (From the author's introduction) 55 #9879 90A15
 Public-interest type results concerning the single regulated multiservice firm and multifirm alternatives. *IEEE Trans. Systems Man Cybernet. SMC-6* (1976), no. 11, 740-746. (I. M. Stancu-Minasian) 56 #10770 90A05
 On the evolution equations of certain social-process models. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 8, 629-631. (Rubin Saposnik) 57 #5198 92A20
 On the mathematical foundations of compartmental analysis in biology, medicine

- and ecology. *IEEE Trans. Circuits and Systems* **CAS-25** (1978), no. 5, 273-279. (Robert J. Mulholland) **58** #4425 92A05
- A note on the properties of compartmental systems. *IEEE Trans. Circuits and Systems* **25** (1978), no. 6, 379-380. (Robert J. Mulholland) **58** #15288 92A05 (93C10)
- On social-process models and behavioral inertia. *IEEE Trans. Systems Man Cybernet.* **SMC-8** (1978), no. 2, 121-127. (Author's summary) **57** #18887 92A20
- See also **Nonlinear networks: theory and analysis**, **52** #5178
- Sandberg, V. Ju.** A heuristic algorithm for graph coloring. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 12 Sb. Statei po Prikl. Anal.* (1974), 58-64. (From the author's introduction) **57** #16122 05C15
- See also **Collection: Numerical mathematics and theoretical cybernetics**, **57** #11988
- Sandberg, Vernon D.** (with Chrzanowski, Paul L.; Matzner, Richard A.; Ryan, Michael P., Jr.) Zero-mass plane waves in nonzero gravitational backgrounds. *Phys. Rev. D* (3) **14** (1976), no. 2, 317-320. (Anton Z. Capri) **57** #2400 83.35
- Sandblad, Henrik** The reception of the Copernican system in Sweden. *Études sur l'audience de la théorie héliocentrique (Sympos. Union Internat. Hist. Philos. Sci., Toruń, 1973)*, I, pp. 241-270. *Studia Copernicana, V; Colloq. Copernicana, I*, Wydawn. Polsk. Akad. Nauk., Wrocław, 1972. (Editors) **58** #21143 01A45
- Sandblom, Carl-Louis** On the convergence of SUMT. *Math. Programming* **6** (1974), 360-364. (S. Zlobec) **49** #12091 90C25
- Stabilization of a fluctuating simple macroeconomic model. *Progress in cybernetics and systems research (Second European Meeting, Vienna, 1974)*, Vol. II: Socio-economic systems, cybernetics of cognition and learning, systems education, cybernetics in organization and management, special aspects, pp. 251-262. Hemisphere, Washington, D. C., 1975. (From the author's text) **56** #14603 90A15
- Optimization of economic policy using lagged controls. *J. Cybernet.* **7** (1977), no. 3-4, 257-267. (A. A. Piontkovskii) **57** #8985 90A05 (90A15)
- Sandefur, James T., Jr.** (with Goldstein, Jerome A.) Asymptotic equipartition of energy for differential equations in Hilbert space. *Trans. Amer. Math. Soc.* **219** (1976), 397-406. (J. Calvert) **53** #13767 34G05 (47D05)
- Higher order abstract Cauchy problems. *J. Math. Anal. Appl.* **60** (1977), no. 3, 728-742. (E. D. Conway) **56** #9027 34G05
- Sandell, Nils R., Jr.** (with Athans, Michael) Solution of some nonclassical LQG stochastic decision problems. *IEEE Trans. Automatic Control* **AC-19** (1974), 108-116. (Jean-Pierre Yvon) **56** #15017 93E05 (93E20)
- On Newton's method for Riccati equation solution. *IEEE Trans. Automatic Control* **AC-19** (1974), 254-255. (Arie Feuer) **54** #9792 93D99
- (with Athans, Michael) Comments on "A solution for a class of stochastic cooperative games" (Internat. J. Control (1) **17** (1973), 705-720) by H. B. Poza and R. L. Kashyap. *Internat. J. Control* **20** (1974), 169-170. (Marcel Rădulescu) **52** #16793 93E05
- (with Athans, Michael; Varaiya, Pravin P.) Stability of interconnected systems. *Proceedings of the IEEE Conference on Decision and Control including the 14th Symposium on Adaptive Processes (Houston, Tex., 1975)*, pp. 456-462. *Inst. Electr. Electron. Engrs., New York*, 1975. (Peter A. Cook) **56** #11291 93D05
- (with Athans, Michael) A finite-state, finite-memory minimum principle. *Proceedings of the IEEE Conference on Decision and Control including the 14th Symposium on Adaptive Processes (Houston, Tex., 1975)*, pp. 637-644. *Inst. Electr. Electron. Engrs., New York*, 1975. (Bojan Popović) **56** #18078 93E20 (90D20)
- Information flow in decentralized systems. *Directions in large-scale systems, many-person optimization and decentralized control (Proc. Sympos., Wakefield, Mass., 1975)*, pp. 1-15. Plenum, New York, 1976. (Author's summary) **56** #8116 93C15 (93A15)
- (with Aldermeshian, Lynda A.) State space reduction techniques in the stochastic control of network routing. *Ninth Annual Asilomar Conference on Circuits, Systems, and Computers (Pacific Grove, Calif., 1975)*, pp. 59-64. *Western Periodicals, North Hollywood, Calif.*, 1976. **58** #32894 90B15
- (with Athay, Thomas M.) An iterative decoupling solution method for large scale Lyapunov equations. *Proceedings of the Eighth Annual Southeastern Symposium on System Theory (Univ. Tennessee, Knoxville, Tenn., 1976)*, pp. 83-89. *Inst. Electr. Electron. Engrs., New York*, 1976. (Peter J. Moylan) **57** #14370 65F10
- (with Teneketzis, Demosthenis) Perturbation methods in decentralized stochastic control. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 1, pp. 37-42. Hemisphere, Washington, D. C., 1977. (Arlid Thowson) **58** #4585 93E20
- (with Baram, Yoram) An information theoretic approach to dynamical systems modeling and identification. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 1, pp. 1113-1118. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) **58** #20727 93E10
- (with Teneketzis, Demosthenis) Linear regulator design for stochastic systems by a multiple time-scales method. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 615-621. (Authors' summary) **56** #15100 93E20
- (with Castañon, David A.) Equilibrium solutions in sequential stochastic games. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 624-627. (Benson Kurtaran) **57** #9232 93E05
- (with Baram, Yoram) An information theoretic approach to dynamical systems modeling and identification. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 1, 61-66. (Allen Klinger and Kofi Arpenyo) **58** #9733 93E99 (93B30, 94A15)
- (with Varaiya, Pravin P.; Athans, Michael; Safonov, Michael G.) Survey of decentralized control methods for large scale systems. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 2, 108-128. (Peter A. Cook) **58** #9465 93A15
- Sander, D.** Über den Zusammenhang zwischen den Kirchhoffschen Sätzen und dem Energiesatz. *Z. Elek. Informations- und Energietechnik*. **4** (1974), 185-189. (Z. Vorel) **50** #9429 (E 57 #15766) 94A20
- See also **Reinschke, Kurt**, **57** #15766
- Fearnley-Sander, Desmond** See **Fearnley-Sander, Desmond**
- Sander, G.** (with Beckers, P.) The influence of the choice of connectors in the finite element method. *Mathematical aspects of finite element methods (Proc. Conf., Consiglio Naz. delle Ricerche (C.N.R.), Rome, 1975)*, pp. 316-342. *Lecture Notes in Math.*, Vol. 606, Springer, Berlin, 1977. (Authors' summary) **58** #19666 73.65
- Sander, Hans-Joachim** ★Dualität bei Optimierungsaufgaben. R. Oldenbourg Verlag, Munich-Vienna, 1973. 271 pp. (Werner Krabs) **55** #11924 90-02
- Sander, Wolfgang** Verallgemeinerungen eines Satzes von S. Piccard. (English summary) *Manuscripta Math.* **16** (1975), no. 1, 11-25. (M. E. Shanks) **51** #9018 54C99 (39A15)
- Verallgemeinerungen eines Satzes von H. Steinhaus (Fund. Math. **1** (1920), 93-104). (English summary) *Manuscripta Math.* **18** (1976), no. 1, 25-42. (J. C. Oxtoby) **52** #14210 (E 55 #610) 28A32 (28A70)
- Erratum zu: "Verallgemeinerungen eines Satzes von H. Steinhaus (Fund. Math. **1** (1920), 93-104)" (Manuscripta Math. **18** (1976), no. 1, 25-42). *Manuscripta Math.* **20** (1977), no. 1, 101-103. (J. C. Oxtoby) **55** #610 28A32 (28A70)
- Šanderová, Jaroslava** A mathematical model for the solution of a certain sequencing problem. (Czech. English summary) *Ekonom.-Mat. Obzor* **7** (1971), 48-60. (K. Zimmermann) **45** #6399 90B35
- Sanders, B. R.** (with Dwyer, H. A.) A physically optimum difference scheme for three-dimensional boundary layers. *Proceedings of the Fourth International Conference on Numerical Methods in Fluid Dynamics (Univ. Colorado, Boulder, Colo., 1974)*, pp. 144-150. *Lecture Notes in Phys.*, Vol. 35, Springer, Berlin, 1975. (Authors' summary) **57** #2161 76.65
- Sanders, Charles W., Jr.** (with Tacker, Edgar C.; Linton, Thomas D.) Open-loop optimal control of a class of continuous-time stochastic systems—a simulation study. *Internat. J. Control* **19** (1974), 1165-1175. (Bojan Popović) **50** #9406 93E25
- (with Tacker, Edgar C.; Linton, Thomas D.) Stability and performance of a class of decentralized filters. *Internat. J. Control* **23** (1976), no. 2, 197-206. (Tsuneo Yoshikawa) **54** #9805 93E10
- (with Tacker, Edgar C.; Linton, Thomas D.; Ling, Robert Y. S.) Specific structures for large-scale state estimation algorithms having information exchange. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 2, 255-261. (Authors' summary) **58** #15351 93A15
- Sanders, David** Metric spaces in which minimal circuits cannot self-intersect. *Proc. Amer. Math. Soc.* **56** (1976), 383-387. (L. V. Quintas) **54** #2527 05C35 (54E35)
- (with Sanders, Jon Henry) Circuit preserving edge maps. *J. Combinatorial Theory Ser. B* **22** (1977), no. 2, 91-96. (Michael O. Albertson) **56** #8428 05C35
- Sanders, Dean** The dominion and separable subalgebras of finitely generated algebras. *Proc. Amer. Math. Soc.* **48** (1975), 1-7. (J. A. Wehlen) **51** #586 16A16
- Sanders, E. L.** (with Bednarek, Alexander R.) A characterization of bivariegated trees. *Discrete Math.* **5** (1973), 1-14. (C. Tartia) **48** #1952 05C05
- Sanders, J. W.** A note on optimal fish harvest. *J. Optim. Theory Appl.* **24** (1978), no. 2, 361-369. (Colin W. Clark) **57** #15572 92A15
- Sanders, J. W.** Unbounded operators and random Fourier series. *Math. Proc. Cambridge Philos. Soc.* **79** (1976), no. 3, 511-520. (J. H. Williamson) **53** #1168 43A15 (42A36)
- Weighted Sidon sets. *Pacific J. Math.* **63** (1976), no. 1, 255-279. (K. A. Ross) **53** #8797 43A46 (42A44)
- Sanders, Jack Palmer** ★The category of H -modules over a spectrum. *Memoirs of the American Mathematical Society*, No. 141. American Mathematical Society, Providence, R.I., 1974. iii + 136 pp. (R. E. Stong) **51** #11480 55B20 (57D75)
- Sanders, Jan** Are higher order resonances really interesting? *Celestial Mech.* **16** (1977), no. 4, 421-440. (Tudor S. Rațiu) **58** #3829 70.58 (34C15, 58F05)
- Sanders, Jon Henry** (with Sanders, David) Circuit preserving edge maps. *J. Combinatorial Theory Ser. B* **22** (1977), no. 2, 91-96. (Michael O. Albertson) **56** #8428 05C35
- Sanders, Robert W.** The starlike radius for classes of regular bounded functions. *Proc. Amer. Math. Soc.* **54** (1976), 217-220. (Carl P. McCarty) **52** #11027 30A32
- Sanders, Thomas J.** On the generalized and the H -shape theories. *Duke Math. J.* **40** (1973), 743-754. (J. Segal) **48** #12463 54C56
- Shape groups for Hausdorff spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **8(28)** (1973), 297-304. (S. Mardešić) **49** #6139 54C56
- Shape groups and products. *Pacific J. Math.* **48** (1973), 485-496. (Maria Moszyńska) **53** #6494 54C56 (55E99)
- On the inequivalence of the Borsuk and the H -shape theories for arbitrary metric spaces. *Fund. Math.* **84** (1974), no. 1, 67-73. (B. J. Ball) **49** #3827 54C56
- (with Rubin, Leonard R.) Compactly generated shape. *General Topology and Appl.* **4** (1974), 73-83. (J. Segal) **51** #1727 54C56
- Compactly generated shape theories. *Fund. Math.* **93** (1976), no. 1, 37-40. (Y. Kodama) **54** #13842 54C56 (55D99)
- See also **Proceedings: University of Oklahoma Topology Conference**, **49** #6114
- Sanderson, Brian J.** (with Rourke, C. P.) On topological neighbourhoods. *Compositio Math.* **22** (1970), 387-424. (R. C. Kirby) **45** #7720 57C50
- (with Rourke, C. P.) Δ -sets. I. Homotopy theory. *Quart. J. Math. Oxford Ser. (2)* **22** (1971), 321-338. (E. B. Curtis) **45** #9327 55F60 (55D99)
- (with Rourke, C. P.) Δ -sets. II. Block bundles and block fibrations. *Quart. J. Math. Oxford Ser. (2)* **22** (1971), 465-485. (E. B. Curtis) **45** #9328 55F60
- (with Rourke, C. P.) ★Introduction to piecewise-linear topology. *Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 69*. Springer-Verlag, New York-Heidelberg, 1972. viii + 123 pp. (R. C. Kirby) **50** #3236 57Cxx
- (with Rourke, C. P.) ★Введение в кусочно линейную топологию. (Russian) [Introduction to piecewise-linear topology] Translated from the English by I. V. Savel'ev. Edited by M. M. Postnikov. Izdat. "Mir", Moscow, 1974. 208 pp. (Editors) **50** #5803 57Cxx
- The simplicial extension theorem. *Math. Proc. Cambridge Philos. Soc.* **77** (1975), 497-498. (R. Fritsch) **51** #4259 57C10 (55J10)
- (with Buoncristiano, Sandro; Rourke, C. P.) ★A geometric approach to homology theory. *London Mathematical Society Lecture Note Series*, No. 18. Cambridge University Press, Cambridge-New York-Melbourne, 1976. iii + 149 pp. (W. Metzler) **54** #1234 (EA 54) 57A65 (55B35, 57C20, 57C50)
- (with Koschorke, Ulrich) Geometric interpretations of the generalized Hopf invariant. *Math. Scand.* **41** (1977), no. 2, 199-217. (David Handel) **57** #13936 55E25
- See also **Pugh, Charles C.**, **58** #31271
- Sanderson, D. E.** An elementary romp through some advanced Euclidean topology.

- Topology Proceedings, Vol. 1 (Conf., Auburn Univ., Auburn, Ala., 1976), pp. 79-90. Math. Dept., Auburn Univ., Auburn, Ala., 1977. (A. Dold) 56 #13207 55C99*
 See also **Complements and comments**, 48 #1835
- Sanderson, James G.** (with Carasso, Alfred S.; Hyman, James M.) Digital removal of random media image degradations by solving the diffusion equation backwards in time. *SIAM J. Numer. Anal.* 15 (1978), no. 2, 344-367. (Clarence M. Ablow) 58 #4594 94A05 (65M30)
- Sanderson, Rebecca** A characterization of quasi-injective abelian groups. *J. Elisha Mitchell Sci. Soc.* 89 (1973), 143-146. (P. Gräbe) 48 #6275 20K10
- Sandford, M. T., II** (with Carter, L. L.; Horak, H. G.) An adjoint Monte Carlo treatment of the equations of radiative transfer for polarized light. *J. Computational Phys.* 26 (1978), no. 2, 119-138. (Authors' summary) 57 #11392 80.60
- Sandhas, W.** (with Kouri, Donald J.; Levin, F. S.) K operators and unitary approximations for the three-body problem. *Phys. Rev. C* (3) 13 (1976), no. 5, 1825-1834. (Lindsay Dodd) 54 #9454 81.47
 (with Alt, E. O.; Ziegelmann, Horst) Coulomb effects in three-body reactions with two charged particles. *Phys. Rev. C* (3) 17 (1978), no. 6, 1981-2005. (Authors' summary) 58 #14629 81.47
 See also **Elementary particle physics: multiparticle aspects**, 48 #1597
- Sandhu, Ranbir S.** (with Pister, Karl S.) Variational principles for boundary value and initial-boundary value problems in continuum mechanics. (Russian summary) *Internat. J. Solids and Structures* 7 (1971), 639-654. (E. J. Haug, Jr.) 49 #4389 73.49
 (with Salaam, U.) A finite element Galerkin formulation and its numerical performance. *Internat. J. Numer. Methods Engrg.* 10 (1976), no. 5, 1077-1095. (Authors' summary) 56 #13722 65N30
 (with Singh, Kamar J.) Reduced integration for improved accuracy of finite element approximations. *Comput. Methods Appl. Mech. Engrg.* 14 (1978), no. 1, 23-37. (From the summary) 58 #13790 65N30
- Sandhya, J. V.** (with Nagaraj, Muppinaia) Classification of non-static axially symmetric space-times. *Vignana Bharathi* 3 (1977), no. 2, 30-35. (J. Blackman) 58 #4176 83.53
- Sandi, C.** Solution of the machine loading problem with binary variables. *Combinatorial programming: methods and applications (Proc. NATO Advanced Study Inst., Versailles, 1974), pp. 371-378. NATO Advanced Study Inst. Ser., Ser. C: Math. and Phys. Sci., Vol. 19, Reidel, Dordrecht, 1975. (P. Brock) 55 #12034 90B35*
- Sändig, Anna-Margarete** Integraltransformationen von Predistributionen. (Italian summary) *Boll. Un. Mat. Ital.* (4) 10 (1974), 60-75. (D. Myers) 51 #11030 44A15 (02H25, 46F10)
 Lokale Werte und Grenzwerte von Predistributionen. *Studia. Sci. Math. Hungar.* 9 (1974), 133-148 (1975). (L. D. Kugler) 53 #3691 46F10 (02H25, 26A98)
 Über die Regularisierung und Ordnung von Predistributionen. *Studia. Sci. Math. Hungar.* 9 (1974), 149-154 (1975). (L. D. Kugler) 53 #3692 46F10 (02H25, 26A98)
 Korrekt gestellte Aufgaben für lineare elliptische partielle Differentialoperatoren mit konstanten Koeffizienten. *Rostock. Math. Kolloq. No. 4* (1977), 19-32. (Christian G. Simader) 58 #29178 35J40
- Sandik, M. D.** An algebra of multioperations. (Russian) *Bul. Akad. Štiinca RSS Moldoven.* 1972, no. 1, 31-38. (G. Čupona) 46 #122 08A25
 (with Odobesku, S. S.) Invertible multioperations. (Russian) *Studies in the theory of quasigroups and loops (Russian), pp. 133-139, 198. Izdat. "Štiinca", Kishinev, 1973. (V. D. Belousov) 52 #8002 08A25 (20N15)*
 Invertible multi-operations and permutations. (Russian) *Acta Sci. Math. (Szeged)* 39 (1977), no. 1-2, 153-162. (G. Čupona) 56 #522 20N15
- Sandimirov, V. P.** (with Belov, B. I.; Logačev, V. N.) Construction of a class of linear binary codes that attain the Varšamov-Griesmer bound. (Russian) *Problemy Peredachi Informacii* 10 (1974), no. 3, 36-44. (Authors' summary) 57 #9274 94A10
- Sandini, Giulio** (with Morasso, Pietro; Tagliasco, Vincenzo; Zaccaria, Renato) Control strategies in the eye-head coordination system. *IEEE Trans. Systems Man Cybernet.* SMC-7 (1977), no. 9, 639-651. (Stephen W. Brady) 57 #9115 92A05
- Sandler, E. A.** (with Kosjakin, A. A.) Stochasticity of a certain class of discrete systems. *Avtomat. i Telemekh.* 1972, no. 9, 87-94 (Russian. English summary); translated as *Automat. Remote Control* 33 (1972), no. 9, part 2, 1479-1485 (1973). (Authors' summary) 56 #11464 93E99
 (with Kosjakin, A. A.) Ergodic properties of a certain class of piecewise smooth transformations of a segment. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 3(118), 32-40. (W. F. Pfeffer) 45 #8802 28A65
 A direct algorithm for imitation of Markov sequences. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 2, 211-213 (Russian); translated as *Engrg. Cybernetics* 11 (1973), no. 2, 355-358. (R. L. Tweedie) 52 #4423 60J20 (65C99)
 (with Kosjakin, A. A.) Iterative random signal generators. *Avtomat. i Telemekh.* 1974, no. 1, 141-150 (Russian); translated as *Automat. Remote Control* 1974, no. 1, part 2, 127-134. 56 #15122 94A05 (65C10, 94A15)
- Sandler, Harold** See **Modern dimensional analysis, similitude and similarity**, 48 #10033
- Sandler, R. L.** Entire and meromorphic solutions of a double inhomogeneous system of difference equations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 13 (1973), no. 4, 147-159, 223. (I. M. Sheffer) 50 #4917 30A20 (39A10)
 On the interpolation of meromorphic functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 16 (1976), no. 2, 133-143, 243. (I. V. Ostrovskii) 54 #7780 30A68
 The representation of the solution of a homogeneous differential equation of infinite order. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 17 (1977), no. 2, 187-196, 222. (K. Seitz) 56 #12371 34A35
- Sandler, Reuben** On homomorphisms and images of projective planes and pseudo planes. Collection of articles dedicated to the memory of Abraham Adrian Albert. *Scripta Math.* 29 no. 3-4, 279-292 (1973). (D. Klucký) 54 #1080 50D35
- Sandler, Ye. A.** See **Sandler, E. A.**
- Sandling, Robert** Fixed point free actions on p -groups. *Arch. Math. (Basel)* 22 (1971), 231-236. (A. Mann) 47 #320 20D15
 The dimension subgroup problem. *J. Algebra* 21 (1972), 216-231. (S. Moran) 46 #1915 20F15
 Dimension subgroups over arbitrary coefficient rings. *J. Algebra* 21 (1972), 250-265. (S. Moran) 46 #1907 20E20
 Note on the integral group ring problem. *Math. Z.* 124 (1972), 255-258. (F. Friedberg) 45 #3594 20C05
 Modular augmentation ideals. *Proc. Cambridge Philos. Soc.* 71 (1972), 25-32. (Donald S. Passman) 46 #7360 20C05
 Subgroups dual to dimension subgroups. *Proc. Cambridge Philos. Soc.* 71 (1972), 33-38. (T. S. Shores) 46 #5454 20E20
 Group rings of circle and unit groups. *Math. Z.* 140 (1974), 195-202. (S. K. Sehgal) 52 #3217 16A26
- Sandmann, Horst** (with Jahnke, Hans-Günther) Ein iteratives Verfahren gemischter Strategie zur Nullstellenbestimmung von Polynomen in einer Unbestimmten mit automatischer Fehlerabschätzung für die Näherungswerte der Nullstellen. *Beiträge Numer. Math.* 1 (1974), 109-120. (Peter Lancaster) 56 #17049 65H05
 Berechnung von Lösungen algebraischer Gleichungssysteme. *Beiträge Numer. Math.* 3 (1975), 149-161. (W. M. Kincaid) 55 #4654 65H10
- Sandomierski, Francis L.** Linearly compact modules and local Morita duality. *Ring theory (Proc. Conf., Park City, Utah, 1971), pp. 333-346. Academic Press, New York, 1972. (E. J. Müller) 49 #9027 16A49*
 Homological dimension under change of rings. *Math. Z.* 130 (1973), 55-65. (A. Rosenberg) 47 #6772 16A60 (18G20)
 (with Cozzens, John H.) Reflexive primes, localization and primary decomposition in maximal orders. *Proc. Amer. Math. Soc.* 58 (1976), 44-50. (J. Kuzmanovich) 54 #7515 16A08
 Classical localization at prime ideals of fully bounded Noetherian rings. *Ring theory (Proc. Conf., Ohio Univ., Athens, Ohio, 1976), pp. 169-181. Lecture Notes in Pure and Appl. Math., Vol. 25, Dekker, New York, 1977. (V. C. Cateforis) 56 #398 16A08*
 (with Cozzens, John H.) Localization at a semiprime ideal of a right Noetherian ring. *Comm. Algebra* 5 (1977), no. 7, 707-726. (K. A. Byrd) 55 #10499 16A08
 (with Cozzens, John H.) Maximal orders and localization. I. *J. Algebra* 44 (1977), no. 2, 319-338. (J. Kuzmanovich) 55 #8082 16A18 (16A08)
 See also **Noncommutative ring theory**, 54 #10306
- Sandor, George N.** See **Chakraborty, Jyotsnamoy; et al.**, 57 #14693
- Sándor, I.** The "discrete lines" method to solve the two dimensional telegraph equation (German and Russian summaries) *Acta Tech. Acad. Sci. Hungar.* 84 (1977), no. 1-2 141-146. (G. C. Barozzi) 57 #1919 65N05
- Sandor, John** (with Williamson, Darrell) Design and simulation of nonlinear controllers. *Proceedings of the Ninth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1976), pp. 62-67. Western Periodicals, North Hollywood, Calif., 1976. (Authors' summary) 57 #18959 93C10*
 (with Williamson, Darrell) Design of nonlinear regulators for linear plants. *IEEE Trans. Automatic Control* AC-22 (1977), no. 1, 47-50. (Authors' summary) 56 #11219 93C05 (93C10, 93D10)
 (with Williamson, Darrell) Identification and analysis of non-linear systems by tensor techniques. *Internat. J. Control* 27 (1978), no. 6, 853-878. (Christopher I. Byrnes) 58 #20678 93B30
- Sandor, Stefan** Recherches axiomatiques sur le problème de Dirichlet. *Rend. Sem. Mat. Univ. Padova* 52 (1974), 329-356 (1975). (Denis Feyel) 52 #8471 31D05
- vallarta Sandova, Manuel** See **Vallarta Sandova, Manuel**
- Sandovici, Profira** Recurrent sections of a vector bundle with respect to a law of differentiation. I. (Romanian. French summary) *Studia Univ. Babeş-Bolyai Math.* 20 (1975), 21-25. (Virgil Obădeanu) 53 #14334 53B15
 Recurrent sections of a vector bundle with respect to a law of differentiation. II. (Romanian. French summary) *Studia Univ. Babeş-Bolyai Math.* 21 (1976), 19-22. (Virgil Obădeanu) 53 #14335 53B15
- Sandrakova, E. V.** Solution of a problem of Bing. (Russian) *Mat. Zametki* 14 (1973), 249-259. (M.-E. Hamstrom) 48 #5050 55A30
- Sandraz, Jean-Paul** (with Foulard, Claude; Gentil, Sylviane) ★Commande et régulation par calculateur numérique. De la théorie aux applications. Préface de R. Perret. Editions Eyrolles, Paris, 1977. 358 pp. 58 #33258 93-02
- Sandri, G.** (with Klimas, A.; Rammath, R. V.) On the compatibility problem for the uniformization of asymptotic expansions. *J. Math. Anal. Appl.* 32 (1970), 482-504. (H. A. Lauwerier) 46 #4078 41A60
 (with Kriz, A. H.; Ramanathan, G. V.) Failure of Bogoljubov's functional assumption. *Phys. Rev. A* (3) 6 (1972), 1950-1955. (Authors' summary) 54 #6809 82.45
 (with Hanson, F. B.; Klimas, A.; Ramanathan, G. V.) Uniformly valid asymptotic solution to a Volterra equation on an infinite interval. *J. Mathematical Phys.* 14 (1973), 1592-1600. (C. Avramescu) 48 #6860 45L05
- Sandritter, W.** (with Riede, U. N.; Moore, G. William) Application of Quine's nullities to a quantitative organelle pathology. *J. Theoret. Biol.* 65 (1977), no. 4, 633-651. (F. W. Stallmann) 55 #10058 92A05 (94A20)
- Sandroni, Alba** C^∞ families of Stein manifolds. (Italian summary) *Boll. Un. Mat. Ital.* (4) 12 (1975), no. 1-2, 161-170. (Hans W. Schuster) 54 #3029 32G10 (32E10)
- Şandru, Nicolae** Some boundary problems in linear micropolar elasticity. (Russian) *Contemporary problems in solid mechanics, Vol. I (Romanian) pp. 133-251. Editura Acad. R. S. R., Bucharest, 1975. (A. Radu) 58 #19593 73.35*
- Şandru, Petru** Complexes cubiques $K_n(f)$. *Rev. Roumaine Math. Pures Appl.* 16 (1971), 617-638. (C. F. Picard) 45 #4901 94A20
- Sandrygailo, I. E.** The Hilbert boundary value problem with infinite index for the half-plane. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* 1974, no. 6, 16-23, 140. (S. G. Samko) 50 #13549 30A88
 The Riemann boundary value problem with infinite index for the half-plane. (Russian) *Dokl. Akad. Nauk BSSR* 19 (1975), no. 10, 872-875, 955. (V. G. Kravčenko) 52 #5986 30A88
 The Riemann boundary value problem with infinite index for the half-plane in a class of functions of completely regular growth. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 1, 21-24, 139. (P. Ju. Alekna) 56 #635 30A88
- Sands, A. D.** Radicals and Morita contexts. *J. Algebra* 24 (1973), 335-345. (E. P. Armendariz) 48 #6157 16A21
 On the factorisation of finite abelian groups. III. *Acta Math. Acad. Sci. Hungar.* 25

- (1974), 279-284. (K. Honda) **50** #7376 20K10
On a conjecture of G. Hajós. *Glasgow Math. J.* **15** (1974), 88-89. (P. Gräbe) **51** #13078 20K25
On the factorization of finite groups. *J. London Math. Soc.* (2) **7** (1974), 627-631. (J. L. Alperin) **48** #8629 20D40
On normal radicals. *J. London Math. Soc.* (2) **11** (1975), no. 3, 361-365. (Anthony E. Hoffman) **52** #8180 16A21
Strong upper radicals. *Quart. J. Math. Oxford Ser.* (2) **27** (1976), no. 105, 21-24. (R. L. Tangeman) **53** #509 16A21
On relations among radical properties. *Glasgow Math. J.* **18** (1977), no. 1, 17-23. (W. G. Leavitt) **55** #392 16A21
(with Jaegermann, Michał) On normal radicals, N -radicals, and A -radicals. *J. Algebra* **50** (1978), no. 2, 337-349. (R. Wiegandt) **58** #16745 16A21
ands, Bill (with Rival, Ivan) Weak embeddings and embeddings of finite distributive lattices. *Arch. Math. (Basel)* **26** (1975), no. 4, 346-352. (R. Balbes) **51** #12648 06A25
(with Yao, Andrew Chi Chih; Reingold, Edward M.) Tiling with incomparable rectangles. *J. Recreational Math.* **8** (1975/76), no. 2, 112-119. (Authors' summary) **56** #5416 10A45 (50B30)
(with Davey, Brian A.) An application of Whitman's condition to lattices with no infinite chains. *Algebra Universalis* **7** (1977), no. 2, 171-178. (Hartmut Höft) **55** #7860 06A20
On a problem involving bounded epimorphisms of lattices. *Algebra Universalis* **7** (1977), no. 2, 211-217. (Werner Poguntkeinsert167) **55** #7865 06A20
(with Kucera, T. G.) Lattices of lattice homomorphisms. *Algebra Universalis* **8** (1978), no. 2, 180-190. (R. Balbes) **57** #3019 06A20
ands, D. A. (with Biggs, Norman L.; Damerell, R. M.) Recursive families of graphs. *J. Combinatorial Theory Ser. B* **12** (1972), 123-131. (H. V. Kronk) **45** #3245 05C15
ands, Matthew (with Feynman, Richard P.; Leighton, Robert B.) ★Фейнмановские лекции по физике. Вып. 1. Современная наука о природе. Законы механики. Вып. 2. Пространство. Время. Движение. (Russian) [The Feynman lectures in physics. Vol. 1. Modern science on nature. Laws of mechanics. Vol. 2. Space. Time. Motion] Translated from the English by A. V. Efremov, G. I. Kopylov and O. A. Hrustalev. Edited by Ja. A. Smorodinskii. Third edition. *Izdat. "Mir", Moscow*, 1976. 439 pp. (Editors) **55** #9633a 69.00
(with Feynman, Richard P.; Leighton, Robert B.) ★Фейнмановские лекции по физике. Вып. 3. Излучение. Волны. Кванты. Вып. 4. Кинетика. Теплоота. Заук. (Russian) [The Feynman lectures in physics. Vol. 3. Radiation. Waves. Quanta. Vol. 4. Kinetics. Temperature. Sound] Translated from the English by A. V. Efremov, G. I. Kopylov, Ju. A. Simonov and O. A. Hrustalev. Edited by Ja. A. Smorodinskii. Third edition. *Izdat. "Mir", Moscow*, 1976. 496 pp. (Editors) **55** #9633b 81.00
andström, Bengt (with Kjellberg, Bo) Asymptotic values of an entire function and its derivative. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **2** (1976), 257-267. (I. N. Baker) **57** #6425 30A66
andu, N. I. Quasinormal (normal) systems of groupoid divisors with division. (Russian) Nets and quasigroups. *Mat. Issled. Vyp.* **39** (1976), 172-186, 234-235. (Kazimierz Glazek) **58** #5988 20L05
(with Prodan, N. I.) A connection between congruences on a division groupoid and congruences on the associated semigroup. (Russian) Quasigroups and combinatorics. *Mat. Issled. Vyp.* **43** (1976), 138-145, 208-209. (Petr Némec) **58** #6035 20N05
Associative nilpotent loops. (Russian) *Bul. Akad. Štiințe RSS Moldoven.* **1978**, no. 1, 28-33, 95. (Ján Duplák) **58** #975 20N05
Generalization of the Fischer theorem for distributive quasigroups. (Russian) *Mat. Zametki* **23** (1978), no. 4, 521-526. (Ján Duplák) **58** #976 20N05
andved, Else Ancillary statistics in models without and with nuisance parameters. *Skand. Aktuarietidskr.* **1972**, 81-91 (1973). (D. R. Brillinger) **50** #15023 62A99
andvold, Karl Erik Global continuous solutions of generalized Goursat problems. *Matematike (Catania)* **26** (1971), 144-172 (1972). (R. Hersh) **47** #9100 35R99 (35D05)
Sandy, G. Ferrell See Applications of Walsh functions, **48** #8080
andzieva, K. B. Singular solutions of nonlinear equations of elliptic type. (Russian) *Differential equations and inequalities (Russian)*, pp. 40-42. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1973. (H. Marcinkowska) **54** #13308 35J60
The estimation of the solution of a certain fourth order equation of elliptic type. (Russian) *Differential equations and inequalities (Russian)*, pp. 50-53. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1973. (H. Marcinkowska) **54** #13307 35J40
ane, Robert N. (with Katzin, Gerald H.; Levine, Jack) Time-dependent dynamical symmetry mappings and associated constants of motion for classical particle systems. II. *J. Mathematical Phys.* **18** (1977), no. 3, 424-431. (Helmuth K. Urbantke) **57** #8265a 70.58 (58F05)
ane, S. S. (with Patwardhan, G. A.) Collineations in finite projective planes and group divisible designs. *Indian J. Pure Appl. Math.* **8** (1977), no. 2, 238-246. (Joseph A. Thas) **57** #144 05B05
Sanechika, Noriaki (with Oyagi, Shigeo; Mori, Ryoichi) An extended threshold logic which realizes second-order threshold functions. *Systems-Computers-Controls* **6** (1975), no. 1, 61-68. (T. C. Wesselkamper) **52** #16893 94A20
Sanekata, Nobuhiro A note on the abstract Cauchy problem in a Banach space. *Proc. Japan Acad.* **49** (1973), 510-513. (S. Goldberg) **50** #10899 47D05
Some remarks on the abstract Cauchy problem. *Publ. Res. Inst. Math. Sci.* **11** (1975/76), no. 1, 51-65. (Robert M. Bullock) **52** #15059 47A50 (34G05, 47D05)
Sanerib, Richard A., Jr. Automorphism groups of ultrafilters. *Algebra Universalis* **4** (1974), 141-150. (B. M. Schein (Šain)) **50** #4717 (EA 55/56) 20B25
Ultraproducts and elementary types of some groups related to infinite symmetric groups. *Algebra Universalis* **5** (1975), 24-38. (Paul C. Eklof) **52** #2872 02H15
Ultrafilters and the basis property. *Pacific J. Math.* **62** (1976), no. 1, 255-263. (R. S. Pierce) **54** #197 06A40
Sanfirov, Ju. Z. See Ioffe, A. F., **54** #2403
Sanford, David H. Competing semantics of vagueness: many values versus super-truth. *Synthese* **33** (1976), no. 2-4, 195-210. (From the text) **57** #15956 02C05
Sangalli, A. (with Marić, Vojislav) Growth of solutions of algebraic equations with coefficients in a group. *Proc. Roy. Soc. Edinburgh Sect. A* **72**, no. 4, 327-330 (1975). (A. Tognoli) **53** #367 12D15 (39A40)
Sangalli, Arturo A. L. Une approche transformationnelle à l'algèbre universelle. (English summary) *Manuscripta Math.* **6** (1972), 177-205. (G. Cupona) **45** #3296 08A25
Sugli automorfismi delle categorie di algebre simili. (English summary) *Riv. Mat. Univ. Parma* (3) **3** (1974), 233-238. (C. Năstăsescu) **55** #10359 08A15
Sangani, S. H. (with Sacks, Richard; Liberty, Stanley R.) A spectral theoretic approach to fault analysis in linear sequential circuits. *J. Franklin Inst.* **302** (1976), no. 3, 239-258. (See Zbl **354** #94022) 94A20
Sangare, Daouda Anneaux pseudo-valués de "pas" fini. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A981-A984. (Ron Brown) **47** #4985 13A15
Sur les extensions canoniques des pseudo-valuations. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 1, A19-A22. (Author's summary) **57** #5985 13A15
Sur la composition des filtrations et des pseudo-valuations. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 5, A287-A290. (Author's summary) **55** #2865 12J20 (13A15)
Sänger, Fritz Einige Charakterentafeln von Symmetrien symmetrischer Gruppen. *Mitt. Math. Sem. Giessen No.* **98** (1973), 21-38. (H. K. Farahat) **47** #8673 20C30
Sanghi, Arun P. (with Sobel, Matthew J.) Bayesian games as stochastic processes. *Internat. J. Game Theory* **5** (1976), no. 1, 1-22. (Jaap Wessels) **53** #10334 90D15
Sequential games as stochastic processes. *Stochastic Processes Appl.* **6** (1977/78), no. 3, 323-336. (H. Taylor) **58** #4378 90D15
Sanghi, B. I. A new continuous sampling plan with a quadratic loss function and without 100% inspection at any stage. *J. Indian Statist. Assoc.* **6** (1968), 19-30. (B. Raja Rao) **48** #7519 62N10 (90B25)
Dodge's CSP-1, CSP-2 and CSP-3 with a quadratic loss function. *J. Indian Statist. Assoc.* **6** (1968), 67-74. (P. W. Mielke, Jr.) **48** #12768 62N10
Sanginov, A. On a boundary value problem with a derivative for a system of three first order equations of composite type. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **18** (1975), no. 4, 3-7. (S. A. Tersenov) **52** #11069 30A88 (35M05)
The problem with oblique derivative for a system of first order equations of composite type in a multiply connected domain. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk* **1976**, no. 4 (62), 3-13. (S. A. Tersenov) **56** #9100 35M05
Sangiovanni-Vincentelli, Alberto L. (with Somalvico, Marco) State-space appears in problem-solving optimization. *Fifth Conference on Optimization Techniques (Rome, 1973), Part II*, pp. 144-158. *Lecture Notes in Comput. Sci., Vol. 4, Springer, Berlin*, 1973. **56** #13832 68A45
(with Santomauro, M.) Matrici sparse e loro impiego nella analisi e progetto di reti di grandi dimensioni. I. *Alta Frequenza* **43** (1974), no. 8, 474-481. (Authors' summary) **55** #4641a 65F30 (94A20)
(with Santomauro, M.) Matrici sparse e loro impiego nella analisi e progetto di reti di grandi dimensioni. II. *Alta Frequenza* **43** (1974), no. 11, 957-975. (Authors' summary) **55** #4641b 65F30 (94A20)
Bipartite graph and optimal tearing of a sparse matrix. *Proceedings of the Eighteenth Midwest Symposium on Circuits and Systems (Concordia Univ., Montreal, Que., 1975)*, pp. 510-514. *Western Periodicals, North Hollywood, Hollywood, Calif.*, 1975. (R. P. Tewarson) **55** #11595 65F99 (94A20)
(with Santomauro, M.) Matrici sparse e loro impiego nella analisi e progetto di reti di grandi dimensioni. III. *Alta Frequenza* **44** (1975), no. 1, 39-50. (Authors' summary) **55** #4641c 65F30 (94A20)
(with Somalvico, Marco) Formulazione teorica del metodo dello spazio degli stati per la risoluzione automatica dei problemi. *Alta Frequenza* **44** (1975), no. 3, 148-164. (Not reviewed) 68A45
An optimal bordered triangular form of a sparse matrix. *Alta Frequenza* **44** (1975), no. 11, 696-710. (D. M. Young, Jr.) **58** #19067 65F05
An optimization problem arising from tearing methods. *Sparse matrix computations (Proc. Sympos., Argonne Nat. Lab., Lemont, Ill., 1975)*, pp. 97-110. *Academic Press, New York*, 1976. (Michael S. Martin) **56** #17033 65F10 (68A20)
(with Guardabassi, Guido) A two levels algorithm for tearing. Special issue on large-scale networks and systems. *IEEE Trans. Circuits and Systems CAS-23* (1976), no. 12, 783-791. (W. Niethammer) **57** #4500 65F30
A note on bipartite graphs and pivot selection in sparse matrices. Special issue on large-scale networks and systems. *IEEE Trans. Circuits and Systems CAS-23* (1976), no. 12, 817-821. (Author's summary) **58** #8208 65F30
(with Chen, Li Kuan; Chua, Leon O.) An efficient heuristic cluster algorithm for tearing large-scale networks. *IEEE Trans. Circuits and Systems CAS-24* (1977), no. 12, 709-717. (B. R. Myers) **57** #2772 94A20 (68A10, 68A20)
(with Wang, Y. T.) On equivalent dynamic networks: elimination of capacitor loops and inductor cutsets. *IEEE Trans. Circuits and Systems CAS-25* (1978), no. 3, 174-177. (W.-K. Chen) **58** #4689 94A20
See also Conference: Optimization Techniques, **48** #5759
Sanguineti, Giannina Sulla corrente traslatoria euleriana che investe un solido di rotazione. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 2, 454-466. (A. Pozzi) **54** #9323 76.35
Sani, R. L. (with Georgakis, Constantine) On the stability of the steady state in systems of coupled diffusion and reaction. *Arch. Rational Mech. Anal.* **52** (1973), 266-296. (Paul Glansdorff) **55** #13082 80.47 (35K55)
Sanikidze, D. G. Certain local convergence criteria for approximate processes in the approximation of Cauchy type singular integrals. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **60** (1970), 277-280. (F. Pecka) **46** #2326 41A55
Certain local remainder estimates of quadratures for Cauchy type singular integrals. (Russian. Georgian and English summaries) *Gamoqneb. Math. Inst. Sem. Mohsen. Anotacie.* **4** (1971), 35-38. (F. Pecka) **45** #6190 65D30
Approximate solution of singular integral equations in the case of closed contours of integration. (Russian. English and Georgian summaries) *Gamoqneb. Math. Inst. Sem. Mohsen. Anotacie.* **5** (1971), 31-35. (F. Pecka) **45** #5683 45L05
Quadrature processes for Cauchy type integrals. (Russian) *Mat. Zametki* **11** (1972),

- 517-526. (F. Pecka) **46** #4076 41A55
A remark on quadrature formulas for singular integrals. (Russian) Problems of applied mathematics—Mushelišvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* **11** (1972), no. 1, 110-120. (F. Pecka) **48** #5347 65D30
- The order of approximation of singular integrals for a certain class of densities by sums of a complicated type. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **68** (1972), 533-536. (Bl. Sendov) **49** #8277 65D15
- A remark on the behavior of a certain approximation process for singular integrals near the ends of the interval of integration. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **69** (1973), 29-32. (J. Kofroň) **50** #3546 65D30
- The approximation of singular Cauchy integrals and their limit values at the endpoints of the curve of integration. (Russian) *Mat. Zametki* **15** (1974), 533-542. (A. Corduneanu) **50** #14087 44A15
- The uniform estimation of the approximation of singular integrals with a Čebyšev weight function by sums of interpolation type. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **75** (1974), 53-55. (F. Pecka) **50** #10707 44A25 (65D30)
- (with Hubedžašvili, Š. S.) A remark on the estimation of the accuracy of a certain process of approximation of singular integrals for functions that have an absolutely continuous derivative of given order. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **78** (1975), no. 3, 561-564. (F. Pecka) **52** #12304 65D30
- Šanin, N. A.** A hierarchy of ways of understanding judgments in constructive mathematics. (Russian) Problems in the constructive trend in mathematics, 6. *Trudy Mat. Inst. Steklov.* **129** (1973), 203-266, 267. (errata insert) (Editors) **58** #27384 02E99
- (with Dragalin, A. G.; Nagornyi, N. M.; Petri, N. V.) Andrei Andreevič Markov (on the occasion of his seventieth birthday). (Russian) *Uspehi Mat. Nauk* **291** (1974), no. 6 (180), 187-191. (1 plate) (Editors) **52** #7796 01A70
- The hierarchy of constructive Brouwer functionals. (Russian. English summary) Investigations in constructive mathematics and mathematical logic. VI (dedicated to A. A. Markov on the occasion of his 70th birthday). *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **40** (1974), 142-147, 160. (E. Mendelson) **54** #74 02E05
- The quantifier of limiting realizability. (Russian. English summary) Studies in constructive mathematics and mathematical logic, VII. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **60** (1976), 209-220, 227. (From the summary) **58** #27418 02F99 (02E99)
- On the quantifier of limiting realizability. Set theory, Foundations of mathematics (Proc. Sympos., Belgrade, 1977). *Zb. Rad. Mat. Inst. Beograd (N.S.)* **2**(10) (1977), 127. (Editors) **58** #21516 02E99
- See also *American Mathematical Society Translations*, Ser. 2, **48** #3; *Problems in the constructive trend in mathematics*, **49** #4761; Goodstein, R. Louis, **50** #4261; *Problems in the constructive trend in mathematics*, **54** #7190; *Problems in the constructive trend in mathematics*, **55** #5379 and *Mathematics and philosophy*, **58** #21414
- Šanin, Aristide** Derivazioni su distribuzioni e connessioni di Finsler. (English summary) *Rend. Sem. Mat. Univ. e Politech. Torino* **31** (1971/73), 157-184 (1974). (M. Stoka) **50** #5673 53B40
- Alcuni tipi di connessioni su varietà quasi prodotto. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **106** (1972), no. 3, 317-332. (M. C. Chaki) **54** #11232 53C15
- Alcuni tipi di varietà luogo di piani in S_5 . *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **106** (1972), no. 3, 371-383. (Bernard Rouxel) **54** #8473 53A20
- Su un tipo di struttura quasi hermitiana del fibrato tangente ad uno spazio di Finsler. (English summary) *Rend. Sem. Mat. Univ. e Politech. Torino* **32** (1973/74), 303-316 (1975). (R. Miron) **51** #11339 53C15
- Trasformazioni pseudoaffini di una varietà differenziabile. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 4, 512-517. (Bernard Rouxel) **52** #11766 53B15
- Connessioni lineari del tipo di Finsler e strutture quasi hermitiane. (English summary) *Riv. Mat. Univ. Parma* (3) **3** (1974), 239-252. (R. Miron) **55** #4075 53C60
- Derivata di Lie e prolungamenti di una derivazione. (English summary) Collection in memory of Enrico Bompiani. *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, suppl., 63-72. (Author's summary) **58** #30900 53C05
- (with Tricerrì, Franco) Prolungamenti di enti geometrici definiti su una varietà fogliettata. (English summary) *Rend. Sem. Mat. Univ. e Politech. Torino* **34** (1975/76), 211-221. (Pedro Martinez Gadea) **55** #9118 57D30 (57D20, 53C05)
- Sankappanavar, H. P.** (with Burris, Stanley) Lattice-theoretic decision problems in universal algebra. *Algebra Universalis* **5** (1975), no. 2, 163-177. (John P. Helm) **52** #13359 02G05 (08A25)
- On the decision problem of the congruence lattices of pseudocomplemented semilattices. *Non-classical logics, model theory and computability* (Proc. Third Latin-Amer. Sympos. Math. Logic, Campinas, 1976), pp. 255-266. *Stud. Logic Found. Math.*, Vol. 89, North-Holland, Amsterdam, 1977. (Stanley N. Burris) **57** #5723 02G05 (06A20)
- Sankar, P. B. K.** A generalisation of Anger and Bourget functions. *J. Sci. Res. Banaras Hindu Univ.* **18** (1967/68), no. 1-2, 78-86. (Y. L. Luke) **47** #8913 33A10
- Two inversion formulae for the Anger transform. *J. Sci. Res. Banaras Hindu Univ.* **18** (1967/68), no. 1-2, 140-146. (Y. L. Luke) **47** #9187 44A15
- On the injective envelope of a torsion-free module over an integral domain. *J. Sci. Res. Banaras Hindu Univ.* **20** (1969/70), no. 2, 206. (R. Bkouche) **56** #8552 13G05
- The Hankel transform of a function in terms of its Anger transform. *Ganita* **21** (1970), no. 1, 35-39. (C. Fox) **45** #7398 44A15
- Injective envelopes of modules. *Progr. Math. (Allahabad)* **4** (1970), no. 2, 19-20. (B. Stenström) **46** #5306 13C10
- A note on quasi-injective modules. *Progr. Math. (Allahabad)* **4** (1970), no. 2, 46-47. (T. Cheatham) **46** #3503 13C10
- Sankar, P. V.** (with Sen, Syamal Kumar) Triangular partitioning for matrix inversion. *Internat. J. Control* (1) **15** (1972), 571-575. (O. Pokorná) **47** #9812 65F05
- Sankaran, Munuswamy** On certain properties of a class of compound Poisson distributions. *Sankhyā Ser. B* **32** (1970), 353-362. (Author's summary) **47** #1173 62E10
- On Nair's transform of the correlation coefficient. *Sankhyā Ser. B* **35** (1973), no. 3, 317-324. (Author's summary) **53** #1848 62H10
- Sankaran, N.** Rings of formal power series. *Canad. Math. Bull.* **14** (1971), 207-220. (J.-F. Lafon) **47** #1805 13J05 (32A05)
- Galois extensions of rings and generalised group extensions. *J. Math. Sci.* **8** (1973), 10-16 (1974). (F. DeMeyer) **58** #5624 13B05
- Automorphisms of restricted power series rings. *J. Algebra* **32** (1974), 400-404. (J. T. Arnold) **50** #7126 13J05
- (with Greco, Silvio) On the separable and algebraic closedness of a Hensel couple in its completion. *J. Algebra* **39** (1976), no. 2, 335-348. (Hamet Seydi) **53** #13209 13J15 (14C20)
- Sankaran, S.** (with Selesnick, Stephen A.) Some remarks on C^* -bigebras and duality. *Semigroup Forum* **3** (1971/72), no. 2, 108-129. (K. H. Hofmann) **45** #2493 46L05 (22D99, 46M99)
- Impurity and duality theorems. (Italian summary) *Boll. Un. Mat. Ital.* (4) **7** (1973), 251-259. (M. Nakamura) **47** #5176 22D05 (22C05, 46L99, 81A6)
- Sankaran, V.** (with Srinath, Mandyam D.) Decoupling of systems with plant and measurement noise. *IEEE Trans. Automatic Control AC-16* (1971), 202-203. (E. B. Lee) **45** #9739 93B15
- (with Srinath, Mandyam D.) Decoupling of linear discrete time systems by state variable feedback. *J. Math. Anal. Appl.* **39** (1972), 338-345. (Edward J. Davison) **46** #10458 93B99
- (with Srinath, Mandyam D.) Duality of linear estimation and control with constraints. *J. Optimization Theory Appl.* **10** (1972), 41-50. (S. Butman) **46** #5017 93E20 (94A05)
- Duality of linear discrete time systems with constraints. *IEEE Trans. Aerospace and Electron. Systems AES-11* (1975), no. 4, 654-659. (H. J. Kushner) **54** #12297 93C55 (93E10)
- Sankaranarayanan, A.** On a group theoretical connection among the physical hierarchies. *Symposia on Theoretical Physics and Mathematics, Vol. 10* (Inst. Math. Sci., Madras, 1969), pp. 85-99. Plenum, New York, 1970. (B. K. Datta) **45** #4757 81.22 (83.53)
- A Hamiltonian form of Maxwell's equations. *Progr. Theoret. Phys.* **43** (1970), 1204-1212. (C. J. Eliezer) **46** #10321 81.35
- Sankaranarayanan, G.** (with Suyambulingom, C.) Distribution of the maximum of the number of impulses at any instant in a type II counter in a given interval of time. *Metrika* **18** (1971/72), 227-233; correction, *ibid.* **20** (1973), 245. (Prem S. Puri) **54** #1421 60K25
- (with Balakrishnan, V. K.; Suyambulingom, C.) Ordered cycle lengths in a random permutation. *Pacific J. Math.* **36** (1971), 603-613. (Bernard Harris) **52** #12037 60C05
- (with Athreya, Krishna B.; Parthasarathy, P. R.) Supercritical age-dependent branching processes with immigration. *J. Appl. Probability* **11** (1974), 695-702. (Anthony G. Pakes) **50** #11491 60J80
- (with Ramanarayanan, R.) On correlated life and repair times. (German and French summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 1, 127-136. (B. Dimitrov) **58** #7905 60K20 (62N05)
- (with Balakrishnan, V. K.) A renewal theorem for a strictly stationary discrete stochastic process. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 4, 581-590. (T. Kawata) **57** #7795 60K05 (60G10)
- (with Ramanarayanan, R.) On a power series whose co-efficients are convolutions of a stable distribution of a positive random variable. *Statist. Hefte (N.F.)* **18** (1977), no. 1, 53-57. (Aart J. Stam) **56** #6906 60K05
- (with Balakrishnan, V. K.) A renewal theorem for a sequence of dependent random variables. *Acta Math. Acad. Sci. Hungar.* **31** (1978), no. 1-2, 1-8. (T. Kawata) **57** #7796 60K05
- (with Krishnamoorthy, A.) Branching processes with immigration subjected to disasters. *J. Math. Phys. Sci.* **12** (1978), no. 2, 165-176. (Anthony G. Pakes) **58** #7891 60J80
- Sankara Rao, K.** (with Bapewara Rao, V. V.; Murti, V. G. K.) Enumeration of directed trees. *Proc. IEEE* **59** (1971), 1036-1037. (T. L. Saaty) **48** #8126 94A20
- (with Swamy, M. N. S.) A note on generation of constituent matrices. *Proc. IEEE* **63** (1975), no. 1, 200-201. (A. S. Householder) **52** #432 15A18 (65F30)
- Sanker, P. B. K.** See **Sankar, P. B. K.**
- Šankibaev, B. N.** Transformations of an inhomogeneous flow in a network. (Russian) *Mathematics and mechanics*, No. 2, Part 2 (Russian), pp. 175-182, 198. *Ministerstvo Vysš. i Sredn. Spec. Obrazovanie, Kazah. SSR, Alma-Ata*, 1967 (1970). (See *RŽMat* **1970** #12 V449; *MR* **48** #17) 90B10
- A condition for the optimality of the solution of an integer distributive problem. (Russian) *Vestnik Akad. Nauk Kazah. SSR* **28** (1972), no. 2(322), 64-65. (G. Bär) **46** #4935 90C10
- (with Šerman, A. I.) An algorithm for the solution of a purely integer linear programming problem. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1973**, no. 5, 87-90, 96. (O. Pokorná) **51** #5000 90C10
- An integer distributing problem. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Drogobych, 1973)* (Russian), pp. 259-289. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1975. (Editors) **56** #14694 90C10
- See also *Mathematics and mechanics*, **48** #17
- Šankin, Ju. P.** Evanescent modes in periodic waveguides. *Radiotekhn. i Elektron.* **19** (1974), no. 8, 1590-1594 (Russian); translated as *Radio Engng. Electron. Phys.* **19** (1974), no. 8, 10-14. (A. Ishimaru) **53** #15107 78.35
- Sankoff, David** Dictionary structure and probability measures. *Information and Control* **19** (1971), 104-113. (W. S. Hatcher) **47** #4499 68A50 (02F10)
- Reconstructing the history and geography of an evolutionary tree. *Amer. Math. Monthly* **79** (1972), 596-603. (R. M. Cormack) **46** #4975 (E **47** #3040) 92A15
- Correction to: "Reconstructing an evolutionary tree". *Amer. Math. Monthly* **79** (1972), 1100. (Editors) **47** #3040 92A05
- Context-free grammars and nonnegative matrices. *Linear Algebra and Appl.* **5**

- (1972), 277-281. (B. Brainerd) **46** #4800 68A30
Matching sequences under deletion/insertion constraints. *Proc. Nat. Acad. Sci. U.S.A.* **69** (1972), 4-6. (P. J. Nicholson) **46** #1372 92A10 (49C99)
(with Patera, Jiri) ★Tables of branching rules for representations of simple Lie algebras. *Les Presses de l'Université de Montréal, Montréal, Que.*, 1973. 99 pp. (William H. Klink) **56** #8761 22E70 (81.17)
(with Sellers, Peter H.) Shortcuts, diversions, and maximal chains in partially ordered sets. *Discrete Math.* **4** (1973), 287-293. (E. Harzheim) **47** #1690 06A10
(with Chvátal, Václav) Longest common subsequences of two random sequences. *J. Appl. Probability* **12** (1975), 306-315. (John Haigh) **53** #9324 60C05
(with Rousseau, Pascale) Locating the vertices of a Steiner tree in an arbitrary metric space. *Math. Programming* **9** (1975), no. 2, 240-246. (George F. Estabrook) **52** #12796 90C35 (92A05)
Minimal mutation trees of sequences. *SIAM J. Appl. Math.* **28** (1975), 35-42. (Editors) **51** #12603 05C35 (92A05)
(with McKay, W.; Patera, Jiri) The computation of branching rules for representations of semisimple Lie algebras. *Computers in nonassociative rings and algebras (Special session, 82nd Annual Meeting Amer. Math. Soc., San Antonio, Tex., 1976), pp. 235-277. Academic Press, New York, 1977. (F. W. Lemire)* **56** #15710 17-04
Sankovskii, E. A. (with Gromyko, V. D.) Questions on the construction of time-optimal control systems with a calibration model. (Russian) *Computer science in mechanical engineering (Russian), pp. 201-212. Akad. Nauk Beloruss. SSR Inst. Tehn. Kibernet., Minsk, 1971 (1972). (Authors' introduction)* **50** #16027 93C99
Sanmartín Espigues, J. Standard models of axiomatic systems of sets. I. (Spanish) *Teorema No. 5* (1972), 55-60. (Constantin Milić) **47** #6485 02K05
Syllogistics, many-valued logic and model theory. (Spanish) *Teorema* **3** (1973), 355-365. (N. C. A. da Costa) **50** #9522 02-03 (02C05)
See also Aspects of the philosophy of W. V. Quine, **55** #2469
San Miguel Marco, Miguel Random periodic functions. (Spanish. English summary) *Rev. Acad. Ci. Zaragoza* (2) **26** (1971), 137-202. (D. S. Adorno) **45** #9378 60G99
Fourier expansion of periodic random functions. (Spanish) *Trabajos Estadist.* **22** (1971), no. 1-2, 27-63. (P. Holgate) **48** #1304 60G17 (42A36)
Some results on the convergence of the Fourier series of a periodic random function. (Spanish. English summary) *Rev. Acad. Ci. Zaragoza* (2) **29** (1974), 87-98. (G. U. Brauer) **50** #5932 60G99 (42A36)
Notes on a type of sequences of random variables that are related to martingales. (Spanish) *Trabajos Estadist. Investigación Oper.* **25** (1974), no. 1-2, 57-63. (A. De Hoyos) **57** #17811 60G45
Two observations on an inequality of Burkholder. (Spanish. English summary) *Rev. Acad. Ci. Zaragoza* (2) **30** (1975), no. 1-2, 31-34. (Maurizio Pratelli) **53** #11738 60G45
On the invariance principle for interchangeable processes. (Spanish. English summary) *Rev. Acad. Ci. Zaragoza* (2) **30** (1975), no. 1-2, 35-41. (A. De Hoyos) **53** #9321 60B10
(with Garrido, L.) Wick's theorem and Fokker-Planck dynamics. *Phys. Lett. A* **62** (1977), no. 7, 467-468. (Nina B. Maslova) **56** #14453 82.47 (34F05)
See also Peierls, Rudolf, **56** #14442
Sannikov, S. S. Spaces of test functions and generalized functions of index type. *Dokl. Akad. Nauk SSSR* **178** (1968), 800-803 (Russian); translated as *Soviet Physics Dokl.* **13** (1968), 95-97. (RZMat 1968 #7 B501) **58** #30167 46F05
On the theory of representations of the group $SL(2, \mathbb{C})$. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 324-327. (C. J. Henrich) **53** #2169 81.22 (22E70)
Sannikov, V. A. On the question of finding the transfer and impulse-transfer functions of an airplane in non-steady-state motion by the method of the Laplace-Carson integral transform. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* **1971**, no. 2, 102-108. (W. S. Loud) **45** #4645 65L05
Sanno, Bartolo Sulla corrispondenza delle superficie per ortogonalità di elementi lineari. (English summary) *Atti Soc. Peloritana Sci. Fis. Mat. Natur.* **16** (1970), 357-366 (1971). (P. Drăgăla) **49** #1335 53A05
Risoluzione dell'equazione differenziale $\partial^2\varphi/\partial^3v = -2\varphi/(u-v)^2$ e sue applicazioni sulla corrispondenza delle superficie per ortogonalità di elementi lineari. (English summary) *Atti Soc. Peloritana Sci. Fis. Mat. Natur.* **17** (1971), no. 1/2, 53-64. (M. Št. Botez) **53** #1434 53A05
Determinazione delle superficie che corrispondono per ortogonalità di elementi lineari ad un ellissoide. (English summary) *Atti Soc. Peloritana Sci. Fis. Mat. Natur.* **17** (1971), no. 1/2, 65-76. (M. Št. Botez) **53** #1435 53A05
Sulle superficie di Jonas in uno spazio affine. (English summary) *Rend. Circ. Mat. Palermo* (2) **22** (1973), no. 3, 245-256 (1974). (M. Št. Botez) **58** #24027 53A05
Sulle superficie che si corrispondono per trasformazione di Lie e su un formulario completo tra gli invarianti del gruppo conforme e gli invarianti del gruppo proiettivo. (English summary) *Rend. Circ. Mat. Palermo* (2) **24** (1975), no. 1-2, 168-176. (Author's summary) **58** #30771 53A05
Sannomiya, Nobuo (with Nishikawa, Yoshikazu; Itakura, Hidekiyo) A method of suboptimal design of nonlinear feedback systems. (French, German and Russian summaries) *Automatica—J. IFAC* **7** (1971), 703-712. (Stanislav K. Myškov) **48** #2860 49B10
A method for construction of suboptimal nonlinear regulators. *Mem. Fac. Engrg. Kyoto Univ.* **34** (1972), 289-300. (John D. Hwang) **50** #10970 49D05 (93C10)
(with Nishikawa, Yoshikazu; Ojika, Takeo) An algorithm of interaction adjustment in multilevel control of linear systems. (Japanese. English summary) *Systems and Control* **16** (1972), 875-879. (Authors' summary) **47** #3061 93C05
A method for construction of suboptimal non-linear regulators by minimax algorithm. *Internat. J. Control* (1) **18** (1973), 417-427. (M. J. Davies) **48** #10579 93C10
(with Nishikawa, Yoshikazu; Ojika, Takeo) An algorithm of interaction coordination in multilevel control of nonlinear systems. *Mem. Fac. Engrg. Kyoto Univ.* **36** (1974), 46-59. (J. Casti) **49** #6960 93A15
(with Nishikawa, Yoshikazu; Lee, Kyuill) A method for solving linear programming problems with unknown parameters. *Mem. Fac. Engrg. Kyoto Univ.* **36** (1974), 183-196. (A. Gewirtz) **51** #4991 90C05
(with Nishikawa, Yoshikazu; Itakura, Hidekiyo) Suboptimal feedback control of linear periodic systems. *J. Optimization Theory Appl.* **18** (1976), no. 2, 271-284. (Thomas S. Angell) **53** #15463 93C05
(with Nishikawa, Yoshikazu; Itakura, Hidekiyo) Power-series approximations for the optimal feedback control of noisy nonlinear systems. *J. Optimization Theory Appl.* **19** (1976), no. 4, 633-644. (H. J. Kushner) **54** #12333 93E20
(with Uno, Kohichi; Itakura, Hidekiyo; Nishikawa, Yoshikazu) Learning controls that use a fuzzy controller. (Japanese) *Systems and Control* **20** (1976), no. 5, 262-268. (Kiyoji Asai) **56** #1839 68A35 (92A25)
(with Matuda, Ko) A method of analysis on the motion of fishing gear: a method for solving a nonlinear two-point boundary value problem with unknown parameters. (Japanese. English summary) *Systems and Control* **21** (1977), no. 12, 678-685. (H. Shintani) **58** #3496 65L10
See also System sensitivity analysis, **52** #12863
Sannou, Syoji A note on monotonically normal spaces. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **12**, 214-217 (1974). (C. R. Borges) **50** #11143 54D20
Sannuti, Peddappalaiah Asymptotic series solution of singularly perturbed optimal control problems. (French, German and Russian summaries) *Automatica—J. IFAC* **10** (1974), 183-194. **56** #12491 34H05
(with Kokotović, Petar V.; O'Malley, Robert E., Jr.) Singular perturbations and order reduction in control theory—an overview. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 51.3, 11 pp. IFAC, Düsseldorf, 1975. (Authors' summary)* **58** #33301 93C15
Asymptotic expansions of singularly perturbed quasi-linear optimal systems. *SIAM J. Control* **13** (1975), 572-592. (G. N. Mil'stein) **55** #3448 34E15 (49A10)
(with Kokotović, Petar V.; O'Malley, Robert E., Jr.) Singular perturbations and order reduction in control theory—an overview. *Automatica—J. IFAC* **12** (1976), no. 2, 123-132. (F. Hoppensteadt) **52** #16740 93-02 (34D15)
On the controllability of singularly perturbed systems. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 622-624. (O. A. Sebasky) **56** #11148 93B05 (93C05, 93C10)
See also System sensitivity analysis, **52** #12863
Sano, Akira Optimal estimation algorithm for a distributed-parameter system with multi-pointwise sources. *Keio Engrg. Rep.* **28** (1975), no. 5, 41-55. (Mark A. Aizerman) **52** #10186 93E10
(with Yamamoto, Satoru; Eimoto, Yasunobu) Fixed-interval smoothing technique for piecewise linear systems. (Japanese. English summary) *Systems and Control* **22** (1978), no. 8, 504-510. (Authors' summary) **58** #26452 93E10
Sano, Katsuhiko (with Kumagai, Yukio) Automata representation in one-dimensional nerve net of homogeneous structure. (Japanese. English summary) *Mem. Muroran Inst. Tech.* **9** (1976), no. 1, 363-379. (Tadashige Ishihara) **56** #15237 94A30 (92A05)
San Ou, Syoji A note on \mathbb{Z} -product. *J. Math. Soc. Japan* **29** (1977), no. 2, 281-285. (Eric K. van Douwen) **56** #1269 54E20 (54G20)
Sanovskii, K. D. (with Bibikov, Ju. N.) On dissipative behavior of an equation of nonlinear oscillations. *Prikl. Mat. Meh.* **35** (1971), 933-937 (Russian); translated as *J. Appl. Math. Mech.* **35** (1971), 886-890 (1972). (T. K. Caughey) **49** #728 34C15
sancho de San Román, Juan See Sancho de San Román, Juan
Šanšavišvili, S. I. Some space problems of elasticity theory. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **87** (1977), no. 3, 573-576. (B. A. Bondarenko) **58** #3869 73.35
Šanšavišvili, V. G. A structure identification method of a certain class of nonlinear dynamical objects with positive feedbacks. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **82** (1976), no. 2, 333-336. (V. V. Udilov) **56** #14907 93B30
Sansing, R. C. (with Owen, Donald B.) The density of the t -statistic for non-normal distributions. *Comm. Statist.* **3** (1974), 139-155. (J. Pickands, III) **49** #8167 62E15
The t -statistic for a double exponential distribution. *SIAM J. Appl. Math.* **31** (1976), no. 4, 634-645. (Javad Behboodani) **54** #11614 62E15
semenov-tjan-Šanskii, M. A. See Semenov-Tjan-Šanskii, M. A.
Sansó, Ferdinando Calcolo della rototraslazione tra due sistemi di riferimento per mezzo di punti noti parzialmente. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 1-2, 106-112 (1975). (M. St. Botez) **58** #18105 50D15 (86.50)
A further account of roto-translations and the use of the method of conditioned observations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **60** (1976), no. 2, 126-134. (From the author's text) **57** #1835 65D20
Sansó, Fernando Teoremi di dipendenza continua dai coefficienti per l'equazione iperbolica o parabolica. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **105** (1971), 3-35. (P. C. Fife) **45** #8972 35B30
Carta conforme con minime deformazioni areali. I, II. (English summaries) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 197-205; *ibid.* (8) **52** (1972), 513-517. (E. Baiada) **48** #11482 30A38
On the condition for the existence of a solution of the modified Molodensky's problem in gravity space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **61** (1976), no. 6, 611-615 (1977). (Author's summary) **58** #32832 86.35
The geodetic boundary value problem in gravity space. (Italian summary) *Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Sez. Ia* (8) **14** (1977), no. 3, 39-97. (Pierre C. Sabatier) **58** #32831 86.35
Molodensky's problem in gravity space: a review of the first results. *Bull. Géodésique* **52** (1978), no. 1, 59-70. (Author's summary) **58** #14988 86.35 (35J55)
Sansone, G. Errata: "Su un'equazione differenziale non lineare della fisica nucleare" (Symposia Mathematica, Vol. VI (INDAM, Rome, 1970), pp. 3-139, Academic Press, London, 1971). *Symposia Mathematica, Vol. VIII (INDAM, Roma, 1972), p. 405. Academic Press, London, 1972. (H. A. Antosiewicz)* **49** #7510 34C05
(with Reissig, R.; Conti, R.) ★Non-linear differential equations of higher order. Translated from the German. *Noordhoff International Publishing, Leyden, 1974. xiii + 669 pp. (Editors)* **49** #9295 34-02 (34Cxx, 34Dxx)
(with Reissig, R.; Conti, R.) ★Качественная теория нелинейных

- дифференциальных уравнений. (Russian) [Qualitative theory of nonlinear differential equations] Translated from the 1963 German edition by I. P. Makarov. Edited by B. P. Demidovič. Izdat. "Nauka", Moscow, 1974. 318 pp. (Editors) **50** #5088 34Cxx (34Dxx)
- Le equazioni diofantee $ax^4 - bx^2 + 1 = \square$, $4x^4 + x^2y^2 + 4y^4 = \square$. *Ann. Mat. Pura Appl.* (4) **98** (1974), 167-181. (J. D. Swift) **50** #9789 10B10
- Le attività dell'Unione Matematica Italiana nel primo cinquantennio della sua fondazione. Cinquantenario dell'Unione Matematica Italiana, 1922-1972 (Riunione celebrativa, Univ. di Bologna, 1972). *Boll. Un. Mat. Ital.* (4) **9** (1974), suppl. fasc. 2, 5-43. (Editors) **53** #12834 01A60
- Un teorema sui sistemi differenziali lineari con condizioni ai limiti lineari. *Riv. Mat. Univ. Parma* (3) **3** (1974), 253-271. (M. Ráb) **57** #6582 34B05
- L'equazione di J. Nagumo, S. Arimoto e S. Yoshizawa. *Ann. Mat. Pura Appl.* (4) **103** (1975), 259-304. (M. Ráb) **51** #13359 34C10
- Il sistema diofanteo $N+1=x^2$, $3N+1=y^2$, $8N+1=z^2$. *Ann. Mat. Pura Appl.* (4) **111** (1976), 125-151. (E. L. Cohen) **54** #12631 10B05
- ★Orthogonal functions. With a foreword by Einar Hille. Translated from the Italian by Ainsley H. Diamond. Corrected reprint of the 1959 revised English edition. *Robert E. Krieger Publishing Co., Huntington, N. Y.*, 1977. xii + 411 pp. (Editors) **54** #10927 41-02 (42A52)
- See also Collection: Sansone, Giovanni, **52** #2783; Biography: Sansone, Giovanni, **52** #5331 and Bibliography: Sansone, Giovanni, **52** #5332
- Sansuc, Jean-Jacques** (with Houzel, Christian; Ovaert, Jean-Louis; Raymond, Pierre) ★Philosophie et calcul de l'infini. Collection "Algorithmes". François Maspero, Paris, 1976. 235 pp. (A.-A. P. Youschkevitch (Juškevič)) **58** #26965 01A50 (00A25)
- (with Colliot-Thélène, Jean-Louis) Torseurs sous des groupes de type multiplicatif; applications à l'étude des points rationnels de certaines variétés algébriques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 18, A1113-A1116. (Loren D. Olson) **54** #2657 14G05
- (with Colliot-Thélène, Jean-Louis) La \mathbb{R} -équivalence sur les tores. *Ann. Sci. École Norm. Sup.* (4) **10** (1977), no. 2, 175-229. (Daniel Coray) **56** #8576 14G05 (12F20)
- (with Colliot-Thélène, Jean-Louis) Variétés de première descente attachées aux variétés rationnelles. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 16, A967-A970. (Authors' summary) **56** #5561 14G05 (14M20, 14C20)
- (with Colliot-Thélène, Jean-Louis) La descente sur une variété rationnelle définie sur un corps de nombres. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 19, A1215-A1218. (Authors' summary) **56** #5565 14G25 (14M20)
- van Sant, T.** See **Van Sant, T.**
- Santa, J.** Convergence theorems of quasi-Hermite-Fejér interpolation. *Publ. Math. Debrecen* **22** (1975), no. 1-2, 23-29. (A. Sharma) **54** #3221 41A05
- Santagati, Giuseppe** (with Pulvirenti, Giuseppe) Sulla dipendenza continua dal complesso dei dati delle soluzioni di una classe di problemi ai limiti non lineari. (English summary) *Matematiche (Catania)* **25** (1970), 324-338 (1971). (B. Fishel) **47** #912 47H15
- (with Pulvirenti, Giuseppe) Sulle approssimazioni successive delle soluzioni di una classe di problemi ai limiti non lineari. (English summary) *Matematiche (Catania)* **25** (1970), 339-349 (1971). (V. Pereyra) **46** #2856 65J05
- On an optimal control problem for a hyperbolic partial differential equation. *J. Optimization Theory Appl.* **7** (1971), 1-10. (V. Komkov) **45** #4249 49A20 (35L10)
- (with Pulvirenti, Giuseppe) Sul minimo di funzioni costo relative ad un processo di controllo con parametri distribuiti. (English summary) *Matematiche (Catania)* **26** (1971), 325-347 (1972). (G. M. Ewing) **47** #7549 49A20
- Alcuni problemi di teoria dei controlli relativi ad un processo di controllo con parametri distribuiti. *Confer. Sem. Mat. Univ. Bari No.* 129 (1972), 33 pp. (L. von Wolfersdorf) **49** #11343 (EA 55/56) 49A20
- (with Pulvirenti, Giuseppe) Alcune osservazioni sulla controllabilità completa di un processo di controllo con parametri distribuiti. (English summary) *Matematiche (Catania)* **28** (1973), 196-207 (1974). (L. Cesari) **50** #8235 49E15
- (with Pulvirenti, Giuseppe) Sulla controllabilità completa in luogo determinato ed in luogo variabile per un processo di controllo con parametri distribuiti. (English summary) Collection of articles dedicated to Giovanni Sansone on the occasion of his eighty-fifth birthday. *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, suppl., 316-328. (J. E. Rubio) **52** #15187 49E15
- Santalo, Luis A.** Some problems of differential geometry. (Spanish) *Notas Ci. Ser. M Mat.* **7** (1969), no. 1, 27-34. (João Lucas Marques Barbosa) **54** #1093 53-02 (57-02, 58-02)
- Probabilities on convex bodies and cylinders. (Spanish. English summary) Collection of articles dedicated to Alberto González Domínguez on his sixty-fifth birthday. *Rev. Un. Mat. Argentina* **25** (1970/71), 95-104. (H. Groemer) **47** #9684 60D05 (53C65)
- (with Yañez, I.) Averages for polygons formed by random lines in Euclidean and hyperbolic planes. *J. Appl. Probability* **9** (1972), 140-157. (R. V. Ambarcumjian) **45** #6050 60D05
- On certain asymmetric unified field theories. (Spanish) *Rev. Acad. Ci. Madrid* **66** (1972), 395-425. (R. L. Ingraham) **47** #10021 83J3
- Unified field theories of Einstein's type deduced from a variational principle: conservation laws. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. II. *Tensor (N.S.)* **25** (1972), 383-389. (H. A. Buchdahl) **48** #13164 83J3
- Total curvatures of compact manifolds immersed in Euclidean space. *Symposia Mathematica, Vol. XIV (Convegno di Teoria Geometrica dell'Integrazione e Varietà Minimali, INDAM, Rome, 1973)*, pp. 363-390. Academic Press, London, 1974. (Y. Katsurada) **52** #6622 53C45
- Curves and quaternions. (Spanish) *Rev. Un. Mat. Argentina* **27** (1974/75), no. 1, 41-52. (H. W. Guggenheimer) **51** #8963 53A05
- The kinematic formula in integral geometry for cylinders. *Ann. Mat. Pura Appl.* (4) **103** (1975), 71-79. (C.-C. Hsiung) **53** #9109 53C65
- ★Integral geometry and geometric probability. With a foreword by Mark Kac. Encyclopedia of Mathematics and its Applications, Vol. 1. Addison-Wesley Publishing Co., Reading, Mass.-London-Amsterdam, 1976. xvii + 404 pp. (W. J. Firey) **55** #6340 53C65 (60D05)
- ★Geometría espinorial. (Spanish) [Spinor geometry] Cursos de Matemática, No. [Courses in Mathematics, No. 2] Consejo Nacional de Investigaciones Científicas Técnicas, Instituto Argentino de Matemática, Buenos Aires, 1976. 131 pp. (Editor) **55** #11163 53A50
- (with Fava, Norberto Angel) Plate and line segment processes. *J. Appl. Probab.* **1** (1978), no. 3, 494-501. (Rodney Coleman) **57** #17762 60D05 (60G55)
- See also Stochastic geometry, **50** #3284
- Santamaria, Luigi** ★Manuale di ricerca operativa. Vol. I. CELUC, Milan, 1971. 447 pp. (F. Giannessi) **50** #9331 90Bxx
- Santana de Galindo, M. S.** (with Kalla, S. L.) An integral involving generalized function of two variables. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **13** (1975), no. 2, 141-147 (1977). (R. K. Saxena) **57** #10022 33A35
- (with Kalla, S. L.) On an extension of the generalized function of two variables. (Spanish. English summary) *Univ. Nac. Tucumán Rev. Ser. A* **25** (1975), no. 1-2, 221-229 (1976). (M. E. Muldoon) **54** #7885 33A30
- Santander, Mariano** (with Boya, Luis J.; Cariñena, José F.) On the continuity of the boosts for each orbit. *Comm. Math. Phys.* **37** (1974), 331-334. (L. O'Riartaigh) **51** #2500 81J22
- (with Cariñena, José F.) On the projective unitary representations of connected Lie groups. *J. Mathematical Phys.* **16** (1975), 1416-1420. (Gerald A. Goldin) **53** #9906 81J22
- (with Boya, Luis J.; Cariñena, José F.) Dilatations and the Poincaré group. *J. Mathematical Phys.* **16** (1975), no. 9, 1813-1815. (Anthony J. Bracken) **53** #7247 81J22 (22E70)
- Santapietro, John J.** The Grothendieck ring of dihedral and quaternion groups. *J. Algebra* **22** (1972), 34-44. (S. A. Basarab) **47** #1873 16A54
- Santaram, K.** A class of higher dimensional manifolds. *J. London Math. Soc.* (2) **15** (1977), no. 2, 351-359. (C. L. Seebeck, III) **56** #13232 57D65
- Santarelli, Ulderico** Un modello astratto dello spazio di Besicovič-Marcinkiewicz. (English summary) *Boll. Un. Mat. Ital.* (4) **4** (1971), 907-911. (Alan H. Shuchat) **45** #9114 46E99
- di Sante, Alessandro** See **Di Sante, Alessandro**
- van Santen, Jan P. H.** A new axiomatization of portfolio theory. *J. Mathematical Psychology* **17** (1978), no. 1, 14-20. (B. G. Mirkin) **58** #25893 90A15
- garcia-Santesmases, J.** See **Garcia-Santesmases, J.**
- Santhanam, T. S.** (with Tekumalla, A. R.) Trace of products of Clifford elements. *Matrix Tensor Quart.* **23** (1972/73), 99-105. (A. O. Morris) **47** #6743 15A66
- (with Tekumalla, A. R.) On a new spin 1/2 field. *Progr. Theoret. Phys.* **50** (1973), 992-1005. (R. Delbourgo) **49** #4462 81J22
- (with Tekumalla, A. R.) Unitary Foldy-Wouthuysen transformations for particles of arbitrary spin. *Lett. Nuovo Cimento* (2) **10** (1974), 737-740. **56** #14340 81J47
- (with Srinivasa Rao, K.; Venkatesh, K.) On the symmetries of the Racah coefficient. *J. Mathematical Phys.* **16** (1975), 1528-1530. (B. M. Agrawal) **52** #16337 81J33
- Quantum mechanics in discrete space and angular momentum. *Found. Phys.* **7** (1977), no. 1/2, 121-127. (Author's summary) **55** #7204 81J47
- (with Gruber, Bruno) Multiquark models and the embedding of groups. *J. Mathematical Phys.* **18** (1977), no. 4, 849-853. (Nigel B. Backhouse) **55** #4978 81J22
- Santi, Elisabetta** See **Chiappini Santi, Elisabetta**
- Santi, Ettore** Sul problema al contorno per l'equazione delle superfici di area minima su domini limitati qualunque. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **17** (1972), 13-26. (Z. C. Motteler) **46** #495 35A99
- Alcuni teoremi di immersione per spazi funzionali con norma mista. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **21** (1975), 97-105. (J. Peetre) **53** #6309 46E35
- Santiago, Marcos Antônio Matos** (with Vaidya, Arvind Narayan) Baker-Campbell-Hausdorff formulae and spherical and hyperbolic rotations. *J. Phys. A* **9** (1976), no. 6, 897-904. (Authors' summary) **56** #543 22E70 (81J22)
- Santilli, Ruggero Maria** (with Roman, Paul) Derivation of Poincaré covariance from causality requirements in field theory. *Internat. J. Theoret. Phys.* **3** (1970), 233-243. (J. Rosen) **48** #3398 81J35
- (with Roman, Paul) Inhomogeneous $U_{3,1}$ -invariant extension of vacuum expectation values. (Italian and Russian summaries) *Nuovo Cimento A* (11) **2** (1971), 965-1015. (Gerald Rosen) **45** #3007 81J22
- (with Aghassi, J. J.; Roman, Paul) Representation theory of a new relativistic dynamical group. (Italian and Russian summaries) *Nuovo Cimento A* (11) **5** (1971), 551-590. (R. L. Ingraham) **46** #5530 22E43 (22E45, 81J22)
- (with Roman, Paul; Aghassi, J. J.; Huddleston, P. L.) Nonrelativistic composite elementary particles and the conformal Galilei group. (Italian and Russian summaries) *Nuovo Cimento A* (11) **12** (1972), 185-204. (J.-P. Antoine) **49** #8540 81J22
- Necessary and sufficient conditions for the existence of a Lagrangian in field theory. I. Variational approach to self-adjointness for tensorial field equations. *Ann. Physics* **103** (1977), no. 2, 354-408. (Author's summary) **58** #32608a 81J49
- Necessary and sufficient conditions for the existence of a Lagrangian in field theory. II. Direct analytic representations of tensorial field equations. *Ann. Physics* **103** (1977), no. 2, 409-468. (Author's summary) **58** #32608b 81J49
- Necessary and sufficient conditions for the existence of a Lagrangian in field theory. III. Generalized analytic representations of tensorial field equations. *Ann. Physics* **105** (1977), no. 2, 227-258. (Author's summary) **58** #32608c 81J49
- Need of subjecting to an experimental verification the validity within a hadron of Einstein's special relativity and Pauli's exclusion principle. *Hadronic J.* **1** (1978), no. 2, 574-901. (Author's summary) **58** #25449 81J00 (83J00)
- See also Analytic methods in mathematical physics, **48** #5746
- Santini, Carlo** Considerazioni sulle funzioni di sopravvivenza del Quiquet. *Giorn. Ist. Ital. Attuari* **33** (1970), 49-58. (Author's summary) **46** #4673 62P05 (34A30)
- de Santis, P.** See **De Santis, P.**
- Santner, Thomas J.** (with Gupta, Shanti S.) On selection and ranking procedures—a restricted subset selection rule. (French summary) Proceedings of the 39th Session of the International Statistical Institute (Vienna, 1973), Vol. 1. *Bull. Inst. Internat. Statist.* **45** (1973), book 1, 478-486. (K. M. Lal Saxena) **51** #11772 62F07

- A restricted subset selection approach to ranking and selection problems. *Ann. Statist.* **3** (1975), 334-349. (D. Y. Huang) **51** #7107 62F07
- A two stage procedure for selecting δ^* -optimal means in the normal model. *Comm. Statist.-Theory Methods* **A5** (1976), no. 3, 283-292. (S. Panchapakesan) **55** #6648 62F07
- A generalized goal in restricted subset selection theory. *Sankhyā Ser. B* **38** (1976), no. 2, 129-143. (D. Y. Huang) **58** #7981 62F07
- (with Bechhofer, Robert E.; Turnbull, Bruce W.) Selecting the largest interaction in a two-factor experiment. *Statistical decision theory and related topics, II* (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976), pp. 1-18. Academic Press, New York, 1977. (Joseph A. Yahav) **55** #9371 62F07 (62K15)
- (with Rinott, Yosef) An inequality for multivariate normal probabilities with application to a design problem. *Ann. Statist.* **5** (1977), no. 6, 1228-1234. (E. J. Williams) **56** #7014 62H10 (62K05)
- See also Special issue: Selection and ranking, **57** #14232
- rsi Santolini, Adelina See Tarsi Santolini, Adelina
- antomauro, M. (with Sangiovanni-Vincentelli, Alberto L.) Matrici sparse e loro impiego nella analisi e progetto di reti di grandi dimensioni. I. *Alta Frequenza* **43** (1974), no. 8, 474-481. (Authors' summary) **55** #4641a 65F30 (94A20)
- (with Sangiovanni-Vincentelli, Alberto L.) Matrici sparse e loro impiego nella analisi e progetto di reti di grandi dimensioni. II. *Alta Frequenza* **43** (1974), no. 11, 957-975. (Authors' summary) **55** #4641b 65F30 (94A20)
- (with Sangiovanni-Vincentelli, Alberto L.) Matrici sparse e loro impiego nella analisi e progetto di reti di grandi dimensioni. III. *Alta Frequenza* **44** (1975), no. 1, 39-50. (Authors' summary) **55** #4641c 65F30 (94A20)
- antoro, N. Operations on permutations and representation in graph form. *Calcolo* **13** (1976), no. 2, 123-129. (M. Aigner) **57** #2982 05C25 (05A10)
- antoro, Nicola Full table search by polynomial functions. *Information Processing Lett.* **5** (1976), no. 3, 72-74. (Itsuo Takamami) **55** #11756 68A50
- antoro, Paolo Un problema al contorno per una equazione iperbolica del terzo ordine non lineare. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **47** (1969), 476-478 (1970). (C. Vaghi) **45** #2327 35L35
- antos, Angel See Proceedings: Conference of Portuguese and Spanish Mathematicians, **49** #7047
- antos, Bernardo Recamán Twelve and its totitives. *Math. Mag.* **49** (1976), no. 5, 239-240. (K. S. Williams) **54** #5098 10A20
- olis Santos, Carlos See Solis Santos, Carlos
- amo Santos, Concepción See Romo Santos, Concepción
- antos, Emilio Quantumlike formulation of stochastic problems. *J. Mathematical Phys.* **15** (1974), 1954-1962. (G. Della Riccia) **51** #9721 81.60
- The harmonic oscillator in stochastic electrodynamics. (Italian and Russian summaries) *Nuovo Cimento B* (11) **19** (1974), 57-89. (H. Primas) **51** #2545 81.60
- Foundations of stochastic electrodynamics. I. General formalism and the free radiation field. (Italian and Russian summaries) *Nuovo Cimento B* (11) **22** (1974), 201-214. (Paul A. Benioff) **52** #12645 81.60
- (with Pesquera, L.) Path integrals in stochastic electrodynamics. *Lett. Nuovo Cimento* (2) **20** (1977), no. 9, 308-312. **56** #10626 81.60
- antos, Eugene S. Fuzzy algorithms. *Information and Control* **17** (1970), 326-339. (J. D. Rutledge) **45** #6541 68A10
- First and second covering problems of quasi stochastic systems. *Information and Control* **20** (1972), 20-37. (A. Paz) **48** #8149 94A35
- Identification of stochastic finite-state systems. *Information and Control* **21** (1972), 1-20. (G. M. Ewing) **48** #3574 93E10
- Probabilistic grammars and automata. *Information and Control* **21** (1972), 27-47. (K. S. Fu) **48** #1833 94A35
- A note on bracketed grammars. *J. Assoc. Comput. Mach.* **19** (1972), 222-224. (Author's summary) **56** #7355 68A30
- Max-product machines. *J. Math. Anal. Appl.* **37** (1972), 677-686. (B. Csáky) **46** #6957 94A25
- On reductions of maximin machines. *J. Math. Anal. Appl.* **40** (1972), 60-78. (H. D. Block) **47** #8213 94A25
- Algebraic structure theory of stochastic machines. *Math. Systems Theory* **6** (1972), 243-262. (K. S. Fu) **47** #8214 94A25
- Regular probabilistic languages. *Information and Control* **23** (1973), 58-70. (I. Kramosil) **48** #7676 68A30
- Fuzzy sequential functions. *J. Cybernet.* **3** (1973), no. 3, 15-31. (K. S. Fu) **50** #16155 94A25 (93A10)
- A note on probabilistic grammars. *Information and Control* **25** (1974), 393-394. (H. Jürgensen) **55** #9614 68A30
- Context-free fuzzy languages. *Information and Control* **26** (1974), 1-11. (Etsuro Moriya) **50** #9065 68A30
- One-way acceptors and languages. *Internat. J. Comput. Information Sci.* **3** (1974), 141-151. (S. A. Greibach) **49** #10192 68A30
- Machines, programs and languages. *J. Cybernet.* **4** (1974), no. 1, 71-86. (J. van Leeuwen (Zbl 325 #68023)) **56** #17213 68A25 (68A30, 94A30)
- Structural equivalence of topological machines. *J. Cybernet.* **4** (1974), no. 4, 81-86. **56** #11659 94A30 (54H99)
- On weak regular probabilistic languages. *Information and Control* **28** (1975), no. 4, 356-361. (P. Turakainen) **51** #14661 68A30
- Realizations of fuzzy languages by probabilistic max-product, and maximin automata. *Information Sci.* **8** (1975), 39-53. (A. Salomaa) **52** #10284 94A35
- Max-product grammars and languages. *Information Sci.* **9** (1975), no. 1, 1-23. (Etsuro Moriya) **51** #15259 94A35 (68A30)
- State-splitting for stochastic machines. *SIAM J. Comput.* **4** (1975), 85-96. (P. C. Gilmore) **53** #5205 94A35
- Probabilistic pushdown automata. *J. Cybernet.* **6** (1976), no. 3-4, 173-187. (A. Paz) **56** #5094 94A35 (68A30)
- Fuzzy and probabilistic programs. *Fuzzy automata and decision processes*, pp. 133-147. North-Holland, New York, 1977. (Yasuyoshi Inagaki) **58** #19335 68A10 (94A30)
- Regular fuzzy expressions. *Fuzzy automata and decision processes*, pp. 169-175. North-Holland, New York, 1977. (From the introduction) **58** #20911 94A30 (68A30)
- tavares dos Santos, Geovan See Tavares dos Santos, Geovan
- Santos, J. (with Arango, H.; Pascual, M.) Tree-threshold-synthesis of ternary functions. *Theory of machines and computations* (Proc. Internat. Sympos., Technion, Haifa, 1971), pp. 353-361. Academic Press, New York, 1971. (Authors' summary) **55** #7590 94A20
- martinez sanchez y a Santos, J. See Martinez Sanchez y A Santos, J.
- lopes dos Santos, L. H. See Lopes Dos Santos, L. H.
- Santos, N. O. Newtonian potential and the complex space. *Lett. Nuovo Cimento* (2) **14** (1975), no. 9, 327-329. (C. B. Collins) **53** #2085 70.30 (83.30)
- dos Santos, Narciso (with Harter, William G.) Double-group theory on the half-shell and the two-level system. I. Rotation and half-integral spin states. *Amer. J. Phys.* **46** (1978), no. 3, 251-263. (Authors' summary) **57** #8686a 81.47
- (with Harter, William G.) Double-group theory on the half-shell and the two-level system. II. Optical polarization. *Amer. J. Phys.* **46** (1978), no. 3, 264-273. (Authors' summary) **57** #8686b 81.47
- moreira dos Santos, Nathan See Moreira dos Santos, Nathan
- Santucci, Lia Formule generalizzate di quadratura collegata ad una data funzione peso. (English summary) *Rend. Mat.* (6) **4** (1971), 115-121. (V. Pereyra) **45** #2927 65D30
- Studio di una funzione analitica collegata ad una particolare equazione di Wiener-Hopf. *Pubblicazioni dell'Istituto di Matematica Applicata, No. 150, Quaderno No. 6*, pp. 3-7. Ist. Mat. Appl., Fac. Ingegneria, Univ. degli Stud. Roma, Rome, 1975. (A. Corduneanu) **52** #8536 33A70 (45E10)
- Sanuki, Heiji (with Konno, Kimiaki) Bäcklund transformation for equation of motion for nonlinear lattice under weak dislocation potential. *J. Phys. Soc. Japan* **39** (1975), no. 1, 22-24. (Authors' summary) **54** #6806 82.35
- (with Wadati, Miki; Konno, Kimiaki) Relationships among inverse method, Bäcklund transformation and an infinite number of conservation laws. *Progr. Theoret. Phys.* **53** (1975), 419-436. (J. Smoller) **51** #7516 81.35
- (with Wadati, Miki; Konno, Kimiaki; Ichikawa, Yoshi-Hiko) Circular polarized nonlinear Alfvén waves—a new type of nonlinear evolution equation in plasma physics. Conference on the Theory and Application of Solitons (Tucson, Ariz., 1976). *Rocky Mountain J. Math.* **8** (1978), no. 1-2, 323-331. (T. Kahan) **58** #14796 82.35
- Sanvicente, E. (with Kushner, Harold J.) Penalty function methods for constrained stochastic approximation. *J. Math. Anal. Appl.* **46** (1974), 499-512. (J. Galambos) **49** #8247 62L20 (65C05)
- (with Kushner, Harold J.) Stochastic approximation of constrained systems with system and constraint noise. *Automatica—J. IFAC* **11** (1975), no. 4, 375-380. (I. M. Stancu-Minasian) **53** #15516 93E10
- Sanyal, Arun Simplexes in $(n-1)$ -dimensional projective space invariant under a cyclic collineation of period n . *J. Math. Phys. Sci.* **11** (1977), no. 6, 535-542. (Dov Avishalom) **58** #12696 50D20
- Associated set of $n+1$ lines in n -dimensional projective space. *Progr. Math. (Allahabad)* **11** (1977), no. 1-2, 111-114. (Dov Avishalom) **57** #13677 50D25 (14N05)
- Sanyal, H. Prasantachandra Mahalanobis: a biographical sketch. A collection of articles dedicated to the memory of P. C. Mahalanobis. *Sankhyā Ser. B* **35** (1973), no. 4, suppl., 3-11. (Editors) **52** #13229 01A70
- Sanz, J. L. (with Martin, Jesús) Slow motion approximation in predictive relativistic mechanics. I. Approximated dynamics up to order c^{-4} . *J. Math. Phys.* **19** (1978), no. 9, 1887-1891. (Authors' summary) **58** #20164 83.34
- Sanz, José M. A well posed boundary value problem in transonic gas dynamics. *Comm. Pure Appl. Math.* **31** (1978), no. 6, 671-679. (R. M. Gundersen) **58** #19737 76.35 (35Q05)
- Sanza, B. Pairs of congruences of a metric space. (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 183-189. (B. Rozenfel'd) **46** #9881 53A35
- Sanz Aguado, Adela Results on a decision problem in which a partial ordering of utilities is known. (Spanish) *Trabajos Estadist. Investigación Oper.* **28** (1977), no. 2-3, 99-117. (G. Pederzoli) **58** #25865 90A05 (90A10)
- Sanzo, Ubaldo Significato epistemologico della polemica Poincaré-Couturat. With an English translation by P. Clare. *Scientia (Milano)* **110** (1975), no. 5-8, 369-418. (Not reviewed) **00A25**
- Sanz Serna, J. M. On a characterization of solvable spaces. (Spanish) *Gac. Mat. (Madrid)* (1) **28** (1976), no. 5-6, 102-103. (O. T. Alas) **55** #13393 54F99
- Sanz Solé, Marta (with Nualart Rodón, David) Intégrales stochastiques par rapport au processus de Wiener à deux paramètres. École d'Été de Calcul des Probabilités de Saint-Flour (Saint-Flour, 1976). *Ann. Sci. Univ. Clermont No. 61 Math. No. 16* (1976), 89-99. (M. Métivier) **58** #24543 60H05
- See also Singleton, Robert R.; et al., **57** #15420
- Sapa, V. A. (with Vetrennikov, A. V.) The equations of motion of a solid body of variable mass with one fixed point which has a cavity not completely filled with fluid. (Russian) *Proceedings of the Second Kazakhstan Interuniversity Science Conference on Mathematical Mechanics* (1965) (Russian), pp. 34-46. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1968. (N. V. Baničuk (RŽMat 1969 #5 A68)) **52** #9793 76.35
- See also Mathematics and mechanics, **48** #17; Mathematics and mechanics, **50** #6724; Collection: Questions on mathematics and mechanics, **58** #3806 and Collection: Questions of mathematics and mechanics, **58** #17438
- Sapagovas, J. See Selected translations in mathematical statistics and probability, **49** #4729
- Sapagovas, Mifodijus (with Kvedaras, Bronius) Results in the domain of the solution of differential and integral equations at the Computing Center of the Physics and Mathematics Institute of the Lithuanian Academy of Sciences. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija. I Sekcija No. 1* (1971), 11-37, 93. (P. C. Fife) **51** #1117 35J99 (65P05)
- Pseudosolvable difference schemes. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 3* (1973), 68-85, 103. (R. Kodnár) **52** #4617 65J05
- A short survey and annotated bibliography on the approximate methods of solution

- of quasilinear elliptic equations. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 6* (1973), 60–128, 129. (Editors) **50** #11796 65Nxx (35Jxx)
- Estimates for the difference Green's function for certain elliptic equations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 1, 189–198, 238. (R. Kodnár) **47** #7928 65N05 (35J15)
- Construction of difference schemes of increased accuracy for quasilinear elliptic equations. I. An extension of the concept of solvability of nonlinear equations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 4, 161–172, 223–224. (H. Schwetlick) **51** #11958 65J05 (47H15)
- A difference scheme of increased accuracy for the third boundary value problem. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 7* (1974), 37–50, 157. (T. Styš) **50** #15375 65N10
- Difference schemes of high order accuracy for quasilinear parabolic equations. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp. 13* (1975), 71–82, 89 (1976). (RŽMat **1976** #11 B1210) **58** #31897 65N20
- Construction of difference schemes of increased accuracy for quasilinear elliptic equations. II. The one-dimensional case. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 2, 103–125, 229. (R. Kodnár) **54** #1630 65L10
- Numerical comparison of some methods for the solution of stationary nonlinear problems of elasticity and plasticity theory. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **7** (1976), no. 5, 125–136. (A. D. Ljaško) **57** #2077 73.65
- Pseudosolvable difference schemes of increased accuracy for nonlinear equations on a nonuniform net. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp. 16* (1976), 61–85, 102. (From the summary) **57** #18119 65L10
- (with Skirmantas, Rimantas) The error of the calculation of derivatives in the finite difference method. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp. 17* (1977), 75–97, 101. (G. W. Hedstrom) **57** #8051 65M15
- Sapagovienė, Danguė** Calculation of the eigenvalues of the Laplace operator. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 875–882. (I. Aganovič) **46** #2898 65N25
- Difference schemes of increased order of accuracy for the homogeneous Helmholtz equation. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 3* (1973), 86–95, 103. (T. Styš) **50** #15385 65N25
- A difference scheme of the sixth order of accuracy for the computation of the eigenvalues of the Laplace operator. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 7* (1974), 51–65, 159. (T. Styš) **50** #15386 65N25
- Difference schemes of increased order of accuracy for the computation of the eigenvalues of certain differential operators. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 7* (1974), 67–76, 159. (T. Styš) **50** #15387 65N25
- Stability of a nonlinear algebraic eigenvalue problem. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp. 15* (1976), 25–35, 83. (Author's summary) **58** #13660 65F15 (15A18)
- The Sturm sequence for a nonlinear algebraic eigenvalue problem. (Russian. Lithuanian and English summaries) *Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp. 16* (1976), 87–95, 102. (Author's summary) **58** #8197 65F15 (65L15, 65N25)
- Sapák, Oldřich** Representation of the finite directed acyclic graph. *Arch. Math. (Brno)* **13** (1977), no. 2, 111–116. (Author's summary) **58** #5347 05C20
- Saparnijazov, O.** The problem of divisors in arithmetic progressions. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 9, 8–10. (D. H. Lehmer) **48** #258 10H20 (10G05)
- (with Fainleib, A. S.) Dispersion of real character sums, and the moments of $L(1, \chi)$. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 6, 24–29, 90. (A. I. Vinogradov) **54** #12681 10H10
- Saparov, M.** The coverings of a random bichromatic graph. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1973**, no. 6, 18–26. (Ju. D. Burtin) **52** #4371 60C05 (05C15)
- Šapatava, A. Š.** The convergence of double-layer regularized difference schemes in complex Hilbert space. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **67** (1972), 285–288. (P. Szeptycki) **49** #5896 47A50 (35R20)
- The convergence of three-layer regularized difference schemes. (Russian. Georgian and English summaries) *Gamoqeneb. Math. Inst. Sem. Moĥsen. Anotacie. No. 8* (1973), 71–75. (S. Burýšek) **49** #9655 47A50 (65J05)
- A certain nonlinear equation of parabolic type. (Russian) *Works of Young Scientists at Tbilisi State University. Physics, Mathematics and Natural Science Series, 2* (Russian), pp. 30–51. Izdat. Tbilis. Univ., Tbilisi, 1974. (Pavel Doktor) **58** #11760 34G05
- Sapatyĭ, P. S.** Solution of branched and cyclic problems by multi-processor computer systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 1, 166–178, 238 (Russian); translated as *Engrg. Cybernetics* **12** (1974), 134–144. (K. H. V. Booth) **53** #7106 68A05
- Šapeev, V. P.** (with Raspopov, V. E.) A hodograph transformation for a system of two inhomogeneous equations. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* **1** (1970), no. 1, 90–94. **47** #9094 35Q99 (76.35)
- (with Raspopov, V. E.) The envelopes of a certain particular solution of conservative systems of equations. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* **1** (1970), no. 5, 78–86. (From the authors' introduction) **55** #3572 35Q99 (76.35)
- (with Raspopov, V. E.; Janenko, N. N.) An application of the method of differential connections to the one-dimensional equations of gas dynamics. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* **2** (1971), no. 5, 3–12. (E. Ungureanu-David) **49** #6771 76.35
- Problem of continuous joining of partial solutions of one-dimensional equations of the dynamics of a nonelastic continuum. (Russian) *Čisl. Metody Meh. Splošn. Sredy* (1974), no. 4, 116–125. (From the introduction) **58** #32361 76.35 (35Q15)
- (with Arais, E. A.; Janenko, N. N.) A realization of Cartan's method of exterior forms on an electronic computer. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 737–738. (E. Maliszewski) **51** #9568 68A15 (58A15)
- (with Fomin, V. M.; Janenko, N. N.) D-properties of systems of one-dimensional equations of the dynamics of an inelastic solid medium. (Russian) *Dokl. Akad. Nauk SSSR* **215** (1974), 1067–1070. (P. P. Teodorescu) **50** #1597 73.35
- (with Raspopov, V. E.; Janenko, N. N.) An application of the method of differential relations to the one-dimensional equations of gas dynamics. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 11 (150), 69–74. (L. Dragoš) **53** #9860 76.35
- (with Žižin, A. E.) On the question of continuous glueing of particular solutions of systems of differential equations. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **6** (1975), no. 2, 20–25. (RŽMat **1976** #3 B336) **58** #29060 35A99
- (with Šitov, Ju. A.) On a method for constructing curvilinear meshes. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **7** (1976), no. 2, 140–144. (From the authors' text) **56** #13686 65N05
- (with Žižin, A. E.) Continuous application of DII-solutions of hyperbolic systems of equations. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **8** (1977), no. 7, 44–52. (From the text) **58** #29329 35L45
- Sapelli, Onorina** (with Allasia, Giampietro) Medie esprese mediante rapporti di momenti. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* **32** (1973/74), 287–302 (1975). (A. Precupanu) **52** #8358 26A86
- Saperstein, Bernard** The generalized birthday problem. *J. Amer. Statist. Assoc.* **67** (1972), 425–428. (Bernard Harris) **47** #5915 60C05
- On the occurrence of n successes within N Bernoulli trials. *Technometrics* **15** (1973), 809–818. (Bernard Harris) **52** #12278 62N10
- Note on a clustering problem. *J. Appl. Probability* **12** (1975), no. 3, 629–632. (Frank K. Hwang) **51** #14190 60C05
- Saperstein, E. E.** (with Fajans, S. A.; Hodel, V. A.) A quantum hydrodynamical description of the collective states of atomic nuclei. (Russian. English summary) *Fiz. Element. Častic i Atom. Jadra* **9** (1978), no. 2, 221–285. (A. A. Arsen'ev) **58** #4047 81.35
- Saperstone, Stephen H.** (with Yorke, James A.) Controllability of linear oscillatory systems using positive controls. *Seminar on Differential Equations and Dynamical Systems, II* (Univ. Maryland, College Park, Md., 1969), pp. 181–184. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (Editors) **52** #7606 93B05
- Global controllability of linear systems with positive controls. *SIAM J. Control* **11** (1973), 417–423. (Hansgeorg Jeggle) **48** #3543 93B05
- Semi-flows on spaces of probability measures. *Math. Systems Theory* **8** (1974/75), no. 3, 256–265. (Shlomo Horowitz) **52** #6887 60J30 (54H20)
- On the attainable set of conditional probability measures in stochastic control problems. *Internat. J. Systems Sci.* **7** (1976), no. 2, 131–135. (N. U. Ahmed) **54** #2314 93E20
- (with Nishihama, Masahiro) Continuity of the limit set maps in semidynamical systems. *J. Differential Equations* **23** (1977), no. 2, 183–199. (S. Ahmad) **55** #1333 54H20 (34C35)
- Sapfirov, S. G.** (with Gusev, Vladimir Alekseevič; Prohoda, O. K.) Functional description of nonlinear sampled-data systems by means of multidimensional D - and D -transformations. (Russian) *Dinamika Sistem Vyp. 5* (1975), 80–88, 174–175. (Authors' summary) **58** #15441 93C10
- Saphar, Pierre** Analyse mathématique: applications p -sommantes et p -décomposables. *Séminaire Laurent Schwartz 1969–1970: Applications radonifiantes, Annexe 1*, 5 pp. Centre de Math., École Polytech., Paris, 1970. (Editors) **54** #8334 47B10
- Applications des normes g_k et d_k . Mesures de Radon k -sommantes. *Séminaire Laurent Schwartz 1969–1970: Applications radonifiantes, Exp. No. 10*, pp. 10 pp. (erratum, p. viii) Centre de Math., École Polytech., Paris, 1970. (A. Wiweger) **54** #3438b 46M05 (47B10)
- Les normes tensorielles g_k et d_k . *Séminaire Laurent Schwartz 1969–1970: Applications radonifiantes, Exp. No. 9*, pp. 16 pp. (errata, p. viii) Centre de Math., École Polytech., Paris, 1970. (A. Wiweger) **54** #3438a 46M05 (47B10)
- Applications p décomposables et p absolument sommantes. *Israel J. Math.* **11** (1972), 164–179. (A. Wiweger) **45** #5779 47B10
- Hypothèse d'approximation à l'ordre p dans les espaces de Banach et approximation d'applications p absolument sommantes. (English summary) Proceedings of the International Symposium on Partial Differential Equations and the Geometry of Normed Linear Spaces (Jerusalem, 1972). *Israel J. Math.* **13** (1972), 379–399 (1973). (A. Wiweger) **48** #12000 46B05 (47B10)
- Une caractérisation des sous espaces de L^p et ses applications. *Séminaire Maurey-Schwartz (année 1972–1973), Espaces L^p et applications radonifiantes, Exp. No. 14*, 13 pp. Centre de Math., École Polytech., Paris, 1973. (Editors) **56** #12955 47B10 (46H05)
- Une caractérisation des sous-espaces de L^p et ses applications. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A35–A38. (T. Figiel) **50** #8043 46E30
- (with Feder, Moshe) L'espace des opérateurs compacts et son espace dual. *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A217–A219. (N. Tomczak-Jaegermann) **51** #1482 47D15 (47B05)
- (with Feder, Moshe) Spaces of compact operators and their dual spaces. *Israel J. Math.* **21** (1975), no. 1, 38–49. (J. R. Holub) **51** #13762 47D15 (47B10)
- (with Gordon, Y.) Ideal norms on $E \otimes L_p$. *Illinois J. Math.* **21** (1977), no. 2, 266–285. (J. F. Smith) **55** #8827 46M05 (47B10)
- Sapiecha, Krzysztof** Analysis of combinational networks with bounded stray delays. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **17** (1972), 323–335. (P. Vondráček) **47** #10154 94A20
- Analysis of combination networks with unbounded gate delays. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **19** (1974), 63–71. (P. Vondráček) **54** #2354 94A20
- Elimination of the M -hazard in realizations of partially defined Boolean functions. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **19** (1974),

- 199-205. (I. G. Rosenberg) **51** #9977 94A20
(with Walczak, Krzysztof) Detection of hazards and their causes in asynchronous sequential systems. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **20** (1975), no. 4, 503-512. (Authors' summary) **57** #5477 94A20
- Combinational circuits with controlled operating hazard. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **21** (1976), no. 2, 209-223. (Author's summary) **56** #18161 94A20
- Detection and location of multiple defects in fan-out free combinational circuits. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **21** (1976), no. 3, 371-383. (Author's summary) **56** #18162 94A20
- An application of the discriminant of a combinational circuit to the determination of its diagnostic tests. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **21** (1976), no. 3, 385-399. (Author's summary) **56** #18163 94A20
- A path set sensitisation procedure for generating tests for combinatorial circuits. *Digital Process.* **2** (1976), no. 4, 307-320. (Chantal Robach) **57** #11958 94A20
- Šapiro, K. Š. A certain generalization of Radner's turnpike theorem. (Russian) *Optimal. Planirovanie* No. 10 (1968), 7-13. (From the author's introduction) **46** #10395 90B30
(with Rubinov, A. M.) A certain generalization of the turnpike theorem in a strong form. (Russian) *Optimal. Planirovanie* No. 10 (1968), 15-27. (From the introduction) **46** #10396 90B30
- De Sapiro, R. See De Sapiro, R.
- Šapira, P. See Schapira, Pierre
- Šapiro, A. D. (with Volkonskii, V. A.; Pomanskii, A. B.) An application of iteration algorithms in the solution of linear programming problems. (Russian) *Ekonom. i Mat. Metody* **8** (1972), 246-255. (O. Pokorná) **46** #6824 90C05
(with Belen'kii, V. Z.; Volkonskii, V. A.; Ivankov, S. A.; Pomanskii, A. B.)
★Итеративные методы в теории игр и программировании. (Russian) [Iterative methods in game theory and programming] *Izdat. "Nauka", Moscow*, 1974. 239 pp. (A. Rapoport) **56** #2192 90-01 (90Dxx)
Some asymptotic properties of a certain problem in scheduling theory. (Russian) *Ekonom. i Mat. Metody* **11** (1975), no. 6, 1214-1216. (RŽMat **1976** #5 V766) **57** #11776 90C35
- Šapiro, A. P. The single binary operation in an abelian group. (Russian) *Dal'nevostoč. Gos. Univ. Učen. Zap.* **69** (1970), 147-150. (V. A. Artamonov) **48** #4158 20K99 (08A25)
On the question of algebraic random number generators. (Russian) *Dal'nevostoč. Mat. Sb.* **1** (1970), 113-118. (R. N. Goss) **52** #5193 94A10 (12C05)
Certain mathematical models of food competition of two fish populations and the Gauss law. (Russian) *Problemy Kibernet.* No. 25 (1972), 161-166. (Colin W. Clark) **45** #6471 92A15
(with Ljubič, Ju. I.) A certain functional equation. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 17 (1973), 81-84, 243. (B. Choczewski) **48** #6744 39A15 (60K99)
(with Skaleckaja, E. I.) Optimization of conditions for the exploitation of populations when there is random replenishment. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 2, 312-314. (Colin W. Clark) **56** #8086 92A15 (90C40)
(with Frisman, E. Ja.) ★Избранные математические модели дивергентной эволюции популяций. (Russian) [Selected mathematical models of the divergent evolution of populations] *Izdat. "Nauka", Moscow*, 1977. 150 pp. (K. Dietz) **58** #4447 92A15
(with Matrienko, L. I.) The stability of the association of two competing populations. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 2, 501-504. (Ju. I. Ljubič) **57** #15573 92A15
- Šapiro, A. V. (with Mahmudov, A. P.) The modulus of the spectrum of almost periodic solutions of certain differential equations in Banach spaces. (Russian. Azerbaijani summary) *Akad. Nauk Azerbaidžan. SSR Dokl.* **32** (1976), no. 1, 12-15. (A. Szép) **55** #8498 34G05
(with Mahmudov, A. P.; Abasov, R. G.) Almost periodic solutions of certain linear differential equations in a Banach space. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **32** (1976), no. 9, 3-7. (Bolis Basit) **56** #6044 34G05 (34C25)
- Šapiro, B. I. See Theory of optimal decisions. **58** #32848
- Šapiro, D. I. Differential games with asymmetric strategies. (Russian. English summary) *Advances in game theory (Proc. Second All-Union Conf., Vilnius, 1971)* (Russian), pp. 246-248. *Izdat. "Mintis", Vilnius*, 1973. (From the author's introduction) **53** #5025 90D25
(with Pospelov, D. A.; Čerezova, N. N.) Situation recognition in the pursuit problem. *Problems of Control and Information Theory/Problemy Upravljenija i Teorii Informacii* **5** (1976), no. 5-6, 19-30. (Authors' summary) **56** #14788 90D25
- Šapiro, E. E. Sufficient conditions for the discreteness of the spectrum of a symmetric differential equation of order $2n$ with operator-valued coefficients. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **27** (1972), no. 3, 52-58. (P. Talpalaru) **46** #4277 47E05
- Šapiro, E. P. (with Rabkin, E. L.) A certain divergent interpolation process. (Russian) *Izv. Vyssh. Učebn. Zaved. Matematika* **1971**, no. 8(111), 103-110. (C. de Boor) **45** #4015 41A05
The properties of a system of Čebyšev nodes that is extended by adding a fixed node. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 1 (193), 177-178. (C. de Boor) **55** #8615 41A05
- Šapiro, G. S. (with Nikišin, V. S.) ★Пространственные задачи теории упругости для многослойных сред. (Russian) [Three-dimensional problems of elasticity theory for multilayer media] *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1970. 260 pp. (Editors) **54** #11901 73.00
(with Poreda, S. J.) Lower bounds for polynomial approximations to rational functions. *Proceedings of the International Conference on Padé Approximants, Continued Fractions and Related Topics (Univ. Colorado, Boulder, Colo., 1972; dedicated to the memory of H. S. Wall). Rocky Mountain J. Math.* **4** (1974), 377-378. (J. P. Ferrier) **50** #13541 30A82
(with Poreda, S. J.; Saff, E. B.) Fundamental constants for rational functions. *Trans. Amer. Math. Soc.* **189** (1974), 351-358. (G. D. Taylor) **50** #13542 30A82
(with Nikišin, V. S.) The contact problem of elasticity theory for a layer that locally is clamped to a half-space. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* **29** (1976), no. 2, 3-15, 70. (From the authors' text) **56** #4354 73A45
See also *Proceedings: Symposium on Continuum Mechanics and Related Problems of Analysis*, **50** #6715; Bland, D. R., **50** #9107; Prager, William, **57** #8331 and *History of mechanics from the end of the eighteenth century to the middle of the twentieth century*, **58** #21246
- Šapiro, I. S. Quantum theory without the superposition principle. *Jadernaja Fiz.* **16** (1972), 1318-1328 (Russian); translated as *Soviet J. Nuclear Phys.* **16** (1973), 727-732. (Author's summary) **50** #15727 81A7
- Šapiro, Ja. L. A geodesic direction field of type B. (Russian) *Trudy Sem. Vektor. Tenzor. Anal.* **15** (1970), 47-64. (G. Kručkovič (RŽMat **1971** #2 A644)) **46** #4411 53B05 (83.53)
The global semireducibility of Riemannian spaces. (Russian) *Ukrain. Geometr. Sb.* No. 9 (1970), 110-116. (P. Günther) **45** #1079 53C20
Superinvolutory distributions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 10(113), 76-81. (V. Oproiu) **45** #4451 57D30
(with Jabrova, A. G.) Homomorphisms of an affine connection, and geodesic distributions. (Russian) *Ukrain. Geometr. Sb.* No. 10 (1971), 80-87. (I. Vaisman) **45** #4313 53B05
Reducible Riemannian spaces and two-sheeted structures on them. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 831-833. (Gheorghe Murărescu) **50** #5687 53C20
Reducible manifolds and local products. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 1305-1308. (I. Vaisman) **47** #2622 57D30
Reducible Riemannian manifolds in the large. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 6(121), 78-85. (O. Kowalski) **46** #6238 53C20
The two-sheeted structure on a reducible Riemannian manifold. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 12(127), 102-110. (G. K. Kiremidjian) **48** #2950 53C40 (58A30)
S-reducible manifolds. *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 1(128), 110-119. (J. Vilms) **48** #1104 53C20
(with Undalova, I. A.) ★Пространства аффинной связности. Часть I. (Russian) [Spaces with affine connection. Part I] *Элементы полилинейной алгебры. [Elements of multilinear algebra] Gor'kov. Gos. Univ., Gorky*, 1974. 71 pp. (L. Tamásy) **57** #7419 53A45
Static Riemannian spaces in the large. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 3 (142), 78-88. (V. Oproiu) **55** #1252 53C20
(with Žukova, N. I.) Simple transversal bifibrations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 4(143), 104-113. (I. Vaisman) **51** #11506 55F65 (57D30)
(with Landa, S. E.) Direction fields on 2-manifolds. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 7(158), 80-91. (L. Reizniš) **56** #13248 58A30
(with Žukova, N. I.) Simple bifibrations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 4(167), 95-104. (I. Pop) **57** #17643 55F65
(with Žukova, N. I.) Reducible k -sheeted structures. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 1(176), 144-147. (D. I. Papuc) **57** #17557 53C15
- Šapiro, Ju. A. (with Savel'eva, T. A.; Sventickaja, I. N.) A certain method of solving a boundary value problem for potential theory. (Russian. English summary) *Vestnik Leningrad. Univ. No. 1 Mat. Meh. Astronom. Vyp. 1* (1974), 161-162, 168. (F. Barański) **53** #8456 31B20
- Šapiro, L. B. A reduction of the fundamental problem of bicomcompact extensions of Wallman type. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 38-41. (Peter Hamburger) **54** #8576 54D35
Three examples in the theory of bicomcompact extensions of topological spaces. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 774-776. (Roman Frič) **50** #11156 54D50
Bicomcompact extensions of Wallman type. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 5, 19-23. (O. Frink) **50** #14670 54D35
The absolutes of topological spaces and of continuous mappings. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 3, 523-526. (J. Mioduszewski) **53** #9171 54G05
The space of closed subsets of D^m is not a dyadic bicomcompactum. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 6, 1302-1305. (A. I. Baškirov) **53** #14383 54B20 (54A25)
Spaces of closed subsets of bicomcompacta. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 2, 295-298. (A. I. Baškirov) **55** #1279 54B20 (54A25, 54B10)
(with Ponomarev, V. I.) Absolutes of topological spaces and of their continuous mappings. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 5(191), 121-136. (J. Mioduszewski) **56** #9503 54G05
- Šapiro, L. Z. (with Sragovič, V. G.) The collective behavior of type G automata. (Russian) *Studies in the theory of adaptive systems (Russian)*, pp. 81-95. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1971. (A. D. Korsunov) **51** #5213 94A30
(with Sragovič, V. G.) Collective behavior of G -type automata. *J. Cybernet.* **2** (1972), no. 3, 101-111. (Editors) **48** #5438 68A35
- Šapiro, M. V. On the Noether theory of integrodifferential operators with piecewise continuous coefficients. (Russian) *Methods of approximate solution of differential and integral equations (Russian)*, pp. 337-348. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) **58** #29922 45E99
Singular integral operators with Carleman shift in Hölder spaces with weight. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **71** (1973), 37-40. (N. K. Karapetjan) **49** #1238 47G05 (45E05)
(with Karlovič, Ju. I.) On an algebra of operators with a Carleman shift that permutes the components of the contour. (Russian) *Mat. Issled.* **9** (1974), no. 3(33), 95-104, 214-215. (D. Przeworska-Rolewicz) **51** #6501 47G05 (45E05)
The algebra of singular integral operators with inverse shift. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), 158-168, 197. (N. K. Karapetjan) **51** #3977 47G05
(with Vasilevskii, N. L.) The algebra generated by singular integral operators with Carleman shift in the case of piecewise continuous coefficients. (Russian) *Ukrain. Mat.*

- Ž. 27 (1975), 216-223, 285. (N. K. Karapetjanc) 51 #6506 47G05 (45E05)
Algebras of singular operators with Carleman shift on a composite contour.
(Russian) *Sibirsk. Mat. Ž.* 19 (1978), no. 1, 201-216, 239. (N. K. Karapetjanc)
57 #10505 47G05 (45E05)
- Šapiro, R. L. (with Vilenkin, N. Ja.; Hudjakova, G. I.) Generalized Jacobi polynomials and their limit values. (Russian) *Functional analysis, No. 9: Harmonic analysis on groups* (Russian), pp. 29-39. *Ul'janovsk. Gos. Ped. Inst., Ul'janovsk*, 1977. (S. I. Gel'fand) 58 #1048 22E70 (33A75)
- Šapiro, V. B. On the question of the statistical estimation of various methods for solving the transport problem. (Russian) *Taškent. Inst. Narod. Hoz. Naučn. Zap. Vyp. 34 Mat. v Priložen.* (1970), 33-38. 55 #9969 90C10
- Šapiro, V. D. (with Ševčenko, V. I.) Wave particle interaction in nonequilibrium media. (Russian) *Izv. Vysš. Učebn. Zaved. Radiofizika* 19 (1976), no. 5-6, 767-791. (J. S. Joel) 58 #8815 78.35
- Šapiro, V. E. (with Loginov, V. M.) "Formulae of differentiation" and their use for solving stochastic equations. (Russian) *Phys. A* 91 (1978), no. 3-4, 563-574. (Nicolae Angelescu) 58 #14811 82.46 (60H10)
- Šapirovič, B. E. Discrete subspaces of topological spaces. Weight, tightness and Suslin number. (Russian) *Dokl. Akad. Nauk SSSR* 202 (1972), 779-782. (Y. Kodama) 45 #1100 54H05
The density of topological spaces. (Russian) *Dokl. Akad. Nauk SSSR* 206 (1972), 559-562. (D. V. Čudnovskii) 52 #4212 54A25
The separability and metrizable spaces with the Suslin condition. (Russian) *Dokl. Akad. Nauk SSSR* 207 (1972), 800-803. (I. Juhász) 48 #1162 54Dxx (54E35) (with Mal'hin, V. I.) Martin's axiom, and properties of topological spaces.
(Russian) *Dokl. Akad. Nauk SSSR* 213 (1973), 532-535. (I. Juhász) 49 #7985 54D55 (04A30, 54A25)
(with Amiržanov, G. P.) Everywhere-dense subsets of topological spaces. (Russian) *Dokl. Akad. Nauk SSSR* 214 (1974), 249-252. (I. Juhász) 49 #7972 54A25
Canonical sets and character. Density and weight in bicompleta. (Russian) *Dokl. Akad. Nauk SSSR* 218 (1974), 58-61. (D. V. Čudnovskii) 52 #4213 54A25
Spaces with the Suslin and Šanin conditions. (Russian) *Mat. Zametki* 15 (1974), 281-288. (D. V. Čudnovskii) 52 #11812 54A25
 π -character and π -weight in bicompleta. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 4, 799-802. (Paul R. Meyer) 53 #14380 54A25
The imbedding of extremally disconnected spaces in bicompleta. b -points and weight of pointwise normal spaces. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 5, 1083-1086. (Stojan Nedev) 52 #15410 54G05 (54A25)
The cardinality of hereditarily normal spaces. (Russian) *Dokl. Akad. Nauk SSSR* 225 (1975), no. 4, 767-770. (V. V. Miškin) 53 #3976 54A25
(with Peregudov, S. A.) A class of bicompleta. (Russian) *Dokl. Akad. Nauk SSSR* 230 (1976), no. 2, 279-282. (V. V. Miškin) 54 #11280 54D30 (54A25)
- Sap'janova, L. A. The scattering problem for the Dirac equation with oscillating potential. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, no. 7 *Mat. Meh. Astronom.* vyp. 2, 90-96, 164. (M. M. Skrižanov) 56 #12398 34B25 (81.47)
- Šapkarev, Ilija A. Über die algebraische Integrierung der Abelschen und Riccatischen Differentialgleichungen. (Macedonian summary) *Bull. Soc. Math. Phys. Macedoine* 23 (1972), 5-11 (1973). (H. Hochstadt) 48 #2469 34A99
Algebraic integration of second order linear differential equations. (Macedonian. German summary) *Proceedings of the Fifth Congress of Mathematicians, Physicists and Astronomers of Yugoslavia (Ohrid, 1970), Vol. I, Mathematics (Macedonian)*, pp. 65-70. *Sojuz Društvo. Mat., Fiz. i Astronom. Jugoslav., Skopje*, 1973. (Anton Hut'a) 57 #747 34A05
Über Polynomlösungen der linearen Differentialgleichungen. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţica in connection with the first centenary of their birth (Proc. Internat. Conf. Integral, Differential and Functional Equations (Bled, 1973) in connection with the first centenary of the birth of Josip Plemelj). *Math. Balkanica* 3 (1973), 533-537. (F. Neuman) 51 #977 34A30
Polynome vom Grad n als vollständige Integrale der linearen partiellen Differentialgleichungen der Ordnung n . Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 583-586. (W. Watzlawek) 51 #13422 35C05
Eine Bemerkung über Polynomlösungen der homogenen linearen Differentialgleichungen. *Bull. Soc. Math. Phys. Macédoine* 26 (1975/76), 5-8 (1977). (E. Barvinek) 58 #11579 34A30
A remark in connection with polynomial solutions of homogeneous linear differential equations. (Macedonian. German summary) *Univ. Kiril Metodij—Skopje Fac. Math.* 3(20) (1977), 5-10; special issue of *Fak. Mat. Univ. Kiril Metodij Skopje Godišen Zb.* 27 (1976/77), no. 3. (J. D. Kečkić) 56 #5982 34A05
- Šapkin, A. F. Methods for the solution of Fredholm equations that are optimal on classes of functions. (Russian) *Mat. Zametki* 15 (1974), 595-602. (K.-H. Hauer) 53 #7085 65R05
- Šapkina, V. N. On the 100th anniversary of the mathematical association of the leading British mathematics teachers. (Russian) *Moskov. Oblast. Ped. Inst. Učen. Zap.* 282, 72-82 (1970). (Kenneth May) 45 #6559 01A60
- Sapogov, N. A. (with Ibragimov, I. A.; Lozinskii, S. M.; Malyšev, A. V.; Petrov, V. V.; Prohorov, Ju. V.; Faddeev, D. K.) Jurii Vladimirovič Linnik: obituary. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 2(170), 197-213 (1 plate). (Editors) 52 #5305 01A70 (10-03)
A uniqueness problem for finite measures in Euclidean spaces. (Russian) Problems in the theory of probability distributions, II. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 41 (1974), 3-13, 165. (K. R. Parthasarathy) 52 #6805 60A10 (28A70)
Stability of the solutions of functional equations that are connected with characterization problems of probability distributions. (Russian. English summary) Problems in the theory of probability distributions, III. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 55 (1976), 15-25, 199. (I. I. Kotlarski) 53 #8703 39A15 (62E10)
Stability of the Marcinkiewicz theorem. The case of a fourth degree polynomial. (Russian. English summary) Continuity and stability in problems of probability theory and mathematical statistics. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 61 (1976), 107-124, 137-138. (G. P. Čistjakov) 55 #4341 60E05
An integral inequality (Russian. English summary) Problems of the theory of probability distributions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 72 (1977), 116-119, 218, 222. (H. J. Godwin) 57 #12804 26A86 (60E05)
Stability of the uniqueness for a probability measure in \mathbb{R}^n that takes given value on the translations of a certain set. (Russian. English summary) Problems of the theory of probability distributions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 72 (1977), 120-131, 218, 222. (K. R. Parthasarathy) 58 #7786 60E05
- Sapogova, N. A. (with Kontorovič, V. M.) The application of group theory to the investigation of the removal of degeneracy in a spherical resonator. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* 14 (1971), 1869-1877. (J. R. Schulenberg) 46 #8544 78.35
- Saponaro, J. A. See Control in space, 48 #13320
- Sapondžjan, O. M. Construction of conformal mapping functions for certain doubly connected regions, with an application to the torsion problem. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* 24 (1971), no. 3, 3-21. (E. Reich) 45 #3685 30A24
- Šaponjić, M. 60th birthday of the president of the I.S.A.E. (Esperanto) *Sci. Rev.* 23 (1972), 185-188. (Editors) 55 #5365 01A70
- Saporta, Gilbert Dépendance et codages de deux variables aléatoires. *Rev. Statist. Appl.* 23 (1975), no. 1, 43-63. (Paul W. Holland) 54 #3972 62H20 (62E99)
- Saposnik, Rubin Power, the economic environment, and social choice. *Econometrica* 42 (1974), 461-470. (Author's summary) 55 #14089 90A05 (92A20)
Social choice with continuous expression of individual preferences. *Econometrica* 43 (1975), no. 4, 683-690. (Author's summary) 56 #2478 92A20 (90A05)
On transitivity of the social preference relation under simple majority rule. *J. Econom. Theory* 10 (1975), no. 1, 1-7. (Prasanta K. Pattanaik) 53 #10180 90A05
- Šapošnikov, A. I. (with Bespalov, N. A.) Solution of the direct geodesic problem on the surface of an ellipsoid by means of the Runge-Kutta-Englang method. (Russian) *Izv. Vysš. Učebn. Zaved. Geod. i Aerofot.* 1976, no. 3, 11-14, 133. (Jifi Nedoma) 55 #2054 86.65
- Šapošnikov, I. G. (with Henner, E. K.) An approximation in the theory of nonequilibrium processes. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 156 Kibernet.-Mat. Metody Issled. Processov i Struktur* (1976), 11-17. (K. Kumar) 57 #11531 82.35
- Šapošnikova, G. A. (with Naletova, V. A.) Disintegration of an arbitrary discontinuity in a perfectly conducting magnetizable incompressible medium. *Prikl. Mat. Meh.* 40 (1976), no. 5, 865-875 (Russian); translated as *J. Appl. Math. Mech.* 40 (1976), no. 5, 816-826 (1977). (R. G. Broadbent) 58 #3973 78.35
(with Gogosov, V. V.; Naletova, V. A.) A model of a multiphase medium. (Russian) *Dokl. Akad. Nauk SSSR* 236 (1977), no. 5, 1098-1101. (From the authors' text) 57 #2103 76.35
(with Naletova, V. A.) Interaction of discontinuities in magnetizable ideally-conducting incompressible media. *Prikl. Mat. Meh.* 41 (1977), no. 1, 53-58 (Russian); translated as *J. Appl. Math. Mech.* 41 (1977), no. 1, 47-51. (Tommaso Ruggeri) 57 #18496 78.35
- Šapošnikova, T. O. Certain estimates of the convergence of variational methods. (Russian. English summary) *Vestnik Leningrad. Univ.* 1971, no. 19, 64-69. (W. Stenger) 46 #4718 65J05 (47A50, 49G99)
Asymptotic estimates for the convergence of the Ritz method in eigenvalue problems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 6(121), 86-91. (J. B. Butler, Jr.) 50 #11816 65N30
Asymptotic estimates of the convergence of the Ritz method in the eigenvalue problem for a degenerate elliptic operator. (Russian) *Differencial'nye Uravnenija* 9 (1973), 709-716, 784. (Author's summary) 57 #16980 35J99 (34B25, 65N25)
A priori estimates of the error of the Ritz method in the eigenvalue problem of degenerate higher order elliptic operators. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 5(132), 99-108. (K. Najzar) 49 #6647 65N25 (35J70)
A certain modification of the method of intermediate problems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 3(142), 89-92. (S. Burýšek) 51 #2282 65J05
Grid approximation of solutions of degenerate equations belonging to a weight space. (Russian) *Differencial'nye Uravnenija* 11 (1975), no. 12, 2261-2268, 2303. (W. S. Loud) 52 #11172 34A45 (65L10)
A priori error estimates for certain variational methods in Sobolev spaces. (Russian) *Variational-difference methods for the solution of problems of mathematical physics (Proc. Second All-Union Sem., Novosibirsk, 1975)* (Russian), pp. 182-194. *Vychisl. Centr Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1976. (I. M. Sheffer) 57 #4538 65N15
A priori error estimates of variational methods in Banach spaces. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 17 (1977), no. 5, 1144-1152, 1332. (Author's summary) 56 #13723 65N30 (65N15)
See also Zabreiko, P. P.; et al., (See Zbl 293 #45001)
- Šapot, D. V. The construction of orthogonal projections of point sets that are determined by a system of inequalities. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 11 (1971), 1113-1126. (S. Zlobec) 45 #2898 65F25
- Sapov, O. P. (with Džalilov, M. R.; Usmanov, Z. D.) Regularities in the development of the spiral shape of shells (from the example of the Gastropoda). (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 19 (1976), no. 2, 47-51. (A. Rapoport) 55 #2181 92A05
- Šapovalenko, V. V. Minimization of a functional with variable domain of integration in the three-dimensional case. (Russian) *Akad. Nauk Ukrain. SSR Inst. Kibernet. Preprint No. 11 Teor. Optimal. Processov* (1977), 25-30. (Editors) 58 #30672 49D99
- Šapovalov, A. V. (with Bagrov, V. G.; Meškov, A. G.; Šapovalov, V. N.) Separation of variables in the Klein-Gordon equation. I. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1973, no. 11, 66-72. (Authors' summary) 58 #25519a 81.35
(with Bagrov, V. G.; Meškov, A. G.; Šapovalov, V. N.) Separation of variables in the Klein-Gordon equation. II. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1973, no. 12, 45-52. (Authors' summary) 58 #25519b 81.35
(with Bagrov, V. G.; Meškov, A. G.; Šapovalov, V. N.) Separation of variables in

- the Klein-Gordon equation. III. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 6, 74-78. (Authors' summary) **58** #25519c 81.35
(with Bagrov, V. G.; Meškov, A. G.; Šapovalov, V. N.) Separation of variables in the Klein-Gordon equation. IV. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 3, 152-154. (Authors' summary) **58** #25519d 81.35
(with Bagrov, V. G.; Gitman, D. M.; Meškov, A. G.; Šimančuk, V. I.; Fedosov, N. I.; Šapovalov, V. N.) New exact solutions of the Dirac equation. IV. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 8, 73-79. (Editors) **58** #32526e 81.35
(with Šapovalov, V. N.) Separation of variables in the Klein-Gordon equation for the superposition of a quantized and a classical field. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 1, 23-27. (Authors' summary) **58** #25538 81.35
(with Šapovalov, V. N.) The structure of a linear canonical transformation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 4, 132-134. (Authors' summary) **58** #25461 81.15
(with Bagrov, V. G.; Gitman, D. M.) Integrals of motion in the problem of an electron in a quantized plane electromagnetic wave. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 2, 116-121. (Authors' summary) **56** #14254 81.35
(with Bagrov, V. G.; Gitman, D. M.; Šapovalov, V. N.) New exact solutions of the Dirac equation. VI. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 6, 105-114. (Editors) **58** #32526g 81.35
- Šapovalov, E. P.** (with Bel'čanskii, G. I.) Application of the minimax method in monitoring problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 2, 78-88 (Russian); translated as *Engrg. Cybernetics* **10** (1972), no. 2, 241-250. (R. J. Buehler) **49** #10347 90B25
- Šapovalov, L. A.** Equations of elastic behavior of a thin shell under nonaxisymmetric deformation. *Izv. Akad. Nauk SSSR Meh. Tverd. Tela* **1976**, no. 3, 62-72 (Russian); translated as *Mechanics of Solids* **11** (1976), no. 3, 59-69. (From the introduction) **58** #3870 73.35
- Šapovalov, N. N.** A certain bilinear form on the universal enveloping algebra of a complex semisimple Lie algebra. (Russian) *Funkcional. Anal. i Priložen.* **6** (1972), no. 4, 65-70. (V. S. Varadarajan) **47** #8644 17B35
On a certain conjecture of Gel'fand and Kirillov. (Russian) *Funkcional. Anal. i Priložen.* **7** (1973), no. 2, 93-94. (W. T. van Est) **48** #467 22E60 (17B35)
Structure of the algebra of regular differential operators on a fundamental affine space. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 1, 43-54. (Nicole Conze) **49** #10820 22E45 (17B10, 17B35)
(with Fomin, A. I.) A certain property of the characters of irreducible representations of real semisimple Lie groups. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 3, 87-88. (A. J. Coleman) **51** #3357 22E45
A certain existence theorem. (Russian) *Funkcional. Anal. i Priložen.* **10** (1976), no. 1, 62-66. (From the author's introduction) **57** #9771 17B35
- Šapovalov, V. N.** (with Bagrov, V. G.; Meškov, A. G.) Separation of variables in the stationary Schrödinger equation. *Izv. Vysš. Učebn. Zaved. Fizika* **1972**, no. 8, 45-50 (Russian); translated as *Soviet Physics J.* **15** (1972), 1115-1119 (1974). (G. P. Bava) **50** #15672 81.35 (35J10)
(with Èkle, G. G.) On the separation of variables in the Dirac equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1973**, no. 6, 94-100. (Ju. M. Berezanskii) **52** #12597 81.35
(with Bagrov, V. G.; Klimenko, Ju. I.; Šahmatov, V. M.; Èkle, G. G.) New exact solutions of the Dirac equation. I. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1973**, no. 7, 95-101. (Editors) **58** #32526a 81.35
(with Bagrov, V. G.; Meškov, A. G.; Šapovalov, A. V.) Separation of variables in the Klein-Gordon equation. I. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1973**, no. 11, 66-72. (Authors' summary) **58** #25519a 81.35
(with Suhomlin, N. B.) Integral collections and the separation of variables in the Klein-Gordon equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1973**, no. 11, 122-125. (Authors' summary) **58** #25542 81.35
(with Bagrov, V. G.; Meškov, A. G.; Šapovalov, A. V.) Separation of variables in the Klein-Gordon equation. II. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1973**, no. 12, 45-52. (Authors' summary) **58** #25519b 81.35
(with Èkle, G. G.) Complete collections, and the integration of a first order linear system. I, II. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 2, 83-88; *ibid.* **1974**, no. 2, 88-92. (Yu. S. Sayasov) **51** #4882 81.35
Covariant properties and symmetry of a second order parabolic equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 4, 27-33. (K. Kumar) **50** #6349 81.35
(with Naiminov, A. L.) On the symmetry of the Hamilton-Jacobi and Klein-Gordon equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 4, 146-147. (K. Kumar) **50** #6347 81.35
(with Suhomlin, N. B.) The canonical transformation of Hamilton's equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 6, 34-36. (B. D. Jovanović) **50** #3699 70.35
(with Bagrov, V. G.; Meškov, A. G.; Šapovalov, A. V.) Separation of variables in the Klein-Gordon equation. III. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 6, 74-78. (Authors' summary) **58** #25519c 81.35
(with Suhomlin, N. B.) Separation of variables in the nonstationary Schrödinger equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 12, 100-105. (Authors' summary) **58** #25536 81.35
(with Bagrov, V. G.; Meškov, A. G.; Šapovalov, A. V.) Separation of variables in the Klein-Gordon equation. IV. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 3, 152-154. (Authors' summary) **58** #25519d 81.35
(with Bagrov, V. G.; Gitman, D. M.; Zadorožnyi, V. N.; Lavrov, P. M.) New exact solutions of the Dirac equation. II. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 4, 29-33. (Editors) **58** #32526b (E **58** #32526d) 81.35
The symmetry of the Dirac-Fok equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 6, 57-63. (Author's summary) **58** #25537 81.35
(with Bagrov, V. G.; Gitman, D. M.; Zadorožnyi, V. N.; Lavrov, P. M.) New exact solutions of the Dirac equation. III. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 7, 7-11. (Editors) **58** #32526c (E **58** #32526d) 81.35
(with Bagrov, V. G.; Gitman, D. M.; Meškov, A. G.; Šimančuk, V. I.; Fedosov, N. I.; Šapovalov, A. V.) New exact solutions of the Dirac equation. IV. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 8, 73-79. (Editors) **58** #32526e 81.35
(with Bagrov, V. G.; Byzov, N. N.; Gitman, D. M.; Klimenko, Ju. I.; Meškov, A. G.; Šahmatov, V. M.) New exact solutions of the Dirac equation. V. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 9, 106-112. (Editors) **58** #32526f 81.35
Symmetry of the equations of motion of a free particle in a Riemannian space. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 12, 14-19. (Author's summary) **58** #25811 83.53
(with Šapovalov, A. V.) Separation of variables in the Klein-Gordon equation for the superposition of a quantized and a classical field. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 1, 23-27. (Authors' summary) **58** #25538 81.35
(with Šapovalov, A. V.) The structure of a linear canonical transformation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 4, 132-134. (Authors' summary) **58** #25461 81.15
(with Meškov, A. G.) Integrals of motion in quantum mechanics. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 11, 13-17. (Authors' summary) **58** #32622 81.58
(with Bagrov, V. G.; Gitman, D. M.; Meškov, A. G.) Complement to the articles: "New exact solutions of the Dirac equation. II, III" (*Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 4, 29-33; *ibid.* **1975**, no. 7, 7-11). *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 1, 126-127. (Editors) **58** #32526d 81.35
The symmetry of the fundamental equations of the dynamics of a Hamiltonian system. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 2, 12-16. (Author's summary) **57** #14043 58F05
Symmetry and first integrals of a system of first order ordinary differential equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 2, 53-56. (From the text) **58** #31230 58F05
Symmetry of differential equations. I. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 6, 57-64. (Editors) **58** #24314a 58A15
Symmetry of differential equations. II. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 6, 64-70. (Editors) **58** #24314b 58A15
(with Bagrov, V. G.; Gitman, D. M.; Šapovalov, A. V.) New exact solutions of the Dirac equation. VI. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 6, 105-114. (Editors) **58** #32526g 81.35
The algebra of an equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 7, 40-45. (Author's review (RŽMat **1977** #12 B615)) **58** #18014 47H15 (58H05)
Symmetry and the integration of the Hamilton-Jacobi equation of a free particle in a Riemannian space. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1978**, no. 6, 34-39. (S. G. Mamaev) **58** #14083 70.58 (58F05, 83.35)
- Šapovalov, V. P.** The number of paths in graphs that realize Boolean functions. (Russian) *Diskret. Analiz* No. 18 (1971), 88-89. (A. D. Koršunov) **45** #6528 94A20
Integration of certain classes of systems of two first order ordinary differential equations. (Russian) *Differentsial'nye Uravnenija* **9** (1973), 1154-1155, 1168. (H. I. Freedman) **48** #597 34A05
- Šapovalovs, ģī, V. Ī.** The problem of maximal flow in a network with disconnected range of carrying capacities. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1970**, 800-802, 860. (B. Zelinka) **47** #2994 90B10
- Sapožnikov, A. A.** The complexity of disjunctive normal forms that are obtainable by means of the gradient algorithm. (Russian) *Diskret. Analiz.* No. 21 (1972), 62-71, 96. (M. Tetruašvili) **49** #12188 94A20 (68A20)
The essential variables of Boolean functions. (Russian) A collection of articles dedicated to the memory of Vitalii Konstantinovič Korobkov. *Diskret. Analiz* No. 23 (1973), 38-58, 74. (R. Shirladze) **51** #2804 94A20
The geometric structure of almost all functions of the algebra of logic. (Russian) *Problemy Kibernet.* No. 30 (1975), 227-261. (János Demetrovics) **52** #7734 94A20 (06A40)
(with Gavrilov, G. P.) ★Сборник задач по дискретной математике. (Russian) [Problem book in discrete mathematics] *Izdat. "Nauka", Moscow*, 1977. 368 pp. (V. Komkov) **57** #9371 00A05 (02-01, 68-01)
(with Astrajan, A. S.; Kuzjirin, N. N.) A survey of some results in covering problems. (Russian) *Diskret. Analiz* No. 30 *Metody Diskret. Anal. v Resenii Kombinatornykh Zadach* (1977), 46-75, 78. (Authors' summary) **58** #27630 05C35 (05B35, 94A20)
- Sapožnikov, A. S.** (with Timofeev, B. B.; Litvinov, V. A.) Optimization of the Markov process of calls to memory with successive access. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 2, 30-36. (V. N. Igolkin) **46** #6651 68A20
(with Litvinov, V. A.; Timofeev, B. B.) The problem of optimizing the hierarchy of memory systems of an automatic control system. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 3, 14-20. (Editors) **58** #25079 68A05
- Sapožnikov, B. D.** Boundary value problems, for linear elliptic equations on the sphere, connected with the Christoffel problem. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* **541** (1972), 166-172. (A. Haimovici) **46** #9519 35J25 (53C45)
A boundary value problem for linear elliptic equations on the sphere which are connected with the generalized Christoffel problem. (Russian) *Theory of functions and functional analysis (Ruzhansky)*, pp. 130-137. *Leningrad. Gos. Ped. Inst., Leningrad*, 1975. (Editors) **58** #30938a 53C45
The convexity of the solution of the generalized Christoffel problem. (Russian) *Functional analysis, No. 6: Theory of operators in linear spaces (Russian)*, pp. 151-154. *Ul'janovsk. Gos. Ped. Inst., Ul'janovsk*, 1976. (Editors) **58** #30938b 53C45
See also Nash, John F., **58** #13123
- Sapožnikov, P. N.** Invariant exponential families of probability densities on the homogeneous space of a Lie group. (Russian) *Perm. Gos. Univ. Učen. Zap.* No. 218 (1969), 241-248. (W. A. Woyczyński) **45** #6104 62A05
Families of distributions on the sphere. (Russian) *Perm. Gos. Univ. Učen. Zap.* No. 218 (1969), 249-257. (W. A. Woyczyński) **45** #6105 62B05
The asymptotic optimality of binomial fixed size plans in a class of plans with bounded mean square size. (Russian) *Statistical theory of estimation, I. Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **43** (1974), 88-93, 170. (B. Ja. Levit) **53** #9544 (EA **54**) 62L12
- Sapožnikov, V. D.** The smoothness of the solutions of a certain family of integral equations. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* **541** (1972), 173-181. (L.

- Janos 46 #7829 45N05 (47G05)
- Sapožnikov, V. V.** (with Sapožnikov, V. V.) Standard realization of a relay apparatus. (Russian) *Avtomat. i Vyčisl. Tehn.* 1971, no. 1, 13-16. (Authors' summary) 45 #8428 94A20
- (with Sapožnikov, V. V.) The problem of obtaining the inclusion functions of the memory elements when coding the states by the columns of the transition table. (Russian) *Problemy Peredači Informacii* 9 (1973), no. 4, 90-91. (J. Kuntzmann) 49 #12206 94A30
- (with Sapožnikov, V. V.) Simplification of the structure of the logical transformer of a finite automaton in coding its states according to the columns of the transition table. (Russian) *Problemy Peredači Informacii* 11 (1975), no. 4, 77-85. (Authors' summary) 58 #4690 94A20
- (with Sapožnikov, V. V.; Trohov, V. G.) The synthesis of a logical transformer of d -dependable finite automata. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1976, no. 3, 268-273, 365. (Authors' summary) 58 #9883 94A20
- (with Sapožnikov, V. V.; Trohov, V. G.) Synthesis of finite automata with self-diagnosis property. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1977, no. 3, 6-11, 92. (M. Tetrušvili) 58 #9923 94A30
- (with Sapožnikov, V. V.) Coding the states of a finite automaton with a simplification of the logical transformer. (Russian) *Problemy Peredači Informacii* 13 (1977), no. 4, 72-80. (Ljudmil Dakovski) 58 #4713 94A25 (94A20)
- Sapožnikov, V. V.** (with Sapožnikov, V. V.) Standard realization of a relay apparatus. (Russian) *Avtomat. i Vyčisl. Tehn.* 1971, no. 1, 13-16. (Authors' summary) 45 #8428 94A20
- (with Sapožnikov, V. V.) The problem of obtaining the inclusion functions of the memory elements when coding the states by the columns of the transition table. (Russian) *Problemy Peredači Informacii* 9 (1973), no. 4, 90-91. (J. Kuntzmann) 49 #12206 94A30
- (with Sapožnikov, V. V.) Simplification of the structure of the logical transformer of a finite automaton in coding its states according to the columns of the transition table. (Russian) *Problemy Peredači Informacii* 11 (1975), no. 4, 77-85. (Authors' summary) 58 #4690 94A20
- (with Sapožnikov, V. V.; Trohov, V. G.) The synthesis of a logical transformer of d -dependable finite automata. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1976, no. 3, 268-273, 365. (Authors' summary) 58 #9883 94A20
- (with Sapožnikov, V. V.; Trohov, V. G.) Synthesis of finite automata with self-diagnosis property. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1977, no. 3, 6-11, 92. (M. Tetrušvili) 58 #9923 94A30
- (with Sapožnikov, V. V.) Coding the states of a finite automaton with a simplification of the logical transformer. (Russian) *Problemy Peredači Informacii* 13 (1977), no. 4, 72-80. (Ljudmil Dakovski) 58 #4713 94A25 (94A20)
- Sapožnikova, S. L.** (with Dončenko, N. A.; Nikulin, V. N.; Ursat'ev, A. A.) An algorithm for the sequential construction of a second order statistical model. (Russian. English summary) *US i M—Upravljajusche Sistyemy i Mašiny* 1977, no. 1 (27), 81-85, 147, 148. (H. Bandemer) 56 #7045 62K05
- Sapožnikova, V. D.** (with Mihlin, S. G.) Potentials of the wave equation. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 9(184), 48-64. (V.-V. Olariu) 58 #11941 35L05
- (with Mihlin, S. G.) The method of potentials in a mixed problem for the wave equation. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 10(185), 100-108. (V.-V. Olariu) 58 #11942 35L05
- (with Maz'ja, V. G.) Correction to: "A remark on the regularization of a singular system in the isotropic theory of elasticity" (Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom. 19 (1964), no. 2, 165-167). (Russian) *Vestnik Leningrad. Univ.* 1977, no. 19 Mat. Meh. Astronom. vyp. 4, 160. (Editors) 58 #17512 35J99
- Sapre, Ashok Ram Chandra** On Euler means of orthogonal series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 13 (1970), 169-173. (D. P. Gupta) 46 #603 42A60
- A note on orthogonal series. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* 39 (1971), 31-34 (1972). (K. Tandori) 49 #986 42A60
- Another note on orthogonal series. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* 39 (1971), 37-40 (1972). (K. Tandori) 49 #5694 42A60
- On (\bar{N}, p_n) summability of orthogonal series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 14 (1971), 55-59. (D. P. Gupta) 46 #604 42A60
- On Euler means and T -means of orthogonal series. *Mat. Vesnik* 9(24) (1972), 91-96. (D. P. Gupta) 48 #11900 42A60
- On the absolute Euler summability of orthogonal series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 15 (1972), 141-144. (H. P. Dikshit) 48 #4626 42A60
- (with Bhatnagar, S. C.) On Euler summability of lacunary orthogonal series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 16 (1973), 203-206. (D. P. Gupta) 50 #883 42A56
- Sapronov, Ju. I.** Relative rotation and the principle of invariance. (Russian) *Seventh Mathematical Summer School (Kaciveli, 1969)*, pp. 322-335. *Izdanie Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (L. Górniewicz) 51 #11212 47H10
- (with Borisovič, Ju. G.) Certain topological invariants of nonlinear Fredholm mappings. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 4 (1970), 7-19. (J. Daneš) 53 #6612 58B15 (58D15)
- Finite-dimensional perturbations of nonlinear Fredholm mappings. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 2 Cylki Statei po Prikl. Analizu* (1970), 21-26. (B. Sadovskii (RŽMat 1971 #9 B673)) 58 #13120 58B15
- (with Borisovič, Ju. G.) On the theory of nonlinear Fredholm mappings. (Russian) *Mathematical Summer School (Kaciveli, 1970) (Russian)*, pp. 128-163. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (C. Bowszyc) 51 #11567 58B15 (47H10)
- The local invertibility of nonlinear Fredholm mappings. (Russian) *Funkcional. Anal. i Priložen.* 5 (1971), no. 4, 38-43. (J. Daneš) 45 #1009 47H10 (58E99)
- (with Gel'man, B. D.; Obuhovskii, V. V.) The dimensions of sets of rational and irrational vectors in Banach spaces of sequences. (Russian) Questions of modern mathematics and methods of teaching it at institutions of higher learning. *Leningrad. Gos. Ped. Inst. Učen. Zap.* 404 (1971), 343-348. (From the authors' introduction) 55 #10998 46A45
- On the homotopy classification of condensing mappings. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 6 (1972), 78-80. (B. Sadovskii (RŽMat 1973 #4 B89) 56 #13263 58C99 (47H10)
- (with Zvjagin, V. G.; Muhamadiev, È. M.) The degree of equivariant Fredholm maps. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 6(174), 209-210. (J. Daneš) 52 #15535 58B15 (58C25)
- (with Zvjagin, V. G.; Muhamadiev, È. M.) On the question of the computation of the degrees of nonlinear Fredholm mappings. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 10 (1973), 25-44. (Editors) 57 #7643a 58B15
- Regular perturbations of a Fredholm mapping and the theorem on the odd fixed point. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 10 (1973), 82-88. (Editors) 57 #7644 58C20 (58B15)
- On the theory of the degree of nonlinear Fredholm mappings. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 11 Sb. Statei Funkcional. Anal. Priložen.* (1973), 92-101. 58 #24317 58B15 (47H15, 55C25)
- (with Začepa, V. R.) Homogeneous regular operators. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 12 Sb. Rabot po Nelineinym Operator. Uraon. i Primene (1974), 26-31. (S. Fučík) 57 #13588 47H05
- (with Začepa, V. R.) Invariant curves in the neighborhood of a multiple fixed point of an analytic mapping of the plane. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 15 Teor. Sb. Statei Nelinein. Funkcional. Anal.* (1974), 33-39. (Editors) 58 #22517 30A32 (58C10)
- (with Borisovič, O. Ju.) Morse's lemma for invariant functions. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 16 Sb. Statei po Nelineinym Operator. Uraon. i Priložen. (1975) 13-17. (A. Verona) 57 #10731 58E05
- (with Borisovič, Ju. G.) Degree invariance principles of Fredholm mappings, and Fredholm structures on interpolation pairs of space. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 20 (1975), 13-19. (Ja. Rutnickii (RŽMat 1975 #6 B828)) 58 #18523 58B15*
- (with Borisovič, Ju. G.; Zvjagin, V. G.) Nonlinear Fredholm mappings, and Leray-Schauder theory. (Russian) *Uspehi Mat. Nauk* 32 (1977), no. 4(196), 3-54, 28 (Christian Fenske) 57 #4216 58B15 (47H15, 55C25)
- Sapsai, R. A.** Probability theory in the Ukraine in the 19th century. (Russian) *Problems in the history of mathematics and mechanics (Russian)*, pp. 98-103, 133. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Author's summary) 58 #26924 01A55
- Šapukov, B. N.** The representation of the group $GL(n, R)$ in the space of tensors of order two. (Russian) *Proceedings of the Seminar of the Department of Geometry, No. VII* (Russian), pp. 152-164. *Izdat. Kazan. Univ., Kazan*, 1974. (K. Radziszewski) 53 #3955 53C30 (22E45)
- (with Norden, A. P.) Boris Lukič Laptev (on the occasion of his seventieth birthday). (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp.* 8 (1975), 5-10. (Editors) 54 #4902 01A70
- Linear connections on a vector bundle. (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp.* 8 (1975), 118-131. (Jacek Gancarzewicz) 55 #8988 53C05
- The theory of the curvature of a vector bundle. (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp.* 9 (1976), 118-137. (J. Virsik) 58 #7474 53C05
- (with Norden, A. P.) Boris Lukič Laptev (on the occasion of his seventieth birthday). (Russian) *Uspehi Mat. Nauk* 31 (1976), no. 1(187), 269-272. (Editors) 53 #12843 01A70
- Sapunar, È. I.** (with Zel'cer, L. B.) Solution of optimization problems by a collective of independent automata. (Russian) *Materialy Sem. Kibernet. Vyp.* 51 (1973), 3-17, 31 (From the authors' text) 57 #2792 94A30
- Sapundžiev, Georgi** (with Naplatanov, Nikolai) Obtaining the static model of the blast-furnace process on the basis of passive experimentation. (Bulgarian. Russian and English summaries) *B'lgar. Akad. Nauk. Otdel. Tehn. Nauk. Izv. Inst. Tehn. Kibernet.* 15 (1973), 29-36. (Authors' summary) 48 #1749 93B30
- See also *Automatic control systems*, 50 #9387
- Sapunov, Ja. G.** Free convection in a strong magnetic field. *Magnit. Gidrodinamika* 10 (1974), no. 4, 24-31 (Russian); translated as *Magnetohydrodynamics* 10 (1974), no. 4, 399-405 (1976). (S. I. Pai) 53 #4726 76.35
- Sapunov, O. M.** On exact solutions of the equations of magnetogasdynamics. *Magnit. Gidrodinamika* 7 (1971), no. 4, 3-10 (Russian); translated as *Magnetohydrodynamics* 7 (1971), 435-441 (1974). (Author's summary) 56 #10384 76.35
- Šapurovas, A. B.** The periodicity of a composite function. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 11 (1971), 207-214. (J. G. Ceder) 45 #486 26A72
- Šara, V. V.** Irreducible complex representations of periodic generalized supersolvable groups. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 1, 62-69, 142. (G. Karpilovsky) 53 #591 20C15
- On the question of the irreducible representations of an infinite direct product of finite groups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 11(186), 113-117. (G. Karpilovsky (Zbl 388 #20005)) 58 #28160 20C30
- (with Berman, S. D.) Irreducible complex representations of finitely generated nilpotent groups. (Russian) *Ukrain. Mat. Ž.* 29 (1977), no. 4, 435-442, 563. (G. Karpilovsky) 56 #12104 20C15
- Sarabia, José** (with Torres, Ennodio) On second order linear differential equations. *J. Mathematical and Physical Sci.* 11 (1977), no. 4, 319-324. (Stanley B. Eliason) 58 #11652 34C10
- Saraburova, L. G.** (with Šaškin, Ju. A.) Intersections of spherically convex sets. (Russian) *Mat. Zametki* 18 (1975), no. 5, 781-791. (N. Poláková) 53 #6426 52A35
- The separation of convex cones. (Russian) *Ural. Gos. Univ. Mat. Zap.* 9 (1975), no. 4, 99-109, 135 (1976). (W. J. Firey) 57 #1280 52A20
- Sarachik, Philip E.** (with Friedland, Bernard) A unified approach to suboptimum control. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automatic Control (IFAC), London, 1966)*, Vol. 1, p. 25, Paper 13A, 8 pp. *Inst. Mech. Engrs. London*, 1967. (Authors' summary) 51 #9889 93C15
- (with Stavroulakis, Peter) Low sensitivity feedback gains for deterministic and stochastic control systems. *Internat. J. Control* (1) 19 (1974), 15-31. (Author's summary

- 56 #11444** 93E20
(with Chu, K'ai Ching) Real-time merging of high-speed vehicular strings. *Transportation Sci.* **9** (1975), no. 2, 122-138. (E. C. Posner) **53 #15321** 90B20
See also **Proceedings: International Congress of the International Federation of Automatic Control (IFAC)**, **51** #12360b
- racino, D. H.** (with Lipshitz, Leonard) The model companion of the theory of commutative rings without nilpotent elements. *Proc. Amer. Math. Soc.* **38** (1973), 381-387. (Authors' summary) **55 #12510** 02H15 (13L05)
Model companions for κ_0 -categorical theories. *Proc. Amer. Math. Soc.* **39** (1973), 591-598. (John T. Baldwin) **47 #4786** 02H05
 m -existentially complete structures. *Colloq. Math.* **30** (1974), 7-13. (G. Cherlin) **49 #10542** 02H05 (02H13)
Wreath products and existentially complete solvable groups. *Trans. Amer. Math. Soc.* **197** (1974), 327-339. (Paul C. Eklof) **49 #7137** 02H15 (20E15)
(with Weispfenning, Volker) On algebraic curves over commutative regular rings. *Model theory and algebra (A memorial tribute to Abraham Robinson)*, pp. 307-383. *Lecture Notes in Math.*, Vol. 498, Springer, Berlin, 1975. (M. Fried) **53 #5606** 14H99 (02H15)
A counterexample in the theory of model companions. *J. Symbolic Logic* **40** (1975), no. 1, 31-34. (G. Cherlin) **56 #15408** 02H13
(with Weispfenning, Volker) Commutative regular rings without prime model extensions. *Proc. Amer. Math. Soc.* **47** (1975), 201-207. (G. Cherlin) **50 #4293** 02H15 (13L05)
Existentially complete nilpotent groups. *Israel J. Math.* **25** (1976), no. 3-4, 241-248. (Paul C. Eklof) **56 #11780** 02H15
Existentially complete torsion-free nilpotent groups. *J. Symbolic Logic* **43** (1978), no. 1, 126-134. (Paul C. Eklof) **58 #212** 02H15 (20A10)
See also **Model theory and algebra**, **52** #7889
- raf, Jagdish R.** (with Srivastava, Manesh P.) Non-linear Couette flow with heat transfer using the B-G-K model. (German summary) *Z. Angew. Math. Phys.* **22** (1971), no. 3, 542-551. (Authors' summary) **58 #32658** 82J35
- rafjan, N. E.** A hierarchical system of automata. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1968**, no. 5, 120-124 (Russian); translated as *Engrg. Cybernetics* **1968**, no. 5, 106-110 (1969). (Author's summary) **48 #8142** 94A30
- rafjan, V. V.** Diffusion processes and differential equations that degenerate at isolated points. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 738-743. (L. I. Gal'čuk) **47 #631** 35J25 (60H15)
The regularization of boundary value problems for equations that are degenerate at isolated points. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **8** (1973), no. 1, 13-25, 88. (P. C. Fife) **49 #830** 35J25
- rafova, Galina H.** (with Bainov, Drumi D.) Solution of a two-point boundary value problem with eigenvalues by the method of averaging on the basis of an asymptotic expansion constructed for the Cauchy problem. (Russian. Macedonian summary) *Bull. Soc. Math. Phys. Macédoine* **24** (1973), 7-19 (1974). (C. Avramescu) **51 #8523** 34B15 (34E05)
(with Bainov, Drumi D.) Solution of a two-point boundary value problem for eigenvalues by the averaging method that is based on the asymptotic expansion constructed for the Cauchy problem. (Russian) *Mathematica (Cluj)* **16** (39) (1974), no. 1, 13-24. (Authors' summary) **56 #9010** 34E05 (34B15)
(with Samoilenko, A. M.) The existence and properties of a bounded solution of a system of nonlinear integrodifferential equations in the neighborhood of an equilibrium point of the unperturbed system. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations (Russian)*, pp. 139-146. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1975. (Editors) **54 #3331** 45J05
(with Bainov, Drumi D.) A certain variant of the averaging method for nonlinear systems of integro-differential equations of standard form. (Russian) *Bul. Inst. Politehn. București* **37** (1975), no. 1, 13-16. (Stefan Balint) **52 #1227** 45J05
(with Samoilenko, A. M.) On the existence and the properties of a bounded solution or a family of bounded solutions of a system of nonlinear integro-differential equations. (Russian. Bulgarian and English summaries) Conference on Differential Equations and Applications (Ruse, 1975). *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 1, 215-220 (1977). (K. Seitz) **57 #17167** 45J05 (34K20)
(with Valčev, Kim G.) A way of transforming a system of integrodifferential equations. (Russian) *Serdica* **2** (1976), no. 2, 154-159. (Stefan Balint) **55 #1011** 45J05
(with Bainov, Drumi D.) Application of partial averaging for a class of integro-differential equations of Fredholm type. *Aequationes Math.* **16** (1977), no. 1-2, 65-69. (Peter J. Bushell) **58 #17750** 45J05 (34C30)
(with Bainov, Drumi D.) Application of the averaging method for a two-point boundary problem for systems of integro-differential equations of Fredholm type. *Aequationes Math.* **16** (1977), no. 1-2, 71-79. (Peter J. Bushell) **57 #13422** 45J05 (34C30)
(with Bainov, Drumi D.) A variant of the averaging method for nonlinear systems of integrodifferential equations of standard form. (Russian) *Publ. Math. Debrecen* **24** (1977), no. 1-2, 205-207. (RŽMat **1978** #12 B784) **58 #23438** 45J05
(with Bainov, Drumi D.) On an application of the averaging method for nonlinear systems of integrodifferential equations. *Publ. Res. Inst. Math. Sci.* **13** (1977/78), no. 3, 583-588. (D. Izjumova) **57 #6649** 34C30 (45J05)
(with Bainov, Drumi D.) Application of the averaging method to a class of integrodifferential equations of Fredholm type. (Russian) *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* **22** (1977), no. 2, 319-322. (A. Corduneanu) **57 #7076** 45J05
(with Bainov, Drumi D.) A variant of the averaging method for systems of integro-differential equations with fast and slow variables. (Russian) *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* **22** (1977), no. 5, 783-789. (S. D. Miluševa) **57 #17168** 45J05
(with Samoilenko, A. M.; Bainov, Drumi D.) An application of the integral manifold method to the study of the bounded solutions of a class of systems of integrodifferential equations. (Russian) *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **22**(70) (1978), no. 1, 75-85. (K. Seitz) **58 #12252** 45J05
- arafudinov, V. A.** Complete open manifolds of nonnegative curvature. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 177-191, 238. (O. Kowalski) **49 #7952** 53C20
Šarafudinov, V. A. Convex sets in Riemannian manifolds. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 1153-1155. (A. Urban) **49 #1429** 53C20
Relative Euler class and the Gauss-Bonnet theorem. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 1321-1335, 1367. (C. Teleman) **50 #1169** 53C20 (57D20)
Radius of injectivity of a complete open manifold of nonnegative curvature. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 1, 46-48. (J. Szenthe) **56 #9459** 53C20
The Pogorelov-Klingenberg theorem for manifolds that are homeomorphic to \mathbb{R}^n . (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 4, 915-925, 958. (J. Szenthe) **58 #7488** 53C20
- Šarafudinova, R. Š.** See al-Fārābī, Abū Naṣr Muḥammad ibn Muḥammad ibn Tarkhān, **55** #7711
- Sarafyan, D.** An investigation concerning fifth order scalar and vector Runge-Kutta processes. *Riv. Mat. Univ. Parma* (2) **12** (1971), 41-45. (H. Brunner) **50 #15351** 65L05
Improved sixth-order Runge-Kutta formulas and approximate continuous solution of ordinary differential equations. *J. Math. Anal. Appl.* **40** (1972), 436-445. (W. H. Enright) **47 #7915** 65L05
- Sarafyan, N. Ye.** See Sarafjan, N. E.
- Saraga, W.** See Network theory, **49** #12198
- Šaraja, V. V.** See Šara, V. V.
- Saralski, Bogdan** (with Kopiecki, Ryszard; Waligóra, Gerald) The research of Jaśkowski on decidability theory of first order sentences. I. Stanisław Jaśkowski's achievements in mathematical logic (Proc. 20th Conf. History of Logic, Cracow, 1974). *Studia Logica* **34** (1975), no. 2, 201-214. (Egon Börger) **54 #86** 02G05 (02B10, 02D99)
- Saramandu, N.** See Recherches sur la philosophie des sciences, **52** #7764
- Saran, Jagdish** Joint distributions based on zeros, horizontal crossings and maximum deviation. *Z. Angew. Math. Mech.* **57** (1977), no. 10, 610-613. (From the introduction) **58 #24563** 60J15 (62E15)
- Saran, L. A.** (with Sliustarova, K. M.) Estimation of the curvature of level curves for functions that are convex with respect to the direction of the imaginary axis. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1972**, 141-144, 189. (R. Kühnau) **46 #3767** 30A32
(with Asaturjan, A. Š.) An unsteady flow of a viscous fluid in pipelines with allowance for inertial forces. (Russian) *Prikl. Meh.* **10** (1974), no. 9, 105-112, 143. (Authors' summary) **54 #9325** 76J35
- Saran, S.** Theorems on bilinear generating functions. *Indian J. Pure Appl. Math.* **3** (1972), no. 1, 12-20. (B. M. Agrawal) **45 #7113** 33A70
(with Lal, Charanjit) Bilinear generating functions of Lauricella and Saran's functions. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **8**(28) (1973), 215-223. (H. M. Srivastava) **49 #9273** 33A30
- Sarančev, A. F.** Basis systems of polynomial solutions of differential equations of stationary distribution of temperature and of elastic equilibrium of an anisotropic body. (Russian. English summary) *Vysisl. Prikl. Mat. (Kiev) No. 34* (1978), 38-53, 165. (L. Jentsch) **58 #14432** 80J35
- Sarančuk, V. G.** Application of the theory of games to a vibrational problem. *Izv. Akad. Nauk SSSR Meh. Teord. Tela* **1974**, 176-183 (Russian); translated as *Mechanics of Solids* **9** (1974), no. 1, 155-161. (Author's summary) **56 #2441** 90D25 (93C15)
- Saranen, Jukka** Charakterisierung einiger Sesquilinear- und Bilinearformen mit Hilfe von Adjunktionen. *Ann. Acad. Sci. Fenn. Ser. A I No. 581* (1974), 40 pp. (Björn Textorius) **52 #4019** 47B50 (46L20)
Über die Verbandcharakterisierung einiger nichtentarteter Formen. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **1** (1975), no. 1, 85-92. (Roy M. Rakestraw) **52 #8892** 46C05
Über das Spektrum des Laplace-Operators in einigen unbeschränkten Gebieten. (English summary) *Manuscripta Math.* **19** (1976), no. 1, 47-56. (J. R. Kuttler) **53 #13864** 35P05
Ausstrahlungsproblem des Laplace-Operators für eine Klasse der Gebiete mit unbeschränktem Rand. (English summary) *Manuscripta Math.* **20** (1977), no. 4, 355-376. (G. Albinus) **56 #3453** 35J05
- Sarangi, J.** Conditional rank tests for double comparison experiments. *Calcutta Statist. Assoc. Bull.* **24** (1975), no. 93-96, 23-32 (1976). (Yves Lepage) **55 #4507** 62G10
- Sarangi, Sangappa Mallapa** (with Singh, S. K.) On Nevanlinna modified deficiency. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 341-347 (1974). (N. Toda) **51 #10632** 30A70
- Šaranović, Stevan** Integrability criteria for a third order linear differential equation. (Serbian. French summary) *Bull. Soc. Math. Phys. Macédoine* **26** (1975/76), 35-38 (1977). (E. Barvinek) **58 #6407** 34-01
- Sarapa, Nikola** On limiting properties of averaged convolution sequences of distributions defined on compact semigroups. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10**(30) (1975), no. 1, 155-159. (Hing Lun Chow) **51 #11007** 43A05 (60B15)
On some properties of distributions defined on metric groups. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10**(30) (1975), no. 2, 371-375. (Wilfried Hazod) **52 #15594** 60B15
On the (c, α) summability of probability distributions defined on compact semigroups. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **12**(32) (1977), no. 2, 359-372. (From the summary) **58 #29828** 43A05 (40G05, 60B15)
- Šarapov, I. P.** See Informational questions of semiotics, linguistics and automatic translation, **50** #9054
- Šarapov, N. I.** The irreducibility and reducibility of polynomials of degree eight. (Russian) *Ul'janovsk. Gos. Ped. Inst. Učen. Zap.* **21** (1971), Ser. Mat. no. 7, 102-119. (E. Inaba) **49 #258** 12E05
- Šarapov, V. G.** A certain class of measurable partitions of a Lebesgue space. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 7, 6-8. (K. Jacobs) **47 #8817** 28A65
Certain classes of measurable partitions of a Lebesgue space. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 8, 6-8. (K. Jacobs) **47 #8818** 28A65
A certain property of the discrete decompositions of the Lebesgue space. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 3, 31-39.

- (S. M. Rudolfer) **45** #5300 28A10
The discrete decompositions and exact endomorphisms of the Lebesgue space. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 5, 30-37. (S. M. Rudolfer) **45** #5301 28A10
A certain class of number-theoretic endomorphisms of A. Rényi and V. A. Rohlin. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 194-206, 214. Izdat. "Fan" Uzbek. SSR, Tashkent, 1974. (S. M. Rudolfer) **51** #13194 28A65 (10Kxx)
Exact endomorphisms with a quasi-invariant measure. (Russian) *Mat. Zametki* **21** (1977), no. 1, 99-108. (B. M. Gurevič) **56** #3254 28A65
Šarapov, V. I. See *Operations research and statistical simulation*, **48** #10430
Šarapudinov, I. I. On the convergence of the Fourier-Cebyšev sums. (Russian) *Numerical analysis and mathematical physics*, No. 2 (Russian), pp. 275-287. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1975. (See RŽMat **1976** #11 B97; MR **56** #1654) 42A56
Šarašenidze, T. V. Multiple orthogonal series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **62** (1971), 261-263. (R. L. Cooke) **45** #5663 42A92
The strong summability of Fourier-Walsh series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **70** (1973), 33-36. (S. Baron) **50** #14045 42A56
Multiple Fourier-Walsh series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **81** (1976), no. 3, 565-567. (W. R. Wade) **53** #13994 42A56
Šarašidze, G. K. Non-algorithmic electronic models and hybrid computing means of problems on Hamiltonian circuits. (Russian. Georgian and English summaries) *Gamoqneb. Math. Inst. Sem. Mošsen. Anotacie. No. 4* (1971), 51-54. (B. Zelinka) **45** #9818 94A20
The structural peculiarities of nonalgorithmic electronic models of certain combinatorial problems. (Russian. Georgian and English summaries) *Gamoqneb. Math. Inst. Sem. Mošsen. Anotacie. No. 6* (1972), 19-25. (B. Zelinka) **47** #8208 94A20
(with Puhov, G. È.) A principle for simulating combinatorial problems of discrete mathematics. (Russian) *Dokl. Akad. Nauk SSSR* **225** (1975), no. 5, 1038-1040. (R. N. Goss) **52** #16894 94A20 (05C20)
Methods of modeling and solving combinatorial problems. (Russian) *Problems in electronics and computer science* (Russian), pp. 257-275, 299. Izdat. "Naukova Dumka", Kiev, 1976. (L. S. Mel'nikov) **58** #388 05C99 (05C35)
Sarason, Donald (with Douglas, Ronald G.) A class of Toeplitz operators. Proceedings of an International Symposium on Operator Theory (Indiana Univ., Bloomington, Ind., 1970). *Indiana Univ. Math. J.* **20** (1971), no. 10, 891-895. (M. B. Abrahamse) **53** #11414 47B35
Representing measures for $R(X)$ and their Green's functions. *J. Functional Analysis* **7** (1971), 359-385. (Author's summary) **54** #3416 46J10 (30A98)
Approximation of piecewise continuous functions by quotients of bounded analytic functions. *Canad. J. Math.* **24** (1972), 642-657. (R. B. Burckel) **46** #9745 46J15 (30A82)
Weak-star density of polynomials. *J. Reine Angew. Math.* **252** (1972), 1-15. (W. B. Jones) **45** #4156 46J10 (47B99)
An addendum to: "Past and future" (Math. Scand. **21** (1967), 5-16 (1968)) by H. Helson and D. Sarason. *Math. Scand.* **30** (1972), 62-64. (M. Rabinathan) **52** #6849 60G10 (42A40)
On products of Toeplitz operators. *Acta Sci. Math. (Szeged)* **35** (1973), 7-12. (R. G. Douglas) **48** #9443 47B35
Algebras of functions on the unit circle. *Bull. Amer. Math. Soc.* **79** (1973), 286-299. (J. V. Ryff) **48** #2777 46J15
Invariant subspaces. *Topics in operator theory*, pp. 1-47. *Math. Surveys*, No. 13, *Amer. Math. Soc., Providence, R.I.*, 1974. (J. Rovnyak) **50** #10862 47A15 (30A78)
Functions of vanishing mean oscillation. *Trans. Amer. Math. Soc.* **207** (1975), 391-405. (H. Widom) **51** #13690 46J10 (30A78, 42A40, 60G10)
Algebras between L^∞ and H^∞ . *Spaces of analytic functions* (Sem. Functional Anal. and Function Theory, Kristiansand, 1975), pp. 117-130. *Lecture Notes in Math.*, Vol. 512, Springer, Berlin, 1976. (J. Globevnik (Zbl 334 #46062)) **58** #12386 46J10
Toeplitz operators with semi-almost periodic symbols. *Duke Math. J.* **44** (1977), no. 2, 357-364. (M. B. Abrahamse) **56** #12965 47B35
Toeplitz operators with piecewise quasicontinuous symbols. *Indiana Univ. Math. J.* **26** (1977), no. 5, 817-838. (David A. Stegenga) **57** #3906 47B35 (30A78, 46L05)
Sarason, Leonard Symmetrizable systems in regions with corners and edges. *J. Math. Mech.* **19** (1969/70), 601-607. (From the introduction) **58** #30520 47G05
Remarks on an inequality of Schlenker and Wilcox. *Ann. Mat. Pura Appl.* (4) **92** (1972), 23-28. (Marvin Shinbrot) **47** #5416 35B45 (47F05)
(with Tartakoff, David S.) Boundary value problems for non-elliptic first order systems of pseudo-differential operators. *Comm. Pure Appl. Math.* **25** (1972), 533-567. (R. D. Moyer) **58** #1779 35S15
Weak equals strong for first-order linear pseudodifferential boundary value problems. *Proc. Amer. Math. Soc.* **39** (1973), 141-148. (W. J. Sweeney) **47** #9103 35S15 (35D10)
(with Smoller, Joel A.) Geometrical optics and the corner problem. *Arch. Rational Mech. Anal.* **56** (1974/75), 34-69. (D. L. Colton) **49** #11059 (EA 50) 35L40
A canonical transformation near a boundary point. *Proc. Amer. Math. Soc.* **48** (1975), 189-192. (Monty Strauss) **52** #968 35A30 (35S05, 47G05)
Hyperbolic and other symmetrizable systems in regions with corners and edges. *Indiana Univ. Math. J.* **26** (1977), no. 1, 1-39. (H. Kumano-go) **56** #877 35L50
Saraswati, D. K. Quantum electrodynamics in an analytic representation. *J. Phys. A* **4** (1971), 165-183. (F. C. Auluck) **49** #4470 81J35
Saraswati, Dipak K. A continued fraction representation of the mass operator. *Canad. J. Phys.* **54** (1976), no. 1, 26-33. (Guy Loupias) **53** #10015 81J47
Sarath, B. (with Varadarajan, K.) Injectivity of direct sums. *Comm. Algebra* **1** (1974), 517-530. (T. Cheatham) **49** #10737 16A52
(with Varadarajan, K.) Injectivity of certain classes of modules. *J. Pure Appl. Algebra* **5** (1974), 293-305. (G. Michler) **50** #7239 16A30
(with Varadarajan, K.) Divisibility of direct sums in torsion theories. *Canad. Math. J.* **28** (1976), no. 1, 211-214. (J. D. Fielberth) **53** #3028 16A64
Krull dimension and Noetherianness. *Illinois J. Math.* **20** (1976), no. 2, 329-353. (Papp) **53** #3009 16A46
partha Sarathy, R. See Partha Sarathy, R.
Saratova, G. Hr. (with Baïnov, Drumi D.) A variant of the averaging method for nonlinear systems of integro-differential equations of standard type. (Russian) *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* **22** (1977), no. 6, 959-962. (Hans Kaper) **58** #6988 45J05
Sarbach, S. Existence of phase transitions near the displacive limit of a classical n -component lattice model. *Phys. Rev. B* (3) **15** (1977), no. 5, 2694-2699. (L. Navarré) **56** #4601 82J47
Sarbadhikari, H. A projective Blackwell space which is not analytic. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 511-514. (Micha Orkin) **48** #4250 28A05 (54H05)
(with Rao, K. P. S. Bhaskara; Grzegorek, Edward) Complementarity in the lattice of Borel structures. *Colloq. Math.* **31** (1974), 29-32. (V. S. Krishnan) **50** #13415 28A05
A note on some properties of A -functions. *Proc. Amer. Math. Soc.* **56** (1976) 321-324. (D. W. Bressler) **53** #10996 26A42
Some uniformization results. *Fund. Math.* **97** (1977), no. 3, 209-214. (T. B. Rushing) **58** #12954 54H05
Sarcineliija, R. A. (with Fel'ker, V. M.) The linear programming problem when there is certain change in the constraints. (Russian. Georgian summary) *Math. Kibernet. Zogiet. Sakith. Gamokw. No. 1* (1973), 43-56. (S. Zlobec) **48** #13248 90C05
The convex programming problem when there is a certain change in the constraints. (Russian. Georgian summary) *Math. Kibernet. Zogiet. Sakith. Gamokw. No. 1* (1973) 57-66. (S. Zlobec) **48** #13249 90C05 (90C25)
The problem of quadratic programming when there is a certain change in the constraints. (Russian) *Works of Young Scientists at Tbilisi State University, Physics Mathematics and Natural Science Series*, 2 (Russian), pp. 62-69. Izdat. Tbilis. Univ. Tbilisi, 1974. (S.-F. Sburlan) **58** #15161 90C20
Analysis of linear programming models when the volume of production resource changes. (Georgian. Russian summary) *Works of Young Scientists at Tbilisi State University, Physics, Mathematics and Natural Science Series*, 2 (Russian), pp. 78-85. Izdat. Tbilis. Univ., Tbilisi, 1974. (See RŽMat **1975** #5 V686; MR **56** #23) 90C50
The problem of production planning with several target functions. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **87** (1977), no. 2, 493-496. (Author's summary) **58** #15111 90B30 (90A15)
Sard, Arthur (with Quinn, Frank) Hausdorff nullity of critical images of Fredholm maps. *Amer. J. Math.* **94** (1972), 1101-1110. (A. J. Tromba) **48** #1260 58B15 (47B30)
Approximation based on nonscalar observations. Collection of articles dedicated to Isaac Jacob Schoenberg on his 70th birthday, IV. *J. Approximation Theory* **8** (1973), 315-334. (G. D. Taylor) **50** #844 41A30
Instances of generalized splines. *Spline-Funktionen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 215-241. *Bibliographisches Inst., Mannheim*, 1974. (Walter Schempp) **54** #3234 41A15
Approximation and probability. *Approximation theory* (Proc. Internat. Colloq., Inst. Angew. Math. Univ. Bonn, Bonn, 1976), pp. 347-351. Springer, Berlin, 1976. (Author's summary) **58** #29726 41A65
On optimal approximation. *Spline functions* (Proc. Internat. Sympos., Karlsruhe, 1975), pp. 220-225. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (Author's summary) **58** #1869 41A15
Function spaces for analysis. *Constructive theory of function of several variables* (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976), pp. 186-195. *Lecture Notes in Math.*, Vol. 571, Springer, Berlin, 1977. (Marc Attia) **58** #12343 46E99 (41A65)
Taylor's formula for maps: the reverse problem. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **3** (1977), no. 2, 247-255. (Sadayuki Yamamuro) **58** #24323 58C20
Sardanašvili, G. A. Compensation, nonlinearity, geometry. (Russian) *Izv. Vysš. Učebn. Zaved. Fiz. 1974*, no. 12, 128-134. (Author's summary) **58** #25812 83J3
(with Frolov, B. N.) Gravitation, and compensating fields. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika 1974*, no. 9, 47-51. (R. Salia) **52** #16499 83J3
Compensation and nonlinear theory. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika 1975*, no. 12, 7-13. (Author's summary) **58** #25632 81J3
Spin representations of the conformal group. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **16** (1975), no. 3, 316-324. (Pavel Winternitz) **54** #6718 81J22
Compensation, and the string model of particles. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika 1977*, no. 5, 144-145. (From the author's introduction) **56** #4467 81J22
Sardarjan, G. G. On a method for defining the degree of significance for complex blocks of discrete functional elements in a circuit. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 2, 49-56. (A. D. Koršunov) **53** #2542 94A20
Sardarly, S. M. A nonlinear operator equation of Volterra type on the half axis. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1968**, no. 5, 73-80. (V. Zizler) **46** #746 47H15
Sardarov, S. S. Certain asymptotic simplifications of heat transport equations. (Russian) *Functional analysis, theory of functions and their applications*, No. 1 (Russian), pp. 164-170, 9-10. *Dagestan. Gos. Univ., Makhachkala*, 1974. (Editors) **58** #29465 35Q99
Sardelis, D. A. The tree graphs of quantum gravity and the Reissner-Nordström solution. *General Relativity and Gravitation* **6** (1975), no. 6, 551-565. (Author's summary) **55** #11906 83J3
lo Sardo, P. See Lo Sardo, P.
Sarehanjan, A. G. (with Agajan, S. S.) On the construction of Hadamard matrices. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **65** (1977), no. 4, 199-203. (N. Ito) **58** #288 05B20
Saren, V. È. Convergence of the method of discrete vortices. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 2, 385-395, 479. (Author's summary) **58** #19809 76J65
Saretalo, Lauri On the optimal search for a target whose motion is a Markov process. *J. Appl. Probability* **10** (1973), 847-856. (H. Taylor) **50** #12220 90B40

- att, Jack** The eightfold way as a consequence of the general theory of relativity. *Collect. Phenom.* **1**, no. 3, 169-172 (1974). (Shin-ichi Kitamura) **53** #2170 81.22 (83.53)
- attil, Gad B.** See Chouraqui, Saadia. **56** #11690
- an, J. Denis** The validity of Nagar's expansion for the moments of econometric estimators. *Econometrica* **42** (1974), 169-176. (V. K. Srivastava) **54** #4026 62P20 (62E20)
- (with Drettakis, E. G.) Missing data in an autoregressive model. *Internat. Econom. Rev.* **15** (1974), 39-58. (Peter M. Robinson) **56** #4085 62M10
- Some discrete approximations to continuous time stochastic models. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 74-90. (C. P. Tsokos) **51** #14506 62P20
- Gram-Charlier approximations applied to t ratios of k -class estimators. *Econometrica* **43** (1975), 327-346. (Author's summary) **55** #13717 62P20 (62E20)
- Some discrete approximations to continuous time stochastic models. *Statistical inference in continuous time economic models*, pp. 27-79. *Contributions to Econom. Anal.*, Vol. 99, North-Holland, Amsterdam, 1976. (See Zbl **357** #62067; MR **58** #31693) 62P20
- Econometric estimators and the Edgeworth approximation. *Econometrica* **44** (1976), no. 3, 421-448. (V. K. Srivastava) **54** #4027 62P20 (62E20)
- (with Espasa, Antoni) The spectral estimation of simultaneous equation systems with lagged endogenous variables. *Internat. Econom. Rev.* **18** (1977), no. 3, 583-605. (G. Tintner) **56** #9889 62P20
- See also Box, Michael J., **47** #4376; Econometric model performance: comparative simulation studies of models of the U.S. economy, **50** #9320; Econometric model performance: comparative simulation studies of models of the U.S. economy, **50** #9322 and Lyttkens, Ejnar, **56** #4104
- gent, R. W. H.** (with Sebastian, D. J.) Numerical experience with algorithms for unconstrained minimization. *Numerical methods for non-linear optimization* (Conf., Dundee, 1971), pp. 45-68. Academic Press, London, 1972. (S. F. McCormick) **52** #2209 65K05
- Minimization without constraints. *Optimization and design* (Internat. Summer School, Louvain, 1971), pp. 37-75. Prentice-Hall, Englewood Cliffs, N.J., 1973. (F. A. Lootsma) **49** #6617 65K05
- (with Sebastian, D. J.) On the convergence of sequential minimization algorithms. *J. Optimization Theory Appl.* **12** (1973), 567-575. (J. E. Dennis, Jr.) **48** #5383 65K05
- (with Murtagh, B. A.) Projection methods for non-linear programming. *Math. Programming* **4** (1973), 245-268. (W. W. Breckner) **52** #16646 90C30
- Reduced-gradient and projection methods for nonlinear programming. *Numerical methods for constrained optimization* (Proc. Sympos., National Physical Lab., Teddington, 1974), pp. 149-174. Academic Press, London, 1974. (Vincențiu Dumitru) **58** #15191 90C30
- (with Polak, Elijah; Sebastian, D. J.) On the convergence of sequential minimization algorithms. *J. Optimization Theory Appl.* **14** (1974), 439-442. (J. E. Dennis, Jr.) **50** #15339 65K05
- (with Mellefont, D. J.) Optimal measurement policies for control purposes. *Internat. J. Control* **26** (1977), no. 4, 595-602. (Jean-Michel Bismut) **56** #15093 93E20
- The decomposition of systems of, procedures and algebraic equations. *Numerical analysis* (Proc. 7th Biennial Conf., Univ. Dundee, Dundee, 1977), pp. 158-178. *Lecture Notes in Math.*, Vol. 630, Springer, Berlin, 1978. (T. Rus) **58** #3658 68A10 (65H10)
- An efficient implementation of the Lemke algorithm and its extension to deal with upper and lower bounds. Complementarity and fixed point problems. *Math. Programming Stud.* No. 7 (1978), 36-54. (J. A. Tomlin) **57** #9087 90C99
- See also Optimization and design, **48** #3456
- ges, Heidrun** Eine Anwendung des Selbergschen Siebes auf algebraische Zahlkörper. *Acta Arith.* **28** (1975/76), no. 4, 433-455. (Matti Jutila) **52** #10631 10H30
- Ein Beweis des Hilbertschen Basissatzes. *J. Reine Angew. Math.* **283/284** (1976), 436-437. (R. E. MacRae) **53** #13200 13E05 (13J05)
- gorodskaja, L. L.** (with Gil', M. I.) A certain approximate method for the inversion of the Laplace transform of functions of several variables. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 487-489, 534. (Walter Gautschi) **49** #4220 65D30
- (with Maglina, E. I.) An approximate method for the solution of an abstract Cauchy problem. (Russian) *Theory of functions. Differential equations and their applications*, No. 1 (Russian), pp. 210-213, 221. *Kalmyck. Gos. Univ., Elista*, 1976. (Authors' summary) **58** #28958 34G05
- gsjan, I. S.** (with Levitan, B. M.) ★Введение в спектральную теорию. Самосопряженные обыкновенные дифференциальные операторы. (Russian) [Introduction to spectral theory. Selfadjoint ordinary differential operators] *Izdat. "Nauka", Moscow*, 1970. 671 pp. (R. C. Gilbert) **45** #8911 34B25 (47E05)
- A uniqueness theorem for the solution of the inverse problem for a one-dimensional Dirac system. (Russian) *Some boundary value problems of ordinary differential equations* (Russian), pp. 3-13. *Univ. Družby Narodov, Moscow*, 1970. (M. Švec) **51** #981 34B05
- (with Saakjan, R. S.) The asymptotic behavior of the spectral matrix of a Dirac system of order $2n$. (Russian) *Some boundary value problems of ordinary differential equations* (Russian), pp. 14-35. *Univ. Družby Narodov, Moscow*, 1970. (M. Kakabadze) **51** #10777 34D05
- Two-sided asymptotic analysis of the number of eigenvalues of a non-semibounded Dirac operator. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 1402-1436. (J. Wiesner) **48** #6537 34B25 (81.34)
- (with Levitan, B. M.) ★Introduction to spectral theory: selfadjoint ordinary differential operators. Translated from the Russian by Amiel Feinstein. Translations of Mathematical Monographs, Vol. 39. American Mathematical Society, Providence, R.I., 1975. xi + 525 pp. (Editors) **51** #6026 34B25 (35Pxx, 47A10)
- See also Boundary value problems of ordinary differential equations, **50** #4195
- han, A. E.** See Proceedings: Session of the International Statistical Institute, **49** #8143
- l-futūh aḥmad ibn muḥammad ibn as-Sari** See Abū l-Futūh Aḥmad ibn Muḥammad ibn as-Sari
- l, József** (with Fényes, Tomás) Periodically changing economic processes. (Hungarian. English and Russian summaries) *Sigma—Mat.-Közgazdasági Folyóirat* **10** (1977), no. 1-2, 1-10. (Peter Bod) **58** #4230 90A15
- Sari, R. R.** (with Merlini, D.) On the ν -dimensional one-component classical plasma: the thermodynamic limit problem revisited. *J. Statist. Phys.* **14** (1976), no. 2, 91-100. (L. Navarro) **56** #7704 82.47
- Saric, William S.** (with Lekoudis, Spyridon G.; Nayfeh, Ali Hasan) Third-order resonant wave interactions. *Phys. Fluids* **20** (1977), no. 11, 1793-1795. (Authors' summary) **56** #14092 76.41
- Saridis, George N.** On a class of performance-adaptive self-organizing control systems. *Pattern recognition and machine learning* (Proc. Japan-U.S. Sem. Learning Process in Control Systems, Nagoya, 1970), pp. 204-220. Plenum Press, New York, 1971. (K. Nakamura) **56** #8121 93C40
- (with Badavas, Paul C.) A performance-adaptive self-organizing control of a class of distributed systems. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-1** (1971), 105-110. (G. M. Ewing) **46** #8727 93E10
- (with Lobbia, Robert N.) Identification and control of multivariable stochastic feedback systems. *J. Cybernet.* **3** (1973), no. 1, 40-59. (H. J. Kushner) **49** #4628 93E10
- (with Fensel, P. A.) Stability considerations on the expanding subinterval performance adaptive SOC algorithm. *J. Cybernet.* **3** (1973), no. 2, 26-39. (Yuzo Yamane) **51** #5131 93E15
- Stochastic approximation methods for identification and control—a survey. System identification and time-series analysis. *IEEE Trans. Automatic Control* **AC-19** (1974), 798-809. (E. Parzen) **55** #14375 93E10 (62L20)
- (with Hofstadter, Robert F.) A pattern recognition approach to the classification of nonlinear systems. *IEEE Trans. Systems Man and Cybernet.* **SMC-4** (1974), 362-371. (Authors' summary) **56** #11403 93E10 (68A45)
- Fuzzy notions in nonlinear system classification. *J. Cybernet.* **4** (1974), no. 2, 67-82. (Author's summary) **57** #5371 93E99 (68A45)
- ★Self-organizing control of stochastic systems. Control and Systems Theory, Vol. 4. Marcel Dekker, Inc., New York-Basel, 1977. xxi + 488 pp. (Lennart Ljung) **58** #9585 93C40 (93E10)
- (with Lee, C. S. G.) Optimal control approximations for trainable manipulators. *Proceedings of the 1977 IEEE Conference on Decision and Control* (New Orleans, La., 1977), Vol. 1, pp. 749-754. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) **58** #20688 93C10
- Expanding subinterval random search for system identification and control. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 3, 405-412. (I. Gustavsson) **58** #15586 93E10
- See also Fuzzy automata and decision processes, **56** #11673
- Šarifaḥ, Ja. S.** (with Džuraev, T. D.) Some boundary value problems for third order partial differential equations. (Russian) *Boundary value problems for differential equations*, No. 2 (Russian), pp. 80-96, 186. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1972. (Authors' summary) **56** #12630 35M05
- (with Džuraev, T. D.) Boundary value problems for a class of third order equations. (Russian) *Boundary value problems for differential equations*, 4 (Russian), pp. 48-76, 190. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (Authors' summary) **57** #13152 35G30
- (with Džuraev, T. D.) Boundary value problems for third order equations of parabolic-hyperbolic type. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **18** (1974), no. 3, 24-28, 102. (T. Kal'menov) **50** #5206 35M05
- Some boundary value problems for third order equations with the heat conduction operator in the principal part. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 45-48, 105. (D. K. Gvazava) **52** #14595 35G25
- Šarifova, T.** The oscillatory nature of the solutions of certain second order nonlinear difference equations. (Russian) *Collection of scientific works of postgraduates*, No. XI: *Mathematics and physics* (Russian), pp. 35-43. *Univ. Družby Narodov, Moscow*, 1972. (I. Stamate) **50** #804 39A10
- The oscillatoriness of the solutions of a second order non-linear difference equation. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 4, 65-67. (D. Izjumova) **47** #9107 39A12 (34C10)
- The oscillation of the solutions of certain difference equations. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Vyp.* **23** (1974), 39-49, 223. (E. G. Djakonov) **57** #938 39A10
- (with Turdiev, T.) Linear functional-difference equations. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 33-37, 104. (Karol Baron) **53** #3534 39A25
- (with Gromova, P. S.) The oscillation of the solutions of difference equations. (Russian. English summary) *Trudy Sem. Teor. Differencial Uravnenii s Otklon. Argumentom Univ. Družby Narodov Patrisa Lumumby* **9** (1975), 39-52. (R. Kodnár) **52** #14717 39A10
- (with Turdiev, T.) The oscillatory nature of the solutions of a second order linear difference equation with variable coefficients. (Russian) *Boundary value problems for differential equations and their applications* (Russian), pp. 135-140, 159. *Fan, Uzbek. SSR, Tashkent*, 1976. (Authors' summary) **58** #29522 39A10
- Šariĭ, T. A.** (with Kostenko, V. G.) The investigation of boundary value problems for a certain quasilinear equation. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1972**, no. 7, 22-28, 132. (Ja. A. Roitberg) **50** #13845 35B20 (35Q99)
- Šarikadze, Dz. V.** (with Hantadze, A. G.) The uniqueness of the solution of a boundary value problem of the dynamics of the ionosphere. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **62** (1971), 305-307. (E. Zeidler) **46** #5861 35Q99 (76.35)
- The two-dimensional flow of a viscous incompressible fluid between two parallel walls. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **63** (1971), 289-292. **45** #1472 76.35
- Šarin, V. I.** A way of constructing algebras of generalized functions. (Russian) *Ural. Gos. Univ. Mat. Zap.* **10**, no. 2 *Issled. Sovrem. Mat. Anal.*, 177-186, 219 (1977). (Z. Zieležny) **58** #2257 46F10
- Sario, Leo** (with Kwon, Young K.) A maximum principle for bounded harmonic functions on Riemannian spaces. *Canad. J. Math.* **22** (1970), 847-854. (M. Glasner) **54** #13780a 53C20 (31C99, 30A50)

- (with Kwon, Young K.) A maximum principle for Dirichlet-finite harmonic functions on Riemannian spaces. *Canad. J. Math.* **22** (1970), 855-862. (M. Glasner) **54** #13780b 53C20 (31C99, 30A50)
- (with Lin, I.) Green's lines on Royden's compactification of a Riemannian space. *J. Indian Math. Soc.* **34** (1970), no. 3-4, 159-174 (1971). (C. Wang) **58** #11471 31C99
- (with Wang, Cecilia Y.; Range, Michael) Biharmonic projection and decomposition. *Ann. Acad. Sci. Fenn. Ser. A I No.* **494** (1971), 15 pp. (M. Goldstein) **57** #9962 30A52
- (with Kwon, Young K.; Walsh, B.) Behavior of biharmonic functions on Wiener's and Royden's compactifications. (French summary) *Ann. Inst. Fourier (Grenoble)* **21** (1971), no. 3, 217-226. (A. M. White) **49** #5385 31C05
- (with Lin, I.) HD-functions on Royden's compactification of a Riemannian space. *J. Indian Math. Soc. (N.S.)* **35** (1971), 119-134 (1972). (G. G. Weill) **46** #9896 53C20 (31C05)
- (with Kwon, Young K.) Harmonic functions on a subregion of a Riemannian manifold. *J. Indian Math. Soc. (N.S.)* **35** (1971), 135-161 (1972). (H. Wu) **50** #2529 31B25 (53C20)
- (with Kawai, Kazumitsu) Extremal properties of quasiharmonic forms and functions. *Kōdai Math. Sem. Rep.* **23** (1971), 267-275. (M. Glasner) **46** #839 53C65
- (with Kawai, Kazumitsu) Extremal solutions of $\Delta u = Pu$. *Kōdai Math. Sem. Rep.* **23** (1971), 276-289. (W. H. Ow) **45** #5915 53C20 (31B05, 58G99)
- (with Chang, John) Royden's algebra on Riemannian spaces. *Math. Scand.* **28** (1971), 139-158. (J. Lelong-Ferrand) **47** #2519 53C20 (30A48, 46J10)
- (with Nakai, Mitsuru) A property of biharmonic functions with Dirichlet finite Laplacians. *Math. Scand.* **29** (1971), 307-316 (1972). (B. Walsh) **46** #9897 53C20 (31B30)
- (with Nakai, Mitsuru) Dirichlet finite biharmonic functions with Dirichlet finite Laplacians. *Math. Z.* **122** (1971), 203-216. (M. Glasner) **45** #2616 53C20 (31B05)
- (with Nakai, Mitsuru) Biharmonic functions on Riemannian manifolds. *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Mushelitsvili) (Russian)*, 329-335. *Izdat. "Nauka", Moscow*, 1972. (Manfred W. Kracht) **52** #6002 31B30 (53C20)
- (with Nakai, Mitsuru) Existence of bounded Dirichlet finite biharmonic functions. *Ann. Acad. Sci. Fenn. Ser. A I No.* **505** (1972), 13 pp. (E. Solomencev (RŽMat 1973 #1 B71)) **54** #10596 30A48 (31C05)
- (with Wang, Cecilia Y.) Parabolicity and existence of bounded biharmonic functions. *Comment. Math. Helv.* **47** (1972), 341-347. (H. Wu) **50** #2532 31B30 (53C20)
- (with Wang, Cecilia Y.) Polyharmonic classification of Riemannian manifolds. *J. Math. Kyoto Univ.* **12** (1972), 129-140. (K.-N. Chow) **45** #8825 30A48
- (with Wang, Cecilia Y.) Generators of the space of bounded biharmonic functions. *Math. Z.* **127** (1972), 273-280. (G. Coeuré) **47** #8888 31B30
- (with Wang, Cecilia Y.) The class of (p, q) -biharmonic functions. *Pacific J. Math.* **41** (1972), 799-808. (Y. Kusunoki) **47** #5780 53C20 (31B30)
- (with Nakai, Mitsuru) Existence of Dirichlet finite biharmonic functions. *Ann. Acad. Sci. Fenn. Ser. A I No.* **532** (1973), 34 pp. (D. H. Armitage) **54** #13781 53C20 (31C99)
- (with Chung, Lung Ock; Wang, Cecilia Y.) Riemannian manifolds with bounded Dirichlet finite polyharmonic functions. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 809-814 (1974). (M. Nakai) **57** #9994 31C05
- (with Wang, Cecilia Y.) Positive harmonic functions and biharmonic degeneracy. *Bull. Amer. Math. Soc.* **79** (1973), 182-187. (H. L. Jackson) **46** #9899 53C20 (31B30)
- (with Hada, Dennis; Wang, Cecilia Y.) Dirichlet finite biharmonic functions on the Poincaré N -ball. *Bull. Amer. Math. Soc.* **79** (1973), 914-915. (H. Wu) **49** #7467 31B30 (53C20)
- (with Wang, Cecilia Y.) Quasiharmonic functions on the Poincaré N -ball. *Bull. Amer. Math. Soc.* **79** (1973), 922-923. (H. Wu) **48** #2411 31B30 (53C20)
- (with Mirsky, Norman; Wang, Cecilia Y.) Bounded polyharmonic functions and the dimension of the manifold. *J. Math. Kyoto Univ.* **13** (1973), 529-535. (F. Barański) **50** #2530 31B30 (53C20)
- (with Nakai, Mitsuru) Existence of bounded biharmonic functions. *J. Reine Angew. Math.* **259** (1973), 147-156. (G. Coeuré) **47** #9482 53C20 (31B30)
- (with Wang, Cecilia Y.) Harmonic and biharmonic degeneracy. *Kōdai Math. Sem. Rep.* **25** (1973), 392-396. (Aatos Lahtinen) **48** #12403 53C20 (31B05)
- (with Wang, Cecilia Y.) Radial quasiharmonic functions. *Pacific J. Math.* **46** (1973), 515-522. (M. Nakai) **48** #550 31B99
- (with Wang, Cecilia Y.) Existence of Dirichlet finite biharmonic functions on the Poincaré 3-ball. *Pacific J. Math.* **48** (1973), 267-274. (B. Walsh) **50** #14582 53C20 (31B30)
- (with Wang, Cecilia Y.) Quasiharmonic functions on the Poincaré N -ball. *Rend. Mat.* (6) **6** (1973), 749-762. (Lung Ock Chung) **53** #5910 31C05
- Biharmonic measure. *Ann. Acad. Sci. Fenn. Ser. A I No.* **587** (1974), 18 pp. (Joel L. Schiff) **56** #12292 31C10
- Completeness and existence of bounded biharmonic functions on a Riemannian manifold. *Ann. Inst. Fourier (Grenoble)* **24** (1974), no. 1, 311-317. (Aatos Lahtinen) **50** #5688 53C20 (31C10)
- A criterion for the existence of biharmonic Green's functions. *Bull. Amer. Math. Soc.* **80** (1974), 1183-1184. (G. Coeuré) **50** #7561 31B30 (30A48)
- (with Wang, Cecilia Y.) Riemannian manifolds of dimension $N > 4$ without bounded biharmonic functions. *J. London Math. Soc.* (2) **7** (1974), 635-644. (D. H. Armitage) **54** #13784 53C20 (31C99)
- (with Wang, Cecilia Y.) Parabolicity and existence of Dirichlet finite biharmonic functions. *J. London Math. Soc.* (2) **8** (1974), 145-148. (H. L. Jackson) **49** #9237 31B30 (53C20)
- (with Hada, Dennis; Wang, Cecilia Y.) Dirichlet finite biharmonic function on the Poincaré N -ball. *J. Reine Angew. Math.* **272** (1974), 92-101. (J. Lelong-Ferrand) **52** #1564 53C20 (31B20)
- Quasiharmonic degeneracy of Riemannian N -manifolds. *Kōdai Math. Sem. Rep.* (1974/75), 53-57. (C. Wang) **53** #8459 31C05
- (with Wang, Cecilia Y.) Harmonic L^p -functions on Riemannian manifolds. *Kōdai Math. Sem. Rep.* **26** (1974/75), 204-209. (N. Nakai) **54** #576 31C05
- (with Hada, Dennis; Wang, Cecilia Y.) Bounded biharmonic functions on Poincaré N -ball. *Kōdai Math. Sem. Rep.* **26** (1974/75), 327-342. (J. Ferrand) **53** #13602 31B30
- (with Hada, Dennis; Wang, Cecilia Y.) N -manifolds carrying bounded but Dirichlet finite harmonic functions. *Nagoya Math. J.* **54** (1974), 1-6. (W. H. O) **52** #8454 31B05
- (with Wang, Cecilia Y.) Counterexamples in the biharmonic classification of Riemannian 2-manifolds. *Pacific J. Math.* **50** (1974), 159-162. (G. Coeuré) **50** #7561 31B30 (53C20)
- (with Mirsky, Norman; Wang, Cecilia Y.) Parabolicity and existence of bounded Dirichlet finite polyharmonic functions. (Italian summary) *Rend. Ist. Mat. Univ. Trieste* **6** (1974), 41-50. (M. Nakai) **53** #13605 31C05
- (with Wang, Cecilia Y.) Negative quasiharmonic functions. *Tōhoku Math. J.* (2) (1974), 85-93. (R. M. Hervé) **49** #9239 31C99
- (with Chung, Lung Ock; Wang, Cecilia Y.) Quasiharmonic L^p -functions on Riemannian manifolds. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **2** (1975), no. 469-478. (M. Nakai) **53** #13607 31C05
- (with Chung, Lung Ock) Harmonic L^p functions and quasiharmonic degeneracy. *Indian Math. Soc. (N.S.)* **39** (1975), 21-28 (1976). (J. Ferrand) **54** #8519 53C (31B05)
- Biharmonic Green's functions and harmonic degeneracy. *J. Math. Kyoto Univ.* (1975), no. 2, 351-362. (B. Walsh) **56** #3328 31C05 (53C20)
- (with Chung, Lung Ock) Harmonic and quasiharmonic degeneracy of Riemannian manifolds. *Tōhoku Math. J.* (2) **27** (1975), no. 4, 487-496. (B. Walsh) **55** #12936 31C05 (53C20)
- (with Nakai, Mitsuru) Manifolds with strong harmonic boundaries but without Green's functions of clamped bodies. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **3** (1975), no. 4, 665-670. (C. Wang) **54** #7819 31C05
- (with Nakai, Mitsuru) Parabolic Riemannian planes carrying biharmonic Green's functions of the clamped plate. *J. Analyse Math.* **30** (1976), 372-389. (Lung Ock Chung) **56** #1223 53C20 (73.53)
- A criterion for the existence of biharmonic Green's functions. *J. Austral. Math. Soc. Ser. A* **21** (1976), no. 2, 155-165. (Lung Ock Chung) **52** #11089 31C05 (30A48)
- (with Nakai, Mitsuru) Harmonic functions on a Riemannian ball. *Math. Proc. Cambridge Philos. Soc.* **80** (1976), no. 2, 277-282. (C. Wang) **54** #575 31C05
- (with Ralston, James V.) A relation between biharmonic Green's functions of simply supported and clamped bodies. *Nagoya Math. J.* **61** (1976), 59-71. (Lung Ock Chung) **53** #11080 31B30
- (with Nakai, Mitsuru; Wang, Cecilia Y.; Chung, Lung Ock) ★Classification theory of Riemannian manifolds. Harmonic, quasiharmonic and biharmonic functions. *Lecture Notes in Mathematics*, Vol. 605. Springer-Verlag, Berlin-New York, 1977. xx + 498 pp. ISBN 3-540-08358-8 (J. Mitchell) **58** #22612 31A30 (30A48, 31C05)
- (with Nakai, Mitsuru) Green's function of the clamped punctured disk. *J. Austral. Math. Soc. Ser. B* **20** (1977), no. 2, 175-181. (M. Ohtsuka) **58** #1195 31A30 (73.31)
- (with Nakai, Mitsuru) On Hadamard's problem for higher dimensions. *J. Reine Angew. Math.* **291** (1977), 145-148. (Lung Ock Chung) **57** #12880 31B30 (73.31)
- (with Chung, Lung Ock; Wang, Cecilia Y.) Biharmonic and quasiharmonic degeneracy. *Kōdai Math. Sem. Rep.* **29** (1977), no. 1-2, 186-196. (Editors) **58** #28562 31C05
- (with Nakai, Mitsuru) A nonexistence test for biharmonic Green's functions of clamped bodies. *Math. Scand.* **40** (1977), no. 1, 151-160. (D. H. Armitage) **56** #3330 31C99
- (with Chung, Lung Ock; Wang, Cecilia Y.) Harmonic and polyharmonic degeneracy. *Math. Scand.* **40** (1977), no. 2, 288-292. (M. Nakai) **57** #9995 31C05
- (with Nakai, Mitsuru) Existence of biharmonic Green's functions. *Proc. London Math. Soc.* (3) **36** (1978), no. 2, 337-368. (Lung Ock Chung) **58** #1203 31B30
- Šariphodževa, F. (with Salihov, G. N.) Cubature formulae for the computation of integrals over the surface of a hypersphere. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 4, 8-9. (I. Šelihova (RŽMat 1974 #B1228)) **54** #28020D99 (65D30)
- A quadrature formula with number-theoretic nets. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Vyp.* **23** (1974), 11-15, 221-222. (Gheorghe Coman) **58** #24876 65D30 (10G05)
- Šariphodževa, Z. The solution of a boundary value problem with a small parameter multiplying the highest derivative and with singularities in the coefficients. (Russian) *Zh. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 885-896, 1090. (M. Ráb) **48** #12851 65L10
- Šaripov, D. S. (with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šatalov, A. S.; Solodovnikov, V. V.; Teodorčik, K. F.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 1: Математическое описание, анализ устойчивости и качества систем автоматического регулирования. (Russian) [Theory of automatic control. Book 1. Mathematical description, analysis of stability and quality of automatic control systems] Edited by V. V. Solodovnikov. *Izdat. "Mašinostroenie", Moscow*, 1967. 768 pp. (Editor) **50** #6557 93-02
- (with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šatalov, A. S.; Solodovnikov, V. V.; Teodorčik, K. F.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. Band 1. Stetige lineare Systeme. Gesamtdirektion der Originalausgabe von W. W. Solodovnikov. Aus dem Russischen übersetzt von Klaus Biener, Klaus Franke, Manfred Krauß, Helmut Otto, Edmund Suschke und Bernd Weber. Deutsche Bearbeitung unter Manfred Peschel. *VEB Verlag Technik, Berlin*, 1971. 744 pp. (pp. foldouts) (W. Oppelt (Zbl 229 #93002)) **50** #6558 93-02
- Šaripov, Ju. Š. The chromatic class of a complementary multigraph. (Russian) Questions on differential equations. *Trudy Samarkand. Gos. Univ. (N.S.) No.* **191** (1970), 217-219

(See RŽMat 1972 #2 V365; MR 52 #7762) 05C15

An algebraic operation as a law of correspondence of two elements to a third. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) Vyp. 235 Voprosy Algebr, Teorii Čisel, Differentsial' i Integral. Uravnenii* (1973), 147-157. 58 #27700 08A25

Nov, S. R. The existence of a singular point. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1968, no. 3, 3-6. (M. Bertolino) 52 #14462 34C05

Investigation of the neighborhood of a singular point in three-dimensional space. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1969, no. 2, 6-8. (M. Bertolino) 47 #7123 34C05

(with Amonov, A. A.) Investigation in the large of a system of three differential equations of a special form. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) No. 181* (1970), 184-194. (K. R. Schneider) 45 #3837 34C99

A classification of integral varieties of a homogeneous three-dimensional system by the structure of the limit sets. (Russian) *Differentsial'nye Uravneniya* 7 (1971), 461-470. (J. Auslander) 46 #3916 34C35

(with Husanov, B.) Generalized nodes and generalized saddle points of a three-dimensional homogeneous system. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1971, no. 11, 9-11. (M. Bertolino) 47 #7116 34C05

(with Nguen Suan-hi) The topological equivalence near the singular point of asymptotically stable systems of differential equations. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 15 (1971), no. 5, 38-42. (J. K. Hale) 46 #444 34C05

The existence of an exclusive direction. (Russian) *Volž. Mat. Sb. No. 8* (1971), 245-250. (L. Reizig) 45 #5471 34C05

Investigation of the infinitely removed singular point of a certain system. (Russian) *Volž. Mat. Sb. No. 8* (1971), 251-255. (L. Reizig) 45 #5472 34C05

Classification of the three-dimensional integral manifolds of a three-dimensional homogeneous system. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) Vyp. 224 Voprosy Kačestven. Teorii Differentsial. Uravnenii* (1972), 118-128. (Editors) 57 #6653 34C30

The topological equivalence of singular points of higher order. (Russian) *Proceedings of the International Symposium on Topology and its Applications (Buda, 1972)*, pp. 233-234. *Savez Društava Mat. Fiz. i Astronom., Belgrade*, 1973. (A. Somolinos) 49 #716 34C05

(with Matvienko, A. M.) A certain classification of the n -dimensional homogeneous system. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 17 (1973), no. 5, 24-29, 77. (C. E. Langenhop) 49 #742 34C30

(with Kulmatov, Dž. G.) A sufficient condition for the existence of regular 0-curves in a nonautonomous multidimensional differential system. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 18 (1974), no. 2, 36-41, 93. (L. Reizig) 49 #5465 34C05

(with Kulmatov, Dž. G.) The compatible existence of the singular points of a differential system of special form. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 1976, no. 5, 34-40, 84. (L. Reizig) 55 #3413 34C05

Global investigation of a homogeneous three-dimensional system based on to the structure of limit sets of trajectories. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) No. 296* (1976), 150-158, 180-181. (Author's summary) 58 #22827 34C30 (58F15)

(with Šestakov, A. A.) The connection between the Ljapunov exponents of a homogeneous and a quasihomogeneous system. (Russian) *Dokl. Akad. Nauk SSSR* 239 (1978), no. 1, 63-66. (C. S. Coleman) 57 #6668 34D05 (34D20)

Nov, T. H. Imbedding theorems in classes of periodic generalized functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 15 (1971), no. 1, 32-35. (Z. Zielezny) 45 #2465 46E35

Cubature formulas that are universally optimal in a class of Banach spaces. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* No. 5 (1971), 37-41. (See RŽMat 1972 #2 B866) 65J05

An upper bound of the norm of the error functional for cubature formulae in the spaces $H_p^s(\Omega)$, with a boundary layer that is regular in the sense of S. L. Sobolev. (Russian) *Dokl. Akad. Nauk SSSR* 202 (1972), 51-53. (G. C. Barozzi) 45 #6188 65D30 (41A55)

A universal asymptotically optimal cubature formula in a class of Hilbert spaces. (Russian) *Sibirsk. Mat. Ž. 13* (1972), 230-232. (Walter Gautschi) 45 #7361 41A55

Nov, M. M. See Coding theory and information modeling. 49 #6994

Nov, R. M. Properties of a certain class of degenerate elliptic systems of second order equations. (Russian) *Differentsial'nye Uravneniya* 9 (1973), 2280-2283, 2304. (S. A. Tersenov) 48 #9105 35J70

An elliptic system of n th order equations with discontinuous coefficients. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geol.-Him. Nauk* 1973, no. 1(47), 20-22, 112. (G. Wildenhain) 52 #3726 35J40

The normal solvability of the Dirichlet problem for a certain degenerate elliptic system. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 2, 343-347, 381. (Author's summary) 58 #6692 35J70

On the question of the normal solvability of the Dirichlet problem for certain degenerate elliptic systems. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geol.-Him. Nauk* 1977, no. 3(65), 20-27. (Editors) 57 #13174 35J55 (30A92)

Šev, O. O. (with Tocenok, V. G.) An upper bound for the number of states of a Moore automaton with finite memory. *Avtomatika* 1974, no. 1, 79-81 (Ukrainian); translated as *Soviet Automat. Control* 7 (1974), no. 1, 66-68. (Editors) 50 #12483 94A30

Je, Anil K. (with Biswas, Nripendra N.) An algorithm for testing 2-summability of Boolean functions. *IEEE Trans. Computers* C-26 (1977), no. 10, 1049-1053. (Authors' summary) 58 #26583 94A20

Kadi, Károlyi Combinatorial proof for a theorem of H. E. Daniels. *Combinatorial theory and its applications, III (Proc. Colloq., Balatonfüred, 1969)*, pp. 975-979. North-Holland, Amsterdam, 1970. (Z. A. Lomnicki) 47 #3187 05A05

On some inequalities for balanced incomplete block design. (German summary) *Proceedings of the Fourth Conference on Probability Theory (Braşov, 1971)*, pp. 435-437. Editura Acad. R. S. R., Bucharest, 1973. (S. S. Shrikhande) 53 #7812 05B05 (62K10)

On the exact distributions of statistics of Kolmogorov-Smirnov type. Collection of articles dedicated to the memory of Alfréd Rényi, II. *Period. Math. Hungar.* 3 (1973),

9-12. (S. G. Mohanty) 48 #9961 62G10 (62E15)

(with Vincze, István) ★Mathematical methods of statistical quality control. Probability and Mathematical Statistics, Vol. 18. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1974. 415 pp. (W. Uhlmann) 49 #8258 62N10

Comments on Imrényi's article entitled "Canonical correlation theory" (Szigma—Mat.-Közgazdasági Folyóirat 5 (1972), 273-290).

Szigma—Mat.-Közgazdasági Folyóirat 7 (1974), 191. (Editors) 50 #15164 62H20

On the convergence of the expectation of the sample quantile. *Limit theorems of probability theory (Colloq., Keszthely, 1974)*, pp. 341-345. *Colloq. Math. Soc. János Bolyai*, Vol. 11, North-Holland, Amsterdam, 1975. (P. K. Sen) 52 #15785 62E20

The consistency of the Shapiro-Francia test. *Biometrika* 62 (1975), no. 2, 445-450. (M. Knott) 52 #2023 62G10

(with Tusnády, Gábor) Testing for normality and for the exponential distribution. *Proceedings of the Fifth Conference on Probability Theory (Braşov, 1974)*, pp. 99-118. Editura Acad. R. S. R., Bucharest, 1977. (M. Knott) 56 #13442 62G10

See also Progress in statistics, 50 #5999

Sarkany, E. F. (with Liniger, Werner) Exponential fitting of matricial multistep methods for ordinary differential equations. *Math. Comp.* 28 (1974), 1035-1052. (J. D. Lambert) 51 #4682 65L05

de Sarkar, A. K. See De Sarkar, A. K.

Sarkar, Annapurna Spectrum of a class of Dirac type differential operator. *J. Indian Inst. Sci.* 59 (1977), no. 11, 483-491. (Alan D. Sloan) 57 #6605 34B25 (35P05)

Spectrum of a Schrödinger operator with a class of damped oscillating potentials. *J. Indian Inst. Sci.* 60 (1978), no. 1, 65-71. (R. C. Varma) 57 #11441 81.34

Sarkar, B. (with Chandrasekhara Rao, K.; Ramachandran, P. S.) A new quadratic performance measure for the design of linear systems. *Indian J. Pure Appl. Phys.* 11 (1973), no. 5, 322-327. (K. Swarup) 50 #6594 93C45

A feedback inventory control system with uncertain average demand. *Opsearch* 11 (1974), no. 4, 173-182. (Yvo M. I. Dirickx) 53 #4944 90B05

A feedback inventory control system with linear cost. *Sankhyā Ser. B* 37 (1975), no. 2, 241-247. (Author's summary) 58 #32885 90B05

Sarkar, Mira (with Mukherjee, Tarun Kumar) Some remarks on supremum of topologies. *An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* 23 (1977), no. 2, 241-249. (Jimmie D. Lawson) 58 #12883 54A10 (46A15)

Sarkar, Pranab Kumar (with Mukherjee, Triptimoy) A method of determination of the articulation points of a graph. *Bull. Calcutta Math. Soc.* 64 (1972), 41-45. (Authors' summary) 49 #10608 05C99

(with Mukherjee, Triptimoy) Some theorems on articulation points of a connected graph. *Bull. Calcutta Math. Soc.* 64 (1972), 47-49. (Authors' summary) 49 #10609 05C99

Sarkar, S. C. (with Barnes, K. J.; Dondi, P. H.) General form of the SU(3) Gürsey matrix. *J. Phys. A* 5 (1972), 555-562. (Authors' summary) 53 #9901 81.22

de Sarkar, S. C. See De Sarkar, S. C.

Sarkar, S. K. (with Aatre, V. K.; Hastings-James, R.) Observers for systems with extended equations of state. *Matrix Tensor Quart.* 26 (1975/76), no. 3, 106-109. (Zbl 332 #93012) 58 #4492 93B05

Sarkar, Sar Ben Local Higgs-Kibble type theories in the unitary gauge. *Nuclear Phys.* B56 (1973), no. 2, 493-506. (Author's summary) 55 #4984 81.22

Sarkar, Sasabindu On the trace of the product of Dirac matrices occurring as $A' = A'_1 \gamma_1 + iA'_2$. *Acta Phys. Acad. Sci. Hungar.* 34 (1973), 13-23. (Author's summary) 56 #10482 81.15

On the trace of the product of Pauli matrices occurring as $a_i = a_i \sigma_i + i a_{i+1}$ and that of the product of Dirac matrices, and the interconnection between them. *Internat. J. Theoret. Phys.* 8 (1973), 171-178. (Author's summary) 50 #15624 81.15

On the trace and the relativistic scalar products involving Dirac matrices γ_i and the 4×4 unit matrix. *Internat. J. Theoret. Phys.* 10 (1974), 291-296. (Author's summary) 54 #9376 81.15

Sarkar, Tapas K. An exact lower confidence bound for the reliability of a series system where each component has an exponential time to failure distribution. *Technometrics* 13 (1971), 535-546. 45 #2874 62N05

Sarker, S. (with Trullinger, S. E.; Bishop, A. R.) Solitary-wave solution for a complex one-dimensional field. *Phys. Lett. A* 59 (1976), no. 4, 255-258. (Authors' summary) 56 #10547 81.35

Sarkhel, D. N. On ω -approximately continuous Denjoy-Stieltjes integral. *Colloq. Math.* 28 (1973), 111-131. (W. D. L. Appling) 49 #487 26A39

On measures induced by an arbitrary function and integrals relative to a function of bounded residual variation. *Rev. Roumaine Math. Pures Appl.* 18 (1973), 927-949. (T. A. Botts) 48 #2335 28A25

Vitali covering theorem in topological spaces. *Bull. Calcutta Math. Soc.* 66 (1974), no. 2, 101-106. (A. Revuz) 53 #5826 28A15

On ω -approximately continuous Perron-Stieltjes and Denjoy-Stieltjes integral. *J. Austral. Math. Soc.* 18 (1974), no. 2, 129-152. (From the introduction) 58 #1055 26A39

A generalization of the Vitali covering theorem. *Fund. Math.* 97 (1977), no. 3, 151-156. (W. F. Pfeffer) 58 #11311 28A15

The pointwise characterization of derivatives of integrals. *Proc. Amer. Math. Soc.* 63 (1977), no. 1, 125-128. (Calixto P. Calderón) 55 #10627 28A15

A criterion for Perron integrability. *Proc. Amer. Math. Soc.* 71 (1978), no. 1, 109-112. (S. Dubuc) 58 #17006 26A39

Sarkisian, A. S. (with Marčuk, G. I.; Kočergin, V. P.) Calculations of flows in a baroclinic ocean: numerical methods and results. *Geophys. Fluid Dynamics* 5 (1973), no. 1, 89-99. (Editors) 57 #15289 86.65 (76.65)

Sarkisjan, A. A. (with Petrov, A. A.) Detection of a signal by the receptive fields of a network. (Russian) *Avtomat. i Vyčisl. Tehn.* 1969, no. 5, 67-73. (Authors' summary) 45 #8387 94A05

Sarkisjan, G. Z. A notion of the effective solvability of predicates. (Russian. Armenian summary) *Molod. Naučn. Rabotnik* 2(22) (1975), 21-24. (Not reviewed) 02G05

Sarkisjan, Ju. S. (with Jakovlev, A. V.) The homological determinacy of T-modules. (Russian) Rings and modules. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov.*

- (LOMI) 64 (1976), 104-126, 161. (S. P. Demuškin) 56 #11985 13D99
- Sarkisjan, M. S.** On the relationship between dissimilar deviators. *Izv. Akad. Nauk SSSR Meh. Tverd. Tela* 1972, 64-69 (Russian); translated as *Mechanics of Solids* 7 (1972), no. 4, 55-59 (1973). (P. Villaggio) 49 #4392 73.53
- Sarkisjan, O. A.** (with Pogossian, É. M.) A formalization of inductive generalization. (Russian. Armenian summary) *Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn.* 8 (1975), 157-175. (loose erratum) (G. Asser) 57 #86 02G05 (94A15, 05C10)
- Generalized D -graphs. (Russian. Armenian summary) *Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn.* 8 (1975), 176-187. (D. Ja. Kesel'man) 56 #5358 05C35
- The relation between algorithmic problems in groups and semigroups. (Russian) *Dokl. Akad. Nauk SSSR* 227 (1976), no. 6, 1305-1307. (O. V. Belegradek) 53 #7751 02F47 (20F10)
- Sarkisjan, R. A.** Conjugacy in free multinilpotent groups. (Russian) *Algebra i Logika* 11 (1972), 694-710, 737. (Charles S. Holmes) 48 #11331 20F10
- Stable automorphisms of certain classes of groups. (Russian) *Sibirsk. Mat. Ž.* 13 (1972), 1091-1106, 1198. (Author's summary) 58 #28198 20F55
- Sarkisjan, S. A.** (with Ahundov, V. M.; Minaev, É. S.) ★ Большие технические системы. Анализ и прогноз развития. (Russian) [Large-scale technological systems. An analysis and a forecast of their development] *Izdat. "Nauka", Moscow*, 1977. 350 pp. (1 foldout) (A. A. Pervozvanskii) 58 #4483 93A99 (90A20, 93A15)
- Sarkisjan, S. C.** (with Kočinjian, L. S.) Some properties of the solutions of Beltrami equations with analytic coefficients. (Russian) *Some problems in modern function theory (Proc. Conf. Modern Problems of Geometric Theory of Functions, Inst. Math., Acad. Sci. USSR, Novosibirsk, 1976)* (Russian), pp. 139-142. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Mat., Novosibirsk*, 1976. (Editors) 58 #22590 30A88
- (with Gol'dberg, A. A.; Kočinjian, L. S.) Some theorems of Picard type. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 13 (1978), no. 1, 23-35, 183. (W. K. Hayman) 58 #11413 30A70
- Sarkisjan, S. G.** (with Sarkisjan, S. R.) Algorithm for the analysis of context-free languages. (Russian. Armenian summary) *Molod. Naučn. Rabotnik* 2(24) (1976), 31-36. (V. N. Agafonov) 58 #8542 68A30
- Sarkisjan, S. O.** Certain methods in the physically nonlinear theory of three-layer plates. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* 26 (1973), no. 3, 37-46, 82. (Editors) 54 #14510 73.35
- Transmission of a load from a thin cylindrical shell of finite length to an infinite elastic cylinder. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 60 (1975), no. 3, 164-170. (S. Drobot) 52 #7273 73.45
- Sarkisjan, S. R.** (with Sarkisjan, S. G.) Algorithm for the analysis of context-free languages. (Russian. Armenian summary) *Molod. Naučn. Rabotnik* 2(24) (1976), 31-36. (V. N. Agafonov) 58 #8542 68A30
- Sarkisjan, V. S.** (with Ovsepjan, L. O.) A contact problem for an anisotropic half-plane with elastic bracing. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 52 (1971), 273-280. (R. C. T. Smith) 45 #4730 73.45
- (with Ovsepjan, L. O.) A periodic contact problem for an anisotropic half-plane with elastic coverings. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 53 (1971), 71-78. (R. C. T. Smith) 45 #4731 73.45
- ★ Некоторые задачи математической теории упругости анизотропного тела. (Russian) [Some problems of the mathematical theory of elasticity of an anisotropic body] *Izdat. Erevan. Univ., Erevan*, 1976. 535 pp. (J. Mazumdar) 58 #14096 73.00
- Self-similar solutions of the problem of axially symmetric filtration of two fluids that differ in their viscosities and densities. (Russian) *Dokl. Akad. Nauk SSSR* 227 (1976), no. 6, 1311-1318. (L. Dragoš) 57 #8397 76.35
- (with Mhitarjan, V. G.; Ovsepjan, L. O.) On a contact problem of nonlinear steady creep with an impression of two identical stamps in the half-plane. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* 30 (1977), no. 4, 44-56, 90. (Authors' summary) 58 #14182 73.45
- Sarkisjan, S. M.** (with Zlatkin, A. A.) A functional equation of continuously-discrete dynamic programming. (Russian) *Mathematical methods for the computer solution of optimal control problems*, No. 1 (Russian), pp. 92-96. *Vyčisl. Centr, Dnepropetrovsk Gos. Univ., Dnepropetrovsk*, 1974. (Editors) 58 #30633 49A99
- An estimate of the optimal control of systems that are described by van der Pol equations. (Russian) *Mathematical methods for the computer solution of optimal control problems*, No. 1 (Russian), pp. 124-130, 185-186. *Vyčisl. Centr, Dnepropetrovsk Gos. Univ., Dnepropetrovsk*, 1974. (Editors) 58 #33286 93C05
- Application of the continuously-discrete maximum principle to the solution of a class of nonlinear problems. (Russian) *Mathematical methods for the computer solution of optimal control problems*, No. 1 (Russian), pp. 131-138, 186. *Vyčisl. Centr, Dnepropetrovsk Gos. Univ., Dnepropetrovsk*, 1974. (Editors) 58 #33294 93C10
- See also **Mathematical methods for the computer solution of optimal control problems**. 58 #30674
- Sarkisyan, M. S.** See **Sarkisjan, M. S.**
- Šarko, V. V.** Smale's theorem for simply connected topological manifolds. (Russian) *Mathematics collection (Russian)*, pp. 119-121. *Izdat. "Naukova Dumka", Kiev*, 1976. (Ju. P. Solov'ev) 57 #13959 57A40
- Šarkov, Ju. A.** (with Mustafaev, L. G.) Semi-isomorphisms of semiheaps. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 11(138), 60-65. (G. Čupona) 48 #11381 20N10
- Semi-isomorphisms of completely simple semigroups. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1975, no. 2, 112-115. (G. Pollák) 52 #14115 20M10
- Structural isomorphisms of completely simple semigroups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1978, no. 4(191), 124-126. (M. K. Sen) 58 #22358 20M10
- Šarkova, N. V.** See **Voronina, N. V.**
- Šarkovskii, O. M.** Uniqueness conditions for functional equations. (Russian) *Trudy Sem. Mat. Fiz. Nelinein. Koleban.* 1 (1968), no. 2, 262-268. (R. D. Driver) 46 #568 39A15
- The problem of the uniqueness of the solutions of differential equations with deviating argument. (Russian) *Mathematical physics*, No. 8 (Russian), pp. 167-172. *Naukova Dumka, Kiev*, 1970. (R. D. Driver) 47 #590 34K05
- (with Kasperov, V. N.) Orbital stability. (Russian. English summary) *Proceedings of the Fifth International Conference on Nonlinear Oscillations (Kiev, 1969)*. Vol. 2: *Qualitative methods in the theory of nonlinear oscillations (Russian)*, pp. 209-215. *Izv. Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (I. Kiguradze) 48 #2498 34D10
- (with Peljuh, G. P.) A characterization of elementary and special functions means of functional relations. (Ukrainian. English and Russian summaries) *Dope Akad. Nauk Ukrain. SSR Ser. A* 1970, 994-998, 1053. (V. L. Makarov) 48 #1158 33A10 (39A15)
- The set of orbit-stable trajectories of a dynamical system. (Russian) *Asymptotic qualitative methods in the theory of nonlinear oscillations (Russian)*, pp. 204-207. *Izv. Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (J. Jarník) 50 #13738 34C35
- (with Poliščuk, V. M.) The general solution of linear differential-difference equations of neutral type. (Russian) *Differential-difference equations (Russian)*, 125-139. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (From the author's introduction) 51 #10802 34K05
- Stability in the large of trajectories and dynamical systems. (Russian) *Mathematical Summer School (Kaciveli, 1971)* (Russian), pp. 349-360. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1972. (L. Reizigš) 51 #14159 58F10
- (with Bondarčuk, V. S.) Reconstructibility of expanding endomorphisms from system of ω -limit sets. (Russian) *Dynamical systems, and questions on the stability of solutions of differential equations (Russian)*, pp. 28-34. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (L. A. Bunimovič) 54 #11395 58F10
- (with Husainov, D. Ja.) The stability of motion with respect to part of the variables. (Russian) *Dynamical systems, and questions on the stability of the solutions of differential equations (Russian)*, pp. 122-127. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (D. Bobrowski) 54 #10773 34D20
- (with Bondarčuk, V. S.) The partially ordered system of ω -limit sets of expanding endomorphisms. (Russian) *Dynamical systems, and questions on the stability of solutions of differential equations (Russian)*, pp. 128-164. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (L. A. Bunimovič) 54 #11396 58F10
- (with Dobrynskiĭ, V. A.) Nonwandering points of dynamical systems. (Russian) *Dynamical systems, and questions on the stability of the solutions of differential equations (Russian)*, pp. 165-174. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (A. Reinfelds) 54 #8734 58F99 (34C35)
- (with Peljuh, G. P.) The general solution of a certain class of nonlinear differential-functional equations of neutral type. (Russian) *Methods of approximate solution of differential and integral equations (Russian)*, pp. 208-229. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) 58 #1471 34K05
- (with Romanenko, O. Ju.) The solutions of an overdetermined system of functional equations. (Russian) *The method of integral manifolds in nonlinear differential equations (Russian)*, pp. 220-232. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (M. Kuczma) 51 #13504 39A30
- Characterization of the cosine. (Russian) *Aequationes Math.* 9 (1973), 121-128. (N. Smajdor) 48 #6746 39A20
- (with Dobrynskiĭ, V. A.) Orbit stability of trajectories. (Russian) *Differential'nye Uravnenija* 9 (1973), 558-559, 591. (L. Reizigš) 47 #7146 34C35 (58F10)
- (with Poliščuk, V. M.) Representation of the solutions of linear differential-difference equations of neutral type. (Russian) *Differential'nye Uravnenija* (1973), 1627-1645, 1740. (Š. Schwabik) 49 #5515 34K05
- (with Dobrynskiĭ, V. A.) Genericity of the dynamical systems almost all of whose trajectories are stable under constantly acting perturbations. (Russian) *Dokl. Akad. Nauk SSSR* 211 (1973), 273-276. (D. Newton) 48 #9762 58F10
- (with Peljuh, G. P.) ★ Введение в теорию функциональных уравнений. (Russian) [Introduction to the theory of functional equations] *Izdat. "Naukova Dumka", Kiev*, 1974. 119 pp. (A. Climescu) 51 #3735 39-02 (34K05)
- (with Peljuh, G. P.) The general solution of a system of functional equations in the neighborhood of a singular point. (Russian) *Functional and differential-difference equations (Russian)*, pp. 100-109. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (M. Kuczma) 51 #13500 39A15
- (with Husainov, D. Ja.) The stability of the solutions of differential equations with retarded argument. (Russian) *Functional and differential-difference equations (Russian)*, pp. 141-147. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (Š. Schwabik) 51 #10819 34K20
- Functional and functional-differential equations in which the deviation of the argument depends on the unknown function. (Russian) *Functional and differential-difference equations (Russian)*, pp. 148-155. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (Š. Schwabik) 51 #10815 34K15
- Globally stable dynamical systems. (Russian. Polish and English summaries) *Nonlinear vibration problems*, No. 15 (Proc. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part II), pp. 61-66. PWN—Polish Sci. Publ., Warsaw, 1974. (Author's summary) 56 #16069 34C35 (54H20)
- (with Mitropol'skii, Ju. O.; Romanenko, O. Ju.; Ševelo, V. M.) The state and prospects of development of the theory of differential equations with deviating argument. (Russian) Presented at the Fourth All-Union Conference on the Theory and Applications of Differential Equations with Deviating Argument (Kiev, 1975). *Ukrain. Mat. Ž.* 28 (1976), no. 2, 279-282. (Editors) 53 #8602 34Kxx
- (with Mitropol'skii, Ju. O.; Myškis, A. D.) The Fourth All-Union Conference on the Theory and Applications of Differential Equations with Deviating Argument. (Russian) Held at Kiev, September 23-26, 1975. *Uspehi Mat. Nauk* 31 (1976), no. 3 (189) 233-238. (Editors) 54 #675 34Kxx
- (with Mitropol'skii, Ju. O.) Development of the theory of differential equations with deviating argument at the Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR. (Russian) *Differential equations with deviating argument (Proc. Fourth All-Union Conf., Kiev, 1975)* (Russian), pp. 215-221, 305. *Izdat. "Naukova Dumka", Kiev*, 1977. (From the text) 58 #4921 01A65 (34Kxx)
- Classical functional equations: fundamental concepts, methods and results. (Russian) *Differential equations with deviating argument (Proc. Fourth All-Union Conf., Kiev, 1975)* (Russian), pp. 290-297, 306. *Izdat. "Naukova Dumka", Kiev*, 1977. (Author's summary) 58 #4921 01A65 (34Kxx)

- summary) **57** #13277 39A20
(with Ševelo, V. M.) Oscillatory nature and asymptotic behavior of the solutions of a class of differential equations with deviating argument. (Russian) *Problems of the asymptotic theory of nonlinear oscillations (Russian)*, pp. 257-263, 280. *Naukova Dumka, Kiev*, 1977. (Authors' summary) **58** #29015 34K15
(with Maistrenko, Ju. L.) Lowering the number of transformations of the argument in functional and differential-functional equations. (Russian) *Qualitative methods in the theory of differential equations with deviating argument (Russian)*, pp. 57-70. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Henryk Adamczyk) **58** #22909 34K05 (39A15)
(with Peljuh, G. P.) Linear difference equations with periodic coefficients. (Russian) *Qualitative methods in the theory of differential equations with deviating argument (Russian)*, pp. 91-100. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (From the introduction) **58** #17622 39A10
Structural theory of differentiable dynamical systems, and weakly nonwandering points. (Russian) *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2*, pp. 193-200. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Tech., No. 4N, Akademie-Verlag, Berlin*, 1977. (Ju. E. Glikli) **58** #24370 58F10
See also **Proceedings: International Conference on Nonlinear Oscillations, 1977** #8969; **Dynamical systems and questions on the stability of the solutions of differential equations**, **50** #7624; **Differential-difference equations**, **50** #10483; **Functional and differential-difference equations**, **50** #10484; **Summer School: Mathematical**, **50** #12551; **Qualitative methods in the theory of differential equations with deviating argument**, **57** #3487; **Differential equations with deviating argument**, **57** #10032 and **Summer School: Mathematical**, **58** #4761
Ózgy, András (with Szemerédi, Endre) On intersections of subsets of finite sets. (Hungarian, English summary) *Mat. Lapok* **21** (1970), 269-278 (1971). (L. Bukovský) **57** #3188 05A05
(with Erdős, Paul; Ruzsa, Imre, Jr.) On the number of solutions of $f(n)=a$ for additive functions. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday, I. *Acta Arith.* **24** (1973), 1-9. (I. Niven) **58** #11013 10H25
On products of integers. *Stud. Sci. Math. Hungar.* **9** (1974), 161-171 (1975). Donald L. Goldsmith) **51** #10201 10A05
Some remarks concerning irregularities of distribution of sequences of integers in arithmetic progressions. I. *Topics in number theory (Proc. Colloq., Debrecen, 1974)*, pp. 287-303. *Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam*, 1976. (S. G. Choi) **55** #12664 10H20 (10H30, 10L10)
(with Deshouillers, Jean-Marc; Erdős, Paul) On additive bases. *Acta Arith.* **30** (1976), no. 2, 121-132. (S. Znám) **54** #5165 10L05
Some metric problems in the additive number theory. I. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **19** (1976), 107-127 (1977). (L. C. Eggan) **58** #27883a 10L10 (10K99)
Some metric problems in the additive number theory. II. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **20** (1977), 111-129. (L. C. Eggan) **58** #27883b 10L10 (10K99)
Remarks on a paper of G. Halász: "On the distribution of additive and the mean values of multiplicative arithmetic functions" (*Studia Sci. Math. Hungar.* **6** (1971), 211-233). *Period. Math. Hungar.* **8** (1977), no. 2, 135-150. (J. W. Porter) **58** #555 0H25
On difference sets of sequences of integers. I. *Acta Math. Acad. Sci. Hungar.* **31** (1978), no. 1-2, 125-149. (S. L. G. Choi) **57** #5942 10L10 (10J10)
et, D. (with Thomas, Y.) Obtention à l'aide de l'invariant imbedding d'une commande optimale contrainte. *Ann. École Nat. Sup. Méc. Nantes* **1970**, premier semestre, 137-147. (Editors) **46** #6121 49A10 (93C15)
(with de Larminat, Philippe; Thomas, Y.) Invariant imbedding et filtrage critère à horizon mobile. *Ann. École Nat. Sup. Méc. Nantes* **1973**, premier semestre, 25-38. (Bojan Popović) **52** #5149 93E10
(with Descusse, J.; Mezencev, R.) Design of an optimal decoupling control algorithm. (French summary) *Math. Comput. Simulation* **19** (1977), no. 2, 99-112. (T. Tobias) **57** #18927 93B15 (93C05)
et, Henri J. La formalisation de "existe". *Logique et Analyse (N.S.)* **19** (1976), no. 74-76, 469-478. (S. J. Surma) **57** #58 02A05
Hintikka's free logic is not free. *Notre Dame J. Formal Logic* **18** (1977), no. 3, 458. (Editors) **58** #16126 02B10
et, Willy (with Engels, E.) General solution and invariants for a class of Lagrangian equations governed by a velocity-dependent potential energy. *J. Phys. A* **6** (1973), 818-825. (Authors' summary) **54** #6738 81.35
(with Engels, E.) On the necessary and sufficient conditions for canonical transformations. *Simon Stevin* **48** (1974/75), no. III-IV, 85-92. (Djordje Djukic) **52** #4759 70.34
Class of Hamiltonians with one degree-of-freedom allowing application of Kruskal's asymptotic theory in closed form. I, II. *Ann. Physics* **92** (1975), no. 2, 232-247; *ibid.* **92** (1975), no. 2, 248-261. (Manfred Andrie) **52** #4765 70.35
Exact invariant for a two-dimensional harmonic oscillator with time-dependent frequency. *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2*, pp. 201-208. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Tech., No. 4N, Akademie-Verlag, Berlin*, 1977. (Author's summary) **58** #32176 70.34
Invariance and conservation laws for Lagrangian systems with one degree of freedom. *J. Mathematical Phys.* **19** (1978), no. 5, 1049-1054. (Julian I. Palmore) **58** #19507a 70.58 (58F05)
Exact invariants for time-dependent Hamiltonian systems with one degree-of-freedom. *J. Phys. A* **11** (1978), no. 5, 843-854. (Author's summary) **58** #14075 70.47
Addendum to: "Invariance and conservation laws for Lagrangian systems with one degree of freedom" (*J. Math. Phys.* **19** (1978), no. 5, 1049-1054). *J. Math. Phys.* **20** (1979), no. 6, 1295. (Julian I. Palmore) **58** #19507b 70.58 (58F05)
aa, A. See Sharma, Ambikeshwar
aa, C. R. (with Dinesha, K. V.) Projected basis set for the irreducible representation $\{2^{N/2}-5, 1^{25}\}$ of $U(n)$. *J. Math. Phys.* **19** (1978), no. 8, 1662-1666. (Authors' summary) **58** #14522 81.22 (22E70)
Sarma, Debabrata (with Das, Sunil, R.; Choudhury, Arun K.; Debnath, Haridas) On the MMSC subgraphs of symmetric graphs. *Proceedings of the Seventh Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1974)*, pp. 121-123. *Western Periodicals, North Hollywood, Calif.*, 1974. (Narsingh Deo) **55** #10326 05C99 (68A10)
(with De, P.; Sen, A.; Pal, Alexander; Choudhury, A. K.) Minimal realization of arbitrary switching functions with 2-level networks of isodistinct and isobaric threshold gates. *Internat. J. Systems Sci.* **5** (1974), 555-573. (E. G. Wagner) **49** #12175 94A20
Sarma, G. N. (with Haddad, Richard A.) Stability of discrete-time systems with periodic coefficients. *Eleventh Joint Automatic Control Conference of the American Automatic Control Council (Georgia Inst. Tech., Atlanta, Ga., 1970)*, pp. 125-128. *Amer. Soc. Mech. Engrs., New York*, 1970. (Authors' summary) **45** #7332 39A12 (93C55)
Sarma, G. Nityananda Leonhard Euler, the monarch of mathematicians. *Math. Education* **6** (1972), B53-B58. **46** #6983 01A70
Sarma, Gabbita S. R. On the existence and uniqueness of solutions for certain boundary value problems governing the species distribution in a rotating binary mixture over an infinite rotating disk. (German summary) *Z. Angew. Math. Phys.* **27** (1976), no. 5, 573-580. (Salvatore Rionero) **54** #14555 76.35
Sarma, I. G. (with Prasad, U. R.) A note on the necessary conditions for optimal strategies in a class of noncooperative N -person differential games. *SIAM J. Control* **9** (1971), 441-445. (A. Blaquière) **46** #3121 90D25
(with Prasad, U. R.) Switching surfaces in N -person differential games. *J. Optimization Theory Appl.* **10** (1972), 160-177. (J. H. Case) **48** #8003 90D25
(with Prasad, U. R.) Multi-criterial problems of optimal control: cooperative game solution of Nash-Harsanyi. *Automat. i Telemekh.* **1975**, no. 6, 95-105. (Russian, English summary); translated as *Automat. Remote Control* **36** (1975), no. 6, part 2, 963-972. (D. H. Chyung) **53** #15399 90D12
(with Vathsala, S.) Constrained linear filter and its relation to singular optimal control. *Internat. J. Control* **21** (1975), 731-741. (Tohru Katayama) **51** #7684 93E10
See also **Sensitivity, adaptivity and optimality**, **49** #8697
Sarma, K. V. See Chatterjee, Bina, **58** #26722; Dhavale, D. G., **58** #26723; Gangadharan, N., **58** #26726; Rai, R. N., **58** #26760 and Sundaramoorthy, G., **58** #26766
Sarma, K. Venkateswara (with Paul, H. S.) Transient analysis of a potential pulse in a piezoelectric (622) crystal plate. *Proc. Indian Acad. Sci. Sect. A* **86** (1977), no. 6, 563-573. (Tommaso Ruggeri) **57** #18389 73.35
Sarma, L. V. K. V. (with Sarma, M. S.) On hydromagnetic Rossby waves excited by travelling forcing effects. *J. Fluid Mech.* **57** (1973), 303-320. (R. P. Kanwal) **48** #12994 76.35
Sarma, M. S. (with Sarma, L. V. K. V.) On hydromagnetic Rossby waves excited by travelling forcing effects. *J. Fluid Mech.* **57** (1973), 303-320. (R. P. Kanwal) **48** #12994 76.35
Sarma, Rohini Kumar A note on the use of words for numbers in ancient Indian mathematics. *Math. Education* **7** (1973), A44-A45. **48** #3674 01A25
Sarma, V. V. S. (with Alam, Mansoor) Optimal maintenance policies for machines subject to deterioration and intermittent breakdowns. *IEEE Trans. Systems Man Cybernet. SMC-5* (1975), no. 3, 396-398. (Authors' summary) **57** #9030 90B25
(with Alam, Mansoor; Lynn, J. W.) Optimal maintenance policy for equipment subject to random deterioration and random failure. A modern control theory approach. *Internat. J. Systems Sci.* **7** (1976), no. 9, 1071-1080. (Der-San Chen) **55** #7349 90B25 (49D10)
(with Alam, Mansoor) An application of optimal control theory to repairman problem with machine interference. *IEEE Trans. Reliab.* **R-26** (1977), no. 2, 121-124. (S. M. Pandit) **58** #4270 90B25 (49-01)
Sarma, Y. R. See Ramakrishna Sarma, Y.
Sarman, S. (with Albrecht, Julius) Bemerkungen zur Iteration mit monoton zerlegbaren Operatoren. *Z. Angew. Math. Mech.* **52** (1972), no. 11, 554-556. (I. K. Marek) **53** #12003 65J05
Sarmanov, O. V. (with Zaharov, V. K.) Multidimensional distribution laws for the maxima of the trajectory segments of a random walk. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **11** (1971), 1521-1543. (E. Seneta) **45** #2805 60J15
(with Zaharov, V. K.) Combinatorial methods for the investigation of the distribution of the range of the trajectories of a random walk. (Russian) *Mat. Sb. (N.S.)* **89(131)** (1972), 520-532, 535. (D. A. Darling) **48** #12652 (EA 49) 60J15
(with Zaharov, V. K.) The distribution law of the range of the trajectories of a Wiener process with nonzero trend. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 1052-1055. (Constance Elson) **49** #8126 60J65
(with Zaharov, V. K.) Combinatorial methods for the investigation of the distribution of the range of the trajectories of a random walk. II. (Russian) *Mat. Sb. (N.S.)* **92(134)** (1973), 446-455, 504. (D. A. Darling) **50** #5941 60J15
See also **Theoretical problems in mathematical statistics**, **48** #7424
Sarmant-Durix, Marie-Claude Forme de certaines fonctions automorphes ayant une infinité dénombrable de pôles dans une couronne. *Séminaire Delange-Pisot-Poitou (14e année: 1972/73), Théorie des nombres Fasc. 1, Exp. No. 8, 7 pp. Secrétariat Mathématique, Paris*, 1973. (Alan Adolphson) **53** #7950 10D10 (14G20)
Points rationnels d'ordre fini des courbes abéliennes (thèse d'Yves Hellegouarch). *Groupe d'Étude d'Analyse Ultramétrique (2e année: 1974/75), Exp. No. 9, 13 pp. Secrétariat Mathématique, Paris*, 1975. (Loren D. Olson) **53** #2955 14G05 (10B10, 14K15)
Décomposition en produit de facteurs de certaines fonctions analytiques uniformes sur un corps ultramétrique. *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A547-A550. (A. F. Monna) **51** #3550 32K10
Sarmin, E. N. A modification of the method of splitting the boundary conditions for the solution of the biharmonic equation. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 1341-1347, 1367. (T. Styš) **49** #8404 65N99
A method for calculating the flow in a round bearing. *Učen. (CAGI)* **4** (1973), no. 3,

- 92-100; translated in *Fluid Mech.—Soviet Res.* 5 (1976), no. 2, 162-172. (Author's summary) 56 #10432 76.65
- Sarna, Ryszard** (with Kuklewski, Julian) Invariants of curves in the space E_3 . (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* 14 *Zastos. Mat.* (1973), 113-119. (W. Wrona) 55 #8974 53A40
- Särndal, Carl-Erik** Studies in the history of probability and statistics. XXVII. The hypothesis of elementary errors and the Scandinavian school in statistical theory. *Biometrika* 58 (1971), 375-391. (Author's summary) 47 #2706 62-03
- Properties of some simple functions of the likelihood ratio. *Austral. J. Statist.* 14 (1972), 41-49. (I. J. Good) 50 #15088 62F05
- (with Cassel, Claes-Magnus) A model for studying robustness of estimators and informativeness of labels in sampling with varying probabilities. *J. Roy. Statist. Soc. Ser. B* 34 (1972), 279-289. (V. P. Godambe) 48 #5218 62D05
- (with Cassel, Claes-Magnus) Evaluation of some sampling strategies for finite populations using a continuous variable framework. *Comm. Statist.* 3 (1974), 373-390. (David Bellhouse) 49 #6430 62D05
- On uniformly minimum variance estimation in finite populations. *Ann. Statist.* 4 (1976), no. 5, 993-997. (V. P. Godambe) 54 #1432 62D05 (62F10)
- (with Cassel, Claes-Magnus; Wretman, Jan Håkan) Some results on generalized difference estimation and generalized regression estimation for finite populations. With comments by T. M. F. Smith and a reply by the authors. *Biometrika* 63 (1976), no. 3, 615-620. (A. Hedayat) 56 #4002 62D05
- (with Cassel, Claes-Magnus; Wretman, Jan Håkan) ★Foundations of inference in survey sampling. Wiley Series in Probability and Mathematical Statistics. Wiley-Interscience [John Wiley & Sons], New York-London-Sydney, 1977. xi + 192 pp. ISBN 0-471-02563-1 (A. J. Scott) 58 #31504 62D05
- Design-based and model-based inference in survey sampling. With discussion. *Scand. J. Statist.* 5 (1978), no. 1, 27-52. (Kenneth R. W. Brewer) 57 #10870 62D05
- See also Mahalanobis, Prasanta Chandra, 51 #2066
- Särnín, Ju. K.** (with Poljakov, V. E.; Proskurin, G. M.; Fedotov, V. P.) Hierarchic network of higher logical functions. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1970, no. 6, 627-632. (F. Vandamme) 45 #4899 94A20
- (with Poljakov, V. E.; Proskurin, G. M.; Fedotov, V. P.) Transformation of symmetric logical functions by iteration of variables. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1972, no. 7, 798-800. (M. Tetrušvili) 48 #10696 94A20
- (with Poljakov, V. E.; Proskurin, G. M.; Fedotov, V. P.) Transformation of symmetric Boolean functions. (Russian) *Materialy Sem. Kibernet. Vyp.* 47 (1972), 16-30. (Authors' summary) 57 #2770 94A20
- Sarno, R.** (with D'Onofrio, Biancamaria; Laloy, M.) Unboundedness properties of solutions of n -th-order differential equations. (Italian summary) *Boll. Un. Mat. Ital.* (4) 10 (1974), 451-459. (V. Stakos) 51 #8541 34C10
- Šaroglavov, V. S.** (with Vasil'ev, V. V.) A method for the approximate solution of a boundary value problem for linear integro-differential equations. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 212-217, 303. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Authors' summary) 58 #29971 45L05 (65R05)
- Šaromet, A. A.** (with Platonov, V. P.) The congruence subgroup problem for linear groups over arithmetic rings. (Russian) *Dokl. Akad. Nauk BSSR* 16 (1972), 393-396, 477. (J. E. Humphreys) 52 #3348 20G30 (20H05)
- Abstract isomorphisms of solvable algebraic groups. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 1, 53-55. (V. L. Popov) 52 #5822 20G15
- Automorphism groups of algebraic groups. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 3, 5-11, 140. (V. L. Popov) 53 #13429 20G15
- Šaronov, A. V.** (with Golubkov, A. S.) Questions on the statistical theory of eliminating signal redundancy. (Russian) *Avtomat. Uprav. i Vyčisl. Tehnika Vyp.* 11 (1975), 323-334. (Editors) 57 #15687 93E10
- Šaronov, V. L.** (with Zamov, N. K.) The strengthening of formulae that are provable in propositional calculus. (Russian) *Kazan. Gos. Univ. Učen. Zap.* 129 (1969), no. 4, 21-31. (G. E. Minc) 50 #49 02B05
- (with Zamov, N. K.) An application of isograms in the search for a proof. (Russian) *Issled. Prikl. Mat. Vyp.* 1 (1973), 94-102. (RŽMat 1974 #9 A91) 57 #11204 68A40
- A strategy for ordering disjuncts in the method of resolutions. (Russian) *Issled. Prikl. Mat. Vyp.* 2 (1974) 85-90. (RŽMat 1975 #3 A126) 57 #11203 68A40
- A strategy for defactorization in the method of resolutions. (Russian) *Issled. Prikl. Mat. No.* 2 (1974), 91-97. (See Zbl 341 #68059) 68A40
- An application of the clause ordering strategy for a certain modification of the resolution method. (Russian) *Issled. Prikl. Mat. No.* 3 (1975), 121-124. (Not reviewed) 68A30
- (with Zamov, N. K.) Decision strategies for finding the derivation in the resolution method. (Russian) *Issled. Prikl. Mat. Vyp.* 4 (1977), 31-34. (RŽMat 1978 #4 A86) 58 #25156 68A40
- See also Studies in constructive mathematics and mathematical logic, 46 #8818 and Corrections to the collection "Investigations in constructive mathematics and mathematical logic", 48 #5807
- Šaronova, T. N.** Elementary inverse subsemigroups of the semigroup of linear transformations. (Russian) *Studies in algebra*, No. 4 (Russian), pp. 115-118, 127. *Izdat. Saratov. Univ., Saratov*, 1974. (G. Pollák) 55 #12847 20M20
- Šarov, A. A.** The concept of information in category theory. (Russian. English summary) *Semiotics and information science*, No. 8 (Russian), pp. 167-178, 215. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1977. (Author's summary) 58 #15360 93A99 (18B99, 94A15)
- Šarova, I. S.** The number of semialgebraic limit cycles. (Russian) *Differencial'nye Uravnenija (Rjazan') Vyp.* 7 (1976), 224-229. (R. S. Levitin) 58 #22764 34C05
- See also Qualitative theory of differential equations, 52 #11191
- Šarova, L. V.** Comparison of the asymptotic expansions that are obtained in the theory of equations with a small parameter and those obtained by the averaging method. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No.* 418 *Voprosy Mat.* (1972), 352-362, 391. (C. Avramescu) 49 #10984 34E05
- A certain method of partial averaging in differential equations. (Russian) *Differencial'nye Uravnenija* 10 (1974), 1074-1077, 1149. (D. Bainov) 50 #2618 34C30
- Averaging of a certain special class of integrodifferential equations. (Russian) *Differencial'nye Uravnenija* 10 (1974), 1520-1524, 1542. (S. D. Miluševa) 51 #345J05
- On an averaging theorem for differential equations with fast and slow variables. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1974, no. 11, 12-13. (S. D. Miluševa) 51 #13372 34C30
- A certain approximate method for the construction of the solutions of integro-differential equations. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 420-422, 432. (Corduneanu) 49 #11841 65R05
- A way of constructing higher order approximations for systems in standard form. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Vyp.* 23 (1974), 174-182, 228. (Ženišek) 58 #6560 34E05
- A certain method for the approximate construction of the solution of integro-differential equations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 1031-1033, 1078. (L. Kosel) 51 #13614 45L05
- The convergence of a process of constructing higher approximations for integrodifferential equations in standard form that are obtainable on the basis of method of averaging. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1975, no. 10-12. (S. D. Miluševa) 51 #13615 45L05 (34C30, 65K05)
- (with Filatov, A. N.) ★Интегральные неравенства и теория нелинейных колебаний. (Russian) [Integral inequalities and the theory of nonlinear oscillations. *Izdat. "Nauka", Moscow*, 1976. 152 pp. (D. Bainov) 58 #11679 34C30
- Sarra, Mariangela** (with Miron, Rosario) Sulle vibrazioni di un particolare sistema a quattro gradi di libertà ed un elemento dissimmetrizzante. (English summary) *Fis. Sem. Mat. Univ. e Politec. Torino* 35 (1976/77), 293-310 (1978). (N. D. Sengupta) 57 #18318 70.34 (34C15, 65L05)
- Sarracino, R. S.** (with Cooperstock, F. I.) The localisation of energy in general relativity. *J. Phys. A* 11 (1978), no. 5, 877-883. (P. A. Goodinson) 57 #18718 83.53
- al-Sarraf, Hassan S.** See Al-Sarraf, Hassan S.
- Sarreither, Paul** Über das Wachstum von Resolventen in der Nähe einer isolierten Singularität. *Manuscripta Math.* 11 (1974), 261-272. (P. A. Kučment) 49 #1147A55 (47B10)
- Transformationsseigenschaften endlicher Ketten und allgemeine Verzweigungsaussagen. *Math. Scand.* 35 (1974), 115-128. (P. A. Kučment) 50 #147A55 (47H99)
- Zur algebraischen Vielfachheit eines Produktes von Operatorscharen. *Math. Scand.* 41 (1977), no. 1, 185-192. (Horst Behncke) 57 #7224 47A55 (47B30)
- Verzweigung an Eigenwerten unendlicher Vielfachheit—Bemerkungen zu einer Arbeit von H.-P. Heinz "Über das Verzweigungsverhalten eines nichtlinearen Eigenwertproblems in der Nähe eines unendlich vielfachen Eigenwertes der Linearisierung" (*Manuscripta Math.* 19 (1976), 105-132). (English summary) *Manuscripta Math.* 24 (1978), no. 4, 449-451. (Ulrich Kosel) 58 #12560 47B55 (58E05)
- Sarris, Achilles A.** (with Su, Stephen Y. H.) The relationship between multivalued switching algebra and Boolean algebra under different definitions of complement. *IEEE Trans. Computers* C-21 (1972), 479-485. (J. C. Muzio) 48 #13507 (E 51 #5194A20
- See also Du Casse, Edgar; et al., 51 #5188 and Du Casse, Edgar; et al., 53 #5188
- Sarroste, Denise** Suites d'interpolation. *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A1905-A1908. (J. Garnett) 46 #6044 46J15 (30A80)
- Sarry, M. F.** A diagrammatic technique for the s - d model. (Russian. English summary) *Teoret. Mat. Fiz.* 31 (1977), no. 3, 365-378. (Author's summary) 56 #7705 82.47
- Šaršekeev, O. Š.** (with Stanjuković, K. P.) Models of the Friedman "universe" in a centrally symmetric reference frame. (Russian. English summary) *Astrofizika* 6 (1975), 571-580. (K.-H. Hauer) 46 #8639 83.53
- (with Stanjuković, K. P.) On the problem of the relationship between the Schwarzschild and Tolman metrics. *Prikl. Mat. Meh.* 37 (1973), 739-745 (Russian) translated as *J. Appl. Math. Mech.* 37 (1973), 697-704. (P. C. Vaidya) 49 #8570 83.35
- Šarsenaliyev, Ž.** (with Raskoša, V. L.) Simplified algorithms for the reconstruction of quantized Gaussian process. (Russian) *Izv. Akad. Nauk Kirgiz. SSR* 1973, no. 1, 13-14. (errata insert) (P. Neumann) 48 #7514 62M20
- (with Kožapysov, A.) A certain method for seeking the global extremum of continuous and discrete signals. (Russian) *Izv. Akad. Nauk Kirgiz. SSR* 1975, no. 49-52. (Not reviewed) 94A05
- (with Kožapysov, A.) Optimal control of linear systems with a small parameter. (Russian. Loose Russian summary) *Izv. Akad. Nauk Kirgiz. SSR* 1977, no. 1, 33-37. (M. Kirillova) 56 #9421 49D99
- Sarsenbaev, Ž.** See Mathematics and mechanics, 50 #6724
- Šarski, A.** See Szarski, A.
- Sartabanov, Ž. A.** (with Umbetžanov, D. U.) The construction of a multiperiodic solution of a certain countable system of partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1972, no. 5, 61-66, 94. (D. Gvazava) 50 #10506 35B10
- An application of the truncation method to the construction of a multiperiodic solution of a certain countable system of partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1973, no. 3, 48-56, 93. (Muszyński) 51 #8660 35R99 (35B10)
- A certain countable system of quasilinear partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1973, no. 5, 53-58. (J. Muszyński) 51 #13492 35R15
- (with Umbetžanov, D. U.) The multiperiodic solution of a certain system of partial differential equations with constant lag. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1976, no. 5, 48-52, 88. (O. Vejvoda) 56 #6166 35R10 (35B10)
- Sarti, E.** (with Bonivento, Claudio) Condizione sufficiente per la stabilità di una classe di sistemi lineari non autonomi. *Alta Frequenza* 37 (1968), 1163-1165. (V. M. Popov) 46 #6885 93D99
- (with Bertoni, Gianni; Bonivento, Claudio) Interpretazione grafica di una condizione di stabilità assoluta per sistemi non stazionari. *Alta Frequenza* 38 (1969), 1163-1165. (V. M. Popov) 46 #6885 93D99

- 72-275. (E. Fagioli) **50** #16029 93D10
- G. C. (with Astarita, G.) A thermomechanical theory for structured materials. *Trans. Soc. Rheol.* **19** (1975), no. 2, 215-228. (François Sidoroff) **54** #11934 73.53
- George See *Philosophers and machines*, **52** #5275
- G. (with Cicciariello, S.; Gatto, R.; Tonin, M.) Equal time commutators for broken conformal invariance and implications for asymptotic sum rules. *Ann. Physics* **5** (1971), 265-323. (Authors' summary) **46** #1247 81.47
- (with Cicciariello, S.) Covariance properties of fields under inversion and finite conformal transformations. (Italian and Russian summaries) *Nuovo Cimento A* (11) **19** (1974), 470-500. (Authors' summary) **56** #7647 81.53
- kov, A. P. (with Ćirkov, M. K.) A certain method of abbreviated control $K\Sigma$. (Russian) *Metody Vyčisl. No. 7* (1971), 129-138. (G. M. Tenengol'c) **46** #4773 8A10
- See also *Computer technology and questions of cybernetics*, **47** #9874
- anov, V. I. (with Metel'skiĭ, A. S.) On the coincidence of periodic processes. (Russian) *Dokl. Akad. Nauk BSSR* **18** (1974), 414-416, 475. (Vladimir Strnad) **50** #6473 90B99
- (with Metel'skiĭ, A. S.) Construction of an optimal periodic process. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1974**, no. 3, 9-12, 138. (B. Ponděliček) **50** #4050 93C99
- The mean value of the functional of the assignment problem. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1976**, no. 2, 111-114, 143. (T. C. Brown) **54** #10038 05A20
- On the minimization of a linear form on a set of n -term cycles. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1976**, no. 4, 17-21, 139. (E. Ja. Gabovič) **56** #14673 90C05 (90B10)
- The matrices of cyclic permutations. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 3, 23-26, 141. (J. L. Brenner) **57** #428 20B25
- An approximate solution of the problem of minimizing a linear form on the set of cyclic substitutions. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 5, 5-10, 139. (Author's summary) **57** #18810 90C05 (65K05)
- as, Jukka Symmetrization of condensers in n -space. *Ann. Acad. Sci. Fenn. Ser. A I* **No. 522** (1972), 44 pp. (F. W. Gehring) **50** #606 30A60
- On the local behavior of quasiregular mappings. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **1** (1975), no. 2, 221-226. (H. M. Reimann) **54** #546 30A60
- The Hausdorff dimension of the branch set of a quasiregular mapping. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **1** (1975), no. 2, 297-307. (Uri Srebro) **53** #805 30A60
- Coefficient of injectivity for quasiregular mappings. *Duke Math. J.* **43** (1976), no. 1, 147-158. (V. Mićić) **53** #11056 30A60
- (with Martio, Olli) Density conditions in the n -capacity. *Indiana Univ. Math. J.* **26** (1977), no. 4, 761-776. (W. R. Derrick) **57** #16582 30A60
- ate, Dilip V. Errors-and-erasures decoding of binary majority-logic-decodable codes. *Electron. Lett.* **12** (1976), no. 17, 441-442. (G. Robert Redinbo) **54** #14870a (E **54** #14870b) **54** #14870b 94A10
- Errata: "Errors-and-erasures decoding of binary majority-logic-decodable codes" *Electron. Lett.* **12** (1976), 441-442). *Electron. Lett.* **12** (1976), no. 21, 572. (G. Robert Redinbo) **54** #14870b 94A10
- (with Pursley, Michael B.) New correlation identities for periodic sequences. *Electron. Lett.* **13** (1977), no. 2, 48-49. (Authors' summary) **56** #11498 94A05
- (with Pursley, Michael B.) Evaluation of correlation parameters for periodic sequences. *IEEE Trans. Information Theory* **IT-23** (1977), no. 4, 508-513. (H. F. Mattson, Jr.) **57** #5393 94A05
- On the complexity of decoding Goppa codes. *IEEE Trans. Information Theory* **IT-23** (1977), no. 4, 515-516. (R. J. McEliece) **58** #9778 94A10 (68A20)
- (with Preparata, Franco P.) Computational complexity of Fourier transforms over finite fields. *Math. Comp.* **31** (1977), no. 139, 740-751. (Sven-Åke Gustafson) **55** #9603 68A20 (65Dxx)
- Semi-fast Fourier transforms over $GF(2^m)$. *IEEE Trans. Computers* **C-27** (1978), no. 3, 283-285. (From the summary) **58** #13903 68A10 (94A05)
- (with Preparata, Franco P.) An improved parallel processor bound in fast matrix inversion. *Information Processing Lett.* **7** (1978), no. 3, 148-150. (Ahmed H. Sameh) **58** #13934 68A20 (65F05)
- ekov, R. A. Extremal quadratic Ljapunov functions of second order systems of equations. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 5, 1159-1167, 1207. (Stefan Balint) **58** #22857 34D20
- čev, V. A. (with Sazonov, V. V.; Zlatoustov, V. A.) ★Вынужденные периодические колебания математического маятника. (Russian) [Forced periodic oscillations of a mathematical pendulum] Preprint No. 32 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1977. 70 pp. (G. V. Hmelevskaja-Plotnikova) **57** #18330 70.34 (34C25)
- (with Sazonov, V. V.) Periodic solutions of systems of ordinary differential equations that are nearly autonomous. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 90* (1977), 59 pp. (Editors) **58** #22818 34C25
- See also *Control in space*, **48** #13319
- ey, M. A certain method for the solution of a weighted equation with a Cauchy kernel. (Russian. English and Azerbaijani summaries) *Azerbaidžan. Gos. Univ. Učen. Zap.* **1974**, no. 2-3 *Fiz. i Mat.*, 58-61. (G. S. Litvinčuk) **54** #3321 45E05
- gin, I. F. (with Maung Čzo N'jun) Optimal cubature formulas on the classes $D_1^{1,c}$ and $D_1^{1,c}$. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* **No. 5** (1971), 22-27. (See RŽMat **1972** #2 B867) 65D30
- On lower bounds for n -diameters. (Russian) *Mat. Zametki* **12** (1972), 413-419. (T. Bojanov) **48** #778 42A04
- An error estimate from below for the formula of approximate summability on the class $E_{\Sigma}(C)$. (Russian) *Mat. Zametki* **21** (1977), no. 3, 371-375. (B. Bojanov) **56** #17015 65D30 (41A55)
- gulov, K. S. The averaging method for a certain class of integro-partial differential equations with deviating argument of neutral type. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk No. 9* (1974), 42-51. (See RŽMat **1974** #9 B1206) 45K05
- The application of a certain iterative process to the approximate solution of integro-partial differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk No. 9* (1974), 51-58. (See RŽMat **1974** #8 B874) 45L05
- Approximate solution of a certain class of partial integrodifferential equations by the method of upper and lower functions. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp. 10* (1974), 57-66. (Editors) **54** #3338 45K05
- A variant of the averaging method for hyperbolic integro-differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp. 12* (1976), 75-81. (RŽMat **1977** #8 B342) **57** #10395 45K05
- A property of semi-explicit partial integro-differential equations with small parameter. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp. 12* (1976), 81-84. (RŽMat **1977** #8 B341) **57** #10391 45J05
- Sarymsakov, B. T. (with Mironov, A. V.) The topological and order boundedness in partially ordered topological vector spaces. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 394* (1970), 108-117 (1971). (E. Strzelecki) **45** #4112 46A40
- (with Mironov, A. V.) On the question of the boundedness and continuity of positive linear mappings of partially ordered topological vector spaces. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 11, 3-5. (R. Cristescu) **52** #1251 46A40
- Sarymsakov, H. A. A certain theorem on the fixed point for a stochastic operator. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1967**, no. 1, 3-7. (I. Šragin) (RŽMat **1968** #2 B614) **46** #6062 46N05 (28A65, 60G99)
- Sarymsakov, K. A certain theorem for linear stochastic operators that depend on a parameter. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1967**, no. 5, 3-5. (L. Libkind (RŽMat **1968** #8 V5)) **46** #6063 46N05
- (with Sarymsakov, T. A.) A central limit theorem. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1967**, no. 6, 3-5. (L. Libkind (RŽMat **1968** #8 V32)) **46** #6064 46N05
- Sarymsakov, T. A. (with Sarymsakov, K.) A central limit theorem. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1967**, no. 6, 3-5. (L. Libkind (RŽMat **1968** #8 V32)) **46** #6064 46N05
- (with Alimova, M. M.) A generalization of Lévy's central limit theorem to martingales. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1969**, no. 2, 3-5. (Editors) **49** #11601 60F05
- (with Vinokurov, V. G.) On the determination of a random process in a semifield. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1969**, no. 6, 3-5. (M. I. Jadrenko) **47** #5939 60G05
- (with Vinokurov, V. G.; Mirzahmedov, M. A.) Random processes in a semifield. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 4, 6-8. (I. Cuculescu) **51** #9204 60G99
- (with Murtazaez, È. È.) Markov process and semigroups of stochastic operators in topological semifields. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 7, 3-5. (M. I. Jadrenko) **53** #6759 60J35
- (with Murtazaez, È. È.) Semigroups of linear operators and evolution equations in weakly normed spaces. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 8, 3-5. (Dumitru Gaşper) **51** #13760 47D05
- (with Mirzahmedov, M. A.) Stationary processes on topological semifields and the problem of their prediction. (Russian) *Taškent. Gos. Univ. Naučn. Trudy Vyp. 394* (1970), 169-175 (1971). (Editors) **54** #8820 60G10 (60G25)
- (with Hadžiev, Dž.) Topological modules over semifields of the first kind. (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), 1041-1043. (V. I. Arnautov) **46** #7329 16A80 (12K05)
- (with Mironov, A. V.) On the notion of a norm of a linear operator in a locally convex space. (Russian) *Dokl. Akad. Nauk SSSR* **204** (1972), 38-41. (G. Marinescu) **46** #9678 46A05 (47A99)
- (with Hadžiev, Dž.) L^* -structures metrized over semifields. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1972**, no. 5, 3-4. (L. Janos) **47** #5618 46N05 (12J99, 54E99)
- (with Mirzahmedov, M. A.) Random processes on topological semifields. (Russian) *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes (Technical Univ., Prague, 1971; dedicated to the memory of Antonín Špaček)*, pp. 765-780. *Academia, Prague*, 1973. (G. Simboan) **51** #4380 60G99
- (with Kučkarov, Ja. H.; Mamirov, U. È.) The law of the iterated logarithm for inhomogeneous Markov chains. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1973**, no. 6, 3-5. (V. V. Anisimov) **49** #9918 60F15
- (with Rubšteĭn, B. A.; Čilin, V. I.) Complete tensor products of topological semifields. (Russian) *Dokl. Akad. Nauk SSSR* **216** (1974), 1226-1228. (J. Karásek) **50** #14172 46A99
- (with Vinokurov, V. G.; Čilin, V. I.) Measures on topological Boolean algebras. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1974), 42-45. (M. Nosal) **50** #13444 28A60
- (with Islamov, A. N.) The existence of an outer measure on Boolean algebras, and certain questions of convergence in topological semifields. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 4, 3-5. (L. Ja. Savel'ev) **53** #760 28A60
- (with Nasirov, S. N.; Hadžiev, Dž.) A description of the ideals of a certain class of rings. (Russian) *Dokl. Akad. Nauk SSSR* **225** (1975), no. 5, 1018-1019. (Klaus Keimel) **53** #5580 13J99 (06A40)
- Semifields. Measures with values in semifields. (Russian) *Voronež. Gos. Univ. Trudy Naučn-Issled. Inst. Mat. VGU Vyp. 20* (1975), 85-87. (L. Ja. Savel'ev) **58** #22477 28A55 (60F15)
- Semifields and probability theory. *Proceedings of the Third Japan-USSR Symposium on Probability Theory (Tashkent, 1975)*, pp. 524-549. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (D. A. Kappos) **56** #6776 60A05 (28A60)
- (with Benderskiĭ, O. Ja.; Čilin, V. I.) Measures with values in semifields, and their applications in probability theory. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 1, 41-44. (Beloslav Riečan) **53** #11015 28A55 (60F15)
- (with Gol'dšteĭn, M. Š.) Partially ordered involutive algebras. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 2, 306-309. (L. Longdon) **54** #942 46K99
- (with Čilin, V. I.) Uniformities and external estimates on logics. (Russian) *Dokl. Akad. Nauk SSSR* **230** (1976), no. 6, 1282-1285. (M. J. Mączyński) **55** #218 06A20 (81.06)
- (with Kučkarov, Ja. H.; Mahmudov, H.) The rate of convergence in ergodic

- theorems. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 6, 3-5. (Constantin Niculescu) **54** #13626 47B55 (28A65)
- (with Rubštejn, B. A.; Čilin, V. I.) Complete tensor products of topological Boolean algebras and semifields. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 7, 3-4. (R. E. Peinado) **56** #5516 12J99
- (with Antonovskii, M. Ja.; Boltjanskii, V. G.) ★Topological semifields and their applications to general topology. American Mathematical Society Translations, Ser. 2, Vol. 106. *American Mathematical Society, Providence, R.I.*, 1977. vi+142 pp. ISBN 0-8218-3056-2 (M. Schroder) **58** #12280 46A99 (06A40, 12J15, 54E15)
- (with Kučkarov, Ja. H.; Dauletbaev, T. E.) Convergence of Boolean measures in metric spaces. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 5, 1023-1025. (T. Neubrunn) **55** #5837 28A55 (60B10)
- (with Halikulov, I. B.) The strong law of large numbers with respect to semifield-valued measures. (Russian) *Dokl. Akad. Nauk SSSR* **238** (1978), no. 4, 808-810. (Ștefan P. Niculescu) **57** #10785 60F15
- Noncommutative probability spaces on O^* -algebras. (Russian) *Dokl. Akad. Nauk SSSR* **241** (1978), no. 2, 297-300. (Ștefan P. Niculescu) **58** #18652 60B99
- See also Aleksandrov, P. S.; et al., **53** #2585 and Sirazdinov, S. H.; et al., **53** #2599
- Sasai, Hitoshi** A note on the penalty method for distributed parameter optimal control problems. *SIAM J. Control* **10** (1972), 730-736. (M. Heymann) **54** #7047 93C20
- An interior penalty method for minimax problems with constraints. *SIAM J. Control* **12** (1974), 643-649. (A. Friedman) **50** #5585 49D30
- A computational algorithm for minimax problems with constraints. *J. Operations Res. Soc. Japan* **20** (1977), no. 1, 36-41. (Pierre Loridan) **57** #3952 49D30 (90C25)
- Sasai, Takao** Monodromy representations of homology of certain elliptic surfaces. *J. Math. Soc. Japan* **26** (1974), 296-305. (J. A. Morrow) **49** #10926 32J15 (14D05)
- (with Nakamura, Gen) The singularities of the solutions of the Cauchy problem for second order equations in case the initial manifold includes characteristic points. *Tôhoku Math. J. (2)* **28** (1976), no. 4, 523-539. (P. Schapira) **57** #6796 35G10
- On a monodromy group and irreducibility conditions of a fourth order Fuchsian differential system of Okubo type. *J. Reine Angew. Math.* **299/300** (1978), 38-50. (T. Ura) **58** #6426 34A20 (14D05)
- The monodromy group and the reducibility conditions of the one dimensional section of Appell's hypergeometric equation for $F_3(\alpha, \alpha', \beta, \beta', \gamma; x, y)$. *Proc. Japan Acad. Ser. A Math. Sci.* **54** (1978), no. 3, 59-61. (V. L. Desphande) **58** #1295 33A30
- Sasakawa, Tatsuya** K-matrix theory of three-body problems. *Nuclear Phys. A* **186** (1972), 417-437. (Author's summary) **52** #2481 81.47
- Scattering theory of three-body systems. *Nuclear Phys. A* **203** (1973), 496-512. (K. Kumar) **53** #12308 81.45
- Treatment of three body problems in coordinate space. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 491-496. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (From the introduction) **58** #32177 70.34
- (with Sawada, Tatsuuro) Three-body problems. *Progr. Theoret. Phys. Suppl. No. 61* (1977), 61-134. (W. O. Amrein) **58** #14592 81.35
- Five-body equation. *Progr. Theoret. Phys. Suppl. No. 61* (1977), 149-160. (W. O. Amrein) **58** #14593 81.35
- (with Sawada, Tatsuuro) Perturbation methods in the scattering theory for local and non-local potentials. *Progr. Theoret. Phys. Suppl. No. 61* (1977), 1-60. (P. Achuthan) **56** #10548 81.35
- Decompositions into channels of three- and four-body wave functions. *Phys. Rev. C* (3) **17** (1978), no. 6, 2015-2025. (Author's summary) **58** #14687 81.47
- Decoupled Yakubovskii equation for a four-body system and its physical implications. *Phys. Rev. C* (3) **17** (1978), no. 6, 2026-2030. (Author's summary) **58** #14688 81.47
- Sasaki, Eiji** Sangaku in Fukui Prefecture. (Japanese) *Sûgaku Kenkyû No. 72* (1977), 33-39. (Joong Fang) **58** #38 01A25
- Sasaki, Isao** (with Koga, Yoshiaki) Theoretical analysis of wiring modes and failure modes for automatic wiring checks. *Information Processing in Japan* **15** (1975), 96-102. (A. D. Booth) **53** #15573 94A20
- Sasaki, Itsuo** (with Kasai, Tamotsu) Algebraic-topological interpretations for basic equations of electromagnetic fields. *Bull. Univ. Osaka Prefecture Ser. A* **25** (1976), no. 1-2, 49-57. (P. R. Bryant) **55** #7132 78.55
- Sasaki, Kazuo** (with Yasuda, Hiroshi) On volume-preserving connections in extended Lie systems. *J. Hokkaido Univ. Ed. Sect. II A* **23** (1972/73), 4-12. (Y. Mutô) **50** #8337 53B05
- Sasaki, Masafumi** (with Gen, Mitsuo) Optimal allocation of system availability. *Systems-Computers-Controls* **6** (1975), no. 1, 9-16. (Robert G. Jeroslow) **53** #7460 90C10 (90B25)
- (with Sakakibara, Toichiro; Matsui, Kineo) A new condition of the feasibility of two-commodity flows in a communication network. *Proceedings of the Ninth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1976)*, pp. 80-82. *Western Periodicals, North Hollywood, Calif.*, 1976. (Kenji Onaga) **58** #9181 90B10
- (with Kaburaki, Shigeru; Yanagi, Shigeru) System availability and optimum spare units. *IEEE Trans. Reliab. R-26* (1977), no. 3, 182-188. (Masanori Kodama) **58** #15105 90B25 (90C10)
- Sasaki, Morio** (with Tamura, Takayuki) Positive rational semigroups and commutative power joined cancellative semigroups without idempotent. *Czechoslovak Math. J.* **21(96)** (1971), 567-576. (J. B. Kim) **45** #2062 20M10
- Sasaki, Ryu** (with Nishijima, Kazuhiko) Power laws in the dispersive approach to field theory. *Progr. Theoret. Phys.* **55** (1976), no. 3, 889-895. (K. T. Mahanthappa) **53** #7263 81.30
- Sasaki, Ryuji** Prym varieties and their application. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 347-365, 111-128 (1975). (H. M. Farkas) **54** #2663 14H40 (14H45, 14K25)
- Theta relations and their applications in abstract geometry. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 366-382, 290-312 (1977). (Allen B. Altman) **57** #16322 14K25 (14K05)
- Sasaki, Shigeo** Spherical space forms with normal contact metric 3-structure. *J. Differential Geometry* **6** (1971/72), 307-315. (M. Kurita) **46** #831 53C30
- On even-dimensional contact Riemannian manifolds. *Differential geometry in honor of Kentaro Yano*, pp. 423-436. Kinokuniya, Tokyo, 1972. (Y. Mutô) **48** #2453C15
- On complete surfaces with Gaussian curvature zero in 3-sphere. *Collection of articles commemorating Władysław Ślebodziński. Colloq. Math.* **26** (1972), 165 (Michael Spivak) **50** #1174 53C40
- A proof of the fundamental theorem of hypersurfaces in a space-form. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday. *I. Tensor (N.S.)* **24** (1972), 363-373. (W. Vortisch (Zbl 258 #53057)) **58** #30953C25
- On complete flat surfaces in hyperbolic 3-space. *Kôdai Math. Sem. Rep.* **25** (1972), 449-457. (Bang-yen Chen) **48** #12420 53C40
- (with Klingenberg, Wilhelm) On the tangent sphere bundle of a 2-sphere. *Tôhoku Math. J. (2)* **27** (1975), 49-56. (R. J. Crittenden) **50** #14591 53C35
- Geodesics on the tangent sphere bundles over space forms. *J. Reine Angew. Math.* **288** (1976), 106-120. (T. J. Willmore) **54** #13788 53C30
- (with Hsu, Chên Jung) On a property of Brieskorn manifolds. *Tôhoku Math. J. (2)* **28** (1976), no. 1, 67-78. (Koichi Ogiue) **53** #1473 53C15 (57D60)
- (with Takahashi, Toshio) Almost contact structures on Brieskorn manifolds. *Tôhoku Math. J. (2)* **28** (1976), no. 4, 619-624. (Koichi Ogiue) **55** #1365 57D60 (53C15, 57D45, 57C45)
- See also Collection: Sasaki, Shigeo, **49** #7054
- Sasaki, Shiro** See Sasaki, Siro
- Sasaki, Shosuke** Method for the field theory on the basis of a physical vacuum and physical one-particle state. *Sci. Rep. College General Ed. Osaka Univ.* **24** (1975), no. 9-31. (Author's summary) **54** #9461 81.47
- Sasaki, Siro** On Pascal's triangle. (Japanese) *Mem. Fac. Gen. Ed. Kumamoto Univ. Nat. Sci. No. 1* (1966), part 1, 1-6. (T. Hayashida) **54** #7276 05A15 (10A99)
- On a certain subfield of a transcendental extension field. (Japanese) *Mem. Gen. Ed. Kumamoto Univ. Natur. Sci. No. 3* (1968), no. 1, 7-8. (Yoshiomi Furukawa) **52** #5636 12F20
- (with Iizuka, Kenzo) A note on the representations of finite groups. (Japanese) *Mem. Fac. Gen. Ed. Kumamoto Univ. Natur. Sci. No. 3* (1968), part 1 1-6. (H. Kimura) **55** #5728 20C15
- (with Iizuka, Kenzo; Ito, Yoshihiko) A note on the representations of finite groups. II. (Japanese. English summary) *Mem. Fac. Gen. Ed. Kumamoto Univ. Natur. Sci. No. 3* (1969), part 1 39-44. (H. Kimura) **55** #5729 20C15
- On quadratic residues as well as nonresidues. (Japanese) *Mem. Fac. Gen. Ed. Kumamoto Univ. Natur. Sci. No. 6* (1971), part 1, 1-4. (D. Sato) **52** #5536 10A99
- Sasaki, Taira** Fundamental considerations for construction of the minimal n -connected graphs. *Electron. Commun. Japan* **57** (1974), no. 10, 13-20. (Author's summary) **56** #11857 05C99 (94A20)
- Sasaki, Takehiko** Beltrami differential equation and quasiconformal mapping. *Osaka Math. J.* **10** (1973), 635-639. (K. Strebel) **49** #7443 30A60
- Boundaries of components of Kleinian groups. *Tôhoku Math. J. (2)* **28** (1976), no. 1, 267-276. (I. Kra) **53** #11053 30A58
- On common boundary points of more than two components of a finitely generated Kleinian group. *Tôhoku Math. J. (2)* **29** (1977), no. 3, 427-437. (I. Kra) **57** #6243 30A58
- The residual limit sets and the generators of finitely generated Kleinian groups. *Osaka J. Math.* **15** (1978), no. 2, 263-282. (William Abikoff) **58** #11382 30A58 (57A10)
- Sasaki, Takeshi** On the finiteness of the monodromy group of the system of hypergeometric differential equations (F_D). *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* (1977), no. 3, 565-573. (V. A. Golubeva) **58** #16654 14D05 (32G20, 33A30, 34A58A15)
- (with Suzuki, Osamu) Some applications of Sygne's formula to the theory of several complex variables. *Nagoya Math. J.* **67** (1977), 53-64. (H. Wu) **56** #667 32E05 (32F05, 53C55)
- Sasaki, Tateaki** Automatic generation of Feynman graphs in QED. *J. Computational Phys.* **22** (1976), no. 2, 189-214. (Author's summary) **54** #12001 81.05
- Sasaki, Yoshi Kazu** Variational design of finite-difference schemes for initial value problems with an integral invariant. *J. Computational Phys.* **21** (1976), no. 3, 270-276. (Rudolf Gorenflo) **54** #6513 65M05
- Sasaki, Yoshikatsu** Formulae in the numerical integration of ordinary differential equations. II, III. *Bull. Nagoya Inst. Tech.* **19** (1967), 105-110; *ibid.* **20** (1968), 125-130. (J. D. Lambert) **47** #9835 65L05
- Sasaki, Yoshinari** (with Hamada, Nozomu; Takahashi, Shin-ichi) Some criteria for aperiodic damping systems. *Electron. Commun. Japan* **58** (1975), no. 4, 33-40. (Michael S. Aftabizadeh) **54** #12302 93D05
- Sasakura, Nobuo** Some results on differential calculus on an algebraic surface. I. *J. Fac. Sci. Univ. Tokyo Sect. I A Math.* **17** (1970), 431-456. (K. Kiyek) **45** #3409 14J10
- Complex analytic de Rham cohomology. I. Vanishing theorems with algebraic growth and algebraic division properties. *Proc. Japan Acad.* **49** (1973), 718-722. (S. Bloom (Zbl 293 #32008)) **58** #22642 32C35
- Complex analytic de Rham cohomology. II. Quantitative properties of analytic varieties. *Proc. Japan Acad.* **50** (1974), 292-295. (C. Bănică (Zbl 313 #32009)) **58** #22643 32C35
- Complex analytic de Rham cohomology. III. de Rham cohomologies and stratifications. *Proc. Japan Acad.* **51** (1975), 7-11. (C. Bănică (Zbl 323 #32001)) **58** #22644 32C35
- Complex analytic de Rham cohomology. IV. Normalized series of prestratified spaces. *Proc. Japan Acad.* **51** (1975), no. 7, 535-539. (C. Bănică (Zbl 358 #32010)) **58** #22645 32C35
- Polynomial growth C^∞ -de Rham cohomology and normalized series of prestratified spaces. *Complex analysis and algebraic geometry*, pp. 383-395. Iwanami Shoten, Tokyo, 1977. (Helmut Hamm) **58** #6335 32C40 (58A10)
- Sasano, Yoshiro** (with Ikeda, Masao) Low-dimensional estimator for a finite-dimensional

- near time-varying system. *Systems-Computers-Controls* 3 (1972), no. 5, 16-22 (1973).
 F. Kaczorek 51 #7667 93C50
- Seiya On quasi-fibrations over spheres. *Proc. Japan Acad.* 48 (1972), 73-76. (R. E. Mosher) 47 #1051 55F05
- (with Nagaiishi, Masumi) Automorphisms of a quaternionic projective space. (Japanese) *Sūgaku* 24 (1972), no. 3, 221-223. 58 #31071 55E45
- The homotopy of Map (CP^n, CP^n). *J. London Math. Soc.* (2) 8 (1974), 193-197. Edgar H. Brown, Jr. 49 #11507 55E05
- On degrees of mapping. *J. London Math. Soc.* (2) 8 (1974), 385-392. (R. J. Milgram) 51 #1807 55C25
- Homotopy types of spherical fibre spaces over spheres. *Pacific J. Math.* 52 (1974), 107-219. (P. W. H. Lemmens) 50 #11233 55F25
- Note on spaces with $H^*(; \mathbb{Z}) = E[x_1, x_2]$. *Kōdai Math. Sem. Rep.* 27 (1976), no. 1-2, 63-167. (J. Stasheff) 53 #6548 55D45
- Tsutomu (with Kinoshita, Kozo) Minimal logic circuits using magnetic bubble logic elements. *Systems-Computers-Controls* 5 (1974), no. 4, 63-71 (1975). (Shuzo Yajima) 52 #10266 94A20
- (with Kinoshita, Kozo) Synthesis of multiple-output logic circuits with 2-input conservative logic elements. *Systems-Computers-Controls* 6 (1975), no. 5, 95-103. (B. Hazeltine) 56 #15209 94A20
- (with Kinoshita, Kozo; Matsuda, Jun) On magnetic bubble logic circuits. *IEEE Trans. Computers* C-25 (1976), no. 3, 247-253. (W.-K. Chen) 52 #12999 94A20
- (with Kinoshita, Kozo) Universality of n -input n -output conservative logic elements. *Systems-Computers-Controls* 7 (1976), no. 5, 28-35 (1977). (Michitaka Kameyama) 58 #4691 94A20
- (with Kinoshita, Kozo) Realization of minimum circuits with two-input conservative logic elements. *IEEE Trans. Comput.* 27 (1978), no. 8, 749-752. (Michitaka Kameyama) 58 #4693 94A20
- (with Kinoshita, Kozo) Cascade realization of 3-input 3-output conservative logic circuits. *IEEE Trans. Computers* C-27 (1978), no. 3, 214-221. (Tatsuo Higuchi) 58 #4692 94A20
- Fumio (with Sakashita, Hideo) A note on Newton-Raphson's method. (Japanese. English summary) *Bull. Kyoto Univ. Ed. Ser. B No. 42* (1973), 1-2. (H. Shintani) 47 #9820 65H05
- Hiroyoshi On the abstract generalization of jet-spaces for manifolds with linear topological coordinates. I. Abstract infinitesimal jets. (Romanian and Russian summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* 19(33) (1974), no. 1, 7-13. (Author's summary) 51 #4304 58A20
- On the abstract generalization of jet-spaces for manifolds with linear topological coordinates. II. Coordinate transformations in abstract jet-spaces, composition of abstract infinitesimal jets and the group of abstract infinitesimal isotropy. (Russian and Romanian summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara Ser. Mat. Fiz. Mec. Teoret. Apl.* 19(33) (1974), no. 2, 111-119. (From the author's introduction) 52 #15528 58A20
- On the abstract generalization of jet-spaces for manifolds with linear topological coordinates. III. Prolongations of tensor fields and connexions into manifolds of abstract vitesse. *Bul. Şti. Tehn. Inst. Politehn. "Traian Vuia" Timişoara* 22(36) (1977), no. 1, 13-18. (Author's introduction) 58 #18521 58A20
- Edward (with Kamiński, Brunon) Spectrum of abelian groups of transformation with completely positive entropy. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astron. Phys.* 24 (1976), no. 9, 683-689. (Douglas Lind) 54 #10561 28A65
- (with Jarek, Paweł) On the conjugacy of homeomorphisms of unit interval. *Comment. Math. Prace Mat.* 19 (1976/77), no. 2, 365-371. (Roman Duda) 56 #13146 54C10
- Asvili, M. A. On a Stefan problem. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 78 (1975), no. 3, 557-560. (H.-J. Engelbert) 52 #9365 60G40
- Stochastic differential representations for the value functions in optimal stopping problems for random processes with continuous time. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 88 (1977), no. 3, 533-536. (G. Niculescu) 58 #3019 60G40
- The problem of optimal stopping of random processes with continuous time. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 89 (1978), no. 1, 25-28. (Author's summary) 58 #18706 60G40
- Ā. M. Einige Möglichkeiten zur Gewinnung von Lösungen der Navier-Stokeschen Gleichungen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* 56 (1976), no. 3, T225-T227. (E. Pinney) 55 #9695 76.35 (35Q10)
- eni, Maurice W. (with Ackoff, Russell L.) ★Fundamentals of operations research. *John Wiley & Sons, Inc., New York-London-Sydney*, 1968. xii + 455 pp. (H.-J. Rossberg [Zbl 164, 195]) 50 #6445 90Bxx
- (with Ackoff, Russell L.) ★Основы исследования операций. (Russian) [Fundamentals of operations research] Translated from the English by V. Ja. Altaev. Edited by I. A. Ušakov. *Izdat. "Mir", Moscow*, 1971. 534 pp. (Editors) 50 #6446 90Bxx
- (with Ackoff, Russell L.) ★La ricerca operativa. Principi, metodi, tecniche. Translated from the English by L. Regalia. *Fondamenti di RO*, no. 1. *Etas Kompas, Milan*, 1972. 511 pp. (Editors) 50 #6447 (EA 51) 90Bxx
- (with Beckwith, Neil E.) Criteria for market segmentation studies. *Management Sci.* 22 (1975/76), no. 8, 892-903 (Authors' summary) 55 #9844 90A15
- nár-Sáska, G. See Molnár-Sáska, G.
- kin, Ju. A. The convergence of linear operators. (Russian) *Constructive theory of functions* (Proc. Internat. Conf., Varna, 1970) (Russian), pp. 119-125. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (Ivan Singer) 51 #3765 41A35 (46E25)
- Convex sets, extremal points, simplexes. (Russian) *Mathematical analysis*, Vol. 11 (Russian), pp. 5-50, 180. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1973. (S. Kutateladze) 53 #8861 46A99
- Abstract harmonic functions and the problem of the convergence of operators. (Russian) *Mathematica (Cluj)* 15(38) (1973), 143-148. (G. Albinus) 50 #13583 31D05 (41A30)
- (with Pytkeev, E. G.; Čakina, R. P.) The extension of linear functionals. (Russian) *Application of functional analysis in approximation theory*, No. 4 (Russian), pp. 92-99. *Kalinin. Gos. Univ., Kalinin*, 1974. (Editors) 58 #30057 46A99 (52A05)
- The local uniqueness of the maximal representative measure. (Russian) *Ural. Gos. Univ. Mat. Zap.* 8, no. 4, 128-130, 137 (1974). (S. Kutateladze) 50 #8007 46A99
- (with Šaraburova, L. G.) Intersections of spherically convex sets. (Russian) *Mat. Zametki* 18 (1975), no. 5, 781-791. (N. Poláková) 53 #6426 52A35
- Sets that admit vector Čebyšev systems. (Russian) *Mat. Zametki* 21 (1977), no. 2, 199-207. (A. S. Cavaretta) 58 #12131 41A50
- Šaškov, A. G. See Haritonov, V. V.; et al., 50 #1646
- Šaškov, M. Ju. ★Построение и исследование разностного аналога оператора Лапласа на прямоугольной сетке. (Russian) [Construction and study of the difference analogue of the Laplace operator on nonrectangular network] Preprint No. 47 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1977. 28 pp. (E. Schechter) 57 #8062 65N10
- Šaškov, V. M. (with Slugin, S. N.) Sufficient conditions for the existence of a minimum of a functional generated by a countable system of unbounded operators. (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 37-39. (L. Janos) 48 #7074 49B30 (46N05)
- (with Slugin, S. N.) Solvability of an extremal problem in a case of infinite systems of weak* closed operations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 8(135), 79-83. (B. T. Poljak) 48 #9491 49A25
- (with Slugin, S. N.) Minimizability of a functional on the topological product of dual spaces. (Russian) Collection of articles dedicated to Aleksandr Petrovič Norden on the occasion of his seventieth birthday. *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 5(144), 188-193. (Nicolae Luca) 52 #6527 49A25
- Solution of a certain problem of Lions on the existence of an optimal control in the coefficients of the derivatives. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 10(149), 84-87. (A. Friedman) 51 #1527 49A10
- (with Slugin, S. N.; Mironov, A. V.) A topological sufficiency test for the existence of the optimal control of a dynamical system. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 10(185), 134-137. (Authors' introduction) 58 #2547 49B30
- Saslaw, William C. The kinetics of gravitational clustering. *Astrophys. J.* 177 (1972), 17-29. (L. F. Oster) 47 #4596 83.35
- Saslow, Carl F. (with Dorfman, Donald D.; Simpson, John C.) Learning models for a continuum of sensory states reexamined. *J. Math. Psych.* 12 (1975), 178-211. (Barry C. Arnold) 51 #9860 92A25
- Sasonkin, A. M. (with Kirlica, V. P.) Controllability of linear systems with distributed lag in the control. (Russian) *Differencial'nye Uravnenija* 10 (1974), 1003-1008, 1147. (M. M. Konstantinov) 50 #3084 49E15
- Sass, Hartmut Eine abstrakte Definition gewisser alternierender Gruppen. *Math. Z.* 128 (1972), 109-113. (F. A. Sherker) 48 #2228 20B10
- Sassa, Hachirō Some distributions derived from random variables with gamma distributions. *Bull. Tokyo Gakugei Univ.* (4) 23 (1971), 5-10. (A. M. Mathai) 46 #6527 62E99
- Sassa, Masataka (with Goto, Eiichi) A hashing method for fast set operations. *Information Processing Lett.* 5 (1976), no. 2, 31-34. (Eberhard Lüdde) 55 #11757 68A50
- Sassara, Richelmo Ippocrate di Chio e la quadratura del cerchio. *Archimede* 23 (1971), no. 3-4, 218-222. (Phillip S. Jones) 57 #15841 01A20
- Sasser, D. W. (with Driver, R. D.; Slater, Morton) The equation $x'(t) = ax(t) + bx(t - \tau)$ with "small" delay. *Amer. Math. Monthly* 80 (1973), 990-995. (B. Stephan) 48 #4449 34K05
- Sassetti, Mauro Teoremi di esistenza per un problema di von Kármán. (English summary) *Boll. Un. Mat. Ital. B* (5) 13 (1976), no. 2, 299-310. (P. Villaggio) 56 #7420 73.35
- Sasso, Leonard P., Jr. A minimal partial degree $< \mathcal{O}$. *Proc. Amer. Math. Soc.* 38 (1973), 388-392. (G. E. Minc) 47 #29 02F30
- A minimal degree not realizing least possible jump. *J. Symbolic Logic* 39 (1974), 571-574. (C. G. Jockusch, Jr.) 50 #12692 02F30
- Deficiency sets and bounded information reducibilities. *Trans. Amer. Math. Soc.* 200 (1974), 267-290. (From the author's introduction) 57 #9510 02F25 (02F30)
- (with Ladner, Richard E.) The weak truth table degrees of recursively enumerable sets. *Ann. Math. Logic* 8 (1975), no. 4, 429-448. (C. G. Jockusch, Jr.) 52 #63 02F30 (02F25)
- A survey of partial degree. *J. Symbolic Logic* 40 (1975), 130-140. (C. G. Jockusch, Jr.) 52 #64 02F30
- Sastri, C. C. A. (with Forte, Bruno) Is something missing in the Boltzmann entropy? *J. Mathematical Phys.* 16 (1975), 1453-1456. (M. Terrenoire) 54 #12093 82.60
- (with Forte, Bruno) Representation of the entropy functional for a grand canonical ensemble in classical statistical mechanics. *J. Mathematical Phys.* 18 (1977), no. 7, 1299-1302. (M. Terrenoire) 57 #11559 82.60 (94A15)
- Sastri, K. S. Specified sequence linear feedback shift registers. *Internat. J. Systems Sci.* 6 (1975), no. 11, 1009-1019. (Abraham Kandel) 52 #16898 94A20
- (with Vajravelu, K.) Free convective heat transfer in a viscous incompressible fluid confined between a long vertical wavy wall and a parallel flat wall. *J. Fluid Mech.* 86 (1978), no. 2, 365-383. (Authors' summary) 58 #19868 80.35
- Sastry, A. S. Zero-divisors in a ring of arithmetic functions. *Elem. Math.* 30 (1975), 56-58. (M. V. Subbarao) 51 #8013 10A20
- Sastry, D. V. S. (with Bhagwandas) A series of counterexamples to a conjecture of Stanton and Mullin. *Utilitas Math.* 4 (1973), 77-85. (R. G. Stanton) 48 #3755 05B05
- A counter example to conjecture of Stanton and Mullin. *Vikram* 19 (1975), no. 1-3, 75-76. (R. C. Mullin) 58 #21718 05B30
- Sastry, K. P. R. (with Satyanarayana Rao, A.) On the characteristic roots of generalised tournament matrices. *Math. Education* 6 (1972), A5-A8. (M. Lotkin) 45 #6842 15A42
- (with Naidu, S. Venkata Ratnam) A new proof of Giesy's theorem on non-B-convexity. *Proc. Amer. Math. Soc.* 57 (1976), no. 2, 367-368. (R. H. Lohman) 54 #8241 46B05
- (with Naidu, S. Venkata Ratnam) Convexity conditions in normed linear spaces. *J. Reine angew. Math.* 297 (1978), 35-53. (D. R. Henney) 58 #12294 46B05
- rama Sastry, M. V. See Rama Sastry, M. V.

narasimha Sastry, N. S. See Narasimha Sastry, N. S.

Sastry, S. S. On a numerical solution of an integral equation of the first kind. *Indian J. Pure Appl. Math.* **3** (1972), no. 1, 148-156. (P. Linz) **45** #6213 65R05

A numerical solution of an integral equation of the second kind occurring in aerodynamics. *Indian J. Pure Appl. Math.* **4** (1973), 838-843. (G. T. Symm) **50** #9022 65R05

Numerical solution of non-singular Fredholm integral equations of the second kind. *Indian J. Pure Appl. Math.* **6** (1975), no. 7, 773-783. (Frank G. Hagin) **57** #4548 65R05

Numerical solution of Fredholm integral equations with a logarithmic singularity. *Internat. J. Numer. Methods Engrg.* **10** (1976), no. 5, 1202-1207. (Author's summary) **58** #8410 65R05

Finite difference approximations to one-dimensional parabolic equations using a cubic spline technique. *J. Comput. Appl. Math.* **2** (1976), no. 1, 23-26. (R. Kodnár) **54** #1647 (E **56** #1734) 65N05

See also Papamichael, N.; et al., **56** #1734

Sastry, V. R. (with Murthy, P. G.) Comments on "Direct methods for transient stability studies in power system analysis" (IEEE Trans. Automatic Control **AC-16** (1971), 332-341) by J. L. Willems. With a reply by J. L. Willems. *IEEE Trans. Automatic Control* **AC-17** (1972), no. 4, 580-582. (W. D. Collins) **56** #11301 93D05

Sasu, Octavian On the solution of a linear and homogeneous system of differential equations with constant coefficients. (Romanian. English summary) *Bul. Inst. Politehn. Braşov Ser. A Mec.* **13** (1971), 23-25. (Editors) **46** #5717 34A30

Sataev, E. A. The number of invariant measures for flows on orientable surfaces. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **39** (1975), no. 4, 860-878. (D. Newton) **52** #12005 58F99 (28A65)

(with Katok, A. B.) Standardness of rearrangement automorphisms of segments and flows on surfaces. (Russian) *Mat. Zametki* **20** (1976), no. 4, 479-488. (D. Newton) **55** #3217 28A65 (58F15)

An invariant of monotone equivalence that determines the factors of automorphisms that are monotonely equivalent to the Bernoulli shift. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 1, 158-181, 231-232. (D. Newton) **56** #582 28A65

Satake, Ichirô Unitary representations of a semi-direct product of Lie groups on δ -cohomology spaces. *Math. Ann.* **190** (1970/71), 177-202. (S. Murakami) **45** #5274 22E45 (32M05)

★Classification theory of semi-simple algebraic groups. With an appendix by M. Sugura. Notes prepared by Doris Schattschneider. Lecture Notes in Pure and Applied Mathematics, 3. Marcel Dekker, Inc., New York, 1971. viii + 149 pp. (T. Ono) **47** #5135 20G15

Fock representations and theta-functions. *Advances in the Theory of Riemann Surfaces (Proc. Conf., Stony Brook, N. Y., 1969), pp. 393-405. Ann. of Math. Studies, No. 66. Princeton Univ. Press, Princeton, N. J., 1971. (J. S. Joel) **54** #12657 10D15 (22E25, 14K25)*

δ -cohomology spaces associated with a certain group extension. *Several complex variables, II (Proc. Internat. Conf., Univ. Maryland, College Park, Md., 1970), pp. 138-168. Lecture Notes in Math., Vol. 185, Springer, Berlin, 1971. (S. Murakami) **46** #302 22E45 (32L10)*

Factors of automorphy and Fock representations. *Advances in Math.* **7**, 83-110 (1971). (Author's introduction) **50** #541 22E45 (22E25, 32N10)

Linear imbeddings of self-dual homogeneous cones. *Nagoya Math. J.* **46** (1972), 121-145. (E. Vinberg) **46** #9188 (E **55** #5909) 20G20 (57E20)

Mountjoy's abelian varieties attached to a holomorphic immersion. *Number theory, algebraic geometry and commutative algebra, in honor of Yasuo Akizuki, pp. 45-69. Kinokuniya, Tokyo, 1973. (Su-shing Chen) **50** #13626 32N15*

On the arithmetic of tube domains (blowing-up of the point at infinity). *Bull. Amer. Math. Soc.* **79** (1973), 1076-1094. (Peter Kiernan) **48** #8861 32N15 (14E15, 14M20)

★Linear algebra. Translated from the Japanese by Sebastian Koh, Tadatoshi Akiba and Shin-ichiro Ihara. Pure and Applied Mathematics, Vol. 29. Marcel Dekker, Inc., New York, 1975. xi + 375 pp. (Marvin Marcus) **53** #5616 15-01

Corrections to my paper: "Linear imbeddings of self-dual homogeneous cones" (Nagoya Math. J. **46** (1972), 121-145). *Nagoya Math. J.* **60** (1976), 219. (Editors) **55** #5909 32M15

On classification of quasi-symmetric domains. *Nagoya Math. J.* **62** (1976), 1-12. (E. Vinberg) **54** #614 32M15

Q-forms of symmetric domains and Jordan triple systems. *Algebraic number theory (Kyoto Internat. Sympos., Res. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976), pp. 163-176. Japan Soc. Promotion Sci., Tokyo, 1977. (I. L. Kantor) **57** #16717 32M15 (17C50)*

On symmetric and quasi-symmetric Siegel domains. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Williams Coll., Williamstown, Mass., 1975), Part 2, pp. 309-315. Amer. Math. Soc., Providence, R.I., 1977. (E. Vinberg) **56** #16001 32M10*

On the blowing-ups of Hilbert modular surfaces. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 1, 221-229. (G. van der Geer) **56** #3027 14J25 (10D20, 32N10)

See also Theory of numbers, **56** #2953

Šatalov, A. S. (with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šaripov, D. S.; Solodovnikov, V. V.; Teodorčik, K. F.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 1: Математическое описание, анализ устойчивости и качества систем автоматического регулирования. (Russian) [Theory of automatic control. Book 1: Mathematical description, analysis of stability and quality of automatic control systems] Edited by V. V. Solodovnikov. *Izdat. "Mašinostroenie", Moscow, 1967. 768 pp. (Editors) **50** #6557 93-02*

(with Batkov, A. M.; Borodin, Ju. I.; Gol'dfarb, L. S.; Ioannesian, A. B.; Krinečik, I. I.; Letov, A. M.; Petrov, V. V.; Popov, E. P.; Semenov, V. V.; Solodovnikov, V. V.; Topčeev, Ju. I.; Ulanov, G. M.) ★Техническая кибернетика. Теория автоматического регулирования. Книга 3: Теория нестационарных, нелинейных и само-настраивающихся систем автоматического регулирования. Часть 1. (Russian) [Engineering cybernetics. Theory of automatic control. Vol. 3: Theory of

nonstationary, nonlinear and selfadjusting systems of automatic control. Part 1] Edited by V. V. Solodovnikov. *Izdat. "Mašinostroenie", Moscow, 1969. 607 pp. (Editors) **45** #9726 93-02*

(with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šaripov, D. S.; Solodovnikov, V. V.; Teodorčik, K. F.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. Band Stetige lineare Systeme. Gesamtdirektion der Originalausgabe von W. W. Solodovnikov. Aus dem Russischen übersetzt von Klaus Biener, Klaus Franke, Manfred Krauß, Helmut Otto, Edmund Suschke und Bernd Weber. Deutsche Bearbeitung unter Manfred Peschel. *VEB Verlag Technik, Berlin, 1971. 744 pp. foldouts (W. Oppelt (Zbl **229** #93002)) **50** #6558 93-02*

Šatalov, Ju. S. An example of the inapplicability of the quasi-reversibility method finding boundary functions that control the solution of the heat equation. (Russian) *Differencial'nye Uravnenija* **10** (1974), 1335-1337, 1344. (Dahsoong Yü) **51** #615 35K05

(with Vlasov, V. V.; Labovskaja, A. S.) Justification of a method for measuring thermophysical characteristics of rigid bodies. (Russian) *Differencial'nye Uravnenija* (1978), no. 2, 268-273, 387. (K. Seitz) **58** #19494 70J35 (35R30)

Šatalov, V. E. Dirichlet series that are composed of the eigenvalues of boundary value problems for an arbitrary second order elliptic differential operator. (Russian) *Differencial'nye Uravnenija* **8** (1972), 1267-1282. (H. Triebel) **46** #3982 35J25 (30A16)

The ζ -function in an elliptic Sobolev problem. (Russian) *Differencial'nye Uravnenija* **10** (1974), 171-173, 184. (J. S. Joel) **54** #14012 58G15

(with Sternin, B. Ju.) The smooth theory of the canonical Maslov operator of complex Lagrangian germ. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 3(177), 229-232. (Alan Weinstein) **57** #10742 58G15

Asymptotic behavior as $t \rightarrow 0$ of the Green's function of the Cauchy problem for parabolic Sobolev problem. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 3 (177), 233-234. (See Zbl **305** #35012) 35K15

(with Sternin, B. Ju.) Asymptotic behavior of the solution of the Cauchy problem for equations with a complex Hamiltonian. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1976), no. 5, 1060-1063. (J. Muszyński) **54** #6215 58G99 (35B40)

Some asymptotic expansions in Sobolev problems. (Russian) *Sibirsk. Mat. Ž.* (1977), no. 6, 1393-1410, 1438. (P. Szeptycki) **57** #3620 35J30 (58G10)

Šatalova, M. A. (with Mihalev, A. V.) Free ordered modules. (Russian) *Mat. Zametki* (1972), 477-487. (Klaus Keimel) **49** #2491 06A70

Ordered rings. (Russian) *Rings, I (Russian), pp. 38-40. Inst. Mat. Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk, 1973. (J. S. Joel) **55** #7881 06A70*

(with Mihalev, A. V.) Free f-modules. (Russian) *Mat. Zametki* **17** (1975), no. 3, 873-885. (J. Karásek) **52** #13565 06A70

Satanovskii, L. M. (with Gol'dberg, M. K.; Levickaja, L. P.) A sharpening of Ghouila-Houri's theorem. (Russian) *Vychisl. Mat. i Vychisl. Tehn. (Kharkov)* **1971**, no. 56-61, 159. (See RZMat **1972** #4 V317) 05C15

Šatašvili, A. D. The transformation of measures in Hilbert space by means of linear differential equations. (Russian) *Theory of random processes, No. 2 (Russian), pp. 113-120, 140. Izdat. "Naukova Dumka", Kiev, 1974. (N. N. Vahanija (Vakhania)) **53** #1718 60G30*

Transformations of a Gaussian measure in Hilbert space that are generated by linear differential equations. (Russian) *Theory of random processes, No. 2 (Russian), pp. 120-128, 140. Izdat. "Naukova Dumka", Kiev, 1974. (N. N. Vahanija (Vakhania)) **53** #1719 60G30*

(with Dalec'kii, Ju. L.) The optimal prediction of random variables that are nonlinearly connected with Gaussian variables. (Russian) *Theory of random processes, No. 3 (Russian), pp. 30-33, 157. Izdat. "Naukova Dumka", Kiev, 1975. (R. Š. Lipčec) **52** #9359 60G25*

(with Dalec'kii, Ju. L.) The characteristic functional of a conditional distribution. (Russian) *Theory of random processes, No. 4 (Russian), pp. 49-51, 117. Izdat. "Naukova Dumka", Kiev, 1976. (L. I. Gal'čuk) **54** #8835 60G35*

(with Skorohod, A. V.) On the absolute continuity of a Gaussian measure under nonlinear transformation. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 15* (1976), 139-151, 157. (G. N. Sytaja) **55** #4363 60G30

Šatašvili, S. H. A certain mixed external spatial problem of the theory of steady-state oscillations. (Russian. Georgian summary) *V. I. Lenin. Sakharth. Politikh. Inst. Šrom. Teor. Veroyatnost. i Mat. Statist.* **1970**, no. 5(140), 21-25. (D. P. Squier) **46** #9566 35Q99

Satgé, Philippe Sur les corps des classes de rayon q . *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A5-A7. (G. Whaples) **47** #8486 12A65

Lois de réciprocité et lois de décomposition. *Séminaire de Théorie des Nombres, 1974-1975 (Univ. Bordeaux I, Talence), Exp. No. 9, 10 pp. Lab. Théorie des Nombres, Centre Nat. Recherche Sci., Talence, 1975. (Pierre Damey) **52** #13742 12A65*

(with Barrucand, Pierre) Une classe de corps résolubles les corps tchebycheviens. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 17, A947-A949. (Charles J. Parry) **53** #8003 12A35 (12A45, 12A50)

Décomposition des nombres premiers dans des extensions non abéliennes. (English summary) *Ann. Inst. Fourier (Grenoble)* **27** (1977), no. 4, ix, 1-8. (Pierre Damey) **57** #16257 12A55

Sathaye, Avinash (with Abhyankar, Shreeram Shankar) ★Geometric theory of algebraic space curves. Lecture Notes in Mathematics, Vol. 423. Springer-Verlag, Berlin-New York, 1974. xiv + 302 pp. (W. Vogel) **50** #13051 14H45 (14M10)

(with Eakin, Paul) Prestable ideals. *J. Algebra* **41** (1976), no. 2, 439-454. (W. V. Vasconcelos) **54** #7449 13H15 (14M05)

Convergence sets of divergent power series. *J. Reine Angew. Math.* **283/284** (1976), 86-98. (Witold Więsław) **53** #5553 12J99 (14E99)

(with Eakin, Paul M.) R-endomorphisms of $R[[X]]$ are essentially continuous. *Pacific J. Math.* **66** (1976), no. 1, 83-87. (J.-P. Lafon) **55** #8027 13J05

On linear planes. *Proc. Amer. Math. Soc.* **56** (1976), 1-7. (O.-H. Keller) **53** #1322 14E25 (13B15, 14E35)

On planar curves. *Amer. J. Math.* **99** (1977), no. 5, 1105-1135. (Henry C. Pinkham) **57** #6029 14H20

- See also **Abhyankar, Shreeram Shankar**, 57 #6037
- Sharad T.** On implicit equations in nonlinear network analysis. *IEEE Trans. Circuit Theory* **CT-19** (1972), 103-105. (K. S. Chao) **54** #7135 94A20
- Y. S.** (with Salpekar, V. Y.) Inequalities for the normal probability integral. *J. Indian Statist. Assoc.* **9** (1971), 38-44. (S. Panchapakesan) **55** #1565 62E15
- (with Pradhan, Meena) Play-the-winner sampling for a fixed sample size with curtailed. *Biometrika* **60** (1973), 424-427. (Mayer Alvo) **49** #6526 62L15
- (with Pradhan, Meena) Equivalence between fixed sample size rule and Hoel's inverse sampling rule for play-the-winner. *J. Amer. Statist. Assoc.* **69** (1974), 475-476. (Authors' summary) **50** #8866 62L10
- (with Pradhan, Meena) Modification of fixed even sample size procedure for play-the-winner. *Comm. Statist.—Theory Methods* **A5** (1976), no. 4, 365-371. (D. Y. Huang) **54** #3921 62F07
- (with Joshi, Suneeta) On estimating the positive mean of a normal distribution with known coefficient of variation. *Sankhyā Ser. B* **38** (1976), no. 1, 62-67. (Authors' summary) **58** #31544 62F10
- Sharper variance bounds for unbiased estimation in inverse sampling. *Biometrika* **64** (1977), no. 2, 425-426. (Author's summary) **58** #13473 62F10
- er, D.** Nonlinear gradient operators and the method of Lyapunov-Schmidt. *Arch. Rational Mech. Anal.* **43** (1971), 222-244. (Norman Dancer) **49** #5968 47H15
- (with Gustafson, Karl) A branching analysis of the Hartree equation. *Rend. Mat.* **6** (1971), 723-734 (1972). (A. Elcrat) **46** #9823 47H15 (35J10, 81.47)
- (with Gustafson, Karl) Large nonlinearities and monotonicity. *Arch. Rational Mech. Anal.* **48** (1972), 109-122. (H. Amann) **49** #1239 47H05
- (with Gustafson, Karl) Large nonlinearities and closed linear operators. *Arch. Rational Mech. Anal.* **52** (1973), 10-19. (S. Fučík) **49** #1251 47H15
- Branching of solutions of nonlinear equations. Rocky Mountain Consortium Symposium on Nonlinear Eigenvalue Problems (Santa Fe, N.M., 1971). *Rocky Mountain J. Math.* **3** (1973), 203-250. (J. Mawhin) **49** #1258 47H15
- (with Knightly, George H.) Nonlinear buckled states of rectangular plates. *Arch. Rational Mech. Anal.* **54** (1974), 356-372. (J. W. Craggs) **50** #1600 73.35
- (with Osborn, John E.) Alternative problems for nonlinear equations. *J. Differential Equations* **17** (1975), 12-31. (Jean Mawhin) **50** #8185 47H15
- (with Osborn, John E.) Alternative problems and monotonicity. *J. Differential Equations* **18** (1975), no. 2, 393-410. (S. Fučík) **51** #11219 47H15 (35J65)
- (with Knightly, George H.) Nonlinear axisymmetric buckled states of shallow spherical caps. *SIAM J. Math. Anal.* **6** (1975), no. 6, 913-924. (S.-F. Sburian) **52** #2351 73.47
- Branching and stability for nonlinear shells. *Applications of methods of functional analysis to problems in mechanics* (Joint Sympos., IUTAM/IMU, Marseille, 1975), pp. 462-473. *Lecture Notes in Math.*, 503. Springer, Berlin, 1976. (Z. Kączkowski) **58** #32276 73.47 (47H15)
- Bifurcation and stability for a class of shells. *Arch. Rational Mech. Anal.* **63** (1976), no. 3, 295-304 (1977). (J. W. Craggs) **55** #7048 73.35
- (with Knightly, George H.) Existence and stability of axisymmetric buckled states of spherical shells. *Arch. Rational Mech. Anal.* **63** (1976/77), no. 4, 305-319. (R. J. Knops) **55** #9672 73.46
- Branching and stability for nonlinear gradient operators. *Nonlinear analysis* (collection of papers in honor of Erich H. Rothe), pp. 179-192. Academic Press, New York, 1978. (Norman Dancer) **58** #18015 47H15
- ayabhamma, V.** Generalized LC-identity on GD-groupoids. (Czech and loose Russian summaries) *Časopis Pěst. Mat.* **102** (1977), no. 3, 270-274, 312. (J. Aczel) **56** #12164 20N05 (39A40)
- Generalized distributivity equation on GD-groupoids. *Mat. Vesnik* **1(14)(29)** (1977), no. 2, 137-145. (D. A. Robinson) **57** #3296 20N15
- Transitivity, associativity and bismetry equations on GD-groupoids. *Publ. Inst. Math. (Beograd) (N.S.)* **21(35)** (1977), 175-183. (V. A. Artamonov) **56** #12148 20L10
- ay, Jay K.** (with Lave, Roy E., Jr.) Markovian decision processes with probabilistic observation of states. *Management Sci.* **20** (1973/74), 1-13. (Neal Glassman) **49** #3644 49C99
- (with Lave, Roy E., Jr.) Markovian decision processes with uncertain transition probabilities. *Operations Res.* **21** (1973), 728-740. (H. Taylor) **51** #7637 90C40
- lo, E. I.** The groups of type CS. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 640-651. (D. I. Zaicev) **45** #382 20D40
- Biprimary minimal nonsupersolvable groups. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 847-848, 864. (N. D. Podufalov) **54** #12887 20D10
- lov, V. P.** (with Semykina, T. D.) One variational principle in the mechanics of continuous media and its application to the theory of viscous-plastic shells. *Izv. Akad. Nauk SSSR Meh. Tverd. Tela* **1976**, no. 3, 172-175 (Russian); translated as *Mechanics of Solids* **11** (1976), no. 3, 167-170. (Authors' summary) **58** #3887 73.49
- mov, N.** The smoothness of the Bellman function. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1968**, no. 2, 3-5. (J. Jarník) **51** #8578 34H05
- The smoothness of the Bellman function for linear systems of differential equations. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1968**, no. 9, 3-4. (J. Jarník) **52** #14525 34H05
- The regular synthesis and the smoothness of Bellman's function for linear systems. (Russian) *Boundary value problems for differential equations*, 1 (Russian), pp. 124-132. *Izdat. "Fan" Uzbek SSR, Tashkent*, 1971. (Ja. Fodor) **45** #6495 93C05
- The smoothness of the Bellman function for nonlinear systems. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 7, 3-5. (O. Gürel) **50** #5575 49A50
- (with Nazyrov, H. A.) F-geodesics, and the solution of a problem of S. Ulam. I. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 4, 32-37. (K. Radziszewski) **45** #5937 53C70 (49A05)
- The problem of avoiding collisions in linear systems. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1972**, no. 11, 7-8. (I. Muntean) **47** #6336 90D25 (34H05)
- On the evasion problem in linear differential games. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 6, 57-62 (Russian); translated as *Engng. Cybernetics* **10** (1972), no. 6, 990-995. (Author's summary) **55** #14243 90D25
- (with Nazyrov, H. A.) Existence of F-geodesics, and the solution of a problem of S. Ulam. II. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 1, 38-41. (K. Radziszewski) **45** #5938 53C70 (49A05)
- The smoothness of the Bellman function. I. (Russian) *Tashkent. Gos. Univ. Naučn. Trudy* **No. 418 Voprosy Mat.** (1972), 248-262, 387. (Editors) **50** #8206 49A50
- Theorems on the existence and uniqueness of the solutions of first order linear extremal-partial differential equations. (Russian) *Boundary value problems for differential equations*, 3 (Russian), pp. 159-163, 188. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1973. (V. Komkov) **51** #8661 35R99 (49A20)
- (with Miščenko, E. F.) Contact avoidance problem in differential games with nonlinear controls. (Russian) *Differencial'nye Uravneniya* **9** (1973), 1792-1797, 1924. (N. N. Petrov) **49** #2123 90D25
- On the pursuit problem in linear differential games. (Russian) *Differencial'nye Uravneniya* **9** (1973), 2000-2009, 2115. (O. Hájek) **51** #2668 90D25
- The smoothness of Bellman's function for a linear optimal control problem. (Russian) *Differencial'nye Uravneniya* **9** (1973), 2176-2179, 2298. (J. Jarník) **48** #11718 34H05
- l-capture in the "isotropic rockets" problem. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1973**, no. 3, 9-11. (A. B. Kuržanskiĭ) **48** #8004 90D25
- The escape problem for a class of nonlinear discrete games. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 6, 45-48 (Russian); translated as *Engng. Cybernetics* **11** (1973), no. 6, 923-926. (Author's summary) **55** #10045 90D25
- The pursuit problem for a certain class of nonlinear differential games. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **17** (1973), no. 4, 34-40, 98. (F. M. Kirillova) **55** #7446 90D25
- The optimality of the pursuit time for a certain class of nonlinear differential games. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **17** (1973), no. 6, 32-38, 75. (Editors) **57** #18857 90D25
- On the pursuit problem in nonlinear differential games. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 3, 88-93. (L. A. Petrosjan) **50** #3972 90D25
- The avoidance of collisions in nonlinear systems. (Russian) *Boundary value problems for differential equations*, 4 (Russian), pp. 169-172, 192-193. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (Author's summary) **58** #9344 90D25
- The escape problem in differential games with nonlinear control. *Automat. i Telemekh.* **1974**, no. 5 (Russian); translated as *Automat. Remote Control* **1974**, no. 5, part 1, 726-731. (W. E. Schmitendorf) **53** #12628 90D25
- (with Miščenko, E. F.) An alternating integral in linear differential games with nonlinear controls. (Russian) *Differencial'nye Uravneniya* **10** (1974), 2173-2178, 2309. (G. Zatiašvili) **51** #7644 90D25
- On the evasion problem in differential games with nonlinear controls. (Russian) *Dokl. Akad. Nauk SSSR* **216** (1974), 744-747. (A. Friedman) **50** #6537 90D25 (49A10)
- The evasion problem in differential games with nonlinear controls. (Russian) *Dokl. Akad. Nauk SSSR* **1974**, no. 3, 3-5. (A. Friedman) **49** #6949 90D25
- (with Azamov, A.) On the problem of avoiding collisions in nonlinear systems. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 6, 3-5. (J. Jarník) **51** #6522 49A10 (90D25)
- A pursuit problem in nonlinear differential games that are close to linear. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 5, 47-52 (Russian); translated as *Engng. Cybernetics* **12** (1974), no. 5, 40-46. (Sahendra N. Singh) **52** #10070 90D25
- On the pursuit problem in nonlinear differential games. *Prikl. Mat. Meh.* **38** (1974), 38-44 (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 26-32. (Gordon Mon) **50** #3973 90D25
- The problem of evading encounters in linear discrete systems. (Russian. English summary) *Kibernetika (Kiev)* **1974**, no. 5, 116-118. (Author's summary) **57** #2614 90D25
- (with Azamov, A.; Petrosjan, L. A.) The structure of optimal strategies in simultaneous pursuit games. (Russian) *Upravljayemye Sistemy* **No. 13** (1974), 65-68, 74. (See RŽMat **1975** #6 B703) 90D25
- The evasion problem for a certain class of nonlinear differential games. (Russian) *Differencial'nye Uravneniya* **11** (1975), no. 4, 672-677, 764. (N. N. Petrov) **52** #2623 90D25
- (with Miščenko, E. F.) Evasion in n-person differential games. (Russian) *Dokl. Akad. Nauk SSSR* **224** (1975), no. 2, 285-288. (G. Zatiašvili) **53** #12627 90D25
- The pursuit problem for a certain class of nonlinear differential games. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 5, 19-24. (Zbi) **305** #90073 **58** #4387 90D25
- On the evasion problem for a certain class of differential games. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 9(160), 48-52. (Editors) **58** #26096 90D25
- The evasion problem in differential games with nonlinear controls. (Russian) *Boundary value problems for differential equations and their applications* (Russian), pp. 117-122, 158-159. *Fan, Uzbek. SSR, Tashkent*, 1976. (Author's summary) **58** #33042 90D25
- The problem of pursuit according to position in differential games. (Russian) *Dokl. Akad. Nauk SSSR* **229** (1976), no. 4, 808-811. (A. I. Subbotin) **54** #4703 90D25
- A problem of avoiding collisions in linear systems. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 1, 117-121. (Author's summary) **57** #15521 90D25
- (with Azamov, A.) Nonlinear discrete evasion games. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 4, 70-74. (Authors' summary) **56** #11028 90D20
- A way of avoiding encounter in differential games. (Russian) *Mat. Sb. (N.S.)* **99(141)** (1976), no. 3, 380-393, 480. (Author's summary) **58** #9345 90D25
- (with Rihsiev, B. B.) Differential evasion games. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* **No. 41** (1976), 3-16, 185. (RŽMat **1977** #1 B631) **58** #33043 90D25
- On the theory of differential games of evasion. (Russian) *Mat. Sb. (N.S.)* **103(145)** (1977), no. 3, 430-444, 464. (È. G. Al'breht) **57** #15522 90D25

- A nonlinear differential evasion game. (Russian) *Mat. Zametki* **21** (1977), no. 3, 415-425. (Milan Medved') **55** #12153 90D25 (49B10)
- (with Miščenko, E. F.; Nikol'skii, M. S.) The problem of avoiding encounter in n -person differential games. (Russian) Analytic number theory, mathematical analysis and their applications (dedicated to I. M. Vinogradov on his 85th birthday). *Trudy Mat. Inst. Steklov.* **143** (1977), 105-128, 210. (A. I. Subbotin) **58** #26081 90D25
- The composition of a differential equation from its solutions, and the proof of a lemma of L. S. Pontrjagin. (Russian) *Differentsial'nye Uravnenija* **14** (1978), no. 7, 1208-1214, 1340. (V. Šeda) **58** #11580 34A30
- (with Rihšiev, B. B.) The evasion problem for L. S. Pontrjagin's generalized control example. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 2, 20-26, 89. (Authors' summary) **58** #23919 49C15 (90D25)
- Satinder, Pushpa K.** See *Proceedings: Summer Meeting of the Canadian Mathematical Congress*, **48** #5776
- Satko, Ladislav** Tensor products of semigroups and maximal semilattice images. (Russian. Loose English summary) *Mat. Časopis Sloven. Akad. Vied* **24** (1974), 239-246. (S. Lajos) **50** #10130 20M10
- The tensor product of right groups. *Math. Slovaca* **26** (1976), no. 1, 57-61. (Ferenc Fenyves) **58** #951 20M10
- Sato, Akihiko** (with Nakata, Shōji) On some nonlinear oscillations that have branching phenomena. (Japanese) *Res. Rep. Kushiyo Tech. College* **9** (1975), 1-9. (loose errata) (T. Ura) **53** #2092 70.34 (34D10)
- Sato, Daihachiro** A characterization of two real algebraic numbers x, y such that $x^y = y^x$. (Japanese) *Sūgaku* **24** (1972), no. 3, 223-226. **58** #27891 12A15
- (with Rankin, Stuart) Entire functions mapping countable dense subsets of the reals onto each other monotonically. *Bull. Austral. Math. Soc.* **10** (1974), 67-70. (T. Kōvari) **49** #10883 30A66
- (with Hitotumatu, Sin) Star of David theorem. I. *Fibonacci Quart.* **13** (1975), 70. (J. B. Kelly) **51** #3036 10A05
- (with Jones, James P.; Wada, Hideo; Wiens, Douglas) Diophantine representation of the set of prime numbers. *Amer. Math. Monthly* **83** (1976), no. 6, 449-464. (B. H. Mayoh) **54** #2615 10M05 (10B15, 02F99)
- (with Hitotumatu, Sin) Simple proof that a p -adic Pascal's triangle is 120° rotatable. *Proc. Amer. Math. Soc.* **59** (1976), no. 2, 406-407. (F. T. Howard) **53** #13085 10A05
- Sato, Ei-ichi** Uniform vector bundles on a projective space. *J. Math. Soc. Japan* **28** (1976), no. 1, 123-132. (W. Barth) **53** #2952 14F05 (32L05)
- On the decomposability of infinitely extendable vector bundles on projective spaces and Grassmann varieties. *J. Math. Kyoto Univ.* **17** (1977), no. 1, 127-150. (P. E. Newstead) **55** #10459 14F05
- Sato, Enji** On the finite sum of Kronecker sets. *Hokkaido Math. J.* **5** (1976), no. 2, 232-236. (Willard Parker) **54** #862 43A46
- Convolutions of measures on some thin sets. *Hokkaido Math. J.* **7** (1978), no. 1, 49-57. (Colin C. Graham) **57** #10370 43A46
- Satō, Fumihiko** Eisenstein series of $SL(n; \mathbb{C})$, and prehomogeneous vector spaces. (Japanese) Short Seminar on Prehomogeneous Vector Spaces and their Applications, II (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No.* **260** (1976), 59-106. (T. Ono) **54** #12662 10D20
- Zeta functions of quadratic forms and special functions. (Japanese) Research on microlocal analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikikenkyūsho Kōkyūroku No.* **295** (1977), 46-59. (Hiroshi Saito) **58** #5514 10C05
- Sato, Hajime** Constructing manifolds by homotopy equivalences. I. An obstruction to constructing PL-manifolds from homology manifolds. (French summary) *Ann. Inst. Fourier (Grenoble)* **22** (1972), no. 1 271-286. (Perrin Wright) **49** #1522 57C15
- Constructing manifolds by homotopy equivalences. II. Browder-Novikov-Wall type obstruction to constructing PL- and topological manifolds from homology manifolds. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973)*, pp. 77-83. Univ. Tokyo Press, Tokyo, 1975. (Perrin Wright) **52** #4308 57C99 (57D65)
- Constructing manifolds by homotopy equivalences. II. Browder-Novikov-Wall type obstruction to constructing PL- and topological manifolds from homology manifolds. *Tōhoku Math. J. (2)* **27** (1975), no. 4, 569-599. (Editors) **52** #9243 57C99 (57D65)
- (with Nishikawa, Seiki) On characteristic classes of Riemannian, conformal and projective foliations. *J. Math. Soc. Japan* **28** (1976), no. 2, 223-241. (Claude Roger) **53** #4090 57D30
- Remarks concerning contact manifolds. *Tōhoku Math. J. 29* (1977), no. 4, 577-584. (Bang-yen Chen) **56** #16537 53C15 (57D15)
- (with Yabuta, Kōzō) Toeplitz operators on strongly pseudoconvex domains in Stein spaces. *Tōhoku Math. J. (2)* **30** (1978), no. 1, 153-162. (M. B. Abrahamse) **58** #2303 46J10 (47B35, 32F15)
- Sato, Haruo** (with Omote, Minoru) Quantum mechanics of a nonlinear system. *Progr. Theoret. Phys.* **47** (1972), 1367-1377. (J. E. Marsden) **47** #9987 81.47
- Sato, Hideo** Duality of torsion modules over a QF-3 one-dimensional Gorenstein ring. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 347-365, 28-36 (1975). (Ju. A. Drozd) **53** #8141 16A52
- On localizations of a 1-Gorenstein ring. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 366-382, 188-193 (1977). (Jonathan Golan) **56** #399 16A08 (16A36)
- Sato, Hiroki** Remarks on the Eichler cohomology of Kleinian groups. *Proc. Japan Acad.* **47** (1971), 239-243. (I. Kra) **45** #5356 30A58
- The periods of Eichler integrals for Kleinian groups. *Trans. Amer. Math. Soc.* **184** (1973), 439-456. (I. Kra) **48** #6406 30A58
- On periods of meromorphic Eichler integrals. *Nagoya Math. J.* **57** (1975), 1-26. (I. Kra) **51** #5922 30A58 (32G20)
- Cusps on boundaries of Teichmüller spaces. *Nagoya Math. J.* **60** (1976), 81-91. (Howard Masur) **53** #884 32G15 (30A46)
- On boundaries of Schottky spaces. *Nagoya Math. J.* **62** (1976), 97-124. (V. Chuckrow) **54** #5463 30A58 (32G15)
- Satō, Hiroshi** A remark on Landau-Shepp's theorem. *Sankhyā Ser. A* **33** (1971), 227-228. (A. K. Gupta) **46** #10059 60G15
- (with Hida, Takeyuki) On white noise. (Japanese) *Sūgaku* **24** (1972), no. 3, 161-173. (Editors) **58** #31365 60G15
- (with Hida, Takeyuki) On the infinite-dimensional rotation group. (Japanese) *Sūgaku* **24** (1972), no. 4, 303-311. (Editors) **58** #31366 60G15 (22E65)
- On Lie group structure of subgroups of $O(S)$. *Proceedings of the Second Japan-USSR Symposium on Probability Theory (Kyoto, 1972)*, pp. 377-383. *Lecture in Math., Vol. 330, Springer, Berlin, 1973.* (Author's introduction) **56** #5803 2 (58D05, 28A40, 60B15)
- An I. L. B. Lie subgroup of $O(\mathbb{S})$. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **27** (1973), 13-21. (Ngô van Quê) **47** #6949 22E65 (58B05)
- Rotation of \mathbb{S} induced by nonsingular transformations. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **28** (1974), 21-41. (Vo-Khac Khoan) **51** #6411 46F10 (47B99)
- (with Oka, Yukimasa) A characterization of unitary operators induced by nonsingular transformations and its applications. *Nagoya Math. J.* **53** (1974), 189-196. (Humphrey S. Fong) **50** #4896 28A65
- (with Okazaki, Yoshiaki) Separabilities of a Gaussian Radon measure. *Ann. H. Poincaré Sect. B (N.S.)* **11** (1975), no. 3, 287-298. (N. N. Vahanija) **53** #4160B05
- (with Tortrat, A.) Prolongements τ -réguliers de lois de probabilité et application lois gaussiennes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. Aiii, A909-A911. (A. D. de Acosta) **52** #4360 60B05 (60G15)
- Banach support of a probability measure in a locally convex space. *Probability Banach spaces (Proc. First Internat. Conf., Oberwolfach, 1975)*, pp. 221-226. *Lecture Notes in Math., Vol. 526, Springer, Berlin, 1976.* (N. N. Vahanija (Vakhania)) **56** #12215 28A40 (60B05, 60G15)
- Two-user communication channels. *IEEE Trans. Information Theory* **IT-23** (1976), no. 3, 295-304. (Author's summary) **58** #26510 94A05
- (with Mitoma, Itaru) Minimal point of a Gaussian measure. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **31** (1977), no. 1, 71-86. (Albert Tortrat) **55** #11322 60B05
- An outer bound to the capacity region of broadcast channels. *IEEE Trans. Information Theory* **IT-24** (1978), no. 3, 374-377. (M. C. Cheng) **58** #4645 94A10
- Sato, Humitaka** (with Tomimatsu, Akira) New series of exact solutions for gravitational fields of spinning masses. *Progr. Theoret. Phys.* **50** (1973), no. 1, 95-110. (Author's summary) **57** #8873 83.53 (85.53)
- (with Maeda, Kei-ichi) Instability of a quantum field in the curved space-time of rotating star. *Progr. Theoret. Phys.* **59** (1978), no. 4, 1173-1187. (H. Rund) **57** #15081.53 (85.53)
- Sato, Inaho** (with Suzuki, Haruo) On almost complex structures on the products of connected sums of the quaternion projective spaces. *Hokkaido Math. J.* **3** (1973), 98-103. (K. Yano) **48** #4959 53C15
- Satō, Isuke** On closed geodesic in a Kaehlerian manifold with positive constant holomorphic sectional curvature. (Japanese summary) *Bull. Yamagata Univ. Natur. Sci.* **5** (1961), no. 2, 259-261. (T. Ohkubo) **45** #9276 53C55
- On contravariant C -analytic vector fields in a compact Sasakian space. *Differential geometry (in honor of Kentaro Yano)*, pp. 437-441. Kinokuniya, Tokyo, 1972. (Y. Katsurada) **48** #2944 53C25
- On infinitesimal C -analytic transformations in a Sasakian manifold. I. *Bull. Yamagata Univ. Natur. Sci.* **8** (1972), no. 1, 1-16. (K. Yano) **47** #4181 53C25
- On special K -spaces of constant holomorphic sectional curvature. Commemorative volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. I. *Tensor (N.S.)* **24** (1972), 355-362. (K. Yano) **52** #1556 53B35
- On a special Sasaki-Killing space of dimension 5. *Bull. Yamagata Univ. Natur. Sci.* **8** (1973), no. 3, 343-347. (David Blair) **51** #11356 53C25
- On a structure similar to Sasakian 3-structure. *Tōhoku Math. J. (2)* **25** (1972), 405-415. (David Blair) **48** #12409 53C25
- On hypersurfaces in even dimensional contact Riemannian manifolds. *Kōdai Math. Sem. Rep.* **26** (1974/75), 230-239. (Y. Tashiro) **53** #11534 53C15
- Vita and list of publications. (Japanese) Collection of articles dedicated to Isuke Satō. *Bull. Yamagata Univ. Natur. Sci.* **9**, no. 1, i-iii, (1976). (1 plate) (Editors) **54** #301A70
- On structures of tangent sphere bundles. Collection of articles dedicated to Isuke Satō. *Bull. Yamagata Univ. Natur. Sci.* **9**, no. 1, 1-12 (1976). (Y. Tashiro) **55** #4070 53C55
- On a structure similar to the almost contact structure. *Tensor (N.S.)* **30** (1976), no. 3, 219-224. (N. Prakash) **56** #1221 53C15
- On a structure similar to almost contact structures. II. *Tensor (N.S.)* **31** (1977), no. 2, 199-205. (N. Prakash) **57** #17558 53C15
- See also **Collection: Satō, Isuke**, **54** #10
- Sato, Kazuo** Micro and macro constant-elasticity-of-substitution production functions in multifactor industry. *J. Econom. Theory* **1** (1969), 438-453 (1973). (Michael D. Intriligator) **53** #4929 90A15
- Ideal index numbers that almost satisfy the factor reversal test. *Rev. Econom. Statist.* **56** (1974), 549-552. (A. L. Nagar) **51** #4954 90A15
- The ideal log-change index number. *Rev. Econom. Statist.* **58** (1976), no. 2, 223-228. (Jean-Louis Boursin) **58** #9151 90A15 (62P20)
- The meaning and measurement of the real value added index. *Rev. Econom. Statist.* **58** (1976), no. 4, 434-442. (József Sivák) **58** #20321 90A15
- Sato, Keniti** Positive pseudo-resolvents in Banach lattices. *J. Fac. Sci. Univ. Tokyo Sect. A* **17** (1970), 305-313. (R. J. Nagel) **53** #8966 47D05 (47B55)
- A note on nonlinear dispersive operators. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **18** (1971/72), 465-473. (Bruce D. Calvert) **47** #7543 47H99 (46A40, 47D05)
- Potential operators for Markov processes. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. III: Probability theory, pp. 193-211. Univ. California Press, Berkeley, Calif., 1972. (C. Stone) **53** #11768 60J35
- Cores of potential operators for processes with stationary independent increments. *Nagoya Math. J.* **48** (1972), 129-145. (S. C. Port) **48** #5189 60J30
- A note on infinitesimal generators and potential operators of contraction semigroups. *Proc. Japan Acad.* **48** (1972), 450-453. (G. Da Prato) **49** #1220 47D05
- A note on infinitely divisible distributions and their Lévy measures. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **12**, 101-109 (1973). (C.-G. Esseen) **50** #3303 60E05
- Convergence to diffusion processes for a class of Markov chains related to

- population genetics. *Proceedings of the Third Japan-USSR Symposium on Probability Theory* (Tashkent, 1975), pp. 550-561. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (Charles J. Mode) **58** #9404 92A10 (60J70)
- Asymptotic properties of eigenvalues of a class of Markov chains induced by direct product branching processes. *J. Math. Soc. Japan* **28** (1976), no. 1, 192-211. (Edward Pollak) **52** #15716 60J80
- A class of Markov chains related to selection in population genetics. *J. Math. Soc. Japan* **28** (1976), no. 4, 621-637. (Charles J. Mode) **58** #9403 92A10 (60J70)
- Diffusion processes and a class of Markov chains related to population genetics. *Osaka J. Math.* **13** (1976), no. 3, 631-659. (Edward Pollak) **56** #3963 60J70 (92A10)
- On Artin's L -functions. *J. College Engrg. Nihon Univ. Ser. B* **18** (1977), 21-22. (Yoshiomi Furuta) **57** #5960 12A70
- (with Yamazato, Makoto) On distribution functions of class L . *Z. Wahrsch. Verw. Gebiete* **43** (1978), no. 4, 273-308. (Stephen James Wolfe) **58** #13270 60E05
- o, Kohel** Equivalence class and invariant figures of rational iterations with special reference to the global convergence properties of Newton's method. *Mem. Numer. Math. No. 5* (1978), 1-32. (J. Vandergraft) **57** #14407 65H05 (65E05)
- o, Koji** Decipherability of GSM encoding. *Systems-Computers-Controls* **5** (1974), no. 2, 53-61 (1975). (R. N. Goss) **51** #5202 94A25
- o, Kojirō** Infinitesimal affine transformations of the tangent bundles with Sasaki metric. *Tōhoku Math. J. (2)* **26** (1974), 353-361. (G. R. Jensen) **50** #5664 53B20
- On the Riemannian curvature tensor in a Kaehler manifold. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **20(68)** (1976), no. 1-2, 193-197 (1977). (Koichi Ogiue) **56** #16530 53B35
- o, Kunihiko** On the Schur multipliers and central subgroups. *Sci. Rep. Kanazawa Univ.* **22** (1977), no. 1, 9-14. (A. Babakhanian) **58** #889 20D25
- to, Kunio** Approximation by $\sum c_i x^{n_i}$ in L^p ($p > 1$). *Bull. Yamagata Univ. Natur. Sci.* **8** (1973), no. 2, 165-170. (J. W. Jerome) **48** #6771 41A10
- to, Masaki** (with Kikkawa, Keiji; Uehara, Kunihiro) Non-linear strings. *Progr. Theoret. Phys.* **57** (1977), no. 6, 2101-2115. (P. P. Divakaran) **57** #15037 81A1
- Operator ordering and perturbation expansion in the path integral formalism. *Progr. Theoret. Phys.* **58** (1977), no. 4, 1262-1270. (Not reviewed) 81A7
- to, Masahiko** Grundy functions and linear games. *Publ. Res. Inst. Math. Sci.* **7** (1971/72), 645-658. (G. Owen) **48** #3510 90D05
- (with Yoninaga, Masataka) Numerical experiments on a conjecture of B. C. Mortimer and K. S. Williams. *Proc. Japan Acad.* **49** (1973), 791-794. (K. S. Williams) **51** #425 12-04 (10M05)
- Characterization of pseudo-Boolean models by Boolean models and its applications to intermediate logics. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 141-155. (Alasdair Urquhart) **49** #4771 02J05 (02C10)
- On the periods of certain pseudorandom sequences. *Publ. Res. Inst. Math. Sci.* **10** (1974/75), no. 1, 77-89. (H. Gupta) **52** #2129 65C10
- On formal fractions associated with the symmetric groups. *J. Combinatorial Theory Ser. A* **20** (1976), no. 1, 124-131. (Thomas W. Cusick) **52** #13413 05A15 (10A30)
- A study of Kripke-type models for some modal logics by Gentzen's sequential method. *Publ. Res. Inst. Math. Sci.* **13** (1977/78), no. 2, 381-468. (G. E. Minc) **57** #2884 02C10 (02D99)
- (with Hosono, Chiharu) The retracts in P_ω do not form a continuous lattice—a solution to Scott's problem. *Theoret. Comput. Sci.* **4** (1977), no. 2, 137-142. (E. G. Wagner) **58** #8442 68A05 (02F29)
- to, Masahisa** The concrete description of the colocalization. *Proc. Japan Acad.* **52** (1976), no. 9, 501-504. (B. Stenström) **55** #5674 16A08 (18E40)
- Fuller's theorem on equivalences. *J. Algebra* **52** (1978), no. 1, 274-284. (Y. Kawada) **58** #5785 16A62 (16A48)
- to, Masako** See Izumi, Masako
- to, Masamichi** (with Nakagawa, Tetsuo) A Galton-Watson process with state dependent immigration. *Res. Rep. Nagaoka Tech. College* **9** (1973/74), 177-182. (E. Seneta) **49** #6392 60J80
- On a Galton-Watson process with state-dependent immigration. *Sci. Rep. Niigata Univ. Ser. A No. 12* (1975), 33-42. (Anthony G. Pakes) **51** #11687 60J80
- A note on invariant measures for the Galton-Watson process with state-dependent immigration. *Sci. Rep. Niigata Univ. Ser. A No. 12* (1975), 43-45. (Anthony G. Pakes) **51** #11688 60J80
- to, Masamitsu** Generalized Laguerre filter and generalized Jacobi filter. *Electron. Comm. Japan* **60** (1977), no. 4, 1-10. (Anastasios N. Venetsanopoulos) **58** #26511 94A05
- to, Masashi** (with Sugimura, Tatsuo; Kasahara, Masao; Namekawa, Toshihiko) Construction of efficient error-correcting codes for a compound-error channel. *Electron. Comm. Japan* **60** (1977), no. 12, 51-58. (Authors' summary) **58** #33508 94A10
- to, Mieko** (with Tsuda, Takao) An algorithm to locate the greatest maxima of multi-variable functions. *Information Processing in Japan* **15** (1975), 85-89. (Sven-Åke Gustafson) **53** #12015 65K05
- to, Mikio** Regularity of hyperfunctions solutions of partial differential equations. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 785-794. Gauthier-Villars, Paris, 1971. (Editors) **58** #31285 58G05 (58G15)
- (with Kawai, Takahiro; Kashiwara, Masaki) On the structure of single linear pseudo-differential equations. *Proc. Japan Acad.* **48** (1972), 643-646. (P. Schapira) **49** #11076 35S05 (47G05, 58G15)
- (with Shintani, Takuro) On zeta functions associated with prehomogeneous vector spaces. *Proc. Nat. Acad. Sci. U.S.A.* **69** (1972), 1081-1082. (T. Kubota) **45** #5140 14G10 (10H05)
- Pseudo-differential equations and theta functions. *Colloque International CNRS sur les Équations aux Dérivées Partielles Linéaires (Univ. Paris-Sud, Orsay, 1972)*, pp. 286-291. *Asiétrisque*, 2 et 3. Soc. Math. France, Paris, 1973. (J. S. Joel) **57** #7701 58G15 (35N10)
- (with Kawai, Takahiro; Kashiwara, Masaki) Microfunctions and pseudo-differential equations. *Hyperfunctions and pseudo-differential equations (Proc. Conf., Katata, 1971; dedicated to the memory of André Martineau)*, pp. 265-529. *Lecture Notes in Math.*, Vol. 287, Springer, Berlin, 1973. (P. Schapira) **54** #8747 58G15 (32C35, 35N10)
- Microlocal structure of a single linear pseudodifferential equation. *Séminaire Goulaouic-Schwartz 1972-1973: Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 18, 9 pp. Centre de Math., École Polytech., Paris, 1973. (P. Schapira) **54** #8748 58G15 (35S10)
- (with Kawai, Takahiro; Kashiwara, Masaki) The theory of pseudodifferential equations in the theory of hyperfunctions. (Japanese) Collection of articles on hyperfunctions. *Sūgaku* **25** (1973), 213-238. (Editors) **57** #17726 58G05 (35N10, 35S05)
- (with Shintani, Takuro) On zeta functions associated with prehomogeneous vector spaces. *Ann. of Math. (2)* **100** (1974), 131-170. (T. Kubota) **49** #8969 12A70 (10H10)
- Recent development in hyperfunction theory and its application to physics (microlocal analysis of 5-matrices and related quantities). *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 13-29. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (Editors) **58** #31305 58G15 (46F15, 58A15, 81.58)
- (with Kashiwara, Masaki) The determinant of matrices of pseudo-differential operators. *Proc. Japan Acad.* **51** (1975), 17-19. (Bert-Wolfgang Schulze) **52** #12010 58G15 (35S05)
- Reduced b -functions. (Japanese) Notes by Tamaki Yano. Conference on Singular Points of Hypersurfaces and b -Functions (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1973). *Sūrikaiseikikenkyūsho Kōkyūroku No. 225* (1975), 1-15. (Tetsuji Miwa) **58** #11506 32C40
- (with Kashiwara, Masaki; Miwa, Tetsuji; Muro, Masayori) The Fourier transform in the case of an imaginary Lagrangian. (Japanese) Distributions and linear differential equations (Proc. Fourth Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 248* (1975), 212-260. (Editors) **58** #13224a (E 58 #13224b) 58G15 (22E30)
- (with Kashiwara, Masaki; Miwa, Tetsuji) Microlocal study of infinite systems. (Japanese) Distributions and linear differential equations (Proc. Fourth Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 248* (1975), 261-292. (Editors) **58** #4127 82.58 (58G15)
- (with Miwa, Tetsuji; Jimbō, Michio; Ōshima, Toshio) Holonomy structure of Landau singularities and Feynman integrals. Proceedings of the Oji Seminar on Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., Kyoto, 1976). *Publ. Res. Inst. Math. Sci.* **12** (1976/77), supplement, 387-439. (C. S. Sharma) **58** #4099 81.58 (58G15)
- (with Miwa, Tetsuji; Jimbō, Michio) Dimension formula for the Landau singularity. Various problems in algebraic analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 266* (1976), 91-107. (Authors' summary) **57** #8599 81.32 (32C40)
- (with Kashiwara, Masaki; Miwa, Tetsuji; Muro, Masayori) Erratum: "The Fourier transform in the case of an imaginary Lagrangian" (*Sūrikaiseikikenkyūsho Kōkyūroku No. 248* (1975), 212-260). (Japanese) Various problems in algebraic analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 266* (1976), 235. (Editors) **58** #13224b 58G15 (22E30)
- (with Kimura, Tatsuo) A classification of irreducible prehomogeneous vector spaces and their relative invariants. *Nagoya Math. J.* **65** (1977), 1-155. (A. L. Oniščik) **55** #3341 32M10 (20G05)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies on holonomic quantum fields. I. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 1, 6-10. (P. D. F. Ion) **58** #32623a 81.58 (15A66, 30A88, 35Q15, 58A15, 58G15, 82.58)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies on holonomic quantum fields. II. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 5, 147-152. (P. D. F. Ion) **58** #32623b 81.58 (15A66, 30A88, 35Q15, 58A15, 58G15, 82.58)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies on holonomic quantum fields. III. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 5, 153-158. (P. D. F. Ion) **58** #32623c 81.58 (15A66, 30A88, 35Q15, 58A15, 58G15, 82.58)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies on holonomic quantum fields. IV. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 6, 183-185. (P. D. F. Ion) **58** #32623d 82.58 (15A66, 30A88, 35Q15, 58A15, 58G15)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies on holonomic quantum fields. V. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 7, 219-224. (P. D. F. Ion) **58** #32623e 81.58 (15A66, 30A88, 35Q15, 58A15, 58G15, 82.58)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies in holonomic quantum fields. (Japanese) Research on microlocal analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikikenkyūsho Kōkyūroku No. 295* (1977), 77-87. (H. Wakita) **58** #8963 81.58 (58G15)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies on holonomic quantum fields. VI. *Proc. Japan Acad. Ser. A Math. Sci.* **54** (1978), no. 1, 1-5. (P. D. F. Ion) **58** #32623f 81.58 (15A66, 30A88, 35Q15, 58A15, 58G15, 82.58)
- (with Miwa, Tetsuji; Jimbō, Michio) Studies on holonomic quantum fields. VII. *Proc. Japan Acad. Ser. A Math. Sci.* **54** (1978), no. 2, 36-41. (P. D. F. Ion) **58** #32623g 81.58 (15A66, 30A88, 35Q15, 58A15, 58G15, 82.58)
- Sato, Mitsutake** (with Fujii, Katsuhiko; Shoji, Kazuhiko) Asymptotic stability in-the-large of the control systems with hysteresis elements. (Japanese. English summary) *Systems and Control* **16** (1972), 335-340. (Authors' summary) **47** #1514 93D05
- Sato, Mutsumi** (with Tanaka, Kohkichi) A proposal of the partition on vocabulary. *Information Processing in Japan* **15** (1975), 113-117. (H. P. Edmundson) **55** #1853 68A30
- Sato, Osamu** (with Morita, Katuhiko) A method of constructing general contact tangential charts. (Czech summary) *Apl. Mat.* **18** (1973), 238-248. (L. Bitay) **47** #6115 65S05
- (with Morita, Katuhiko) On the construction of tangential contact circular charts. *Rev. Anal. Numér. Théor. Approx.* **4** (1975), no. 1, 29-44. (Authors' introduction) **58** #31705 65S05 (50B05)
- Sato, Risaburo** (with Tsukada, M.; Ishii, Naohiro) Stochastic automaton models for the temporal pattern discrimination of nerve impulse sequences. *Biol. Cybernet.* **21** (1976), no. 3, 121-130. (Authors' summary) **58** #4430 92A05 (94A35)
- (with Tayama, Norio; Masuda, Jiro) Proposal for a symmetric ternary logic system.

- Systems-Computers-Controls* 7 (1976), no. 2, 52-59 (1977). (C. Moraga) 56 #8221 94A20
- Sato, Ryōtarō** Properties of ergodic affine transformations of locally compact groups. III. *Proc. Japan Acad.* 47 (1971), 163-166. (R. Larsen) 45 #3675 28A65 (22D05)
On a general ratio ergodic theorem with weighted averages. *Proc. Amer. Math. Soc.* 35 (1972), 177-178. (R. V. Chacon) 46 #2455 47A35 (28A65)
On the individual ergodic theorem for positive operators. *Proc. Amer. Math. Soc.* 36 (1972), 456-458. (A. Alexiewicz) 46 #7934 47A35 (28A65)
Local ergodic properties of L_p -operator semigroups. *Comment. Math. Univ. Carolinae* 14 (1973), 177-181. (Humphrey S. Fong) 50 #4897 28A65
Ergodic theorems and weak mixing for Markov processes. *J. Math. Soc. Japan* 25 (1973), 257-264. (Michael Lin) 48 #7382 60J05 (28A65)
On the limit of weighted operator averages. *Math. Ann.* 203 (1973), 1-8. (L. Sucheston) 49 #5887 47A35 (28A65)
On decomposition of transformations in infinite measure spaces. *Pacific J. Math.* 44 (1973), 733-738. (Humphrey S. Fong) 48 #2344 28A65
Abel-ergodic theorems for subsequences. *Pacific J. Math.* 47 (1973), 233-242. (R. V. Chacon) 49 #9159 28A65 (47A35)
Ergodic properties of bounded L_1 -operators. *Proc. Amer. Math. Soc.* 39 (1973), 540-546. (H. Fong) 54 #2920 28A65
On Akcoglu and Sucheston's operator convergence theorem in Lebesgue space. *Proc. Amer. Math. Soc.* 40 (1973), 513-516. (L. Sucheston) 49 #5888 47A35
On the individual ergodic theorem for subsequences. *Studia Math.* 45 (1973), 31-35. (errata insert) (L. Sucheston) 49 #5889 47A35 (28A65)
A general ratio ergodic theorem for Abel sums. *Studia Math.* 46 (1973), 223-233. (M. A. Akcoglu) 48 #8756 28A65
A note on operator convergence for semigroups. *Comment. Math. Univ. Carolinae* 15 (1974), 127-129. (Humphrey S. Fong) 49 #5890 47A35
An Abel-maximal ergodic theorem for semi-groups. *Pacific J. Math.* 51 (1974), 543-547. (R. V. Chacon) 51 #6454 47A35 (28A65)
Positive contractions on L_1 -spaces. *Proc. Amer. Math. Soc.* 42 (1974), 442-444. (M. A. Akcoglu) 52 #11629 47A35
Ergodic theorems for semi-groups in L_p , $1 < p < \infty$. *Tōhoku Math. J. (2)* 26 (1974), 73-76. (Humphrey S. Fong) 49 #7808 47A35 (28A65)
A mean ergodic theorem. *Amer. Math. Monthly* 82 (1975), 487-488. (Paul S. Muhly) 51 #11138 47A35 (28A65)
Operators on continuous function spaces and L_1 -spaces. *Colloq. Math.* 34 (1975/76), no. 2, 257-269. (John N. McDonald) 53 #3672 46E15
A note on a local ergodic theorem. *Comment. Math. Univ. Carolinae* 16 (1975), 1-11. (R. J. Nagel) 51 #1435 47A35 (28A65)
On mean ergodic theorems for positive operators in Lebesgue space. *J. Math. Soc. Japan* 27 (1975), 207-212. (Humphrey S. Fong) 53 #1304 47A35
Invariant measures for semigroups. *Studia Math.* 53 (1975), no. 2, 129-134. (Humphrey S. Fong) 51 #13195 28A65
A mean ergodic theorem for a contraction semigroup in Lebesgue space. *Studia Math.* 54 (1975/76), no. 3, 213-219. (Humphrey S. Fong) 53 #3736 47A35
On the existence of positive invariant functions for semigroups of operators. *Tōhoku Math. J. (2)* 27 (1975), no. 2, 187-196. (Humphrey S. Fong) 52 #11004 28A65 (47D05)
Operators on some function spaces. *Colloq. Math.* 36 (1976), no. 1, 117-120. (Richard Rochberg) 54 #13574 46J10 (47B37)
(with Hasegawa, Shigeru) A general ratio ergodic theorem for semigroups. *Pacific J. Math.* 62 (1976), no. 2, 435-437. (J. B. Robertson) 53 #11021 28A65
Invariant measures for bounded amenable semigroups of operators. *Proc. Japan Acad.* 52 (1976), no. 5, 215-218. (M. M. Day) 56 #1132 47D05 (28A65)
On a local ergodic theorem. *Studia Math.* 58 (1976), no. 1, 1-5. (M. A. Akcoglu) 54 #10567 28A65 (47A35)
An Abelian ergodic theorem. *Comment. Math. Univ. Carolinae* 18 (1977), no. 3, 415-422. (Yves Derriennic) 58 #11329 28A65
(with Hiai, Fumio) Mean ergodic theorems for semigroups of positive linear operators. *J. Math. Soc. Japan* 29 (1977), no. 1, 123-134. (From the introduction) 58 #30367 47A35 (47D05)
Ergodic theorems for semigroups of positive operators. *J. Math. Soc. Japan* 29 (1977), no. 4, 591-606. (K. Yosida) 57 #7212 47A35 (47D05)
Invariant measures for ergodic semigroups of operators. *Pacific J. Math.* 71 (1977), no. 1, 173-192. (Michael Lin) 56 #8813 28A65 (47A35)
An individual ergodic theorem. *Proc. Amer. Math. Soc.* 65 (1977), no. 2, 235-241. (N. N. Ganihodzaev) 56 #8814 28A65 (47A35)
The individual ergodic theorem for linear operators. (Japanese) *Sūgaku* 29 (1977), no. 1, 1-13. (Takayuki Furuta) 58 #7139 47A35
Convex combinations of commuting affine operators. *Comment. Math. Univ. Carolinae* 19 (1978), no. 1, 45-51. (R. J. Nagel) 58 #2368 47A35
Positive operators and the ergodic theorem. *Pacific J. Math.* 76 (1978), no. 1, 215-219. (U. Krengel) 58 #1092 28A65
(with Hasegawa, Shigeru; Tsurumi, Shigeru) Vector valued ergodic theorems for a one-parameter semigroup of linear operators. *Tōhoku Math. J. (2)* 30 (1978), no. 1, 95-106. (Richard Fleming) 57 #7210 47A35 (47D05)
- Sato, Ryuzo** Stability conditions in two-sector models of economic growth. *J. Econom. Theory* 1 (1969), 107-117 (1970). (Michael D. Intriligator) 53 #4930 90A15
A further note on a difference equation recurring in growth theory. *J. Econom. Theory* 2 (1970), 95-102. (James A. LaVita) 53 #8696 39A10
On the stability properties of dynamic economic systems. *Internat. Econom. Rev.* 14 (1973), 753-764. (Georg Bol) 50 #9318 90A15
The most general class of CES functions. *Econometrica* 43 (1975), no. 5-6, 999-1003. (From the author's introduction) 55 #14101 90A10
Self-dual preferences. *Econometrica* 44 (1976), no. 5, 1017-1032. (From the summary) 58 #15018 90A05
The implicit formulation and non-homothetic structure of utility functions. *Quantitative Wirtschaftsforschung*, pp. 579-595. Mohr, Tübingen, 1977. (From the introduction) 58 #32852 90A10
- Analysis of production functions by Lie theory of transformation groups: classification of general CES functions. *Resource allocation and division of space (F. Internat. Sympos., Toba, 1975)*, pp. 1-14. *Lecture Notes in Econom. and Math. Syst.* Vol. 147, Springer, Berlin, 1977. (Ronald W. Shephard) 58 #20371 90B30 (90A05)
See also *Resource allocation and division of space*, 57 #4991
- Sato, S. M.** (with Lopresti, Philip V.) New results in multivariable decoupling the (French, German and Russian summaries) *Automatica—J. IFAC* 7 (1971), 499-507. (Jan C. Willems) 48 #3539 93A15
- Sato, Shawich** Two-fold assigning families of holomorphic mappings. *Kumamoto J. (Math.)* 9 (1972/73), 63-73. (J. Hurt) 49 #10923 32H20
On equicontinuous families of holomorphic functions. *Kumamoto J. Sci. (Math.)* (1972/73), 75-86. (H. Wu) 53 #8470 32A17 (32D05)
On the exact ranges of complex manifolds. *Hokkaido Math. J.* 4 (1975), 1-7. (Schneider) 52 #3587 32C10 (32H20)
On the continuity of entire functions. *Kumamoto J. Sci. (Math.)* 12 (1976/77), no. 14-16. (W. Barth) 56 #12296 32A15 (32F05)
- Sato, Shigeo** (with Nakamura, Seitaro) Symmetry of strong interactions. *Progr. Theor. Phys. Suppl.* No. 48 (1971), 1-40. (P. Achuthan) 46 #3010 81J22
- Sato, Shinsaku** (with Shiota, Taira) Remarks on modified symmetrizers for 2×2 hyperbolic mixed problems. *Hokkaido Math. J.* 5 (1976), no. 1, 120-138. (H.-O. Kreiss) 55 #13106 35S15 (35L55)
- Sato, Shizuka** On the kernel of a higher derivative. *Res. Bull. Fac. Ed. Oita Univ.* 4 (1973), no. 1, 1-2. (Allen B. Altman) 46 #5298 13B10
On a derivation projective algebra. *Res. Bull. Fac. Ed. Oita Univ.* 4 (1971), no. 1-4. (Samuel H. Cox, Jr.) 48 #2132 13B10
On the primary decomposition of differential ideals. *Hiroshima Math. J.* 6 (1976), no. 1, 55-59. (Johnny A. Johnson) 53 #385 13B10
Some results on differential ideals in a Noetherian ring. *Rep. Fac. Engrg. Oita Univ.* No. 2 (1976), 63-66. (Paolo Maroscia) 58 #630 13B10 (13A15)
- Sato, Shizuko** (with Yamaguchi, Seiichi) Remarks on analytic HSP-transformation Kaehler manifolds. *TRU Math.* 13 (1977), no. 2, 57-63. (T. Suguri) 57 #10631 53B35
- Sato, Shunsuke** (with Kobayashi, Kingo; Izumi, Masako) A self-dual network derived from a single neuron equation. *Biol. Cybernet.* 18 (1975), no. 3-4, 209-215. (K. Haderer) 58 #26145 92A05
(with Kobayashi, Kingo) Asymptotic distribution of eigenvalues and degeneracy of sparse random matrices. *Bull. Math. Statist.* 17 (1976/77), no. 3-4, 83-99. (William H. Olson) 57 #1601 60B99 (81J60)
Evaluation of the first-passage time probability to a square root boundary for the Wiener process. *J. Appl. Probability* 14 (1977), no. 4, 850-856. (Victor Goodman) 57 #10797 60G15 (60J60)
On the moments of the firing interval of the diffusion approximated model neuron. *Math. Biosci.* 39 (1978), no. 1-2, 53-70. (Kenneth Wickwire) 57 #11823 92A05
- Sato, Tadakazu** (with Honda, Namio) Period-preservation and Poisson stability of parallel maps of tessellation automata. *Proceedings of the International Symposium on Uniformly Structured Automata and Logic (Internat. Inst. Advanced Study Soc. Inform. Sci., Tokyo, 1975)*, pp. 53-61. *IEEE Computer Soc., New York, 1975.* (From the introduction) 58 #9924 94A30
(with Honda, Namio) Certain relations between properties of maps of tessellation automata. *J. Comput. System Sci.* 15 (1977), no. 2, 121-145. (E. Kauniks) 58 #3208 68A25 (94A30)
- Sato, Takeyoshi** Some remarks on boundary properties of analytic functions on Riemann surfaces. *J. Hokkaido Univ. Ed. Sect. II A* 19 (1968/69), no. 1, 40-44. (Author's introduction) 58 #28508 30A72 (30A46)
Evans' solution of the equation $\Delta u = qu$ on Riemann surfaces. I. *J. Hokkaido Univ. Ed. Sect. II A* 22 (1972), no. 2, 72-81. (Author's introduction) 58 #28480 30A52
Evans' solution of the equation $\Delta u = qu$ on Riemann surfaces. II. *J. Hokkaido Univ. Ed. Sect. II A* 23 (1972/73), 13-19. (Author's introduction) 55 #10667 30A50
Integral representation of solutions of the equation $\Delta u = qu$ on a Riemann surface (Japanese summary) *J. Hokkaido Univ. Ed. Sect. II A* 24 (1973/74), 7-34. (M. Nakai) 55 #3239 30A50 (31C05)
- Sato, Takuji** (with Sawaki, Sumio; Watanabe, Yoshiyuki) Notes on a K -space of constant holomorphic sectional curvature. *Kōdai Math. Sem. Rep.* 26 (1975), no. 4, 438-445. (David Blair) 52 #4163 53B35
(with Takamatsu, Kichiro) A K -space of constant holomorphic sectional curvature. *Kōdai Math. Sem. Rep.* 27 (1976), no. 1-2, 116-127. (Hassan Akbar-Zadeh) 53 #9102 53C55
- Sato, Terukiyo** Nonimbedding theorems of Lie algebras. *Hiroshima Math. J.* 2 (1972), 15-18. (T. S. Ravisankar) 48 #2204 17B40
On generators of Lie algebras. *Hiroshima Math. J.* 4 (1974), 29-51. (S. Tôgô) 49 #10747 17B05
- Sato, Tetsuya** (with Fujita, Tsutomu; Sugiyama, Hiroshi) Application of quasilinearization technique to the filtering problem in case of nonlinear stochastic control system. *Tech. Rep. Osaka Univ.* 21 (1971), 361-369. 50 #12401 93E10
A new type of nonlinear plasma equation. I. Formulation. *J. Phys. Soc. Japan* 41 (1976), no. 1, 309-314. (V. P. Milant'ev) 56 #14427 82J35 (35L60)
A new type of nonlinear plasma equation. II. Annihilative and transparent interactions of pulses. *J. Phys. Soc. Japan* 41 (1976), no. 1, 315-320. (V. P. Milant'ev) 56 #14428 82J35 (35L60)
- Sato, Tokui** ★ Introduction to mathematical analysis. Part 1. (Japanese) *Kyoritsu Shuppan, Tokyo*, 1968. 230 + 7 pp. (Yōto Kubota) 58 #6092a 26-01 (28-01)
Sur la différentiabilité et l'intégrale indéfinie de fonctions définies dans un intervalle. *Ann. Mat. Pura Appl.* (4) 89 (1971), 277-308. (B. K. Lahiri) 47 #2011 26A24
★ Introduction to mathematical analysis. Part 2. Volume I. (Japanese) *Kyoritsu Shuppan, Tokyo*, 1972. 255 + iii pp. (Yōto Kubota) 58 #6092b 26-01 (28-01)
Sur l'intégrale de fonctions appartenant à S_p . *Ann. Mat. Pura Appl.* (4) 92 (1972), 151-167. (B. K. Lahiri) 47 #5195 26A63 (26A57)
★ Introduction to mathematical analysis. Part 2. Volume II. (Japanese) *Kyoritsu*

- Shuppan, Tokyo, 1975. 295 + iii pp. (Yôto Kubota) **58** #6092c 26-01 (28-01)
- o, Toshiaki (with Ando, Kiyoshi; Mizuno, Hirobumi) Unitary geometry. I. (Japanese. English summary) *Rep. Univ. Electro-Comm.* **27** (1976/77), no. 2, 277-281. (S. Murakami) **58** #1284a 32M05
- (with Matsumoto, Takashi) Eventual passivity of nonlinear resistive networks and their operating points. *Electron. Commun. Japan* **60** (1977), no. 2, 51-59. (From the summary) **58** #20859 94A20
- (with Ando, Kiyoshi; Mizuno, Hirobumi) Unitary geometry. III. (Japanese. English summary) *Rep. Univ. Electro-Comm.* **28** (1977/78), no. 2, 237-243. (S. Murakami) **58** #1284c 32M05
- (with Ando, Kiyoshi; Mizuno, Hirobumi) Unitary geometry. II. (Japanese. English summary) *Rep. Univ. Electro-Comm.* **28** (1977/78), no. 1, 87-98. (S. Murakami) **58** #1284b 32M05
- to, Tsuneo Deficiencies of an entire algebroid function of finite order. *Kôdai Math. Sem. Rep.* **24** (1972), 34-49. (N. Toda) **48** #6424 30A70
- to, Yoshiharu On the crossed extensor analysis. *RAAG Res. Notes* (3) No. 190 (1973), ii + 12 pp. (K. K. Gorowara) **48** #1070 53A45
- to, Yûkiti Periodic solutions of the equation $\ddot{x} + f(x)\dot{x} + g(x) = 0$ without the hypothesis $xg(x) > 0$ for $|x| > 0$. *Comment Math. Univ. St. Paul.* **20** (1971/72), 127-145. (J. J. Schäffer) **46** #2157 34C25
- Limit cycles of a certain nonlinear differential equation of the second order. *Funkcial. Ekvac.* **16** (1973), 53-67. (J. W. Heidel) **48** #8953 34C05
- On the limit cycles of $\ddot{x} + F(\dot{x}) + g(x) = 0$. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 2, 261-266. (H. Hochstadt) **57** #3508 34C05
- toth, H. Table errata: *Higher transcendental functions, Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. *Math. Comp.* **24** (1970), no. 110, 504. (Editors) **54** #3044 33-XX (65A05)
- Table errata: *Formulas and theorems for the special functions of mathematical physics* (third edition of the English translation, Springer, New York, 1966) by W. Magnus, F. Oberhettinger and R. P. Soni. *Math. Comp.* **24** (1970), no. 110, 505. (Editors) **53** #4467 65A05 (33-02)
- atov, A. K. A numerical method for solving steady-state problems of diffraction of electromagnetic waves by solids of revolution. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 237-241, 272. (J. E. Rosenthal) **47** #4545 78.65
- (with Vinokurov, V. A.) Estimation of the regularization parameter in nonlinear problems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 1386-1392, 1628. (S. Burýšek) **52** #11686 47H15 (65J05)
- (with Svešnikov, A. G.) A numerical method for the solution of integral equations of the first kind in problems of diffraction by solids of revolution. (Russian) *Vyčisl. Metody i Programirovanie* No. 24 (1975), 68-80. (See RŽMat **1976** #5 B443) 65R05
- atre, Thomas W. Natural deduction rules for modal logics. *Notre Dame J. Formal Logic* **13** (1972), 461-475. (S. K. Thomason) **47** #6446 02C10
- Natural deduction rules for $S1^0$ - $S4^0$. *Notre Dame J. Formal Logic* **13** (1972), 565-568. (J. Michael Dunn) **50** #4251 02C10
- rov, A. D. Expansions of fields in open waveguides and resonators. *Radiotekh. i Elektron.* **17** (1972), 1153-1160 (Russian); translated as *Radio Engng. Electron. Phys.* **17** (1972), 896-902. (V. H. Weston) **50** #9178 78.41
- (with Ševčenko, V. V.) Decomposition of the field in an open layered wave guide when the guided waves are degenerate. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **17** (1974), no. 11, 1692-1702. (Authors' summary) **56** #4432 78.35
- satsangi, Prem S. (with Ellis, Jack B.) A generalized system-theoretic framework for modelling large scale national economic systems in dynamic, structural and spatial terms. *Internat. J. Systems Sci.* **2** (1971/72), 213-223. (A. C. Williams) **46** #10380 90A15
- (with Bhargava, D. K.) Economic system: a multi-dimensional model. *Internat. J. Systems Sci.* **9** (1978), no. 6, 603-612. (Edwin Burmeister) **58** #15033 90A15 (93B10)
- satskih, S. Ja. The stability of the solution of the linear prediction problem for stationary processes with discrete parameter. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 1(152), 71-81. (M. Rabindranathan) **54** #8831 60G25
- The stability of the solution of the prediction problem for discrete processes of maximal rank. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 1 (176), 108-117. (M. A. Mirzahmedov) **56** #6836 60G25
- satsuma, Junkichi (with Oikawa, Masayuki; Yajima, Nobuo) Shallow water waves propagating along undulation of bottom surface. *J. Phys. Soc. Japan* **37** (1974), 511-517. **53** #12197 76.35
- (with Yajima, Nobuo) Initial value problems of one-dimensional self-modulation of nonlinear waves in dispersive media. *Progr. Theoret. Phys. Suppl.* No. 55 (1974), 284-306. (R. Glassey) **57** #3675 35Q99 (35B40)
- Higher conservation laws for the nonlinear Schrödinger equation through Bäcklund transformation. *Progr. Theoret. Phys.* **53** (1975), 585-586. **53** #12301 81.35
- N-soliton solution of the two-dimensional Korteweg-deVries equation. *J. Phys. Soc. Japan* **40** (1976), no. 1, 286-290. (Ryogo Hirota) **52** #14703 35Q99
- (with Hirota, Ryogo) N-soliton solutions of model equations for shallow water waves. *J. Phys. Soc. Japan* **40** (1976), no. 2, 611-612. (Mark J. Ablowitz) **53** #1064 35Q99 (76.35)
- (with Hirota, Ryogo) Nonlinear evolution equations generated from the Bäcklund transformation for the Toda lattice. *Progr. Theoret. Phys.* **55** (1976), no. 6, 2037-2038. (Christiane Coudray) **56** #10536 81.35
- (with Hirota, Ryogo) A variety of nonlinear network equations generated from the Bäcklund transformation for the Toda lattice. *Progr. Theoret. Phys. Suppl.* No. 59 (1976), 64-100. (Authors' summary) **56** #10535 81.35
- (with Kaup, David J.) A Bäcklund transformation for a higher order Korteweg-de Vries equation. *J. Phys. Soc. Japan* **43** (1977), no. 2, 692-726. (Authors' summary) **56** #10549 81.35
- (with Hirota, Ryogo) Nonlinear evolution equations generated from the Bäcklund transformation for the Boussinesq equation. *Progr. Theoret. Phys.* **57** (1977), no. 3, 797-807. (Christiane Coudray) **56** #10537 81.35
- abdel-Sattar, A. Dabur See Abdel-Sattar, A. Dabur
- Sattaripour, S. A. (with Ahmadi, G.) Dynamic stability of a column subjected to an axial random load. *Indust. Math.* **26** (1976), no. 2, 67-77. (R. Subramanian) **55** #4881 73.60
- (with Ahmadi, Goodarz) On the stability of differential equations with random coefficients. *Indust. Math.* **27** (1977), no. 1, 1-11. (Ludwig Arnold) **56** #16085 34F05 (60H10)
- Sattarov, A. E. Extremals of the metric space of support vector densities. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 9(184), 119-121. (L. Tamássy) **57** #7422 53B05
- Sattarov, A. S. Solution of certain boundary value problems for the Euler-Poisson-Darboux equation when $-1 < c < 0$. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk* **1973**, no. 1(47), 9-19, 112. (T. Kal'menov) **51** #10906 35Q05
- (with Radžabov, N. S.) A study of exterior boundary value problems of Dirichlet and Neumann type for the fundamental equation of axially symmetric field theory by the potential method. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **17** (1974), no. 5, 7-11. (V. M. Isakov) **52** #14326 31A25 (35J05)
- Solution of a problem of Riquier type for certain higher order equations with a singular line by the potential method. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk* **1975**, no. 1 (55), 12-19, 115. (M. A. Atahodžev) **53** #6091 35J40
- A study of a boundary value problem of type B for a fourth order model equation with a singular curve. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **19** (1976), no. 8, 3-7. (G. Wildenhain) **55** #6006 35J40
- (with Radžabov, N. S.; Džabirov, D. K.) Fundamental solution and integral representations for an equation of elliptic type with two singular lines. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 9, 13-17. (V. V. Kovrižkin) **58** #1622 35J70 (35C15)
- (with Radžabov, N. S.; Džabirov, D. K.) Construction of potentials for a certain equation of elliptic type with two singular lines. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 11, 7-10. (M. A. Atahodžev) **57** #16977 35J70
- (with Radžabov, N. S.; Džabirov, D. K.) The analogue of Poisson's formula for a certain second order equation of elliptic type with two singular lines. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 12, 3-7. (M. Zlámal) **58** #1520 35B25 (35C99)
- Sattarov, F. H. The limit cycles of a certain system of differential equations. (Russian) *Gor'kov. Gos. Univ. Učebn. Zap. No. 158 (Ser. Mat.)* (1972), 32-34. (K. R. Schneider) **48** #11659 34C05
- A certain method for the construction of acyclic and monocyclic domains. (Russian) *Differencial'nye Uravnenija* **10** (1974), 844-850, 955. (K. R. Schneider) **50** #5091 34C05
- See also Qualitative theory of differential equations, **52** #11191
- Sattarova, G. A. (with Molodenkova, I. D.) A modification of the method of the fast Fourier transform. (Russian) *Differencial'nye Uravnenija i Vyčisl. Mat. Vyp. 5* (1975), part 2, 97-117, 146. (Authors' summary) **57** #18166 65T05
- Sattarova, M. K. Representation of analytic functions of n independent variables by a sum of squares. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **18** (1975), no. 2, 8-11. (L. I. Ronkin) **54** #7832 32A99
- Sattath, Shmuel (with Tversky, Amos) Unite and conquer: a multiplicative inequality for choice probabilities. *Econometrica* **44** (1976), no. 1, 79-89. (T. Parthasarathy) **58** #15019 90A05 (90A10)
- Satterthwaite, Mark Allen Strategy-proofness and Arrow's conditions: Existence and correspondence theorems for voting procedures and social welfare functions. *J. Econom. Theory* **10** (1975), no. 2, 187-217. (Prasanta K. Pattanaik) **54** #2159 90A99
- (with Blin, Jean-Marie) On preferences, beliefs, and manipulation within voting situations. *Econometrica* **45** (1977), no. 4, 881-888. (Maurice Salles) **56** #7770 90A05
- (with Muller, Eitan) The equivalence of strong positive association and strategy-proofness. *J. Econom. Theory* **14** (1977), no. 2, 412-418. (Mamoru Kaneko) **55** #11942 90A05
- Satterwhite, R. E. (with Hicks, Troy L.) Quasi-pseudometrics over Tikhonov semi-fields. *Math. Japon.* **22** (1977), no. 3, 315-321. (P. Fletcher) **57** #7539 54E25
- Sattinger, D. See *Advances in differential and integral equations*, **50** #10389
- Sattinger, David H. Stability of bifurcating solutions by Leray-Schauder degree. *Arch. Rational Mech. Anal.* **43** (1971), 154-166. (B. V. Loginov) **49** #1259 47H15
- Monotone methods in nonlinear elliptic and parabolic boundary value problems. *Indiana Univ. Math. J.* **21** (1971/72), 979-1000. (K. Hawlitschek) **45** #8969 35A05
- (with Joseph, Daniel D.) Bifurcating time periodic solutions and their stability. *Arch. Rational Mech. Anal.* **45** (1972), 79-109. (V. Judovič (RŽMat **1973** #1 B294)) **52** #8682 35Q10
- Conformal metrics in \mathbb{R}^2 with prescribed curvature. *Indiana Univ. Math. J.* **22** (1972/73), 1-4. (K.-N. Chow) **46** #4437 53C20
- Stability of solutions of nonlinear equations. *J. Math. Anal. Appl.* **39** (1972), 1-12. (F. Brauer) **46** #4303 47H15 (34G05)
- ★Topics in stability and bifurcation theory. *Lecture Notes in Mathematics*, Vol. 309. Springer-Verlag, Berlin-New York, 1973. vi + 190 pp. (From the author's preface) **57** #3569 35-02
- Transformation groups and bifurcation at multiple eigenvalues. *Bull. Amer. Math. Soc.* **79** (1973), 709-711. (B. V. Loginov) **49** #7861 47H15 (35J60)
- (with McLeod, J. B.) Loss of stability and bifurcation at a double eigenvalue. *J. Functional Analysis* **14** (1973), 62-84. (Bruce Calvert) **50** #5565 47H15
- (with Payne, Lawrence E.) Saddle points and instability of nonlinear hyperbolic equations. *Israel J. Math.* **22** (1975), no. 3-4, 273-303. (Howard A. Levine) **53** #6112 35L60
- A nonlinear parabolic system in the theory of combustion. *Quart. Appl. Math.* **33** (1975/76), 47-61. (F. Hoppensteadt) **57** #3576 35B20 (35K60)
- On a free surface problem. *Applications of methods of functional analysis to problems in mechanics* (Joint Sympos., IUTAM/IMU, Marseille, 1975), pp. 474-481. *Lecture Notes in Math.*, 503. Springer, Berlin, 1976. (David M. Burley) **58** #32362 76.35 (35Q99)

- Pattern formation in convective phenomena. *Turbulence and Navier-Stokes equations* (Proc. Conf., Univ. Paris-Sud, Orsay, 1975), pp. 159-173. *Lecture Notes in Math.*, Vol. 565, Springer, Berlin, 1976. (J. S. Joel) **57** #7663 58E05 (35Q99, 58F10)
- On the stability of waves of nonlinear parabolic systems. *Advances in Math.* **22** (1976), no. 3, 312-355. (J. Smoller) **55** #8561 35K55
- On the free surface of a viscous fluid motion. *Proc. Roy. Soc. London Ser. A* **349** (1976), no. 1657, 183-204. (Jacques Mauss) **54** #4314 76.41
- Application of group theoretic methods in bifurcation theory. *Group theoretical methods in physics* (Proc. Fifth Internat. Colloq., Univ. Montréal, Montréal, Que., 1976), pp. 585-589. Academic Press, New York, 1977. (B. V. Loginov) **58** #7697 58E05 (22E99, 47H15)
- Cooperative effects in fluid problems. *Synergetics* (Proc. Internat. Workshop, Garmisch-Partenkirchen, 1977), pp. 51-57. Springer, Berlin, 1977. (J. S. Joel) **58** #32384 76.58
- Stability of travelling waves of nonlinear parabolic equations. *VII. Internationale Konferenz über Nichtlineare Schwingungen* (Berlin, 1975), Band I, Teil 2, pp. 209-213. Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., no. 4N, Akademie-Verlag, Berlin, 1977. (Wolfgang Alt) **58** #29274 35K55
- Selection mechanisms for pattern formation. *Arch. Rational Mech. Anal.* **66** (1977), no. 1, 31-42. (B. V. Loginov) **58** #7696 58E05 (35B40, 47H15, 80.58)
- Weighted norms for the stability of traveling waves. *J. Differential Equations* **25** (1977), no. 1, 130-144. (J. Smoller) **56** #6123 35K99
- Group representation theory and branch points of nonlinear functional equations. *SIAM J. Math. Anal.* **8** (1977), no. 2, 179-201. (B. V. Loginov) **55** #11297 58E05 (22E45, 47H15)
- Recent progress in bifurcation theory. *Nonlinear analysis* (collection of papers in honor of Erich H. Rothe), pp. 193-209. Academic Press, New York, 1978. (B. V. Loginov) **58** #18546 58E05 (47H15)
- See also **Nonlinear problems in the physical sciences and biology**, **51** #7766
- Sattinger, Michael** Local stability when initial holdings are near equilibrium holdings. *J. Econom. Theory* **11** (1975), no. 2, 161-167. (Hildegard Dierker) **54** #2155 90A15
- Compensating wage differences. *J. Econom. Theory* **16** (1977), no. 2, 496-503. (Author's summary) **56** #17712 90A05 (92A20)
- Sattler, R.** (with Meijer, H. G.) On uniform distribution of integers and uniform distribution Mod 1. *Nieuw Arch. Wisk.* (3) **20** (1972), 146-151. (L. Kuipers) **47** #151 10F40
- A theorem concerning (r_1, r_2, \dots, r_t) -primitive sequences and an application to $(0, r)$ -primitive sequences. *Delft Progress Rep.* **2** (1976/77), no. 1, 23-26. (From the summary) **58** #22007 10L10
- Satubaldyev, D.** (with Džamirzaev, A. A.) The absolute constant in the Mešalkin-Rogozin theorem. (Russian) *Random processes and statistical inference*, No. 5 (Russian), pp. 36-41, 201. Izdat. "Fan" Uzbek. SSR, Tashkent, 1975. (R. J. Tomkins) **53** #4178 60F05
- (with Atakuziev, D. A.) An estimate of the rate of convergence in B. Freyer's local limit theorem. (Russian) *Tskent. Gos. Univ. Naučn. Trudy Vyp.* 490 Voprosy Matematiki (1976), 38-43, 261. (Authors' summary) **57** #14104 60F05
- Satyabanta Singh, A.** A counterpart of Minkowski's inequality (a particular case of Satyabanta's inequality). *Math. Education* **6** (1972), A4. (Editors) **45** #5296 26A87
- Satyanarayana, A.** (with Prabhakar, A.) New topological formula and rapid algorithm for reliability analysis of complex networks. *IEEE Trans. Reliab.* **R-27** (1978), no. 2, 82-100. (W.-K. Chen) **58** #9884 94A20
- Satyanarayana, Kesiraju** Evaluation of $\sum_{x=1}^{\infty} 1/[x(x+1)(x+2)\cdots(x+m)]^n$ and allied series. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 409-414 (1972). (S. M. Shah) **48** #4567 40A25
- ★ Poristic theory, pedal lines, Kantor lines, Kantor points and allied topics. Study by the method of complex coordinates. *Visalaandhra Publishing House, Vijayawada*, 1976. xviii + 157 pp. (Editors) **54** #3565 50-02
- Satyanarayana, M.** A note on quasi-primary rings. *Math. Student* **38** (1970), 175-176. (E. M. Patterson) **46** #5296 13A15
- A note on a self injective ring. *Canad. Math. Bull.* **14** (1971), 271-272. (M. Teply) **47** #278 16A52
- Commutative semigroups in which primary ideals are prime. *Math. Nachr.* **48** (1971), 107-111. (O. Steinfeld) **45** #2051 20M10
- Commutative primary semigroups. *Czechoslovak Math. J.* **22(97)** (1972), 509-516. (G. J. Lallement) **46** #7418 20M10
- Semigroups with ascending chain condition. *J. London Math. Soc.* (2) **5** (1972), 11-14. (E.-A. Behrens) **45** #6964 20M10
- (with McMorris, F. R.) Categorical semigroups. *Proc. Amer. Math. Soc.* **33** (1972), 271-277. (H.-J. Hoehnke) **45** #2061 20M10
- On dual semigroups. *Publ. Math. Debrecen* **20** (1973), 45-51. (Št. Schwarz) **48** #6297 20M10
- On semigroups admitting ring structure. II. *Semigroup Forum* **6** (1973), no. 3, 189-197. (H. J. Weinert) **51** #8306 20M10
- On the left cancellative semigroups. *Semigroup Forum* **6** (1973), no. 4, 317-329. (J. E. Kuczowski) **51** #13098 20M10
- (with Meronk, D. B.) Semigroups of transitive type. *Math. Nachr.* **59** (1974), 199-206. (T. Tamura) **49** #2996 20M10
- (with Mannepalli, V. L.) Monoids of Dedekind type. *Semigroup Forum* **9** (1974/75), no. 1, 19-27. (S. Lajos) **51** #10499 20M10
- (with Dorofeeva, M. P.; Mannepalli, V. L.) Prüfer and Dedekind monoids. *Semigroup Forum* **9** (1974/75), no. 4, 294-309. (B. Stenström) **52** #606 20M10
- On 0-radical of a semigroup. *Math. Nachr.* **66** (1975), 231-234. (D. R. LaTorre) **52** #622 20M10
- On a class of semisimple semigroups. *Semigroup Forum* **10** (1975), no. 2, 129-138. (Št. Schwarz) **52** #3397 20M10
- (with Dorofeeva, M. P.; Mannepalli, V. L.) Prüfer and Dedekind monoids. II. *Semigroup Forum* **11** (1975/76), no. 2, 102-114. (B. Stenström) **52** #14107 20M10
- Quasi- and weakly-injective S -systems. *Math. Nachr.* **71** (1976), 183-190. (Edward T. Wong) **53** #8301 20M10
- (with Mannepalli, V. L.) Multiplication semigroups. III. *Semigroup Forum* **12** (1976), no. 2, 165-175. (D. R. LaTorre) **54** #10454c 20M10
- On generalized kernels. *Semigroup Forum* **12** (1976), no. 4, 283-292. (Št. Schwarz) **54** #2851a 20M10
- On generalized kernels. II. *Semigroup Forum* **12** (1976), no. 4, 293-298. (Schwarz) **54** #2851b 20M10
- Semigroup methods in ring theory. *Ring theory* (Proc. Conf., Ohio Univ., Ath. Ohio, 1976), pp. 213-221. *Lecture Notes in Pure and Appl. Math.*, Vol. 25, Dekker, York, 1977. (H. J. Weinert) **55** #12769 16A48 (20M10)
- On commutative semigroups which are unions of a finite number of principal ideals. *Czechoslovak Math. J.* **27(102)** (1977), no. 1, 61-68. (O. Steinfeld) **55** #12841 20M10
- A class of maps acting on semigroups. *Publ. Math. Debrecen* **24** (1977), no. 2, 209-213. (T. Tamura) **57** #12745 20M15
- Structure and ideal theory of commutative semigroups. *Czechoslovak Math. J.* **28(103)** (1978), no. 2, 171-180. (T. Tamura) **58** #952 20M10
- Satyanarayana, U. V.** (with Weiss, Max L.) The geometry of convex curves tending to the unit disc. *Proc. Amer. Math. Soc.* **41** (1973), 159-166. (J. A. Cima) **47** #704 30A78
- (with Weiss, Max L.) Tangential asymptotic values of bounded analytic functions. *Proc. Amer. Math. Soc.* **41** (1973), 167-172. (J. A. Cima) **47** #7045 30A78
- Satyanarayana Murty, P. V.** On the zero divisors of Z_n . *Math. Education* **9** (1975), no. B37-B38. (M. S. Cheema) **51** #12664 10A05
- On the product of four consecutive integers. *Math. Education* **9** (1975), no. B49-B50. (Donald L. Goldsmith) **52** #3026 10A05
- A proof of the generalization of Fermat's theorem. *Math. Education* **11** (1977), 2, A36. (K. S. Williams) **55** #12620 10A20
- Satyanarayana Rao, A.** (with Sastry, K. P. R.) On the characteristic roots of general tournament matrices. *Math. Education* **6** (1972), A5-A8. (M. Lotkin) **45** #6842 15A42
- Elementary solutions of certain types of homogeneous partial differential equations with constant coefficients. *Math. Education* **6** (1972), A107-A112. (Author's summary) **46** #7693 35E05
- (with Narasimha Murthy, K.) A note on self-adjoint systems of differential equation. *Math. Education* **9** (1975), no. 3, A59-A60. (Alexander Alenicyan) **52** #85 34B05
- Satyanarayana Rao, Aribindi** (with Subba Rao, P. V.; Ramachandra Rao, B.) A simple proof of Fischer's inequality. *Math. Education* **5** (1971), A65-A66. (D. Ž. Đoković) **46** #92 26A87
- On the matrix summability of a class of Fourier series. *Bull. Calcutta Math. Soc.* (1972), 125-128. (L. Leindler) **49** #977 42A24
- On the absolute matrix summability of a Fourier series. *Pacific J. Math.* **42** (1972), 221-225. (H. P. Dikshit) **47** #7304 42A28
- On the strong (L) summability of the $(C, 1)$ mean of a Fourier series. *Bull. Calcutta Math. Soc.* **65** (1973), 15-17. (errata insert) (Gokulananda Das) **51** #8721 42A24
- On the Stepanov-almost periodic solution of an abstract differential equation. *Indiana Univ. Math. J.* **23** (1973/74), 205-208. (Jagdish Chandra) **48** #664 34G05 (47D05)
- On differential operators with Bohr-Neugebauer type property. *J. Differential Equations* **13** (1973), 490-494. (V. Lakshmikantham) **48** #6598 34G05
- On the order of magnitude of the matrix transform of a class of derived Fourier series. *Math. Student* **41** (1973), 180-182. (D. P. Gupta) **50** #10666 42A24
- Matrix summability of a class of derived Fourier series. *Pacific J. Math.* **48** (1973), 481-484. (S. M. Mazhar) **53** #1139 42A24
- A variational property for a family of weakly continuous vector-valued functions (Italian summary) *Boll. Un. Mat. Ital.* (4) **10** (1974), 1-5. (R. Rao Chivukula) **54** #8271 46E40
- (with Hengartner, Walter) On the spectrum of almost periodic solutions of an abstract differential equation. *J. Austral. Math. Soc.* **18** (1974), 385-387. (R. A. Struble) **51** #3637 34G05
- On the almost periodic solution of an abstract differential equation. *J. Austral. Math. Soc.* **18** (1974) no. 2 252-256. (Author's summary) **57** #10156 34G05
- (with Hengartner, Walter) On the existence of a unique almost periodic solution of an abstract differential equation. *J. London Math. Soc.* (2) **8** (1974), 577-581. (J. Prouse) **50** #13785 34G05
- On the absolute Nörlund summability of a Fourier series. *Math. Student* **42** (1974), 5-8 (1975). (Shri Nivas Bhatt) **54** #8129 42A20
- A note on the integration of Stepanov-almost periodic functions. *Math. Student* **42** (1974), 138-140 (1975). (A. Precupanu) **53** #8779 42A84
- On the Stepanov-almost periodic solution of a second-order operator differential equation. *Proc. Edinburgh Math. Soc.* (2) **19** (1974/75), 261-263. (D. Ramakrishna Rao) **53** #11185 34G05
- On the absolute Nörlund summability of a class of Fourier series. *Rend. Circ. Mat. Palermo* (2) **23** (1974), no. 2-3, 182-186 (1975). (Shri Nivas Bhatt) **53** #3579 42A24
- On weakly almost-periodic families of linear operators. *Canad. Math. Bull.* **18** (1975), no. 1, 81-85. (J. A. Goldstein) **52** #1410 47D10
- On second-order differential operators with Bohr-Neugebauer type property. *Canad. Math. Bull.* **18** (1975), no. 3, 393-396. (Bolis Basit) **55** #796 34G05
- On the Stepanov-bounded primitive of a Stepanov-almost periodic function. (Italian summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 1, 65-68. (Carl I. DeVito) **53** #6223 42A84
- Strong almost periodicity of certain solutions of operator differential equations (Italian summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 2, 243-248. (G. Ladas) **54** #5574 34G05
- On the weakly almost periodic solutions of certain abstract differential equations. *Czechoslovak Math. J.* **26(101)** (1976), no. 1, 65-70. (J. E. Lagnese) **52** #11245 34G05
- On the Stepanov-bounded solutions of certain abstract differential equations. *Indian J. Pure Appl. Math.* **8** (1977), no. 1, 120-123. (Author's summary) **56** #12484 34G05
- (with Vasilache, Sergiu) On the primitive of a certain Stepanov almost periodic

- function. (Italian summary) *Boll. Un. Mat. Ital. B* (5) **15** (1978), no. 1, 344-348. (K. C. Gupta) **58** #6905 42A84
- On the almost periodic solutions of certain second-order abstract differential equations. *J. Math. Anal. Appl.* **62** (1978), no. 1, 63-67. (Bolis Basit) **58** #6590 34G05
- Ybaldina, K. I. Absolute estimates of the rate of convergence to stable laws. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 773-775. (J. Štěpán) **46** #10047 60F99
- On the question of the estimation of the rate of convergence in a limit theorem with a stable limit law. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 211-212. (J. Štěpán) **47** #7785 60F05
- Estimation of the rate of convergence to stable laws. (Russian) *Vestnik Akad. Nauk Kazah. SSR* **29** (1973), no. 4(336) 57-65. (M. Loève) **49** #4080 60F05
- Tyulova, S. Generalized methods of Adams type for integro-differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk* No. 7 (1970), 121-131. (See RŽMat 1971 #1 B922) 45J05
- Error estimates for generalized methods of Adams type for integro-differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk* No. 7 (1970), 132-143. (See RŽMat 1970 #12 B931) 45J05 (45L10)
- (with Otelbaev, M. O.) On imbedding theorems. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp.* 10 (1974), 32-37. (J. Musielak) **54** #5825 46E35
- Two-kind approximations for Volterra type integrodifferential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp.* 10 (1974), 66-75. (Editors) **54** #3332 45J05
- Utyo, E. I. See Šatilo, E. I.
- Utyr, A. V. A gradient-free algorithm for the minimization of a function of several variables. (Russian) *Optimization methods and operations research, applied mathematics* (Russian), pp. 178-181, 192. *Akad. Nauk SSSR Sibirsk. Otdel. Sibirsk. Energet. Inst., Irkutsk*, 1976. (A. B. Pevnyi) **58** #4342 90C30 (49A20)
- A gradient-free algorithm for the minimization of functionals. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 6, 498-501, 572. (Author's summary) **58** #23932 49D10
- Utyro, Ja. I. Interior estimates for the solution of a certain class of ultraparabolic equations. (Russian) *Ural. Gos. Univ. Mat. Zap.* 7 (1969/70), no. 4, 104-119. (J. Kačur) **45** #727 35K10
- The first boundary value problem for a certain ultraparabolic equation. (Russian) *Differentsial'nye Uravneniya* **7** (1971), 1089-1096, 1141. (D. B. Kotlow) **46** #7711 35K20
- Utz, H. (with de Groot, E. H.) Quantum statistics and the uncorrelated jet model at high energy. *Nuclear Phys. B* **130** (1977), no. 2, 257-268. (P. Caldirola) **57** #11523 81G2
- See also **Elementary particle physics: multiparticle aspects**, **48** #1597
- Utzner, William J., Jr. Canonical reduction of mechanical systems invariant under abelian group actions with an application to celestial mechanics. *Indiana Univ. Math. J.* **26** (1977), no. 5, 951-976. (Manfred Andrie) **56** #6735 58F05 (70S8)
- Uau, J. Quantum conjugate momentum of angular momentum modulus. *J. Phys. A* **11** (1978), no. 1, 69-79. (Marcel Coz) **57** #11497 81A7
- Saucier, Gabriele Un algorithme efficace recherchant l'isomorphisme de 2 graphes. (Loose English summary) *Rev. Française Informat. Recherche Opérationnelle* **5** (1971), no. R-3, 39-51. (T. L. Saaty) **46** #1654 05C99
- (with Robach, Chantal) Dynamic testing of control units. *IEEE Trans. Comput.* **27** (1978), no. 7, 617-623. (Authors' summary) **58** #20910 94A30
- Saičuk, U. P. The rotation of three concentric spheres that are separated by fluids. (Belorussian. Russian summary) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1973**, no. 5, 113-118, 140. (M. Drăganu) **50** #3754 76J35
- Saucukova, L. Z. Solution of a certain classification problem by the method of computing the estimates. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 4, 1020-1030, 1090. (Jana Zvárová) **52** #9718 68A45
- Saudargas, Al'girdas One approach to the problem of partial realization. *Automat. i Telemekh.* **1977**, no. 2, 73-80. (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 2, part 1, 221-227. (Peter A. Cook) **56** #2511 93B15
- A criterion for the partial realization of discrete stationary systems. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravleniya—Trudy Sem. Processy Optimal. Upravleniya V Sekcija Vyp.* 20 (1977), 9-20, 89. (Author's summary) **58** #15476 93C55
- Sauer, C. H. (with Lavenberg, Stephen S.) Sequential stopping rules for the regenerative method of simulation. *IBM J. Res. Develop.* **21** (1977), no. 6, 545-558. (Laurence L. George) **57** #14192 60K30 (68A55)
- See also **Papers: System performance evaluation**, **50** #15416
- Sauer, Günter (with Seibert, Wolfgang; Wille, Rudolf) On free modular lattices over partial lattices with four generators. *Proceedings of the University of Houston Lattice Theory Conference* (Houston, Tex., 1973), pp. 332-382. *Dept. Math., Univ. Houston, Houston, Tex.*, 1973. (R. P. Dilworth) **53** #10671 06A30
- Sauer, Niko (with Fujita, Hiroichi) On existence of weak solutions of the Navier-Stokes equations in regions with moving boundaries. *J. Fac. Sci. Univ. Tokyo Sect. I* **17** (1970), 403-420. (A. Elcrat) **45** #7310 35Q10 (47F05)
- Sauer, Norbert On the factorization of n -graphs. *Combinatorial theory and its applications, III* (Proc. Colloq., Balatonfüred, 1969), pp. 981-995. North-Holland, Amsterdam, 1970. (Author's summary) **48** #5872 05A05
- On the maximal number of edges in graphs with a given number of edge-disjoint triangles. *J. London Math. Soc.* (2) **4** (1971), 153-156. (F. Harary) **45** #8567 05C99
- (with Abbott, H. L.; Hanson, Denis) Intersection theorems for systems of sets. *J. Combinatorial Theory Ser. A* **12** (1972), 381-389. (J. E. Graver) **45** #6633 05A05 (04A20)
- On the density of families of sets. *J. Combinatorial Theory Ser. A* **13** (1972), 145-147. (L. Bukovský) **46** #7017 02H10 (04A20, 05A05)
- (with Schaer, Jonathan) On the factorization of the complete graph. *J. Combinatorial Theory Ser. B* **14** (1973), 1-6. (G. Chartrand) **47** #1684 05C99
- (with Erdős, Paul; Schaer, Jonathan; Spencer, Joel H.) Factorizing the complete graph into factors with large star number. *J. Combinatorial Theory Ser. B* **18** (1975), 180-183. (A. Rosa) **51** #276 05C99
- (with Bollobás, Béla) Uniquely colourable graphs with large girth. *Canad. J. Math.* **28** (1976), no. 6, 1340-1344. (P. Erdős) **55** #2632 05C15
- (with Stone, Michael G.) Endomorphism and subalgebra structure; a concrete characterization. *Acta Sci. Math. (Szeged)* **39** (1977), no. 3-4, 397-402. (O. Frink) **58** #464 08A25
- (with Stone, Michael G.) The algebraic closure of a semigroup of functions. *Algebra Universalis* **7** (1977), no. 2, 219-233. (I. Gy. Maurer) **58** #16924 20M20
- (with Stone, Michael G.) The algebraic closure of a function. *Algebra Universalis* **7** (1977), no. 3, 295-306. (Gilbert Crombez) **56** #222 08A25
- (with Fejes Tóth, László) Thinnest packing of cubes with a given number of neighbours. *Canad. Math. Bull.* **20** (1977), no. 4, 501-507. (Bal Kishan Dass) **57** #17513 52A45 (05B40)
- Sauer, P. U. Off-energy-shell continuation of the two-nucleon transition matrix in the presence of tensor forces. *Nuclear Phys. A* **170** (1971), 497-512. (Author's summary) **52** #2482 81A7
- Sauer, Robert Über eine Verallgemeinerung der Hodographenabbildung. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B.* **1970**, part II, 1-9 (1971). (W. O. Criminale, Jr.) **46** #2982 76A4
- Saul'ev, V. K. Asymptotically bilateral methods of solution of partial differential equations. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 362-371. (B. Jankó) **45** #9440 65P05
- (with Samoilo, I. I.) Approximate methods of unconditional optimization of functions of several variables. (Russian) *Mathematical analysis, Vol. 11* (Russian), pp. 91-128, 180. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1973. (S.-F. Shurlan) **51** #14585 65K05
- Once again on absolutely stable explicit difference schemes. (Russian) *Differentsial'nye Uravneniya* **9** (1973), 355-360, 397. (J. Mikliček) **47** #7925 65M10
- (with Prohorov, M. B.) The Kalman-Bucy optimal filtering method, and its generalizations. (Russian) *Mathematical analysis, Vol. 14* (Russian), pp. 167-207, i. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1977. (Vladimir Katkovnik) **57** #19016 93E10
- Combination of Čaplygin and spline-collocation methods for the solution of ordinary differential equations. (Russian) *Differentsial'nye Uravneniya* **14** (1978), no. 8, 1520-1521, 1535. (Gheorghe Micula) **58** #24964 65L05
- Saulis, L. I. (with Šeršadze, T. L.) Multidimensional limit theorems for densities of distribution. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **60** (1970), 533-536. (J. H. Kučkarov) **45** #4486 60F05
- Asymptotic expansion for the density of the distribution of sums of independent non-identically distributed multidimensional random variables. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 651-663. (S. A. Book) **45** #6063 60F05
- The local limit theorem for the density of distribution in \mathbf{R}^k . (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **12** (1972), no. 4, 195-205, 241. (H. G. Tucker) **49** #6320 60F05
- (with Misevičius, E.) Asymptotic expansions of large deviations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 1, 129-136, 234. (H. G. Tucker) **49** #6326 60F10
- (with Nakas, A.) Asymptotic expansions for large deviations when the Cramér condition is violated. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 1, 199-219, 238. (H. G. Tucker) **49** #4082 60F10
- (with Nakas, A.) Certain limit theorems, allowing for large deviations, for sums of independent random variables. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 3, 141-159, 235. (S. A. Book) **48** #12633 60F10
- Limit theorems that take into account large deviations in the case when Ju. V. Linnik's condition is satisfied. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 4, 173-196, 225-226. (M. Loève) **50** #5908 60F10
- (with Statulevičius, V.) On large deviations for a distribution density function. Collection of articles dedicated to the memory of Wolfgang Richter. *Math. Nachr.* **70** (1975), 111-132. (Roy V. Erickson) **54** #3819 60F10
- (with Statulevičius, V.) On large deviations in the scheme of summing random variables with weights. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 2, 145-154, 244. (S. A. Book) **54** #3820 60F10
- (with Statulevičius, V.) Large deviations in a local limit theorem for sums of random variables connected in a Markov chain. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 3, 151-159, 235. (Š. K. Formanov) **55** #1423 60F10 (60J05)
- (with Rudzikis, R.; Statulevičius, V.) A general lemma on probabilities of large deviations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 2, 99-116, 217. (Werner Wolf) **58** #18681 60F10
- See also **Selected translations in mathematical statistics and probability**, **48** #1276
- Sauljak, A. A. More on an equation with a linear-fractional right-hand side. (Russian) *Differentsial'nye Uravneniya* (Rjazan') *Vyp.* 7 (1976), 217-219. (R. S. Levitin) **58** #17310 34C05
- Sauljan, T. A. Overconvergence of a form of function series in the space \mathcal{C}^r . (Russian) *Theory of functions. Differential equations and their applications, No. 1* (Russian), pp. 95-98, 217. *Kalmyck. Gos. Univ., Elista*, 1976. (Author's summary) **58** #28583 32A05
- Šauman, A. M. (with Ovruckii, A. I.) A study of algorithms for approximate division. (Russian) *Computer technology and questions of cybernetics, No. 7* (Russian), pp. 65-86. *Izdat. Moskov. Univ., Moscow*, 1970. (E. Maliszewski) **47** #2854 68A10
- (with Bereznaia, I. Ja.) Transformation of binary sequences in a certain class of n -stage linear filters. (Russian) *Computer technology and questions of cybernetics, No. 7* (Russian), pp. 119-125. *Izdat. Moskov. Univ., Moscow*, 1970. (R. N. Goss) **49** #4666 94A20 (92A25)
- Combined noise preventing arithmetic codes. (Russian) *Computing techniques and questions of cybernetics, No. 7* (Russian), pp. 53-64. (errata insert) *Izdat. Moskov. Univ., Moscow*, 1970. (G. M. Tenengol'c) **47** #4712 94A10
- A certain class of noise-preventing arithmetic codes. (Russian) *Computer technology and questions of cybernetics, No. 6* (Russian), pp. 37-43. *Izdat. Leningrad. Univ., Leningrad*, 1971. (G. M. Tenengol'c) **48** #3606 94A10

- (with Bereznaja, I. Ja.) Zero sequences for an n -pulse linear filter. (Russian) *Computer technology and questions of cybernetics*, No. 8 (Russian), pp. 92-107. Izdat. Leningrad. Univ., Leningrad, 1971. (I. Meznik) **49** #6997 94A05
- On estimating the adaptiveness of division algorithms. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. Vyp.* 9 (1972), 54-78. (D. H. Lehmer) **57** #11165 68A10
- Fast multiplication of binary numbers. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. Vyp.* 9 (1972), 79-88. (A. V. Palagin) **55** #4779 68A20
- Determination of the adaptivity index of division algorithms. (Russian) *Metody Vychisl.* 8 (1973), 117-129. (E. Maliszewski) **51** #4713 68A10 (65D15)
- A study of adaptive algorithms for multiplication. (Russian) *Computer technology and questions of cybernetics*, No. 10 (Russian), pp. 22-39, 157. Izdat. Leningrad. Univ., Leningrad, 1974. (E. Maliszewski) **51** #4712 68A10
- A certain class of algorithms for approximate division. (Russian) *Computing techniques and questions of cybernetics*, No. 10 (Russian), pp. 44-49, 157. Izdat. Leningrad. Univ., Leningrad, 1974. (E. Maliszewski) **51** #4714 68A10
- A multiplication algorithm with doubled accuracy for single address digital computers. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. No.* 11 (1974), 50-63. (See Zbl **289** #68028) 68A20
- Errors in the approximate division when the quotient is redundant. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. No.* 11 (1974), 64-79. (See Zbl **328** #68053) 68A20
- A summability method with transfer preservation. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. Vyp.* 12 (1975), 31-37, 159. (M. I. Dehtjar') **58** #3659 68A10
- (with Ladatko, V. I.) Iterative schemes of division that use multiplication. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. Vyp.* 13 (1977), 59-78. (Authors' summary) **58** #13889 68A10
- A method for fast division. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. Vyp.* 14 (1977), 3-11, 205. (K. Moszyński) **58** #3684 68A20
- (with Sodman-Mihailov, D. B.) Determination of the periods of self-generating sequences. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. Vyp.* 14 (1977), 60-72, 207. (Bolesław Mikołajczak) **58** #4715 94A25
- See also *Computer technology and questions of cybernetics*, **47** #1322; *Computer technology and questions of cybernetics*, **47** #7974 and *Computer technology and questions of cybernetics*, **47** #9874
- Šaumjan, S. K. See *Mathematical linguistics*, **48** #3312
- Saunders, B. David (with Schneider, Hans) A symmetric numerical range for matrices. *Numer. Math.* **26** (1976), no. 1, 99-105. (K. Veselić) **56** #5611 15A60 (47A10)
- (with Cain, Bryan E.; Schneider, Hans) On the geometry of dual pairs. *Studies in Appl. Math.* **56** (1976/77), no. 1, 71-79. (Authors' summary) **58** #17800 46C05 (47A10, 47H99)
- A condition for the convexity of the norm-numerical range of a matrix. *Linear Algebra and Appl.* **16** (1977), no. 2, 167-175. (Raphael Loewy) **58** #10971 15A60
- Saunders, D. I. Malthusian behaviour of the critical and subcritical age-dependent branching processes with arbitrary state space. *J. Appl. Probability* **13** (1976), no. 3, 455-465. (D. R. Grey) **54** #3871 60J80
- Saunders, I. W. (with Gani, J.) On the parity of individuals in a branching process. *J. Appl. Probability* **13** (1976), no. 2, 219-230. (A. R. Moncayo) **53** #9403 60J80
- A convergence theorem for parities in a birth-and-death process. *J. Appl. Probability* **13** (1976), no. 2, 231-238. (A. R. Moncayo) **53** #9404 60J80
- (with Moran, P. A. P.) On the quantiles of the gamma and F distributions. *J. Appl. Probability* **15** (1978), no. 2, 426-432. (Rashid Ahmad) **58** #3153 62E15
- Saunders, K. V. (with Leitmann, G.) Some geometric aspects of optimal processes. II. Problems with state constraints. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **14** (1968), no. 3-4, 45-56. (Zbl **195**, 439) **58** #23897 49B10 (49E05)
- Saunders, L. M. (with Abarbanel, Henry D. I.) Laplace transforms and the diagonalization of Bethe-Salpeter equations for absorptive parts. *Phys. Rev. D* (3) **2** (1970), 711-716. (P. Achuthan) **47** #6229 81A4
- (with Saxton, O. H. N.; Tan, Chung-I) Crossed-channel partial-wave expansions and the Bethe-Salpeter equation. *Phys. Rev. D* (3) **3** (1973), 1005-1011. (D. B. Fairlie) **51** #4876 81A22
- Saunders, Michael A. (with Golub, Gene H.) Linear least squares and quadratic programming. *Integer and nonlinear programming*, pp. 229-256. North-Holland, Amsterdam, 1970. (Editors) **55** #9983 90C20
- (with Osborne, Michael R.) Descent methods for minimisation. *Optimization (Proc. Sem., Austral. Nat. Univ., Canberra, 1971)*, pp. 221-237. Univ. Queensland Press, St. Lucia, 1972. (V. Pereyra) **52** #4624 65K05
- Numerical stability in large-scale linear programming. *Error, approximation, and accuracy (Proc. Sem., Austral. Nat. Univ., Canberra, 1972)*, pp. 144-158. Univ. Queensland Press, St. Lucia, 1973. (J. S. Kowalik) **54** #4633 90C05
- (with Gill, Philip E.; Golub, Gene H.; Murray, Walter) Methods for modifying matrix factorizations. *Math. Comp.* **28** (1974), 505-535. (L. W. Ehrlich) **49** #8299 65F05
- (with Gill, Philip E.; Murray, Walter) Methods for computing and modifying the LDV factors of a matrix. *Math. Comp.* **29** (1975), no. 132, 1051-1077. (O. Pokorná) **52** #9588 65F30
- (with Paige, C. C.) Solutions of sparse indefinite systems of linear equations. *SIAM J. Numer. Anal.* **12** (1975), no. 4, 617-629. (R. P. Tewarson) **52** #4595 65F10
- A fast, stable implementation of the simplex method using Bartels-Golub updating. *Sparse matrix computations (Proc. Sympos., Argonne Nat. Lab., Lemont, Ill., 1975)*, pp. 213-226. Academic Press, New York, 1976. (A. Gewirtz) **58** #20412 90C05
- (with Paige, C. C.) Least squares estimation of discrete linear dynamic systems using orthogonal transformations. *SIAM J. Numer. Anal.* **14** (1977), no. 2, 180-193. (V. N. Igolkin) **55** #10130 93E10
- (with Murtagh, B. A.) Large-scale linearly constrained optimization. *Math. Programming* **14** (1978), no. 1, 41-72. (R. N. Kaul) **57** #2580 90C40
- Saunders, P. T. (with Bazin, M. J.) On the stability of food chains. *J. Theoret. Biol.* **52** (1975), no. 1, 121-142. (J. M. Skowronski) **54** #9733 92A15 (93D05)
- Saunders, R. (with Hassan, S. S.; Bullough, R. K.) Propagational effects in an ab initio theory of super-radiance from extended systems. *J. Phys. A* **9** (1976), no. 10, 1725-1730. (M. M. Skriganov) **56** #14392 81A65
- Saunders, Roy Conservative processes with stochastic rates. *J. Appl. Probability* **12** (1975), no. 3, 447-456. (John Radcliffe) **52** #12127 60K99 (92A15)
- Limiting results for carrier-borne epidemics. *J. Appl. Probability* **12** (1975), no. 3, 793-799. (Stanley Sawyer) **54** #12249 92A15
- On joint exchangeability and conservative processes with stochastic rates. *J. Appl. Probability* **13** (1976), no. 3, 584-590. (Peter Purdue) **54** #8933 60K99
- (with Kryscio, Richard J.) A note on the cost of carrier-borne, right-shift, epidemic models. *J. Appl. Probability* **13** (1976), no. 4, 652-661. (K. Dietz) **54** #6993
- (with Kryscio, Richard J.) Parameter estimation for the carrier-borne epidemic model. *J. Roy. Statist. Soc. Ser. B* **38** (1976), no. 3, 265-269. (Authors' summary) **58** #31687 62P10 (92A15)
- (with Funk, Gerald M.) Poisson limits for a clustering model of Strauss. *J. Probability* **14** (1977), no. 4, 776-784. (David J. Strauss) **56** #16849 60K99 (60J99)
- (with Severo, Norman C.) A note on reversed conservative processes. *Stochastic Processes Appl.* **6** (1977/78), no. 2, 195-200. (K. Dietz) **57** #10842 60J99
- Saunders, Sam C. (with Mann, Nancy R.) ★ On invariant confidence intervals for parameters of a new life distribution. ARL 71-0085. Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio, 1971. iii + 26 pp. (M. Skibinsky) **47** #6012 62F05 (62F25)
- Birnbaum's contributions to reliability theory. *Reliability and fault tree analysis (Conf., Univ. California, Berkeley, Calif., 1974)*, pp. xv-xxxix. Soc. Indust. Appl. Math., Philadelphia, Pa., 1975. (Editors) **54** #12455 01A70 (62N05)
- (with Whittemore, Alice) Optimal inventory under stochastic demand with supply options. *SIAM J. Appl. Math.* **32** (1977), no. 2, 293-305. (Knut Rieck) **55** #7343 90B05
- Saunders, V. R. An introduction to molecular integral evaluation. *Computational techniques in quantum chemistry and molecular physics (Proc. NATO Adv. Study Inst., Ramsau, 1974)*, pp. 347-424. NATO Advanced Study Inst. Ser., Ser. C: Math. and Phys. Sci., Vol. 15, Reidel, Dordrecht, 1975. (John P. Coleman) **56** #17629 81A65
- Sauriol, Pierre La structure tétrahexaédrique du système complet des propositions catégoriques. *Dialogue* **15** (1976), no. 3, 479-501. (J. A. Kalman) **54** #4915 02A20
- Sauro, Tulipani Alcuni risultati sui reticoli M -algebrici. (English summary) *Ann. U. Ferrara Sez. VII (N.S.)* **16** (1971), 55-62. (R. S. Pierce) **46** #1666 06A20
- Sulla completezza e sulla categoricità della teoria delle W -algebre semplici. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **17** (1972), 1-11. (E. W. Chapin, Jr.) **46** #5216 08A25 (02H15)
- Saut, Jean-Claude Sur un problème hyperbolique non linéaire. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A671-A673. (D. E. Edmunds) **45** #716 35L10 (47F05)
- Sur certaines généralisations de l'équation de Korteweg-de Vries. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A653-A656. (Howard A. Levine) **51** #3735L60
- Applications de l'interpolation non linéaire à des problèmes d'évolution non linéaires. *J. Math. Pures Appl.* (9) **54** (1975), 27-52. (Sadakazu Aizawa) **56** #12625 35L60 (47H99, 35Q99)
- (with Temam, Roger) Remarks on the Korteweg-de Vries equation. *Israel J. Math.* **24** (1976), no. 1, 78-87. (Authors' summary) **56** #12676 35Q99
- (with Temam, Roger) Propriétés de l'ensemble des solutions stationnaires ou périodiques des équations de Navier-Stokes: généralité par rapport aux données aux limites. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 1, A673-A676. (Author's summary) **57** #921 35Q10 (58D99)
- (with Meurant, G.) Bifurcation and stability in a chemical system. *J. Math. Anal. Appl.* **57** (1977), no. 1, 69-92. (Rutherford Aris) **57** #2217 80J35
- Sautter, Werner Schwankungsbereiche linearer Optimierungsaufgaben. (English summary) *Numer. Math.* **21** (1973/74), 264-269. (H. Schwetlick) **49** #10360 90C05
- A posteriori-Fehlerabschätzungen für die Pseudoinverse und die Lösung minimaler Länge. (English summary) *Computing* **14** (1975), no. 1-2, 37-44. (A. Jaeger) **54** #7415A09 (65F20)
- Fehleranalyse für die Gauss-Elimination zur Berechnung der Lösung minimaler Länge. (English summary) *Numer. Math.* **30** (1978), no. 2, 165-184. (Author's summary) **58** #13669 65G05 (65D10, 65F10)
- Sauvageot, Jacqueline Algorithmes d'Euclide dans certains corps biquadratiques. *Séminaire Delange-Pisot-Poitou (14e année: 1972/73), Théorie des nombres, Fasc. 1, Exposé No. 15, 3 pp. Secrétariat Mathématique, Paris, 1973.* (Veikko Ennola) **53** #28912A30 (12A20)
- Sauvageot, Jean-Luc (with Samuélidès, Manuel) Une classe de représentations des groupes commutatifs non localement compacts: les représentations spéciales. *Bull. Sci. Math.* (2) **97** (1973), 65-80. (J. Ernest) **48** #4189 22A25
- (with Samuélidès, Manuel) Représentations des algèbres de Lie localement convexes. Application aux relations de commutation. *Bull. Sci. Math.* (2) **98** (1974), no. 1, 3-16. (Wayne J. Holman, III) **56** #3077 17B15 (22E45)
- Sur le type du produit croisé d'une algèbre de von Neumann par un groupe localement compact d'automorphismes. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 941-944. (Ole A. Nielsen) **49** #5867 46L10
- (with Samuélidès, Manuel) Algèbre de Krieger d'un système dynamique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A709-A712. (Douglas Lin) **54** #7753 28A65 (46L10)
- Image d'un homomorphisme et flot des poids d'une relation d'équivalence mesurée. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 12, A619-A622. (Ș. Strătilă) **55** #13257 46L10 (22D40, 28A65)
- Sur le type du produit croisé d'une algèbre de von Neumann par un groupe localement compact. (English summary) *Bull. Soc. Math. France* **105** (1977), no. 3, 349-368. (Author's summary) **57** #17305 46L10
- See also *Guichardet, Alain*, **50** #5483
- hogbe-Saux, Marie-Thérèse See *Hogbe-Saux, Marie-Thérèse*
- Sava, Valeriu A. (with Aron, Marian) Weak solutions in the theory of mixtures. *Arch. Mech.* **16** (1973), 297-302. (Authors' introduction) **56** #7434 73A7 (80A47)
- On the existence and uniqueness of the solution of a boundary-value problem in the theory of incompressible micropolar fluids. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sec. I a Mat. (N.S.)* **19** (1973), no. 2, 449-460. (J. P. Guiraud) **53** #4727 76J35
- A uniqueness theorem for compressible micropolar fluids. *An. Ști. Univ. "Al. I. Cuza" Iași Sec. I a Mat. (N.S.)* **19** (1973), no. 2, 449-460. (J. P. Guiraud) **53** #4727 76J35

- Cuza" Iași Secț. I a Mat. (N.S.) 22 (1976), no. 1, 87-92. (From the author's introduction) 55 #7100 76.35
- A regularization theorem in the theory of micropolar fluids. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 61 (1976), no. 3-4, 242-246 (1977). (Author's summary) 58 #17604 35Q99 (76.35)
- Weak solutions in the linear theory of incompressible micropolar fluids. *Proceedings of the Conference on Differential Equations and their Applications* (Univ. Iași, Iași, 1973), pp. 145-147. *Editura Acad. R.S.R., Bucharest*, 1977. (V. Komkov) 57 #8398 76.35
- Pulsatile flow of a micropolar fluid in a rigid tube with longitudinal vibration. *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* 23 (1977), no. 1, 193-198. (S. N. Murthy) 57 #18460 76.35 (73.35)
- age, I. Richard (with Reynolds, David S.) Random wear models in reliability theory. *Advances in Appl. Probability* 3 (1971), 229-248. (A. Obretenov) 47 #1228 65N05
- (with Webster, Murray, Jr.) Source of evaluations reformulated and analyzed. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. IV: *Biology and health*, pp. 317-327. *Univ. California Press, Berkeley, Calif.*, 1972. (From the authors' introduction) 54 #3781 60A05 (92A20)
- (with Sethuraman, Jayaram) Asymptotic distribution of the log likelihood ratio based on ranks in the two sample problem. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. I: *Theory of statistics*, pp. 437-458. *Univ. California Press, Berkeley, Calif.*, 1972. (Jana Jurečková) 53 #11872 62G10 (62E20)
- Incomplete contingency tables: conditions for the existence of unique mle. *Mathematical and statistics (in honour of Harold Bergström on the occasion of his 65th birthday)*, pp. 87-99. *Dept. of Math., Chalmers Inst. Tech., Göteborg*, 1973. (S. K. Katti) 51 #14382 62F10
- vage, James R. (with Künzle, Hans P.) Un système elliptique sur les variétés de dimension deux. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 287 (1978), no. 4, A249-A250. (Authors' summary) 58 #24399 58G10
- vage, John E. The complexity of decoders. II. Computational work and decoding time. *IEEE Trans. Information Theory* IT-17 (1971), 77-85. (Author's summary) 45 #9855 94A10
- (with Harper, L. H.) On the complexity of the marriage problem. *Advances in Math.* 9 299-312 (1972). (V. N. Agafonov) 52 #9684 68A20
- Computational work and time on finite machines. *J. Assoc. Comput. Mach.* 19 (1972), 660-674. (Richard DeMillo) 48 #7661 68A20
- (with Lamagna, Edmund A.) Combinational complexity of some monotone functions. *15th Annual Symposium on Switching and Automata Theory* (1974), pp. 140-144. *IEEE Comput. Soc., Long Beach, Calif.*, 1974. (A. D. Koršunov) 54 #4842 94A20 (68A20)
- Signal detection in the presence of multiple-access noise. *IEEE Trans. Information Theory* IT-20 (1974), 42-49. (K. S. Miller) 56 #5061 94A15
- An algorithm for the computation of linear forms. *SIAM J. Comput.* 3 (1974), 150-158. (E. M. Reingold) 49 #11860 68A20 (65F30)
- The complexity of decoders. *Coding and complexity (Summer School, Udine, 1974)*, pp. 163-205. *Internat. Centre for Mech. Sci., CISM Courses and Lectures*, No. 216, *Springer, Vienna*, 1975. (See Zbl 358 #94034; MR 58 #9786) 94A10
- (with Harper, L. H.; Payne, Thomas H.; Straus, Ernst G.) Sorting $X + Y$. *Comm. ACM* 18 (1975), 347-349. (Forbes D. Lewis) 51 #14641 68A20
- (with Harper, L. H.; Hsieh, W. N.) A class of Boolean functions with linear combinational complexity. *Theoret. Comput. Sci.* 1 (1975), no. 2, 161-183. (I. Hal Sudborough) 54 #4184 68A20 (94A20)
- ★The complexity of computing. *Wiley-Interscience [John Wiley & Sons]*, New York-London-Sydney, 1976. xiii + 391 pp. (M. I. Dehtjar') 58 #13936 68A20
- (with Harper, L. H.) Complexity made simple. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973)*, Tomo II, pp. 253-262. *Atti dei Convegni Lincei*, No. 17, *Accad. Naz. Lincei, Rome*, 1976. (G. Wechsung) 57 #11171 68A20 (94A20)
- (with Swamy, Sowmitri) Space-time trade-offs on the FFT algorithm. *IEEE Trans. Inform. Theory* 24 (1978), no. 5, 563-568. (David Dobkin) 58 #25122 68A20 (94A05)
- vage, Leonard Jimmie The characteristic function characterized and the momentousness of moments. *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompili*, pp. 130-140. *Edizioni Oderisi, Gubbio*, 1971. (J. H. B. Kemperman) 51 #6915 60E05
- Elicitation of personal probabilities and expectations. *J. Amer. Statist. Assoc.* 66 (1971), 783-801. (V. P. Godambe) 48 #9903 62A99 (62C99)
- ★The foundations of statistics. Second revised edition. *Dover Publications, Inc.*, New York, 1972. xv + 310 pp. (Editors) 50 #1364 62Axx
- (with Das Gupta, Somesh; Eaton, Morris L.; Olkin, Ingram; Perlman, Michael D.; Sobel, Milton) Inequalities on the probability content of convex regions for elliptically contoured distributions. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: *Probability theory*, pp. 241-265. *Univ. California Press, Berkeley, Calif.*, 1972. (Z. Šidák) 54 #1478 62H05
- (with Dubins, Lester E.) ★Inequalities for stochastic processes (how to gamble if you must). Corrected republication of the 1965 edition. *Dover Publications, Inc.*, New York, 1976. 255 pp. (Editors) 53 #14618 60Gxx (90Dxx)
- On rereading R. A. Fisher. Edited posthumously by John W. Pratt. With a discussion by B. Efron, Churchill Eisenhart, Bruno de Finetti, D. A. S. Fraser, V. P. Godambe, I. J. Good, O. Kempthorne and Stephen M. Stigler. *Ann. Statist.* 4 (1976), no. 3, 441-500. (R. J. Buehler) 53 #7698 01A70 (62-03, 62A99)
- See also Studies in Bayesian econometrics and statistics, 53 #11818; *Obituary: Savage, Leonard Jimmie*, 53 #12850; *Logic, methodology and philosophy of science*, 55 #7657; *de Finetti, Bruno*, 55 #12431 and *Marschak, Jacob*, 58 #7948
- vage, Sam L. Statistical indicators of optimality. *14th Annual IEEE Symposium on Switching and Automata Theory* (Univ. Iowa, Iowa City, Iowa, 1973), pp. 85-91. *IEEE Comput. Soc., Northridge, Calif.*, 1973. (Jean-Baptiste Hiriart-Urruty) 55 #7428 90C99 (65K05)
- (with Weiner, Peter; Bagchi, A.) Neighborhood search algorithms for finding optimal travelling salesman tours must be inefficient. *Fifth Annual ACM Symposium on Theory of Computing* (Austin, Tex., 1973), pp. 207-213. *Assoc. Comput. Mach., New York*, 1973. (Kailash C. Kapur) 54 #6558 68A20 (90B10, 90C50)
- (with Weiner, Peter; Bagchi, A.) Neighborhood search algorithms for guaranteeing optimal traveling salesman tours must be inefficient. *J. Comput. System Sci.* 12 (1976), no. 1, 25-35. (Michael J. Todd) 53 #2380 90C35 (90C05)
- Some theoretical implications of local optimization. *Math. Programming* 10 (1976), no. 3, 354-366. (Author's summary) 57 #11792 90C99
- Šavaliav, M. Š. A transport phenomenon in the Burnett approximation in multicomponent gas mixtures. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* 1974, no. 1, 126-137. (M. Drăganu) 49 #10308 82.45
- Savanov, V. L. Methods for the reconstruction of functions in experimental data processing problems. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 300 (1976), 70-79. (From the text) 57 #18022 65D10
- Savarenskiĭ, E. F. (with Sadovskii, M. A.; Bulanže, Ju. D.; Magnickii, V. A.; Rizničenko, Ju. V.) The significance of the works of A. N. Tikhonov for the development of geophysics. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1977, no. 1, 5-9. (Editors) 55 #5364 01A70 (86.01)
- (with Glasko, V. B.) The method of regularization and uniqueness problems in the study of regional horizontally layered formations. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1977, no. 1, 10-18. (Authors' summary) 58 #25846 86.60
- Savariau, Jacques Anneaux héréditaires à droite. *C. R. Acad. Sci. Paris Sér. A-B* 275 (1972), A691-A693. (B. Stenström) 51 #601 16A46
- Savbianova, R. A. A method for the exact solution of a biharmonic problem. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) No.* 37 (1975), 19-26, 142. (RŽMat 1976 #6 B442) 58 #29097 35C05 (31A30)
- Savčenko, A. Ja. See Savčenko, O. Ja.
- Savčenko, G. B. A certain boundary value problem for a system of partial differential equations with constant coefficients. (Russian) *Differencial'nye Uravnenija* 9 (1973), 527-532, 589. (J. Chrastina) 47 #5424 35E99
- Savčenko, Ju. B. A homogeneous semi-boundary value problem for an equation in a Banach space. (Russian) *Voronež. Gos. Univ. Trudy Sem. Funkcional. Anal. Vyp.* 10, 146-159 (1968). (Š. Schwabik) 53 #13771 34G05
- (with Krein, S. G.) Exponential dichotomy for partial differential equations. (Russian) *Differencial'nye Uravnenija* 8 (1972), 835-844. (K. R. Schneider) 46 #3941 34G05 (35E99)
- See also Collection: Papers by postgraduates in mathematics and mechanics, 47 #4748
- Savčenko, Ju. G. (with Svistel'nik, A. A.) Decoding of group codes. (Russian) *Avtomat. i Vyčisl. Tehn.* 1969, no. 1, 50-54. (L. Bassalygo (RŽMat 1969 #9 V258)) 45 #9793 94A10
- (with Hmelevaja, A. V.) Methods for the successive realization of symmetric Boolean functions. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1974, no. 3, 24-29. (Jürgen Dassow) 53 #12783 94A20
- See also Cybernetics and computer technology, 48 #1517
- Savčenko, L. Ī. (with Kovač, Ju. Ī.) A boundary value problem for a nonlinear system of differential equations with retarded argument. (Russian. German summary) *Vyčisl. Prikl. Mat. (Kiev) No.* 11 (1970), 114-124. (K. Smítalová) 45 #7214 34K10 (65L10)
- (with Mihailec', B. M.) The approximate solution of difference equations with polynomial coefficients. (Russian) *Ukrain. Mat. Ž.* 27 (1975), no. 6, 822-827, 863. (C. Illoiu) 54 #1674 65Q05 (39A10)
- (with Mihailec', B. M.) The approximate solution of a certain class of linear differential-difference equations. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 2, 252-256, 287. (A. Halanay) 53 #13790 34K99
- Savčenko, L. Ī. Control of the results of approximate solution of differential equations by the method of coincidence of significant digits. (Russian) *Perm. Gos. Univ. Učen. Zap.* No. 218 (1969), 220-225. (C. Illoiu) 45 #6215 65P05
- Savčenko, O. Ja. On the stability of motions of conservative mechanical systems under continually-acting perturbations. *Prikl. Mat. Meh.* 38 (1974), 240-245 (Russian); translated as *J. Appl. Math. Mech.* 38 (1974), 214-220. (P. Hagedorn) 56 #9009 34D20 (70.34)
- The influence of constantly acting perturbations on the stability of the motion of some mechanical systems. (Russian) *Meh. Tverd. Tela Vyp.* 7 (1974), 48-51. (From the text) 58 #7711 58F05
- (with Koval'ov, O. M.) Stability of uniform rotations of a rigid body about a principal axis. *Prikl. Mat. Meh.* 39 (1975), no. 4, 650-660 (Russian); translated as *J. Appl. Math. Mech.* 39 (1975), no. 4, 623-633 (1976). (Robert E. Roberson) 54 #9206 70.34
- On the theory of the critical case of n pairs of pure imaginary roots. (Russian) *Meh. Tverd. Tela Vyp.* 8 (1976), 78-88, 139. (Author's summary) 57 #16861 34D20
- ★Устойчивость стационарных движений механических систем. (Russian) [Stability of stationary motions of mechanical systems] *Izdat. "Naukova Dumka", Kiev*, 1977. 160 pp. (V. Komkov) 56 #4298 70.34
- (with Harlamov, P. V.; Gorr, G. V.; Dokševič, A. Ī.; Koval'ov, O. M.; Konosevič, B. Ī.) Some questions on the nonlinear theory of the observation of dynamical systems. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 3, 244-247, 286. (Szyman Dolecki) 56 #13078 49E05 (34C35)
- (with Koval'ov, O. M.) Stability of stationary motions of Hamiltonian systems in the presence of a fourth order resonance. (Russian) *Meh. Tverd. Tela Vyp.* 9 (1977), 40-44, 125. (Editors) 58 #13167 58F05
- Savčenko, V. S. (with Afanas'ev, M. M.; Kočegub, P. H.) The construction of the optimal diagram of the armature current of a positional electric drive motor. (Russian) *Theory of optimal processes (Russian)*, pp. 94-108. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1972. (I. M. Konstantinov) 48 #8047 93C15
- Savchenko, A. Ia. See Savčenko, O. Ja.
- Savčuk, V. F. (with Liskovec, O. A.) An iterative method for the solution of equations of the first kind. (Russian) *Questions in applied mathematics (Russian)*, pp. 159-166. *Sibirsk. Energet. Inst. Akad. Nauk SSSR Sibirsk. Otdel., Irkutsk*, 1975. (From the authors' introduction) 57 #14428 65J05

- (with Liskovec, O. A.) Convergence in the energy norm of the iteration method for an equation of the first kind. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 2, 19-23, 139. (J. W. Schmidt) 54 #11771 65J05 (47A50)
- Some iterative methods for the solution of equations of the first kind. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 5, 23-27, 139. (Author's summary) 58 #3425 65J05 (47A50)
- (with Liskovec, O. A.) The method of simple iterations with an alternately alternating step for an equation of the first kind. (Russian) *Dokl. Akad. Nauk BSSR* 21 (1977), no. 1, 9-12, 91. (Authors' summary) 58 #3415 65J05 (47A50)
- Savčuk, V. P.** Certain properties of the roots of sums of entire functions. (Russian) *Dokl. Akad. Nauk BSSR* 18 (1974) 973-975, 1050-1051. (I. N. Baker) 50 #13465 30A08
- Nonstationary flow in a semi-infinite annular duct. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* 1975, no. 2, 124-128, 144. (Jakub Siemek) 52 #12525 76.35
- Save, M. A.** A general criterion for optimal structural design. Collection of articles dedicated to William Prager. *J. Optimization Theory Appl.* 15 (1975), 119-129. (I. Tadjbakhsh) 50 #9128 73.49
- Savel'ev, B. V.** Prediction of new technologies used in the construction of optimal economic plans. *Automat. i Telemekh.* 1975, no. 11, 151-158 (Russian. English summary); translated as *Automat. Remote Control* 36 (1972), no. 11, part 2, 1887-1894. (Morton I. Kamien) 55 #2083 90A15
- (with Boglaev, I. P.) Design of an optimum plan for an economic system with stocks of products. *Automat. i Telemekh.* 1975, no. 8, 48-56 (Russian. English summary); translated as *Automat. Remote Control* 36 (1975), no. 8, part 1, 1252-1260 (1976). (Charles R. Johnson) 54 #4617 90B30 (49A05, 90A15)
- The construction of an optimal design for a dynamic model of the economy with a set of technological methods. (Russian) *Control problems in technology, economics and biology* (Russian), pp. 87-92, 224. Nauka, Moscow, 1976. (Author's summary) 58 #32872 90A15
- Savel'ev, I. V.** ★Основы Теоретической физики. (Russian) [Fundamentals of theoretical physics] Том 1: Механика. Электродинамика. [Vol. 1: Mechanics. Electrodynamics] Izdat. "Nauka", Moscow, 1975. 416 pp. (Editors) 52 #16201 69.00
- Piecewise linear branched coverings. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 84 (1976), no. 1, 21-23. (I. Ivanšić) 55 #4190 57C25
- ★Основы теоретической физики. Том 2. (Russian) [Fundamentals of theoretical physics. Vol. 2] Квантовая механика. [Quantum mechanics] Izdat. "Nauka", Moscow, 1977. 351 pp. (Vadim Komkov) 58 #25539 81.35
- Cyclic branched coverings and singularities of complex hypersurfaces. (Russian) *Uspehi Mat. Nauk* 32 (1977), no. 1 (193), 203-204. (M. L. Gromov) 56 #1295 55C35 (57E25, 32C40)
- See also Rourke, C. P.; et al., 50 #5803
- Savel'ev, Ju. V.** Application of the Krylov-Bogoljubov method to the study of a class of dynamical systems near boundaries of the domain of stability. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1978, no. 2(189), 81-86. (B. S. Popov) 58 #6526 34C35
- Savel'ev, L. Ja.** ★Лекции по математическому анализу. (Russian) [Lectures on mathematical analysis] Введение. [Introduction] Novosibirsk. Gosudarstv. Univ., Novosibirsk, 1969. 292 pp. (Editors) 52 #10293 00A05
- ★Лекции по математическому анализу. (Russian) [Lectures on mathematical analysis] Часть 1: Числовые последовательности. [Part 1: Numerical sequences] Novosibirsk. Gosudarstv. Univ., Novosibirsk, 1969. 339 pp. (Editors) 52 #10294 00A05 (26-01)
- Measures on topological Boolean rings. (Russian) *Dokl. Akad. Nauk SSSR* 202 (1972), 41-43; erratum, *ibid.* 206 (1972), no. 4-6, vii. (M. Nosal) 49 #5293 28A60 (28A45)
- ★Лекции по математическому анализу. (Russian) [Lectures on mathematical analysis] Часть 2: Элементарные функции. Глава 1. Целые функции. [Part 2: Elementary functions. Chapter 1. Entire functions] Novosibirsk. Gosudarstv. Univ., Novosibirsk, 1973. 230 pp. (Editors) 52 #10295 00A05 (26-01, 30-01)
- ★Лекции по математическому анализу. (Russian) [Lectures on mathematical analysis] Часть 2: Элементарные функции. Глава 2. Расширенная числовая прямая. Глава 3. Степенные ряды. [Part 2: Elementary functions. Chapter 2. Extended real line. Chapter 3. Power series] Novosibirsk. Gosudarstv. Univ., Novosibirsk, 1973. 166 pp. (Editors) 52 #10296 00A05 (26-01, 30-01)
- ★Лекции по математическому анализу. (Russian) [Lectures on mathematical analysis] Часть 3: Элементарные функции. [Part 3: Elementary functions] Novosibirsk. Gosudarstv. Univ., Novosibirsk, 1974. 285 pp. (Editors) 52 #10297 00A05 (26-01, 30-01)
- ★Комбинаторика и вероятность. (Russian) [Combinatorics and probability] Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1975. 423 pp. (Editors) 52 #13395 05-01 (60C05)
- ★Лекции по математическому анализу. Часть 4. (Russian) [Lectures on mathematical analysis. Part 4] Дифференциал. [The differential] Novosibirsk. Gosudarstv. Univ., Novosibirsk, 1975. 159 pp. (Editors) 53 #14119 46Gxx (26-02)
- A theorem on the extension of sequential measures. (Russian) *Dokl. Akad. Nauk SSSR* 229 (1976), no. 2, 307-309. (Przemysław Kranz) 58 #11308 28A10
- Extension of continuous measures. (Russian) *Dokl. Akad. Nauk SSSR* 239 (1978), no. 2, 272-274. (Przemysław Kranz) 57 #16531 28A45
- Savel'ev, M. V.** (with Leznov, A. N.) The Plancherel measure of the principal continuous series of unitary representations of the group $U(p, q)$. (Russian. English summary) *Teoret. Mat. Fiz.* 8 (1971), no. 2, 161-174. (Authors' summary) 57 #12786 22E45
- (with Leznov, A. N.) A certain parametrization of compact groups. (Russian) *Funkcional. Anal. i Priložen.* 8 (1974), no. 4, 87-88. (K. Strambach) 51 #785 22C05
- (with Leznov, A. N.) Questions on the representation theory of semisimple Lie groups. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jdra* 7 (1976), no. 1, 55-107. (Editors) 58 #28293 22E45
- (with Leznov, A. N.) Projection operators for semisimple Lie groups. (Russian. English summary) *Teoret. Mat. Fiz.* 31 (1977), no. 2, 273-274. (Editors) 58 #28294 22E45
- Savel'ev, P. L.** See Methods and models of control, 50 #12520
- Savel'ev, V. A.** (with Vavilov, E. M.) The optimal period of discrete measurements of random processes. (Russian. English summary insert) *Kibernetika* (Kiev) 1972, no. 1, 146-147. (From the introduction) 47 #10113 93E10
- Savel'ev, V. P.** The controls, optimal with respect to the consumption of energy in a second order nonlinear system. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* 12 (1969), 1061-1066. (P. C. Das) 45 #6496 93C05
- (with Biljuba, V. F.) An investigation of the optimal scheduling in a queueing problem with priorities. (Russian. English summary) *Theory of oscillations, applied mathematics and cybernetics. Izv. Vysš. Učebn. Zaved. Radiofizika* 15 (1972), 1070-1076. (E. V. Bulinskaja) 48 #5632 90B35
- Synthesis of a second order optimal nonlinear system. (Russian) *Theory of oscillations, applied mathematics and cybernetics, No. 1* (Russian), pp. 209-221. Gos. Univ., Gorki, 1973. (Editors) 57 #9187 93B30
- Classification of the connected components of the set of uncontrollability of one-dimensional motion. I. (Russian) *Dinamika Sistem Vyp.* 5 (1975), 118-132. (Author's summary) 58 #13192a 58F10 (34H05)
- Classification of the connected components of the set of uncontrollability of one-dimensional motion. II. (Russian) *Dinamika Sistem Vyp.* 5 (1975), 133-144. (Author's summary) 58 #13192b 58F10 (34H05)
- Savel'ev, L. S.** See Logique et méthodologie des sciences en U.R.S.S., 58 #21367
- Savel'eva, T. A.** (with Sventickaja, I. N.; Šapiro, Ju. A.) A certain method of solving boundary value problem for potential theory. (Russian. English summary) *Vopr. Leningrad. Univ. No. 1 Mat. Meh. Astronom. Vyp.* 1 (1974), 161-162, 168. (F. Barak) 53 #8456 31B20
- Savelova, T. I.** Solution of an equation of convolution type with an inaccurately prescribed kernel by the regularization method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1972), 212-218. (S. Buryšek) 45 #8047 65R05
- (with Tihomirov, V. V.) The solution of convolution type integral equations of the first kind in the multi-dimensional case. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 555-563, 810. (L. B. Rall) 48 #10173 65R05 (45E10)
- The application of a certain class of regularizing algorithms to the solution of convolution type integral equations of the first kind in a Banach space. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 479-483, 534. (S. Buryšek) 49 #9656 47G05 (65J05)
- Projection methods for the solution of linear ill-posed equations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 1027-1031, 1078. (V. V. Vasin) 50 #2958 47G05 (65J05)
- The regularization of integral equations of the first kind of convolution type. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 15 (1975), no. 2, 298-304, 538. (V. V. Vasin) 52 #7179 65R05
- The regularization of systems of linear integral equations of the first kind of convolution type. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 15 (1975), no. 6, 1381-1386. (Ulrich Eckhardt) 53 #14953 65R05 (45E10)
- (with Zjabrev, N. B.) Estimation of the rate of convergence of regularized solutions of an equation of convolution type with errors in the kernel and the right-hand side. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 5, 1091-1101, 1370. (Authors' summary) 57 #18161 65R05
- The optimal regularization of operator equations with errors in the formulas for operator and for the right-hand side. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 17 (1977), no. 6, 1579-1583, 1629. (A. I. Šchiop) 57 #18083 65J05 (47A50)
- The optimal regularization of equations of convolution type with approximate right-hand side and kernel. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 18 (1978), no. 2, 218-222, 270. (Author's summary) 58 #25045 65R05
- Optimal regularization of equations of convolution type with random errors in the kernel and on the right-hand side. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 18 (1978), no. 2, 275-283, 523. (Author's summary) 57 #14554 65R05 (45E10, 93C22)
- Savenko, P. A.** (with Voitič, N. N.) Branching of solutions of the antenna synthesis problem based on a specified amplitude radiation pattern. *Radiotekhn. i Elektronika* (1976), no. 4, 723-729 (Russian); translated as *Radio Engng. Electron. Phys.* 21 (1976), 4, 44-50. (Authors' summary) 54 #11986 78.45
- Savenkov, V. A.** (with Martynenko, Mih. D.) A certain method for determining the characteristic of a wing of finite span. (Russian) *Dokl. Akad. Nauk BSSR* 19 (1975), 7, 585-587, 665. (E. Ungureanu-David) 53 #15082 76.35
- Savenkov, V. D.** (with Gubanov, G. P.; Duhovčenko, V. I.) Approximation of continuous periodic functions of two variables by trigonometric polynomials. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications, No. 6* (Russian), pp. 41-47. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1975. (RZMat 1976 #8 B114) 58 #29743 42A08
- Savenkov, V. N.** (with Lavrik, V. I.) ★Справочник по конформным отображениям. (Russian) [A handbook on conformal mappings] "Naukova Dumka", Kiev, 1970. 200 pp. (Editors) 52 #14257 30A30 (30A26)
- Savenkova, N. P.** (with Gordeev, A. V.; Gulín, A. V.; Myščekaja, E. E.) ★Численное исследование устойчивости магнитно-звукового солитона. (Russian) [A numerical study of the stability of a magnetic sonic soliton] Preprint No. 50 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1977. 19 pp. (V. P. Kalašnikov) 57 #11374 78B05
- Šavgulidze, E. T.** The hypercompleteness of locally convex spaces. (Russian) *Mat. Zametki* 13 (1973), 297-302. (V. Pták) 49 #9578 46A30
- B_γ -completeness. (Russian) *Funkcional. Anal. i Priložen.* 9 (1975), no. 4, 95-96. (W. Slowikowski) 53 #14069 46A30 (46F05)
- Certain properties of fully complete locally convex spaces. (Russian) *Trudy Moskov. Mat. Obšč.* 32 (1975), 251-266. (W. Slowikowski) 54 #13523 46A30
- The Minlos theorem for measures that are not sign-definite. (Russian) *Uspehi Matem. Nauk* 31 (1976), no. 3(189), 222. (A. Badrikian) 57 #6359 28A40
- Conditions for certain forms of completeness in the class of projective limits of sequences of inductive limits of sequences of Fréchet spaces. (Russian) *Funkcional. Anal. i Priložen.* 11 (1977), no. 1, 91-92. (J. E. Cigler) 58 #7013 46A05 (46M10)
- Savić, Branko** A new procedure for determining the coefficients of a Taylor series. (Serbo-Croatian. English summary) *Mat. Vesnik* 1(14)(29) (1977), no. 1, 51-54. (Crstici) 58 #16999 26A06
- A note on the solution of differential equations by means of Taylor series.

- (Serbo-Croatian. French summary) *Mat. Vesnik* 1(14)(29) (1977), no. 3, 309-312. (S. Aljančić) 58 #1331 34A25
- vić, Vladimir N. Sur une série trigonométrique particulière. *Mat. Vesnik* 12(27) (1975), no. 2, 177-182. (H. Burkil) 52 #6301 42A20
- vickaja, T. I. (with Zabotin, Ja. I.) Properties of quasiconcave functions. (Russian) *Primenen. Metodov Vychisl. Mat. i ÉVM v Tehn.-Ékonom. Rasčet. Vyp.* 2 (1970), 137-143. (Editors) 58 #6113 26A51 (90C30)
- vickii, G. M. (with Vlasov, A. G.) Some peculiarities of the method of overdetermined series. (Russian) *Problems of theoretical physics, II. Theory of the atom. Functional methods in quantum field theory and statistical physics. Mathematical physics*, pp. 159-167, 183. *Izdat. Leningrad. Univ., Leningrad*, 1975. (Editors) 57 #13163 35J05 (81.35)
- vickii, Ja. Z. (with Gončarova, I. F.) A non-parametric penalty method in optimal control problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1971, no. 5, 14-19 (Russian); translated as *Engrg. Cybernetics* 9 (1971), no. 5, 795-800. (J. Cullum) 47 #7563 49D30
- vickii, Ju. A. (with Alekseev, V. G.) The estimation of the spectrum of a Gaussian random process from a realization of it with missing observations. (Russian) *Problemy Peredachi Informacii* 9 (1973), no. 1, 66-72. (József Pergel) 50 #11675 62M15
- vickii, V. E. See *Mathematical methods for the solution of economic problems*, 50 #12144
- vile, Henry See *Glucker, J.*, 58 #26845
- vin, G. M. (with Ruščickii, Ja. Ja.) The solution of a contact problem for a certain variant of nonclassical elasticity theory. (Russian) *Prikladna. Meh.* 7 (1971), no. 6, 103-105. (G. Rieder) 45 #8105 73.35
(with Kaminskii, A. A.) A certain model of the destruction of visco-elastic media. (Russian) *Prikladna. Meh.* 7 (1971), no. 9, 3-12. (G. Rieder) 45 #8115 73.45
See also *Continuum mechanics and related problems of analysis*, 50 #6714 and *Obituary: Savin, G. M.*, 56 #11726
- vin, M. M. (with Šukšunov, V. E.; Potockii, S. I.; Marinin, V. I.) Introduction to the theory of time-optimal adaptive systems of automatic control. (Russian) *Izv. Vysš. Učebn. Zaved. Élektromekhanika* 1972, no. 12, 1277-1288, 1398. (Bojan Popović) 48 #8048 93C40
- vin, N. Eugene Systems k -class estimators. *Econometrica* 41 (1973), 1125-1136. (Author's summary) 55 #13718 62P20
The Koopmans and Hood test: a comment. *Econometrica* 43 (1975), 521-522. (From the author's text) 55 #13719 62P20
(with Berndt, Ernst R.) Estimation and hypothesis testing in singular equation systems with autoregressive disturbances. *Econometrica* 43 (1975), no. 5-6, 937-957. (Authors' summary) 55 #13688 62M10 (62P20)
Conflict among testing procedures in a linear regression model with autoregressive disturbances. *Econometrica* 44 (1976), no. 6, 1303-1315. (A. L. Nagar) 57 #4437 62J05
(with Berndt, Ernst R.) Conflict among criteria for testing hypotheses in the multivariate linear regression model. *Econometrica* 45 (1977), no. 5, 1263-1277. (Authors' summary) 58 #18899 62H15 (62J05, 62P20)
(with White, Kenneth) Testing for autocorrelation with missing observations. *Econometrica* 46 (1978), no. 1, 59-67. (Benjamin Kedem Kimelfeld) 58 #8096 62M10
- vin, V. V. The moduli of Riemann surfaces. (Russian) *Dokl. Akad. Nauk SSSR* 196 (1971), 783-785. (F. Huckemann) 47 #464 30A60 (30A46)
A certain mapping of the ball into space. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), 1328-1329. (V. Mičić) 51 #8414 30A60
(with Apanasov, B. N.) A conjecture in the theory of n -dimensional quasiconformal mappings. (Russian) *Dokl. Akad. Nauk SSSR* 234 (1977), no. 4, 737-739. (V. G. Šeretov) 57 #621 30A60
- vinelli, R. (with Daudey, J. P.; Diner, Simon) Numerical integration techniques for quantum chemistry. The role of periodization in the calculation of electronic integrals. *Theoret. Chim. Acta* 37 (1975), no. 4, 275-283. (Editors) 56 #4569 81.65
- vinov, V. M. See *Algorithms and the organization of the solution of economic problems*, 48 #7911 (EA 49) and *Algorithms and the organization of the solution of economic problems*, 50 #6426
- vinov, G. V. (with Kublanovskaja, V. N.; Smirnova, T. N.) On the solution of problems with sparse matrices. (Russian) Numerical methods and automatic programming. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 35 (1973), 75-94. (F. Szidarovszky) 49 #1749 65F05
The numerical stability of a matrix double sweep. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 17 (1977), no. 2, 306-319, 545. (J. Segethová) 58 #13652 65F05
The conjugate gradient method for systems of nonlinear equations. (Russian) Numerical methods and questions on organization of computations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 70 (1977), 178-183, 293. (Author's summary) 58 #19103 65H10
- vinov, N. V. Completely closed mappings. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 4, 39-45. (E. Halfar) 52 #15346 54C10
An example of a perfectly normal bicom pact without intermediate dimensions. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 31 (1976), no. 3, 52-55. (V. V. Miškin) 54 #11265 54B25 (54C10, 54F45)
Two examples in the dimension theory of bicom pacts. (Russian) *Dokl. Akad. Nauk SSSR* 233 (1977), no. 1, 41-44. (S. Adnadjević) 56 #1277 54F45
- vinova, L. T. (with Kon'kova, T. Ja.; Kublanovskaja, V. N.) On the solution of a nonlinear spectral problem for a matrix. (Russian) Numerical methods and automatic programming. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 58 (1976), 54-66, 160. (A. S. Householder) 57 #7973 65F15
(with Kublanovskaja, V. N.) On the solution of matrix eigenvalue problems. (Russian) Numerical methods and questions on organization of computations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 70 (1977), 124-139, 291-292. (Authors' summary) 58 #19076 65F15
- vir, Jacob Model and random-testing properties of intermittent faults in combinational circuits. *J. Design Automat. Fault-Tolerant Comput.* 2 (1978), no. 3, 215-230. (G. Saucier) 58 #20874 94A20
- vitch, Walter J. A note on multithread automata and context-sensitive languages. *Acta Informat.* 2 (1973), 249-252 (Author's summary) 57 #14635 68A30
Maze recognizing automata and nondeterministic tape complexity. Fourth Annual ACM Symposium on the Theory of Computing (Denver, Colo., 1972). *J. Comput. System Sci.* 7 (1973), 389-403. (J. Tucker) 49 #4314 68A25 (02F15)
How to make arbitrary grammars look like context-free grammars. *SIAM J. Comput.* 2 (1973), 174-182. (J.-F. Perrot) 50 #9066 68A30
Ambiguity in OL-systems with fragmentation. *Proceedings of the Ninth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1976)*, pp. 128-130. *Western Periodicals, North Hollywood, Calif.*, 1974. (Authors' summary) 56 #17230 68A30
Parsing of developmental languages. *Proceedings of the Seventh Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1974)*, pp. 101-103. *Western Periodicals, North Hollywood, Calif.*, 1974. (Jürgen Dassow) 57 #4668 68A30
Some characterizations of Lindenmayer systems in terms of Chomsky-type grammars and stack machines. *Information and Control* 27 (1975), 37-60. (S. Ginsburg) 50 #11871 68A30
(with Reedy, Ann) Ambiguity in the developmental systems of Lindenmayer. Collection of papers on cellular automata and developmental systems (Conf. Biologically Motivated Automata Theory, MacLean, Va., 1974). *J. Comput. System Sci.* 11 (1975), no. 2, 262-283. (Derick Wood) 52 #12430 68A30
(with Reedy, Ann) The Turing degree of the inherent ambiguity problem for context-free languages. *Theor. Comput. Sci.* 1 (1975), no. 1, 77-91. (John P. Helm) 52 #10381 02F05 (68A25, 68A30)
Computational complexity of developmental programs. *Automata, languages, development*, pp. 283-291. *North-Holland, Amsterdam*, 1976. (Branislav Rován) 58 #3749 68A30 (68A20)
Ambiguous developmental plans. *Automata, languages, development*, pp. 293-300. *North-Holland, Amsterdam*, 1976. (K. P. Lee) 57 #18265 68A30
Three hardest problems. *Foundations of computer science, II (Lectures, 2nd Advanced Course, Univ. Amsterdam, Amsterdam, 1976)*, Part 2, pp. 109-149. *Math. Centre Tracts*, No. 82, *Math. Centrum, Amsterdam*, 1976. (Pavel Strnad) 58 #3685 68A20
(with Vitányi, Paul M. B.) Linear time simulation of multithread Turing machines with head-to-head jumps. *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 453-464. *Lecture Notes in Comput. Sci.*, Vol. 52, *Springer, Berlin*, 1977. (Pavel Strnad) 56 #10155 68A25 (02F15)
Recursive Turing machines. *Internat. J. Comput. Math.* 6 (1977/78), no. 1, 3-31. (George Tourlakis) 56 #11768 02F15 (68A20)
See also *Proceedings: Annual ACM Symposium on the Theory of Computing*, 50 #1553
- Savits, Thomas H. Branching Markov processes in a random environment. *Indiana Univ. Math. J.* 21 (1971/72), 907-923. (C. H. Kraft) 46 #964 60J80
Space-time harmonic functions and age-dependent branching processes. *Advances in Appl. Probability* 7 (1975), 283-298. (S. Dubuc) 52 #9402 60J80
Applications of space-time harmonic functions to branching processes. *Ann. Probability* 3 (1975), 61-69. (S. Dubuc) 52 #9401 60J80
An age-dependent model with parental survival. *Ann. Probability* 4 (1976), no. 3, 382-392. (P. Jagers) 53 #6775 60J80
(with Block, Henry W.) The IFRA closure problem. *Ann. Probability* 4 (1976), no. 6, 1030-1032. (Benjamin Epstein) 54 #6431 62N05
The supercritical multi-type Crump and Mode age-dependent model. *Osaka J. Math.* 13 (1976), no. 2, 349-360. (Stephen D. Durham) 55 #11416 60J80
(with Block, Henry W.) Shock models with NBUE survival. *J. Appl. Probab.* 15 (1978), no. 3, 621-628. (M. Abdel-Hameed) 58 #24808 62N05 (60K10)
- Savitskiy, Ya. Z. See *Savickii, Ja. Z.*
- Šavkun, N. V. See *Holomorphic functions of several complex variables*, 50 #10294
- Šavohina, N. S. Two-dimensional case of modeling of Riemannian geometry by a force field. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 7 (1970), 135-138. (RŽFiz) 1971 #3 B150 58 #32802 83.53
Anticommutator of a spinor field in a two-dimensional Riemannian space-time. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 7 (1970), 139-146. (RŽFiz) 1971 #2 B163 58 #32803 83.53
The Riemann function for the Dirac equation in a two-dimensional de Sitter space-time. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 7 (1970), 147-149. (RŽFiz) 1971 #2 B164 58 #32804 83.53
The quantum theory of spinor field in a two-dimensional de Sitter space-time. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 8 (1971), 142-150. (RŽFiz) 1972 #6 B144 58 #32805 83.53
The spinor field in a two-dimensional de Sitter space-time. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 9 (1973), 82-96. (RŽFiz) 1974 #6 B205 58 #32806 83.53
(with Černikov, N. A.) Quantization of the spinor field in a spherical universe. (Russian. English summary) *Teoret. Mat. Fiz.* 16 (1973), no. 1, 77-89. (Authors' summary) 57 #18635 81.53
(with Černikov, N. A.) Conformal angular momentum. (Russian. English summary) *Teoret. Mat. Fiz.* 18 (1974), 310-317. (From the authors' summary) 57 #8720 81.53
(with Zaharov, A. V.) Passage to the limit $r \rightarrow \infty$ in the invariant box method. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 10-11 (1975), 237-249. (Authors' introduction) 58 #32820 83.53
- Savost'janova, N. P. A criterion for the uniqueness of the element of best approximation in normed linear spaces. (Russian) *Application of functional analysis in approximation theory*, No. 1 (Russian), pp. 114-127. *Kalinin. Gos. Univ., Kalinin*, 1973. (G. Godini) 49 #3411 41A65
A criterion for the uniqueness of the element of best approximation in locally convex spaces. (Russian) *Application of functional analysis in approximation theory*, No. 3 (Russian), pp. 118-126. *Kalinin. Gos. Univ., Kalinin*, 1974. (Editors) 58 #29727 41A65
- Savov, T. P. A certain inequality concerning several homogeneous linear forms with rational complex coefficients. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 7 (1971), no. 1, 9-16 (1973). (B. Diviš) 48 #6009 10E15

- (with Kulev, N. V.) A certain method for the study of curves of degree two. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 3, 99-110 (1974). (L. Bal) 54 #8425 50B10
- Savov, Tasko** Sur une inégalité considérée par D. S. Mitrinović. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 381-409 (1972), 47-50. (Victor I. Levin) 48 #11427 26A87
- Savoy, C. A.** An algebraic approach to the saturation of chiral algebra. *Developments in high-energy physics (Proc. Internat. School Phys. "Enrico Fermi", Course LIV, Varenna, 1971)*, pp. 247-252. Academic Press, New York, 1972. (P. P. Divakaran) 57 #14983 81.22
- L'unification des forces faibles et électromagnétiques dans la théorie de Weinberg-Salam. (English summary) *Colloque No. 3. J. Physique* 39 (1978), no. 6, Suppl., 92-103. (Author's summary) 58 #25568 81.46
- Savrin, V. I.** (with Tjurin, N. E.; Hrustalev, O. A.) The \mathcal{Q} -matrix method in the theory of strong interactions. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* 7 (1976), no. 1, 21-54. (Authors' summary) 57 #11498 81.47
- Savruk, M. P.** (with Panasjuk, V. V.; Dacišin, O. P.) An integral equation for a doubly periodic problem in the theory of cracks. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1974, 71-74, 95. (M. Sokółowski) 49 #4386 73.45
- A doubly periodic system of slits of longitudinal shift in an elastic body. (Russian) *Prikl. Meh.* 11 (1975), no. 12, 113-117, 135. 56 #13960 73.45
- (with Panasjuk, V. V.; Dacyšin, A. P.) ★ Распределение напряжений около трещин в пластинках и оболочках. (Russian) [Distribution of stresses near cracks in plates and shells] *Izdat. "Naukova Dumka", Kiev*, 1976. 443 pp. (V. Komkov) 55 #4870 73.45
- Savsan, M. A.** (with Grušin, V. V.) Smoothness of the solutions of boundary value problems for a certain class of elliptic equations of arbitrary order that are degenerate on the boundary of the domain. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 5, 33-41. (Ė. M. Saak) 52 #14646 35J70
- Analyticity of the solutions of boundary value problems for a certain class of elliptic equations of arbitrary order that are degenerate on the boundary of the domain. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 31 (1976), no. 6, 3-11. (G. Wildenhain) 56 #3458 35J40
- Savukynas, A. J.** (with Jucys, A. P.) ★ Математические основы теории атома. (Russian) [Mathematical foundations of the theory of the atom] Lithuanian and English summaries. *Izdat. "Mintis", Vilnius*, 1973. 479 pp. (From the authors' summary) 54 #4427 81.47 (81.22)
- (with Jucys, A. P.) Errata: *Mathematical foundations of the theory of the atom* (Izdat. "Mintis", Vilnius, 1973). (Russian) *Litovsk. Fiz. Sb.* 15 (1975), no. 5, 861. (Editors) 55 #1981 81.47
- (with Čižiūnas, A.) Perturbation of the boundary conditions for differential equations of atomic theory. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* 16 (1975), no. 5, 635-645, 769. (M. Martinis) 55 #5014 81.35
- Săvulescu, B.** (with Ionescu, H.; Dinescu, C.) ★ Probleme ale cercetării operaționale. (Romanian) [Problems in operations research] *Editura Didactică și Pedagogică, Bucharest*, 1972. 319 pp. (Editors) 50 #9330 90Bxx (90C05)
- (with Dinescu, C.) New results in the flow transport problem. *An. Univ. București Mat.* 27 (1978), 21-35. (From the introduction) 58 #15087 90B10
- Săvulescu, Șt. N.** An integro-differential formulation of the Navier-Stokes equations and its relation with turbulent shear flows. *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* 16 (1971), 677-691. (G. Power) 47 #4534 76.45
- (with Dumitrescu, H.) Theoretical evaluation of turbulence intensity distributions associated to Thompson's velocity profiles. *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* 22 (1977), no. 5, 647-656. (Authors' summary) 58 #19785 76.60
- Savurbaev, A. S.** A certain problem of heat exchange in the case of motion of viscoplastic media between parallel plates. *Proceedings of the Sixth Scientific Conference of the Professorial and Teaching Staff of the Faculty of Mathematics and Physics of the Samarkand State Pedagogical Institute (Samarkand, 1972)*, (Russian), pp. 79-83. *Samarkand. Gos. Univ., Samarkand*, 1972. 54 #1798 73.35 (80.35)
- Approximate solution of the problem of nonstationary motion in a viscoplastic medium in a flat pipe. (Russian) *Taškent. Gos. Ped. Inst. Sb. Naučn. Trudov* 166 *Nekotorye Voprosy Fiz. Kristal. i Differencial. Urauneniū* (1976), 61-64, 91. (Author's summary) 57 #17172 45L10
- Savvateev, V. V.** (with Matveev, S. V.) Three-dimensional manifolds having simple special spines. (Russian) *Colloq. Math.* 32 (1974), 83-97. (I. Ivanić) 51 #6829 57C35 (57A10)
- Savvin, A. B.** (with Kapitonenko, V. V.) Restoration experiments in identification. *Automat. i Telemekh.* 1972, no. 1, 155-160 (Russian. English summary); translated as *Automat. Remote Control* 33 (1972), no. 1, part 2, 137-141. (Authors' summary) 56 #11178 93B30
- Saw, John G.** (with Bradley, E. L., Jr.) Choosing the optimum lot size for a reordering policy with instantaneous emergency deliveries. *Technometrics* 14 (1972), 931-934. (S. A. Burr) 49 #6897 90B05
- Expectation of elementary symmetric functions of a Wishart matrix. *Ann. Statist.* 1 (1973), 580-582. (D. G. Kabe) 50 #8831 62H10
- Jacobians of singular transformations with applications to statistical distribution theory. *Comm. Statist.* 1 (1973), 81-91. (C. G. Khatri) 47 #6011 62E99
- A lower bound for the distribution of a partial product of latent roots. *Comm. Statist.* 3 (1974), 665-669. (Author's summary) 50 #11635 62H10
- (with Linton, Darrell G.) Reliability analysis of the k -out-of- n : F system. *IEEE Trans. Reliab. R-23* (1974), no. 2, 97-103. (H. Taylor) 53 #10242 90B25
- (with Hoffman, Thomas R.) Distribution of the largest of a set of equicorrelated normal variables. *Comm. Statist.* 4 (1975), 49-55. (P. K. Sen) 51 #2156 62H10
- An improved analytic form for the Jacobian of a singular transformation. *Comm. Statist.* 4 (1975), 273-276. (Editors) 51 #831 26A57 (62H10)
- Tests on the intensity of a Poisson process. *Comm. Statist.* 4 (1975), no. 8, 777-782. (Rashid Ahmad) 52 #6966 62P05
- (with Downing, Daryl J.) Does the dispersion matrix of a multivariate normal population have Markov structures? *Comm. Statist.* 4 (1975), no. 11, 1073-1079. (Werner Fieger) 53 #9510 62H15
- On inequalities in constrained random variables. *Comm. Statist.—Theory Meth.* A6 (1977), no. 13, 1301-1304. (Yosef Rinott) 58 #8022 62H05 (60E05)
- Zonal polynomials: an alternative approach. *J. Multivariate Anal.* 7 (1977), no. 461-467. (Yasuko Chikuse) 56 #9815 62H10 (33A70)
- Sawa, Takamitsu** Finite-sample properties of the k -class estimators. *Econometrica* (1972), 653-680. (I. Guttman) 48 #7521 62P20
- Estimation of a stochastically dependent equations system. (Japanese) *J. Jap. Statist. Soc.* 3 (1972/73), no. 2, 69-87. (Takeshi Amemiya) 54 #14300 62P20
- (with Anderson, T. W.) Distributions of estimates of coefficients of a single equation in a simultaneous system and their asymptotic expansions. *Econometrica* (1973), 683-714. (Authors' summary) 55 #11545 62P20 (62E20)
- Almost unbiased estimator in simultaneous equations systems. *Internat. Econ. Rev.* 14 (1973), no. 1, 97-106. (A. L. Nagar) 52 #9548 62P20
- (with Kanoh, Satoru) Categorical control in regression. *J. Amer. Statist. Assoc.* (1976), no. 354, 361-365. (Takeshi Amemiya) 54 #1492 62J05
- (with Anderson, T. W.) Two-stage least squares: in which direction should the residuals be minimized? *J. Amer. Statist. Assoc.* 72 (1977), no. 357, 187-191. (Prem Goel) 57 #1777 62J05 (62E20)
- Sawada, Hideki** The structure of the Hecke algebra $H_c(G_0, U_0)$ for a finite Steinberg group G_0 . *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* 21 (1974), 333-355. (James F. Hurle) 50 #7318 20C30 (20G05)
- A characterization of the modular representations of finite groups with split (B, N) -pairs. *Math. Z.* 155 (1977), no. 1, 29-41. (Michael Klemm) 56 #8679 20C20
- Endomorphism rings of split (B, N) -pairs. *Tokyo J. Math.* 1 (1978), no. 1, 139-144. (J. E. Humphreys) 58 #22264 20C05
- Sawada, Katsuro** (with Kotera, Takeyasu) A method for finding N -soliton solutions of the K.d.V. equation and K.d.V.-like equation. *Progr. Theoret. Phys.* 51 (1974), 1355-1366. (G. L. Lamb, Jr.) 55 #10878 35Q99
- (with Kotera, Takeyasu) Inverse problem and classes of non-linear partial differential equations. *J. Phys. Soc. Japan* 39 (1975), no. 2, 501-508. (Kishin Mariwalla) 53 #12295 81.35
- (with Kotera, Takeyasu) Integrability and a solution for the one-dimensional N -particle system with inversely quadratic pair potentials. *J. Phys. Soc. Japan* 39 (1975), no. 6, 1614-1618. (Mark J. Ablowitz) 52 #16211 70.35
- (with Kotera, Takeyasu) A recurrence formula and the KdV system. *J. Phys. Soc. Japan* 41 (1976), no. 3, 1062-1066. (Authors' summary) 57 #15029 81.35
- (with Kotera, Takeyasu) Another derivation of the solution of the finite Toda lattice. *J. Phys. Soc. Japan* 44 (1978), no. 2, 659-662. (Mark Adler) 58 #22835 34C35 (70.47)
- Sawada, Kazuya** (with Sakawa, Masatoshi; Narutaki, Ryonosuke) Multiobjective optimization in a nonlinear dynamic production model. (Japanese) *Systems and Control* 20 (1976), no. 7, 388-390. (Nobuo Sannomiya) 54 #4618 90B30
- Sawada, Kiyoshi** (with Senō, Manabu; Iwamoto, Kazutoshi) Instability and oscillatory behavior of membrane-chemical reaction systems. *J. Theoret. Biol.* 72 (1978), no. 3, 577-588. (Uwe an der Heiden) 58 #9393 92A05
- Sawada, Tatsuro** (with Sasakawa, Tatuya) Three-body problems. *Progr. Theoret. Phys. Suppl.* No. 61 (1977), 61-134. (W. O. Amrein) 58 #14592 81.35
- (with Sasakawa, Tatuya) Perturbation methods in the scattering theory for local and non-local potentials. *Progr. Theoret. Phys. Suppl.* No. 61 (1977), 1-60. (P. Achuthan) 56 #10548 81.35
- Sawade, Kazuo** Hadamard matrices of order 100 and 108. *Bull. Nagoya Inst. Tech.* 29 (1977), 147-153. (L. D. Baumert) 58 #21696 05B20
- Sawaki, K.** (with Huang, C. C.; Brumelle, Shelby L.; Vertinsky, I.) Optimal control for multi-servers queueing systems under periodic review. *Naval Res. Logist. Quart.* 24 (1977), no. 1, 127-135. (Micha Yadin) 58 #13399 60K25
- Sawaki, Katsushige** Some extensions of dynamic economic lot size model with backlogging. *J. Operations Res. Soc. Japan* 14 (1971), 1-18. (M. Stoica) 46 #10381 90A15
- (with Ichikawa, Akira) Optimal control for partially observable Markov decision processes over an infinite horizon. (Japanese summary) *J. Operations Res. Soc. Japan* 21 (1978), no. 1, 1-16. (Agostino Villa) 58 #9725 93E20 (90B25)
- Sawaki, Sumio** On almost-Hermitian manifolds satisfying a certain condition on the almost-complex structure tensor. *Differential geometry (in honor of Kentaro Yano)*, pp. 443-450. Kinokuniya, Tokyo, 1972. (R. S. Millman) 48 #2960 53C55
- Sufficient conditions for an almost-Hermitian manifold to be Kählerian. *Hokkaido Math. J.* 1 (1972), 21-29. (C. I. Ipsas) 49 #7945 53B35
- (with Yamagata, Masahiro) Notes on almost Hermitian manifolds. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. III. *Tensor (N.S.)* 26 (1972), 221-226. (T. Suguri) 49 #1449 53C55
- (with Takamatsu, Kichiro) On almost complex hypersurfaces of a K -space. *Tōhoku Math. J.* 2 (25 (1973), 569-578. (Koichi Ogue) 48 #12371 53B35
- (with Sekigawa, Kouei) Almost Hermitian manifolds with constant holomorphic sectional curvature. *J. Differential Geometry* 9 (1974), 123-134. (G. R. Jensen) 49 #3756 53C15
- (with Yano, Kentaro) Sur le tenseur de courbure de Weyl et celui de Bochner. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 9, A293-A295. (Authors' summary) 58 #24101 53B35
- (with Watanabe, Yoshiyuki; Sato, Takuji) Notes on a K -space of constant holomorphic sectional curvature. *Kōdai Math. Sem. Rep.* 26 (1975), no. 4, 438-445. (David Blair) 52 #4163 53B35
- (with Yano, Kentaro) On complex Weyl-Hlavatý connections. *Kōdai Math. Sem. Rep.* 28 (1976/77), no. 4, 372-380. (R. Miron) 57 #1382 53C55
- (with Yamanoue, Yoshio) On a 6-dimensional K -space. *Sci. Rep. Niigata Univ. Ser. A No. 13* (1976), 13-17. (N. Prakash) 53 #3965 53C55
- Sawano, Akio** (with Iwamoto, Kanji) Error detection and correction in formal languages. *NEC Res. Developments* No. 30 (1973), 64-71. 55 #11727 68A30
- (with Iwamoto, Kanji) Error correction for regular languages and context-free languages. *Systems-Computers-Controls* 4 (1973), no. 6, 41-47. (Richard A. DeMillo) 51 #2360 68A30
- Sawaragi, Yoshikazu** (with Sunahara, Yoshifumi; Katayama, Tohru) Stochastic optimum

- synthesis of time-variant control systems by introducing non-linear elements. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 34, Paper 18A, 9 pp. *Inst. Mech. Engrs., London, 1967*. (From the summary) **51** #9945 93E20
- (with Katayama, Tohru) On the estimation of state variables and parameters for discrete-time noisy nonlinear dynamical systems. *Proceedings of the Sixteenth Japan National Congress for Applied Mechanics (Univ. Tokyo, Tokyo, 1966)*, pp. 348-355. *Sci. Council of Japan, Tokyo, 1967*. (R. L. Kashyap) **50** #12405 93E10
- (with Sunahara, Yoshifumi; Hara, Kei) On a statistical analysis of non-linear time-variant control systems with a dead time subjected to a suddenly applied random disturbance with the mean value. *Proceedings of the Sixteenth Japan National Congress for Applied Mechanics (Univ. Tokyo, Tokyo, 1966)*, pp. 356-363. *Sci. Council of Japan, Tokyo, 1967*. (Authors' summary) **56** #11466 93E99
- (with Shima, Masasuke) On the optimality of the boundary control for the two dimensional nonlinear control system which contains control variables linearly. (Japanese. English summary) *J. Japan Assoc. Automat. Control Engrs.* **12** (1968), 686-692. (Authors' summary) **50** #12366 93C10
- (with Inoue, Koichi; Asai, Koh) Synthesis of open-loop optimal control with zero sensitive terminal constraints. (French, German and Russian summaries) *Automatica—J. IFAC* **5** (1969), 389-394. (Authors' summary) **48** #8039 93B35
- (with Inoue, Koichi; Akashi, Hajime; Ogino, Katsuya) Sensitivity approaches to optimization of linear systems with time delay. (French, German and Russian summaries) *Automatica—J. IFAC* **7** (1971), 671-679. (S.-C. Huang) **47** #9402 49E30
- (with Sunahara, Yoshifumi; Ohminato, Kohji) On the estimation of stochastic sensitivity for non-linear dynamical systems in state estimation problems. *Internat. J. Control* (1) **13** (1971), 1083-1095. (N. U. Ahmed) **45** #9776 93E10
- (with Ono, T.; Yamasaki, J.) On the controllability of systems with a time-varying delay. *Internat. J. Control* (1) **14** (1971), 975-987. (Authors' summary) **56** #11146 93B05 (93C05)
- (with Fukawa, Hiroshi; Katsuma, Shoichiro) On conditions for optimality of boundary control. Optimization of nonlinear control systems with multiple control variables appearing linearly. (Japanese. English summary) *Systems and Control* **15** (1971), 619-626. (Authors' summary) **57** #18957 93C10
- (with Nakamizo, Takayoshi) Analytical study on n -th order linear system with stochastic coefficients. *Stability of stochastic dynamical systems (Proc. Internat. Sympos., Univ. Warwick, Coventry, 1972)*, pp. 173-185. *Lecture Notes in Math.*, Vol. 294, Springer, Berlin, 1972. (C. J. Harris) **53** #10444 93E15
- (with Katayama, Tohru; Fujishige, Satoru) Sequential state estimation with interrupted observation. *Information and Control* **21** (1972), 56-71. (M. Zakai) **48** #1773 93E10
- (with Ogino, Katsuya) Game theoretic approach to sensitivity design of optimal systems. *Sensitivity, adaptivity and optimality (Proc. Third IFAC Sympos., Ischia, 1973)*, pp. 394-399. *Instrument Soc. Amer., Pittsburgh, Pa.*, 1973. (N. N. Petrov) **50** #15953 90D25
- (with Baba, Norio) A note on the learning behavior of variable-structure stochastic automata. *IEEE Trans. Systems Man Cybernet. SMC-3* (1973), 644-647. (P. Turakainen) **56** #15241 94A35
- (with Akashi, Hajime; Imai, Hiroyuki; Yoshikawa, Tsueneo; Fujishige, Satoru) On optimal observation strategy in adaptive control process. (Japanese. English summary) *Systems and Control* **17** (1973), 387-396. (Authors' summary) **47** #8161 93C40
- (with Sayama, Hayatoshi; Kameyama, Yoshimasa; Nakayama, Hirotaka) Iteration process in Lagrange multipliers for multiplier method. (Japanese. English summary) *Systems and Control* **17** (1973), 775-778. (M. Yamasaki) **49** #6937 90C30
- (with Fujishige, Satoru) Optimal estimation for continuous system with jump process. *IEEE Trans. Automatic Control AC-19* (1974), 225-228. (D. D. Sworwer) **54** #2301 93E10
- (with Katayama, Tohru; Fujishige, Satoru) State estimation for continuous-time system with interrupted observation. *IEEE Trans. Automatic Control AC-19* (1974), 307-314. (P. S. Knopov) **55** #2308 93E10
- (with Baba, Norio) Two ϵ -optimal nonlinear reinforcement schemes for stochastic automata. *IEEE Trans. Systems Man Cybernet. SMC-4* (1974), 126-131. (R. G. Buharev) **56** #8247 94A35
- (with Nakayama, Hirotaka; Sayama, H.) On an optimization problem with min-constraints. *Internat. J. Systems Sci.* **5** (1974), 995-1004. (B. T. Poljak) **53** #11467 49D99
- (with Kobayashi, Toshihiro) Distributed parameter differential games. (Japanese) *Systems and Control* **18** (1974), 101-111. (Authors' summary) **49** #2122 90D25
- (with Kobayashi, Toshihiro) On the observability of distributed parameter systems. (Japanese. English summary) *Systems and Control* **18** (1974), no. 12, 703-711. (Takashi Yahagi) **53** #2464 93C20 (93B05)
- (with Baba, Norio) On the learning behavior of stochastic automata under a nonstationary random environment. *IEEE Trans. Systems Man Cybernet. SMC-5* (1975), no. 2, 273-275. (R. Theodorescu) **55** #12374 94A35
- (with Nagata, Motoyasu) Error analysis of fixed-point prediction with coloured measurement noise. *Internat. J. Control* **21** (1975), 391-400. (W. J. Padgett) **51** #5124 93E10
- (with Fujishige, Satoru; Nagai, Hideo) System-theoretical approach to model reduction and system-order determination. *Internat. J. Control* **22** (1975), no. 6, 807-819. (M. Aoki) **56** #2513 93B20
- (with Sakawa, Masatoshi) Multiple-objective optimization for environment development systems. *Internat. J. Systems Sci.* **6** (1975), 157-164. (Authors' summary) **51** #5106 93C99
- (with Nakayama, Hirotaka; Sayama, H.) Multiplier method and optimal control problems with terminal state constraints. *Internat. J. Systems Sci.* **6** (1975), 465-477. (Joseph C. Dunn) **56** #2552 93C20
- (with Sakawa, Masatoshi) Multiple-criteria optimization of pollution control model. *Internat. J. Systems Sci.* **6** (1975), no. 8, 741-748. (Claude Carasso) **53** #5003 90C50
- (with Fujishige, Satoru) Optimal control for linear continuous-time systems with general noises based upon sampled data. *Internat. J. Systems Sci.* **6** (1975), no. 12, 1111-1118. (Anders Lindquist) **53** #5136 93E20
- (with Sakawa, Masatoshi) State-space constrained optimal control problems with control variables appearing linearly. *Internat. J. Systems Sci.* **6** (1975), no. 12, 1185-1194. (Authors' summary) **57** #2679 93C15
- (with Nakayama, Hirotaka; Sayama, H.) A generalized Lagrangian function and multiplier method. *J. Optimization Theory Appl.* **17** (1975), no. 3/4, 211-227. (Authors' summary) **55** #9990 90C25
- (with Sakawa, Masatoshi) Multiple-criteria optimization for environment development system—constrained case. *Mem. Fac. Engrg. Kyoto Univ.* **37** (1975), no. 3, 176-183. (A. B. Kuržanskiĭ) **53** #2392 90C50
- (with Sakawa, Masatoshi) Optimal control problems for state-constrained nonlinear systems with the control variables appearing linearly. (Japanese. English summary) *Systems and Control* **19** (1975), no. 6, 323-331. (Kimio Kanai) **53** #10397 93C10 (93C50)
- (with Nagata, Motoyasu) Error analysis of low-order filters and unuality between error equations of low-order filter and singular control problem. *Internat. J. Control* **23** (1976), no. 1, 67-79. (Katsuji Uosaki) **54** #2305 93E10
- (with Nagata, Motoyasu) Error analysis of the Schmidt-Kalman filter. *Internat. J. Systems Sci.* **7** (1976), no. 7, 769-778. (Tohru Katayama) **53** #15518 93E10
- (with Fujishige, Satoru; Nagai, Hideo) Construction of a lower-order model of a stationary linear discrete-time system on the basis of a measure of reducibility. (Japanese. English summary) *Systems and Control* **20** (1976), no. 7, 381-387. (Authors' summary) **55** #14313 93C05 (93C55)
- (with Nakayama, Hirotaka) Multiple objective decision making, and its applications. (Japanese) *Systems and Control* **20** (1976), no. 10, 511-520. (Not reviewed) **90A05** (90C40)
- (with Ikeda, Saburo; Nakamori, Yoshiteru) A measure of obtaining representative pointwise source and its availability for air pollution control. *Internat. J. Systems Sci.* **8** (1977), no. 12, 1429-1440. (S. G. Tzafestas) **57** #9144 92A99
- (with Tanino, T.; Nakayama, Hirotaka) Multiplier functions and duality for non-linear programmes having a set constraint. *Internat. J. Systems Sci.* **9** (1978), no. 4, 467-481. (R. N. Kaul) **58** #15192 90C30
- (with Miyamoto, Sadaaki; Ikeda, Saburo) Identification of distributed systems and the theory of the regularization. *J. Math. Anal. Appl.* **63** (1978), no. 1, 77-95. (Kimio Kanai) **57** #15694 93E10 (65K05)
- See also **Proceedings: International Congress of the International Federation of Automatic Control (IFAC)**, **51** #12360a and **System sensitivity analysis**, **52** #12863
- Sawashima, Ikuko** (with Niuro, Fumio) Reduction of a sub-Markov operator to its irreducible components. *Natur. Sci. Rep. Ochanomizu Univ.* **24** (1973), 35-59. (Michael Lin) **49** #7809 (E 55 #8843) 47B35
- (with Niuro, Fumio) On a set including the spectra of positive operators. *Sci. Papers College Gen. Ed. Univ. Tokyo* **23** (1973), 93-98. (I. K. Marek) **49** #5925 47B55
- (with Niuro, Fumio) Correction to: "Reduction of a sub-Markov operator to its irreducible components" (*Natur. Sci. Rep. Ochanomizu Univ.* **24** (1973), 35-59). *Natur. Sci. Rep. Ochanomizu Univ.* **25** (1974), no. 1, 57. (Michael Lin) **55** #8843 47A35
- Sawashita, Norichika** (with Oka, Shichirō; Sugawara, Masahiro) On the group of self-equivalences of a mapping cone. *Hiroshima Math. J.* **4** (1974), 9-28. (J. W. Rutter) **49** #11503 55D10
- On the group of self-equivalences of the product of spheres. *Hiroshima Math. J.* **5** (1975), 69-86. (M. Arkowitz) **51** #14035 55D10
- On the self-equivalences of H -spaces. *J. Math. Tokushima Univ.* **10** (1976), 17-33. (Richard Holzager) **55** #1354 55D45
- On H -equivalences of $SU(3)$, $U(3)$ and $Sp(2)$. *J. Math. Tokushima Univ.* **11** (1977), 33-47. (J. Stasheff) **58** #2797 55D10 (55D45)
- Sawaya, Yuichi** (with Hori, Jun-ichi; Okamoto, Yukio; Ono, Masatoshi) Phase transition between stationary states. I. A simple model of laser-like behaviour. *Progr. Theoret. Phys.* **52** (1974), no. 4, 1146-1160. (M. Drăganu) **53** #10053 82J35
- Sawczuk, Antoni** Problems in the theory of moderately large bendings of rigid-plastic shells. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* **9** (1971), 335-354. (M. Sokolowski) **45** #8088 73J34
- See also **Collection: Heinrich, Helmut**, **51** #2818; **Foundations of plasticity**, **56** #1865 and **Nowacki, W. K.**, **57** #14696
- Saweris, Nashat B.** (with Pillai, K. C. S.) Asymptotic distribution of Hotelling's trace for two unequal covariance matrices and robustness study of test of equality of mean vectors. *J. Stat. Plann. Inference* **1** (1977), no. 2, 109-120. (Monoru Siotani) **58** #18896 62H10
- Sawhney, S.** Behaviour of a complex system having stand-by components in spares. (German summary) *Z. Operations Res. Ser. A-B* **17** (1973), no. 3, A85-A95. (Author's summary) **56** #7918 90B25
- Sawicka, Halina** On some properties of generalized Post algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 267-269. (Ph. Dwinger) **45** #3270 06A40
- On some properties of Post algebras with countable chain of constants. *Colloq. Math.* **25** (1972), 201-209. (M. M. Richter) **48** #8331 06A40
- Sawicki, Janusz** Application of the Haar function in signal analysis. (Polish. English and Russian summaries) *Rozprawy Politech. Poznań No. 56* (1973), 77 pp. (T. Kaczorek) **51** #7703 94A05
- Estimating the power spectra of random processes by the use of Haar functions. *Found. Control Engrg.* **1** (1975), no. 1, 47-58. (G. Robert Redinbo) **54** #12321 93E10
- Sawicki, Tadeusz** (with Szczepankiewicz, Eugeniusz) Ordinary moments of certain random variables. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **12** *Zastos. Mat.* (1973), 69-80. (Editors) **54** #11615 62E15
- (with Malek, Karol; Serafin-Kołodziejczyk, Ewa; Szczepankiewicz, Eugeniusz) Sampling in the case of some particular random fields. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **14** *Zastos. Mat.* (1973), 55-67. (Editors) **55** #6544c 60G10 (62M99)
- (with Szczepankiewicz, Eugeniusz) The central moments of certain random variables. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **17**

- Zastos. Mat. (1974), 61-72. **54** #11616 62E15
- Sawik, Tadeusz** Minimal-time programming for multi-assortment production. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **21** (1976), no. 3, 327-340. (Author's summary) **56** #17783 90B35
- Time-optimal production scheduling in the case of a time-varying set of available production equipment. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **22** (1977), no. 4, 473-486. (Author's summary) **56** #17784 90B35
- Stochastic optimal control of a multi-facility, multi-product production scheduling with random times of supplies. (Polish and Russian summaries) *Control Cybernet.* **6** (1977), no. 3-4, 21-35. (Jean-Michel Bismut) **56** #18079 93E20 (90B35)
- Stochastic models of production scheduling problems. (Polish. Russian and English summaries) *Arch. Automat. Telemech.* **23** (1978), no. 1-2, 115-127. (Author's summary) **58** #20370 90B30
- Stochastic control of production scheduling under random periods of facilities availability for assignment. (Polish and Russian summaries) *Podstawy Sterowania* **8** (1978), no. 2, 201-216. (From the text) **58** #25943 90B35
- Sawin, Dwight H., III** (with Maki, Gary K.; Jeng, Bor-Ren A.) Improved state assignment selection tests. *IEEE Trans. Computers* **C-21** (1972), 1443-1449. (Authors' summary) **54** #7128 94A20
- A proposed method for generation of minimum-hardware state assignments. *Proceedings of the Seventh Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1974), pp. 174-176. *Western Periodicals, North Hollywood, Calif.*, 1974. (Jan Grabowski) **57** #9338 94A20
- (with Maki, Gary K.) Asynchronous sequential machines designed for fault detection. *IEEE Trans. Computers* **C-23** (1974), 239-249. (See Zbl **382** #94044) 94A25
- (with Maki, Gary K.) Fault-tolerant asynchronous sequential machines. *IEEE Trans. Computers* **C-23** (1974), no. 7, 651-657. (Authors' summary) **57** #5466 94A20
- (with Maki, Gary K.) Fail-safe asynchronous sequential machines. *IEEE Trans. Comput.* **C-24** (1975), 675-677. (W. K. Chen) **51** #7746 94A20
- (with Maki, Gary K.) Comments on: "Fault-tolerant asynchronous networks" (IEEE Trans. Computers **C-22** (1973), 662-669) by Dhiraj K. Pradhan and Sudhakar M. Reddy. With a reply by D. K. Pradhan and S. M. Reddy *IEEE Trans. Comput.* **C-24** (1975), 756-759. (W.-K. Chen) **51** #9978 94A20
- See also **Wakerly, John F.**, (Not reviewed) and **Special issue: Fault-tolerant computing**, **54** #1693
- warzecha-Sawoń, Aleksandra** See **Warzecha-Sawoń, Aleksandra**
- Sawoń, Zbigniew** Positively definite functionals in Banach algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 55-60. (D. J. Patil) **47** #4008 46K05
- Submultiplicative norms on the space $C(S)$. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 3, 153-155. (A. M. Sinclair) **53** #3712 46J10
- Compact homeomorphisms on $C(S)$. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 3, 157-161. (A. M. Sinclair) **53** #3713 46J10 (47B05)
- (with Warzecha-Sawoń, Aleksandra) Urysohn's lemma in Banach function algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 11, 1101-1103. (T. T. West) **58** #2301 46J10 (46H05)
- Some remarks about the three spaces problem in Banach algebras. *Czechoslovak Math. J.* **28(103)** (1978), no. 1, 56-58. (F. F. Bonsall) **57** #7174 46H05 (46J10, 46K05)
- Saworotnow, Parfeny P.** Integral as a certain type of a positive definite function. *Proc. Amer. Math. Soc.* **35** (1972), 93-95. (A. M. Sinclair) **45** #7482 46K05 (28A45)
- Semigroups with positive definite structure. *Proc. Amer. Math. Soc.* **40** (1973), 421-425. (L. N. Argabright) **47** #9176 43A35 (22A25)
- Abstract stationary processes. *Proc. Amer. Math. Soc.* **40** (1973), 585-589. (R. Jajte) **48** #3111 60G10
- A characterization of Hilbert modules. *Bull. Calcutta Math. Soc.* **68** (1976), no. 1, 39-41. (B. Yood) **56** #16387 46K15
- Daniell construction for an H^* -algebra valued measure. *Indiana Univ. Math. J.* **25** (1976), no. 9, 877-882. (J. D. Maitland Wright) **53** #14147 46K15 (28A45)
- See also **Vector and operator valued measures and applications**, **48** #4264
- Sawtelle, Peter G.** Quasi-unmixed local rings and quasi-subspaces. *Proc. Amer. Math. Soc.* **38** (1973), 59-64. (W. Heinzer) **48** #6097 13H10
- Quasi-unmixedness and integral closure of Rees rings. *Proc. Amer. Math. Soc.* **56** (1976), 95-98. (D. Kirby) **53** #2924 13C15 (13B20)
- Sawyer, D. B.** Convex sets and the hexagonal lattice. *Quart. J. Math. Oxford Ser. (2)* **27** (1976), no. 106, 217-225. (A. Florian) **54** #3595 52A40
- Sawyer, Stanley** A remark on the S -equation for branching processes. *Proc. Japan Acad.* **46** (1970), 427-429. (See Zbl **208**, 438) 60J80
- Rates of convergence for some functionals in probability. *Ann. Math. Statist.* **43** (1972), 273-284. (S. M. Samuels) **46** #937 60F05
- (with Rosencrans, Steven I.) An extremal property of independent random variables. *Proc. Amer. Math. Soc.* **36** (1972), 552-556. (N. C. Jain) **47** #1123 60G45 (60G50, 60J65)
- A remark on the Skorohod representation. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **23** (1972), 67-74. (G. K. Eagleson) **46** #10037 60E05
- A Fatou theorem for the general one-dimensional parabolic equation. *Bull. Amer. Math. Soc.* **79** (1973), 1210-1215. (T. L. Lai) **49** #8124 60J50 (35K10)
- A Fatou theorem for the general one-dimensional parabolic equation. *Indiana Univ. Math. J.* **24** (1974/75), 451-498. (H. P. McKean, Jr.) **50** #3372 60J60 (35K15)
- The Skorohod representation. Papers arising from a Conference on Stochastic Differential Equations (Univ. Alberta, Edmonton, Alta., 1972). *Rocky Mountain J. Math.* **4** (1974), 579-596. (J. Kiefer) **50** #8632 60B10
- An application of branching random fields to genetics. *Probabilistic methods in differential equations* (Proc. Conf., Univ. Victoria, Victoria, B. C., 1974), pp. 100-112. *Lecture Notes in Math.*, Vol. 451, Springer, Berlin, 1975. (From the author's introduction) **56** #4909 92A10 (60J85)
- Branching diffusion processes in population genetics. *Advances in Appl. Probab.* **8** (1976), no. 4, 659-689. (Charles J. Mode) **55** #5239 92A10 (60J85)
- Results for the stepping stone model for migration in population genetics. *Probability* **4** (1976), no. 5, 699-728. (Author's summary) **58** #33157 92A15 (60J85)
- Asymptotic properties of the equilibrium probability of identity in a geographic structured population. *Advances in Appl. Probability* **9** (1977), no. 2, 268-282. (Edw. Pollak) **57** #9123 92A10
- Rates of consolidation in a selectively neutral migration model. *Ann. Probab.* (1977), no. 3, 486-493. (Charles J. Mode) **56** #4910 92A10 (92A15, 60J20)
- On the past history of an allele now known to have frequency p . *J. Appl. Probab.* **14** (1977), no. 3, 439-450. (S. Levin) **58** #20618 92A15 (92A10)
- Sawyer, Walter Warwick** On the matrix with elements $1/(r+s-1)$. *Canad. Math. Bull.* (1974), 297-298. (H. Minc) **52** #436 15A21
- ★A first look at numerical functional analysis. Oxford Applied Mathematics and Computing Science Series. Clarendon Press, Oxford, 1978. xi + 186 pp. ISBN 0-19-859628-6 (L. Collatz) **58** #17764 46-01 (65-01)
- Sawyers, K. N.** (with Rivlin, Ronald S.) Instability of an elastic material. (Russian summary) *Internat. J. Solids and Structures* **9** (1973), 607-613. (J. L. Nowinski) **49** #1874 73J35
- (with Rivlin, Ronald S.) The strain-energy function for elastomers. *Trans. S. Rheol.* **20** (1976), no. 4, 545-557. (H. Parkus) **54** #11926 73J49
- (with Rivlin, Ronald S.) On the speed of propagation of waves in a deformed elastic material. (German summary) *Z. Angew. Math. Phys.* **28** (1977), no. 6, 1045-1057. (J. V. Crags) **57** #8313 73J35
- (with Rivlin, Ronald S.) On the speed of propagation of waves in a deformed compressible elastic material. (German summary) *Z. Angew. Math. Phys.* **29** (1978), no. 2, 245-251. (D. R. Bland) **58** #8666 73J35
- Saxena, Ashok K.** On an application of Matusita's distance function. *J. Indian Statist. Assoc.* **7** (1969), 73-76. (K. G. Jöreskog) **49** #6500 62H30
- Classification into two multivariate complex normal distributions with different covariance matrices. *J. Indian Statist. Assoc.* **7** (1969), 158-161. (Jana Zvárová) **48** #9989 62H30
- On an aspect of local property of absolute summability of the derived series of Fourier series. *Rend. Circ. Mat. Palermo (2)* **23** (1974), no. 1, 44-48. (Yung-ming Chen) **52** #6305 42A28
- Saxena, K. M. Lal** (with Alam, Khursheed; Tong, Yung Liang) Optimal confidence interval for a ranked parameter. *J. Amer. Statist. Assoc.* **68** (1973), 720-725. (Hubert J. Chen) **53** #1814 62F07 (62F25)
- (with Rizvi, M. Haseeb) On interval estimation and simultaneous selection of ordered location or scale parameters. *Ann. Statist.* **2** (1974), 1340-1345. (Hubert J. Chen) **53** #11857 62F10
- (with Alam, Khursheed) On interval estimation of a ranked parameter. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 277-283. (M. L. Tiku) **50** #8801 62F10
- Distribution-free tolerance intervals for stochastically ordered distributions. *Ann. Statist.* **4** (1976), no. 6, 1210-1218. (M. S. Nikulin) **55** #4508 62G15
- A single-sample procedure for the estimation of the largest mean. *J. Amer. Statist. Assoc.* **71** (1976), no. 353, 147-148. (Bruce W. Turnbull) **53** #6844 62F07
- See also **Optimizing methods in statistics**, **48** #9900
- Saxena, K. P.** On power of a STPT procedure in ANOVA model I using certain approximations. *Estatistica* **29** (1971), 44-53. (Burt S. Holland) **51** #7191 62L10
- On power of sometimes pool tests and the Bayes rule for intercepts in linear regression models assuming heterogeneity of variances. *Estatistica* **29** (1971), no. 111, 158-166. (1975). (Lubomir Kubáček) **53** #6909 62J10
- (with Tailor, J. K.) Approximate formulae for power components of sometimes pool test procedure based on a mixed model. *Sankhyā Ser. B* **36** (1974), no. 3, 267-277. (Lubomir Kubáček) **53** #9532 (E **58** #31622) 62J10
- Estimation of variance using two preliminary tests in ANOVA model-I. (German summary) *Biometrische Z.* **17** (1975), no. 5, 308-324. (T. A. Bancroft) **52** #15874 62J10
- (with Tailor, J. K.) Corrigenda: "Approximate formulae for power components of sometimes pool test procedure based on a mixed model" (Sankhyā Ser. B **36** (1974), no. 3, 267-277). *Sankhyā Ser. B* **37** (1975), no. 2, 254. (Editors) **58** #31622 62J10
- (with Tailor, J. K.) A note on inference in a mixed model. *Vikram* **19** (1975), no. 1-3, 43-53. (Authors' summary) **58** #24676 62F05
- Saxena, P. C.** (with Aggarwal, S. P.) Duality theorems for fractional functional programming with quadratic constraint. (Czech summary) *Ekonom.-Mat. Obzor* **10** (1974), 86-92. (M. Yamasaki) **49** #10365 90C20
- (with Jain, O. P.) A duality theorem for a special class of programming problems in complex space. *J. Optimization Theory Appl.* **16** (1975), 207-220. (R. W. Cottle) **51** #14990 90C30
- (with Aggarwal, S. P.) Duality theorems for non-linear fractional programs. *Z. Angew. Math. Mech.* **55** (1975), no. 9, 523-525. (M. Rössler) **54** #4657 90C25
- (with Aggarwal, S. P.) The decomposition method for linear programming problems with linear and fractional target functions. (Polish. Russian and English summaries) *Przegląd Statyst.* **23** (1976), no. 2, 211-229. (Authors' summary) **55** #2119 90C05
- (with Patkar, Vivek) Non-linear non-differentiable fraction programming in complex space. *Cahiers Centre Études Rech. Opér.* **20** (1978), no. 2, 183-193. (John J. Dinkel) **58** #20456 90C30
- Saxena, P. K.** (with Bhandari, Mahesh Chandra) Lower formation radical for near rings. *Kyungpook Math. J.* **18** (1978), no. 1, 23-29. (Marjory J. Johnson) **58** #11032 16A76 (16A21)
- Saxena, R. B.** A new proof of S. A. Telyakovskii's theorem on the approximation of continuous functions by algebraic polynomials. *Studia Sci. Math. Hungar.* **7** (1972), 3-9. (E. W. Cheney) **48** #4575 41A05
- On the stability of interpolation. *Studia Sci. Math. Hungar.* **7** (1972), 321-329. (A. Sharma) **48** #6765 41A05
- A note on D. L. Berman's theorem on the divergence of Hermite-Fejér interpolation. *Studia Sci. Math. Hungar.* **7** (1972), 417-421. (J. Prasad) **48** #11849 41A05

- (with Sharma, Ambikeshwar) Convergence of averaging interpolation operators. Collection of articles dedicated to Stanislaw Golb on his 70th birthday, II. *Demonstratio Math.* **6** (1973), 821–839 (1974). (J. R. Rice) **51** #1203 41A05
- Approximation of continuous functions by polynomials involving Freud's interpolatory polynomials. *Studia Sci. Math. Hungar.* **8** (1973), 437–446. (H. Kramer) **56** #6197 41A10
- A note on the rate of convergence of Hermite-Fejér interpolation polynomials. *Canad. Math. Bull.* **17** (1974), 299–301. (R. Franke) **50** #10610 41A05
- The Hermite-Fejér process on the Tchebycheff matrix of second kind. *Stud. Sci. Math. Hungar.* **9** (1974), 223–232 (1975). (R. Franke) **51** #6225 41A05
- (with Prasad, Jagdish) Degree of convergence of quasi-Hermite-Fejér interpolation. *Publ. Inst. Math. (Beograd) (N.S.)* **19** (33) (1975), 123–130. (Christian Coatméclec) **54** #8082 41A05
- (with Mathur, K. K.) The rapidity of convergence of quasi-Hermite-Fejér interpolation polynomials. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 3–4, 343–347. (A. K. Varma) **54** #10930 41A05
- Averaging interpolation of Hermite-Fejér type. *Canad. Math. Bull.* **19** (1976), no. 3, 315–321. (R. Franke) **55** #10911 41A05
- xena, R. K.** See **Saxena, Ram Kishore**
- xena, R. K.** See **Saxena, Rajendra K.**
- xena, R. K.** (with Jain, Pawan Kumar) Simultaneous automorphisms in the spaces of analytic functions over non-Archimedean fields. (Italian summary) *Boll. Un. Mat. Ital. A* (5) **14** (1977), no. 1, 98–106. (A. F. Monna) **55** #11014 46E10 (32K10)
- xena, R. P.** (with Bhargava, S. C.) Stable periodic solutions of the reactive-diffusive Volterra system of equations. *J. Theoret. Biol.* **67** (1977), no. 3, 399–406. (J. W. Jerome) **57** #5158 92A05 (35K55)
- xena, Rajendra K.** Certain kernel functions. *Vikram—Quart. Res. J. Vikram Univ.* **3** (1959), no. 3, 64–69. (B. L. Sharma) **45** #2415 44A05
- On the resultant of two functions. *Vikram—Quart. Res. J. Vikram Univ.* **5** (1961), no. 3, 209–220. (B. L. Sharma) **45** #2416 44A05
- A few theorems on generalised Hankel transform. *Vikram—Quart. Res. J. Vikram Univ.* **6** (1962), no. 1 & 3, 1–9. (B. L. Sharma) **45** #2417 44A15
- On self-reciprocal functions in $\chi_{s,k,m}$ -transform. *Ganita* **21** (1970), no. 2, 65–70. (S. K. Bose) **45** #4073 44A15
- (with Jain, N. C.) Some double integral transformation of Meijer's G -function. *Kyungpook Math. J.* **12** (1972), 273–278. (R. S. Dahiya) **47** #7079 33A35
- (with Mahajan, R. R.) On a generalized double integral transform. *Kyungpook Math. J.* **17** (1977), no. 2, 215–220. (N. C. Jain) **57** #13387 44A05
- (with Koranne, V. D.) A theorem on the operational calculus. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 3, 201–206. (Authors' summary) **57** #1041 45H05
- (with Mahajan, R. R.) Some finite integrals and Fourier sine series for a generalised function of two variables. I. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 3, 243–252. (Authors' summary) **56** #16007 33A30
- xena, Ram Kishore** (with Vyas, R. C.) Kummer's transform of two variables. *Riv. Mat. Univ. Parma* (2) **10** (1969), 23–32. (K. M. Saxena) **45** #5675 44A20
- (with Kushwaha, R. S.) Applications of Jacobi polynomials to non-linear oscillations. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 65–72. (J. W. Heidell) **45** #8938 34C15
- (with Kushwaha, R. S.) Applications of Jacobi polynomials to non-linear differential equation associated with confluent hypergeometric function. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 281–288. (Brij Mohan) **46** #3864 33A65
- (with Bora, S. L.; Kalla, S. L.) On integral transforms. *Univ. Nac. Tucumán Rev. Ser. A* **20** (1970), 181–188. (P. Anandani) **45** #2419 (E 49 #3470) 44A20
- Definite integrals involving Fox's H -function. *Acta Mexicana Ci. Tecn.* **5** (1971), 6–11. (C. L. Parihar) **46** #2109 33A35
- (with Mathai, A. M.) Meijer's G -function with matrix argument. *Acta Mexicana Ci. Tecn.* **5** (1971), 85–92. (H. M. Srivastava) **47** #8921 33A35
- An integral associated with generalized H -function and Whittaker functions. *Acta Mexicana Ci. Tecn.* **5** (1971), 149–154. (S. L. Kalla) **48** #11606 33A35
- (with Banerji, P. K.) Integrals involving Fox's H -function. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **15**(63) (1971), no. 3, 263–269 (1973). (Authors' summary) **54** #7892 33A35
- (with Mathai, A. M.) Extensions of an Euler's integral through statistical techniques. *Math. Nachr.* **51** (1971), 1–10. (Wolfgang Sendler) **49** #5417 33A35
- (with Bora, S. L.) On fractional integration. *Publ. Inst. Math. (Beograd) (N.S.)* **11**(25) (1971), 19–22. (S. L. Kalla) **46** #7452 26A33 (44A15)
- (with Bora, S. L.) Integrals involving product of Bessel functions and generalised hypergeometric functions. *Publ. Inst. Math. (Beograd) (N.S.)* **11**(25) (1971), 23–28. (S. D. Bajpai) **46** #7578 33A35
- (with Mathur, S. N.) A finite series for the H -functions. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 49–52. (R. N. Jain) **49** #5419 33A35
- On a generalization of Erdelyi's formula for Jacobi polynomials. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 63–66. (A. Erdélyi) **49** #5412 33A30
- Integrals of products of H -functions. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 185–191. (A. M. Mathai) **49** #10932 33A35
- (with Mathai, A. M.) A generalized probability distribution. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 193–202. (A. Fuchs) **49** #8165 62E15
- (with Kalla, S. L.) Relations between Hankel and hypergeometric function operators. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 231–234. (S. K. Chatterjea) **50** #903 44A15
- (with Kalla, S. L.; Bora, S. L.) Addendum to a paper: "On integral transforms" (Univ. Nac. Tucumán Rev. Ser. A **20** (1970), 181–188). *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 289. (V. M. Bhise) **49** #3470 44A15
- Integration of certain products associated with generalized hypergeometric functions. *Acta Mexicana Ci. Tecn.* **6** (1972), 25–29. (H. M. Srivastava) **48** #8868 33A30
- Integration of certain products associated with Bessel and confluent hypergeometric functions. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **16**(64) (1972), no. 1, 93–96 (1973). (R. P. Soni) **48** #11616 33A40
- (with Munot, P. C.) Some formulae involving Jacobi polynomials. *J. Indian Math. Soc. (N.S.)* **36** (1972), 243–253 (1973). (R. S. Dahiya) **48** #4361 33A30
- (with Kushwaha, R. S.) Applications of Jacobi polynomials to non-linear differential equation associated with generalized hypergeometric function. *J. Mathematical and Physical Sci.* **6** (1972), 341–350. (P. Anandani) **48** #2464 33A25 (33A30)
- (with Mathai, A. M.) Expansions of Meijer's G -function of two variables when the upper parameters differ by integers. *Kyungpook Math. J.* **12** (1972), 61–68. (V. M. Bhise) **46** #2105 33A35
- (with Munot, P. C.) An operational formula for Jacobi polynomials. *Math. Student* **40A** (1972), 139–146. (H. M. Srivastava) **48** #4371 33A65
- (with Kushwaha, R. S.) An integral transform associated with a kernel of Fox. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 201–206 (1974). (C. Fox) **52** #14882 45H05 (44A15)
- (with Kushwaha, R. S.) Certain dual integral equations associated with a kernel of Fox. *Proc. Nat. Acad. Sci. India Sect. A* **42** (1972), 39–45. (R. G. Buschman) **49** #1037 45F10
- (with Sethi, P. L.) On the formal solution of quadruple integral equations. *Proc. Nat. Acad. Sci. India Sect. A* **42** (1972), 57–61. (S. L. Kalla) **50** #2838 45F10
- (with Agrawal, I.) An infinite integral involving Meijer's G -function. *Riv. Mat. Univ. Parma* (3) **1** (1972), 15–21. (V. M. Bhise) **51** #951 33A35
- (with Bora, S. L.; Kalla, S. L.) An expansion formula for Fox's H -function of two variables. *Univ. Nac. Tucumán Rev. Ser. A* **22** (1972), 43–48. (R. N. Jain) **48** #6489 33A35
- (with Mathai, A. M.) ★Generalized hypergeometric functions with applications in statistics and physical sciences. Lecture Notes in Mathematics, Vol. 348. Springer-Verlag, Berlin-New York, 1973. vii+314 pp. (R. G. Buschman (Canad. J. Statist. **4** (1976), no. 2, 319)) **57** #3471 33A35
- Abelian theorems for distributional H -transform. *Acta Mexicana Ci. Tecn.* **7** (1973), 66–76. (C. Fox) **51** #8757 44A15 (46F10)
- (with Banerji, P. K.) On some results involving products of H -functions. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **19** (1973), 175–178. (S. D. Bajpai) **48** #8875 33A35
- (with Sethi, P. L.; Banerji, P. K.) Dual series equations associated with Bessel and hypergeometric functions. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. a Mat. (N.S.)* **19** (1973), no. 2, 391–394. (Philip Heywood) **52** #14879 45F10
- (with Sethi, P. L.) Certain properties of bivariate distributions associated with generalized hypergeometric functions. (French summary) *Canad. J. Statist.* **1** (1973), no. 2, 171–180. (Minoru Siotani) **53** #6827 62E15
- (with Mathai, A. M.) On the linear combinations of stochastic variables. *Metrika* **20** (1973), 160–169. **51** #2077 62E15
- (with Kumbhat, R. K.) Fractional integration operators of two variables. *Proc. Indian Acad. Sci. Sect. A* **78** (1973), 177–186. (C. Fox) **48** #9286 44A15 (26A33)
- (with Sethi, P. L.) Relations between generalised Hankel and modified hypergeometric function operators. *Proc. Indian Acad. Sci. Sect. A* **78** (1973), 267–273. (H. M. Srivastava) **48** #11936 44A15 (26A33)
- (with Bora, S. L.) A generalised theorem on integral transforms. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 7–9 (1974). (P. Anandani) **51** #3807 44A15
- (with Vyas, R. C.) Integrals involving G -function of two variables. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 17–23 (1974). (R. A. Askey) **51** #3575 33A35
- (with Sethi, P. L.) A formal solution of dual integral equations associated with H -function of two variables. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 121–130 (1974). (R. G. Buschman) **51** #6320 45F10
- (with Banerji, P. K.) Contour integral involving Legendre polynomial and Fox's H -function. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 193–198 (1974). (H. M. Srivastava) **51** #13313 33A45
- (with Kumbhat, R. K.) A generalization of Kober operators. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 31–36. (N. C. Jain) **49** #484 26A33
- (with Modi, G. C.) Some expansions involving H -function of two variables. *C. R. Acad. Bulgare Sci.* **27** (1974), 165–168. (B. R. Bhonsle) **49** #9278 33A35
- (with Kumbhat, R. K.) Integral operators involving H -function. *Indian J. Pure Appl. Math.* **5** (1974), 1–6. (S. L. Kalla) **52** #1188 44A15
- On a generalized function of n variables. *Kyungpook Math. J.* **14** (1974), 255–259. (R. S. Dahiya) **51** #3569 33A35
- (with Kumbhat, R. K.) Dual integral equations associated with H -functions. *Proc. Nat. Acad. Sci. India Sect. A* **44** (1974), 106–112. (S. L. Kalla) **52** #1213 45F10
- (with Kumbhat, R. K.) A formal solution of certain triple integral equations involving H -functions. *Proc. Nat. Acad. Sci. India Sect. A* **44** (1974), 153–159. (S. L. Kalla) **52** #1212 45F10
- (with Vyas, R. C.) On Kummer's transform of two variables involving Meijer's G -function. *Rev. Mat. Hisp.-Amer.* (4) **34** (1974), 335–338. (Brij Mohan) **50** #13656 33A35
- (with Kalla, S. L.) Integral operators involving hypergeometric functions. II. *Univ. Nac. Tucumán Rev. Ser. A* **24** (1974), no. 1–2, 31–36 (1975). (Editors) **52** #1186 44A15 (33A35, 44A20)
- (with Modi, G. C.) Expansion formulae of the generalised H -function/ (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), no. 3, 185–195. (V. L. Deshpande) **54** #13161 33A30
- (with Sethi, P. L.) On dual series relations involving series of Whittaker functions. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), no. 3, 201–205. (S. L. Kalla) **54** #13502 45F10 (33A15)
- (with Sethi, P. L.; Banerji, P. K.) Triple integral equations involving H -function. *Bull. Calcutta Math. Soc.* **67** (1975), no. 4, 225–228. (R. G. Buschman) **56** #3596 45F10 (33A35)
- (with Sethi, P. L.) Applications of fractional integration operators to triple integral equations. *Indian J. Pure Appl. Math.* **6** (1975), no. 5, 512–521. (K. N. Srivastava) **56** #3597 45F10
- (with Kumbhat, R. K.) Theorems connecting L , L^{-1} and fractional integration operators. *Proc. Nat. Acad. Sci. India Sect. A* **45** (1975), no. 3, 205–209. (N. C. Jain) **56** #16272 44A10 (26A33)

- (with Vyas, R. C.) Some theorems on Kummer's transform in two variables. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **18** (1975), no. 1, 57-65. (R. S. Dahiya) **52** #3898 44A30
- (with Kumbhat, R. K.) Some properties of generalized Kober operators. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **18** (1975), no. 2, 139-150. (S. D. Bajpai) **52** #6335 44A05
- (with Modi, G. C.) An integral transform associated with H -function of two variables. *C. R. Acad. Bulgare Sci.* **29** (1976), no. 1, 29-32. (Hans-Jürgen Glaeske) **53** #8807 44A30 (33A35)
- (with Hamza, Abdelaziz M.) On some results involving Miejer's G -function and Bessel polynomials. (Arabic summary) *Libyan J. Sci.* **6B** (1976), 83-86. (C. L. Parihar) **56** #3375 33A35
- (with Banerji, P. K.) Expansions of generalized H -function. *Indian J. Pure Appl. Math.* **7** (1976), no. 3, 337-341. (R. N. Jain) **58** #1300 33A35
- On the H -function of n -variables. *Kyungpook Math. J.* **17** (1977), no. 2, 221-226. (R. G. Buschman) **57** #3472 33A35
- (with Hamza, Abdelaziz M.) An integral associated with Bessel polynomials and the H -function. (Arabic summary) *Libyan J. Sci.* **7** (1977), no. B, 35-40. (Authors' summary) **58** #28723 33A35
- Saxena, S. K.** (with Nigam, A. K.) Symmetric-simplex block designs for mixtures. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 466-472. (I. M. Chakravarti) **49** #10088 62K10
- Saxena, Shobha** Certain generating functions. *Defence Sci. J.* **23** (1973), 37-40. (Brij Mohan) **49** #3234 33A30
- Saxena, Subhash C.** (with Shah, Swarupchand M.) ★Introduction to real variable theory. Intext Series in Advanced Mathematics. Intext Educational Publishers, Scranton, Pa.-Toronto, Ont.-London, 1972. xiii + 334 pp. (Editors) **50** #7436 26-01
- A simple construction of a non-Desarguesian plane. *Math. Mag.* **46** (1973), 225. (L. Guggenbuhl) **48** #12282 50D35
- On existence of some hyplanes of order (n, m) . *Portugal. Math.* **34** (1975), no. 3-4, 197-198. (H. S. M. Coxeter) **53** #10615 05B25
- Saxena, Vinod Prakash** On a new class of kernels. *Jñānabha Sect. A* **1** (1971), no. 1, 57-62. (P. G. Rooney) **46** #7793 42A76
- On some properties concerning Fox's H -function. *Proc. Nat. Acad. Sci. India Sect. A* **43** (1973), 316-320. (C. K. Sharma) **51** #3570 33A35
- Some rules in Laplace transform of one and two variables. *Math. Education* **8** (1974), A1-A8. (C. Fox) **49** #11159 44A10
- Some multiplication formulae of the G -function of two variables. *Math. Education* **8** (1974), A57-A61. (S. D. Bajpai) **50** #10354 33A35
- Saxer, Walter** See Buhlmann, Hans, **50** #12582; Buhlmann, Hans, **52** #7793; Kongress: Mathematiker, **53** #7713 and Kongress: Mathematiker, **53** #7714
- Saxl, Jan** On triply transitive groups of odd degree. *J. London Math. Soc.* (2) **7** (1973), 159-167. (H. Kimura) **48** #4083 20B20
- Characters and subgroups of linear groups. *J. Algebra* **34** (1975), 524-527. (J. F. Humphreys) **51** #8272 20G05
- Characters of multiply transitive permutation groups. *J. Algebra* **34** (1975), 528-539. (Donald E. Taylor) **56** #8680 20C30
- Characters and generosity of permutation groups. *Proc. Amer. Math. Soc.* **47** (1975), 73-76. (H. Nagao) **50** #10031 20B20
- Normal subgroups of 4-transitive groups. *Quart. J. Math. Oxford Ser. (2)* **26** (1975), no. 102, 237-242. (D. Wales) **53** #10896 20B20
- (with Baldwin, John T.) Logical stability in group theory. *J. Austral. Math. Soc. Ser. A* **21** (1976), no. 3, 267-276. (Paul C. Eklof) **53** #10934 20E10 (20A10, 02H25)
- (with Neumann, Peter M.) The primitive permutation groups of some special degrees. *Math. Z.* **146** (1976), no. 2, 101-104. (W. M. Kantor) **53** #8206 20B20
- Restrictions of characters, generosity, interchange and coloured graphs. *Combinatoire et représentation du groupe symétrique (Actes Table Ronde CNRS, Univ. Louis-Pasteur Strasbourg, Strasbourg, 1976), pp. 258-266. Lecture Notes in Math., Vol. 579. Springer, Berlin, 1977. (Norman Biggs) **57** #12658 20B20 (20C15)*
- Permutation groups of degree $4p+3$. *J. London Math. Soc.* (2) **15** (1977), no. 1, 66-74. (Cheryl E. Praeger) **56** #455 20B20
- On a theorem of Jordan and Manning. *J. London Math. Soc.* (2) **15** (1977), no. 3, 437-444. (Editors) **56** #8668 20B15
- Saxon, Stephen A.** Nuclear and product spaces, Baire-like spaces, and the strongest locally convex topology. *Math. Ann.* **197** (1972), 87-106. (S. O. Iyahan) **46** #4140 46A05
- Embedding nuclear spaces in products of an arbitrary Banach space. *Proc. Amer. Math. Soc.* **34** (1972), 138-140. (K. Floret) **47** #7369 46A05
- (with Brooks, M. S.; Morris, Sidney A.) Generating varieties of topological groups. *Proc. Edinburgh Math. Soc.* (2) **18** (1972/73), 191-197. (L. Corwin) **47** #6930 22A05
- (with Diestel, Joseph; Morris, Sidney A.) Varieties of linear topological spaces. *Trans. Amer. Math. Soc.* **172** (1972), 207-230. (Z. Semadeni) **47** #5540 46A05 (46B99, 46M15)
- (with Todd, Aaron R.) A property of locally convex Baire spaces. *Math. Ann.* **206** (1973), 23-34. (J. Diestel) **48** #6865 46A05
- Some normed barrelled spaces which are not Baire. *Math. Ann.* **209** (1974), 153-160. (N. J. Kalton) **50** #5411 46A07
- Two characterizations of linear Baire spaces. *Proc. Amer. Math. Soc.* **45** (1974), 204-208. (Robert Knowles) **50** #10740 46A15
- (with Wilansky, Albert) The equivalence of some Banach space problems. *Colloq. Math.* **37** (1977), no. 2, 217-226. (M. Valdivia) **58** #23508 46B05
- Saxton, Lawrence V.** An extension of the class of on-line machines. *Proceedings of the Fourth Manitoba Conference on Numerical Mathematics (Winnipeg, Man., 1974), pp. 329-341. Congr. Numer., No. XII, Utilitas Math., Winnipeg, Man., 1975. (Pavel Strnad) **51** #9578 68A25*
- (with Fischer, Patrick C.; Robertson, Edward L.) On the sequential nature of functions. *J. Comput. System Sci.* **13** (1976), no. 1, 51-68. (Z. Ras) **57** #18185 68A05
- Saxton, O. H. N.** (with Saunders, L. M.; Tan, Chung-I) Crossed-channel partial-wave expansions and the Bethe-Salpeter equation. *Phys. Rev. D* (3) **3** (1973), 1005-1011. (D. B. Fairlie) **51** #4876 81.22
- Saya, H.** (with Bordier, J.) A necessary and sufficient condition for a power language to $LL(k)$. *Comput. J.* **16** (1973), 351-356. (Armin Cremers) **51** #4729 68A30
- Sayama, H.** (with Oi, K.; Takamatsu, Takeichiro) Computational schemes of the Davidson-Fletcher-Powell method in infinite-dimensional space. *J. Optimization Theory Appl.* **12** (1973), 447-458. (V. V. Ivanov) **48** #10110 65K05
- (with Nakayama, Hirotaka; Sawaragi, Yoshikazu) On an optimization problem with min-constraints. *Internat. J. Systems Sci.* **5** (1974), 995-1004. (B. T. Poljak) **53** #11467 49D99
- (with Nakayama, Hirotaka; Sawaragi, Yoshikazu) Multiplier method and optimality control problems with terminal state constraints. *Internat. J. Systems Sci.* **6** (1975), 465-477. (Joseph C. Dunn) **56** #2552 93C20
- (with Nakayama, Hirotaka; Sawaragi, Yoshikazu) A generalized Lagrangian function and multiplier method. *J. Optimization Theory Appl.* **17** (1975), no. 3/4, 211-227. (Authors' summary) **55** #9990 90C25
- (with Fan, Liang-tseng; Fan, L. S.) On Lagrange multipliers and constraints. I. Lagrangian approach. *Internat. J. Systems Sci.* **7** (1976), no. 11, 1283-1298. (Jean-Baptiste Hiriart-Urruty) **54** #12219a 90C30
- (with Fan, Liang-tseng; Fan, L. S.) On Lagrange multipliers and constraints. II. Augmented Lagrangian approach. *Internat. J. Systems Sci.* **7** (1976), no. 11, 1299-1311. (Jean-Baptiste Hiriart-Urruty) **54** #12219b 90C30
- Sayama, Hayatoshi** (with Kameyama, Yoshimasa; Nakayama, Hirotaka; Sawaragi, Yoshikazu) Iteration process in Lagrange multipliers for multiplier method. (Japanese. English summary) *Systems and Control* **17** (1973), 775-778. (M. Yamasaki) **49** #6930 90C30
- Sayari, Abdelhamid** (with Billiet, Yves; Zarrouk, Hédi) La détermination systématique de sous-groupes spatiaux et des changements de repère conventionnel des groupes spatiaux. (English summary) *Acta Cryst. Sect. A* **34** (1978), no. 3, 414-421. (Authors' summary) **58** #22328 20H15
- el-Sayed, Abu-Bakr** See El-Sayed, Abu-Bakr
- el-Sayed, M. A.** See El-Sayed, M. A.
- Sayeki, Yutaka** Allocation of importance: an axiom system. *J. Mathematical Psychology* **9** (1972), 55-65. (R. D. Luce) **47** #10096 92A25
- Sayer, F. P.** The sums of certain series containing hyperbolic functions. *Fibonacci Quart.* **14** (1976), no. 3, 215-223. (Bruce C. Berndt) **54** #5663 40A05
- The eigenvalue problem for infinite systems of linear equations. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 2, 269-273. (A. S. Householder) **56** #4136 65F15
- Saylor, Paul E.** (with Bracha-Barak, Amnon) A symmetric factorization procedure for the solution of elliptic boundary value problems. *SIAM J. Numer. Anal.* **10** (1973), 190-206. (Murli M. Gupta) **47** #4425 65F10
- Second order strongly implicit symmetric factorization methods for the solution of elliptic difference equations. *SIAM J. Numer. Anal.* **11** (1974), 894-908. (Author's summary) **54** #9110 65N20
- Saylor, Richard** Boundary values of solutions of elliptic equations. *Indiana Univ. Math. J.* **24** (1974/75), 907-913. (H. Marcinkowska) **51** #6133 35J40
- Sayrafiezadeh, Mahmoud** A Helly-type theorem for linear collineations. *Amer. Math. Monthly* **82** (1975), no. 7, 742-744. (R. Artzy) **51** #11269 50D25
- (with Levinson, Henry W.; Pollice, G. F.) Non triply collinear sets of points. *Bull. Calcutta Math. Soc.* **68** (1976), no. 3, 167-174. (T. G. Ostrom) **58** #30724 50D30
- Sayward, Charles** A defense of Sommers. *Philos. Studies* **29** (1976), no. 5, 343-347. (Not reviewed) **02A05**
- Sayward, Frederick G.** (with Lipton, Richard J.) Response time of parallel programs. *Proceedings of the 1977 International Conference on Parallel Processing (Wayne State Univ., Detroit, Mich., 1977), pp. 234-242. Inst. Elect. Electron. Engrs., New York, 1977. (Authors' summary) **58** #32008 68A05*
- el-Sayyad, G. M.** See El-Sayyad, G. M.
- Sayyed, K. A. M.** (with Nassif, M.) Order of magnitude of coefficients of polynomials of two complex variables in simple sets. *J. Natur. Sci. and Math.* **17** (1977), no. 1, 73-79. (A. K. Agarwal) **57** #684 32A30
- Šazaliev, T.** (with Bykov, Ja. V.) The solvability of the Cauchy problem for loaded ordinary differential equations. (Russian) *Akad. Nauk Kazah. SSR Trudy Inst. Mat. i Meh.* **1** (1970), 26-38, 318. (Editors) **56** #8939 34A10
- Sazanov, V. S.** On the question of an isotropic geodesic field of multidimensional directions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 12 (163), 83-86 (1976). (A. Švec) **55** #4005 53B20
- Sazhin, M. V.** See Sazhin, M. V.
- Šazijatov, Š.** Nonholonomic mechanical systems of variable mass with friction. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 316 Voprosy Meh. i Mat.* (1968), 112-126. (Q. K. Ghori) **50** #11910 70.53
- (with Šahaidarova, P. Š.) The integration of equations of the motion of holonomic nonconservative systems with pulse multipliers of connections. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 7, 9-11. (Gh. Silaș) **47** #7981 70.35
- Sazhin, A. I.** Conditionally periodic motions of a particle in the gravitation field of an axisymmetric planet. (Russian. English summary) *Vestnik Leningrad. Univ.* **1971**, no. 13, 166-172. (B. Garfinkel) **45** #6373 85.34
- Sazhin, M. V.** (with Griščuk, L. P.) Classification in the sense of Petrov of traveling and standing gravitational waves. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 1, 72-75. (M. A. H. MacCallum) **52** #16475 83.35
- (with Griščuk, L. P.) Excitation and detection of standing gravitational waves. *Ž. Èksper. Teoret. Fiz.* **68** (1975), 1569-1582. (Russian. English summary); translated as *Soviet Physics JETP* **41** (1975) no. 5, 787-793 (1976) (Authors' summary) **52** #16474 83.35
- Sazonov, L. I.** Solution of the problem of linear conjugacy of analytic functions of two complex variables. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 1288-1291. (Jurgen Leiterer) **48** #2821 47B35 (30A88, 32A30)
- A bisingular equation with a shift in the space L_p . (Russian) *Mat. Zametki* **13** (1973), 385-393. (S. G. Samko) **47** #9361 47G05 (30A88, 45E05)
- (with Piliđi, V. S.) A priori estimates for characteristic bisingular integral operators. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 285-287. (D. Przeworska-Rolewicz) **51** #6505 47G05 (45E05)

- Continuous functions of two isometric operators: the Noether property and invertibility. (Russian) *Mat. Issled.* 9 (1974), no. 2(32), 126-138, 251. (Jürgen Leiterer) 58 #23690 47A60
- (with Mjasnikov, A. G.) Singular integral operators with a non-Carleman shift. (Russian) *Dokl. Akad. Nauk SSSR* 237 (1977), no. 6, 1289-1292. (Author's review (RZMat 1978 #6 B615)) 58 #12526 47G05 (45E10)
- ono, V. Ju. Sequentially and parallelly computable functionals (extended abstract). *λ -calculus and computer science theory (Proc. Sympos., Rome, 1975)*, pp. 312-318. *Lecture Notes in Comput. Sci.*, Vol. 37, Springer, Berlin, 1975. (B. Lercher) 57 #15985 02C20
- Expressibility of functionals in the LCF language of D. Scott. (Russian) *Algebra i Logika* 15 (1976), no. 3, 308-330, 366. (H. B. Curry) 55 #12480 02C20 (68A30)
- Sequentially and in parallel computable functionals. (Russian) *Sibirsk. Mat. Ž.* 17 (1976), no. 3, 648-672, 717. (A. S. Kuzičev) 54 #7211 02C20 (68A05)
- ono, V. V. Amélioration de l'estimation d'une rapidité de convergence. (English summary) *Les probabilités sur les structures algébriques (Actes Colloq. Internat. CNRS, No. 186, Clermont-Ferrand, 1969)*, pp. 295-310. *Éditions Centre Nat. Recherche Sci., Paris*, 1970. (Editors) 53 #14610 60F05
- Sur les estimations de la rapidité de convergence dans le théorème limite central, cas de dimensions finie et infinie. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 2, pp. 577-587. *Gauthier-Villars, Paris*, 1971. (H. Bergström) 54 #11463 60F05
- On a bound for the rate of convergence in the multidimensional central limit theorem. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. II: Probability theory, pp. 563-581. *Univ. California Press, Berkeley, Calif.*, 1972. (R. N. Bhattacharya) 53 #4185 60F05
- The convergence of the distributions of the sums of independent random variables to a class of infinitely divisible distributions in the multidimensional case. (Russian. Georgian summary) Collection of articles dedicated to Academician N. I. Muskhelishvili on the occasion of his eightieth birthday. *Tbilis. Univ. Šrom. A* 4(146) (1972), 29-37. (Harry I. Cohn.) 49 #9909 60F05
- On the multidimensional central limit theorem with a weakened condition on moments. *Proceedings of the Second Japan-USSR Symposium on Probability Theory (Kyoto, 1972)*, pp. 384-396. *Lecture Notes in Math.*, Vol. 330, Springer, Berlin, 1973. (H. Bergström) 56 #1417 60F05
- On the estimation of the moments of sums of independent random variables. (Russian. English summary) *Teor. Verojatnost. i Primenen.* 19 (1974), 383-386. (A. V. Nagaev) 50 #1334 60G50
- (with Saryčev, V. A.; Zlatoustov, V. A.) ★Вынужденные периодические колебания математического маятника. (Russian) [Forced periodic oscillations of a mathematical pendulum] Preprint No. 32 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1977. 70 pp. (G. V. Hmelevskaja-Plotnikova) 57 #18330 70.34 (34C25)
- (with Saryčev, V. A.) Periodic solutions of systems of ordinary differential equations that are nearly autonomous. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 90* (1977), 59 pp. (Editors) 58 #22818 34C25
- See also Billingsley, Patrick, 58 #13247
- zonov, V. Yu. See Sazonov, V. Ju.
- zykin, A. A. See Pauli, Wolfgang, 54 #2404 and Pauli, Wolfgang, 55 #5375
- itev, V. I. (with Pavlov, A. A.) Determination of an elementary operation in the problem of the optimal control of a nonlinear object. (Russian) *Adapt. Sistemy Avtomat. Upravlenija Vyp.* 2 (1974), 95-98, 152. (Authors' summary) 55 #3912 49A99
- iteva, L. V. Analytic criteria for axially symmetric spaces. (Russian) *Collection of scientific works of postgraduates, No. XI: Mathematics and physics (Russian)*, pp. 73-83. *Univ. Družby Narodov, Moscow*, 1972. (D. I. Papuc) 49 #1368 53B20
- ordone, Carlo. Sulle misure invarianti. *Ricerche Mat.* 21 (1972), 244-251. (Richard Isaac) 53 #3261 28A65
- Su una caratterizzazione degli operatori differenziali del 2° ordine. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 54 (1973), 365-372 (1974). (P. C. Fife) 52 #8639 35G15
- Alcune questioni di convergenza per operatori differenziali del 2° ordine. (English summary) *Boll. Un. Mat. Ital.* (4) 10 (1974), 672-682. (Z. C. Motteler) 51 #13433 35J15
- Sulla caratterizzazione degli operatori differenziali del 2° ordine, di tipo ellittico. (English summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) 41 (1974), 31-45 (1975). (Z. C. Motteler) 57 #3613 35J15
- Su alcune applicazioni di un tipo di convergenza variazionale. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) 2 (1975), no. 4, 617-638. (M. Schechter) 54 #5801 46A99
- Sulla G-convergenza di equazioni ellittiche e paraboliche. *Ricerche Mat.* 24 (1975), no. 1, 76-136. (J. Frehse (Zbl 348 #35007)) 58 #6663 35J15 (35K10)
- (with Ambrosetti, Antonio) Γ -convergenza e G-convergenza per problemi non lineari di tipo ellittico. (English summary) *Boll. Un. Mat. Ital. A* (5) 13 (1976), no. 2, 352-362. (From the introduction) 58 #7318 49D10 (35J35, 46G99)
- (with Carbone, Luciano) Un teorema di compattezza per la Γ -convergenza di funzionali non coercitivi. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 62 (1977), no. 6, 744-748. (Jaures P. Cecconi) 58 #12616 49B99
- (with Marcellini, Paolo) Sur quelques questions de G-convergence et d'homogénéisation non linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 10, A535-A537. (Authors' summary) 55 #1181 49A20 (35J20)
- Sur une limite d'intégrales polynômiales du calcul des variations. *J. Math. Pures Appl.* (9) 56 (1977), no. 1, 67-77. (C. Vinti) 58 #18062 49F99
- (with Marcellini, Paolo) An approach to the asymptotic behaviour of elliptic-parabolic operators. *J. Math. Pures Appl.* (9) 56 (1977), no. 2, 157-182. (G. Papanicolaou) 57 #844 35B40
- (with Marcellini, Paolo) Dualità e perturbazione di funzionali integrali. *Ricerche Mat.* 26 (1977), no. 2, 383-421. (T. Zolezzi) 57 #7295 49A15
- urlian, Silviu-Florin (with Nădejde, Ileana; Berghaller, Cristian; Zidăroiu, C.) ★Probleme de cercetare operațională. Programare matematică. (Romanian) [Problems of operations research. Mathematical programming] *Editura Academiei Republicii Socialiste România, Bucharest*, 1971. 449 pp. (I. Gh. Ciobanu) 48 #7955 90Cxx (90Bxx)
- On the mixed problem for the theory of Hencky-Nadai deformations. (Romanian. English summary) *Stud. Cerc. Mat.* 24 (1972), 1129-1136. (W. Kecs) 50 #6267 73.35
- On the existence and uniqueness of solutions of the Dirichlet problem in the theory of elastoplastic deformations. (Romanian) *Stud. Cerc. Mat.* 24 (1972), 1293-1308. (A. Radu) 51 #2418 73.35
- (with Mazilu, Petrișor) ★Metode funcționale în rezolvarea ecuațiilor teoriei elasticității. (Romanian)[Functional methods in the solution of the equations of the theory of elasticity] *Editura Academiei Republicii Socialiste România, Bucharest*, 1973. 166 pp. (V. Gheorghiu) 58 #3881 73.46
- Duality principles in nonlinear programming and continuum mechanics. (French summary) *Proceedings of the Fourth Conference on Probability Theory (Brașov, 1971)*, pp. 587-596. *Editura Acad. R. S. R., Bucharest*, 1973. (H. R. Aggarwal) 53 #7197 73.49 (90C50)
- On a particular class of optimal problems with applications in the projection method. *Sechste Oberwolfach-Tagung über Operations Research* (1973), Teil II, pp. 102-108. *Operations Research Verfahren, Band XIX, Hain, Meisenheim am Glan*, 1974. (Leon Cooper) 56 #1715 65K05 (49D99, 90C99)
- The Dirichlet problem of elastic equilibrium. *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* 19 (1974), no. 5, 833-847. (P. Villaggio) 52 #16225 35Q99 (73.35)
- (with Pascali, Dan) Strongly non-linear perturbation of divergence equation on unbounded domains. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 6, 725-732. (M. Schechter) 57 #10226 35J65
- Some remarks on existence theorems for functional equations with odd operators. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 8, 1107-1116. (R. C. Buck) 55 #1152 47H05
- Approximative methods in the study of elastic equilibrium. I. Existence and uniqueness of the solution. (Romanian. English summary) *Stud. Cerc. Mat.* 28 (1976), no. 6, 711-721. (W. Kecs) 55 #9658 73.35
- A method of constructing an orthogonal basis in a Hilbert space. (Romanian. English summary) *Stud. Cerc. Mat.* 29 (1977), no. 4, 423-433. (A. E. Danese) 58 #3375 65F25 (41A65)
- Sbytov, Ju. G. Collision between an electromagnetic wave and a gravitational wave packet. *Ž. Éksp. Teoret. Fiz.* 63 (1972), 737-744. (Russian. English summary); translated as *Soviet Physics JETP* 36 (1973), 387-390. (Author's summary) 51 #14857 83.35
- dalla chiara Scabia, Maria Luisa See Dalla Chiara Scabia, Maria Luisa
- Scaccia, C. See Numerical methods in fluid dynamics, 49 #10260
- Scacciati, E. (with Presutti, Enrico; Sewell, Geoffrey L.; Wanderlingh, F.) Studies in the C^* -algebraic theory of nonequilibrium statistical mechanics: Dynamics of open and of mechanically driven systems. *J. Mathematical Phys.* 13 (1972), 1085-1098. (E. J. Verboven) 53 #12419 82.46
- (with Marchioro, C.; Presutti, Enrico) Analysis of the time correlations of infinitely large systems by studying the relaxation of a spin-1/2 probe system. *Physica* 57 (1972), 79-92. (F. C. Auluck) 55 #5075 81.60
- (with Presutti, Enrico) Local bounded perturbations of KMS states. *J. Mathematical Phys.* 15 (1974), 1620-1625. (Gérard G. Emch) 53 #2234 82.46
- Ščadilov, A. E. A fractional step scheme for parabolic equations of general form. (Russian) Boundary value problems of mathematical physics, 7. *Trudy Mat. Inst. Steklov.* 116 (1971), 227-234, 237. (N. N. Janenko) 51 #7316 65H10
- See also Boundary value problems of mathematical physics, 50 #2656
- Ščadilov, V. E. (with Solonnikov, V. A.) A certain boundary value problem for the stationary system of Navier-Stokes equations. (Russian) Boundary value problems of mathematical physics, 8. *Trudy Mat. Inst. Steklov.* 125 (1973), 196-210, 235. (P. C. Fife) 51 #1164 35Q10
- See also Boundary value problems of mathematical physics, 51 #6096
- tallini Scafati, Maria See Tallini Scafati, Maria
- Scaife, B. K. P. (with Lewis, J. T.; McConnell, James) Relaxation effects in rotational Brownian motion. *Proc. Roy. Irish Acad. Sect. A* 76 (1976), no. 7, 43-69. (Authors' summary) 56 #10691 82.60
- (with Coelho, R.) On the force exerted on an electric charge immersed in a polarised, non-conducting, dielectric fluid. *Proc. Roy. Irish Acad. Sect. A* 78 (1978), no. 2, 9-15. (W. E. Williams) 58 #14371 78.35
- See also Studies in numerical analysis, 49 #11759
- Scalapino, D. J. (with Luther, A.) Critical properties of a two-dimensional planar model. *Phys. Rev. B* (3) 16 (1977), no. 3, 1153-1163. (From the authors' summary) 56 #10692 82.60
- Scales, Ronald A Russellian approach to truth. *Noûs* 11 (1977), no. 2, 169-174. (Editors) 58 #5066 02C10 (02A05)
- Scalia, M. (with Marchetti, Federico; Negrini, Piero; Salvadori, Luigi) Liapunov direct method in approaching bifurcation problems. *Ann. Mat. Pura Appl.* (4) 108 (1976), 211-226. (Marshall Slemrod) 56 #3421 34D20 (58F10)
- Scaliger, Joseph See Glucker, J., 58 #26845
- Scalzo, Richard C. Existence of equilibrium points in N-person differential games. *Differential games and control theory (Proc. NFS-CBMS Regional Res. Conf., Univ. Rhode Island, Kingston, R.I., 1973)*, pp. 125-140. *Lecture Notes in Pure Appl. Math.*, Vol. 10, Dekker, New York, 1974. (See Zbl 309 #90072;) 90D25
- N-person linear-quadratic differential games with constraints. *SIAM J. Control* 12 (1974), 419-425. (A. Blaquière) 51 #12350 90D25
- Differential games with restricted phase coordinates. *SIAM J. Control* 12 (1974), 426-435. (W. E. Schmitendorf) 53 #7519 90D25
- (with Williams, Stephen A.) On the existence of a Nash equilibrium point for N-person differential games. *Appl. Math. Optim.* 2 (1975/76), no. 3, 271-278. (G. Owen) 53 #15403 90D25
- A note on the existence of synthesis of saddle points in differential games. *Differential games and control theory, II (Proc. 2nd Conf., Univ. Rhode Island, Kingston, R.I., 1976)*, pp. 315-327. *Lecture Notes in Pure and Appl. Math.*, 30, Dekker, New York, 1977. (Editors) 58 #33044 90D25
- Scandura, Joseph M. Structural learning: definitional foundations for competence theories and the idealized theory of behavior. *Structural learning, II*, pp. 275-316. *Gordon and Breach, New York*, 1976. (A. Rapoport) 57 #18889 92A25

See also **Structural learning**, 56 #2483

- Scania, J. J. G.** (with Suranyi, P.) Rigorous bounds on inclusive and exclusive cross sections. I. Lower bound on the integral of an analytic function. *J. Mathematical Phys.* 17 (1976), no. 5, 747-752. (G. R. Allcock) 54 #6728 81.30
(with Bartels, J.) An SU(2) symmetric reggeon field theory with a negative mass. *Nuclear Phys. B* 139 (1978), no. 3, 221-259. (Authors' summary) 58 #14767 81.22
- Scanlon, C. H.** Additivity and indefinite integration for McShane's P -integral. *Proc. Amer. Math. Soc.* 39 (1973), 129-134. (T. A. Botts) 47 #3609 26A42
- cronin-Scanlon, Jane** See **Cronin-Scanlon, Jane**
- Scanlon, T. Joseph** See **Proceedings: Symposium on Statistics and Related Topics**, 51 #2037
- Scanlon, T. M.** The consistency of number theory via Herbrand's theorem. *J. Symbolic Logic* 38 (1973), 29-58. (Wilfried Sieg) 58 #16191 02D99
(with Goldfarb, Warren D.) The ω -consistency of number theory via Herbrand's theorem. *J. Symbolic Logic* 39 (1974), 678-692. (A. Kino) 51 #2879 02D99 (02D05)
- Scanlon, William J.** See **Adaptive economic models**, 55 #9888
- Scarani, Claudia** (with Gambetta, Guido) Metodi non lineari per la stima del coefficiente di autocorrelazione. (English and French summaries) Studi in memoria di Ettore Pezzoli, II. *Statistica (Bologna)* 35 (1975), no. 1, 125-143. (P. Fortunati) 53 #4419 62M10
- Scaravelli, Corrado** Risoluzione, razionale nelle funzioni date, delle equazioni alle differenze (con un passo $h \neq 0$), d'ordine finito, lineari e a coefficienti periodici di periodo h . I. Variabile indipendente reale, ed equazioni dei primi tre ordini. (English summary) *Riv. Mat. Univ. Parma* (2) 11 (1970), 17-43. (A. Haimovici) 47 #2213 39A10
Risoluzione, razionale nelle funzioni date, delle equazioni alle differenze (con un passo $h \neq 0$), d'ordine finito, lineari e a coefficienti periodici di periodo h . II. Variabile indipendente reale, ordine generico. (English summary) *Riv. Mat. Univ. Parma* (2) 12 (1971), 151-165. (A. Haimovici) 50 #10585 39A25
Opportunità di presentare le equazioni alle differenze finite anche nella forma di equazioni alle prederivate. Il caso lineare e a coefficienti costanti. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 52 (1972), 861-867 (1973). (V. Murgescu) 49 #9459 39A10
Stretto legame fra equazioni alle prederivate ed equazioni differenziali quando le equazioni sono lineari e a coefficienti costanti. I. Caso del primo ordine. (English summary) *Riv. Mat. Univ. Parma* (3) 2 (1973), 1-9. (I. Fenyő) 52 #14437 34A45 (39A10)
Stretto legame fra equazioni alle prederivate ed equazioni differenziali quando le equazioni sono lineari e a coefficienti costanti. II. Caso di un ordine finito qualsiasi. (English summary) *Riv. Mat. Univ. Parma* (3) 3 (1974), 273-290. (I. Fenyő) 56 #8940 34A10
- Scarbata, G.** Walsh-Funktionen und ihre Erzeugung. (Russian and English summaries) *Nachrichtentech. Elektronik* 26 (1976), no. 3, B, 111-118. (Author's summary) 57 #9260 94-02 (42A56)
- Scares, I. Damiao** (with Novello, Mario; Galvão, Carlos A. P.; Salim, J. M.) Electric and magnetic gravitational monopoles. I. The equation of motion of poles. *Proceedings of the International Symposium on Relativity and Unified Field Theory (Calcutta, 1975-1976)*, pp. 129-138. S. N. Bose Inst. Phys. Sci., Calcutta, 1978. (Authors' summary) 58 #19878 80.53
- Sarf, Herbert E.** On the existence of a cooperative solution for a general class of n -person games. *J. Econom. Theory* 3 (1971), 169-181. (From the author's introduction) 56 #8033 90D12
(with Debreu, G.) The limit of the core of an economy. *Decision and organization (a volume in honor of Jacob Marschak)*, pp. 283-295. *Studies in Mathematical and Managerial Economics*, Vol. 12, North-Holland, Amsterdam, 1972. (James W. Friedman) 54 #6905 90A15
★The computation of economic equilibria. With the collaboration of Terje Hansen. Cowles Foundation Monograph, No. 24 Yale University Press, New Haven, Conn.-London, 1973. x+249 pp. (David Schmeidler) 52 #12727 90A15 (90C50, 90D45)
(with Shapley, L. S.) On cores and indivisibility. *J. Math. Econom.* 1 (1974), no. 1, 23-37. (Louis J. Billera) 54 #4601 90A15 (90D45)
(with Eaves, B. Curtis) The solution of systems of piecewise linear equations. *Math. Oper. Res.* 1 (1976), no. 1, 1-27. (C. B. Garcia) 56 #4126 65F05 (65K05)
An observation on the structure of production sets with indivisibilities. *Proc. Nat. Acad. Sci. U.S.A.* 74 (1977), no. 9, 3637-3641. (F. Giannessi) 56 #10957 90C10
See also **Notes: Lectures on mathematics in the behavioral sciences**, 50 #1699 and **Studies in optimization**, 50 #9349
- Scarfiello, R.** On homogeneous distributions on the unit circle. (Spanish) Collection of articles dedicated to Alberto González Domínguez on his sixty-fifth birthday. *Rev. Un. Mat. Argentina* 25 (1970/71), 343-349. (L. Arteaga) 47 #7422 46F10
- Scargle, Jeffrey D.** (with Barnes, Aaron) Collisionless damping of hydromagnetic waves in relativistic plasma. I. Weak Landau damping; heating of the crab nebula. *Astrophys. J.* 184 (1973), 251-270. (E. G. Broadbent) 49 #6883 85.53
- Scarlatt, A.** See **Instability of continuous systems**, 49 #10495
- Scarlatt, E.** (with Stoica, M.) Fuzzy algorithms in economic systems. *Econom. Comp. Econom. Cybernet. Stud. Res.* 1975, no. 1, 239-247. (Editors) 57 #15311 90A05 (90B35)
- Scarlatt, F.** The equivalent four-terminal network for different magnetic structures. (French summary) *Rev. Roumaine Phys.* 16 (1971), 41-56. (P. R. Bryant) 45 #8136 78.31 (94A20)
- Scarpato, Renato César** Inverse simultaneous carriers. (Spanish) *Math. Notae* 22 (1970/71), 95-100. (M. E. Shanks) 50 #14631 54B25
A selection theorem for continuous inverse simultaneous carriers. (Spanish) *Math. Notae* 22 (1970/71), 101-105. (M. E. Shanks) 50 #14632 54B25 (54C65)
Selections for carriers of finite dimension. (Spanish) *Math. Notae* 23 (1972/73), 93-98. (M. E. Shanks) 50 #14633 (EA 51) 54B25 (54C65)
A theorem on the lifting of continuous selections. (Spanish) *Math. Notae* 25 (1976), 49-54. (O. T. Alas) 58 #7550 54C65 (46G99)

- Scarpellini, Bruno** ★Proof theory and intuitionistic systems. *Lecture Notes in Mathematics*, Vol. 212. Springer-Verlag, Berlin-New York, 1971. vii + 291 pp. (D. Nelson) 48 #10771 02C15 (02D99)
Induction and transfinite induction in intuitionistic systems. *Ann. Math. Logic* (1972), 173-227. (A. S. Troelstra) 45 #8500 02C15 (02E05)
On barinduction of higher types for decidable predicates. *Ann. Math. Logic* (1972/73), 77-163. (John Staples) 48 #73 (E 49 #2284) 02D99 (02E05)
A formally constructive model for barrecursion of higher types. *Z. Math. Logik Grundlagen Math.* 18 (1972), 321-383. (Horst Luckhardt) 49 #2280 02D05 (02E05, 02F43)
Erratum: "On barinduction of higher types for decidable predicates" (*Ann. Math. Logic* 5 (1972/73), 77-163). *Ann. Math. Logic* 6 (1973/74), 421. (Editors) 49 #2284 02D99
Disjunctive properties of intuitionistic systems. *Arch. Math. Logik Grundlagenforsch.* 16 147-158 (1974). (Justus Diller) 53 #2647 02D99 (02C15)
On the spectra of certain semi-groups. *Math. Ann.* 211 (1974), 323-336. (W. Parry) 52 #9003 47D05 (28A65, 54H20)
Bemerkungen zu Regel und Schema. *†ISILC Proof Theory Symposium (Proc. Internat. Summer Inst. and Logic Colloq., Kiel, 1974)*, pp. 320-340. *Lecture Notes in Math.*, Vol. 500, Springer, Berlin, 1975. (Horst Luckhardt) 54 #7219 02D99 (02C15)
On certain nonlinear eigenvalue problems. *Math. Nachr.* 77 (1977), 373-390. (B. V. Loginov) 56 #3876 58C99 (47H15)
A new realizability notion for intuitionistic analysis. *Z. Math. Logik Grundlagen Math.* 23 (1977), no. 2, 137-167. (From the introduction) 58 #5099 02E05 (02C15)
Un problème de théorie de la prédiction. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 25, A1251-A1254. (Author's summary) 58 #13325 60G25
Fourier analysis on dynamical systems. *J. Differential Equations* 28 (1978), no. 3, 309-326. (Karl Petersen) 58 #11330 28A65
- Scarpetta, G.** (with Marinaro, M.; Mercaldo, L.) Regularization of the Lee model through analytic continuation of operators. (Italian and Russian summaries) *Nuovo Cimento A* (11) 18 (1973), 615-634. (James D. Fabrey) 52 #7387 81.47
(with Vilasi, G.) Spontaneous break-down of symmetry in the static ultra-local approximation of the $g\phi^4$ quantum field theory. (Italian and Russian summaries) *Nuovo Cimento A* (11) 28 (1975), no. 1, 62-74. (Not reviewed) 81.34
(with Caianiello, E. R.; Marinaro, M.) Some unorthodox expansions in quantum field theory and statistical mechanics. (Italian and Russian summaries) *Nuovo Cimento B* (11) 44 (1978), no. 2, 299-323. (G. Costa) 58 #4049 81.41
- Scarpi, Giambattista** Sulla possibilità di un modello reologico intermedio di tipo evolutivo. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 52 (1972), 912-917 (1973). (R. Nardini) 48 #12995 76.35
- Scarpini, Francesco** Sulla selezione di un sistema completo di funzioni ai fini dell'approssimazione in media della soluzione di un problema di tipo misto. (English summary) *Calcolo* 7 (1970), 21-28. (Catherine Bandle) 46 #5852 35M05 (65N99)
Sul calcolo della soluzione di un problema di fluidodinamica con metodi alle differenze finite. (English summary) *Calcolo* 7 (1970), 323-338. (M. Zlámal) 46 #4766 65R05
Sull'applicazione del metodo dei minimi quadrati ad un problema differenziale di fluidodinamica. (English summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) 37 (1970), 25-47. (W. Velte) 47 #657 35Q99 (65N30, 76.35)
(with Valdinoci, T.) Su alcuni sistemi di complementarità connessi a disequazioni variazionali di tipo ellittico. (English summary) *Calcolo* 9 (1972), 143-182. (Anna Ostanello-Borreani) 53 #1911 65D15
(with Fusiardi, Alfonso; Mosco, Umberto; Schiaffino, Andrea) A dual method for the numerical solution of some variational inequalities. *J. Math. Anal. Appl.* 40 (1972), 471-493. (Catherine Bandle) 48 #2865 49B30 (49B25, 49C10, 49C15)
(with Fusiardi, Alfonso) Riguardo ad un problema di trasmissione su un campo illimitato. *Ist. Lombardo Accad. Sci. Lett. Rend. A* 107 (1973), 419-459. (S. Cinquini) 49 #9414 35J10
(with Levati, C.; Volpi, G.) ★Sul trattamento numerico di alcuni problemi variazionali di tipo unilaterale. Pubblicazioni del Laboratorio di Analisi Numerica del Consiglio Nazionale delle Ricerche, No. 82. *Laboratorio di Analisi Numerica del Consiglio Nazionale delle Ricerche, Pavia, 1974*. 63 pp. (Not reviewed) 65K05
Some algorithms solving the unilateral Dirichlet problem with two constraints. (Italian summary) *Calcolo* 12 (1975), no. 2, 113-149. (R. S. Anderssen) 54 #14401 65N30 (35J20)
(with Mosco, Umberto) Complementarity systems and approximation of variational inequalities. (Loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge Anal. Numér.* 9 (1975), no. R-1, 83-104. (Pierre-Louis Lions) 57 #7991 65J05 (35J25)
(with Vivaldi, Maria Agostina) Évaluation de l'erreur d'approximation pour une inéquation parabolique relative aux convexes dépendant du temps. *Appl. Math. Optim.* 4 (1977/78), no. 2, 121-138. (J. R. Cannon) 57 #14517 65N30
(with Vivaldi, Maria Agostina) Error estimates for the approximation of some unilateral problems. (French summary) *RAIRO Anal. Numér.* 11 (1977), no. 2, 197-208, 221. (Reinhard Scholz) 58 #8362 65N30
- Scarselli, Alessandro** Sulla p -profondità di un gruppo finito risolubile. *Matematiche (Catania)* 28 (1973), 378-389 (1974). (Thomas Laffey) 50 #13264 20D20
Generalizzazione di un teorema di Zappa sulle S -partizioni. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 56 (1974), 5-9. (G. Zappa) 51 #5759 20D25
Una osservazione sulla classe di Fitting normale minima. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 58 (1975), no. 4, 499-500. (Franco Migliorini) 54 #12888 20D10
Sui gruppi a sottogruppi supersolubili abeliani. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 60 (1976), no. 5, 564-569. (Richard Davitt) 57 #9834 20D10+
SA-gruppi e SN-gruppi. (English summary) *Boll. Un. Mat. Ital. A* (5) 14 (1977), no. 1, 174-182. (L. Beran) 56 #15765 20D25
- Sčastlivii, G. G.** (with Titko, A. I.) A problem of determining the characteristics of an electromagnetic field in a conducting rail with an air window. (Russian) *Izv. Sibirsk.*

- Izdel. Akad. Nauk SSSR Ser. Tehn. Nauk* **1977**, no. 8, 132-139, 160. (From the text) **8** #14384 78.35
- Michele** (with Dentoni, Paolo) Funzioni regolari nell'algebra di Cayley. *Rend. Sem. Mat. Univ. Padova* **50** (1973), 251-267 (1974). (M. O. Gonzalez) **50** #13559 30A97
- in, B. M.** (with Vilkov, A. V.; Židkov, N. P.) A study of Patterson's integral equation. (Russian) *Numerical methods and programming, XVI (Russian)*, pp. 271-281. *Izdat. Moskov. Univ., Moscow*, 1971. (V. P. Milantiev) **51** #14834 82.45
- (with Židkov, N. P.; Časnik, E. I.) Certain mathematical questions on the interpretation of Debye powder patterns. (Russian) *Numerical methods and programming, XVI (Russian)*, pp. 282-287. *Izdat. Moskov. Univ., Moscow*, 1971. (V. P. Milantiev) **51** #14845 82.50
- (with Vilkov, A. V.; Židkov, N. P.) A method of finding the global minimum of a function of one variable. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 4, 1040-1047, 1090. (R. S. Andersen) **53** #9649 65K05
- (with Židkov, N. P.) A method for a global minimum search. (Russian. Georgian and English summaries) *Gamqeneb. Math. Inst. Sem. Mohsen. Anotacie. Vyp.* **11** (1976), 7-62. (Ulrich Eckhardt) **55** #4257 58C20 (65K05)
- See also **Studies of equations of mathematical physics**, **50** #4197
- in, N. I.** (with Karhov, A. N.) ★Математические методы программирования в экономике. (Russian) [Mathematical programming methods in economics] Математическая Статистика для Экономистов. [Mathematical Statistics for Economists] *Izdat. "Statistika", Moscow*, 1974. 143 pp. (K. Zimmermann) **53** #10173 90-01
- rovickii, L. P.** See **Mathematical and informational models of science control**, **19** #12117
- ov, A. I.** A certain algebra of one-place primitive recursive functions. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **44** (1969), no. mat., 11-16. (R. A. Di Paola) **47** #1595 02F99
- (with Poljakov, E. A.) Automorphisms of certain algebras of partial functions. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **61** (1969), no. mat., 188-194. (Robert M. Baer) **48** #5956 08A05 (02F99)
- ov, Ju. K.** See **Cybernetics—in the service of Communism**, **48** #10432
- ov, V. P.** See **Nicolaus Copernicus. On the 500th anniversary of his birth**, **50** #12560
- olev, I. R.** A study of some models of economic growth. (Russian) *Cybernetics—in the service of Communism, Vol. 6 (Russian)*, pp. 113-132. "Énergija", Moscow, 1971. Vladimir Strnad) **51** #2604 90A15
- ol'kov, E. A.** (with Gilenko, N. D.) The scientific and pedagogical activities of Petr Sergeevič Novikov. (Russian) Mathematical logic, theory of algorithms and theory of sets (dedicated to P. S. Novikov on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **133** (1973), 5-10, 274. (Editors) **48** #1859 01A70
- Uniformization of sets of certain classes. (Russian) Mathematical logic, theory of algorithms and theory of sets (dedicated to P. S. Novikov on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **133** (1973), 251-262, 276. (Editors) **58** #27498 04A15
- (with Adjan, S. I.; Gilenko, N. D.; Uspenskii, V. A.) Petr Sergeevič Novikov. (Russian) *Mat. v Škole* **1975**, no. 2, 83-85. (Not reviewed) 01A70
- See also **Current questions in mathematical logic and set theory**, **53** #2566
- ol'kova, G. M.** Certain theorems of the theory of quantifiers. (Russian) *Nonclassical logic (Russian)*, pp. 91-106. *Izdat. "Nauka", Moscow*, 1970. (A. Tauts) **47** #8258 02C99
- ol'kačev, V. N.** The general solutions of differential equations of one-dimensional nonstationary flows in multidimensional space. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1971**, no. 3, 132-138. (Simona Popp) **46** #6711 76.35
- ol'kov, V. S.** See **Ščolokov, V. S.**
- ol'kova, T. N.** The theory of periodic mappings. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 15 Teor. Sb. Statei Nelinein. Funkcional. Anal.* **1974**, 75-80. (RŽMat **1975** #5 A558) **58** #24250 55C35
- Computation of the degree of mappings that are equivariant relative to the actions of the group Z_k . (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* **20** (1975), 51-56. (E. Skljarenko (RŽMat **1977** #7 A692)) **58** #24251 55C35
- (with Borisovič, Ju. G.; Izrailevič, Ja. A.) On the method of A. Borel's spectral sequence in the theory of equivariant mappings. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 1(193), 161-162. (Gencho Skordev) **55** #13409 55C25 (57F99)
- On the problem of the computation of the degree of an equivariant mapping. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 2, 426-435, 480. (Ju. G. Borisovič) **58** #7613 55C35 (55C25)
- ol'kov, I. B.** (with Vinogradov, V. N.; Gaï, E. V.; Popov, S. I.; Rabotnov, N. S.) Construction of physical bases for the groups $O(5)$ and $SU(3)$ with automatic performance of symbolic transformations. *Jadernaja Fiz.* **16** (1972), 1178-1187 (Russian); translated as *Soviet J. Nuclear Phys.* **16** (1973), 647-652. (Authors' summary) **50** #15650 81.22
- ol'nikov, B. A.** An application of the methods of iterative aggregation to the solution of systems of linear equations. (Russian) *Ékonom. i Mat. Metody* **2** (1966), 723-731. (From the author's introduction) **46** #6580 65F99 (90A99)
- (with Dudkin, L. M.; Homjakov, V. A.) Fundamental problems of classical aggregation in a model of inter-product balance. (Russian) *Ékonom. i Mat. Metody* **9** (1973), 231-242. (A. Aganbegian) **49** #2039 90A15
- (with Vahutinskii, I. Ja.; Dudkin, L. M.) Iterative aggregation in certain optimal economic models. (Russian) *Ékonom. i Mat. Metody* **9** (1973), 420-434. (V. Spiridonov) **50** #12154 90A10
- ol'nikov, V. N.** The convergence phenomenon of a certain nonlinear system. (Russian) *Differencial'nye Uravnenija* **8** (1972), 737-739. (Wolfdietrich Müller) **46** #476 34E99
- ol'nikov, V. V.** (with Panarin, A. I.) Tensor decomposition of multidimensional finite-difference boundary value problems. (Russian) *Mathematical physics, No. 3 (Russian)*, pp. 183-204. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1976. (I. Enescu) **57** #16336 15A69
- See also **Mathematical physics**, **56** #1652; **Numerical analysis and mathematical physics**, **56** #1653 and **Numerical analysis and mathematical physics**, **56** #1654
- ol'nikin, M. B.** (with Šor, N. Z.) An algorithm for solution of a two step problem of stochastic programming. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 3, 56-58. (Authors' summary) **45** #8268 90C15
- (with Šor, N. Z.) Multistage stochastic programming problems in parametric form. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1968), No. 3 (Russian)*, pp. 64-73. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (Authors' introduction) **46** #3078 90C15
- (with Šor, N. Z.) An estimate of the rate of convergence of the random search method. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 4, 55-58. (E. G. Gol'shtein) **52** #16647 90C30 (65K05)
- (with Šor, N. Z.) Some problems of approximation by functions with restrictions on the first and second derivatives. (Russian) *Theory of optimal decisions (Russian)*, pp. 11-20. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1976. (Ja. I. Al'ber) **58** #23933 49D10 (41A30)
- Some properties of averaged directions. (Russian) *Theory of optimal solutions (Russian)*, pp. 13-18. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1977. (Editors) **58** #7316 49D05
- (with Nenahov, È. I.) Some modifications of subgradient descent. (Russian) *Theory of optimal solutions (Russian)*, pp. 18-22. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1977. (Editors) **58** #12626 49D05
- Properties of summary directions of displacement. (Russian) *Kibernetika (Kiev)* **1978**, no. 1, 135-136. (S. Zlobec) **58** #3449 65K05 (90C25)
- See also **Mathematical methods for the study and optimization of systems**, **50** #12146; **Theory of optimal decisions**, **57** #11725 and **Theory of optimal decisions**, **58** #32847
- Ščepanovskii, V. A.** (with Dulov, V. G.) Slowing down of supersonic flow behind a curved shock wave following an isentropic compression. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR Ser. Tehn. Nauk* **1977**, no. 8, 72-78, 158. (From the text) **58** #19693 76.35
- Ščepetev, V. A.** (with Gutljanskii, V. Ja.) On theorems of distortion and rotation on the class of holomorphic univalent functions. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 867-872, 911. (K. W. Lucas) **49** #560 30A38
- (with Gutljanskii, V. Ja.) A generalized area theorem for a certain class of q -quasiconformal mappings. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1974), 509-512. (P. M. Tamrazov) **51** #3434 30A60
- Ščepin, E. V.** An axiomatization of the dimension of metric spaces. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 31-32. (Y. Kodama) **47** #5849 54F45
- The bicomact Ponomarev-Zaicev extension and the so-called spectral parasite. (Russian) *Mat. Sb. (N.S.)* **88(130)** (1972), 316-326. (Peter Hamburger) **46** #2643 54D35
- Real functions, and spaces that are nearly normal. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 1182-1196, 1200. (R. Engelking) **48** #4999 54D15
- An axiomatization of the dimension of metric spaces. (Russian) *Mat. Sb. (N.S.)* **92(134)** (1973), 135-141, 166. (D. Adnadjevič) **48** #12482 54F45
- (with Lokucievskii, O. V.) On P. S. Alexandroff's axiomatic definition of the dimension. *Topics in topology (Proc. Colloq., Keszthely, 1972)*, pp. 477-480. *Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam*, 1974. (K. Nagami) **50** #14704 54F45
- A certain problem of L. A. Tumarkin. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 42-43. (J. W. Jaworowski) **50** #11223 55D05 (54F45)
- On a problem of Isbell. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 3, 541-543. (J. N. Younglove) **52** #1640 54E15 (54D20)
- A theorem on the coalescing of antipodes. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 4 772-774. (J. W. Jaworowski) **52** #15439 55C20
- The dimension of a sum of curves. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 4(184), 267-268. (K. Sieklucki) **53** #6515 54F45
- Topological products, groups, and a new class of spaces that are more general than metric spaces. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 3, 527-529. (Jacob Kofner) **53** #9144 54D15 (54B10, 54E99)
- Topology of limit spaces with uncountable inverse spectra. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 5 (191), 191-226. (Z. Semadeni) **57** #4072 54B25
- Real functions and canonical sets in Tihonov products and topological groups. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 6(192), 17-27. (R. Engelking) **56** #16561 54C30 (54B10)
- A finite-dimensional bicomact absolute neighborhood retract is metrizable. (Russian) *Dokl. Akad. Nauk SSSR* **233** (1977), no. 3, 304-307. (Christian Fenske) **58** #7545 54C55
- Ščepkin, A. V.** (with Molčanova, V. A.) Comparative analysis of control laws of a closed model of an economic system. *Avtomat. i Telemekh.* **1977**, no. 10, 100-109. (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 10, part 2, 1512-1519 (1978). (Authors' summary) **57** #15342 90A15
- Ščepkin, G. G.** Construction of the electromagnetic field in layered media with high conductivity. (Russian) *Izv. Severo-Kavkaz. Naučn. Centra Vyss. Školy Ser. Estestv. Nauk.* **1975**, no. 4, 20-26, 116. (Jifi Nedoma) **57** #8972 86.35
- (with Krasovskii, Ju. P.) Asymptotic behavior of an electromagnetic field on a laminated medium with high conductivity. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 3, 705-717, 821. (V. P. Kalashnikov) **54** #14573 78.35
- Ščepockin, S. S.** Controllable line processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 6, 79-84. (Author's summary) **56** #5023 93E20 (90C40)
- Ščepockina, I. M.** Representations of solvable Lie groups. (Russian) *Funkcional. Anal. i Priložen.* **11** (1977), no. 2, 93-94. (N. N. Šapovalov) **57** #529 22E25 (22E45)
- Ščerba, A. Z.** Asymptotic expansion of the solution of a Volterra integral equation. (Russian) *Kuban. Gos. Univ. Naučn. Trudy No. 148 Mat. Anal.* (1971), 85-91. (C. Avramescu) **49** #11169 45D05
- Holomorphic solutions of a certain class of Volterra integral equations. (Russian) *Differencial'nye Uravnenija* **10** (1974), 2079-2080, 2088. (M. Tvrđý) **51** #3819 45D05
- Ščerbakii, I. K.** The coincidence of primarities. (Russian) *Bul. Akad. Štiințe RSS Moldoven.* **1973**, no. 1, 25-30, 91. (W. G. Leavitt) **48** #8559 16A46
- Ščerbak, A. F.** (with Levin, G. L.; Volček, B. A.) On the question of the solution of a

- certain class of problems of scheduling theory. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 5, 126-128. (S. Krčevinac) 49 #8640 90B35
(with Levin, G. L.; Volček, B. A.) A certain class of optimal work scheduling problems. (Russian) *Ekonom. i Mat. Metody* 10 (1974), no. 5, 947-956. (RŽMat 1975 #2 V728) 57 #9042 90B35
- Ščerbak, I. G. Algebras of automorphic forms with three generators. (Russian) *Funkcional. Anal. i Priložen.* 12 (1978), no. 2, 93-94. (I. Dolgachev) 58 #27963 14B05 (10D15)
- Ščerbak, L. N. (with Marčenko, B. G.) ★Линейные случайные процессы и их приложения. (Russian) [Linear random processes and their applications] *Izdat. "Naukova Dumka", Kiev*, 1975. 143 pp. (From the editor's preface) 53 #10420 93Exx (94-01)
- Ščerbak, V. V. (with Burdjuk, V. Ja.; Kahičko, A. A.) The construction of Hamiltonian paths in tournaments. (Russian. English summary insert) *Kibernetika (Kiev)* 1978, no. 2, 65-68. (D. Ja. Kesel'man) 58 #10571 05C20 (05C30, 90B10)
- Ščerbakov, A. A. The nucleus of a sequence that is obtained from a given sequence by a regular transformation. (Russian) *Mat. Zametki* 19 (1976), no. 5, 707-716. (Dimo B. Dimitrov) 58 #1824 40J05
Cores of sequences of complex numbers and their regular transformations. (Russian) *Mat. Zametki* 22 (1977), no. 6, 815-823. (L. Loone) 58 #6808 40A99
The summability of bounded sequences by regular matrices. (Russian) *Ural. Gos. Univ. Mat. Zap.* 10, no. 2 *Issled. Sovremen. Mat. Anal.*, 194-200, 220 (1977). (Editors) 57 #13283 40C05
- Ščerbakov, A. P. See *Problems in theoretical physics*, 50 #12007
- Ščerbakov, A. V. (with Kočergin, V. P.) Second order difference schemes for the approximation of an elliptic equation with a small parameter multiplying the highest derivatives. (Russian) *Cisl. Metody Meh. Splošn. Sredy* 5 (1974), no. 1, 88-97. 56 #13682 65N05
- Ščerbakov, B. A. A comparison principle for recurrentness and classes of isochrone functions. (Russian) *Mat. Issled.* 6 (1971), no.3(21), 148-161, 202. (J. Auslander) 47 #9593 54H20
Certain properties of classes of isochrone functions. (Russian) *Mat. Issled.* 6 (1971), no. 3(21), 188-196, 205. (J. Auslander) 47 #9594 54A20
★Топологическая динамика и устойчивость по Пуассону решений дифференциальных уравнений. (Russian) [Topological dynamics and Poisson stability of the solutions of differential equations] *Izdat. "Stiintsa", Kishinev*, 1972. 231 pp. (J. K. Hale) 48 #4425 34C25 (34G05, 54H20)
A certain general property of compact primitives of abstract functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 11(138), 88-96. (N. G. Markley) 51 #1290 43A60
The compatible recurrence of the bounded solutions of first order differential equations. (Russian) *Differencial'nye Uravnenija* 10 (1974), 270-275, 372. (D. Newton) 49 #7523 34C25
(with Koreneva, L. V.) The preservation of the nature of the recurrence of the solutions of differential equations under perturbations. (Russian) *Differencial'nye Uravnenija* 10 (1974), 470-475, 572. (D. Newton) 49 #7524 34C25
The nature of the recurrence of the solutions of linear differential systems. (Russian. Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* 21 (1975), 57-59. (Juri Bogdanov) 57 #13026 34C25 (54H20)
The comparability of the motions of dynamical systems with regard to the nature of their recurrence. (Russian) *Differencial'nye Uravnenija* 11 (1975), no. 7, 1246-1255, 1349. (M. Eisenberg) 53 #1555 54H20
(with Čeban, D. N.) Asymptotically Poisson stable motions of dynamical systems, and their comparability with regard to the recurrence property in the limit. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 5, 898-906, 966. (Wolfgang Hahn) 57 #10107 34C35 (34D05)
(with Fal'ko, N. S.) The minimality of sets and the Poisson stability of motions in homomorphic dynamical systems. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 6, 1091-1097, 1157. (J. Auslander) 58 #11687 34C35 (34D20)
See also *Proceedings: International Conference on Nonlinear Oscillations*, 47 #8969 and *Studies in algebra, mathematical analysis, and their applications*, 57 #15817
- Ščerbakov, E. A. Homeomorphic solutions of degenerate elliptic systems. (Russian) *Mat. Fiz. i Funkcional. Anal. Vyp.* 1 (1969), 100-116, 259-260. (RŽMat 1970 #8 B344) 57 #10218 35J45
Homeomorphic solutions of degenerate elliptic systems. (Russian) *Mathematical physics*, No. 8 (Russian), pp. 187-190. *Naukova Dumka, Kiev*, 1970. (M. Haimovici) 45 #2316 35J45 (30A92)
Homeomorphic solutions of a certain degenerate elliptic system. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 10(173), 93-96. (B. Goldschmidt (Zbl 348 #35040)) 58 #11909 35J70
- Ščerbakov, E. S. Figure operations of parallel substitution, and the unary algebras generated by them. (Russian) *Computing techniques and questions of cybernetics*, No. 10 (Russian), pp. 90-99, 159. (errata insert) *Izdat. Leningrad. Univ., Leningrad*, 1974. (E. Ikauniks) 50 #6681 94A30
- Ščerbakov, N. R. (with Krugljakov, L. Z.) On the geometry of a k -pseudolocaf family of d -planes in projective space. (Russian) *Geometry collection*, No. 13. *Trudy Tomsk. Gos. Univ.* 246 (1973), 43-51. (D. Palman) 50 #14524 53A20
(with Krugljakov, L. Z.) 1-pseudofocal α -families of two-dimensional planes in a projective space. (Russian) *Geometry collection*, No. 14. *Trudy Tomsk. Gos. Univ.* 255 (1974), 82-90. 58 #24064 53A20
- Ščerbakov, N. S. (with Nomokonov, V. N.) A class of majority decipherable codes with independent two-bit checks. (Russian. English summary insert) *US i M—Upravljajušče Sistemy i Mašiny* 1976, no. 2(22), 95-101. (Editors) 58 #4615 94A10
- Ščerbakov, R. N. (with Sluhaev, V. V.) Frame fields and fiberbundles. (Russian) *Geometry collection*, No. 9. *Trudy Tomsk. Gos. Univ.* 212 (1972), 5-9. (A. Švec) 50 #1164 53C15
(with Sluhaev, V. V.) Remarks concerning V. S. Malahovskii's article "Differential geometry of rigged varieties of figures" (*Trudy Kaliningrad. Gos. Univ. Differencial'naja Geometr. Mnogoobraz. Figur* No. 2 (1971), 5-19). (Russian) *Geometry collection*, No. 9. *Trudy Tomsk. Gos. Univ.* 212 (1972), 224-235. (K. Radziszewski) 52 #6614 53C30
- ★Основы метода внешних форм и линейчатой дифференциальной геометрии. (Russian) [Principles of the method of exterior forms and differential line geometry] *Izdat. Tomsk. Univ., Tomsk*, 1973. 235 pp. (loose errata) (A. Švec) 53 #6446 53-01
(with Sluhaev, V. V.) Differential topology aspects of the Cartan method. (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 44-47. (J. Vanžura) 48 #7271 55F10 (53C01)
On an unfortunate publication ("On the geometry of tangentially rigged manifolds" *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 9(124), 54-65) by V. S. Malahovskii. (Russian) *Geometry collection*, No. 12. *Trudy Tomsk. Gos. Univ.* 244 (1975), 102-104. (I. Kolář) 52 #15291 53B25
(with Cyrenova, V. B.) Foundations of surface theory in the three-dimensional, quasielliptic space S_3^1 . (Russian) *Geometry collection*, No. 15. *Trudy Tomsk. Gos. Univ.* 258 (1975), 183-204, 239. (B. Rozenfel'd) 54 #11200 53A35
See also *Geometry collection*, 49 #9747; *Geometry collection*, 49 #9748; *Geometry collection*, 49 #9749; *Geometry collection*, 52 #4143; *Geometry collection*, 52 #4144; *Geometry collection*, 54 #1094 and *Obituary: Finkov, S. P.*, 57 #5646
- Ščerbakova, V. A. (with Geraščenko, E. I.; Erman, V. L.; Il'in, I. P.; Kozlov, Ju. M.; Korotaeva, I. P.; Makar'ev, B. M.; Pal'tov, I. P.; Popov, E. P.; Samoilo, V. S.; Sidorov, I. M.; Favorskii-Pavlovskii, S. S.; Fedorov, S. M.; Hlyupalo, E. I.) ★Методы синтеза нелинейных систем автоматического управления. (Russian) [Methods for the synthesis of nonlinear automatic control systems.] Edited by S. M. Fedorov. *Nonlinear Automatic Control Systems*, Vol. 3. *Izdat. "Mašinstroenie", Moscow*, 1970. 416 pp. (Stanislav K. Myškov) 52 #7629 93C10
(with Alekperov, V. P.; Andrievskii, V. R.; Bahanov, L. E.; Bykov, V. P.; Zubkov, M. Ja.; Ivanenko, V. G.; Modjaev, A. D.; Potemkin, V. G.; Tepjakov, E. P.; Topčeev, Ju. I.; Fedorov, S. M.; Hlyupalo, E. I.; Černikov, S. A.; Čudov, M. A.; Šipilov, A. I.; Šumilov, B. F.) ★Нелинейные корректирующие устройства в системах автоматического управления. (Russian) [Nonlinear correcting devices in automatic control systems] Edited by Ju. I. Topčeev. *Nonlinear Automatic Control Systems*, Vol. 2. *Izdat. "Mašinstroenie", Moscow*, 1971. 466 pp. (Bojan Popović) 50 #4005 93-01
Irreducible tensors and spherical functions. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 27 (1972), no. 2, 195-202. (L. Méder) 46 #6736 81.22
- Ščerbakova, V. I. (with Ul'janov, P. L.) The completeness of systems of functions (F -functions). (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 6(157), 155-165. (A. Olevskii) 54 #13453 42A64
- Ščerbakova, R. I. Evolution representations of the algebra of functions in a Banach space are summable with a weight. (Russian) *Optimizacija Vyp.* 17 (34) (1975), 143-147, 161. (M. M. Day) 54 #13630 47D05
- Ščerbakova, V. M. ★Ряды Фурье и элементы операционного исчисления. (Russian) [Fourier series and elements of operational calculus] *Moskov. Tehnolog. Inst., Moscow* 1971. 103 pp. (Editors) 54 #3262 42-01
- Ščerbina, V. M. Some questions on integration in K -spaces with identity. (Russian) *Collection of papers by postgraduates*, Vol. 2 (Russian), 77-82. *Voronež. Gos. Univ. Koronezh*, 1972. (See RŽMat 1974 #4 B830; MR 57 #9376) 46G10 (26A63)
(with Sobolev, V. I.) The continuity of mappings of K -spaces with unit. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 6 (1972), 86-88. (V. Geiler (RŽMat 1973 #B598)) 56 #13015 47H99
(with Sobolev, V. I.) The extrema of mappings of K -spaces with identity. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 11 Sb. Statei Funkcional. Anal. i Priložen.* (1973), 84-91. (V. Geiler (RŽMat 1974 #8 B768)) 57 #13476 46G05
A theorem on finite inclusions in K -spaces with identity. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 15 Teor. Sb. Statei Nelinein. Funkcional. Anal.* (1974), 69-74. (Not reviewed) 46G99
(with Sobolev, V. I.) The differentiation of mappings of K -spaces. (Russian) *Dokl. Akad. Nauk SSSR* 225 (1975), no. 5, 1020-1022. (Ju. A. Abramovič) 53 #1217 46A40 (46G05)
Strict differentiability of mappings of K -spaces, and some theorems on local invertibility. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 4(184), 269-270. (J. Kolomyj) 53 #9279 58C20 (46G05)
- Ščerbina, G. V. (with Temkin, L. A.; Temkina, V. S.) Solution of the problem on the flow of a fluid in an infinite T -shaped domain by means of the Fredholm equation of the first kind. (Russian) *Vychisl. Mat. i Vychisl. Tehn. (Kharkov)* 1971, no. 2, 37-44, 158. (S. RŽMat 1972 #2 B861) 76.45
On the question of the form of the free surface of an ideal incompressible fluid. (Russian. English summary) *Mat. Fiz. i Funkcional. Anal. Vyp.* 3 (1972), 96-100, 110. (Author's summary) 58 #3938 76.35
A boundary value problem in the theory of viscous fluid flow. (Russian. English summary) *Mat. Fiz. i Funkcional. Anal. Vyp.* 3 (1972), 101-104, 110. (Author's summary) 58 #3909 76.34
A certain boundary value problem that arises in applications. (Russian. English summary) *Mathematical physics and functional analysis*, No. V (Russian), pp. 73-75, 15. *Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkih Temperatur, Kharkov*, 1974. (J. S. Joe) 56 #9114 35Q99 (49F10)
(with Temkin, L. A.; Temkina, V. S.) The calculation of the free surface of capillary fluid in a vessel. (Russian) *Numerical mathematics and computer technology*, No. V (Russian), pp. 81-86, 166. *Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkih Temperatur, Kharkov*, 1974. (Authors' summary) 56 #14128 76.65
Sufficient conditions for the solvability of a certain nonlinear boundary value problem on the half-axis. (Russian) *Differencial'nye Uravnenija* 11 (1975), no. 1, 2189-2195, 2300. (Author's summary) 57 #6592 34B15
On the question of nonclassical solutions of nonlinear boundary value problems for a second order equation. (Russian) *Questions on mathematical physics and functional analysis* (Proc. Res. Sem. Inst. Low Temp. Phys. Engrg., Kharkov) (Russian), pp. 116-121, 173-174. *"Naukova Dumka", Kiev*, 1976. (Author's summary) 58 #6452 34B15
A certain problem of isoperimetric type that arises in applications. (Russian. English summary) *Questions on mathematical physics and functional analysis* (Proc. Res. Sem. Inst. Low Temp. Phys. Engrg., Kraków) (Russian), pp. 168-169, 176. *"Naukova Dumka", Kiev*, 1976. (From the summary) 58 #11567 34A10
The singular nonlinear boundary value problem for a second-order equation with rapidly growing right-hand side. (Russian) *Differencial'nye Uravnenija* 12 (1976), no.

- 9-304, 379. (I. Kiguradze) **53** #13706 34B15
(with Myškis, A. D.) A certain limit boundary value problem that does not satisfy S. Bernstein's condition and has an application in the theory of capillary phenomena. (Russian) *Differentsial'nye Uravneniya* **12** (1976), no. 6, 991-998, 1140. (Piero Bassanini) #13188 34B15
- na, Ju. M.** (with Bartiš, M. Ja.) A certain difference method for solving nonlinear operator equations. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1972**, 579-582, 668. (S. Fučík) **46** #8404 65H05 (47H15)
A certain iteration method for the solution of nonlinear algebraic and transcendental equations. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1972**, no. 7, 72-76, 134. (J. W. Schmidt) **51** #4653 65H05
(with Bartiš, M. Ja.) A certain iteration process for the solution of a nonlinear operator equation. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 16* (1972), 105-121. (C. Illoio) **47** #9823 65J05
(with Bartiš, M. Ja.) Iteration formulas that are obtainable by means of recursion. (Russian) *Mathematics collection (Russian)*, pp. 50-53. *Izdat. "Naukova Dumka"*, Kiev, 1976. (Editors) **58** #19104 65J05 (47H15)
A perturbation analogue of the method of tangent hyperbolas. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1976**, no. 11, 66-70, 126. (Author's summary) **58** #31797 65H05
(with Bartiš, M. Ja.) A study of convergence conditions and an estimate of the total error of an iteration-difference method for the solution of nonlinear operator equations. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp. 28* (1976), 3-9, 150. (Authors' summary) **57** #18070 65J05
(with Bartiš, M. Ja.; Sen'ko, P. S.) An iteration-difference method for the solution of nonlinear operator equations. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp. 29* (1976), 50-55, 152. (Authors' summary) **57** #18072 65J05
- ina, N. V.** The continuity of one-parameter families of sets. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 2, 327-329. (R. Engelking) **55** #13375 54C60 (54A20)
- ina, O. A.** Optimal partitioning into blocks of a quasiblock problem of Boolean programming. (Russian) *A collection of papers on mathematical cybernetics*, No. 1 (Russian), pp. 81-89. *Vychisl. Centr. Akad. Nauk SSSR, Moscow*, 1976. (Editors) **54** #32938 90C10
- ina, P. I.** Decoding of cyclic codes by the use of a μ -connected adapter. (Russian) *Vychisl. Tehn. v Mašinstroen.* **1974**, no. 1(32), 17-22. (Author's summary) **56** #11515 94A10
Estimation of the connectivity of an adapter. (Russian) *Vychisl. Tehn. v Mašinstroen.* **1974**, no. 1(32), 23-28. (Author's summary) **56** #11516 94A10
- ina, V. A.** The removal of cutoffs in the T -exponent. (Russian. English summary) *Teoret. Mat. Fiz.* **18** (1974), 161-173. (Author's summary) **57** #8702 81.47
(with Gordevskii, V. D.; Uvarov, O. V.; Čudinovič, I. Ju.) Bogoljubov's R -operation for local interactions. (Russian. English summary) *Teoret. Mat. Fiz.* **20** (1974), 147-159. (Authors' summary) **57** #8685 81.47
(with Čudinovič, I. Ju.) Renormalized Feynman amplitudes for fields with fixed masses. (Russian. English summary) *Teoret. Mat. Fiz.* **27** (1976), no. 1, 24-37. (Authors' summary) **56** #7593 81.46
(with Uvarov, O. V.) The structure of the R -operation for local interactions. (Russian) *Vestnik Har'kov. Gos. Univ. No. 134 Mat. i Meh. Vyp. 41* (1976), 59-72, 2. (Authors' summary) **58** #14765 81.65
- ina, V. P.** The rotation of a vector field for a certain class of operators. (Russian) *Mathematical physics*, No. 16 (Russian), pp. 190-193, 200. *Izdat. "Naukova Dumka"*, Kiev, 1974. (J. Daneš) **49** #3625 47H15
Computation of the index of a critical point. (Russian) *Mat. Fiz. Vyp. 18* (1975), 159-162, 168. (Author's summary) **57** #7274 47H10 (58E05)
(with Skripnik, I. V.) The bifurcation of the solutions of boundary value problems for nondivergence equations. (Russian) *Mat. Fiz. Vyp. 20* (1976), 99-103, 114. (From the introduction) **58** #1611 35J60 (58G10)
Partial regularity of the solutions of a class of nondivergent quasilinear elliptic equations. (Russian) *Mat. Fiz. Vyp. 22* (1977), 112-115, 126. (O. John) **57** #6822 35J40 (35D10)
- ina-Samoilova, I. S.** See *Astronomy*, **56** #4302 and *Astronomy*, **57** #18744
- inin, E. V.** (with Šilova, E. I.) Some aspects of the theoretical analysis of three-dimensional MHD flow in a diffuser. *Magnit. Gidrodinamika* **7** (1971), 11-17 (Russian); translated as *Magnetohydrodynamics* **7** (1971), 9-14 (1973). (Rishi Ram) **48** #12996 76.35
- inin, Ju. G.** (with Lebedev, S. D.) Solution of a combinatorial problem in the design of self-checking equipment. *Avtomatika* **1970**, no. 5, 53-58 (Ukrainian); translated as *Soviet Automat. Control* **3** (1970), no. 5, 40-44 (1971). (J. P. Roth) **47** #2853 68A10
- in, A. L.** (with Maksimenkov, A. V.) Scheduling the filling of standing order assignments. (Russian) *Programirovanie* **1978**, no. 1, 77-83. (Jacek Błażewicz) **58** #25940 90B35
- in, A. M.** (with Dodonov, A. G.; Černyšev, Ju. O.; Sadovoi, N. N.) Solution of the assignment problem by reducing it to the problem of finding the optimal path on a graph. (Russian) *Elektronika i Modelirovanie* No. 15 (1977), 77-80, 125. (Editors) **58** #25961 90C05 (90C50)
- ov, A. A.** (with Čerepanov, V. I.) An application of the Racah algebra for point groups to the calculation of the energy spectra of complexes. (Russian) *Izv. Vysš. Školy. Zaved. Fizika* **1971**, no. 7, 91-93. (L. Méder) **45** #4758 81.22
- of, B.** See *Applied mechanics*, **50** #11914
- of, Manfred** The decomposition of the product of a momentum-zero- and a mass-zero-representation of the Poincaré group. *Z. Physik* **229** (1969), 336-346. (L. Méder) **47** #8028 81.22
★ The reduction of the product of two irreducible unitary representations of the proper orthochronous quantum-mechanical Poincaré group. *Lecture Notes in Physics*, Vol. 5. *Springer-Verlag, Berlin-New York*, 1970. iv+120 pp. (W. Miller, Jr. (Zbl 245 #22022)) **57** #16471 22E43 (22D30, 81.22)
A universal covering group of $SU(p, q)$. *Rep. Mathematical Phys.* **4** (1973), 275-280. (M. E. Mayer) **48** #13035 81.22
(with Ligon, Thomas) On the global symmetry of the classical Kepler problem. *Rep. Mathematical Phys.* **9** (1976), no. 3, 281-300. (Manfred Andrić) **54** #13996 58F05 (70.58)
- Schaafsma, Willem** Testing statistical hypotheses concerning the expectations of two independent normals, both with variance one. I. *Nederl. Akad. Wetensch. Proc. Ser. A* **74**=*Indag. Math.* **33** (1971), 86-99. (D. R. Truax) **45** #1311 62F05
Testing statistical hypotheses concerning the expectations of two independent normals, both with variance one. II. *Nederl. Akad. Wetensch. Proc. Ser. A* **74**=*Indag. Math.* **33** (1971), 100-105. (D. R. Truax) **45** #7868 62F05
Paired comparisons with order-effects. *Ann. Statist.* **1** (1973), 1027-1045. (Damaraju Raghavarao) **52** #1986 62F05
(with van Vark, Gerrit N.) Classification and discrimination problems with applications. I. *Statistica Neerlandica* **31** (1977), no. 1, 25-45. (Akio Kudo) **58** #13517 62H30
See also *Discriminant analysis and applications*, **57** #17959
- Schaal, Hermann** Die Affinminimalfächen von G. Thomsen. *Arch. Math. (Basel)* **24** (1973), 208-217. (K. Strubecker) **47** #7613 53A10
Die Ennepersche Minimalfäche als Grenzfall der Minimalfäche von G. Thomsen. *Arch. Math. (Basel)* **24** (1973), 320-322. (J. Hosccek) **47** #7614 53A10
Neue Erzeugungen der Minimalfächen von G. Thomsen. *Monatsh. Math. 77* (1973), 433-461. (K. Strubecker) **49** #7927 53A10
★Lineare Algebra und analytische Geometrie. Band I. *Friedr. Vieweg & Sohn, Braunschweig*, 1976. vi+255 pp. (Editors) **52** #13873 15-01
★Lineare Algebra und Analytische Geometrie. Band II. *Vieweg, Braunschweig*, 1976. vii+328 pp. (Editors) **53** #14290 50-01 (15-01)
(with Glässner, Ekkehart) ★Lineare Algebra und analytische Geometrie. Band III. Aufgaben mit Lösungen. *Vieweg, Braunschweig*, 1977. x+306 pp. (Editors) **54** #12800 15-01
- Schaal, Werner** Der Satz von Erdős und Fuchs in reell-quadratischen Zahlkörpern. *Acta Arith.* **32** (1977), no. 2, 147-156. (E. Grosswald) **55** #7969 10J99 (12A25, 12A95)
See also *Zahlentheorie*, **50** #12875
- Schar, Günter** Zur Lösung von Faltungsintegralgleichungen mit Hadamard-Integralen mittels der Mikusinskischen Operatorenrechnung. *Beiträge Anal. No. 2* (1971), 99-122. (I. Fenyő) **46** #9670 45H05
Eine Eigenschaft der dritten Potenz brückenloser Graphen. *Math. Nachr.* **51** (1971), 189-196. (Editors) **47** #1685 05C99
Eine Charakterisierung der Graphen, deren dritte Potenz 2-hamiltonsch ist. *Math. Nachr.* **66** (1975), 145-154. (Frank W. Owens) **52** #2959 05C35
- Schar, Richard** (with Lebovitz, Norman R.) Exchange of stabilities in autonomous systems. *Studies in Appl. Math.* **54** (1975), no. 3, 229-260. (F. Hoppensteadt) **57** #16853a 34D15
Singularly perturbed conservative systems. Summer Research Conference on Singular Perturbations: Theory and applications (Northern Arizona Univ., Flagstaff, Ariz., 1975). *Rocky Mountain J. Math.* **6** (1976), no. 4, 711-723. (W. M. Greenlee) **56** #780 34E15 (34C30)
(with Lebovitz, Norman R.) Exchange of stabilities in autonomous systems. II. Vertical bifurcation. *Studies in Appl. Math.* **56** (1976/77), no. 1, 1-50. (F. Hoppensteadt) **57** #16853b 34D15
See also *Conference: Differential Equations*, **51** #966
- Schaback, Robert** (with Werner, Helmut) ★Praktische Mathematik. II: Methoden der Analysis. Nach Vorlesungen an der Universität Münster, herausgegeben mit Unterstützung von R. Runge und H. Arndt. *Hochschultext. Springer-Verlag, Berlin-New York*, 1972. vi+355 pp. (A. S. Householder) **53** #11953 65-02 (65Dxx, 65L05)
Anwendungen der konvexen Optimierung auf Approximationstheorie und Splinesfunktionen. *Methoden und Verfahren der mathematischen Physik, Band 6*, pp. 129-151. *B. I.-Hochschul Taschenbücher*, No. 725, *Bibliographisches Inst., Mannheim*, 1972. (E. W. Cheney) **52** #1459 49A25 (41A65)
Spezielle rationale Splinesfunktionen. *J. Approximation Theory* **7** (1973), 281-292. (H. L. Loeb) **49** #11103 41A15
Interpolation mit nichtlinearen Klassen von Spline-Funktionen. Collection of articles dedicated to Isaac Jacob Schoenberg on his 70th birthday, II. *J. Approximation Theory* **8** (1973), 173-188. (L. L. Schumaker) **49** #9488 41A15 (65D05)
Optimale Interpolations- und Approximationssysteme. *Math. Z.* **130** (1973), 339-349. (L. L. Schumaker) **48** #9194 41A35
Konstruktion und algebraische Eigenschaften von M -Spline-Interpolierenden. (English summary) *Numer. Math.* **21** (1973/74), 166-180. (Gerhard Merz) **49** #9487 41A15
(with Braess, Dietrich; Brink-Spalk, Jan) ★Eine Bibliographie zur nichtlinearen Approximationstheorie. *Sonderforschungsbereiches 72, Universität Bonn, Bonn*, 1974. i+34 pp. (Editors) **50** #7890 41-XX
Kollokation mit mehrdimensionalen Spline-Funktionen. (English summary) *Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 291-300. *Lecture Notes in Math.*, Vol. 395, *Springer, Berlin*, 1974. (Author's summary) **50** #1501 65J05
Ein Optimierungsproblem aus der Kristallographie. (English summary) *Numerische Methoden bei Optimierungsaufgaben, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 113-123. *Internat. Schriftenreihe Numer. Math.*, Band 23, *Birkhäuser, Basel*, 1974. (Rainer Burkard) **55** #7388 90C10 (65K05, 90C30, 90C25)
Konstruktion von Spline-Interpolierenden und Peano-Kernen. (English summary) *Spline-Funktionen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 243-255. *Bibliographisches Inst., Mannheim*, 1974. (Walter Schempp) **54** #3235 41A15
Globale Konvergenz von Verfahren zur nichtlinearen Approximation. (English summary) *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math., Univ. Bonn, Bonn, 1976)*, pp. 352-363. *Springer, Berlin*, 1976. (Author's summary) **58** #31739 65D15
Calculation of best approximations by rational splines. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 533-539. *Academic Press, New York*, 1976. (Dietrich Braess) **54** #13418 41A50 (65D15)
See also *Finite Elemente*, **56** #4112 and *Approximation theory*, **58** #23247
- Schach, S. R.** Some applications of new identities for Legendre associated functions of integral order and degree. *Math. Colloq. Univ. Cape Town* **10** (1975/76), 21-36. (P. Anandani) **54** #10711 33A45

- New identities for Legendre associated functions of integral order and degree. I. *SIAM J. Math. Anal.* 7 (1976), no. 1, 59-69. (P. Anandani) 53 #906 33A45
- New identities for Legendre associated functions of integral order and degree. II. Extension to other polynomials. *SIAM J. Math. Anal.* 7 (1976), no. 5, 754-766. (P. Anandani) 54 #7915 33A65
- Schach, Siegfried** Weak convergence results for a class of multivariate Markov processes. *Ann. Math. Statist.* 42 (1971), 451-465. (D. L. Iglehart) 45 #4507 60J10
- (with Jacobs, David R., Jr.) Stochastic order relationships between $GI/G/k$ systems. *Ann. Math. Statist.* 43 (1972), 1623-1633. (Micha Yadin) 51 #4458 60K25
- (with McNeil, Donald R.) Central limit analogues for Markov population processes. With a discussion by J. F. C. Kingman, M. S. Bartlett, A. D. Barbour, D. R. Cox, D. G. Kendall and V. Barnett, and replies by S. Schach and D. R. McNeil. *J. Roy. Statist. Soc. Ser. B* 35 (1973), 1-23. (C. C. Heyde) 49 #6390 60J80
- The asymptotic distribution of the test statistic of the incidence test proposed by K. Kannemann—a correction: "An incidence test for k related samples". *Biometrische Z.* 18 (1976), no. 6, 505-508. (Editors) 58 #24704b 62G10
- Schacher, Murray M.** (with Fein, Burton) Solutions of pure equations in rational division algebras. II. *J. Algebra* 21 (1972), 518-522. (S. Elliger) 47 #1779 12A80
- (with Benard, Mark) The Schur subgroup. II. *J. Algebra* 22 (1972), 378-385. (T. V. Fossum) 46 #1890 20C05 (16A26)
- (with Seitz, Gary M.) π -groups that are M -groups. *Math. Z.* 129 (1972), 43-48. (P. Fong) 47 #1940 20D20
- More on the Schur subgroup. *Proc. Amer. Math. Soc.* 31 (1972), 15-17. (W. Feit) 45 #393 20D25 (16A40)
- (with Straus, Ernst G.) Some applications of a non-Archimedean analogue of Descartes' rule of signs. *Acta Arith.* 25 (1973/74), 353-357. (Jack Sonn) 50 #290 12F10
- (with Small, Lance W.) Noncrossed products in characteristic p . *J. Algebra* 24 (1973), 100-103. (A. Rosenberg) 46 #7300 16A40
- (with Fein, Burton) Maximal subfields of tensor products. *Pacific J. Math.* 45 (1973), 479-483. (A. Yaqub) 47 #6764 16A40
- (with Fein, Burton) Finite subgroups of finite dimensional division algebras. *Bull. Amer. Math. Soc.* 80 (1974), 290-292. (K. W. Roggenkamp) 48 #11195 16A40
- (with Fein, Burton) Embedding finite groups in rational division algebras. III. *J. Algebra* 28 (1974), 304-310. (J. Knopfmacher) 49 #2832 16A40
- (with Fein, Burton) Finite subgroups occurring in finite-dimensional division algebras. *J. Algebra* 32 (1974), 332-338. (S. Elliger) 51 #10387 16A40
- (with Herstein, Israel Nathan; Procesi, Claudio) Algebraic valued functions on noncommutative rings. *J. Algebra* 36 (1975), no. 1, 128-150. (Robert L. Snider) 51 #10385 16A38
- (with Procesi, Claudio) A non-commutative real Nullstellensatz and Hilbert's 17th problem. *Ann. of Math. (2)* 104 (1976), no. 3, 395-406. (G. A. Efroymson) 55 #5599 12D15 (10B35)
- (with Fein, Burton) Galois groups and division algebras. *J. Algebra* 38 (1976), no. 1, 182-191. (Jacques Martinet) 53 #5655 16A40 (12G05)
- (with Fein, Burton) Brauer groups of fields algebraic over Q . *J. Algebra* 43 (1976), no. 1, 328-337. (S. Yuan) 54 #12716 12A80 (16A16)
- (with Fein, Burton) The ordinary quaternions over a Pythagorean field. *Proc. Amer. Math. Soc.* 60 (1976), 16-18 (1977). (C. F. Moppert) 54 #5199 12D15 (12A80, 16A40)
- (with Gordon, Basil) Quartic coverings of a cubic. *Number theory and algebra*, pp. 97-101. Academic Press, New York, 1977. (B. Fein) 57 #5953 12A55
- The crossed-product problem. *Ring theory II (Proc. Second Conf., Univ. Oklahoma, Norman, Okla., 1975)*, pp. 237-245. *Lecture Notes in Pure and Appl. Math.*, Vol. 26, Dekker, New York, 1977. (B. Fein) 55 #8100 16A46 (16-02)
- (with Fein, Burton) Ulm invariants of the Brauer group of a field. *Math. Z.* 154 (1977), no. 1, 41-50. (M. Orzech) 56 #15615 12A80 (12G99)
- Non-uniqueness in crossed products. *Representation theory of algebras (Proc. Conf., Temple Univ., Philadelphia, Pa., 1976)*, pp. 447-449. *Lecture Notes in Pure Appl. Math.*, Vol. 37, Dekker, New York, 1978. (Yutaka Kawada) 58 #5798 16A74 (16A16)
- See also **Selected papers: Algebra**, 57 #2802
- Schachermayer, Walter** Supporteurs des prodistributions et mesures cylindriques. *Séminaire Paul Krée, 1re année (1974/75), Équations aux dérivées partielles en dimension infinie, Exp. No. 3*, 8 pp. *Secrétariat Mathématique, Paris*, 1975. (Zbl 319 #46028) 58 #1077 28A40
- Supporteur d'une probabilité cylindrique ou d'une prodistribution. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 11, A377-A379. (Albert Tortrat) 52 #4361 60B05 (28A40)
- Sur un théorème de Grothendieck. *Séminaire Pierre Lelong (Analyse), Année 1974/75*, pp. 193-212. *Lecture Notes in Math.*, Vol. 524, Springer, Berlin, 1976. (Peter Michor) 54 #5856 46M05 (46B05)
- Eberlein-compactes et espaces de Radon. *École d'Été de Calcul des Probabilités de Saint-Flour (Saint-Flour, 1976)*. *Ann. Sci. Univ. Clermont No. 61 Math. No. 14* (1976), 129-143. (D. J. H. Garling) 56 #15872 28A40
- Mesures cylindriques sur les espaces de Banach, qui ont la propriété de Radon-Nikodym. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 4, A227-A229. (N. N. Vahanija) 54 #501 28A40
- On compact spaces which are not c -spaces. *Bol. Soc. Mat. Mexicana (2)* 22 (1977), no. 2, 60-63. (Author's summary) 58 #30971 54D30 (28A32)
- Eberlein-compactes et espaces de Radon. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 7, A405-A407. (Author's summary) 55 #12892 28A30
- Addendum: Une modification standard de la démonstration non standard de Reeb et Schweitzer "Un théorème de Thurston établi au moyen de l'analyse non standard". *Differential topology, foliations and Gelfand-Fuks cohomology (Proc. Sympos., Pontificia Univ. Católica, Rio de Janeiro, 1976)*, pp. 139-140. *Lecture Notes in Math.*, Vol. 652, Springer, Berlin, 1978. (Robert Roussarie) 58 #18491b 57D30
- Schachschneider, R.** Versuchsauswertung und Prognose nach einem Verfahren zur Bewertung der Ähnlichkeit. (English summary) *Biometrische Z.* 17 (1975), 49-64. (H. L. Harter) 51 #14428 62H25
- Schachtel, G.** A noncommutative algorithm for multiplying 5×5 matrices using 103 multiplications. *Inform. Process. Lett.* 7 (1978), no. 4, 180-182. (J. L. Brenner) 58 #3686 68A20
- mugur-Schächter, Mioara** See **Mugur-Schächter, Mioara**
- Schackert, Holger** (with Gerber, Siegmund) Bewegungsdeterminierte linear-beschränkte Akzeptoren und eindeutige Grammatiken. (English and Russian summaries) *Elektron. Informationsverarbeitung Kybernetik* 12 (1976), no. 8/9, 415-420. (Wilfried Brauer) 56 #7326 68A25 (68A30)
- Schactman, Richard H.** (with Dowling, Thomas A.) On the relative efficiency of randomized response models. *J. Amer. Statist. Assoc.* 70 (1975), 84-87. (I. Guttmann) 51 #7077 62D05
- Schadach, Dieter J.** ★Biomathematik. I. Kombinatorik, Wahrscheinlichkeit und Information. Wissenschaftliche Taschenbücher, Band 83. Akademie-Verlag, Berlin; Pergamon Press, Oxford; Vieweg & Sohn, Braunschweig, 1971. 91 pp. (Michael Artzt) 52 #16697 92A05
- ★Biomathematik. II. Graphen, Halbgruppen und Automaten. Wissenschaftliche Taschenbücher, Band 87. Akademie-Verlag, Berlin; Pergamon Press, Oxford; Vieweg & Sohn, Braunschweig, 1971. 113 pp. (Michael Arbib) 52 #16698 92A05
- Schade, J.** (with Niethammer, Wilhelm) On a relaxed SOR-method applied to nonsymmetric linear systems. *J. Comput. Appl. Math.* 1 (1975), no. 3, 133-136. (Hageman) 53 #9612 65F10
- Schader, Martin** (with Opitz, Otto) ★Operations Research Verfahren und Marketingprobleme. Mathematical Systems in Economics, Heft 19. Verlag Anton Hain, Meisenheim am Glan, 1975. viii+216 pp. (M. Rössler) 53 #10174 90-02
- (with Lauwerth, Werner) Distanzindizes zur mehrdimensionalen Skalierung. *Operations Research Verfahren, Band XXII*, pp. 166-175. Hain, Meisenheim am Glan, 1976. (Margaret P. Gessaman) 55 #9420 62H99
- Schaefer, Brian M.** (with Nahi, Nasser E.) Decision-directed adaptive recursive estimation divergence prevention. *IEEE Trans. Automatic Control* AC-17 (1972), 61-68. (Andrew P. Sage) 49 #2187 93E10
- Schaefer, Helmut H.** ★Topological vector spaces. Third printing corrected. *Graduate Texts in Mathematics*, Vol. 3. Springer-Verlag, New York-Berlin, 1971. xi+294 pp. (Editors) 49 #7722 46Axx
- Normed tensor products of Banach lattices. *Proceedings of the International Symposium on Partial Differential Equations and the Geometry of Normed Linear Spaces (Jerusalem, 1972)*. *Israel J. Math.* 13 (1972), 400-415 (1973). (A. Wiweger) 48 #12078 46M05
- On the representation of Banach lattices by continuous numerical functions. *Math. Z.* 125 (1972), 215-232. (J. Kist) 45 #7441 46A40
- ★Banach lattices and positive operators. *Die Grundlehren der mathematischen Wissenschaften*, Band 215. Springer-Verlag, New York-Heidelberg, 1974. xi+376 pp. (P. C. Zaenen) 54 #11023 46A40 (47B55, 47D20)
- Orderings of vector spaces. *Foundations of quantum mechanics and ordered linear spaces (Advanced Study Inst., Marburg, 1973)*, pp. 4-10. *Lecture Notes in Phys.*, Vol. 25, Springer, Berlin, 1974. (Editors) 57 #13440 46A40
- The Šilov boundary of a convex cone. *Foundations of quantum mechanics and ordered linear spaces (Advanced Study Inst., Marburg, 1973)*, pp. 342-344. *Lecture Notes in Phys.*, Vol. 29, Springer, Berlin, 1974. (A. Goulet de Rugy (Zbl 286 #46030) 58 #12290 46A99
- Reticoli di Hilbert ed operatori di Hilbert-Schmidt. *Conferenze tenute in occasione del cinquantenario dell'Unione Matematica Italiana (1972)*. *Boll. Un. Mat. Ital.* (4) (1974), no. 2 suppl., 77-86. (R. Cristescu) 56 #3666 47B10
- Banach lattices and cyclic Banach spaces. *Spectral Theory Symposium (Trinity College, Dublin, 1974)*. *Proc. Roy. Irish Acad. Sect. A* 74 (1974), 283-289. (B. Walsh) 50 #14353 47B99 (46A40)
- (with Schlotterbeck, Ulf) On the approximation of kernel operators by operators of finite rank. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, I. *J. Approximation Theory* 13 (1975), 33-39. (G. Mühlbach) 50 #14326 47B10
- On the σ -spectrum of order bounded operators. *Math. Z.* 154 (1977), no. 1, 79-84. (S. Kutateladze) 57 #10494 47B55 (47A10)
- Schaefer, John F.** (with Cannon, Robert H., Jr.) On the control of unstable mechanical systems. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 12, Paper 6C, 13 pp. *Inst. Mech. Engrs., London*, 1967. (Author's summary) 51 #9873 93B05
- See also **Proceedings: International Congress of the International Federation of Automatic Control (IFAC), 51 #12360a**
- Schaefer, M.** See also **Schäfer, Manfred**
- Schaefer, Margaret K.** (with Hurter, Arthur P., Jr.) An algorithm for the solution of location problems with metric constraints. *Naval Res. Logist. Quart.* 21 (1974), 625-633. (J. Falk) 50 #15926 90C30
- (with Hurter, Arthur P., Jr.; Wendell, Richard E.) Solutions of constrained location problems. *Management Sci.* 22 (1975/76), no. 1, 51-56. (Edwin Burmeister) 53 #102290B05
- Schaefer, Martin** Das asymptotische Verhalten des t -Tests unter allgemeinen Alternativen (English and French summaries) *Math. Operationsforsch. Statist.* 6 (1975), no. 3, 775-785. (Reinhard Michel) 52 #15786 62E20
- Note on the k -dimensional Jensen inequality. *Ann. Probability* 4 (1976), no. 3, 502-504. (Matthew Goldstein) 53 #4173 60E05 (52A40)
- Schaefer, Marvin** ★A mathematical theory of global program optimization. Prentice-Hall Series in Automatic Computation. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1977. xvii+198 pp. (K. H. V. Booth) 49 #8419 68A05
- Schaefer, Paul** Matrix transformations of sequences of translates of bounded sequences. *Math. Japon.* 17 (1972), 129-134. (F. P. Cass) 48 #6759 40C05
- Infinite matrices and invariant means. *Proc. Amer. Math. Soc.* 36 (1972), 104-110. (B. E. Rhoades) 46 #5885 40C05
- An algorithm for finding the G.C.D. of a finite set of integers. *Delta (Waukesha)* (1975), 19-27. (S. I. Gendler) 51 #317 10A05
- Schaefer, Philip W.** On the Cauchy problem for the nonlinear biharmonic equation. *Math. Anal. Appl.* 36 (1971), 660-673. (From the author's introduction) 55 #10843 35J60

- Bounds in the Cauchy problem for a fourth order quasi-linear equation. *SIAM J. Math.* **21** (1971), 44-50. (H. F. Weinberger) **46** #2219 35J60
- On uniqueness, stability and pointwise estimates in the Cauchy problem for coupled elliptic equations. *Quart. Appl. Math.* **31** (1973), 321-328. (L. E. Payne) **55** #3528 45
- Improvable estimates in some non-well-posed problems for a system of elliptic equations. *SIAM J. Math. Anal.* **4** (1973), 447-455. (J. Conlan) **48** #4506 35J45
- A priori bounds in the Cauchy problem for coupled elliptic systems. *Applicable Anal.* **4** (1974), no. 3, 207-221. (Author's summary) **57** #10219 35J45
- On existence in the Cauchy problem for the biharmonic equation. *Compositio Math.* (1974), 203-207. (L. E. Payne) **49** #5609 35R25
- (with Sperb, René Peter) A maximum principle for a class of functionals in linear Dirichlet problems. *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976), pp. 400-406. Lecture Notes in Math., Vol. 564, Springer, Berlin, 1976.* (Editors) **58** #29209 35J65
- (with Sperb, René Peter) Maximum principles for some functionals associated with solution of elliptic boundary value problems. *Arch. Rational Mech. Anal.* **61** (1976), 1, 65-76. (L. E. Payne) **53** #8653 35J40
- On a maximum principle for a class of fourth-order semilinear elliptic equations. *Proc. Roy. Soc. Edinburgh Sect. A* **77** (1977), no. 3-4, 319-323. (G. Albinus) **58** #29196 35J60 (31A30)
- (with Sperb, René Peter) Maximum principles and bounds in some inhomogeneous elliptic boundary value problems. *SIAM J. Math. Anal.* **8** (1977), no. 5, 871-878. (atherine Bandle) **58** #11889 35J40
- Schäfer, Ralf E. ★Probabilistische Informationsverarbeitung. Theorie, Methoden und Experiment. Verlag Hans Huber, Bern-Stuttgart-Vienna, 1976. 346 pp. (From the preface) **58** #31484 62A15
- Schäfer, Thomas J. Complexity of decision problems based on finite two-person perfect-information games. *Eighth Annual ACM Symposium on Theory of Computing (Jersey, Pa., 1976), pp. 41-49. Assoc. Comput. Mach., New York, 1976.* (Y. Yesha) **51** #10135 68A20 (90D10)
- Schäfer, David G. (with Coburn, L. A.; Douglas, Ronald G.; Singer, I. M.) C^* -algebras operators on a half-space. II. Index theory. *Inst. Hautes Études Sci. Publ. Math. No.* (1971), 69-79. (H. Widom) **50** #10884 47B30 (46L05)
- Approximation of the Dirichlet problem on a half space. *Acta Math.* **129** (1972), no. 4, 281-295. (G. W. Hedstrom) **52** #16058 65N10
- An application of von Neumann algebras to finite difference equations. *Ann. of Math.* (2) **95** (1972), 117-129. (D. E. Edmunds) **45** #5563 35J40 (46L10, 47F05, 58N05)
- An application of von Neumann algebras to finite difference equations. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971), pp. 183-194. Amer. Math. Soc., Providence, R.I., 1973.* (Stanley Osher) **49** #838 35J40 (30A12)
- A regularity theorem for conservation laws. *Advances in Math.* **11** (1973), 368-386 (Smoller) **48** #4523 35L45 (58G99)
- (with Guillemin, V.) Remarks on a paper of D. Ludwig. *Bull. Amer. Math. Soc.* **79** (1973), 382-385. (D. L. Russell) **53** #13800 35B40 (35J05, 58G15)
- An index theorem for systems of difference operators on a half space. *Inst. Hautes Études Sci. Publ. Math. No.* **42** (1973), 121-127. (R. G. Douglas) **47** #9341 47B45 (58G10)
- The capacitor problem. *Indiana Univ. Math. J.* **24** (1974/75), no. 12, 1143-1167. (Jeffrey Rauch) **52** #14607 35J05
- (with Guillemin, V.) Fourier integral operators from the Radon transform point of view. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973), Part 2, pp. 297-300. Amer. Math. Soc., Providence, R.I., 1975.* (Ju. V. Egorov) **52** #1420 47G05 (58G15)
- Singularities and the obstacle problem. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973), Part 2, pp. 339-340. Amer. Math. Soc., Providence, R.I., 1975.* (J. S. Joel) **57** #10227 35J65
- (with Golubitsky, M.) Stability of shock waves for a single conservation law. *Advances in Math.* **16** (1975), 65-71. (J. Smoller) **51** #10889 35L65
- A stability theorem for the obstacle problem. *Advances in Math.* **17** (1975), no. 1, 4-47. (H. Jacobowitz) **52** #994 35J25 (58C15, 58G15)
- An example of generic regularity for a non-linear elliptic equation. *Arch. Rational Mech. Anal.* **57** (1975), 134-141. (B. A. Fleishman) **52** #8649 35J65
- On the existence of discrete frequencies of oscillation in a rotating fluid. *Studies in Appl. Math.* **54** (1975), no. 3, 269-274. (Author's summary) **56** #10385 76.35
- Supersonic flow past a nearly straight wedge. *Duke Math. J.* **43** (1976), no. 3, 537-670. (M. Honda) **54** #1850 76.35 (58C15)
- A new proof of the infinite differentiability of the free boundary in the Stefan problem. *J. Differential Equations* **20** (1976), no. 1, 266-269. (A. D. Solomon) **52** #11325 35K05
- One-sided estimates for the curvature of the free boundary in the obstacle problem. *Advances in Math.* **24** (1977), no. 1, 78-98. (S. Cinquini) **56** #6506 49A99 (35J20)
- Some examples of singularities in a free boundary. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **4** (1977), no. 1, 133-144. (N. A. Warsi (Zbl 354 #35033)) **58** #24345 58E15 (35J99)
- Non-uniqueness in the equilibrium shape of a confined plasma. *Comm. Partial Differential Equations* **2** (1977), no. 6, 587-600. (Pierre-Louis Lions) **58** #29210 35J65 (82.35)
- (with Guillemin, V.) On a certain class of Fuchsian partial differential equations. *Duke Math. J.* **44** (1977), no. 1, 157-199. (R. D. Moyer) **55** #3504 35D10 (58G15, 58A30)
- Schäfer, David J. (with Janardan, Konanur G.) A generalization of Markov-Pólya distribution, its extensions and applications. (German summary) *Biometrical J.* **19** (1977), no. 2, 87-106. (Graham J. G. Upton) **55** #9358 62E10 (62P99)
- Schäfer, F. See Garcia-Schaeffer, Françoise
- Schäfer, Françoise See Garcia-Schaeffer, Françoise
- Schäfer, Helmut (with Benz, Walter; Leibner, Werner) Kreise, Zykel, Ketten. Zur Geometrie der Algebren. Ein Bericht. *Jber. Deutsch. Math.-Verein.* **74** (1972/73), Abt. 1, 107-122. (Editors) **58** #7388 50D45
- Benz-Peczar-Doppelverhältnisisidentitäten zum allgemeinen Satz von Miquel. *Abh. Math. Sem. Univ. Hamburg* **42** (1974), 228-235. (Zbl 307 #50014) **58** #30737 50D35
- Das von Staude'sche Theorem in der Geometrie der Algebren. *J. Reine Angew. Math.* **267** (1974), 133-142. (J. W. P. Hirschfeld) **57** #13682 50D35
- Die Sieben-Punkte-Ausartungen des Satzes von Miquel in Möbiusebenen. *Math. Z.* **137** (1974), 185-196. (K. Strubecker) **49** #11384 50D45
- Eine Kennzeichnung miquelscher Möbiusebenen. *Mitt. Math. Gesellsch. Hamburg* **10** no. 3, 179-184 (1974). (W. R. Heise) **54** #3579 50D45
- Schäfer, L. R. (with Henderson, C. R.; Searle, S. R.) The invariance and calculation of Method 2 for estimating variance components. (French summary) *Biometrics* **30** (1974), 583-588. (D. V. Chopra) **54** #1494 62J10
- Schäfer, R. (with Knoll, J.) Semiclassical scattering theory with complex trajectories. I. Elastic waves. *Ann. Physics* **97** (1976), no. 2, 307-366. (Y. Avishai) **53** #12294 81.35
- (with Knoll, J.) Complex paths and uniform approximations in a semi-classical description of direct reactions. *Phys. Rep.* **31C** (1977), no. 2, 159-207. (P. Achuthan) **56** #14141 78.35 (81.35)
- Schäfer, Jonathan (with Hadwiger, Hugo) Studie zur kombinatorischen Geometrie zentralsymmetrischer Eikörper. *Portugal. Math.* **30** (1971), 145-152. (G. D. Chakerian) **46** #2551 52A35
- (with Wetzel, John E.) Boxes for curves of constant length. *Israel J. Math.* **12** (1972), 257-265. (E. Heil) **47** #5726 52A40
- An "obvious" but useful theorem about closed curves. *Math. Mag.* **45** (1972), 154-155. (F. Brooks) **45** #7599 52A40 (53A05)
- (with Sauer, Norbert) On the factorization of the complete graph. *J. Combinatorial Theory Ser. B* **14** (1973), 1-6. (G. Chartrand) **47** #1684 05C99
- Von nicht konvexen Polygonen. *Elem. Math.* **30** (1975), 29-30. (A. Florian) **51** #1608 52A10
- (with Erdős, Paul; Sauer, Norbert; Spencer, Joel H.) Factorizing the complete graph into factors with large star number. *J. Combinatorial Theory Ser. B* **18** (1975), 180-183. (A. Rosa) **51** #276 05C99
- Schäfer, Henry M. Cardinalities of bases. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971), pp. 387-388. Academia, Prague, 1972.* (S. H. Hechler) **52** #6638 54A25
- Characterizations of three types of topological properties of maps. *Proceedings of the International Symposium on Topology and its Applications (Budva, 1972), pp. 222-224. Savez Društava Mat. Fiz. i Astronom., Belgrade, 1973.* (Edwin Duda) **49** #1466 54C10
- Schafarewitsch, Igor R. See Šafarevič, I. R.
- Schäfer, D. E. (with Thakur, Ajit K.; Rescigno, Aldo) On the stochastic theory of compartments. I. A single-compartment system. *Bull. Math. Biophys.* **34** (1972), no. 1, 53-63. (Authors' summary) **53** #12636 92A05
- (with Thakur, Ajit K.; Rescigno, Aldo) On the stochastic theory of compartments. II. Multi-compartment systems. *Bull. Math. Biology* **35** (1973), no. 1/2, 263-271. (Authors' summary) **53** #12637 92A05
- Schäfer, Dick B. Confidence bands for the minimum fatigue life. *Technometrics* **16** (1974), 113-123. (J. F. Lawless) **49** #4187 62N05
- A note on a simple test function for the Weibull distribution location parameter. *Scand. Actuar. J.* **1975** no. 1, 1-5. (Lai K. Chan) **51** #14361 62F05
- Schäfer, Eugen (with Brosowski, Bruno; Hoffmann, K.-H.; Weber, H.) Stetigkeitssätze für metrische Projektionen. *Iterationsverfahren, Numerische Mathematik, Approximationstheorie (Tagung Nichtlineare Aufgaben Numer. Math., Oberwolfach, 1968), pp. 11-17. Internat. Schriftenreihe Numer. Math., Vol. 15, Birkhäuser, Basel, 1970.* (J. Blatter) **52** #1120 41A65
- (with Brosowski, Bruno; Hoffmann, K.-H.; Weber, H.) Metrische Projektionen auf lineare Teilräume von $C_0(\mathbb{Q}, H)$. *Iterationsverfahren, Numerische Mathematik, Approximationstheorie (Tagung Nichtlineare Aufgaben Numer. Math., Oberwolfach, 1968), pp. 19-27. Internat. Schriftenreihe Numer. Math., Vol. 15, Birkhäuser, Basel, 1970.* (J. Blatter) **52** #1121 41A65
- Ein Konstruktionsverfahren bei allgemeiner linearer Approximation. *Numer. Math.* **18** (1971/72), 113-126. (H. Werner) **47** #6065 65D15 (41A50)
- Konstruktion von Lösungen konvexer Approximationsaufgaben. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), T240-T241. (F. Deutsch) **50** #14025 41A65
- Eine Fehlerabschätzung für lineare Funktionale auf Sobolev-Räumen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (München, 1973). *Z. Angew. Math. Mech.* **54** (1974), T231-T232. (Ulrich Kosel) **50** #8970 65J05 (46E35)
- (with Hoffmann, K.-H.; Jörn, E.; Weber, H.) Ein Approximationssatz und seine Anwendung in der Kontrolltheorie. *Optimization and optimal control (Proc. Conf., Oberwolfach, 1974), pp. 150-157. Lecture Notes in Math., Vol. 477, Springer, Berlin, 1975.* (Editors) **58** #2554 49C05
- Ein Satz vom Jackson-Typ und seine Anwendung auf die Diskretisierung von Kontrollproblemen. *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math., Univ. Bonn, Bonn, 1976), pp. 364-377. Springer, Berlin, 1976.* (From the introduction) **58** #30673 49D99 (41A15)
- Schäfer, James A. The signature of fiber bundles. *Proc. Amer. Math. Soc.* **33** (1972), 548-550. (G. Hirsch) **48** #3046 55F10 (57A65)
- Homotopy smoothing certain PL-manifolds. *Proc. Amer. Math. Soc.* **50** (1975), 399-402. (C. L. Seebeck, III) **51** #4262 57D10
- Representing homology classes on surfaces. *Canad. Math. Bull.* **19** (1976), no. 3, 373-374. (J. S. Birman) **56** #13236 57D95
- Poincaré complexes and one-relator groups. *J. Pure Appl. Algebra* **10** (1977/78), no. 2, 121-126. (F. E. A. Johnson) **56** #15791 20J05 (57B10)
- Schäfer, K. (with Schütte, G.) On the connection between the Jastrow method and Brueckner theory. *Nuclear Phys.* **A183** (1972), 1-20. (Authors' summary) **52** #2483 81.47

- Schäfer, Lothar Diagrammatic methods and renormalization in the Iwamoto-Yamada cluster expansion. *J. Mathematical Phys.* **14** (1973), 1299-1307. (F. C. Auluck) **48** #7851 81.47
- The renormalized variational theory: its structure, interpretation, and relation to other methods. *Nuclear Phys.* **A216** (1973), 365-385. (Author's summary) **50** #9253 81.49
- On the single-particle potential of renormalized Brueckner theory. *Nuclear Phys.* **A217** (1973), 361-371. (Author's summary) **50** #9249 81.47
- Conformal covariance in the framework of Wilson's renormalization group approach. *J. Phys. A* **9** (1976), no. 3, 377-395. (Derek Capper) **54** #1997 81.47 (85.62)
- Schäfer, Manfred Berry-Esseen-type inequality for a special class of distributions. *Metrika* **22** (1975), 77-83. (S. M. Samuels) **51** #14202 60E05 (62H10)
- Schäfer, R. D. A coordinatization theorem for commutative power-associative algebras. Collection of articles dedicated to the memory of Abraham Adrian Albert. *Scripta Math.* **29**, no. 3-4, 437-442 (1973). (T. S. Ravisankar) **54** #10350 17A10
- Schäfer, R. E. See Reliability and biometry: statistical analysis of lifelength, **49** #1630
- Schäfer, Ray E. A note on the uniform prior distribution for reliability. *IEEE Trans. Reliab.* **R-19** (1970), no. 2, 76-77. (C. Mohan) **53** #6955 62N05
- (with Takenaga, Roy) A sequential probability ratio test for availability. *Technometrics* **14** (1972), 123-135. **45** #2864 62L12
- (with Sheffield, T. S.) Inferences on the parameters of the logistic distribution. (French summary) *Biometrics* **29** (1973), 449-455. (Hubert J. Chen) **51** #14362 62F05
- (with Mann, Nancy R.; Singpurwalla, Nozer D.) ★Methods for statistical analysis of reliability and life data. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, New York-London-Sydney, 1974. ix + 564 pp. (H. L. Harter) **51** #2228 62N05
- Modified estimators for the binomial parameter. *Amer. Statist.* **30** (1976), no. 2, 98-100. (Barry C. Arnold) **56** #6986 62F10
- Schäfer, Thomas Eine Anmerkung zu der Arbeit: "Identifiability and estimability" (Math. Operationsforsch. Statist. **5** (1974), 223-233) von H. Bunke und O. Bunke. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 5, 697-699. (Author's summary) **55** #1648 62J05 (62H15)
- Schäfer, Werner (with Delves, Franz-Jürgen; Schempp, Walter) Convergence of abstract splines. *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math. Univ. Bonn, Bonn, 1976)*, pp. 155-166. Springer, Berlin, 1976. (From the introduction) **58** #29716 41A65
- (with Schempp, Walter) Splineapproximation in intermediären Räumen. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 226-246. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (Authors' introduction) **58** #12103 41A15
- (with Schempp, Walter) Error bounds for bivariate spline interpolation. *Constructive theory of functions of several variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 196-211. *Lecture Notes in Math.*, Vol. 571, Springer, Berlin, 1977. (Franz-Jürgen Delves) **58** #23300 41A63 (41A15, 41A65)
- (with Delves, Franz-Jürgen) The operator of surface interpolation. *J. Approximation Theory* **21** (1977), no. 3, 293-302. (S. D. Riemenschneider) **58** #12082 41A05
- Schäfer, Wolfgang ★Theoretische Grundlagen der Stabilität technischer Systeme. Direkte Methode. Reihe Wissenschaft. Friedr. Vieweg & Sohn, Braunschweig, 1976. 130 pp. ISBN 3-528-06816-7 (Vadim Komkov) **58** #33384 93D05
- Die explizite und vollständige Lösung von zwei speziellen Aufgaben der linearen diskreten Approximation. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 6, 879-888. (H. L. Loeb) **56** #4170 65K05
- Fehlerabschätzungen bei der Spline-Blending Interpolation. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T299-T301. (Dietrich Braess) **56** #3515 41A15 (65D05)
- (with Sebastian, Hans-Jürgen) An extended functional equation as a necessary and sufficient optimality condition for a discrete control problem with incomplete information. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optim.* **9** (1978), no. 1, 95-107. (Stanley R. Pliska) **58** #12623 49C99
- See also Ostrovskii, G. M.; et al., (Not reviewed)
- Schäff, F. (with Kölbig, K. S.) Errata: "Handbook of mathematical functions with formulas, graphs, and mathematical tables". *Math. Comp.* **26** (1972), 1029. (Editors) **47** #2788 65D20
- Schäffer, Juan Jorge Norms and determinants of operators. Proceedings of an International Symposium on Operator Theory (Indiana Univ., Bloomington, Ind., 1970). *Indiana Univ. Math. J.* **20** (1971), no. 10, 943-944. (H. A. Gindler) **53** #10837 (EA 54) 15A60 (47A30)
- On the geometry of spheres in L -spaces. *Israel J. Math.* **10** (1971), 114-120. (A. C. Zaenen) **45** #5720 46B05
- Linear differential equations with delays: Admissibility and conditional exponential stability. II. *J. Differential Equations* **10** (1971), 471-484. (S. Leela) **45** #686 34K20 (47E05)
- Linear differential equations with delays: admissibility and exponential dichotomies. *Ordinary differential equations (Proc. Conf., Math. Res. Center, Nael Res. Lab., Washington, D. C., 1971)*, pp. 277-286. Academic Press, New York, 1972. (S. Leela) **54** #10807 34K15
- (with James, Robert C.) Super-reflexivity and the girth of spheres. *Israel J. Math.* **11** (1972), 398-404. (A. C. Zaenen) **46** #4175 46B10
- (with Nyikos, Peter J.) Flat spaces of continuous functions. *Studia Math.* **42** (1972), 221-229. (T. R. Jenkins) **46** #7875 46E15 (54C40)
- The self-circumferences of polar convex disks. *Arch. Math. (Basel)* **24** (1973), 87-90. (E. J. F. Primrose) **47** #5732 52A50
- On the geometry of spheres in spaces of continuous functions. *J. Analyse Math.* **26** (1973), 337-389. (Zbl 271 #46019) **58** #30101 46E15
- (with Coffman, Charles V.) Linear differential equations with delays. Existence, uniqueness, growth, and compactness under natural Carathéodory conditions. *J. Differential Equations* **16** (1974), 26-44. (Jean Mawhin) **50** #2643 34K05
- (with Coffman, Charles V.) The structure of translation-invariant memories. *J. Differential Equations* **16** (1974), no. 3, 428-459. (Russell C. Thompson) **55** #10799 (E

55 #10800) 34K05 (34G05)

Dichotomies for linear differential equations with delays: the Carathéodory case. *Ann. Mat. Pura Appl.* (4) **104** (1975), 297-311. (Robert M. Bullock) **51** #1340 34K05★Geometry of spheres in normed spaces. Lecture Notes in Pure and Applied Mathematics, No. 20. Marcel Dekker, Inc., New York-Basel, 1976. vi + 228 pp. (T. Figliola) **57** #7120 46B05(with Coffman, Charles V.; Johnson, Barry Edward) Addenda: "The structure translation-invariant memories" (*J. Differential Equations* **16** (1974), 428-459). *Differential Equations* **20** (1976), no. 1, 270-281. (Russell C. Thompson) **55** #1080 34K05 (34G05)(with Noll, Walter) Orders, gauge, and distance in faceless linear cones: examples relevant to continuum mechanics and relativity. *Arch. Rational Mech. Anal.* **66** (1977), no. 4, 345-377. (S. Gudder) **56** #8463 06A65 (73.15, 83.15)Orders, gauge, and distance in faceless linear cones. II. Gauge-preserving bijections are cone-isomorphisms. *Arch. Rational Mech. Anal.* **67** (1978), no. 4, 305-313. (Gudder) **57** #13441 46A40 (46E05)See also TOPO 72—general topology and its applications, **49** #1457 andConference: Differential Equations, **51** #966Schäffer, Karl-August Hans Münzner 70 Jahre. *Allg. Stat. Arch.* **60** (1976), no. 2, 259-270. (Editors) **56** #8303 01A70Schaffner, C. A. (with Krieger, H. A.) The global optimization of incoherent phase signals. *SIAM J. Appl. Math.* **21** (1971), 573-589. (S. Csibi) **46** #8747 94A05Schaffner, Kenneth F. See Historical and philosophical perspectives of science, **50** #6711Schaffranek, Manfred (with Anderson, Oskar; Popp, Werner; Steinmetz, Dieter; Steng, Horst) ★Schätzen und Testen. Eine Einführung in die Wahrscheinlichkeitsrechnung und schliessende Statistik. Heidelberger Taschenbücher, Band 177. Springer-Verlag, Berlin-New York, 1976. xi + 385 pp. (From the author's preface) **57** #10856 62-00Schaffter, T. (with Chihara, Charles S.; Lin, You Feng) A formalization of a nominalistic set theory. *J. Philos. Logic* **4** (1975), no. 2, 155-169. (From the introduction) **58** #21609 02K10Schäffke, F. W. Zu den Orthogonalpolynomen von Althammer. *J. Reine Angew. Math.* **253** (1972), 195-199. (A. Magnus) **45** #2227 33A45Integrationstheorie und quasinnormierte Gruppen. *J. Reine Angew. Math.* **253** (1972), 117-137. (W. Hackenbroch) **46** #5566 28A45Der "Satz von Fubini" in der allgemeinen Integrationstheorie. *J. Reine Angew. Math.* **256** (1972), 58-70. (W. Hackenbroch) **48** #4262 28A45(with Schmidt, Dieter S.) ★Gewöhnliche Differentialgleichungen. Die Grundlagen der Theorie im Reellen und Komplexen. Heidelberger Taschenbücher, Band 10. Springer-Verlag, Berlin-New York, 1973. vii + 163 pp. (Editors) **50** #7623 34-01

(with Wolf, G.) Einfache verallgemeinerte klassische Orthogonalpolynome.

Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* **262/263** (1973), 339-355. (Editors) **57** #3481 33A65(with Schmidt, Dieter) Einfacher Beweis des Hauptsatzes über einfache Singularitäten. *Arch. Math. (Basel)* **25** (1974), 154-159. (D. A. Lutz) **52** #11160 34G05 (34A20)Zum Problem der Irreduzibilität für zweiparametrische Eigenwertaufgaben. *J. Reine Angew. Math.* **283/284** (1976), 182-185. (Walter Eberhard) **53** #5991 34B25

Lokale Integralnormen und verallgemeinerte uneigentliche

Riemann-Stieltjes-Integrale. *J. Reine Angew. Math.* **289** (1977), 118-134. (W. Hackenbroch) **56** #12220 28A45Schaible, Siegfried Quasi-convex optimization in general real linear spaces. (German summary) *Z. Operations Res. Ser. A-B* **16** (1972), no. 5, A205-A213. (R. W. Cottle) **53** #12601 90C30Quasi-concavity and pseudo-concavity of cubic functions. *Math. Programming* **17** (1973), 243-247. (Alexander M. Rubinov) **48** #6339 26A51 (90C25)On factored quadratic functions. (German summary) *Z. Operations Res. Ser. A-B* **17** (1973), A179-A181. (K. Swarup) **54** #4655 90C20Nonlinear fractional programming. *Sechste Oberwolfach-Tagung über Operations Research* (1973), Teil II, pp. 109-115. *Operations Research Verfahren, Band XIX, Hain Meisenheim am Glan*, 1974. (S. P. Aggarwal) **56** #2398 90C30Maximization of quasi-concave quotients and products of finitely many functional. *Cahiers Centre Études Recherche Opér.* **16** (1974), 45-53. (K. Swarup) **52** #5042 90C30 (90C25)Parameter-free convex equivalent and dual programs of fractional programming problems. (German summary) *Z. Operations Res. Ser. A-B* **18** (1974), A187-A196. (M. Mañas) **50** #3952 90C30Fractional programming. I. Duality. *Management Sci.* **22** (1975/76), no. 8, 858-866. (B. Bercanu) **54** #9675 90C30Fractional programming II. On Dinkelbach's algorithm. *Management Sci.* **22** (1975/76), no. 8, 868-873. (B. Bercanu) **54** #9676 90C30Minimization of ratios. *J. Optimization Theory Appl.* **19** (1976), no. 2, 347-352. (Falk) **54** #2205 90C25Duality in fractional programming: a unified approach. *Operations Res.* **24** (1976), no. 3, 452-461. (R. N. Kaul) **53** #15375 90C30Recent results in fractional programming. *VIII. Oberwolfach-Tagung über Operations Research* (1976), pp. 271-272. *Operations Research Verfahren, XXIII, Hain Meisenheim*, 1977. **58** #32973 90C30Second-order characterizations of pseudoconvex quadratic functions. *J. Optimization Theory Appl.* **21** (1977), no. 1, 15-26. (R. W. Cottle) **55** #5818 26A01 (90C20)(with Avriel, Mordecai) Second order characterizations of pseudoconvex functions. *Math. Programming* **14** (1978), no. 2, 170-185. (Jacques A. Ferland) **57** #3334 26A51Schaich, E. (with Streckler, H.) Hans Kellner (1902 bis 1976) zum Gedenken. *Metrika* **26** (1976), no. 4, 197-199. (Editors) **55** #5367 01A70Schainker, Robert B. (with Chidambara, M. R.) Lower order generalized aggregated model and suboptimal control. *IEEE Trans. Automatic Control* **AC-16** (1971), 175-180. (H. Witsenhausen) **45** #1640 93C45

Schäl, Manfred Über Lösungen einer Erneuerungsgleichung. Collection of articles

- licated to Lothar Collatz on his sixtieth birthday. *Abh. Math. Sem. Univ. Hamburg* **36** (71), 89-98. (N. H. Bingham) **48** #12659 60K05
- On continuous dynamic programming with discrete time-parameter. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **21** (1972), 279-288. (M. Stoica) **47** #4106 49C99
- A selection theorem for optimization problems. *Arch. Math. (Basel)* **25** (1974), 3-224. (C. J. Himmelberg) **49** #11357 49E10 (90D35)
- On dynamic programming: compactness of the space of policies. *Stochastic Processes Appl.* **3** (1975), no. 4, 345-364. (Nagata Furukawa) **52** #7558 90C40
- Conditions for optimality in dynamic programming and for the limit of n -stage optimal policies to be optimal. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **32** (1975), no. 3, 179-196. (H. Taylor) **51** #15007 90C40
- On the optimality of (s, S) -policies in dynamic inventory models with finite horizon. *AM J. Appl. Math.* **30** (1976), no. 3, 528-537. (E. V. Bulinskaja) **54** #4609 90B05
- On negative dynamic programming with irreducible Markov chains and the average cost criterion. *Dynamische Optimierung (Tagung, Inst. Angew. Math., Univ. Bonn, Bonn, 76)*, pp. 93-97. *Bonner Math. Schriften*, No. 98, Inst. Angew. Math., Univ. Bonn, Bonn, 77. (H. Taylor) **58** #26027 90C40
- Wijk, J. Pieter M. A formal language approach to two-way communication. *Philips Res. Rep.* **25** (1970), 430-436. (Author's summary) **47** #4701 94A05
- (with Post, Karel A.) On the error probability for a class of binary recursive feedback strategies. *IEEE Trans. Information Theory* **IT-19** (1973), 498-511; correction, *ibid.* **IT-20** (1974), 284. (S. Guisau) **51** #15197 94A15
- (with Tiernan, James C.) An upper bound to the capacity of the band-limited gaussian autoregressive channel with noiseless feedback. *IEEE Trans. Information Theory* **IT-20** (1974), 311-316. (A. D. Wyner) **52** #12957 94A05
- (with Vinck, A. J.) Syndrome decoding of binary rate- $\frac{1}{2}$ convolutional codes. *IEEE Trans. Comm.* **COM-24** (1976), no. 9, 977-985. (E. R. Berlekamp) **55** #12300 94A10
- (with Vinck, A. J.) On a syndrome decoder for binary rate- $\frac{1}{2}$ convolutional codes. *Topics in information theory (Second Colloq., Kesztely, 1975)*, pp. 539-557. *Colloq. Math. Soc. János Bolyai*, Vol. 16, North-Holland, Amsterdam, 1977. (N. J. Patterson) **58** #9779 94A10
- Convolutional-codes for integrated coding. *Communication systems and random process theory (Proc. 2nd NATO Advanced Study Inst., Darlington, 1977)*, pp. 319-334. *NATO Advanced Study Inst. Ser., Ser. E: Appl. Sci.*, No. 25, Sijthoff & Noordhoff, Alphen aan den Rijn, 1978. (Philippe Piret) **58** #9780 94A10
- See also Symposium: Information Theory, **50** #9416 and Key papers in the development of information theory, **52** #5177
- lehn, Wolfgang (with Sebastian, Hans-Jürgen) Ein Reihenfolgeproblem in der Netzplantechnik. *Elektron. Informationsverarbeitung. Kybernetik* **8** (1972), 3-29. (Authors' summary) **51** #12307 90B10
- ler, Kay-Uwe Einige Sätze über Deck-Meide-Untergruppen endlicher auflösbarer Gruppen. *Math. Z.* **130** (1973), 199-206. (H. Bechtell) **48** #6235 20D10
- Über normal eingebettete Untergruppen endlicher auflösbarer Gruppen. *Arch. Math. (Basel)* **25** (1974), 341-343. (E. M. Pal'čik) **50** #10061 20D10
- Über metazyklische p -Untergruppen p -auflösbarer Gruppen. *Arch. Math. (Basel)* **26** (1975), no. 5, 463-469. (Fletcher Gross) **54** #7610 20D10
- Über Schunk-Klassen mit normal eingebetteten Projektoren. *J. Algebra* **36** (1975), no. 3, 435-447. (T. O. Hawkes) **52** #3315 20D10
- Über die maximale Formation in einem gesättigten Homomorph. *J. Algebra* **45** (1977), no. 2, 453-464. (T. O. Hawkes) **56** #471 20D10
- ow, G. (with Yamamura, M.) Investigation of ground state correlations in an extended Lipkin-Meshkov-Glick model. *Nuclear Phys.* **A161** (1971), 93-104. (J. T. Cushing) **45** #1516 8146
- mel, Hans (with Elsässer, Klaus) The application of the spectral method to nonlinear wave propagation. *J. Computational Phys.* **22** (1976), no. 4, 501-516. (David F. Griffiths) **56** #7469 7635
- nk, Roger C. See Computer models of thought and language, **48** #1549
- nel, Stephen H. An extension of Chevalley's theorem to congruences modulo prime powers. *J. Number Theory* **6** (1974), 284-290. (J. Browkin) **50** #2130 10B40
- (with Isbell, John R.) On the fractional parts of n/j , $j = o(n)$. *Proc. Amer. Math. Soc.* **60** (1976), 65-67 (1977). (J. H. B. Kemperman) **55** #2806 10H20 (10K99)
- (with Magill, Kenneth D., Jr.) Schützenberger groups and Chebyshev polynomials. *Semigroup Forum* **13** (1976/77), no. 4, 301-306. (Anne L. Hudson) **55** #8225 20M20
- (with Isbell, John R.; Klun, Miroslav I.) Affine parts of algebraic theories. I. *J. Algebra* **44** (1977), no. 1, 1-8. (Hugo Volger) **55** #2555 02H10 (18C10)
- A combinatorial problem of Shields and Percy. *Proc. Amer. Math. Soc.* **65** (1977), no. 1, 185-186. (T. C. Brown) **55** #12538 05A99
- (with Isbell, John R.; Klun, Miroslav I.) Affine parts of algebraic theories. II. *Canad. J. Math.* **30** (1978), no. 2, 231-237. (Hugo Volger) **57** #12640 18C10
- per, Knut On discontinuous Riesz means of integral order. *J. London Math. Soc.* (2) **3** (1971), 588-596. (A. Peyerimhoff) **47** #9119 40G99
- per, Ralf ★Über Konvergenzfelder von verallgemeinerten Nörlundverfahren. Inaugural-Dissertation zur Erlangung der Doktorwürde der Organisationsseinheit Mathematik und Naturwissenschaften der Gesamthochschule Kassel. *Gesamthochschule Kassel, Kassel*, 1973. iii + 41 pp. (See Zbl **284** #40004) 40G05
- On the behaviour of Laplace-integrals under conformal mappings of the region of convergence. *Publ. Math. Debrecen* **21** (1974), 9-14. (V. P. Mainra) **50** #10701 44A10
- pira, Hermann See Čebyšev, P. L., **52** #13270
- pira, Pierre Équations aux dérivées partielles dans l'espace des hyperfonctions. *Séminaire Pierre Lelong (Analyse) (année 1967-1968)*, pp. 38-45. *Lecture Notes in Math.*, Vol. 71, Springer, Berlin, 1968. (Dieter Lutz) **51** #8815 46F15 (35E99)
- ★Théorie des hyperfonctions. *Lecture Notes in Mathematics*, Vol. 126. Springer-Verlag, Berlin-New York, 1970. xi + 157 pp. (G. Bengel (Zbl **192**, 473)) **58** #30195 46F15 (32A99, 58G05)
- Hyperfonctions et problèmes aux limites elliptiques. *C. R. Acad. Sci. Paris Sér. A-B* **270** (1970), A1162-A1165. (Zbl **191**, 117) **58** #30196 46F15 (35Jxx)
- Construction de solutions élémentaires dans le faisceau C de M. Sato. *Séminaire Goulaouic-Schwartz* (1970-1971), *Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 11, 15 pp. (unpaged errata following Annex, No. 1) Centre de Math., École Polytech., Paris, 1971. (J. S. Joel) **57** #7702 58G15 (35D05)
- Utilisation des hyperfonctions dans les théorèmes de dualité de la géométrie analytique. *Séminaire Pierre Lelong (Analyse) (année 1970)*, pp. 166-182. *Lecture Notes in Math.*, Vol. 205, Springer, Berlin, 1971. (R. Michael Range) **52** #793 32C35
- Théorème d'unicité de Holmgren et opérateurs hyperboliques dans l'espace des hyperfonctions. *An. Acad. Brasil. Ci.* **43** (1971), 39-44. (C. P. Gupta) **46** #9732 46F15 (35D05)
- (with Kantor, Jean-Michel) Hyperfonctions associées aux faisceaux analytiques réels cohérents. *An. Acad. Brasil. Ci.* **43** (1971), 299-306. (J. Mitchell) **47** #823 46F15 (32C35, 46M15)
- Hyperfonctions et problèmes aux limites elliptiques. *Bull. Soc. Math. France* **99** (1971), 113-141. (Author's introduction) **58** #18608 58G05 (35J99)
- (with Bony, Jean-Michel) Sur le prolongement des solutions holomorphes d'équations aux dérivées partielles définies dans des ouverts convexes. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A360-A363. (J. Mitchell) **45** #5596a 35Q99 (32D99)
- ★Теория гиперфункций. (Russian) [Theory of hyperfunctions] Translated from the French by M. A. Šubin. Edited by V. P. Palamodov. Library of the Journal "Matematika". Izdat. "Mir", Moscow, 1972. 142 pp. (Editors) **58** #30194 46F15
- (with Bony, Jean-Michel) Solutions analytiques et hyperfonctions du problème de Cauchy pour les opérateurs hyperboliques non stricts. *Séminaire Goulaouic-Schwartz 1971-1972: Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 12, 7 pp. *École Polytech., Centre de Math., Paris*, 1972. (Ju. V. Egorov) **54** #741 35L25 (46F15)
- (with Bony, Jean-Michel) Existence et prolongement des solutions holomorphes des équations aux dérivées partielles. *Séminaire Goulaouic-Schwartz 1971-1972: Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 11, 10 pp. *École Polytech., Centre de Math., Paris*, 1972. (J. Kajiwara) **53** #979 35A20 (32D15)
- (with Bony, Jean-Michel) Existence et prolongement des solutions analytiques des systèmes hyperboliques non stricts. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A86-A89. (J. Mitchell) **45** #5596b 35Q99 (32D99)
- (with Bony, Jean-Michel) Problème de Cauchy, existence et prolongement pour les hyperfonctions solutions des équations hyperboliques non strictes. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A188-A191. (J. Mitchell) **45** #7241 35D99 (32D99, 46F15)
- (with Bony, Jean-Michel) Existence et prolongement des solutions holomorphes des équations aux dérivées partielles. *Invent. Math.* **17** (1972), 95-105. (Hikosaburo Komatsu) **49** #3305 35G05 (35A20, 58G10)
- (with Bony, Jean-Michel) Solutions analytiques et hyperfonctions du problème de Cauchy pour les opérateurs hyperboliques non stricts. *Colloque International CNRS sur les Équations aux Dérivées Partielles Linéaires (Univ. Paris-Sud, Orsay, 1972)*, pp. 108-116. *Astérisque*, 2 et 3, Soc. Math. France, Paris, 1973. (Editors) **58** #17558 35L99 (46F15)
- (with Bony, Jean-Michel) Existence et prolongement des solutions holomorphes des équations aux dérivées partielles. *Colloque International CNRS sur les Équations aux Dérivées Partielles Linéaires (Univ. Paris-Sud, Orsay, 1972)*, pp. 117-127. *Astérisque*, 2 et 3, Soc. Math. France, Paris, 1973. (Monty Strauss) **52** #11298 35G15
- (with Bony, Jean-Michel) Solutions hyperfonctions du problème de Cauchy. *Hyperfonctions and pseudo-differential equations (Proc. Conf., Katata, 1971; dedicated to the memory of André Martineau)*, pp. 82-98. *Lecture Notes in Math.*, Vol. 287, Springer, Berlin, 1973. (J. Mitchell) **53** #1070 35S10 (35A05, 46F15)
- (with Bony, Jean-Michel) Prolongement et existence des solutions des systèmes hyperboliques non stricts à coefficients analytiques. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971)*, pp. 85-95. *Amer. Math. Soc., Providence, R.I.*, 1973. (Authors' review (Zbl **262** #35039)) **58** #29315 35L30
- Le faisceau C de M. Sato. *Fonctions de plusieurs variables complexes (Sém. François Norquet, 1970-1973; à la mémoire d'André Martineau)*, pp. 196-203. *Lecture Notes in Math.*, Vol. 409, Springer, Berlin, 1974. (J. S. Joel) **57** #7703 58G15 (35D05)
- (with Bony, Jean-Michel) Propagation des singularités analytiques pour les solutions des équations aux dérivées partielles. *Séminaire Goulaouic-Schwartz (1973-1974), Équations aux dérivées partielles et analyse fonctionnelle*, Exp. Nos. 21 et 22, 13 pp. *Centre de Math., École Polytech., Paris*, 1974. (Ju. V. Egorov) **58** #13222 58G15 (35S05)
- (with Bony, Jean-Michel) Propagation des singularités analytiques des solutions des équations aux dérivées partielles. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 231-233. (Ju. V. Egorov) **51** #6890 58G15 (35N10)
- Errata: "Propagation au bord et réflexion des singularités analytiques des solutions des équations aux dérivées partielles" (Séminaire Goulaouic-Schwartz 1975/1976: Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 6, Centre Math., École Polytech., Palaiseau, 1976). *Séminaire Goulaouic-Schwartz 1975/1976: Équations aux dérivées partielles et analyse fonctionnelle*, 1 p. *Centre Math., École Polytech., Palaiseau*, 1976. (Editors) **58** #2915b 58G15 (35N10)
- Propagation au bord et réflexion des singularités analytiques des solutions des équations aux dérivées partielles. *Séminaire Goulaouic-Schwartz 1975/1976: Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 6, 13 pp. *Centre Math., École Polytech., Palaiseau*, 1976. (Editors) **58** #2915a (E **58** #2915b) 58G15 (35N10)
- (with Pallu de la Barrière, Philippe) Application de la théorie des microfonctions holomorphes au problème de Cauchy à données singulières. *Séminaire Goulaouic-Schwartz 1975/1976: Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 23, 15 pp. *Centre Math., École Polytech., Palaiseau*, 1976. (J. Kajiwara) **58** #1560 35G10 (32C99)
- (with Bony, Jean-Michel) Propagation des singularités analytiques pour les solutions des équations aux dérivées partielles. (English summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 1, x, 81-140. (R. D. Moyer) **54** #1314 58G15 (35A30)
- Propagation au bord et réflexion des singularités analytiques des solutions des équations aux dérivées partielles. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 5, Aii, A251-A253. (J. S. Joel) **57** #7704 58G15 (35S15)

- Propagation at the boundary and reflection of analytic singularities of solutions of linear partial differential equations. I. Proceedings of the Oji Seminar on Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., Kyoto, 1976). *Publ. Res. Inst. Math. Sci.* 12 (1976/77), supplement, 441-453. (J. Kajiwara) 58 #13217 58G05 (35A20, 58G15)
- Propagation au bord et réflexion des singularités analytiques des solutions des équations aux dérivées partielles. II. *Séminaire Goulaouic-Schwartz* 1976/1977: *Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 9, 10 pp. *Centre Math., École Polytech., Palaiseau*, 1977. (J. S. Joel) 58 #2915c 58G15 (35N10)
- (with Kashiwara, Masaki) Problème de Cauchy pour les systèmes d'équations différentielles et microdifférentielles dans le domaine complexe. *Séminaire Goulaouic-Schwartz* (1976/1977) *Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 20, 12 pp. *Centre Math., École Polytech., Palaiseau*, 1977. (Akira Asada) 57 #14074 58G15 (35S10)
- (with Kashiwara, Masaki) Systèmes micro-hyperboliques. *Séminaire Goulaouic-Schwartz* (1976/1977), *Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 24, 16 pp. *Centre Math., École Polytech., Palaiseau*, 1977. (Editors) 58 #31300 58G15
- Propagation au bord et réflexion des singularités analytiques des solutions des équations aux dérivées partielles. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 6, A381-A383. (Author's summary) 55 #4292 58G15
- Schapiro, Sherman M.** (with Sethna, P. R.) An estimate for the small parameter in the asymptotic analysis of non-linear systems by the method of averaging. (French and German summaries) *Internat. J. Non-Linear Mech.* 12 (1977), no. 3, 127-140. (W. S. Loud) 57 #16838 34C30
- Schaposnik, F.** (with de Vega, Héctor) Multiplicative renormalization of composite operators. *J. Mathematical Phys.* 17 (1976), no. 7, 1248-1251. (M. Seetharaman) 53 #10017 81.47
- (with Cremmer, E.; Scherk, J.) Uniqueness of the 't Hooft-Polyakov magnetic monopole solution. *Phys. Lett. B* 65 (1976), no. 1, 78-80. (Authors' summary) 56 #10527 81.35
- Schappacher, Norbert** Zur Existenz einfacher abelscher Varietäten mit komplexer Multiplikation. *J. Reine Angew. Math.* 292 (1977), 186-190. (Hideo Imai) 58 #5691 14K15 (14K22)
- Schappacher, Wilhelm** Homomorphe lokal-gleichstetige Halbgruppen. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 537-540. (Author's summary) 55 #6238 47D05
- ★ Ordnungserhaltende nichtlineare Halbgruppen. Berichte der Mathematisch-Statistischen Sektion, Forschungszentrum Graz, No. 33 (1975). *Mathematisch-Statistische Sektion, Forschungszentrum Graz, Graz*, 1975. 20 pp. (K. Gustafson) 57 #1195 47D05
- Scattering theory for the linear Boltzmann equation. *Ber. Math.-Statist. Sekt. Forschungszentrum Graz* No. 69 (1976), 14 pp. (Paul F. Zweifel) 56 #17646 82.45
- Holomorphic nonlinear semigroups. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* 11(31) (1976), no. 1, 81-89. (Simeon Reich) 53 #11437 47H05
- Produktintegrale und Halbgruppen. *Iterationsprobleme* (Graz, 1977), *Ber. No. 90*, 13 pp. *Math.-Statist. Sektion, Forschungszentrum Graz, Graz*, 1978. (Hans Kaper) 58 #18016 47H15 (34K05)
- Schappel, Renate** Differentiability on the boundary of the solutions of linear elliptic boundary value problems. *Proc. Roy. Soc. Edinburgh Sect. A* 73 (1975), 235-249. (V.-V. Olariu) 52 #6162 35D10
- Schappelle, Robert H.** The inverse of the confluent Vandermonde matrix. *IEEE Trans. Automatic Control* AC-17 (1972), no. 5, 724-725. (Author's summary) 55 #14299 93B25
- Schaps, Mary** Déformations non singulières de courbes gauches. *Singularités à Cargèse* (*Rencontre Singularités Géom. Anal., Inst. Études Sci., Cargèse*, 1972), pp. 121-128. *Asiérisque*, Nos. 7 et 8, *Soc. Math. France, Paris*, 1973. (Henry C. Pinkham) 50 #9862 14B05 (14D15)
- (with Dietze, Anke) Determining subgroups of a given finite index in a finitely presented group. *Canad. J. Math.* 26 (1974), 769-782. (E. F. Robertson) 53 #10942 20F05 (68A10)
- Birational morphisms factorizable by two monoidal transformations. *Math. Ann.* 222 (1976), no. 1, 23-28. (Tomás Sánchez Giralda) 54 #7467 14E15
- Nonsingular deformations of a determinantal scheme. *Pacific J. Math.* 65 (1976), no. 1, 209-215. (J.-E. Bertin) 54 #10260 14D15
- (with Mandelbaum, Richard) Deformations of generalized complete intersections. *Proc. Amer. Math. Soc.* 61 (1976), no. 1, 7-10 (1977). (Henry C. Pinkham) 55 #2897 14D15 (14B05)
- (with Mandelbaum, Richard) Smoothing perfect varieties. *Several complex variables* (*Proc. Sympos. Pure Math., Vol. XXX, Part 1, Williams Coll., Williamstown, Mass.*, 1975), pp. 51-56. *Amer. Math. Soc., Providence, R.I.*, 1977. (Bernard Teissier) 58 #11522 32G05 (32C40)
- Deformations of Cohen-Macaulay schemes of codimension 2 and non-singular deformations of space curves. *Amer. J. Math.* 99 (1977), no. 4, 669-685. (J. C. Fogarty) 58 #10918 14H20 (14M10)
- (with Mandelbaum, Richard) On the smoothing and deformation of perfect varieties. *Math. Ann.* 226 (1977), no. 1, 67-80. (Jonathan M. Wahl) 55 #2896 14D15 (14B05)
- Scharf, Alois** ★ Faserungen von Graphenmannigfaltigkeiten. Inaugural-Dissertation zur Erlangung des Doktorgrades der Hohen Mathematisch-Naturwissenschaftlichen Fakultät der Rheinischen Friedrich-Wilhelms-Universität, Bonn, 1973. *Bonner Mathematische Schriften*, No. 73. *Mathematisches Institut, Universität Bonn, Bonn*, 1974. viii + 60 pp. (Alan H. Durfee) 54 #13920 57A10 (32C40, 14B05, 57E15, 57C45)
- Zur Faserung von Graphenmannigfaltigkeiten. *Math. Ann.* 215 (1975), 35-45. (Alan H. Durfee) 51 #14087 57D15 (32C40)
- Scharf, G.** (with Weiss, R.) The inverse problem of potential scattering according to the Klein-Gordon equation. *Helv. Phys. Acta* 44 (1971), 910-929. (P. Achuthan) 50 #12080 81.47
- (with Weiss, R.) Photon correlations in the Dicke maser model. *Helv. Phys. Acta* 47 (1974), 505-516. (T. Sasakawa) 51 #12173 81.33
- Dynamics of the Dicke laser model in the classical region. I. *Helv. Phys. Acta* (1975), no. 3, 329-342. (G. R. Alcock) 56 #4503a 81.35
- Dynamics of the Dicke laser model. II. An example of a semi-classical theory in presence of focal points. *Helv. Phys. Acta* 50 (1977), no. 2, 253-266. (G. R. Alcock) 56 #4503b 81.35
- (with Klaus, M.) The regular external field problem in quantum electrodynamics. *Helv. Phys. Acta* 50 (1977), no. 6, 779-802. (A. Rouet) 58 #8935 81.47
- (with Klaus, M.) Vacuum polarization in Fock space. *Helv. Phys. Acta* 50 (1977), no. 6, 803-814. (S. Malin) 58 #4072 81.47
- Scharf, Joachim-Hermann** Approximation nichtelementarer Funktionen durch Polynome aus Exponentialtermen, dargestellt am Beispiel des Gauss'schen Fehlerintegrals. (English summary) *Biometrische Z.* 14 (1972), no. 4, 233-260. (Author's summary) 55 #46165D99 (65G05)
- Scharf, Louis L.** (with Lytle, Dean W.) Stability of parameter estimates for a Gaussian process. *IEEE Trans. Aerospace and Electron. Systems* AES-9 (1973), 847-851. (Capon) 48 #10628 94A05
- (with Martin, R. Douglas) Simulation of processes with nonseparable covariances. *IEEE Trans. Automatic Control* AC-18 (1973), no. 5, 546-547. (Authors' summary) 56 #6840 60G35
- (with Alspach, Daniel L.; Abiri, Amnon) A Bayesian solution to the problem of state estimation in an unknown noise environment. *Internat. J. Control* (1) 19 (1974), 265-287. (D. V. Lindley) 49 #4626 93E10
- (with Moose, Paul H.) Information measures and performance bounds for array processors. *IEEE Trans. Information Theory* IT-22 (1976), no. 1, 11-21. (From the authors' introduction) 54 #2306 93E10
- (with Alspach, Daniel L.) Non-linear state estimation in observation noise with unknown covariance. *Internat. J. Control* 27 (1978), no. 2, 293-304. (Authors' summary) 57 #5347 93E10
- Scharf, V.** Optimuminvariante Bereiche der Zielfunktionskoeffizienten linearer Programme. *Z. Angew. Math. Mech.* 54 (1974), 58-62. (J. Abraham) 52 #7530 90C05
- Scharf, Werner** K-matrix-class estimators and the full-information maximum-likelihood estimator as a special case. *J. Econometrics* 4 (1976), no. 1, 41-50. (A. L. Nagarajan) 55 #6762 62P20
- Scharipow, D. S.** See Šaripov, D. S.
- Schark, Rainer** (with Wills, Jörg M.) Asymptotisches Verhalten einer diophantischen Approximations-Funktion. *Acta Arith.* 22 (1973), 129-136. (R. Wallisser) 47 #3322 10F10
- (with Wills, Jörg M.) Translationen, Bewegungen und Gitterpunktzahl konvexer Bereiche. *Geometriae Dedicata* 3 (1974), 251-256. (H. Groemer) 50 #4498 10E05
- Eine diophantische Approximations-Funktion. *Monatsh. Math.* 78 (1974), 131-140. (R. J. Hans-Gill) 51 #3068 10F10
- Scharlau, Rudolf** (with Quebbemann, Heinz-Georg; Scharlau, Winfried; Schulte, M.) Quadratische Formen in additiven Kategorien. Colloque sur les Formes Quadratiques (Montpellier, 1975). *Bull. Soc. Math. France Suppl. Mem. No. 48* (1976), 93-101. (Werner Bani) 57 #12566 15A63 (18D10, 18D35)
- Paare alternierender Formen. *Math. Z.* 147 (1976), no. 1, 13-19. (Maurice Flaman) 54 #7505 15A63
- Scharlau, Winfried** Induction theorems and the structure of the Witt group. *Invent. Math.* 11 (1970), 37-44. (J. S. Hsia) 45 #1834 10C05 (16A54, 20C30)
- (with Hirzebruch, F.) ★ Einführung in die Funktionalanalysis. B. I.-Hochschultaschenbücher, No. 296*. *Bibliographisches Institut, Mannheim-Vienna-Zurich*, 1971. 178 pp. (B. Crstici (Zbl 219 #46001)) 57 #3803 46-01
- (with Knebusch, Manfred) Über das Verhalten der Witt-Gruppe bei galoischen Körpererweiterungen. *Math. Ann.* 193 (1971), 189-196. (G. Maxwell) 45 #1955 15A63 (10C05, 16A74)
- (with Knebusch, Manfred) Quadratische Formen und quadratische Reziprozitätsgesetze über algebraischen Zahlkörpern. *Math. Z.* 121 (1971), 346-368. (L. Hormix) 50 #4486 10C05 (12A65, 15A63)
- Quadratic reciprocity laws. *J. Number Theory* 4 (1972), 78-97. (Manfred Knebusch) 45 #1835 10C05 (12A90)
- (with Ischebeck, Friedrich) Hermitesche und orthogonale Operatoren über kommutativen Ringen. *Math. Ann.* 200 (1973), 327-334. (B. Stenström) 48 #11091 13C10 (15A63)
- Eine Invariante endlicher Gruppen. *Math. Z.* 130 (1973), 291-296. (W. E. Jenner) 48 #399 20C05 (12A50)
- Automorphisms and involutions of incidence algebras. *Proceedings of the International Conference on Representations of Algebras* (Carleton Univ., Ottawa, Ont., 1974), Paper No. 24, 11 pp. *Carleton Math. Lecture Notes*, No. 9, *Carleton Univ., Ottawa, Ont.*, 1974. (Hugo S. Sun) 51 #614 16A72 (16A28)
- (with Bak, Anthony) Grothendieck and Witt groups of orders and finite groups. *Invent. Math.* 23 (1974), 207-240. (A. Dress) 49 #5093 16A54 (10C05)
- Involutions on orders. I. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. II. *J. Reine Angew. Math.* 268/269 (1974), 190-202. (Ju. A. Drozd) 50 #4647 16A18 (16A28)
- On subspaces of inner product spaces. *Proceedings of the International Congress of Mathematicians* (Vancouver, B. C., 1974), Vol. 1, pp. 331-335. *Canad. Math. Congress Montreal, Que.*, 1975. (Ju. A. Drozd) 55 #381 15A63 (06A10)
- Zur Existenz von Involutionsen auf einfachen Algebren. *Math. Z.* 145 (1975), no. 29-32. (Carl Riehm) 52 #13925 16A40
- (with Quebbemann, Heinz-Georg; Scharlau, Rudolf; Schulte, M.) Quadratische Formen in additiven Kategorien. Colloque sur les Formes Quadratiques (Montpellier, 1975). *Bull. Soc. Math. France Suppl. Mem. No. 48* (1976), 93-101. (Werner Bani) 57 #12566 15A63 (18D10, 18D35)
- A historical introduction to the theory of integral quadratic forms. *Conference on Quadratic Forms—1976* (*Proc. Conf., Queen's Univ., Kingston, Ont.*, 1976), pp. 284-333. *Queen's Papers in Pure and Appl. Math.*, No. 46. *Queen's Univ., Kingston, Ont.*, 1977. (L. A. Connors) 58 #5515 10C05
- See also Hirzebruch, F.; et al., 49 #6250 and Representations of algebras,

- #3207
P. On the relationship between different approximating methods. (German and Asian summaries) *Acta Tech. Acad. Sci. Hungar.* **82** (1976), no. 1-2, 53-59. (Author's summary) **56** #9977 65J05
- Thomas W.** Axiomatization of fragments of S5. *Notre Dame J. Formal Logic* **16** (5), 45-70. (David Makinson) **50** #12666 02C10
- nann, Ernst T.** (with Wagoner, Robert V.) Electromagnetic fields produced by inviscid rotating disks. *Astrophys. J.* **171** (1972), 107-125. (H. Treder) **47** #4597 5
- nann, Martin G.** (with Siebenmann, Laurence C.) The Hauptvermutung for C^∞ isomorphisms. II. A proof valid for open 4-manifolds. *Compositio Math.* **29** (1974), -264. (B. J. Sanderson) **51** #11533 57D10 (57C25, 57D05)
- (with Siebenmann, Laurence C.) The Hauptvermutung for smooth singular isomorphisms. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973)*, pp. 91. *Univ. Tokyo Press, Tokyo*, 1975. (B. J. Sanderson) **51** #9075 57D10 (57C25, 505)
- (with Kirby, Robion C.) A curious category which equals TOP. *Manifolds—Tokyo 3 (Proc. Internat. Conf., Tokyo, 1973)*, 93-97. *Univ. Tokyo Press, Tokyo*, 1975. (B. J. Sanderson) **51** #9072 57C25 (57A99)
- Equivalence of 5-dimensional s -cobordisms. *Proc. Amer. Math. Soc.* **53** (1975), no. 08-510. (R. E. Stong) **52** #1735 57D80
- Constructing strange manifolds with the dodecahedral space. *Duke Math. J.* **43** (76), no. 1, 33-40. (Roger Fenn) **53** #6574 57C25 (57C15)
- Transversality theories at dimension four. *Invent. Math.* **33** (1976), no. 1, 1-14. (R. Kirby) **53** #14502 57A55 (57A15)
- Simplicial triangulation of noncombinatorial manifolds of dimension less than 9. *ms. Amer. Math. Soc.* **219** (1976), 269-287. (R. C. Kirby) **54** #3710 57D05 C15)
- Thoroughly knotted homology spheres. *Houston J. Math.* **3** (1977), no. 2, 271-283. (Jean Burlet) **56** #1322 57C35 (57B99)
- Isotopy and cobordism of homology spheres in spheres. *J. London Math. Soc.* (2) **16** (77), no. 3, 559-567. (Kenneth C. Millett) **57** #4180 57A35 (57C35)
- The fundamental group of fibered knot cobordisms. *Math. Ann.* **225** (1977), no. 3, 1-251. (Wilbur Whitten) **55** #1363 57C45
- Non-PL imbeddings of 3-manifolds. *Amer. J. Math.* **100** (1978), no. 3, 539-545. (Frank Quinn) **58** #24277 57A35 (57C15)
- na, Bhu Dev** See **Sharma, Bhu Dev**
- f, Dieter W.** (with Argyris, John H.) Berechnung vorgespannter Netzwerke. Die Lösung eines nicht-linearen elastischen Problems. *Bayer. Akad. Wiss. Math.-Natur. Kl. B.* **1970, part II**, 25-58 (1971). (Z. Kączkowski) **46** #6695 73G5
- (with Argyris, John H.) Matrix displacement analysis of shells and plates including inverse shear strain effects. *Comput. Methods Appl. Mech. Engrg.* **1** (1972), 81-139. (Z. Kączkowski) **51** #12095 73G5
- berger, Rolf** (with Arnold, Ludwig) On statistical models for heavy nuclei. (Italian and Russian summaries) *Nuovo Cimento A* (11) **4** (1971), 99-110. (L. S. Schulman) **5** #3030 82.47
- On the work load process in a general preemptive resume priority queue. *J. Appl. Probability* **9** (1972), 588-603. (P. R. Milch) **51** #2019 60K25
- ★ Warteschlangen. *Springer-Verlag, Vienna-New York*, 1973. xii + 214 pp. (Jos. H. de Smit) **51** #2020 60K25
- A broad analysis of single server priority queues with two independent input streams, one of them Poisson. *Advances in Appl. Probability* **6** (1974), 666-688. (Douglas Kennedy) **50** #14992 60K25
- A note on optimal service selection in a single server queue. *Management Sci.* **21** (1974/75), no. 11, 1326-1331. (Thomas L. Magnanti) **55** #1535 60K25
- Basic analysis of a head-of-the-line priority queue with renewal type input. *J. Appl. Probability* **12** (1975), 346-352. (Brian Conolly) **51** #9259 60K25
- (with Hordijk, Arie; Iglehart, Donald L.) Discrete time methods for simulating continuous time Markov chains. *Advances in Appl. Probability* **8** (1976), no. 4, 772-788. (F. Neuts) **54** #11690 62M05 (60J10, 60K15, 65C05)
- On the equilibrium distribution of a class of finite-state generalized semi-Markov processes. *Math. Oper. Res.* **1** (1976), no. 4, 395-406. (A. A. Juskevici) **56** #6911 60K15
- Insensitivity of steady-state distributions of generalized semi-Markov processes. I. *Ann. Probability* **5** (1977), no. 1, 87-99. (E. Arjas) **55** #9318 60K15 (60K20)
- Insensitivity of steady-state distributions of generalized semi-Markov processes. II. *Ann. Probability* **6** (1978), no. 1, 85-93. (E. Arjas) **57** #14175 60K15
- olov, A. S.** See **Satalov, A. S.**
- e, Peter** Über lineare Differentialgleichungen im Mikusiński'schen Operatorenkörper. *Studia Math.* **29** (1967/68), 109-115. (See Zbl **167**, 420) 44A40
- Über eine Erweiterung des Cauchyschen Integralsatzes auf nichtrektifizierbare Kurven. (Russian, English and French summaries) *Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe* **16** (1967), no. 6, 783-786. (Y. Komatu) **53** #3270 30A02
- Über indexsequentielle Tabellensuchen. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **9** (1973), 259-263. (M. Tetrušvili) **5** #3677 68A50
- Zur Verteilung der Mantisie in der Gleitkommadarstellung einer Zufallsgröße. (English and Russian summaries) *Z. Angew. Math. Mech.* **53** (1973), 553-565. (O. P. Stackelberg) **50** #11396 60F05 (10K99)
- Die H_∞ -Limitierbarkeit einer Klasse von Zahlenfolgen. *Math. Nachr.* **60** (1974), 31-190. (O. P. Stackelberg) **50** #11397 60F05 (10K99, 40G10)
- Ein Kriterium für die H_∞ -Limitierbarkeit. *Math. Nachr.* **64** (1974), 63-70. (A. Meir) **51** #1199 40G99
- Zur Anwendung von Limitierungsverfahren auf das Gesetz der großen Zahlen. *Math. Nachr.* **65** (1975), 179-182. (V. K. Rohatgi) **51** #9167a 60F05
- Zum Gesetz der großen Zahlen für allgemeinere Mittel. *Math. Nachr.* **65** (1975), 183-186. (V. K. Rohatgi) **51** #9167b 60F05
- Zur Limitierung beschränkter Zahlenfolgen durch iterierte bewichtete Mittel. *Wiss. Techn. Hochsch. Karl-Marx-Stadt* **17** (1975), no. 2, 237-240. (W. Beekmann) **52** #3790 40G05
- Zum Gesetz der grossen Zahlen bei zufälliger Summandenzahl. *Math. Nachr.* **71** (1976), 75-82. (J. Sethuraman) **55** #4350 60F10
- Zur Limitierung von Summen unabhängiger Zufallsgrößen. *Math. Nachr.* **71** (1976), 83-113. (Werner Wolf) **54** #1346 60F05
- Schatteles, Tiberio** See **Contributions to the von Neumann growth model**, **48** #1669 and **Recherches sur la philosophie des sciences**, **52** #7764
- Schatten, Robert** Remark on the approximation problem. *Ann. Mat. Pura Appl.* (4) **98** (1974), 235-238. (R. C. James) **50** #5431 46B15
- Schattschneider, Doris J.** A multiplicative metric. *Math. Mag.* **49** (1976), no. 4, 203-205. (J. E. Brothens) **54** #8581 54E35
- The plane symmetry groups: their recognition and notation. *Amer. Math. Monthly* **85** (1978), no. 6, 439-450. (H. W. Guggenheimer) **57** #17476 50A15 (20H15)
- Tiling the plane with congruent pentagons. *Math. Mag.* **51** (1978), no. 1, 29-44. (A. Florian) **58** #12735 52A45 (50B30)
- (with Satake, Ichirō, **47** #5135 and **Johnsonbaugh, Richard**, **54** #11289
- Schatz, Alfred H.** (with Bramble, James H.) Least squares methods for 2mth order elliptic boundary-value problems. *Math. Comp.* **25** (1971), 1-32. (P. G. Ciarlet) **45** #4657 65N99
- (with Nitsche, Joachim A.) On local approximation properties of L_2 -projection on spline-subspaces. Collection of articles dedicated to Wolfgang Haack on the occasion of his 70th birthday. *Applicable Anal.* **2** (1972), 161-168. (Walter Schempp) **53** #1127 41A65
- (with Bramble, James H.) Higher order local accuracy by averaging in the finite element method. *Mathematical aspects of finite elements in partial differential equations (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1974)*, pp. 1-14. *Publication No. 33, Math. Res. Center, Univ. of Wisconsin-Madison, Academic Press, New York*, 1974. (From the introduction) **58** #31903 65N30
- (with Nitsche, Joachim A.) Interior estimates for Ritz-Galerkin methods. *Math. Comp.* **28** (1974), 937-958. (J. W. McLaurin) **51** #9525 65N30 (35Jxx)
- An observation concerning Ritz-Galerkin methods with indefinite bilinear forms. *Math. Comp.* **28** (1974), 959-962. (J. W. McLaurin) **51** #9526 65N30 (35Jxx)
- (with Bramble, James H.; Nitsche, Joachim A.) Maximum-norm interior estimates for Ritz-Galerkin methods. *Math. Comput.* **29** (1975), 677-688. (Stephen Hilbert) **53** #1975 65N15
- (with Wahlbin, Lars B.) Maximum norm error estimates in the finite element method for Poisson equation on plane domains with corners. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 541-547. *Academic Press, New York*, 1976. (Robin McLeod) **54** #14402 65N30
- (with Bramble, James H.) Estimates for spline projections. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge Anal. Nomér.* **10** (1976), no. R-2, 5-37. (B. I. Kvasov) **55** #9563 65N30 (41A15)
- (with Bramble, James H.) Higher order local accuracy by averaging in the finite element method. *Math. Comp.* **31** (1977), no. 137, 94-111. (Georges A. Lebaud) **55** #4739 65N30
- (with Wahlbin, Lars B.) Interior maximum norm estimates for finite element methods. *Math. Comp.* **31** (1977), no. 138, 414-442. (Pierre Hillion) **55** #4748 65N30
- (with Bramble, James H.; Thomée, Vidar; Wahlbin, Lars B.) Some convergence estimates for semidiscrete Galerkin type approximations for parabolic equations. *SIAM J. Numer. Anal.* **14** (1977), no. 2, 218-241. (G. C. Barozzi) **56** #7231 65M10
- (with Wahlbin, Lars B.) Maximum norm estimates in the finite element method on plane polygonal domains. I. *Math. Comp.* **32** (1978), no. 141, 73-109. (P. G. Ciarlet) **58** #19233a 65N30
- (with Wahlbin, Lars B.) Maximum norm estimates in the finite element method on plane polygonal domains. II. Refinements. *Math. Comp.* **33** (1979), no. 146, 465-492. (P. G. Ciarlet) **58** #19233b 65N30
- Schatz, George C.** (with Kuppermann, Aron; Baer, M.) Quantum mechanical reactive scattering for planar atom plus diatom systems. I. Theory. *J. Chem. Phys.* **65** (1976), no. 11, 4596-4623. (Authors' summary) **56** #10542 81J35
- (with Kuppermann, Aron) Quantum mechanical reactive scattering for three-dimensional atom plus diatom systems. I. Theory. *J. Chem. Phys.* **65** (1976), no. 11, 4642-4667. (Authors' summary) **56** #10543 81J35
- Schatz, J. A.** (with Entringer, Roger C.; Jackson, Douglas E.) On nonrepetitive sequences. *J. Combinatorial Theory Ser. A* **16** (1974), 159-164. (E. C. Milner) **48** #10860 05B30
- Schatzki, Thomas F.** Hyperelliptic decision surfaces from the method of generalized portraits. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-3** (1973), 428-433. (Yoshinori Uesaka) **52** #9719 68A45
- Schatzman, Evry** See **Cargèse lectures in physics**, **55** #5132
- Schatzman, Michelle** Problèmes aux limites non linéaires semi-coercifs. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A1305-A1308. (R. A. Tapia) **46** #9824 47H15
- Problèmes aux limites non linéaires, non coercifs. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 641-686 (1974). (M. Schechter) **52** #1445 47H15 (35G30)
- Sur une classe de problèmes hyperboliques non linéaires. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A671-A674. (Bruce Calvert) **48** #4864 47H15 (35L60)
- Le système différentiel $(d^2u/dt^2) + \partial\phi(u) \ni f$ avec conditions initiales. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 11, A603-A606. (Author's summary) **55** #3578 35R99 (47H15)
- Schatzmann, Michael** The integral equations for round buoyant jets in stratified flows. (German summary) *Z. Angew. Math. Phys.* **29** (1978), no. 4, 608-630. (S. I. Pai) **58** #25367 76.45
- Schatzoff, Martin** See **Papers: System performance evaluation**, **50** #15416 and **Perspectives in biometrics**, **58** #31689
- Schaub, D.** Multiplicité et dépendance intégrale sur un idéal. *Deuxième Colloque d'Algèbre Commutative (Rennes, 1976)*, *Exp. No. 1*, 20 pp. *Univ. Rennes, Rennes*, 1976. (Richard Draper) **56** #15633 13H15 (14B99)
- Propriété topologique du gradué associé d'un anneau (S_r) . *Comm. Algebra* **5** (1977), no. 11, 1223-1239. (J. H. de Boer (Zbl **369** #13015)) **58** #22055 13J99 (13H10, 14B10)
- Schaubert, Daniel H.** (with Mittra, Raj) A spectral domain method for remotely probing stratified media. *IEEE Trans. Antennas and Propagation* **AP-25** (1977), no. 2, 261-265.

- (Norman Bleistein) 55 #13959 78.46
- Schäuble, M.** (with Seidler, Karl-Heinrich) Lagrange-Theorie, Lagrange-Methoden und Verallgemeinerungen. *Wiss. Z. Techn. Hochsch. Ilmenau* 18 (1972), no. 3, 69-101. (Russell D. Rupp) 48 #4888 49D99 (90C30)
- (with Sachs, Horst) The construction of uniquely k -colorable graphs without cycles of length three—a remark on a paper of Ja. Nešetřil: "On uniquely colorable graphs without short cycles" (*Časopis Pěst. Mat.* 98 (1973), 122-125). (Russian) *Math. Nachr.* 63 (1974), 387-391. (D. Cvetković) 51 #5372 05C15
- Zum Beweis einer Verallgemeinerung eines Satzes von Farkas-Minkowski. *Wiss. Z. Techn. Hochsch. Ilmenau* 21 (1975), no. 1, 57-64. (K. Zimmermann) 52 #7547 90C25
- Optimalitätsbedingungen für konvexe und lokalkonvexe nichtlineare Optimierungsprobleme mit unendlich vielen Nebenbedingungen. *Wiss. Z. Techn. Hochsch. Ilmenau* 22 (1976), no. 6, 41-77. (Jochem Zowe) 56 #10968 90C25
- (with Elster, Karl-Heinz; Reinhardt, Rüdiger; Donath, Gerhard) ★Einführung in die nichtlineare Optimierung. Mathematisch-Naturwissenschaftliche Bibliothek, Band 63. *BSB B. G. Teubner Verlagsgesellschaft, Leipzig*, 1977. 299 pp. (L. Collatz) 58 #26002 90C30
- See also Sachs, Horst, 49 #10587
- Schauder, Julius Pawel** ★Oeuvres. Sous la rédaction de Jan Kiszyński, Władysław Orlicz, et Marcell Stark. *PWN-Éditions Scientifiques de Pologne, Warsaw*, 1978. 487 pp. (errata insert) (Editors) 58 #10260 01A75
- Schawerte, R.** Über die Länge einer Berechnung bei linearer Parameterabhängigkeit der Operationszeit. *Theoretical computer science (Third GI Conf., Darmstadt, 1977)*, pp. 407-413. *Lecture Notes in Comput. Sci.*, Vol. 48, Springer, Berlin, 1977. (Author's summary) 58 #25123 68A20
- Schäufelberger, W.** See IFAC/IFIP Conference: Digital Computer Applications to Process Control, 48 #10428 and IFAC/IFIP Conference: Digital Computer Applications to Process Control, 48 #10429
- Schafele, Ronald A.** An application of pairwise independence of random variables to regression analysis. *Canad. Math. Bull.* 18 (1975), no. 3, 397-404. (I. Guttman) 53 #9525 62J05
- Schauland, Horst** (with Naylor, Thomas H.) A survey of users of corporate planning models. *Management Sci.* 22 (1975/76), no. 9, 927-937. (Michael D. Intriligator) 53 #4926 90A15 (90B05, 68A55)
- Schaum, H. J.** (with Gorenflo, Rudolf) Monoton einschliessende Iterationsverfahren für invars-isotone Diskretisierung nichtlinearer Zwei-Punkt-Randwertaufgaben zweiter Ordnung. (English summary) *Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 177-198. *Lecture Notes in Math.*, Vol. 395, Springer, Berlin, 1974. (J. Švejška) 50 #3586 65L10
- Schaumberger, Norman** Using L'Hospital's rule to sum a series. *Pi Mu Epsilon J.* 6, no. 5, 281-282 (1976). (P. D. Kathal) 55 #919 40A25
- (with Kabak, Bert) Another proof of the arithmetic-geometric mean inequality. *Pi Mu Epsilon J.* 6, no. 6, 352-354 (1977). (Editors) 55 #3197 26A86
- Schawe, D. P.** A Cauchy condition for functions. *Math. Mag.* 44 (1971), 159-161. (P. H. Diananda) 46 #7752 40A05
- Schay, Geza** Nearest random variables with given distributions. *Ann. Probability* 2 (1974), 163-166. (A. De Hoyos) 50 #5880 60B05
- Scheaffer, Richard L.** (with Mendenhall, William) ★Mathematical statistics with applications. *Duxbury Press, North Scituate, Mass.*, 1973. xiii + 561 + 88 pp. (Editors) 50 #5991 62-01
- Asymptotic properties of sample proportions under a Markovian renewal structure. *Comm. Statist.* 2 (1973), 167-184. (M. Knott) 49 #4178 62L15
- Tests for uniform clustering and randomness. *Comm. Statist.* 2 (1973), 479-492. (M. Arató) 49 #10066 62H30 (62F05)
- On direct versus inverse sampling from mixed populations. (French summary) *Biometrics* 30 (1974), 187-198. (A. Hedayat) 48 #12703 62F10
- (with Mendenhall, William) ★Introduction to probability: theory and applications. *Duxbury Press, North Scituate, Mass.*, 1975. x + 289 pp. (Editors) 53 #11683 60-01
- A note on approximate confidence limits for the negative binomial model. *Comm. Statist.—Theory Methods* A5 (1976), no. 2, 149-158. (S. Kotz) 55 #4490 62F25
- (with Ingram, C. R.) On consistent estimation of age replacement intervals. *Technometrics* 18 (1976), no. 2, 213-219. (A. K. Gayen) 55 #4578 62N05
- On the computation of certain minimum variance unbiased estimators. *Technometrics* 18 (1976), no. 4, 497-499. (Menachem Dishon) 54 #14176 62B05 (90B25)
- (with Doviak, M. J.) Utilizing auxiliary variables in sequential ratio and regression estimation schemes. *Comm. Statist.—Theory Methods* A6 (1977), no. 5, 391-404. (Nitis Mukhopadhyay) 56 #1622 62L12
- Schechter, Bruce M.** Yang-Mills theory on the hypertorus. *Phys. Rev. D* (3) 16 (1977), no. 10, 3015-3020. (H. Rund) 56 #14363 81.53 (81.58)
- Schechter, Ervin** A piecewise Lagrange interpolation with application to error estimates in finite-difference methods. (Romanian and Russian summaries) *Studia Univ. Babeş-Bolyai Ser. Math.-Mech.* 16 (1971), no. 2, 67-73. (T. E. Hull) 46 #4676 65D05
- (with Hadnagy, A.) On the discrete convergence of nonlinear difference methods. Collection of articles dedicated to G. Călugăreanu on his seventieth birthday. *Rev. Roumaine Math. Pures Appl.* 17 (1972), 1349-1355. (A. Trevogda (RZMat 1973 #4 B988)) 50 #15328 65J05 (47H15)
- Error estimates and convergence in the numerical solution of non-linear parabolic equations. *Topics in numerical analysis (Proc. Roy. Irish Acad. Conf., University Coll., Dublin, 1972)*, pp. 265-276. *Academic Press, London*, 1973. (Alfred R. Mitchell) 51 #2307 65N10
- The use of differential inequalities in the convergence analysis of the numerical solution of degenerate parabolic equations. *Topics in numerical analysis, II (Proc. Roy. Irish Acad. Conf., Univ. College, Dublin, 1974)*, pp. 163-173. *Academic Press, London*, 1975. (A. D. Solomon) 54 #4132 65M99
- See also Nonlinear analysis and applications in mechanics, 58 #17977
- Schechter, Joseph** Yang-Mills particle in 't Hooft's gauge field. *Phys. Rev. D* (3) 14 (1976), no. 2, 524-527. (Author's summary) 58 #8876 81.22
- Schechter, Martin** ★Principles of functional analysis. *Academic Press, New York-London*, 1971. xix + 383 pp. (Editors) 56 #3607 46-01 (47-01)
- ★Spectra of partial differential operators. North-Holland Series in Applied Mathematics and Mechanics, Vol. 14. *North-Holland Publishing Co., Amsterdam-London; American Elsevier Publishing Co., Inc., New York*, 1971. xiii + pp. (From the author's preface) 56 #6144 35P05
- Quantities related to strictly singular operators. *Indiana Univ. Math. J.* 21 (1971/72), 1061-1071. (J. D. Gray) 45 #4171 47B99
- (with Berger, Melvyn S.) On the solvability of semilinear operator equations, elliptic boundary value problems. *Bull. Amer. Math. Soc.* 78 (1972), 741-745. (J. Thomas) 46 #2511 47H15 (35K60)
- Hamiltonians for singular potentials. *Indiana Univ. Math. J.* 22 (1972/73), 483-503. (B. Hellwig) 46 #4280 47F05 (35P99)
- (with Berger, Melvyn S.) Embedding theorems and quasi-linear elliptic boundary value problems for unbounded domains. *Trans. Amer. Math. Soc.* 172 (1972), 261-280. (A. Kufner) 47 #803 46E35 (35J65, 35L60, 49F99)
- ★Principles of functional analysis. Student edition. *Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London*, 1973. xix + 383 pp. (Editors) 57 #7017 46-01 (47-01)
- A nonlinear elliptic boundary value problem. *Ann. Scuola Norm. Sup. Pisa* (3) 25 (1973), 707-716 (1974). (J. E. Lagnese) 51 #6141 35J65
- On the essential spectrum of partial differential operators bounded from below. *Scripta Math.* 29, 5-16 (1973). (Y. I. Kannai) 48 #7017 47F05
- Operators obeying Weyl's theorem. *Scripta Math.* 29, 67-75 (1973). (K. K. Ober) 48 #4773 47A10
- (with Shapiro, Jack M.) A generalized operational calculus developed from Fredholm operator theory. *Trans. Amer. Math. Soc.* 175 (1973), 439-467. (F. Gilfeather) 47 #2406 (EA 48) 47A60 (47B30)
- Scattering theory for elliptic operators of arbitrary order. *Comment. Math. Helv.* 48 (1974), 84-113. (C. Bardos) 51 #3726 35P25
- (with Freeman, R. S.) On the existence, uniqueness and regularity of solutions of general elliptic boundary-value problems. *J. Differential Equations* 15 (1974), 213-240. (Melvin Heard) 58 #11884 35J40
- A unified approach to scattering. *J. Math. Pures Appl.* (9) 53 (1974), 373-396. (Kato) 51 #1436 47A40 (35P25)
- Scattering theory for second order elliptic operators. *Ann. Mat. Pura Appl.* (4) 119 (1975), 313-331. (T. Kato) 53 #13869 35P25 (47A40)
- Essential self-adjointness of the Schrödinger operator with magnetic vector potential. *J. Functional Analysis* 20 (1975), no. 2, 93-104. (Zbl 323 #35022) 58 #2315 35P05
- Cut-off potentials and forms extensions. *Lett. Math. Phys.* 1 (1975/77), no. 2, 265-273. (Derek W. Robinson) 56 #12969 47B37
- Proper boundary points of the spectrum. *Osaka J. Math.* 12 (1975), 41-44. (C. Putnam) 51 #6450 47A10
- (with Snow, Morris) The Fredholm spectrum on tensor products. *Proc. Roy. Irish Acad. Sect. A* 75 (1975), no. 13, 121-127. (Robin Harte) 51 #13728 47A10
- Nonhomogeneous elliptic systems and scattering. *Tôhoku Math. J.* (2) 27 (1975), no. 4, 601-616. (Author's summary) 57 #10275 35P25 (35J45, 47A40)
- The Klein-Gordon equation and scattering theory. *Ann. Physics* 101 (1976), no. 1, 601-609. (Teruo Ikebe) 57 #917 35P25
- Eigenfunction expansions for the Schrödinger operator. *Ark. Mat.* 14 (1976), no. 277-287. (M. M. Skrziganov) 55 #13097 35P10 (35J10)
- Differentiability of solutions of elliptic problems with respect to parameters. (Italian summary) *Boll. Un. Mat. Ital. A* (5) 13 (1976), no. 3, 601-608. (V. A. Kondratiev) 55 #3524 35J30
- Remarks on a previous paper: "On the essential spectrum of an arbitrary operator I". *J. Math. Anal. Appl.* 13 (1966), 205-215. *J. Math. Anal. Appl.* 54 (1976), no. 138-141. (T. Kato) 55 #8851 47B30 (47A55)
- Scattering theory for elliptic systems. *J. Math. Soc. Japan* 28 (1976), no. 1, 71-77. (J. Thomas Beale) 57 #914 35P20
- Discreteness of the singular spectrum for Schrödinger operators. *Math. Proc. Cambridge Philos. Soc.* 80 (1976), no. 1, 121-133. (From the introduction) 57 #17021 35P25 (47A40)
- On the spectra of singular elliptic operators. *Mathematika* 23 (1976), no. 1, 107-111. (J. R. Kuttler) 53 #13865 35P15
- Scattering theory for pseudodifferential operators. *Quart. J. Math. Oxford Ser.* 27 (1976), no. 105, 111-121. (F. Cardoso) 53 #14230 47G05 (35P25, 47A40)
- ★Modern methods in partial differential equations. An introduction. *McGraw-Hill International Book Co., New York-Bogotá-Auckland*, 1977. xiv + 245 pp. *ISBN 0-07-055193-6* (Ju. V. Kostarčuk) 58 #17436 35-01
- (with Berger, Melvyn S.) On the solvability of semilinear gradient operator equations. *Advances in Math.* 25 (1977), no. 2, 97-132. (R. Kannan) 58 #17997 47H15 (58E99)
- (with Koller, Herbert; Weder, Ricardo A.) Schrödinger operators in the uniform norm. *Ann. Inst. H. Poincaré Sect. A (N.S.)* 26 (1977), no. 3, 303-311. (Richard Lavine) 58 #17586 35P05 (35J10)
- The existence of wave operators in scattering theory. *Bull. Amer. Math. Soc.* 82 (1977), no. 3, 381-383. (Boris Pavlov) 55 #11075 47A40 (35P25)
- (with Weder, Ricardo A.) The Schrödinger operator with vector potential. *Comm. Partial Differential Equations* 2 (1977), no. 5, 549-561. (C. A. Swanson) 57 #6887 35P05
- A new criterion for scattering theory. *Duke Math. J.* 44 (1977), no. 4, 863-871. (Richard B. Lavine) 58 #7140 47A40 (35P25, 81.47)
- A subgradient duality theorem. *J. Math. Anal. Appl.* 61 (1977), no. 3, 850-855. (W. Leung Chan) 57 #11772 90C30 (49D10)
- Wave operators for oscillating potentials. *Lett. Math. Phys.* 2 (1977/78), no. 127-132. (Woodford W. Zachary) 57 #8629 81.35
- See also Spectral analysis, 52 #14684 (EA 53)
- froda-Schechter, Micheline** See Froda-Schechter, Micheline

- er, Murray Duality in continuous linear programming. *J. Math. Anal. Appl.* **37** (2), 130-141. (W. F. Tyndall) **45** #3065 90C05
- (with Mond, Bertram) A programming problem with an L_p norm in the objective function. *J. Austral. Math. Soc. Ser. B* **19** (1975/76), no. 3, 333-342. (M. Dragomirescu) #9078 90C30
- (with Mond, Bertram) On a constraint qualification in a nondifferentiable programming problem. *Naval Res. Logist. Quart.* **23** (1976), no. 4, 611-613. (Albert Key) **56** #10000 65K05 (90C99)
- A solvability theorem for homogeneous functions. *SIAM J. Math. Anal.* **7** (1976), 5, 696-701. (W. J. Firey) **54** #5969 52A05 (90C25)
- Sufficient conditions for duality in homogeneous programming. *J. Optimization Theory Appl.* **23** (1977), no. 3, 389-400. (J. C. Allwright) **57** #15455 90C25
- Symmetric duality via conjugate duality. (German and Russian summaries) *Z. angew. Math. Mech.* **57** (1977), no. 6, 329-332. (R. N. Kaul) **56** #14759 90C99 #505
- er, Samuel Minimization of a convex function by relaxation. *Integer and nonlinear programming*, pp. 177-189. North-Holland, Amsterdam, 1970. (Editors) **55** #9537 #505
- On the choice of relaxation parameters for nonlinear problems. *Numerical solution systems of nonlinear algebraic equations (NSF-CBMS Regional Conf., Univ. Pittsburgh,sburgh, Pa., 1972)*, pp. 349-372. Academic Press, New York, 1973. (Ian Gladwell) #16008 65H10
- (with Ablow, C. M.) Campylotropic coordinates. *J. Comput. Phys.* **27** (1978), no. 3, -362. (William H. H. Banks) **58** #3455 65L05
- man, Gideon A remark on unconditional basic sequences in L_p ($1 < p < \infty$). *Israel Math.* **19** (1974), 220-224. (Author's summary) **58** #23512 46B15 (46E30)
- Complemented subspaces of $(l_2 \oplus l_2 \oplus \dots)_p$ ($1 < p < \infty$) with an unconditional basis. *Israel J. Math.* **20** (1975), no. 3-4, 351-358. (P. Wojtaszczyk) **52** #1272 #15
- Examples of ℓ_p spaces ($1 < p \neq 2 < \infty$). *Israel J. Math.* **22** (1975), no. 2, 138-147. (S. Gleit) **52** #11545 46B05
- On Pełczyński's paper "Universal bases" (Studia Math. **32** (1969), 247-268). *Israel Math.* **22** (1975), no. 3-4, 181-184. (M. M. Day) **52** #11553 46B15
- man, Jack An income fluctuation problem. *J. Econom. Theory* **12** (1976), no. 2, 1-241. (G. Tintner) **53** #10217 90A99
- (with Escudero, Vera L. S.) Some results on "an income fluctuation problem". *J. Econom. Theory* **16** (1977), no. 2, 151-166. (G. Tintner) **57** #2468 90A05 (90C50)
- er, Hanno Über die Menge der Zahlen, die als Minima quadratischer Formen auftreten. (English summary) *J. Number Theory* **9** (1977), no. 1, 121-141. (Thomas W. Leisk) **57** #5914 10F20 (10E25)
- er, Stephen Accessibility of optima in pure exchange economies. *J. Math. Econom.* **1977**, no. 3, 197-216. (Su-shing Chen) **58** #4218 90A10 (58C25, 58E15)
- See also Marsden, Jerrold Eldon; et al., **58** #13209
- ine, Alexander (with Spira, Robert S.) Table errata: "A cotangent analogue of continued fractions" (Duke Math. J. **4** (1938), 323-340) by D. H. Lehmer. *Math. Comp.* (1974), 677. (Editors) **49** #10627 10-04 (10A30)
- er, Hans Transitive actions on Hopf homogeneous spaces. *Manuscripta Math.* **4** (1971), 99-134. (S. Murakami) **45** #2086 54H15 (57E25)
- (with Harrison, Jerome) Zur Homotopietheorie von Abbildungen in homotopie-assoziative H -Räume. *Arch. Math. (Basel)* **23** (1972), 319-323. (C. S. Hoo) #8219 55D45
- Sur la topologie des groupes compacts connexes. *C. R. Acad. Sci. Paris Sér. A-B* **4** (1972), A1441-A1443. (A. Morimoto) **49** #458 22C05
- Restklassenräume kompakter zusammenhängender Gruppen mit Schnitt. *Math. Ann.* **206** (1973), 149-155. (S. N. Hudson) **48** #4191 22C05 (55G40, 57E25)
- Eine Bemerkung zur Stabilität von Entfaltungen. (English summary) *Manuscripta Math.* **13** (1974), 101-108. (Jean Martinet) **54** #6187 58C25
- Gruppen von Homotopieklassen von Abbildungen in Produkte von denberg-MacLane-Räumen. *Math. Ann.* **210** (1974), 281-294. (A. H. Copeland, Jr.) #5791 55D45 (55E20)
- (with Kahn, Peter J.) Localisation des groupes et des espaces nilpotents par des escopes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 12, A119-A422. (M. Mimura) **52** #15447 55D99
- Bemerkungen über Gruppen von Homotopieklassen. *Arch. Math. (Basel)* **28** (1977), no. 3, 301-307. (Guido Mislin) **55** #11250 55D45
- See also Mathematics: Periodical collection of translations of foreign articles, #19
- er, K. (with Stumpf, Harald; Märkl, H. G.) Symmetry conditions on nonlinear minor field functionals. *Z. Naturforsch.* **25a** (1970), 1556-1561. (Robert L. Warnock) #2190 8146
- (with Bauhoff, W.) On the calculation of vector mesons in functional nonlinear minor theory. *Z. Naturforsch.* **27a** (1972), 1539-1553. (Robert L. Warnock) **53** #4795 8146
- (with Stumpf, Harald) On the construction of relativistic representation spaces in functional quantum theory of the nonlinear spinor field. *Z. Naturforsch.* **30a** (1975), no. 1, 1361-1371. (Authors' summary) **57** #8709 8147
- er, Peter See Jahrestagung: Gesellschaft für Informatik. **48** #1502
- el, Henry A statistical theory of calibration. *Ann. Statist.* **1** (1973), 1-37. (I. Guttman) **49** #1693 62J05
- A note on a reformulation of the S -method of multiple comparison. With a comment by R. A. Olshen and a rejoinder by the author. *J. Amer. Statist. Assoc.* **72** (1977), no. 357, 143-146. (C. R. Rao) **58** #8053 62J15
- See also Lehmann, E. L., **57** #15921
- el, Gabriela Familles de directions Bertrand. (Romanian summary) *An. Univ. Mișoara Ser. Ști. Mat.* **13** (1975), no. 1, 71-83 (1977). (Bernard Rouxel) **57** #17520 #A05
- er, C. L. Generalized stochastic processes. *Nieuw Arch. Wisk. (3)* **25** (1977), no. 3, 14-256. (M. M. Rao) **58** #31370 60G20
- er, Vladimir Maps between topological groups that are homotopic to isomorphisms. *Proc. Amer. Math. Soc.* **33** (1972), 562-567. (G. E. Bredon) **46** #288 22A05 (57E99)
- Turbulence and Hausdorff dimension. *Turbulence and Navier-Stokes equations (Proc. Conf., Univ. Paris-Sud, Orsay, 1975)*, pp. 174-183. *Lecture Notes in Math.*, Vol. 565, Springer, Berlin, 1976. (P. L. Sulem) **56** #10405 7649 (28A65, 35Q10, 58F15)
- Géométrie fractale de la turbulence. Équations de Navier-Stokes et dimension de Hausdorff. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 2, A11-A122. (S. J. Taylor) **52** #12509 7628
- Partial regularity of solutions to the Navier-Stokes equations. *Pacific J. Math.* **66** (1976), no. 2, 535-552. (From the author's introduction) **56** #12677 35Q99 (35D10)
- Hausdorff measure and the Navier-Stokes equations. *Comm. Math. Phys.* **55** (1977), no. 2, 97-112. (From the text) **58** #23176 35Q10 (49F99)
- See also Sinai, Ja. G., **58** #28437
- Scheffers, Georg See Lie, Sophus, **52** #13275 and Lie, Sophus, **57** #45
- Scheffeld, J. S. (with Saffman, Philip) Flow over a wing with an attached free vortex. *Studies in Appl. Math.* **57** (1976/77), no. 2, 107-117. (W. F. Ames) **57** #2125 7635
- Scheffler, Israel See Logic & art, Essays in honor of Nelson Goodman, **52** #13073
- Scheffler, T. B. Analyticity of the eigenvalues and eigenfunctions of an ordinary differential operator with respect to a parameter. *Proc. Roy. Soc. (London) Ser. A* **336** (1974), 475-486. (William N. Everitt) **49** #9324 34B25
- Scheffold, Egon Die erzeugte Algebra eines Markov-Verbandsoperators in $C(X)$. *Math. Ann.* **193** (1971), 76-82. (B. Yood) **45** #874 46E15 (28A65, 47D99)
- Das Spektrum von Verbandsoperatoren in Banachverbänden. *Math. Z.* **123** (1971), 177-190. (H. Schwetlick) **48** #2827 47B55
- Ein allgemeiner Korovkin-Satz für lokalkonvexe Vektorverbände. *Math. Z.* **132** (1973), 209-214. (J. A. Van Casteren) **48** #9365 46E05
- Über den schwachen Kegel-Spektralradius und die nichtnegativen Spektralwerte positiver Operatoren. *Math. Z.* **135** (1973/74), 93-110. (M. A. Kaashoek) **49** #1214 47B55
- Über die punktweise Konvergenz von Operatoren in $C(X)$. (English summary) *Rev. Acad. Ci. Zaragoza (2)* **28** (1973), 5-12. (Ju. A. Šaškin) **48** #948 47B99 (41A65)
- Eine abstrakte Spline-Theorie. *Spline-Funktionen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 257-274. *Bibliographisches Inst., Mannheim*, 1974. (Walter Schempp) **54** #3236 41A15
- Einschließungssätze für den schwachen Kegel-Spektralradius. *Arch. Math. (Basel)* **25** (1974), 516-521. (I. K. Marek) **51** #6487 47B55
- Das Spline-Problem als ein Approximationsproblem. *J. Approximation Theory* **12** (1974), 265-282. (Walter Schempp) **50** #10621 41A15
- Abschätzungen für Spektralwerte. *Arch. Math. (Basel)* **27** (1976), no. 2, 172-187. (E. R. Deal) **53** #3775 47B37 (47G05)
- Eine Abschätzung für die subdominanten Eigenwerte nichtnegativer Matrizen. (English summary) *Linear Algebra and Appl.* **19** (1978), no. 1, 91-93. (Ludwig Elsner) **58** #736 15A42 (15A48)
- Scheffold, Bertram Eine Anwendung der Jordanschen Normalform. (English summary) *Z. Angew. Math. Phys.* **27** (1976), no. 6, 873-875. (Charles R. Johnson) **56** #5590 15A06 (90A15)
- Scheiba, Jürgen Stufenräume und Endomorphismen zum direkten Integral von Gårding und Wightman. *Math. Ann.* **182** (1969), 319-333. (Author's introduction) **58** #2244 46F05 (46G99, 8146)
- Distributionen auf Räumen vom Typ \mathbb{S} in der Quantenfeldtheorie. *Math. Scand.* **26** (1970), 51-61. (From the introduction) **58** #2245 46F05 (46G99, 8146)
- Scheibe, Erhard Popper and quantum logic. *British J. Philos. Sci.* **25** (1974), 319-328. (From the introduction) **58** #32491 8106
- See also Logic, methodology and philosophy of science, **55** #7657 and Tarski, Alfred, **55** #7716
- Scheibe, Karin Ein Vergleich zweier Verfahren zur Lösung linearer 0-1-Optimierungsprobleme mit kombinatorischen Mitteln. (English and Russian summaries) *Elektron. Informationsverarbeit. Kybernetik* **10** (1974), 355-359. (Csaba Fabian) **50** #15913 90C10
- Scheiber, V. Berechnung der OC- und ASN-Funktionen geschlossener Sequentialtests bei Binomialverteilung. (English summary) *Computing (Arch. Elektron. Rechnen)* **8** (1971), 107-112. (Author's summary) **48** #7499 62L10
- Versuchspläne zur stochastischen Optimierung. (English summary) *Computing (Arch. Elektron. Rechnen)* **9** (1972), 383-399. (H. Bandemer) **47** #1212 62K05
- Scheiblich, H. E. Free inverse semigroups. *Semigroup Forum* **4** (1972), 351-359. (D. B. McAlister) **46** #3648 20M05
- Concerning congruences on symmetric inverse semigroups. *Czechoslovak Math. J.* **23** (1973), 1-10. (B. Pondělíček) **47** #3582 20M10
- Free inverse semigroups. *Proc. Amer. Math. Soc.* **38** (1973), 1-7. (G. J. Lallement) **46** #9196 20M05
- (with Moore, Kayran C.) T_X is absolutely closed. *Semigroup Forum* **6** (1973), no. 3, 216-226. (F. R. McMorris) **51** #10516 20M99
- (with Geoffrey, Cynthia D.) Chain conditions on posets. *Glasgow Math. J.* **15** (1974), 79-81. (Joel Berman) **50** #12826 06A10
- Kernels of inverse semigroup homomorphisms. *J. Austral. Math. Soc.* **18** (1974), 289-292. (F. R. McMorris) **50** #13334 20M10
- On epics and dominions of bands. *Semigroup Forum* **13** (1976/77), no. 2, 103-114. (John M. Howie) **55** #3136 20M10
- On coproducts of rectangular bands. *Rocky Mountain J. Math.* **8** (1978), no. 3, 539-545. (B. M. Schein (Šain)) **57** #16433 20M05
- (with Nordahl, Thomas E.) Regular \ast -semigroups. *Semigroup Forum* **16** (1978), no. 3, 369-377. (T. E. Hall) **58** #22357 20M10
- Scheick, John T. (with Freud, Géza) Polynomial approximation on the real line. *Studia Sci. Math. Hungar.* **6** (1971), 23-25. (L. Raymon) **46** #581 41A10
- Inequalities for derivatives of polynomials of special type. Collection of articles dedicated to J. L. Walsh on his 75th birthday. *VIII. J. Approximation Theory* **6** (1972), 354-358. (M. Marden) **49** #7653 41A10 (26A75)
- Scheid, Harald Funktionen über lokal endlichen Halbordnungen. II. *Monatsh. Math.* **75** (1971), 44-56. (C. G. Wagner) **45** #208 05B30
- Über die Möbiusfunktion einer lokal endlichen Halbordnung. (English summary) *J. Combinatorial Theory Ser. A* **13** (1972), 315-331. (E. Harzheim) **46** #5187 06A10 (06A20)

- Algebraische Aspekte in der elementaren Kombinatorik. *Math.-Phys. Semesterber.* 25 (1978), no. 1, 21-30. (L. D. Baumert) 57 #5763 05-01
- Scheid, Werner (with Ong, Piet Tjing) The two center oscillator potential with finite depth. *Z. Naturforsch.* 30a (1975), 406-412. (C. J. Eliezer) 54 #14603 81-33
- Scheidecker, Jean-Paul (with Froeschlé, Claude) Numerical study of a four-dimensional mapping. II. *Astronom. and Astrophys.* 22 (1973), 431-436. (O. Gürel) 47 #9822 65H10
- (with Froeschlé, Claude) Numerical study of the stochasticity of dynamical systems with more than two degrees of freedom. *J. Computational Phys.* 11 (1973), 423-439. (R. G. Langebartel) 48 #10081 65F15 (85.65)
- (with Froeschlé, Claude) Quelques résultats numériques sur l'existence, la dimension et la disparition des variétés invariantes d'une transformation à quatre et à six dimensions conservant la mesure. Avec discussion. *Transformations ponctuelles et leurs applications (Colloq. Internat. CNRS, No. 229, Toulouse, 1973)*, pp. 227-244, 269-270. Editions Centre Nat. Recherche Sci., Paris, 1976. (Editors) 58 #8604 70.34 (65L99)
- Scheidig, H. See *Jahrestagung: Gesellschaft für Informatik*, 48 #1502
- Scheidt, John K. (with Salehi, Habib) Interpolation of q -variate weakly stationary stochastic processes over a locally compact abelian group. *J. Multivariate Anal.* 2 (1972), 307-331. (J. B. Robertson) 48 #5175 60G25
- von Scheidt, Jürgen Ein Mittelwert auf kompakten Riemannschen Mannigfaltigkeiten nichtpositiver konstanter Krümmung. *Math. Nachr.* 67 (1975), 119-137. (P. Günther) 52 #4351 58G99 (35L10, 58E10)
- (with Purkert, Walter) Eine Störungsrechnung für die Eigenwerte und Eigenvektoren zufälliger Matrizen. *Beiträge Anal. No. 11* (1978), 113-135. (Thomas H. Foregger) 58 #16719 15A18 (62H99, 81.60)
- Scheifele, Gerhard (with Stiefel, Eduard L.) ★Linear and regular celestial mechanics. Perturbed two-body motion, numerical methods, canonical theory. Die Grundlehren der mathematischen Wissenschaften, Band 174. Springer-Verlag, New York-Heidelberg, 1971. ix + 301 pp. (V. Szebehely) 56 #4300 70.34 (85.34)
- (with Stiefel, Eduard L.) ★Линейная и регулярная небесная механика. (Russian) [Linear and regular celestial mechanics] Возмущенная задача двух тел. Численные методы. Каноническая теория. [Perturbed two-body problem. Numerical methods. Canonical theory] Translated from the English by P. A. Ageev. Edited by V. A. Brumberg. Izdat. "Nauka", Moscow, 1975. 303 pp. (Editors) 56 #17293 70.34 (85.34)
- Schein, David E. The number of edge 3-colorings of a planar cubic graph as a permanent. *Discrete Math.* 8 (1974), 377-382. (F. Bernhart) 50 #163 05C15
- Schein, Boris M. Idempotent semigroups with isomorphic endomorphism semigroups. (Russian) *Works of young scientists: mathematics and mechanics, No. 2 (Russian)*, pp. 143-149. Izdat. Saratov. Univ., Saratov, 1969. (L. Potemkin) 50 #4796 20M10
- Involuted restrictive bisemigroups of binary relations. *Mat. Časopis Sloven. Akad. Vied* 19 (1969), 307-315. (J. J. Malone, Jr.) 46 #1951 20N99
- An idempotent semigroup is determined by the pseudogroup of its local automorphisms. (Russian) *Ural. Gos. Univ. Mat. Zap.* 7 (1969/70), no. 3, 222-233. (K. Drbohlav) 46 #3659 20M10
- ★Лекции о полугруппах преобразований. (Russian) [Lectures on transformation semigroups] Special course. Izdat. Saratov. Univ., Saratov, 1970. 50pp. (Anna Ja. A. Zenslat) 53 #681 20M20
- A relation of codeterminacy on semigroups of functions. (Russian) *Ordered sets and lattices, No. 1 (Russian)*, pp. 86-89. Izdat. Saratov. Univ., Saratov, 1971. (R. P. Sullivan) 52 #632 20M20
- Homomorphisms of symmetric semigroups into inverse semigroups. (Russian) *Theory of semigroups and its applications, No. 2 (Russian)*, pp. 90-93. Izdat. Saratov. Univ., Saratov, 1971. (P. Javor) 53 #13455 20M20
- A symmetric semigroup of transformations is covered by its inverse subsemigroups. (Russian) *Acta Math. Acad. Sci. Hungar.* 22 (1971/72), 163-171. (R. Renne) 45 #424 (EA 45) 20M20
- Linearly fundamentally ordered semigroups. *Colloq. Math.* 23 (1971), 17-23. (T. S. Blyth) 46 #3398 06A50
- Representation of events in an automaton with a given stabilizer. (Russian. English summary insert) *Kibernetika (Kiev)* 1971, no. 2, 25-34. (B. Pondělíček) 46 #1514 94A30
- A remark concerning congruences on $[0]$ bisimple inverse semigroups. *Semigroup Forum* 3 (1971/72), no. 1, 80-83. (T. Tamura) 46 #7419 20M10
- On the definition of distributive semilattices. *Algebra Universalis* 2 (1972), 1-2. (R. P. Dilworth) 46 #3385 06A20
- A representation theorem for lattices. *Algebra Universalis* 2 (1972), 177-178. (R. P. Dilworth) 46 #5192 06A20
- Symmetric finite semigroups of transformations, and nuclear automata. (Russian) *Dokl. Akad. Nauk SSSR* 204 (1972), 302-305. (I. Peák) 46 #282 20M20 (94A30)
- Pseudo-semilattices and pseudo-lattices. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 2(117), 81-94. (Št. Schwarz) 46 #5203 06A50
- A new representation theorem for completely $[0]$ -simple semigroups. *Semigroup Forum* 4 (1972), 312-320. (R. Renne) 47 #6923 20M30
- An example of two non-isomorphic finite subdirectly irreducible bands generating the same variety of bands. *Semigroup Forum* 4 (1972), 365-366. 46 #1945 20M10 (06A50)
- (with Gluskin, L. M.) The theory of operations as the general theory of groups by A. K. Suškevič. An historical review. *Semigroup Forum* 4 (1972), 367-371. (Editors) 46 #3670 20M99 (01A60)
- Minimal group congruence need not be smallest. *Semigroup Forum* 5 (1972/73), 273-276. (M. Kolibiar) 47 #8731 20M10
- (with Wiweger, Antoni) How to divide by the empty set? (Polish) *Wiadom Mat.* (2) 15, 13-15 (1972). (Editors) 58 #5450 08A05 (54B15)
- (with Djadčenko, G. G.) Monogenic inverse semigroups. (Russian) *Algebra and number theory, No. 1 (Russian)*, pp. 3-26. Kabardino-Balkarsk. Gos. Univ. Nalchik, 1973. (G. Pollák) 55 #12837 20M10
- Semigroups of binary relations. *Mini-Conference on Semigroup Theory (József Attila Univ., Szeged, 1972)*, pp. 17-24. József Attila Univ., Szeged, 1973. (R. J. Plemmons) 53 #5793 20M20
- Kernel-quasiorders and kernel-equivalences on rings: a ring-theoretic analogue semigroup-theoretic problem. *Rings, modules and radicals (Proc. Colloq., Keszthely, 1971)*, pp. 463-468. *Colloq. Math. Soc. János Bolyai, Vol. 6, North-Holland, Amsterdam, 1973.* (H. J. Weinert) 50 #2260 16A64 (06A70)
- Compatible function semigroups. *Colloq. Math.* 28 (1973), 19-26, 162. (E. Behrens) 48 #6300 20M20
- Complextions, translational hulls and ideal extensions of inverse semigroups. *Czechoslovak Math. J.* 23(98) (1973), 575-610. (J. E. Ault) 48 #4166 20M10
- Semigroups for which every transitive representation by functions is a representation by invertible functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 7(112-121. (Uno Kaljulaid) 51 #13108 20M30
- (with Howie, J. M.) Products of idempotent order-preserving transformations. *London Math. Soc.* (2) 7 (1973), 357-366. (C. Chou) 48 #10909 06A05
- Bands of unipotent monoids. *Semigroup Forum* 6 (1973), no. 1, 75-79. (T. E. H. 52 #10929 20M10
- (with Roiz, E. N.) Brown-McCoy radical and prime radical of semigroups. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 6 (174), 215-216. (B. Pondělíček) 53 #20M10
- Antisymmetric transformation semigroups, and conuclear automata. (Russian) *Automata, No. 1 (Russian)*, pp. 61-64, 107. Izdat. Saratov. Univ., Saratov, 1974. (Ist. Babesányi) 57 #12755 20M35
- Lattice-ordered semigroups of functions. (Russian) *Ordered sets and lattices, No. 1 (Russian)*, pp. 109-113. Izdat. Saratov. Univ., Saratov, 1974. (T. Saitō) 58 #428 06A50
- Inverse semigroups that do not admit isomorphic representations by partial transformations of their proper subsets. (Russian) *Theory of semigroups and its applications, No. 3 (Russian)*, pp. 139-148, 155. Izdat. Saratov. Univ., Saratov, 1974. (I. Ponizovskii) 57 #502 20M30
- Bands of monoids. *Acta Sci. Math. (Szeged)* 36 (1974), 145-154. (G. J. Lallemand) 50 #7392 20M10
- Function \cup -semigroups. *Colloq. Math.* 31 (1974), 11-20. (R. McFadden) 50 #12850 06A50
- Representation of involuted semigroups by binary relations. Collection of articles dedicated to Andrzej Mostowski on his sixtieth birthday, VI. *Fund. Math.* 82 (1974/75) 121-141. (I. Gy. Maurer) 50 #2381 20M30 (06A50)
- Injectives in certain classes of semigroups. *Semigroup Forum* 9 (1974/75), no. 159-171. (Mohan S. Putcha) 51 #13097 20M10
- (with Gluskin, L. M.) Ideal extensions of irreductive semigroups. *Semigroup Forum* 9 (1974/75), no. 3, 216-240. (S. Lajos) 51 #13091 20M10
- (with Djadčenko, G. G.) The structure of finite monogenic inverse semigroups. (Russian) *Ural. Gos. Univ. Mat. Zap.* 9, no. 1, 15-21, 140 (1974). (B. Pondělíček) 52 #10914 20M10
- Free inverse semigroups are not finitely presentable. *Acta Math. Acad. Sci. Hungar.* 26 (1975), 41-52. (T. E. Hall) 50 #13325 20M05
- Commutative semigroups all of whose subsemigroups are densely embedded. *Acta Math. Acad. Sci. Hungar.* 26 (1975), no. 3-4, 327-330. (Donald W. Miller) 54 #2849 20M10
- Corrigenda to "Commutative semigroups where congruences form a chain" (Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. 17 (1969), 523-527). (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 23 (1975), no. 1 1247-1248. (G. B. Preston) 54 #2850 20M10
- A new proof for the McAlister "P-theorem". *Semigroup Forum* 10 (1975), no. 185-188. (T. Saitō) 52 #621 20M10
- Products of idempotent order-preserving transformations of arbitrary chains. *Semigroup Forum* 11 (1975/76), no. 4, 297-309. (John M. Howie) 52 #8308 20M20
- On semigroup radicals. *Universale Algebren und Theorie der Radikale*, pp. 49-53. Studien zur Algebra und ihre Anwendungen, Band 1, Akademie-Verlag, Berlin, 1976. (H. Hoehnke) 58 #11181 20M10
- Injective commutative semigroups. *Algebra Universalis* 6 (1976), no. 3, 395-397. (S. Blyth) 55 #8219 20M10
- Regular elements of the semigroup of all binary relations. *Semigroup Forum* 11 (1976/77), no. 2, 95-102. (R. J. Plemmons) 55 #5773 20M10
- Imbedding of semigroups in inverse semigroups. (Russian) *Algebra and number theory, No. 2 (Russian)*, pp. 147-163. Kabardino-Balkarsk. Gos. Univ., Nalchik, 1977. (Bokut) 58 #957 20M15
- (with Gluskin, L. M.; Šneperman, L. B.; Jaroker, I. S.) Addendum to: "A survey of semigroups of continuous selfmaps" (*Semigroup Forum* 11 (1975/76), no. 3, 189-281) by K. D. Magill. *Semigroup Forum* 14 (1977), no. 2, 95-125. (K. N. Sigmon) 56 #318 20M20 (22A15)
- On semisimple bands. *Semigroup Forum* 16 (1978), no. 1, 1-12. (G. Grätzer) 58 #967 20M30
- See also *Sverdlovsk Symposium*, 45 #6958; *American Mathematical Society Translations, Ser. 2*, 48 #4 and *Problems: Semigroups*, 53 #10953
- Scheinberg, Stephen Automorphisms of commutative Banach algebras. *Problems in analysis (papers dedicated to Salomon Bochner, 1969)*, pp. 319-323. Princeton Univ. Press, Princeton, N.J., 1970. (A. M. Sinclair) 50 #5475 46J05
- Fatou's lemma in normed linear spaces. *Pacific J. Math.* 38 (1971), 233-238. (Miličić) 46 #7871 46B99 (46E25)
- The spectrum of an automorphism. *Bull. Amer. Math. Soc.* 78 (1972), 621-623. (Longdon) 45 #9148 46J05
- Invariant norms for $C(T)$. *Studia Math.* 42 (1972), 289-294. (L. Narici) 46 #42 46J10
- Calibration of digital-analog converters. *Arch. Rational Mech. Anal.* 52 (1973), 261-265. (I. Kaufmann) 49 #8453 68A55
- Homeomorphism and isomorphism of abelian groups. *Canad. J. Math.* 26 (1974), 1515-1519. (T.-S. Wu) 50 #4809 22B05
- (with Finkelstein, Mark) Kernels for solving problems of Dirichlet type in half-plane. *Advances in Math.* 18 (1975), no. 1, 108-113. (David R. Adams) 52 #35 31A25
- Analytic approximations and Dirichlet problems on bordered Riemann surface

- of Math. (2) **102** (1975), no. 1, 139-141. (T. W. Gamelin) **51** #13241 30A82
- Uniform approximation by entire functions. *J. Analyse Math.* **29** (1976), 16-18. (R. urckel) **58** #22664 32E30 (41A30)
- Cluster sets and corona theorems. *Banach spaces of analytic functions (Proc. Synski Conf., Kent State Univ., Kent, Ohio, 1976)*, pp. 103-106. *Lecture Notes in Math.* Vol. 604, Springer, Berlin, 1977. (Zbl **359** #46037) **58** #30276 46J15 (30A72, 98)
- (with Hummel, J. A.; Zalzman, Lawrence) A coefficient problem for bounded vanishing functions. *J. Analyse Math.* **31** (1977), 169-190. (J. G. Krzyż) **58** #11358 1A34
- Uniform approximation by functions analytic on a Riemann surface. *Ann. of Math.* **108** (1978), no. 2, 257-298. (M. Hervé) **58** #17111 30A82
- rt, G. Numerische Lösung der Laplace-Gleichung mittels Splinesfunktionen. *Wiss. Techn. Hochsch. Ilmenau* **23** (1977), no. 5, 91-99. **58** #25030 65P05
- man, José Alexandre (with Brocki, W. A.) Some results on global asymptotic stability of difference equations. *J. Econom. Theory* **10** (1975), no. 2, 265-268. (Peter J. ylan) **53** #7567 93D05
- On optimal steady states of n -sector growth models when utility is discounted. *And. d. Brasil. Ci.* **48** (1976), no. 4, 609-626. (From the introduction) **58** #20322 15
- On optimal steady states of n -sector growth models when utility is discounted. Hamiltonian dynamics in economics. *J. Econom. Theory* **12** (1976), no. 1, 11-30. (Yves asko) **57** #5027 90A15
- (with Brock, William A.) Global asymptotic stability of optimal control systems with applications to the theory of economic growth. Hamiltonian dynamics in economics. *J. Econom. Theory* **12** (1976), no. 1, 164-190. (Edwin Burmeister) **56** #2569 3D99 (90A15)
- (with Araujo, A.) Smoothness, comparative dynamics, and the turnpike property. *Monetaria* **45** (1977), no. 3, 601-620. (R. N. Kaul) **55** #11613 65K05 (90C40)
- , L. A variational technique for the calculation of the energy levels of polyatomic molecules in the muffin-tin approximation. *Simon Stevin* **49** (1975/76), no. 3, 121-138. (D. Logan) **54** #4437 81.49
- Günter (with Storch, Uwe) Differentielle Eigenschaften der Lokalisierung von analytischer Algebren. *Math. Ann.* **197** (1972), 137-170. (Joseph Lipman) **46** #5299 310
- (with Wiebe, Hartmut) Über Derivationen von lokalen analytischen Algebren. *Compositio Mathematica, Vol. XI (Convegno di Algebra Commutativa, INDAM, Rome, 71)*, pp. 161-192. Academic Press, London, 1973. (Y. Nakai) **49** #3225 32K10
- (with Storch, Uwe) ★Lokale Verzweigungstheorie. Vorlesungen über kommutative Algebra (Wintersemester 1973/74). Schriftenreihe des Mathematischen Institutes der Universität Freiburg, No. 5. Institut des Mathématiques, Université de Fribourg, Fribourg, 1974. viii + 151 pp. (Tadayuki Matsuoka) **54** #294 13B15 4B99
- (with Storch, Uwe) Über Spurfunktionen bei vollständigen Durchschnitten. *J. reine Angew. Math.* **278/279** (1975), 174-190. (H. Kurke) **52** #13867 14M10 1B10
- (with Storch, Uwe) Quasi-Frobenius-Algebren und lokal vollständige Durchschnitte. (English summary) *Manuscripta Math.* **19** (1976), no. 1, 75-104. (P. bellanas) **53** #10822 (E **55** #2940) 14M10 (16A36)
- (with Storch, Uwe) Addendum zu: "Quasi-Frobenius-Algebren und lokal vollständige Durchschnitte" (Manuscripta Math. **19** (1976), no. 1, 75-104). *Manuscripta Math.* **20** (1977), no. 1, 99-100. (P. Abellanas) **55** #2940 14M10
- (with Wiebe, Hartmut) Über Derivationen in isolierten Singularitäten auf vollständigen Durchschnitten. *Math. Ann.* **225** (1977), no. 2, 161-171. (Authors' review (Zbl **338** #32005)) **58** #22649 32C40
- Gal, Vladimir The Gauss method for integrating rapidly oscillating functions—a formula and nomogram for estimating the error. *TESLA Electronics* **9** (1976), no. 2, 47-48. (C. J. Bouwkamp) **54** #6700 78.65
- H.-J. Dynamische Optimierung zur allgemeinen Spline-Approximation mit Ungleichungsnebenbedingungen und Anwendung auf Optimierungsberechnungen beim Entwurf von Strassen. (English summary) *Computing (Arch. Elektron. Rechnen)* **10** (1972), 191-204. (R. F. Albrecht) **48** #7543 65D15
- The force density method for form finding and computation of general networks. *Comput. Methods Appl. Mech. Engrg.* **3** (1974), no. 1, 115-134. (Z. Kączkowski) **52** #12505 73.65 (94A20)
- Ein Least-Squares-Dämpfungsansatz zur Lösung nichtlinearer unterbestimmter Gleichungssysteme. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* **56** (1976), no. 3, T315-T317. (A. S. Householder) **53** #9626 65H10
- (with Eggensperger, R.) Least-squares-Lösungen und Dämpfung bei unterbestimmten nichtlinearen Gleichungssystemen. (English summary) *Computing* **19** (1977), no. 2, 157-170. (Authors' summary) **58** #24905 65H10
- in, Charles W. Monotone convergence of the Sor-Newton iterative technique. *SIAM Numer. Anal.* **10** (1973), 933-938. (J. J. Moré) **49** #8331 65H10
- l, Anita (with Barakat, Richard) Time-dependent entropies associated with single mode radiation in a cavity. *Phys. Lett. A* **64** (1977), no. 2, 187-189. **56** #14199 0.60
- I, Hans-Joachim Explizite Restabschätzungen für gewisse Typen asymptotischer Entwicklungen von Parameterintegralen. *Beiträge Anal.* No. 3 (1972), 97-108. (D. T. laimo) **49** #1746 65D30
- Eine explizite Restgliedabschätzung für asymptotische Entwicklungen von Parameterintegralen. *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* **17** (1975), no. 6, 499-776. (L. Berg) **55** #955 41A60
- Asymptotische Darstellungen für Parameterintegrale mit zwei reellen Parametern. I. *Math. Nachr.* **82** (1978), 309-323. (L. Berg) **58** #1911 41A60
- enberg, Björn The group of homotopy self-equivalences of some compact W -complexes. *Math. Ann.* **200** (1973), 253-266. (David Smallen) **48** #5062 5D10
- On the self-equivalences of a space with non-cyclic fundamental group. *Math. Ann.* **205** (1973), 333-344. (C. R. Curjel) **48** #3039 55D10
- Schellenberg, Paul J. (with Mullin, Ronald C.) Room designs of small side. *Proceedings of the Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1971)*, pp. 521-526. Dept. Comput. Sci., Univ. Manitoba, Winnipeg, Man., 1971. (M. Kimberley) **50** #12769 05B30
- (with Horton, J. D.; Mullin, Ronald C.) On the existence of Room squares of side $8s+5$. *Proceedings of the Third Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1972)*, pp. 425-446. Florida Atlantic Univ., Boca Raton, Fla., 1972. (W. D. Wallis) **50** #150 05B30
- On balanced Room squares and complete balanced Howell rotations. *Aequationes Math.* **9** (1973), 75-90. (W. D. Wallis) **47** #4827 05B30
- (with Vanstone, S. A.) Vector spaces, geometries, and designs. *Utilitas Math.* **6** (1974), 337-341. (Heinrich Werner) **51** #192 05B05
- A computer construction for balanced orthogonal matrices. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1975)*, pp. 513-522. Congressus Numerantium, No. XIV, Utilitas Math., Winnipeg, Man., 1975. (Vera Pless) **52** #13423 05B05
- (with McCarthy, David; Mullin, Ronald C.; Stanton, Ralph G.; Vanstone, S. A.) The non-existence of $(7,1)$ -designs with $v=31$, $b<43$. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1975)*, pp. 479-495. Congressus Numerantium, No. XVI, Utilitas Math. Publ., Winnipeg, Man., 1976. (Edward Spence) **54** #2496 05B05
- (with McCarthy, David; Mullin, Ronald C.; Stanton, Ralph G.; Vanstone, S. A.) The non-existence of $(7,1)$ -designs with $v=31$, $b>50$. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1975)*, pp. 497-532. Congressus Numerantium, No. XVI, Utilitas Math. Publ., Winnipeg, Man., 1976. (Edward Spence) **54** #2497 05B05
- (with Hoffman, Frederick; Vanstone, S. A.) A starter-adder approach to equidistant permutation arrays and generalized room squares. *Ars Combinatoria* **1** (1976), no. 1, 307-319. (Mikhail Deza) **54** #12554 05B30
- (with McCarthy, David; Mullin, Ronald C.; Stanton, Ralph G.; Vanstone, S. A.) On approximations to a projective plane of order 6. *Ars Combinatoria* **2** (1976), 111-168. (Joseph A. Thas) **55** #144 05B30
- Further results on $v_2(7,1)$. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1977)*, pp. 591-603. Congressus Numerantium, No. XIX, Utilitas Math., Winnipeg, Man., 1977. (R. C. Mullin) **58** #307 05B30
- (with McCarthy, David; Mullin, Ronald C.; Stanton, Ralph G.; Vanstone, S. A.) Toward the uniqueness of the $(7,1)$ -design on 31 varieties. *Proceedings of the Sixth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1976)*, pp. 265-285. Congress. Numer., XVIII, Utilitas Math., Winnipeg, Man., 1977. (Authors' summary) **58** #27552 05B05
- (with Vanstone, S. A.) Some results on equidistant permutations. *Proceedings of the Sixth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1976)*, pp. 389-410. Congress. Numer., XVIII, Utilitas Math., Winnipeg, Man., 1977. (Authors' summary) **58** #27565 05B30 (05B15, 94A10)
- (with Van Rees, G. H. J.; Vanstone, S. A.) The existence of balanced tournament designs. *Ars Combinatoria* **3** (1977), 303-317. (S. K. Tharthare) **58** #21799 05C30
- (with Taylor, Judy) On a conjecture concerning generalized Room squares. *Ars Combinatoria* **4** (1977), 59-68. (Mikhail Deza) **57** #16109 05B30
- (with Vanstone, S. A.) Recursive constructions for equidistant permutation arrays. *J. Austral. Math. Soc. Ser. A* **24** (1977), no. 2, 216-223. (Mikhail Deza) **57** #16110 05B30
- (with Vanstone, S. A.) A construction for equidistant permutation arrays of index one. *J. Combinatorial Theory Ser. A* **23** (1977), no. 2, 180-186. (Judith Q. Longyear) **56** #2849 05B30
- (with Vanstone, S. A.) A construction for BIBDs based on an intersection property. *Utilitas Math.* **11** (1977), 313-324. (Michael J. Ganley) **55** #10289 05B05
- Schellhaas, Helmut Ein Algorithmus für das zeitabhängige Verhalten eingebetteter Markoff-Ketten bei den Wartesystemen $M^{(r)}/G^m/1$ und $G^m/M^{(r)}/1$. (English summary) *Unternehmensforschung* **15** (1971), 229-239. (J. G. C. Templeton) **49** #6412 60K25
- Zur Extrapolation in Markoffschen Entscheidungsmodellen mit Diskontierung. (English summary) *Z. Operations Res. Ser. A-B* **18** (1974), A91-A104. (K. Zimmerman) **51** #9835 90C40
- Bewertete generative Prozesse mit Anwendung auf Lagerhaltungsmodelle mit zustandsabhängigen Parametern. *Operations Research Verfahren, Band XX*, pp. 129-162. Hain, Meisenheim am Glan, 1975. (Knut Richter) **56** #3966 60K15
- Schellong, Inge Eine Kriterium für die Richtigkeit der Milnor-Vermutung. (English summary) *Manuscripta Math.* **15** (1975), 81-89. (T.-Y. Lam) **52** #13636 10C05
- Schelm, E. P. (with Weise, K.) Die Berechnung von Interpolationspolynomen unter Verwendung von Orthogonalpolynomen. (English summary) *Biometrische Z.* **13** (1971), 299-313. (Author's summary) **46** #4658 62J99
- Schelp, R. H. (with Faudree, R. J.; Rousseau, C. C.) Theory of path length distributions. I. *Discrete Math.* **6** (1973), 35-52. (M. Aigner) **48** #1981 05C35
- (with Faudree, R. J.) Problem 72-6*, "A solved and unsolved graph coloring problem", by P. Erdős. *SIAM Rev.* **15** (1973), 377-380. (Rudolf Halin) **48** #5898 05C15
- (with Faudree, R. J.) Path connected graphs. *Acta Math. Acad. Sci. Hungar.* **25** (1974), 313-319. (N. G. de Bruijn) **51** #12601 05C35
- (with Faudree, R. J.) All Ramsey numbers for cycles in graphs. *Discrete Math.* **8** (1974), 313-329. (E. C. Milner) **49** #10596 05C35
- (with Faudree, R. J.; Lawrence, S. L.; Parsons, T. D.) Path-cycle Ramsey numbers. *Discrete Math.* **10** (1974), 269-277. (F. Harary) **50** #9663 05C15
- (with Faudree, R. J.) Ramsey type results. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. II, pp. 657-665. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (Václav Chvátal) **53** #13016 05C15
- A partial Baer *-semigroup of relations. *J. Austral. Math. Soc.* **19** (1975), 160-172. (R. J. Greechie) **51** #7982 06A40 (20M99)
- (with Faudree, R. J.) Path Ramsey numbers in multicolorings. *J. Combinatorial*

- Theory Ser. B* 19 (1975), no. 2, 150-160. (S. A. Burr) 54 #152 05C35
(with Faudree, R. J.) Path-path Ramsey-type numbers for the complete bipartite graph. *J. Combinatorial Theory Ser. B* 19 (1975), no. 2, 161-173. (S. A. Burr) 54 #153 05C35
(with Faudree, R. J.) The entire graph of a bridgeless connected plane graph is pancnnected. *J. London Math. Soc.* (2) 12 (1975/76), no. 1, 59-66. (J. Mitchem) 52 #5460 05C10
(with Faudree, R. J.) Ramsey numbers for all linear forests. *Discrete Math.* 16 (1976), no. 2, 149-155. (S. A. Burr) 55 #2650 05C35
(with Faudree, R. J.) The square of block is strongly path connected. *J. Combinatorial Theory Ser. B* 20 (1976), no. 1, 47-61. (Arthur M. Hobbs) 54 #12568 05C35
(with Erdős, Paul; Faudree, R. J.; Rousseau, C. C.) Generalized Ramsey theory for multiple colors. *J. Combinatorial Theory Ser. B* 20 (1976), no. 3, 250-264. (R. L. Graham) 54 #5030 05C15
(with Burr, Stefan A.; Faudree, R. J.) On Ramsey-minimal graphs. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing* (Louisiana State Univ., Baton Rouge, La., 1977), pp. 115-124. *Congressus Numerantium, No. XIX, Utilitas Math., Winnipeg, Man., 1977.* (C. C. Rousseau) 58 #5324 05C15
(with Erdős, Paul; Faudree, R. J.; Rousseau, C. C.) On cycle-complete graph Ramsey numbers. *J. Graph Theory* 2 (1978), no. 1, 53-64. (Fan R. K. Chung) 58 #16412 05C99
(with Burr, Stefan A.; Erdős, Paul; Faudree, R. J.; Rousseau, C. C.) Ramsey-minimal graphs for multiple copies. *Nederl. Akad. Wetensch. Indag. Math.* 40 (1978), no. 2, 187-195. (Torrence D. Parsons) 58 #5387 05C99
Schelter, William Products of torsion theories. *Arch. Math. (Basel)* 22 (1971), 590-596. (B. J. Müller) 45 #8690 16A62 (13D99)
(with Roberts, Paul) Flat modules and torsion theories. *Math. Z.* 129 (1972), 331-334. (J. S. Alin) 47 #1871 16A50
Two-sided rings of quotients. *Arch. Math. (Basel)* 24 (1973), 274-277. (Robert S. Cunningham) 47 #8589 16A08
Topological rings of quotients. *Canad. J. Math.* 26 (1974), 1228-1233. (J. K. Luedeman) 50 #9989 16A80
Essential extensions and intersection theorems. *Proc. Amer. Math. Soc.* 53 (1975), no. 2, 328-330. (Robert R. Colby) 52 #10800 16A46
Intersection theorems for some noncommutative noetherian rings. *J. Algebra* 38 (1976), no. 1, 244-250. (G. Krause) 53 #5662 16A46
Integral extensions of rings satisfying a polynomial identity. *J. Algebra* 40 (1976), no. 1, 245-257. (E. Formanek) 54 #5295 (E 55 #405) 16A38
On the Krull-Akizuki theorem. *J. London Math. Soc.* (2) 13 (1976), no. 2, 263-264. (Claudio Procesi) 53 #8131 16A46
(with Small, Lance W.) Some pathological rings of quotients. *J. London Math. Soc.* (2) 14 (1976), no. 2, 200-202. (G. Michler) 55 #2981 16A21
Affine PI rings are catenary. *Bull. Amer. Math. Soc.* 83 (1977), no. 6, 1309-1310. (Edward Formanek) 56 #8610 16A38
Errata: "Integral extensions of rings satisfying a polynomial identity" (*J. Algebra* 40 (1976), no. 1, 245-257). *J. Algebra* 44 (1977), no. 2, 576. (Edward Formanek) 55 #405 16A38
Azumaya algebras and Artin's theorem. *J. Algebra* 46 (1977), no. 1, 303-304. (F. DeMeyer) 56 #3044 16A16
(with Handelman, David; Lawrence, John) Skew group rings. *Houston J. Math.* 4 (1978), no. 2, 175-198. (Claudio Procesi) 58 #5771 16A38 (16A26)
Non-commutative affine P.I. rings are catenary. *J. Algebra* 51 (1978), no. 1, 12-18. (Edward Formanek) 58 #5772 16A38
(with Paré, Robert) Finite extensions are integral. *J. Algebra* 53 (1978), no. 2, 477-479. (L. C. A. van Leeuwen) 58 #5781 16A56 (16A38)
Schempp, Walter Zur Lototsky-Transformation über kompakten Räumen von Wahrscheinlichkeitsmassen. (English summary) *Manuscripta Math.* 5 (1971), 199-211. (V. Baskekov (RZMat 1972 #3 B680)) 50 #5271 40J05
(with Felbecker, Günter) A generalization of Bohman-Korovkin's theorem. *Math. Z.* 122 (1971), 63-70. (G. D. Taylor) 45 #789 41A35
A note on Korovkin test families. *Arch. Math. (Basel)* 23 (1972), 521-524. (P. D. Morris) 47 #7400 46E05 (41A65)
(with Dreseler, Bernd) Saturation on locally compact abelian groups. *Manuscripta Math.* 7 (1972), 141-174. (P. L. Butzer and H. Johnen) 46 #7776 41A40
(with Delvos, Franz-Jürgen) On spline systems: L_m -splines. *Math. Z.* 126 (1972), 154-170. (J. W. Jerome) 45 #9034 41A15
(with Dreseler, Bernd) Spezielle Funktionen der mathematischen Physik und Saturation. *Methoden und Verfahren der mathematischen Physik, Band 11*, pp. 1-17. *Bibliographisches Institut, Mannheim*, 1973. (W. Müller, Jr.) 50 #13916 35P99 (41A40)
(with Dreseler, Bernd) Saturation on locally compact abelian groups: an extended theorem. *Manuscripta Math.* 8 (1973), 271-286. (C. F. Dunkl) 48 #4586 41A40 (43A15)
(with Dreseler, Bernd) Zonal approximation processes. *Math. Z.* 133 (1973), 81-92. (P. L. Butzer) 49 #964 41A65 (41A40)
Zur Theorie der Spline Systeme. *Spline-Funktionen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 275-287. *Bibliographisches Inst., Mannheim*, 1974. (B. I. Kvasov) 55 #8661 41A65 (41A15)
(with Dreseler, Bernd) On the Charshiladze-Lozinski theorem for compact topological groups and homogeneous spaces. *Manuscripta Math.* 13 (1974), 321-337. (Dietrich Braess) 50 #14021 41A65 (42-XX)
(with Tippenhauer, Ulrich) Reprokerne zu Spline-Grundräumen. *Math. Z.* 136 (1974), 357-369. (E. Gerlach) 58 #6867 41A65 (41A15, 46E20)
Zur Theorie der saturierten Approximationsverfahren auf lokalkompakten abelschen Gruppen. (English summary) *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 181-187. *Reidel, Dordrecht*, 1975. (C. F. Dunkl) 56 #6222 41A40 (43A25)
(with Delvos, Franz-Jürgen) Sard's method and the theory of spline systems. *J. Approximation Theory* 14 (1975), no. 3, 230-243. (J. R. Rice) 52 #8756 41A65
(with Delvos, Franz-Jürgen) On optimal periodic spline interpolation. *J. Math. Anal. Appl.* 52 (1975), no. 3, 553-560. (Werner Haussmann) 54 #5707 41A65
(with Dreseler, Bernd) On the convergence and divergence behaviour of approximation processes in homogeneous Banach spaces. *Math. Z.* 143 (1975), 81-92. (D. E. Wulbert) 51 #8710 41A65 (43A70)
(with Dreseler, Bernd) Fine groupings and the divergence of approximation processes on compact topological groups. *Math. Z.* 145 (1975), no. 1, 93-97. (D. E. Wulbert) 52 #1124 41A65 (42A08)
(with Dreseler, Bernd) On the Fourier transformation on spaces of (p, q) -multipliers. *Monatsh. Math.* 80 (1975), no. 3, 171-177. (Satoru Igari) 53 #1173 43A22
(with Dreseler, Bernd) Central approximation processes. *Tôhoku Math. J.* (2) 1975, no. 2, 153-173. (Jörgen Löfström) 53 #3557 41A40
(with Delvos, Franz-Jürgen; Schäfer, Werner) Convergence of abstract spline approximation theory (Proc. Internat. Colloq., Inst. Angew. Math. Univ. Bonn, Bonn, 1976), pp. 155-166. *Springer, Berlin*, 1976. (From the introduction) 58 #29716 41A65
(with Delvos, Franz-Jürgen) An extension of Sard's method. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 80-91. *Lecture Notes in Math.*, Vol. 50. *Springer, Berlin*, 1976. (Authors' introduction) 58 #12098 41A15
(with Schäfer, Werner) Splineapproximation in intermediären Räumen. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 226-246. *Lecture Notes in Math.*, Vol. 501. *Springer, Berlin*, 1976. (Authors' introduction) 58 #12103 41A15
(with Dreseler, Bernd) Spaces of test functions and theorems of the Bochner-Schoenberg-Eberlein type. *Math. Z.* 148 (1976), no. 3, 207-213. (J. Schmüdgen) 53 #14023 43A35 (46F05)
Group actions on the solutions of linear partial differential equations. *Math. Z.* 148 (1976), no. 2, 111-115. (S. G. Gindikin) 54 #11406 58G05 (22E30)
(with Schäfer, Werner) Error bounds for bivariate spline interpolation. *Constructive theory of functions of several variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 196-211. *Lecture Notes in Math.*, Vol. 571. *Springer, Berlin*, 1977. (Franz-Jürgen Delvos) 58 #23300 41A63 (41A15, 41A65)
Bernstein polynomials in several variables. *Constructive theory of functions of several variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 212-219. *Lecture Notes in Math.*, Vol. 571. *Springer, Berlin*, 1977. (B. Dreseler) 58 #23301 41A63
Approximation of G-homogeneous Banach spaces. *Constructive theory of functions of several variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 220-225. *Lecture Notes in Math.*, Vol. 571. *Springer, Berlin*, 1977. (B. Dreseler) 58 #23357 43A75 (42A08)
Approximation on compact Riemannian globally symmetric manifolds of rank one. *J. Approximation Theory* 21 (1977), no. 3, 236-245. (Author's review (Zbl 309 #43020)) 58 #23362 43A85
On functions of positive type on commutative monoids. *Math. Z.* 156 (1977), no. 2, 115-121. (Christian Berg) 57 #3749 43A35
(with Kösters, Heinz-Walter) L-Splines als schwache Lösungen von verallgemeinerten Randwertproblemen. *J. Approximation Theory* 22 (1978), no. 3, 206-222. (Franz-Jürgen Delvos) 58 #23260 41A15 (41A05, 65D05)
See also *Spline-Funktionen*, 49 #9478; *Spline functions*, 53 #1111 and *Constructive theory of functions of several variables*, 57 #6949
Schendel, Udo ★Sparse-Matrizen. Eine Einführung mit Beispielen. *R. Oldenbourg Verlag, München-Vienna*, 1977 150 pp. (A. S. Householder) 55 #9512 65F99
Schenck, Dieter Über zweidimensionale singuläre Operatoren auf den Räumen M_p . *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* 17 (1975), no. 2, 259-268. (Richard Bagby) 52 #15119 47G05
Schenk, Günter Die Logik. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* 23 (1974), no. 3, 27-54. (Editors) 57 #2859 02-01
Schenk, R. (with Scheurer, H. G.) Neues Identifikationsverfahren auf der Grundlage der Korrelationsfunktionen. (English summary) *Regelungstech.* 23 (1975), no. 8, 275-280. (Authors' summary) 56 #15057 93E10
Schenk, Wilfried Über das asymptotische Verhalten der Übergangswahrscheinlichkeiten eines stochastischen Prozesses mit stationären und unabhängigen Zuwächsen. *Wiss. Z. Techn. Univ. Dresden* 24 (1975), no. 5, 945-947. (J. G. Wendel) 52 #15691 60J30
Schenkmann, Eugene The independence of some exponential values. *Amer. Math. Monthly* 81 (1974), 46-49. (M. J. Cowles) 51 #12728 10F35
★Group theory. Corrected reprint of the 1965 edition. *Robert E. Krieger Publishing Co., Huntington, N.Y.*, 1975. xiv + 289 pp. ISBN 0-88275-070-4 (Editors) 57 #416 20-01
A group theoretic presentation of the alternating group on five symbols, A_5 . *Math. Mat.* 48 (1975), 170-171. (M. D. Hestenes) 51 #5776 20F05
A theorem on locally finite groups and a class of infinite groups defined by generators and relations. *Symposia Mathematica, Vol. XVII (Convegno sui Gruppi Infiniti, INDAM, Roma, 1973)*, pp. 277-282. *Academic Press, London*, 1976. (B. Chan) 54 #12905 20E25
Groups with a finite number of Sylow L -subgroups. *Proc. Amer. Math. Soc.* 54 (1976), no. 2, 205. (B. A. F. Wehrhritz) 53 #8263 20E99
A factorization theorem for groups and Lie algebras. *Proc. Amer. Math. Soc.* 60 (1978), no. 2, 149-152. (G. P. Kukin) 57 #9773 17B60 (20F05)
Schensted, Irene Verona ★A course on the application of group theory to quantum mechanics. *Neo Press, Peaks Island, Me.*, 1976. vii + 342 pp. (Nigel B. Backhouse) 57 #2248 81.22
Schenzel, Peter Innere Regression am Beispiel eigentlich nichtlinearer Funktionen. (English summary) *Biometrische Z.* 14 (1972), no. 4, 272-282. (Roland Bulirsch) 55 #6779 65D10
Einige Anwendungen der lokalen Dualität und verallgemeinerte Cohen-Macaulay-Moduln. *Math. Nachr.* 69 (1975), 227-242. (K. Kiyek) 53 #2940 14B15 (14M05, 13D05, 13C15)
(with Vogel, Wolfgang) On set-theoretic intersections. *J. Algebra* 48 (1977), no. 1, 401-408. (Allen B. Altman) 57 #12541 14M10 (13H15)
On Veronesean embeddings and projections of Veronesean varieties. *Arch. Math. (Basel)* 30 (1978), no. 4, 391-397. (W. Vogel) 58 #5651 13H10 (14M05)
Schenzle, D. (with Kramer, P.) Some applications of canonical transformations in

- gmann Hilbert space. (Spanish summary) *Rev. Mexicana Fis.* **22** (1973), no. 1-2, 44. (Thomas A. Barnebey) **56** #10565 81.46
- Anton Roelof** ★ Kernel operators. Dissertation, Rijksuniversiteit te Leiden, Leiden. With a Dutch summary. *Rijksuniversiteit te Leiden, Leiden*, 1977, iii + 60 pp. (loose ends) (W. A. J. Luxemburg) **55** #13279 47B37 (46E30, 47G05)
- Order continuous components of operators and measures. *Nederl. Akad. Wetensch. Ser. A* **81** = *Indag. Math.* **40** (1978), no. 1, 110-117. (W. A. J. Luxemburg) #17378 47B55
- T. J.** Series solutions and the adiabatic invariant of the Helmholtz equation. *Physica* **74** (1974), 397-415. (C. J. Bouwkamp) **53** #12226 78.41 (78.65)
- rs, Heinrich** Leibniz' Disputationen "De conditionibus": Ansätze zu einer stischen Aussagenlogik. *Akten des II. Internationalen Leibniz-Kongresses (Hannover, 1972), Band IV: Logik, Erkenntnistheorie, Methodologie, Sprachphilosophie*, pp. 1-17. *Acta Leibnitiana Suppl.*, Vol. XV, Steiner, Wiesbaden, 1975. (Editors) **58** #27186 03 (01A45)
- ll, Bernd** Kürzungseigenschaften und reflexive Unterkategorien. *Math. Nachr.* **62** (74), 27-44. (J. R. Isbell) **52** #2227 08A05
- HL** (with Lax, Melvin D.) Stochastic transport in a disordered solid. I. Theory. *Phys. Rev. B* (3) **7** (1973), no. 10, 4491-4502. (Authors' summary) **52** #12673 82.60
- r, Donald** The form of reductio ad absurdum. *Mind* **80** (1971), no. 318, 247-252. (K. Boue) **56** #11741 02B05 (02A05)
- r, G.** (with Pereyra, Victor) Eigenvalues of symmetric tridiagonal matrices: a fast, accurate and reliable algorithm. *J. Inst. Math. Appl.* **12** (1973), 209-222. (Murli M. Gupta) **52** #15986 65F15
- (with Pereyra, Victor) Efficient computer manipulation of tensor products with applications to multidimensional approximation. *Math. Comput.* **27** (1973), 595-605. (R. Bartels) **52** #15994 65F30 (65D05)
- See also **Mathematical aspects of finite elements in partial differential equations**, #1525
- er, K.** (with Butzer, Paul L.) Approximation theorems for sequences of commutative operators in Banach spaces. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970) (Russian)*, pp. 137-146. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (E. W. Cheney) **53** #13954 41A65
- Über die beste Approximation von L_p -Funktionen durch Splines. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970) (Russian)*, pp. 277-286. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (L. L. Schumaker) **51** #8684 41A15
- Über die Konvergenz von natürlichen interpolierenden Splines. *Linear operators and approximation (Proc. Conf., Oberwolfach, 1971)*, pp. 487-492. *Internat. Ser. Numer. Math.*, Vol. 20, Birkhäuser, Basel, 1972. (Gerhard Merz) **52** #3801 41A05
- Über die Dualen von Banachräumen, die durch lineare Approximationsprozesse erzeugt werden, und Anwendungen für periodische Distributionen. *Acta Math. Acad. Sci. Hungar.* **23** (1972), 343-365. (Jörgen Löfström) **47** #7296 41A65
- (with Wagner, Heinz-Joseph) An equivalence theorem on best approximation of continuous functions by algebraic polynomials. *Applicable Anal.* **2** (1972/73), 343-354. (Ralph L. James) **52** #14777 41A50
- A remark on the characterization of Lip 1 by trigonometric best approximation. Collection of articles dedicated to J. L. Walsh on his 75th birthday, III. *J. Approximation Theory* **5** (1972), 213-215. (L. Leindler) **49** #971 42A08
- (with Butzer, Paul L.) Jackson and Bernstein-type inequalities for families of commutative operators in Banach spaces. Collection of articles dedicated to J. L. Walsh on his 75th birthday, III. *J. Approximation Theory* **5** (1972), 308-342. (B. Dreseler) **49** #11121 41A65
- (with Butzer, Paul L.; Westphal, Ursula) On the Banach-Steinhaus theorem and approximation in locally convex spaces. *Acta Sci. Math. (Szeged)* **34** (1973), 25-34. (Walter Schempp) **48** #4595 41A65 (46A99)
- (with Esser, Henning) Eine Bemerkung zur Konvergenz Hermitescher Interpolationsprozesse. (English summary) *Numer. Math.* **21** (1973/74), 220-222. (John M. Karon) **53** #6979 65D05
- On extensions of a theorem of S. N. Bernstein. *Studia Sci. Math. Hungar.* **8** (1973), 269-271. (Ivan Singer) **50** #7917 41A65 (46B05)
- Approximation theorems for polynomial spline operators. *Functional analysis and its applications (Internat. Conf., Eleventh Anniversary of Maitscience, Madras, 1973)*, dedicated to Alladi Ramakrishnan, pp. 438-467. *Lecture Notes in Math.*, Vol. 399, Springer, Berlin, 1974. (Howard L. Weiner) **53** #6158 41A15
- Stetigkeitsmoduli und beste Approximation durch polynomiale Splines. *Spline-Funktionen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 289-302. *Bibliographisches Inst., Mannheim*, 1974. (L. Leindler) **54** #8094 41A15 (26A15)
- (with Esser, Henning) Konvergenzordnungen von Ein- und Mehrschrittverfahren bei gewöhnlichen Differentialgleichungen. (English summary) *Computing (Arch. Elektron. Rechnen)* **12** (1974), no. 2, 127-143. (H. Brunner) **53** #7034 65L05
- Characterization of generalized Lipschitz classes by best approximation with splines. *SIAM J. Numer. Anal.* **11** (1974), 283-304. (D. C. Handscomb) **50** #10622 41A15
- A comparison approach to direct theorems for polynomial spline approximation. *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 189-214. *Reidel, Dordrecht*, 1975. (Werner Haussmann) **58** #1850 41A10 (41A15)
- Inequalities of Bernstein type in a Banach space. (Russian) *Mat. Zametki* **17** (1975), no. 6, 925-937. (Hans-Jürgen Albrand) **56** #3538 41A65 (46B99)
- (with DeVore, Ronald A.) A constructive theory for approximation by splines with an arbitrary sequence of knot sets. *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math., Univ. Bonn, Bonn, 1976)*, pp. 167-183. *Springer, Berlin*, 1976. (From the introduction) **58** #29637 41A25
- Some inverse theorems for best approximation by L-splines. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 549-555. *Academic Press, New York*, 1976. (L. L. Schumaker) **55** #8629 41A15 (41A40)
- (with Johnen, Hans) Direct and inverse theorems for best approximation by A-splines. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 116-131. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (From the introduction) **58** #1860 41A15
- Best approximation by Chebyshevian splines and generalized Lipschitz spaces. *Rev. Anal. Numér. Théorie Approximation* **5** (1976), no. 1, 87-95 (1977). (Dietrich Braess) **57** #6977 41A25 (41A15)
- (with Johnen, Hans) On the equivalence of the K-functional and moduli of continuity and some applications. *Constructive theory of functions of several variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 119-140. *Lecture Notes in Math.*, Vol. 571, Springer, Berlin, 1977. (Lee L. Keener) **58** #7060 46E35 (46M35)
- Optimal degree of approximation by splines. *Optimal estimation in approximation theory (Proc. Internat. Sympos., Freudenstadt, 1976)*, pp. 139-149. *Plenum, New York*, 1977. (V. A. Popov) **57** #3698 41A15
- See also **Approximationstheorie**, **52** #14743 and **Approximation theory**, **58** #23247
- Scherer, Rudolf** Fehlerabschätzung für ein Runge-Kutta-Verfahren mit mehrfachen Knoten. (English summary) *Computing (Arch. Elektron. Rechnen)* **10** (1972), 391-396. (Jochen Werner) **48** #5388 65L05
- Herleitung von Runge-Kutta-Verfahren der Ordnung vier mit übersichtlichen Fehlerdarstellungen. *Math. Z.* **128** (1972), 311-323. (F. Stenger) **47** #6096 65L05
- Zur Stabilität halbexpliziter Runge-Kutta-Methoden. *Arch. Math. (Basel)* **26** (1975), 267-272. (Rolf Jeltsch) **51** #7295 65L05
- Exaktheitseigenschaft einiger Runge-Kutta-Formeln. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* **55** (1975), no. 4, T259-T260. (Abbas I. Abdel Karim) **54** #1620 65L05
- Bemerkungen zur numerischen Behandlung steifer Differentialgleichungssysteme. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* **56** (1976), no. 3, T317-T319. (A. S. Householder) **53** #9654 65L05
- A note on Radau and Lobatto formulae for O.D.E.'s. *Nordisk Tidsskr. Informationsbehandling (BIT)* **17** (1977), no. 2, 235-238. (Author's summary) **57** #11060 65L05
- Spiegelung von Stabilitätsbereichen. *Numerical treatment of differential equations (Proc. Conf., Math. Forschungsinst., Oberwolfach, 1976)*, pp. 147-152. *Lecture Notes in Math.*, Vol. 631, Springer, Berlin, 1978. (J. C. Butcher) **58** #19153 65L05
- Scherf, Harald** See **Pokropp, Fritz**, **57** #14197
- Scherk, J.** Zero-slope limit of the dual resonance model. *Nuclear Phys.* **B31** (1971), 222-234. (J. E. Marsden) **46** #8593 81.47
- (with Schwarz, John H.) Dual models and the geometry of space-time. *Phys. Lett.* **52B** (1974), 347-350. (Authors' summary) **50** #12130 83.53
- (with Schwarz, John H.) Gravitation in the light cone gauge. *General Relativity and Gravitation* **6** (1975), no. 6, 537-550. (Hsin-Yang Yeh) **56** #10721 83.53
- An introduction to the theory of dual models and strings. *Rev. Modern Phys.* **47** (1975), 123-164. (John McEwan) **56** #17602 81.47
- Dual models: candidates for a renormalizable theory of gravity. *Nonlocal, nonlinear and nonrenormalizable field theories (Proc. Fourth Internat. Sympos. on Nonlocal Field Theories, Alushta, 1976) (Russian)*, pp. 286-302. *Ob'ed. Inst. Jadern. Issled., Dubna*, 1976. (M. J. Perry) **56** #2176 83.53
- (with Cremmer, E.) Spontaneous compactification of space in an Einstein-Yang-Mills-Higgs model. *Nuclear Phys. B* **108** (1976), no. 3, 409-416. (P. A. Goodinson) **53** #10123 83.53 (81.53)
- (with Cremmer, E.; Schaposnik, F.) Uniqueness of the 't Hooft-Polyakov magnetic monopole solution. *Phys. Lett. B* **65** (1976), no. 1, 78-80. (Authors' summary) **56** #10527 81.35
- (with Ferrara, S.; van Nieuwenhuizen, P.) Locally supersymmetric Maxwell-Einstein theory. *Phys. Rev. Lett.* **37** (1976), no. 16, 1035-1037. (C. B. Collins) **55** #7265 83.35
- (with Cremmer, E.) Spontaneous compactification of extra space dimensions. *Nuclear Phys. B* **118** (1977), no. 1-2, 61-75. (A. U. Klimyk) **55** #13994 81.35
- (with Brink, Lars; Schwarz, John H.) Supersymmetric Yang-Mills theories. *Nuclear Phys. B* **121** (1977), no. 1, 77-92. (S. Deser) **56** #4545 81.53
- (with Cremmer, E.; Ferrara, S.) U(N) invariance in extended supergravity. *Phys. Lett. B* **68** (1977), no. 3, 234-238. (Authors' summary) **58** #9059 83.53
- Scherk, Peter** (with Linberg, Rolf) ★ Rudiments of plane affine geometry. *Mathematical Expositions*, No. 20. *University of Toronto Press, Toronto, Ont.-Buffalo, N. Y.*, 1975. ix + 113 pp. (M. V. D. Burmester) **54** #13702 50-01
- (with Lane, Norman D.; Turgeon, Jean M.) Quasigraphs. *Canad. J. Math.* **29** (1977), no. 1, 1-28. (L. M. Kelly) **56** #6583 53C75
- On the intersection number of two plane curves. *J. Geometry* **10** (1977), no. 1-2, 57-68. (W. Burau) **58** #16682 14H20
- See also **Foundations of geometry**, **52** #15206
- Schermann, Klára** Groups of order which is indivisible by a fixed prime. *Mat. Časopis Sloven. Akad. Vied* **19** (1969), 255-263. (D. J. S. Robinson) **46** #1918 20F50
- Scherpereel, Anne** See **Duval-Scherpereel, Anne**
- Scherer, Willy** Der phänomenologische Energietensor im Rahmen der linearen Feldtheorie. *Helv. Phys. Acta* **44** (1971), 530-544. (H. Treder) **52** #16515 83.53
- See also **Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday**, **48** #15
- Schertz, Reinhard** L-Reihen in imaginär-quadratischen Zahlkörpern und ihre Anwendung auf Klassenzahlprobleme bei quadratischen und biquadratischen Zahlkörpern. I. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* **262/263** (1973), 120-133. (T. Metsänkylä) **48** #11057 12A70
- Arithmetische Ausdeutung der Klassenzahlformel für einfach reelle kubische Zahlkörper. *Abh. Math. Sem. Univ. Hamburg* **41** (1974), 211-223. (P. J. Weinberger) **50** #4536 12A50 (12A25, 12A30)
- (with Lang, Heinrich) Bemerkungen über die Klassenzahl eines imaginären bizyklischen biquadratischen Zahlkörpers. *Abh. Math. Sem. Univ. Hamburg* **42** (1974), 212-216. (T. Metsänkylä) **54** #276 12A50 (12A25, 12A30)
- Über die Klassenzahl gewisser nicht galoisscher Körper 6-ten Grades. *Abh. Math. Sem. Univ. Hamburg* **42** (1974), 217-227. (T. Metsänkylä) **50** #12969 12A50 (12A35, 12A40)
- L-Reihen in imaginär-quadratischen Zahlkörpern und ihre Anwendung auf Klassenzahlprobleme bei quadratischen und biquadratischen Zahlkörpern. II. *J. Reine*

- Angew. Math.* **270** (1974), 195-212. (T. Metsänkylä) **50** #276 12A70
(with Lang, Heinrich) Kongruenzen zwischen Klassenzahlen quadratischer Zahlkörper. *J. Number Theory* **8** (1976), no. 3, 352-365. (T. Metsänkylä) **54** #7428 12A50 (12A25)
Die singulären Werte der Weberschen Funktionen $f_1, f_2, \gamma_2, \gamma_3$. *J. Reine Angew. Math.* **286/287** (1976), 46-74. (E. Grosswald) **54** #10205 12A65 (10D15)
Die Klassenzahl der Teilkörper abelscher Erweiterungen imaginär-quadratischer Zahlkörper. I. *J. Reine Angew. Math.* **295** (1977), 151-168. (Judith Sunley) **57** #3100a 12A50
Die Klassenzahl der Teilkörper abelscher Erweiterungen imaginär-quadratischer Zahlkörper. II. *J. Reine Angew. Math.* **296** (1977), 58-79. (Judith Sunley) **57** #3100b 12A50
Zur Theorie der Ringklassenkörper über imaginär-quadratischen Zahlkörpern. *J. Number Theory* **10** (1978), no. 1, 70-82. (E. Grosswald) **58** #594 12A65
- Scherzinger, Ann** Table errata: *Table of integrals, series, and products* (English translation of the fourth Russian edition, Academic Press, New York, 1965) by I. S. Gradshteyn and I. M. Ryzhik. *Math. Comp.* **30** (1976), no. 136, 899. (Editors) **53** #11957 65A05 (00A05)
(with Secrest, Don) Table errata: *Tables of integral transforms, Vol. II* (McGraw-Hill Book Co., New York, 1954) by A. Erdelyi, W. Magnus, F. Oberhettinger & F. G. Tricomi. *Math. Comp.* **31** (1977), no. 137, 328-329. (Editors) **54** #14304 65A05
- Scherzler, Eberhard** On Henselian pairs. *Comm. Algebra* **3** (1975), 391-404. (John W. Petro) **53** #13186 13A99
- Schett, Alois** Addendum to: "Properties of the Taylor series expansion coefficients of the Jacobian elliptic functions" (*Math. Comp.* **30** (1976), no. 133, 143-147). *Math. Comp.* **30** (1976), no. 133, loose microfiche suppl. A1-A5. (Editors) **55** #6782 65D20 (33-00)
Properties of the Taylor series expansion coefficients of the Jacobian elliptic functions. *Math. Comp.* **30** (1976), no. 133, 143-147. (Author's summary) **52** #12298 (E 55 #6782) (E 54 #11736) 65D20 (33-00)
Corrigendum: "Properties of the Taylor series expansion coefficients of the Jacobian elliptic functions" (*Math. Comp.* **30** (1976), no. 133, 143-147). *Math. Comp.* **31** (1977), no. 137, 330. (Editors) **54** #11736 65D20 (33A25)
Recurrence formula of the Taylor series expansion coefficients of the Jacobian elliptic functions. *Math. Comp.* **31** (1977), no. 140, 1003-1005. (Y. L. Luke) **56** #687 33A25
- maggiolo-Schettini, Andrea** See Maggiolo-Schettini, Andrea
- Schetzen, Martin** Asymptotic optimum Laguerre series. *IEEE Trans. Circuit Theory* **CT-18** (1971), 493-500. (B. Rodriguez-Salinas) **46** #588 41A60
A theory of non-linear system identification. *Internat. J. Control* **20** (1974), 577-592. (I. M. Stojanov) **51** #5127 93E10
Theory of p th-order inverses of nonlinear systems. *IEEE Trans. Circuits and Systems* **CAS-23** (1976), no. 5, 285-291. (Author's summary) **56** #14868 93A99 (93C10)
- Scheu, G.** Schrankenkonstruktion für die Lösung der elliptischen Randwertaufgabe mit konstanten Koeffizienten. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* **55** (1975), no. 4, T221-T223. (From the author's introduction) **57** #6816 35J25
Global methods for the construction of convergent sequences of bounds for systems of ordinary initial value problems. *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976)*, pp. 407-416. *Lecture Notes in Math.*, Vol. 564, Springer, Berlin, 1976. (Editors) **58** #28770 34A45 (65L05)
(with Adams, E.) Zur numerischen Durchführung eines Iterationsverfahrens für monotone Schrankenfolgen bei nichtlinearen gewöhnlichen Rand- oder Anfangswertaufgaben. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* **56** (1976), no. 3, T270-T272. (Editors) **58** #31855 65L10
Eine verbesserte Abschätzung für den Verfahrensfehler bei der numerischen Integration von gewöhnlichen nichtlinearen Randwertaufgaben zweiter Ordnung. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* **56** (1976), no. 3, T319-T322. (Rudolf Gorenflo) **53** #12023 65L10
On the optimization of the error estimate of a fixed point theorem. *J. Math. Anal. Appl.* **57** (1977), no. 2, 298-322. (V. A. Ivanov) **55** #6838 65J05
Numerische Berechnung konvergenter Schrankenfolgen mittels Interpolationspolynomen für gewöhnliche Anfangswertaufgaben. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T301-T304. (H. Brunner) **56** #1725 65L05
Über eine Wahl des Parameters beim Parallelenverfahren (Parallel-Chord-Method). (English summary) *Computing* **20** (1978), no. 1, 17-26. (Werner C. Rheinboldt) **57** #14417 65H10
- Scheubel, Johann** See Hughes, Barnabas B., **58** #21084
- Scheuer, Ernest M.** (with Barlow, Richard E.; Proschan, Frank) A system debugging model. With discussion by N. Nissil, B. Epstein, R. E. Barlow, F. Proschan, and E. M. Scheuer. *Operations research and reliability (Proc. NATO Conf., Turin, 1969)*, pp. 401-420. Gordon and Breach, New York, 1971. (B. Dimitrov) **51** #4609 62N05 (90B25)
(with Mann, Nancy R.; Fertig, Kenneth W.) A new goodness-of-fit test for the two-parameter Weibull or extreme-value distribution with unknown parameters. *Comm. Statist.* **2** (1973), 383-400. (A. Goldman) **48** #9958 62G10
(with Blischke, Wallace R.) Calculation of the cost of warranty policies as a function of estimated life distributions. *Naval Res. Logist. Quart.* **22** (1975), no. 4, 681-696. (Authors' summary) **55** #9912 90B25
- Scheuneman, John** (with Fillmore, Jay P.) Fundamental groups of compact complete locally affine complex surfaces. *Pacific J. Math.* **44** (1973), 487-496. (Y. Matsushima) **48** #6474 32M05 (20F05)
Fundamental groups of compact complete locally affine complex surfaces. II. *Pacific J. Math.* **52** (1974), 553-566. (M. J. Dunwoody) **54** #612 32M10 (20E40)
Affine structures on three-step nilpotent Lie algebras. *Proc. Amer. Math. Soc.* **46** (1974), 451-454. (D. Milićić) **54** #470 22E25
- Translations in certain groups of affine motions. *Proc. Amer. Math. Soc.* **47** (1975), 223-228. (R. Steinberg) **51** #8337 22E25 (17B30)
- Scheunert, M.** (with Krause, Fr.) On the construction and uniqueness of superpropagators for scalar massless fields. (Italian and Russian summaries) *Nuovo Cimento A* (11) (1972), 221-240. (A. C. Manoharan) **48** #10344 8130
(with Nahm, W.) On the structure of simple pseudo Lie algebras and their invariant bilinear forms. *J. Mathematical Phys.* **17** (1976), no. 6, 868-879. (Robert E. Borcherds) **55** #3010 17B20
(with Nahm, W.; Rittenberg, V.) Classification of all simple graded Lie algebras whose Lie algebra is reductive. I. *J. Mathematical Phys.* **17** (1976), no. 9, 1626-1639. (J. F. Cornwell) **54** #2742a 17B20
(with Nahm, W.; Rittenberg, V.) Classification of all simple graded Lie algebras whose Lie algebra is reductive. II. Construction of the exceptional algebras. *J. Mathematical Phys.* **17** (1976), no. 9, 1640-1644. (J. F. Cornwell) **54** #2742b 17B20
(with Nahm, W.; Rittenberg, V.) The classification of graded Lie algebras. *Phys. Lett. B* **61** (1976), no. 4, 383-384. (S. N. Biswas) **53** #15144 8122
(with Nahm, W.; Rittenberg, V.) Graded Lie algebras: Generalization of Hermitian representations. *J. Mathematical Phys.* **18** (1977), no. 1, 146-154. (J. F. Cornwell) **54** #12844 17B10 (8122)
(with Nahm, W.; Rittenberg, V.) Irreducible representations of the $osp(2,1) \oplus spl(2,1)$ graded Lie algebras. *J. Mathematical Phys.* **18** (1977), no. 1, 155-162. (J. F. Cornwell) **54** #12845 17B10 (8122)
(with Rittenberg, V.) Elementary construction of graded Lie groups. *J. Mathematical Phys.* **19** (1978), no. 3, 709-713. (M. K. F. Wong) **57** #6309 22E25 (58F05)
- Scheurer, Bruno** Régularité des solutions d'un problème fondamental du calcul des variations et application. (Italian summary) *Boll. Un. Mat. Ital. B* (5) **13** (1976), no. 160-190. (H. Beckert) **55** #3913 49A99 (35J35)
Existence et approximation de points selles pour certains problèmes non linéaires. (English summary) *RAIRO Anal. Numér.* **11** (1977), no. 4, 369-400, iv. (Author's summary) **57** #3951 49D05
- Scheurer, H. G.** (with Schenk, R.) Neues Identifikationsverfahren auf der Grundlage der Korrelationsfunktionen. (English summary) *Regelungstech.* **23** (1975), no. 8, 275-284. (Authors' summary) **56** #15057 93E10
Ein adaptives, explizites Parameterschätzverfahren mit geringem Speicherplatz- und Rechenzeitbedarf. (English summary) *Regelungstech.* **23** (1975), no. 12, 427-433. (G. M. Ewing) **52** #12932 93E10
- Scheurer, P. B.** (with Poncet, J.; Stueckelberg de Breidenbach, E. C. G.) Sur une question de calcul de variations sous contraintes. (English summary) *Helv. Phys. Acta* **44** (1971), 522-529. (J. Adler) **50** #12006 8049
- Scheurer, Paul B.** Logique fermionique et logique bosonique. (English summary) *Internat. Logic Rev.* No. 6 (1972), 188-206. (D. E. Catlin) **50** #9194 8106 (02C05)
(with Stueckelberg de Breidenbach, E. C. G.) ★Thermocinétique phénoménologique galiléenne. Lehrbücher und Monographien aus dem Gebiete der exakten Wissenschaften, Physikalische Reihe, Band 6. Birkhäuser Verlag, Basel-Stuttgart, 1974. 253 pp. (M. Fabrizio) **58** #25435 8053
Cohomology of the action differential forms. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 609-613. *Lecture Notes in Phys.*, Vol. 5. Springer, Berlin, 1976. (Hans P. Künzle) **58** #31149 58A10
- Scheurle, Jürgen** (with Kirchgässner, Klaus) Verzweigung und Stabilität von Lösungen semilinearer elliptischer Randwertprobleme. *Jber. Deutsch. Math.-Verein.* **77** (1975), no. 1, 39-54. (Authors' review (Zbl 304 #47056)) **58** #6683 35J65 (47H15)
(with Kirchgässner, Klaus) Bifurcation. *Dynamical systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974)*, Vol. 1, pp. 115-129. Academic Press, New York, 1976. (J. S. Joel) **58** #29182 35J55 (47H15, 58E05)
Selective iteration and applications. *J. Math. Anal. Appl.* **59** (1977), no. 3, 596-611. (J. Daneš) **56** #1148 47H10
Ein selektives Projektions-Iterationsverfahren und Anwendungen auf Verzweigungsprobleme. (English summary) *Numer. Math.* **29** (1977/78), no. 1, 11-33. (I. M. Sheffer) **57** #7993 65J05 (47H15)
- Scheutz, Georg** See Merzbach, Uta C., **58** #4882
- Schexnayder, Michel** (with Mott, Joe L.) Exact sequences of semi-value groups. *J. Reine Angew. Math.* **283/284** (1976), 388-401. (John David) **53** #8050 13F05
- Schey, H. M.** The asymptotic distribution of the one-sided Kolmogorov-Smirnov statistic for truncated data. *Comm. Statist.—Theory Methods* **A6** (1977), no. 14, 1361-1366. (R. Heathcote) **58** #7973 62E20 (62G10)
- Schiaffino, Andrea** (with Fusciardi, Alfonso; Mosco, Umberto; Scarpini, Francesco) dual method for the numerical solution of some variational inequalities. *J. Math. Anal. Appl.* **40** (1972), 471-493. (Catherine Bandle) **48** #2865 49B30 (49B25, 49C10, 49C15)
(with de Angelis, V.; Fusciardi, Alfonso) Some methods for the numerical solution of variational inequalities with two obstacles. *Calcolo* **10** (1973), 285-338. (Klaus Glaschoff) **57** #7327 49D25
(with Tesi, Alberto) On the operator equation $AX - XA = iB$. (Italian summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) **42** (1975), 18-31. (Authors' summary) **56** #12947A60 (47B25)
A compactness method for a class of semi-linear Volterra integro-differential equations in Banach spaces. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **61** (1976), no. 3-4, 222-228 (1977). (J. A. Nohel) **58** #12260 45N05 (45J05, 47H15)
(with Salvadori, Luigi) On the problem of total stability. *Nonlinear Anal.* **1** (1976/77), no. 3, 207-213. (Wolfgang Hahn) **58** #22856 34D20
Compactness methods for quasi-linear evolution-equations. *Rend. Sem. Mat. Univ. Padova* **55** (1976), 151-166. (Sadakazu Aizawa) **57** #10157 34G05
Compactness methods for a class of semi-linear evolution-equations. *Nonlinear Anal.* **2** (1978), no. 2, 179-188. (A. Pazy) **58** #22896 34G05 (35K99)
- Schianchi, Rosanna** Spazi di Sobolev dissimmetrici e con peso. (English summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) **42** (1975), 349-388. (Pavel Doktor) **56** #16363 46E35
- Schiaparelli, G. V.** See Fleckenstein, Joachim Otto, **52** #13130 and Fleckenstein, Joachim

- to, 52 #13131
- Marcello** Il regime di moto laminare nella regione di imbocco di un tubo circolare. *Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **108** (1974), no. 2, 153-169. (St. I. Georgiță) **52** #9783 76.34
- avo, M.** See **Lo Schiavo, M.**
- oni, Nicola** (with Guardabassi, Guido) Boundary optimal constant control versus periodic operation. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 22.2, 6 pp.* IFAC, Düsseldorf, 1975. (Authors' summary) #33351 93C99
- (with Guardabassi, Guido) Permanent differential games: quasi-stationary and axed steady-state operations. *Directions in large-scale systems, many-person optimization and decentralized control (Proc. Sympos., Wakefield, Mass., 1975), pp. 5-251.* Plenum, New York, 1976. (A. B. Kuržanskii) **57** #18855 90D25
- (with Locatelli, Arturo) Further results on trajectory insensitivity. *Automatica—J. AC* **12** (1976), no. 3, 285-288. (B. P. Molinari) **54** #12280 93B35
- (with Locatelli, Arturo) Two-time-scale discrete systems. *Applications and research information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 2, pp. 421-425.* Hemisphere, Washington, D.C., 1977. (Authors' summary) #15474 93C55
- ulli, L.** Generalized Bell's inequalities. *Lett. Nuovo Cimento* (2) **20** (1977), no. 11, 40-404. **56** #14384 81.60
- den, W.** See **Control in space**, **48** #8041
- z, G. J.** See **Role and effectiveness of theories of decision in practice**, **56** #10776
- K, Karl** ★Lineare Optimierung. B. I.-Hochschul Taschenbücher, Band 64. Mathematik für Studienanfänger. Bibliographisches Institut, Mannheim-Vienna-Zurich, 1976. 331 pp. (K. Zimmermann) **53** #10279 90C05 (65K05)
- See also **Handbuch: Meyers**, **51** #7771
- Marlene** A note on generalized direct products of groups. *Canad. J. Math.* **25** (1973), 115-116. (D. J. S. Robinson) **47** #347 20F25
- Central decompositions of groups. *Math. Colloq. Univ. Cape Town* **8** (1973), 57-161. (D. J. S. Robinson) **54** #10407 20D40
- khoff, Wolfgang** Cônes tangents de Whitney, variétés de multiplicité, des couples (X, Y) normalement pseudo-plats, et équisingularité pour les ensembles analytiques de définition finie d'un espace de Banach complexe. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 22, A1457-A1459. (Author's summary) **55** #12943 2B10
- Whitneysche Tangentenkegel, Multiplizitätsverhalten, Normal-Pseudoflachheit und Singularitätstheorie für Ramische Räume. *Schr. Math. Inst. Univ. Münster* (2) **1** (1977), viii + 82 pp. (A. Aeppli (Zbl 379 #32024)) **58** #28641 32B10 32C40
- bel, Wolfgang** (with Jerke, Wolfgang; Terno, Johannes; Unger, Gerhard) Ein Beitrag zur Behandlung der Entartung beim Simplexverfahren. (English summary) *Beiträge Numer. Math.* **4** (1975), 105-114. (Csaba Fabian) **56** #14681 90C10
- ber, D.** Field switching in the presence of superconducting material. *J. Franklin Inst.* **302** (1976), no. 4, 293-312. (G. S. Agarwal) **55** #4946 78.35
- elbusch, Lary** Sylow 2-subgroups of simple groups. *J. Algebra* **31** (1974), 131-153. (Henry S. Leonard, Jr.) **50** #10067 20D20
- On the transfer homomorphism. *Comm. Algebra* **3** (1975), 295-317. (David Finkel) **51** #8235 20D05
- fer, Gerhard** ★Zur Theorie und Praxis der iterativen Optimierung grosser linearer Systeme. Mit einer Diskussion der planungsorganisatorischen Aspekte iterativer Optimierungsmethoden. Agrarwirtschaft—Zeitschrift für Betriebswirtschaft, Marktforschung und Agrarpolitik, Sonderheft 59. Alfred Strothe Verlag, Hannover, 1975. xiii + 272 pp. (Ferenc Forgó) **57** #11731 90C05 (90A15)
- ferdecker, E.** See **Fundamentals of mathematics**, **49** #8788
- ehlen, W.** Vibration control in rotordynamics. (Bulgarian and Russian summaries) *Mechanics (Third Congress, Varna, 1977) (Bulgarian). Godišnik Visš. Učebn. Zaved. Tehn. Meh.* **12** (1977), no. 3, 17-25. (Author's summary) **58** #33360 93C99
- See also **Applied mechanics**, **50** #11914
- ek, Helmut** Equations over groups. *Word problems: decision problems and the Burnside problem in group theory (Conf. on Decision Problems in Group Theory, Univ. California, Irvine, Calif., 1969; dedicated to Hanna Neumann), pp. 563-567. Studies in Logic and the Foundations of Math., Vol. 71, North-Holland, Amsterdam, 1973. (F. Levin) **55** #3096 20F99*
- emann, G.** (with Ose, G.; Baumann, H.; Stopp, Friedmar; Körner, W.; Lochmann, G.) ★Lehr- und Übungsbuch: Mathematik, Band IV. Mathematische Modelle, Matrizenrechnung, Lineare Optimierung, Wahrscheinlichkeitsrechnung und mathematische Statistik, Spieltheorie-Bedienungstheorie-Monte-Carlo-Methoden, Praktisches Rechnen, Nomografie. Verlag Harri Deutsch, Zurich-Frankfurt am Main, 1973. 696 pp. ISBN 3-87144-277-1 (Editors) **57** #5528 00A05
- emann, Günther** Zwei Klassen algebraischer Varietäten 3. Ordnung und deren Homologiegruppen. *Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M. 6 Beitr. Algebra Geom.* **4** (1975), 23-27. (A. H. Wallace) **56** #5585 14M99
- Zur Homöomorphie algebraischer Hyperflächen. *Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M. 6 Beitr. Algebra Geom.* **4** (1975), 65-70. (A. H. Wallace) **56** #5587 14N05
- Homotope lineare Räume auf algebraischen Hyperflächen. *Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M. Math.* **7** (1976), 57-59. (Konrad Drechsler) **55** #354 14E25
- Die Homologiegruppen der Umgebungsänderer gewisser Kegelspitzen. *Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg M. 8 Beitr. Algebra Geom.* **6** (1977), 7-11. (From the text) **58** #16669 14F15
- erholz, G.** (with Alabiso, C.) Infrared slavery and quark confinement. *Nuclear Phys. B* **110** (1976), no. 1, 81-92. (John McEwan) **54** #1955 81.45
- erwagen, Andreas** Über ein Teilerproblem. *Math. Nachr.* **72** (1976), 151-168. (K. Thanigasalam) **54** #2609 10J25
- Bemerkungen zu einem Teilerproblem. *Publ. Math. Debrecen* **25** (1978), no. 1-2, 41-46. (Ekkehard Krätzel) **58** #16564 10H25
- esser, W. E.** See **Stiff differential systems**, **49** #8359 and **Numerical methods for differential systems**, **55** #11629
- Schieve, William C.** (with Lowry, John T.) Scattering theory in three-body kinetic equations. *Transport Theory Statist. Phys.* **1** (1971), no. 3, 225-238. (Gérard G. Emch) **54** #12047 81.47
- See also **Lectures: Statistical physics**, **48** #5565
- van Schieveen, Hendrik Michiel** A projection method for two-point boundary value problems. *Numerische Behandlung von Differentialgleichungen, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1975), pp. 223-232. Internat. Ser. Numer. Math., Vol. 31, Birkhäuser, Basel, 1976. (Author's summary) **58** #24974 65L10*
- Schiff, B.** (with Whiteman, J. R.) Finite element approximation of singular functions. *Numerische Methoden der Approximationstheorie, Band 3 (Tagung, Math. Forschungsinst., Oberwolfach, 1975), pp. 319-333. Internat. Ser. Numer. Math., Vol. 30, Birkhäuser, Basel, 1976. (Authors' summary) **58** #25014 65N30*
- Schiff, H.** The symplectic group and parity. *Lett. Nuovo Cimento* (2) **9** (1974), 242-244. (Editors) **56** #7540 81.22
- Collinear topological monopoles and topological lines. *J. Phys. A* **11** (1978), no. 1, 173-177. (Author's summary) **57** #11353 78.22 (81.22)
- Schiff, Joel L.** Relations between boundaries of a Riemannian manifold. *Bull. Austral. Math. Soc.* **6** (1972), 25-30. (Y. K. Kwon) **45** #2618 53C20 (31B05)
- A note on the space of Dirichlet-finite solutions of $\Delta u = Pu$ on a Riemann surface. *Hiroshima Math. J.* **2** (1972), 239-242. (M. Glasner) **48** #2374 30A48 (31B15)
- Φ -bounded solutions of $\Delta u = Pu$ on a Riemann surface. *Kōdai Math. Sem. Rep.* **24** (1972), 217-223. (K.-N. Chow) **47** #5250 30A48
- Extremal properties of p -forms on a Riemannian manifold. *Kyungpook Math. J.* **12** (1972), 33-36. (Y. K. Kwon) **46** #9900 53C20 (30A52)
- Rotation-free solutions with positive infimum of the equation $\Delta u = Pu$ in a neighborhood of a singularity of the density P . *Publ. Inst. Math. (Beograd) (N.S.)* **13(27)** (1972), 117-120. (Author's summary) **54** #5458 30A48
- H^p -spaces of harmonic functions and the Wiener compactification. *Math. Z.* **132** (1973), 135-140. (S. Fisher) **48** #541 30A78
- Nonnegative solutions of $\Delta u = Pu$ on open Riemann surfaces. *J. Analyse Math.* **27** (1974), 230-241. (Author's review (Zbl 293 #31007)) **57** #16577 30A52 (31C05)
- (with Kwon, Young K.) Counterexamples for the space of minimal solutions of the equation $\Delta u = Pu$ on a Riemann surface. *Michigan Math. J.* **21** (1974), 353-354 (1975). (M. Glasner) **51** #8444 31C05
- Harmonic null sets and the Painlevé theorem. *Proc. Amer. Math. Soc.* **43** (1974), 171-172. (H. Leutwiler) **48** #8784 30A50 (31A20)
- Isomorphisms between harmonic and P -harmonic Hardy spaces on Riemann surfaces. *Pacific J. Math.* **62** (1976), no. 2, 551-560. (M. Nakai) **57** #9996 31C05
- On the behavior of meromorphic functions at the ideal boundary of a Riemann surface. *Proc. Amer. Math. Soc.* **54** (1976), 130-132. (Tatsuo Fuji'e) **52** #11035 30A50
- Ideal boundaries of a Riemann surface for the equation $\Delta u = Pu$. *Proc. Amer. Math. Soc.* **66** (1977), no. 1, 57-61. (C. Wang) **56** #8838 30A50
- On a set of poles at the Wiener boundary. *Rocky Mountain J. Math.* **7** (1977), no. 2, 365-368. (H. L. Jackson) **55** #10704 31A20 (30A50)
- Schiffer, Menahem M.** (with Tammi, Olli) A Green's inequality for the power matrix. *Ann. Acad. Sci. Fenn. Ser. A I No. 501* (1971), 15 pp. (W. C. Royster) **45** #5339 30A34
- (with Schmidt, H. G.) A new set of coefficient inequalities for univalent functions. *Arch. Rational Mech. Anal.* **42** (1971), 346-368. (R. McLaughlin) **48** #11479 30A34
- (with Schober, Glenn) An extremal problem for the Fredholm eigenvalues. *Arch. Rational Mech. Anal.* **44** (1971/72), 83-92. (Y. Komatu) **49** #7435 (E 49 #7436) 30A38 (30A60)
- Inequalities in the theory of univalent functions. *Inequalities, III (Proc. Third Sympos., Univ. California, Los Angeles, Calif., 1969; dedicated to the memory of Theodore S. Motzkin), pp. 311-319. Academic Press, New York, 1972. (W. C. Royster) **49** #558 30A34*
- (with Pederson, R. N.) A proof of the Bieberbach conjecture for the fifth coefficient. *Arch. Rational Mech. Anal.* **45** (1972), 161-193. (W. C. Royster) **47** #453 30A34
- (with Schober, Glenn) A remark on the paper "An extremal problem for the Fredholm eigenvalues" (Arch. Rational Mech. Anal. **44** (1971), 83-92). *Arch. Rational Mech. Anal.* **46** (1972), 394. (Y. Komatu) **49** #7436 30A38 (30A60)
- (with Adler, Ronald J.; Mark, James; Sheffield, Charles) Kerr geometry as complexified Schwarzchild geometry. *J. Mathematical Phys.* **14** (1973), 52-56. (Alan Barnes) **47** #8070 83.53
- (with Hersch, Joseph; Payne, Lawrence E.) Some inequalities for Stekloff eigenvalues. *Arch. Rational Mech. Anal.* **57** (1975), 99-114. (Robert D. Brown) **52** #8676 35P15 (49H05)
- (with Osserman, Robert) Doubly-connected minimal surfaces. *Arch. Rational Mech. Anal.* **58** (1975), no. 4, 285-307. (Klaus Steffen) **52** #6547 49F10 (53A10)
- (with Schober, Glenn) Coefficient problems and generalized Grunsky inequalities for schlicht functions with quasiconformal extensions. *Arch. Rational Mech. Anal.* **60** (1975/76), no. 3, 205-228. (See Zbl 339 #30012) 30A34
- (with Schober, Glenn) Coefficient problems and generalized Grunsky inequalities for schlicht functions with quasiconformal extensions. *Arch. Rational Mech. Anal.* **60** (1975/76), no. 3, 205-228. (Tadashi Kuroda) **53** #8409 30A34
- (with Schober, Glenn) A distortion theorem for quasiconformal mappings. *Advances in complex function theory (Proc. Sem., Univ. Maryland, College Park, Md., 1973-1974), pp. 138-147. Lecture Notes in Math., Vol. 505, Springer, Berlin, 1976. (G. D. Anderson) **54** #10598 30A58*
- (with Schober, Glenn) Representation of fundamental solutions for generalized Cauchy-Riemann equations by quasiconformal mappings. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **2** (1976), 501-531. (H. Renelt) **57** #12844 30A60 (35C99)
- (with Friedland, Shmuel) Global results in control theory with applications to univalent functions. *Bull. Amer. Math. Soc.* **82** (1976), no. 6, 913-915. (L. Mikołajczyk) **54** #11129 49A10 (30A34)
- (with Hummel, J. A.) Variational methods for Bieberbach-Eilenberg functions and for pairs. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **3** (1977), no. 1, 3-42. (Evelyn M. Silvia) **58** #28473 30A38

- (with Friedland, Shmuel) On coefficient regions of univalent functions. *J. Analyse Math.* **31** (1977), 125-168. (J. L. Kazdan) **58** #22519 30A34
- See also Collection: Schiffer, Menahem M., **55** #2426 and Courant, Richard, **56** #13103
- Schiffman, Stephen J.** (with Arkowitz, Martin; Ewing, John) H -structures on localized and completed spheres. *Quart. J. Math. Oxford Ser. (2)* **26** (1975), no. 103, 295-307. (J. Stasheff) **53** #11606 55D45
- A Samelson product and homotopy-associativity. *Proc. Amer. Math. Soc.* **70** (1978), no. 2, 189-195. (M. Arkowitz) **58** #18425 55D45 (55E15)
- Schiffmann, Gérard** Un analogue du théorème de Borel-Weil-Bott dans le cas non compact. *Séminaire Bourbaki, 23e année (1970/1971), Exp. No. 398*, pp. 323-336. *Lecture Notes in Math.*, Vol. 244, Springer, Berlin, 1971. (J. S. Joel) **57** #16478 22E45
- Intégrales d'entrelacement et fonctions de Whittaker. *Bull. Soc. Math. France* **99** (1971), 3-72. (P. C. Trombi) **47** #400 22E45
- (with Rallis, Stephen J.) Distributions invariantes par le groupe orthogonal. *Analyse harmonique sur les groupes de Lie (Sém., Nancy-Strasbourg, 1973-75)*, pp. 494-642. *Lecture Notes in Math.*, Vol. 497, Springer, Berlin, 1975. (T. Ono) **53** #7944 10C15 (22E50)
- (with Letac, Gérard; Mazet, Pierre) A note on left-continuous random walks. *J. Appl. Probability* **13** (1976), no. 4, 814-817. (Joel Pitt) **55** #1483 60J15
- (with Rallis, Stephen J.) Discrete spectrum of the Weil representation. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 267-270. (Stephen Gelbart) **55** #2763 10D20 (22E45, 10C15)
- (with Rallis, Stephen J.) Automorphic cusp forms constructed from the Weil representation. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 271-275. (Stephen Gelbart) **55** #2764 10D20 (22E45)
- (with Rallis, Stephen J.) Représentations supercuspidales du groupe métaplectique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 16, A931-A934. (Authors' summary) **55** #5534 10C15 (10D20, 22E50)
- (with Rallis, Stephen J.) Représentations supercuspidales du groupe métaplectique. *J. Math. Kyoto Univ.* **17** (1977), no. 3, 567-603. (Stephen Gelbart) **58** #16523 10D15 (22E50)
- See also Séminaire: Banach, **51** #8773 and Analyse harmonique sur les groupes de Lie, **52** #5843
- Schiffner, K.** ★Vergleich numerischer Lösungen nach dem Differenzenverfahren und nach der Finite-Element-Methode am Beispiel symmetrischer Flüssigkeitsschwingungen in Behältern. Deutsche Luft- und Raumfahrt, Forschungsbericht 71-69. *Deutsche Forschungs- und Versuchsanstalt für Luft- und Raumfahrt Arbeitsgruppe Thermoelastik Porz-Wahn*, 1971. 60 pp. (P. Gordon) **50** #1564 68A20 (65N30)
- Schiffner, G.** (with Catara, F.; Di Toro, M.; Pace, E.) A rigorous method for solving nonlinear equations: Hartree-Fock and related problems. (Italian and Russian summaries) *Nuovo Cimento A* (11) **11** (1972), 733-748. (M. Drăganu) **49** #1997 81.65
- (with Fonte, G.; Mignani, R.) Solution of the Hartree-Fock equations. *Comm. Math. Phys.* **33** (1973), 293-304. (H. A. Gindler) **50** #6367 81.47
- (with Lappano, M.; Sgroi, M.) A computational method for eigenvalues and eigenvectors. II. A simple three-body system. *Lett. Nuovo Cimento* (2) **20** (1977), no. 16, 569-572. (From the text) **58** #14089 70.65 (49G10)
- (with Fonte, G.) A computational method for eigenvalues and eigenvectors. (Italian and Russian summaries) *Nuovo Cimento B* (11) **37** (1977), no. 1, 63-77. (From the authors' summary) **55** #1122 47A70 (65J05)
- Schikhof, W. H.** A Radon-Nikodym theorem for non-archimedean integrals and absolutely continuous measures on groups. *Nederl. Akad. Wetensch. Proc. Ser. A* **74**=*Indag. Math.* **33** (1971), 78-85. (A. F. Monna) **46** #314 28A25 (12J99, 22A10)
- (with van Rooij, Arnoud) Non-Archimedean analysis. *Nieuw Arch. Wisk.* (3) **19** (1971), 120-160. (A. F. Monna) **47** #2392 46N05 (12J10)
- (with van Rooij, Arnoud) Non-archimedean commutative C^* -algebras. *Nederl. Akad. Wetensch. Proc. Ser. A* **76**=*Indag. Math.* **35** (1973), 381-389. (George Bachman) **48** #6963 46L99
- (with van Rooij, Arnoud) Group representations in non-archimedean Banach spaces. *Table Ronde d'Analyse non Archimédienne (Paris, 1972)*, pp. 329-340. *Bull. Soc. Math. France, Mém. No. 39-40, Soc. Math. France, Paris, 1974.* (L. Corwin) **51** #3350 22D12
- Non-archimedean invariant means. *Compositio Math.* **30** (1975), 169-180. (A. C. M. van Rooij) **53** #1165 43A07
- The set of derivatives in a non-archimedean field. *Math. Ann.* **216** (1975), 67-70. (N. De Grande-De Kimpe) **51** #10312 12J10 (26A24)
- Schild, Albert** (with Silverman, Herb) Convolutions of univalent functions with negative coefficients. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **29** (1975), 99-107 (1977). (Paul Eenigenburg) **56** #15902 30A32
- (with Silverman, Herb) Some properties of schlicht functions with "small" coefficients. *Complex analysis (Proc. S.U.N.Y. Conf., Brockport, N.Y., 1976)*, pp. 105-114. *Lecture Notes in Pure and Appl. Math.*, Vol. 36, Dekker, New York, 1978. (E. Netanyahu) **58** #17069 30A32
- Schild, Alfred E.** (with Ehlers, Jürgen; Pirani, Félix) The geometry of free fall and light propagation. *General relativity (papers in honour of J. L. Synge)*, pp. 63-84. Clarendon Press, Oxford, 1972. (From the introduction) **58** #20258 83.57
- (with Ehlers, Jürgen) Geometry in a manifold with projective structure. *Comm. Math. Phys.* **32** (1973), 119-146. (R. L. Ingraham) **48** #7137 53B10 (83.53)
- Fokker action principles with self-action. I. General theory; outline of a program for constructing models of elementary particles. *Ann. Physics* **93** (1975), no. 1-2, 88-115. (J. V. Greenman) **52** #12635 81.49
- Fokker action principles with self-action. II. Applications of the general theory to a single particle in uniform circular motion; modified Maxwell-Lorentz interaction; a model of the electron. *Ann. Physics* **99** (1976), no. 2, 434-458. (J. V. Greenman) **54** #6788 81.49
- (with Plebański, Jerzy F.) Complex relativity and double KS metrics. (Italian summary) *Nuovo Cimento B* (11) **35** (1976), no. 1, 35-53. (Richard Sigal) **55** #2045 83.53
- See also Shepley, Lawrence C., **58** #10223
- Schild, Uri** (with Rowen, Louis Halle) A scalar expression for matrices with symplectic involution. *Math. Comp.* **32** (1978), no. 142, 607-613. (Carl Riehm) **58** #776 16A42
- Schilder, Michael** New applications of Wiener integrals to engineering and physics. *Statist. Phys.* **1** (1969), 475-516. (Not reviewed) **28A40**
- Another set of axioms for classical gas dynamics. *J. Mathematical Phys.* **13** (1972), 813-821. (M. J. Maczynski) **48** #10414 82.60
- Dynamic observation models. *J. Statist. Phys.* **13** (1975), no. 6, 491-514. (Harr Tan) **56** #5010 93E10 (81.60, 94A05)
- Schiller, Daniel G.** (with Cockayne, Ernest J.) Computation of Steiner minimal trees. *Combinatorics (Proc. Conf. Combinatorial Math., Math. Inst., Oxford, 1972)*, pp. 53-58. *Inst. Math. Appl., Southend-on-Sea, 1972.* (C. Tartia) **49** #8889 05C05
- Schiller, John** Perceptron order for cylindrical, polar, and spherical connectivity. *Discrete Math.* **14** (1976), no. 1, 77-81. (Neal R. Wagner) **52** #9720 68A45 (50B99)
- (with Eisen, Martin) Stability analysis of normal and neoplastic growth. *Math. Biology* **39** (1977), no. 5, 597-605. (H. W. Hethcote) **57** #5185 92A15
- Schilling, C.** See Gauß, Carl Friedrich, **58** #27147a and Gauß, Carl Friedrich, **58** #27147b
- Schilling, K.** (with Engels, J.; Fabricius, K.) Statistical bootstrap models for build-up decay of isoscalar and isovector fireballs. (Italian and Russian summaries) *Nuovo Cimento A* (11) **23** (1974), 581-609. (C. H. Woo) **53** #7259 81.30
- Schilling, R. J.** (with Chua, Leon O.) An algorithm for modeling the step response behavior of ground stable nonlinear systems. *IEEE Trans. Circuits and Systems* **21** (1974), 417-423. (P. C. Parks) **52** #10111 93A10
- backwinkel-Schillings, Margot See Backwinkel-Schillings, Margot
- Schiltknecht, Heinz** ★Lagerbewirtschaftung mit mehreren Produkten. Abhandlung zur Erlangung des Titels eines Doktors der Mathematik der Eidgenössischen Technischen Hochschule, Zürich. Diss. No. 5092. *Eidgenössische Technische Hochschule, Zurich*, 1970. 90 pp. (Peter Bod) **56** #14619 90B05
- Schiltz, Dominique** (with Vaillant, Jean) Systèmes fortement hyperboliques à caractéristiques de multiplicité variable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 3, A133-A136. (Authors' summary) **58** #23113 35L55
- Schimank, Hans** Carl Friedrich Gauß. *Gauß-Gesellschaft Göttingen, Mitteilungen No. 8*, 6-31. (14 plates) *Gauß-Gesellschaft, Göttingen*, 1971. (Editors) **52** #13163 01A55
- Zur Geschichte der Physik an der Universität Göttingen vor Wilhelm Weber (1734-1830). (English summary) *RETE* **2**, no. 3, 207-252, (1974). (Ja. O. Matviš) **58** #10090 01A50
- Schimansky-Geier, L.** (with Ebeling, Werner; Ivanov, Chr.) Stochastic theory of nucleation in bistable reaction systems. *Stochastische Theorie der nichtlinearen irreversiblen Prozesse (Second Rostock Univ. Conf., Wilhelm-Pieck-Universität, Rostock, 1977)*, pp. 93-103. *Rostocker Phys. Manuskripte*, 2. *Wilhelm-Pieck-Universität, Rostock*, 1977. (Olaf Heilmann) **58** #32433 80.34
- Schimming, R.** Zur Geschichte der ebenen Gravitationswellen, einer Lösungsklass der Einsteinschen Gleichungen. *NTM Schr. Geschichte Naturwiss. Tech. Medizin* **10** (1974), no. 2, 21-31. (H. Treder) **56** #4620 83.01 (01A60)
- Riemannsche Räume mit ebenfrontiger und mit ebener Symmetrie. *Math. Nachrichten* **59** (1974), 129-162. (H. Rund) **49** #4531 83.53
- Eine mathematische Definition des Klassifikationsbegriffs. *Wiss. Z. Karl-Marx-Universität Leipzig Math.-Natur. Reihe* **23** (1974), no. 5, 561-567. (Dj. Kurepa) **52** #7907 04A05
- Bedingungen reiner Strahlung in der allgemeinen Relativitätstheorie. 5. Tagung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975), Heft 3, pp. 424-432. *Wiss. Schr. Techn. Hochschule Karl-Marx-Stadt, Techn. Hochschule, Karl-Marx-Stadt*, 1975. (John Madach) **56** #4686 83.53
- Partielle Differentialausdrücke 2. Ordnung für Tensor- und andere Felder. Notwendige Bedingungen für das Huygenssche Prinzip. *Beiträge Anal.* Heft **9** (1974), 91-96. (Carl Brans) **55** #13085 35L10
- Huygens hyperbolic second order differential equations for multicomponent fields. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 3, 351-363, 428. (P. Günther) **56** #16714 58G99 (35L10, 53C50)
- Schimming, Reiner** (with Belger, Martin) Wave propagation and Huygens' principle a problem in the theory of hyperbolic differential equations. (Bulgarian) *Fiz.-Mat. Sci. B'lgar. Akad. Nauk.* **17**(50) (1974), 34-46. (RŽMat **1974** #10 B286) **58** #29314 35L30
- Schimmer, Jörg** Speculation, profitability, and price stability—a formal approach. *Rivista Econom. Statist.* **55** (1973), no. 1, 110-114. (From the author's introduction) **56** #10790A05 (90D35)
- Some theorems on the relation between profitable speculation and price stability. *Operations Research Verfahren, Band XXII*, pp. 176-191. *Hain, Meisenheim am Glan*, 1976. (J. Rosenmüller) **55** #9881 90A15
- Schimpl, Richard** See Fischer, Gerd, **51** #532
- Schim van der Loeff, S.** (with Harkema, R.) Three models of firm behaviour; theory and estimation, with an application to the Dutch manufacturing sector. *Rev. Econom. Statist.* **58** (1976), no. 1, 13-21. (Anjan Mukherji) **56** #14604 90A15
- Schinas, John** (with DeBlasi, Francesco S.) Exponential stability of difference equations which cannot be linearized. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 16-21. (A. Halanay) **50** #5241 39A12
- (with DeBlasi, Francesco S.) On the stable manifold theorem for discrete time dependent processes in Banach spaces. *Bull. London Math. Soc.* **5** (1973), 275-282. (Clark Robinson) **48** #5120 58F10
- (with DeBlasi, Francesco S.) Stability of multivalued discrete dynamical systems. *Differential Equations* **14** (1973), 245-262. (E. O. Roxin) **54** #8060 39A10 (34C35)
- On the smoothness of the stable manifold of neutral functional differential equations. *Proceedings of the C. Carathéodory International Symposium (Athens, 1974)*, pp. 539-545. *Greek Math. Soc., Athens*, 1974. (M. C. Irwin) **57** #6751 34K05 (58F10)
- (with DeBlasi, Francesco S.) On the stability of difference equations in Banach spaces. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sec. I a Mat. (N.S.)*

- 1974), 65-80. (A. Halanay) 51 #10924 39A10
- Stability and conditional stability of time-dependent difference equations in Banach spaces. *J. Inst. Math. Appl.* 14 (1974), 335-346. (A. Halanay) 50 #13943 39A10
- (with DeBlasi, Francesco S.) The Lyapunov theorem on the behavior of solutions of nonautonomous differential system in a neighborhood of a periodic solution with corresponding multivalued variational equation. *J. Differential Equations* 22 (1976), no. 1, 180-192. (C. Olech) 55 #13008 34C25
- On the asymptotic equivalence of linear difference equations. (Italian summary) *Riv. Mat. Univ. Parma* (4) 3 (1977), 111-118 (1978). (Sadakazu Aizawa) 58 #6790 39A10 (34G05)
- Neke, Erich (with Zimmermann, Peter) Über die Singularitäten der Hodographentransformation in der Magnetogasdynamik. *Beiträge Anal. No. 2* (1971), 133-142. (K. Maruhn) 47 #1364 76J31
- (with Höpfner, J.) Erzeugung von Pseudozufallszahlenfolgen mit stückweise polygonaler Verteilung. (English summary) *Computing (Arch. Elektron. Rechnen)* 9 (1972), 63-68. (V. Dupač) 46 #8375 65C10
- (with Grubne, Elke) Potentialtheoretische Lösung eines ebenen Spannungsproblems. *Beiträge Numer. Math.* 1 (1974), 121-134. (Ulrich Eckhardt) 54 #14540 73J65
- (with Hoang Duc Nguyen) Numerische Lösungen des dritten Randwertproblems der Potentialtheorie für ebene nichtbeschränkte Gebiete. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* 25 (1976), no. 3, 71-80. (R. B. Kelman) 54 #14327 65E05
- (with Neubert, Hellmuth) Numerische Behandlung statischer Lagerhaltungsmodelle mit stochastischem Bedarf. *Beiträge Numer. Math.* 6 (1977), 145-155. (From the introduction) 58 #20339 90B05
- Iterative Lösungen von Randwertproblemen partieller Differentialgleichungen vom zusammengesetzten Typ. (English and Russian summaries) *Z. Angew. Math. Mech.* 58 (1978), no. 5, 271-276. (Author's summary) 58 #13809 65P05 (35M05)
- See also Ermakov, S. M., 57 #14326
- indler, Patrick Tense logic for discrete future time. *J. Symbolic Logic* 35 (1970), 105-118. (R. I. Goldblatt) 45 #33 02C10
- indler, S. Iterationsalgorithmen für gewöhnliche Differentialgleichungen und ihre Eignung zur Parallelarbeit mittels Symbolmanipulation. (English summary) *Computing (Arch. Elektron. Rechnen)* 8 (1971), 291-308. (F. J. Murray) 45 #4646 65L99 (34A50)
- See also Jahrestagung: Gesellschaft für Informatik, 48 #1502
- indler, Sigrum Scheduling general monitor systems. *Proceedings of the Ninth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1976)*, pp. 122-124. *Western Periodicals, North Hollywood, Calif.*, 1974. (Author's summary) 56 #17785 90B35
- Scheduling algorithms for monitor systems on M -processor systems, $M > 1$. *Proceedings of the Eighth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1975)*, pp. 42-44. *Western Periodicals Co., North Hollywood, Calif.*, 1975. (Author's introduction) 50 #9043 68A10
- indler, Susan Explicit integral transform proofs of some transplantation theorems for the Hankel transform. *SIAM J. Math. Anal.* 4 (1973), 367-384. (A. Schwartz) 49 #1022 44A15
- (with Mirman, R.) The decomposition of the tensor product of representations of symmetric group. *J. Mathematical Phys.* 18 (1977), no. 8, 1678-1696. (Authors' summary) 56 #463 20C30
- inke, Erich See Ermakov, S. M., 55 #6771
- innar, Arie P. Query and construction of multi-attribute social accounts. *J. Mathematical Sociology* 5 (1977/78), no. 2, 239-255. (Stephen B. Seidman) 56 #17922 92A20
- (with Stewman, Shelby) A class of Markov models of social mobility with duration memory patterns. *J. Math. Sociol.* 6 (1978/79), no. 1, 61-86. (Alexander Mehlmann) 58 #20633 92A20 (60J20)
- inzel, Andrzej On various branches of the theory of numbers. (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* 13(46) (1970), 130-138. (Editors) 53 #244 10-02 (12-03)
- Reducibility of polynomials. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 1, pp. 491-496. *Gauthier-Villars, Paris*, 1971. (M. Fried) 54 #12726 12E05
- Reducibility of lacunary polynomials. 1969 *Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969)*, pp. 135-149. *Amer. Math. Soc., Providence, R.I.*, 1971. (D. J. Lewis) 48 #2105 10M05
- (with Baker, Alan) On the least integers represented by the genera of binary quadratic forms. *Acta Arith.* 18 (1971), 137-144. (H. M. Stark) 47 #8437 10C15 (10F35, 10H15)
- Diophantine equations. (Polish) *Wiadom. Mat. (2)* 12, no. 2, 227-232 (1971). (Editors) 56 #11889 10Bxx
- A biography of Waclaw Sierpiński. (Polish) *Wiadom. Mat. (2)* 12, no. 2, 303-308 (1971). (Editors) 53 #57 01A70
- Waclaw Sierpiński's papers on the theory of numbers. *Acta Arith.* 21 (1972), 7-13. (errata insert) (Editors) 46 #9b 01A70
- (with Fried, Michael D.) Reducibility of quadrinomials. *Acta Arith.* 21 (1972), 153-171. (H. B. Mann) 47 #1774 12A20
- Integer points on conics. *Comment. Math. Prace Mat.* 16 (1972), 133-135; erratum, *ibid.* 17 (1973), 305. (E. L. Cohen) 48 #233 10B05
- (with Brostow, Witold) On interesting walks in a graph. *J. Statist. Phys.* 4 (1972), 103-110. (J. Sedláček) 46 #8899 05C35
- On a theorem of Bauer and some of its applications. II. *Acta Arith.* 22 (1973), 221-231. (D. J. Lewis) 48 #8443 12A55 (10B99, 10M05, 12A20)
- On the product of the conjugates outside the unit circle of an algebraic number. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday. IV. *Acta Arith.* 24 (1973), 385-399. (C. J. Smyth) 50 #12963 (E 51 #8070) 12A15
- A contribution to combinatorial geometry. Collection of articles dedicated to Stanisław Gołab on his 70th birthday. I. *Demonstratio Math.* 6 (1973), 339-342. (J. F. Rigby) 50 #3099 50D05
- A general irreducibility criterion. *J. Indian Math. Soc. (N.S.)* 37 (1973), 1-8 (1974). (D. J. Lewis) 55 #2859 12E05
- Reducibility of quadrinomials. (Russian) *Proceedings of the International Conference on Number Theory (Moscow, 1971)*. *Trudy Mat. Inst. Steklov.* 132 (1973), 143-144, 265. (Editors) 48 #11033 10M05
- (with Oderfeld, J.) The mathematical works of Michał Kalecki. (Polish) *Wiadom. Mat. (2)* 16, 71-73 (1973). (V. Komkov) 56 #11722 01A70
- Addendum to the paper: "On the product of the conjugates outside the unit circle of an algebraic number" (*Acta Arith.* 24 (1973), 385-399). *Acta Arith.* 26 (1974/75), no. 3, 329-331. (Editors) 51 #8070 12A15
- On two conjectures of P. Chowla and S. Chowla concerning continued fractions. *Ann. Mat. Pura Appl. (4)* 98 (1974), 111-117. (L. Carlitz) 49 #4943 10F30 (10B05)
- Primitive divisors of the expression $A^n - B^n$ in algebraic number fields. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. II. *J. Reine Angew. Math.* 268/269 (1974), 27-33. (W. W. Adams) 49 #8961 12A45 (10F25)
- Les extensions pures et les résidus des puissances. *Journées Arithmétiques de Bordeaux (Conf., Univ. Bordeaux, 1974)*, pp. 69-74. *Astérisque, Nos. 24-25, Soc. Math. France, Paris*, 1975. (D. J. Lewis) 52 #338 12A20
- On power residues and exponential congruences. Collection of articles in memory of Jurii Vladimirovič Linnik. *Acta Arith.* 27 (1975), 397-420. (D. J. Lewis) 52 #337 12A20
- On linear dependence of roots. *Acta Arith.* 28 (1975/76), no. 2, 161-175. (errata insert) (M. Fried) 52 #10665 12A20
- (with Goldfeld, Dorian M.) On Siegel's zero. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* 2 (1975), no. 4, 571-583. (H. M. Stark) 53 #8016 12A70 (10H10)
- Traces of polynomials in algebraic numbers. *Norske Vid. Selsk. Skr. (Trondheim)* 1975, no. 6, 3 pp. (M. Fried) 54 #270 12A20
- On the number of irreducible factors of a polynomial. *Topics in number theory (Proc. Colloq., Debrecen, 1974)*, pp. 305-314. *Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam*, 1976. (H. J. Godwin) 55 #7989 12A20 (10H99, 12A15)
- (with Tijdeman, Robert) On the equation $y^m = P(x)$. *Acta Arith.* 31 (1976), no. 2, 199-204. (David Lee Hilliker) 54 #10142 10B30
- (with Browkin, Jerzy; Diviš, Bohuslav) Addition of sequences in general fields. *Monatsh. Math.* 82 (1976), no. 4, 261-268. (András Sárközi) 55 #5568 10L05
- Les résidus de puissances et les congruences exponentielles. *Journées Arithmétiques de Caen (Univ. Caen, Caen, 1976)*, pp. 103-109. *Astérisque No. 41-42, Soc. Math. France, Paris*, 1977. (Editors) 56 #5488 12A20 (10A15, 10B35)
- (with Shorey, T. N.; Van der Poorten, Alfred J.; Tijdeman, Robert) Applications of the Gel'fond-Baker method to Diophantine equations. *Transcendence theory: advances and applications (Proc. Conf., Univ. Cambridge, Cambridge, 1976)*, pp. 59-77. *Academic Press, London*, 1977. (John H. Loxton) 57 #12383 10B45
- (with Montgomery, Hugh L.) Some arithmetic properties of polynomials in several variables. *Transcendence theory: advances and applications (Proc. Conf., Univ. Cambridge, Cambridge, 1976)*, pp. 195-203. *Academic Press, London*, 1977. (R. Tijdeman) 57 #12447 12A20
- Abelian binomials, power residues and exponential congruences. *Acta Arith.* 32 (1977), no. 3, 245-274. (D. J. Lewis) 55 #2829 12A20 (10A15, 10B35)
- Reducibility of lacunary polynomials. III. *Acta Arith.* 34 (1977/78), no. 3, 227-266. (Christopher Smyth) 58 #22012 12A20
- An inequality for determinants with real entries. *Colloq. Math.* 38 (1977/78), no. 2, 319-321. (D. London) 58 #5714 15A15
- An analogue of Harnack's inequality for discrete superharmonic functions. *Demonstratio Math.* 11 (1978), no. 1, 47-60. (Ü. Kuran) 58 #6287 31A05
- See also Computers in number theory, 47 #3285; *Proceedings: International Conference on Number Theory*, 51 #5463; *Problems: Infinite sets*, 52 #114; *Sierpiński, Waclaw*, 54 #2405; *Sierpiński, Waclaw*, 54 #2406; *Sierpiński, Waclaw; et al.*, 54 #2407 and *Discussion: Mathematical terms and symbols*, 56 #15244
- Schinzel, Britta Struktur von Programmbindeln. *Theoretical computer science (Third GI Conf., Darmstadt, 1977)*, pp. 226-233. *Lecture Notes in Comput. Sci., Vol. 48, Springer, Berlin*, 1977. (Robert M. Baer) 58 #3750 68A30 (02F45)
- Decomposition of Gödelnumberings into Friedbergnumberings. *Z. Math. Logik Grundlagen Math.* 23 (1977), no. 5, 393-399. (Paul Bankston) 58 #10386 02F99 (18A30)
- Schinzinger, R. (with Ballard, Dana H.; Jelinek, C. O.) An algorithm for the solution of constrained generalised polynomial programming problems. *Comput. J.* 17 (1974), 261-266. (Robert A. Abrams) 53 #4979 90C30
- Schiop, Alexandru I. Monotone methods in nonlinear extremal problems on function spaces. (Romanian. English summary) *Stud. Cerc. Mat.* 22 (1970), 303-309. (N. Tița) 46 #7896 46G05 (47H05)
- Two extremal problems in Banach spaces with differentiable norms. *J. London Math. Soc. (2)* 4 (1971), 147-152. (James T. Wong) 47 #4077 47H05 (46N05, 49A25)
- ★Metode aproximative în analiza neliniară. (Romanian) [Approximate methods in nonlinear analysis] With an English summary. *Ediura Academiei Republicii Socialiste România, Bucharest*, 1972. 280 pp. (errata insert) (V. Perreya) 50 #1502 65J05 (47H15, 49D15)
- On the convergence of Galerkin's perturbation method. *Numerische Methoden der Approximationstheorie, Band 1 (Tagung, Math. Forschungsinst., Oberwolfach, 1971)*, pp. 165-171. *Internat. Schriftenreihe Numer. Math., Band 16, Birkhäuser, Basel*, 1972. (G. Vainikko) 53 #7023 65J05
- Stability of Ritz procedure for nonlinear two-point boundary value problem. *Numer. Math.* 20 (1972/73), 208-212. (Jochen Werner) 47 #6099 65L10 (34B15, 65N30)
- Investigations on the convergence and stability of Ritz-Galerkin processes for a class of boundary value problems. (Romanian. English summary) *Stud. Cerc. Mat.* 24 (1972), 257-290. (D. Pascali) 50 #1071 47H15 (65N30)
- The Galerkin method for the approximate solution of the Dirichlet problem for the equation $\Delta u = f(x, u, u_x)$. (Romanian. English summary) *Stud. Cerc. Mat.* 24 (1972), 447-455. (C. Ilie) 50 #9011 65N30
- A remark on non-linear integral equations of the Hammerstein type. *Portugal.*

- Math.* 33 (1974), 157-161. (H. Amann) 50 #7972 45L05
 ★Metode numerice pentru rezolvarea ecuațiilor diferențiale. (Romanian)
 [Numerical methods for the solution of differential equations] With an English summary and table of contents. *Editura Academiei Republicii Socialiste România, Bucharest*, 1975. 161 pp. (Author's summary) 57 #4542 65N30 (65L10, 65R05, 65Q05)
 (with Hertling, Joerg) On the stability of the Ritz-Galerkin method for Hammerstein equations. *Math. Comput.* 29 (1975), 484-488. (K. S. Thomas) 52 #4677 65R05
 On the stability of the Ritz procedure for nonlinear problems. *Numer. Math.* 23 (1975), 305-310. (Charles W. Groetsch) 51 #14576 65J05
 The stability of the Ritz method for nonlinear boundary value problems (in two dimensions). (Romanian. English summary) *Stud. Cerc. Mat.* 29 (1977), no. 4, 435-438. (Author's summary) 58 #13791 65N30
 The stability of Ritz-Galerkin calculation processes for nonlinear problems. (Romanian. English summary) *Stud. Cerc. Mat.* 29 (1977), no. 5, 535-546. (From the summary) 58 #13695 65J05 (65L10)
- Schioppa, Fiorella Padoa** Equality of opportunity and other goals of educational policy. *Metroecon.* 24 (1972), 255-277. (Author's introduction) 50 #12176 90A99
- Schipke, Siegfried** (with Geise, Gerhard) Ausgleichsgerade, -kreis, -ebene und -kugel im Raum. *Math. Nachr.* 62 (1974), 65-75. (K. Strubecker) 49 #11374 50B10 (65D10)
 Ein spezielles Romberg-Verfahren. *Wiss. Z. Techn. Univ. Dresden* 25 (1976), no. 4, 799-803. (Henning Esser) 55 #4614 65D30
- Schipp, Ferenc** (with Pál, L. G.) On the Steinhaus conjecture with respect to the Haar series. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory)* (Budapest, 1969), pp. 343-349. *Akadémiai Kiadó, Budapest*, 1972. (L. Leindler) 52 #14824 42A56
 Über die Konvergenz von Reihen nach Produktsystemen. *Acta Sci. Math. (Szeged)* 35 (1973), 13-16. (R. A. Askey) 48 #9247 42A56
 (with Türnpü, H.) Über schwach multiplikative Systeme. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 17 (1974), 91-96 (1975). (D. J. Eustice) 52 #14832 42A60
 Über einen Ableitungsbegriff von P. L. Butzer und H. J. Wagner. Papers presented at the Fifth Balkan Mathematical Congress (Belgrad, 1974). *Math. Balkanica* 4 (1974), 541-546. (R. Liedl) 52 #1151 42A56
 (with Türnpü, H.) Almost everywhere convergence of function series with respect to product systems. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* 342 (1974), 189-192. (F. Móricz) 51 #8729 42A60
 On a generalization of the concept of orthogonality. *Acta Sci. Math. (Szeged)* 37 (1975), no. 3-4, 279-285. (Roger L. Jones) 52 #12068 60G40 (42A60)
 Über gewisse Maximaloperatoren. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 18 (1975), 189-195 (1976). (Josef Wichmann) 55 #3670 42A56
 Certain rearrangements of series in the Walsh system. (Russian) *Mat. Zametki* 18 (1975), no. 2, 193-201. (W. R. Wade) 52 #11458 42A56
 On the dyadic derivative. *Acta Math. Acad. Sci. Hungar.* 28 (1976), no. 1-2, 145-152. (John A. Gosselin) 54 #13446 42A56
 On L^p -norm convergence of series with respect to product systems. (Russian summary) *Anal. Math.* 2 (1976), no. 1, 49-64. (R. F. Gundy) 55 #1451 60G45 (42A60)
 Pointwise convergence of expansions with respect to certain product systems. (Russian summary) *Anal. Math.* 2 (1976), no. 1, 65-76. (John A. Gosselin) 54 #3281 42A56 (60G45)
 On term by term dyadic differentiability of Walsh series. (Russian summary) *Anal. Math.* 2 (1976), no. 2, 149-154. (John A. Gosselin) 53 #13995 42A56
 On a.e. convergence of expansion with respect to a bounded orthonormal system of polygonals. *Studia Math.* 58 (1976), no. 3, 287-290. (W. R. Wade) 54 #13447 42A56
 (with Alexits, Gyorgy) On the absolute convergence of certain function series. *Acta Math. Acad. Sci. Hungar.* 30 (1977), no. 3-4, 333-339. (Masako Izumi) 57 #1006 42A28 (42A60)
 Fourier series and martingale transforms. *Linear spaces and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977)*, pp. 571-581. *Internat. Ser. Numer. Math., Vol. 40, Birkhäuser, Basel*, 1978. (M. M. Rao) 58 #18707 60G45 (42A20)
- Schipper, Ross** On the behavior of ideal classes in cyclic unramified extensions of prime degree. *Number theory and algebra*, pp. 303-309. *Academic Press, New York*, 1977. (William C. Waterhouse) 57 #16260 12A65
- de Schipper, W. J.** A note on the modulus of an order bounded linear operator between complex vector lattices. *Nederl. Akad. Wetensch. Proc. Ser. A* 76 = *Indag. Math.* 35 (1973), 355-367. (A. V. Buhvalov) 51 #13757 47B55 (46A40)
- ★Symmetric closed categories. *Mathematical Centre Tracts*, No. 64. *Mathematisch Centrum, Amsterdam*, 1975. v + 197 pp. (H.-B. Brinkmann) 53 #8190 18D15
- Schips, B.** (with Stier, W.) Autokorrelationstests und autoregressive Schätzverfahren. (English and Russian summaries) *Z. Angew. Math. Mech.* 52 (1972), 273-282. (W. Uhlmann) 47 #4400 62J05
 See also *Operations Research-Verfahren*. 50 #9307
- Schirmeier, Horst** Eine für die Nuklearität lokalkonvexer Räume hinreichende Bedingung. *Math. Ann.* 211 (1974), 35-36. (A. J. Lazar) 50 #7978 46A05
- Schirmeier, Ursula** Isomorphie harmonischer Räume. *Math. Ann.* 225 (1977), no. 1, 33-55. (I. Netuka) 55 #10713 31D05
 Ein Banach-Stone-Satz für adaptierte Vektorverbände und Algebren. *Math. Z.* 156 (1977), no. 3, 279-290. (I. Netuka) 58 #12309 46E05 (31D05)
- Schirmer, Helga** Fixed point sets of homeomorphisms of compact surfaces. *Israel J. Math.* 10 (1971), 373-378. (S. T. Lin) 45 #7699 54H25
 δ -continuous selections of small multifunctions. *Canad. J. Math.* 24 (1972), 631-635. (E. Michael) 45 #9301 54C60 (54H25)
 Fixed point sets of homeomorphisms on dendrites. *Fund. Math.* 75 (1972), no. 2, 117-122. (C. J. Himmelberg) 46 #6336 54H25
 Fixed point and coincidence sets of biconnected multifunctions on trees. *Pacific J. Math.* 40 (1972), 445-449. (L. E. Ward, Jr.) 46 #4517 54H25
 Homotopy for small multifunctions. *Fund. Math.* 78 (1973), no. 2, 169-176. (J. W. Jaworski) 48 #2991 54C60
- Simplicial approximation of small multifunctions. *Fund. Math.* 84 (1974), no. 121-126. (J. W. Jaworski) 49 #3829 54C60
 Fixed point sets of polyhedra. *Pacific J. Math.* 52 (1974), 221-226. (L. E. Ward, Jr.) 50 #5771 54H25 (57C05)
 A Nielsen number for fixed points and near points of small multifunctions. *Fund. Math.* 88 (1975), no. 2, 145-156. (R. E. Smithson) 51 #11470 54H25
 Mappings of polyhedra with prescribed fixed points and fixed point indices. *Pacific J. Math.* 63 (1976), no. 2, 521-530. (L. E. Ward, Jr.) 54 #1204 55C20 (57C05)
 Fixed points can characterize curves. *Canad. Math. Bull.* 21 (1978), no. 2, 207-212. (Heinz-Otto Peitgen) 58 #12986 54H25
- Schirn, Matthias** Identität und Identitätsaussage bei Frege. *Studien zu Frege, Band II*, 181-215. *Problemata*, No. 43, *Frommann-Holzboog, Stuttgart*, 1976. (From the introduction) 58 #27263 02A05
 See also *Studien zu Frege*, 57 #9455a; *Studien zu Frege*, 57 #9455b and *Studien zu Frege*, 57 #9455c
- Schirotsk, Winfried** (with Landsberg, Max) General extension theorems for linear functionals. *Math. Nachr.* 61 (1974), 111-122. (I. Namioka) 50 #10744 46A20
 Minimale Erweiterungen von Linearformen. *Wiss. Z. Techn. Univ. Dresden* (1975), no. 5, 949-953. (N. De Grande-De Kimpe) 56 #1006 46A15
 (with Landsberg, Max) Extremal and invariant extensions of linear functionals. *Math. Nachr.* 71 (1976), 191-202. (B. Rodriguez-Salinas) 54 #3359 46A99
 Extension of additive non-negatively homogeneous functionals in quasilinear spaces. *Demonstratio Math.* 10 (1977), no. 1, 241-260. (Manfred W. Kracht) 56 #1026 46A99 (65J05)
 (with Landsberg, Max) Mazur-Orlicz type theorems with some applications. *Math. Nachr.* 79 (1977), 331-341. (S. Simons) 58 #2143 46A40
 (with Landsberg, Max) Zur konvexen Optimierung in quasilinearen Räumen. *Wiss. Z. Techn. Univ. Dresden* 26 (1977), no. 2, 331-335. (J. Abraham) 56 #2387 90C30 (90C30)
- Schittkowski, Klaus** Numerical solution of systems of nonlinear inequalities. *Optimization and operations research (Proc. Conf., Oberwolfach, 1975)*, pp. 259-272. *Lecture Notes in Economics and Mathematical Systems*, Vol. 117, *Springer, Berlin*, 1976. (K. Swarup) 56 #17081 65K05
 An adaptive precision method for the numerical solution of constrained optimization problems applied to a time-optimal heating process. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977)*, Part 2, pp. 125-135. *Lecture Notes in Control and Information Sci.*, Vol. 7, *Springer, Berlin*, 1978. (D. M. Topkis) 58 #2565 49D30 (90C30)
- Schiwy, Günther** See *Wissenschaftstheorie*, 53 #2579
- Schjaer-Jacobsen, Hans** (with Madsen, Kaj) Singularities in minimax optimization of networks. *IEEE Trans. Circuits and Systems* CAS-23 (1976), no. 7, 456-460. (Zbl 34 #90055) 58 #20465 90C35 (65K05)
 (with Madsen, Kaj) Linearly constrained minimax optimization. *Math. Programming* 14 (1978), no. 2, 208-223. (Norihiko Adachi) 57 #11767 90C30
 (with Madsen, Kaj) Minimax optimization subject to linear constraints. *Z. Angew. Math. Mech.* 58 (1978), no. 7, T489-T491. (John C. Gittins) 58 #26013 90C30
- Schkolnick, Mario** (with Lang, Tomás) The minimization of control variables in adaptive systems. *Theory of machines and computations (Proc. Internat. Sympos., Technion, Haifa, 1971)*, pp. 377-386. *Academic Press, New York*, 1971. (Fujio Nishida) 53 #5178 94A20
 The equivalence of reducing transition languages and deterministic languages. *Comm. ACM* 17 (1974), 517-519. (Author's summary) 49 #8436 68A30
 The optimal selection of secondary indices for files. *International Computing Symposium (Antibes, 1975)*, pp. 91-96. *North-Holland, Amsterdam*, 1975. (Author's summary) 57 #4713 68A50
 On a covering problem for partially specified switching functions. *IEEE Trans. Computers* C-24 (1975), no. 11, 1139-1141. (C. Tartia) 53 #10505 94A20
 (with Bayer, R.) Concurrence of operations on B-trees. *Acta Informat.* 9 (1977/78), no. 1, 1-21. (K. H. V. Booth) 56 #13836 68A50
- Schlaefli, John L.** See *Operational Research*, 49 #12059
- Schlagbauer, H.** On the dimension of coincidence sets. *Abh. Math. Sem. Univ. Hamburg* 37 (1972), 236-245. (S. K. Kaul) 46 #4522 55C20 (57C99)
- Schlageter, Gunter** To the problem of record placement in inverted file systems. *International Computing Symposium 1977 (Fifth, Liège, 1977)*, pp. 483-489. *North-Holland, Amsterdam*, 1977. (V. Ju. Meitus) 58 #14018 68A50
- Schlaifev, Robert** See *Marschak, Jacob*, 58 #7948
- Schlais, H. E.** Non-aposynthesis and non-hereditary decomposability. *Pacific J. Math.* 48 (1973), 643-652. (F. Burton Jones) 47 #5845 54F15
- Schlapp, R.** The contribution of the Scots to mathematics. *Math. Gaz.* 57 (1973), no. 39, 1-16. (Editors) 57 #5597 01A50
- Schlee, Walter** Verallgemeinerte Differentialgleichungen zur Lösung von Optimierungsaufgaben. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 24 (1972), 37-47. (K. Hinderer) 48 #2470 34A99 (90C30)
 Zwei Glivenko-Cantelli-Theoreme für endliche Dimension. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 28 (1973/74), 1-4. (F. Papangelou) 51 #6933 60F05
 Berechnung stochastischer Termine. (English summary) *Z. Operations Res. Ser. A-B* 21 (1977), no. 5, A157-A171. (K. Zimmermann) 57 #18795 90B35
 See also *Oberwolfach-Tagung: Operations Research*, 48 #3455
- Schlegel, Palmer R.** A note on a special tridiagonal matrix. *Matrix Tensor Quart.* 2 (1974/75), 111-113. (Marvin Marcus) 54 #7496 (E 54 #7497) 15A15
 See also *Anderson, Oliver D.*, 54 #7497 (E 54 #7498) and *Anderson, Oliver D.*, 54 #7498
- Schlegelmilch, Rolf** (with Uhlig, Frank) Über Matrizen mit semidefinitem Realteil, Imaginärteil oder polarem Defekt und ihre Eigenwerte. (English summary) *Linear and Multilinear Algebra* 5 (1977/78), no. 3, 225-228. (B. David Saunders) 57 #358 15A57
- Schleich, Theodor** ★Einige Bemerkungen zur Spektralzerlegung der Hecke-Algebra für d PGL_2 über Funktionenkörpern. Inaugural-Dissertation zur Erlangung des Doktorgrades der Mathem.-Naturw. Fakultät der Rheinischen

- edrich-Wilhelms-Universität, Bonn, 1974. *Bonner Mathematische Schriften*, No. 71. *Mathematisches Institut, Universität Bonn, Bonn*, 1974. v+55 pp. (Allan J. Silberger) #8759 22E55 (12A90, 10D15)
- her, Stefan See Oberwolfach-Tagung: Operations Research, 48 #3452
- hert, Hubert See Belnap, Nuel D., Jr.; et al., 58 #27358
- rmacher, Adolf (with Kegel, Otto H.) Amalgams and embeddings of projective planes. *Geometriae Dedicata* 2 (1973), 379-395. (B. Artmann) 49 #3678 50D35
- (with Pretzel, Oliver) On permutation groups in which non-trivial elements have p fixed points or none. *Proc. London Math. Soc.* (3) 30 (1975), no. 4, 471-495. (J. D. Dixon) 51 #5721 20B10
- (with Pretzel, Oliver) On permutation groups whose non-trivial elements have at most three fixed points. *Proc. London Math. Soc.* (3) 31 (1975), no. 1, 1-20. (H. Nagao) #3076 20B20
- (with Pretzel, Oliver) On permutation groups in which nontrivial elements fix two points or none. *J. Algebra* 44 (1977), no. 1, 283-289. (Wolfgang Knapp) 55 #8155 20B10
- See also Combinatorial mathematics, 49 #10558
- rmacher, Friedrich See Lewis, Albert C., 57 #9419
- ffer, Arthur, Jr. (with Kemeny, John G.; Snell, J. Laurie; Thompson, Gerald L.) *Mathematik für die Wirtschaftspraxis*. Übersetzung aus dem englischen von Hans-Jürgen Zimmermann. *Walter de Gruyter, Berlin-New York*, 1966. xv+492 pp. (Editors) 50 #12501 00A05
- (with Kemeny, John G.; Snell, J. Laurie; Thompson, Gerald L.) ★Finite mathematics with business applications. Second edition. *Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1972. xiii+529 pp. (Editors) 50 #12500 00A05
- (with Kemeny, John G.; Snell, J. Laurie; Thompson, Gerald L.) ★Mathematik für die Wirtschaftspraxis. Übersetzung aus dem englischen von Hans-Jürgen Zimmermann. Zweite verbesserte Auflage. *Walter de Gruyter, Berlin-New York*, 1972. xv+492 pp. (Editors) 50 #12502 00A05
- iff, Martin Über geschlossene Lösungen des Poincaréschen Randwertproblems mit Hilfe einer komplexen Differentialgleichung. *Beiträge Anal. Heft 6* (1974), 73-85. (M. Ohtsuka) 58 #6290 31A25
- Untersuchung spezieller trigonometrischer Reihen zur Lösung von Randwertproblemen der ebenen Laplacegleichung. *5. Tagung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975), Heft 2*, pp. 368-377. *Wiss. Schr. Techn. Hochschule Karl-Marx-Stadt, Techn. Hochschule, Karl-Marx-Stadt, 1975*. (M. S. Agranovič) 56 #12564 35J05
- (with Schubert, Hans) Zur Ermittlung der zirkulationsbehafteten Unterschallströmung eines Tschaplygin-Gases um ein Kreisprofil. (English and Russian summaries) Collection of articles dedicated to Helmut Heinrich on the occasion of his seventieth birthday. *Z. Angew. Math. Mech.* 55 (1975), 9-17. (G. Paria) 52 #4815a (E 52 #4815b) 76.45 (65R05)
- (with Schubert, Hans) Berichtigung zu: "Zur Ermittlung der zirkulationsbehafteten Unterschallströmung..." (*Z. Angew. Math. Mech.* 55 (1975), 9-17). *Z. Angew. Math. Mech.* 55 (1975), no. 9, 544. (G. Paria) 52 #4815b 76.45 (65R05)
- (with Schubert, Hans) Über Verzweigungslösungen einer speziellen nichtlinearen Integralgleichung. *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2*, pp. 237-244. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., No. 4N, Akademie-Verlag, Berlin, 1977*. (D. H. Hyers) 58 #23419 45G99
- See also Ermakov, S. M., 55 #6771 and Ermakov, S. M., 57 #14326
- leinkofer, G. (with Schneider, Albert) Ein Vergleichssatz für komplexe nichtlineare Differentialgleichungssysteme. *Arch. Math. (Basel)* 25 (1974), 167-171. (J. F. Heyda) 50 #5097 34C10 (34A20)
- leinkofer, Gerhard Unbeschränkte Randwerte bei parabolischen Differentialgleichungen. (English summary) *Manuscripta Math.* 5 (1971), 373-384. (Hiroshi Fujita) 46 #5831 35K55
- lender, Bodo See Fachtagung: Gesellschaft für Informatik, Programmiersprachen, 48 #10176
- lesinger, Ernest C. (with Klamkin, Murray S.) Diamond inequalities. *Math. Mag.* 50 (1977), no. 2, 96-98. (Erwin Lutwak) 55 #8961 52A40
- lesinger, Jacques (with Dufour, Pierre; Vanderborg, Gérard; Erculisse, Michel) Essai d'application de la méthode spectroscopique de Lanczos pour la recherche des valeurs propres des matrices. Utilisation des calculateurs en mathématiques pures (Conf., Limoges, 1975). *Bull. Soc. Math. France Mém. No. 49-50* (1977), 181-185. (Ludwig Elsner) 58 #3366 65F15
- lesinger, James W. Sets of colorings of circuits. *Bull. Amer. Math. Soc.* 80 (1974), 721-723. (F. Bernhart) 51 #236 05C15
- lesinger, Ludwig See Descartes, René, 50 #4226
- hiesseleman, J. Power families: a note on the Box and Cox transformation. *J. Roy. Statist. Soc. Ser. B* 33 (1971), 307-311. (Author's summary) 47 #4354 62A10
- hiesinger, L. (with Payne, G. L.) Variational methods in a harmonic oscillator basis. *J. Computational Phys.* 13 (1973), 266-287. (H. S. P. Grässer) 49 #4487 81.49
- (with Payne, G. L.) Procedure for finding the scattering solutions of the Schrödinger equation. *Phys. Rev. A* (3) 10 (1974), 1559-1567. (Authors' summary) 53 #10047 81.65
- hiesinger, Michael Rigidity of quotient singularities. *Invent. Math.* 14 (1971), 17-26. (F. Oort) 45 #1912 32G05
- (with Kas, Arnold) On the versal deformation of a complex space with an isolated singularity. *Math. Ann.* 196 (1972), 23-29. (G. K. Kiremidjian) 45 #3769 32G05
- On rigid singularities. Complex analysis, 1972 (Proc. Conf., Rice Univ., Houston, Tex., 1972), Vol. I: Geometry of singularities. *Rice Univ. Studies* 59 (1973), no. 1, 147-162. (Bernard Teissier) 49 #9258 32C40 (14B10)
- See also Mathematics: Periodical collection of translations of foreign articles, 49 #4721
- chlesner, John W. (with Singhal, J. P.) On determinant representations for certain classical polynomials. *J. Natur. Sci. and Math.* 10 (1970), 287-291. (S. K. Chatterjea) 47 #5324 33A65
- Note on some characteristic properties of functions of the second kind. *Portugal. Math.* 31 (1972), 13-19. (P. Anandani) 46 #3865 33A65
- (with Mays, Michael; Simons, William) Open sets from disjoint closed intervals. *Proc. West Virginia Acad. Sci.* 45 (1973), 358-359. (William Eames) 50 #4843 26A03
- A note on biorthogonal polynomials in two variables. *SIAM J. Math. Anal.* 5 (1974), 11-18. (J. J. Price) 48 #11888 42A52
- Schlichting, Günter (with Kaniuth, Eberhard) Zur harmonischen Analyse klassenkompakter Gruppen. II. *Invent. Math.* 10 (1970), 332-345. (H. Leptin) 47 #5521 43A20 (43A35)
- Eine Charakterisierung gewisser diskreter Gruppen durch ihre reguläre Darstellung. (English summary) *Manuscripta Math.* 9 (1973), 389-409. (Paul S. Muhly) 48 #2302 22D05 (46L10)
- Topologische Gruppen mit endlichen Klassen konjugierter Elemente. *Math. Z.* 142 (1975), 15-17. (S. N. Hudson) 51 #3348 22D05
- Schlickewei, Hans Peter On the fractional parts of the sum of powers of rational numbers. *Mathematika* 22 (1975), no. 2, 154-155. (Thomas W. Cusick) 52 #13654 10F10
- On products of special linear forms with algebraic coefficients. *Acta Arith.* 31 (1976), no. 4, 389-398. (R. Tijdeman) 55 #2794 10F45
- Die p -adische Verallgemeinerung des Satzes von Thue-Siegel-Roth-Schmidt. *J. Reine Angew. Math.* 288 (1976), 86-105. (R. Tijdeman) 54 #10158 10F10 (10F45, 10B15)
- Linearformen mit algebraischen Koeffizienten. (English summary) *Manuscripta Math.* 18 (1976), no. 2, 147-185. (J. H. Loxton) 53 #5492 10F35
- Inequalities for decomposable forms. *Journées Arithmétiques de Caen (Univ. Caen, Caen, 1976), pp. 267-271. Astérisque No. 41-42, Soc. Math. France, Paris, 1977*. (P. E. Blanksby) 56 #8499 10F10
- Über die diophantische Gleichung $x_1 + x_2 + \dots + x_n = 0$. *Acta Arith.* 33 (1977), no. 2, 183-185. (W. H. Mills) 55 #12633 10B25
- The p -adic Thue-Siegel-Roth-Schmidt theorem. *Arch. Math. (Basel)* 29 (1977), no. 3, 267-270. (David Lee Hilliker) 58 #10768 10F25 (10F45)
- On norm form equations. *J. Number Theory* 9 (1977), no. 3, 370-380. (P. Bundschuh) 56 #2912 10B15 (10B35)
- On linear forms with algebraic coefficients and Diophantine equations. *J. Number Theory* 9 (1977), no. 3, 381-392. (P. Bundschuh) 56 #2934 10F45 (10B15)
- Schlieder, Siegfried (with Seiler, Erhard) Some remarks on the "null plane development" of a relativistic quantum field theory. *Comm. Math. Phys.* 25 (1972), 62-72. (W. Güttinger) 45 #4772 81.46
- (with Seiler, Erhard) Remarks concerning the connection between properties of the 4-point-function and the Wilson-Zimmermann expansion. *Comm. Math. Phys.* 31 (1973), 137-159. (W. Güttinger) 49 #1985 81.47
- Structure of singularities of Wightman-distributions and the Wilson-Zimmermann-expansion respectively lightcone-expansion. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975), pp. 85-91. Lecture Notes in Phys., 39, Springer, Berlin, 1975*. (Editors) 58 #32613 81.53
- Schlieker, A. Input-Output-Analyse und Fragen der Bewertung und Planung. *Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe* 22 (1973), 8-24. (Vladimir Strnad) 50 #12172 90A15
- (with Fuhrmann, J.) Zeitverzögerung und Stabilität in Input-Output-Modellen. *Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe* 22 (1973), 46-64. (Vladimir Strnad) 50 #12161 90A15
- Schlier, Ch. See Jahrestagung: Gesellschaft für Informatik, 48 #1502
- Schindwein, M. (with Patani, A.; Shafi, Q.) Topological charges in field theory. *J. Phys. A* 9 (1976), no. 9, 1513-1520. (Håkan Snellman) 54 #2021 81.57
- (with Honerkamp, J.; Patani, A.; Shafi, Q.) On kink solutions in two space dimensions. *Lett. Nuovo Cimento* (2) 15 (1976), no. 4, 97-100. (Editors) 56 #4630 83.35
- Schlink, Bernhard On a principle of contradiction in normative logic and jurisprudence. *Theory and Decision* 2 (1971), no. 1, 35-48. 45 #4958 02C10
- Schlipf, John Stewart (with Barwise, K. Jon) On recursively saturated models of arithmetic. *Model theory and algebra (A memorial tribute to Abraham Robinson), pp. 42-55. Lecture Notes in Math., Vol. 498, Springer, Berlin, 1975*. (S. Feferman) 53 #12934 02H20
- (with Barwise, K. Jon) An introduction to recursively saturated and resplendent models. *J. Symbolic Logic* 41 (1976), no. 2, 531-536. (M. E. Nadel) 53 #7761 02H05
- A guide to the identification of admissible sets above structures. *Ann. Math. Logic* 12 (1977), no. 2, 151-192. (M. E. Nadel) 58 #5177 02H10 (02F27)
- Ordinal spectra of first-order theories. *J. Symbolic Logic* 42 (1977), no. 4, 492-505. (Editors) 58 #27446 02H05 (02F27)
- Toward model theory through recursive saturation. *J. Symbolic Logic* 43 (1978), no. 2, 183-206. (Nigel J. Cutland) 58 #10399 02H05 (02F50)
- (with Harrington, Leo A.; Krousis, Lefteris) A generalized Kleene-Moschovakis theorem. *Proc. Amer. Math. Soc.* 68 (1978), no. 2, 209-213. (S. S. Wainer) 57 #16020 02F27
- Schlissel, Arthur Solutions of the wave equation which decay with respect to time at a prescribed rate. *Applicable Anal.* 6 (1976/77), no. 3, 165-176. (Ernest G. Kalnins) 58 #11839 35B40 (35L05)
- The development of asymptotic solutions of linear ordinary differential equations, 1817-1920. *Arch. Hist. Exact Sci.* 16 (1976/77), no. 4, 307-378. (From the foreword) 58 #27042 01A55 (01A60, 34-03, 34E05)
- The initial development of the WKB solutions of linear second order ordinary differential equations and their use in the connection problem. (German summary) *Historia Math.* 4 (1977), 183-204. (L. Reizinš) 56 #2750 01A60 (34-03)
- Schlitt, H. ★Stochastische Vorgänge in linearen und nichtlinearen Regelkreisen. Theorie geregelter Systeme. *Friedr. Vieweg & Sohn, Braunschweig*, 1968. xii+324 pp. (loose errata) (Editors) 50 #16044 93E10
- Schlomiuk, Dana I. Topos di Grothendieck e topos di Lawvere e Tierney. (English summary) *Rend. Mat.* (6) 7 (1974), 513-553. (Marta C. Bunge) 51 #3252 18A15 (02K15, 14A20)

- ★Logique des topos (introduction à la théorie des topos élémentaires). Séminaire de Mathématiques Supérieures, No. 53 (Été 1974). *Les Presses de l'Université de Montréal, Montréal, Que.*, 1977. 132 pp. (Gavin Wraith) **56** #11790 02K10 (18A15, 18F10, 02H10)
- Schlomiuk, Norbert H.** μ -homotopic maps are loop homotopic. *Ann. Mat. Pura Appl.* (4) **92** (1972), 211-215. (G. V. Krishnarao) **47** #5875 55J10 (55E99)
On co-H-objects in the category of augmented algebras. (Italian summary) *Boll. Un. Mat. Ital.* (4) **5** (1972), 506-510. (C. Nijā) **47** #4897 08A10 (18C99)
- Schlosser, Herbert** Hierarchy equations for reduced transition operators. *Phys. Rev. A* (3) **15** (1977), no. 3, 1349-1351. (H. Araki) **57** #11499 81A7
- Schlosser, Karl-Heinz** (with Delvos, Franz-Jürgen) Das Tensorproduktschema von Spline Systemen. (English summary) *Spline-Funktionen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 59-73. Bibliographisches Inst., Mannheim, 1974. (L. L. Schumaker) **54** #801 41A15
(with Kösters, Heinz-Walter) Berechnung von L-Splines zu Operatoren zweiter Ordnung mit konstanten Koeffizienten. (English summary) *Computing* **15** (1975), no. 3, 205-216. (R. S. Varga) **54** #1628 65L10
Mehrdimensionale Spline-Interpolation mittels Spline-Systemen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* **55** (1975), no. 4, T260-T262. (Gerhard Merz) **55** #3615 41A15
Mehrdimensionale Spline-Interpolation mit Hilfe der Methode von Sard. (English summary) *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 247-264. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (Author's summary) **58** #1837 41A05 (41A15, 41A63)
- Schlösser, Ludwig** ★Über Boolesche Ianoyschemata. Mit einer Englischen Zusammenfassung. Universität Bonn Informatik Berichte, No. 9. Institut für Informatik, Universität Bonn, Bonn, 1975. ii+68 pp. (Kurt Mehlhorn) **54** #1705 68A05
- Schlote, K.-H.** Zur Kohomologietheorie topologischer Algebren. Beiträge zur Theorie nichtnormierbarer topologischer Algebren. *Wiss. Z. Karl-Marx-Universität Leipzig Math.-Natur. Reihe* **24** (1975), no. 5, 513-523. (B. R. Gelbaum) **55** #3817 46M20
- Schlöterbeck, Ulf** Über Klassen majorisierbarer Operatoren auf Banachverbänden. (English summary) *Rev. Acad. Ci. Zaragoza* (2) **26** (1971), 585-614. (H. E. Lacey) **47** #9343 47B55
(with Nagel, Rainer J.) Integraldarstellung regulärer Operatoren auf Banachverbänden. *Math. Z.* **127** (1972), 293-300. (W. A. J. Luxemburg) **47** #2421 47B55 (46A40)
Order-theoretic characterization of Hilbert-Schmidt operators. *Arch. Math. (Basel)* **24** (1973), 67-70. (Neil E. Gretskey) **48** #4821 47B55
(with Nagel, Rainer J.) Kompaktheit von Integraloperatoren auf Banachverbänden. *Math. Ann.* **202** (1973), 301-306. (K. Sundaresan) **48** #12135 47B37 (46E30)
(with Nagel, Rainer J.) Zur Approximation kompakter Operatoren durch Operatoren endlichen Ranges. *Arch. Math. (Basel)* **25** (1974), 514-515. (K. Sundaresan) **50** #14323 47B05 (47B55)
(with Schaefer, Helmut H.) On the approximation of kernel operators by operators of finite rank. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. *J. Approximation Theory* **13** (1975), 33-39. (G. Mühlbach) **50** #14326 47B10
- von **Schlözer, Dorothea** See **Dallmann, Paul**, **58** #15917
- Schlueter, Robert A.** (with Levis, Alexander H.) The optimal linear regulator with state-dependent sampling. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 5, 512-515. (Authors' summary) **56** #6499 49A10
The optimal linear regulator with constrained sampling times. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 5, 515-518. (Author's summary) **56** #4958 93C05
(with Levis, Alexander H.) The optimal adaptive sampled-data regulator. *Trans. ASME Ser. G. J. Dynamic systems, Measurement and Control* **96** (1974), 334-340. (R. S. Bucy) **50** #4042 93C40
(with Ma, Richard K. T.) Optimal control system design: the control and sampling problem. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 228-233. *Inst. Electr. Electron. Engrs., New York*, 1976. (From the summary) **57** #18976 93C40
- Schlumberger, Maurice** (with Vuillemin, Jean) Optimal disk merge patterns. *Acta Inform.* **3** (1973), 25-35. (Amitava Bagchi) **54** #6597 68A50 (68A10)
- Schlup, W. A.** A test of the DV method with an exactly soluble transport problem. *J. Phys. A* **8** (1975), no. 9, 1373-1378. (Author's summary) **52** #4907 82A9
Special solutions of the Fokker-Planck transport equation for arbitrary band structures; mobility and diffusivity in a uniform field of force. *J. Statist. Phys.* **12** (1975), 131-143. (Hans Kaper) **51** #7544 82A5
- Schlup, Werner A.** The variational method of Djukic and Vujanovic and its relation to classical variational methods. (German summary) *Z. Angew. Math. Phys.* **27** (1976), no. 5, 525-544. (B. Vujanovic) **54** #11898 70A9
- Schlussel, Z.** (with Feigelstock, Shalom) Principal ideal and Noetherian groups. *Pacific J. Math.* **75** (1978), no. 1, 87-92. (L. C. A. van Leeuwen) **58** #926 20K10 (16A66)
- Schmaai, Albertus** (with Stam, Aart Johannes; de Vries, Trienco) Tauberian theorems for limitation methods admitting a central limit theorem. *Math. Z.* **150** (1976), no. 1, 75-82. (N. H. Bingham) **54** #11464 60F05 (40E05)
- Schmähling, Reiner** Separable Algebren über kommutativen Ringen. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* **262/263** (1973), 307-322. (M. A. Knus) **52** #466 16A16
Hinterineinanderausführung von Formen. *J. Reine Angew. Math.* **272** (1974), 113-126. (H. D. Warner) **51** #356 10C10 (13A99)
Eine axiomatische Kennzeichnung der Determinante auf endlich-erzeugten, projektiven Moduln. *J. Reine Angew. Math.* **276** (1975), 56-67. (J. Ohm) **52** #5648 13C10 (15A15)
(with Thode, Thomas) Optimale Approximation—ein Zugang zur Analysis. *Math.-Phys. Semesterheft* **24** (1977), no. 2, 220-248. (P. D. Morris) **58** #6844 41A30
- Schmale, Wiland** ★Asymptotische Eigenwertverteilungen zufälliger symmetrischer Matrizen. Von der Universität Stuttgart zur Erlangung der Würde eines Doktors der Naturwissenschaften (Dr. rer. nat.) genehmigte Abhandlung. *Universität Stuttgart*,
- Stuttgart*, 1971. 85 pp. (A. C. Offord) **49** #5043 15A42 (60H99)
- Schmalisch, Gerd** Numerische Verfahren zur Berechnung zeitoptimaler Relaissteuerung. *Wiss. Z. Tech. Dresden* **27** (1978), no. 2, 375-379. (O. V. Vasil'ev) **58** #732 49D10
- Schmandt, Frederick D.** Coding need: a system's concept. *Survey of combinatorial the (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971)*, pp. 385-390. North-Holland, Amsterdam, 1973. (G. Solomon) **51** #2772 94A10
- Schmeichel, Edward F.** (with Hakimi, S. Louis) Pancyclic graphs and a conjecture Bondy and Chvátal. *J. Combinatorial Theory Ser. B* **17** (1974), 22-34. (J. A. Bondy) **55** #10323 05C35
A note on the edge reconstruction conjecture. *Bull. Austral. Math. Soc.* **12** (1975), 27-30. (D. L. Greenwell) **51** #7962 05C99
(with Hakimi, S. Louis) On the existence of a traceable graph with prescribed vertex degrees. *Ars Combinatoria* **4** (1977), 69-80. (David M. Berman) **58** #16403 05C35
(with Collier, James B.) New flip-flop constructions for hypohamiltonian graphs. *Discrete Math.* **18** (1977), no. 3, 265-271. (Authors' summary) **58** #27622 05C35
(with Hakimi, S. Louis) On planar graphical degree sequences. *SIAM J. Appl. Math.* **32** (1977), no. 3, 598-609. (Editors) **57** #9583 05C10
(with Hakimi, S. Louis) Graphs and their degree sequences: a survey. *Theory and applications of graphs (Proc. Internat. Conf., Western Mich. Univ., Kalamazoo, Mich., 1976)*, pp. 225-235. *Lecture Notes in Math.*, Vol. 642, Springer, Berlin, 1978. (L. V. Beineke) **58** #21847 05C99
(with Collier, James B.) Systematic searches for hypohamiltonian graphs. *Networks* **8** (1978), no. 3, 193-200. (Carsten Thomassen) **58** #10590 05C35
- Schmeidler, David** Convexity and compactness in countably additive correspondences. *Differential Games and Related Topics (Proc. Internat. Summer School, Varenna, 1970)*, pp. 235-242. North-Holland, Amsterdam, 1971. (Chr. Y. Pauc) **46** #5568 28A55
A condition for the completeness of partial preference relations. *Econometrica* **39** (1971), 403-404. (L. E. Ward, Jr.) **48** #9677 54F05 (90A10)
(with Debreu, G.) The Radon-Nikodým derivative of a correspondence. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. II: Probability theory, pp. 41-56. Univ. California Press, Berkeley, Calif., 1972. (Christiane Godet-Thobie) **53** #11013 28A45
A remark on the core of an atomless economy. *Econometrica* **40** (1972), 579-580. (W. Hildebrand) **49** #6890 90A15
(with Vind, Karl) Fair net trades. *Econometrica* **40** (1972), 637-642. (Y. I. Kannai) **51** #9769 90A15
(with Drèze, Jacques H.; Jaskold Gabszewicz, Jean; Vind, Karl) Cores and prices in an exchange economy with an atomless sector. *Econometrica* **40** (1972), 1091-1108. (Y. I. Kannai) **52** #7488 90A15
Cores of exact games. I. *J. Math. Anal. Appl.* **40** (1972), 214-225. (Y. I. Kannai) **52** #2609 90D13
On set correspondences into uniformly convex Banach spaces. *Proc. Amer. Math. Soc.* **34** (1972), 97-101. (J. Musielak) **45** #2137 28A55
(with Hildenbrand, Werner; Zamir, Shmuel) Existence of approximate equilibria and cores. *Econometrica* **41** (1973), 1159-1166. (From the authors' text) **55** #14128 90A15
Equilibrium points of nonatomic games. *J. Statist. Phys.* **7** (1973), 295-300. (James W. Friedman) **57** #5132 90D13
(with Pazner, Elisha A.) Competitive analysis under complete ignorance. *Internat. Econom. Rev.* **16** (1975), 246-257. (From the authors' introduction) **55** #9875 90A15
(with Kalai, Ehud; Pazner, Elisha A.) Collective choice correspondences as admissible outcomes of social bargaining processes. *Econometrica* **44** (1976), no. 2, 233-240. (Rubin Saposnik) **56** #2210 90A05 (92A20)
(with Karni, Edi) Independence of nonfeasible alternatives, and independence of nonoptimal alternatives. *J. Econom. Theory* **12** (1976), no. 3, 488-493. (B. G. Mirkin) **54** #9613 90A05
(with Kalai, Ehud) Aggregation procedure for cardinal preferences: a formulation and proof of Samuelson's impossibility conjecture. *Econometrica* **45** (1977), no. 6, 1431-1438. (Rubin Saposnik) **56** #10763 90A05 (92A20)
(with Kalai, Ehud) An admissible set occurring in various bargaining situations. *J. Econom. Theory* **14** (1977), no. 2, 402-411. (Mamoru Kaneko) **55** #12159 90D45
(with Postlewaite, Andrew) Approximate efficiency of non-Walrasian Nash equilibria. *Econometrica* **46** (1978), no. 1, 127-135. (Hildegard Dierker) **57** #9011 90A15
(with Jaynes, G.; Okuno, Masahiro) Efficiency in an atomless economy with fiat money. *Internat. Econom. Rev.* **19** (1978), no. 1, 149-156. (J. Rosenmüller) **58** #4205 90A05
- Schmeidler, Felix** Die Ausbreitung neuer Erfindungen in der neuzeitlichen Astronomie. (English summary) *RETE* **1** (1971/72), no. 2, 117-124. (Author's summary) **57** #12078 01A55
Die Astronomie des Copernicus. *Nicolaus Copernicus zum 500. Geburtstag*, pp. 1-21. Böhlau, Cologne, 1973. (Editors) **50** #6754 01A40
Über die Kontinuitätstheorie zur Auffindung periodischer Lösungen. (English summary) *Astronom. Nachr.* **294** (1973), 149-152. (J. S. Joel) **48** #5456 70J35
Johannes Regiomontanus. *Vistas Astronom.* **21** (1977), no. 4, 315-324. (Editors) **58** #10218 01A70
- Schmeidler, W.** See **Fundamentals of mathematics**, **49** #8788
- Schmeikal, B.** See **Quantitative sociology**, **56** #2480
- Schmeiser, Bruce W.** (with Ramberg, John S.) An approximate method for generating asymmetric random variables. *Comm. ACM* **17** (1974), 78-82. (J. Spanier) **48** #1004 65C10
(with Deutsch, Stuart Jay) A versatile four parameter family of probability distributions suitable for simulation. *AIIE Trans.* **9** (1977), no. 2, 176-182. (S. Kotz) **57** #7843 62E25 (65C05)
- Schmeisser, Gerhard** Optimale Schranken zu einem Satz über Nullstellen Hermiteischer Trinome. *J. Reine Angew. Math.* **246** (1971), 147-160. (From the author's introduction) **54** #5520 33A65

- Zur Lage der Kritischen Punkte eines Polynoms. *Rend. Sem. Mat.-Univ. Padova* 46 (71), 405-415. (M. Marden) 46 #3754 30A08
- Zur Theorie der Potenzreihen mit Lücken. *Math. Z.* 126 (1972), 40-46. (L. R. Sons) #8811 30A10
- Optimale Quadraturformeln mit semidefiniten Kernen. (English summary) *Numer. Math.* 20 (1972/73), 32-53. (H. E. Fettis) 47 #7901 65D30
- Nullstelleneinschlüssen und Landau-Fejér-Montel problem. *Studia Sci. Math. Hungar.* 7 (1972), 459-472. (R. Vermes) 49 #539 30A08
- (with Rahman, Qazi Ibadur) Location of the zeros of polynomials with a prescribed m . *Trans. Amer. Math. Soc.* 196 (1974), 69-78. (D. A. Brannan) 50 #2461 A06
- Optimale Quadraturformeln mit semidefiniten Kernen. *Numerisch Methoden der Approximationstheorie, Band 2* (Tagung, Math. Forschungsinst., Oberwolfach, 1973), pp. 7-129. *Internat. Schriftenreihe Numer. Math., Band 26, Birkhäuser, Basel, 1975.* (H. E. Fettis) 52 #2157 65D30
- A representation for the remainder of the Maclaurin quadrature formula. *Numer. Math.* 27 (1976/77), no. 3, 355-358. (Thomas A. Atchison) 55 #6797 65D30
- (with Rahman, Qazi Ibadur) Some inequalities for polynomials with a prescribed m . *Trans. Amer. Math. Soc.* 216 (1976), 91-103. (H.-J. Runckel) 53 #3271 A04
- (with Rahman, Qazi Ibadur) Rational approximation to the exponential function. *Adé and rational approximation* (Proc. Internat. Sympos., Univ. South Florida, Tampa, La., 1976), pp. 189-194. *Academic Press, New York, 1977.* (Manfred v. Golitschek) 7 #13311 41A20
- (with Rahman, Qazi Ibadur) On rational approximation on the positive real axis. *Canad. J. Math.* 29 (1977), no. 1, 180-192. (G. Meinardus) 55 #3620 41A20
- On Ilieff's conjecture. *Math. Z.* 156 (1977), no. 2, 165-173. (D. A. Brannan) 8 #6182 30A06
- (with Rahman, Qazi Ibadur) Inequalities for polynomials on the unit interval. *Trans. Amer. Math. Soc.* 231 (1977), no. 1, 93-100. (N. K. Govil) 57 #3358 30A06
- (with Rahman, Qazi Ibadur) Rational approximation to e^{-x} . *J. Approximation Theory* 23 (1978), no. 2, 146-154. (F. M. Larkin) 58 #6837 41A20 (41A25)
- (with Rahman, Qazi Ibadur; Turán, Pál) On a phenomenon concerning $(0, 2)$ -interpolation. *Period. Math. Hungar.* 9 (1978), no. 1-2, 163-171. (Helmut Brass) 7 #13293 41A05
- Meissner, Hans-Jürgen (with Triebel, Hans) Anisotropic spaces. I. Interpolation of abstract spaces and function spaces. *Math. Nachr.* 73 (1976), 107-123. (Jöran Bergh) 5 #3819 46M35 (46E35)
- Anisotropic spaces. II. Equivalent norms for abstract spaces, function spaces with weights of Sobolev-Besov type. *Math. Nachr.* 79 (1977), 55-73. (Jöran Bergh) 57 #7148 46E35 (46M35)
- Melovsky, Karl-Heinz Probleme der Bayesschen Schätzung bei Zeitdiskreter Beobachtung. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 10 (1974), 407-430. (Author's summary) 57 #10952 62M05 (93E10)
- (with Iwainsky, A.; Ahlbehrendt, N.; Kempe, Volker) Identifikation und Extrapolation von Zufallsprozessen auf der Grundlage von Vektor-Markov-Modellen. *Z. Elek. Informations- und Energietechnik* 5 (1975), no. 5, 376-388. (A. Ja. Dorogovcev) 53 #7576 93E10
- (with Ahlbehrendt, N.; Iwainsky, A.; Kempe, Volker) Identifikation und Extrapolation von Zufallsprozessen auf der Grundlage von Vektor-Markov-Modellen. II. Das Identifikationsproblem. *Z. Elek. Informations- und Energietechnik* 6 (1976), no. 1, 51-64. (A. Ja. Dorogovcev) 57 #19009a 93E10 (60G25, 60H10)
- Merckotte, H. Interdependences between consistent tests and estimates. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 16 (1970), 293-306. (R. H. Berk) 45 #2849 62F10
- Merl, James H. An elementary sentence which has ordered models. *J. Symbolic Logic* 37 (1972), 521-530. (G. Fuhrken (Zbl 278 #02041)) 55 #96 02H05 (02K35)
- (with Shelah, Saharon) On power-like models for hyperinaccessible cardinals. *J. Symbolic Logic* 37 (1972), 531-537. (P. Štěpánek) 47 #6474 02H05
- Peano models with many generic classes. *Pacific J. Math.* 46 (1973), 523-536. (M. Boffa) 50 #6831 02H20
- Generalizing special Aronszajn trees. *J. Symbolic Logic* 39 (1974), 732-740. (N. H. Williams) 52 #7905 02K35 (02H05, 04A20)
- (with Garfunkel, Solomon) The undecidability of theories of groupoids with an extra predicate. *Proc. Amer. Math. Soc.* 42 (1974), 286-289. (M. R. Krom) 48 #3725 02G05
- A partition property characterizing cardinals hyperinaccessible of finite type. *Trans. Amer. Math. Soc.* 188 (1974), 281-291. (N. H. Williams) 49 #2386 02K35 (04A10, 04A20)
- The number of equivalence classes of existentially complete structures. *Model theory and algebra* (A memorial tribute to Abraham Robinson), pp. 170-171. *Lecture Notes in Math., Vol. 498, Springer, Berlin, 1975.* (William H. Wheeler) 54 #2450 02H05 (02H13)
- On κ -like structures which embed stationary and closed unbounded subsets. *Ann. Math. Logic* 10 (1976), no. 3-4, 289-314. (G. Fuhrken) 55 #7763 02H05 (02K15, 02K35, 04A20)
- The decidability of some \aleph_0 -categorical theories. *Colloq. Math.* 36 (1976), no. 2, 165-169. (O. V. Belegadek) 56 #113 (EA 55/56) 02G20 (02G05)
- Effectiveness and Vaught's gap ω two-cardinal theorem. *Proc. Amer. Math. Soc.* 58 (1976), 237-240. (Douglas E. Miller) 55 #5433 02H05 (02F35)
- Remarks on self-extending models. *Z. Math. Logik Grundlagen Math.* 22 (1976), no. 6, 509-512. (Douglas E. Miller) 56 #5267 02H05 (02K35)
- On \aleph_0 -categoricity and the theory of trees. *Fund. Math.* 94 (1977), no. 2, 121-128. (O. V. Belegadek) 55 #10269 02H05 (02G15, 02G20)
- Theories with only a finite number of existentially complete models. *Israel J. Math.* 28 (1977), no. 4, 350-356. (A. B. Slomson) 57 #16052 02H13
- An axiomatization for a class of two-cardinal models. *J. Symbolic Logic* 42 (1977), no. 2, 174-178. (Manfred Armbrust) 58 #203 02H05
- \aleph_0 -categoricity of partially ordered sets of width 2. *Proc. Amer. Math. Soc.* 63 (1977), no. 2, 299-305. (O. V. Belegadek) 55 #12501 02G15 (02G20, 02H05)
- On \aleph_0 -categoricity of filtered Boolean extensions. *Algebra Universalis* 8 (1978), no. 2, 159-161. (B. Weglorz) 57 #9529 02H13
- Schmets, Jean (with Münster, Michel) Fonctionnelles linéaires bornées sur $C(X)$. (English summary) *Bull. Soc. Roy. Sci. Liège* 39 (1970), 551-554. (F. Cunningham, Jr.) 45 #2457 46E10
- Sur le principe du "bang-bang". *Rev. Roumaine Math. Pures Appl.* 15 (1970), 633-641. (Author's summary) 54 #3538 49A35
- (with De Wilde, Marc) Caractérisation des espaces $C(X)$ ultrabornologiques. (English summary) *Bull. Soc. Roy. Sci. Liège* 40 (1971), 119-121. (P. P. Narayanaswami) 45 #872 46E10 (54C35)
- Espaces $C(X)$ évaluable, infra-évaluable et σ -évaluable. (English summary) *Bull. Soc. Roy. Sci. Liège* 40 (1971), 122-126. (S. A. Naimpally) 45 #875 46E10
- Sur le support des ensembles bornés de $C^*(X)$. (English summary) *Bull. Soc. Roy. Sci. Liège* 40 (1971), 211-213. (R. A. Raimi) 46 #653 46E10
- (with Fourneau, René) Séparabilité des espaces $[C(X)]^*_b$ et $[C^b(X)]^*_b$. (English summary) *Bull. Soc. Roy. Sci. Liège* 40 (1971), 448-450. (J. Kist) 46 #649 46E10 (54C45)
- (with Garnir, Henry G.; De Wilde, Marc) ★Analyse fonctionnelle. Tome II. Mesure et intégration dans l'espace euclidien E_n . *Lehrbücher und Monographien aus dem Gebeite der exakten Wissenschaften, Mathematische Reihe, Band 37. Birkhäuser Verlag, Basel-Stuttgart, 1972.* 287 pp. (W. A. J. Luxemburg) 56 #562 28-01
- Espaces $C(X)$ tonnelés, infratonnelés et σ -tonnelés. *Actes du Colloque d'Analyse Fonctionnelle* (Univ. Bordeaux, Bordeaux, 1971), pp. 351-355. *Bull. Soc. Math. France, Mém. No. 31-32, Soc. Math. France, Paris, 1972.* (S. A. Naimpally) 51 #11079 46E10
- (with Gulick, Denny) Separability and semi-norm separability for spaces of bounded continuous functions. *Bull. Soc. Roy. Sci. Liège* 41 (1972), 254-260. (W. H. Summers) 49 #5795 46E10
- (with De Wilde, Marc) Locally convex topologies strictly finer than a given topology and preserving barrelledness or similar properties. (French summary) *Bull. Soc. Roy. Sci. Liège* 41 (1972), 268-271. (H. Hogbe-Nlend) 47 #749 46A05
- (with Buchwalter, Henri) Sur quelques propriétés de l'espace $C_c(T)$. Application aux espaces $C_c(T)$ et $C_b(T)$. *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A1300-A1303. (I. Namioka) 45 #5726 46E10
- (with Garnir, Henry G.; De Wilde, Marc) ★Analyse fonctionnelle. Tome III: Espaces fonctionnels usuels. *Lehrbücher und Monographien aus dem Gebeite der exakten Wissenschaften, Mathematische Reihe, Band 45. Birkhäuser Verlag, Basel-Stuttgart, 1973.* 375 pp. (W. A. J. Luxemburg) 56 #1039 46Exx (46F05)
- Indépendance des propriétés de tonnelage et d'évaluable affaiblis. (English summary) *Bull. Soc. Roy. Sci. Liège* 42 (1973), 104-108. (K. Sundaresan) 48 #4677 46A09
- (with Nouredine, Khalil) Espaces associés à un espace localement convexe et espaces de fonctions continues. (English summary) *Bull. Soc. Roy. Sci. Liège* 42 (1973), 109-117. (K. Sundaresan) 48 #9327 46A07
- (with Buchwalter, Henri) Sur quelques propriétés de l'espace $C_c(T)$. *J. Math. Pures Appl.* (9) 52 (1973), 337-352. (R. A. Raimi) 48 #12012 46E10
- Espaces associés aux espaces linéaires à semi-normes des fonctions continues et bornées sur un espace complètement régulier et séparé. *Actes du Deuxième Colloque d'Analyse Fonctionnelle de Bordeaux* (Univ. Bordeaux, 1973), III, pp. 35-50. *Publ. Dép. Math. (Lyon)* 10 (1973), no. 4, 313-328. (Richard Haydon) 51 #1357 46E10
- Characterization of the barreled, d -barreled and σ -barreled spaces of continuous functions. *Functional analysis and its applications* (Internat. Conf., Eleventh Anniversary of Matscience, Madras, 1973; dedicated to Alladi Ramakrishnan), pp. 468-476. *Lecture Notes in Math., Vol. 399, Springer, Berlin, 1974.* (Denny Gulick) 53 #8876 46E10
- (with Zafarani, Jafar) Topologie stricte faible et mesures discrètes. (English summary) *Bull. Soc. Roy. Sci. Liège* 43 (1974), 405-418. (K. Sundaresan) 51 #1358 46E10
- Simple and weak compactness in spaces of continuous functions. *Function spaces and dense approximation* (Proc. Conf., Univ. Bonn, Bonn, 1974), pp. 124-133. *Bonn. Math. Schriften, No. 81, Inst. Angew. Math., Univ. Bonn, Bonn, 1975.* (R. C. James) 57 #1060 46A05 (46E10)
- Separability for semi-norms on spaces of bounded continuous functions. *J. London Math. Soc.* (2) 11 (1975), no. 2, 245-248. (Denny Gulick) 52 #1282 46E15
- Spaces associated to spaces of continuous functions. *Math. Ann.* 214 (1975), 61-72. (H. Buchwalter) 51 #6382 46E10
- ★Espaces de fonctions continues. *Lecture Notes in Mathematics, Vol. 519. Springer-Verlag, Berlin-New York, 1976.* xii + 150 pp. (I. Tweddle) 54 #11041 46E10 (46A05)
- Spaces of continuous functions. *Functional analysis: surveys and recent results* (Proc. Conf., Paderborn, 1976), pp. 89-104. *North-Holland Math. Studies, Vol. 27; Notas de Mat., No. 63, North-Holland, Amsterdam, 1977.* (B. Walsh) 58 #12316 46E10
- On spaces of vector-valued continuous functions. *General topology and its relations to modern analysis and algebra, IV* (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B, pp. 400-406. *Soc. Czechoslovak Mathematicians and Physicists, Prague, 1977.* (I. Tweddle) 57 #1112 46E40 (46A09)
- Localization properties in spaces of continuous functions. *Bull. Soc. Roy. Sci. Liège* 46 (1977), no. 9-10, 241-244. (Y. Benyamini) 57 #7151 46E40
- Bornological and ultrabornological $C(X; E)$ spaces. *Manuscripta Math.* 21 (1977), no. 2, 117-133. (Author's summary) 57 #13468 46E40
- Schmetterer, L. Sur les lois de Poisson. (English summary) *Les probabilités sur les structures algébriques* (Actes Colloq. Internat. CNRS, No. 186, Clermont-Ferrand, 1969), pp. 311-318. *Éditions Centre Nat. Recherche Sci., Paris, 1970.* (Author's summary) 53 #14580 60B15
- Alfréd Rényi, in memoriam. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: Probability theory, pp. xxv-1. *Univ. California Press, Berkeley, Calif., 1972.* (Editors) 52 #7818 01A70
- On Poisson laws and related questions. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: Probability theory, pp. 169-185. *Univ. California Press, Berkeley,*

- Calif., 1972. (Eberhard Siebert) **53** #4170 60B15
Über einen Satz von A. Rényi. Collection of articles dedicated to the memory of
Alfréd Rényi, I. *Period. Math. Hungar.* **2** (1972), 27-32. (L. Leindler) **48** #9229
42A20
On the embedding of infinitely divisible laws. (French summary) *Proceedings of the
Fourth Conference on Probability Theory (Braşov, 1971)*, pp. 83-86. *Editura Acad. R. S.
R., Bucharest*, 1973. (H. Heyer) **53** #14581 60B15
(with Hazod, Wilfried) Über einige mit der Wahrscheinlichkeitstheorie
zusammenhängende Probleme der Gruppentheorie. Collection of articles dedicated to
Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* **262/263** (1973),
144-152. (H. Heyer) **52** #8317 22A05 (60B15)
★Introduction to mathematical statistics. Translated from the second German
edition by Kenneth Wickwire. Die Grundlehren der mathematischen Wissenschaften,
Band 202. *Springer-Verlag, Berlin-New York*, 1974. vii + 502 pp. (Editors) **50** #11555
62-02
Plongement de lois indéfiniment divisibles. Colloque Consacré au Calcul des
Probabilités (Univ. Clermont, Clermont-Ferrand, 1973). *Ann. Sci. Univ. Clermont* **51**
(1974), no. 9, 1-4. (Klaus Schmidt) **52** #4369 60B15
(with Strasser, Helmut) Zur Theorie der erwartungstreuen Schätzungen. *Anz.
Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **1974**, no. 6, 59-66. (Reinhard Michel)
52 #15806 62F10 (62B05)
Zur numerischen Quadratur. (English and Russian summaries) Collection of
articles dedicated to Helmut Heinrich on the occasion of his seventieth birthday. *Z.
Angew. Math. Mech.* **55** (1975), 59-63. (Henning Esser) **51** #10970 41A55 (65Dxx)
★Введение в математическую статистику. (Russian) [Introduction to
mathematical statistics] Translated from the second German edition, and edited by Ju.
V. Linnik. *Izdat. "Nauka", Moscow*, 1976. 520 pp. (Editors) **54** #3890 62-02
Sur quelques résultats asymptotiques pour le processus de Robbins-Monro. Two
Symposia on Probability and Applications (Journées d'Optimisation Stochastique,
Clermont, 1975). *Ann. Sci. Univ. Clermont No. 58 Math. No. 12* (1976), 166-176. (P.
Révész) **53** #4414 62L20
On the theory of unbiased estimation. *Proceedings of the Symposium to honour Jerzy
Neyman (Warsaw, 1974)*, pp. 313-317. *Państw. Wydawn. Nauk., Warsaw*, 1977. (L. B.
Klebanov) **56** #9791 62F10 (62B05)
See also **Fundamentals of mathematics**, **49** #8788; **Compstat**, **49** #9990;
Colloque: Consacré au Calcul des Probabilités, **50** #3282; **Keane, M. S.**, **50** #3293;
Huber, Peter J., **50** #8792 (EA 51); **Tortrat, A.**, **53** #14582 and **Feldman, Jacob**,
54 #8818
Schmid, Beat Friedrich ★Ganzzahlige lineare Programmierung und das
Knapsack-Problem. Abhandlung zur Erlangung der Würde eines Doktors der
Mathematik der Eidgenössischen Technischen Hochschule Zürich. Diss. No. 4639.
Eidgenössische Technische Hochschule Zürich, Zurich, 1972. ii + 29 pp. (Csaba Fabian)
50 #6491 90C10
Ganzzahlige lineare Programmierung und das Knapsack-Problem. *Z.
Wahrscheinlichkeitstheorie und Verw. Gebiete* **23** (1972), 255-259. (C.-A. Burdet)
47 #8110 90C10 (10B10)
Schmid, E. See **Elementary particle physics: multiparticle aspects**, **48** #1597
Schmid, G. Die Methode der finiten Elemente als Sonderfall der Methode der gewichteten
Residuen. (English and Russian summaries) *Z. Angew. Math. Mech.* **52** (1972), no. 9,
461-469. (O. Widlund) **52** #12362 65N30
Ritz-Galerkin approximations in fluid dynamics. *Proceedings of the Fifth
International Conference on Numerical Methods in Fluid Dynamics (Twente Univ.,
Enschede, 1976)*, pp. 84-95. *Lecture Notes in Phys.*, Vol. 59, *Springer, Berlin*, 1976. (See
RZMat **1977** #8 B974; MR **55** #4934) 76.65
Finite element approximation to vector fields with non-vanishing divergence and
rotations. *Formulations and computational algorithms in finite element analysis
(U.S.-Germany Sympos., Mass. Inst. Tech., Cambridge, Mass., 1976)*, pp. 1039-1058.
MIT Press, Cambridge, Mass., 1977. (D. Schultz) **58** #8797 76.65
See also **Numerical methods in fluid dynamics**, **49** #10260
Schmid, G. Bruno Transformation theory, accelerating frames, and two simple problems.
Amer. J. Phys. **45** (1977), no. 7, 652-657. (C. J. Eliezer) **56** #4537 81.47
Schmid, Hans Albrecht (with Lautenbach, Kurt) Use of Petri nets for proving correctness
of concurrent process systems. *Information processing 74 (Proc. IFIP Congress,
Stockholm, 1974)*, pp. 187-191. *North-Holland, Amsterdam*, 1974. (Karel Čulík)
55 #14427 94A20 (68A05)
(with Best, Eike) Markierte Petrinetze und Σ -Teilsysteme. *Fünfte Jahrestagung der
Gesellschaft für Informatik (Dortmund, 1975)*, pp. 151-161. *Lecture Notes in Comput. Sci.*,
Vol. 34, *Springer, Berlin*, 1975. (Hermann Walter) **52** #10242 94A20 (94A30)
(with Best, Eike) Systems of open paths in Petri nets. *Mathematical foundations of
computer science 1975 (Fourth Sympos., Mariánské Lázně, 1975)*, pp. 186-193. *Lecture
Notes in Comput. Sci.*, Vol. 32, *Springer, Berlin*, 1975. (A. D. Koršunov) **53** #2524
94A20 (05Cxx)
On the efficient implementation of conditional critical regions and the construction
of monitors. *Acta Informat.* **6** (1976), no. 3, 227-249. (I. Kaufmann) **54** #6543
68A05
Schmid, Hans Joachim Eine geometrische Deutung der Ungarischen Methode. *Math. Z.*
138 (1974), 213-218. (M. Mañas) **50** #9354 90C05
Interpolation of harmonic functions. *Constructive theory of functions of several
variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 226-249. *Lecture Notes
in Math.*, Vol. 571, *Springer, Berlin*, 1977. (B. M. Agrawal) **58** #3303 65D05
(31A05)
Schmid, Jürg On the compactification of closure algebras. *Fund. Math.* **79** (1973), no. 1,
33-48. (Timothy Cramer) **48** #196 06A40
Completing Boolean algebras by nonstandard methods. *Z. Math. Logik Grundlagen
Math.* **20** (1974), 47-48. (D. Monk) **50** #1876 02H25 (06A40)
A monadic approach to the McNeille completion of a lattice. *Arch. Math. (Basel)*
28 (1977), no. 3, 225-232. (Peter Köhler) **56** #8450 06A23
Nonstandard constructions for join-extensions of lattices. *Houston J. Math.* **3**
(1977), no. 3, 423-439. (H. Gonshor) **56** #8446 06A20
Schmid, Peters Über die Stabilitätsgruppen der Untergruppenreihen einer endlichen
Gruppe. *Math. Z.* **123** (1971), 318-324. (M. E. Harris) **45** #5212 20D30
Über die Automorphismengruppen endlicher Gruppen. *Arch. Math. (Basel)*
(1972), 236-242. (Fletcher Gross) **46** #7380 20D45
Untergruppenreihen normalisierende Automorphismengruppen. *Arch. Math.
(Basel)* **23** (1972), 459-468. (H. Kurzweil) **47** #3529 20D45 (20D10, 20D30)
Formationen und Automorphismengruppen. *J. London Math. Soc.* (2) **7** (1973),
83-94. (W. E. Deskins) **48** #2254 20D45
Über den größten nilpotenten Normalteiler der Automorphismengruppe einer
endlichen Gruppe. *J. Algebra* **25** (1973), 165-171. (R. W. Carter) **47** #5129 20D45
Nilpotente Gruppen und Stabilitätsgruppen. *Math. Ann.* **202** (1973), 57-69. (P.
M. Neumann) **48** #2255 20D45 (20D15)
Eine Bemerkung über Potenzautomorphismen endlicher Gruppen. *Math. Nachr.*
(1973), 317-319. (D. K. Friesen) **48** #11301 20D45
(with Maier, Rudolf) The embedding of quasinormal subgroups in finite groups.
Math. Z. **131** (1973), 269-272. (Sergei A. Syskin) **51** #697 20D25
Lokale Formationen endlicher Gruppen. *Math. Z.* **137** (1974), 31-48. (W.
Deskins) **49** #10782 20D45
Normal p -subgroups in the group of outer automorphisms of a finite p -group.
Math. Z. **147** (1976), no. 3, 271-277. (J. A. Gallian) **54** #7620 20D45
(with Griess, Robert L., Jr.) The Frattini module. *Arch. Math. (Basel)* **30** (1978),
no. 3, 256-266. (D. F. Holt) **58** #11168 20J05 (20C20)
(with Barnes, Donald W.; Stambach, Urs) Cohomological characterisations
saturated formations and homomorphisms of finite groups. *Comment. Math. Helv.* **53**
(1978), no. 2, 165-173. (Ken-ichi Tahara) **58** #11167 20J05
Every saturated formation is a local formation. *J. Algebra* **51** (1978), no. 1, 144-149.
(R. Steinberg) **58** #5927 20D99 (20F05)
Schmid, Roberto See **Conference: Optimization Techniques**, **48** #5759 and **Theory and
applications of variable structure systems**, **52** #10108
Schmid, W. (with Griffiths, Phillip) Locally homogeneous complex manifolds. (Russian)
Translated from the English (*Acta Math.* **123** (1969), 253-302) by B. L. Žitnickii. *Uspehi
Mat. Nauk* **26** (1971), no. 5(161), 117-168. (Editors) **52** #8509 32M10 (14C30,
53C30)
Variation of Hodge structure: the singularities of the period mapping. *Invent. Math.*
22 (1973), 211-319. (Andrew J. Sommese) **52** #3157 14D05 (14D20, 22E15, 32J25,
32M10)
Abbildungen in arithmetische Quotienten hermitescher symmetrischer Räume.
Classification of algebraic varieties and compact complex manifolds, pp. 243-258. *Lecture
Notes in Math.*, Vol. 412, *Springer, Berlin*, 1974. (J. S. Joel) **57** #6523 32J25
(32M15)
(with Griffiths, Phillip) Recent developments in Hodge theory: a discussion of
techniques and results. *Discrete subgroups of Lie groups and applications to moduli
(Internat. Colloq., Bombay, 1973)*, pp. 31-127. *Oxford Univ. Press, Bombay*, 1975. (A. L.
Oniščik) **54** #7868 32J25 (14C30)
Some remarks about the discrete series characters of $Sp(n, \mathbb{R})$. *Non-commutative
harmonic analysis (Actes Colloq., Marseille-Luminy, 1974)*, pp. 172-194. *Lecture Notes in
Math.*, Vol. 466, *Springer, Berlin*, 1975. (E. A. Thieleker) **53** #10990 22E45
Some properties of square-integrable representations of semisimple Lie groups.
Ann. of Math. (2) **102** (1975), no. 3, 535-564. (D. Poguntke (Zbl **347** #22011))
58 #28303 22E45
On the characters of the discrete series. The Hermitian symmetric case. *Invent. Math.* **30**
(1975), no. 1, 47-144. (N. R. Wallach) **53** #714 22E45
(with Hecht, Henryk) A proof of Blattner's conjecture. *Invent. Math.* **31** (1975), no.
2, 129-154. (N. R. Wallach) **53** #715 22E45
 L^2 -cohomology and the discrete series. *Ann. of Math.* (2) **103** (1976), no. 2, 375-394.
(N. R. Wallach) **53** #716 22E45
(with Hecht, Henryk) On integrable representations of a semisimple Lie group.
Math. Ann. **220** (1976), no. 2, 147-149. (Kenneth Johnson) **53** #3203 22E45
Two character identities for semisimple Lie groups. *Non-commutative harmonic
analysis (Actes Colloq., Marseille-Luminy, 1976)*, pp. 196-225. *Lecture Notes in Math.*
Vol. 587, *Springer, Berlin*, 1977. (A. J. Silberger (Zbl **362** #22015)) **58** #22405
22E45
(with Atiyah, M. F.) A geometric construction of the discrete series for semisimple
Lie groups. *Invent. Math.* **42** (1977), 1-62. (P. C. Trombi) **57** #3310 22E45
Schmid, H. See **New developments in relativistic quantum field theory and its applications**
49 #11977
Schmidt, Adam Vergleich zweier Lösungsverfahren für das halbhomogene
Randwertproblem an Eigenwertstellen. *Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe*
14 (1965), no. 3/4, 431-433. (A. M. Kral) **52** #11173 34B05
(with Fenýő, István) Über gewisse partielle Differentialgleichungen im Bereich der
Distributionen. *J. Reine Angew. Math.* **252** (1972), 215-220. (Jaime Lesmes) **45** #724
35D99 (46F10)
Didaktische Kritik am indirekten Beweis. (Russian, English and French summaries)
Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe **21** (1972), no. 8, 781-782. (Michael Otte)
53 #5229 00A25
Störungsrechnung für lineare gewöhnliche Differentialoperatoren. II. *Z. Angew.
Math. Mech.* **52** (1972), no. 12, 611-616. (D. Schmidt) **54** #3115 34E10 (34A45)
Linear differential equations with constant coefficients in two independent
variables. *Differential equations (Colloq., Keszthely, 1974)*, pp. 365-372. *Colloq. Math.
Soc. János Bolyai*, Vol. 15, *North-Holland, Amsterdam*, 1977. (Author's review (Zbl **34**
#35016)) **58** #29098 35C05 (35E05)
See also **Collection: Schmidt, Adam**, **52** #7752; **Biography: Schmidt, Adam**,
53 #68 and **Stolle, Hans-Wolfgang**, **53** #69
Schmidt, Asmus L. On the approximation of quaternions. *Math. Scand.* **34** (1974),
184-186. (L. C. Egan) **51** #8040 10F05
Diophantine approximation of complex numbers. *Acta Math.* **134** (1975), 1-85. (W.
J. LeVeque) **54** #10160 10F20 (10E25)
On C -minimal forms. *Math. Ann.* **215** (1975), 203-214. (Thomas W. Cusick)
51 #12705 10C25 (10E25)
Minimum of quadratic forms with respect to Fuchsian groups. I. *J. Reine Angew.
Math.* **286/287** (1976), 341-368. (Harvey Cohn) **56** #15566 10E20 (10C05, 10D05)

- Minimum of quadratic forms with respect to Fuchsian groups. II. *J. Reine Angew. Math.* **292** (1977), 109-114. (Harvey Cohn) **56** #15567 10E20 (10D05, 10C05)
- Diophantine approximation in the field $\mathbb{Q}(i^{1/2})$. *J. Number Theory* **10** (1978), no. 2, 151-176. (Thomas W. Cusick) **58** #5537 10F20
- id, B. Caractérisation des lois de probabilités qui conduisent à une martingale tournée particulière. *Publ. Inst. Statist. Univ. Paris* **19** (1970), no. 1, 101-106. (From the author's introduction) **57** #7758 60G50 (60G45)
- id, B. On asymptotic exponential regression with correlated observations. *Math. Biosci.* **16** (1973), 1-9. (G. Papanicolaou) **47** #1187 62F10
- id, Bernd Über die Ecken des numerischen Wertebereichs in einer Banachalgebra. *Math. Z.* **126** (1972), 47-50. (J. P. Williams) **46** #667 46H05
- Über die Ecken des numerischen Wertebereichs in einer Banachalgebra. II. *Math. Z.* **127** (1972), 186-190. (J. P. Williams) **47** #7429 46H05 (47A10)
- id, Bernd A new definition of singular points in general relativity. *General Relativity and Gravitation* **1** (1970/71), no. 3, 269-280. (Pham Mau Quan) **53** #15288 83.58 58H05
- (with Hájíček, Petr) The b -boundary of tensor bundles over a space-time. *Comm. Math. Phys.* **23** (1971), 285-295. (J. K. Beem) **45** #6360 83.53
- Homogeneous Riemannian spaces and Lie algebras of Killing fields. *General Relativity and Gravitation* **2** (1971), 105-120. (C. B. Collins) **53** #3960 53C50
- The local b -completeness of space-times. *Comm. Math. Phys.* **29** (1973), 49-54. (Philippe-A. Dionne) **48** #1121 53C50 (83.53)
- Conditions on a connection to be a metric connection. *Comm. Math. Phys.* **29** (1973), 55-59. (C. Di Comite) **48** #1087 53C05
- A new definition of conformal and projective infinity of space-times. *Comm. Math. Phys.* **36** (1974), 73-90. (D. Di Comite) **49** #4532 83.53
- (with Walker, Martin; Sommers, Paul) A characterization of the Bondi-Metzner-Sachs group. *General Relativity and Gravitation* **6** (1975), no. 5, 489-497. (J. E. Marsden) **54** #14739 83.58
- Conformal bundle boundaries. *Asymptotic structure of space-time (Proc. Sympos., Univ. Cincinnati, Cincinnati, Ohio, 1976)*, pp. 429-440. Plenum, New York, 1977. (Kishore Marathe) **58** #9079 83.53 (53C50)
- (with Clarke, C. J. S.) Singularities: the state of the art. *General Relativity and Gravitation* **8** (1977), no. 2, 129-137. (Editors) **57** #8832 83.00
- (with Ellis, G. F. R.) Singular space-times. *General Relativity and Gravitation* **8** (1977), no. 1, 915-953. (W. Israel) **58** #32821 83.58
- id, Brian K. On the homotopy invariance of certain functors. *Pacific J. Math.* **54** (1974), 245-256. (Timothy Porter) **51** #6801 55E05
- Quotients of the augmentation ideal of a group ring by powers of itself. *Illinois J. Math.* **19** (1975), 18-26. (R. J. Daverman) **51** #14082 57C45 (20F05)
- Homotopy invariance of contravariant functors acting on smooth manifolds. *Pacific J. Math.* **57** (1975), no. 2, 559-562. (R. Fritsch) **52** #11928 57A65 (55E05)
- (with Mattheiss, T. H.) The probability that a random polytope is bounded. *Math. Oper. Res.* **2** (1977), no. 3, 292-296. (M. Gondran) **58** #20413 90C05 (52A25)
- id, Darrell (with Henry, Myron S.) Continuity theorems for the product approximation operator. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 24-42. Academic Press, New York, 1976. (V. Murgescu) **54** #8120 41A65
- (with Henry, Myron S.) Continuity theorems for the rational product approximation operator. *J. Approximation Theory* **19** (1977), no. 2, 135-142. (V. Murgescu) **55** #6074 41A35
- id, Diana Bounds for the closure ordinals of replete monotonic increasing functions. *J. Symbolic Logic* **40** (1975), no. 3, 305-316. (A. Kino) **52** #7865 (EA 53) 02D05
- Built-up systems of fundamental sequences and hierarchies of number-theoretic functions. *Arch. Math. Logik Grundlagenforsch.* **18** (1976/77), no. 1-2, 47-53. (S. S. Wainer) **57** #16025a 02F35
- Postscript to: "Built-up systems of fundamental sequences and hierarchies of number-theoretic functions" (Arch. Math. Logik. Grundlagenforsch. **18** (1976), 47-53). *Arch. Math. Logik Grundlagenforsch.* **18** (1976), no. 3-4, 145-146. (S. S. Wainer) **57** #16025b 02F35
- See also **Hermes, Hans**, **49** #10519
- id, Dieter S. (with Schäfke, F. W.) ★Gewöhnliche Differentialgleichungen. Die Grundlagen der Theorie im Reellen und Komplexen. Heidelberger Taschenbücher, Band 108. Springer-Verlag, Berlin-New York, 1973. vii + 163 pp. (Editors) **50** #7623 34-01
- Zur Differentialgleichung der Ellipsoidfunktionen. *Arch. Rational Mech. Anal.* **53** (1973/74), 40-55. (H. Hochstadt) **49** #688 34A20
- Zur Theorie der einfachen Singularitäten. *Arch. Math. (Basel)* **25** (1974), 160-166. (D. A. Lutz) **52** #11161 34A20 (34G05)
- id, Dieters (with Meyer, Kenneth R.) Periodic orbits near \mathbb{P}_4 for mass ratios near the critical mass ratio of Routh. *Celestial Mech.* **4** (1971), 99-109. (D. Sweet) **47** #6164 70.34
- The family of direct periodic orbits of the first kind in the restricted problem of three bodies. *Ordinary differential equations (Proc. Conf., Math. Res. Center, Naval Res. Lab., Washington, D. C., 1971)*, pp. 553-561. Academic Press, New York, 1972. (V. Szebehely) **54** #4228 70.34
- Families of periodic orbits in the restricted problem of three bodies connecting families of direct and retrograde orbits. *SIAM J. Appl. Math.* **22** (1972), 27-37. (Author's summary) **57** #18331 70.34 (34C35)
- (with Sweet, Daniel) A unifying theory in determining periodic families for Hamiltonian systems at resonance. *J. Differential Equations* **14** (1973), 597-609. (N. Fenichel) **48** #6563 34C35 (70.34)
- (with Schäfke, F. W.) Einfacher Beweis des Hauptsatzes über einfache Singularitäten. *Arch. Math. (Basel)* **25** (1974), 154-159. (D. A. Lutz) **52** #11160 34G05 (34A20)
- Periodic solutions near a resonant equilibrium of a Hamiltonian system. *Celestial Mech.* **9** (1974), 81-103. (N. Fenichel) **49** #9340 34C25 (70.34)
- (with Meyer, Kenneth R.) Entrainment domains. *Funkcial. Ekvac.* **20** (1977), no. 2, 171-192. (P. J. Holmes) **57** #1557 58F05 (58F10)
- Hopf's bifurcation theorem and the center theorem of Liapunov with resonance cases. *J. Math. Anal. Appl.* **63** (1978), no. 2, 354-370. (James A. Murdock) **57** #16832 34C25 (58F10, 70.34)
- See also **Marsden, Jerrold Eldon; et al.**, **58** #13209
- Schmidt, Dirk Konstruktion unterer Schranken für einfache Eigenwerte. *Beiträge Anal.* **No. 1** (1971), 83-91. (W. Stenger) **45** #9474 65F15
- Zur Konstruktion geodätischer Felder der Variationsrechnung. *Beiträge Anal. Heft 7* (1975), 157-163. (From the author's introduction) **56** #6511 49B20
- Zur Hinlänglichkeit des Pontrjaginschen Maximumprinzips. *Beitr. Anal. No. 10* (1977), 101-109. (C. P. Ortlieb) **58** #12595 49B10 (49B15)
- See also **Smogorževskii, O. S.**, **58** #2578
- Schmidt, Douglas C. (with Druffel, Larry E.) An extension of the clause table approach to multi-output combinational switching networks. *IEEE Trans. Computers* **C-23** (1974), 338-346. (B. Hazeltine) **50** #6661 94A20
- (with Druffel, Larry E.; Simpson, James E.) A partitioning isomorphism algorithm for directed graphs using the F matrix. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory, and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1975)*, pp. 251-264. Congressus Numerantium, No. XIV, Utilitas Math., Winnipeg, Man., 1975. (C. Tartia) **54** #2515 05C20 (68A10)
- (with Metzke, Gernot) Modular replacement of combinational switching networks. *IEEE Trans. Computers* **C-24** (1975), no. 1, 29-48. (Shuzo Yajima) **54** #9882 94A20 (90C10)
- (with Druffel, Larry E.) A fast backtracking algorithm to test directed graphs for isomorphism using distance matrices. *J. Assoc. Comput. Mach.* **23** (1976), no. 3, 433-445. (Curtis R. Cook) **53** #14968 68A10 (68A20)
- (with Druffel, Larry E.; Wang, Da Lun) A generator set for representing all automorphisms of a graph. *SIAM J. Appl. Math.* **34** (1978), no. 3, 593-596. (P. K. Stockmeyer) **58** #21781 05C25 (20B25)
- Schmidt, E. J. P. Georg On multiplicative Lebesgue integration and families of evolution operators. *Math. Scand.* **29** (1971), 113-133. (Ivan Dobrakov) **50** #4885 28A45 (47D05)
- (with Guillot, Jean-Claude) Spectral and scattering theory for Dirac operators. *Arch. Rational Mech. Anal.* **55** (1974), 193-206. (K. Gustafson) **50** #7848 35P25 (47A40)
- On scattering by time-dependent perturbations. *Indiana Univ. Math. J.* **24** (1974/75), 925-935. (J. A. Goldstein) **52** #1360 47A40 (35P25)
- See also **Oberwolfach-Tagung: Operations Research**, **48** #3452
- Schmidt, E. Tamás Eine Verallgemeinerung des Satzes von Schmidt-Ore. *Publ. Math. Debrecen* **17** (1970), 283-287 (1971). (Ronald P. Morash) **46** #3387 06A30
- On n -permutate equational classes. *Acta Sci. Math. (Szeged)* **33** (1972), 29-30. (S. Comer) **46** #1683 08A15
- Every finite distributive lattice is the congruence lattice of some modular lattice. *Algebra Universalis* **4** (1974), 49-57. (Heinrich Werner) **51** #296 06A30
- A remark on lattice varieties defined by partial lattices. *Stud. Sci. Math. Hungar.* **9** (1974), 195-198 (1975). (Joel Berman) **51** #10181 06A20
- Über die Kongruenzrelationen der modularen Verbände. *Beiträge zur Algebra und Geometrie, 3. Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M Math.* **5** (1974), 59-68. (Ralph Freese) **53** #222 06A35
- On the length of the congruence lattice of a lattice. *Algebra Universalis* **5** (1975), 98-100. (Joel Berman) **52** #2977 06A20
- (with Fried, Ervin) Standard sublattices. *Algebra Universalis* **5** (1975), no. 2, 203-211. (Iqbalunnisa) **54** #184 06A20
- On finitely generated simple modular lattices. *Period. Math. Hungar.* **6** (1975), no. 3, 213-216. (R. P. Dilworth) **53** #2783 06A30
- Lattices generated by partial lattices. *Lattice theory (Proc. Colloq., Szeged, 1974)*, pp. 343-353. *Colloq. Math. Soc. János Bolyai, Vol. 14, North-Holland, Amsterdam, 1976.* (R. W. Quackenbush) **55** #12587 06A20
- On the variety generated by all modular lattices of breadth two. *Houston J. Math.* **2** (1976), no. 3, 415-418. (Ralph Freese) **54** #188 06A30
- See also **Proceedings: Lattice Theory Conference**, **54** #7327 and **Lattice theory**, **55** #2670
- Schmidt, Eckard (with Lancaster, Peter) L -splines for constant coefficient differential operators. *Proceedings of the Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1971)*, pp. 457-462. Dept. Comput. Sci., Univ. Manitoba, Winnipeg, Man., 1971. (L. W. Johnson) **49** #7656 41A15
- On the continuity of the set-valued exponential metric projection. *J. Approximation Theory* **7** (1973), 36-40. (P. D. Morris) **49** #9502 41A50
- (with Lancaster, Peter; Watkins, David S.) Bases of splines associated with constant coefficient differential operators. *SIAM J. Numer. Anal.* **12** (1975), no. 4, 630-645. (J. W. Jerome) **52** #8728 41A15
- See also **Theory of approximation, with applications**, **52** #14742
- Schmidt, Eckart (with Bachmann, Friedrich) ★ n -gons. Translated from the German by Cyril W. L. Garner. Mathematical Expositions, No. 18. University of Toronto Press, Toronto, Ont.-Buffalo, N. Y., 1975. xv + 191 pp. (Editors) **50** #10996 50D05
- Schmidt, Erhard See Grundlagen der modernen Mathematik, **50** #6716; Naas, Josef, **54** #7179; Collection: Schmidt, Erhard, **56** #5 and Dinghas, Alexander, **57** #15919
- Schmidt, Erik Meineche (with Engelfriet, Joost) IO and OI. I. *J. Comput. System Sci.* **15** (1977), no. 3, 328-353. (J. D. Rutledge) **58** #19381a 68A30 (68A05)
- (with Szymanski, Thomas G.) Succinctness of descriptions of unambiguous context-free languages. *SIAM J. Comput.* **6** (1977), no. 3, 547-553. (R. E. Stearns) **56** #13811 68A30
- (with Engelfriet, Joost) IO and OI. II. *J. Comput. System Sci.* **16** (1978), no. 1, 67-99. (J. D. Rutledge) **58** #19381b 68A30
- Schmidt, Frank On the role of truncation processes for numerical modeling. *J. Atmospheric Sci.* **32** (1975), no. 9, 1755-1778. (Jiří Nedoma) **52** #7476 86.65
- Schmidt, Franz (with Ebersberger, Helmut; Gillert, Heinz; Grammlich, Lothar; Kühne, Rolf; Maibaum, Gert; Neumann, Peter; Nollau, Volker; Storm, Regina; Winkler, Wolfgang) ★Wahrscheinlichkeitsrechnung und mathematische Statistik: Lexikon. Herausgegeben von P. H. Müller. Akademie-Verlag, Berlin, 1970. x + 278 pp. (Editors) **50** #11539 62-XX (60-XX)
- Über die Darstellung einer Klasse von stationären stochastischen Prozessen durch

- gleitende Mittel. *Math. Nachr.* **51** (1971), 279-310. (H. Heyer) **47** #7799 60G10
Logik und Metaphysik bei Leibniz. *Studia Leibnitiana* **3** (1971), no. 2, 85-99.
(Editors) **58** #26925 01A45
- Über die Darstellung einer Klasse von stationären stochastischen Prozessen mit Hilfe von verallgemeinerten zufälligen Massen. *Math. Nachr.* **56** (1973), 21-41. (J. R. Blum) **48** #9827 60G10
- Verallgemeinerte stationäre stochastische Prozesse auf Gruppen der Form $Z \times \bar{G}$. *Math. Nachr.* **57** (1973), 337-357. (J. R. Blum) **49** #9922 60Bxx (60G10)
- Über die Fortsetzbarkeit eines homogenen und isotropen zufälligen Feldes. *Math. Nachr.* **65** (1975), 281-300. (M. I. Jadrénko) **52** #12058 60G10
- Verallgemeinerte stationäre stochastische Prozesse auf Gruppen der Form $R \times G^-$. *Math. Nachr.* **68** (1975), 29-48. (M. I. Jadrénko) **53** #6706 60G10
(with Weron, Aleksander) Orthogonal decomposition of Banach space valued stationary processes over groups. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 10, 1007-1010. (S. A. Čobanjan) **57** #7748 60G10
- Schmidt, Garfield C.** Extension of lattice homomorphisms. *J. London Math. Soc.* (2) **8** (1974), 707-710. (D. G. Johnson) **50** #2867 46A40
Extension theorems for linear lattices with positive algebraic basis. *Period. Math. Hungar.* **6** (1975), no. 4, 295-307. (R. Cristescu) **53** #10690 06A65
Cones with faces, M -discrete ordered linear spaces and representations of discrete linear lattices. *J. London Math. Soc.* (2) **16** (1977), no. 2, 333-347. (H. Gordon) **58** #23486 46A40
- Schmidt, George** Resonant excitation of electrostatic modes with electromagnetic waves. *Phys. Fluids* **16** (1973), 1676-1679. (T. Kahan) **49** #11961 78.35
- Schmidt, George T.** Closed-loop control of stochastic non-linear systems. (French, German and Russian summaries) *Automatica—J. IFAC* **7** (1971), 557-566. (Ruth Curtin) **53** #2493 93E20
A new technique for closed-loop control of discrete stochastic nonlinear systems. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-2** (1972), 279-281. (V. N. Igolkin) **46** #10481 93E20
On the dynamic stability of systems with a finite number of degrees of freedom. *Équations différentielles et fonctionnelles non linéaires (Actes Conf. Internat. "Equa-Diff 73", Brussels/Louvain-la-Neuve, 1973), pp. 489-505. Hermann, Paris, 1973. (T. G. Hallam) **53** #13759 34D99*
- Linear and nonlinear filtering techniques. *Control and dynamic systems, Advances in Theory and applications, Vol. 12, pp. 63-98. Academic Press, New York, 1976. (Tohru Katayama) **53** #2431 93-02 (93E10)*
- Probability densities of parametrically excited random vibrations. With discussion. *Stochastic problems in dynamics (Sympos., Univ. Southampton, Southampton, 1976), pp. 197-213. Pitman, London, 1977. (Kazimierz Sobczyk) **58** #8889 81.34*
- See also *Control in space*, **48** #8041
- Schmidt, Gerd** Die Übergangsfunktion des einfachen, von zwei Erneuerungsprozessen gesteuerten Bedienungskanal mit endlichem Warteraum. (English summary) *Z. Operations Res. Ser. A-B* **16** (1972), A43-A56. (From the author's summary) **54** #6329 60K25
- Schmidt, Günter** (with Heinrich, W.) Zum Einfluss höherer Näherungen bei parametererregten Schwingungen. *Monatsb. Deutsch. Akad. Wiss. Berlin* **13** (1971), 557-561. (Jochen Werner) **46** #7633 34C15
★Parametererregte Schwingungen. With contributions by R. Schultz. Mathematik für Naturwissenschaft und Technik, 15. VEB Deutscher Verlag der Wissenschaften, Berlin, 1975. 313 pp. (Zbl 305 #70022) **58** #32178 70.34 (34C15)
See also *Beiträge: Schwingungstheorie*, **49** #10493; *Konferenz: Nichtlineare Schwingungen*, **56** #715; *Konferenz: Nichtlineare Schwingungen*, **56** #716; *Konferenz: Nichtlineare Schwingungen*, **57** #14674 and *Konferenz: Nichtlineare Schwingungen*, **58** #32160
- Schmidt, Gunther** (with Langmaack, Hans) Klassen unwesentlich verschiedener Ableitungen als Verbände. *Automatentheorie und formale Sprachen (Tagung, Math. Forschungsinst., Oberwolfach, 1969), pp. 169-182. Bibliographisches Inst., Mannheim, 1970. (M. Novotný) **51** #4716 68A15 (06A20)*
- (with Ströhlein, Thomas) Some aspects in the construction of timetables. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974), pp. 516-520. North-Holland, Amsterdam, 1974. (A. K. Dewdney) **55** #12042 90B40 (94A20)*
- Eine Überlagerungstheorie für Wurzelgraphen. *Graphen, Algorithmen, Datenstrukturen (Zweite Fachtagung über Graphentheoretische Konzepte der Informatik, Göttingen, 1976), pp. 65-76. Appl. Comput. Sci., Vol. 4, Hanser, Munich, 1976. (R. C. Read) **58** #10624 05C99 (68A05)*
- (with Ströhlein, Thomas) A Boolean matrix iteration in timetable construction. *Linear Algebra and Appl.* **15** (1976), no. 1, 27-51. (Richard N. Burns) **56** #10922 90B99
- See also *Untersuchungen zur asymptotischen Theorie nichtlinearer Differentialgleichungen*, **57** #16757
- Schmidt, H. G.** (with Schiffer, Menahem M.) A new set of coefficient inequalities for univalent functions. *Arch. Rational Mech. Anal.* **42** (1971), 346-368. (R. McLaughlin) **48** #11479 30A34
- Schmidt, H. J., Jr.** (with Richen, Forrest A.) A character-theoretic complementation theorem for Carter subgroups. *J. London Math. Soc.* (2) **7** (1973), 168-170. (H. Bechtell) **48** #4117 20D25
The \mathfrak{F} -depth of an \mathfrak{F} -projector. *Pacific J. Math.* **46** (1973), 537-547. (T. O. Hawkes) **48** #11299 20D30
- Schmidt, Heinz-Jürgen** ★Coordinatization of certain convex sets in axiomatic quantum theory. Presented as the author's thesis to the Fachbereich Physik der Philipps-Universität Marburg. Notes in Mathematical Physics, No. 15. Abteilung Mathematische Physik, Fachbereichs Physik, Universität Marburg, Marburg, 1975. x + 131 pp. (From the author's preface) **57** #8655 81.46
- Schmidt, Hermann** (with Eichhorn, Wolfgang) Über bilineare Additionstheoreme. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B. 1969, part II, 25-30 (1970). (L. Losonczi) **46** #7747 39A15*
- Über die Werte der Riemannschen ζ -Funktion und verwandter Funktionen für ganzzahlige Argumente. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B. 1972, Abt. II, 87-99*
- (1973). (T. Kubota) **50** #7054 10H05 (10H10)
- Bemerkungen zur elementaren Algebra II: Über trinomische Gleichungen quadratischer Diskriminante und rationale Punkte auf gewissen algebraischen Flächen. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B. 1974, 115-132 (1975). (J. W. S. Cassels) **53** #2827 10B15*
- Eine diophantische Aufgabe des Leonardo von Pisa. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B. 1975, 189-195 (1976). (J. W. S. Cassels) **54** #228 10B05*
- Asymptotische Entwicklung von verallgemeinerten Bernoullischen Functionen u von Teilsummen Dirichletscher Reihen mit periodischer Koeffizientenfolge. *Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, III, J. Reine Angew. Math.* **274/275** (1975), 94-103. (Bruce C. Berndt) **52** #303 10H10
- Schmidt, J.** Zur Axiomatisierung von Konvergenzstrukturen. *Math. Nachr.* **78** (1977) 363-367. (A. H. Stone) **58** #7532 54A20
- Schmidt, J. W.** See **Schmidt, Jochen W.**
- Schmidt, J. W., Jr.** (with White, J. A.; Bennett, G. K.) ★Analysis of queueing systems: Operations Research and Industrial Engineering. *Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1975. x + 532 pp. ISBN 0-12-746950-8 (B. V. Stuck) **56** #16842 60K25 (90B99)*
- Schmidt, J. William** ★Mathematical foundations for management science and systems analysis. Operations Research and Industrial Engineering. *Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1974. xiii + 581 pp. (Editors) **53** #7170 69.00*
- Schmidt, Joachim W.** (with Roggenkamp, Klaus W.) Almost split sequences for integral group rings and orders. *Comm. Algebra* **4** (1976), no. 10, 893-917. (M. E. Keating) **54** #350 16A26
A construction of large lattices by almost split sequences. *Arch. Math. (Basel)* **2** (1977), no. 5, 481-484. (Sylvia Wiegand) **57** #6074 16A18
Irreducible homomorphisms for lattices over orders. *Bull. Austral. Math. Soc.* **1** (1977), no. 1, 109-124. (I. Reiner) **58** #5748 16A18 (16A62, 16A64)
- Schmidt, Jochen W.** Eingrenzung von Lösungen nichtlinearer Gleichungen durch Verfahren mit höherer Konvergenzgeschwindigkeit. (English summary) *Computing (Arch. Elektron. Rechnen)* **8** (1971), 208-215. (J. F. Traub) **47** #2817 65J05
Eindeutige Lösbarkeit von linearen Optimierungsproblemen. *Z. Angew. Math. Mech.* **51** (1971), 153-155. (P. J. Laurent) **45** #9682 90C05
Einschließung von Nullstellen bei Operatoren mit monoton zerlegbarer Steigung durch überlinear konvergente Iterationsverfahren. *Ann. Acad. Sci. Fenn. Ser. A I No.* **502** (1972), 15 pp. (Gerhard Merz) **48** #5374 65J05
Überlinear konvergente Mehrschrittverfahren vom Regula falsi- und Newton-Typ (English and Russian summaries) *Z. Angew. Math. Mech.* **53** (1973), no. 2, 103-114. (A. S. Householder) **52** #16014 65J05
Ein ableitungsfreies Mehrschrittverfahren für Extremwertaufgaben. *Math. Nachr.* **59** (1974), 95-104. (Peter Kall) **52** #12329 65K05
Regula-falsi-Verfahren mit konsistenter Steigung und Majorantenprinzip. *Period. Math. Hungar.* **5** (1974), 187-193. (W. Niethammer) **50** #8957 65H05
Bemerkungen zu einem Verfahren von H. J. Stetter. *Beiträge Numer. Math.* **4** (1975), 205-213. (H. J. Stetter) **56** #10021 65L05
Herleitung der Konvergenzordnung bei Differenzverfahren mit Hilfe Greenscher Funktionen. (Bulgarian and Russian summaries) *Conference on Differential Equations and Applications (Ruse, 1975). Godišnik Viss. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 3, 181-190 (1977). (Erich Bohl) **58** #19166 65L10 (65R05)
Über lineare Ungleichungen vom Gronwall'schen Typ. *Beiträge Numer. Math.* **4** (1976), 171-189. (Š. Schwabik) **56** #13603 65J05 (47B55)
Monotone Einschließung von Inversen positiver Elemente durch Verfahren von Schulz-Typ. (English summary) *Computing* **16** (1976), no. 3, 211-219. (J. Vandergraft) **54** #1596 65J05 (65F10)
(with Nauber, W.) Über Verfahren zur zweiseitigen Approximation inverser Elemente. (English summary) *Computing* **17** (1976), no. 1, 59-67. (G. Alefeld) **54** #6496 65J05
Monotone Einschließung von Inversen positiv zerlegbarer Elemente durch ein quadratisch konvergentes Verfahren. *Theory of nonlinear operators (Proc. Fourth Internat. Summer School, Acad. Sci., Berlin, 1975), pp. 373-379. Abh. Akad. Wiss. DDR Abt. Math.-Natur.-Tech., Jahrgang 1977, 1, Akademie-Verlag, Berlin, 1977. (G. Alefeld) **57** #7994 65J05*
- Eine Anwendung des Brouwerschen Fixpunktsatzes zur Gewinnung von Fehlerschranken für Näherungen von Polynomnullstellen. *Beiträge Numer. Math.* **4** (1977), 157-163. (W. Börsch-Supan) **56** #9963 65H05
Ein kubisch konvergentes Einschließungsverfahren zur Inversion positiver Elemente. (English summary) *Computing* **19** (1977), no. 2, 175-178. (E. G. D'jakonov) **56** #17034 65F10
(with Mettke, Holger) Konvergenz von quadratischen Interpolations- und Flächenabgleichsplines. (English summary) *Computing* **19** (1977/78), no. 4, 351-363. (Dietrich Braess) **57** #6964 41A15
(with Hoyer, Wolfgang) Ein Konvergenzsatz für Verfahren vom Brown-Brent-Typ (English and Russian summaries) *Z. Angew. Math. Mech.* **57** (1977), no. 7, T397-T403. (W. Niethammer) **57** #14418 65H10
Untere Fehlerschranken für Regula-Falsi-Verfahren. *Period. Math. Hungar.* **9** (1978), no. 3, 241-247. (W. Niethammer) **58** #13676 65H05 (47H15)
Zur Konvergenz von kubischen Interpolationssplines. *Z. Angew. Math. Mech.* **5** (1978), no. 2, 109-110. (John M. Karon) **58** #1870 41A15
- Schmidt, Jürgen** Boolean duality extended. *Theory of sets and topology (in honour of Felix Hausdorff, 1868-1942), pp. 435-453. VEB Deutsch. Verlag Wissensch., Berlin, 1972. (P. Dilworth) **49** #8911 06A35*
- Universal and internal properties of some extensions of partially ordered sets. *J. Reine Angew. Math.* **253** (1972), 28-42. (R. P. Dilworth) **46** #105 06A10
Universal and internal properties of some completions of k -join-semilattices and k -join-distributive partially ordered sets. *J. Reine Angew. Math.* **255** (1972), 8-22. (V. S. Krishnan) **45** #6708 06A10
(with Mena, Roberto A.) New proofs and an extension of a theorem of G. Birkhoff. *J. Algebra* **24** (1973), 213-218. (E. T. Schmidt) **47** #4877 06A20
Each join-completion of a partially ordered set is the solution of a universal

- blem. Collection of articles dedicated to the memory of Hanna Neumann, VIII. *J. Austral. Math. Soc.* **17** (1974), 406-413. (J. Karásek) **50** #4415 06A10
- Quasi-decompositions, exact sequences, and triple sums of semigroups. I. General theory. *Proceedings of the Lattice Theory Conference (Ulm, 1975)*, pp. 180-206. *Univ. m. Ulm*, 1975. (V. S. Krishnan) **55** #8220 20M10 (06A50)
- Quasi-decompositions, exact sequences, and triple sums of semigroups. II. Applications. *Proceedings of the Lattice Theory Conference (Ulm, 1975)*, pp. 207-232. *Univ. Ulm*, 1975. (V. S. Krishnan) **55** #8221 20M10 (06A50)
- (with Tsinakis, Constantine) Relative pseudo-complements, join-extensions, and meet-retractions. *Proceedings of the Lattice Theory Conference (Ulm, 1975)*, pp. 233-251. *Univ. Ulm*, 1975. (Daniel Ponasse) **55** #7866 06A20
- Invertible prime ideals and partial fractions. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, III. *J. Reine Angew. Math.* **274/275** (1975), 13-277. (N. L. Alling) **51** #10314 13A15
- (with Fajtlowicz, Siemion) Bézout families, join-congruences, and meet-irreducible ideals. *Lattice theory (Proc. Colloq., Szeged, 1974)*, pp. 51-76. *Colloq. Math. Soc. János Bolyai*, Vol. 14, North-Holland, Amsterdam, 1976. (Albert Stralka) **56** #2883 06A15
- Quasi-decompositions, exact sequences, and triple sums of semigroups. I. General theory. *Contributions to universal algebra (Colloq., József Attila Univ., Szeged, 1975)*, pp. 355-397. *Colloq. Math. Soc. János Bolyai*, Vol. 17, North-Holland, Amsterdam, 1977. (Ralph Freese) **57** #12353a 08A25
- Quasi-decompositions, exact sequences, and triple sums of semigroups. II. Applications. *Contributions to universal algebra (Colloq., József Attila Univ., Szeged, 1975)*, pp. 399-428. *Colloq. Math. Soc. János Bolyai*, Vol. 17, North-Holland, Amsterdam, 1977. (Ralph Freese) **57** #12353b 08A25 (20M10)
- (with Tsinakis, Constantine) Relative pseudo-complements, join-extensions, and meet-retractions. *Math. Z.* **157** (1977), no. 3, 271-284. (Editors) **57** #12314 06A25
- Binomial pairs, semi-Brouwerian and Brouwerian semilattices. *Notre Dame J. Formal Logic* **19** (1978), no. 3, 421-434. (Leo Esakia) **58** #10639 06A20 (02J05)
- See also *Contributions to universal algebra*, **56** #11863
- Schmidt, K. W. (with Wang, Edward Tzu-Hsia) The weights of Hadamard matrices. *J. Combinatorial Theory Ser. A* **23** (1977), no. 3, 257-263. (N. Ito) **56** #11826 05B20
- Schmidt, Klaus On a characterisation of certain infinitely divisible positive definite functions and measures. *J. London Math. Soc. (2)* **4** (1971/72), 401-407. (W. A. Woyczyński) **45** #4065 43A35 (60F99)
- (with Parthasarathy, Kalyanapuram Rangachari) ★Positive definite kernels, continuous tensor products, and central limit theorems of probability theory. *Lecture Notes in Mathematics*, Vol. 272. Springer-Verlag, Berlin-New York, 1972. vi + 107 pp. (T. P. Speed (Zbl 237 #43005)) **58** #29849 43A35 (46M99, 60B15, 81A3)
- (with Parthasarathy, Kalyanapuram Rangachari) Factorisable representations of current groups and the Araki-Woods imbedding theorem. *Acta Math.* **128** (1972), no. 1-2, 53-71. (H. Araki) **52** #10950 22D10
- A class of infinitely divisible positive definite functions on topological groups. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **25** (1972/73), 97-102. (K. R. Parthasarathy) **49** #1550 60B15
- (with Parthasarathy, Kalyanapuram Rangachari) Stable positive definite functions. *Trans. Amer. Math. Soc.* **203** (1975), 161-174. (H. Heyer) **51** #6907 60B15 (43A35)
- Stable probability measures on R^n . *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **33** (1975/76), no. 1, 19-31. (K. R. Parthasarathy) **54** #3804 60E05
- (with Parthasarathy, Kalyanapuram Rangachari) A new method for constructing factorisable representations for current groups and current algebras. *Comm. Math. Phys.* **50** (1976), no. 2, 167-175. (C. Martin Edwards) **54** #7706 22E45
- (with Parry, William) A note on cocycles of unitary representations. *Proc. Amer. Math. Soc.* **55** (1976), no. 1, 185-190. (Alain Guichardet) **52** #14146 22D10
- ★Cocycles on ergodic transformation groups. *Macmillan Lectures in Mathematics*, Vol. 1. Macmillan Company of India, Ltd., Delhi, 1977. 202 pp. **58** #28262 22D40
- Infinite invariant measures on the circle. *Symposia Mathematica*, Vol. XXI (Convegno sulle Misure su Gruppi e su Spazi Vettoriali, Convegno sui Gruppi e Anelli Ordinati, INDAM, Rome, 1975), pp. 37-43. Academic Press, London, 1977. (Douglas Lind) **57** #16541 28A65
- (with Parthasarathy, Kalyanapuram Rangachari) On the cohomology of a hyperfine action. *Monatsh. Math.* **84** (1977), no. 1, 37-48. (Alain Guichardet) **56** #15884 28A65
- See also *Mathematics of contemporary physics*, **53** #7
- Schmidt, Olaf A system of axioms for the Archimedean theory of equilibrium and centre of gravity. *Centaurus* **19** (1975), 1-35. (L. W. Szczerba) **58** #15809 01A20
- Schmidt, P. G. Beiträge zur Theorie stark multiplikativer Funktionen. *Zahlentheorie (Tagung, Math. Forschungsinst., Oberwolfach, 1970)*, pp. 125-135. *Ber. Math. Forschungsinst., Oberwolfach*, No. 5, Bibliographisches Inst., Mannheim, 1971. (O. P. Stackelberg) **52** #323 10K20
- Schmidt, Paul W. Evaluation of the integral $\int_0^\infty t^{2\alpha-1} J_\nu(x\sqrt{1+t^2})/(1+t^2)^{\alpha+\beta-1} dt$. *Math. Comp.* **32** (1978), no. 141, 265-269. (Y. L. Luke) **56** #16016 33A35
- An asymptotic approximation for a type of Fourier integral. *Math. Comp.* **32** (1978), no. 144, 1171-1182. (B. Dreseler) **58** #23297 41A60 (42A76)
- Schmidt, Peter The asymptotic distribution of dynamic multipliers. *Econometrica* **41** (1973), no. 1, 161-164. (Author's introduction) **55** #13720 62P20 (90A15)
- Calculating the power of the minimum standard error choice criterion. *Internat. Econom. Rev.* **14** (1973), no. 1, 253-255. (Mir Ali) **52** #9459 62F05
- The asymptotic distribution of forecasts in the dynamic simulation of an econometric model. *Econometrica* **42** (1974), 303-309. (Author's summary) **55** #14154 90A20
- The algebraic equivalence of the Oberhofer-Kmenta and Theil-Boot formulae for the asymptotic variance of a characteristic root of a dynamic econometric model. *Econometrica* **42** (1974), 591-592. (Author's introduction) **55** #13721 62P20
- (with Sickles, Robin) On the efficiency of the Almon lag technique. *Internat. Econom. Rev.* **16** (1975), no. 3, 792-795. (C. W. J. Granger) **53** #14844 62P20
- (with Guilkey, David K.) Some further evidence on the power of the Durbin-Watson and Geary tests. *Rec. Econom. Statist.* **57** (1975), no. 3, 379-382. (A. K. Gayen) **53** #9529 62J05 (62P20)
- (with Ramsey, James B.) Some further results on the use of OLS and BLUS residuals in specification error tests. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 389-390. (Authors' summary) **54** #1528 62P20
- (with Sickles, Robin) Some further evidence on the use of the Chow test under heteroskedasticity. *Econometrica* **45** (1977), no. 5, 1293-1298. (T. D. Dwivedi) **58** #3225 62J05 (62P20)
- (with Mann, W. Robert) A note on the approximation of arbitrary distributed lag structures by a modified Almon lag. *J. Amer. Statist. Assoc.* **72** (1977), no. 358, 442-443. (Authors' summary) **56** #4108 62P20
- (with Aigner, Dennis J.; Lovell, C. A. Knox) Formulation and estimation of stochastic frontier production function models. *J. Econometrics* **6** (1977), no. 1, 21-37. (Jacob Paroush) **56** #7087 62P20
- Schmidt, Phillip H. The extended variational method applied to the bifurcation of solutions to nonlinear problems. *Indiana Univ. Math. J.* **26** (1977), no. 4, 691-706. (John Alan MacBain) **56** #13010 47H15 (58E05)
- Schmidt, R. O. See *Applications of Walsh functions*, **48** #8080
- Schmidt, Robert (with DaDeppo, Donald A.) A survey of literature on large deflections of nonshallow arches. Bibliography of finite deflections of straight and curved beams, rings, and shallow arches. *Indust. Math.* **21** (1971), 91-114. **46** #10268 73J00
- Optimale Wertpapiermischungen mit Hilfe des Chance-Constrained Programming. *Proceedings in Operations Research*, 4 (Annual Meeting, Deutsch. Gesellsch. Operations Research, Würzburg, 1974), pp. 51-71. Physica-Verlag, Würzburg, 1974. (Peter Kall) **56** #2260 90A15 (90C25)
- The boundary value problem for helium II. (German summary) *Ann. Physik* (7) **34** (1977), no. 1, 52-66. (W. F. Ames) **55** #11815 80J35
- Schmidt, Roland Zentralisatorverbände endlicher Gruppen. *Rend. Sem. Mat. Univ. Padova* **44** (1970), 97-131. (Charles S. Holmes) **47** #1943 20D30
- Verbandsisomorphismen endlicher auflösbarer Gruppen. *Arch. Math. (Basel)* **23** (1972), 449-458. (N. Ito) **48** #413 20D10
- A characterization of $PSL(2, p^n)$ by its centralizer lattice. *J. Algebra* **21** (1972), 280-291. (A. R. Camina) **46** #247 20D05
- Lattice isomorphisms and saturated formations of finite soluble groups. *Proceedings of the Second International Conference on the Theory of Groups (Australian Nat. Univ., Canberra, 1973)*, pp. 605-610. *Lecture Notes in Math.*, Vol. 372, Springer, Berlin, 1974. (H. Bechtell) **53** #8248 20D30
- Untergruppenverbände zweifach transitiver Permutationsgruppen. *Math. Z.* **144** (1975), no. 2, 161-168. (W. M. Kantor) **51** #13008 20B20
- Normal subgroups and lattice isomorphisms of finite groups. *Proc. London Math. Soc. (3)* **30** (1975), 287-300. (F. Napolitani) **52** #10879 20D30
- Untergruppenverbände endlicher einfacher Gruppen. *Geometriae Dedicata* **6** (1977), no. 3, 275-290. (N. Ito) **57** #12680 20D05
- Verbandsautomorphismen der alternierenden Gruppen. *Math. Z.* **154** (1977), no. 1, 71-78. (Wolfgang Knapp) **56** #5731 20F30
- Untergruppenverbände direkter Produkte von Gruppen. *Arch. Math. (Basel)* **30** (1978), no. 3, 229-235. (Charles S. Holmes) **58** #11149 20F30
- Schmidt, Rolf (with Herrmann, Manfred) Zur Transitivität der normalen Flachheit. *Invent. Math.* **28** (1975), 129-136. (Joel Roberts) **52** #405 14E15 (13H10)
- (with Herrmann, Manfred; Vogel, Wolfgang) ★Theorie der normalen Flachheit. Mit englischer und russischer Zusammenfassung. Mit einem Geleitwort von Wolfgang Gröbner. Teubner-Texte zur Mathematik. *BSB B.G. Teubner Verlagsgesellschaft, Leipzig*, 1977. xii + 218 pp. (J. S. Joel) **58** #27959 14B05 (13H10, 14E15)
- (with Herrmann, Manfred) Regular sequences and lifting property. *Pacific J. Math.* **75** (1978), no. 2, 449-453. (Johnny A. Johnson) **58** #10864 13C99
- Schmidt, Sieglinde (with Biess, Günther) Eine Methode zur numerischen Lösung von Optimierungsaufgaben nach dem verallgemeinerten diskreten Maximumprinzip bei separablen Modellgleichungen. *Wiss. Z. Techn. Hochsch. Chem. Leuna-Merseburg* **16** (1974), 59-63. (H. Weber) **51** #4668 65K05
- Schmidt, V. (with König, Dieter) Zufällige Punktprozesse in der Geophysik. (English summary) *Numerische Methoden in der Geophysik (Zweites Sympos., Tharandt, 1975)*, pp. 143-158. *Geofyzikální Ústav Česk. Akad. Věd, Prague*, 1976. (G. Paria) **56** #7481 76J60
- (with König, Dieter; Stoyan, Dietrich) On some relations between stationary distributions of queue lengths and imbedded queue lengths in $G/G/s$ queueing systems. (German and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 4, 577-586. (Stig I. Rosenlund) **54** #11560 60K25
- (with König, Dieter) Bedienungsmodelle mit stochastischen Abhängigkeiten. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 4, 607-639. (Peter Franken) **55** #6610 60K25
- On the non-equivalence of two criteria of comparability of stationary point processes. (Polish summary) *Zastos. Mat.* **15** (1976), no. 1, 33-37. (Olav Kallenberg) **54** #1373 60G55
- Schmidt, W. (with Raszillier, I.; Stefanescu, I.-S.) On zeroes of the pion electromagnetic form factor. *J. Mathematical Phys.* **17** (1976), no. 11, 1957-1962. (R. G. Newton) **54** #6727 81J30
- See also *Operationsforschung*, **57** #4990a and *Operationsforschung*, **57** #4990b
- Schmidt, Werner ★Revidierte Transportalgorithmen. Beiträge zur Datenverarbeitung und Unternehmensforschung, Band 3. Verlag Anton Hain, Meisenheim am Glan, 1973. iv + 120 pp. (U. Weisner) **49** #6899 90B05
- Schmidt, Willi Zum Problem der Dekomposition von Automaten. *Studien zur Algebra und ihre Anwendungen (mit Anwendungen in der Mathematik, Physik und Rechenstechnik)*, pp. 75-82. *Schriftenreihe Zentralinst. Math. Mech. Akad. Wissensch. DDR*, Heft 16, Akademie Verlag, Berlin, 1972. (From the introduction) **58** #8506 68A25
- Schmidt, Wolfgang H. Asymptotic normality of least-square estimators in multivariate singular linear models. (German and Russian summaries) Vorträge auf der Ersten Sommerschule über Probleme der Modellwahl und Parameterschätzung in der Regressions-Analyse (Zinnowitz, 1974). *Math. Operationsforsch. Statist.* **6** (1975), no. 2, 285-299. (P. K. Sen) **53** #6907 62J05 (62E20)
- Asymptotic optimality of estimators in multivariate linear models. (German and Russian summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 5, 713-731. (C. R. Rao) **53** #4350 62F10 (62J05)
- (with Bunke, Helga; Hennig, C.) Weighted combination of prior and sample

- information and parameter estimation. (German and Russian summaries) *Math. Operationsforsch. Statist.* 7 (1976), no. 5, 665-672. (L. B. Klebanov) 55 #1555 62C10
- Strong consistency of variance estimation and asymptotic theory for tests of the linear hypothesis in multivariate linear models. (German and Russian summaries) *Math. Operationsforsch. Statist.* 7 (1976), no. 5, 701-705. (D. G. Kabe) 54 #14242 62H15
- Asymptotics in multivariate linear models with optimal experimental designs. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Statist.* 8 (1977), no. 4, 447-452. (B. L. Granovskii) 58 #24773 62K05
- Schmidt, Wolfgang M.** Some recent progress in Diophantine approximations. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1*, pp. 497-503. Gauthier-Villars, Paris, 1971. (R. Wallisser) 54 #12677 10F35
- Mahler's T-numbers. 1969 Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969), pp. 275-286. Amer. Math. Soc., Providence, R.I., 1971. (B. Volkmann) 49 #8944 (EA 50) 10F35
- Diophantine equations involving norm forms. *Seminar on Modern Methods in Number Theory (Inst. Statist. Math., Tokyo, 1971), Paper No. 5*, 12 pp. Inst. Statist. Math., Tokyo, 1971. (Editors) 51 #10223 10B15
- Approximation to algebraic numbers. *Enseignement Math.* (2) 17 (1971), 187-253. (Alan Baker) 48 #6014 10F25
- On a problem of Heilbronn. *J. London Math. Soc.* (2) 4 (1971/72), 545-550. (B. d'Orgeval) 45 #7612 52A40
- Linear forms with algebraic coefficients. I. *J. Number Theory* 3 (1971), 253-277. (R. Tijdeman) 46 #7176 10F10
- Linearformen mit algebraischen Koeffizienten. II. *Math. Ann.* 191 (1971), 1-20. (R. Tijdeman) 46 #7177 10F99
- ★Approximation to algebraic numbers. *Série des Conférences de l'Union Mathématique Internationale, No. 2. Monographie No. 19 de l'Enseignement Mathématique. Secrétariat de l'Enseignement Mathématique, Université de Genève, Geneva, 1972. 70 pp.* (Editors) 49 #8943 10F25
- Simultaneous approximation to algebraic numbers by algebraic numbers in a given number field. *Proceedings of the 1972 Number Theory Conference (Univ. Colorado, Boulder, Colo.), pp. 189-193. Univ. Colorado, Boulder, Colo., 1972. (Editors) 52 #8044 10F10*
- Irregularities of distribution. VII. *Acta Arith.* 21 (1972), 45-50. (I. Niven) 47 #8474 10K30 (10K25)
- Norm form equations. *Ann. of Math.* (2) 96 (1972), 526-551. (H. J. Kanold) 47 #3313 10B20
- Volume, surface area and the number of integer points covered by a convex set. *Arch. Math. (Basel)* 23 (1972), 537-543. (J. B. Wilker) 47 #5730 52A45 (10F30)
- Irregularities of distribution. VI. *Compositio Math.* 24 (1972), 63-74. (I. Niven) 47 #152 10F40
- (with Meisters, Gary H.) Translation-invariant linear forms on $L^2(G)$ for compact Abelian groups G . *J. Functional Analysis* 11 (1972), 407-424. (C. Chou) 49 #11142 43A15
- Inequalities for resultants and for decomposable forms. *Diophantine approximation and its applications (Proc. Conf., Washington, D.C., 1972), pp. 235-253. Academic Press, New York, 1973. (W. W. Adams) 50 #7044 10F25 (10F10)*
- Zur Methode von Stepanov. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday, IV. *Acta Arith.* 24 (1973), 347-367. (errata insert) (Clifford Queen) 48 #11118 14G13 (12A90)
- A lower bound for the number of solutions of equations over finite fields. Collection of articles dedicated to K. Mahler on the occasion of his seventieth birthday. *J. Number Theory* 6 (1974), 448-480. (H. M. Stark) 50 #13045 10B15 (14G13)
- Irregularities of distribution. VIII. *Trans. Amer. Math. Soc.* 198 (1974), 1-22. (I. Niven) 50 #12952 10K30 (10K05)
- Applications of Thue's method in various branches of number theory. *Proceedings of the International Congress of Mathematicians (Vancouver, B.C., 1974), Vol. 1, pp. 177-185. Canad. Math. Congress, Montreal, Que., 1975. (R. Tijdeman (Zbl 334 #10003)) 58 #21928 10B15 (10F35)*
- Irregularities of distribution. IX. Collection of articles in memory of Jurii Vladimirovič Linnik. *Acta Arith.* 27 (1975), 385-396. (L. Kuipers) 51 #12768 10K30
- Simultaneous approximation to algebraic numbers by elements of a number field. *Monatsh. Math.* 79 (1975), 55-66. (W. W. Adams) 51 #367 10F10 (10F25)
- The measure of the intersection of rotates of a set on the circle. *Proc. Amer. Math. Soc.* 48 (1975), 18-20. (P. Gerl) 50 #9811 10F40
- Rational approximation to solutions of linear differential equations with algebraic coefficients. *Proc. Amer. Math. Soc.* 53 (1975), no. 2, 285-289. (Grigorii V. Čudnovskii) 52 #8053 10F45 (10F25)
- ★Equations over finite fields. An elementary approach. *Lecture Notes in Mathematics, Vol. 536. Springer-Verlag, Berlin-New York, 1976. ix+276 pp.* (H. M. Stark) 55 #2744 10B15 (14G13, 10G05)
- On Osgood's effective Thue theorem for algebraic functions. *Comm. Pure Appl. Math.* 29 (1976), no. 6, 749-763. (D. W. Masser) 54 #7393 10F35
- Two questions in Diophantine approximation. *Monatsh. Math.* 82 (1976), no. 3, 237-245. (A. C. Woods) 55 #2772 10F10
- ★Small fractional parts of polynomials. *Regional Conference Series in Mathematics, No. 32. American Mathematical Society, Providence, R.I., 1977. v+41 pp. ISBN 0-8218-1682-9 (Ming-Chit Liu) 56 #15568 10F10 (10F40)*
- Irregularities of distribution. X. *Number theory and algebra, pp. 311-329. Academic Press, New York, 1977. (Harald Niederreiter) 58 #10803 10K30 (10K05)*
- Diophantine approximation in power series fields. *Acta Arith.* 32 (1977), no. 3, 275-296. (W. W. Adams) 55 #5549 10F45
- On the distribution modulo 1 of the sequence $an^2 + bn$. *Canad. J. Math.* 29 (1977), no. 4, 819-826. (S. V. Kotov) 56 #253 10B45 (10F40)
- See also **Mathematics: Periodical collection of translations of foreign articles.** 49 #4720; **Mathematics: Periodical collection of translations of foreign articles.** 49 #4722; **Reversat, Marc.** 53 #327 and **Gramain, François.** 53 #14010
- Schmidtke, K.** Classification of computing machines with finite computations with respect to the p -inclusion. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 747-751. (W. D. Maurer) 51 #9563 68A05
- Classification of computing machines with infinite computations with respect to the p -inclusion. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 71-77. (Author's summary) 55 #10168 94A30 (68A25)
- Schmidtmayer, Josef** ★Maticový počet a jeho použití v technice. (Czech) [Matrix calculus and its application in engineering] Third edition, revised and augmented. Teoretická Knížnice Inženýra. [Theoretical Library for the Engineer] Sítiní Nakladatelství Technické Literatury, Prague, 1974, 360 pp. (loose tables) (Editors) 52 #13874 15-0
- Schmidt-Weinmar, H. G.** (with Lam, D. K.; Wouk, Arthur) The 3-D distribution of sources of optical scattering computed from complex-amplitude far-field data. (French summary) *Canad. J. Phys.* 54 (1976), no. 19, 1925-1936. (J. S. Colonias) 55 #7138 78.65
- Schmied, J.** (with Handlová, E.; Nedoma, Jiří) A study of the propagation of the SH-wave field in a stratified medium with a local inhomogeneity by numerical analysis methods. (Russian) *Numerische Methoden in der Geophysik (Zweites Sympos., Tharandt, 1975), pp. 177-195. Geofyzikální Ústav Česk. Akad. Věd, Prague, 1976. (George V. Demidov) 56 #2190 86.65*
- Schmieder, L.** Mehrdimensionale Hermite'sche Interpolationspolynome. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* 55 (1975), no. 4, T223-T228. (Editors) 58 #17656 41A05
- Integration der Bewegungsgleichungen des starren Körpers mit Hilfe der Lie-Reihen-Methode von Gröbner. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* 56 (1976), no. 3, T322-T324. (Rudolf Gorenflo) 53 #12019 65L05 (70.34)
- Die Anwendung der Hermite'schen Interpolationspolynome auf die Methode der finiten Elemente. *Z. Angew. Math. Mech.* 57 (1977), no. 5, T149-T151. (B. A. Bondarenko) 56 #7449 73.65
- Schmied, H.** (with Vielsack, P.) Spatial bifurcation problems, solved by Mathieu equations. *Mech. Res. Comm.* 4 (1977), no. 1, 1-4. (Authors' introduction) 58 #32246 73.35
- Kombinationsresonanz bei Systemen mit allgemeiner harmonischer Erregermatrix. *Z. Angew. Math. Mech.* 58 (1978), no. 6, 170-172. (From the introduction) 58 #20681 93B99 (93D99)
- Schmincke, Upke-Walther** Essential selfadjointness of a Schrödinger operator with strongly singular potential. *Math. Z.* 124 (1972), 47-50. (Teruo Ikebe) 45 #7306 35J10 (47F05)
- Essential selfadjointness of Dirac operators with a strongly singular potential. *Math. Z.* 126 (1972), 71-81. (Teruo Ikebe) 46 #4028 35Q99 (81.47)
- Distinguished selfadjoint extensions of Dirac operators. *Math. Z.* 129 (1972), 335-349. (Teruo Ikebe) 48 #4792 47A55 (47F05)
- A spectral gap theorem for Dirac operators with central field. *Math. Z.* 131 (1973), 351-356. (Teruo Ikebe) 50 #14303 47A55
- (with Kalf, Hubert; Walter, Johann; Wüst, Rainer) On the spectral theory of Schrödinger and Dirac operators with strongly singular potentials. *Spectral theory and differential equations (Proc. Sympos., Dundee, 1974; dedicated to Konrad Jörgens), pp. 182-226. Lecture Notes in Math., Vol. 448, Springer, Berlin, 1975. (J. Wiesner) 53 #1051 35P05 (81.47)*
- Schmitendorf, William E.** (with Foley, Michael H.) On a class of nonzero-sum, linear-quadratic differential games. *J. Optimization Theory Appl.* 7 (1971), 357-377. (C. P. Tsokos) 46 #8674 90D25
- (with Rekasi, Z. V.) Comments on "On the noninferiority of Nash equilibrium solutions" (IEEE Trans. Automatic Control AC-16 (1971), 170-173). *IEEE Trans. Automatic Control AC-17* (1972), 178. (Editors) 50 #3971 90D25
- A sufficient condition for optimal control problems with time delays. (French, German and Russian summaries) *Automatica—J. IFAC* 9 (1973), 633-637. (Author's summary) 56 #14944 93C15
- (with Walker, J. A.) On the equivalence of some necessary conditions for vector-valued criteria problems. *IEEE Trans. Automatic Control AC-18* (1973), 664-665. (Nagata Furukawa) 54 #6959 90C30
- Cooperative games and vector-valued criteria problems. *IEEE Trans. Automatic Control AC-18* (1973), no. 2, 139-144. (Allen Klinger) 55 #7435 (E 55 #7436) 90D12 (90C99, 90A99)
- (with Walker, J. A.) A simple test for asymptotic stability in partially dissipative symmetric systems. *Trans. ASME Ser. E. J. Appl. Mech.* 40 (1973), 1120-1121. (E. O. Roxin) 54 #9786 93D05
- (with Leitmann, G.) Some sufficiency conditions for Pareto-optimal control. *Trans. ASME Ser. G. J. Dynamic Systems, Measurement and Control* 95 (1973), 356-361. (D. F. Lawden) 48 #9497 49B10
- (with Palm, William J.) A conjugate point condition for control problems with delayed state vectors. *IEEE Trans. Automatic Control AC-19* (1974), 72-73. (S.-C. Huang) 51 #8925 49B35
- (with Foley, Michael H.) A class of differential games with two pursuers versus one evader. *IEEE Trans. Automatic Control AC-19* (1974), 239-243. (C. P. Tsokos) 55 #2173 90D25
- (with Leitmann, G.) A simple derivation of necessary conditions for Pareto optimality. *IEEE Trans. Automatic Control AC-19* (1974), 601-602. (G. Zatiašvili) 55 #2258 93C99
- (with Palm, William J.) Conjugate-point conditions for variational problems with delayed argument. *J. Optimization Theory Appl.* 14 (1974), 599-612. (D. K. Hughes) 50 #14429 49B35
- Many player differential games with coalitions. *The theory and application of differential games (Proc. NATO Advanced Study Inst., Univ. Warwick, Coventry, 1974), pp. 133-144. NATO Adv. Study Inst. Ser., Ser. C: Math. and Phys. Sci., 13. Reidel, Dordrecht, 1975. (G. J. Olsder) 58 #33045 90D25*
- Minimax control of systems with uncertainty in the initial state and in the state equations. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976), pp. 100-106. Inst. Electr.*

- Electron. Engrs., New York, 1976. (From the summary) 57 #17460 49B40
- A sufficient condition for minmax control of systems with uncertainty in the state equations. *IEEE Trans. Automatic Control* AC-21 (1976), no. 4, 512-515. (E. G. Brecht) 54 #6975 90D25
- (with Pascoletti, Adriano; Serafini, Paolo) Comments on: "Cooperative games and cost-valued criteria problems" (IEEE Trans. Automat. Control AC-18 (1973), no. 2, 9-144) by W. E. Schmitendorf. With a reply by the author. *IEEE Trans. Automatic Control* AC-21 (1976), no. 5, 806-808. (Allen Klinger) 55 #7436 90D12 (90C99, 9A99)
- Differential games without pure strategy saddle-point solutions. Differential game issue. *J. Optimization Theory Appl.* 18 (1976), no. 1, 81-92. (Pan-Tai Liu) 57 #2615 90D25
- (with Moriarty, G.) A sufficiency condition for coalitive Pareto-optimal solutions. Differential game issue. *J. Optimization Theory Appl.* 18 (1976), no. 1, 93-102. (A. I. Jabotkin) 54 #12239 90D25
- Pontryagin's principle for problems with isoperimetric constraints and for problems with inequality terminal constraints. *J. Optimization Theory Appl.* 18 (1976), no. 4, 51-567. (G. Zatišvili) 53 #14268 (E 58 #18047ab) 49B35
- Necessary conditions and sufficient conditions for static minmax problems. *J. Math. Anal. Appl.* 57 (1977), no. 3, 683-693. (H. S. P. Grässer) 55 #3921 (E 57 #8009) 49B40
- Corrigendum: "Necessary conditions and sufficient conditions for static minmax problems" (J. Math. Anal. Appl. 57 (1977), no. 3, 683-693). *J. Math. Anal. Appl.* 61 (1977), no. 2, 564. (Editors) 57 #8009 65K05 (49-XX)
- A note on the use of direct sufficient conditions in optimal control problems. *J. Optimization Theory Appl.* 23 (1977), no. 3, 465-470. (Author's summary) 58 #15451 3C15
- (with Olmstead, W. E.) Optimal control of the end-temperature in a semi-infinite rod. (German summary) *Z. Angew. Math. Phys.* 28 (1977), no. 4, 697-706. (Authors' summary) 58 #32456 80A9
- Reply to the "Comment on 'Pontryagin's principle for problems with isoperimetric constraints and problems with inequality terminal constraints'" by B. A. Forster and N. V. Long (J. Optim. Theory Appl. 25 (1978), no. 2, 317-322). *J. Optim. Theory Appl.* 25 (1978), no. 2, 323. (Author's summary) 58 #18047b 49B35
- (with Olmstead, W. E.) Optimal blowing. *SIAM J. Appl. Math.* 35 (1978), no. 3, 548-563. (Authors' summary) 58 #19779 76A9
- See also Forster, B. A.; et al., 58 #18047a (E 58 #18047b)
- Schmitt, A. Die Zustands-Komplexitätsklassen von Turingmaschinen. *Automatentheorie und formale Sprachen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 341-350a. *Bibliographisches Inst., Mannheim, 1970.* (H. Jürgensen) 49 #8427 68A20
- See also Jahrestagung: Gesellschaft für Informatik, 48 #1502
- Schmitt, B. V. See Schmitt, Bruno V.
- Schmitt, Bernard Théorème ergodique ponctuel pour les suites uniformes. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* 8 (1972), 387-394. (Michael Keane) 54 #7754 28A65
- Schmitt, Bernhard A-priori-Abschätzungen für den Abbrechindex und Fehlerschranken bei alternierenden Folgen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* 56 (1976), no. 3, T324-T326. (Henning-Esser) 54 #4056 65B99
- Schmitt, Bruno V. Détermination, à l'aide d'index, des solutions périodiques de l'équation de Duffing $x'' + 2x^3 = \lambda \cos t$. *Conference on the Theory of Ordinary and Partial Differential Equations (Univ. Dundee, Dundee, 1972)*, pp. 330-334. *Lecture Notes in Math.*, Vol. 280, Springer, Berlin, 1972. (Frank G. Hagin) 54 #5546 34C25
- Sur l'existence et la localisation de solutions périodiques de systèmes différentiels périodiques. Application à l'équation de Duffing. (English, German and Russian summaries) *Internat. J. Non-Linear Mech.* 7 (1972), 199-205. (F. M. Arscott) 48 #6556 34C25
- Index associé à l'équation de Mathieu. *Publ. Math. Univ. Bordeaux Année I (1972/73)*, No. 1, Exp. No. 9, 9 pp. (Joseph C. Wilson) 52 #11207 34C25
- Sur des déformations de systèmes différentiels à coefficients périodiques. *Équations différentielles et fonctionnelles non linéaires (Actes Conf. Internat. "Equa-Diff 73", Bruxelles/Louvain-la-Neuve, 1973)*, pp. 55-63. *Hermann, Paris, 1973.* (From the author's introduction) 57 #6660 34C35 (58F10)
- Utilisation de l'index de Seifert dans les problèmes de contrôle par des commandes périodiques. Journées de Contrôle (Univ. Bordeaux, Bordeaux, 1973). II. *Publ. Math. Univ. Bordeaux* 1973/74, no. 3, 73-74. (Editors) 54 #13251 34H05 (34C25)
- Sur les plongements, admettant zéro ou un point fixé, du disque dans le plan. *Topology* 14 (1975), no. 4, 357-365. (Oscar Burlet) 53 #1597 57A35
- Structure de l'ensemble des systèmes différentiels linéaires, à coefficients périodiques, de dimension deux. *Arch. Math. (Basel)* 30 (1978), no. 5, 508-515. (C. Carton-Lebrun) 58 #18605 58F99 (34C35)
- Schmitt, Charles B. The faculty of arts at Pisa at the time of Galileo. (Italian summary) *Physis—Riv. Internaz. Storia Sci.* 14 (1972), no. 3, 243-272. (Author's summary) 57 #12041 01A40
- Schmitt, Günter Speichertechnische und numerische Probleme bei der Auflösung grosser geodätischer Normalgleichungssysteme. Zur Erlangung des akademischen Grades eines Doktor-Ingenieurs (Dr.-Ing.) von der Fakultät für Bauingenieur- und Vermessungswesen der Universität (TH) Karlsruhe genehmigte Dissertation, Munich, 1973. *Deutsche Geodät. Kommiss. Bayer. Akad. Wiss. Reihe C No. 195 (1973)*, 89 pp. 56 #14548 86A65
- Schmitt, Heinz Grundratsachen über lokale Kohomologiemoduln. *Der kanonische Modul eines Cohen-Macaulay-Rings (Sem. Lokale Kohomologietheorie von Grothendieck, Univ. Regensburg, Regensburg, 1970/1971)*, pp. 33-44, 103. *Lecture Notes in Math.*, Vol. 238, Springer, Berlin, 1971. (J. S. Joel) 57 #16278 13D99 (18H15)
- Schmitt, I. (with Fabricius, K.) A relation between the current and the field strength tensor in non-abelian gauge theories. *Lett. Nuovo Cimento* (2) 21 (1978), no. 2, 37-40. (J. G. Taylor) 58 #25625 81S3
- Schmitt, Klaus (with de Nevers, K.) An application of the shooting method to boundary value problems for second order delay equations. *J. Math. Anal. Appl.* 36 (1971), 588-597. (R. E. Fennell) 45 #7218 34K05
- A note on periodic solutions of second order ordinary differential equations. *SIAM J. Appl. Math.* 21 (1971), 491-494. (T. G. Proctor) 46 #3913 34C25
- Periodic solutions of nonlinear differential systems. *Conference on the Theory of Ordinary and Partial Differential Equations (Univ. Dundee, Dundee, 1972)*, pp. 335-340. *Lecture Notes in Math.*, Vol. 280, Springer, Berlin, 1972. (Jean Mawhin) 54 #3097 34C25
- (with Bebernes, J. W.) An existence theorem for periodic boundary value problems for systems of second order differential equations. *Arch. Math. (Brno)* 8 (1972), 173-176. (J. A. Marlin) 49 #704 34B15
- Periodic solutions of systems of second-order differential equations. *J. Differential Equations* 11 (1972), 180-192. (J. J. Schäffer) 45 #3858 34C25
- (with Gustafson, G. B.) Nonzero solutions of boundary value problems for second order ordinary and delay-differential equations. *J. Differential Equations* 12 (1972), 129-147. (L. D. Fountain) 49 #10959 34B15
- Periodic solutions of nonlinear differential systems. *J. Math. Anal. Appl.* 40 (1972), 174-182. (R. A. Struble) 47 #2143 34C25 (34K15)
- Periodic solutions of small period of systems of n th order differential equations. *Proc. Amer. Math. Soc.* 36 (1972), 459-463. (J. W. Heidel) 46 #9452 34C25
- Intermediate value theorems for nonlinear periodic functional differential operators. *Équations différentielles et fonctionnelles non linéaires (Actes Conf. Internat. "Equa-Diff 73", Bruxelles/Louvain-la-Neuve, 1973)*, pp. 65-78. *Hermann, Paris, 1973.* (B. Stephan) 53 #6053 34K15
- (with Bebernes, J. W.) Periodic boundary value problems for systems of second order differential equations. *J. Differential Equations* 13 (1973), 32-47. (L. Erbe) 49 #5451 34B15 (34C25)
- (with Gustafson, G. B.) Periodic solutions of hereditary differential systems. *J. Differential Equations* 13 (1973), 567-587. (O. Gürel) 49 #7520 34C25
- (with Brooks, Robert M.) Pointwise completeness of differential-difference equations. *Rocky Mountain J. Math.* 3 (1973), 11-14. (C. H. Anderson) 49 #10996 34K15
- Existence and multiplicity of solutions of some nonlinear equations. *Ordinary and partial differential equations (Proc. Conf., Univ. Dundee, Dundee, 1974)*, pp. 227-238. *Lecture Notes in Math.*, Vol. 415, Springer, Berlin, 1974. (Eugene Allgower) 54 #10724 34B15 (47H15, 58E99)
- (with Bebernes, J. W.; Gaines, Robert E.) Existence of periodic solutions for third and fourth order ordinary differential equations via coincidence degree. *Ann. Soc. Sci. Bruxelles Sér. I* 88 (1974), 25-36. (Jean Mawhin) 49 #5480 34C25
- (with Gustafson, G. B.) A note on periodic solutions for delay-differential systems. *Proc. Amer. Math. Soc.* 42 (1974), 161-166. (V. Staiikos) 48 #4454 34K15
- Boundary value problems and comparison theorems for ordinary differential equations. *SIAM J. Appl. Math.* 26 (1974), 670-678. (A. Averna) 50 #7671 34C10
- Eigenvalue problems for nonlinear second order differential equations. *Spectral theory and differential equations (Proc. Sympos., Dundee, 1974; dedicated to Konrad Jörgens)*, pp. 294-306. *Lecture Notes in Math.*, Vol. 448, Springer, Berlin, 1975. (P. Waltman) 53 #935 34B25
- Applications of variational equations to ordinary and partial differential equations—multiple solutions of boundary value problems. *J. Differential Equations* 17 (1975), 154-186. (R. Kannan) 51 #1516 47H15 (34B15)
- (with Thompson, Russell C.) Boundary value problems for infinite systems of second-order differential equations. *J. Differential Equations* 18 (1975), no. 2, 277-295. (William E. Fitzgibbon) 51 #10794 34G05 (34B15)
- Approximate solutions of boundary value problems for systems of nonlinear differential equations. *Differential equations (Third Mexico-U.S. Sympos., Mexico City, 1975) (Spanish)*, pp. 345-354. *Math. Notes and Sympos.*, Vol. 2, Fondo de Cultura Económ., Mexico City, 1976. (Peter J. Bushell) 57 #771 34B15
- (with Mawhin, Jean L.) Rothe and Altman type coincidence theorems and applications to differential equations. *Nonlinear Anal.* 1 (1976/77), no. 2, 151-160. (V. V. Obuhovskii) 58 #30561 47H15 (34C25, 55C20)
- (with Volkmann, Peter) Boundary value problems for second order differential equations in convex subsets of a Banach space. *Trans. Amer. Math. Soc.* 218 (1976), 397-405. (J. E. Lagnese) 53 #970 34G05
- (with Knobloch, H. W.) Non-linear boundary value problems for systems of differential equations. *Proc. Roy. Soc. Edinburgh Sect. A* 78 (1977/78), no. 1-2, 139-159. (J. W. Bebernes) 58 #1351 34B15
- (with Bebernes, J. W.) Invariant sets and the Hukuhara-Kneser property for systems of parabolic partial differential equations. *Proceedings of the Regional Conference on the Application of Topological Methods in Differential Equations (Boulder, Colo., 1976)*. *Rocky Mountain J. Math.* 7 (1977), no. 3, 557-567. (Zbl 377 #35035) 58 #29092 35B99 (35K40)
- (with Aguinaldo, L.) On the boundary value problem $u'' + u = au' + p(t)$, $u(0) = 0 = u(\pi)$. *Proc. Amer. Math. Soc.* 68 (1978), no. 1, 64-68. (Jean Mawhin) 57 #6584 34B15
- See also Norkin, S. B., 49 #9367 and Delay and functional differential equations and their applications, 51 #8579
- Schmitt, Marcel Rapidité de convergence des dérivées tangentielles dans les problèmes de perturbation singulière relatifs au problème de Dirichlet. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 20, A1271-A1273. (Author's summary) 56 #3437 35B25
- Schmitt, Peter Summierungsverfahren und rekurrente Markoff-Ketten. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* 181 (1973), 329-352. (U. Krenzel) 49 #919 40C99 (60J10)
- Lineare Gleichverteilung. (English summary) *Manuscripta Math.* 12 (1974), 271-283. (Harald Niederreiter) 51 #406 10K05
- Erzeugung äquivalenter Summierungsverfahren durch Matrizenprodukte. *Monatsh. Math.* 78 (1974), 147-155. (W. Biegert) 49 #9469 40C05
- Linear uniform distribution. (French summary) *Répartition modulo 1 (Actes Colloq., Marseille-Luminy, 1974)*, pp. 245-252. *Lecture Notes in Math.*, Vol. 475, Springer, Berlin, 1975. (Harald Niederreiter) 52 #13700 10K05
- Spreading information by conferences. *Discrete Math.* 15 (1976), no. 3, 305-306. (Harald Scheid) 53 #7798 05A15

- Schmitt, Peter H.** The model-completion of Stone algebras. *Ann. Sci. Univ. Clermont No. 60 Math. No. 13* (1976), 135-155. (Leo Esakia) **57** #5743 02H15 (06A35)
Normal double Stone algebras. *Algebra Universalis* **7** (1977), no. 2, 205-209. (Daniel Ponasse) **55** #7876 06A35 (02J05)
- Schmitz, Georg** (with Boddenberg, Erich; Köhnen, Walter; Rinkens, Hans-Dieter)
★Mathematik-Lexikon. Begriffswörterbuch zur Didaktik der Mathematik. *Westermann Taschenbuch, Braunschweig*, 1972. 188 pp. (Editors) **50** #6741 00A20
- Schmitz, Norbert** Sequentielle Minimax-Tests bei Wiener-Prozessen. (English and French summaries) *Math. Operationsforsch. Statist.* **1** (1970), no. 4, 289-295. (W. Sendler) **45** #9415 62L15
A note on the optimality of k -stage tests. (German summary) *Metrika* **19** (1972), 72-75. (R. D. H. Jones) **48** #7500 62L10
Zur Verwendung linearer Programme in der Statistik. (English summary)
Proceedings of the Fourth Conference on Probability Theory (Braşov, 1971), pp. 343-353. Editura Acad. R.S.R., Bucharest, 1973. (Author's summary) **55** #6647 62F05 (90C05)
Zur Optimalität des Likelihoodquotienten-Sequenztests. *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes (Tech. Univ. Prague, Prague, 1971; dedicated to the memory of Antonín Špaček)*, pp. 781-791. Academia, Prague, 1973. (J. Wolfowitz) **50** #3485 62L10
Bemerkung zur Verwendung randomisierter Verfahren. *Sechste Oberwolfach-Tagung über Operations Research* (1973), Teil II, pp. 116-120. *Operations Research Verfahren, Band XIX, Hain, Meisenheim am Glan*, 1974. (Hans Bühlmann) **56** #4791 90B15
(with Plachky, Detlef) ★Vorlesungen über Wahrscheinlichkeitstheorie. I. Mathematical Systems in Economics, No. 26. *Verlag Anton Hain, Meisenheim am Glan*, 1976. vi + 216 pp. (S. J. Taylor) **54** #1329 60-01
(with Lehmann, Fritz) ★Monte-Carlo-Methoden. I. Erzeugen und Testen von Zufallszahlen. Mathematical Systems in Economics, Vol. 28. *Verlag Anton Hain, Meisenheim am Glan*, 1976. 134 pp. (R. S. Guter) **56** #1665 65C10
(with Zachow, Ernst-Wilhelm) Eine Axiomatisierung des erwarteten Nutzens. *Mathematical economics and game theory*, pp. 250-264. *Lecture Notes in Econ. and Math. Systems*, Vol. 141. Springer, Berlin, 1977. (From the introduction) **58** #26065 90D15
A further note on Arrow's impossibility theorem. *J. Math. Econom.* **4** (1977), no. 2, 189-196. (Amos Kats) **58** #15067 90A15 (92A20)
- Schmitz, R.** (with Felderhof, B. U.) Creeping flow about a sphere. *Phys. A* **92** (1978), no. 3-4, 423-437. (L. R. Mack) **58** #3939 7635
- Schmitz, Werner** Über längste Wege und Kreise in Graphen. *Rend. Sem. Mat. Univ. Padova* **53** (1975), 97-103. (T. Zamfirescu) **55** #175 05C35
- Schmookler, Yulia** Statistical mechanics and systems of large numbers of elements with random interaction. *SIAM J. Control* **13** (1975), 243-270. (Editors) **58** #32713 82.60 (60K35)
- Schmüdgen, Konrad** Über LMC-Algebren. *Math. Nachr.* **68** (1975), 167-182. (Paul S. Muhly) **52** #15030 46L05
The order structure of topological \ast -algebras of unbounded operators. I. *Rep. Mathematical Phys.* **7** (1975), no. 2, 215-227. (J. W. M. Ford) **53** #1283 46L05 (46A40)
Der beschränkte Teil in Operatorenalgebren. Beiträge zur Theorie nichtnormierbarer topologischer Algebren. *Wiss. Z. Karl-Marx-Universität Leipzig Math.-Natur. Reihe* **24** (1975), no. 5, 473-490. (B. Yood) **56** #6425 46L99
Uniform topologies and strong operator topologies on polynomial algebras and on the algebra of CCR. *Rep. Mathematical Phys.* **10** (1976), no. 3, 369-384. (J. W. M. Ford) **56** #1093 46L99
- Schmutz, Manfred** Generalized phase-space descriptions as linear representations of operators. (Italian and Russian summaries) *Nuovo Cimento B* (11) **25** (1975), 337-347. (Author's summary) **50** #12078 81.47
(with Leschke, Hajo) Operator orderings and functional formulations of quantum and stochastic dynamics. *Z. Phys. B* **27** (1977), no. 1, 85-94. (Cécile DeWitt-Morette and Maurice M. Mizrahi) **58** #8938 81.47 (47B15)
Real-time Green's functions in many body problems. *Z. Phys. B* **30** (1978), no. 1, 97-106. (L. A. Turski) **58** #9007 82.47
- Schmutzer, E.** ★Grundprinzipien der klassischen Mechanik und der klassischen Feldtheorie (kanonischer Apparat). Studienbücherei. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1973. 135 pp. (E. Hardtwig (Zbl) **268** #70020) **57** #18305 70.00
★Основные принципы классической механики и классической теории поля (канонический аппарат). (Russian) [Fundamental principles of classical mechanics and classical field theory (canonical apparatus)] Translated from the German by G. M. Il'icheva. Edited by S. P. Alliluev. *Izdat. "Mir", Moscow*, 1976. 157 pp. (Vadim Komkov) **58** #32189 70.49 (81.00)
Relativistic conductive additional terms in Navier-Stokes equations. *General Relativity and Gravitation* **7** (1976), no. 12, 925-936. (Andrew King) **57** #18731 83.53 (85.53)
(with Schütz, Wilhelm) ★Galileo Galilei. Dritte Auflage. Biographien Hervorragender Naturwissenschaftler. Techniker und Mediziner, 19. *BSB B. G. Teubner Verlagsgesellschaft, Leipzig*, 1977. 152 pp. (1 plate) **58** #27159 01A70
(with Plebański, Jerzy F.) Quantum mechanics in non-inertial frames of reference. *Fortschr. Physik* **25** (1977), no. 1, 37-82. (C. J. S. Clarke) **55** #11869 81.53
See also *Symposia Mathematica*, **48** #5579 and *Gravitation: problems, prospects*, **48** #7881
- Schnabel, C. P. J.** See van Lint, Jacobus H., **50** #4311
- Schnabel, R.** (with Bachmann, Friedrich) Kriterien für Hjelmlevgruppen. *Abh. Math. Sem. Univ. Hamburg* **44** (1975), 222-232 (1976). (R. Lingenberg) **53** #6409 50C25
- Schnabl, R.** Über symmetrische Masse auf kartesischen Produkten. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **20** (1971), 83-86. (Edwin Hewitt) **46** #3737 28A35
Über gleichmäßige Approximation durch positive lineare Operatoren. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970)* (Russian), pp. 287-296. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (Karl Scherer) **51** #6241 41A35
- Schnackenberg, F. Richard** Injectors of finite groups. *J. Algebra* **30** (1974), 548-558. (A. R. Camina) **50** #478 20D99
- Schnackenberg, J.** Network theory of microscopic and macroscopic behavior of master equation systems. *Rev. Modern Phys.* **48** (1976), no. 4, 571-585. (Author's summary) **56** #2159 82.60
★Thermodynamic network analysis of biological systems. Universitext. Springer-Verlag, Berlin-New York, 1977. viii + 143 pp. ISBN 3-540-08122-4 (From the introduction) **58** #33100 92A05 (80.35)
- Schnare, Paul S.** (with de Groot, Johannes H.) A topological characterization of products of compact totally ordered spaces. *General Topology and Appl.* **2** (1972), 67-73. (K. L. Magill, Jr.) **45** #9290 54F05
The topological complementation theorem à la Zorn. *Proc. Amer. Math. Soc.* **38** (1972), 285-286. (Anne K. Steiner) **45** #5943 (E **56** #1249) 54A05 (06A20)
Erratum to: "The topological complementation theorem à la Zorn" (Proc. Amer. Math. Soc. **35** (1972), 285-286). *Proc. Amer. Math. Soc.* **65** (1977), no. 1, 188. (Anne K. Steiner) **56** #1249 54A10
- Schnatz, T. W.** (with Siewert, C. E.) Radiative transfer in a Rayleigh-scattering atmosphere with true absorption. *J. Mathematical Phys.* **11** (1970), 2733-2739. (S. Ueno) **46** #10354 82.45
- Schneebeli, Hans Rudolf** ★Virtuelle Eigenschaften in der Gruppentheorie und virtuelle Cohomologie. Mit einer englischen Zusammenfassung. Abhandlung zur Erlangung des Titels eines Doktors der Mathematik der Eidgenössischen Technischen Hochschule Zürich. Diss. No. 5810. *Eidgenössische Technische Hochschule Zürich, Zürich*, 1977. v + 43 pp. (D. L. Johnson) **56** #15792 20J05
On virtual properties and group extensions. *Math. Z.* **159** (1978), no. 2, 159-167. (Ian M. Chiswell) **57** #12717 20J05
- Schneberger, H.** Optimierung in der Stichprobentheorie durch Schichtung und Aufteilung. (English summary) *Unternehmensforschung* **15** (1971), 240-254. (Author's summary) **48** #9909 62D05
Optimale Aufteilung des Stichprobenumfangs bei mehreren Merkmalen. *Metrika* **20** (1973), 1-16. (Jon Stene) **53** #6819 62P05
- Schneeweiß, Christoph** ★Regelungstechnische stochastische Optimierungsverfahren in Unternehmensforschung und Wirtschaftstheorie. *Lecture Notes in Operations Research and Mathematical Systems*, Vol. 49. Springer-Verlag, Berlin-New York, 1971. xi + 254 pp. (K. Ackermann) **52** #4942 90-02 (93E20)
Lagerhaltungs-Produktions-Modelle mit deterministischer Nachfrage. (English summary) *Unternehmensforschung* **15** (1971), 157-166. (C. Ratiu-Suciu) **46** #1297 90B05
Dynamische Sicherheitsäquivalente in stochastischen Lagerhaltungsmodellen. *Sechste Oberwolfach-Tagung über Operations Research* (1973), Teil II, pp. 121-134. *Operations Research Verfahren, Band XIX, Hain, Meisenheim am Glan*, 1974. (K. Hinderer) **56** #2318 90B30 (90C40)
Dynamic certainty equivalents in production smoothing theory. *Internat. J. Systems Sci.* **6** (1975), 353-365. (H. J. Kushner) **52** #12755 93B30
Linear decision rules for cash-balancing and inventory problems. *European J. Oper. Res.* **1** (1977), no. 6, 386-395. (Laurence L. George) **56** #17759 90B05 (93E20)
- Schneeweiss, Hans** The (μ, σ) -decision criterion on the class of normal distributions. *Inference and decision*, pp. 23-30. *Selecta Statistica Canadiana*, Vol. 1, Halsted Press, New York, 1973. (D. V. Lindley) **52** #1958 62C05 (90A10)
On the consistency of classical decision criteria. *Inference and decision*, pp. 31-44. *Selecta Statistica Canadiana*, Vol. 1, Halsted Press, New York, 1973. (D. V. Lindley) **52** #1957 62C05 (90A10)
The Ellsberg paradox from the point of view of game theory. *Inference and decision*, pp. 65-78. *Selecta Statistica Canadiana*, Vol. 1, Halsted Press, New York, 1973. (Norbert Schmitz) **52** #2629 90D45 (60A05, 90A05)
★Ökonometrie. Zweite verbesserte und erweiterte Auflage. *Physica-Verlag, Würzburg-Vienna*, 1974. 391 pp. ISBN 3-7908-0149-6 (G. Tintner) **56** #13499 62P20
Struktur-Inferenz an drei Beispielen. (English, French and Russian summaries) *Statist. Hefte (N.F.)* **16** (1975), no. 4, 316-326. (Author's summary) **55** #13620 62A99
Consistent estimation of a regression with errors in the variables. *Metrika* **23** (1976), no. 2, 101-115. (Prem K. Goel) **55** #6713 62J05 (62F10)
Kritische Bemerkungen zur Kritik am Wahrscheinlichkeitssubjektivismus. (English, French and Russian summaries) *Statist. Hefte (N.F.)* **18** (1977), no. 4, 218-232. (Detlef Plachky) **58** #13243 60A05 (62A99)
An exchange of correspondence. Comment on: "Bayesian inference and the optimality of maximum likelihood estimation" (Internat. Statist. Rev. **45** (1977), no. 1, 9-11) by J. J. Higgins. With a reply by Higgins. *Internat. Statist. Rev.* **46** (1978), no. 1, 75-76. (D. V. Lindley) **58** #3169 62F15
See also *Operations Research-Verfahren*, **48** #3447
- Schneeweiß, W.** Zuverlässigkeitsanalysen mit dem Begriff bedingte Wahrscheinlichkeit. (English summary) *Regelungstech. Prozeß-Datenverarbeitung* **18** (1970), no. 11, 494-499. (Author's summary) **52** #7601 93A10
Analyse von Zuverlässigkeitsproblemen bei der Prozessautomatisierung. (English summary) *Regelungstech.* **24** (1976), no. 3, 73-80. (Author's summary) **56** #18164 94A20 (90B25)
- Schneider, A. M.** See Control in space, **48** #13320
- Schneider, Albert** (with Nießen, Heinz-Dieter) Integraltransformationen zu singulären S-hermiteschen Rand-Eigenwertproblemen. (English summary) *Manuscripta Math.* **5** (1971), 133-145. (H. Hochstadt) **45** #5452 34B25 (47E05)
Bemerkung zu einem Vergleichssatz für gewöhnliche lineare Differentialgleichungen. (English summary) *Manuscripta Math.* **7** (1972), 83-86. (J. W. Bebernes) **45** #8932 34C10
(with Nießen, Heinz-Dieter) Spectral theory for left-definite singular systems of differential equations. *Spectral theory and asymptotics of differential equations (Proc. Conf., Scheveningen, 1973)*, pp. 29-43. *North-Holland Math. Studies*, Vol. 13, North-Holland, Amsterdam, 1974. (K. Moszyński) **54** #10725 34B20
(with Nießen, Heinz-Dieter) Spectral theory for left-definite singular systems of differential equations. II. *Spectral theory and asymptotics of differential equations (Proc. Conf., Scheveningen, 1973)*, pp. 45-56. *North-Holland Math. Studies*, Vol. 13, North-Holland, Amsterdam, 1974. (K. Moszyński) **54** #10726 34B20

- (with Schleinkofer, G.) Ein Vergleichssatz für komplexe nichtlineare Differentialgleichungssysteme. *Arch. Math. (Basel)* **25** (1974), 167-171. (J. F. Heyda) #5097 34C10 (34A20)
- A note on eigenvalue problems with eigenvalue parameter in the boundary conditions. *Math. Z.* **136** (1974), 163-167. (W. E. Boyce) **49** #9325 34B25
- S-hermitian boundary-value problems for difference systems. *J. Reine Angew. Math.* **280** (1976), 70-76. (Wolfgang Hahn) **52** #11391 39A12 (34B25)
- On spectral theory for singular S-hermitian difference systems. *J. Reine Angew. Math.* **280** (1976), 77-90. (Wolfgang Hahn) **52** #11392 39A12 (34B25)
- (with Nießen, Heinz-Dieter) Linksdefinite singuläre kanonische Eigenwertprobleme. *J. Reine Angew. Math.* **281** (1976), 13-52. (Walter Eberhard) **52** #11184 34B25 (E05)
- (with Nießen, Heinz-Dieter) Linksdefinite singuläre kanonische Eigenwertprobleme. *J. Reine Angew. Math.* **289** (1977), 62-84. (Walter Eberhard) **55** #8457 34B20
- der, C. R. Global aspects of the matrix Riccati equation. *Math. Systems Theory* **7** (1973), no. 3, 281-286. (P. Brunovský) **52** #11997 58F05 (34C35)
- SL₂(\mathbb{R}) actions on surfaces. *Amer. J. Math.* **96** (1974), 511-528. (Zbigniew Nitecki) #4298 57E25
- ider, Claus Vereinfachte Rekursionen zur Richardson-Extrapolation in Spezialfällen. (English summary) *Numer. Math.* **24** (1975), no. 2, 177-184. (Helmut Brass) **51** #14510 65B05
- ider, D. G. (with Jordan, James H.) Covering classes of residues in $\mathbb{Z}(\sqrt{-2})$. *Math. Mag.* **44** (1971), 257-261. (J. D. Swift) **46** #3483 12A15
- ider, Dennis M. Sufficient sets for some spaces of entire functions. *Trans. Amer. Math. Soc.* **197** (1974), 161-180. (Arne Stray) **50** #10301 32A15 (46E10)
- ider, F. Adaptivsteuerung von Reglerkennwerten—Ermittlung des Steuerungsgesetzes mittels Digitalrechner. I. (English summary) *Regelungstech. Prozess-Datenverarbeitung* **18** (1970), no. 3, 101-106. (Author's summary) **52** #7646 93C40
- ider, G. Eine suboptimale Methode zur Synthese von Abtastsystemen mit beschränkter Stellgröße. (English summary) *Regelungstech. Prozess-Datenverarbeitung* **19** (1971), no. 8, 332-338. (I. V. Beiko) **45** #8359 93C05
- ider, H.-J. See Schneider, Hans-Jürgen
- ider, H. W. Groups of free involutions of homotopy $S^{(n+1)/2} \times S^{(n+1)/2}$ s. *Trans. Amer. Math. Soc.* **206** (1975), 99-136. (Soon-Kyu Kim) **51** #6862 57E25 (57D60)
- ider, Hans (with Barker, George Phillip) ★Matrices and linear algebra. Second edition. Holt, Rinehart and Winston, Inc., New York-Montreal, Que.-London, 1973. xi+413 pp. (Editors) **50** #2191 15-01
- (with Richman, Daniel J.) Primes in the semigroup of non-negative matrices. *Proceedings of a Symposium on Inverse Semigroups and their Generalisations (Northern Illinois Univ., DeKalb, Ill., 1973)*, pp. 166-171. Northern Illinois Univ., DeKalb, Ill., 1973. (W. E. Deskins) **52** #630 20M20 (15A48)
- (with Bleicher, Michael N.; Wilson, Robert L., Jr.) Permanence of identities on algebras. *Algebra Universalis* **3** (1973), 72-93. (P. F. Conrad) **49** #2492 06A75
- (with Engel, Gernot M.) Cyclic and diagonal products on a matrix. *Linear Algebra and Appl.* **7** (1973), 301-335. (H. Ratschek) **48** #2160 15A21
- (with Engel, Gernot M.) Inequalities for determinants and permanents. *Linear and Multilinear Algebra* **1** (1973), 187-201. (M. Shafqat Ali) **51** #8135 15A15
- (with Turner, Robert E. L.) Matrices Hermitian for an absolute norm. *Linear and Multilinear Algebra* **1** (1973), no. 1, 9-31. (F. F. Bonsall) **48** #320 15A60 (47A10)
- (with Turner, Robert E. L.) Diagonal norm Hermitian matrices. *Linear Algebra and Appl.* **8** (1974), 375-412. (F. F. Bonsall) **50** #365 15A60
- (with Deutsch, Emeric) Bounded groups and norm-Hermitian matrices. *Linear Algebra and Appl.* **9** (1974), 9-27. (M. Shafqat Ali) **52** #3200 15A60
- (with Richman, Daniel J.) Primes in the semigroup of non-negative matrices. *Linear and Multilinear Algebra* **2** (1974), 135-140. (R. J. Plemmons) **50** #7216 15A48
- (with Engel, Gernot M.) Diagonal similarity and equivalence for matrices over groups with 0. *Czechoslovak Math. J.* **25(100)** (1975), no. 3, 389-403. (M. Pearl) **53** #477 15A21
- (with Loewy, Raphael) Positive operators on the n -dimensional ice cream cone. *J. Math. Anal. Appl.* **49** (1975), 375-392. (K. Veselić) **53** #11426 47B99 (15A60)
- (with Barker, George Phillip) Algebraic Perron-Frobenius theory. *Linear Algebra and Appl.* **11** (1975), no. 3, 219-233. (W. C. Rheinboldt) **51** #10371 15A48
- (with Loewy, Raphael) Indecomposable cones. *Linear Algebra and Appl.* **11** (1975), no. 3, 235-245. (S. Dubuc) **52** #3917 46A40 (15A60)
- (with Deutsch, Emeric; Gibson, Peter M.) The Fuglede-Putnam theorem and normal products of matrices. Collection of articles dedicated to Olga Taussky Todd. *Linear Algebra and Appl.* **13** (1976), no. 1/2, 53-58. (R. Merris) **53** #493 15A57
- (with Engel, Gernot M.) The Hadamard-Fischer inequality for a class of matrices defined by eigenvalue monotonicity. *Linear and Multilinear Algebra* **4** (1976/77), no. 3, 155-176. (Charles R. Johnson) **55** #5664 15A42
- (with Saunders, B. David) A symmetric numerical range for matrices. *Numer. Math.* **26** (1976), no. 1, 99-105. (K. Veselić) **56** #5611 15A60 (47A10)
- (with Cain, Bryan E.; Saunders, B. David) On the geometry of dual pairs. *Studies in Appl. Math.* **56** (1976/77), no. 1, 71-79. (Authors' summary) **58** #17800 46C05 (47A10, 47H99)
- The Birkhoff-Egervary-König theorem for matrices over lattice ordered abelian groups. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 91-94. (Editors) **56** #12038 15A51 (06A60)
- The concepts of irreducibility and full indecomposability of a matrix in the works of Frobenius, König and Markov. *Linear Algebra and Appl.* **18** (1977), no. 2, 139-162. (Thomas Hawkins) **56** #5170 01A60 (15-03, 15A21)
- Olga Taussky-Todd's influence on matrix theory and matrix theorists. A discursive personal tribute. *Linear and Multilinear Algebra* **5** (1977/78), no. 3, 197-224. (Thomas Hawkins) **57** #39 01A65
- (with Wells, Robert) A note on the concordance homotopy group of real projective space. *Proc. Amer. Math. Soc.* **62** (1977), no. 2, 367-373. (Terry Lawson) **55** #4229 57E05
- (with Richman, Daniel J.) On the singular graph and the Weyr characteristic of an M -matrix. *Aequationes Math.* **17** (1978), no. 2-3, 208-234. (George P. Barker)
- 58** #16727 15A48
- Schneider, Hans-Jochen See Jahrestagung: Gesellschaft für Informatik, **48** #1502
- Schneider, Hans-Jürgen (with Güntsch, Fritz Rudolf) ★Einführung in die Programmierung digitaler Rechenautomaten. Dritte, völlig neu bearbeitete Auflage. Walter de Gruyter, Berlin-New York, 1972. 320 pp. (syntax table in pocket) (Editors) **50** #9034 68A05
- (with Ehrig, Hartmut; Pfender, Michael) Graph-grammars: an algebraic approach. 14th Annual IEEE Symposium on Switching and Automata Theory (Univ. Iowa, Iowa City, Iowa, 1973), pp. 167-180. *IEEE Comput. Soc., Northridge, Calif.*, 1973. (Siegmund Gerber) **54** #14453 68A30
- (with Weber, D.) Ein Test der Einbettbarkeit markierter Graphen unter Verwendung einer Hash-Codierung. *Dritte Jahrestagung der Gesellschaft für Informatik (Hamburg, 1973)*, pp. 81-91. *Lecture Notes in Comput. Sci., Vol. 1, Springer, Berlin*, 1973. (From the text) **58** #8585 68A50
- Syntax-directed description of incremental compilers. *Vierte Jahrestagung der Gesellschaft für Informatik (Berlin, 1974)*, pp. 192-201. *Lecture Notes in Comput. Sci., Vol. 26, Springer, Berlin*, 1975. (Gianni Aguzzi) **54** #9181 68A30
- (with Ehrig, Hartmut) Grammars on partial graphs. *Acta Informat.* **6** (1976), no. 3, 297-316. (W. Vollmerhaus) **56** #1829 68A30
- Graph grammars. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Körmik, 1977)*, pp. 314-331. *Lecture Notes in Comput. Sci., Vol. 56, Springer, Berlin*, 1977. (Max Dauchet) **58** #32115 68A30
- Schneider, Hans-Jürgen Verallgemeinerung eines Satzes von H. Samelson. *Comment. Math. Helv.* **46** (1971), 175-181. (J. P. May) **45** #2706 55A35
- (with Oberst, Ulrich) Die Struktur von projektiven Moduln. *Invent. Math.* **13** (1971), 295-304. (Z. Papp) **45** #319 16A50
- (with Oberst, Ulrich) Kommutative, F -lineare kompakte Ringe. *J. Algebra* **25** (1973), 316-363. (J.-P. Lafon) **48** #11088 13C05
- (with Oberst, Ulrich) Über Untergruppen endlicher algebraischer Gruppen. (English summary) *Manuscripta Math.* **8** (1973), 217-241. (F. Oort) **50** #339 14L20 (17B45)
- Bemerkung zu einer Arbeit von Tate-Oort. (English summary) *Manuscripta Math.* **8** (1973), 319-322. (F. Oort) **50** #340 14L20 (17B50)
- (with Oberst, Ulrich) Untergruppen formeller Gruppen von endlichem Index. *J. Algebra* **31** (1974), 10-44. (Robert A. Morris) **50** #13057 14L05
- Konstruktion der Integrale von endlichen algebraischen Gruppen. *Math. Z.* **138** (1974), 255-264. (Loren D. Olson) **50** #9881 14L15
- Cartan matrix of liftable finite group schemes. *Comm. Algebra* **5** (1977), no. 8, 795-819. (J.-E. Bertin) **55** #12738 14L05
- Schneider, Heinrich Junktive Anpassung hinreichender und notwendiger Bedingungen. *Praxis Math.* **17** (1975), 153-155. (Not reviewed) 02-01
- Schneider, Hubert H. (with Bullock, Arthur M.) A calculus for finitely satisfiable formulas with identity. *Arch. Math. Logik Grundlagenforsch.* **15**, 158-163 (1972). (J. M. Plotkin) **48** #8219 02G05
- (with Bullock, Arthur M.) On generating the finitely satisfiable formulas. *Notre Dame J. Formal Logic* **14** (1973), 373-376. (A. B. Slomson) **47** #8280 02G10
- A deduction system for the full first-order predicate logic. *Notre Dame J. Formal Logic* **17** (1976), no. 3, 439-445. (N. C. A. da Costa) **56** #111 02G10 (02B10)
- Some remarks concerning a definition of ordered pairs. *Amer. Math. Monthly* **84** (1977), no. 8, 636-638. (Michael Byrd) **56** #15425 04-01
- Schneider, Ivo Die mathematischen Praktiken im See-, Vermessungs- und Wehrwesen vom 15. bis zum 19. Jahrhundert. *Technikgeschichte* **37** (1970), no. 3, 210-242. (V. E. Thoren) **56** #11693 01A40 (01A45, 01A50, 01A55)
- Clausius' erste Anwendung der Wahrscheinlichkeitsrechnung im Rahmen der atmosphärischen Lichtstreuung. (English summary) *Arch. History Exact Sci.* **14** (1974), 143-158. (Richard Vahrenkamp) **57** #366 01A55
- Die Rolle des Formalen und des Individuums in der Mathematik bei Descartes und Leibniz. *Sudhoffs Arch.* **58** (1974), 225-234. (M. Kline) **57** #30 01A45
- ★Clausius' erste Anwendung der Wahrscheinlichkeitsrechnung im Rahmen der atmosphärischen Lichtstreuung. With an English summary. Veröffentlichungen des Forschungsinstituts des Deutschen Museums für die Geschichte der Naturwissenschaften und der Technik, Reihe A: Kleine Mitteilungen, No. 168. Deutsches Museum für die Geschichte der Naturwissenschaften und der Technik, Munich, 1975. pp. 143-158. (Editors) **58** #21232 01A55
- Rudolph Clausius' Beitrag zur Einführung wahrscheinlichkeitstheoretischer Methoden in die Physik der Gase nach 1856. (English summary) *Arch. History Exact Sci.* **14** (1975), no. 3, 237-261. (Richard Vahrenkamp) **57** #36a 01A55
- The introduction of probability into mathematics. (German summary) *Historia Math.* **3** (1976), no. 2, 135-140. (Author's summary) **58** #21144 01A45
- Wahrscheinlichkeit und Zufall bei Kepler. *Philos. Natur.* **16** (1976/77), no. 1, 40-63. (J. A. Lohne) **55** #12419 01A45
- Schneider, J. E. Orthogonal groups of nonsingular forms of higher degree. *J. Algebra* **27** (1973), 112-116. (A. O. Morris) **48** #4141 20G15
- Schneider, K. R. Ein Einschliessungssatz für die Periode nichtlinearer Schwingungen. (Russian summary) *Proceedings of the Fifth International Conference on Nonlinear Oscillations (Kiev, 1969)*, Vol. 2: Qualitative methods in the theory of nonlinear oscillations (Russian), pp. 558-572. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (L. Erbe) **47** #8980 34C15
- Über die Ausnutzung der Parameterabhängigkeit eines dynamischen Systems bei der qualitativen Untersuchung geschlossener Integralkurven. *Math. Nachr.* **50** (1971), 7-16. (F. Brauer) **47** #2147 34C35
- Näherungsverfahren zur Ermittlung periodischer Lösungen von Systemen nichtlinearer periodischer Differentialgleichungen. (English summary) *Computing (Arch. Elektron. Rechnen)* **10** (1972), 63-82. (W. S. Loud) **47** #3737 34A50 (34C25, 65L10)
- Über die Parameterabhängigkeit von Grenzzyklen. *Math. Nachr.* **53** (1972), 125-144. (J. W. Heidel) **48** #624 34C05
- Über die Periode nichtlinearer Schwingungen autonomer dynamischer Systeme n -ter Ordnung. (English and Russian summaries) *Z. Angew. Math. Mech.* **53** (1973), no. 3, 199-205. (G. R. Sell) **53** #6021 34C25
- Zur Konvergenz im Mittel von Näherungsverfahren zur Bestimmung periodischer

- Lösungen von periodischen Vektordifferentialgleichungen. *Beiträge Numer. Math.* 2 (1974), 163-176. (Zbl 309 #65035) 58 #28771 34A45 (65L99)
- Zur Existenz und numerischen Approximation von Lösungen nichtlinearer Eigenwertprobleme. *Math. Nachr.* 62 (1974), 121-132. (P. A. Kučment) 50 #3040 47H15
- Zur Abschätzung der Frequenz nichtlinearer Schwingungen einer Klasse gewöhnlicher Differentialgleichungen. (English and Russian summaries) *Z. Angew. Math. Mech.* 54 (1974), 83-90. (J. W. Heidel) 50 #694 34C25
- Eine Methode zur Gewinnung von Existenzsätzen bei nichtlinearen Eigenwertproblemen. 5. Tagung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975), Heft 1, pp. 40-45. *Wiss. Schr. Techn. Hochsch. Karl-Marx-Stadt, Techn. Hochsch., Karl-Marx-Stadt, 1975.* (B. V. Loginov) 56 #9342 47H15
- (with Vegner, B. U.) The asymptotic behavior of the period of limit cycles that contract to a singular point. (Russian) *Mat. Issled.* 10 (1975), no. 2(36), 28-35, 280-281. (A. A. Reinfelds) 53 #8559 34C05
- Über die Anwendbarkeit der Mittelungsmethode zum Nachweis der Existenz periodischer Lösungen. *Math. Nachr.* 69 (1975), 97-106. (R. F. Matlak) 53 #13743 34C25 (34C30)
- Über eine Integralgleichungsmethode in der Theorie autonomer Schwingungen und ihre Anwendung auf Bifurkationsprobleme. *Math. Nachr.* 69 (1975), 191-204. (E. K. H. Hoehn) 53 #13735 34C15
- Über das Fehlen periodischer Lösungen bei einer Klasse nichtlinearer autonomer Differentialgleichungen n -ter Ordnung. *Z. Angew. Math. Mech.* 56 (1976), no. 8, 389-391. (K. Schmitt) 54 #5547 34C25
- On a class of nonlinear integral equations of Volterra-Hammerstein type. *Theory of nonlinear operators (Proc. Fourth Internat. Summer School, Acad. Sci., Berlin, 1975)*, pp. 381-388. *Abh. Akad. Wiss. DDR Abt. Math.-Natur.-Tech.* 1977, 1, Akademie-Verlag, Berlin, 1977. (J. M. Cushing) 58 #2086 45G99
- (with Wegner, Bernd) Asymptotic behaviour of the period of a closed trajectory contracting to a singular point. VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2, pp. 215-219. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., No. 4N, Akademie-Verlag, Berlin, 1977.* (M. Rão) 58 #28897 34D05 (34C35)
- Investigations of integral equations in the theory of nonlinear oscillations. VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2, pp. 221-236. *Abh. Akad. Wissensch. DDR Abt. Math.-Naturwissensch.-Techn., No. 4N, Akademie Verlag, Berlin, 1977.* (M. Ráb) 58 #28855 34C15 (45D05)
- Über eine Methode zur Untersuchung erzwungener Schwingungen. *Math. Nachr.* 76 (1977), 109-122. (W. S. Loud) 58 #11675 34C25
- Über die Anwendung der Mittelungsmethode zur Untersuchung der Abzweigung einer periodischen Lösung von einem singulären Punkt. *Untersuchungen zur asymptotischen Theorie nichtlinearer Differentialgleichungen*, pp. 57-64. *Schriftenreihe des Zentralinst. für Math. und Mech., Heft 26, Akademie-Verlag, Berlin, 1978.* (D. Schmidt) 58 #11681 34C30
- Schneider, Kenneth S.** (with Jelinek, Frederick) On variable-length-to-block coding. *IEEE Trans. Information Theory IT-18* (1972), 765-774. (J.-M. Goethals) 52 #5199 94A15
- (with Jelinek, Frederick) Variable-length encoding of fixed-rate Markov sources for fixed-rate channels. *IEEE Trans. Information Theory IT-20* (1974), 750-755. (Authors' summary) 56 #18114 94A15
- (with Orr, Richard S.) Aperiodic correlation constraints on large binary sequence sets. *IEEE Trans. Information Theory IT-21* (1975), 79-84. (Patrick P. Bergmans) 52 #7691 94A05
- Schneider, Manfred** Über die Eindeutigkeit von Randwertproblemen für partielle Differentialgleichungen vom hyperbolischen und gemischt elliptisch-hyperbolischen Typ. *Methoden und Verfahren der mathematischen Physik, Band 7*, pp. 63-77. *B. I.-Hochschultaschenbücher, No. 726, Bibliographisches Inst., Mannheim, 1972.* (M. H. Protter) 51 #10896 35M05
- Über die Eindeutigkeit des Tricomi- und Gellerstedt-Problems. *Methoden und Verfahren der mathematischen Physik, Band 6*, pp. 113-128. *B. I.-Hochschultaschenbücher, No. 725, Bibliographisches Inst., Mannheim, 1972.* (M. H. Protter) 51 #10895 35M05
- Schwache und halbstärke Lösungen des Tricomi Problems für lineare partielle Differentialgleichungen zweiter Ordnung. *Methoden und Verfahren der mathematischen Physik, Band 10*, pp. 99-115. *Bibliographisches Institut, Mannheim, 1973.* (M. H. Protter) 51 #10897 35M05
- (with Bertoluzza, Carlo) Informations totalement composables. *Théories de l'information (Actes du Colloque sur l'Information et les Questionnaires, Centre de Rencontres Mathématiques de Luminy, 1973)*, pp. 90-98. *Lecture Notes in Math., Vol. 398, Springer, Berlin, 1974.* (B. Forte) 54 #12365 94A15
- Funktionalanalytische Methoden zur Behandlung von linearen partiellen Differentialgleichungen vom gemischten Typ. *Überblicke Mathematik, Band 7*, pp. 219-265. *Bibliographisches Inst., Mannheim, 1974.* (M. H. Protter) 53 #13863 35M05 (35Dxx, 46E35)
- Über schwache und halbstärke Lösungen des Tricomi-Problems. *Math. Nachr.* 60 (1974), 167-180. (D. K. Gvazava) 50 #10560 35M05
- Über Differentialgleichungen zweiter Ordnung vom gemischten Typ im R^3 . *Math. Nachr.* 66 (1975), 57-66. (S. A. Tersenov) 52 #1039 35M05
- (with Gilbert, Robert Pertsch) Evolution equations with generalized Riemann operators. *Applicable Anal.* 6 (1976/77), no. 1, 75-79. (D. L. Colton) 54 #5629 35K99 (30A92)
- Über eine spezielle Differentialgleichung vom gemischten Typ im R^3 . (English summary) *Monatsh. Math.* 82 (1976), no. 4, 317-326. (D. K. Gvazava) 57 #3660 35M05
- Über eine Methode zur Konvergenzbeschleunigung bei einschließenden Iterationsverfahren. *Wiss. Z. Techn. Hochschule Karl-Marx-Stadt* 18 (1976), no. 4, 415-418. (W. C. Rheinboldt) 54 #14363 65J05
- ★ Introduction to partial differential equations of mixed type. *Lecture Notes, No. 1. Institute for Mathematical Sciences, University of Delaware, Newark, Del., 1977.* 55 pp. (S. A. Tersenov) 57 #6881 35M05
- Über Randwertprobleme für Gleichungen vom gemischten Typ im R^3 . I. *Polon. Math.* 34 (1977), no. 1, 1-12. (D. K. Gvazava) 57 #17019a 35M05
- Über Randwertprobleme für Gleichungen vom gemischten Typ im R^3 . II. *Polon. Math.* 34 (1977), no. 1, 43-45. (D. K. Gvazava) 57 #17019b 35M05
- (with Salzmann, Helmut) Schwache Lösungen des Frankl-Morawetz-Problem R^3 . (English summary) *Monatsh. Math.* 84 (1977), no. 3, 237-246. (N. N. Jane) 57 #6880 35M05
- See also Berezin, I. S.; et al., 49 #8265 and Berezin, I. S.; et al., 49 #8266
- Schneider, Martin** ★ Analysis und Synthese bei Leibniz. Inaugural-Dissertation zur Erlangung der Doktorwürde der Philosophischen Fakultät der Rheinischen Friedrich-Wilhelms-Universität zu Bonn. *Rheinische Friedrich-Wilhelms-Universität, Bonn, 1974.* 348 pp. (F. C. Kreiling) 58 #15902 01A45 (00A25, 05A05)
- See also Heinekamp, Albert, 58 #15903
- Schneider, Michael** (with Knorr, Knut) Relativexzeptionelle analytische Mengen. *M. Ann.* 193 (1971), 238-254. (Y.-T. Siu) 45 #2208 32F10
- Halbstetigkeitssätze für relativ analytische Räume. *Invent. Math.* 16 (1972), 161-176. (M. Range) 46 #390 32C35
- Bildgarben und Fasercohomologie für relativ analytische Räume. (English summary) *Manuscripta Math.* 7 (1972), 67-82. (O. Riemenschneider) 46 #384 32C35 (32L10)
- Über eine Vermutung von Hartshorne. *Math. Ann.* 201 (1973), 221-229. (W. Ba) 50 #10324 32F10 (14C30)
- Ein einfacher Beweis des Verschwindungssatzes für positive holomorphe Vektorraumbündel. (English summary) *Manuscripta Math.* 11 (1974), 95-101. (Thimm) 50 #5038 32L10
- Lefschetzsätze und Hyperkonvexität. *Invent. Math.* 31 (1975), no. 2, 183-192. (Barth) 53 #3362 32F10 (14C20, 32J25)
- Tubenummengungen Steinscher Räume. (English summary) *Manuscripta Math.* (1976), no. 4, 391-397. (O. Forster) 54 #7854 32E10
- Stabile Vektorraumbündel vom Rang 2 auf der projektiven Ebene. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. II* 1976, no. 6, 83-86. (W. Barth) 56 #5559 14F05
- Lefschetz theorems and a vanishing theorem of Grauert-Riemenschneider. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part 2, Williams Coll., Williamsstown, Mass., 1975)*, pp. 35-39. *Amer. Math. Soc., Providence, R.I., 1977.* (Barth) 56 #12314 32F10 (32L10, 32M15)
- (with Grauert, Hans) Komplexe Unterräume und holomorphe Vektorraumbündel vom Rang zwei. *Math. Ann.* 230 (1977), no. 1, 75-90. (W. Barth) 58 #1279 32L10
- Familien negativer Vektorraumbündel und 1-konvexe Abbildungen. Special issue dedicated to the seventieth birthday of Erich Kähler. *Abh. Math. Sem. Univ. Hamburg* 47 (1978), 150-170. (Shigeo Nakano) 58 #11514 32C45 (14F05, 32L05)
- Schneider, Michel** (with Picard, Claude-François) Information du type M transmise par questionnaire latticiel. *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A660-A663. (Terrenoire) 52 #5204 94A15
- Information du type M transmise par un questionnaire avec circuits. *C. R. Acad. Sci. Paris Sér. A-B* 275 (1972), A611-A614. (L. L. Campbell) 50 #12453 94A15
- (with Bertoluzza, Carlo) Résolution d'une équation fonctionnelle intervenant théorie de l'information. *C. R. Acad. Sci. Paris Sér. A-B* 277 (1973), A539-A541. (Aczél) 48 #5723 94A15 (39A30)
- Méthodes pour recenser toutes les cliques maximales et θ -maximales d'un graphe. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Verte* 7 (1973), no. V-3, 21-33. (A. K. Dewdney) 54 #5054 05C99 (68A10)
- Schneider, Robert B.** Isometries of $H^p(U^n)$. *Canad. J. Math.* 25 (1973), 92-95. (D. Clark) 47 #2089 32A30 (30A78, 46J15)
- Extreme points in $H^1(U^n)$. *Duke Math. J.* 40 (1973), 425-431. (J. A. Cin) 51 #5955 32A10 (46J15)
- Unit preserving isometries are homomorphisms in certain L^p . *Canad. J. Math.* (1975), 133-137. (R. H. Cox) 50 #10799 46E30
- (with Ahern, Patrick) Isometries of H^∞ . *Duke Math. J.* 42 (1975), 321-326. (D. Clark) 56 #5936 32D05 (46J15, 32E25)
- (with Ahern, Patrick) The boundary behavior of Henkin's kernel. *Pacific J. Math.* 66 (1976), no. 1, 9-14. (B. M. Weinstock) 55 #8409 32E25 (32F10)
- Schneider, Rolf** Zwei Extremalaufgaben für konvexe Bereiche. *Acta Math. Acad. Sci. Hungar.* 22 (1971/72), 379-383. (C. M. Petty) 45 #2578 52A40
- The mean surface area of the boxes circumscribed about a convex body. *Arch. Polon. Math.* 25 (1971/72), 325-328. (E. Heil) 46 #4370 52A40
- Krümmungsschwerpunkte konvexer Körper. I. *Abh. Math. Sem. Univ. Hamburg* (1972), 112-132. (G. T. Sallee) 46 #6160 52A20
- Krümmungsschwerpunkte konvexer Körper. II. *Abh. Math. Sem. Univ. Hamburg* 37 (1972), 204-217. (G. T. Sallee) 48 #9554 52A20 (53C65)
- Konvexe Flächen mit langsam abnehmender Krümmung. *Arch. Math. (Basel)* (1972), 650-654. (M. do Carmo) 47 #5781 53C20
- Closed convex hypersurfaces with second fundamental form of constant curvature. *Proc. Amer. Math. Soc.* 35 (1972), 230-233. (Alan Weinstein) 46 #6254 53C45
- Volumen und Schwerpunkt von Polyedern. *Elem. Math.* 28 (1973), 137-141. (H. Croft) 48 #12305 52A25
- A characteristic extremal property of simplices. *Proc. Amer. Math. Soc.* 40 (1973), 247-249. (H. Kramer) 48 #1049 52A40
- Summanden konvexer Körper. *Arch. Math. (Basel)* 25 (1974), 83-85. (G. T. Sallee) 49 #6032 52A20
- Bewegungsaquivalente, additive und stetige Transformationen konvexer Bereiche. *Arch. Math. (Basel)* 25 (1974), 303-312. (G. Ewald) 49 #9738 52A10
- (with McMullen, Peter; Shephard, Geoffrey C.) Monotypic polytopes and their intersection properties. *Geometriae Dedicata* 3 (1974), 99-129. (Joseph Zaks) 50 #5652 52A25
- Additive Transformationen konvexer Körper. *Geometriae Dedicata* 3 (1974), 221-228. (G. T. Sallee) 50 #8299 52A20
- On asymmetry classes of convex bodies. *Mathematika* 21 (1974), 12-18. (G. Chakerian) 50 #14492 52A20
- Equivariant endomorphisms of the space of convex bodies. *Trans. Amer. Math. Soc.* 194 (1974), 53-78. (G. T. Sallee) 50 #5633 52A20 (53C65)

- Kinematische Berührmaße für konvexe Körper. *Abh. Math. Sem. Univ. Hamburg* 1975, 12-23 (1976). (L. A. Santaló) **52** #15249 52A50
- Remark on a conjectured characterization of the sphere. *Ann. Polon. Math.* **31** (5), no. 2, 187-190. (T. J. Willmore) **52** #15321 53C45
- Isometrien des Raumes der konvexen Körper. *Colloq. Math.* **33** (1975), no. 2, 224, 304. (P. R. Goodey) **52** #6576 52A20
- Kinematische Berührmaße für konvexe Körper und Integralrelationen für flächenmaße. *Math. Ann.* **218** (1975), no. 3, 253-267. (W. J. Firey) **52** #11806 65
- Neighbourliness of centrally symmetric polytopes in high dimensions. *Mathematika* 1975, no. 2, 176-181. (G. C. Shephard) **53** #9038 52A25
- A measure of convexity for compact sets. *Pacific J. Math.* **58** (1975), no. 2, 617-625. (W. Guggenheimer) **52** #1525 52A20
- Zonoids whose polars are zonoids. *Proc. Amer. Math. Soc.* **50** (1975), 365-368. (Thor's summary) **57** #10601 52A20
- Bestimmung eines konvexen Körpers durch gewisse Berührmasse. *Arch. Math. (Basel)* **27** (1976), no. 1, 99-105. (A. Florian) **54** #3586 52A20
- Eine kinematische Integralformel für konvexe Körper. *Arch. Math. (Basel)* **28** (77), no. 2, 217-220. (W. J. Firey) **55** #11181 53C65 (52A20)
- Eine Charakterisierung der Kugel. *Arch. Math. (Basel)* **29** (1977), no. 6, 660-665. (J. cowski) **58** #7394 52A20
- Ein kombinatorisches Analogon zum Satz von Gauss-Bonnet. *Elem. Math.* **32** (77), no. 5, 105-108. (H. E. Debrunner) **58** #13057 57C05
- Kritische Punkte und Krümmung für die Mengen des Konvexrings. *Enseignement math.* **23** (1977), no. 1-2, 1-6. (T. Banchoff) **57** #7474 53C45 (57D70)
- Das Christoffel-Problem für Polytope. *Geometriae Dedicata* **6** (1977), no. 1, 81-85. (Florian) **57** #10609 52A25
- Rekonstruktion eines konvexen Körpers aus seinen Projektionen. *Math. Nachr.* **79** (77), 325-329. (A. Florian) **58** #18147 52A20
- On the skeletons of convex bodies. *Bull. London Math. Soc.* **10** (1978), no. 1, 84-85. (Hadwiger) **58** #18148 52A20
- der, Theodor** Über rationale Stellen, an denen eine algebraische Funktion rationale Werte annimmt. *Zahlentheorie (Tagung, Math. Forschungsinst., Oberwolfach, 1970)*, pp. 7-145. *Ber. Math. Forschungsinst., Oberwolfach*, No. 5, Bibliographisches Inst., Mannheim, 1971. (W. J. LeVeque) **51** #366 10F05
- Rationale Punkte über einer algebraischen Kurve. *Séminaire Delange-Pisot-Poitou 8e année: 1973/74, Théorie des nombres, Fasc. 1, Exp. No. 20, 7 pp. Secrétariat mathématique, Paris*, 1975. (P. Bundschuh) **53** #5493 10F35 (10F05)
- Eine Bemerkung zu einem Satz von C. L. Siegel. *Comm. Pure Appl. Math.* **29** (1976), 6, 775-782. (P. Bundschuh) **54** #10167 10F35
- See also **Zahlentheorie**, **50** #12875
- der, Thomas R.** Theorem on the convergence rate of generalized Fourier series. *J. Mathematical Phys.* **12** (1971), 1508-1509. (From the author's introduction) **54** #3284 A60
- der, Urs** ★Beiträge zur Theorie der sesquilinearen Räume unendlicher Dimension. Inaugural-Dissertation zur Erlangung der philosophischen Doktorwürde vorgelegt der philosophischen Fakultät II der Universität Zürich. *Universität Zürich, Zurich*, 1975. 71 p. (J. Dieudonné) **58** #751 15A63 (10C30)
- der, Victor** See **Schneider, Victor B.**
- der, Victor** See **Schneider, Victor P.**
- der, Victor B.** (with Mickunas, M. Dennis) On the ability to cover LR(k) grammars with LR(1), SLR(1), and (1, 1) bounded-context grammars. *14th Annual IEEE Symposium on Switching and Automata Theory (Univ. Iowa, Iowa City, Iowa, 1973)*, pp. 109-121. *IEEE Comput. Soc., Northridge, Calif.*, 1973. (Wilfried Brauer) **55** #6975 54A30
- (with Winiger, Gary) Translation grammars for compilation and decompilation. *Nordisk Tidskr. Informationsbehandling (BIT)* **14** (1974), 78-86. (Leon Levy) **49** #11869 68A30
- (with Mickunas, M. Dennis; Lancaster, R. L.) Transforming LR(k) grammars to LR(1), SLR(1), and (1, 1) bounded right-context grammars. *J. Assoc. Comput. Mach.* **23** (1976), no. 3, 511-533. (Terese Marie McCloskey) **53** #14997 68A30
- der, Victor P.** Degree of symmetry of Stiefel manifolds. *Duke Math. J.* **39** (1972), 85-288. (K. W. Kwun) **45** #7748 57F15
- Transitive actions on highly connected spaces. *Proc. Amer. Math. Soc.* **38** (1973), 79-185. (C. Teleman) **47** #9658 57E15
- Homogeneous spaces with vanishing Steenrod squaring operations. *Proc. Amer. Math. Soc.* **50** (1975), 451-458. (S. Y. Hussein) **53** #9263 57E25 (57F15)
- Compactifications for some semigroups using the Whyburn construction. *Semigroup Forum* **13** (1976/77), no. 2, 135-142. (Y.-F. Lin) **55** #10599 22A15 (54D35, 54H15)
- (with Kuhn, Stephen) The Whyburn construction and fiber bundles. *General Topology and Appl.* **7** (1977), no. 1, 129-138. (Richard R. Patterson) **55** #6427 55F10
- Semigroups and the n -sphere. *Semigroup Forum* **15** (1977/78), no. 1, 93-94. (Haskell Cohen) **57** #515 22A15
- der, Volker** Die elliptischen Fixpunkte zu Modulgruppen in Quaternionenschiefkörpern. *Math. Ann.* **217** (1975), no. 1, 29-45. (K.-B. Gundlach) **52** #5574 10D05
- Die Dimensionen der Räume automorpher Formen zu Modulgruppen in Quaternionenschiefkörpern über reellquadratischen Zahlkörpern. *Math. Ann.* **226** (1977), no. 2, 183-194. (H. Klingen) **55** #12643 10D20 (10D15)
- Elliptische Fixpunkte und Drehfaktoren zur Modulgruppe in Quaternionenschiefkörpern über reellquadratischen Zahlkörpern. *Math. Z.* **152** (1977), no. 2, 145-163. (K.-B. Gundlach) **55** #5537 10D05 (10D20)
- der, W. J.** Some theorems on the level curves of harmonic measures and applications. *Analytic methods in mathematical physics (Sympos., Indiana Univ., Bloomington, Ind., 1968)*, pp. 531-534. *Gordon and Breach, New York*, 1970. (H. L. Jackson) **49** #568 30A44
- (with Barth, Karl F.) Entire functions mapping arbitrary countable dense sets and their complements onto each other. *J. London Math. Soc.* (2) **4** (1971/72), 482-488. (T. Kövari) **46** #353 30A66
- (with Barth, Karl F.) On a problem of C. Rényi concerning Julia lines. Collection of articles dedicated to J. L. Walsh on his 75th birthday. *VII. J. Approximation Theory* **6** (1972), 312-315. (W. H. J. Fuchs) **49** #582 30A66
- (with Barth, Karl F.) On a problem of Erdős concerning the zeros of the derivatives of an entire function. *Proc. Amer. Math. Soc.* **32** (1972), 229-232. (P. Erdős) **45** #2168 30A66
- Schneider, W. R.** Resolvents, semigroups and Gibbs states for infinite coupling constant. *Comm. Math. Phys.* **43** (1975), no. 2, 121-129. (H. Baumgärtel) **56** #3657 47A55 (82.47)
- The Bloch equation at low temperatures. *Helv. Phys. Acta* **49** (1976), no. 1, 91-98. (K. Kumar) **53** #2211 81.47
- Continued fraction representation of correlation functions. *Z. Phys. B* **24** (1976), no. 1, 135-139. (J. A. Goldstein) **53** #9782 70.47
- Schneider, Wolfgang** (with Güttler, Reiner; Mehlhorn, Kurt; Wernet, Norbert) Binary search trees: average and worst case behavior (extended abstract). *GI-6. Jahrestagung (Stuttgart, 1976)*, pp. 301-313. *Informatik-Fachberichte, Band 5, Springer, Berlin*, 1976. (Amitava Bagchi) **57** #4596 68A10
- Schnelle, H.** See **Semantics and communication**, **49** #4731 and **Logic, methodology and philosophy of science**, **55** #7657
- Schneller, Meir I.** Regression analysis for multiplicative phenomena and its implication for the measurement of investment risk. *Management Sci.* **22** (1975/76), no. 4, 422-426. (C. W. J. Granger) **52** #16551 90A99 (62J05)
- Schnepes-Schneppe, M. A.** See **Snepes-Sneppe, M. A.**
- Schurr, Fritz** (with Scholz, Siegfried) Fehlerabschätzungen für das charakteristische Anfangswertproblem bei der hyperbolischen Differentialgleichung $z_{xy} = f(x, y, z)$. *Wiss. Z. Techn. Univ. Dresden* **23** (1974), 1077-1083. (H. C. Kranzer) **52** #4648 65M15
- Verbesserte Fehlerengrenzungen für das charakteristische Anfangswertproblem einer hyperbolischen Differentialgleichung $z_{xy} = f(x, y, z)$. *Wiss. Z. Techn. Univ. Dresden* **24** (1975), no. 5, 955-963. (J. W. Schmidt) **55** #4708 65M15
- Einschrittverfahren zur numerischen Behandlung des charakteristischen Anfangswertproblems bei einer hyperbolischen Differentialgleichung $z_{xy} = f(x, y, z, p, q)$. (English and Russian summaries) *Z. Angew. Math. Mech.* **57** (1977), no. 11, 659-669. (Author's summary) **57** #1914 65M10
- Schnirman, E.** (with Oliveira, Colber G.) Conformal invariance of the equations of motion in curved spaces. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **17** (1972), 379-397. (Alan Barnes) **49** #4533 83.53
- Schnitzer, Hartmut** Funktionenkörper mit isomorphen absoluten Galoisgruppen. *J. Reine Angew. Math.* **292** (1977), 43-54. (W.-D. Geyer) **55** #12691 12A55 (12A90)
- Schnittler, Christoph** (with Rogazewski, Peter) Ein neues Verfahren zur Berechnung stationärer magnetischer und elektrostatischer Felder bei Anwesenheit polarisierbarer Materie. *Wiss. Z. Techn. Hochsch. Ilmenau* **20** (1974), no. 2, 119-128. (C. J. Bouwkamp) **50** #9183 78.65
- Schnitzer, F. J.** (with Prins, G.; Razen, Reinhard A.) A note on decompositions of the ground set of families of sets. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10**(30) (1975), no. 2, 219-222. (R. A. Brualdi) **52** #13401 05A05
- (with Razen, Reinhard A.) Einige Sätze über gemeinsame Transversalen zweier Mengenfamilien. *Arch. Math. (Basel)* **27** (1976), no. 3, 312-318. (E. Harzheim) **53** #12962 05A05 (04A20)
- (with Prins, G.; Razen, Reinhard A.) On Hall's condition in transversal theory. *J. Reine Angew. Math.* **289** (1977), 85-95. (Karsten Steffens) **57** #12238 05A05
- (with Kopetzky, Hans Günther) Bemerkungen zu einem Approximationssatz für regelmäßige Kettenbrüche. *J. Reine Angew. Math.* **293/294** (1977), 437-440. (Roland Fischer) **56** #266 10F20
- (with Grosswald, Emil) A class of modified ζ and L -functions. *Pacific J. Math.* **74** (1978), no. 2, 357-364. (I. John Zucker) **58** #21970 10H10
- Schnitzer, Franz** (with Katz, Morris W.) On a problem of J. Czipser. *Rend. Sem. Mat. Univ. Padova* **44** (1970), 85-90. (Calvin T. Long) **45** #8540 05A15
- (with Hwang, Jun Shung; Seidel, Wladimir) Uniqueness theorems for bounded holomorphic functions. *Math. Z.* **122** (1971), no. 4, 366-370. (S. M. Shah) **52** #11052 30A76
- (with Nishiura, Togo) A proof of an inequality of H. Thunsdorff. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 357-380* (1971), 1-2. (D. Boyd) **45** #5295 26A86
- (with Nishiura, Togo) Moments of convex and monotone functions. *Monatsh. Math.* **76** (1972), 135-137. (R. S. Booth) **46** #5547 26A48
- (with Imrich, Wilfried) Eine Charakterisierung konvexer Mengen. *Arch. Math. (Basel)* **26** (1975), 322-326. (Bernd Kind) **51** #8957 52A10
- Schnitzer, Howard J.** The $1/N$ expansion of renormalizable and non-renormalizable scalar field theories. *Nuclear Phys. B* **109** (1976), no. 2, 297-321. (Robert L. Warnock) **54** #1952 81.35
- Schnizer, Bernhard** The Cerenkov field of a uniformly charged thin disc moving through a homogeneous dispersionless dielectric. I. *Acta Phys. Austriaca* **34** (1971), no. 1-2, 48-64. (T. Erber) **54** #9352 78.33
- (with Ledinegg, E.; Papousek, W.) Elektromagnetische Wellenausbreitung zwischen Erde und Ionosphäre in einem sphärischen, anisotropen, nicht-homogenen Wellenleitermodell. (English summary) *Acta Phys. Austriaca* **44** (1976), no. 3-4, 293-313. (Rolf Leis) **54** #1881 78.35
- Schnoege, Klausjürgen** Drei-Punkte-Formeln zur numerischen Integration. *Z. Angew. Math. Mech.* **52** (1972), 427-430. (Henning Esser) **52** #4589 65D30
- Über eine Quadraturformel von Laplace. *Math. Nachr.* **58** (1973), 295-297. (F. Stenger) **49** #6570 65D30
- Ein mathematisches Spiel. *Math.-Phys. Semesterber.* **20** (1973), 20-25. (S. Cruceanu) **52** #5050 90D05
- Verallgemeinerungen der Simpsonschen Quadraturformel. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* **55** (1975), no. 4, T262-T263. (Walter Gautschi) **53** #9609 65D30
- Schnorr, Claus-Peter** Über die Zufälligkeit und den Zufallsgrad von Folgen. *Automatentheorie und formale Sprachen (Tagung, Math. Forschungsinst., Oberwolfach,*

- 1969), pp. 351-367. *Bibliographisches Inst., Mannheim*, 1970. (P. Gács) **49** #1827 68A20 (02F10)
- ★Zufälligkeit und Wahrscheinlichkeit. Eine algorithmische Begründung der Wahrscheinlichkeitstheorie. *Lecture Notes in Mathematics*, Vol. 218. Springer-Verlag, Berlin-New York, 1971. iv + 212 pp. (H. Bergström) **54** #2328 94A10 (68A20, 02E10)
- (with Stimm, H.) Endliche Automaten und Zufallsfolgen. (English summary) *Acta Informat.* **1** (1971/72), no. 4, 345-359. (Authors' summary) **55** #10169 94A30
- A unified approach to the definition of random sequences. *Math. Systems Theory* **5** (1971), 246-258. (G. O. H. Katona) **50** #6808 02E15 (60A05)
- Optimal Gödel numberings. *Information processing 71 (Proc. IFIP Congress, Ljubljana, 1971)*, Vol. 1: *Foundations and systems*, pp. 56-58. North-Holland, Amsterdam, 1972. (John T. Gill) **53** #7127 68A20
- Does the computational speed-up concern programming? *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 585-591. North-Holland, Amsterdam, 1973. (Ronald V. Book) **52** #16124 68A20
- Lower bounds for the product of time and space requirements of Turing machine computations. *Mathematical foundations of computer science (Proc. Sympos. and Summer School, Štrbské Pleso, 1973)*, pp. 153-161. *Math. Inst., Slovak Acad. Sci., Bratislava*, 1973. (John T. Gill) **53** #7128 68A20
- Process complexity and effective random tests. Fourth Annual ACM Symposium on the Theory of Computing (Denver, Colo., 1972). *J. Comput. System Sci.* **7** (1973), 376-388. (John T. Gill) **48** #3713 02E15 (60A05, 68A20)
- ★Rekursive Funktionen und ihre Komplexität. Teubner Studienbücher: Informatik. Leitfäden der angewandten Mathematik und Mechanik LAMM, Band 24. B. G. Teubner, Stuttgart, 1974. 191 pp. (G. Wechsung) **57** #2892 02Fxx (68A20)
- On maximal merging of information in Boolean computations. *Automata, languages and programming (Second Colloq., Univ. Saarbrücken, Saarbrücken, 1974)*, pp. 294-300. *Lecture Notes in Comput. Sci.*, Vol. 14, Springer, Berlin, 1974. (Dorothy Bollman) **55** #12570 05C35 (68A20, 02B05)
- Zwei lineare untere Schranken für die Komplexität Boolescher Funktionen. (English summary) *Computing (Arch. Elektron. Rechnen)* **13** (1974), no. 2, 155-171. (Kurt Mehlhorn) **54** #4190 68A20 (94A20)
- Optimal enumerations and optimal Gödel numberings. *Math. Systems Theory* **8** (1974/75), no. 2, 182-191. (Igor Lavrov) **52** #10385 02F20 (68A20)
- The network-complexity of equivalence and other applications of the network-complexity (extended abstract). *Automata theory and formal languages (Second GI Conf., Kaiserslautern, 1975)*, pp. 83-92. *Lecture Notes in Comput. Sci.*, Vol. 33, Springer, Berlin, 1975. (John T. Gill) **53** #7129 68A20 (94A20)
- The combinational complexity of equivalence. *Theoret. Comput. Sci.* **1** (1975/76), no. 4, 289-295. (Dorothy Bollman) **54** #1714 68A20 (94A20)
- (with Stumpf, G.) A characterization of complexity sequences. *Z. Math. Logik Grundlagen Math.* **21** (1975), 47-56. (John T. Gill) **51** #12027 68A20 (02F10)
- The network complexity and the Turing machine complexity of finite functions. *Acta Informat.* **7** (1976), no. 1, 95-107. (Pavel Strnad) **54** #9883 94A20 (68A20)
- A lower bound on the number of additions in monotone computations. *Theoret. Comput. Sci.* **2** (1976), no. 3, 305-315. (Zvi Galil) **54** #6556 68A20
- A survey of the theory of random sequences. *Basic problems in methodology and linguistics (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Part III, Univ. Western Ontario, London, Ont., 1975)*, pp. 193-211. *Univ. Western Ontario Ser. Philos. Sci.*, Vol. 11, Reidel, Dordrecht, 1977. (Editors) **58** #24431 60A05 (02E99)
- The network complexity and the breadth of Boolean functions. *Logic Colloquium 76 (Proc. Conf., Oxford, 1976)*, pp. 491-504. *Studies in Logic and Found. Math.*, Vol. 87, North-Holland, Amsterdam, 1977. (V. P. Orevkov) **58** #8494 68A20 (02E10, 94A20)
- Improved lower bounds on the number of multiplications/divisions which are necessary to evaluate polynomials. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 135-147. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (Author's summary) **58** #25124 68A20 (12-04)
- An algorithm for transitive closure with linear expected time. *Theoretical computer science (Third GI Conf., Darmstadt, 1977)*, pp. 329-338. *Lecture Notes in Comput. Sci.*, Vol. 48, Springer, Berlin, 1977. (Editors) **58** #25100 68A10 (05C99)
- (with Reynvaan, Conrad H. H.) Über Netzwerkgrößen höherer Ordnung und die mittlere Anzahl der in Netzwerken benutzten Operationen. *Theoretical computer science (Third GI Conf., Darmstadt, 1977)*, pp. 368-390. *Lecture Notes in Comput. Sci.*, Vol. 48, Springer, Berlin, 1977. (Jürgen Dassow) **57** #19141 94A20
- (with Klupp, H.) A universally hard set of formulae with respect to non-deterministic Turing acceptors. *Information Processing Lett.* **6** (1977), no. 2, 35-37. (Jan van Leeuwen) **56** #4241 68A20 (02B99)
- (with Fuchs, P. H.) General random sequences and learnable sequences. *J. Symbolic Logic* **42** (1977), no. 3, 329-340. (John P. Helm) **58** #13937 68A20 (02F25)
- Satisfiability is quasilinear complete in NQL. *J. Assoc. Comput. Mach.* **25** (1978), no. 1, 136-145. (Pavel Strnad) **58** #8495 68A20 (02F15)
- See also *Proceedings: Annual ACM Symposium on the Theory of Computing*, **50** #1553 and *Complexity of computations and algorithms*, **51** #2325
- Schnute, Jon (with Shinbrot, Marvin) Kinetic theory and boundary conditions for fluids. *Canad. J. Math.* **25** (1973), 1183-1215. (S. Harris) **48** #10404 82A5
- (with Shinbrot, Marvin) The Cauchy problem for the Navier-Stokes equations. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 457-474. (Howard Swann) **50** #13920 (E 54 #3187) 35Q10
- (with van den Driessche, Pauline) Two biological applications of Dulac's criterion. *Appl. Math. Notes* **1** (1975), no. 2, 75-81. (Archibald Brown) **55** #5241 92A15 (92A05, 34C05)
- Entropy and kinetic theory for a confined gas. *Canad. J. Math.* **27** (1975), no. 6, 1271-1315. (Simona Popp) **53** #10075 82A6
- See also *Shinbrot, Marvin*, **54** #3187
- Schober, Glenn (with Schiffer, Menahem M.) An extremal problem for the Fredholm eigenvalues. *Arch. Rational Mech. Anal.* **44** (1971/72), 83-92. (Y. Komatu) **49** #7435 (E 49 #7436) 30A38 (30A60)
- (with Duren, Peter L.) On a class of schlicht functions. *Michigan Math. J.* **18** (1971), 353-356. (W. K. Hayman) **45** #532c 30A34
- (with Schiffer, Menahem M.) A remark on the paper "An extremal problem for Fredholm eigenvalues" (Arch. Rational Mech. Anal. **44** (1971), 83-92). *Arch. Ratio Mech. Anal.* **46** (1972), 394. (Y. Komatu) **49** #7436 30A38 (30A60)
- (with Hengartner, Walter) Points extrémaux des familles de fonctions univalentes. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A837-A838. (F. R. Keogh) **45** #7038 30A36
- Estimates for Fredholm eigenvalues based on quasiconformal mapping. *Numerische, insbesondere approximationstheoretische Behandlung von Funktionalgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1972)*, pp. 211-21. *Lecture Notes in Math.*, Vol. 333, Springer, Berlin, 1973. (R. Kühnau) **56** #8846 30A60 (30A30)
- (with Hengartner, Walter) A remark on level curves for domains convex in one direction. Collection of articles dedicated to Eberhard Hopf on the occasion of his 70 birthday. *Applicable Anal.* **3** (1973), 101-106. (Paul Eenigenburg) **52** #14260 30A38 (30A60)
- (with Leutwiler, Heinz) Toeplitz forms and the Grunsky-Nehari inequalities. *Michigan Math. J.* **20** (1973), 129-135. (W. E. Kirwan) **48** #2371 (EA 48) 30A38
- (with Hengartner, Walter) Extreme points for some classes of univalent functions. *Trans. Amer. Math. Soc.* **185** (1973), 265-270. (Louis Brickman) **49** #559 30A36
- (with Hengartner, Walter) Propriétés des points d'appui des familles compactes de fonctions univalentes. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 551-553. (Horst Tietze) **51** #880 30A38
- (with Hengartner, Walter) Compact families of univalent functions and their support points. *Michigan Math. J.* **21** (1974), 205-217 (1975). (T. Giec) **51** #898 30A74 (46E10)
- ★Univalent functions—selected topics. *Lecture Notes in Mathematics*, Vol. 47. Springer-Verlag, Berlin-New York, 1975. v + 200 pp. (James A. Hummel) **58** #22527 30A36 (30A60)
- (with Schiffer, Menahem M.) Coefficient problems and generalized Grunsky inequalities for schlicht functions with quasiconformal extensions. *Arch. Rational Mech. Anal.* **60** (1975/76), no. 3, 205-228. (See Zbl 339 #30012) 30A34
- (with Schiffer, Menahem M.) Coefficient problems and generalized Grunsky inequalities for schlicht functions with quasiconformal extensions. *Arch. Rational Mech. Anal.* **60** (1975/76), no. 3, 205-228. (Tadashi Kuroda) **53** #8409 30A34
- (with Kirwan, William E.) On extreme points and support points for some families of univalent functions. *Duke Math. J.* **42** (1975), 285-296. (Louis Brickman) **51** #3416 30A32
- (with Schiffer, Menahem M.) A distortion theorem for quasiconformal mappings. *Advances in complex function theory (Proc. Sem., Univ. Maryland, College Park, Md., 1973-1974)*, pp. 138-147. *Lecture Notes in Math.*, Vol. 505, Springer, Berlin, 1976. (G. D. Anderson) **54** #10598 30A58
- (with Schiffer, Menahem M.) Representation of fundamental solutions for generalized Cauchy-Riemann equations by quasiconformal mappings. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **2** (1976), 501-531. (H. Renelt) **57** #12844 30A60 (35C99)
- (with Grassmann, E. G.; Hengartner, Walter) Support points of the class of close-to-convex functions. *Canad. Math. Bull.* **19** (1976), no. 2, 177-179. (From the text) **58** #6202 30A32
- (with Kirwan, William E.) Extremal problems for meromorphic univalent functions. *J. Analyse Math.* **30** (1976), 330-348. (F. R. Keogh) **56** #3283 30A38
- (with Cima, Joseph A.) Analytic functions with bounded mean oscillation and logarithms of H^p functions. *Math. Z.* **151** (1976), no. 3, 295-300. (C. N. Linden) **54** #13085 30A78
- (with Hengartner, Walter) Some new properties of support points for compact families of univalent functions in the unit disk. *Michigan Math. J.* **23** (1976), no. 2, 207-216 (1977). (G. V. Kuz'mina) **58** #11361 30A36
- Coefficients of inverses of meromorphic univalent functions. *Proc. Amer. Math. Soc.* **67** (1977), no. 1, 111-116. (Donald K. Blevins) **56** #12251 30A34
- A geometric condition for bounded mean oscillation. *Math. Z.* **161** (1978), no. 2, 291-292. (M. O. Gonzalez) **58** #11416 30A72
- Schoch, Manfred (with Baumann, Horst; Buros, Gustav; Dück, Werner; Eilhauer, Rolf; Elster, Karl-Heinz; Freier, Manfred; Gärtner, Karl-Heinz; Köth, Heinz; Lang, Rainer; Otto, Carl; Patzer, Heiko; Runge, Walter; Sachs, Horst; Strohe, Hans-Gerhard; Weiß, Manfred) ★Mathematik für ökonomische und ingenieurökonomische Fachrichtungen. Teil I: Mathematische Grundlagen. Herausgegeben von Heinz Köth, Carl Otto, Walter Runge und Manfred Schoch. *Verlag Die Wirtschaft*, Berlin, 1971. 997 pp. (Editors) **50** #6240 69.00
- Anwendung des Erweiterungsprinzips zur Entwicklung eines Lösungsverfahrens für eine Klasse von Min-Max-Problemen. (English and French summaries) *Math. Operationsforsch. Statist.* **4** (1973), no. 1, 7-22. (Author's summary) **57** #1891 65K05 (90C99)
- Zur Eckpunkt-Optimierung. (English and French summaries) *Math. Operationsforsch. Statist.* **5** (1974), no. 2, 83-92. (Author's summary) **56** #14760 90C99
- ★Das Erweiterungsprinzip und seine Anwendung zur Entwicklung von Algorithmen für die Lösung kombinatorischer Optimierungsaufgaben. *VEB Deutscher Verlag der Wissenschaften*, Berlin, 1976. 300 pp. (J. Abraham) **56** #1716 65K05 (90C10)
- (with Grundler, G.) Das Tourenproblem mit zentralem Fuhrpark bei unterschiedlichen Fahrzeugtypen. (English and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 3, 329-337. (Wolfgang Wetterling) **57** #15429 90C10 (90B20)
- (with Lyska, Werner) Kombinatorische Algorithmen zur Lösung spezieller nichtlinearer 0-1-Optimierungsaufgaben. (English and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optim.* **9** (1978), no. 1, 9-20. (Ferenc Forgó) **58** #20457 90C30
- See also *Lehrbuch der Mathematik für Wirtschaftswissenschaften*, **56** #4289
- Schochet, Claude ★Cobordism from an algebraic point of view. *Lecture Notes Series*, No. 29. *Mathematisk Institut, Aarhus Universitet, Aarhus*, 1971. iv + 190 pp. (A. Liulevicius) **45** #6020 57D75 (18G99, 55F45)
- (with Harper, John R.) Coalgebra extensions in two-stage Postnikov systems. *Math.*

- id. 29 (1971), 232-236 (1972). (R. J. Milgram) 46 #9985 55G45
- A two-stage Postnikov system where $E_2 \neq E_\infty$ in the Eilenberg-Moore spectral sequence. *Trans. Amer. Math. Soc.* 157 (1971), 113-118. (J. P. May) 46 #6362 20
- (with Kraines, David) Differentials in the Eilenberg-Moore spectral sequence. *J. Appl. Algebra* 2 (1972), no. 2, 131-148. (J. Stasheff) 45 #9331 55H20
- (with Kaminker, Jerome) Ext(X) from a homological point of view. *Proceedings Conference Operator Theory (Dalhousie Univ., Halifax, N. S., 1973)*, pp. 129-140. *Lecture Notes in Math.*, Vol. 345, Springer, Berlin, 1973. (J. W. Bunce) 56 #6429 46M20 335, 46L99, 58G10
- On the bordism ring of complex projective space. *Proc. Amer. Math. Soc.* 37 (1973), -270. (R. E. Stong) 46 #6342 55B20 (57A20)
- On the structure of graded formal groups of finite characteristic. *Proc. Cambridge Philos. Soc.* 73 (1973), 215-222. (Bodo Pareigis) 49 #5076 16A24
- (with Kaminker, Jerome) Steenrod homology and operator algebras. *Bull. Amer. Math. Soc.* 81 (1975), no. 2, 431-434. (M. F. Atiyah) 56 #9287 46M20 (55B15, 510)
- (with Brown, Lawrence G.) K_1 of the compact operators is zero. *Proc. Amer. Math. Soc.* 59 (1976), no. 1, 119-122. (P. A. Fillmore) 54 #984 47B05 (58G15)
- (with Kaminker, Jerome) Topological obstructions to perturbations of pairs of operators. *K-theory and operator algebras (Proc. Conf., Univ. Georgia, Athens, Ga., 1975)*, pp. 70-77. *Lecture Notes in Math.*, Vol. 575, Springer, Berlin, 1977. (M. F. Atiyah) #17625 55B35 (46L05, 46M20, 47B37)
- (with Kahn, Daniel S.; Kaminker, Jerome) Generalized homology theories on compact metric spaces. *Michigan Math. J.* 24 (1977), no. 2, 203-224. (Harold Hastings) #13921 55B35
- (with Kaminker, Jerome) K-theory and Steenrod homology: applications to the John-Douglas-Fillmore theory of operator algebras. *Trans. Amer. Math. Soc.* 227 (1977), 63-107. (P. A. Fillmore) 55 #4138 55B15 (46M20)
- Netman, Irwin E. (with Busby, Robert C.) Compact induced representations. *Canad. Math. Bull.* 24 (1972), 5-16. (H. Leptin) 45 #2495 46J99 (22D99, 43A20)
- Kernels of representations and group extensions. *Proc. Amer. Math. Soc.* 36 (1972), 4-570. (S. Strătilă) 47 #8761 22D10
- (with Busby, Robert C.; Smith, Harvey A.) Integral operators and the compactness induced representations. *Trans. Amer. Math. Soc.* 164 (1972), 461-477. (A. B. Illcox) 45 #4167 46J99 (47G05)
- Compact and Hilbert-Schmidt induced representations. *Duke Math. J.* 41 (1974), -102. (H. Leptin) 48 #11392 22D30
- (with Wu, Yel Chiang) Continuity of stability groups and conjugation. *Rocky Mountain J. Math.* 5 (1975), 309-316. (H. Salzmann) 50 #14715 54H15
- (with Fontenot, Robert A.) Induced representations of groups on Banach spaces. *Rocky Mountain J. Math.* 7 (1977), no. 1, 53-82. (R. Rigelhof) 56 #15824 22D12
- Integral operators in the theory of induced Banach representations. *Mem. Amer. Math. Soc.* 16 (1978), no. 207, vii + 53 pp. (Jonathan M. Rosenberg) 58 #6060 22D30 (22D12, 47B10)
- Lu, A. V. (with Luus, Rein) Relationship of the two-level optimization procedure to the discrete maximum principle. *AIChE J.* 18 (1972), no. 3, 659-660. (R. S. Anderssen) 2 #16023 65K05
- K, Eberhard (with Fenske, Christiano Clemente) Nuklearität und lokale Konvexität von Folgenräumen. *Math. Nachr.* 45 (1970), 327-335. (From the authors' introduction) 4 #884 46A15
- ★Diametrale Dimension, approximative Dimension und Anwendungen. Gesellschaft für Mathematik und Datenverarbeitung, Bonn, Ber. No. 43. *Gesellschaft für Mathematik und Datenverarbeitung, Bonn*, 1971. ii + 48 pp. (A. Pietsch (Zbl 228 #46009)) 5 #11002 46A99
- (with Rosenberger, Bernd) Über nukleare (F)-Räume mit Basis. *Compositio Math.* 5 (1972), 207-219. (M. S. Ramanujan) 47 #3939 46A35
- Über die Konvergenzgeschwindigkeit projektiver Verfahren. II. *Math. Z.* 127 (1972), 191-198. (W. C. Rheinboldt) 46 #10199 65J05
- Approximation von Elementen eines lokalkonvexen Raumes. *Studia Math.* 41 (1972), 263-271. (J. Blatter) 47 #2305 46A05 (41A65)
- (with Fenske, Christiano Clemente) Nuclear spaces of maximal diametral dimension. *Compositio Math.* 26 (1973), 303-308. (Tosun Terzioğlu) 48 #9324 46A05
- On projection methods for linear equations of the second kind. *J. Math. Anal. Appl.* 45 (1974), 293-299. (A. Pietsch) 49 #9657 47A50 (65J05)
- Approximation numbers of bounded operators. *J. Math. Anal. Appl.* 51 (1975), no. 2, 440-448. (A. Pietsch) 53 #1355 47H99 (47B10)
- (with Weis, Lutz) Einige Aspekte der Funktionalanalysis. *Jber. Deutsch. Math.-Verein.* 77 (1975/76), no. 3, 138-159. (See RŽMat 1976 #7 B585) 47-02 (46-02)
- See also *Proceedings: Conference on Problems in Nonlinear Functional Analysis*, 52 #15125
- Rock, Rolf Denotation and existence in logical systems. *Proceedings of the First Scandinavian Logic Symposium (Åbo, 1968)*, pp. 134-165. *Filosofiska Studier*, No. 8, Filosof. Föreningen och Filosof. Inst., Uppsala Univ., Uppsala, 1970. (M. J. Cresswell) 50 #12667 02C10
- ★Quasi-connectives definable in concept theory. *Library of Theoria*, No. 13. C. W. K. Gleerup, Lund, 1971. 75 pp. (M. J. Cresswell) 48 #5823 02C05
- On the axiom of choice and the continuum hypothesis. *Z. Math. Logik Grundlagen Math.* 17 (1971), 35-37; correction, *ibid.* 17 (1971), 464. (A. H. Kruse) 45 #6616 02K20
- On standard models of set theories. *Logique et Analyse (N.S.)* 16 (1973), 413-433. (P. Štěpánek) 50 #6846 02K15
- Set theory can provide for all accessible ordinals. *Logique et Analyse (N.S.)* 16 (1973), 595-598. (P. Štěpánek) 50 #6847 02K15
- A critique of some logical treatments of ontological predicates. *Proceedings of a Colloquium on Logic and Ontology (Internat. Forschungszentrum für Grundfragen der Wissenschaft., Salzburg, 1973)*. *J. Philos. Logic* 3 (1974), 317-322. (Merrie Bergmann) 57 #12163 02A05
- The consistency of the axiom of constructibility in ZF with non-predicative ultimate classes. *Logique et Analyse (N.S.)* 17 (1974), 95-100. (P. Štěpánek) 51 #145 02K05
- A note on models of set theories. *Logique et Analyse (N.S.)* 17 (1974), no. 67-68, 509. (Editors) 55 #99 02K15
- A note on the axiom of choice and the continuum hypothesis. *Notre Dame J. Formal Logic* 18 (1977), no. 3, 409-414. (L. Bukovský) 58 #10450 02K25 (02K20)
- Schoedon, P. M. (with Filippi, Siegfried) Explizite klassische und Hermite'sche Runge-Kutta-Verfahren zur numerischen Lösung von nichtlinearen Volterra-Integralgleichungen. *Mitt. Math. Sem. Giessen No. 93* (1971), 64-81. (P. Linz) 45 #4689 65R05
- Schoeller, Colette Groupes affines, commutatifs, unipotents sur un corps non parfait. *Bull. Soc. Math. France* 100 (1972), 241-300. (T. Kambayshi) 52 #13863 (EA 53) 14L15
- Sur l'homologie de certains anneaux locaux. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 23, A1099-A1102. (Author's summary) 58 #10867 13D99 (13H99)
- Schoeman, M. J. On splitting extensions by torsion groups. *Nederl. Akad. Wetensch. Proc. Ser. A* 76 = *Indag. Math.* 35 (1973), 132-136. (F. L. Hardy) 47 #1975 20K40
- (with Pretorius, L. M.) A note on P_T -groups. *Nederl. Akad. Wetensch. Proc. Ser. A* 78 = *Indag. Math.* 37 (1975), 224-229. (K. M. Rangaswamy) 51 #5804 20K40
- Embedding in torsion-complete groups. (Afrikaans summary) *Tydskr. Natuurwetenskap* 15 (1975), no. 1, 7-8. (F. L. Hardy) 53 #8283 20K35
- Injective properties of torsion-complete mixed groups. *An. Şti. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.)* 22 (1976), no. 1, 11-13. (R. Mines) 56 #12145 20K10
- See also *Symposium: Algebra*, 58 #16739
- Schoen, James A. Factor representations and factor states on a C^* -algebra. *Canad. J. Math.* 28 (1976), no. 1, 130-134. (H. Halpern) 53 #1284 46L05
- Schoen, Richard (with Simon, Leon; Yau, Shing Tung) Curvature estimates for minimal hypersurfaces. *Acta Math.* 134 (1975), no. 3-4, 275-288. (Robert Gulliver) 54 #11243 53C40 (49F10)
- (with Yau, Shing Tung) Harmonic maps and the topology of stable hypersurfaces and manifolds with non-negative Ricci curvature. *Comment. Math. Helv.* 51 (1976), no. 3, 333-341. (H. Wu) 55 #11302 58E99 (53C20)
- (with Simon, Leon; Almgren, Frederick J., Jr.) Regularity and singularity estimates on hypersurfaces minimizing parametric elliptic variational integrals. I, II. *Acta Math.* 139 (1977), no. 3-4, 217-265. (William K. Allard) 57 #7333 49F22
- (with Yau, Shing Tung) On univalent harmonic maps between surfaces. *Invent. Math.* 44 (1978), no. 3, 265-278. (Jill P. Mesirov) 57 #17706 58E15
- Schoen, Robert (with Keyfitz, Nathan; Preston, Samuel H.) Inferring probabilities from rates: extension to multiple decrement. *Skand. Aktuarietidskr.* 1972, 1-13 (1973). (B. Brainerd) 50 #8894 62P05 (92A15)
- Schoenberg, B. See Hecke, Erich, 51 #7795
- Schoenberg, Isaac Jacob The perfect B-splines and a time-optimal control problem. *Israel J. Math.* 10 (1971), 261-274. (G. Nielson) 47 #9130 41A15
- Norm inequalities for a certain class of C^∞ functions. *Israel J. Math.* 10 (1971), 364-372. (V. Ganapathy Iyer) 45 #3661 26A93
- (with Cavaretta, Alfred S., Jr.) Solution of Landau's problem concerning higher derivatives on the halfline. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970) (Russian)*, pp. 297-308. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (A. K. Varma) 51 #5868 26A84
- On polynomial spline functions on the circle. I. Their interpolatory properties. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 403-418. *Akadémiai Kiadó, Budapest*, 1972. (Derek W. Arthur) 52 #11415 41A15
- On polynomial spline functions on the circle. II. Monosplines and quadrature formulae. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 419-433. *Akadémiai Kiadó, Budapest*, 1972. (Derek W. Arthur) 52 #11416 41A15
- Cardinal interpolation and spline functions. II. Interpolation of data of power growth. Collection of articles dedicated to J. L. Walsh on his 75th birthday, VIII. *J. Approximation Theory* 6 (1972), 404-420. (R. Franke) 49 #5649 41A15
- Notes on spline functions. I. The limits of the interpolating periodic spline functions as their degree tends to infinity. *Nederl. Akad. Wetensch. Proc. Ser. A* 75 = *Indag. Math.* 34 (1972), 412-422. (A. Sharma) 47 #5492 41A15 (42A08)
- ★Cardinal spline interpolation. Conference Board of the Mathematical Sciences Regional Conference Series in Applied Mathematics, No. 12. *Society for Industrial and Applied Mathematics, Philadelphia, Pa.*, 1973. vi + 125 pp. (H. L. Loeb) 54 #8095 41A15
- (with Greville, Thomas N. E.; Sharma, Ambikeshwar) The spline interpolation of sequences satisfying a linear recurrence relation. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 365-367. *Academic Press, New York*, 1973. (Charles K. Chui) 52 #3806 41A15
- (with Silliman, Sherwood D.) On semi-cardinal quadrature formulae. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 461-467. *Academic Press, New York*, 1973. (Walter Gautschi) 52 #14781 41A55
- Splines and histograms. *Spline functions and approximation theory (Proc. Sympos., Univ. Alberta, Edmonton, Alta., 1972)*, pp. 277-327. *Internat. Ser. Numer. Math.*, Vol. 21, Birkhäuser, Basel, 1973. (Ralph E. Carlson) 51 #8685a (E 51 #8685b) 41A15
- The elementary cases of Landau's problem of inequalities between derivatives. *Amer. Math. Monthly* 80 (1973), 121-158. (R. A. Askey) 47 #3619 26A84
- Notes on spline functions. III. On the convergence of the interpolating cardinal splines as their degree tends to infinity. *Israel J. Math.* 16 (1973), 87-93. (Sherwood D. Silliman) 54 #13393 41A15
- (with Richards, Franklin B.) Notes on spline functions. IV. A cardinal spline analogue of the theorem of the brothers Markov. *Israel J. Math.* 16 (1973), 94-102. (Sherwood D. Silliman) 54 #13394 41A15
- Remarks concerning a numerical inversion of the Laplace transform due to Bellman, Kalaba, and Lockett. *J. Math. Anal. Appl.* 43 (1973), 823-828. (P. N. Rathie) 48 #4659 44A10
- (with Lipow, Peter R.) Cardinal interpolation and spline functions. III. Cardinal Hermite interpolation. *Linear Algebra and Appl.* 6 (1973), 273-304. (R. Franke)

- 57 #17084 41A15
(with Sharma, Ambikeshwar) Cardinal interpolation and spline functions. V. The B -splines for cardinal Hermite interpolation. *Linear Algebra and Appl.* 7 (1973), 1-42. (R. Franke) 57 #17085 41A15
(with de Boor, Carl) Unique prime factorization and lattice points. *Math. Mag.* 46 (1973), 198-203. (D. A. Klarner) 49 #4914 10A05 (50A05)
Cardinal spline interpolation and the exponential Euler splines. *Functional analysis and its applications (Internat. Conf., Eleventh Anniversary of Matscience, Madras, 1973; dedicated to Atladi Ramakrishnan)*, pp. 477-489. *Lecture Notes in Math.*, Vol. 399, Springer, Berlin, 1974. (Derek W. Arthur) 52 #14760 41A15
Spline functions and differential equations—first order equations. *Studies in numerical analysis (papers in honour of Cornelius Lanczos on the occasion of his 80th birthday)*, pp. 311-324. Academic Press, London, 1974. (David R. Ferguson) 51 #13532 41A15
Cardinal interpolation and spline functions. VI. Semi-cardinal interpolation and quadrature formulae. *J. Analyse Math.* 27 (1974), 159-204. (See Zbl 297 #41001) 41A15
Cardinal interpolation and spline functions. VI. Semi-cardinal interpolation and quadrature formulae. *J. Analyse Math.* 27 (1974), 159-204. 58 #12097a 41A15
Cardinal interpolation and spline functions. VII. The behavior of cardinal spline interpolants as their degree tends to infinity. *J. Analyse Math.* 27 (1974), 205-229. (See Zbl 303 #41008) 41A15
Cardinal interpolation and spline functions. VII. The behavior of cardinal spline interpolants as their degree tends to infinity. *J. Analyse Math.* 27 (1974), 205-229. 58 #12097b 41A15
(with Silliman, Sherwood D.) On semicardinal quadrature formulae. *Math. Comp.* 28 (1974), 483-497. (Walter Gautschi) 49 #6571 65D30
Remarks on two geometric conjectures of L. Fejes Tóth. *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* 21 (1975), 9-13. (H. S. M. Coxeter) 53 #6420 52A10
On the motion of a billiard-ball in two dimensions. *Delta (Waukesha)* 5 (1975), 1-18. (J. B. Roberts) 51 #410 10K15
Notes on spline functions. V. Orthogonal or Legendre splines. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. I. *J. Approximation Theory* 13 (1975), 84-104. (Sherwood D. Silliman) 56 #16210 41A15
(with Newman, Donald J.) Splines and the logarithmic function. *Pacific J. Math.* 61 (1975), no. 1, 241-258. (Charles K. Chui) 56 #6203 41A15
(with de Boor, Carl) Cardinal interpolation and spline functions. VIII. The Budan-Fourier theorem for splines and applications. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 1-79. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (From the introduction) 58 #12097c 41A15
On Micchelli's theory of cardinal \mathcal{E} -splines. *Studies in spline functions and approximation theory*, pp. 251-276. Academic Press, New York, 1976. (Author's summary) 58 #6830 41A15
On the remainders and the convergence of cardinal spline interpolation for almost periodic functions. *Studies in spline functions and approximation theory*, pp. 277-303. Academic Press, New York, 1976. (Author's summary) 58 #1838 41A05
Notes on spline function. VI. Extremum problems of the Landau-type for the differential operators $D^2 \pm 1$. *Studies in spline functions and approximation theory*, pp. 353-369. Academic Press, New York, 1976. (Author's summary) 58 #1871 41A15
On the location of the frets on the guitar. *Amer. Math. Monthly* 83 (1976), no. 7, 550-552. (H. S. M. Coxeter) 53 #13126 10F20
(with Greville, Thomas N. E.; Sharma, Ambikeshwar) The spline interpolation of sequences satisfying a linear recurrence relation. *J. Approximation Theory* 17 (1976), no. 3, 200-221. (M. Marsden) 54 #13388 41A15
Extremum problems for the motions of a billiard ball. I. The L_p norm, $1 < p < \infty$. *Nederl. Akad. Wetensch. Proc. Ser. A 79 = Indag. Math.* 38 (1976), no. 1, 66-75. (C. G. Lekkerkerker) 52 #15236 52A20
Extremum problems for the motions of a billiard ball. II. The L_∞ norm. *Nederl. Akad. Wetensch. Proc. Ser. A 79 = Indag. Math.* 38 (1976), no. 3, 263-279. (C. G. Lekkerkerker) 53 #9041 52A40 (26A86, 10E05, 05B30)
On the zeros of the successive derivatives of integral functions. II. *Complex analysis (Proc. Conf., Univ. Kentucky, Lexington, Ky., 1976)*, pp. 109-116. *Lecture Notes in Math.*, Vol. 599, Springer, Berlin, 1977. (J. P. Singh) 58 #11407 30A66
The Landau problem for motions in a ring and in bounded continua. *Amer. Math. Monthly* 84 (1977), no. 1, 1-12. (Luciana Lupas) 55 #10623 26A84 (41A15)
Extremum problems for the multi-dimensional case of König and Szűcs of billiard ball motions. *C. R. Math. Rep. Acad. Sci. Canada* 1 (1978/79), no. 1, 37-40. (J. Hersch) 58 #24012 52A40
The Landau problem. I. The case of motions on sets. *Nederl. Akad. Wetensch. Indag. Math.* 40 (1978), no. 2, 276-286. (A. K. Varma) 58 #11288 26A87
See also Collection: Schoenberg, Isaac Jacob, 47 #6405; Collection: Schoenberg, Isaac Jacob, 48 #8153; Collection: Schoenberg, Isaac Jacob, 48 #8154; Collection: Schoenberg, Isaac Jacob, 48 #8155 (EA 48); Karlin, Samuel, 49 #2234; Bibliography: Schoenberg, Isaac Jacob, 49 #2235; Doctoral students of I. J. Schoenberg, 49 #2236;
Linear operators and approximation, 50 #5498; Problems: Linear operators and approximation, 51 #6219; de Boor, Carl, 51 #8685b and Studies in spline functions and approximation theory, 52 #14741
Schoenberg, M. (with Censor, Dan) Two dimensional wave problems in rotating elastic media. *Appl. Sci. Res.* 27 (1972/73), 401-414. (F. Abramovici) 48 #10254 73J35
(with Brandstatter, J. J.) Dynamic programming, Fermat's principle and stochastic eikonal equations. *J. Franklin Inst.* 298 (1974), 223-230. (G. M. Ewing) 50 #3070 49C99
Schoenberg, Bruno ★Elliptic modular functions: an introduction. Translated from the German by J. R. Smart and E. A. Schwandt. Die Grundlehren der mathematischen Wissenschaften, Band 203. Springer-Verlag, New York-Heidelberg, 1974. viii+233 pp. (W. W. Stothers) 54 #236 10D05
See also Scholz, Arnold, 50 #2046
Schoenberg-Deuel, Johanna (with Hess, Peter) Inéquations variationnelles elliptiques non coercives. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 719-722. (R. Temam)
- 50 #8201 49A30 (35J99)
(with Hess, Peter) A criterion for the existence of solutions of non-linear boundary value problems. *Proc. Roy. Soc. Edinburgh Sect. A* 74 (1974/75) (1976). (H. Amann) 55 #13070 35J05
(with Vaillancourt, Rémi) Flots sur le tore bidimensionnel. (English summary) *R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 10, A447-A448. (Authors' summary) 58 #24371 58F10
Schoener, Thomas W. Alternatives to Lotka-Volterra competition: models of inter-complexity. *Theoret. Population Biology* 10 (1976), no. 3, 309-333. (Author's summary) 58 #20619 92A15
Schoenfeld, Alan H. Continuous surjections from Cantor sets to compact metric spaces. *Proc. Amer. Math. Soc.* 46 (1974), 141-142. (F. Burton Jones) 49 #9822 54A10
Continuous measure-preserving maps onto Peano spaces. *Pacific J. Math.* 58, no. 2, 627-642. (C. J. Himmelberg) 52 #4254 54F25 (28A65)
(with Gruenhage, Gary) An alternate characterization of the Cantor set. *Amer. Math. Soc.* 53 (1975), no. 1, 235-236. (J. Mioduszewski) 51 #14005 (54F65)
(with Putcha, Mohan S.) Applications of algebraic and combinatoric techniques to a problem in geometry. *J. Pure Appl. Algebra* 7 (1976), no. 2, 235-237. (Hugo Schneider) 52 #10446 05A99 (20M20)
Continuous mappings from Cantor spaces onto inverse limit spectra. *Proc. Amer. Math. Soc.* 60 (1976), 331-334 (1977). (Jerry F. Williams) 54 #8551 54B25 (54C10)
Schoenfeld, David A. Asymptotic properties of tests based on linear combinations of orthogonal components of the Cramér-von Mises statistic. *Ann. Statist.* 5 (1977), 1017-1026. (B. Ja. Levit) 56 #7003 62G10
Schoenfeld, Lowell (with Harris, Bernard) A composition theorem for the enumeration of certain subsets of symmetric semigroups and the corresponding sets of labeled functional digraphs. *Combinatorial theory and its applications, II (Proc. Colloq., Balatonfüred, 1969)*, pp. 637-650. North-Holland, Amsterdam, 1970. (J. W. Nešetřil) 45 #6699 05C30
(with Berndt, Bruce C.) Periodic analogues of the Euler-Maclaurin and Poisson summation formulas with applications to number theory. *Acta Arith.* 28 (1975/76) 1, 23-68. (Karl-Heinz Indlekofer) 52 #5586 10G05
(with Rosser, J. Barkley) Sharper bounds for the Chebyshev functions $\theta(x)$ and $\psi(x)$. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his seventieth birthday. *Math. Comp.* 29 (1975), 243-269. (R. P. Brent) 56 #15581 10H05
Sharper bounds for the Chebyshev functions $\theta(x)$ and $\psi(x)$. II. *Math. Comp.* 29 (1976), no. 134, 337-360. (R. P. Brent) 56 #15581b 10H05
Corrigendum: "Sharper bounds for the Chebyshev functions $\theta(x)$ and $\psi(x)$ ". *Math. Comput.* 30 (1976), no. 134, 337-360. *Math. Comp.* 30 (1976), no. 136, 900-901. (R. P. Brent) 56 #15581c 10H05
Schoenstadt, Arthur L. On a new stability criterion. (Romanian summary) *Bul. Politehn. Iaşi. (N.S.)* 20(24) (1974), no. 1-2, sect. I, 73-77. (F. Brauer) 50 #734D10
The effect of spatial discretization on the steady-state and transient solutions of dispersive wave equation. *J. Computational Phys.* 23 (1977), no. 4, 364-379. (Manohar) 56 #10433 76J65
Schoenwaelder, U. Finite groups with a Sylow 2-subgroup of type M_{24} . I, II. *J. Algebra* (1974), 20-45; *ibid.* 28 (1974), 46-56. (M. Herzog) 51 #5744 20D05
Finite groups with Sylow 2-subgroups isomorphic to $T/Z(T)$, where T is a M_{24} . *J. Algebra* 36 (1975), no. 3, 395-407. (Fletcher Gross) 53 #8232 20D05
Schoepfle, Gordon M. (with Rehm, Warren S.; Young, John H.) Ionic concentration profiles and charge distribution for the domain of a polarized spherical cell. *Bull. Math. Biol.* 40 (1978), no. 3, 411-424. (David Foster) 57 #15554 92A05
Schofield, Brian The mathematics of yarn irregularity. *Bull. Inst. Math. Appl.* 9 (1973), 11, 348-351. (Not reviewed) 73J62
Schofield, Norman Transitivity of preferences on a smooth manifold of alternatives. *Econom. Theory* 14 (1977), no. 1, 149-171. (Yves Balasko) 57 #8986 90A05 (92A05)
(with Alt, James) Clique analysis of a tolerance relation. *J. Math. Sociol.* 3 (1978/79), no. 1, 155-162. (Authors' summary) 58 #26180 92A20 (05C35)
Schofield, P. Time correlations in classical statistical mechanics. *J. Phys. A* 7 (1974), 246-259. (Author's summary) 50 #15759 82J05
Schoißengeier, Johannes Gleichmäßige Gleichverteilung in lokalkompakten Räumen. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* 1974, no. 8, 95-101. (William A. Browder) 52 #10654 10K05
Gleichmäßige Gleichverteilung in lokalkompakten Räumen. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* 184 (1975), no. 5-7, 171-202. (Harald Niederreiter) 55 #2821 10K05
(with Maxones, W.; Richards, Ian; Rindler, Harald) Ein metrisches Ergebnis die Diskrepanz von Folgen. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* 184 (1976), no. 8-10, 405-409 (1977). (Gérard Rauzy) 58 #22002 10K30
(with Niederreiter, Harald) Almost periodic functions and uniform distribution. I. *J. Reine Angew. Math.* 291 (1977), 189-203. (M. Mendès France) 55 #10410K35 (10K05, 10K30)
(with Rindler, Harald) Gleichverteilte Folgen und differenzierbare Funktionen. (English summary) *Monatsh. Math.* 84 (1977), no. 2, 125-131. (Harald Niederreiter) 58 #10801 10K05
Über die Diskrepanz gewisser Folgen Mod 1 mit Hilfe Diophantischer Approximation. *Math. Z.* 159 (1978), no. 2, 169-179. (L. Kuipers) 58 #10810K30 (10K05)
Schol-Cancelier, Claudy (with Goullet de Rugy, Alain; MacGibbon, Brenda) Quelques résultats nouveaux sur les points extrémaux d'un simplexe compact. *Séminaire Choquet 10e année (1970/71), Initiation à l'analyse, Fasc. 2, Exp. No. 18, 13 pp. Secrétariat Mathématique, Paris, 1971.* (Zbl 222 #46012) 57 #17204 46A99
Sur la régularité des solutions faibles du problème de Dirichlet associé à un opérateur intégral-différentiel. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1977), no. 14, A795-A798. (Author's summary) 55 #13060 35D10 (35J70, 45J05)
Schöler, Ulrich (with Fischer, Werner) Kompakte Mengen in den Räumen $L_p(X, \mu)$. *Math. Nachr.* 64 (1974), 323-332. (J. A. Van Casteren) 50 #10793 46E30

- with Fischer, Werner) In non-locally bounded L_p -spaces the norm is not almost
tive. *Studia Math.* **51** (1974), 125-128. (J. A. Van Casteren) **50** #2896 46E30
- with Fischer, Werner) Sur la bornitude d'une mesure vectorielle. (English
ary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 10, A519-A522. (Z.
ki) **53** #3252 28A45 (46E30, 46G10)
- with Fischer, Werner) A characterization of non-locally bounded Orlicz spaces by
r series with finite domain of convergence. *Comment. Math. Prace Mat.* **19** (1976),
67-72. (M. M. Rao) **54** #8259 46E30
- with Fischer, Werner) The range of vector measures into Orlicz spaces. *Studia*
59 (1976), no. 1, 53-61. (Igor Klavánek) **55** #611 28A45 (46E30)
- with Fischer, Werner) On derivatives of vector measures into $l_p(X)$, $0 < p < 1$.
ment. *Math. Prace Mat.* **20** (1977), no. 1, 53-56. (Barbara T. Faires) **56** #16371
0 (28A45)
- William B. (with Gaglioli, Richard A.) Differentiation of tensor fields. *SIAM*
14 (1972), 271-277. (E. J. Post) **46** #6196 53A45
- with Gaglioli, Richard A.) Normals to coordinate hypersurfaces as weight
s-one covariant base vectors. *SIAM Rev.* **15** (1973), 275-282. (J. Buchanan)
9578 53A45
- Robert A. (with Reed, Irving S.; Truong, T. K.; Welch, Lloyd R.) The fast
ding of Reed-Solomon codes using Fermat theoretic transforms and continued
ions. *IEEE Trans. Information Theory* **IT-24** (1978), no. 1, 100-106. (Stefan
unekov) **58** #20794 94A10
- Arnold ★Einführung in die Zahlentheorie. Überarbeitet und herausgegeben von
er Schoenberg. Fünfte Auflage. Sammlung Götschen, Band 5131. Walter de
ter, Berlin-New York, 1973. 128 pp. (Editors) **50** #2046 10-01
- Friedrich-Wilhelm A comparison of efficient location estimators. *Ann. Statist.* **2**
4, 1323-1326. (G. Manija) **50** #15137 62G20
- Weighted median regression estimates. *Ann. Statist.* **6** (1978), no. 3, 603-609.
es N. Adichie) **57** #7893 62J05 (62F20, 62G05)
- H. See Frege, Gottlob, **49** #10510
- Hans-Eberhard Zur Messbarkeit konvergenter Pfade diskreter stochastischer
esse. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* **27** (1978),
4, 131-134. (H. Hering) **58** #24509 60G17 (35J25)
- Reinhard Abschätzungen linearer Durchmesser in Sobolev- und Besov-Räumen.
English summary) *Manuscripta Math.* **11** (1974), 1-14. (J. Blatter) **50** #8054
35 (41A65)
- Durchmesserschätzungen für die Einheitskugel des Sobolev-Raumes $W_q^s(U)$ in
 U . (English summary) *Applicable Anal.* **5** (1975/76), no. 4, 257-264. (A. Kufner)
#12738 41A65 (41A25)
- Approximation von Sattelpunkten mit finiten Elementen. (English summary) *Finite*
mente (Tagung, Univ. Bonn, Bonn, 1975), pp. 53-66. *Bonn. Math. Schrift.*, No. 89,
Angew. Math., Univ. Bonn, Bonn, 1976. (Author's summary) **57** #11111 65N30
- L_∞ -convergence of saddle-point approximations for second order problems. (French
summary) *RAIRO Anal. Numér.* **11** (1977), no. 2, 209-216, 221. (T. Styš) **56** #7247
115 (65N30)
- A mixed method for 4th order problems using linear finite elements. (French
summary) *RAIRO Anal. Numér.* **12** (1978), no. 1, 85-90, iii. (P. G. Ciarlet) **58** #3549
430
- Siegfried (with Weiss, Wolfgang) Runge-Kutta-Nyström-Verfahren mit variablen
amern zur numerischen Behandlung von gewöhnlichen Differentialgleichungen
ter Ordnung. *Beiträge Numer. Math.* **2** (1974), 211-227. (Jochen Werner)
#1738 65L05
- (with Schnerr, Fritz) Fehlerabschätzungen für das charakteristische
angswertproblem bei der hyperbolischen Differentialgleichung $z_{xy} = f(x, y, z)$. *Wiss.*
Techn. Univ. Dresden **23** (1974), 1077-1083. (H. C. Kranzer) **52** #4648 65M15
- Runge-Kutta-Verfahren mit festen und variablen Parametern zur Lösung von
temen gewöhnlicher Differentialgleichungen 1. Ordnung. (Czech summary) *Apl.*
20 (1975), 166-185. (H.-O. Kreiss) **51** #7296 65L05
- Increase of the order of convergence by variable parameters. (Bulgarian and
ssian summaries) Conference on Differential Equations and Applications (Ruse,
75). *Godišnik Visš. Učebn. Zaved. Plovdiva Mat.* **11** (1975), no. 3, 191-198 (1977).
uthor's summary) **57** #11061 65L05
- (with Bräuer, Klaus; Thomas, Stefan) Ein A -stabiles einstufiges
senbrock-Verfahren dritter Ordnung. *Beiträge Numer. Math.* **5** (1976), 191-199. (Zbl
#65067) **58** #19154 65L05
- U. Kurt On averaging Lefschetz numbers. *Proc. Amer. Math. Soc.* **33** (1972),
7-612. (John R. Harper) **49** #8006 55C20
- The Nielsen fixed point theory for noncompact spaces. Collection of articles on
ed point theory. *Rocky Mountain J. Math.* **4** (1974), 81-87. (L. Górniewicz) **50** #1232
55C20 (54H25)
- See also Bibliography: Fixed point theory, **48** #975
- blond, Christiane (with Spindel, Philippe) Propagateurs des champs spinoriels et
toriels dans l'univers de de Sitter. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci.*
62 (1976), no. 2, 124-134. (John Madore) **53** #15255 83A47
- (with Spindel, Philippe) Conditions d'unicité pour le propagateur $D'(x, y)$ du champ
alaire dans l'univers de de Sitter. (English summary) *Ann. Inst. H. Poincaré Sect. A*
25 (1976/77), no. 1, 67-78. (Z. Janković) **54** #6858 83A47
- (with Spindel, Philippe; Henneaux, Marc) Invariance relativiste de la théorie des
amps sur un espace-temps courbe. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci.*
63 (1977), no. 2, 179-186. (J. Rosen) **57** #15099 81.53 (83.53)
- (with Castoldi, P.) Strong coupling limit of the $g\phi^4$ theory. *Phys. Lett. B* **70** (1977),
2, 209-212. (M. Seetharaman) **58** #14607 81A6
- burg, U. Anwendung der Penalty-Methode bei finiten Elementen. Vorträge der
issenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und
echanik (Göttingen, 1975). *Z. Angew. Math. Mech.* **56** (1976), no. 3, T327-T329. (J. L.
owinski) **55** #4887 73A65
- B. See Fundamentals of mathematics, **49** #8788
- Rolf Acyclic models and excision. *Proc. Amer. Math. Soc.* **59** (1976), no. 1,
7-168. (Dana May Latch) **54** #13897 55B10
- Fibrations over a CWh-base. *Proc. Amer. Math. Soc.* **62** (1976), no. 1, 165-166
- (1977). (David Handel) **55** #4165 55F05
- Schönbach, D. I. (with Neuman, Charles P.) Discrete (Legendre) orthogonal polynomials
—a survey. *Internat. J. Numer. Methods Engrg.* **8** (1974), 743-770. (V. L. Makarov)
51 #3583 33A70 (39A12)
- (with Neuman, Charles P.) Discrete weighted residual methods. A survey. *Internat.*
J. Systems Sci. **8** (1977), no. 9, 985-1007. (Peter Deuflhard) **57** #1931 65N30
- (with Neuman, Charles P.) Discrete weighted residual methods. Multi-interval
methods. *Internat. J. Systems Sci.* **8** (1977), no. 11, 1281-1298. (A. B. Stephens)
57 #14538 65Q05
- (with Neuman, Charles P.) Discrete weighted residual methods: a sensitive
nonlinear boundary-value problem. *J. Optimization Theory Appl.* **22** (1977), no. 2,
239-249. (David R. Kincaid) **56** #7217 65L10
- (with Neuman, Charles P.) Evaluation of sums of convolved powers using Bernoulli
numbers. *SIAM Rev.* **19** (1977), no. 1, 90-99. (Thomas A. Atchison) **55** #1698
65B10
- Schönbek, M. E. Some results on the FitzHugh-Nagumo equations. *Nonlinear diffusion*
(NSF-CBMS Regional Conf. Nonlinear Diffusion Equations, Univ. Houston, Houston,
Tex., 1976), pp. 213-217. *Res. Notes Math.*, No. 14, Pitman, London, 1977. (F. Rothe)
57 #885 35K55 (35B40)
- Schönbek, Tomas P. On inverse scattering for the Klein-Gordon equation. *Trans. Amer.*
Math. Soc. **166** (1972), 101-123. (Stanley L. Steinberg) **45** #7528 47F05 (35L05)
- Notes to a paper by C. N. Friedman. *J. Functional Analysis* **14** (1973), 281-294. (M.
Schechter) **50** #10529 35J10 (47F05)
- On a calculus for a generalized scalar operator. *J. Math. Anal. Appl.* **58** (1977), no.
3, 527-540. (Bernard B. Morrel) **58** #7155 47A60 (47D15)
- Schönbek, M. Time and mass in relativity. *Acta Phys. Austriaca* **38** (1973), 168-196. (D.
G. B. Edelen) **48** #1648 83.53
- Schöne, Wolfgang Ein Eigenwertproblem des metrischen Tensors und seine geometrische
Deutung. Collection of articles dedicated to Stanisław Gołb on his 70th birthday, I.
Demonstratio Math. **6** (1973), 343-365. (W. Wrona) **49** #6107 53C45
- Algorithmen zur Bestimmung intern und extern stabiler Mengen und der
chromatischen Zahl eines endlichen Graphen. *Wiss. Z. Techn. Hochsch.*
Karl-Marx-Stadt **17** (1975), no. 2, 269-280. (Rudolf Halin) **54** #7302 05C15
- Schöneberg, Rainald (with Reinermann, Jochen) Some results in the fixed point theory of
nonexpansive mappings and generalized contractions. *Fixed point theory and its*
applications (Proc. Sem., Dalhousie Univ., Halifax, N.S., 1975), pp. 175-186. *Academic*
Press, New York, 1976. (P. M. Fitzpatrick) **56** #9338 47H10
- (with Reinermann, Jochen) Some results and problems in the fixed point theory for
nonexpansive and pseudocontractive mappings in Hilbert-space. *Fixed point theory and*
its applications (Proc. Sem., Dalhousie Univ., Halifax, N.S., 1975), pp. 187-196. *Academic*
Press, New York, 1976. (P. M. Fitzpatrick) **56** #9339 47H10
- Some fixed point theorems for mappings satisfying Frum-Ketkov conditions.
Comment. Math. Univ. Carolinae **17** (1976), no. 2, 399-411. (S. P. Singh) **53** #14237 (E
55 #1162) 47H10
- On the structure of fixed point sets of pseudo-contractive mappings. *Comment.*
Math. Univ. Carolinae **17** (1976), no. 4, 771-777. (Simeon Reich) **55** #3886 47H10
- Errata to: "Some fixed point theorems for mappings satisfying Frum-Ketkov
conditions" (Comment. Math. Univ. Carolinae **17** (1976), no. 2, 399-411). *Comment.*
Math. Univ. Carolinae **17** (1976), no. 4, 812. (Editors) **55** #1162 47H10
- (with Goebel, Kasimierz) Moons, bridges, birds ... and nonexpansive mappings
in Hilbert space. *Bull. Austral. Math. Soc.* **17** (1977), no. 3, 463-466. (John Staples)
57 #17398 47H10
- On the structure of fixed point sets of pseudo-contractive mappings. II. *Comment.*
Math. Univ. Carolinae **18** (1977), no. 2, 299-310. (Author's summary) **58** #23809
47H10
- (with Kirk, William A.) Some results on pseudo-contractive mappings. *Pacific J.*
Math. **71** (1977), no. 1, 89-100. (Eugene Allgower) **58** #7234 47H10
- Zeros of nonlinear monotone operators in Hilbert space. *Canad. Math. Bull.* **21**
(1978), no. 2, 213-219. (Gianfranco Bottaro) **58** #17983 47H05
- Schönefeld, Reinhold Günstige Zustandsvariable eines rationalen Übertragungsgliedes
bezüglich der rechenstechnischen Eigenschaften seiner Empfindlichkeitsmatrix. *Wiss. Z.*
Techn. Hochsch. Ilmenau **18** (1972), no. 1, 27-36. (Hansgeorg Jeggle) **48** #3549
93B35
- Die Hybridrechenstechnik—Stand und Entwicklungstendenzen. *Wiss. Z. Techn.*
Hochsch. Ilmenau **20** (1974), no. 2, 9-23. (F. J. Murray) **50** #9086 68A55
- Schönefeld, Steven Schauder bases in the Banach spaces $C^k(T^n)$. *Trans. Amer. Math. Soc.*
165 (1972), 309-318. (T. A. Cook) **45** #2452 46B15
- (with Stiles, Wilbur J.) On the inductive limit of $\cup l_p$, $0 < p < 1$. *Studia Math.* **56**
(1976), no. 3, 277-286. (R. H. Lohman) **55** #3743 46A45
- (with Stiles, Wilbur J.) On the sequence space $l_{(p_n)}$ and $\lambda_{(p_n)}$, $0 < p_n < 1$. *Trans.*
Amer. Math. Soc. **225** (1977), 243-257. (C. Bessaga) **56** #6337 46A45 (46A15)
- Schönemann, Peter H. The minimum average correlation between equivalent sets of
uncorrelated factors. *Psychometrika* **36** (1971), 21-30; *erratum, ibid.* **38** (1973), 149. (D.
Papamicali) **46** #10145 62K15 (62H25)
- (with Wang, Ming Mei) Some new results on factor indeterminacy. *Psychometrika*
37 (1972), 61-91. (C. Hayashi) **47** #2754 62H25 (62P15, 92A25)
- (with Lingoes, James C.) Alternative measures of fit for the Schönemann-Carroll
matrix fitting algorithm. *Psychometrika* **39** (1974), 423-427. (Authors' summary)
53 #7008 65F99 (62P15)
- (with Steiger, James H.) Regression component analysis. *British J. Math. Statist.*
Psychology **29** (1976), no. 2, 175-189. (Authors' summary) **56** #1644 62P15
- Schönfeld, Jonathan F. Patching solitons in 2+1 dimensions. *Nuclear Phys. B* **125** (1977),
no. 3-4, 381-403. (R. Mirman) **57** #2342 81S7
- Schönfeld, Peter ★Methoden der Ökonometrie. Band I: Lineare Regressionsmodelle.
Vahlens Handbücher der Wirtschafts- und Sozialwissenschaften. Verlag Franz Vahlen
GmbH, Berlin, 1969. xi+295 pp. (G. Tintner) **51** #11907 62P20
- ★Methoden der Ökonometrie. Band II: Stochastische Regressoren und simultane
Gleichungen. Vahlens Handbücher der Wirtschafts- und Sozialwissenschaften. Verlag
Franz Vahlen, Munich, 1971. xiv+345 pp. (G. Tintner) **51** #11908 62P20
- Best linear minimum bias estimation in linear regression. *Econometrica* **39** (1971),

- 531-544. (D. V. Chopra) **49** #1694 62J05
 A note on least squares estimation and the BLUE in a generalized linear regression model. *J. Econometrics* **3** (1975), no. 2, 189-197. (V. K. Srivastava) **55** #1649 62J05
- Schonfeld, Tibor J.** (with Schwartz, Mischa) Rapidly converging second-order tracking algorithms for adaptive equalization. *IEEE Trans. Information Theory* **IT-17** (1971), 572-579. (Authors' summary) **50** #4098 94A05
- Schönfeld, Wolfgang** Eine algebraische Konstruktion abzählbarer Modelle. *Arch. Math. Logik Grundlagenforsch.* **18** (1976), no. 3-4, 135-144. (J. Shilleto) **57** #12206 02H13
 (with Kim, Ki Hang; Roush, Fred William) On the residual finiteness of free semigroups and composition of Boolean matrices. *Proc. Amer. Math. Soc.* **63** (1977), no. 1, 188. (Eckehart Hotzel) **55** #5769 20M05
- Schonfelder, J. L.** Chebyshev expansions for the error and related functions. *Math. Comp.* **32** (1978), no. 144, 1232-1240. (L. Fox) **58** #13630 65D20 (33A20)
 See also **Software for numerical mathematics**, **50** #6095
- Schönhage, Arnold** Universelle Turing Speicherung. *Automatentheorie und formale Sprachen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 369-383.
Bibliographisches Inst., Mannheim, 1970. (R. N. Goss) **51** #14628 68A05
 (with Strassen, Volker) Schnelle Multiplikation grosser Zahlen. (English summary) *Computing (Arch. Elektron. Rechnen)* **7** (1971), 281-292. (Authors' summary) **45** #1431 68A20
 Zur Konvergenz der Stufenpolynome über den Nullstellen der Legendre-Polynome. *Linear operators and approximation (Proc. Conf., Oberwolfach, 1971)*, pp. 448-451. *Internat. Ser. Numer. Math., Vol. 20, Birkhäuser, Basel, 1972.* (David A. Sprecher) **51** #8697 41A35
 Unitäre Transformationen grosser Matrizen. (English summary) *Numer. Math.* **20** (1972/73), 409-417. (J. G. Herriot) **48** #5361 65F30
 Fast Schmidt orthogonalization and unitary transformations of large matrices. *Complexity of sequential and parallel numerical algorithms (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1973)*, pp. 283-291. *Academic Press, New York, 1973.* (W. C. Rheinboldt) **50** #11749 65F25 (68A20)
 Zur rationalen Approximierbarkeit von e^{-x} über $[0, \infty)$. *J. Approximation Theory* **7** (1973), 395-398. (A. Magnus) **49** #3391 41A20
 Zur Quadratur holomorpher periodischer Funktionen. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. *IV. J. Approximation Theory* **13** (1975), 341-347. (Editors) **58** #23294 41A55
 (with Saff, E. B.; Varga, Richard S.) Geometric convergence to e^{-x} by rational functions with real poles. *Numer. Math.* **25** (1975/76), no. 3, 307-322. (W. Fraser) **57** #3704 41A20 (65D99)
 A lower bound for the length of addition chains. *Theor. Comput. Sci.* **1** (1975), no. 1, 1-12. (Boleslaw Mikolajczak) **57** #18229 68A20
 The production of partial orders. *Journées algorithmiques (École Norm. Sup., Paris, 1975)*, pp. 229-246. *Astérisque, No. 38-39, Soc. Math. France, Paris, 1976.* (J. Misra) **57** #4606 68A10
 Schnelle Multiplikation von Polynomen über Körpern der Charakteristik 2. (English summary) *Acta Informat.* **7** (1976/77), no. 4, 395-398. (Kurt Mehlhorn) **55** #9604 68A20 (12-04)
 (with Paterson, Michael S.; Pippenger, Nicholas) Finding the median. *J. Comput. System Sci.* **13** (1976), no. 2, 184-199. (David Dobkin) **55** #1814 68A20
 (with Saff, E. B.; Varga, Richard S.) Errata: "Geometric convergence to e^{-x} by rational functions with real poles" (Numer. Math. **25** (1975/76), no. 3, 307-322). *Numer. Math.* **26** (1976), no. 2, 226. (W. Fraser) **57** #3705 41A05 (65D99)
 An elementary proof for Strassen's degree bound. *Theoret. Comput. Sci.* **3** (1976/77), no. 2, 267-272. (M. Tetruashvili) **55** #7987 12-04 (68A20)
 Die Diskriminante einer Matrix. *Arch. Math. (Basel)* **28** (1977), no. 4, 401-408. (A. Lee) **55** #12746 15A15
 See also **Cybernetics collection**, **48** #5714 and **Linear operators and approximation**, **50** #6720
- Schönhammer, K.** (with Cederbaum, L. S.) A simple variational approach to perturbation theory. *Phys. Rev. A* (3) **12** (1975), no. 6, 2257-2263. (Corneliu Eftimiu) **52** #16350 81J35
- Schönheim, J.** (with Erdős, Paul) On the set of non pairwise coprime divisors of a number. *Combinatorial theory and its applications, I (Proc. Colloq., Balatonfüred, 1969)*, pp. 369-376. *North-Holland, Amsterdam, 1970.* (G. O. H. Katona) **47** #1620 05A05 (10A05)
 A generalization of results of P. Erdős, G. Katona, and D. J. Kleitman concerning Sperner's theorem. *J. Combinatorial Theory Ser. A* **11** (1971), 111-117. (D. J. Kleitman) **45** #1869 10A25
 (with Herzog, Marcel) Group partition, factorization and the vector covering problem. *Canad. Math. Bull.* **15** (1972), 207-214. (R. G. Stanton) **46** #1927 20K25 (05A17)
 (with Herzog, Marcel) On certain sets of divisors of a number. *Discrete Math.* **1** (1972), no. 4, 329-332. (H. J. Godwin) **45** #6782 10A05 (05B10)
 (with Herzog, Marcel) The B , property and chromatic numbers of generalized graphs. *J. Combinatorial Theory Ser. B* **12** (1972), 41-49. (M. S. Cheema) **45** #75 05A05
 On a problem of Daykin concerning intersecting families of sets. *Combinatorics (Proc. British Combinatorial Conf., Univ. Coll. Wales, Aberystwyth, 1973)*, pp. 139-140. *London Math. Soc. Lecture Note Ser., No. 13, Cambridge Univ. Press, London, 1974.* (David E. Daykin) **50** #9598 05A05
 On a problem of Purdy related to Sperner systems. *Canad. Math. Bull.* **17** (1974), 135-136. (M. S. Cheema) **50** #4317 05A05
 (with Burshtein, Nechemia) On exactly covering systems of congruences having moduli occurring at most twice. *Czechoslovak Math. J.* **24(99)** (1974), 369-372. (B. Novák) **50** #4521 10L99
 (with Erdős, Paul) Edge decompositions of the complete graph into copies of a connected subgraph. *Proceedings of the Conference on Algebraic Aspects of Combinatorics (Univ. Toronto, Toronto, Ont., 1975)*, pp. 271-278. *Congressus Numerantium, No. XIII, Utilitas Math., Winnipeg, Man., 1975.* (L. W. Beineke) **52** #10501 05C99
 (with Milner, E. C.) A Hall-type condition for property \mathfrak{B} . *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida A. Univ., Boca Raton, Fla., 1975)*, pp. 523-530. *Congressus Numerantium, No. XIV, Utilitas Math., Winnipeg, Man., 1975.* (R. J. Wilson) **52** #13402 05A05
 (with Bialostocki, A.) Packing and covering of the complete graph with 4-cycles. *Canad. Math. Bull.* **18** (1975), no. 5, 703-708. (F. Harary) **53** #10661 05C99
 Partition of the edges of the directed complete graph into 4-cycles. *Discrete Math.* **11** (1975), 67-70. (Moshe Rosenfeld) **51** #251 05C20
 Hereditary systems and Chvátal's conjecture. *Proceedings of the Fifth Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 537-539. *Congressus Numerantium, No. XV, Utilitas Math., Winnipeg, Man., 1976.* (D. J. Kleitman) **52** #13403 05A05
 (with Bermond, Jean-Claude) G -decomposition of K_n , where G has four vertices less. *Discrete Math.* **19** (1977), no. 2, 113-120. (F. Harary) **58** #371 05C99
 (with Bialostocki, A.) Decomposition of K_n into subgraphs of prescribed type. *Arch. Math. (Basel)* **31** (1978/79), no. 1, 105-112. (Jean-Claude Bermond) **58** #2105-02 (05C99)
 (with Stein, Philip) On Chvátal's conjecture related to hereditary systems. *Combin.* **5** (1978), 275-291. (C. Berge) **58** #16334 05A99 (05C99)
 See also **Algebraic coding theory: history and development**, **51** #9958 and **Problems: Combinatorics**, **52** #5430
- Schönheinz, Hartmut** Ein Beitrag zu Fehlerabschätzungen bei Differenzenverfahren. *Beiträge Numer. Math.* **1** (1974), 135-155. (Jacob Steinberg) **55** #4695 65L10 (65G05)
- Schönhofer, Alfred** Ein Minimalproblem der Flächentheorie. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B.* **1974**, 83-90 (1975). (H. R. Müller) **51** #11298 53A10
- Schöniger, G.** (with Großmann, Christian; Kürz, A.) Genauigkeitsschranken bei gemischter Anwendung von Barriere- und Strafmethode in der konvexen Optimierung (English and Russian summaries) *Z. Angew. Math. Mech.* **56** (1976), no. 4, 161-168. (Joachim Hirche) **55** #2145 90C30
 (with Großmann, Christian) Sensitivität und Anwendbarkeit von Straf-Barriere-Methoden. (English and Russian summaries) *Z. Angew. Math. Mech.* **56** (1977), no. 4, 255-264. (William Boykin) **56** #3720 49D30
- Schönwald, Hans G.** Eine Bemerkung zu Verallgemeinerungen der Ungleichung arithmetischen und geometrischen Mittel. (English summary) *Monatsh. Math. Phys.* **80** (1977), no. 2, 141-143. (E. F. Beckenbach) **52** #5916 26A87
 Kombinatorische und geometrische Darstellung von gewissen Verallgemeinerungen zyklischer Polytope. *Arch. Math. (Basel)* **28** (1977), no. 3, 312-317. (R. Schneider) **55** #52004(4) 58 #30750 52A25
- Schönwandt, U.** (with Meissner, P.) Modellbildung zur Kalman-Filterung der Doppler-Trägheitsnavigation. (English summary) *Regelungstech.* **23** (1975), no. 10, 352-359. (Authors' summary) **56** #11392 93E10
- van de Schoot, J.** (with Wilbrink, H. A.) Nearaffine planes. I. *Nederl. Akad. Wetensch. Proc. Ser. A* **78=Indag. Math.** **37** (1975), 137-143. (J. André) **51** #5342 01A05 (50D35)
- Schopf, Gerhard** The dependence of the hypersurfaces of associated types for systems of associated orders on the choice of the associated orders. (Russian) *Izv. Vysš. Zaved. Mat.* **1974**, no. 12(151), 35-46. (R. P. Boas, Jr.) **51** #5957 32A15 (31C10)
 The dependence of hypersurfaces of conjugate types on the conjugate orders. (Russian) *Izv. Vysš. Zaved. Matematika* **1976**, no. 4(167), 105-121. (L. I. Ronkin) **56** #5922 32A15
 Das Nullstellengebilde von Potenzreihen in z und \bar{z} . *Math. Nachr.* **78** (1977), 319-326. (From the text) **58** #6305 32A05
 Conjugate types of entire characteristic functions of several variables. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 4, 489-498, 564. (A. I. Heifich) **57** #680 32A05 (60F05)
 Über die Äquivalenz zweier Charakteristiken der Konvergenzgeschwindigkeit einer n -dimensionalen Wahrscheinlichkeitsmasse. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* **27** (1978), no. 1, 47-51. (L. A. Anorina) **57** #17767 60E05
- Schöpf, Hans-Georg** (with Bahr, Ute; Diener, Gerhard) Nichtlokale Theorie der effektiven Materialgesetze in heterogenen Substanzen. (Russian and English summaries) *Wiss. Z. Techn. Univ. Dresden* **23** (1974), 319-325. (J. Murzewski) **51** #2434
 Laudatio anlässlich der Ehrenpromotion von Herrn Professor Dr. rer. nat. Hans-Jürgen Treder. *Wiss. Z. Techn. Univ. Dresden* **25** (1976), no. 4, 753-756. (Edmund Treder) **54** #39 01A70 (83.01)
- Schöpf, Peter** ★Der Anziehungsbereich der Fixpunkte einer biholomorphen Abbildung K^n (K ein vollständig bewerteter Körper). Dissertationen der Universität Graz **44**. Berichte der Mathematisch-statistischen Sektion, Forschungszentrum Graz, N. (1975). *Mathematisch-statistische Sektion, Forschungszentrum Graz, Graz, 1975.* (W. Bartenwerfer) **56** #661 32B05 (12B40, 32H99)
 Schüttelung konvexer Mengen. *Ber. Math.-Statist. Sekt. Forschungszentrum Graz* **68** (1976), 14 pp. (L. A. Santaló) **55** #3968 52A20
 Gewichtete Volumensmittelwerte von Simplexes, welche zufällig in einem konvexen Körper des R^n gewählt werden. (English summary) *Monatsh. Math.* **83** (1977), 331-337. (H. Groemer) **57** #1285 52A40 (60D05)
- Schopp, J.** Überdeckungsprobleme ebener Bereiche von konstantem Durchmesser. *Fortschr. Math. Mech. Engrg.* **21** (1977), no. 2, 103-109. (W. J. Firey) **58** #7408 52A10 (52A10)
- Schor, Ricardo Schwartz** The particle structure of ν -dimensional Ising models at low temperatures. *Comm. Math. Phys.* **59** (1978), no. 3, 213-233. (G. Costa) **58** #48247
- Schori, R. M.** A technique in infinite-dimensional topology. *Topology Conference (General Topology Conf., Emory Univ., Atlanta, Ga., 1970)*, pp. 89-96. *Dept. Math., Univ. of Atlanta, Ga., 1970.* (D. E. Sanderson) **50** #5802 57A20 (54-02)
 (with West, James E.) 2^I is homeomorphic to the Hilbert cube. *Bull. Amer. Math. Soc.* **78** (1972), 402-406. (D. E. Sanderson) **46** #8230 57A20
 Inverse limits and near-homomorphism techniques in hyperspace problems. *General topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 421-428. *Lecture Notes in Math., Vol. 378, Springer, Berlin, 1974.* (Roman Duda) **50** #1154B20

- with Curtis, Douglas W.) 2^* and $C(X)$ are homeomorphic to the Hilbert cube. *Amer. Math. Soc.* **80** (1974), 927-931. (Robert A. McCoy) **50** #5719 54B20 (25)
- with West, James E.) Hyperspaces of graphs are Hilbert cubes. *Pacific J. Math.* **53** (1), 239-251. (D. E. Sanderson) **51** #4134 54B20
- with West, James E.) The hyperspace of the closed unit interval is a Hilbert cube. *Amer. Math. Soc.* **213** (1975), 217-235. (D. E. Sanderson) **52** #11815 54B20 (20)
- with Curtis, Douglas W.) Hyperspaces which characterize simple homotopy type. *Gen. Topology and Appl.* **6** (1976), no. 2, 153-165. (Roman Duda) **52** #15483 (10) 54B20
- Survey of hyperspace results using infinite-dimensional topology and a short proof $2^I \approx Q$. *Topology Proceedings, Vol. 1 (Conf., Auburn Univ., Auburn, Ala., 1976)*, pp. 139. *Math. Dept., Auburn Univ., Auburn, Ala., 1977.* (J. E. Keesling) **57** #13825 (20) 57A20
- with Curtis, Douglas W.; Quinn, J. P.) The hyperspace of compact convex subsets polyhedral 2-cell. *Houston J. Math.* **3** (1977), no. 1, 7-15. (John Hempel) **55** #4091 B20
- with Curtis, Douglas W.) Hyperspaces of polyhedra are Hilbert cubes. *Fund. Math.* **99** (1978), no. 3, 189-197. (A. B. Németh) **58** #12892 54B20 (54F65)
- Thomas R. (with Tindall, John E.) Multiple discriminant analysis: a repeated squares design. *Virginia J. Sci.* **23** (1972), 62-63. (C. Hayashi) **48** #1388 62H30
- ann, Jürgen Konvergenz des Galerkinverfahrens zur Lösung von Randwertgleichungen. (English summary) *Finite Elemente (Tagung, Inst. Angew. Math., Univ. Bonn, Bonn, 1975)*, pp. 67-84. *Bonn. Math. Schrifi., No. 89, Inst. Angew. Math. Univ. Bonn, Bonn, 1976.* (Philip Brenner) **57** #1934 65N30
- Günter ★ Mengen und algebraische Strukturen. Grundlagen der modernen Mathematik für Naturwissenschaft und Technik an Hoch- und Fachhochschulen. R. G. Schönbauer Verlag, Munich-Vienna, 1976. 193 pp. (Editors) **53** #12815 00A05
- Benno Local regression and stochastic approximation. Vorträge der wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), T229-T230. (J. Burman) **50** #1439 62L20
- Local estimation of regression functions and local prediction. *Z. Angew. Math. Mech.* **53** (1973), no. 6, 349-352. (Zbl **268** #62002) **58** #3226 62J05 (93E10)
- On the choice of the class intervals in the application of the chi-square test. (Roman and French summaries) *Math. Operationsforsch. Statist.* **5** (1974), no. 4-5, 377-377. (M. Raghavachari) **52** #9486 62G10
- On the choice of the class intervals for the chi-square test of goodness of fit. Beiträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Munich, 1973). *Z. Angew. Math. Mech.* **54** (1974), T19-T251. (M. A. Hamdan) **51** #2138 62G10
- Numerical inversion of a class of characteristic functions. *Nordisk Tidskr. Informationsbehandling (BIT)* **15** (1975), no. 1, 94-102. (Zbl **311** #65012) **58** #19035 D15
- Generalized Cramér-von Mises tests. *Z. Angew. Math. Mech.* **57** (1977), no. 5, 44-T346. (Nanak Chand) **55** #13656 62G10
- Schrag, Evelyn ★ Raumgruppen in n Dimensionen und Cohomologie. Handlung zur Erlangung der Würde eines Doktors der Mathematik der Eidgenössischen Technischen Hochschule Zürich. Diss. No. 4419. *Eidgenössische Technische Hochschule Zürich, Zürich, 1971.* 43 pp. (A. O. Morris) **50** #13308 #15
- ack, Günter Untersuchungsmethoden für spezielle Markow-Prozesse. *Praxis Math.* **28** (1978), no. 8, 225-239. (See Zbl **383** #60066) 60-01
- U. See Control in space, **48** #8040
- orgh, Alberto Henri Yerli. (Spanish) *Rev. Colombiana Mat.* **8** (1974), 37-38. (Editors) **51** #34 01A70
- h, Peter K. (with Jensen, Jorgen B.; Larsen, Peter F.) A strong completeness theorem for Łukasiewicz finitely many-valued logics. *Proceedings of the Seventh International Symposium on Multiple-Valued Logic (Charlotte, N.C., 1977)*, pp. 89-91. *IEEE Comput. Soc., Long Beach, Calif., 1977.* (Michael Byrd) **56** #15366 02C05
- Dieter Kommutatorsätze und Lösungen von linearen homogenen Gleichungen. *Stock. Math. Kolloq. Heft 1* (1976), 31-46. (Author's review (Zbl **348** #47022)) **53** #30385 47A50 (44A40, 47B47)
- Algebraische Unabhängigkeit und Produktschranken minimaler Länge. *Demonstratio Math.* **10** (1977), no. 1, 139-154. (I. Fenyő) **56** #990 44A40 (46N05)
- F. W. (with Taggart, D. A.) Ferrite-filled cavity resonators. *Appl. Sci. Res.* **25** (1971/72), 35-53. (A. Ishimaru) **47** #2924 78.49
- Gerda See Jahrestagung: Gesellschaft für Informatik, **48** #1502
- René Marches aléatoires sur les espaces homogènes. *Ann. Sci. Univ. Clermont Math.* **15** (1977), 108-109. (Hubert Hennion) **58** #24456 60B15
- Marches aléatoires sur les espaces homogènes de groupes de Lie nilpotents, complément connexes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), 5, A347-A349. (Author's summary) **58** #24564 60J15 (60B15)
- Th. The stress tensor in QED. *Lett. Math. Phys.* **1** (1975/76), no. 3, 237-241. (S. Leser) **54** #2018 81.53
- enlober, Martin Über analytische Fortsetzung in Banachräumen. *Math. Ann.* **199** (1972), 313-336. (P. Lelong) **50** #2566 32K05 (46G20)
- Holomorphy Vervollständigung metrisierbarer lokalconvexer Räume. *Bayer. Akad. Wiss. Math.-Natur. Kl. S.-B.* **1973, Abt. II**, 57-66 (1974). (Ph. Noverraz) **50** #8070 46G20 (32D15)
- Über maximal-reguläre und minimal-entartete holomorphy Abbildungen. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 581-590. (K. Lamotte) **48** #11579 32H99
- The envelope of holomorphy as a functor. *Fonctions analytiques de plusieurs variables et analyse complexe (Colloq. Internat. CNRS, No. 208, Paris, 1972)*, pp. 21-230. "Agora Mathematica", No. 1, Gauthier-Villars, Paris, 1974. (Ph. Noverraz) **7** #708 32D10 (46G20)
- Bounding sets in Banach spaces and regular classes of analytic functions. *Functional analysis and applications (Proc. Sympos., Univ. Fed. Pernambuco, Recife, 1972)*, pp. 109-122. *Lecture Notes in Math., Vol. 384, Springer, Berlin, 1974.* (G. Coeuré)
- 52** #15009 46G20
- Riemann domains: basic results and open problems. *Proceedings on Infinite Dimensional Holomorphy (Internat. Conf., Univ. Kentucky, Lexington, Ky., 1973)*, pp. 196-212. *Lecture Notes in Math., Vol. 364, Springer, Berlin, 1974.* (S. Dineen) **54** #3024 32D05 (46G20)
- with Aron, Richard M.) Compact holomorphic mappings on Banach spaces and the approximation property. *Bull. Amer. Math. Soc.* **80** (1974), 1245-1249. (Ph. Noverraz) **50** #8068 46G20 (32E30)
- Analytic continuation and regular classes in locally convex Hausdorff spaces. *Portugal. Math.* **33** (1974), 219-250. (P. Lelong) **50** #8071 46G20 (32D15)
- e-product and continuation of analytic mappings. *Analyse fonctionnelle et applications (Comptes Rendus Colloq. d'Analyse, Inst. Mat., Univ. Federal Rio de Janeiro, Rio de Janeiro, 1972)*, pp. 261-270. *Actualités Sci. Indust., No. 1367, Hermann, Paris, 1975.* (P. Lelong) **55** #3765 46E10 (58B10, 32K05)
- The Levi problem for domains spread over locally convex spaces with a finite dimensional Schauder decomposition. (French summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 4, vi, 207-237. (S. Dineen) **58** #1262 32F15 (32D05, 46G20)
- (with Dineen, Seán; Noverraz, Philippe) Le problème de Levi dans certains espaces vectoriels topologiques localement convexes. *Bull. Soc. Math. France* **104** (1976), no. 1, 87-97. (P. Lelong) **53** #11372 46G20 (32F15, 32D05)
- (with Aron, Richard M.) Compact holomorphic mappings on Banach spaces and the approximation property. *J. Functional Analysis* **21** (1976), no. 1, 7-30. (Ph. Noverraz) **53** #6323 46G20 (32H99)
- (with Aron, Richard M.; Globevnik, Josip) Interpolation by vector-valued analytic functions. (Italian summary) *Rend. Mat.* **(6)** **9** (1976), no. 2, 347-364. (R. H. Cox) **55** #667 30A80 (30A98)
- Richness of the class of holomorphic functions on an infinite dimensional space. *Functional analysis: surveys and recent results (Proc. Conf., Paderborn, 1976)*, pp. 209-225. *North-Holland Math. Studies, Vol. 27; Notas de Mat., No. 63, North-Holland, Amsterdam, 1977.* (S. Dineen) **58** #2282 46G20 (32D05)
- Polynomial approximation on compact sets. *Infinite dimensional holomorphy and applications (Proc. Internat. Sympos., Univ. Estadual de Campinas, São Paulo, 1975)*, pp. 379-391. *North-Holland Math. Studies, Vol. 12, Notas de Mat., no. 54, North-Holland, Amsterdam, 1977.* (M. Hervé) **57** #3453 32E30
- $\tau_\infty = \tau_0$ for domains in C^N . *Infinite dimensional holomorphy and applications (Proc. Internat. Sympos., Univ. Estadual de Campinas, São Paulo, 1975)*, pp. 393-395. *North-Holland Math. Studies, Vol. 12, Notas de Mat., no. 54, North-Holland, Amsterdam, 1977.* (G. Coeuré) **57** #7168 46G20 (32A99)
- Holomorphy Funktionen auf Gebieten über Banach-Räumen zu vorgegebenen Konvergenzraten. (English summary) *Manuscripta Math.* **21** (1977), no. 4, 315-327. (Ingo Lieb) **56** #8893 32A30 (58B10)
- Schotter, A. Auctioning Böhm-Bawerk's horses. *Internat. J. Game Theory* **3** (1974), 195-215. (A. C. Williams) **52** #4948 90A10 (90D45)
- Schottlaender, S. (with Neuhaus, W.) Die Weiterentwicklung der Aireyschen Konvergenzfaktoren für das Exponentialintegral zu einer Darstellung mit Restglied. (English summary) *Computing* **15** (1975), no. 1, 41-52. (L. Berg) **52** #15973 65D30 (41A60)
- Schou, Geert (with Barndorff-Nielsen, Ole) On the parametrization of autoregressive models by partial autocorrelations. *J. Multivariate Anal.* **3** (1973), 408-419. (M. Arató) **49** #8251 62M10
- See also Proceedings: Conference on Foundational Questions in Statistical Inference, **52** #15744
- Schoute, Frits C. Information and control in packet switched satellite communication. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 297-305. *Inst. Electr. Electron. Engrs., New York, 1976.* (From the author's summary) **56** #18094 94A05
- (with ter Horst, M. Frans; Willems, Jan C.) Hierarchic recursive image enhancement. *IEEE Trans. Circuits and Systems CAS-24* (1977), no. 2, 67-78. (M. D. Srinath) **58** #26512 94A05 (93E10)
- Decentralized control in packet switched satellite communication. *IEEE Trans. Automatic Control AC-23* (1978), no. 2, 362-371. (From the summary) **58** #4603 94A05
- Schouten, D. B. J. See Peters, P. J. L. M., **51** #14895
- van der duyn Schouten, F. A. See van der Duyn Schouten, F. A.
- Schouten, J. A. See Nijenhuis, Albert, **46** #12 and Góth, Stanislaw, **48** #35
- Schrack, Günther (with Choit, Mark) Optimized relative step size random searches. *Math. Programming* **10** (1976), no. 2, 230-244. (Paul C. Kettler) **54** #6506 65K05 (90C30)
- See also Numerical methods for nonlinear optimization, **48** #10490
- Schrack, Günther Friedemann Lower bounds to the abscissa of stability of a stable polynomial from symmetric functions. *SIAM J. Appl. Math.* **21** (1971), 373-379. (W. M. Kincaid) **47** #1276 65H05
- Schrader, Jürgen Verallgemeinerte konvexe Funktionen. (English and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 1, 41-53. (Y. Cherruault) **56** #16491 49B30
- Schrader, K. H. Phenomena and system equations of linearized vibrations of nonlinear systems. *Formulations and computational algorithms in finite element analysis (U.S.-Germany Sympos., Mass. Inst. Tech., Cambridge, Mass., 1976)*, pp. 496-524. *M.I.T. Press, Cambridge, Mass., 1977.* (Samuel Levy) **57** #14683 70.34
- Schrader, Keith W. A generalization of the Helly selection theorem. *Bull. Amer. Math. Soc.* **78** (1972), 415-419. (D. C. Russell) **45** #8788 26A45
- Second and third order boundary value problems. *Proc. Amer. Math. Soc.* **32** (1972), 247-252. (J. W. Bebernes) **45** #639 34B15
- (with Thornburg, James L.) Sufficient conditions for the existence of convergent subsequences. *Pacific J. Math.* **57** (1975), no. 1, 301-306. (K. Kutzler) **51** #11056 46A40
- (with Umamaheswaram, S.) Existence theorems for higher order boundary value problems. *Proc. Amer. Math. Soc.* **47** (1975), 89-97. (L. D. Fountain) **50** #5079 34B15
- (with Umamaheswaram, S.) Almost everywhere convergence for sequences of continuous functions. *Proc. Amer. Math. Soc.* **47** (1975), 387-392. (S. M. Mazhar)

50 #5259 40A05

Oscillation and comparison for second order differential equations. *Proc. Amer. Math. Soc.* **51** (1975), 131-136. (H. A. DeKleine) **51** #8552 34C10Differential inequalities for second- and third-order equations. *J. Diff. Equations* **25** (1977), no. 2, 203-215. (G. A. Klaassen) **56** #16032 34A40 (34B15)(with Carmignani, Robert) Subfunctions and distributional inequalities. *SIAM J. Math. Anal.* **8** (1977), no. 1, 52-68. (L. D. Fountain) **55** #3388 34B15 (34A99)Schrader, Robert Yukawa quantum field theory in two space-time dimensions without cutoffs. *Ann. Physics* **70** (1972), 412-457. (P. G. Federbush) **46** #1241 81.46The Maxwell group and the quantum theory of particles in classical homogeneous electromagnetic fields. *Fortschr. Physik* **20** (1972), no. 12, 701-734. (Author's summary) **56** #10500 81.22(with Osterwalder, Konrad) On the uniqueness of the energy density in the infinite volume limit for quantum field models. *Helv. Phys. Acta* **45** (1972/73), no. 5, 746-754. (J. Glimm) **53** #7293 81.47(with Osterwalder, Konrad) Axioms for Euclidean Green's functions. *Comm. Math. Phys.* **31** (1973), 83-112. (W. Güttinger) **48** #7834 81.46(with Osterwalder, Konrad) Euclidean Fermi fields and a Feynman-Kac formula for boson-fermion models. *Helv. Phys. Acta* **46** (1973/74), 277-302. (M. J. Westwater) **51** #2524 81.46On the euclidean version of Haag's theorem in $P(\phi)_2$ theories. *Comm. Math. Phys.* **36** (1974), 133-136. (T. Neubrunn) **54** #14653a (E 54 #14653b) 81.60Erratum: "On the Euclidean version of Haag's theorem in $P(\phi)_2$ theories" (Comm. Math. Phys. **36** (1974), 133-136). *Comm. Math. Phys.* **38** (1974), 81-82. (T. Neubrunn) **54** #14653b 81.60Local operator products and field equations in $P(\phi)_2$ theories. *Fortschr. Physik* **22** (1974), 611-631. (Aubrey Truman) **58** #32600 81.47(with Osterwalder, Konrad) Axioms for Euclidean Green's functions. II. With an appendix by Stephen Summers. *Comm. Math. Phys.* **42** (1975), 281-305. (W. Güttinger) **51** #12189 81.46(with Uhlenbrock, Dietrich A.) Markov structures on Clifford algebras. *J. Functional Analysis* **18** (1975), 369-413. (J. Glimm) **53** #7310 81.60 (47D05)A possible constructive approach to ϕ_4^4 . (French summary) *Les méthodes mathématiques de la théorie quantique des champs (Colloq. Internat. CNRS, No. 248, Marseille, 1975)*, pp. 347-361. *Éditions Centre Nat. Recherche Sci., Paris*, 1976. (Author's summary) **57** #18642 81.58 (58I99)A possible constructive approach to ϕ_4^4 . *Comm. Math. Phys.* **49** (1976), no. 2, 131-153. (G. Costa) **57** #8656a 81.46A possible constructive approach to ϕ_4^4 . III. *Comm. Math. Phys.* **50** (1976), no. 2, 97-102. (G. Costa) **57** #8656c 81.46New rigorous inequality for critical exponents in the Ising model. *Phys. Rev. B* (3) **14** (1976), no. 1, 172-173. (Author's summary) **56** #2132 82.46A possible constructive approach to ϕ_4^4 . II. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **26** (1977), no. 3, 295-301. (G. Costa) **57** #8656b 81.46(with Hess, H.; Uhlenbrock, Dietrich A.) Domination of semigroups and generalization of Kato's inequality. *Duke Math. J.* **44** (1977), no. 4, 893-904. (Adriaan Ijp) **56** #16446 47I05 (81.47)New correlation inequalities for the Ising model and $P(\phi)$ theories. *Phys. Rev. B* (3) **15** (1977), no. 5, 2798-2803. (J. E. Lowther) **56** #7719 82.60(with Combes, J. M.; Seiler, Rudolf) Classical bounds and limits for energy distributions of Hamilton operators in electromagnetic fields. *Ann. Physics* **111** (1978), no. 1, 1-18. (Lawrence E. Thomas) **58** #8930 81.47Towards a constructive approach of a gauge invariant, massive $P(\phi)_2$ theory. *Comm. Math. Phys.* **58** (1978), no. 3, 299-312. (Jean-Pierre Eckmann) **57** #11500 81.47(with Seiler, Rudolf) A uniform lower bound on the renormalized scalar Euclidean functional determinant. *Comm. Math. Phys.* **61** (1978), no. 2, 169-175. (Jean Michel Combes) **58** #14689 81.47 (58G10)

Schrader, Wilhelm ★Einführung in die Zahlentheorie. Tutorial: Reihe Mathematik.

Pädagogischer Verlag Schwann, Düsseldorf, 1973. 135 pp. (Editors) **52** #13596 10-01

Schorta-Schrag, Evelyn See Schorta-Schrag, Evelyn

Schrag, Gerald Every finite group is the automorphism group of some finite orthomodular lattice. *Proc. Amer. Math. Soc.* **55** (1976), no. 1, 243-249. (R. J. Greechie) **53** #2784 06A30 (20B25)Schrage, Georg Maximale stabile Punktmengen und minimale Überdeckungen gleichgewichtiger Hypergraphen. *Math. Z.* **124** (1972), 186-190. (M. Las Vergnas) **47** #79 05C99A generalization of the König-Egervary theorem. (German summary) *Proceedings of the Fourth Conference on Probability Theory (Braşov, 1971)*, pp. 597-600. *Editura Acad. R.S.R., Bucharest*, 1973. (R. A. Brualdi) **52** #13517 05C99Neue Ergebnisse der Theorie der Hypergraphen mit Anwendungen in der Informationstheorie. *Collect. Math.* **28** (1977), no. 2, 163-175. (R. C. Read) **58** #10625 05C99 (94A15)Schrage, Linus Minimizing the time-in-system variance for a finite joblet. *Management Sci.* **21** (1974/75), no. 5, 540-543. (John C. Gittins) **54** #4627 90B35(with Schwarz, Leroy B.) Optimal and system myopic policies for multi-echelon production/inventory assembly systems. *Management Sci.* **21** (1974/75), no. 11, 1285-1294. (Stratton C. Jaquette) **53** #2328 90B05Implicit representation of variable upper bounds in linear programming. *Computational practice in mathematical programming*, pp. 118-132. *Math. Programming Studies*, Vol. 4, North-Holland, Amsterdam, 1975. (Paul C. Kettler) **57** #11732 90C05Implicit representation of generalized variable upper bounds in linear programming. *Math. Programming* **14** (1978), no. 1, 11-20. (J. Falk) **58** #9223 90C05See also Mitten, L. G.; et al., **52** #7516Schramm, Klaus (with Berndt, Rolf) Arithmetisch ganze Differentiale der Modulfunktionenkörper 6. und 7. Stufe. *Acta Arith.* **33** (1977), no. 2, 151-168. (Authors' review (Zbl. 336 #10018)) **58** #27770 10D05 (12A90, 13G05)Schramm, Ruben On a generalized Fourier-type integral and its application to the solution of certain boundary value problems. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza"*Iasi Sect. I a Mat. (N.S.) **17** (1971), 381-406. (J. N. Pandey) **46** #7794 42A7Quasilinearity properties of differentiable functions in a field with a non-Archimedean valuation. *Math. Z.* **138** (1974), 265-272. (George Bachman) **50** #12995 12J99 (26A06)Boundary conditions for the univalence of NVL-transformations. *Math. Ann.* (1978), no. 3, 191-198. (Su-shing Chen) **58** #13143 58C25 (65H05, 90A15)Schramme, Dieter (with Baumgart, Gunther; Neumann, Peter) Optimierung des Flugzeugsatzes mit Hilfe eines Verfahrens der blinden Suche. (English and Russian summaries) *Math. Operationsforsch. Statist.* **4** (1973), no. 1, 51-62. (Authors' summary) **55** #9925 90B35Schrapel, H. D. Ein Beitrag zur Ljapunowschen Stabilitätstheorie. *Beiträge zur Mechanik (Festschrift zum siebzigsten Geburtstag Udo Wegner)*, pp. 255-273. *Inst. Mech. (Bauwesen), Univ. Stuttgart, Stuttgart*, 1972. (B. Stephan) **54** #7975 34D20Ein Beitrag zur ersten Ljapunowschen Methode. *Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972)*. *Z. Angew. Math. Mech.* **53** (1973), T243-T244. (H. A. Antosiewicz) **49** #5434D20Verschärfung des Ljapunowschen Stabilitätsbegriffes. *Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Munich, 1973)*. *Z. Angew. Math. Mech.* **54** (1974), T174-T175. (F. Bräuer) **50** #5113 34D20Erweiterung der ersten Ljapunowschen Methode im kritischen Fall. *Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975)*. *Z. Angew. Math. Mech.* **56** (1976), no. 3, T76-T77. (Hochstadt) **55** #779 34C20Erweiterung eines Satzes von Andronow und Witt. *Z. Angew. Math. Mech.* (1977), no. 5, T89-T90. (G. A. Klaassen) **56** #12458 34D20Schreckenberger, Jürgen Über die Faktoralgebren von Scharoiden. *Math. Nachr.* (1976), 165-169. (K. Dröhl) **55** #554 20N10(with Michler, Lothar) Über die induktiven Gruppoide der partiellen Automorphismen von Algebren. *Math. Nachr.* **72** (1976), 219-230. (E. T. Schmidt) **55** #5768 20L05Schreckengost, Jack F. (with Cornell, John A.) Extended complete block designs correlated observations. (French summary) *Biometrics* **32** (1976), no. 3, 505-518. (Authors' summary) **55** #6728 62K10Schreiber, Alfred Das Induktionsproblem im Lichte der Approximationstheorie der Wahrheit. *Z. Allgemeine Wissenschaftstheorie* **8** (1977), no. 1, 77-90. (Author's summary) **58** #16106 02A05Zur algebraischen Analyse der Kettenregel. *Math.-Phys. Semesterber.* **25** (1978), 1, 79-96. (R. Cohn) **58** #10853 12H05 (26A06, 58C20)Logische Form und Invarianz. *Philos. Natur.* **17** (1978/79), no. 1, 66-69. (E. Curry) **58** #5039 02C05Schreiber, Bertram M. (with Ito, Takashi) A space of sequences given by pairs of unimodular operators. *Proc. Japan Acad.* **46** (1970), 637-641. (R. Larsen) **45** #2409 47B15(with Rajagopalan, M.) Ergodic automorphisms and affine transformations of locally compact groups. *Pacific J. Math.* **38** (1971), 167-176. (A. C. M. van Rooij) **46** #5582 28A65 (22D05, 22D40)(with Brown, Léon; Taylor, B. Alan) Spectral synthesis and the Pompeiu problem. (French summary) *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 3, 125-154. (L. Zalcman) **50** #4979 30A98 (46J15)(with Jonah, David) Transitive affine transformations on groups. *Pacific J. Math.* **58** (1975), no. 2, 483-509. (L. Dornhoff) **52** #8265 20F15(with Kumar, Awdhesh) Self-decomposable probability measures on Banach spaces. *Studia Math.* **53** (1975), no. 1, 55-71. (R. Jajte) **52** #6808 60B05(with Borel, Armand) P -adic linear groups with ergodic automorphisms. *Israel Math. J.* **24** (1976), no. 3-4, 199-205. (Authors' summary (Zbl. 332 #22012)) **58** #22322D40 (22E40, 28A65)(with Kumar, Arunod) Characterization of subclasses of class L probability distributions. *Ann. Probability* **6** (1978), no. 2, 279-293. (V. M. Kruglov) **57** #10760E05 (60F05)Schreiber, Helmut Korrelationsanalyse zufälliger Prozesse in linearen stochastischen Systemen mit geringer Streuung der Systemparameter. *Wiss. Z. Techn. Univ. Dresden* (1975), no. 1, 159-161. (Ludwig Arnold) **52** #4414 60H99 (93E99)Korrelationsanalyse nichtstationärer zufälliger Prozesse in linearen analogen Systemen mit Hilfe der zweidimensionalen Z -Transformation. *Wiss. Z. Techn. Univ. Dresden* **24** (1975), no. 2, 415-420. (T. Kaczorek) **54** #14853 93E10Schreiber, J. (with Bibel, Wolfgang) Proof search in a Gentzen-like system of first-order logic. *International Computing Symposium (Antibes, 1975)*, pp. 205-212. *North-Holland, Amsterdam*, 1975. (John Hooley) **58** #32125 68A40 (02B10)Schreiber, Jean-Pierre Une caractérisation des nombres de Pisot-Salem des corps p -adiques. *Contributions à la théorie des séries trigonométriques et à la théorie des nombres*, pp. 55-63. *Bull. Soc. Math. France Mem., No. 19, Soc. Math. France*, 1969. (Zbl. 239 #12002) **58** #27881 12A15 (10K35, 43A35)Un ensemble remarquable du point de vue de l'analyse de Fourier sur \mathbb{Q}_p . *Compt. Rend. Acad. Sci. Paris* **273** (1971), 125-132. (A. C. M. van Rooij) **46** #5941 43A45Approximations diophantiennes et problèmes additifs dans les groupes abéliens compacts. *Bull. Soc. Math. France* **101** (1973), 297-332. (Harald Niederreiter) **51** #416 10K40 (12A15, 22B05, 43A70)Schreiber, Michel Fermeture en probabilité de certains sous-espaces d'un espace de chaos de Wiener. (English summary) *Z. Wahrscheinlichkeitstheorie und verw. Gebiete* **14** (1969/70), 36-48. (Author's summary) **54** #1405 60J65 (60G05)(with Anderson, William N., Jr.) The infimum of two projections. *Acta Sci. Math. (Szeged)* **33** (1972), 165-168. (J. A. Erdős) **48** #848 46C05Quelques remarques sur les caractérisations des espaces L^p , $0 < p < 1$. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **8** (1972), 83-92. (N. Dinculeanu) **47** #762 46A15 (02H99, 46E30)A perturbation theorem. *Acta Math. Acad. Sci. Hungar.* **24** (1973), 293-306. (Caradus) **48** #2807 47A55

(with Dacunha-Castelle, Didier) Sous-espaces symétriques des espaces d'Orlicz

- ad. Sci. Paris Sér. A-B 276 (1973), A629-A631. (K. Sundaresan) 48 #2742
- ith Dacunya-Castelle, Didier) Techniques probabilistes pour l'étude de problèmes
orphismes entre espaces de Banach. (English summary) *Ann. Inst. H. Poincaré*
(N.S.) 10 (1974), 229-277. (K. Sundaresan) 52 #1812 60B10 (46E30)
- rivé convexe d'une loi de probabilité et lois stables. Application à un problème
orphisme. (English summary) *Israel J. Math.* 28 (1977), no. 4, 287-312. (Author's
au) 58 #24450 60B10 (46N05, 60E05)
- ★Morris Differential forms. A heuristic introduction. Universitext.
er-Verlag, New York-Berlin, 1977. x+147 pp. ISBN 0-387-90287-2 (A. Verona)
3111 58A10 (26-01, 58A10)
- regular integers. *Amer. Math. Monthly* 85 (1978), no. 3, 165-172. (H.-J. Kanold)
16183 10A25 (10L10)
- Peter Paul Theseus im Labyrinth als Turingmaschine. *Z. Math. Logik*
lagen Math. 17 (1971), 57-60. (È. Orlovskii) 46 #5120 02F15
- onstruktive Teiltheorien. *Z. Math. Logik Grundlagen Math.* 17 (1971), 197-204.
(Szczërba) 51 #10051 02E99 (50A05)
- efinitorische Erweiterungen formalisierter Geometrien. *Grundlagen der Geometrie*
algebraische Methoden (Internat. Kolloq., Pädagog. Hochschule "Karl Liebknecht",
am, 1973), pp. 80-88. *Potsdamer Forschungen, Reihe B, Heft 3, Pädagog. Hochschule*
Liebknecht", Potsdam, 1974. (L. W. Szczërba) 51 #7859 02H05
- Durch Schlußregeln definierte logische Kalküle. *Wiss. Z. Ernst-Moritz-Arndt-Univ.*
wald Math.-Natur. Reihe 23 (1974), 35-38. (H. Schwichtenberg) 51 #5260
0 (02D99)
- ★Theorie der geometrischen Konstruktionen. Studienbücherei. *VEB Deutscher*
g der Wissenschaften, Berlin, 1975. 297 pp. (H. W. Guggenheimer) 58 #30726
5
- ree-transducers and syntax-connected transductions. *Automata theory and formal*
ages (Second GI Conf., Kaiserslautern, 1975), pp. 202-208. *Lecture Notes in Comput.*
Vol. 33, Springer, Berlin, 1975. (Stephen Soule) 53 #2030 68A25
- ★Grundlagen der Mathematik. Studienbücherei. Mathematik für Lehrer, Band 12.
Deutscher Verlag der Wissenschaften, Berlin, 1977. 239 pp. (L. Janos) 57 #15932
1
- See also Gross, Maurice; et al., 50 #15451
- r, Shmuel Covering all triples on n marks by disjoint Steiner systems. *J.*
binatorial Theory Ser. A 15 (1973), 347-350. (Jean Doyen) 48 #10846 05B05
- Some mappings of periodic groups. *Israel J. Math.* 17 (1974), 117-123. (A. L.
teman) 49 #10629 10A25 (20F50)
- Some balanced complete block designs. *Israel J. Math.* 18 (1974), 31-37. (R. C.
lin) 50 #141 05B05
- r, W. (with Landovitz, Leon F.) Exactly solvable one-dimensional transport. I.
n bounded by partially absorptive walls. (Italian summary) *Nuovo Cimento B* (11)
1978), no. 2, 319-333. (Carlo Cercignani) 57 #15129 82A5
- n, André (with Grégoire, Jean-Pierre) Algèbre—généralisation de la notion de
uit amalgamé et application à des catégories concrètes. (English summary) *Bull.*
Roy. Sci. Liège 40 (1971), 543-554. (D. Pumplin) 46 #9135 18A30 (08A25)
- r, Ju. A. See Šreider, Ju. A.
- W. William Thomson-Lord Kelvin of Largs: ein Physiker im Spannungsfeld
chen Grundlagen- und Industrieforschung im Kapitalismus des 19. Jahrhunderts.
M Schr. Geschichte Naturwiss. Tech. Medizin 12 (1975), no. 2, 108-114. (M. Kline)
#54 01A55 (01A70)
- André-Marie Ampère—Begründer der Elektrodynamik. *NTM Schr. Geschichte*
urwiss. Tech. Medizin 13 (1976), no. 2, 104-111. (Editors) 58 #27043 01A70
A55)
- er, Erik A. A note on O-symmetric lattices. *Caribbean J. Sci. Math.* 1 (1969), no. 2,
50. (S. S. Holland, Jr.) 52 #216 06A30
- Tight residuated mappings. *Proceedings of the University of Houston Lattice Theory*
ference (Houston, Tex., 1973), pp. 519-530. *Dept. Math., Univ. Houston, Houston,*
., 1973. (T. S. Fofanova) 53 #2766 06A15
- r, Herbert Zur Darstellung der Lösungen inhomogener linearer
angs-Randwert-Probleme bei Systemen partieller Differentialgleichungen. *Wiss. Z.*
hn. Hochschule Karl-Marx-Stadt 13 (1971), 271-280. (J. S. Papadakis) 46 #7691
99
- Bemerkungen zu einem Iterationsverfahren für nichtlineare
angs-Randwert-Probleme bei partiellen Differentialgleichungen. *Wiss. Z. Techn.*
chsch. Karl-Marx-Stadt 14 (1972), 717-726. (Clarence M. Ablow) 48 #3275
999
- er, Mynda Stochastic pursuit-evasion games with information lag. I. Perfect
ervation. *J. Appl. Probability* 12 (1975), 248-256. (R. L. Kashyap) 54 #4781
E05
- Stochastic pursuit-evasion games with information lag. II. Observation with error.
J. Appl. Probability 13 (1976), no. 2, 313-328. (From the authors' summary) 58 #4388
D25
- er, Christa-Maria Eine Pseudobasismethode für ein spezielles lineares
otimierungsproblem. *Wiss. Z. Techn. Hochschule Karl-Marx-Stadt*, 17 (1975), no. 6,
11-768. (Author's summary) 56 #4816 90C05
- er, Helmut See Origins of digital computers, 50 #6760
- ffer, J. R. (with Wada, Y.) Brownian motion of a domain wall and the diffusion
stants. *Phys. Rev. B* (3) 18 (1978), no. 8, 3897-3912. (Authors' summary)
#20135 82.60 (69.00)
- ver, Karl-Heinz (with Rutsch, Martin) ★Aufgaben zur Wahrscheinlichkeit.
Mathematik für Wirtschaftswissenschaftler, Band 3. *Bibliographisches Institut,*
annheim-Vienna-Zurich, 1974. v+263 pp. (Editors) 50 #11340 60-01
- ★Morphismen von Relationen- und Verknüpfungsalgebren. Zur Erlangung des
amherischen Grades eines Doktors der Wirtschaftswissenschaften von der Fakultät für
irtschaftswissenschaften der Universität Fridericiana Karlsruhe (Technische
ochschule) genehmigte Dissertation. *Universität Fridericiana Karlsruhe (Technische*
ochschule), Karlsruhe, 1974. ii+106 pp. (M. M. Richter) 51 #8008 08A25 (02H05)
- (with Rutsch, Martin) ★Wahrscheinlichkeit. II. Mathematik für
irtschaftswissenschaftler, No. 2. *Bibliographisches Institut, Mannheim-Vienna-Zurich,*
1976. vii+396 pp. (Editors) 57 #4268 60-01
- Schrijver, Alexander (with Brouwer, A. E.) ★On the period of an operator, defined on
antichains. *Mathematisch Centrum Afdeling Zuivere Wiskunde ZW 24/74.*
Mathematisch Centrum, Amsterdam, 1974. i+13 pp. (R. Stanley) 50 #1990 06A10
- Linking systems, matroids and bipartite graphs. *Proceedings of the Fifth British*
Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975), pp. 541-544. Congressus
Numerantium, No. XV, Utilitas Math., Winnipeg, Man., 1976. (Curtis Greene)
52 #13443 05B35
- Characterizations of supercompact spaces. *General topology and its relations to*
modern analysis and algebra, IV (Proc. Fourth Prague Topological Sympos., Prague,
1976), Part B, pp. 407-411. *Soc. Czechoslovak Mathematicians and Physicists, Prague,*
1977. (Richard A. Aló) 58 #2721 54D30
- (with Brouwer, A. E.; Hanani, Haim) Group divisible designs with block-size four.
Discrete Math. 20 (1977/78), no. 1, 1-10. (J. H. van Lint) 57 #5780 05B05
- A note on David Lubell's article: "Local matching in the function space of a partial
order" (J. Combinatorial Theory Ser. A 19 (1975), 154-159). *J. Combinatorial Theory*
Ser. A 23 (1977), no. 3, 359-362. (Curtis Greene) 56 #15506 06A10
- (with Brouwer, A. E.) The blocking number of an affine space. *J. Combinatorial*
Theory Ser. A 24 (1978), no. 2, 251-253. (G. L. Alexanderson) 58 #293 05B25
- A short proof of Minc's conjecture. *J. Combinatorial Theory Ser. A* 25 (1978), no. 1,
80-83. (J. H. van Lint) 58 #10481 05A20 (05B20)
- Schröcker, Alfred Leibniz' Mitarbeit an Etienne Chauvins *Nouveau Journal des Savans.*
(English summary) *Studia Leibnitiana* 8 (1976), no. 1, 128-139. (Author's summary)
58 #26926 01A45
- Schröder, Dierk See Sensitivity, adaptivity and optimality, 49 #8697
- Schröder, Eberhard H. Kennzeichnung und Darstellung kinematischer Räume metrischer
Ebenen. *Abh. Math. Sem. Univ. Hamburg* 39 (1973), 184-230. (R. Lingenberg)
49 #11376 50C15
- Zur Theorie subaffiner Inzidenzgruppen. (English summary) *J. Geometry* 3 (1973),
31-69. (E. W. Ellers) 49 #6016 50A20
- ★Darstellende Geometrie. Studienbücherei. Mathematik für Lehrer, Band 8. *VEB*
Deutscher Verlag der Wissenschaften, Berlin, 1974. 160 pp. (Editors) 52 #15203
50-01
- Kreisgeometrische Darstellung metrischer Ebenen und verallgemeinerte Winkel-
und Distanzfunktionen. *Abh. Math. Sem. Univ. Hamburg* 42 (1974), 154-186. (W. Benz)
52 #11735 50D45
- Gemeinsame Eigenschaften euklidischer, galileischer und minkowskischer Ebenen.
Mitt. Math. Gesellsch. Hamburg 10, no. 3, 185-217 (1974). (H. Groh) 54 #11164
50C25
- Untersuchungen zu einem hyperoskulierenden Büschel von Kegelschnitten. *Elem.*
Math. 30 (1975), 49-56. (K. Strubecker) 51 #8936 50B10
- Zur Charakterisierung von Quadriken. (English summary) *J. Geometry* 8 (1976), no.
1-2, 75-77. (Author's summary) 58 #18127 50D35
- Über eine Eigenschaft der Dualitäten. *Beiträge zur geometrischen Algebra (Proc.*
Sympos., Duisburg, 1976), pp. 287-288. Lehrbücher u. Monographien aus dem Gebiete der
Exakt. Wiss., Math. Reihe, Band 21, Birkhäuser, Basel, 1977. (H. Groh) 57 #13664
50A99 (06A30, 50D99)
- Untersuchungen zu einem hyperoskulierenden Büschel von Kegelschnitten. II.
Elem. Math. 32 (1977), no. 1, 6-11. (K. Strubecker) 55 #6295 50B10
- Schröder, Ernst See Grattan-Guinness, Ivor, 58 #76
- Schröder, Gerhard ★Optimale Abschätzungen von Polynomnullstellen und
Polynomkoeffizienten mit Anwendungen auf die Verfahren von Graeffe und Nickel.
Gesellschaft für Mathematik und Datenverarbeitung Bonn, Ber. No. 89. *Gesellschaft für*
Mathematik und Datenverarbeitung, Bonn, 1974. 58 pp. (F. Götze) 50 #1494 65H05
- Schröder, Gunnar (with Ratschek, Helmut) Über die Ableitung von intervallwertigen
Funktionen. (English summary) *Computing (Arch. Elektron. Rechnen)* 7 (1971),
172-187. (Walter Gautschi) 45 #2925 (EA 46) 65D99
- Charakterisierung des quasilinearen Raumes $I(R)$ und Klassifizierung der
quasilinearen Räume der Dimension 1 und 2. (English summary) *Computing (Arch.*
Elektron. Rechnen) 10 (1972), 111-120. (H. Ratschek) 47 #2809 65G05
- Differentiation of interval functions. *Proc. Amer. Math. Soc.* 36 (1972), 485-490.
(R. A. Tapia) 46 #10181 65D99 (46N05)
- (with Kracht, Manfred W.) Zur Intervallrechnung in linearen Räumen. (English
summary) *Computing (Arch. Elektron. Rechnen)* 11 (1973), no. 1, 73-79. (H. Ratschek)
52 #2196 65J05
- (with Kracht, Manfred W.) Bergmische Polynom-Erzeugende erster Art.
Manuscripta Math. 9 (1973), 333-355. (E. Kreyszig) 48 #2542 35C15 (32H10)
- (with Kracht, Manfred W.) Eine Einführung in die Theorie der quasilinearen
Räume mit Anwendung auf die in der Intervallrechnung auftretenden Räume.
Math.-Phys. Semesterber. 20 (1973), 226-242. (Walter Gautschi) 48 #3240 65G05
(46A99)
- Zum Begriff der Dimension von quasilinearen Räumen. *Mathematica (Cluj)* 16(39)
(1974), no. 1, 177-182. (B. Levinger) 53 #13259 15A03
- Zur Struktur des Raumes der Hypernormbälle über einem linearen Raum. (English
summary) *Computing* 15 (1975), no. 1, 67-70. (J. Vandergragt) 54 #1597 65J05
(46A99)
- (with Ratschek, Helmut) Über den quasilinearen Raum. *Ber. Math.-Statist. Sekt.*
Forschungszentrum Graz No. 65 (1976), 23 pp. (Werner Bani) 57 #6045 15A03
- (with Ratschek, Helmut) Representation of semigroups as systems of compact
convex sets. *Proc. Amer. Math. Soc.* 65 (1977), no. 1, 24-28. (B. M. Schein (Šain))
58 #6027 20M30
- Schröder, Johann Range-domain implications for linear operators. *SIAM J. Appl. Math.*
19 (1970), 235-242. (B. Janko) 45 #7492 47B55 (15A48)
- Duality in linear range-domain implications. *Inequalities, III (Proc. Third Sympos.,*
Univ. California, Los Angeles, Calif., 1969; dedicated to the memory of Theodore S.
Motzkin), pp. 321-332. Academic Press, New York, 1972. (R. J. Nagel) 48 #12139
47B40
- Einschlussaussagen bei Differentialgleichungen. *Numerische Lösung*
nichtlinearer partieller Differential- und Integrodifferentialgleichungen (Tagung, Math.
Forschungsinst., Oberwolfach, 1971), pp. 23-49. *Lecture Notes in Math.*, Vol. 267,

- Springer, Berlin, 1972. (S. Dümmel) **50** #5179 35J60 (47H15)
 (with Trottenberg, Ulrich) Reduktionsverfahren für Differenzengleichungen bei Randwertaufgaben. I. (English summary) *Numer. Math.* **22** (1973/74), 37-68. (J. R. Kuttler) **48** #12869 65N20
 Epi und extremer Mono in $T_{2\alpha}$. *Arch. Math. (Basel)* **25** (1974), 561-565. (E. P. Rozycki) **52** #6648 54C10 (54B30)
 Upper and lower bounds for solutions of generalized two-point boundary value problems. *Numer. Math.* **23** (1975), 433-457. (Robert D. Russell) **53** #1991 65R05 (34A40)
 (with Trottenberg, Ulrich; Reutersberg, Heinz) Reduktionsverfahren für Differenzengleichungen bei Randwertaufgaben. II. (English summary) *Numer. Math.* **26** (1976), no. 4, 429-459. (J. R. Kuttler) **55** #4733 65N20
 Inclusion statements for operator equations by a continuity principle. *Manuscripta Math.* **21** (1977), no. 2, 135-171. (B. Jankó) **56** #9343 47H15
 Inverse-monotone nonlinear differential operators of the second order. *Proc. Roy. Soc. Edinburgh Sect. A* **79** (1977/78), no. 3-4, 193-226. (R. C. Gilbert) **58** #11584 34A40
 (with Trottenberg, Ulrich; Witsch, Kristian) On fast Poisson solvers and applications. *Numerical treatment of differential equations (Proc. Conf., Math. Forschungsinst., Oberwolfach, 1976)*, pp. 153-187. *Lecture Notes in Math.*, Vol. 631, Springer, Berlin, 1978. (B. L. Buzbee) **57** #14534 65P05
 M-matrices and generalizations using an operator theory approach. *SIAM Rev.* **20** (1978), no. 2, 213-244. (Robert Beauwens) **58** #16728 15A48 (47B55, 65F15)
 See also *Numerical treatment of differential equations*, **57** #8021
- Schroder, M. (with Binz, Ernst; Butzmann, Heinz-Peter; Feldman, William A.; Kutzler, Kurt) On ω -admissible vector space topologies on $C(X)$. *Math. Ann.* **196** (1972), 39-47. (N. Noble) **46** #8163 54C35
 Solid convergence spaces. *Bull. Austral. Math. Soc.* **8** (1973), 443-459. (Bernd Müller) **47** #9528 54C35
 A family of c -embedded spaces whose associated completely regular topology is compact. *Arch. Math. (Basel)* **25** (1974), 69-74. (Ronald Beattie) **52** #1600 54A20 (54D60)
 (with Broughan, Kevin A.) Variations on a metric theme. *Math. Chronicle* **3** (1974/75), 71-80. (George M. Reed) **50** #11172 54E35
 (with Kent, Darrell C.; McKennon, K.; Richardson, Gary D.) Continuous convergence in $C(X)$. *Pacific J. Math.* **52** (1974), 457-465. (R. Beattie) **51** #6709 54C35 (54A20)
 Compactness theorems. *Categorical topology (Proc. Conf., Mannheim, 1975)*, pp. 566-577. *Lecture Notes in Math.*, Vol. 540, Springer, Berlin, 1976. (Author's summary) **55** #11189 54A20
 Marinescu structures and C -spaces. *Proceedings of the Conference on Convergence Spaces (Univ. Nevada, Reno, Nev., 1976)*, pp. 204-235. *Dept. Math., Univ. Nevada, Reno, Nev.*, 1976. (Gary Richardson) **55** #4097 54C35 (54A20)
 Adherence operators and a way of multiplying convergence structures. *Math. Chronicle* **4** (1976), no. 2-3, 148-162. (Ray Gazik) **53** #3975 54A20
- Schröder-Brzosiński, J. (with Neuhuber, W.) Berechnung des quadratischen Mittelwerts der Regelabweichung zu einem Endzeitpunkt mit Hilfe der adjungierten Differentialgleichung. (English summary) *Regelungstech. Prozeß-Datenverarbeitung* **21** (1973), no. 3, 88-90. (Authors' summary) **55** #10132 93E15
 See also *Control in space*, **48** #8041
- Schrödinger, Erwin ★Избранные труды по квантовой механике. (Russian) [Selected works on quantum mechanics.] Основоположающие работы по волновой механике 1926-1927 гг. Работы разных лет по квантовой механике. [Fundamental works in wave mechanics 1926-1927. Works of different periods on quantum mechanics. Methodological questions of quantum mechanics] Edited and with a supplement "Erwin Schrödinger and the origin of quantum mechanics" by L. S. Poljak. With commentaries by V. P. Vizgin. Серия "Классики Науки". ["Classics of Science"] Series Izdat. "Nauka", Moscow, 1976. 424 pp. (Not reviewed) **01A75** (81.35)
 See also *Hanle, Paul A.*, **58** #27070
- Schroek, Franklin E., Jr. Generalization of the Cook formalism for Fock space. *J. Mathematical Phys.* **12** (1971), 1849-1857. (K. Chadani) **45** #8184 81.47
 A model of field theory treated in the Fock-Cook formalism. *J. Mathematical Phys.* **14** (1973), 130-138. (P. Achuthan) **47** #6232 81.46
 A note on Kato's perturbation theory. *J. Mathematical Phys.* **14** (1973), 829-830. (K. Veselić) **48** #10382 81.47
 A model of quantum field theory treated in the Fock-Cook formalism. II. *J. Mathematical Phys.* **16** (1975), 729-739. (P. Achuthan) **50** #15728 81.47
 Cores for operators in quantum mechanics. *J. Mathematical Phys.* **16** (1975), no. 10, 2112-2113. (From the author's introduction) **51** #14806 81.47
 Measures with minimum uncertainty on non-commutative algebras with application to measurement theory in quantum mechanics. *Mathematical foundations of quantum theory (Proc. Conf., Loyola Univ., New Orleans, La., 1977)*, pp. 299-327. *Academic Press, New York*, 1978. (U. Cattaneo) **58** #14624 81.46 (46L15)
- Schroeder, Anne (with Diday, Edwin; Ok, Y.) The dynamic clusters method in pattern recognition. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974)*, pp. 691-697. *North-Holland, Amsterdam*, 1974. (B. Chandrasekaran) **54** #1736 68A45 (62H99)
 (with Leroudier, Jacques) A statistical approach to the estimation of service times distributions for operating systems modelling. *International Computing Symposium (Antibes, 1975)*, pp. 171-184. *North-Holland, Amsterdam*, 1975. (Authors' summary) **57** #7805 60K25 (90B25)
 (with Diday, Edwin) A new approach in mixed distributions detection. (Loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Verte* **10** (1976), no. V-2, 75-106. (Authors' summary) **56** #13451 62H30 (68A45)
 Analyse d'un mélange de distributions de probabilité de même type. *Rev. Statist. Appl.* **24** (1976), no. 1, 39-62. (Author's summary) **56** #4030 62F10 (62H30)
- Schroeder, J. See *Instability of continuous systems*, **49** #10495
- Schroeder, Karl J. (with Penner, Sidney) Abstract characterizations of continuous functions. *Aequationes Math.* **11** (1974), 121-127. (B. Schweizer) **54** #5080 08A05 (54C05)
- Schroeder, Roger G. Resource planning in university management by goal programming. *Operations Res.* **22** (1974), no. 4, 700-710. (Peter Bod) **55** #7324 90A15
- Schroedter, Rolf (with Grabowski, Helmut; Fücke, Rudolf) ★Praktische Mathematik Hilfsmittel und Verfahren. Zweite verbesserte Auflage. Mathematik für Ingenieure. Fachbuchverlag, Leipzig, 1974. 438 pp. (Editors) **53** #11949 65-01
- Schroer, Bert (with Seiler, Rudolf; Swieca, Jorge Andre) Problems of stability for quantum fields in external time-dependent potentials. *Phys. Rev. D* (3) **2** (1970), 2927-2937. (M. J. Westwater) **48** #7836 81.46
 (with Swieca, Jorge Andre) Indefinite metric and stationary external interaction quantized fields. *Phys. Rev. D* (3) **2** (1970), 2938-2944. (M. J. Westwater) **48** #7881.47
 (with Swieca, Jorge Andre) Conformal transformations for quantized fields. *Rev. D* (3) **10** (1974), 480-485. (Authors' summary) **53** #9920 81.22
 Conformal invariance in Minkowskian quantum field theory and global operator expansions. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 92-101. *Lecture Notes in Phys.*, 39, Springer, Berlin, 1976. (Editors) **58** #32601 81.47
 Review on recent progress in renormalization theory. (Russian summary)
 International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part I. Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 240-251, 263. (G. Costa) **56** #10604 81.47
 (with Nielsen, N. K.) Axial anomaly and Atiyah-Singer theorem. *Nuclear-Phys.* **127** (1977), no. 3, 493-508. (Mi-Soo Smith) **58** #20048 81.57 (58G10)
 (with Nielsen, N. K.; Römer, H.) Classical anomalies and local version of Atiyah-Singer theorem. *Phys. Lett. B* **70** (1977), no. 4, 445-448. (Mi-Soo Smith) **56** #7657 81.58 (58G10)
 (with Römer, H.) "Fractional winding numbers" and surface effects. *Phys. Lett.* **71** (1977), no. 1, 182-184. (Editors) **58** #20053 81.58 (58G10)
 (with Nielsen, N. K.; Römer, H.) Anomalous currents in curved space. *Nuclear Phys. B* **136** (1978), no. 3, 475-492. (Ann Stehney) **58** #14973 83.57 (58G10)
 See also *New developments in relativistic quantum field theory*, **49** #11978
- Schroeter, G. (with Luh, Wolfgang) On the absolute convergence of lacunary orthonormal series. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 1-2, 89-92. (L. Leindler) **55** #42A28 (42A44)
- Schroeter, Gerhard Probability of kill and expected destroyed value if the underlying distributions are rotationally symmetric. *Operations Res.* **24** (1976), no. 3, 586-591. *Zbl* **338** #60065 90B99
 The application of a Hankel transformation to a class of circularly symmetric coverage problems. *Operations Res.* **25** (1977), no. 4, 675-687. (Olavi Hellman) **56** #7941 90B99
- Schroeter, Günter Ein Beitrag zum Müntzschens Problem und zur (a_n) -Abgeschlossenheit Banachräumen. *Mitt. Math. Sem. Giessen No. 105* (1973), iii+57 pp. (W. A. Luxemburg) **50** #14001 41A30
 Analytische Fortsetzbarkeit von Funktionen, die durch $\{e^{-\lambda_n x}\}$ approximiert werden können. *Mitt. Math. Sem. Giessen Heft 111* (1974), 35-47. (S. K. Bajaj) **55** #636 30A18
 A remark on the Hausdorff moment problem. *Tôhoku Math. J.* (2) **27** (1975), no. 389. (R. A. Horn) **55** #10976 44A50
- Schroff, R. Vermeidung von Verklemmungen in bewerteten Petrinetzen. *Vierte Jahrestagung der Gesellschaft für Informatik (Berlin, 1974)*, pp. 316-325. *Lecture Notes in Comput. Sci.*, Vol. 26, Springer, Berlin, 1975. (Hermann Walter) **52** #10267 94A05
- Schröter, Heinz Über disjunkte dynamische Systeme mit diskretem Spektrum. *Wiss. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* **26** (1977), no. 5, 63-70. (L. Petersen) **58** #6170 28A65
- Schröter, J. (with Kraus, K.) Expectation values of unbounded observables. *Internat. Theoret. Phys.* **7** (1973), 431-442. (Authors' summary) **50** #15717 81.47
- Schröter, Joachim (with West, G.) Kinetische Herleitung verallgemeinerter Nernst-Planck-Gleichungen. I. II. (English summaries) *Ann. Physik.* (7) **32** (1975), 19-32; *ibid.* **32** (1975), 33-46. (Authors' summary) **56** #4588 82.45
 (with West, G.) Kinetische Herleitung verallgemeinerter Nernst-Planck-Gleichungen. III. Eindimensionales Membranmodell. *Ann. Physik* (7) (1975), no. 3, 227-237. (Authors' summary) **56** #4589 82.45
 The complete Chapman-Enskog procedure for the Fokker-Planck equation. *Arch. Rational. Mech. Anal.* **66** (1977), no. 2, 183-199. (From the introduction) **58** #14758 82.35
- Schröter, Karl Die Mengenlehre als inhaltliches Fundament der Mathematik. *NTM Science Geschichte Naturwiss. Tech. Medizin* **6** (1969), no. 1, 1-9. (H. C. Kennedy) **58** #701A55
 ★Mathematik im System der Wissenschaften. Sitzungsberichte des Plenums der Klassen der Akademie der Wissenschaften der DDR, Jahrgang 1972, 11. Akademie-Verlag, Berlin, 1973. 76 pp. (Editors) **58** #26671 00A25
 Bericht der problemgebundenen Klasse: Mathematik im System der Wissenschaften. *Sitzungsberichte des Plenums und der Klassen der Akademie der Wissenschaften der DDR (Berlin, 1972)*, No. 11, pp. 5-23. *Akademie-Verlag, Berlin*, 1973. (Michael Otte) **58** #26672 00A25
 Zur axiomatischen Festlegung des Gruppenbegriffs. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, II. *J. Reine Angew. Math.* **268** (1974), 283-285. (Peter M. Neumann) **51** #5717 20A05
 Die Beiträge von Leibniz zur Algebra der verbandstheoretischen Relationen. *Operational. Akten des II. Internationalen Leibniz-Kongresses (Hannover, 1972)*, *II: Wissenschaftstheorie und Wissenschaftsgeschichte*, pp. 27-36. *Studia Leibnitiana Suppl.*, Vol. XIII, Steiner, Wiesbaden, 1975. (Editors) **58** #21183 01A50 (06-03)
 See also *Sitzungsberichte: Plenums und der Klasse der Akademie der Wissenschaften der DDR*, **55** #2447 and *Obituary: Schröter, Karl*, **58** #105
- Schröter, Ralf-Dieter See *Sominskii, I. S.*, **56** #5100
- Schroth, Peter Zur Definition der Nörlund'schen Hauptlösung von Differenzengleichungen. *Manuscripta Math.* **24** (1978), no. 3, 239-251. (Author's summary) **58** #17624 39A10
- Schryer, N. L. Solution of monotone nonlinear elliptic boundary value problems. *Numer. Math.* **18** (1971/72), 336-344. (D. P. Squier) **47** #1305 65N10

- constructive approximation of solutions to linear elliptic boundary value problems. *J. Numer. Anal.* **9** (1972), 546-572. (J. W. McLaurin) **47** #9860 65N99
- with McKenna, James) Analysis of field-aided, charge-coupled device transfer. *System Tech. J.* **54** (1975), 667-685. (Alfred R. Mitchell) **51** #2310 65N30
- with M. R. See Štabnoi, M. R.
- with Alex ★ On the quantum mechanical N -body system. With a German summary. Dissertation submitted to the Swiss Federal Institute of Technology, Zürich, in degree of Doctor of Natural Sciences. Diss. No. 4602. *Swiss Federal Institute of Technology, Zürich*, 1972. iv + iii + 101 pp. (John D. Dollard) **53** #12371 81.47
- See *Proceedings: Operations Research*, **55** #11995
- with Levey, Martin) Book on indeterminate problems of abū Kāmil (850-930). *Centaureus* **13** (1968/69), no. 1, 91-94. (See Zbl **208**, 4) 01A30
- with Levey, Martin) Indeterminate problems of Abū Kāmil (850-930). (Italian summary) *Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Sez. Ia* (8) **10** (1970), 23-96. (Authors' introduction) **57** #12030 01A30
- Joachim See *Proceedings: Oberwolfach Conference on Celestial Mechanics*, 1979
- C. F. Invariant subspaces with invariant complements. *Proc. Amer. Math. Soc.* **96**(9), 85-90. (From the author's introduction) **54** #1006 47B37
- Overdetermined systems on $L^2(\mathbb{R}^+)$. *Analytic theory of differential equations* (Proc. Western Michigan Univ., Kalamazoo, Mich., 1970), pp. 221-225. *Lecture Notes in Math.*, Vol. 183, Springer, Berlin, 1971. (Editors) **58** #1721 35N05
- On a conjecture of L. B. Page. *Pacific J. Math.* **42** (1972), 733-737. (J. Rovnyak) #4030 47A20
- with Carswell, J. G. W.) Lifting of operators that commute with shifts. *Michigan J. J.* **22** (1975), 65-69. (Paul S. Muhly) **51** #11136 47A20
- The corona theorem as an operator theorem. *Proc. Amer. Math. Soc.* **69** (1978), no. 1-76. (R. G. Douglas) **58** #2428 47B37 (46J15)
- with Hans Über das Randwertproblem von Poincaré in der Ebene. (Russian, English French summaries) *Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe* **19** (1970), no. 397-404. (M. M. Schiffer) **53** #11075 31A25
- with Wittig, W.) Zur Integralgleichung der tragenden Rechteckfläche bei metrischer Anströmung. (English and Russian summaries) *Z. Angew. Math. Mech.* **1971**, 345-352. (S. A. Berger) **45** #1477 76.45
- Bemerkung zu einer zweidimensionalen singulären Integralgleichung. *Z. Angew. Math. Mech.* **53** (1973), 415-416. (T. G. Gegelia) **50** #5400 45E05
- with Bittner, Leonhard) Professor Dr.-Ing. techn. h. c. Helmut Heinrich. Collection of articles dedicated to Helmut Heinrich on the occasion of his seventieth birthday. *Z. Angew. Math. Mech.* **55** (1975), 1. (1 plate) (Editors) **51** #2835 01A70
- with Schleiff, Martin) Zur Ermittlung der zirkulationsbehafteten Terschallströmung eines Tschaplygin-Gases um ein Kreisprofil. (English and Russian summaries) Collection of articles dedicated to Helmut Heinrich on the occasion of his seventieth birthday. *Z. Angew. Math. Mech.* **55** (1975), 9-17. (G. Paria) **52** #4815a (E #4815b) 76.45 (65R05)
- with Schleiff, Martin) Berichtigung zu: "Zur Ermittlung der zirkulationsbehafteten Terschallströmung..." (*Z. Angew. Math. Mech.* **55** (1975), 9-17). *Z. Angew. Math. Mech.* **55** (1975), no. 9, 544. (G. Paria) **52** #4815b 76.45 (65R05)
- with Schleiff, Martin) Über Verzwägungslösungen einer speziellen nichtlinearen Integralgleichung. *VII. Internationale Konferenz über Nichtlineare Schwingungen* (Berlin, 1975), Band I, Teil 2, pp. 237-244. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn.*, No. 4N, Akademie-Verlag, Berlin, 1977. (D. H. Hyers) #23419 45C99
- Nachruf für Herrn Prof. Dr. N. I. Muschellischwili. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* **26** (1977), no. 2, 151-152. (Editors) **56** #8304a 47A0
- with Horst ★ Topologie: eine Einführung. Dritte Auflage. *Mathematische Leitfäden. G. Teubner, Stuttgart*, 1971. 328 pp. (Editors) **49** #11450 54-01 (55-01)
- ★ Categories. Translated from the German by Eva Gray. *Springer-Verlag, New York-Heidelberg*, 1972. xi + 385 pp. (Editors) **50** #2286 18-02
- ★ Topologie. Eine Einführung. Vierte Auflage. *Mathematische Leitfäden. B. G. Teubner, Stuttgart*, 1975. 328 pp. (Editors) **54** #11257 54-01 (55-01)
- See also *Oberwolfach-Tagung: Operations Research*, **48** #3448;
- Oberwolfach-Tagung: Operations Research*, **48** #3450; *Oberwolfach-Tagung: Operations Research*, **48** #3452; *Oberwolfach-Tagung: Operations Research*, **48** #3454; *Oberwolfach-Tagung: Operations Research*, **48** #3455;
- Oberwolfach-Tagung: Operations Research*, **50** #9309 and *Oberwolfach-Tagung: Operations Research*, **50** #9310
- with L. K. Representative samples of programmable functions. *Information and Control* **25** (1974), 30-44. (Author's summary) **58** #32065 68A20 (94A15)
- Iterated limiting recursion and the program minimization problem. *J. Assoc. Comput. Mach.* **21** (1974), 436-445. (Ronald E. Prather) **57** #2893 02F10 (02F20, 02A25)
- Extending the expressive power of semantic networks. *Artificial Intelligence* **7** (1976), no. 2, 163-198. (Charles G. Morgan) **54** #11877a (E **54** #11877b) 68A45
- Erratum: "Extending the expressive power of semantic networks" (*Artificial Intelligence* **7** (1976), 163-198). *Artificial Intelligence* **7** (1976), no. 4, 369. (Charles G. Morgan) **54** #11877b 68A45
- with Ernst See Locher-Ernst, Louis, **57** #10572
- with Werner (with Gaensslen, Hermann) ★ Einfache und komplexe statistische Analyse. Eine Darstellung der multivariaten Verfahren für Sozialwissenschaftler und Mediziner. Uni-Taschenbücher, No. 274. *Ernst Reinhardt Verlag, Munich-Basel*, 1973. 26 pp. (Editors) **53** #4303 62-01 (62Hxx)
- with Gaensslen, Hermann) ★ Einfache und komplexe statistische Analyse. Eine Darstellung der multivariaten Verfahren für Sozialwissenschaftler und Mediziner. Zweite Auflage. Uni-Taschenbücher, No. 274. *Ernst Reinhardt Verlag, Munich-Basel*, 1976. 334 pp. (Editors) **55** #11444 62-01
- with G. See *Mathematiker über die Mathematik*, **51** #2831
- with Thomas H. (with Weidenmüller, Hans A.) The effective interaction in nuclei and its perturbation expansion: An algebraic approach. *Ann. Physics* **73** (1972), 108-135. (E. C. G. Sudarshan) **49** #11996 81.47
- (with Weidenmüller, Hans A.) Perturbation theory for the effective interaction in nuclei. *Ann. Physics* **76** (1973), 483-509. (E. C. G. Sudarshan) **51** #12184 81.41
- Schucany, William R. (with Gray, H. L.) ★ The generalized jackknife statistic. *Statistics Textbooks and Monographs*, Vol. 1. *Marcel Dekker, Inc., New York*, 1972. x + 308 pp. (J. N. K. Rao) **49** #8175 62F10
- (with Gray, H. L.; Watkins, T. A.) On the jackknife statistic and its relation to UMVU estimators in the normal case. With comments by Robert V. Hogg, N. L. Johnson, David F. Andrews, James N. Arveson and Farhad Mehran and a rejoinder by H. L. Gray, T. A. Watkins and W. R. Schucany. *Comm. Statist.* **2** (1973), 285-320. (D. A. Sprott) **49** #10019 62F10
- (with Li, Loretta) Some properties of a test for concordance of two groups of rankings. *Biometrika* **62** (1975), no. 2, 417-423. (P. K. Sen) **51** #14449 62J15
- (with Gray, H. L.; Watkins, T. A.) On the generalized jackknife and its relation to statistical differentials. *Biometrika* **62** (1975), no. 3, 637-642. (P. J. Huber) **52** #15796 62F10
- (with Gray, H. L.; Woodward, Wayne A.) Best estimates of functions of the parameters of the Gaussian and gamma distributions. *IEEE Trans. Reliab.* **R-25** (1976), no. 2, 95-99. **56** #13428 62F10
- (with Kelley, Gary D.; Kelley, Judy A.) Efficient estimation of $P(Y < X)$ in the exponential case. *Technometrics* **18** (1976), no. 3, 359-360. (C. J. Park) **54** #11633 62F10
- (with Sommers, John P.) Improvement of kernel type density estimators. *J. Amer. Statist. Assoc.* **72** (1977), no. 358, 420-423. (G. Manija) **56** #6996 62G05
- Schuch, A. F. (with Overton, W. C., Jr.) A uniform vector distribution for accurate spatial integration. *J. Computational Phys.* **14** (1974), 59-83. (J. E. Lowther) **52** #12675 82.65
- Schuch, Hans-Jürgen (with Thimm, Werner) Kleine Copernicus-Bibliographie. *Nicolaus Copernicus zum 500. Geburtstag*, pp. 265-270. *Böhlau, Cologne*, 1973. (Editors) **50** #9487 01A40
- Schucking, Engelbert L. (with Honig, Eli; Vishveshwara, C. V.) Motion of charged particles in homogeneous electromagnetic fields. *J. Mathematical Phys.* **15** (1974), 774-781. (F. A. E. Pirani) **50** #3866 83.53
- (with Greene, Richard D.; Vishveshwara, C. V.) The rest frame in stationary space-times with axial symmetry. *J. Mathematical Phys.* **16** (1975), 153-157. (P. Rastall) **50** #15828 83.53
- General relativity and astrophysics. The riddle of gravitation—on the occasion of the 60th birthday of Peter G. Bergmann (Proc. Conf., Syracuse Univ., Syracuse, N. Y., 1975). *General Relativity and Gravitation* **7** (1976), no. 1, 113-126. (Andrew King) **54** #14734 83.53
- Schue, John Representations of solvable Lie p -algebras. *J. Algebra* **38** (1976), no. 2, 253-267. (Bodo Pareigis) **53** #8167 17B30
- Schuegraf, Ernst (with Aalto, Sergei) Determination of the number of unambiguous bit matrices. *Internat. J. Comput. Information Sci.* **6** (1977), no. 3, 223-235. (Authors' summary) **58** #32151 68A99 (68A45, 68A50)
- Schuenemeyer, John H. (with Bargmann, Rolf E.) Maximum eccentricity as a union-intersection test statistic in multivariate analysis. *J. Multivariate Anal.* **8** (1978), no. 2, 268-273. (Edward M. Carter) **58** #8030 62H15 (62H25)
- Schuessler, B. (with Grimm, L. J.) Numerical solution of periodic differential systems. *Z. Angew. Math. Mech.* **55** (1975), no. 7-8, 442-443. (Francesco G. Lerda) **55** #13792 65L05
- Schuh, Dieter ★ Untersuchungen zur Geschichte der tibetischen Kalenderrechnung. Verzeichnis der Orientalischen Handschriften in Deutschland, Supplementband 16. *Franz Steiner Verlag GmbH, Wiesbaden*, 1973. vii + 239 pp. (Editors) **58** #21031 01A25
- Schuh, Edward Many-valued logics and the Lewis paradoxes. *Notre Dame J. Formal Logic* **14** (1973), 250-252. (A. Rose) **48** #61 02C05
- Schuh, H.-J. A condition for the extinction of a branching process with an absorbing lower barrier. *J. Math. Biol.* **3** (1976), no. 3-4, 271-287. (P. D. M. Macdonald) **54** #11540 60J80
- (with Barbour, Andrew D.) On the asymptotic behaviour of branching processes with infinite mean. *Advances in Appl. Probability* **9** (1977), no. 4, 681-723. (E. Seneta) **57** #17861 60J80
- Schuh, M. W. (with Rothman, Neal J.) Laplace transforms on vanishing algebras. *Semigroup Forum*. **8** (1974), no. 3, 189-214. (Anne C. Baker) **52** #5853 22A20 (43A32)
- Schuhmacher, Heinz F. (with Karpf, Armin D.; Liehl, Hermann J.) A new derivation of loop amplitudes by direct integration. *Nuclear Phys.* **B56** (1973), no. 2, 565-588. (Authors' summary) **58** #4071 81.47
- Schuhmann, Elisabeth Vicimus GEGAN. Interpretationsvarianten zu einer Tagebuchnotiz von C. F. Gauss. *NTM Schr. Geschichte Naturwiss. Tech. Medizin* **13** (1976), no. 2, 17-20. (Editors) **58** #27044 01A70 (01A55)
- See also Gauß, Carl Friedrich, **58** #10102
- Schuitman, A. On a certain test function space for Schwartz's Hankel transform. *Delft Progress Rep. Ser. F* **2** (1976/77), no. 3, 193-206. (E. L. Koh) **56** #6293 44A15
- (with Braaksma, B. L. J.) Some classes of Watson transforms and related integral equations for generalized functions. *SIAM J. Math. Anal.* **7** (1976), no. 6, 771-798. (E. L. Koh) **54** #8176 44A15
- A testing function space for the two sided Laplace transform. *Delft Progr. Rep.* **3** (1977/78), no. 3, 187-197. (P. Anandani) **58** #12220 44A10
- Schuldenfrei, Richard Eberle on nominalism in non-atomic systems. *Noûs* **3** (1969), no. 4, 427-430. (Editors) **58** #5090a 02C99
- Schuldt, S. B. A method of multipliers for mathematical programming problems with equality and inequality constraints. *J. Optimization Theory Appl.* **17** (1975), no. 1/2, 155-161. (P. J. Laurent) **53** #14910 65K05
- Schulenberg, John R. (with Wilcox, Calvin H.) Coerciveness inequalities for nonelliptic systems of partial differential equations. *Ann. Mat. Pura Appl.* (4) **88** (1971), 229-305. (B. Hellwig) **47** #2439 47F05 (35J30)
- (with Wilcox, Calvin H.) Completeness of the wave operators for scattering problems of classical physics. *Bull. Amer. Math. Soc.* **77** (1971), 777-782. (C. L. Dolph) **45** #4217 47F05 (35P25)

- (with Wilcox, Calvin H.) A coerciveness inequality for a class of nonelliptic operators of constant deficit. *Ann. Mat. Pura Appl.* (4) **92** (1972), 77-84. (Marvin Shinbrot) **47** #5415 35B45 (47F05)
- (with Wilcox, Calvin H.) Eigenfunction expansions and scattering theory for wave propagation problems of classical physics. *Arch. Rational Mech. Anal.* **46** (1972), 280-320. (Teruo Ikebe) **51** #6177 35P10 (47A40)
- A local compactness theorem for wave propagation problems of classical physics. *Indiana Univ. Math. J.* **22** (1972/73), 429-433. (Homer F. Walker) **46** #4015 35P25
- (with LaVita, James A.; Wilcox, Calvin H.) The scattering theory of Lax and Phillips and wave propagation problems of classical physics. Collection of articles dedicated to Eberhard Hopf on the occasion of his 70th birthday. *Applicable Anal.* **3** (1973), 57-77. (Boris Pavlov) **53** #11245 35P25 (47A40)
- On conservative boundary conditions for operators of constant deficit: the Maxwell operator. *J. Math. Anal. Appl.* **48** (1974), 223-249. (D. L. Colton) **50** #2713 35P25
- The Debye potential: a scalar factorization for Maxwell's equations. *J. Math. Anal. Appl.* **63** (1978), no. 2, 502-520. (Kishin Mariwalla) **58** #19838 78.35
- See also Spectral theory and wave processes, **49** #4732; Spectral theory, **49** #4733 and Korobeinikov, V. P., **53** #4722
- Schüler, L. Über die Konsistenz einer Schätzung mehrdimensionaler Dichten auf der Basis trigonometrischer Reihen. (English summary) *Metrika* **23** (1976), no. 2, 77-82. (Author's summary) **55** #11485 62G05
- (with Wolff, H.) Zur Schätzung eines Dichtefunktionals. (English summary) *Metrika* **23** (1976), no. 3, 149-154. (Wolfgang Wertz) **55** #4498 62G05
- Schüler, P. F. Weakly context-sensitive languages as model for programming languages. *Acta Informat.* **3** (1973/74), 155-170. (Horst Reichel) **51** #14662 68A30
- WCS-analysis of the context-sensitive. *Acta Informat.* **4** (1975), no. 4, 359-371. (Costică Cazacu) **52** #12434 68A30 (02G05, 68A20)
- A note on degrees of context-sensitivity. *Acta Informat.* **5** (1975), no. 4, 387-394. (A. Ja. Dikovskii) **54** #1731 68A30
- Inductive definability in formal language theory. *J. Comput. System Sci.* **16** (1978), no. 3, 400-412. (Cristian Calude) **57** #18266 68A30
- Schuler, Peter ★ Mathematische Computer-Modelle. Abhandlung zur Erlangung der Würde eines Doktors der Mathematik der Eidgenössischen Technischen Hochschule Zürich. Diss. No. 4473. *Eidgenössische Technische Hochschule Zürich, Zurich*, 1970. 50 pp. (R. N. Goss) **49** #11863 68A25 (02F10)
- Schüller, Rudolf Stufen der Homogenität in distributiven schwach affinen Räumen. *Beiträge zur geometrischen Algebra (Proc. Sympos., Duisburg, 1976)*, pp. 289-292. *Lehrbücher u. Monographien aus dem Gebiete der Exakt. Wiss., Math. Reihe, Band 21, Birkhäuser, Basel*, 1977. (K. Strubecker) **57** #17486 50D10
- Schüler, Wolfgang (with Albach, Horst) On a method of capital budgeting under uncertainty. *J. Mathematical and Physical Sci.* **4** (1970), 208-226. (G. Tintner) **52** #2604 90C50 (90A05)
- Schull, W. J. See Genetics and social structure, **49** #10401 and Demographic genetics, **52** #10091
- Schuller, Günther (with Stoer, Josef) Über die Konvergenzordnung gewisser Rang-2-Verfahren zur Minimierung von Funktionen. (English summary) *Numerische Methoden bei Optimierungsaufgaben, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 125-147. *Internat. Schriftenreihe Numer. Math., Band 23, Birkhäuser, Basel*, 1974. (Authors' summary) **58** #24952 65K05 (65B99)
- On the order of convergence of certain quasi-Newton methods. *Numer. Math.* **23** (1974), 181-192. (Bernard Martinet) **52** #9609 65K05
- Schulman, Jerry D. (with Desoer, Charles A.) Cancellations in multivariable continuous-time and discrete-time feedback systems treated by greatest common divisor extraction. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 4, 401-402. (Authors' summary) **55** #14307 93B99
- (with Desoer, Charles A.) Zeros and poles of matrix transfer functions and their dynamical interpretation. *IEEE Trans. Circuits and Systems* **CAS-21** (1974), 3-8. (J. E. Rubio) **52** #10128 93B25 (93B20)
- Schulman, L. See Dynamical systems, **52** #11994
- Schulman, L. S. (with Revzen, M.) Phase transitions as catastrophes. *Collect. Phenom.* **1**, no. 1, 43-49 (1972). (Miroslav Grmela) **54** #6822 82.58
- (with Peres, Asher) Existence theorem for some differential equations with advanced interactions. *Phys. Rev. D* (3) **5** (1972), 2654-2655. (R. G. Newton) **51** #13399 34K05
- Some differential-difference equations containing both advance and retardation. *J. Mathematical Phys.* **15** (1974), 295-298. (J. K. Hale) **51** #3642 34K10
- Caustics and multivaluedness: two results of adding path amplitudes. *Functional integration and its applications (Proc. Internat. Conf., London, 1974)*, pp. 144-156. *Clarendon Press, Oxford*, 1975. (Yvette Kosmann-Schwarzbach) **57** #18640 81.58 (58C25, 58G99)
- Stable generation of simple forms. *J. Theoret. Biol.* **57** (1976), no. 2, 453-468. (J. M. Skowronski) **56** #4898 92A05
- (with Shtokhamer, Roman) Thermodynamic arrow for a mixing system. *Internat. J. Theoret. Phys.* **16** (1977), no. 4, 287-298. (Khawaja Tahir Shah) **57** #8946 83.58 (58F15)
- (with Newman, Charles M.) Metastability and the analytic continuation of eigenvalues. *J. Mathematical Phys.* **18** (1977), no. 1, 23-30. (Shigetoshi Katsura) **54** #14656 82.30
- Illustration of reversed causality with remarks on experiment. *J. Statist. Phys.* **16** (1977), no. 2, 217-231. (Author's summary) **56** #2160 82.60
- Schulman, Robert S. (with Haden, Richard L.) A test theory model for ordinal measurements. *Psychometrika* **40** (1975), no. 4, 455-472. (Authors' summary) **58** #8121 62P15
- Schult, Eberhard ★ Transportoptimierung im Lager. Schriften zur wirtschaftswissenschaftlichen Forschung, Band 52. *Verlag Anton Hain, Meisenheim am Glan*, 1972. vii + 156 pp. (F. Weinberg) **48** #13212 90B05
- Schulte, A. See Fundamentals of mathematics, **49** #8788
- Schulte, M. (with Quebbemann, Heinz-Georg; Scharlau, Rudolf; Scharlau, Winfried) Quadratische Formen in additiven Kategorien. *Colloque sur les Formes Quadratiques (Montpellier, 1975)*. *Bull. Soc. Math. France Suppl. Mem. No. 48* (1976), 93-101. (Werner Bani) **57** #12566 15A63 (18D10, 18D35)
- Schulte Mönting, Jürgen Finitely generated implicative semi-lattices. *Proceedings of Lattice Theory Conference (Ulm, 1975)*, pp. 252-253. *Univ. Ulm, Ulm*, 1975. (W. Ne) **55** #5490 06A20
- Interpolation formulae for predicates and terms which carry their own history. *Arch. Math. Logik Grundlagenforsch.* **17** (1975/76), no. 3-4, 159-169. (N. Motoh) **55** #5405 02D99 (02B10)
- Schulten, Klaus (with Gordon, Roy G.) Exact recursive evaluation of 3j- and 6j-coefficients for quantum-mechanical coupling of angular momenta. *J. Mathematical Phys.* **16** (1975), no. 10, 1961-1970. (J.-L. Calais) **52** #2490 81.65
- (with Gordon, Roy G.) Semiclassical approximations to 3j- and 6j-coefficients for quantum-mechanical coupling of angular momenta. *J. Mathematical Phys.* **16** (1975), no. 10, 1971-1988. (J.-L. Calais) **52** #2491 81.65
- Schultheis, H. (with Schultheis, R.) Electrostatic or gravitational interaction energy of coaxial ellipsoids. *J. Mathematical Phys.* **16** (1975), 905-909. (Z. Janković) **51** #1478.31
- Schultheis, R. (with Schultheis, H.) Electrostatic or gravitational interaction energy of coaxial ellipsoids. *J. Mathematical Phys.* **16** (1975), 905-909. (Z. Janković) **51** #1478.31
- Schultheis, P. M. See Key papers in the development of information theory, **52** #5177
- Fichtner-Schultz, Barbara See Fichtner-Schultz, Barbara
- Schultz, D. G. (with Sticht, D. J.; Vincent, Thomas L.) Sufficiency theorems for target capture. Collection of articles dedicated to Professor Adolf Busemann. *J. Optimization Theory Appl.* **17** (1975), no. 5/6, 523-543. (G. N. Mil'shtein) **53** #7563 93C15 (90D25, 49E15)
- Schultz, D. H. (with Greenspan, Donald) Fast finite-difference solution of biharmonic problems. *Comm. ACM* **15** (1972), 347-350. (Authors' summary) **47** #2829 65N10
- Two test cases for the numerical solution of harmonic mixed boundary value problems. *J. Inst. Math. Appl.* **15** (1975), 1-8. (Robert D. Russell) **50** #1537 65N10
- (with Walter, Gilbert G.) Some eigenfunction methods for computing a numerical Fourier transform. *J. Inst. Math. Appl.* **18** (1976), no. 3, 279-293. (J. G. Hen) **56** #13743 65T05
- (with Greenspan, Donald) Simplification and improvement of a numerical method for Navier-Stokes problems. *Differential equations (Colloq., Keszthely, 1974)*, pp. 201-222. *Colloq. Math. Soc. János Bolyai, Vol. 15, North-Holland, Amsterdam*, 1975. (James E. Edwards) **58** #19254 65P05 (65N20, 76.65)
- Schultz, D. M. (with Crouse, C. F.) Random splittings: a model for a mass-size distribution. *South African Statist. J.* **7** (1973), 143-152. (N. L. Johnson) **48** #1002 62N99 (62E10)
- Schultz, Gerald M. See Transactions: Conference of Army Mathematicians, **49** #4735
- Schultz, Heinrich See Forbes, Eric Gray, **58** #26955
- Schultz, Henry J. Systems of derivations on topological algebras of power series. *Austral. Math. Soc. J.* **19** (1975), 358-370. (R. J. Loy) **51** #11112 46H20 (46J35)
- Schultz, Hilbert K. A Kuhn-Tucker algorithm. *SIAM J. Control* **11** (1973), 438-445. (H. Bartels) **52** #5043 90C30
- Schultz, James (with Hubert, Lawrence J.) Quadratic assignment as a general data analysis strategy. *British J. Math. Statist. Psychology* **29** (1976), no. 2, 190-241. (Authors' summary) **56** #1643 62P15 (62H30)
- Schultz, Konrad Ein Standardmodell für Skalen Mengenlehre. *Z. Math. Logik Grundlagen Math.* **23** (1977), no. 5, 405-408. (E. A. Paljutin) **58** #21613 02K10
- Schultz, Martin H. L^2 error bounds for the Rayleigh-Ritz-Galerkin method. *SIAM Numer. Anal.* **8** (1971), 737-748. (C. A. Hall) **45** #7967 65N30
- The computational complexity of elliptic partial differential equations. *Complexity of computer computations (Proc. Sympos., IBM Thomas J. Watson Res. Center, York Heights, N. Y., 1972)*, pp. 73-83, 187-212. *Plenum, New York*, 1972. (David R. Kin) **52** #3699 35-04 (35J15, 68A20)
- (with Eisenstat, Stanley C.) Computational aspects of the finite element method. *The mathematical foundations of the finite element method with applications to partial differential equations (Proc. Sympos., Univ. Maryland, Baltimore, Md., 1972)*, pp. 505-524. *Academic Press, New York*, 1972. (Georges A. Lebaud) **53** #12034 65N30
- Discrete Techebycheff approximation for multivariate splines. *J. Comput. Syst. Sci.* **6** (1972), 298-304. (E. W. Cheney) **46** #5898 41A15
- Quadrature-Galerkin approximations to solutions of elliptic differential equations. *Proc. Amer. Math. Soc.* **33** (1972), 511-515. (D. C. Gilles) **47** #4467 65N30
- Error bounds for Galerkin's method for monotone operator equations. *Proc. Amer. Math. Soc.* **35** (1972), 227-229. (J. R. Cannon) **45** #6181 65J05
- ★ Spline analysis. *Prentice-Hall Series in Automatic Computation. Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1973. xiii + 156 pp. (J. R. Cannon) **50** #15270 65N30
- (with Eisenstat, Stanley C.) The complexity of partial differential equations. *Complexity of sequential and parallel numerical algorithms (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1973)*, pp. 271-282. *Academic Press, New York*, 1973. (Siegfried Filippi) **53** #1980 65N30
- Error bounds for a bivariate interpolation scheme. Collection of articles dedicated to Isaac Jacob Schoenberg on his 70th birthday, III. *J. Approximation Theory* **8** (1979), 189-194. (J. W. Jerome) **51** #14518 65D05
- A Ritz method for an optimal control problem. *J. Optimization Theory Appl.* **17** (1973), 255-265. (Henry Hermes) **48** #2876 49D15
- The complexity of linear approximation algorithms. *Complexity of computer computations (Proc. Sympos., New York, 1973)*, pp. 135-148. *SIAM-AMS Proc., Vol. VII, American Math. Soc., Providence, R.I.*, 1974. (J. R. Rice) **52** #8736 41A45 (65D15, 68A20)
- (with Eisenstat, Stanley C.; Sherman, Andrew H.) The application of sparse matrix methods to the numerical solution of nonlinear elliptic partial differential equations. *Constructive and computational methods for differential and integral equations (Sympos., Indiana Univ., Bloomington, Ind., 1974)*, pp. 131-153. *Lecture Notes in Math., Vol. 478, Springer, Berlin*, 1974. (Editors) **58** #19252 65P05 (65F30)
- Complexity and differential equations. *Analytic computational complexity (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1975)*, pp. 143-149. *Academic Press, New York*, 1976. (R. P. Brent) **56** #1805 68A20

- with Eisenstat, Stanley C.; Sherman, Andrew H.) Applications of an element for Gaussian elimination. *Sparse matrix computations (Proc. Sympos., Argonne Lab., Lemont, Ill., 1975)*, pp. 85–96. Academic Press, New York, 1976. (Michael S. n) **56** #17022 65F05 (68A20)
- hillip On a paper of Szele and Szendrei on groups with commutative morphism rings. *Acta Math. Acad. Sci. Hungar.* **24** (1973), 59–63. (K. Faltings) **5145** 20K30
- the endomorphism ring of the additive group of a ring. *J. Austral. Math. Soc.* **15** (1), 60–69. (K. M. Rangaswamy) **49** #2984 20K30
- orsion-free extensions of torsion-free abelian groups. *J. Algebra* **30** (1974), 75–91. am J. Wickless) **49** #7376 20K15
- ematic paradoxes. *J. Recreational Math.* **7** (1974), 140–142. (Paul Ernest) **2477** 02A05
- with Bowshell, R. A.) Unital rings whose additive endomorphisms commute. *Ann.* **228** (1977), no. 3, 197–214. (R. B. Warfield, Jr.) **58** #16768 16A56 (70)
- R. See Schmidt, Günter, **58** #32178
- R. B. (with Ahmed, Nasir; Rao, K. R.) The generalized transform. *Applications of alsh functions (Proc. Sympos., Washington, D.C., 1971)*, pp. 60–67. Naval Research Laboratory, Washington, D.C., 1971. (P. Brock) **50** #1550 65T05 (94A05)
- with Ahmed, Nasir; Rao, K. R.) A generalized discrete transform. *Proc. IEEE* **59** (1), 1360–1362. (P. N. Rathie) **48** #5715 94A05
- with Ahmed, Nasir; Rao, K. R.) On the characterization of the amplitude and of N -periodic sequences. *Information and Control* **20** (1972), 9–19. (V. P. Mainra) **8081** 94A05
- Reinhard Some recent results on topological manifolds. *Amer. Math. Monthly* **78** (1), 941–952. (R. C. Kirby) **45** #6015 57–02 (57C25)
- Semifree circle actions with twisted fixed point sets. *Proceedings of the Second Conference on Compact Transformation Groups (Univ. Massachusetts, Amherst, Mass., 1971)*, Part I, pp. 102–116. *Lecture Notes in Math.*, Vol. 298, Springer, Berlin, 1972. (H.-T. Ku) **50** #14824 57E15
- Z_2 -torus actions on homotopy spheres. *Proceedings of the Second Conference on Compact Transformation Groups (Univ. Massachusetts, Amherst, Mass., 1971)*, Part I, pp. 118–118. *Lecture Notes in Math.*, Vol. 298, Springer, Berlin, 1972. (H.-T. Ku) **50** #14799 57D60 (57E15)
- Composition constructions on diffeomorphisms of $S^p \times S^q$. *Pacific J. Math.* **42** (2), 739–754. (E. C. Turner) **47** #4280 57D50
- Circle actions on homotopy spheres bounding plumbing manifolds. *Proc. Amer. Math. Soc.* **36** (1972), 297–300. (H.-T. Ku) **46** #8248 57D55 (57E15)
- (with Becker, James C.) Spaces of equivariant self-equivalences of spheres. *Bull. Amer. Math. Soc.* **79** (1973), 158–162. (Joel M. Cohen) **48** #1220 55D35 (55E45)
- Circle actions on homotopy spheres bounding generalized plumbing manifolds. *Ann.* **205** (1973), 201–210. (F. Raymond) **52** #1749 57E25
- Homotopy decompositions of equivariant function spaces. I. *Math. Z.* **131** (1973), 75–75. (E. C. Turner) **53** #11636 57E05
- Homotopy decompositions of equivariant function spaces. II. *Math. Z.* **132** (1973), 90. (E. C. Turner) **53** #11637 57E05
- Homotopy sphere pairs admitting semifree differentiable actions. *Amer. J. Math.* **96** (4), 308–323. (L. Liniger) **51** #4295 57E15 (57D65)
- Differentiable Z_p actions on homotopy spheres. *Bull. Amer. Math. Soc.* **80** (1974), 1–964. (M.-C. Ku) **50** #8576 57E15 (55E45)
- A generalization of Thom classes and characteristic classes to nonspherical actions. *Canad. J. Math.* **26** (1974), 138–144. (G. V. Krishnarao) **49** #3934 57F40
- (with Becker, James C.) Equivariant function spaces and stable homotopy theory. I. *Comment. Math. Helv.* **49** (1974), 1–34. (R. K. Lashof) **49** #3994 57D85 (55E10)
- Rational h -cobordism invariants for lens space bundles. *Quart. J. Math. Oxford* (2) **25** (1974), 497–511. (W. Metzler) **51** #9102 (E 55 #6455) 57F25 (55F25)
- (with Burghilea, Dan) On the semisimple degree of symmetry. (French summary) *Bull. Soc. Math. France* **103** (1975), no. 4, 433–440. (H.-T. Ku) **53** #1614 57E15
- Differentiable group actions on homotopy spheres. I. Differential structure and the not invariant. *Invent. Math.* **31** (1975), no. 2, 105–128. (Theodore Chang) **53** #9264 57E25
- Circle actions on homotopy spheres not bounding spin manifolds. *Trans. Amer. Math. Soc.* **213** (1975), 89–98. (M.-C. Ku) **52** #1750 57E25
- (with Becker, James C.) Equivariant function spaces and stables homotopy theory. *Indiana Univ. Math. J.* **25** (1976), no. 5, 481–492. (R. K. Lashof) **54** #3689 57D10 (57E15)
- Equivariant function spaces and equivariant stable homotopy theory. *Transformation groups (Proc. Conf., Univ. Newcastle upon Tyne, Newcastle upon Tyne, 1976)*, pp. 169–189. *London Math. Soc. Lecture Note Series*, No. 26, Cambridge Univ. Press, Cambridge, 1977. (E. C. Turner) **58** #13097 57E15
- Closed curves and circle homomorphisms in groups of diffeomorphisms. *Fund. Math.* **95** (1977), no. 2, 141–146. (R. K. Lashof) **55** #9126 57E05 (55E99)
- Corrigenda: "Rational H -cobordism invariants for lens space bundles" (Quart. J. Math. Oxford Ser. (2) **25** (1974), 497–511). *Quart. J. Math. Oxford Ser. (2)* **28** (1977), no. 109, 128. (W. Metzler) **55** #6455 57F25 (55F25)
- On the topological classification of linear representations. *Topology* **16** (1977), no. 3, 63–269. (A. Liulevicius) **58** #18449 55F50 (57E10)
- Homological transfers for orbit space projections. *Manuscripta Math.* **24** (1978), no. 2, 229–238. (T. Y. Lin) **57** #17669 57E15
- itz, Reinhard Ein Abstiegsverfahren für Approximationsaufgaben in normierten Räumen. (English summary) *Numer. Math.* **31** (1978/79), no. 1, 77–95. (Dietrich Braess) **58** #24862 65D15 (49D10)
- itz, T. D. (with Kwok, P. C.) Linked cluster theorem for the Abrikosov pseudofermion representation of spin operators. *Phys. Lett.* **39A** (1972), 402–404. (H. J. Hilhorst) **53** #15198 81.47
- itz, Hartmut See Timofeev, B. B.; et al., **57** #11848
- itz, Klaus-Peter Die Geometrien der ebenen Schnitte quadratischer Mengen. (English summary) *J. Geometry* **7** (1976), no. 1, 43–52. (Francis Buekenhout) **52** #11734 50D35
- siegmund-Schulze, Rainer See Siegmund-Schulze, Rainer
- siegmund-Schulze, Reinhard See Siegmund-Schulze, Reinhard
- Schulz, Christoph (with Betke, U.; Wills, Jörg M.) Bänder und Möbiusbänder in konvexen Polytopen. *Abh. Math. Sem. Univ. Hamburg* **44** (1975), 249–262 (1976). (E. Jucović) **53** #11497 52A25
- (with Ewald, Günther; Kleinschmidt, Peter) Kombinatorische Klassifikation symmetrischen Polytope. *Abh. Math. Sem. Univ. Hamburg* **45** (1976), 191–206. (G. T. Sallee) **54** #3587 52A25
- (with Betke, U.; Wills, Jörg M.) Zur Zerlegbarkeit von Skeletten. *Geometriae Dedicata* **5** (1976), no. 4, 435–451. (E. Jucović) **55** #13343 52A25
- Hamilton-Flächen auf Prismen. *Geometriae Dedicata* **6** (1977), no. 3, 267–274. (W. W. Breckner) **58** #7398 52A25
- (with Betke, U.; Wills, Jörg M.) Mannigfaltigkeiten im 2-Skelett konvexer Polytope. Special issue dedicated to the seventieth birthday of Erich Kähler. *Abh. Math. Sem. Univ. Hamburg* **47** (1978), 113–127. (Götz Brunner) **58** #18457 57A05 (52A25)
- Schulz, Eberhard Existenzsätze für Halbgruppenwerte kompakter Abbildungen in topologischen Vektorräumen. *Math. Nachr.* **57** (1973), 181–199. (Heinrich Steinlein) **49** #5957 47H10
- Schulz, Günther Eine Anwendung des Erweiterungsprinzips auf die Lösung allgemeiner linearer Optimierungsaufgaben. I. (English and French summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 1, 3–14. (O. Pokorná) **53** #15348a 90C05
- Eine Anwendung des Erweiterungsprinzips auf die Lösung allgemeiner linearer Optimierungsaufgaben. II. (English and French summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 6, 855–866. (O. Pokorná) **53** #15348b 90C05
- Schulz, H. (with Bang, J. M.; Bunakov, V. E.; Gareev, F. A.) The effects of configuration mixing in one-nucleon transfer reaction. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* **5** (1974), 263–307. (Authors' summary) **55** #1973 81.47
- (with Efimov, V. N.) A model of the boundary conditions in the problem of two and three particles. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* **7** (1976), no. 4, 875–915. (Authors' summary) **57** #18659 82.31
- Schulz, Jürgen Ein Näherungsverfahren zur Lösung eindimensionaler singulärer Integralgleichungen nicht normalen Typs. *Beiträge Numer. Math.* **2** (1974), 177–191. (R. C. MacCamy) **55** #6144 45E05
- Über die Konvergenz der Neumannschen Reihe in linearen topologischen Räumen. *Beiträge Anal.* No. 12 (1978), 177–183. (S. Buryšek) **58** #24924 65J05 (47A50)
- Schulz, Konrad A cutting plane algorithm and a column generation algorithm as dual algorithms. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optim.* **9** (1978), no. 1, 31–42. (Author's summary) **58** #15165 90C25 (90C30)
- Schulz, Ralph-Hardo On the lines of special block designs. *J. Combinatorial Theory Ser. A* **14** (1973), 102–112. (W. D. Wallis) **46** #7052 05B05
- Zur Geometrie der $PSU(3, q^2)$ eine Klasse von Steinerschen Systemen. *Geometriae Dedicata* **3** (1974), 11–19. (J. Schonheim) **49** #4811 05B30
- Geometrie über $GF(4)$. *Math.-Phys. Semesterber.* **22** (1975), no. 2, 158–184. (H. S. M. Coxeter) **53** #3864 50D30 (05B25)
- Zur Geometrie der $PSU(3, q^2)$. *Beiträge zur geometrischen Algebra (Proc. Sympos., Duisburg, 1976)*, pp. 293–298. *Lehrbücher u. Monographien aus dem Gebiete der Exakt. Wiss., Math. Reihe, Band 21*, Birkhäuser, Basel, 1977. (Ascher Wagner) **57** #12659 20B25 (50D30)
- Schulz, Reinhard Über Näherungslösungen von nichtlinearen Zweipunkt-Randwertproblemen (NZR). *Beiträge zur Schwingungstheorie*, pp. 115–121. *Schriftenreihe Zentralinst. Math. Mech. Akad. Wiss. der DDR, Heft 19*, Akademie-Verlag, Berlin, 1974. (O. Widlund) **50** #15361 65L10
- Schulz, Rudi Über eine spezielle zweidimensionale Operatorenrechnung mit einem krummlinig begrenzten Grundbereich. *Math. Nachr.* **67** (1975), 145–156. (L. Berg) **51** #11032 44A40
- Schulze, Bert-Wolfgang Potentiale bei der Wellengleichung im R^2 und Charakterisierung der Mengen der Kapazität Null. *Elliptische Differentialgleichungen, Band I (Kolloq., Berlin, 1969)*, pp. 137–157. Akademie-Verlag, Berlin, 1970. (S. Dümmel) **51** #3478 31A15 (35L05)
- Mengen der Kapazität Null für nichtelliptische Differentialgleichungen. Das Dirichlet-Problem für $u_{xy} = 0$. *Elliptische Differentialgleichungen, Band II*, pp. 217–246. *Schriftenreihe Inst. Math. Deutsch. Akad. Wissensch. Berlin, Reihe A, Heft 8*, Akademie-Verlag, Berlin, 1971. (V. Ficker) **48** #6446 31A25 (35L05)
- Nullmengensysteme in der Potentialtheorie. *Math. Nachr.* **49** (1971), 293–309. (Ü. Kuran) **46** #9372 31C15
- (with Wildenhain, Günther) Die Rolle des Balayage-Prinzips in der Theorie der Differentialgleichungen. *Math. Nachr.* **53** (1972), 371–382. (S. Dümmel) **47** #7196 35C99 (31C15, 46N05)
- Bemerkungen über das Dirichlet-Problem für $u_{xy} = 0$. *Math. Nachr.* **56** (1973), 189–194. (Ü. Kuran) **48** #6707 35L20 (31A25)
- Ein Balayage-Prinzip für korrekte Randwert-Probleme. I. *Math. Nachr.* **56** (1973), 307–344. (Gottfried Anger) **49** #11226 46E10 (31C15, 35G15)
- Ein Balayage-Prinzip für korrekte Randwertprobleme. II. *Math. Nachr.* **58** (1973), 313–336. (Gottfried Anger) **49** #612 31B20
- (with Wildenhain, Günther) Zur Potentialtheorie für stark elliptische Systeme mit konstanten Koeffizienten. *Math. Nachr.* **62** (1974), 189–215. (S. Dümmel) **50** #2693 35J55 (31B35)
- A priori-Abschätzungen für stark elliptische Systeme. *5. Tagung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975)*, Heft 1, pp. 109–114. *Wiss. Schr. Techn. Hochsch. Karl-Marx-Stadt, Techn. Hochsch., Karl-Marx-Stadt*, 1975. (Rolf Leis) **55** #6008 35J45
- Über das inverse Problem beim Laplace-Operator. *Math. Nachr.* **67** (1975), 225–235. (Gottfried Anger) **52** #8460 31B20
- Abschätzungen in Normen gleichmäßiger Konvergenz für elliptische Randwert-Probleme. *Math. Nachr.* **67** (1975), 303–315. (W. J. Sweeney) **52** #14631 35J40
- Zusammenhang zwischen Balayage für allgemeine Randwert-Probleme und angepaßten Kapazitätsbegriffen. *Rev. Roumaine Math. Pures Appl.* **20** (1975), no. 7, 819–837. (Gottfried Anger) **52** #8456 31B15

- A priori estimates in uniform norms for strongly elliptic systems. (Russian) *Sibirsk. Mat. Z.* **16** (1975), 384-394, 422. (J. Kačur) **57** #10222 35J55 (35B45)
(with Anger, Gottfried) Einige Bemerkungen über harmonische Masse und inverse Probleme. *Beiträge Anal. Heft* **8** (1976), 13-26. (G. Albinus) **56** #5915 31B20 (35J05)
- Balayage und Kapazität bei allgemeinen Randwert-Problemen für elliptische Gleichungen höherer Ordnung. *Beiträge Anal. Heft* **9** (1976), 97-106. (G. Albinus) **56** #6107 35J40 (31C15)
(with Wildenhain, Günther) Potentialtheorie für stark elliptische Systeme höherer Ordnung. *Beiträge Anal. Heft* **9** (1976), 107-112. (G. Albinus) **56** #3461 35J45 (31C15)
- Potentials for higher order elliptic equations, and inverse problems. (Russian) *Differencial'nye Uravneniya* **12** (1976), no. 1, 148-158, 190. (Author's summary) **58** #6673 35J40 (31B35)
- On the set of all elliptic boundary value problems for an elliptic pseudodifferential operator on a manifold. *Math. Nachr.* **75** (1976), 271-282. (A. S. Dynin) **56** #16709 58G15 (35S15)
(with Wildenhain, Günther) ★Methoden der Potentialtheorie für elliptische Differentialgleichungen beliebiger Ordnung. Lehrbücher und Monographien aus dem Gebiete der Exakten Wissenschaften: Mathematische Reihe, Band 60. *Birkhäuser Verlag, Basel-Stuttgart*, 1977. xv + 408 pp. ISBN 3-7643-0944-X (M. Schechter) **58** #17437 35-02 (31Bxx, 35Jxx)
- The inverse problem for higher order elliptic equations. (Russian) *Differencial'nye Uravneniya* **13** (1977), no. 12, 2265-2271, 2304. (J. Kačur) **58** #6783 35R30 (35J99)
(with Pillai, Ulf) ★Elliptische Randwertprobleme für Komplexe von Pseudodifferentialoperatoren. With English and Russian summaries. Report No. R-03/78. *Zentralinstitut für Mathematik und Mechanik, Akademie der Wissenschaften der DDR, Berlin*, 1978. 91 pp. (Ja. A. Roitberg) **58** #18612 58G10 (35J60)
See also *Contributions to the School on Global Analysis*, **58** #31136a and *Contributions to the School on Global Analysis*, **58** #31136b
- Schulze, D. See *Reports: Seminar on Formal Methodology of Empirical Sciences*, **50** #13
- Schulze, U. E. Consistency of the Hotelling-, Wilks-, Roy- and Pillai-tests for a general linear hypothesis in multivariate linear nonnormally distributed models. (German and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 1, 11-21. (Dennis L. Young) **55** #6697 62H15
- Schulze, Volker Die Primeilerdichte von ganzzahligen Polynomen. I. *J. Reine Angew. Math.* **253** (1972), 175-185. (O. H. Körner) **45** #8640 12A20 (12B05)
Die Primeilerdichte von ganzzahligen Polynomen. II. *J. Reine Angew. Math.* **256** (1972), 153-162. (O. H. Körner) **47** #178 10K99
Über die Zerlegung von Primzahlen bestimmter arithmetischer Progressionen in algebraischen Zahlkörpern. *J. Reine Angew. Math.* **264** (1973), 147-148. (J. S. Joel) **48** #6063 12A75 (10H20)
Über die Wertgleichheit homogener Linearformen. *Period. Math. Hungar.* **5** (1974), 201-213. (P. Szűsz) **52** #298 10F40
Die Primeilerdichte von ganzzahligen Polynomen. III. *J. Reine Angew. Math.* **273** (1975), 144-145. (O. H. Körner) **51** #5559 12A75
Über die Ordnung von Halbgruppen mit gewissen Eigenschaften. *J. Reine Angew. Math.* **273** (1975), 146-149. (W. Narkiewicz) **56** #12155 20M10
Polynome mit nicht durch Restklassen beschreibbaren Primeilerdichten. *Acta Arith.* **31** (1976), no. 2, 195-197. (Philip A. Leonard) **54** #12727 12E05
Die Verteilung der Primeiler von Polynomen auf Restklassen. I. *J. Reine Angew. Math.* **280** (1976), 122-133. (Larry J. Goldstein) **53** #341a 12A20 (12A75)
Die Verteilung der Primeiler von Polynomen auf Restklassen. II. *J. Reine Angew. Math.* **281** (1976), 126-148. (Larry J. Goldstein) **53** #341b 12A20 (12A75)
Potenzreste. *Acta Arith.* **33** (1977), no. 4, 379-404. (Klaus Burde) **57** #220 10A15 (12A99)
- Schulze-Röbbecke, Thomas ★Algorithmen zur Auflösung und Deformation von Singularitäten ebener Kurven. Diplomarbeit, Universität Bonn, Bonn, 1976. Bonner Mathematische Schriften, No. 96. *Mathematisches Institut der Universität Bonn, Bonn*, 1977. 87 pp. (Jonathan M. Wahl) **57** #331 14H20 (14B05)
- Schumacher, Dietmar (with Howlett, C.) Free finitary algebras in a co-complete cartesian closed category. *Canad. Math. Bull.* **15** (1972), 373-374. (Horst Reichel) **47** #1911 18D35
Absolutely free algebras in a topos containing an infinite object. *Canad. Math. Bull.* **19** (1976), no. 3, 323-328. (Andreas Blass) **55** #12790 18C99 (02H15)
- Schumacher, Georg Über ebene, regulär faktorisierbare und einfache holomorphe Abbildungen. (English summary) *Manuscripta Math.* **15** (1975), 33-43. (H. Röhr) **52** #3598 32D20
Ein topologisches Reduziertheitskriterium für holomorphe Abbildungen. *Math. Ann.* **220** (1976), no. 2, 97-103. (Gerd Fischer) **53** #5934 32C40
- Schumacher, Heinz (with Duske, Jürgen; Parchmann, Rainer) A pattern representation of indexed languages. *Information Processing Lett.* **5** (1976), no. 5, 152-154. (Branislav Rován) **56** #7340 68A30
(with Bodendiek, Rainer; Wegner, Horst) Über eine spezielle Klasse graziöser Eulerscher Graphen. *Mitt. Math. Gesellsch. Hamburg* **10**, no. 4, 241-248 (1976). (Rudolf Halin) **58** #21804 05C35
(with Bodendiek, Rainer; Wegner, Horst) Über graziöse Numerierungen von Graphen. *Elem. Math.* **32** (1977), no. 3, 49-58. (J. Sedláček) **57** #16139 05C99
(with Bodendiek, Rainer; Wegner, Horst) Über graziöse Graphen. *Math.-Phys. Semesterber.* **24** (1977), no. 1, 103-126. (S. W. Golomb) **56** #11853 05C99
(with Bodendiek, Rainer) Über Bäume und Zahlen. *Praxis Math.* **19** (1977), no. 6, 141-145. (Heiko Harborth) **57** #5798 05C05
- Schumacher, Konrad Gradientenverfahren im Hilbertraum, die unter schwachen Voraussetzungen konvergieren. (English summary) *Numerische Behandlung von Differentialgleichungen* (Tagung, Math. Forschungsinst., Oberwolfach, 1974), pp. 275-285. *Internat. Schriftenreihe Numer. Math., Band 27, Birkhäuser, Basel*, 1975. (Author's summary) **58** #31822 65J05 (49A99)
Iterative Optimierungsverfahren, die unter schwachen Voraussetzungen konvergieren. (English summary) *Numer. Math.* **24** (1975), no. 5, 443-456. (R. Kodnár) **52** #15183 49D20
- Lower bounds and inclusion balls for the solution of locally uniformly convex optimization problems. *Optimization and operations research (Proc. Conf., Oberwolfach, 1975)*, pp. 273-282. *Lecture Notes in Econom. Math. Systems*, Vol. 117, Springer, Berlin, 1976. (B. Ross Barmish) **57** #18829 90C25 (65K05)
(with Hadeler, K. P.; an der Heiden, Uwe) Generation of the nervous impulse as a periodic oscillations. *Biol. Cybernet.* **23** (1976), no. 4, 211-218. (J. Myron Horowitz) **58** #15279 92A05
On the uniqueness of forward continuation for time-lag systems. *J. Differential Equations* **25** (1977), no. 3, 365-376. (K. Zima) **57** #3551 34G05 (34K05)
Existence and continuous dependence for functional-differential equations with unbounded delay. *Arch. Rational Mech. Anal.* **67** (1978), no. 4, 315-335. (D. H. Chynoweth) **57** #16908 34K05 (34G05)
- Schumacher, Martin Ein Polyasches Momentenproblem und umhüllende asymptotische Potenzreihen. *Math. Z.* **145** (1975), no. 3, 231-234. (R. A. Horn) **52** #8442 30A15 (30A84)
★Über asymptotische Potenzreihen in zwei Veränderlichen und ein zweidimensionales Momentenproblem. Dissertation zur Erlangung des Grades eines Doktors der Naturwissenschaften der Universität Dortmund. *Universität Dortmund, Dortmund*, 1976. 54 pp. (E. Rieksting) **56** #16229 41A60 (44A50)
- Schumacher, Robert Zur Minimalität trigonometrischer Polynomoperatoren. (English summary) *Manuscripta Math.* **19** (1976), no. 2, 133-142. (Manfred v. Golitschik) **53** #13974 42A12
- Schumaker, L. L. (with Jerome, Joseph W.) Local bases and computation of g-splines. *Methoden und Verfahren der mathematischen Physik, Band 5*, pp. 171-199. *B. I.-Hochschulschriften, No. 724 a-b, Bibliographisches Inst., Mannheim*, 1971. (Ian Gladwell) **50** #15273 65D15
(with Mangasarian, Olvi L.) Discrete splines via mathematical programming. *SIAM J. Control* **9** (1971), 174-183. (P. J. Laurent) **46** #4068 41A15
A constrained rational approximation problem in filter design. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970)* (Russian), pp. 309-314. *Izdat. Bolgarsk. Akad. Nauk, Sofia*, 1972. (R. S. Bucy) **50** #13997 41A20
(with Lorentz, Georg Günther) Saturation of positive operators. Collection of articles dedicated to J. L. Walsh on his 75th birthday, IV (Proc. Internat. Conf. Approximation Theory, Related Topics and their Applications, Univ. Maryland, College Park, Md., 1970). *J. Approximation Theory* **5** (1972), 413-424. (B. Dresler) **49** #9495 41A40
Constructive aspects of discrete polynomial spline functions. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 469-476. *Academic Press, New York*, 1973. (M. Marsden) **49** #3388 41A15
(with Lyche, Tom) On the convergence of cubic interpolating splines. *Spline functions and approximation theory (Proc. Sympos., Univ. Alberta, Edmonton, Alta., 1973)*, pp. 169-189. *Internat. Ser. Numer. Math., Vol. 21, Birkhäuser, Basel*, 1973. (A. Sharma) **52** #6252 41A15
(with Munteanu, Marie-Jeanne) Direct and inverse theorems for multidimensional spline approximation. *Indiana Univ. Math. J.* **23** (1973/74), 461-470. (Karl Schenck) **49** #3407 41A65 (46E35)
(with Jerome, Joseph W.) Characterizations of absolute continuity and essential boundedness for higher order derivatives. Collection of articles dedicated to Salomon Bochner. *J. Math. Anal. Appl.* **42** (1973), 452-465. (K. M. Garg) **50** #974 46E05 (26A24, 41A15)
(with Munteanu, Marie-Jeanne) On a method of Carasso and Laurent for constructing interpolating splines. *Math. Comp.* **27** (1973), 317-325. (G. D. Byrne) **48** #7536 65D05
(with Mangasarian, Olvi L.) Best summation formulae and discrete splines. *SIAM J. Numer. Anal.* **10** (1973), 448-459. (C. Micchelli) **48** #10052 65D15
(with Lyche, Tom) Computation of smoothing and interpolating natural splines and local bases. *SIAM J. Numer. Anal.* **10** (1973), 1027-1038. (C. de Boor) **49** #1732 65D10
(with Jerome, Joseph W.) On the distance to a class of generalized splines. *Linear operators and approximation, II (Proc. Conf., Math. Res. Inst., Oberwolfach, 1974)*, pp. 503-517. *Internat. Ser. Numer. Math., Vol. 25, Birkhäuser, Basel*, 1974. (Philip W. Smith) **52** #14755 41A15
(with Daniel, James W.) On the closedness of the linear image of a set, applications to generalized spline functions. *Applicable Anal.* **4** (1974), no. 3, 191-212. (Marc Attie) **53** #1222 46B05 (41A15)
(with Munteanu, Marie-Jeanne) Some multidimensional spline approximations methods. *J. Approximation Theory* **10** (1974), 23-40. (M. Marsden) **51** #13531 41A15 (41A63)
(with Lyche, Tom) Local spline approximation methods. *J. Approximation Theory* **15** (1975), no. 4, 294-325. (Tord H. Ganelius) **53** #1108 41A15
(with Reddien, George W., Jr.) On a collocation method for singular two point boundary value problems. *Numer. Math.* **25** (1975/76), no. 4, 427-432. (Robert Russell) **56** #4183 65L10
Two-stage spline methods for fitting surfaces. *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math. Univ. Bonn, Bonn, 1976)*, pp. 378-389. Springer, Berlin, 1976. (From the introduction) **58** #29712 41A63
Fitting surfaces to scattered data. *Approximation theory, II (Proc. Internat. Sympos. Univ. Texas, Austin, Tex., 1976)*, pp. 203-268. *Academic Press, New York*, 1976. (J. Hayes) **54** #14312 65D10
(with Eidson, Harold D.) Spline solution of linear initial- and boundary-value problems. *Moderne Methoden der numerischen Mathematik (Tagung 200-Jahrfeier, Teubner, Clausthal, Clausthal, 1975)*, pp. 67-80. *Internat. Ser. Numer. Math., Vol. 30, Birkhäuser, Basel*, 1976. (Authors' summary) **58** #24971 65L10
(with de Boor, Carl; Lyche, Tom) On calculating with B-splines. II. Integrating numerical methods of the approximation theory, Band 3 (Tagung, Math. Forschungsinstitut, Oberwolfach, 1975), pp. 123-146. *Internat. Ser. Numer. Math., Vol. 30, Birkhäuser, Basel*, 1976. (Authors' summary) **58** #23256 41A15 (65D05)
Toward a constructive theory of generalized spline functions. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 265-331. *Lecture Notes in Math., Vol. 50, Springer, Berlin*, 1976. (M. J. Marsden (Zbl 342 #41009)) **58** #1872 41A15

- with Jerome, Joseph W.) Local support bases for a class of spline functions. *J. Approximation Theory* 16 (1976), no. 1, 16-27. (Derek W. Arthur) 52 #14756 41A15
- with Baumeister, Johann) Nonlinear classes of splines and variational problems. *J. Approximation Theory* 18 (1976), no. 1, 63-73. (Marc Atteia) 55 #8658 41A65
- eros of spline functions and applications. *J. Approximation Theory* 18 (1976), no. 2, 68. (C. Micchelli) 55 #3616 41A15
- a Tchebycheffian spline functions. *J. Approximation Theory* 18 (1976), no. 3, 403. (Hans Strauss) 54 #8096 41A15
- with Copley, P.) On p Lg-splines. *J. Approx. Theory* 23 (1978), no. 1, 1-28. (Marc Jacquet) 58 #23258 41A15
- ee also Approximation theory, 48 #761 and Approximation theory, 54 #5673
- u, U. Linear stability of finite difference equations for three-dimensional flow fields. *J. Computational Phys.* 18 (1975), no. 4, 465-470. (P. C. Jain) 52 #12541
- with Sweet, Roland A.) A direct method for the solution of Poisson's equation with inhomogeneous boundary conditions on a staggered grid of arbitrary size. *J. Computational Phys.* 20 (1976), no. 2, 171-182. (A. O. Garder, Jr.) 52 #16055 65N05
- n, Ulrich See Jahrestagung: Gesellschaft für Informatik, 48 #1502
- n, W. (with Teichmann, G.) Some remarks concerning the linear theory of orthotropic shells. *Acta Mech.* 25 (1976/77), no. 3-4, 291-299. (V. P. Pavlov) 56 #7444 7353
- J. R. (with Sagle, Arthur A.) Multiplications on homogeneous spaces, associative algebras and connections. *Pacific J. Math.* 48 (1973), 247-266. (K. Yosida) 51 #11361 53C30 (17E05)
- (with Sagle, Arthur A.) Anti-commutative algebras and homogeneous spaces with applications. *Pacific J. Math.* 68 (1977), no. 1, 255-269. (J. L. Koszul) 57 #10647 30 (55D45)
- ky, Alan (with McNabb, Alex) Factorization of operators. I. Algebraic theory and examples. *J. Functional Analysis* 9 (1972), 262-295. (P. M. Anselone) 45 #2521 65 (46H99, 47B35)
- (with McNabb, Alex) Factorization and imbedding for general linear boundary value problems. *J. Differential Equations* 14 (1973), 518-546. (G. B. Gustafson) 57 #771 34G05
- (with Wenska, Tom) Imbedding a class of linear integral equations through the first critical point. *SIAM J. Math. Anal.* 4 (1973), 592-608. (Stefan Balint) 48 #4664 30
- (with McNabb, Alex) An initial value theory for linear causal boundary value problems. *J. Differential Equations* 15 (1974), 322-349. (Z. Vorel) 49 #7558 34K05
- (with McNabb, Alex) Factorization of Fredholm operators on analytic functions. *National Conference on Differential Equations (Univ. Southern California, Los Angeles, Calif., 1974)*, pp. 557-567. Academic Press, New York, 1975. (G. O. Okikiolu) 57 #17361 47B30 (45B05, 47G05)
- (with Wenska, Tom) An operator residue theorem with applications to branching problems and renewal type integral equations. *SIAM J. Math. Anal.* 6 (1975), 229-235. (Salehi) 51 #3937 47A65 (60J80, 60K05)
- (with Pierce, J. G.) Optimal impulsive control of compartment models. I. Qualitative aspects. *J. Optimization Theory Appl.* 18 (1976), no. 4, 537-554. (Werner W. Heng) 54 #9669 90C25 (92A05)
- ns, George F. Solutions to four modal problems of Sobociński. *Notre Dame J. Formal Logic* 12 (1971), 335-340. (Kristen Segerberg) 46 #5110 02C10
- S3.02=S3.03. *Notre Dame J. Formal Logic* 15 (1974), 147-148. (Editors) 51 #10768 02C10
- K and \mathbb{Z} . *Notre Dame J. Formal Logic* 15 (1974), 295-297. (N. B. Cocchiarella) 51 #9534 02C10
- Wajsberg normal forms for S5. *J. Philos. Logic* 4 (1975), no. 3, 357-360. (Editors) 51 #21482 02C10
- A Henkin-style completeness proof for the pure implicational calculus. *Notre Dame J. Formal Logic* 16 (1975), 402-404. (N. C. A. da Costa) 51 #10073 02G20
- Remark on a logic of preference. *Notre Dame J. Formal Logic* 16 (1975), no. 4, 509-510. (F. R. Drake) 52 #5364 02C10
- Disjunctive extensions of S4 and a conjecture of Goldblatt's. *Z. Math. Logik und Grundlagen Math.* 21 (1975), 81-86. (N. B. Cocchiarella) 51 #2871 02C10
- Interpolation in S5 and some related systems. *Rep. Math. Logic No. 6* (1976), 97-109. (Editors) 58 #16157 02C10
- An incomplete nonnormal extension of S3. *J. Symbolic Logic* 43 (1978), no. 2, 1-212. (S. K. Thomason) 58 #5067 02C10
- erman, John See Complements and comments, 48 #1835
- termann, Michael F. Zur Adäquatheit des Hacking-Stegmüllerschen Begriffs. *Z. Allgemeine Wissenschaftstheorie* 8 (1977), no. 2, 375-378. (Günter W. Weng) 57 #12164 02A05 (62A10)
- pp, Paul E. Small cancellation theory over free products with amalgamation. *Math. Ann.* 193 (1971), 255-264. (R. C. Lyndon) 45 #392 20F25
- (with Appel, Kenneth I.) The conjugacy problem for the group of any tame alternating knot is solvable. *Proc. Amer. Math. Soc.* 33 (1972), 329-336. (D. E. Cohen) 55 #3530 20F10
- A survey of SQ-universality. *Conference on Group Theory (Univ. Wisconsin-Parkside, Kenosha, Wis., 1972)*, pp. 183-188. *Lecture Notes in Math.*, Vol. 319, Springer, Berlin, 1973. (F. Levin) 52 #3342 20F05
- A survey of small cancellation theory. *Word problems: decision problems and the Burnside problem in group theory (Conf. on Decision Problems in Group Theory, Univ. California, Irvine, Calif. 1969; dedicated to Hanna Neumann)*, pp. 569-589. *Studies in Logic and the Foundations of Math.*, Vol. 71, North-Holland, Amsterdam, 1973. (Robert G. Burns) 54 #415 20F10
- (with Miller, Charles F., III) The geometry of Higman-Neumann-Neumann extensions. Collection of articles dedicated to Wilhelm Magnus. *Comm. Pure Appl. Math.* 26 (1973), 787-802. (R. C. Lyndon) 49 #9091 20F10
- (with McCool, James) On one relator groups and HNN extensions. Collection of articles dedicated to the memory of Hanna Neumann, II. *J. Austral. Math. Soc.* 16 (1973), 249-256. (M. J. Dunwoody) 49 #2952 20F05
- Some reflections on HNN extensions. *Proceedings of the Second International Conference on the Theory of Groups (Australian Nat. Univ., Canberra, 1973)*, pp. 611-632. *Lecture Notes in Math.*, Vol. 372, Springer, Berlin, 1974. (C. R. J. Clapham) 50 #10085 20E30
- (with Sacerdote, George S.) SQ-universality in HNN groups and one relator groups. *J. London Math. Soc.* (2) 7 (1974), 733-740. (Stephen Meskin) 51 #718 20F05
- Embeddings into simple groups. *J. London Math. Soc.* (2) 13 (1976), no. 1, 90-94. (R. C. Lyndon) 53 #5758 20F15
- A strengthened Freiheitssatz. *Math. Ann.* 221 (1976), no. 1, 73-80. (K. Appel) 57 #3255 20F10
- (with Lyndon, Roger C.) ★Combinatorial group theory. *Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 89. Springer-Verlag, Berlin-New York*, 1977. xiv + 339 pp. ISBN 3-540-07642-5 (Ian M. Chiswell) 58 #28182 20F05 (55A05)
- A note on non-Hopfian groups. *J. London Math. Soc.* (2) 16 (1977), no. 2, 235-236. (Robert G. Burns) 57 #9850 20E99 (20F05)
- Schupp, Peter 3×3-Zauberquadrate über endlichen Körpern. *Praxis Math.* 18 (1976), no. 8, 197-202. (L. D. Baumert) 58 #291 05B20
- Schuppe, Wolfgang See Bürger, Erich, 58 #31984
- Schuppel, Baldur M. Regularisierung singularer Integralgleichungen vom nicht normalen Typ mit stückweise stetigen Koeffizienten. *Function theoretic methods for partial differential equations (Proc. Internat. Sympos., Darmstadt, 1976)*, pp. 430-442. *Lecture Notes in Math.*, Vol. 561, Springer, Berlin, 1976. (Author's review (Zbl 339 #45005)) 58 #23407 45E05
- Regularisierung singularer Integralgleichung vom nichtnormalen Typ mit unstetigen Koeffizienten. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* 56 (1976), no. 3, T265-T266. (Pekka Silvennoinen) 55 #6145 45E05
- van Schuppen, Jan H. See Van Schuppen, Jan H.
- Schur, F. See Festschrift: Weber, Heinrich, 50 #12626
- Schur, Issai ★Gesammelte Abhandlungen. Band I. Herausgegeben von Alfred Brauer und Hans Rohrbach. *Springer-Verlag, Berlin-New York*, 1973. xv + 491 pp. (1 plate) (Editors) 57 #2858a 01A75
- ★Gesammelte Abhandlungen. Band II. Herausgegeben von Alfred Brauer und Hans Rohrbach. *Springer-Verlag, Berlin-New York*, 1973. iv + 494 pp. (Editors) 57 #2858b 01A75
- ★Gesammelte Abhandlungen. Band III. Herausgegeben von Alfred Brauer und Hans Rohrbach. *Springer-Verlag, Berlin-New York*, 1973. iv + 480 pp. (Editors) 57 #2858c 01A75
- See also Brauer, Alfred, 52 #10565 and Brauer, Alfred, 58 #10160
- Schurer, F. An application of natural cubic spline functions to numerical integration formulae. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970) (Russian)*, pp. 315-325. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (Gerhard Merz) 51 #2258 65D30
- (with van Rooij, P. L. J.) ★A bibliography on spline functions. II. T.H.-Report 73-WSK-01. *Department of Mathematics, Technological University Eindhoven, Eindhoven*, 1973. ii + 70 pp. (From the authors' introduction) 55 #8628 41A15
- (with van Rooij, P. L. J.) A bibliography on spline functions. *Spline-Funktionen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 315-415. *Bibliographisches Inst., Mannheim*, 1974. (Editors) 53 #11267 41A15 (00A15)
- A remark on extremal sets in the theory of polynomial interpolation. *Stud. Sci. Math. Hungar.* 9 (1974), 77-79 (1975). (J. Prasad) 51 #10954 41A05
- (with Steutel, F. W.) On an inequality of Lorentz in the theory of Bernstein polynomials. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 332-338. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (From the introduction) 58 #12094 41A10
- (with Sikkema, P. C.; Steutel, F. W.) On the degree of approximation with Bernstein polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* 79=Indag. Math. 38 (1976), no. 3, 231-239. (Helmuth Brass) 53 #6155 41A10
- (with Steutel, F. W.) ★On the degree of approximation of 2π -periodic functions in C^1 with positive linear operators of the Jackson type. T. H.-Report 77-WSK-02. *Department of Mathematics, Technological University Eindhoven, Eindhoven*, 1977. ii + 48 pp. (B. Bojanov) 58 #1949 42A08 (41A35)
- (with Steutel, F. W.) The degree of local approximation of functions in $C_0[0,1]$ by Bernstein polynomials. *J. Approximation Theory* 19 (1977), no. 1, 69-82. (Martin E. Price) 55 #10913 41A10
- (with Steutel, F. W.) Note on the asymptotic degree of approximation of functions in $C^1[0,1]$ by Bernstein polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* 80=Indag. Math. 39 (1977), no. 2, 128-130. (Martin E. Price) 56 #6213 41A25
- (with Steutel, F. W.) On the degree of approximation of functions in $C_0[0,1]$ by the operators of Meyer-König and Zeller. *J. Math. Anal. Appl.* 63 (1978), no. 3, 719-728. (P. C. Sikkema) 58 #12120 41A35
- Schürer, K. Inequalities for the chromatic numbers of graphs. *J. Combinatorial Theory Ser. B* 16 (1974), 77-85. (J. Mitchem) 48 #10875 05C15
- On the evolution of random graphs over expanding square lattices. *Acta Math. Acad. Sci. Hungar.* 27 (1976), no. 3-4, 281-292. (J. W. Moon) 54 #10085 05C99
- (with Täutu, Petre) Markov configuration processes on a lattice. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 2, 233-244. (John G. Basterfield) 54 #6333 60K35
- Limit theorems for complete subgraphs of random graphs. *Period. Math. Hungar.* 10 (1979), no. 1, 47-53. (G. R. Grimmett) 58 #21820 05C35 (60F99)
- See also Oxtoby, John C., 52 #14214
- Schurle, Arlo W. Decompositions of E^3 into shrinkable ends. *Duke Math. J.* 39 (1972), 45-53. (J. Martin) 45 #1139 57A10
- Strongly cellular subsets of E^3 . *Fund. Math.* 80 (1973), no. 3, 207-212. (R. Bean) 48 #7293 57A60
- Decompositions of E^3 into strongly cellular sets. *Illinois J. Math.* 18 (1974), 160-164. (R. Bean) 49 #8021 57A10
- Schürmann, J. (with Boidol, J.; Leptin, Horst; Vahle, D.) Räume primitiver Ideale von Gruppenalgebren. *Math. Ann.* 236 (1978), no. 1, 1-13. (Jonathan M. Rosenberg) 58 #16959 22E25 (22D15, 43A20)
- Schurmann, A. Functions computable by a computer. (Polish and Russian summaries)

- Studia Logica* 27 (1971), 57-72. (W. D. Maurer) 47 #6458 02F10 (94A25)
On the minimum error in addition processes of positive floating-point numbers. (Polish summary) *Zastos. Mat.* 13 (1972/73), 351-366. (A. D. Booth) 48 #3242 65G05
- Schürmann, Jürgen** (with Oertel, Lothar; Meyer-Brötz, Günter; Felbaum, Klaus) Zur Koeffizientenberechnung und Stabilitätsprüfung bei der adaptiven Differenz-Pulscode-Modulation (ADPCM). (English summary) *AEÜ—Arch. Elektron. Übertragungstech. Electron. Comm.* 29 (1975), 193-201. (K. Jacobs) 54 #4809 94A05
- Schürer, Walter** Tafelkernerhaltende Permutationen endlicher Halbgruppen. *Math.-Phys. Semesterber.* 20 (1973), 202-225. (M. Friedberg) 49 #7380 20M15
- Schuss, Zeev** Regularity theorems for solutions of a degenerate evolution equation. *Arch. Rational. Mech. Anal.* 46 (1972), 200-211. (J. E. Lagnese) 48 #11714 34G05 (35K35)
(with Livne, A.) Singular perturbations for degenerate elliptic equations of second order. *Arch. Rational. Mech. Anal.* 52 (1973), 233-243. (L. E. Bobisud) 49 #797 35B25 (35J70)
Asymptotic expansions for parabolic systems. *J. Math. Anal. Appl.* 44 (1973), 136-159. (S. I. Rosencrans) 49 #858 35K40
(with Livne, A.) Singular perturbations for systems of linear partial differential equations. *Trans. Amer. Math. Soc.* 190 (1974), 335-343. (Denise Huet) 49 #5530 35B25
(with Matkowsky, Bernard J.) On the problem of exit. *Bull. Amer. Math. Soc.* 82 (1976), no. 2, 321-324. (Kunio Nishioka) 55 #9296 60J60
Singular perturbations and the transition from thin plate to membrane. *Proc. Amer. Math. Soc.* 58 (1976), 139-147. (A. M. Il'in) 54 #693 35B25
★Notes for stochastic differential equations. Lecture Notes, No. 3. *University for Mathematical Sciences, University of Delaware, Newark, Del.*, 1977. v + 199 pp. (J. D. Atkinson) 57 #7765 60H10 (35B25, 60J70)
The resolvent of a singularly perturbed elliptic operator. *J. Math. Anal. Appl.* 59 (1977), no. 2, 227-241. (P. C. Fife) 56 #3459 35J40 (35B25)
(with Matkowsky, Bernard J.) The exit problem for randomly perturbed dynamical systems. *SIAM J. Appl. Math.* 33 (1977), no. 2, 365-382. (G. Papanicolaou) 56 #9713 60J60
- Schüssler, Hans. W.** A stability theorem for discrete systems. *IEEE Trans. Acoust. Speech Signal Processing ASSP-24* (1976), no. 1, 87-89. (K. B. Datta) 57 #5324 93D99 (93C55)
- Schüssler, W.** Über einige Approximationsprobleme beim Entwurf digitaler Filter. *Numerische Methoden der Approximationstheorie, Band 1 (Tagung, Math. Forschungsinst., Oberwolfach, 1971)*, pp. 173-186. *Internat. Schriftenreihe zur Numer. Math., Band 16, Birkhäuser, Basel*, 1972. (D. C. Handcomb) 58 #31758 65D99
- Schuster, Eugene F.** Joint asymptotic distribution of the estimated regression function at a finite number of distinct points. *Ann. Math. Statist.* 43 (1972), 84-88. (H. Chernoff) 46 #1000 62E20
(with Narvarte, J. A.) A new nonparametric estimator of the center of a symmetric distribution. *Ann. Statist.* 1 (1973), 1096-1104. (G. Roussas) 50 #15121 62G05
On the goodness-of-fit problem for continuous symmetric distributions. *J. Amer. Statist. Assoc.* 68 (1973), 713-715. (Bradford R. Crain) 50 #11624 (E 51 #14401) 62G10
Buffon's needle experiment. *Amer. Math. Monthly* 81 (1974), 26-29. 48 #9780 60-01
Corrigendum: "On the goodness-of-fit problem for continuous symmetric distributions" (J. Amer. Statist. Assoc. 68 (1973), 713-715). *J. Amer. Statist. Assoc.* 69 (1974), 288. (Bradford R. Crain) 51 #14401 62G10
On the rate of convergence of an estimate of a functional of a probability density. *Scand. Actuar. J.* 1974, 103-107. (A. Liebetrau) 54 #6353 62E20 (62G05)
(with Philippou, Andreas N.) The odds in some odd-even games. *Amer. Math. Monthly* 82 (1975), 646-648. (Frank K. Hwang) 51 #6909 60C05
(with Rao, P. V.; Littell, Ramon C.) Estimation of shift and center of symmetry based on Kolmogorov-Smirnov statistics. *Ann. Statist.* 3 (1975), no. 4, 862-873. (G. E. Noether) 51 #11800 62G05
Estimating the distribution function of a symmetric distribution. *Biometrika* 62 (1975), no. 3, 631-635. (Bradford R. Crain) 52 #9478 (E 53 #14780) 62G05
An integer programming handicap system in a "write ring tossing game". *Math. Mag.* 48 (1975), 134-142. (Suresh Candra) 56 #14765 90C05 (90C05)
Correction: "Estimating the distribution function of a symmetric distribution" (*Biometrika* 62 (1975), 631-635). *Biometrika* 63 (1976), no. 2, 412. (Editors) 53 #14780 62G05
- Schuster, H. G.** Absence of long-range order in certain random systems. *Phys. Lett. A* 60 (1977), no. 2, 89-91. (Author's summary) 56 #17657 82.60
Phase transitions in random uniaxial systems with dipolar interactions. *Z. Phys. B* 27 (1977), no. 3, 251-259. (Author's summary) 57 #8799 82.47
- Schuster, Hans-Werner** (with Wiegmann, Klaus-Werner) Ein Modulproblem für kohärente Unterabgebren. *Ann. Scuola Norm. Sup. Pisa* (3) 26 (1972), 739-745. (C. Bănică) 51 #3536 32G13
(with Wiegmann, Klaus-Werner) Komplexe Unterstrukturen mit endlichen Trägern. *Math. Ann.* 201 (1973), 19-31. (O. Riemschneider) 49 #3216 32G10 (32G13)
(with Kramm, Bruno) Über die Cohomologie analytischer Algebren. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 5, 655-668. (H. Kerner) 56 #3356 32G05 (13D10, 18H15)
- Schuster, J. J.** (with Chikkagoudar, M. S.) Comparison of failure rates using rank tests. *J. Amer. Statist. Assoc.* 69 (1974), 411-413. (A. P. Basu) 50 #15127 62G10 (62N05)
- Schuster, Peter** See *Komplexität von Entscheidungsproblemen—ein Seminar*, 57 #18232
- Schuster, Seymour** Progress on the problem of eccentric hosts. *Graph theory and applications (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1972; dedicated to the memory of J. W. T. Youngs)*, pp. 283-290. *Lecture Notes in Math.*, Vol. 303, Springer, Berlin, 1972. (G. Chartrand) 50 #12809 05C35
(with Chartrand, Gary) On a variation of the Ramsey number. *Trans. Amer. Math. Soc.* 173 (1972), 353-362. (A. J. Schwenk) 47 #6541 05C35
(with Chartrand, Gary; Kronk, Hudson V.) A technique for reconstructing disconnected graphs. *Colloq. Math.* 27 (1973), 31-34. (L. W. Beineke) 48 #305C99
(with Chartrand, Gary) A note on cycle Ramsey numbers. *Discrete Math.* 5 (1973), 313-315. (Václav Chvátal) 47 #6542 05C35
(with Chartrand, Gary) On the independence numbers of complementary graphs. *Trans. New York Acad. Sci.* (2) 36 (1974), 247-251. (E. A. Nordhaus) 50 #405C99
(with Burns, David) Every $(p, p-2)$ graph is contained in its complement. *Graph Theory 1* (1977), no. 3, 277-279. (W. G. Brown) 57 #5820 05C35
(with Burns, David) Embedding $(p, p-1)$ graphs in their complements. *Israel Math.* 30 (1978), no. 4, 313-320. (Aldo G. S. Ventre) 58 #16354 05C10
- Schuster, Wolfgang** Integraldarstellung und analytische Fortsetzung der regulären $L_F(P; z)$ der Fuchsschen DG zweiter Ordnung mit singulären Stellen in spezieller $L_F(P; z)$. *Festband anlässlich des 65. Geburtstages von Ernst Peschl*, pp. 43-56. *Gesellsch. Math. Datenverarbeitung Bonn, Ber. No. 57*, Gesellsch. Math. Datenverarbeitung, Bonn, 1973. (W. Strod) 52 #14430 34A20
Operatoren auf dem Integralraum der Fuchsschen Differentialgleichung zweiter Ordnung. Inaugural-Dissertation zur Erlangung des Doktorgrades der Hohen Mathem.-Naturw. Fakultät der Rheinischen Friedrich-Wilhelms-Universität zu Bonn. *Bonn. Math. Schr. No. 57* (1972), vi + 84 pp. (O. Borůvka) 51 #13324 34A20
- Schüth, Heinrich** Stabilität von periodischen Geodätischen auf n -dimensionalen Ellipsoiden. Inaugural-Dissertation zur Erlangung des Doktorgrades der Hohen Mathem.-Naturw. Fakultät der Rheinischen Friedrich-Wilhelms-Universität zu Bonn. *Bonn. Math. Schr. No. 60* (1972), iii + 130 pp. (J. Moser) 49 #4034 58F05 (58E70, 58H)
- Schütt, Dieter** A generalized concept of automaton automorphisms. (German summary) *Computing (Arch. Elektron. Rechnen)* 8 (1971), 74-78. (W. Imrich) 46 #3669 20M68A25, 94A30
Shift register graphs and permutation/reset automata. *J. Cybernet.* 2 (1972), no. 69-73. (Bostwick F. Wyman) 49 #10465 94A30
Zustandsfolgenabbildungen von verallgemeinerten endlichen Automaten. *Erste Fachtagung der Gesellschaft für Informatik über Automatentheorie und Formale Sprachen (Bonn, 1973)*, pp. 88-97. *Lecture Notes in Computer Science*, Vol. 2, Springer, Berlin, 1973. (H. Jürgensen) 55 #5326 94A30
★Zu den Grundlagen einer Theorie netzverarbeitender Automaten. *Gesellschaft für Mathematik und Datenverarbeitung, Bonn, Ber. No. 95. Gesellschaft für Mathematik und Datenverarbeitung, Bonn*, 1974. 51 pp. (Siegmar Gerber) 53 #4628 68A25 (68A50, 94A30)
(with Ecker, Klaus H.) Über Transformationen von Schaltfunktionen. (English summary) *Elektron. Informationsverarbeit. Kybernetik* 10 (1974), 297-300. (Adam) 54 #12474 02B05 (94A20)
(with Pollul, W.) Characterization of growth in deterministic Lindenmayer systems. *Nederl. Akad. Wetensch. Proc. Ser. A* 78 = *Indag. Math.* 37 (1975), 183-188. (A. I. 52 #4727 68A30 (92A05)
(with Ecker, Klaus H.) Computational work of combinational machines. *IEE Trans. Computers* C-26 (1977), no. 11, 1161-1163. (N. A. Karpova) 58 #15719 94A20 (68A20)
- Schütt, Hans-Werner** Zur Fälschungshypothese im Galilei-Prozess. (English summary) *Sudhoffs Arch.* 55 (1971), 337-353. (D. J. Struik) 57 #31 01A45
Galilei in der Sicht des Wissenschaftshistorikers Emil Wohlwill. (English summary) *Sudhoffs Arch.* 57 (1973), 84-98. (H. Wussing) 57 #9410 01A45 (01A70)
- Schütte, D.** On the construction of solvable models of the many body problem. *Naturforsch.* 28a (1973), 396-403. (Author's summary) 56 #10672 82.47
- Schütte, G.** (with Schäfer, K.) On the connection between the Jastrow method and Brueckner theory. *Nuclear Phys. A* 183 (1972), 1-20. (Authors' summary) 52 #2481.47
Solution of the cranking model to all orders. *Z. Phys. A* 283 (1977), no. 2, 183-190. (Author's summary) 56 #14331 81.47
- Schutte, H. J.** (with Wessels, S. F. G.) Contributions to the theory of $(1, 1)$ rings. *Portu. Math.* 32 (1973), 59-69. (T. S. Ravisankar) 48 #2196 17A30
- Schütte, Kurt** Einführung der Normalfunktionen Θ_α ohne Auswahlaxiom und ohne Regularitätsbedingung. *Arch. Math. Logik Grundlagenforsch.* 17 (1975/76), no. 171-178. (A. Kino) 54 #7213 02D05
(with Buchholz, Wilfried) Die Beziehungen zwischen den Ordinalzahlssystemen Θ_α und $\Theta(\omega)$. *Arch. Math. Logik Grundlagenforsch.* 17 (1975/76), no. 3-4, 179-189. (J. Seldin) 55 #2516 02D05 (04A10)
Primitiv-rekursive Ordinalzahlfunktionen. *Bayer. Akad. Wiss. Math.-Natur. S.-B.* 1975, 143-153 (1976). (A. Kino) 54 #12503 02F27 (02D05)
★Proof theory. Translated from the revised German edition by J. N. Cross. *Grundlehren der Mathematischen Wissenschaften*, Band 225. Springer-Verlag, Berlin-New York, 1977. xii + 299 pp. ISBN 3-540-07911-4 (V. P. Orevkov) 58 #2149 02Dxx (02-02, 02C15)
See also Feys, R., 50 #9527; Symposium: \models ISILC Proof Theory, 52 #1313
- Diller, Justus; et al.** 53 #10532 and Bibliography: Schütte, Kurt, 53 #10533
- Schutte, R.** (with Bownds, John M.; Cushing, Jim M.) Existence, uniqueness, and extendibility of solutions of Volterra integral systems with multiple, variable kernels. *Funkcial. Ekvac.* 19 (1976), no. 2, 101-111. (C. van Trigt) 55 #1005 45D05
- de Schutter, F.** See *De Schutter, F.*
- de Schutter-Herteleer, A.** Une généralisation de concepts spectraux non stationnaires (English summary) *Séries chronologiques: approches fréquentielle et temporelle (Colloq., Brussels, 1977). Cahiers Centre Etudes Recherche Opér.* 19 (1977), no. 365-377. (Author's summary) 58 #31670 62M15
- Schutz, Bernard F., Jr.** Perfect fluids in general relativity: velocity potentials and variational principle. *Phys. Rev. D* (3) 2 (1970), 2762-2773. (J. D. Logan) 47 #80783.53
Non-vacuum ADM field equations. *Methods of local and global differential geometry in general relativity (Proc. Regional Conf. on Relativity, Univ. Pittsburgh, Pa., 1970)*, pp. 171-175. *Lecture Notes in Physics*, Vol. 14, Springer, Berlin, 1972. (Kishore Marathe) 54 #12146 83.53
(with Friedman, John L.) Axisymmetric stability of Kerr black holes. *Phys. J.*

- 32 (1974), 243-245. (Authors' summary) 50 #15857 85.35
with Friedman, John L.) On the stability of relativistic systems. *Astrophys. J.* 200 (1975), no. 1, part 1, 204-220. (A. H. Taub) 51 #12258 83.35
On the strength of a system of partial differential equations. *J. Mathematical Phys.* 19 (1975), 855-856. (Pierre Hillion) 51 #4926 83.35
with Bardeen, James M.; Friedman, John L.; Sorkin, Rafael) A new criterion for ar instability of rapidly rotating stars. *Astrophys. J.* 217 (1977), no. 1, part 2, L53. 58 #25833 85.49
with Friedman, John L.) Lagrangian perturbation theory of nonrelativistic fluids. *Astrophys. J.* 221 (1978), no. 3, part 1, 937-957. (Authors' summary) 58 #14982 (49C99)
- John W. ★Foundations of special relativity: kinematic axioms for Minkowski e-time. Lecture Notes in Mathematics, Vol. 361. Springer-Verlag, Berlin-New York, 1974. xx+314 pp. (R. I. Pimenov) 57 #2405 83.50
- Karin Zur Beschreibung eines Labyrinthes durch ein Wort über einem zweistelligen Alphabet. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 1972, 275-282. (W. Vollmerhaus) 48 #1547 68A45 (94A20)
(with Gössel, Michael; Kämmerer, Wilhelm) The realization of the separation into sets of a set of N -component binary vectors by means of representative elements. Russian. English summary insert) *Kibernetika (Kiev)* 1972, no. 2, 113-117. (W. Dörfler) #1611 05A17
- Wilhelm (with Schmutzer, E.) ★Galileo Galilei. Dritte Auflage. Biographien vorragender Naturwissenschaftler. Techniker und Mediziner, 19. BSB B. G. Teubner Tagessgesellschaft, Leipzig, 1977. 152 pp. (1 plate) 58 #27159 01A70
- Wolfgang Ein Lösungsalgorithmus für Aufgaben der dyadischen Optimierung. *Arch. Math. Hochschule. Karl-Marx-Stadt* 13 (1971), 127-134. (P. J. Laurent) #12231 90C05
- D. (with Langer, Heinz; Partzsch, Lothar) Über verallgemeinerte gewöhnliche Differentialoperatoren mit nichtlokalen Randbedingungen und die von ihnen erzeugten Markov-Prozesse. *Publ. Res. Inst. Math. Sci.* 7 (1971/72), 659-702. (F. B. Knight) #2677 60J35 (47D05)
Über das asymptotische Verhalten von Bayesschen und Maximum-Likelihood-Schätzungen. (English and Russian summaries) *Math. Operationsforsch. Statist. Ser. Statist.* 8 (1977), no. 3, 367-373. (A. M. Kagan) #18868 62F10 (62E20, 62F15)
- e, Dieter Zur Grenzverteilung gewisser Funktionale von Prozessen mit abhängigen Zuwächsen. *Math. Nachr.* 80 (1977), 327-336. (S. J. Taylor) 58 #7866 J30
- enberger, Marcel-Paul (with Foata, Dominique) On the rook polynomials of Ferrers diagrams. *Combinatorial theory and its applications, II (Proc. Colloq., Balatonfüred, 1969)*, pp. 413-436. North-Holland, Amsterdam, 1970. (Jay R. Goldman) 50 #12738 0A05
Parties rationnelles d'un monoïde libre. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 3*, pp. 281-282. Gauthier-Villars, Paris, 1971. (See #1228 #94035; MR 54 #5) 20M05
Sur un théorème de G. de B. Robinson. *C. R. Acad. Sci. Paris Sér. A-B* 272 (1971), 420-421. (G. de B. Robinson) 45 #3595 20C15
(with Foata, Dominique) On the principle of equivalence of Sparre Anderson. *Math. Scand.* 28 (1971), 308-316 (1972). (G. J. Lallement) 46 #7410 20M05 05A10
Promotion des morphismes d'ensembles ordonnés. *Discrete Math.* 2 (1972), 73-94. (E. Harzheim) 45 #8587 06A15
(with Foata, Dominique) Nombres d'Euler et permutations alternantes. *A survey of combinatorial theory (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971)*, pp. 173-187. North-Holland, Amsterdam, 1973. (Harald Scheid) 50 #6870 05A15
À propos du relation rationnelles fonctionnelles. *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 103-114. North Holland, Amsterdam, 1973. (Y. Zalcstein) 52 #7205 68A25 (20M35, 68A30)
Sur un langage équivalent au langage de Dyck. *Logic, methodology and philosophy of science, IV (Proc. Fourth Internat. Congr., Bucharest, 1971)*, pp. 197-203. *Studies in Logic and Foundations of Math., Vol. 74*, North-Holland, Amsterdam, 1973. (Martti Penttonen) 56 #4259 68A30
Sur une construction de Gilbert de B. Robinson (Amer. J. Math. 60 (1938), 745-760). *Séminaire P. Dubreil, 25e année (1971/72), Algèbre, Fasc. 1, Exp. No. 8, 4 pp.* Secrétariat Mathématique, Paris, 1973. (A. O. Morris) 52 #13416 05A17 (20B99)
Sur une propriété syntactique des relations rationnelles. (English summary) *Automata, languages and programming (Second Colloq., Univ. Saarbrücken, Saarbrücken, 1974)*, pp. 612-619. *Lecture Notes in Comput. Sci., Vol. 14*, Springer, Berlin, 1974. (M. Novotný) 55 #8229 20M35 (68A30)
Sur certaines pseudo-variétés de monoïdes finis. *Comptes Rendus des Journées Mathématiques de la Société Mathématique de France (Univ. Sci. Tech. Languedoc, Montpellier, 1974)*, pp. 317-327. *Cahiers Math. Montpellier*, No. 3, U.E.R. de Math., Univ. Sci. Tech. Languedoc, Montpellier, 1974. (H.-J. Hoehne) 51 #10514 20M35
Une propriété des monoïdes libres. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 833-834. (André Lentin) 49 #10801 20M05
Sur les monoïdes finis dont les groupes sont commutatifs. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge* 8 (1974), no. R-1, 55-61. (G. J. Lallement) 50 #2382 20M35
Sur les relations rationnelles. *Automata theory and formal languages (Second GI Conf., Kaiserslautern, 1975)*, pp. 209-213. *Lecture Notes in Comput. Sci., Vol. 33*, Springer, Berlin, 1975. (Ronald E. Prather) 52 #16917 94A30 (68A30)
Solution non commutative d'une équation différentielle classique. *New concepts and technologies in parallel information processing (Proc. NATO Adv. Study Inst., Capri, 1973)*, pp. 381-401. *NATO Adv. Study Inst. Ser. E: Appl. Sci., Vol. 9*, Noordhoff, Leiden, 1975. (D. Simovici) 57 #12242 05A15 (34A25)
Sur certaines opérations de fermeture dans les langages rationnels. *Symposia Mathematica, Vol. XV (Convegno di Informatica Teorica, INDAM, Roma, 1973)*, pp. 245-253. Academic Press, London, 1975. (André Lentin) 54 #9182 68A30
Evacuations. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie*
- (Rome, 1973), Tomo I, pp. 257-264. *Atti dei Convegni Lincei, No. 17, Accad. Naz. Lincei, Rome, 1976*. (Dominique Foata) 57 #16393 20C30
Une caractérisation des parties reconnaissables. *Formal languages and programming (Proc. Sem., UAM-IBM Sci. Center, Univ. Autónoma Madrid, Madrid, 1975)*, pp. 77-82. North-Holland, Amsterdam, 1976. (H. Jürgensen) 54 #9183 68A30
Sur une caractérisation des parties reconnaissables d'un monoïde libre. *Journées algorithmiques (École Norm. Sup., Paris, 1975)*, pp. 247-251. *Astérisque*, No. 38-39, Soc. Math. France, Paris, 1976. (Eugene M. Norris) 56 #15798 20M05
(with Eilenberg, Samuel) On pseudovarieties. *Advances in Math.* 19 (1976), no. 3, 413-418. (Anna Ja. Aizenstat) 53 #5431 08A15 (20M35)
Sur le produit de concaténation non ambigu. *Semigroup Forum* 13 (1976/77), no. 1, 47-75. (H. Jürgensen) 56 #3171 20M35 (68A30)
Sur les relations rationnelles entre monoïdes libres. *Theoret. Comput. Sci.* 3 (1976/77), no. 2, 243-259. (H. Jürgensen) 56 #4260 68A30 (20M35)
La correspondance de Robinson. *Combinatoire et représentation du groupe symétrique (Actes Table Ronde CNRS, Univ. Louis-Pasteur Strasbourg, Strasbourg, 1976)*, pp. 59-113. *Lecture Notes in Math., Vol. 579*, Springer, Berlin, 1977. (Dominique Foata) 58 #16863 20C30 (05A17)
(with Perrin, Dominique) Codes et sous-monoïdes possédant des mots neutres. *Theoretical computer science (Third GI Conf., Darmstadt, 1977)*, pp. 270-281. *Lecture Notes in Comput. Sci., Vol. 48*, Springer, Berlin, 1977. (Harold N. Ward) 57 #19185 94A30 (20M35)
Une propriété de Hankel des relations fonctionnelles entre monoïdes libres. *Advances in Math.* 24 (1977), no. 3, 274-280. (Claude Benzaken) 57 #9897 20M35 (20M05, 68A30)
Sur une variante des fonctions séquentielles. *Theoret. Comput. Sci.* 4 (1977), no. 1, 47-57. (H. Jürgensen) 57 #11180 68A25
(with Lascoux, Alain) Sur une conjecture de H. O. Foulkes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 7, A323-A324. (Authors' summary) 57 #12672 20C30 (14M15)
See also Actes: Congrès International des Mathématiciens, 54 #5
- Schuur, Jerry D. (with Bebernes, J. W.) The Ważewski topological method for contingent equations. *Ann. Mat. Pura Appl.* (4) 87 (1970), 271-279. (G. A. Klaasen) 45 #8954 34C35
(with Bebernes, J. W.) Investigations in the topological method of Ważewski. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 49 (1970), 39-42 (1971). (J. Kaplan) 45 #5462 34C99
(with Chow, Shui Nee; Dunninger, D. R.) Oscillatory properties of solutions of n -th order ordinary differential equations. *Funkcial. Ekvac.* 14 (1971), 191-196. (G. J. Butler) 46 #5731 34C10
(with Chow, Shui Nee) Fundamental theory of contingent differential equations in Banach space. *Trans. Amer. Math. Soc.* 179 (1973), 133-144. (L. Cesari) 48 #2514 34G05 (47H15)
Boundary value problems for $x''=f(t, x, x')$ and nonlinear functional analysis. *Nonlinear functional analysis and differential equations (Proc. Conf., Mich. State Univ., East Lansing, Mich., 1975)*, pp. 319-337. *Lecture Notes in Pure and Appl. Math., Vol. 19*, Marcel Dekker, New York, 1976. (K. Schrader (Zbl 345 #34007)) 58 #11599 34B15
(with Kannan, Rangachary) Boundary value problems for even order nonlinear ordinary differential equations. *Bull. Amer. Math. Soc.* 82 (1976), no. 1, 80-82. (Š. Schwabik) 52 #14441 34B15
(with Kannan, Rangachary) Nonlinear boundary value problems and Orlicz spaces. (Italian summary) *Ann. Mat. Pura Appl.* (4) 113 (1977), 245-254. (Simeon Reich) 57 #12981 34B20 (47H15)
Perturbation at resonance for a fourth order ordinary differential equation. *J. Math. Anal. Appl.* 65 (1978), no. 1, 20-25. (S. Fučík) 58 #7258 47H15 (34B15)
See also Advances in differential and integral equations, 50 #10389 and Nonlinear functional analysis and differential equations, 57 #17314
- Schuur, Susan E. (with Lewis, Donald J.) Varieties of small degree over finite fields. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* 262/263 (1973), 293-306. (Clifford Queen) 48 #3965 14G05 (12C05)
- Schuermann, F. J. (with Waikar, V. B.) ★Upper percentage points of the smallest root of the MANOVA matrix. Report No. ARL 72-0128. Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio, 1972. iv+19 pp. (Authors' summary) 54 #1482 62H10
(with Krishnaiah, Paruchuri R.; Chattopadhyay, A. K.) ★Tables for a multivariate F distribution. ARL 73-0006. Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio, 1973. v+26 pp. (Authors' summary) 54 #11653 62H10 (62Q05)
(with Krishnaiah, Paruchuri R.; Chattopadhyay, A. K.) ★Exact percentage points of the distribution of the trace of $S_1(S_1+S_2)^{-1}$. ARL 73-0008. Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio, 1973. v+26 pp. (Authors' summary) 55 #1618 62H10
(with Krishnaiah, Paruchuri R.; Chattopadhyay, A. K.) ★Tables for the distributions of the ratios of the extreme roots to the trace of Wishart matrix. ARL 73-0010. Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio, 1973. v+16 pp. (Authors' summary) 55 #1619 62H10
(with Waikar, V. B.) Tables for the power function of Roy's two sided test for testing hypothesis $\Sigma = I$ in the bivariate case. *Comm. Statist.* 1 (1973), 271-280. (Authors' summary) 47 #4393 62H15
(with Krishnaiah, Paruchuri R.; Chattopadhyay, A. K.) On the distributions of the ratios of the extreme roots to the trace of the Wishart matrix. *J. Multivariate Anal.* 3 (1973), 445-453. (Somesh Das Gupta) 48 #9976 62H10
(with Krishnaiah, Paruchuri R.; Waikar, V. B.) Upper percentage points of the intermediate roots of the MANOVA matrix. *Sankhyā Ser. B* 35 (1973), no. 3, 339-358. (Authors' summary) 53 #1846 62H10
(with Waikar, V. B.) Exact joint density of the largest and smallest roots of the Wishart and Manova matrices. *Utilitas Math.* 4 (1973), 253-260. (P. K. Sen) 48 #5268 62H10
(with Krishnaiah, Paruchuri R.) ★On the exact distributions of the individual roots

- of the complex Wishart and multivariate beta matrices. Report No. ARL TR 74-0063. *Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio*, 1974. iii + 119 pp. (errata insert) (C. G. Khatri) 50 #3457 62H10
- (with Krishnaiah, Paruchuri R.) ★On the exact distributions of the ratios of the individual roots to the trace of the complex and real Wishart matrices. Report ARL TR 74-0026. *Aerospace Research Laboratories, Office of Aerospace Research, United States Air Force, Wright-Patterson Air Force Base, Ohio*, 1974. iii + 33 pp. (loose errata) (C. G. Khatri) 51 #4551 62H10
- (with Waikar, V. B.) Upper percentage points of the smallest root of the MANOVA matrix. *Ann. Inst. Statist. Math. Suppl. No. 8* (1974), 79-94. (Donald R. Jensen) 51 #14412 62H10
- (with Krishnaiah, Paruchuri R.) On the evaluation of some distributions that arise in simultaneous tests for the equality of the latent roots of the covariance matrix. *J. Multivariate Anal.* 4 (1974), 265-282. (E. J. Williams) 50 #11633 62H10
- (with Park, C.) Evaluations of barrier-crossing probabilities of Wiener paths. *J. Appl. Probability* 13 (1976), no. 2, 267-275. (S. J. Taylor) 53 #6770 60J65
- Schuermans, M. F. H.** (with Broer, L. J. F.) On a simple wave approximation to a non-linear problem. *J. Engrg. Math.* 5 (1971), 109-120. (Peter J. Chen) 50 #15518 73.35
- On a simple wave approximation of a set of linear dispersive wave equations. *J. Engrg. Math.* 5 (1971), 195-205. (H. Flaschka) 52 #2384 76.35
- On the range of validity of a simple wave approximation of a non-linear set of diffusive wave equations. *J. Engrg. Math.* 5 (1971), 207-218. (H. Flaschka) 51 #12122 76.35
- (with Broer, L. J. F.) On a class of scattering equations. *Appl. Sci. Res.* 26 (1972), 161-174. (P. Achuthan) 46 #10320 81.35
- plancke-Schuyten, G.** See **Plancke-Schuyten, G.**
- Schwab, Claude** Étude sur l'application de la méthode des problèmes auxiliaires unidimensionnels à différents types de fonctionnelles non linéaires. (German and English summaries) *Z. Angew. Math. Phys.* 24 (1973), 537-547. (H. F. Weinberger) 50 #3049 49A20
- Schwab, Emil** Images dans les catégories régulières. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* 11 (1973), 169-174. (H. Gonshor) 51 #5702 18A20
- On characterizations of inverse semigroups. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 21 (1973), 201-204. (S. Lajos) 48 #2284 20M10
- (with Bercei, E.) Über ein Theorem betreffend die extremalen Optimalstrategien in Matrixspielen. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* 13 (1975), no. 1, 5-9 (1977). (G. Owen) 57 #9092 90D12 (90C05)
- Über difunktionale Relationen in Kategorien mit Faserprodukten. *Bul. Ști. Tehn. Inst. Politehn. "Traian Vuia" Timișoara* 22(36) (1977), no. 1, 46-47. (Jiří Adámek) 57 #12635 18B10
- Über das verallgemeinerte Inverse eines Morphismus. *Math. Nachr.* 81 (1978), 243-257. (Donald W. Robinson) 57 #9786 18A20
- Schwab, H.** (with Bourier, G.) Lagerhaltung bei Preiserhöhung. (English summary) *Z. Oper. Res. Ser. A-B* 22 (1978), no. 3, A81-A93. (Authors' summary) 58 #15079 90B05
- Schwabhauser, Wolfram** (with Baumann, Heribert) Eine Vereinfachung des hyperbolischen Parallelaxioms. *Arch. Math. (Basel)* 21 (1970/71), 634-640. (Johannes Böhm) 45 #1034 50C05
- ★Modelltheorie. I. B. I. Hochschulschriften, No. 813a*. *Bibliographisches Institut, Mannheim-Vienna-Zurich*, 1971. vi + 165 pp. (J. A. Makowsky) 48 #3732 (EA 58) 02H05
- ★Modelltheorie. II. B. I-Hochschultaschenbücher, No. 815. *Bibliographisches Institut, Mannheim-Vienna-Zurich*, 1972. iv + 123 pp. (J. A. Makowsky) 51 #129 02Hxx
- Modelltheorie. *Jber. Deutsch. Math.-Verein.* 75 (1973/74), no. 3, part 1, 114-129. (K. Hauschild (Zbl 274 #02003)) 58 #204 02H05 (02-01)
- (with Szczerba, Lesław W.) An affine space as union of spaces of higher dimension. *Proceedings of the Tarski Symposium (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971)*, pp. 133-138. *Amer. Math. Soc., Providence, R. I.*, 1974. (J. Katerínák) 53 #5290 02G15 (50A25)
- (with Szczerba, Lesław W.) Relations on lines as primitive notions for Euclidean geometry. Collection of articles dedicated to Andrzej Mostowski on his sixtieth birthday, VIII. *Fund. Math.* 82 (1974/75), 347-355. (V. Havel) 50 #12697 (E 51 #5282) 02G10 (50A25)
- (with Szczerba, Lesław W.) Errata to the paper: "Relations on lines as primitive notions for Euclidean geometry" (Fund. Math. 82 (1974/75), 347-355). *Fund. Math.* 87 (1975), no. 3, 283. (Editors) 51 #5282 02G10 (50A25)
- See also **Grundlagen der modernen Mathematik**, 50 #6716
- Schwabik, Štefan** On Fredholm-Stieltjes integral equations. *Comment. Math. Univ. Carolinae* 12 (1971), 845-849. (F. Smithies) 45 #2537 47G05 (45B05)
- On an integral operator in the space of functions with bounded variation. *Časopis Pěst. Mat.* 97 (1972), no. 3, 297-329. (James V. Herod) 56 #9197 45B05
- (with Tvrdý, Milan) On the generalized linear ordinary differential equation. (Czech summary) *Časopis Pěst. Mat.* 98 (1973), 206-211, 213. (David L. Lovelady) 48 #2471 34A99 (45J05)
- On the relation between Young's and Kurzweil's concept of Stieltjes integral. (Czech summary) *Časopis Pěst. Mat.* 98 (1973), 237-251, 315. (A. M. Bruckner) 48 #477 26A42
- On a modified sum integral of Stieltjes type. (Czech summary) *Časopis Pěst. Mat.* 98 (1973), 274-277, 315. (A. M. Bruckner) 48 #478 26A42
- Floquet theory for generalized differential equations. (Czech. Loose German summary) *Časopis Pěst. Mat.* 98 (1973), 416-418. (Leo F. Boron) 49 #699 34A30
- A remark on the d -characteristic and the d_z -characteristic of linear operators in a Banach space. *Studia Math.* 48 (1973), 251-255. (S. Goldberg) 48 #12084 47A05
- Remark on linear equations in Banach space. *Časopis Pěst. Mat.* 99 (1974), 115-122. (S. Goldberg) 52 #11634 47A50 (47B30)
- On Volterra-Stieltjes integral equations. *Časopis Pěst. Mat.* 99 (1974), 255-278. (S. I. Grossman) 50 #14106 45D05
- On an integral operator in the space of functions with bounded variation. II. (Russian summary) *Časopis Pěst. Mat.* 102 (1977), no. 2, 189-202. (James V. Herod) 56 #9198 45B05
- Note on Volterra-Stieltjes integral equations. (Czech and loose Russian summary) *Časopis Pěst. Mat.* 102 (1977), no. 3, 275-279, 313. (S. I. Grossman) 57 #345D05
- Schwabl, Wilhelm** (with Urban, Paul) Hans Thirring. *Acta Phys. Austriaca* 45 (1976), 3-4, 193-194. (Editors) 53 #7702 01A70
- Schwach, Paul** Sur la génération des corps quasi métacycliques. (English summary) *Acad. Sci. Paris Sér. A-B* 283 (1976), no. 4, A117-A149. (Author's summary) 54 #10211 12A90
- Schwaiger, Jens** (with Reich, Ludwig) Über die analytische Iterierbarkeit formaler Potenzreihenvektoren. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* 184 (1976), no. 8-10, 599-617. (J. Dieudonné) 57 #6287 22E05 (34A10)
- Über einen Satz von H. Hornich in der Theorie der unendlichen Produkte. *Österreich. Akad. Wiss. Math.-Natur. Kl.* 1977, no. 9, 168-175. (K.-B. Gundlach) 58 #6192 30A16
- (with Reich, Ludwig) Über einen Satz von Shl. Sternberg in der Theorie analytischen Iterationen. (English summary) *Monatsh. Math.* 83 (1977), no. 3, 207-211. (H. H. Johnson) 57 #675 32A05 (58H05)
- Schwall, Erhard** ★Eine numerische Theorie zur Kollokationsmethode für die Potenzreihenvektoren. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* 184 (1976), no. 8-10, 599-617. (J. Dieudonné) 57 #6287 22E05 (34A10)
- Gesellschaft für Mathematik und Datenverarbeitung, Bonn, Ber. No. 108. *Gesellschaft für Mathematik und Datenverarbeitung, Bonn*, 1976. v + 89 pp. (Rudolf Gorenflo) 56 #1758 65R05 (31Bxx)
- Schwaller, Richard L.** (with Tiaht, Kenneth J.) A method of constrained randomization for $p_1^{n_1} p_2^{n_2} \dots p_k^{n_k}$ factorials. *Ann. Statist.* 3 (1975), no. 5, 1135-1148. (D. M. Raghuvarao) 51 #11867 62K15
- Schwandt, Ernst A.** On the Fourier coefficients of the Poincaré series. *J. London Soc.* (2) 5 (1972), 584-588. (J. Lehner) 47 #3673 30A58 (10D05, 20G05)
- On modular cusp forms and their reproducing kernel. *J. London Math. Soc.* (3) 12 (1975/76), no. 4, 459-464. (Jürgen Elstrodt) 53 #2838 10D15
- See also **Schoeneberg, Bruno**, 54 #236
- Schwanengel, Ulrich** (with Dierolf, Susanne) Un exemple d'un groupe topologique Q -minimal mais non précompact. (English summary) *Bull. Sci. Math.* (2) 101 (1977), 3, 265-269. (K. A. Ross) 58 #983 22A05
- Schwanitz, Gerhard** (with List, Günther; Walter, Martin; Baginski, Manfred; Lösch, Georg; Mertens, Aldo; Glaewe, Willi; Goll, Peter) ★Einführung in die mathematische Logik, Einführung in die Mengenlehre, Aufbau der Zahlenbereiche. Zweite Auflage. *Volk und Wissen Volkseigener Verlag, Berlin*, 1973. 327 pp. (loose errata) (Editors) 50 #12630 02-01 (04-01)
- Schwänzl, Roland** Koeffizienten im Burnsideing. *Arch. Math. (Basel)* 29 (1977), 621-622. (T. tom Dieck) 57 #7627 57E15
- Schwartz, A. S.** See **Švarc, A. S.**
- Schwartz, Aba** (with Karni, Edi) Two theorems on optimal stopping with backward solicitation. *J. Appl. Probability* 14 (1977), no. 4, 869-875. (Nagata Furukawa) 57 #1794 62L15
- (with Karni, Edi) Search theory: the case of search with uncertain recall. *Econometric Theory* 16 (1977), no. 1, 38-52. (P. Neumann) 57 #5063 90B40
- Schwartz, Alan L.** Additions and corrections to: "On the ideal structure of the algebra of radial functions". *Proc. Amer. Math. Soc.* 39 (1973), 288-294. (R. E. Edwards) 47 #2272 43A20
- Generalized convolutions and positive definite functions associated with generalized orthogonal series. *Pacific J. Math.* 55 (1974), 565-582. (N. H. Bingham) 51 #642A88 (42A60, 60E05)
- (with Connett, William C.) A multiplier theorem for ultraspherical series. *J. Math.* 51 (1974), 51-70. (M. de Guzmán) 50 #10674 42A56 (42A18)
- (with Connett, William C.) A multiplier theorem for Jacobi expansions. *J. Math.* 52 (1974/75), 243-261. (Aline Bonami) 52 #8772 (E 52 #8773) 42A18 (42A18)
- (with Connett, William C.) Unifying multiplier theorems of Hörmander, Marcinkiewicz, and Michlin type. *Bull. Amer. Math. Soc.* 81 (1975), 570-572. (McKennon) 52 #8774 42A56 (33A45, 42A18)
- (with Connett, William C.) A correction to the paper: "A multiplier theorem for Jacobi expansion" (Studia Math. 52 (1974/75), 243-261). *Studia Math.* 54 (1975), 107. (Aline Bonami) 52 #8773 42A56
- (with Connett, William C.) Weak type multipliers for Hankel transforms. *Pacific J. Math.* 63 (1976), no. 1, 125-129. (Satoru Igari) 57 #17135 44A20 (42A18)
- (with Connett, William C.) A failure of stability under complex interpolation. *Canad. J. Math.* 29 (1977), no. 6, 1167-1170. (Jöran Bergh) 56 #9249 46E35
- (with Connett, William C.) The theory of ultraspherical multipliers. *Mem. Am. Math. Soc.* 9 (1977), no. 183, iv + 92 pp. (Aline Bonami) 55 #8666 42A18 (46E35)
- l^1 -convolution algebras: representation and factorization. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 41 (1977/78), no. 2, 161-176. (N. H. Bingham) 57 #1020 42A96 (60B15, 43A20)
- Schwartz, Benjamin L.** Separating points in a rectangle. *Math. Mag.* 46 (1973), 62-67. (Watanabe) 47 #5727 52A40
- Self-generating integers. *Math. Mag.* 46 (1973), 158-160. (Editors) 47 #10B05
- A two-move game. *Math. Mag.* 47 (1974), 190-197. (Norman P. Coleman) 50 #3966 90D20
- Queueing models with lane selection: a new class of problems. *Operations Research* (1974), no. 2, 331-339. (Jos H. A. de Smit) 53 #6793a (E 53 #6793b) 60K25
- On polyhedral faces. *Math. Mag.* 48 (1975), no. 5, 289-290. (H. W. Guggenheimer) 53 #6564 57A10 (52A25)
- Errata: "Queueing models with lane selection: a new class of problems" (Operations Res. 22 (1974), no. 2, 331-339). *Operations Res.* 24 (1976), no. 2, 386. (Jos H. A. de Smit) 53 #6793b 60K25
- Schwartz, Bernd** (with Beer, Klaus; Tichatschke, Rainer) Mehrfache Zerlegung linearer Optimierungsaufgaben. (English and Russian summaries) *Math. Operationsforsch.*

- Statist.* **2** (1971), no. 2, 95-115. (H. Weber) **49** #6915 90C05
(with Tichatschke, Rainer) Über eine Zerlegungsmethode zur Lösung gross dimensionierter linearer Optimierungsaufgaben. (English and Russian summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 1, 15-31. (Siegfried Schaible) **53** #9643 55K05 (90C05)
Zur Lösung nichtlinearer konvexer Optimierungsaufgaben durch Ressourcenzerlegung. *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* **19** (1977), no. 4, 491-498. (Siegfried Schaible) **57** #11755 90C25
- vartz, Charles** A classical perturbation theory. *J. Mathematical Phys.* **18** (1977), no. 1, 110-112. (Author's summary) **54** #9220 70A1
- vartz, D. E.** (with Hoffman, Alan J.) On partitions of a partially ordered set. *J. Combinatorial Theory Ser. B* **23** (1977), no. 1, 3-13. (Curtis Greene) **57** #12244 35A17 (06A10, 90C50)
- vartz, Diane L.** Ergodic theorems for an infinite particle system with births and deaths. *Ann. Probability* **4** (1976), no. 5, 783-801. (Richard Holley) **54** #6334 60K35
Applications of duality to a class of Markov processes. *Ann. Probability* **5** (1977), no. 4, 522-532. (David S. Griffiths) **56** #6937 60K35
On hitting probabilities for an annihilating particle model. *Ann. Probability* **6** (1978), no. 3, 398-403. (F. L. Spitzer) **58** #13411 60K35
- vartz, Dietrich** Mengenlehre über vorgegebenen algebraischen Systemen. *Math. Nachr.* **53** (1972), 365-370. (U. Felgner) **47** #8297 02K10
Ultraprodukte in der Theorie der logischen Auswahlfunktionen. *Z. Math. Logik Grundlagen Math.* **21** (1975), no. 5, 385-394. (G. Fuhrken) **52** #13375 02H13
Das Homomorphietheorem für MV-Algebren endlicher Ordnung. *Z. Math. Logik Grundlagen Math.* **22** (1976), no. 2, 141-148. (RZMat 1977 #2 A82) **58** #21446 02C05 (02J05)
Arithmetische Theorie der MV-Algebren endlicher Ordnung. *Math. Nachr.* **77** (1977), 65-73. (Stephen Comer) **57** #104 02J05
Theorie der polyadischen MR-Algebren endlicher Ordnung. *Math. Nachr.* **78** (1977), 131-138. (Marcel Guillaume) **57** #16069 02J99
Sequenzschliessen in der algebraischen Attributenlogik. *Z. Math. Logik Grundlagen Math.* **23** (1977), no. 6, 487-495. (Herman R. Jervell) **58** #5013 02B10
- vartz, Eric L.** The development of specific visual connections in the monkey and the goldfish: outline of a geometric theory of receptotopic structure. *J. Theoret. Biol.* **69** (1977), no. 4, 655-683. (Fred L. Bookstein) **57** #2635 92A05
- vartz, H. M.** Poincaré's Rendiconti paper on relativity. I, II, III. *Amer. J. Phys.* **39** (1971), 1287-1294; *ibid.* **40** (1972), 862-872; *ibid.* **40** (1972), 1282-1287. (Editors) **58** #15994 01A60 (83.01)
- vartz, Howard J.** (with Caughran, James G.) Spectra of compact composition operators. *Proc. Amer. Math. Soc.* **51** (1975), 127-130. (Joel H. Shapiro) **51** #13750 47B37 (30A18)
- vartz, J. L.** (with Krieger, Moshe) Méthodes pratiques de réduction et de réalisation des machines séquentielles à séquences d'entrée de longueur déterminée. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* **7** (1973), no. J-3, 45-73. (H. D. Block) **51** #12032 68A25
- vartz, J. S.** (with Edgar, T. F.) Analytical model reduction of large scale linear dynamic systems. *AIChE J.* **23** (1977), no. 6, 948-951. (Authors' summary) **57** #5287 93C40
- vartz, Jacob T.** ★Nonlinear functional analysis. Notes by H. Fattorini, R. Nirenberg and H. Porta, with an additional chapter by Hermann Karcher. Notes on Mathematics and its Applications. Gordon and Breach Science Publishers, New York-London-Paris, 1969. vii+236 pp. (K. D. Elworthy) **55** #6457 (EA 55/56) 58-02 (46Gxx)
Intersection-theoretic principles for the existence of critical points and fixed points. *Lectures in differential equations, Vol. I*, pp. 123-146. Van Nostrand, New York, 1969. (R. Z. Goldstein) **46** #906 57D70
(with Dunford, Nelson) ★Linear operators. Part III: Spectral operators. With the assistance of William G. Bade and Robert G. Bartle. Pure and Applied Mathematics, Vol. VII. Interscience Publishers [John Wiley & Sons, Inc.], New York-London-Sydney, 1971. i-xx and 1925-2592. (Henry R. Dowson) **54** #1009 47B40 (47-02)
Principles of specification language design with some observations concerning the utility of specification languages. *Algorithm specification (Courant Comput. Sci. Sympos. 4, New York Univ., New York, 1971)*, pp. 1-37. Prentice-Hall Series in Automat. Comput., Prentice-Hall, Englewood Cliffs, N. J., 1972. (Derek C. Oppen) **55** #1790 68A05
Semantic definition methods and the evolution of programming languages. *Formal semantics of programming languages (Courant Comput. Sci. Sympos. 2, New York Univ., New York, 1970)*, pp. 1-23. Prentice Hall Series in Automat. Comput., Prentice-Hall, Englewood Cliffs, N. J., 1972. (D. Vaida) **55** #6929 68A05
- ★On programming. An interim report on the SETL project. Installment II: The SETL language and examples of its use. *Computer Science Department, Courant Institute of Mathematical Sciences, New York University, New York, 1973. viii+520 pp.* (See Zbl 272 #68018) 68A05
Semantic and syntactic issues in programming. *Bull. Amer. Math. Soc.* **80** (1974), 185-206. (David C. Rine) **49** #4294 68A05
- ★On programming. An interim report on the SETL project. Part I: Generalities. Part II: The SETL language and examples of its use. Second revised edition of the two-volume work. *Computer Science Department, Courant Institute of Mathematical Sciences, New York University, New York, 1975. xii+675 pp.* (From the author's preface) **57** #11158 68A05
(with Kennedy, Ken) An introduction to the set theoretical language SETL. *Comput. Math. Appl.* **1** (1975), no. 1, 97-119. (J. E. L. Peck) **52** #9663 68A05
(with Coppage, Samuel) A fast switch. *Amer. Math. Monthly* **83** (1976), no. 9, 711-718. (C. L. Liu) **55** #2374 94A20 (68A20)
- (with Chaitin, Gregory J.) A note on Monte Carlo primality tests and algorithmic information theory. *Comm. Pure Appl. Math.* **31** (1978), no. 4, 521-527. (Jau Shyong Shiue) **58** #4629 94A15 (02F20, 10-04, 68A20)
- vartz, Jean-Marie** (with Enock, Michel) Une dualité dans les algèbres de von Neumann. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A683-A685. (S. Sakai) **50** #1008 46L10
(with Enock, Michel) Une catégorie d'algèbres de Kac. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 643-645. (S. Sakai) **52** #1344 46L99 (46M15)
- (with Enock, Michel) ★Une dualité dans les algèbres de von Neumann. *Bull. Soc. Math. France Mém.* No. 44. Supplément au Bull. Soc. Math. France, Tome 103, no. 4. Société Mathématique de France, Paris, 1975. 144 pp. (J. Ernest) **56** #1091 46L25 (22D35, 46M15)
Relations entre "ring groups" et algèbres de Kac. *Bull. Sci. Math.* (2) **100** (1976), no. 4, 289-300. (J. M. G. Fell) **57** #12773 22D35 (46L10)
(with Enock, Michel) Une nouvelle construction du poids dual sur le produit croisé d'une algèbre de von Neumann par un groupe localement compact. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 8, A415-A418. (S. Sakai) **57** #3874 46L99 (46L10)
(with Enock, Michel) Algèbres de Kac et produits croisés. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 6, A321-A323. (S. Sakai) **57** #3873 46L99 (46L10)
- See also Guichardet, Alain, 50 #5483
- Schwartz, L. E.** A globally convergent algorithm for nonlinear least squares. *Progress in statistics (European Meeting of Statisticians, Budapest, 1972)*, pp. 667-676. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974.* (A. Goldman) **51** #4675 65K05
- Schwartz, Laurent** Un théorème de dualité pour les applications radonifiantes. *C. R. Acad. Sci. Paris Sér. A-B* **268** (1969), A1410-A1413. (Zbl 229 #60008) **57** #16528 28A40 (46G99, 60B99)
Applications du théorème de dualité sur les applications p -radonifiantes. *C. R. Acad. Sci. Paris Sér. A-B* **268** (1969), A1612-A1615. (Zbl 199 #523) **58** #7762 60B05 (28A40, 46G99)
- ★Analyse. Deuxième partie: Topologie générale et analyse fonctionnelle. *Collection Enseignement des Sciences*, No. 11. Hermann, Paris, 1970. 433 pp. (Zbl 206, 63) **57** #7087 46-01 (54-01)
Un théorème de dualité pour les applications p -radonifiantes applications de ce théorème. *Les probabilités sur les structures algébriques (Actes Colloq. Internat. du CNRS, No. 186, Clermont-Ferrand, 1969)*, pp. 319-326. Editions Centre Nat. Recherche Sci., Paris, 1970. (Author's summary) **54** #8775 60B05 (47B10, 28A40)
Systèmes projectifs de mesures et théorème de Prokhorov. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Exp. No. 1, 5 pp.* Centre de Math., École Polytech., Paris, 1970. (J. D. Knowles) **53** #11005 28A30
Poids et mesures. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Exp. No. 4, 5 pp.* (errata, p. vii) Centre de Math., École Polytech., Paris, 1970. (Albert Tortrat) **54** #5425b 28A40 (47B10, 60B10)
La topologie étroite et la topologie cylindrique. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Exp. No. 3, 7 pp.* (errata, p. vii) Centre de Math., École Polytech., Paris, 1970. (Albert Tortrat) **54** #5425a 28A40 (47B10, 60B10)
Limites projectives de variables aléatoires. Applications décomposables et nikodymises. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Exp. No. 13, 8 pp.* (erratum, p. viii) Centre de Math., École Polytech., Paris, 1970. (N. N. Vahanija (Fakahnja)) **53** #4202 60G05 (28A40, 47B10, 60B05)
Probabilités cylindriques et fonctions aléatoires. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Exp. No. 6, 8 pp.* Centre de Math., École Polytech., Paris, 1970. (Hiroshi Sato) **53** #6654 60B05 (28A40)
Ordre et type; problèmes d'approximation; applications radonifiantes. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Exp. No. 5, 11 pp.* Centre de Math., École Polytech., Paris, 1970. (Albert Tortrat) **54** #5425c 28A40 (47B10, 60B10)
Mouvement brownien. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Exp. No. 15, 23 pp.* Centre de Math., École Polytech., Paris, 1970. (Editors) **54** #6299 60J65
Suite de l'exposé XXIV et théorème de dualité en situation générale. *Séminaire Laurent Schwartz (1969-1970), Applications radonifiantes, Exp. No. 25, 12 pp.* Centre de Math., École Polytech., Paris, 1970. (Editors) **58** #30218 46G99 (28A40)
Le théorème de dualité pour les applications radonifiantes. *Séminaire Laurent Schwartz (1969-1970), Applications radonifiantes, Exp. No. 24, 13 pp.* (erratum, p. ix), Centre de Math., École Polytech., Paris, 1970. (Editors) **58** #30224 46G99 (28A40)
Les applications 0-radonifiantes. *Séminaire Laurent Schwartz (1969-1970), Applications radonifiantes, Exp. Nos. 16-17, 14 pp.* (errata, p. viii) Centre de Math., École Polytech., Paris, 1970. (D. J. H. Garling) **52** #14945b 46B99 (47B10)
Applications p -radonifiantes, $0 < p < +\infty$. *Séminaire Laurent Schwartz (1969-1970), Applications radonifiantes, Exp. Nos. 11-12, 15 pp.* (erratum, p. viii) Centre de Math., École Polytech., Paris, 1970. (D. J. H. Garling) **52** #14945a 46B99 (47B10)
Les applications 0-radonifiantes dans les espaces de suites. *Séminaire Laurent Schwartz (1969-1970), Applications radonifiantes, Exp. No. 26, 19 pp.* (errata, p. viii-ix), Centre de Math., École Polytech., Paris, 1970. (Editors) **58** #30216 46G99 (28A40)
Applications p -radonifiantes et théorème de dualité. Proceedings of the International Colloquium on Nuclear Spaces and Ideals in Operator Algebras (Warsaw, 1969). *Studia Math.* **38** (1970), 203-213. (errata insert) (W. A. Woyczyński) **46** #321 28A40 (47B10, 60B05)
Produits tensoriels g_p et d_p , applications p -sommantes, applications p -radonifiantes. *Séminaire Bourbaki, 23e année (1970/1971), Exp. No. 386, pp. 63-88. Lecture Notes in Math., Vol. 244, Springer, Berlin, 1971.* (Editors) **57** #17310 46M05 (28A45, 47B10, 60Bxx)
Applications p -radonifiantes et théorème de dualité. *Troisième Colloque sur l'Analyse Fonctionnelle (Liège, 1970)*, pp. 99-109. Vander, Louvain, 1971. (Editors) **52** #8988 47B10 (28A40, 60B05)
Probabilités cylindriques et applications radonifiantes. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **18** (1971), 139-286. (A. Badrikian) **47** #9281 46G10
Désintégration régulière d'une mesure par rapport à une famille de tribus. *Séminaire Goulaouic-Schwartz 1971-1972: Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 24, 7 pp.* École Polytech., Centre de Math., Paris, 1972. **55** #8303 28A50
Désintégration d'une mesure. *Séminaire Goulaouic-Schwartz 1971-1972: Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 23, 10 pp.* École Polytech., Centre de Math., Paris, 1972. (Michel Valadier) **54** #2910 28A50

- Applications radonifiantes dans l'espace des séries convergentes. *Séminaire Goulaouic-Schwartz* 1971-1972: Deux journées p -radonifiantes, *Conférence* No. 3, 14 pp. *Centre de Math., École Polytech., Paris*, 1972. (N. Tomczak-Jaegermann) **53** #3755 47B10 (46B15)
- (with Maurey, Bernard; Nahoum, Albert) Étude du transformé d'un processus par une surmartingale régulière de mesures. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1365-A1368. (S. J. Taylor) **45** #2782 60G45
- Jean Delsarte. *Enseignement Math.* (2) **18** (1972), 113. (Editors) **51** #2840 01A70
- Paul Lévy (1885-1971). (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **15**(48) (1972), 171. (Editors) **58** #94 01A70
- Special maps in Banach-spaces: p -summing, p -radonifying, p -integral, p -nuclear maps. *J. Proc. Roy. Soc. New South Wales* **105** (1972), no. 3-4, 94-96 (1973). (B. M. Makarov) **53** #1324 47B10 (46B99)
- ★Ecuaciones diferenciales parciales elípticas. (Spanish) [Elliptic partial differential equations] Second edition. *Revista Colombiana de Matemáticas, Monografías Matemáticas*, No. 13. [Colombian Review of Mathematics, Mathematical Monographs, No. 13] *Departamento de Matemáticas y Estadística, Universidad Nacional de Colombia; Sociedad Colombiana de Matemáticas, Bogotá*, 1973. iii + 98 pp. (Editors) **51** #6122 35Jxx (35H05)
- ★Radon measures on arbitrary topological spaces and cylindrical measures. *Tata Institute of Fundamental Research Studies in Mathematics*, No. 6. *Published for the Tata Institute of Fundamental Research, Bombay by Oxford University Press, London*, 1973. xii + 393 pp. (R. M. Dudley) **54** #14030 60B05 (28A40)
- Applications p -sommantes et p -radonifiantes. *Séminaire Maurey-Schwartz Année 1972-1973: Espaces L^p et applications radonifiantes*, Exp. No. 3, 8 pp. *Centre de Math., École Polytech., Paris*, 1973. (Editors) **55** #13273 47B10
- Applications 0-radonifiantes. *Séminaire Maurey-Schwartz Année 1972-1973: Espaces L^p et applications radonifiantes*, Exp. No. 9, 14 pp. *Centre de Math., École Polytech., Paris*, 1973. (Editors) **55** #3853 47B10 (60B05)
- Les applications p -sommantes. *Séminaire Maurey-Schwartz Année 1972-1973: Espaces L^p et applications radonifiantes*, Exp. No. 2, 19 pp. *Centre de Math., École Polytech., Paris*, 1973. (Bernd Rosenberger) **53** #3756 47B10
- Surmartingales régulières à valeurs mesures et désintégrations régulières d'une mesure. *J. Analyse Math.* **26** (1973), 1-168. (A. Badrikian) **51** #8368 28A50 (60G45)
- ★Mathematische Methoden der Physik. I. Mit Übungsaufgaben von Denise Huet. Übersetzung aus dem französischen von Horst Holdgrün. *Bibliographisches Institut, Mannheim-Vienna-Zurich*, 1974. 184 pp. (Editors) **50** #9459 00A05 (46Fxx)
- Les espaces de type et cotype 2, d'après Bernard Maurey, et leurs applications. (English summary) *Colloque International sur les Processus Gaussiens et les Distributions Aléatoires* (Colloque Internat. du CNRS, No. 222, Strasbourg, 1973). *Ann. Inst. Fourier (Grenoble)* **24** (1974), no. 2, x, 179-188. (A. Pietsch) **54** #900 46B05 (28A40, 47B10, 60B05)
- Désintégrations régulières, tribus fortes, et probabilités extrémales. *Rev. Colombiana Mat.* **8** (1974), 39-45. (S. D. Chatterji) **50** #13442 28A50
- ★Les tenseurs. Suivi de *Torseurs sur un espace affine* par Y. Bamberger et J.-P. Bourguignon. *Actualités Scientifiques et Industrielles*, No. 1376. *Hermann, Paris*, 1975. iii + 203 pp. (J. D. Zund) **58** #753 15A69 (53-01, 58-01)
- Fonctions mesurables et \ast -scalairement mesurables, mesures banachiques majorées, martingales banachiques, et propriété de Radon-Nikodým. *Séminaire Maurey-Schwartz 1974-1975: Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*, Exp. No. IV, 18 pp. (erratum, pp. 1-2) *Centre Math., École Polytech., Paris*, 1975. (D. J. H. Garling) **56** #6385 46G10
- Propriété de Radon-Nikodým. *Séminaire Maurey-Schwartz (1974-1975), Espaces L^p applications radonifiantes et géométrie des espaces de Banach*, Exp. No. V-VI, 26 pp. (erratum, p. 2) *Centre Math., École Polytech., Paris*, 1975. (D. J. H. Garling) **58** #17840 46G10 (28A45, 60G45)
- Additif: "Fonctions mesurables et \ast -scalairement mesurables, mesures banachiques majorées, martingales banachiques, et propriété de Radon-Nikodým" (*Séminaire Maurey-Schwartz 1974-1975: Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*, Exp. No. IV, Centre Math., École Polytech., Paris, 1975). *Séminaire Maurey-Schwartz 1975-1976: Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*, Annexe No. 3, 3 pp. *Centre Math., École Polytech., Palaiseau*, 1976. (Editors) **58** #17841 46G10
- Certaines propriétés des mesures sur les espaces de Banach. *Séminaire Maurey-Schwartz (1975-1976), Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*, Exp. No. 23, 13 pp. *Centre Math., École Polytech., Palaiseau*, 1976. (Walter Schachermayer) **57** #16529 28A40 (60B05)
- Processus de Markov et désintégrations régulières. (English summary) *Ann. Inst. Fourier (Grenoble)* **27** (1977), no. 3, xi, 211-277. (Albert Tortrat) **58** #7871 60J40
- See also *Colloque: CNRS, Équations aux Dérivées Partielles Linéaires*, **49** #11010; *Poincaré, Henri*, **52** #2804; *Séminaire: Laurent Schwartz*, **52** #8850; *Séminaire: Maurey-Schwartz*, **52** #8851; *Séminaire: Maurey-Schwartz*, **52** #8852; *Séminaire: Maurey-Schwartz*, **52** #8853; *Colloque: Analyse Fonctionnelle*, **52** #8854; *Séminaire: Goulaouic-Schwartz*, **52** #8961; *Séminaire: Goulaouic-Schwartz*, **52** #8962; *Séminaire: Goulaouic-Schwartz*, **52** #8963; *Séminaire: Goulaouic-Schwartz*, **52** #8964; *Séminaire: Goulaouic-Lions-Schwartz*, **52** #8965; *Séminaire: Schwartz*, **52** #13084; *Séminaire: Goulaouic-Schwartz*, **55** #13050 and *Séminaire: Goulaouic-Schwartz*, **58** #22954
- Schwartz, Lawrence On certain properties of linear estimators. *Information Sci.* **6** (1973), 183-186. (Mir Ali) **49** #11703 62F10
- Sequential estimations with unestimated parameters—the fallacy. *Information Sci.* **7** (1974), 185-187. (C. P. Tsokos) **49** #1706 62L12 (93E10)
- Schwartz, Liana See *Popa-Burcă, Liana Schwartz*
- Schwartz, M. Off-diagonal long-range behavior of interacting Bose system. *Phys. Rev. B* (3) **15** (1977), no. 3, 1399-1403. (Author's summary) **54** #12091 82A47
- Schwartz, M. D. (with Denning, Dorothy E.; Denning, Peter J.) Securing data bases under linear queries. *Information processing 77 (Proc. IFIP Congr., Toronto, Ont., 1977)*, pp. 395-398. *IFIP Congr. Ser., Vol. 7, North-Holland, Amsterdam*, 1977. (Authors' summary) **58** #25083 68A05 (94A15)
- Schwartz, M. I. (with Forys, L. J.; Heffes, Harry; Holtzman, J. M.; Horing, S.; E. J.; Stiles, J. A.) A study of the analysis and control of the flow of air traffic. *Networks* **1** (1971/72), 15-42; *ibid.* **1** (1971/72), 209-243; *ibid.* **1** (1971/72), 346-8650 90B15
- Schwartz, Marie-Hélène Théorème d'approximation simpliciale lié à une stratification. *Mathematica (Cluj)* **13**(36) (1971), 301-334. (F. Laudenbach) **49** #11524 (32C40, 57C05)
- Un problème d'homotopie relatif à une stratification. *Mathematica (Cluj)* (1972), 369-397. (A. Verona) **51** #4261 57C55
- Local theory of analytic functions of several complex variables. *Notes Price. Seminar Schwartz, iv+70 pp. Notes on Pure Math., No. 7* (1973), *Dept. Math., Australian Nat. Univ., Canberra*, 1973. (Not reviewed)
- Sections holomorphes d'espaces à fibres linéaires variables. *Journées sur les Fonctions Analytiques (Toulouse, 1976)*, pp. 280-299. *Lecture Notes in Math., Springer, Berlin*, 1977. (A. Verona) **56** #15999 32L05
- See also *Séminaire: Schwartz*, **52** #13084
- Schwartz, Mischa (with Schonfeld, Tibor J.) Rapidly converging second-order algorithms for adaptive equalization. *IEEE Trans. Information Theory* **IT-17** (1971), 572-579. (Authors' summary) **50** #4098 94A05
- Schwartz, Nancy L. (with Kamien, Morton I.) Optimal maintenance and sale of a machine subject to failure. *Management Sci.* **17** (1970/71), B495-B504. (A. Ben El Mecheie) **46** #6798 90B25
- (with Kamien, Morton I.) Limit pricing and uncertain entry. *Economics Letters* (1971), 441-454. (Michael D. Intriligator) **52** #2532 90A10
- (with Kamien, Morton I.) Sufficient conditions in optimal control theory. *Econom. Theory* **3** (1971), 207-214. (From the authors' introduction) **56** #6517 49B99
- (with Kamien, Morton I.) Theory of the firm with induced technical change. *Metroecon.* **23** (1971), 233-256. (Authors' summary) **53** #12530 90A15
- (with Kamien, Morton I.) A note on resource usage and market structure. *Econom. Theory* **15** (1977), no. 2, 394-397. (A. C. Williams) **56** #17727 90A10
- Schwartz, Niels Über die Beziehungen zwischen der Galoisgruppe und dem Rang einer Anordnungen eines formal-reellen Körpers. *Arch. Math. (Basel)* **29** (1977), 148-153. (William C. Waterhouse) **57** #5969 12D15
- η_n -Strukturen. *Math. Z.* **158** (1978), no. 2, 147-155. (E. Harzheim) **57** #02H05 (06A05, 06A55, 10M15)
- Schwartz, Paul Two theorems on suns in continuous function spaces. *Approximation Theory and Methods, 1973*, pp. 477-480. *Academic Press, New York*, 1973. (F. Deutsch) **49** #967 41A65
- Characterization and uniqueness of best uniform vector-valued linear approximation. *J. Approximation Theory* **14** (1975), no. 3, 218-224. (Author's introduction) **58** #17824 46E40
- Schwartz, Richard E. (with Dym, Clive L.) An integer maximization problem. *Oper. Res.* **19** (1971), 548-550. (E. Balas) **47** #4638 90C10
- (with Kiefer, Jack C.) Correction: "Admissible Bayes character of T^2 " and other fully invariant tests for classical multivariate normal problems" (*Ann. Statist.* **36** (1965), 747-770). *Ann. Math. Statist.* **43** (1972), 1742. (E. L. L. L.) **50** #11567 62C15
- Two examples of invariant Bayes procedures. *Ann. Statist.* **1** (1973), (Lionel Weiss) **50** #3436 62F15 (62A05, 62C10)
- Schwartz, Robert A. See *Fama, Eugene F.*, **55** #9855
- Schwartz, S. C. On the estimation of a Gaussian convolution probability density. *Appl. Math.* **17** (1969), 447-453. (D. R. Brillinger) **45** #4566 62M10
- (with Davisson, Lee D.) Analysis of a decision-directed receiver for a sequence with unknown transition probabilities. (Russian) *Symposium on Information Theory (Dubna, 1969). Problemy Peredachi Informacii* **6** (1970), no. 2, 82-86. (M. I. Gerasimov) **48** #3618 94A15
- (with Martin, R. Douglas) Robust detection of a known signal in nearly white noise. *IEEE Trans. Information Theory* **IT-17** (1971), 50-56. (T. N. Bhargava) **46** #3185 94A05
- (with Martin, R. Douglas) On mixture, quasi-mixture and nearly normal processes. *Ann. Math. Statist.* **43** (1972), 948-967. (P. M. Lee) **46** #2735 62C10
- (with Denning, Peter J.) Properties of the working-set model. *Comm. ACM* (1972), 191-198. (A. D. Booth) **47** #6119 68A05
- Conditional mean estimates and Bayesian hypothesis testing. *IEEE Trans. Information Theory* **IT-21** (1975), no. 6, 663-665. (A. Ja. Dorogovcev) **52** #62F15 (62B05)
- On the structure of posterior conditional variances. *Ninth Annual Asilomar Conference on Circuits, Systems, and Computers (Pacific Grove, Calif., 1975)*, pp. 380-385. *Western Periodicals, North Hollywood, Calif.*, 1976. (See Zbl) **355** #62C54 (98825) 93E20
- (with Calo, S. B.) An upper bound for the equilibrium mean wait in a GI/G/1 queue. *Math. Oper. Res.* **2** (1977), no. 3, 240-243. (Peter Franken) **50** #60K25
- Schwartz, Thomas Choice functions, "rationality" conditions, and variations on the axiom of revealed preference. *J. Econom. Theory* **13** (1976), no. 3, 414-427. (J. Salles) **55** #9832 90A05
- Schwartz, W. Eine Variante des Töpfer-Verfahrens. *Numerische Methoden bei Differentialgleichungen und mit funktionalanalytischen Hilfsmitteln (Vortragsaus Tagungen, Tech. Univ. Clausthal-Zellerfeld und Oberwolfach, 1972)*, pp. 193-201. *Internat. Schr. Numer. Math., Band 19, Birkhäuser, Basel*, 1974. (Wolfgang W. W. W.) **54** #1543 65D15 (41A50)
- Schwartzbauer, T. Approximation of measure-preserving transformations. *Math. Theory* **6** (1972/73), 312-323. (R. V. Chacon) **49** #537 28A65
- Entropy and approximation of measure preserving transformations. *Pacific J. Math.* **43** (1972), 753-764. (R. L. Adler) **47** #5230 28A65
- Methods of approximation in ergodic theory. *Entropy and ergodic theory* (1971), 101-113. *Selecta Statistica Canadiana, Vol. 2, Univ. Press Canada, Toronto, Ont.* (R. L. Adler) **52** #11005 28A65

- artzman, M. I. See Švarcman, M. I.
- artzman, Sol Parallel vector fields and periodic orbits. *Proc. Amer. Math. Soc.* **44** (1974), 167-168. (Waldyr M. Oliva) **48** #9767 58F20
- arz, A. F. See Network theory. **49** #12198
- arz, A. S. See Švarc, A. S.
- arz, Binyamin Mappings of domains by components of solutions of differential systems. *J. Differential Equations* **10** (1971), 314-323. (Z. Nehari) **45** #621 34A20
- Curves on the unit sphere and disconjugacy of differential systems. *J. Math. Anal. Appl.* **39** (1972), 75-86. (G. J. Butler) **46** #5712 34A20 (34C10)
- Bounds for solutions of complex differential systems. *J. Differential Equations* **16** (1974), 168-185. (D. A. Lutz) **50** #7633 34A20
- (with Edelstein, Michael) On the length of linked curves. *Israel J. Math.* **23** (1976), 1, 94-95. (R. A. Horn) **53** #1417 52A40
- Bounds for solutions of complex differential systems. II. *J. Differential Equations* **21** (1976), no. 1, 9-24. (D. A. Lutz) **54** #10718 34A20
- arz, Dan On D -invariant and S -invariant sets in algebraic linguistics. (Romanian. French summary) *Stud. Cerc. Mat.* **27** (1975), no. 6, 731-737. (Author's summary) **58** #32116 68A30
- arz, Friedrich Ein Struktursatz für eine Klasse von Pseudobewertungen. *Arch. Math. Basel* **22** (1971), 597-601. (K. Kiyek) **45** #8651 13A15
- arz, Fritz Classification of the irreducible representations of the groups $IO(n)$. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **15** (1971), 15-35. (R. Mirman) **45** #3008 81.22
- Asymptotic expansions of Fourier integrals with light cone singularities. *J. Mathematical Phys.* **13** (1972), 1621-1634. (A. Erdélyi) **46** #9614 41A60 (42A76)
- Constraints for the phase of a scattering amplitude from elastic unitarity. *Acta Phys. Austriaca* **46** (1976/77), no. 3, 205-215. (Author's summary) **56** #2086 81.49
- On discrete subgroups of the Lorentz group. *Lett. Nuovo Cimento* (2) **15** (1976), no. 1, 7-14. (M. K. F. Wong) **56** #15831 22E40 (22E43)
- arz, Gabriele Zur partiellen Differentialgleichung der schlichten Funktionen. Collection in honor of Hans Hornich. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **185** (1976), no. 1-3, 89-93. (J. Nikolaus) **56** #15908 30A36 (35A99, 32A30)
- arz, Gerald W. On the de Rham cohomology of the leaf space of a foliation. *Topology* **13** (1974), 185-187. (Ph. Tondeur) **49** #6254 57D30
- Smooth functions invariant under the action of a compact Lie group. *Topology* **14** (1975), 63-68. (G. R. Belickii) **51** #6870 58C25 (57E15)
- Covering smooth homotopies of orbit spaces. *Bull. Amer. Math. Soc.* **83** (1977), no. 5, 1028-1030. (Felice Ronga) **56** #6707 58C25 (57E15)
- arz, Gideon On time-free functions. *Trans. Amer. Math. Soc.* **167** (1972), 471-478. (S. J. Taylor) **45** #2105 26A15 (39A15, 60G99)
- Ways of randomizing and the problem of their equivalence. *Israel J. Math.* **17** (1974), 1-10. (V. N. Igolkin) **50** #4060 93E05
- Randomizing when time is not well-ordered. *Israel J. Math.* **19** (1974), 241-245. (T. Parthasarathy) **51** #15036 90D99
- Noninvariance of \bar{d} -convergence of k -step Markov approximations. *Ann. Probability* **4** (1976), no. 6, 1033-1035. (Nathaniel Friedman) **54** #13036 28A65 (60G10)
- (with Rudolph, Daniel J.) On attaining \bar{d} . *Israel J. Math.* **24** (1976), no. 3-4, 185-190. (Paul C. Shields) **54** #2919 28A65
- (with Rudolph, Daniel J.) The limits in \bar{d} of multi-step Markov chains. *Israel J. Math.* **28** (1977), no. 1-2, 103-109. (Paul C. Shields) **57** #589 28A65
- Estimating the dimension of a model. *Ann. Statist.* **6** (1978), no. 2, 461-464. (Andrew Harvey) **57** #7855 62F99
- arz, H. Zur Dynamik entkoppelter und optimierter linearer Mehrgrößenregelungssysteme. (English summary) *Regelungstech. Prozeß-Datenverarbeitung*. **22** (1974), no. 4, 100-102. (A. Benveniste) **52** #16767 93C45
- Markov-parameter representation of linear time-variable systems with separable system functions. (Russian summary) *Problems of Control and Information Theory/Problemy Upravleniya i Teorii Informacii* **5** (1976), no. 1, 63-79. (Author's summary) **55** #10111 93C45 (93C05, 93B15)
- arz, H. A. ★Gesammelte mathematische Abhandlungen. Band I, II. Nachdruck in einem Band der Auflage von 1890. Chelsea Publishing Co., Bronx, N.Y., 1972. Band I: xiv + 338 pp. (vier Tafeln); Band II: vii + 370 pp. (bound as one vol.) (Editors) **52** #13287 01A75
- arz, H. C. Oscillations and asymptotic stability of control systems with non-linear pulse-amplitude modulation. *Automatic and remote control III* (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966), Vol. 1, p. 54, Paper 28D, 7 pp. Inst. Mech. Engrs., London, 1967. (Editors) **51** #9916 93D99
- See also Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360c
- arz, Hans-Rudolf ★Numerik symmetrischer Matrizen. Unter Mitwirkung von H. Rutishauser und E. Stiefel. Zweite, durchgesehene und erweiterte Auflage. Leitfäden der angewandten Mathematik und Mechanik, Band 11. B. G. Teubner, Stuttgart, 1972. 261 pp. (Editors) **49** #11784 65Fxx
- Stability of Kepler motion. *Comput. Methods Appl. Mech. Engrg.* **1** (1972), 279-299. (F. V. Pohle) **51** #9604 70.34 (85.34)
- ★Numerical analysis of symmetric matrices. With the participation of H. Rutishauser and E. Stiefel. Translated from the German by Paul Hertelendy. Prentice-Hall Series in Automatic Computation. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1973. xi + 276 pp. (Editors) **49** #11783 65Fxx
- The eigenvalue problem $(A - \lambda B)x = 0$ for symmetric matrices of high order. *Comput. Methods Appl. Mech. Engrg.* **3** (1974), no. 1, 11-28. (A. S. Householder) **52** #2170 65F15
- The method of coordinate over-relaxation for $(A - \lambda B)x = 0$. *Numer. Math.* **23** (1974), 135-151. (Claude Brezinski) **51** #9456 65F15
- Finite Elemente bei einfachen Eigenwertaufgaben. Feststellungen und Kuriositäten. (English summary) *Finite Elemente und Differenzenverfahren (Spezialtagung, Univ. Clausthal, Clausthal-Zellerfeld, 1974)*, pp. 133-151. *International Series of Numerical Mathematics*, Vol. 28, Birkhäuser, Basel, 1975. (M. Zlámal) **55** #9553 65L15
- Praktische Erfahrungen mit Varianten der Koordinatenüberrelaxation zur Lösung von Eigenwertaufgaben. (English summary) *Numerische Behandlung von Differentialgleichungen, Band 2* (Tagung, Math. Forschungsinst., Oberwolfach, 1975), pp. 199-222. *Internat. Ser. Numer. Math.*, Vol. 31, Birkhäuser, Basel, 1976. (Author's summary) **58** #25011 65N30
- Two algorithms for treating $Ax = \lambda Bx$. *Comput. Methods Appl. Mech. Engrg.* **12** (1977), no. 2, 181-199. (Author's summary) **58** #13661 65F15
- Elementare Darstellung der schnellen Fouriertransformation. (English summary) *Computing* **18** (1977), no. 2, 107-116. (Peter Deuflhard) **55** #11569 65D15
- The fast Fourier transform for general order. (German summary) *Computing* **19** (1977/78), no. 4, 341-350. (Peter Deuflhard) **58** #31983 65T05
- See also Stiefel, Eduard L., **55** #4591; Rutishauser, Heinz, **58** #19010a and Rutishauser, Heinz, **58** #19010b
- Schwarz, Hans-Ulrich Adjungierte Operatorenideale. *Math. Nachr.* **55** (1973), 293-308. (A. Pietsch) **47** #9304 46L20 (47B10)
- Dualität und Approximation von Normidealen. *Math. Nachr.* **66** (1975), 305-317. (S. Simons) **52** #6454 46L20
- Norm ideals determined by Banach lattices and abstract L_p -spaces. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 2, 255-265. (H. Jarchow) **56** #12920 46L20 (46A40)
- Schwarz, Helmut ★Optimale Regelung linearer Systeme. Theoretische und Experimentelle Methoden der Regelungstechnik, Band 12. Bibliographisches Institut, Mannheim-Vienna-Zurich, 1976. 242 pp. (Claudia Simionescu) **56** #14845 93-01 (49-01)
- Schwarz, J. Generic commands—a tool for partial correctness formalisms. *Comput. J.* **20** (1977), no. 2, 151-155. (Author's summary) **58** #14009 68A45
- Schwarz, John H. (with Scherk, J.) Dual models and the geometry of space-time. *Phys. Lett. 52B* (1974), 347-350. (Authors' summary) **50** #12130 83.53
- (with Scherk, J.) Gravitation in the light cone gauge. *General Relativity and Gravitation* **6** (1975), no. 6, 537-550. (Hsin-Yang Yeh) **56** #10721 83.53
- (with Ramond, Pierre) Classification of dual model gauge algebras. *Phys. Lett. B* **64** (1976), no. 1, 75-77. (Gerald A. Goldin) **55** #7163 81.22
- (with Brink, Lars; Scherk, J.) Supersymmetric Yang-Mills theories. *Nuclear Phys. B* **121** (1977), no. 1, 77-92. (S. Deser) **56** #4545 81.53
- (with Freedman, Daniel Z.) Unification of supergravity and Yang-Mills theory. *Phys. Rev. D* (3) **15** (1977), no. 4, 1007-1012. (Authors' summary) **57** #8551 81.22
- (with Brink, Lars; Gell-Mann, Murray; Ramond, Pierre) Supergravity as geometry of superspace. *Phys. Lett. B* **74** (1978), no. 4-5, 336-340. (Authors' summary) **57** #15202 83.53
- (with Brink, Lars; Gell-Mann, Murray; Ramond, Pierre) Extended supergravity as geometry of superspace. *Phys. Lett. B* **76** (1978), no. 4, 417-422. (Authors' summary) **58** #14901 83.53
- Schwarz, K. P. Application of collocation: spherical harmonics from satellite observations. *Mathematical geodesy, Part III* (Internat. Summer School Math. Methods Phys. Geodesy, Ramsau, 1973), pp. 111-132. *Methoden und Verfahren Math. Phys.*, Band 14, Bibliographisches Inst., Mannheim, 1975. (C. C. Tscherning) **56** #10749 86.65 (86.60)
- Schwarz, Kunibert Die konvexe Erweiterungsmethode—eine Methode zur Lösung diskreter Optimierungsaufgaben. (English and Russian summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 3, 331-340. (Author's summary) **56** #7958 90C05 (65K05)
- Schwarz, Leroy B. A simple continuous review deterministic one-warehouse N -retailer inventory problem. *Management Sci.* **19** (1972/73), 555-566. (D. Hochstädter) **49** #2055 90B05
- (with Schrage, Linus) Optimal and system myopic policies for multi-echelon production/inventory assembly systems. *Management Sci.* **21** (1974/75), no. 11, 1285-1294. (Stratton C. Jaquette) **53** #2328 90B05
- A note on the near optimality of "S-EOQ's worth" forecast horizons. *Operations Res.* **25** (1977), no. 3, 533-536. (Roman Słowiński) **56** #2261 90A15 (90B05)
- Schwarz, Martin, Jr. (with Poland, Douglas) Random walk with two interacting walkers. *J. Chem. Phys.* **63** (1975), 557-568. (Authors' summary) **57** #15157 82.60
- Schwarz, Peter (with Reinschke, Kurt) Sensitivity analysis of linear and nonlinear networks. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **11** (1975), no. 7/8, 405-421. (J. Černý) **54** #2270 93B35 (94A20)
- (with Reinschke, Kurt) ★Verfahren zur rechnergestützten Analyse linearer Netzwerke. Lehrbuch. Elektronisches Rechnen und Regeln, Band 9. Akademie-Verlag, Berlin, 1976. xi + 324 pp. (Editors) **57** #2771 94A20 (94-01)
- Verfahren zur Toleranzoptimierung linearer Netzwerke. *Z. Elek. Informations- und Energietechn.* **7** (1977), no. 5, 487-492. **58** #4694 94A20
- Schwarz, Stefan On the semigroup of binary relations on a finite set. *Czechoslovak Math. J.* **20** (1975), 632-679. (B. Šain (B. Schein) (RŽMat 1971 #7 A158)) **45** #5251 20M20 (04A20, 05A05)
- On the structure of dual semigroups. *Czechoslovak Math. J.* **21** (1976), 461-483. (D. R. LaTorre) **45** #2063 20M10
- (with Novák, Břetislav) Vojtěch Jarník. (22.12.1897-22.9.1970). *Acta Arith.* **20** (1972), 107-115. (Editors) **46** #6982a 01A70
- On some semigroups in combinatorics. *Mini-Conference on Semigroup Theory (József Attila Univ., Szeged, 1972)*, pp. 24-31. *József Attila Univ., Szeged, 1973.* (Hugo S. Sun) **53** #5782 20M10 (05B20)
- A note on small categories with zero. *Acta Sci. Math. (Szeged)* **35** (1973), 161-164. (G. J. Lallement) **48** #8671 20M99
- The semigroup of fully indecomposable relations and Hall relations. *Czechoslovak Math. J.* **23** (1978), 151-163. (G. E. Wall) **47** #5159 20M20 (05A05)
- Circulant Boolean relation matrices. *Czechoslovak Math. J.* **24** (1979), 252-253. (B. M. Schein (Šain)) **50** #516 20M10
- Sums of powers of binary relations. (Russian. Loose English summary) *Mat. Časopis Sloven. Akad. Vied* **24** (1974), 161-171. (Dj. Kurepa) **51** #164 04A05
- (with Kim, Ki Hang) The semigroup of circulant Boolean matrices. *Czechoslovak Math. J.* **26** (1976), no. 4, 632-635. (J. B. Kim) **55** #3128 20M99
- Intersections of maximal ideals in semigroups. *Semigroup Forum* **12** (1976), no. 4, 367-372. (S. Lajos) **54** #2852 20M10
- The ideal structure of C -semigroups. *Czechoslovak Math. J.* **27** (1977), no. 2, 313-337. (M. Satyanarayana) **55** #12842 20M10
- A counting theorem in the semigroup of circulant Boolean matrices. *Czechoslovak*

- Math. J.* 27(102) (1977), no. 3, 504-510. (J. B. Kim) 56 #15808 20M10
 See also Jakubik, Ján; et al., 49 #7088; Jakubik, Ján; et al., 50 #31 and
 Problems: Semigroups, 53 #10953
- Schwarz, Wilhelm** Spezielle G-äquivalente elliptische Differentialoperatoren, ein
 Charaktersatz und Anwendungen. *Bonn. Math. Schr. No.* 59 (1972), iv + 107 pp. (K. H.
 Mayer (Zbl 307 #58019)) 56 #16705 58G10
- Schwarz, Wolfgang** Über Teiler von n der Gestalt $p-1$. *Zahlentheorie (Tagung, Math.*
Forschungsinst., Oberwolfach, 1970), pp. 147-158. *Ber. Math. Forschungsinst.,*
Oberwolfach, Heft 5, Bibliographisches Inst., Mannheim, 1971. (Editors) 58 #27856
 10H25
 (with Spilker, Jürgen) Eine Anwendung des Approximationssatzes von
 Weierstrass-Stone auf Ramanujan-Summen. *Nieuw Arch. Wisk. (3)* 19 (1971), 198-209.
 (Henri Joris) 48 #11030 10K20
 Bemerkungen zu einem Satz der Herren Turán und Clunie über das Verhalten von
 Potenzreihen auf dem Rande des Konvergenzkreises. II. *Publ. Math. Debrecen* 18
 (1971), 129-137 (1972). (J. Clunie) 46 #9305 30A10
 Ramanujan-Entwicklungen stark multiplikativer zahlentheoretischer Funktionen.
Acta Arith. 22 (1972/73), 329-338. (S. L. Segal) 48 #2096 10H25
 (with Indlekofer, Karl-Heinz) Über B-Zwillinge. *Arch. Math. (Basel)* 23 (1972),
 251-256. (G. J. Rieger) 47 #6635 10J05
 Über B-Zwillinge. II. *Arch. Math. (Basel)* 23 (1972), 408-409. (G. J. Rieger)
 47 #6636 10J05
 A remark on multiplicative functions. *Bull. London Math. Soc.* 4 (1972), 136-140.
 (G. Halász) 47 #4952 10H25
 Berichtigung zu der Arbeit "Weitere, mit einer Methode von Erdős-Prachar erzielte
 Ergebnisse". *Math. Nachr.* 52 (1972), 385. (H.-E. Richert) 47 #165 10H30
 Über Potenzreihen, die irrationale Funktionen darstellen. I. *Überblicke*
Mathematik, Band 6, pp. 179-196. *Bibliographisches Inst., Mannheim, 1973.* (A. J. Van
 der Poorten) 51 #8382 30A10 (10A20)
 (with Wirsing, Eduard A.) The maximal number of non-isomorphic abelian groups
 of order n . *Arch. Math. (Basel)* 24 (1973), 59-62. (R. A. Rankin) 47 #4953 10H25
 (20K99)
 Eine weitere Bemerkung über multiplikative Funktionen. *Colloq. Math.* 28 (1973),
 81-89. (O. H. Körner) 48 #6037 10H25
 Ramanujan-Entwicklungen stark multiplikative Funktionen. Collection of articles
 dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.*
 262/263 (1973), 66-73. (T. M. Apostol) 48 #2097 10H25
 (with Wallisser, Rolf) Über gewisse nichtfortsetzbare Potenzreihen. *Monatsh. Math.*
 77 (1973), 63-66. (D. G. Cantor) 50 #13469 30A10
 (with Wallisser, Rolf) Über gewisse nichtfortsetzbare Potenzreihen. II. *Monatsh.*
Math. 77 (1973), 251-266. (M. E. Noble) 48 #11453 30A14
 ★Einführung in Siebmethoden der analytischen Zahlentheorie. *Bibliographisches*
Institut, Mannheim-Vienna-Zürich, 1974. 215 pp. (H.-E. Richert) 53 #13147 10H30
 Über Potenzreihen, die irrationale Funktionen darstellen. II. *Überblicke*
Mathematik, Band 7, pp. 7-32. *Bibliographisches Inst. Mannheim, 1974.* (A. J. Van der
 Poorten) 51 #8383 30A10 (10A20)
 Die Ramanujan-Entwicklung reellwertiger multiplikativer Funktionen vom Betrage
 kleiner oder gleich Eins. *J. Reine Angew. Math.* 271 (1974), 171-176. (T. M. Apostol)
 51 #395 10H99
 (with Spilker, Jürgen) Über zahlentheoretische Funktionen, die
 $f(x+y)=f(x)+f(y)$ erfüllen. *Mitt. Math. Sem. Giessen No. iii* (1974), 80-86. (T. M.
 Apostol) 51 #8014 10A20
 ★Einführung in die Zahlentheorie. Die Mathematik: Einführungen in Gegenstand
 und Ergebnisse ihrer Teilgebiete und Nachbarwissenschaften. *Wissenschaftliche*
Buchgesellschaft, Darmstadt, 1975. viii + 180 pp. (Bruce C. Berndt) 55 #7893 10-01
 Zum zahlentheoretischen Werk von Enrico Bombieri. *Jahrbuch Überblicke*
Mathematik, 1975, pp. 150-151. *Bibliographisches Inst., Mannheim, 1975.* (Editors)
 52 #7817 01A70
 Über die Ramanujan-Entwicklung multiplikativer Funktionen. Collection of
 articles in memory of Jurij Vladimirovič Linnik. *Acta Arith.* 27 (1975), 269-279. (G.
 Halász) 51 #8054 10H25
 Eine Bemerkung über Restklassencharaktere. *Math.-Phys. Semesterber.* 22 (1975),
 no. 2, 185-192. (S. L. Segal) 51 #12667 10A10
 (with Spilker, Jürgen) Mean values and Ramanujan expansions of almost even
 arithmetical functions. *Topics in number theory (Proc. Colloq., Debrecen, 1974)*, pp.
 315-357. *Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam, 1976.*
 (Karl-Heinz Indlekofer) 56 #5480 10K20 (10K35)
 Aus der Theorie der zahlentheoretischen Funktionen. *Jber. Deutsch. Math.-Verein.*
 78 (1976/77), no. 3, 147-167. (H.-E. Richert) 55 #12667 10H25 (10K20)
 (with Lucht, Lutz) Über die Lösungsanzahl der Gleichung $f(n)=\kappa \cdot n$ für gewisse
 Klassen multiplikativer Funktionen. *Monatsh. Math.* 81 (1976), no. 3, 213-216. (L.
 Carlitz) 53 #13145 10H25 (10B20)
 Liouville-Zahlen und der Satz von Baire. *Math.-Phys. Semesterber.* 24 (1977), no. 1,
 84-87. (P. Bundschuh) 56 #8504 10F35 (10F05)
 See also Cartan, H., 49 #8773; Kant, Immanuel, 50 #12620 und Zahlentheorie,
 50 #12875
- Kosmann-Schwarzbach, Yvette** See Kosmann-Schwarzbach, Yvette
- Schwarze, Jochen** Preiselastizitäten bei wahrscheinlichkeitsverteilter Nachfrage. (English
 summary) *Operations Research-Verfahren, IV*, pp. 259-268. *Hain, Meisenheim am Glan,*
 1967. (G. Tintner) 48 #13190 90A10
 (with Mundlos, Bernd) Basic ideas on stochastic indices. *Theory and applications of*
economic indices (Proc. Internat. Sympos., Univ. Karlsruhe, Karlsruhe, 1976), pp. 257-270.
Physica-Verlag, Würzburg, 1978. (From the introduction) 58 #15060 90A15
 Ein verallgemeinertes deterministisches Netzplanmodell. (English summary) *Z.*
Oper. Res. Ser. A-B 22 (1978), no. 5, A173-A194. (Author's summary) 58 #25913
 90B10
- Schwarzenberger, R. L. E.** ★Topics in differential topology. Publications of the
 Ramanujan Institute, No. 3. *Ramanujan Institute, University of Madras, Madras, 1972.*
 vi + 72 pp. (Ulrich Koschorke) 53 #9236 57Dxx
 Classification of crystal lattices. *Proc. Cambridge Philos. Soc.* 72 (1972), 325-349.
- (Werner Nowacki) 48 #1950 05B45 (82.20)
 (with Mayer, K. H.) Lefschetz formulae for modest vector bundles. *Proc.*
Cambridge Philos. Soc. 73 (1973), 439-453. (L. Lininger) 47 #2630 57E15 (57E16)
 The 17 plane symmetry groups. *Math. Gaz.* 58 (1974), 123-131. (Editors) 57 #20H15
 Crystallography in spaces of arbitrary dimension. *Proc. Cambridge Philos. Soc.*
 (1974), 23-32. (Werner Nowacki) 50 #2360 20H15
- Schwarzkopf, A. B.** Optimal controls for problems with a restricted state space. *SIAM*
Control 10 (1972), 487-511. (Thomas S. Angell) 47 #7554 49B15
 Relaxed control problems with state equality constraints. *SIAM J. Control*
 (1975), 677-694. (Ivar Ekeland) 51 #13820 49B10
 Controllability and tenability of nonlinear systems with state equality constraints.
SIAM J. Control 13 (1975), 695-705. (Ivar Ekeland) 51 #13821 49B10 (49E15)
 Optimal controls with equality state constraints. *J. Optimization Theory Appl.*
 (1976), no. 3, 455-468. (J. Warga) 54 #5939 49B35
 See also Optimal control and differential equations, 57 #10536
- Schweber, S. S.** Asymptotic states in nonrelativistic models exhibiting infra-red
 divergences. (Italian and Russian summaries) *Nuovo Cimento B* (11) 18 (1973), 81-91.
 (P. Pascual) 50 #3818 81A47
 See also Elementary particle physics and scattering theory, 53 #4762 and
 Elementary particle physics and scattering theory, 53 #4763
- Schweda, Manfred** (with Dirschmid, Hansjörg; Kummer, Wolfgang) ★Einführung in
 mathematischen Methoden der theoretischen Physik. *Vieweg, Braunschweig, 1976.*
 vii + 212 pp. (H. S. P. Grässer) 56 #8249 00A05 (69.00)
 (with Ferrara, S.; Piguet, O.) Some supersymmetric aspects of the
 supertransformation of Becchi, Rouet and Stora. *Nuclear Phys. B* 119 (1977),
 493-514. (Editors) 56 #4549 81S3
 (with Piguet, O.) A generalized Slavnov-invariant abelian Higgs-Kibble model.
Nuclear Phys. B 139 (1978), no. 3, 203-215. (Authors' summary) 58 #14516 81S3
Schwede, Gary W. N -variable fuzzy maps with application to disjunctive decomposition
 fuzzy switching functions. *Proceedings of the Sixth International Symposium on*
Multiple-Valued Logic (Univ. Center, Utah State Univ., Logan, Utah, 1976), pp. 203-208.
IEEE Comput. Soc., Long Beach, Calif., 1976. (Author's summary) 58 #20875
 94A20
 (with Kandel, Abraham) Fuzzy maps. *IEEE Trans. Systems Man Cybernet.* SMC-9
 (1977), no. 9, 669-674. (Masaharu Mizumoto) 56 #11623 94A20
- Schweder, Tore** Window estimation of the asymptotic variance of rank estimation
 location. *Scand. J. Statist.* 2 (1975), no. 3, 113-126. (Rudolph J. Beran) 53 #14762G05
- Some "optimal" methods to detect structural shift or outliers in regression. *J. Am.*
Statist. Assoc. 71 (1976), no. 354, 491-501. (A. Hedayat) 54 #14248 62J05 (62J06)
 Point process models for line transect experiments. *Recent developments in statistics*
 (Proc. European Meeting Statisticians, Grenoble, 1976), pp. 221-242. *North-Holland,*
Amsterdam, 1977. (P. Holgate) 56 #16850 60K99 (62G05, 92A05)
- Schweiger, Fritz** Eine Bemerkung zu einer Arbeit von S. D. Chatterji. (Loose English
 summary) *Mat. Casopis Sloven. Akad. Vied* 19 (1969), 89-91. (R. H. Farrell) 46 #40A15 (28A65)
 Metrische Theorie kettenbruchähnlicher Ziffernentwicklungen. *Zahlentheorie*
 (Tagung, Math. Forschungsinst. Oberwolfach, 1970), pp. 159-172. *Ber. Math.*
Forschungsinst., Oberwolfach, Heft 5, Bibliographisches Inst., Mannheim, 1971. (J.
 Galambos) 51 #408 10K10
 Induzierte Masse bei zahlentheoretischen Transformationen. *Monatsh. Math. Phys.*
 (1971), 57-64. (B. Volkmann) 45 #1865 10K20
 Kapazität und Dimension verallgemeinerter Cantorscher Mengen. *Acta Arith.*
 (1972), 125-132. (J. Galambos) 51 #3100 10K10
 Metrische Sätze über Oppenheimentwicklungen. *J. Reine Angew. Math.* 254 (1972),
 152-159. (J. Galambos) 45 #6781 10K10
 Abschätzung der Hausdorffdimension für Mengen mit vorgeschriebenen
 Häufigkeiten der Ziffern. *Monatsh. Math.* 76 (1972), 138-142. (B. Volkmann)
 46 #3473 10K15 (28A65)
 (with Stradner, Wolfgang) Die Billingsleydimension von Mengen mit
 vorgeschriebenen Ziffern. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* 180 (1973),
 95-109. (O. P. Stackelberg) 46 #5277 10K99
- ★The metrical theory of Jacobi-Perron algorithm. *Lecture Notes in Mathematics*
 Vol. 334. *Springer-Verlag, Berlin-New York, 1973.* iii + 111 pp. (J. Galambos)
 49 #10654 10K10 (10F20, 10K15)
 Volumsapproximation beim Jacobialgorithmus. II. *Acta Arith.* 23 (1973), 393-403.
 (R. Tijdeman) 48 #6015 10F25 (10K10)
 Billingsleydimension und Packungsexponent. *Anz. Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* 1973, no. 9, 69-72. (J. Galambos) 52 #8070 10K10
 (with Waterman, Michael S.) Some remarks on Kuzmin's theorem for F -expansions.
J. Number Theory 5 (1973), 123-131. (J. Galambos) 47 #8446 10F20 (10K10)
 Volumsapproximation beim Jacobialgorithmus. *Math. Ann.* 203 (1973), 283-293.
 (R. Tijdeman) 48 #2084 10K10
 (with Stradner, Wolfgang) Die Billingsleydimension von Mengen mit
 vorgeschriebenen Ziffern. II. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* 180
 (1973), 151-155. (O. P. Stackelberg) 49 #2631 10K10
 Metrische Ergebnisse über den Kotengalsalgorithmus. *Acta Arith.* 26 (1974),
 no. 3, 217-222. (J. Galambos) 51 #10269 10K10
 Numbertheoretical endomorphisms with σ -finite invariant measure. *Israel J. Math.*
 21 (1975), no. 4, 308-318. (Roland Fischer) 52 #5608 10K10 (28A65)
 Eine kotengalsalgorithmusähnliche Abbildung. Collection of articles dedicated to
 Helmut Hasse on his seventy-fifth birthday. III. *J. Reine Angew. Math.* 274/275 (1975),
 90-93. (J. Galambos) 51 #10270 10K10
 (with Fischer, Roland) The number of steps in a finite Jacobi algorithm.
Manuscripta Math. 17 (1975), no. 3, 291-308. (J. M. Gandhi) 52 #10574 10A05
 Some remarks on ergodicity and invariant measures. *Michigan Math. J.* 22 (1975),
 no. 2, 181-187. (J. Galambos) 51 #12765 10K10 (28A65)
 Gedämpfte zahlentheoretische Transformationen. (English summary) *Monatsh. Math. Phys.*
 79 (1975), 67-73. (J. Galambos) 50 #12948 10K10

- Der Satz von Hurwitz beim Jacobialgorithmus. (English summary) *Monatsh. Math.* 0 (1975), no. 3, 215-218. (R. Tijdeman) 52 #8047 10F20
- Approximation properties of Jacobi's algorithm. *Monatsh. Math.* 81 (1976), no. 1, 9-61. (R. Tijdeman) 53 #2845 10F20
- Zahlentheoretische Transformationen mit σ -endlichem invariantem Mass. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* 185 (1976), no. 1-3, 95-103. (J. Galambos) 56 #5477 10K15
- Über einen Algorithmus von R. Güting. (English summary) *J. Reine Angew. Math.* 93/294 (1977), 263-270. (J. Galambos) 56 #293 10K10 (10A30)
- (with Li, Tien Yien) The generalized Boole's transformation is ergodic. *Manuscripta Math.* 25 (1978), no. 2, 161-167. (R. L. Adler) 58 #17043 28A65
- $\tan x$ is ergodic. *Proc. Amer. Math. Soc.* 71 (1978), no. 1, 54-56. (R. L. Adler) 7 #12822 28A65 (10K99)
- Geigert, Dietmar Über endliche, ordnungspolynomvollständige Verbände. *Monatsh. Math.* 78 (1974), 68-76. (H. F. J. Lowig) 49 #4880 06A20
- Some remarks on polarity lattices and on ortholattices. *Proceedings of the Lattice Theory Conference (Ulm, 1975)*, pp. 254-256. *Univ. Ulm, Ulm, 1975*. (A. C. Choudhury) 15 #219 06A20
- Über die Gruppen der Polynomautomorphismen endlicher Verbände. *Abh. Math. Sem. Univ. Hamburg* 43 (1975), 221-223. (Dietmar Dörninger) 53 #2774 06A20
- Über idempotente Polynomfunktionen auf Verbänden. *Elem. Math.* 30 (1975), 30-32. (A. C. Choudhury) 52 #10520 06A20
- Über Zentralkollineationen und Verbandspolynomfunktionen. *Publ. Math. Debrecen* 22 (1975), no. 3-4, 225-229. (R. J. Bumcrot) 52 #2985 06A30 (50D30)
- Endomorphically complete groups. *Contributions to universal algebra (Colloq., József Attila Univ., Szeged, 1975)*, pp. 429-434. *Colloq. Math. Soc. János Bolyai, Vol. 17, North-Holland, Amsterdam, 1977*. (H. Lausch) 57 #16407 20D99 (08A25)
- Vollständige, geometrische Verbände mit Polarität. *Arch. Math. (Basel)* 28 (1977), no. 3, 233-237. (R. J. Bumcrot) 56 #15516 06A30
- Polynomautomorphismen auf endlichen Gruppen. *Arch. Math. (Basel)* 29 (1977), no. 1, 34-38. (H. Lausch) 56 #8695 20D45
- Zur Definition der Polynomalgebra. *Math. Nachr.* 79 (1977), 249-251. (H. Lausch) 57 #5877 08A25
- Affine complete ortholattices. *Proc. Amer. Math. Soc.* 67 (1977), no. 2, 198-200. (Ann Miller) 57 #191 06A20
- (with Kamara, Morike) Eine Charakterisierung polynomvollständiger Polaritätsverbände. *Arch. Math. (Basel)* 30 (1978), no. 6, 661-664. (Ralph Freese) 58 #10637 06A20
- weikert, D. G. (with Goldstein, A. J.) A proper model for testing the planarity of electrical circuits. *Bell System Tech. J.* 52 (1973), 135-142. (C. F. Picard) 49 #8747 94A20
- weinsberg, Allen Principal ideals of compact operators. *Indiana Univ. Math. J.* 25 (1976), no. 3, 229-233. (Warren R. Wogen) 53 #3724 46L15
- Joins and intersections of ideals of compact operators. *Proc. Amer. Math. Soc.* 59 (1976), no. 2, 268-272. (A. Brown) 56 #12919 46L15 (47B10)
- weitzer, Paul A. Counterexamples to the Seifert conjecture and opening closed leaves of foliations. *Ann. of Math. (2)* 100 (1974), 386-400. (Robert Roussarie) 50 #8557 57D30 (58F10)
- (with Blanton, John D.) Axioms for characteristic classes of manifolds. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973)*, Part 1, pp. 349-356. *Amer. Math. Soc., Providence, R.I., 1975*. (R. E. Stong) 51 #11534 57D20
- Compact leaves of codimension one foliations. *Differential topology and geometry (Proc. Colloq., Dijon, 1974)*, pp. 273-276. *Lecture Notes in Math., Vol. 484, Springer, Berlin, 1975*. (C. S. Hartzman) 52 #9250 57D30 (58F10)
- Compact leaves of foliations. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 1, pp. 543-546. *Canad. Math. Congress, Montreal, Que., 1975*. (Robert Roussarie) 55 #4207 57D30
- (with Reeb, Georges H.) Un théorème de Thurston établi au moyen de l'analyse non standard. *Differential topology, foliations and Gelfand-Fuks cohomology (Proc. Sympos., Pontificia Univ. Católica, Rio de Janeiro, 1976)*, p. 138. *Lecture Notes in Math., Vol. 652, Springer, Berlin, 1978*. (Robert Roussarie) 58 #18491a 57D30
- See also Differential geometry, 51 #6863; Dynamical systems, 52 #11994; Differential topology, foliations and Gelfand-Fuks cohomology, 58 #13044 and Schachermayer, Walter, 58 #18491b
- weitzer, Paul J. Multiple policy improvements in undiscounted Markov renewal programming. *Operations Res.* 19 (1971), no. 3, 784-793. (Author's summary) 56 #11006 90C45
- Optimization with an approximate Lagrangian. *Math. Programming* 7 (1974), 191-198. (Kailash K. Kapur) 50 #3077 49D99 (65K05)
- (with Hordijk, Arie; Tijms, Henk) The asymptotic behaviour of the minimal total expected cost for the denumerable state Markov decision model. *J. Appl. Probability* 12 (1975), 298-305. (H. Taylor) 51 #15004 90C40
- (with Lam, Shui) Buffer overflow in a store-and-forward network node. *IBM J. Res. Develop.* 20 (1976), no. 6, 542-550. (Authors' summary) 58 #33577 94A20 (60K30, 68A99)
- (with Gavish, Bezalel) An optimality principle for Markovian decision processes. *J. Math. Anal. Appl.* 54 (1976), no. 1, 173-184. (Bruce D. Craven) 51 #12223 90C40
- (with Gavish, Bezalel) The Markovian queue with bounded waiting time. *Management Sci.* 23 (1976/77), no. 12, 1349-1357. (Authors' summary) 58 #31448 60K25
- (with Federgrün, A.) The asymptotic behavior of undiscounted value iteration in Markov decision problems. *Math. Oper. Res.* 2 (1977), no. 4, 360-381 (1978). (Richard F. Serfozo) 57 #5149 90D35 (90C40)
- (with Gavish, Bezalel; Shlifer, Eliezer) The zero pivot phenomenon in transportation and assignment problems and its computational implications. *Math. Programming* 12 (1977), no. 2, 226-240. (J. T. Howson, Jr.) 56 #2349 90C05 (90B10)
- (with Konheim, Alan G.) Buffer overflow calculations using an infinite-capacity model. *Stochastic Processes Appl.* 6 (1977/78), no. 3, 267-276. (Burton Simon) 58 #24617 60K30 (60K25)
- (with Brosh, Israel; Shlifer, Eliezer) Generalized Markovian decision processes. (German summary) *Z. Operations Res. Ser. A-B* 21 (1977), no. 5, A173-A186. (Santosh Kumar) 56 #14734 90C40
- (with Federgrün, A.) Foolproof convergence in multichain policy iteration. *J. Math. Anal. Appl.* 64 (1978), no. 2, 360-368. (R. N. Kaul) 58 #9296 90C45
- See also Markov decision theory, 56 #14660
- Schweitzer, U. (with Niethammer, Wilhelm) On the numerical analytic continuation of power series with application to the two-body and three-body problems. *Comput. Methods Appl. Mech. Engrg.* 5 (1975), 239-249. (Radu Bădescu) 52 #4748 70.30
- Schweitzer, W. (with Haagen, Klaus) Zur Approximation der hypergeometrischen Verteilung durch die Normalverteilung. *Statist. Hefte (N.F.)* 16 (1975), no. 2, 123-127. (See Zbl 312 #62014) 62E20
- Schweizer, Berthold (with Erber, T.; Sklar, Abe) Mixing transformations on metric spaces. *Comm. Math. Phys.* 29 (1973), 311-317. (E. S. Boylan) 48 #2343 28A65
- (with Sklar, Abe) Probabilistic metric spaces determined by measure preserving transformations. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 26 (1973), 235-239. (H. Sherwood) 48 #12623 60B99 (54E35)
- (with Sklar, Abe) Operations on distribution functions not derivable from operations on random variables. *Studia Math.* 52 (1974), 43-52. (J. D. Mason) 50 #11377 60E05
- Multiplications on the space of probability distribution functions. *Aequationes Math.* 12 (1975), no. 2-3, 156-183. (R. G. Laha) 52 #6809 60B05
- Sur la possibilité de distinguer les points dans un espace métrique aléatoire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 7, A459-A461. (H. Sherwood) 52 #9191 54E99
- (with Wolff, Edward F.) Sur une mesure de dépendance pour les variables aléatoires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 8, A469-A461. (Robin K. Milne) 55 #11503 62H99
- (with Sklar, Abe) The axiomatic characterization of functions. *Z. Math. Logik Grundlagen Math.* 23 (1977), no. 5, 373-382. (From the introduction) 58 #10441 02J99
- (with Moynihan, R.; Sklar, Abe) Inequalities among operations on probability distribution functions. *General inequalities (Proc. First Internat. Conf., Math. Res. Inst., Oberwolfach, 1976)*, I, pp. 133-149. *Birkhäuser, Basel, 1978*. (M. Skalsky) 58 #7784 60E05
- Schweizer, Urs Fortsetzung von Spezialisierungen: ein idealtheoretischer Zugang. *Comment. Math. Helv.* 49 (1974), 245-250. (W. Vogel) 51 #3166 14A25 (13F20)
- Convexification of preference orderings. *Operations Research Verfahren, Band XXII*, pp. 192-199. *Hain, Meisenheim am Glan, 1976*. (John Roberts) 56 #14566 90A05
- (with Hartwick, John; Varaiya, Pravin P.) Comparative statics of a residential economy with several classes. *J. Econom. Theory* 13 (1976), no. 3, 396-413. (Alberto Chilosi) 55 #7338 90A99
- Schwenk, Allen J. (with Harary, Frank; O'Neil, Peter V.; Read, Ronald C.) The number of trees in a wheel. *Combinatorics (Proc. Conf. Combinatorial Math., Math. Inst., Oxford, 1972)*, pp. 155-163. *Inst. Math. Appl., Southend-on-Sea, 1972*. (J. W. Moon) 50 #1962 05C30
- (with Harary, Frank) Evolution of the path number of a graph: Covering and packing in graphs. II. *Graph theory and computing*, pp. 39-45. *Academic Press, New York, 1972*. (R. C. Mullin) 49 #2456 05C35
- Acquaintance graph party problem. *Amer. Math. Monthly* 79 (1972), 1113-1117. (A. W. Goodman) 51 #5416 05C99
- (with Harary, Frank; Krarup, J.) Graphs suppressible to an edge. *Canad. Math. Bull.* 15 (1972), 201-204. (E. M. Palmer) 47 #75 05C99
- (with Harary, Frank; Scott, R. L.) On the reconstruction of countable forests. *Publ. Inst. Math. (Beograd) (N.S.)* 13(27) (1972), 39-42. (E. M. Palmer) 48 #5894 05C05
- (with Harary, Frank) A new crossing number for bipartite graphs. *Utilitas Math.* 1 (1972), 203-209. (K. Wagner) 46 #8906 05C99
- Almost all trees are cospectral. *New directions in the theory of graphs (Proc. Third Ann Arbor Conf., Univ. Michigan, Ann Arbor, Mich., 1971)*, pp. 275-307. *Academic Press, New York, 1973*. (A. Mowshowitz) 52 #5456 05C05
- (with Harary, Frank) The number of caterpillars. *Discrete Math.* 6 (1973), 359-365. (J. Sedláček) 48 #8282 05C05
- (with Harary, Frank) On the number of unique subgraphs. *J. Combinatorial Theory Ser. B* 15 (1973), 156-160. (E. M. Palmer) 48 #3794 05C30
- (with Harary, Frank) The no-touch puzzle and graphical complementation. *J. Recreational Math.* 6 (1973), 284-286. (L. V. Quintas) 55 #190 05C99
- (with Harary, Frank; Kainen, Paul C.; White, Arthur T.) A maximal toroidal graph which is not a triangulation. *Math. Scand.* 33 (1973), 108-112. (Václav Chvátal) 48 #10889 05C35
- (with Harary, Frank; Kainen, Paul C.) Toroidal graphs with arbitrarily high crossing numbers. *Nanta Math.* 6 (1973), no. 1, 58-67. (H. V. Kronk) 49 #103 05C10
- (with Harary, Frank) Which graphs have integral spectra? *Graphs and combinatorics (Proc. Capital Conf., George Washington Univ., Washington, D.C., 1973)*, pp. 45-51. *Lecture Notes in Math., Vol. 406, Springer, Berlin, 1974*. (M. Doob) 52 #7970 05C99
- Computing the characteristic polynomial of a graph. *Graphs and combinatorics (Proc. Capital Conf., George Washington Univ., Washington, D.C., 1973)*, pp. 153-172. *Lecture Notes in Math., Vol. 406, Springer, Berlin, 1974*. (M. Doob) 52 #7972 05C99
- (with Chvátal, Václav) On the Ramsey number of the five-spoked wheel. *Graphs and combinatorics (Proc. Capital Conf., George Washington Univ., Washington, D.C., 1973)*, pp. 247-261. *Lecture Notes in Math., Vol. 406, Springer, Berlin, 1974*. (R. L. Graham) 51 #234 05C15
- (with Harary, Frank) The communication problem on graphs and digraphs. *J. Franklin Inst.* 297 (1974), 491-495. (J. W. Moon) 50 #1980 05C99 (94A20)
- (with Mallion, R. B.; Trinajstić, N.) On the characteristic polynomial of a rooted

- graph. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 345-350. *Academia, Prague*, 1975. (Jean H. Bevis) **53** #5345 05C05
 (with Robinson, Robert W.) The distribution of degrees in a large random tree. *Discrete Math.* **12** (1975), no. 4, 359-372. (J. W. Moon) **53** #10629 05C05
 (with Harary, Frank; Robinson, Robert W.) Twenty-step algorithm for determining the asymptotic number of trees of various species. *J. Austral. Math. Soc. Ser. A* **20** (1975), no. 4, 483-503. (J. W. Moon) **53** #10644 05C30
 (with Beineke, Lowell W.) On a bipartite form of the Ramsey problem. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 17-22. *Congressus Numerantium, No. XV, Utilitas Math., Winnipeg, Man.*, 1976. (S. A. Burr) **53** #13013 05C15
 (with Harary, Frank) On tactical configurations with no four-cycles. *J. Combinatorial Theory Ser. A* **20** (1976), no. 3, 371-374. (Judith Q. Longyear) **53** #10618 05B30
 (with Harary, Frank; Mowshowitz, Abbe) Line minimal Boolean forests. *Colloq. Math.* **37** (1977), no. 1, 167-173. (Brian Alspach) **57** #5814 05C25
 An asymptotic evaluation of the cycle index of a symmetric group. *Discrete Math.* **18** (1977), no. 1, 71-78. (J. W. Moon) **57** #9598 05C25 (05C05)
 (with Harary, Frank; Palmer, Edgar M.; Robinson, Robert W.) Enumeration of graphs with signed points and lines. *J. Graph Theory* **1** (1977), no. 4, 295-308. (L. W. Beineke) **57** #5818 05C30
 (with Palmer, Edgar M.) The number of self-complementary achiral necklaces. *J. Graph Theory* **1** (1977), no. 4, 309-315. (P. K. Stockmeyer) **58** #5356 05C30
- Schwerdtfeger, Hans** Fundamental relations of surface theory as matrix identities. Collection of articles dedicated to Stanislaw Gołb on his 70th birthday, II. *Demonstratio Math.* **6** (1973), 841-846 (1974). (M. Št. Botez) **50** #11040 53A05
 On $(n+1)$ -point invariants of the group $GL(n, F)$. Collection of articles dedicated to Olga Taussky-Todd. *Linear and Multilinear Algebra* **3** (1975/76), no. 1-2, 105-109. (A. O. Morris) **52** #13882 15A15
 ★Introduction to group theory. *Noordhoff International Publishing, Leyden*, 1976. xvi + 238 pp. (Donald E. Taylor) **55** #8151 20-01
 Invariants of a class of transformation groups. *Aequationes Math.* **14** (1976), no. 1/2, 105-110. (Rodney Angotti) **53** #14291 50A15
 Invariants à cinq points dans le plan projectif. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 3, A127-A128. (Author's summary) **57** #10576 50D25
 Invariants of a class of transformation groups. II. *Aequationes Math.* **17** (1978), no. 2-3, 292-294. (F. A. Sherk) **58** #12720 50D99
 On $(n+1)$ -point invariants of the group $GL(n, F)$. II. *Linear and Multilinear Algebra* **6** (1978/79), no. 1, 63-64. (A. O. Morris) **58** #919 20G15
 See also **Functional equations and inequalities**, **58** #23210
- Schwermer, Joachim** Sur la cohomologie des sous-groupes de congruence de $SL_3(Z)$. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 11, A817-A820. (J. S. Joel) **55** #3162 22E40 (10D20)
 ★Eisensteinreihen und die Kohomologie von Kongruenzuntergruppen von $SL_n(Z)$. Inaugural-Dissertation zur Erlangung des Doktorgrades der Hohen Mathematisch-Naturwissenschaftlichen Fakultät der Rheinischen Friedrich-Wilhelms-Universität, Bonn. Bonner Mathematische Schriften, No. 99. Mathematisches Institut, Universität Bonn, Bonn, 1977. x + 70 pp. (S. Raghavan) **58** #16531 10D20 (22E50)
- Schwetlick, Hubert** Zur Konstruktion invarianter polyedrischer Kegel für gewisse Klassen von reellen Matrizen und deren Ausnutzung für Fehlerabschätzungen beim Eigenwertproblem. (English and Russian summaries) *Z. Angew. Math. Mech.* **50** (1970), 665-670. (Chandler Davis) **45** #6177 65F15
 (with Dietze, S.) Über die Schrittweitenwahl bei Abstiegsverfahren zur Minimierung konvexer Funktionen. (English and Russian summaries) *Z. Angew. Math. Mech.* **51** (1971), 451-454. (W. Oetli) **46** #4720 65K05
 Zur Durchführbarkeit von Fehlerabschätzungen für das Eigenwertproblem reeller Matrizen mittels invarianter Kegel. (English and Russian summaries) *Z. Angew. Math. Mech.* **51** (1971), 551-557. (K. Najzar) **46** #8401 65F15
 Zur Konvergenz regularisierter Gauss-Newton-Verfahren. (Russian summary) *Ž. Vychisl. Mat. i Mat. Fiz.* **13** (1973), 1371-1382, 1635. (H. H. Goldstine) **50** #11780 65K05
 Minimizing nonlinear functions by descent methods. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974)*, pp. 562-568. North-Holland, Amsterdam, 1974. (Bernard Lemaire) **54** #4105 65K05
 Über die Realisierung und Konvergenz von Mehrschrittverfahren zur iterativen Lösung nichtlinearer Gleichungen. (English and Russian summaries) *Z. Angew. Math. Mech.* **54** (1974), 479-493. (W. C. Rheinboldt) **51** #14565 65H10
 Über n^2 -Schritt-Verfahren zur Lösung nichtlinearer Gleichungen. *Z. Angew. Math. Mech.* **54** (1974), 822-825. (J. J. Moré) **51** #4657 65H10
 Zur Minimierung von Funktionen mehrerer Veränderlicher mittels ableitungsfreier Verfahren vom Newton-Typ. (Russian summary) *Ž. Vychisl. Mat. i Mat. Fiz.* **14** (1974), 278-291, 531. (A. Majthay) **51** #9486 65K05
 Ein neues Prinzip zur Konstruktion implementierbarer, global konvergenter Einbettungsalgorithmen. *Beiträge Numer. Math.* **4** (1975), 215-228. (Jan Žitko) **58** #31798 65H05
 Ein neues Prinzip zur Konstruktion implementierbarer, global konvergenter Einbettungsalgorithmen (Testbeispiele). *Beiträge Numer. Math.* **5** (1976), 201-206. (Roland Bulirsch) **58** #19120 65J05
 (with Menzel, R.) Über einen Ordnungsbegriff bei Einbettungsalgorithmen zur Lösung nichtlinearer Gleichungen. (English summary) *Computing* **16** (1976), no. 3, 187-199. (R. A. Tapia) **53** #4519 65H05
 (with Ehle, Gerd-Peter) Discretized Euler-Chebyshev multistep methods. *SIAM J. Numer. Anal.* **13** (1976), no. 3, 432-447. (Editors) **52** #16497 83J3
 (with Ehle, Gerd-Peter) Rapidly convergent methods for minimizing a sum of squares. *Beiträge Numer. Math.* **6** (1977), 49-59. (Richard H. Byrd) **57** #14441 65K05
 (with Menzel, Reinhard) Zur Lösung parameterabhängiger nichtlinearer Gleichungen mit singulären Jacobi-Matrizen. (English summary) *Numer. Math.* **30** (1978), no. 1, 65-79. (From the summary) **57** #18063 65H05
- Schwetman, H. D.** (with Krause, K. L.; Shen, V. Y.) Analysis of several task-scheduling algorithms for a model of multiprogramming computer systems. *J. Assoc. Comput. Mach.* **22** (1975), no. 4, 522-550. (Richard A. DeMillo) **52** #12758 (E **55** #141890B35 (68A99)
 (with Krause, K. L.; Shen, V. Y.) Errata: "Analysis of several task-scheduling algorithms for a model of multiprogramming computer systems" (J. Assoc. Comput. Mach. **22** (1975), no. 4, 522-550). *J. Assoc. Comput. Mach.* **24** (1977), no. 3, (Editors) **55** #14181 90B35 (68A05)
- Schwichtenberg, Helmut** Beweis-theoretische Charakterisierung einer Erweiterung der Grzegorzcyk-Hierarchie. *Arch. Math. Logik Grundlagenforsch.* **15**, 129-145 (1972) Rödding) **48** #3717 02F20 (02F35)
 (with Rödding, Dieter) Bemerkungen zum Spektralproblem. *Z. Math. Logik Grundlagen Math.* **18** (1972), 1-12. (U. Felgner) **46** #5128 02H99
 (with Wainer, S. S.) Infinite terms and recursion in higher types. *†ISILC Theory Symposium (Proc. Internat. Summer Inst. and Logic Colloq., Kiel, 1974)* 341-364. *Lecture Notes in Math., Vol. 500, Springer, Berlin*, 1975. (S. Feferman) **54** #7231 02F29 (02B25)
 Elimination of higher type levels in definitions of primitive recursive functions by means of transfinite recursion. *Logic Colloquium '73 (Bristol, 1973)*, pp. 279-303. *Symposium in Logic and the Foundations of Mathematics, Vol. 80, North-Holland, Amsterdam*, (Flavio Previale) **52** #7866 02D05 (02F29)
 Definierbare Funktionen im λ -Kalkül mit Typen. *Arch. Math. Logik Grundlagenforsch.* **17** (1975/76), no. 3-4, 113-114. (Henk Barendregt) **54** #4928 02C20
 See also **Handbook: Mathematical logic**, **58** #10343
- Schwierz, Klaus-Peter** (with Bierbaum, Fritz) A bibliography on interval-mathematics. *Comput. Appl. Math.* **4** (1978), no. 1, 59-86. (W. Börsch-Supan) **57** #11024 65G05 (00A15)
- Schwinger, Julian** Photon propagation function: a comparison of asymptotic functions. *Proc. Nat. Acad. Sci. U.S.A.* **71** (1974), 5047-5051. (George Zipfel, Jr.) **51** #78141
 Casimir Effect in source theory. *Lett. Math. Phys.* **1** (1975/76), no. 1, 43-47. (Kalašnikov) **53** #7329 8247
 Source theory viewpoints in deep inelastic scattering. *Proc. Nat. Acad. Sci. U.S.A.* **72** (1975), 1-5. (P. Achuthan) **50** #15685 81J35
 Source theory discussion of deep inelastic scattering with polarized particles. *Nat. Acad. Sci. U.S.A.* **72** (1975), 1559-1563 (K. Chadan) **51** #14807 8147
 Source theory analysis of electron-positron annihilation experiments. *Proc. Nat. Acad. Sci. U.S.A.* **72** (1975), no. 12, 4725-4728. (L. P. Horwitz) **55** #1989 81J35
 Deep inelastic scattering of leptons. *Proc. Nat. Acad. Sci. U.S.A.* **73** (1976), no. 3351-3354. (L. P. Horwitz) **55** #1990 8147
 Deep inelastic scattering of charged leptons. *Proc. Nat. Acad. Sci. U.S.A.* **73** (1976), no. 11, 3816-3819. (L. P. Horwitz) **55** #1991 8147
 (with Tsai, Wu Yang) New approach to quantum corrections in synchrotron radiation. *Ann. Physics* **110** (1978), no. 1, 63-84. (Pierre Hillion) **57** #11457 (33A65)
 (with DeRaad, Lester L., Jr.; Milton, Kimball A.) Casimir effect in dielectric media. *Ann. Physics* **115** (1978), no. 1, 1-23. (Authors' summary) **58** #25405 78J35
- Schwolew, K.-H.** (with Rempel, J.) Ein Verfahren zur Faktorisierung des charakteristischen Polynoms eines Graphen. *Wiss. Z. Techn. Hochsch. Ilmenau* (1977), no. 4, 25-39. (Ruth Bari) **57** #9593 05C20
- Schwyn, P. J.** (with Bickart, Theodore A.) Stability of networks with distributed nonlinear elements. I. *Networks* **2** (1972), 45-96. (B. J. Leon) **46** #1476 94A20
 (with Bickart, Theodore A.) Stability of networks with distributed and nonlinear elements. II. *Networks* **2** (1972), 341-374. (B. J. Leon) **48** #3630 94A20
- Sciama, D. W.** (with Clarke, C. J. S.) Static gravitational multipoles—the connection between field and source in general relativity. *General Relativity and Gravitation* (1971), 331-345. (Mayer Humi) **52** #16470 83J35
 (with Ellis, G. F. R.) Global and non-global problems in cosmology. *General relativity (papers in honour of J. L. Synge)*, pp. 35-59. Clarendon Press, Oxford, (From the introduction) **58** #20203 83J53
 Recent developments in the theory of gravitational radiation. *General Relativity and Gravitation* **3** (1972), 149-165. (Barry Aronson) **53** #2257 83J00
 Black holes and their thermodynamics. *Vistas Astronom.* **19** (1975/76), no. 385-401. (C. J. S. Clarke) **58** #32822 85.00 (80.00)
 (with Candelas, P.) Irreversible thermodynamics of black holes. *Phys. Rev. Lett.* (1977), no. 23, 1372-1375. (Authors' summary) **57** #8959 85.60 (80.60)
 See also **General relativity and cosmology**, **49** #8567 and **Quantum gravity (O. Symposium, Chilton, 1974)**, **56** #17537
- Sciampicotti, Vilma** Applicazione del metodo di Liouville-Steckloff-Fubini per la integrazione delle equazioni differenziali lineari di ordine n . (English summary) *Mat. (6)* **5** (1972), 203-212. (N. Hayek Calil) **49** #5441 34A30
 Formule di quadratura di tipo gaussiano collegate all'operatore ipergeometrico. *Pubblicazioni dell'Istituto di Matematica Applicata, No. 120, Quaderno No. 3, pp. 2*. Ist. Mat. Appl., Fac. Ingegneria, Univ. degli Stud. Roma, Rome, 1973. (M. Zlámal) **52** #14783 41A55
 Formule di quadratura collegate all'operatore ipergeometrico. *Pubblicazioni dell'Istituto di Matematica Applicata, No. 110, Quaderno No. 1, pp. 31-44*. Ist. Mat. Appl., Fac. Ingegneria, Univ. degli Stud. Roma, Rome, 1973. (M. Zlámal) **52** #141A55
- Alcune osservazioni sull'identità di Green-Lagrange. (English summary) *Matematiche (Catania)* **30** (1975), no. 1, 69-77 (1976). (N. Hayek Calil) **55** #334A30
- Sciarrino, A.** (with Buccella, F.; Sorba, Paul) Quarks and the Poincaré group: $SU(6) \times SU(3)$ as a classification group for baryons. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 29-36. *Lecture Notes in Phys., Vol. 40, Springer, Berlin*, 1976. (Lawrence P. Horwitz) **57** #18544 81.22 (22E70)
- morgan-Sciarrino, J.** See **Morgan-Sciarrino, J.**
- Sciavico, Lorenzo** (with Balestrino, Aldo; Eisenberg, A.) A generalised approach to

- stability analysis of PWM feedback control systems. *J. Franklin Inst.* **298** (1974), 45-58.
K. B. Datta) **52** #5136 93D15
(with Balestrino, Aldo; Celandano, Giovanni) On incomplete pole assignment in linear systems. (Russian summary) *Systems Sci.* **2** (1976), no. 4, 59-69 (1977). (errata insert) (Edward W. Kamen) **57** #5241 93B25
- aza, Giuseppe** La genesi degli ordinali transfiniti nell'opera di G. Cantor. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* **34** (1975/76), 247-262. (Editors) **55** #33 01A55 (04-03)
- lik, V. D.** (with Nalbandjan, Ž. S.) A realization of the fast Fourier transform on a specialized processor. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **11** (1976), no. 5, 440-449, 482. (Authors' summary) **57** #15731 94A05
- lemi, Benedetto** p -groups, diagonalizable automorphisms and loops. *Rend. Sem. Mat. Univ. Padova* **45** (1971), 199-221. (N. D. Gupta) **46** #5439 20D15
Un'osservazione sui gruppi finiti dotati di automorfismi di ordine p^n privi di coincidenze. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 509-510 (1974). (N. Ito) **50** #7329 20D10
Homogeneous verbal functions on groups. *Rend. Sem. Mat. Univ. Padova* **49** (1973), 299-321. (C. C. Edmunds) **54** #5356 20F15
- račev, V. S.** Fourth order elliptic equations with a small parameter that degenerate at the boundary of the domain. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **26** (1971), no. 4, 89-98. (J. Kačur) **45** #3930 35J30
- scov, O. V.** The indices of reliability of periodic scanning systems. (Russian) *Avtomat. i Vychisl. Tehn.* **1971**, no. 4, 33-37. (József Pergel) **46** #10160 62N05
- ov, I. N.** See **Differential equations and their applications**, **48** #3659
- to, S.** (with Ademollo, M.; d'Adda, A.; d'Auria, R.; Napolitano, E.; di Vecchia, P.; Gliozzi, F.; Musto, R.; Nicodemi, F.) Theory of an interacting string and dual-resonance model. (Italian and Russian summaries) *Nuovo Cimento A* (11) **21** (1974), 77-145. (Masatsugu Minami) **53** #15191 81.47
Instantons and transverse pure gauge fields. *Phys. Lett. B* **71** (1977), no. 1, 129-132. (Author's summary) **58** #14732 81.55
(with Ferrara, S.; Girardello, L.) An infinite set of conservation laws of the supersymmetric sine-Gordon theory. *Phys. Lett. B* **76** (1978), no. 3, 303-306. (Authors' summary) **58** #14493 81.22
- nti, Davide** Sulla convergenza del metodo dei moltiplicatori. (English summary) *Boll. Un. Mat. Ital. A* (5) **13** (1976), no. 2, 379-386. (Marco Gaviano) **55** #4676 65K05
On a characterization of convergence for the Hestenes method of multipliers. *J. Optimization Theory Appl.* **22** (1977), no. 2, 227-237. (Hwa-Shan Ho) **56** #10008 65K05 (49D99)
- vi, Susanna** La biblioteca di Antonio Beniveni. (English summary) *Physis—Riv. Internaz. Storia Sci.* **17** (1975), no. 3-4, 255-268. (Editors) **57** #5585 01A40
- ve, Stanley L.** Improved estimation of parameters in multivariate regression. *Sankhyā Ser. A* **33** (1971), 61-66. (W. E. Strawderman) **46** #4654 62H20
(with Morris, Carl; Radhakrishnan, R.) Non-optimality of preliminary-test estimators for the mean of a multivariate normal distribution. *Ann. Math. Statist.* **43** (1972), 1481-1490. (Somesh Das Gupta) **50** #3431 62F10
(with Johari, Shyam) Partitioning a distribution. *Comm. Statist.—Theory Methods* **A5** (1976), no. 2, 133-147. (Authors' summary) **55** #1569 62E99 (62P15, 62B10)
Population mixture models and clustering algorithms. *Comm. Statist.—Theory Methods* **A6** (1977), no. 5, 417-434. (P. A. K. Covey-Crump) **55** #13672 62H30
- bey, P.** Singular Gauss-Markov models. *Canad. J. Statist.* **3** (1975), no. 1, 105-110. (C. H. Kapadia) **53** #4395 62J05
(with Kabe, D. G.) On a criterion for extrapolation in multivariate normal regression. *Statist. Hefte (N.F.)* **18** (1977), no. 2, 129-132. (Authors' summary) **58** #31615 62J05
(with Kabe, D. G.) Vector quadratic programming problems and inequality constrained least squares estimation. *Indust. Math.* **28** (1978), no. 1, 37-50. (Authors' summary) **58** #20429 90C20
- ble, Jennifer A.** A combinatorial approach to map theory. *Combinatorial mathematics, V (Proc. Fifth Austral. Conf., Roy. Melbourne Inst. Tech., Melbourne, 1976)*, pp. 197-205. *Lecture Notes in Math.*, Vol. 622, Springer, Berlin, 1977. (T. R. S. Walsh) **57** #12279 05C10
- dranu, Alexandru** Some transformations regarding the integration of equations of Abel type. (Romanian) *Gaz. Mat. Ser. A* **79** (1974), 21-23. (Editors) **57** #754 34A25
- field, D. F.** Continued-fraction method for perturbation theory. *Phys. Rev. Lett.* **29** (1972), 811-814. (Author's summary) **51** #14843 82.47
A note on the use of a continued fraction for perturbation theory. Proceedings of the International Conference on Padé Approximants, Continued Fractions and Related Topics (Univ. of Colorado, Boulder, Colo., 1972; dedicated to the memory of H. S. Wall). *Rocky Mountain J. Math.* **4** (1974), 383-384. (Editors) **49** #4486 81.47
- linik, Hugo D.** On the solution of non-linear least squares problems. *Information processing 71 (Proc. IFIP Congr., Ljubljana, 1971)*, Vol. 2: Applications, pp. 1258-1265. North-Holland, Amsterdam, 1972. (Author's summary) **58** #3310 65D10 (62J05)
(with Guttman, Irwin; Pereyra, Victor) Least squares estimation for a class of non-linear models. *Technometrics* **15** (1973), 209-218. (A. C. Cohen) **49** #1658 62F10
(with Friedlander, A.; Martinez, J. M.) Generalized inverses and a new stable secant type minimization algorithm. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977)*, Part 2, pp. 136-146. *Lecture Notes in Control and Informat. Sci.*, Vol. 7, Springer, Berlin, 1978. (Marco Gaviano) **58** #13708 65K05 (90C30)
- olokov, V. S.** (with Krasil'nikov, V. V.; Roščupkin, S. M.) On the theory of kinetic equations for electron systems with impurity. (Russian. English summary) *Ukrain. Fiz. Ž.* **16** (1971), 1690-1698. (L. Arkeryd) **45** #9630 82.45
(with Peletminskii, S. V.; Sokolovskii, A. I.) Hydrodynamics of a superfluid Bose-fluid with allowance for dissipative processes in a model with weak interaction. (Russian. English summary) *Teoret. Mat. Fiz.* **34** (1978), no. 1, 81-98. (Authors' summary) **58** #14858 82.60
- olozzi, Donato** Perturbazione di punti critici su sottovarietà. (English summary) *Boll. Un. Mat. Ital. B* (5) **14** (1977), no. 3, 644-665. (Christian Fenske) **57** #4233 58E05
- onzo, Pasquale** A tenth order solution in explicit form to the "restricted" three-body problem. (Italian summary) *Mem. Soc. Astronom. Ital. (N.S.)* **44** (1973), 1-12. (F. V. Pohle) **48** #10250 70.65
- Scoppola, Carlo M.** Su una classe di gruppi finiti. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **62** (1977), no. 5, 579-583. (F. Napolitano) **58** #22290 20D30
- Scorza, Gaetano** See **Symposia Mathematica**, **48** #8541
- Scotoni, Igino** (with Vascon, Mario) Un metodo numerico per la risoluzione del problema di Dirichlet. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 615-620 (1974). (M. Zlámal) **51** #7239 65D15
- Scott, Alastair** (with Smith, T. M. F.) Survey design, symmetry and posterior distributions. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 57-60. (David Bellhouse) **48** #12673 62D05
(with Blight, B. J. N.) A stochastic model for repeated surveys. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 61-66. (K. Vijayan) **50** #8779 62D05
(with Press, S. James) Missing variables in Bayesian regression. *Studies in Bayesian econometrics and statistics (in honor of Leonard J. Savage)*, pp. 259-272. *Contributions to Economic Analysis*, No. 86, North-Holland, Amsterdam, 1975. (Bruce M. Hill) **56** #4034a 62F15 (62J05)
On admissibility and uniform admissibility in finite population sampling. *Ann. Statist.* **3** (1975), 489-491. (Author's summary) **50** #11568 62C15
(with Smith, T. M. F.) Minimax designs for sample surveys. *Biometrika* **62** (1975), no. 2, 353-357. (K. Vijayan) **53** #11829 62D05
(with Smith, T. M. F.) Comments on "The efficient use of supplementary information in standard sampling procedures" (J. Roy. Statist. Soc. Ser. B **33** (1971), 391-400) by E. K. Foreman and K. R. W. Brewer. *J. Roy. Statist. Soc. Ser. B* **37** (1975), 146-148. (David Bellhouse) **51** #2068 62D05
(with Press, S. James) Missing variables in Bayesian regression. II. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 366-369. (Bruce M. Hill) **56** #4034b 62F05 (62J05)
(with Smith, T. M. F.; Jones, R. G.) The application of time series methods to the analysis of repeated surveys. *Internat. Statist. Rev.* **45** (1977), no. 1, 13-28. (Kenneth R. W. Brewer) **55** #11457 62D05 (62M10)
See also **Šidák, Zbyněk**, **51** #11815
- Scott, Allan** See **Primer for the Fibonacci numbers**, **50** #12906
- Scott, Alwyn C.** (with McLaughlin, David W.) A restricted Bäcklund transformation. *J. Mathematical Phys.* **14** (1973), 1817-1828. (G. L. Lamb, Jr.) **48** #9127 35L65
(with Chu, Flora Ying Fun; McLaughlin, David W.) The soliton: a new concept in applied science. *Proc. IEEE* **61** (1973), 1443-1483. (Clarence M. Ablow) **50** #10510 35B40 (35Q99)
(with Chu, Flora Ying Fun) Bäcklund transformations and the inverse method. *Phys. Lett.* **47A** (1974), 303-304. (K. M. Case) **51** #6100 35A30 (35R30)
The application of Bäcklund transforms to physical problems. *Bäcklund transformations, the inverse scattering method, solitons, and their applications (Workshop Contact Transformations, Vanderbilt Univ., Nashville, Tenn., 1974)*, pp. 80-105. *Lecture Notes in Math.*, Vol. 515, Springer, Berlin, 1976. (Clarence M. Ablow) **58** #29466 35Q99 (78.35, 92A05)
A plausibility argument for the Marchenko equation. *The 1976 Ames Research Center (NASA) Conference on the Geometric Theory of Non-linear Waves (Moffett Field, Calif., 1976)*, pp. 147-153. *Lie Groups: History, Frontiers and Appl.*, Vol. VI, Math Sci Press, Brookline, Mass., 1977. (Mark J. Ablowitz) **58** #1765 35Q99
Neurodynamics: a critical survey. *J. Mathematical Psychology* **15** (1977), no. 1, 1-45. (Tadashige Ishihara) **56** #14817 92A05 (92A25)
See also **Nonlinear wave motion**, **49** #790
- Scott, Brian M.** Toward a product theory for orthocompactness. *Studies in topology (Proc. Conf., Univ. North Carolina, Charlotte, N.C., 1974; dedicated to Math. Sect. Polish Acad. Sci.)*, pp. 517-537. Academic Press, New York, 1975. (William Lindgren) **51** #9024 54D20
On the existence of totally inhomogeneous spaces. *Proc. Amer. Math. Soc.* **51** (1975), 489-493. (V. Kannan) **51** #11458 54F50
(with Jones, Ralph) Metric rigidity in E^n . *Proc. Amer. Math. Soc.* **53** (1975), no. 1, 219-222. (L. Janos) **51** #13993 54E40
A class of spaces with many open sets. *Topology (Proc. Ninth Annual Spring Topology Conf., Memphis State Univ., Memphis, Tenn., 1975)*, pp. 245-247. *Lecture Notes in Pure and Appl. Math.*, Vol. 24, Dekker, New York, 1976. (H. R. Bennett) **55** #1271 54A25 (54D20)
Orthocompactness in normality in finite products of locally compact LOTS's. *Set-theoretic topology (Papers, Inst. Medicine and Math., Ohio Univ., Athens, Ohio, 1975-1976)*, pp. 339-348. Academic Press, New York, 1977. (D. J. Lutzer) **55** #13380 54D30 (54F05)
A "more topological" proof of the Tietze-Urysohn theorem. *Amer. Math. Monthly* **85** (1978), no. 3, 192-193. (B. T. Sims) **57** #13832 54C20
Some "almost-Dowker" spaces. *Proc. Amer. Math. Soc.* **68** (1978), no. 3, 359-364. (Gary Gruenhage) **57** #7523 54D15
- Scott, C. H.** (with Jefferson, T. R.) Optimal regulation of the service rate for a queue with finite waiting space. *J. Optimization Theory Appl.* **20** (1976), no. 2, 245-250. (Andor Dobó) **55** #6620 60K25
(with Jefferson, T. R.) Duality for convex functionals: specific cases. *Internat. J. Systems Sci.* **8** (1977), no. 11, 1313-1320. (K. G. Murty) **56** #17845 90C99
(with Jefferson, T. R.) Trace optimization problems and generalized geometric programming. *J. Math. Anal. Appl.* **58** (1977), no. 2, 373-377. (Jean-Pierre Crouzeix) **57** #5102 90C25
(with Jefferson, T. R.) Duality in infinite-dimensional mathematical programming: convex integral functionals. *J. Math. Anal. Appl.* **61** (1977), no. 1, 251-261. (Suresh Chandra) **58** #20436 90C25 (90C30)
(with Jefferson, T. R.) Duality in finite dimensional complex space. *Bull. Austral. Math. Soc.* **18** (1978), no. 1, 65-75. (A. G. Azpeitia) **58** #4331 90C25 (90C30)
- Scott, C. K.** (with Fischbach, Ephraim; Nieto, Michael Martin) Duffin-Kemmer-Petiau subalgebras: representations and applications. *J. Mathematical Phys.* **14** (1973), 1760-1774. (R. Delbourgo) **50** #15632 81.22
(with Singh, R. N.) Evaluation of nuclear matrix elements involving harmonic oscillator wave functions. *Canad. J. Phys.* **52** (1974), 324-329. **53** #12278 81.33
(with Fischbach, Ephraim; Louck, James D.; Nieto, Michael Martin) The Lie

- algebra $SO(N)$ and the Duffin-Kemmer-Petiau ring. *J. Mathematical Phys.* **15** (1974), 60-64. (S. N. Biswas) **49** #6797 81.17
- Scott, Christine** (with Saleh, A. K. Md. Ehsanes) The effect of truncation on the size of the t -test. *J. Statist. Comp. and Simulation* **3** (1975), no. 4, 345-368. (Steven Arnold) **51** #14363 62F05
- (with Saleh, A. K. Md. Ehsanes; Junkins, D. Bruce) Exact first and second order moments of order statistics from the truncated exponential distribution. *Naval Res. Logist. Quart.* **22** (1975), 65-77. (Mir Ali) **52** #4522 62G30
- See also **Discussion: Papers, International Association of Survey Statisticians**, **56** #4008
- Scott, D. Bernard** An idea of Beniamino Segre. (Italian summary) *Rend. Sem. Mat. Fis. Milano* **41** (1971), 9-17. (S. L. Kleiman) **46** #5335 14H35 (14N99)
- Sydney Rex Tims (born 21 December 1926, died 16 February 1971). *Bull. London Math. Soc.* **4** (1972), 100-101 (Editors) **46** #1541 01A70
- (with Evyatar, A. A.) On polynomials in a polynomial. *Bull. London Math. Soc.* **4** (1972), 176-178. (P. Abellanas) **47** #4978 12E05
- (with Lascu, Alexandru) An algebraic correspondence with applications to projective bundles and blowing up Chern classes. *Ann. Mat. Pura Appl.* (4) **102** (1975), 1-36. (L. Bădescu) **50** #13031 14E05 (14E15)
- (with Lascu, Alexandru; Mumford, David) The self-intersection formula and the "formule-clef". *Math. Proc. Cambridge Philos. Soc.* **78** (1975), 117-123. (T. Oda) **56** #354 14C15
- (with Lascu, Alexandru) Un polynôme invariant par l'éclatement d'un intersection complète. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 15, A789-A792. (Jonathan M. Wahl) **54** #312 14C99 (14F05)
- (with Lascu, Alexandru) A simple proof of the formula for the blowing up of Chern classes. *Amer. J. Math.* **100** (1978), no. 2, 293-301. (T. Oda) **57** #12506 14C15 (14F99)
- Scott, D. J.** An invariance principle for reversed martingales. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **20** (1971), 9-27. (S. R. S. Varadhan) **47** #2640 60B10 (60F05, 60G45)
- Central limit theorems for martingales and for processes with stationary increments using a Skorokhod representation approach. *Advances in Appl. Probability* **5** (1973), 119-137. (Stanley Sawyer) **49** #1548 60B10 (60G10)
- (with Heyde, C. C.) Invariance principles for the law of the iterated logarithm for martingales and processes with stationary increments. *Ann. Probability* **1** (1973), 428-436. (M. Iosifescu) **50** #5886 60B10
- (with Adler, Robert J.) Martingale central limit theorems without uniform asymptotic negligibility. *Bull. Austral. Math. Soc.* **13** (1975), no. 1, 45-55. (Don McLeish) **52** #15607 60F05 (60G45)
- (with Basawa, I. V.) Efficient tests for branching processes. *Biometrika* **63** (1976), no. 3, 531-536. (A. N. Philippou) **56** #7062 62M05 (60J80)
- (with Basawa, I. V.) Efficient tests for stochastic processes. *Sankyā Ser. A* **39** (1977), no. 1, 21-31. (A. N. Philippou) **58** #18982 62M99 (62F20)
- A central limit theorem for martingales and an application to branching processes. *Stochastic Processes Appl.* **6** (1977/78), no. 3, 241-252. (M. P. Quine) **57** #17785 60F05 (60J80)
- Scott, Dana S.** Lattice theory, data types and semantics. *Formal semantics of programming languages (Courant Comput. Sci. Sympos. 2, New York Univ., New York, 1970)*, pp. 65-106. *Prentice-Hall Series in Automat. Comput.*, Prentice-Hall, Englewood Cliffs, N. J., 1972. (E. G. Wagner) **56** #7304 68A05
- Continuous lattices. *Toposes, algebraic geometry and logic (Conf., Dalhousie Univ., Halifax, N. S., 1971)*, pp. 97-136. *Lecture Notes in Math.*, Vol. 274, Springer, Berlin, 1972. (I. Fleischer) **53** #7879 06A30 (02C20)
- Models for various type-free calculi. *Logic, methodology and philosophy of science, IV (Proc. Fourth Internat. Congr., Bucharest, 1971)*, pp. 157-187. *Studies in Logic and Foundations of Math.*, Vol. 74, North-Holland, Amsterdam, 1973. (R. Hindley) **57** #15987 02C20 (02F45, 04A05, 68A05)
- Background to formalization. *Truth, syntax and modality (Proc. Conf. Alternative Semantics, Temple Univ., Philadelphia, Pa., 1970)*, pp. 244-273. *Studies in Logic and the Foundations of Math.*, Vol. 68, North-Holland, Amsterdam, 1973. (H. B. Curry) **56** #5202 02A05
- Axiomatizing set theory. *Axiomatic set theory (Proc. Sympos. Pure Math., Vol. XIII, Part II, Univ. California, Los Angeles, Calif., 1967)*, pp. 207-214. *Amer. Math. Soc., Providence, R.I.*, 1974. (M. Boffa) **52** #13387 02K15
- Completeness and axiomatizability in many-valued logic. *Proceedings of the Tarski Symposium (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971)*, pp. 411-435. *Amer. Math. Soc., Providence, R.I.*, 1974. (Alasdair Urquhart) **51** #57 02C05 (02G10)
- Data types as lattices. *ISILC Logic Conference (Proc. Internat. Summer Inst. and Logic Colloq., Kiel, 1974)*, pp. 579-651. *Lecture Notes in Math.*, Vol. 499, Springer, Berlin, 1975. (Dianne E. Britton) **53** #9700 68A05 (02C20)
- Combinators and classes. λ -calculus and computer science theory (Proc. Sympos., Rome, 1975), pp. 1-26. *Lecture Notes in Comput. Sci.*, Vol. 37, Springer, Berlin, 1975. (J. P. Seldin) **58** #21489 02C20
- Some philosophical issues concerning theories of combinators. λ -calculus and computer science theory (Proc. Sympos., Rome, 1975), pp. 346-366. *Lecture Notes in Comput. Sci.*, Vol. 37, Springer, Berlin, 1975. (B. Lercher) **57** #15986 02C20
- Lambda calculus and recursion theory. *Proceedings of the Third Scandinavian Logic Symposium (Univ. Uppsala, Uppsala, 1973)*, pp. 154-193. *Stud. Logic Found. Math.*, Vol. 82, North-Holland, Amsterdam, 1975. (A. S. Kuzičev) **52** #5372 02C20 (02F25, 02F30)
- Does many-valued logic have any use? With comments by T. J. Smiley, J. P. Cleave and R. Giles. *Philosophy of logic (Proc. Third Bristol Conf. Critical Philosophy, Univ. Bristol, Bristol)*, pp. 64-95. *Univ. California Press, Berkeley, Calif.*, 1976. (Victor K. Finn) **58** #10307 02C05
- Data types as lattices. Semantics and correctness of programs. *SIAM J. Comput.* **5** (1976), no. 3, 522-587. (John T. Gill) **55** #10262 02F43 (02C20, 68A05, 06A23, 54F05)
- Logic and programming languages. *Comm. ACM* **20** (1977), no. 9, 634-641. (Horst
- Reichel) **56** #10114 68A05
- See also **Proceedings: Tarski Symposium**, **50** #1829; **Lemmon, E. J.**, **57** # and **Bell, John**, **58** #10443
- Scott, David W.** (with Tapia, Richard A.; Thompson, James R.) Kernel density estimation revisited. *Nonlinear Anal.* **1** (1976/77), no. 4, 339-372. (Wolfgang Wertz) **58** #2462G05
- Scott, E. J.** Determination of the Riemann function. *Amer. Math. Monthly* **80** (1906-909. (V. Rosa) **48** #2576 35L15
- The Riemann function for a class of equations of the form $\partial^2 v / \partial y \partial x + v(x)u(y)v = 0$. *Ganita* **26** (1975), no. 1, 19-28. (W. Watzlawek) **57** #35Q99
- See also **Analytic methods in mathematical physics**, **48** #5746 and **Saks, S.**, **50** #2456
- Scott, Elizabeth L.** (with Neyman, Jerzy) Outlier proneness of phenomena and of distributions. *Optimizing methods in statistics (Proc. Sympos., Ohio State Univ., Columbus, Ohio, 1971)*, pp. 413-430. *Academic Press, New York*, 1971. (I. Gut) **49** #4140 62F05
- See also **Stochastic point processes: statistical analysis, theory, and applications**, **48** #10008; **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9422; **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9423; **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9424; **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9425; **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9426 and **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9427
- Scott, Frederick J.** New partial asymptotic stability results for nonlinear ordinary differential equations. *Pacific J. Math.* **72** (1977), no. 2, 523-535. (T. A. Burton) **57** #6669 34D05
- On a partial asymptotic stability theorem of Willett and Wong. *J. Math. Anal.* **63** (1978), no. 2, 416-420. (R. Grimmer) **58** #1420 34D05
- Scott, G. Peter** ★ An introduction to 3-manifolds. Department of Mathematics, University of Maryland, Lecture Note, No. 11. *Department of Mathematics, University of Maryland, College Park, Md.*, 1974. iii + 41 pp. (J. S. Birman) **54** #1227 57A10
- Normal subgroups in 3-manifold groups. *J. London Math. Soc.* (2) **13** (1976), 5-12. (Benny Evans) **53** #6565 57A10
- Fundamental groups of non-compact 3-manifolds. *Proc. London Math. Soc.* (3) **37** (1977), no. 2, 303-326. (Benny Evans) **56** #6640 55A05 (57A10)
- Subgroups of surface groups are almost geometric. *J. London Math. Soc.* (4) **18** (1978), no. 3, 555-565. (John Hempel) **58** #12996 55A10
- Scott, G. Peter** On sufficiently large 3-manifolds. *Quart. J. Math. Oxford Ser. (2)* **24** (1972), 159-172; *correction, ibid.* (2) **24** (1973), 527-529. (Wolfgang H. Heil) **52** #57A10
- Finely generated 3-manifold groups are finitely presented. *J. London Math. Soc.* (2) **6** (1973), 437-440. (J. S. Birman) **52** #1660 55A05
- Compact submanifolds of 3-manifolds. *J. London Math. Soc.* (2) **7** (1973), 246-250. (C. D. Feustel) **48** #5080 57A10
- (with Epstein, D. B. A.) A 3-manifold which is not a product. *Proc. Cambridge Philos. Soc.* **74** (1973), 445-448. (C. D. Feustel) **48** #5079 57A10
- An embedding theorem for groups with a free subgroup of finite index. *London Math. Soc.* **6** (1974), 304-306. (C. R. J. Clapham) **50** #10082 20E20
- (with Dyer, Joan L.) Periodic automorphisms of free groups. *Comm. Algebra* **3** (1975), 195-201. (D. E. Cohen) **51** #5762 20E05
- Scott, J. F.** ★ The scientific work of René Descartes (1596-1650). With a foreword by W. Turnbull. Reprinted. *Taylor and Francis, Ltd., London*; distributed in the U.S. by Crane, Russak & Co., Inc., New York, 1976. v + 211 pp. (1 plate) ISBN 0-85066-110-2 (C. J. Scriba) **58** #15904 01A45
- See also **Correspondence: Isaac Newton**, **58** #27163
- Scott, James H., Jr.** A theory of optimal capital structure. *Bell J. Econom.* **7** (1976), 33-54. (John C. Gittins) **55** #7325 90A15
- Scott, Jean V.** Computer design of cascade logic. *Comput. J.* **17** (1974), 253-260. (Author summary) **52** #5223 94A20
- Scott, Joanna I.** (with Oppenheim, Irwin) Decay of correlations in vibrational relaxation. *J. Statist. Phys.* **11** (1974), 51-70. (George Weiss) **51** #2564 82.47
- Scott, Kenneth F. N.** On the construction of BIBD with $\lambda = 1$. *Canad. Math. Bull.* **16** (1973), 329-335. (W. M. Kantor) **49** #80 05B05
- Scott, L. Ridgeway** (with Berger, Alan E.; Strang, Gilbert) Approximate boundary conditions in the finite element method. *Symposia Mathematica, Vol. X (Conveg. Analisi Numerica, INDAM, Rome, 1972)*, pp. 295-313. *Academic Press, London*, (G. H. Meyer) **53** #7070 65N30
- Finite element convergence for singular data. *Numer. Math.* **21** (1973/74), 317-324. (G. T. Symm) **49** #1805 65N35
- C^1 continuity via constraints for 4th order problems. *Mathematical aspects of elements in partial differential equations (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1974)*, pp. 171-193. *Publication No. 33, Math. Res. Ctr. Univ. of Wisconsin-Madison, Academic Press, New York*, 1974. (From the introduction) **58** #31925 65N30
- (with Morgan, John) A nodal basis for C^1 piecewise polynomials of degree n . *Math. Comput.* **29** (1975), 736-740. (Charles K. Chui) **51** #11930 65D15
- Interpolated boundary conditions in the finite element method. *SIAM J. Numer. Anal.* **12** (1975), 404-427. (I. Norman Katz) **52** #7162 65N35
- (with Bona, Jerry L.) Solutions of the Korteweg-de Vries equation in fractional order Sobolev spaces. *Duke Math. J.* **43** (1976), no. 1, 87-99. (R. Glassey) **52** #1435Q99
- Optimal L^∞ estimates for the finite element method on irregular meshes. *Comp. Sci.* **30** (1976), no. 136, 681-697. (William W. Hager) **55** #9560 65N15
- A survey of displacement methods for the plate bending problem. *Formulation of computational algorithms in finite element analysis (U.S.-Germany Sympos., Mass. Tech., Cambridge, Mass., 1976)*, pp. 855-876. *M.I.T. Press, Cambridge, Mass.*, 1977. (N. L. Narasimhan) **57** #14820 73.65
- A sharp form of the Sobolev Trace theorems. *J. Functional Analysis* **25** (1977),

- 1-80. (A. Kufner) 57 #1109 46E35
(with Calderón, Alberto P.) Sobolev type inequalities for $p > 0$. *Studia Math.* 62 (1978), no. 1, 75-92. (Jóran Bergh) 58 #7057 46E35
See also **Mathematical foundations of the finite element method with applications to partial differential equations**, 49 #11824
Lawrence W. (with Duncan, John) A branch-and-bound algorithm for pagination. *Operations Res.* 23 (1975), no. 2, 240-259. (Authors' summary) 55 #9594 68A10 (OB99)
Leonard L. The modular theory of permutation representations. *Representation theory of finite groups and related topics (Proc. Sympos. Pure Math., Vol. XXI, Univ. Wisconsin, Madison, Wis., 1970)*, pp. 137-144. *Amer. Math. Soc., Providence, R.I.*, 1971. (with Isaacs, I. Martin) Blocks and subgroups. *J. Algebra* 20 (1972), 630-636. (S. B. Long) 45 #6944 20C20
On permutation groups of degree 2 p. *Math. Z.* 126 (1972), 227-229. (David R. Mason) 49 #10760 20B15
Modular permutation representations. *Trans. Amer. Math. Soc.* 175 (1973), 101-121. (H. K. Farahat) 46 #9154 20C20
(with Cline, Edward; Parshall, Brian) Cohomology of finite groups of Lie type. I. *Inst. Hautes Études Sci. Publ. Math.* No. 45 (1975), 169-191. (S. I. Gel'fand) 53 #3134 20G10
(with Cline, Edward; Parshall, Brian) Minimal elements of $H(H;p)$ and conjugacy of Levi complements in finite Chevalley groups. *J. Algebra* 34 (1975), 521-523. (James F. Hurley) 51 #8278 20G40
(with Feit, Walter; Lyndon, Roger C.) A remark about permutations. *J. Combinatorial Theory Ser. A* 18 (1975), 234-335. (J. D. Dixon) 51 #8217 20B05
Permutation modules and 1-cohomology. *Arch. Math. (Basel)* 27 (1976), no. 4, 362-368. (Edward Cline) 56 #5689 18H10 16A26, 16A62
Estimates in permutation groups. *Geometriae Dedicata* 5 (1976), no. 2, 219-227. (Cheryl E. Praeger) 54 #12869 20B15
Matrices and cohomology. *Ann. of Math. (2)* 105 (1977), no. 3, 473-492. (E. Vinberg) 56 #5746 20J05 20G10
(with Raymond, Frank) Failure of Nielsen's theorem in higher dimensions. *Arch. Math. (Basel)* 29 (1977), no. 6, 643-654. (Jeffrey L. Tollefson) 57 #7625 57E10
(with Cline, Edward; Parshall, Brian; van der Kallen, Wilberd) Rational and generic cohomology. *Invent. Math.* 39 (1977), no. 2, 143-163. (S. I. Gel'fand) 55 #12737 (EA 57) 14L15 14M15, 20G10
(with Cline, Edward; Parshall, Brian) Cohomology of finite groups of Lie type. II. *J. Algebra* 45 (1977), no. 1, 182-198. (S. I. Gel'fand) 55 #8201 20G10 20J05
Some properties of character products. *J. Algebra* 45 (1977), no. 2, 259-265. (D. Wales) 56 #5700 20C15
(with Cline, Edward; Parshall, Brian) Induced modules and affine quotients. *Math. Ann.* 230 (1977), no. 1, 1-14. (Chin-han Sah) 57 #9861 20G05
(with Cline, Edward; Parshall, Brian) Induced modules and extensions of representations. *Invent. Math.* 47 (1978), no. 1, 41-51. (J. E. Humphreys) 58 #16897 20G05
See also **Proceedings: Conference on Finite Groups**, 52 #14012 and **Serre, Jean-Pierre**, 56 #8675
McKinley Distribution of the number of tasks by a repairable machine. *Operations Res.* 20 (1972), 851-859. (D. J. Daley) 49 #6399 60K20
Queueing with two servers working in shifts. *Operations Res.* 20 (1972), no. 2, 421-424. (Author's summary) 53 #1777 60K25
Single counter queue with two servers and two arrival rates. *Opsearch* 10 (1973), 135-140. (M. L. Chaudhry) 53 #1778 60K25
Further results for the $M/M/1$ queue. *Cahiers Centre Études Recherche Opér.* 16 (1974), 251-260. (E. Arjas) 50 #14993 60K25
McKelvin R. (with Nelson, Paul, Jr.) Internal values in particle transport by the method of invariant imbedding. *J. Math. Anal. Appl.* 34 (1971), 628-643. (A. Leonard) 46 #4903 82.65
(with Burgmeier, J. W.) A method for obtaining bounds on eigenvalues and eigenfunctions by solving non-homogeneous integral equations. (German summary) *Computing (Arch. Elektron. Rechnen)* 10 (1972), 9-22. (P. Linz) 51 #2314 65R05
(with Nelson, Paul, Jr.) The relationship between two variants of invariant imbedding. *J. Math. Anal. Appl.* 37 (1972), 501-505. (F. Odeh) 45 #632 34B99
★ Invariant imbedding and its applications to ordinary differential equations: an introduction. *Applied Mathematics and Computation*, No. 1. *Addison-Wesley Publishing Co., Reading, Mass.-London-Amsterdam*, 1973. xviii+215 pp. (W. S. Loud) 50 #3593 65L99
An initial value method for the eigenvalue problem for systems of ordinary differential equations. *J. Computational Phys.* 12 (1973), 334-347. (G. H. Meyer) 48 #12857 65L15
(with Kalaba, Robert E.) An initial value method for integral operators. I. Complex eigenvalues. *J. Computational Phys.* 12 (1973), 364-368. (P. M. Anselone) 49 #11837 65R05
(with Casti, John; Kalaba, Robert E.) A proposal for the calculation of characteristic functions for certain differential and integral operators via initial-value methods. *J. Math. Anal. Appl.* 41 (1973), 1-13. (S. L. Kalla) 47 #7936 65R05
(with Maynard, C. W.) Some relationships between Green's functions and invariant imbedding. *J. Optimization Theory Appl.* 12 (1973), 6-15. (C. W. Gear) 48 #10133 65L10
(with Kalaba, Robert E.) An initial-value method for integral operators. II. Complex eigenfunctions. *J. Optimization Theory Appl.* 12 (1973), 338-343. (P. M. Anselone) 49 #11838 65R05
An initial-value method for the eigenvalue problem for differential equations with nonseparated boundary conditions. *J. Optimization Theory Appl.* 12 (1973), 355-366. (L. Collatz) 48 #4382 34A25
(with Kalaba, Robert E.) An initial-value method for integral operators. IV. Complex-valued kernels of Laser theory. *J. Quant. Spectrosc. Radiat. Transfer* 13 (1973), no. 6, 509-515. (Authors' summary) 57 #14545 65R05 (78.45)
(with Kalaba, Robert E.) An initial-value method for Fredholm integral equations with generalized degenerate kernels. *J. Approximation Theory* 11 (1974), 194-200. (W. R. Boland) 50 #14098 45B05
On the conversion of boundary-value problems into stable initial-value problems via several invariant imbedding algorithms. *Numerical solutions of boundary value problems for ordinary differential equations (Proc. Sympos., Univ. Maryland, Baltimore, Md., 1974)*, pp. 89-146. *Academic Press, New York*, 1975. (G. H. Meyer) 54 #4120 65L10
(with Kalaba, Robert E.) An initial-value method for integral operators. V. Kernels depending upon a parameter. *Appl. Math. Comput.* 1 (1975), no. 1, 25-35. (Authors' summary) 58 #6997 45L05
(with Vandevender, Walter H.) A comparison of several invariant imbedding algorithms for the solution of two-point boundary-value problems. *Appl. Math. Comput.* 1 (1975), no. 3, 187-218. (Richard C. Allen, Jr.) 51 #14596 65L10
(with Kalaba, Robert E.) An initial-value method for integral operators. III. Refinement of complex eigenvalues by Newton's method. *Internat. J. Numer. Methods Engrg.* 9 (1975), no. 4, 944-948. (P. M. Anselone) 52 #12371 65R05
(with Watts, Herman A.) A systematized collection of codes for solving two-point boundary value problems. *Numerical methods for differential systems*, pp. 197-227. *Academic Press, New York*, 1976. (Roland Bulirsch) 58 #19167 65L10
(with Watts, Herman A.) Computational solution of linear two-point boundary value problems via orthonormalization. *Papers on the numerical solution of two-point boundary-value problems (NSF-CBMS Regional Res. Conf., Texas Tech Univ., Lubbock, Tex., 1975)*. *SIAM J. Numer. Anal.* 14 (1977), no. 1, 40-70. (Francesco G. Lerda) 56 #13663 65L10
Scott, N. R. (with Cole, G. W.) A mathematical model of the dynamic heat transfer from the respiratory tract of a chicken. *Bull. Math. Biology* 39 (1977), no. 4, 415-433. (Kuang-Ho Chen) 57 #5161 92A05 (35A22, 35G15)
Scott, Nigel Acceleration waves in constrained elastic materials. *Arch. Rational Mech. Anal.* 58 (1975), no. 1, 57-75. (I. M. Longman) 52 #7266 73.35
Scott, P. R. A lattice problem in the plane. *Mathematika* 20 (1973), 247-252. (C. M. Petty) 49 #11386 52A10 (10E05)
An analogue of Minkowski's theorem in the plane. *J. London Math. Soc. (2)* 8 (1974), 647-651. (G. Ewald) 51 #4058 52A40 (10E05)
Area-diameter relations for two-dimensional lattices. *Math. Mag.* 47 (1974), 218-221. (E. Heil) 50 #1130 52A40 (10E05)
On Minkowski's theorem. *Math. Mag.* 47 (1974), 277. (G. Ewald) 51 #4050 52A10 (10E05)
Convex bodies and lattice points. *Math. Mag.* 48 (1975), 110-112. (G. C. Shephard) 51 #1610 52A20
On convex lattice polygons. *Bull. Austral. Math. Soc.* 15 (1976), no. 3, 395-399. (J. M. Wills) 55 #3964 52A10 (10E05)
Lattice points in convex sets. *Math. Mag.* 49 (1976), no. 3, 145-146. (J. Bokowski) 53 #9034 52A10 (10E05)
A new extension of Minkowski's theorem. *Bull. Austral. Math. Soc.* 18 (1978), no. 3, 403-405. (R. P. Bambah) 58 #21952 10E05 (52A10)
On three sets with no point in common. *Mathematika* 25 (1978), no. 1, 17-23. (R. C. Buck) 58 #18140 52A10
Scott, Peter See **Scott, G. Peter**
Scott, Peter D. (with Thorp, James S.) A descent algorithm for linear continuous Chebyshev approximation. Collection of articles dedicated to J. L. Walsh on his 75th birthday. VII. *J. Approximation Theory* 6 (1972), 231-241. (H. L. Loeb) 50 #3535 65D15 (41A50)
Optimality with a finite number of trajectory penalties. *Internat. J. Control* 20 (1974), 305-320. (M. J. Davies) 50 #5586 49D30
A quadratic programming dual algorithm for minimax control. *IEEE Trans. Automatic Control* AC-20 (1975), 434-435. (Author's summary) 55 #7394 90C20 (49D40)
Minimax and L_1 curve fitting in non-Gaussian MAP estimation. *IEEE Trans. Automatic Control* AC-20 (1975), no. 5, 690-691. (Author's summary) 52 #7673 93E10
On optimal peak regulation. *J. Cybernet.* 5 (1975), no. 4, 37-49 (1976). (Theodore Guinn) 54 #13665 49A25 (90C25)
A class of peak regulators with fixed feedback control laws. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 1223-1227. *Inst. Electr. Electron. Engrs., New York*, 1976. (Author's summary) 56 #18018 93D10
Scott, R. L. (with Harary, Frank; Schwenk, Allen J.) On the reconstruction of countable forests. *Publ. Inst. Math. (Beograd) (N.S.)* 13(27) (1972), 39-42. (E. M. Palmer) 48 #5894 05C05
Scott, R. W. (with Anderson, B. D. O.) Comments on "Conditions for a feedback transfer matrix to be proper" (IEEE Trans. Automatic Control AC-20 (1975), 570-571) by M. Vidyasagar. With author's reply. *IEEE Trans. Automatic Control* AC-21 (1976), no. 4, 632-634. (Editors) 55 #2259 93C99
Scott, Richard W. (with Fralick, Stanley C.) Nonparametric Bayes-risk estimation. *IEEE Trans. Information Theory* IT-17 (1971), 440-444. (A. D. McLaren) 48 #9906 62C99
Scott, Ridgway See **Scott, L. Ridgeway**
Scott, S. D. Formation radicals for near-rings. *Proc. London Math. Soc. (3)* 25 (1972), 441-464. (G. Betsch) 47 #3464 16A76
Idempotents in near-rings with minimal condition. *J. London Math. Soc. (2)* 6 (1973), 464-466. (M. F. Smiley) 47 #3465 16A76
Minimal ideals of near-rings with minimal condition. *J. London Math. Soc. (2)* 8 (1974), 8-12. (G. Betsch) 49 #2855 16A76
Near-rings that reduce to rings. *Bull. Austral. Math. Soc.* 17 (1977), no. 1, 135-137. (G. Betsch) 56 #8635 16A76
A theorem on nilpotency in near-rings. *Proc. Edinburgh Math. Soc. (2)* 21 (1978/79), no. 1, 87-88. (Howard E. Bell) 57 #12615 16A76
Scott, S. H. (with Hilton, A. J. W.; Rado, Richard) A (< 5)-colour theorem for planar graphs. *Bull. London Math. Soc.* 5 (1973), 302-306. (G. Chartrand) 48 #1960 05C15
(with Hilton, A. J. W.) A further construction of double diagonal orthogonal Latin

- squares. *Discrete Math.* **7** (1974), 111-127. (J. F. Lawless) **48** #8266 05B15
(with Hilton, A. J. W.; Rado, Richard) Multicolouring graphs and hypergraphs. *Nanta Math.* **9** (1976), no. 2, 152-155. (R. A. Melter) **58** #27601 05C15
- Scott, Stuart** Moments of suprema of random variables. *Comm. Statist.—Theory Methods* **A5** (1976), no. 7, 673-680. (Tze Leung Lai) **54** #3842 60G50
- Scott, Terrence R.** (with Brayton, Robert K.; Hoffman, Alan J.) A theorem on inverses of convex sets of real matrices with application to the worst case dc problem. *IEEE Trans. Circuits and Systems* **CAS-24** (1977), no. 8, 409-415. (William N. Anderson, Jr.) **57** #2571 90C30 (94A20)
- Scott, Thomas J.** Monotonic permutations of chains. *Pacific J. Math.* **55** (1974), 583-594. (Joel Berman) **52** #5516 06A55
- Scott, Trevor B.** Graph colouring with preassignment and unavailability constraints. *Ars Combinatoria* **2** (1976), 25-32. (Author's summary) **58** #5336 05C15 (90B35)
- Scott, W. E.** Free-surface breakdown in a rapidly rotating liquid. *J. Fluid Mech.* **86** (1978), no. 3, 457-463. (D. A. Nield) **58** #14295 76J35
- Scott, W. F.** On eigenfunction expansions of second-order ordinary differential equations. *J. London Math. Soc.* (2) **4** (1971/72), 551-559. (R. R. D. Kemp) **45** #3832 34B25
- Scott, W. T.** H. S. Wall (1902-1971). Proceedings of the International Conference on Padé Approximants, Continued Fractions and Related Topics (Univ. of Colorado, Boulder, Colo., 1972; dedicated to the memory of H. S. Wall). *Rocky Mountain J. Math.* **4** (1974), 137-140. (Editors) **48** #8183 01A70
- Scott, William R.** (with Hanes, Harold; Olson, Keith) Products of simple groups. *J. Algebra* **36** (1975), no. 2, 167-184. (Philip J. Greenberg) **55** #10558 20D05
Products of A_5 and a finite simple group. *J. Algebra* **37** (1975), no. 1, 165-171. (Cheryl E. Praeger) **52** #3321 20D40
See also **Proceedings: Conference on Finite Groups**, **52** #14012 and **Kelley, John L.**; et al., **52** #14890
- Scotti, A.** (with Galgani, Luigi; Valz Gris, F.) Asymptotic equivalence of classical ensembles by the method of the maximum. *Physica* **47** (1970), 601-609. (Roy R. Johnson) **45** #3025 82.44
(with Galgani, Luigi) Recent progress in classical nonlinear dynamics. *Riv. Nuovo Cimento* (2) **2** (1972), 189-209. (Editors) **47** #1340 70.00
(with Diana, E.; Galgani, Luigi; Giorgilli, Antonio) On the direct construction of formal integrals of a Hamiltonian system near an equilibrium point. (Italian summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 1, 84-89. (R. A. Struble) **51** #6008 34A25
- Scotti, Fernanda** (with Torre, Anna) Grafi triangolati tracciabili sul toro. *Istit. Lombardo Accad. Sci. Lett. Rend. A* **110** (1976), no. 2, 520-530 (1977). (O. D'Antona) **58** #10551 05C10 (57C15)
- Scotto, Aldo** Ettore Del Vecchio-Socio effettivo. *Atti Accad. Ligure Sci. Lett.* **29** (1973), 42-43. (Editors) **48** #5799 01A70
- Scott-Thomas, J. F.** (with Rogak, E. D.) On necessary conditions for optimality in a Banach space. *J. Math. Anal. Appl.* **41** (1973), 44-53. (G. Zatiašvili) **47** #5687 49B30
- Scoupas, John N.** On Landau's theorem for the trinomial equation. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Georghe Țițeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 449-452. **52** #709 30A08
On the geometry of polynomials. *Tensor (N.S.)* **28** (1974), 123-124. (M. Marden) **50** #10216 30A08
- Scourfield, Eira J.** Non-divisibility of some multiplicative functions. *Acta Arith.* **22** (1972/73), 287-314. (W. Narkiewicz) **47** #4954 10H25 (10A20, 10C15)
On polynomial-like multiplicative functions weakly uniformly distributed (mod N). *J. London Math. Soc.* (2) **9** (1974/75), 245-260. (T. M. Apostol) **50** #7001 10A20
A coprimality problem for two polynomial-like multiplicative functions. *Séminaire de Théorie des Nombres, 1975-1976 (Univ. Bordeaux I, Talence), Exp. No. 23, 5 pp. Lab. Théorie des Nombres, Centre Nat. Recherche Sci., Talence, 1976.* (Philip A. Leonard) **56** #2942 10H25 (10A20)
An asymptotic formula for the property $(nf(n))=1$ for a class of multiplicative functions. *Acta Arith.* **29** (1976), no. 4, 401-423. (J. Kubilius) **54** #12687 10H25
On the property $(f(n), g(n))=1$ for certain multiplicative functions. *Journées Arithmétiques de Caen (Univ. Caen, Caen, 1976), pp. 273-276. Astérisque No. 41-42, Soc. Math. France, Paris, 1977.* (T. M. Apostol) **56** #286 10H25
On the divisibility of $r_2(n)$. *Glasgow Math. J.* **18** (1977), no. 1, 109-111. (Marvin I. Knopp) **54** #12652 10D05
- Scoville, Richard** (with Carlitz, Leonard; Hoggatt, Verner E., Jr.) Some functions related to Fibonacci and Lucas representations. *The theory of arithmetic function, (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1971), pp. 71-102. Lecture Notes in Math., Vol. 251, Springer, Berlin, 1972.* (J. M. Gandhi) **49** #4923 10A35
(with Carlitz, Leonard) Tangent numbers and operators. *Duke Math. J.* **39** (1972), 413-429. (H. Gupta) **46** #1968 26A09
(with Carlitz, Leonard) Up-down sequences. *Duke Math. J.* **39** (1972), 583-598. (L. D. Baumert) **47** #1627 05A15
(with Carlitz, Leonard; Hoggatt, Verner E., Jr.) Fibonacci representations. *Fibonacci Quart.* **10** (1972), no. 1, 1-28. (D. A. Klarner) **46** #3427 (E **48** #3857) 10A35
(with Carlitz, Leonard; Hoggatt, Verner E., Jr.) Lucas representations. *Fibonacci Quart.* **10** (1972), no. 1, 29-42, 70, 112. (D. A. Klarner) **46** #3429 10A35
(with Carlitz, Leonard; Hoggatt, Verner E., Jr.) Fibonacci representations of higher order. I, II. *Fibonacci Quart.* **10** (1972), no. 1, 43-69, 94; *ibid.* **10** (1972), no. 1, 71-80, 94. (D. A. Klarner) **46** #3428 10A35
(with Carlitz, Leonard; Hoggatt, Verner E., Jr.) Pellian representations. *Fibonacci Quart.* **10** (1972), no. 5, 449-488. (S. A. Burr) **47** #8420 10A40
(with Carlitz, Leonard; Hoggatt, Verner E., Jr.) Representations for a special sequence. *Fibonacci Quart.* **10** (1972), no. 5, 499-518, 550. (S. A. Burr) **47** #8421 10A40
(with Carlitz, Leonard; Hoggatt, Verner E., Jr.) Addendum to the paper: "Fibonacci representations" (Fibonacci Quart. **10** (1972), no. 1, 1-28). *Fibonacci Quart.* **10** (1972), no. 5, 527-530. (J. M. Gandhi) **48** #3857 10A35
(with Carlitz, Leonard; Kurtz, David C.; Stackelberg, Olaf P.) Asymptotic properties of Eulerian numbers. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **23** (1972), 47-54. (J. Riordan) **46** #8961 10A40 (05Axx, 60C05)
(with Carlitz, Leonard) The sign of the Bernoulli and Euler numbers. *Amer. Monthly* **80** (1973), 548-549. (H. Gupta) **47** #4917 10A40
(with Carlitz, Leonard) Enumeration of rises and falls by position. *Discrete* (1973), 45-59. (R. W. Robinson) **47** #1626 05A15
(with Carlitz, Leonard) Partially ordered sets associated with Fibonacci representations. *Duke Math. J.* **40** (1973), 511-524. (J. Riordan) **47** #6600
(with Carlitz, Leonard; Vaughan, Theresa P.) Enumeration of permutation sequences with restrictions. *Duke Math. J.* **40** (1973), 723-741. (D. P. Roselle) **48** #8253 05A15
(with Carlitz, Leonard; Vaughan, Theresa P.) Some arithmetic functions related to Fibonacci numbers. *Fibonacci Quart.* **11** (1973), no. 4, 337-386. (J. B. Kelly) **48** #10969 10A40
(with Carlitz, Leonard) Enumeration of permutations by rises, falls, rising runs and falling maxima. *Acta Math. Acad. Sci. Hungar.* **25** (1974), 269-277. (D. P. Roselle) **52** #2909 05A15
(with Carlitz, Leonard; Vaughan, Theresa P.) Enumeration of pairs of permutations and sequences. *Bull. Amer. Math. Soc.* **80** (1974), 881-884. (Alexanderson) **51** #180 05A15
(with Carlitz, Leonard) Generalized Eulerian numbers: combinatorial applications. *J. Reine Angew. Math.* **265** (1974), 110-137. (Bernard Harris) **55** #2587 (E **55** #405) 05A15
(with Carlitz, Leonard) Eulerian numbers and operators. *Fibonacci Quart.* (1975), 71-83. (Dominique Foata) **51** #12546 05A15 (10A40)
(with Carlitz, Leonard) A note on weighted sequences. *Fibonacci Quart.* **13** (1975), no. 4, 303-306. (T. C. Brown) **52** #8019 10A35
(with Carlitz, Leonard) Generating functions for certain types of permutation. *Combinatorial Theory Ser. A* **18** (1975), 262-275. (R. Stanley) **51** #7890 05A15
(with Carlitz, Leonard) A generating function for triangular partitions. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his sixtieth birthday. *Math. Comp.* **29** (1975), 67-77. (George E. Andrews) **51** #3049 10A15
(with Carlitz, Leonard) Enumeration of up-down permutations by upper runs. *Monatsh. Math. Phys.* **79** (1975), 3-12. (L. D. Baumert) **50** #12748 05A15
(with Carlitz, Leonard; Vaughan, Theresa P.) Enumeration of pairs of permutations. *Discrete Math.* **14** (1976), no. 3, 215-239. (Michael Henle) **53** #10515 05A15
(with Carlitz, Leonard) Corrigendum to the paper "Generalized Eulerian numbers: combinatorial applications" (J. Reine Angew. Math. **265** (1974), 110-137). *J. Reine Angew. Math.* **288** (1976), 218-219. (Bernard Harris) **55** #2588 05A15
(with Carlitz, Leonard; Vaughan, Theresa) Enumeration of pairs of sequences by rises, falls and levels. *Manuscripta Math.* **19** (1976), no. 3, 211-243. (Louis Comtet) **55** #5460 05A15
(with Carlitz, Leonard) Zero-one sequences and Fibonacci numbers. *Fibonacci Quart.* **15** (1977), no. 3, 246-254. (M. Rahman) **57** #5888 10A35 (05A10)
(with Carlitz, Leonard) Some permutation problems. *J. Combinatorial Theory Ser. A* **22** (1977), no. 2, 129-145. (D. P. Roselle) **55** #120 05A15
- Scozzafava, Romano** The locally compact semialgebra generated by relations in a semigroup of transformations. (Italian summary) *Boll. Un. Mat. Ital.* (4) **6** (1971), 735-746. (Bernard L. Madison) **45** #5755 46H05
Semigrupp primitivi. (English summary) *Boll. Un. Mat. Ital.* (4) **6** (1972), 201-202. (H. D'Alarcao) **47** #8737 20M20
Sulle partizioni di un insieme finito su cui opera un semigrupp di trasformazioni. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1971), 161-166 (1974). (B. M. Schein) **51** #769 20M20
Graphs and finite transformation semigroups. *Discrete Math.* **5** (1973), 87-94. (Imrich) **47** #8346 05C25 (20M20)
The radical of a locally compact semialgebra. *Studia Sci. Math. Hungar.* **8** (1973), 39-41. (E. J. Barbeau) **50** #999 46H99
Strong transformation semigroups and relevant graphs and configurations. (English summary) Collection of articles dedicated to Giovanni Sansone on the occasion of his eighty-fifth birthday. *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, suppl., 389-402. (E. Hotzel) **58** #16925 20M20
Combinatorial configurations generated by finite semigroups. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973), Tomo II, pp. 31-40. Atti dei Convegni Lincei, No. 17, Accad. Naz. Lincei, Rome, 1976.* (B. M. Schein) **58** #6019 20M20 (05B30)
(with Lajos, Sándor) ★Notes on semigroups. III. *DM 77-3. Department of Mathematics, Karl Marx University of Economics, Budapest, 1977.* 22 pp. (K. Namboripad) **57** #12726 20Mxx (20-01)
- Scranton, Bruce E.** (with Holmes, Richard B.; Ward, Joseph D.) Best approximation to compact operators. II. *Bull. Amer. Math. Soc.* **80** (1974), 98-102. (J. Blatter) **50** #47B05 (41A65)
(with Holmes, Richard B.; Ward, Joseph D.) Approximation from the space of compact operators and other M -ideals. *Duke Math. J.* **42** (1975), 251-269. (N. Tomczak-Jaegermann) **52** #15104 47D99 (46L20)
(with Legg, David A.; Ward, Joseph D.) Chebyshev subspaces in the space of compact operators. *J. Approximation Theory* **15** (1975), no. 4, 326-334. (Howard) **54** #986 47Bxx (41A65, 47D15)
(with Holmes, Richard B.; Ward, Joseph D.) Uniqueness of commuting compact operator approximations. *Trans. Amer. Math. Soc.* **208** (1975), 330-340. (L. J. Wallen) **52** #47A65
- Scruton, R. E.** (with Knibb, D.) On the solution of parabolic partial differential equations in Chebyshev series. *Comput. J.* **14** (1971), 428-432. **47** #9861 65P05
The generalised Euler transformation. *Comput. J.* **15** (1972), 258. (From the English text) **48** #1426 65B10
(with Dew, P. M.) An improved method for the solution of the heat equation in Chebyshev series. *J. Inst. Math. Appl.* **9** (1972), no. 3, 299-309. (Authors' summary) **52** #4650 65N05
On divergent series. *Math. Gaz.* **56** (1972), no. 396, 99-103. (Editors) **58** #140A05

- A modification of Miller's recurrence algorithm. *Nordisk Tidskr. Informationsbehandling (BIT)* 12 (1972), 242-251. (H. Shintani) 46 #6631 65Q05
 (with Dew, P. M.) The solution of the heat equation in two space variables using Chebyshev series. *J. Inst. Math. Appl.* 11 (1973), no. 2, 231-240. (Authors' summary) 2 #4651 65N05
 Polynomial approximations to the solution of the heat equation. *Proc. Cambridge Philos. Soc.* 73 (1973), 157-165. (L. Fox) 47 #1310 65P05 (35K05)
 (with Dew, P. M.) Chebyshev methods for the numerical solution of parabolic partial differential equations in two and three space variables. *J. Inst. Math. Appl.* 16 (1975), no. 1, 121-131. (Alfred R. Mitchell) 52 #4652 65N05
 ton, G. R. (with Truman, Aubrey) Analytic structure of the Laplace transforms of distributions with restricted support. *J. Mathematical Phys.* 14 (1973), 982-985. (Z. Ditzian) 49 #5702 42A68 (46F10)
 a, Carl-Heinz Über die Darstellung von alternierenden Funktionalfeldern in reellen Banach-Räumen. *Rend. Circ. Mat. Palermo* (2) 19 (1970), 193-212. (C.-C. Hsiung) 46 #10023 58C20
 Über den Hauptsatz des Pfaffschen Problems. *Rend. Circ. Mat. Palermo* (2) 20 (1971), 5-33. (J. E. Brothers) 48 #7309 58A15
 Koordinatenfreie Charakteristiken-theorie. *Math. Nachr.* 56 (1973), 1-20. (Manfred W. Kracht) 50 #13840 35A30
 Über die mehrdimensionale Legendre-Transformation. *Z. Angew. Math. Mech.* 53 (1973), no. 5, 271-273. (H. S. P. Grässer) 52 #11708 49C10
 Koordinatenfreie Charakteristiken-theorie. II. *Math. Nachr.* 59 (1974), 253-259. (Authors' review (Zbl 277 #35001)) 58 #22959 35A30
 Absolute Analysis und alternierende Differentialformen. *Math.-Phys. Semesterber.* 21 (1974), 170-181. (T. Okubo) 53 #14529 58C20 (46G05, 58A15)
 a, Christoph J. Das Problem des Prinzen Ruprecht von der Pfalz. *Praxis Math.* 10 (1968), no. 9, 241-246. (H. S. M. Coxeter) 58 #15905 01A45 (50B30)
 Eine mathematische Festvorlesung vor 300 Jahren. Collection of articles dedicated to J. E. Hofmann on the occasion of his seventieth birthday. *Janus* 56 (1969), 182-190. (Editors (Jfj)) 58 #26927 01A45
 Zur Entwicklung der additiven Zahlentheorie von Fermat bis Jacobi. *Jber. Deutsch. Math.-Verein.* 72 (1970/71), no. 1, 122-142. (William C. Waterhouse) 58 #16474 10-03 (01A50, 01A55)
 The autobiography of John Wallis, F.R.S. *Notes and Records Roy. Soc. London* 25 (1970), 17-46. (M. Kline) 58 #95 01A70 (01A45)
 The French edition of Newton's *Principia* (translation of the Marquise du Chatelet): 1759 or 1756? *Actes XII^e Congrès Internat. d'Histoire des Sciences* (Paris, 1968), Tome III B: Science et Philosophie: XVII^e et XVIII^e Siècles, pp. 117-119. *Librairie Sci. et Techn. A. Blanchard, Paris*, 1971. (J. E. Hofmann) 54 #7171 01A50
 Siegfried Heller (1. Dezember 1876 bis 9. Juni 1970). *Jber. Deutsch. Math.-Verein.* 73 (1971/72), no. 1, 1-5. (Editors) 57 #15926 01A70
 Geschichte der Mathematik im Spiegel der Zeit. Zugleich eine Würdigung des Schaffens von Joseph E. Hofmann: Collection of articles dedicated to Joseph Ehrenfried Hoffmann on the occasion of his seventieth birthday. *Mitt. Math. Sem. Giessen No. 90* (1971), 2-24. (Editors) 52 #13231 01A70
 Chronology of J. E. Hofmann, biobibliographic note, and supplementary bibliography of his publications. *Historia Math.* 2 (1975), 147-152. (Editors) 57 #5625 01A70
 Mathematische Theorie und mathematische Erfahrung. *Sudhoffs Arch.* 60 (1976), no. 4, 338-353. (Author's summary) 58 #26689 01A05 (00A25)
 Carl Friedrich Gauss in der Wissenschaftsgeschichte. Festschrift zur 200. Wiederkehr des Geburtstages von Carl Friedrich Gauss. *Abh. Braunschweig. Wiss. Gesellsch.* 27 (1977), 39-56. (J. S. Joel) 58 #16041 01A70
 Bernhard Sticker (2. August 1906-30. August 1977). *Studia Leibnitiana* 9 (1977), no. 2, 159-167. (Editors) 58 #10219 01A70
 (with Drake, Stillman; Coxeter, Harold Scott MacDonald; Jones, Charles V.; Tropp, Henry S.; Sinclair, B.; Mahoney, Michael Sean; Struik, Dirk J.) A memorial tribute to Kenneth O. May. *Historia Math.* 5 (1978), no. 1, 3-12. (Editors) 56 #15322 01A70
 See also Hofmann, Joseph Ehrenfried, 58 #16065
 ba, Evelyn Über (k, r) -Zahlen. (English summary) *Monatsh. Math.* 80 (1975), no. 1, 31-35. (T. M. Apostol) 51 #12744 10H25
 Eine asymptotische Formel für Summen über die reziproken Werte additiver Funktionen. *Acta Arith.* 32 (1977), no. 4, 387-391. (J. Galambos) 55 #2808 10H25
 Eine Bemerkung zu dem grössten quadratfreien Teiler einer natürlichen Zahl. (English summary) *Monatsh. Math.* 84 (1977), no. 1, 13-19. (H. Halberstam) 57 #12424 10H25
 bner, D. R. Lie-admissible, nodal, noncommutative Jordan algebras. *Trans. Amer. Math. Soc.* 154 (1971), 105-111. (J. Goldman) 47 #3468 17A15
 mger, E. B. (with Holland, W. Charles) Free products of lattice ordered groups. *Algebra Universalis* 2 (1972), 247-254. (S. P. Bandyopadhyay) 47 #8384 06A55
 A large class of small varieties of lattice-ordered groups. *Proc. Amer. Math. Soc.* 51 (1975), 301-306. (W. C. Holland) 52 #5517 06A55
 pcariu, Dragoş (with Băianu, Ion) On adjoint dynamical systems. *Bull. Math. Biology* 35 (1973), 475-486. (G. Georgescu) 50 #12312 92A05
 ven, L. E. (with Othmer, H. G.) On the eigenvalues of the matrix pencil $A + \mu B$. (German summary) *Z. Angew. Math. Phys.* 24 (1973), 135-139. (J. Buchanan) 48 #11149 15A18
 (with Orr, F. M.) Rimming flow: numerical simulation of steady, viscous, free-surface flow with surface tension. *J. Fluid Mech.* 84 (1978), no. 1, 145-165. (David F. Griffiths) 57 #18484 76G5
 ven, Michael See Analysis of human behaviour, 52 #12857
 ven, R. A. See State of the art in numerical analysis, 55 #13726
 vgs, W. (with Gudder, Stanley P.) Unbounded representations of \ast -algebras. *Pacific J. Math.* 70 (1977), no. 2, 369-382. (G. Lassner) 58 #2345 46L99
 do, Francesco M. Vito Volterra and theoretical ecology. *Theoret. Population Biology* 2 (1971), 1-23. (Colin W. Clark) 53 #12629 92-03 (92-02)
 (with Matessi, Carlo) The population genetics of assortative mating based on imprinting. *Theoret. Population Biology* 7 (1975), 306-337. (D. Ludwig) 53 #7534 92A10
 (with Ziegler, James R.) Vladimir Aleksandrovich Kostitzin and theoretical ecology. *Theoret. Population Biology* 10 (1976), no. 3, 395-412. (Michael Conrad) 56 #17889 92-XX (01A60)
 (with Levine, S. H.; Plunkett, D. J.) Persistence and convergence of ecosystems: an analysis of some second order difference equations. *J. Math. Biol.* 4 (1977), no. 2, 171-182. (Authors' summary) 57 #18882 92A15
 Šćukin, K. K. A minimal radical and weakly irreducible groups. (Russian) *Mat. Zametki* 13 (1973), 447-456. (F. Haimo) 49 #429 20F30
 Šćukin, M. Ju. Questions of urban systems modelling in developed capitalistic countries (a survey). (Russian) *Ekonom. i Mat. Metody* 14 (1978), no. 1, 160-173. 58 #15068 90A15 (92A20)
 Šćukina, E. S. See Nicolaus Copernicus. On the 500th anniversary of his birth, 50 #12560
 Šćuko, S. D. On the problem of distinguishing between a center and a focus. (Russian) *Dokl. Akad. Nauk SSSR* 203 (1972), 1008-1010. (J. M. Skowroński) 45 #7175 34C05 (65L99)
 Scull, J. R. See Control in space, 48 #13320
 Scull, Sidney C. Spectra in representations of semisimple Lie group. *Proc. Amer. Math. Soc.* 41 (1973), 287-293. (E. A. Thieleker) 51 #13142 22E45
 Heisenberg subgroups of semisimple Lie groups. *J. Math. Phys.* 16 (1975), 1646-1648. (L. O'Riartaigh) 51 #14779 81.22 (22E70)
 Positive operators and automorphism groups of bounded symmetric domains. *Rep. Mathematical Phys.* 10 (1976), no. 1, 1-7. (A. Korányi) 56 #3192 22E45
 Sculy, Illeana See Collection: Moisil, Grigore Costantin, 49 #4703
 Šćurenkov, V. See Šćurenkov, V. M.
 Šćuric-Ćudovan, Vlasta Der orientierte Niče-sche Strahlkomplex eines Flächenbüschels 2. Grades. (Serbo-Croatian summary) *Rad Jugoslav. Akad. Znan. Umjet.* 367 (1974), 151-205. (E. W. Ellers) 50 #5615 50D20
 Der orientierte Niče-sche Strahlkomplex eines Flächenbüschels 2. Grades. II. (Serbo-Croatian summary) *Rad Jugoslav. Akad. Znan. Umjet.* 370 (1975), 57-91. (E. W. Ellers) 57 #10573 50D20
 Das F_2^2 Flächenbüschel und eine Möglichkeit des Eintauchens des (MK) in den (VN) Komplex. (Serbo-Croatian summary) *Rad Jugoslav. Akad. Znan. Umjet.* 374 (1977), 57-91. (H. W. Guggenheimer) 57 #13684 50D40 (14N05, 50D25)
 Scussel, Christopher Goldbach's conjecture. *Pi Mu Epsilon J.* 5, 402-408 (1973). (M. C. Wunderlich) 48 #3852 10A25
 Scutaru, H. Coherent states and induced representations. *Lett. Math. Phys.* 2 (1977/78), no. 2, 101-107. (Author's summary) 58 #22406 22E45 (32N10)
 Sczech, R. Ein einfacher Beweis der Transformationsformel für $\log \eta(z)$. *Math. Ann.* 237 (1978), no. 2, 161-166. (R. W. K. Odoni) 58 #21948 10D15
 Sea, Ronald G. (with Singer, Robert A.) Addition to "Increasing the computational efficiency of discrete Kalman filters" (IEEE Trans. Automatic Control AC-16 (1971), 254-257). *IEEE Trans. Automatic Control* AC-17 (1972), 180. (Editors) 49 #4629 93E10 (94A05)
 (with Singer, Robert A.) New results in optimizing surveillance system tracking and data correlation performance in dense multitarget environments. *IEEE Trans. Automatic Control* AC-18 (1973), 571-582. (S. G. Tzafestas) 54 #4793 93E10
 Seabrook, R. (with Evans, F. J.) Some questions related to the general variational problem. *J. Franklin Inst.* 296 (1973), 287-296. (Djordje Djukic) 49 #4361 7049
 Seabury, Chester C. Some extension theorems for regular maps of Stein manifolds. *Bull. Amer. Math. Soc.* 80 (1974), 1223-1224. (W. R. Zame) 50 #2565 32H99 (32D15)
 (with Ellis, David; Hill, C. Denson) The maximum modulus principle. I. Necessary conditions. *Indiana Univ. Math. J.* 25 (1976), no. 7, 709-715. (Authors' introduction) 58 #28674 32F99
 On extending regular holomorphic maps from Stein manifolds. *Pacific J. Math.* 65 (1976), no. 2, 499-515. (W. Barth) 54 #7839 32C25 (32D20)
 Seah, Sek Wui Family of solutions of a generalized differential equation as a Kluczyński family. Proceedings of the Second Symposium Mathematik (Univ. Malaya/Univ. Kebangsaan Malaysia, Kuala Lumpur, 1974). *Bull. Malaysian Math. Soc. Special Issue* (1975), 67-70. (From the author's introduction) 54 #5551 34C30 (54H20)
 Family of solutions of a generalized differential equation as a Kluczyński family. *Nanta Math.* 9 (1976), no. 1, 59-64. (Author's introduction) 55 #8447 34A99
 Seal, C. E. (with Stubberud, Allen R.) Comments on "On optimal terminal control". *IEEE Trans. Automatic Control* AC-15 (1970), 498. (Authors' summary) 45 #1650 93C05
 (with Stubberud, Allen R.) Final value control systems. *Advances in control systems: theory and applications*, Vol. 8, pp. 23-52. Academic Press, New York, 1971. 56 #14945 93C15
 Seal, Hilary L. Numerical calculation of the probability of ruin in the Poisson/exponential case. (German, French and Italian summaries) *Mitt. Verein. Schweiz. Versich.-Math.* 72 (1972), 77-100. (A. P. Basu) 46 #6552 62P05
 The numerical calculation of $U(w, t)$, the probability of non-ruin in an interval $(0, t)$. *Scand. Actuar. J.* 1974, 121-139. (George Weiss) 50 #8766 60K99 (62P05)
 A note on the use of Laguerre polynomials in the inversion of Laplace transforms. *Bl. Dtsch. Ges. Versicherungsmath.* 12 (1975/76), no. 2, 131-134. (N. N. Abdelmalek) 52 #12299 65D20
 Studies in the history of probability and statistics. XXXV. Multiple decrements or competing risks. *Biometrika* 64 (1977), no. 3, 429-439. (Author's summary) 58 #7936 62-03 (01A65, 62P05)
 See also Studies in the history of statistics and probability, 51 #1889
 Seall, Robert Connections between projective geometry and superassociative algebra. *J. Geometry* 4 (1974), 11-33. (G. J. Schellekens) 50 #8287 50D35 (08A15)
 Seaman, P. H. (with Gay, T. W.) Composite priority queue. *IBM J. Res. Develop.* 19 (1975), 78-81. (Izhak Rubin) 50 #15477 68A50
 Searby, D. G. (with Wamsley, J. W.) Minimal presentations for certain metabelian groups. *Proc. Amer. Math. Soc.* 32 (1972), 342-348. (N. D. Gupta) 45 #357 20E05
 Searby, David (with Baxter, Robert) Modus ponens eliminability in a formalisation of the predicate calculus. *Atti Accad. Sci. Ist. Bologna Cl. Sci. Fis. Rend.* (13) 2 (1974/75), no. 2, 51-61. (K. Inoue) 55 #5387 02B10
 A note on the existence of the Pappus configuration in planes of order nine. (Italian summary) *Boll. Un. Mat. Ital.* (4) 10 (1974), 529-531. (T. G. Ostrom) 51 #1604 50D35

- (with Barnabei, Marilena; Zucchini, Cristina) On small $\{k; q\}$ -arcs in planes of order q^2 . *J. Combinatorial Theory Ser. A* **24** (1978), no. 2, 241-246. (Joseph A. Thas) **57** #12261 05B25
- Searl, J. W.** Extensions of a theorem of Erdélyi. *Arch. Rational Mech. Anal.* **50** (1973), 127-138. (R. E. O'Malley, Jr.) **49** #7542 34E15
- Searle, S. R.** ★Linear models. *John Wiley & Sons, Inc., New York-London-Sydney*, 1971. xxi + 532 pp. (M. Atiqullah) **45** #2868 62J05
- Univariate data for multi-variable situations: Estimating variance components. *Multivariate statistical inference (Proc. Res. Sem., Dalhousie Univ., Halifax, N.S., 1972)*, pp. 197-216. North-Holland, Amsterdam; American Elsevier, New York, 1973. (Robert Hultquist) **48** #5284 62J05
- (with Rudan, J. W.) Wanted: an inverse matrix. *Comm. Statist.* **2** (1973), 155-166. (Robert Hultquist) **49** #4170 62J05
- Prediction, mixed models, and variance components. *Reliability and biometry: statistical analysis of lifelength (Proc. Conf., Florida State Univ., Tallahassee, Fla., 1973)*, pp. 229-266. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1974. (C. W. Chen) **50** #3475 62J10
- (with Rounsaville, T. R.) A note on estimating covariance components. *Amer. Statist.* **28** (1974), 67-68. (M. Atiqullah) **50** #1427 62J10
- (with Henderson, C. R.; Schaeffer, L. R.) The invariance and calculation of Method 2 for estimating variance components. (French summary) *Biometrics* **30** (1974), 583-588. (D. V. Chopra) **54** #1494 62J10
- (with Corbeil, R. R.) A comparison of variance component estimators. (French summary) *Biometrics* **32** (1976), no. 4, 779-791. (Robert Hultquist) **56** #1609 62J10
- (with Corbeil, R. R.) Restricted maximum likelihood (REML) estimation of variance components in the mixed model. *Technometrics* **18** (1976), no. 1, 31-38. (Lubomír Kubáček) **53** #6847 62F10 (62J10)
- A univariate formulation of the multivariate linear model. *Contributions to survey sampling and applied statistics*, pp. 181-189. *Academic Press, New York*, 1978. (Anant M. Kshirsagar) **58** #18928 62J05 (62H10)
- Sears, D. B.** (with Wray, S. D.) An inequality of C. R. Putnam involving a Dirichlet functional. *Proc. Roy. Soc. Edinburgh Sect. A* **75** (1975/76), no. 3, 199-207. (F. Max Stein) **56** #3402 34B25
- Sears, Michael** Topologies on the group of self homeomorphisms of the Cantor set. *Mat. Časopis Sloven. Akad. Vied* **21** (1971), 227-232. (N. G. Markley) **46** #9299 28A65 (54H20)
- The automorphisms of the shift dynamical system are relatively sparse. *Math. Systems Theory* **5** (1971), 228-231. (W. J. Gray) **46** #6331 54H15 (54H20)
- Expansive self-homeomorphisms of the Cantor set. *Math. Systems Theory* **6** (1972), 129-132. (B. L. Brechner) **46** #8198 54H15
- Topological models for generators. *Math. Systems Theory* **7** (1973), 32-38. (J. B. Robertson) **48** #3030 54H20
- Expansiveness of locally compact spaces. *Math. Systems Theory* **7** (1974), no. 4, 377-382. (H. Keynes) **52** #6689 54H20
- On ergodic homeomorphisms. *Math. Systems Theory* **9** (1975), no. 2, 109-116. (N. G. Markley) **52** #6690 54H20
- Weakly ergodic homeomorphisms. *Proc. Amer. Math. Soc.* **58** (1976), 319-324. (Manfred Denker) **53** #11593 54H20
- Sears, William R.** See **Collected works: Jones, Robert T.**, **53** #84
- Seater, John J.** A unified model of consumption, labor supply, and job search. *J. Econom. Theory* **14** (1977), no. 2, 349-372. (Georg Bol) **56** #14605 90A15
- Seatzu, Sebastiano** Su un metodo di risoluzione di sistemi lineari con matrice a banda. *Rend. Sem. Fac. Sci. Univ. Cagliari* **44** (1974), no. 1-2, 61-69. (Siegfried Fillippi) **52** #12308 65F05
- Un metodo per la costruzione di smoothing splines naturali mono e bidimensionali. (English summary) *Calcolo* **12** (1975), no. 3, 259-273. (Wilhelm Sippel) **55** #8630 41A15
- Sulla equivalenza tra formule di quadratura e monosplines. (English summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **111** (1977), no. 1-2, 81-88. (Author's summary) **58** #17672 41A55
- Sulla costruzione di basi a supporto minimo per splines generalizzate con nodi multipli. (English summary) *Calcolo* **14** (1977), no. 4, 385-398 (1978). (Marc Duc-Jacquet) **58** #29619 41A15
- Sebakhy, Omar** (with Bayoumi, M. M.) A simplified criterion for the controllability of linear systems with delay in control. *IEEE Trans. Automatic Control* **AC-16** (1971), no. 4, 364-365. (Authors' summary) **53** #15442 93B05
- (with Bayoumi, M. M.) Controllability of linear time-varying systems with delay in control. *Internat. J. Control* **17** (1973), 127-135. (D. Obradović) **47** #6355 93B05
- (with Francis, Bruce A.; Wonham, W. Murray) Synthesis of multivariable regulators: the internal model principle. *Appl. Math. Optim.* **1** (1974/75), no. 1, 64-86. (L. Cesari) **54** #2262 93B05
- Linear regulators with internal stability and partially bounded inputs. *IEEE Trans. Automatic Control* **AC-20** (1975), 266-268. (S. P. Bhattacharyya) **55** #7504 93C05
- Eventual stability of an adaptive control system. *IEEE Trans. Automatic Control* **AC-20** (1975), no. 5, 717-718. (A. M. Krall) **52** #10161 93D05
- (with Wonham, W. Murray) A design procedure for multivariable regulators. *Automatica-J. IFAC* **12** (1976), no. 5, 467-478. (Bradley W. Dickinson) **55** #2277 93D15
- A discrete model reference adaptive system design. *Internat. J. Control* **23** (1976), no. 6, 799-804. (A. S. C. Sinha) **53** #12699 93C55
- Sebal, A. V.** (with Haddad, Abraham) Robust state estimation in uncertain systems: combined detection-estimation with incremental MSE criterion. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 5, 821-825. (Hironao Kawashima) **58** #26453 93E10 (62N15)
- (with Haddad, Abraham) State estimation for singularly perturbed systems with uncertain perturbation parameter. *IEEE Trans. Automat. Control* **23** (1978), no. 3, 464-469. (Authors' summary) **58** #26454 93E10
- Šebaldin, R. P.** (with Umetčikova, N. A.) The computation of the Legendre function $P_\nu(X)$ of arbitrary fractional index ν . (Russian) *Computing methods and programming for the electronic computers "URAL-2", "URAL-4", No. 2 (Russian)*, pp. 27-31. *Saratov. Univ., Saratov*, 1968. (B. A. Bondarenko) **52** #7086 65D20
- Sebastian, D. J.** (with Sargent, R. W. H.) Numerical experience with algorithm unconstrained minimization. *Numerical methods for non-linear optimization* (Dundee, 1971), pp. 45-68. *Academic Press, London*, 1972. (S. F. McCormick) **52** #65K05
- (with Sargent, R. W. H.) On the convergence of sequential minimization algorithms. *J. Optimization Theory Appl.* **12** (1973), 567-575. (J. E. Dennis, Jr.) **48** #5383 65K05
- (with Polak, Elijah; Sargent, R. W. H.) On the convergence of sequential minimization algorithms. *J. Optimization Theory Appl.* **14** (1974), 439-442. (Dennis, Jr.) **50** #15339 65K05
- Sebastian, Hans-Jürgen** (with Schallehn, Wolfgang) Ein Reihenfolgeproblem in der Netzplantechnik. *Elektron. Informationsverarbeitung. Kybernetik* **8** (1972), 3-29. (A. summary) **51** #12307 90B10
- (with Sieber, Norbert) Ein mathematisches Modell zur Optimalregelung von Versorgungssystemen. (English and Russian summaries) *Math. Operationsforsch.* **5** (1974), no. 9, 661-685. (D. Hochstädter) **51** #2612 90B05
- (with Glaeske, Hans-Jürgen) Über eine Verallgemeinerung der Besselfunktion. *Math. Nachr.* **67** (1975), 41-52. (R. A. Askey) **51** #10715 33A40
- Dynamische Optimierung unter Einbeziehung zeitabhängiger Einflussparameter. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), 427-452. (K. Hinderer) **56** #11002 90C40
- (with Sieber, Norbert; Gnauschun, Dietrich) Über geschlossene Lösungen der Optimalregelung eines speziellen Versorgungssystems mittels dynamischer Optimierung. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), 453-469. (K. Hinderer) **56** #11003 90C40 (90C50)
- An extended Bellman functional equation of dynamic optimization. (Russian, German and English summaries) *Math. Operationsforsch. Statist. Ser. Optimiz.* (1977), no. 4, 509-527. (A. A. Juškevič) **58** #7317 49D05 (90C05)
- Dynamic programming for problems with time-dependent parameters. (Russian) *Differentsial'nye Uravnenija* **14** (1978), no. 2, 345-354, 389. (N. N. Petrov) **58** #90C40 (93C55, 93E20)
- (with Schäfer, Wolfgang) An extended functional equation as a necessary condition for sufficient optimality condition for a discrete control problem with incomplete information. (German and Russian summaries) *Math. Operationsforsch. Statist. Optim.* **9** (1978), no. 1, 95-107. (Stanley R. Pliska) **58** #12623 49C99
- Sebastian, K. L.** (with Rangarajan, S. K.) A matrix identity and perturbation expressions. *Molecular Phys.* **36** (1978), no. 2, 343-353. (Authors' summary) **58** #20022 81D05
- Sebastiani, Marcos** Complément à "Quelques critères topologiques de simplicité pour certains type de variétés algébriques". (Spanish summary) *Univ. Repub. Fac. Agrimens. Montevideo Publ. Inst. Mat. Estadist.* **4**, 115-116 (1969). (Editors) **46** #14E15 (32C40, 57D45)
- Un exposé de la formule de Leray-Norguet. *Bol. Soc. Brasil. Mat.* **1** (1970), 47-57. (T. Suguri) **48** #559 32A25
- Une action exotique libre de Z_2 sur S^5 . *Bol. Soc. Brasil. Mat.* **2** (1971), no. (P. Orlik) **47** #4279 57D55 (55C35, 57E25)
- (with Thom, René) Un résultat sur la monodromie. *Invent. Math.* **13** (1971), (A. Hirschowitz) **45** #2201 32C35
- Sur l'ensemble des points fixes des actions de S^1 . (English summary) *Cambridge Philos. Soc.* **72** (1972), 387-392. (J. A. Schafer) **46** #4560 57E15 (57E25)
- ★El teorema de Jordan. (Spanish) [The Jordan theorem] Cursos, Seminarios y Tesis del PEAM, No. 3 [Courses, Seminars and Theses of the PEAM, No. 3] *Univ. del Zulia, Maracaibo*, 1977. iv + 105 pp. (U. D'Ambrosio) **56** #6639 55-01
- Sebastião e Silva, José** Sur l'intervention du calcul symbolique et des distributions dans l'étude de l'équation de Boltzmann. (Italian summary) Rédigé par des confrères décédés auteurs, y compris J. Silva Oliveira et G. Köthe, avec un avertissement de Campos Ferreira. *Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Ser. Ia* (1974/75), no. 5, 313-363. (See Zbl **359** #46028) **45K05** (44A40, 46F10)
- See also **Köthe, Gottfried**, **53** #2594 and **Forjaz, António Pereira**; et al., **55** #10213
- Sebaugh, Jeanne L.** (with Hassanein, Khatib M.) Estimation of the parameters of logistic distribution from grouped samples. *Skand. Aktuarietidskr.* **1973**, 1-10. (Cohen) **52** #6976 62F10 (62D05)
- Sebekin, B. I.** The diffraction of surface waves by a wedge. *Izv. Akad. Nauk SSSR Fiz. Atmosf. i Okeana* **3** (1967), no. 8, 890-902 (Russian); translated as *Izv. Acad. USSR Atmosf. Ocean Phys.* **3** (1967), no. 8, 517-523 (1968). (Author's summary) **56** #10386 76.35
- Šebeko, G. A.** Diffraction of a scalar spherical wave by several spheres arranged in half-space. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1970** no. 3, 5-10, 92. (Rosenthal) **49** #6783 78.35
- Šebeko, S. A.** (with Ismagilov, R. S.) On the question of obtaining realizable transfer functions of optimal systems. (Russian) *Moskov. Inst. Elektron. Mašinstroenija—Trudy MIEM No. 15 Funkcional. Anal. i Priložen.* (1971), 12-13. (See RZMat **1971** #7 B988) **93C99**
- Sebel'din, A. M.** Conditions of the isomorphism of completely decomposable torsion-free abelian groups with isomorphic rings of endomorphisms. (Russian) *Mat. Zametki* (1972), 403-408. (L. Procházka) **45** #8728 20K15
- Groups of homomorphisms of completely decomposable torsion-free abelian groups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 7(134), 77-80. (Bican) **48** #6277 20K15
- Complete direct sums of torsion-free abelian groups of rank 1 with isomorphic rings of endomorphisms. I. (Russian) *Mat. Zametki* **14** (1973), 867-871. (Procházka) **49** #5206 20K15
- Sums of automorphisms of completely decomposable torsion-free abelian groups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 2(153), 85-92. (A. I. Moskalenko) **52** #5830 20K30
- Seber, George A. F.** Independence and normal variables. *Amer. Statist.* **27** (1973), 110-111. (B. C. Gupta) **51** #4552 62H10
- Scheffe's S-method revisited. *Amer. Statist.* **28** (1974), 164. (E. S. Keeping)

- #2185 62J15
★Linear regression analysis. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, New York-London-Sydney, 1977. xvii + 465 pp. (Emil jøetvoll) 55 #9428 62J05 (62J10)
(with Lucas, H. A.) Estimating coverage and particle density using the line intercept method. *Biometrika* 64 (1977), no. 3, 618-622. (Authors' summary) 58 #13470 F10
(with Calvert, Bruce D.) Minimisation of functions of a positive semidefinite matrix subject to $AX=0$. *J. Multivariate Anal.* 8 (1978), no. 2, 274-281. (C. G. Khatri) 1 #3210 62H99 (15A99)
ry, Jennifer A skew-Hadamard matrix of order 92. *Bull. Austral. Math. Soc.* 5 (1971), 203-204. (L. D. Baumert) 45 #89 05B20
Some results on configurations. *J. Austral. Math. Soc.* 12 (1971), 378-384. (W. M. Kantor) 46 #77 05B30
(with Wallis, Walter Denis; Street, Anne Penfold) ★Combinatorics: Room squares, sum-free sets, Hadamard matrices. Lecture Notes in Mathematics, Vol. 292. Springer-Verlag, Berlin-New York, 1972. iv + 508 pp. (Stanley E. Payne) 52 #13397 5-02
Orthogonal $(0, 1, -1)$ -matrices. *Proceedings of the First Australian Conference on Combinatorial Mathematics* (Univ. Newcastle, Newcastle, 1972), pp. 61-84. Univ. of Newcastle Res. Associates, Newcastle, 1972. (J. J. Seidel) 52 #143 05B20
On supplementary difference sets. *Aequationes Math.* 8 (1972), 242-257 (L. D. Baumert) 47 #3197 05B05
(with Whiteman, Albert Leon) Some classes of Hadamard matrices with constant diagonal. *Bull. Austral. Math. Soc.* 7 (1972), 233-249. (J. J. Seidel) 47 #4821 05B20
(with Cooper, Joan) A construction for Hadamard arrays. *Bull. Austral. Math. Soc.* (1972), 269-277. (J. J. Seidel) 47 #4819 05B20
Recent advances in the construction of Hadamard matrices. *Proceedings of the Fourth Southeastern Conference on Combinatorics, Graph Theory and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1973), pp. 53-89. *Utilitas Math.*, Winnipeg, Man., 1973. (E. Spence) 51 #12539 05-02
(with Di Paola, Jane W.; Wallis, Walter Denis) A list of (v, b, r, k, λ) designs for $v \leq 30$. *Proceedings of the Fourth Southeastern Conference on Combinatorics, Graph Theory and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1973), pp. 249-258. *Utilitas Math.*, Winnipeg, Man., 1973. (Derek Smith) 50 #4334 05B05
(with Hunt, David C.) Cyclotomy, Hadamard arrays and supplementary difference sets. *Proceedings of the Second Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1972), pp. 351-381. *Congressus Numerantium*, No. VII, *Utilitas Math.*, Winnipeg, Man., 1973. (H. B. Mann) 51 #202 05B20 (05B10)
(with Geramita, Anthony V.; Pullman, Norman J.) Families of weighing matrices. *Report of the Algebra Group*, pp. 260-264. *Queen's Papers in Pure and Appl. Math.*, No. 36, *Queen's Univ.*, Kingston, Ont., 1973. (J. J. Seidel) 49 #4808a 05B20
(with Whiteman, Albert Leon) A note on BIBDs. Collection of articles dedicated to the memory of Hanna Neumann, III. *J. Austral. Math. Soc.* 16 (1973), 257-261. (J. F. Lawless) 48 #10848 05B05
Kronecker products and BIBDs. *J. Combinatorial Theory Ser. A* 14 (1973), 248-252. (H. Hanani) 51 #193 05B05
Hadamard matrices of order $28m$, $36m$ and $44m$. *J. Combinatorial Theory Ser. A* 15 (1973), 323-328. (J. J. Seidel) 49 #2426 05B20
Complex Hadamard matrices. *Linear and Multilinear Algebra* 1 (1973), 257-272. (Stanley E. Payne) 50 #4343 05B20
A note on amicable Hadamard matrices. *Utilitas Math.* 3 (1973), 119-125. (J. J. Seidel) 47 #6514 05B20
Some matrices of Williamson type. *Utilitas Math.* 4 (1973), 147-154. (A. L. Whiteman) 48 #5888 05B20
Williamson matrices of even order. *Combinatorial mathematics* (Proc. Second Australian Conf., Univ. Melbourne, Melbourne, 1973), pp. 132-142. *Lecture Notes in Math.*, Vol. 403, Springer, Berlin, 1974. (A. L. Whiteman) 50 #4344 05B20
Families of codes from orthogonal $(0, 1, -1)$ -matrices. *Proceedings of the Third Manitoba Conference on Numerical Mathematics* (Winnipeg, Man., 1973), pp. 419-426. *Utilitas Math.*, Winnipeg, Man., 1974. (N. J. A. Sloane) 49 #7014 94A10
(with Geramita, Anthony V.; Geramita, Joan Murphy) Orthogonal designs. *Report of Algebra Group* (Queen's Univ., Kingston, Ont., 1973/1974), pp. 64-119. *Queen's Papers in Pure and Appl. Math.*, No. 41, *Queen's Univ.*, Kingston, Ont., 1974. (David A. Drake) 54 #12547 05B30
(with Geramita, Anthony V.) Orthogonal designs. II. *Report of Algebra Group* (Queen's Univ., Kingston, Ont., 1973/1974), pp. 165-196. *Queen's Papers in Pure and Appl. Math.*, No. 41, *Queen's Univ.*, Kingston, Ont., 1974. (David A. Drake) 54 #12549 05B30
(with Geramita, Anthony V.) Orthogonal designs. III. Weighing matrices. *Report of Algebra Group* (Queen's Univ., Kingston, Ont., 1973/74), pp. 226-263. *Queen's Papers in Pure and Appl. Math.*, No. 41, *Queen's Univ.*, Kingston, Ont., 1974. (Editors) 52 #13430 05B15 (05B20)
(with Geramita, Anthony V.) Orthogonal designs. IV. Existence questions. *Report of Algebra Group* (Queen's Univ., Kingston, Ont., 1973/74), pp. 264-295. *Queen's Papers in Pure and Appl. Math.*, No. 41, *Queen's Univ.*, Kingston, Ont., 1974. (Editors) 52 #13431 05B15 (05B20)
A note on supplementary difference sets. *Aequationes Math.* 10 (1974), 46-49. (H. B. Mann) 49 #82 05B10
(with Geramita, Anthony V.; Pullman, Norman J.) Families of weighing matrices. *Bull. Austral. Math. Soc.* 10 (1974), 119-122. (J. J. Seidel) 49 #4808b 05B20
(with Geramita, Anthony V.) Orthogonal designs. III. Weighing matrices. *Utilitas Math.* 6 (1974), 209-236. (David A. Drake) 54 #12551 05B30
(with Lakein, Richard B.) On the matrices used to construct Baumert-Hall arrays. *Combinatorial mathematics, III* (Proc. Third Australian Conf., Univ. Queensland, St. Lucia, 1974), pp. 156-170. *Lecture Notes in Math.*, Vol. 452, Springer, Berlin, 1975. (A. L. Whiteman) 51 #7906 05B20
Some remarks on supplementary difference sets. *Infinite and finite sets* (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, pp. 1503-1526. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (S. K. Tharthare) 52 #133 05B10
(with Geramita, Anthony V.) A survey of orthogonal designs. *Proceeding of the Fourth Manitoba Conference on Numerical Mathematics* (Winnipeg, Man., 1974), pp. 121-168. *Congr. Numer.*, No. XII, *Utilitas Math.*, Winnipeg, Man., 1975. (S. K. Tharthare) 52 #134 05B15
(with Geramita, Anthony V.) Orthogonal designs. II. *Aequationes Math.* 13 (1975), no. 3, 299-313. (David A. Drake) 54 #12550 05B30
Constructions for amicable orthogonal designs. *Bull. Austral. Math. Soc.* 12 (1975), 179-182. (Judith Q. Longyear) 51 #5337 05B15
(with Whiteman, Albert Leon) Some results on weighing matrices. *Bull. Austral. Math. Soc.* 12 (1975), no. 3, 433-447. (S. K. Tharthare) 52 #144 05B20
On Hadamard matrices. *J. Combinatorial Theory Ser. A* 18 (1975), 149-164. (J. J. Seidel) 52 #145 05B20
(with Geramita, Anthony V.) Orthogonal Designs. IV. Existence questions. *J. Combinatorial Theory Ser. A* 19 (1975), 66-83. (David A. Drake) 54 #12552 05B30
Construction of Williamson type matrices. *Linear and Multilinear Algebra* 3 (1975/76), no. 3, 197-207. (A. L. Whiteman) 53 #167 05B20
(with Geramita, Anthony V.; Geramita, Joan Murphy) Orthogonal designs. *Linear and Multilinear Algebra* 3 (1975/76), no. 4, 281-306. (David A. Drake) 54 #12548 05B30
(with Eades, Peter) An infinite family of skew weighing matrices. *Combinatorial mathematics, IV* (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), pp. 27-40. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (Authors' summary) 55 #10290 05B20
(with Geramita, Anthony V.) Some new constructions for orthogonal designs. *Combinatorial mathematics, IV* (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), pp. 46-54. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (Noboru Hamada) 55 #127 05B05
(with Billington, Elizabeth, J.; Street, Anne Penfold) Designs from cyclotomy. *Combinatorial mathematics, IV* (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), pp. 158-176. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (Michael J. Ganley) 55 #130 05B05 (12C20)
(with Eades, Peter; Robinson, Peter J.; Williams, Ian S.) An algorithm for orthogonal designs. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1975), pp. 279-292. *Congressus Numerantium*, No. XVI, *Utilitas Math. Publ.*, Winnipeg, Man., 1976. (Judith Q. Longyear) 53 #10617 05B30
(with Cooper, Joan) A note on orthogonal designs in order eighty. *Ars Combinatoria* 1 (1976), no. 1, 267-274. (Edward Spence) 53 #12998 05B30
(with Giles, J. R.) George Szekeres. With affection and respect. *J. Austral. Math. Soc. Ser. A* 21 (1976), no. 4, 385-392. (Editors) 53 #5231 01A70
(with Cooper, Joan) Using cyclotomy to construct orthogonal designs. *J. Austral. Math. Soc. Ser. A* 22 (1976), no. 1, 119-127. (Bhagwandas) 56 #153 05B15
On the existence of Hadamard matrices. *J. Combinatorial Theory Ser. A* 21 (1976), no. 2, 188-195. (S. K. Tharthare) 54 #12543 05B20
(with Newman, Douglas J.) Reduction of angular momentum expressions by matrix arithmetic. *J. Phys. A* 9 (1976), no. 12, 2021-2033. (G. R. Alcock) 54 #14585 81.05
Orthogonal designs. V. Orders divisible by eight. *Utilitas Math.* 9 (1976), 263-281. (David A. Drake) 54 #12553 05B30
(with Eades, Peter; Wormald, Nicholas C.) A note on asymptotic existence results for orthogonal designs. *Combinatorial mathematics, V* (Proc. Fifth Austral. Conf., Roy. Melbourne Inst. Tech., Melbourne, 1976), pp. 76-90. *Lecture Notes in Math.*, Vol. 622, Springer, Berlin, 1977. (Bhagwandas) 58 #5267 05B05 (62K10)
(with Robinson, Peter J.) Orthogonal designs in powers of two. *Ars Combinatoria* 4 (1977), 43-57. (Robert L. Wilson, Jr.) 58 #10530 05B30
(with Cummings, Larry J.) An algorithm for the permanent of circulant matrices. *Canad. Math. Bull.* 20 (1977), no. 1, 67-70. (H. Minc) 56 #8593 15A15 (65F30)
(with Hammer, Joseph; Livingston, Richard) A remark on the excess of Hadamard matrices and orthogonal designs. *Ars Combin.* 5 (1978), 237-254. (Peter Eades) 58 #10505 05B20
(with Robinson, Peter J.) On the structure and existence of some amicable orthogonal designs. *J. Austral. Math. Soc. Ser. A* 25 (1978), no. 1, 118-128. (R. C. Mullin) 58 #290 05B20
See also *Proceedings: Australian Conference on Combinatorial Mathematics*, 49 #10557
Sebesta, Henry R. (with Asher, Robert B.) Optimal control of systems with state-dependent time delay. *Internat. J. Control* (1) 14 (1971), 353-365. (G. D. Allen) 47 #2466 49B35
Sebestyén, Á. (with Lukács, Béla) On the rescaling problem of space-times admitting groups of conformal motions. *Internat. J. Theoret. Phys.* 16 (1977), no. 6, 419-424. (Robert Malhot) 58 #9036 83.22
Sebestyén, Zoltán A weakening of the definition of C^* -algebras. *Acta Sci. Math. (Szeged)* 35 (1973), 17-20. (G. A. Elliott) 48 #12070 46L05
Remarks on the paper of H. Araki and G. A. Elliott "On the definition of C^* -algebras" (Publ. Res. Inst. Math. Sci. 9 (1973/74), 93-112). *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 17 (1974), 35-39 (1975). (Horst Behncke) 52 #3975 46L05
On the definition of C^* -algebras. *Publ. Math. Debrecen* 21 (1974), 207-217. (Robert S. Doran) 51 #11118 (EA 54) (EA 52) 46K05 (46L05)
Some local characterization of boundedness and of C^* -equivalent algebras. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 18 (1975), 197-207 (1976). (B. Yood) 54 #11070 46K05
On a problem of Araki and Elliott. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 18 (1975), 209-221 (1976). (G. A. Elliott) 54 #13578 46K05
On extendibility of $*$ -representations from $*$ -ideals. *Acta Sci. Math. (Szeged)* 40 (1978), no. 1-2, 169-174. (H. Araki) 58 #2314 46K10
Seborg, Dale E. (with Johnson, Ernest F.) Construction of regions of stability for non-linear systems containing time delays. *Internat. J. Control* (1) 12 (1970), 961-976. (H. T. Banks) 45 #3896 34K15 (93D99)

- (with Nieman, R. E.; Fisher, D. Grant) A review of process identification and parameter estimation techniques. *Internat. J. Control* (1) **13** (1971), 209-264. (K. Magnus) **46** #6873 93B30
- (with Topaloglu, Toros) Further comments on "A note on pole assignment" (IEEE Trans. Automatic Control **AC-17** (1972), 822-823). With a reply by B. Sridhar and D. P. Lindorff. *IEEE Trans. Automatic Control* **AC-19** (1974), 94-95. (D. H. Chyung) **53** #5092 93B99
- (with Park, Haingjun) Eigenvalue assignment using proportional-integral feedback control. *Internat. J. Control* **20** (1974), 517-523. (Edward J. Davison) **50** #12374 93C45
- (with Topaloglu, Toros) A design procedure for pole assignment using output feedback. *Internat. J. Control* **22** (1975), no. 6, 741-748. (C. E. Langenhov) **54** #2274 93B99 (93D15)
- (with Shah, Sirish L.; Fisher, D. Grant) Disturbance localization in linear systems by eigenvector assignment. *Internat. J. Control* **26** (1977), no. 6, 853-869. (K. B. Datta) **57** #5258 93B35
- (with Shah, Sirish L.; Fisher, D. Grant) Eigenvalue invariance to system parameter variations by eigenvector assignment. *Internat. J. Control* **26** (1977), no. 6, 871-881. (K. B. Datta) **57** #5259 93B35
- Sebrjakov, G. G.** See *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47) and *Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics*, **48** #8022
- Sec, Antoinette** (with Gérard, Raymond) Feuilletages de Painlevé. *Bull. Soc. Math. France* **100** (1972), 47-72. (F. J. Echarte Reula) **46** #5675 32L05 (34A20, 57D30, 58A15)
- Le problème de Briot et Bouquet. *Journées complexes: équations différentielles et fonctions de plusieurs variables* (Meiz, 1972), Exp. No. V, ii + 18 pp. *Inst. Recherche Math. Avancée, Strasbourg*, 1973. (J. S. Joel) **57** #14012 58A15 (34A20, 57D30)
- Sur les équations de Pfaff polynomiales et pseudopolynomiales complètement intégrables. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 711-713. (H. Goldschmidt) **50** #5154 35A30 (32A99, 57D30, 58A15)
- Sur certaines équations de Pfaff complètement intégrables dans le champ complexe (propriétés du feuilletage associé). *Differential topology and geometry* (Proc. Colloq., Dijon, 1974), pp. 224-233. *Lecture Notes in Math.*, Vol. 484, Springer, Berlin, 1975. (I. Vaisman) **52** #6747 57D30 (58A15)
- Forme de Liouville et trajectoires extrémales. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 9, A413-A415. (Author's summary) **58** #24358 58F05 (58E15)
- See also **Painlevé, Paul** **58** #27154a
- Sechser, Otto** A mathematical approach to the theory of morphology. *Prague studies in mathematical linguistics*, No. 2, pp. 187-201. *Univ. Alabama Press, University, Ala.*, 1967. (See **Zbl** **183**, 222; **MR** **54** #11870) 68A30
- Seck, Friedrich** See *Selbstzeugnisse von Johannes Kepler*, **51** #10005
- Sečkin, G. I.** Integro-differential operators in star-shaped domains. (Russian) *Moskov. Oblast. Ped. Inst. Sb. Trudov* **15** (1972), no. 2 *Teor. Funkcii Funkcional. Anal. i Priložen.*, 217-222 (1973). (See **RZMat** **1974** #2 B138) 32A25
- Groups of operators in multicircular domains. (Russian) *Moskov. Oblast. Ped. Inst. Sb. Trudov* **15** (1972), no. 2 *Teor. Funkcii Funkcional. Anal. i Priložen.*, 223-226 (1973). (See **RZMat** **1974** #2 B136) 32A25
- General integral representations in groups. (Russian) *Moskov. Oblast. Ped. Inst. Sb. Trudov* **15** (1972), no. 2 *Teor. Funkcii Funkcional. Anal. i Priložen.*, 227-231 (1973). (See **RZMat** **1974** #2 B137) 32A25
- Limit values of Temljakov-Bavrin-type integrals and boundary value problems of linear conjugacy. (Russian) *Mathematical analysis and the theory of functions*, No. 1 (Russian), pp. 88-103. *Moskov. Oblast. Gos. Ped. Inst. im. Krupskoi, Moscow*, 1973. (Author's introduction) **58** #28625 32A25
- Integrals of Temljakov-Bavrin type of the first kind and second order and their analogues. (Russian) *Mathematical analysis and the theory of functions*, No. 1 (Russian), pp. 104-116. *Moskov. Oblast. Gos. Ped. Inst. im. Krupskoi, Moscow*, 1973. (Author's introduction) **58** #28626 32A25
- The behavior of an integral with unbounded defining domain at the points of a circle of singularities. (Russian) *Mathematical analysis and the theory of functions*, No. 1 (Russian), pp. 117-123. *Moskov. Oblast. Gos. Ped. Inst. im. Krupskoi, Moscow*, 1973. (I. Bavrin (**RZMat** **1975** #5 B178)) **58** #28627 32A25
- Bavrin's operator method, and integral representations that are connected with groups and semigroups of operators. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 770-773. (J. Siciak) **51** #3496 32A25
- See also **Mathematical analysis and the theory of functions**, **58** #29250 and **Mathematical analysis and the theory of functions**, **58** #29266
- Seckler, B. D.** See **Mal'cev, A. I.**, **50** #1878 and **Mal'cev, A. I.**; et al., **52** #13380
- Secomb, T. W.** Flow in a channel with pulsating walls. *J. Fluid Mech.* **88** (1978), no. 2, 273-288. (William H. H. Banks) **58** #25350 76.35 (92A05)
- Secrest, Don** (with Kouri, Donald J.; Levin, F. S.; Craigie, Michael) On a general relationship between solutions of alternative sets of equations for rearrangement channel T operators. *J. Chem. Phys.* **61** (1974), 17-20. (Authors' summary) **53** #12360 81.47
- (with Scherzinger, Ann) Table errata: *Tables of integral transforms*, Vol. II (McGraw-Hill Book Co., New York, 1954) by A. Erdelyi, W. Magnus, F. Oberhettinger & F. G. Tricomi. *Math. Comp.* **31** (1977), no. 137, 328-329. (Editors) **54** #14304 65A05
- Šeda, Anthony Karel** (with Porter, Timothy) Une application de la théorie des obstructions équivariantes à la théorie des espaces fibrés. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 745-746. (S. Y. Hussein) **50** #1238 55F05 (55G36)
- A continuity property of Haar systems of measures. *Ann. Soc. Sci. Bruxelles Sér. I* **89** (1975), no. 4, 429-433. (A. Revuz) **53** #6555 55F10 (28A35)
- Un concept de mesures invariantes pour les groupoides topologiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **208** (1975), no. 23, A1603-A1605. (K. H. Hofmann) **53** #696 22A99 (43A05)
- On compact transformation groupoids. (French summary) *Cahiers Topologie Géom. Différentielle* **16** (1975), no. 4, 409-414, 446 (1976). (Herbert Abels) **54** #6106 54H15
- An extension theorem for transformation groupoids. *Proc. Roy. Irish Acad. Sect. A* **75** (1975), no. 18, 255-262. (Jean Pradines) **54** #3725 57E10 (20L15)
- (with Wickstead, Anthony) On invariant measures for compact transformation groups. *Ann. Soc. Sci. Bruxelles Sér. I* **90** (1976), no. 4, 277-283. (James C. Smith) **54** #13039 28A70
- Haar measures for groupoids. *Proc. Roy. Irish Acad. Sect. A* **76** (1976), no. 5, 257-262. (K. H. Hofmann) **55** #629 28A70 (22A99)
- (with Dakin, M. K.) G -spaces and topological groupoids. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **12(32)** (1977), no. 1, 191-198. (Jean-Paul Brasselet) **57** #13942 55F10
- Šeda, Valter** On the three-point boundary-value problem for a non-linear third-order ordinary differential equation. *Arch. Math. (Brno)* **8** (1972), 85-98 (1973). (L. D. Fountaine) **48** #619 34B15
- On an application of the Stone theorem in the theory of differential equations. (Czech summary) *Časopis Pěst. Mat.* **97** (1972), 183-189, 206. (S. Beljaskii (**RZMat** **1972** #11 B265)) **50** #686 34C10
- On a boundary value problem for a nonlinear second-order differential equation. *Mat. Časopis Sloven. Akad. Vied* **22** (1972), 231-234. (L. D. Fountaine) **47** #5342 34B15
- On a nonlinear boundary value problem of higher order. *Proceeding of Equations* (Third Czechoslovak Conf. Differential Equations and Appl., Brno, 1972), pp. 145-150. *Folia Fac. Sci. Natur. Univ. Purkynianae Brunensis, Ser. Monograph., Tomus 1, Purkyniana, Brno*, 1973. (J. W. Heidel) **50** #675 34B15
- On a nonlinear boundary value problem. (Slovak and Russian summaries) *Fac. Rerum Natur. Univ. Comenian. Math.* **30** (1975), 95-119. (L. Erbe) **53** #3434 34B15
- (with Göhde, Dietrich) Über Koinzidenzsätze und deren Anwendung auf Funktionaldifferentialgleichungen. *Beiträge Anal. Heft 7* (1975), 43-54. (Sadatoshi Aizawa) **56** #1146 47H10
- (with Duchoň, Miloslav) Professor Anton Hut'a on the occasion of his sixtieth birthday. (Slovak) *Mat. Časopis Sloven. Akad. Vied* **25** (1975), no. 4, 377-381. (Ed. J. Vaisman) **54** #31 01A70
- Two remarks on boundary value problems for ordinary differential equations. *Differential Equations* **26** (1977), no. 2, 278-290. (S. J. Lee) **57** #764 34B10
- Sedaev, A. A.** The H -property in symmetric spaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 11 (1970), 67-80. (H. Triebel) **45** #4140 46E30
- (with Semenov, E. M.) The possibility of describing interpolation spaces in terms of Peetre's K -method. (Russian) *Optimizacija* (No. 4(21) (1971), 98-114. (S. D. Riemenschneider) **51** #6391 46E30 (46M35)
- The properties of operators in an interpolation pair of Banach spaces. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU No. 3* (1971), 108-125. (S. D. Riemenschneider) **47** #2349 46M35
- A description of the interpolation spaces of the couple (L^p_α, L^p_β) , and certain real questions. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 798-800. (S. D. Riemenschneider) **48** #2748 46E35
- A problem of G. Ja. Lozanovskii. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU Vyp. 14 Sb. Statei Teor. Operator. Uravnenii* (1971), 63-67. (**RZMat** **1975** #8 B652) **57** #7105 46A40
- (with Bryskin, I. B.) The geometric properties of the unit ball in spaces of the type of the Hardy classes. (Russian) *Investigations on linear operators and the theory of functions*, IV. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1973), 7-16. (L. I. Hedberg) **52** #14963 46E15 (30A78)
- Weak and strong convergence in interpolation spaces. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Drogoňov, 1973)*, Functional analysis and its applications (Russian), pp. 245-267. *Akad. Nauk SSSR Central. Ekonom.-Mat. Inst., Moscow*, 1975. (I. E. Šarygin) **58** #12426 46M35
- Sedelev, B. V.** (with Sadohin, Ju. N.) A probabilistic model of the reproduction of physical volume of basic resources. (Russian) *Ekonom. i Mat. Metody* **5** (1969), 12-15. (From the authors' introduction) **45** #8249 90B05
- Distributed lags in economic processes and estimation of their parameters. (Russian) *Ekonom. i Mat. Metody* **8** (1972), 650-664. (H. Toutenbury) **46** #8645 90A15
- See also **Statistical analysis of economic time series and prediction**, **50** #1446
- Sedello, M.** ★Existence of a competitive equilibrium for an economy with nonconvex preferences. *Mathematical Systems in Economics*, No. 15. *Verlag Anton Hain, Meisenheim am Glan*, 1975. iii + 67 pp. (John Roberts) **53** #4931 90A15
- (with Duske, Jürgen; Parchmann, Rainer; Specht, J.) IO-macrolanguages and attributed translations. *Information and Control* **35** (1977), no. 2, 87-105. (Daniel Rosenkrantz) **57** #18242 68A30
- Sedenko, V. I.** Stability of the rotation of a conservative continuum. (Russian) *Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk*, **1976**, no. 4, 43-48. (Author's summary) **58** #6549 34D20 (70.34)
- Sedgewick, Robert** The analysis of Quicksort programs. *Acta Informat.* **7** (1976/77), 327-355. (Zvi Galil) **56** #10127 68A10
- Permutation generation methods. *Comput. Surveys* **9** (1977), no. 2, 137-164. (Donald B. Johnson) **57** #4607 68A10
- Quicksort with equal keys. *SIAM J. Comput.* **6** (1977), no. 2, 240-267. (Amir Bagchi) **56** #7309 68A10
- Data movement in odd-even merging. *Proceedings of a Conference on Theoretical Computer Science (Univ. Waterloo, Waterloo, Ont., 1977)*, pp. 163-172. *Comput. Sci. Dept., Univ. Waterloo, Waterloo, Ont.*, 1978. (From the summary) **58** #13904 68A10
- Data movement in odd-even merging. *SIAM J. Comput.* **7** (1978), no. 3, 239-250. (Jaroslav Morávek) **58** #3660 68A10 (68A20)
- Sedgwick, A. E.** (with Hull, T. E.; Enright, W. H.; Fellen, B. M.) Comparing numerical methods for ordinary differential equations. *SIAM J. Numer. Anal.* **9** (1972), 603-610. (errata, *ibid.* **11** (1974), 681. (J. C. Butcher) **50** #3577 65L05
- Šedivá-Trnková, Věra** On descriptive classification of set-functors. I. *Comment. Math. Univ. Carolinae* **12** (1971), 143-174. (O. Wyler) **45** #3515 18A99 (04A15)
- On descriptive classification of set-functors. II. *Comment. Math. Univ. Carolinae* **13** (1971), 345-357. (O. Wyler) **45** #3516 18A99 (04A15)
- (with Reiterman, Jan) When categories of presheaves are binding. *General topology*

- its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971), pp. 447-450. *Academia, Prague*, 1972. (R. Fritsch) **51** #644 (EA 51) 15
- Non-constant continuous mappings of metric or compact Hausdorff spaces. *Comment. Math. Univ. Carolinae* **13** (1972), 283-295. (H. Herrlich) **46** #2623 54C05 (C99)
- (with Pultr, Aleš) Strong embeddings into categories of algebras. *Illinois J. Math.* (1972), 183-195. (H. Herrlich) **45** #6724 08A15
- (with Koubek, Václav) The Cantor-Bernstein theorem for functors. *Comment. Math. Univ. Carolinae* **14** (1973), 197-204. (Joseph Chacron) **48** #8596 (EA 51) 399
- X^m is homeomorphic to X^n iff $m \sim n$ where \sim is a congruence on natural numbers. *Math. 80* (1973), no. 1, 51-56. (R. J. Koch) **49** #3869 (EA 51) 54H10 (M30)
- On minimal realizations of behavior maps in categorical automata theory. *Comment. Math. Univ. Carolinae* **15** (1974), 555-566. (E. G. Manes) **50** #4692 18B20
- Spaces which admit negative powers and all roots. *Comment. Math. Univ. Carolinae* (1974), 571-572. (M. Yamada) **50** #7394 20M30
- Automata and categories. *Mathematical foundations of computer science 1975 fourth Sympos., Mariánské Lázně, 1975*, pp. 138-152. *Lecture Notes in Comput. Sci.*, **1**, 32. Springer, Berlin, 1975. (E. G. Manes) **52** #13985 18B20 (93A05, 94A30)
- Strong embeddings of the category of graphs into topological categories. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 11-515. *Academia, Prague*, 1975. (Dana May Latch) **54** #2752 18B15
- Minimal realizations for finite sets in categorical automata theory. *Comment. Math. Univ. Carolinae* **16** (1975), 21-35. (Horst Reichel) **51** #8202 18B20
- (with Adámek, Jiří; Koubek, Václav; Reiterman, Jan) Free algebras, input processes and free monads. *Comment. Math. Univ. Carolinae* **16** (1975), 339-351. (E. G. Manes) **51** #8203 18B20
- Products of topological spaces represent any semigroup. *Comment. Math. Univ. Carolinae* **16** (1975), 393-394. (Editors) **51** #3343 20M30 (54H10)
- (with Reiterman, Jan) The categories of presheaves containing any category of algebras. *Dissertationes Math. (Rozprawy Mat.)* **124** (1975), 53 pp. (F. E. J. Linton) #527 18A25
- Representation of semigroups by products in a category. *J. Algebra* **34** (1975), 1-204. (W. Taylor) **51** #3342 20M30
- (with Adámek, Jiří; Koubek, Václav) Sums of Boolean spaces represent every group. *Pacific J. Math.* **61** (1975), no. 1, 1-6. (R. S. Pierce) **53** #2790 06A40 (0K99, 08A10)
- On a representation of commutative semigroups. *Semigroup Forum* **10** (1975), no. 3, 13-214. (W. Taylor) **51** #10512 20M30
- On products of binary relational structures. *Comment. Math. Univ. Carolinae* **17** (1976), no. 3, 513-521. (William A. Lampe) **54** #12601 08A05 (06A10)
- All small categories are representable by continuous nonconstant mappings of compacta. (Russian) *Dokl. Akad. Nauk SSSR* **230** (1976), no. 4, 789-791. (J. R. Isbell) #5316 18B99
- (with Adámek, Jiří) Realization is not universal. *Algebraische Methoden und ihre Anwendungen in der Automatentheorie (Problemsem., Weissig, 1976)*, pp. 38-55. *Vorträge zur Automatentheorie, Heft 21, Weiterbildungszentrum für Math. Kybernetik u. Elektentechn.*, Techn. Univ. Dresden, Dresden, 1977. (Aleksander Albicki) **58** #16825 18B20
- (with Adámek, Jiří) Recognizable and regular languages in a category. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 106-211. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (Václav Koubek) #7 #12636 18B20 (68A25, 94A30)
- Relational automata in a category and their languages. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 340-355. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (Jiří Adámek) **58** #16826 18B20 (18B10, 94A30)
- Categorical aspects are useful for topology. *General topology and its relations to modern analysis and algebra, IV (Proc. Fourth Prague Topological Sympos., Prague, 1976)*, Part A, pp. 211-225. *Lecture Notes in Math.*, Vol. 609, Springer, Berlin, 1977. (E. G. Manes) **56** #16573 54D99
- (with Adámek, Jiří) On languages, accepted by machines in the category of sets. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 523-531. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (Aleksander Albicki) **57** #5517 94A30 (68A30, 68A25)
- Productive representations of semigroups by pairs of structures. *Comment. Math. Univ. Carolinae* **18** (1977), no. 2, 383-391. (K. D. Magill, Jr.) **56** #3082 18A99 (20M30)
- (with Reiterman, Jan) Topological categories containing any category of algebras. *Czechoslovak Math. J.* **27(102)** (1977), no. 4, 626-643. (R. Fritsch) **58** #16822 18B15
- (with Koubek, Václav) Isomorphisms of sums of Boolean algebras. *Proc. Amer. Math. Soc.* **66** (1977), no. 2, 231-236. (Stephen Comer) **57** #200 06A40
- Jaroslav Hilbert's third problem. (Czech) *Pokroky Mat. Fyz. Astronom.* **16** (1971), 292-300. (Editors) **58** #12668 50A30 (01A60)
- George Cantor, the founder of set theory (on the 100th anniversary of Cantor's first work on set theory). (Czech) *Pokroky Mat. Fyz. Astronom.* **20** (1975), 5-14. (Editors) **58** #10144 01A55
- J. Ondřej Über eine birationale Transformation n_3 -Grades im n -dimensionalen projektiven Raum S_n . *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* **25** (1971), 35-43. (S. S. Subramanyam) **46** #6151 50D20
- Alkin, N. M. (with Kabanov, G. A.) A certain physical principle of reliability theory and some consequences of it. (Russian) *Mathematical methods in quality control and reliability (Proc. All-Union Colloq., Tashkent, 1967)* (Russian), pp. 103-124. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1969. (A. Obretenov) **45** #6134 62N05
- Jiří Adámek ★ Einführung in die Graphentheorie. Zweite Auflage. Aus tschechischem Original vom Autor übersetzt. Mathematische Schülerbücherei, No. 40. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1972. 171 pp. (Editors) **49** #8888 05Cxx
- The reconstruction of a connected graph from its spanning trees. *Mat. Časopis Sloven. Akad. Vied* **24** (1974), no. 4, 307-314. (B. Manvel) **54** #175 05C99
- Some properties of trees. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 467-470. *Academia, Prague*, 1975. (B. Manvel) **52** #5457 05C05
- Perfect and quasiperfect graphs. (Czech. English summary) *Časopis Pěst. Mat.* **100** (1975), no. 2, 135-141. (Pavol Hell) **54** #5055 05C99
- On magic graphs. (Russian summary) *Math. Slovaca* **26** (1976), no. 4, 329-335. (Rudolf Halin) **55** #7853 05C99
- ★ Úvod do teorie grafů. (Czech) [Introduction to graph theory] Cesta k Vědě, No. 25. [Path to Knowledge, No. 25] *Academia, Prague*, 1977. 227 pp. (Editors) **58** #10538 05Cxx
- Sedláček, Ladislav Groupoids and groups with operators. (Czech. Russian and German summaries) *Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci* **6** (1962), 33-66. (Author's summary) **45** #8759 20N99
- Universal algebras. (Czech. Russian and German summaries) *Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci* **15** (1964), 39-68. (P. Kratochvíl) **45** #3297 08A25
- An application of the generalized Jordan-Hölder theorem in the theory of direct products of sets with operators. (Czech. German summary) *Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci* **21** (1966), 45-57. (B. M. Schein (Šain)) **46** #8935 08A05
- Zum Problem des Isomorphismus der direkten Produkte von Gruppoiden. (Czech summary) *Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci* **27** (1968), 111-134. (B. M. Schein (Šain)) **46** #9221 20N99
- Zum Problem der inneren direkten Produkte von Gruppoiden. (Czech and Russian summaries) *Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci* **41** (1973), 27-38. (D. A. Robinson) **50** #4784 (E 50 #4440) 20L05
- Beitrag: "Zum Problem der inneren direkten Produkte von Gruppoiden" (Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci **41** (1973), 27-38). Collection of papers on the theory of ordered sets and general algebra. *Acta Fac. Rerum Natur. Univ. Comenian. Math., Special No.* (1975), 43-45. (B. M. Schein (Šain)) **50** #4440 08A10 (20L10)
- Sedláček, Z. Perturbation approach to plasma oscillations. *Czechoslovak J. Phys.* **18B** (1968), no. 5, 618-628. (Author's summary) **52** #7392 81A7
- Continuum eigenmodes of an inhomogeneous plasma. *Czechoslovak J. Phys.* **22B** (1972), no. 6, 439-458. (Author's summary) **52** #7393 81A7
- On the connection between the continuum eigenfunctions and the dispersion function of the Vlasov operator. *Czechoslovak J. Phys.* **23B** (1973), 892-907. (Woodford W. Zachary) **52** #7394 81A7
- Time-independent canonical perturbation theory for nearly multiple-periodic systems. *J. Phys. A* **8** (1975), no. 7, 1067-1074. (A. D. Brjuno) **57** #8253 7034 (34C30)
- The averaged Hamiltonian of a time-independent nearly multiple-periodic system. *J. Phys. A* **8** (1975), no. 9, 1384-1389. (V. G. Kolomeic) **53** #9776 7034
- Sedleckí, A. M. Nonharmonic Fourier series. (Russian) *Sibirsk. Mat. Ž.* **12** (1971), 1100-1114. (V. M. Kokilašvili) **52** #11449 42A20
- Interpolation by entire functions of exponential type. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. No. 89* (1971), 55-64. (G. Halász) **48** #6429 30A80
- The biorthogonal expansions in exponential functions. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 583-590. (I. N. Baker) **48** #2653 42A60
- Continuation periodic in the mean and bases of exponential functions in $L^p(-\pi, \pi)$. (Russian) *Mat. Zametki* **12** (1972), 37-42. (A. Devinatz) **48** #6806 42A64 (30A18, 42A84)
- Complete and uniformly minimal systems of exponential functions in $L^p(-\pi, \pi)$. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. No. 146 Vysš. Mat.* (1972), 167-174. (J. Musielak) **49** #5697 42A64 (33A10)
- Interpolation in H^p spaces in a half-plane. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 1293-1295. (C. Tanaka) **47** #8867 30A80 (30A78)
- Mean periodic extension of continuous functions with preservation of smoothness. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 302-304. (R. P. Boas, Jr.) **48** #6807 42A84 (26A15, 42A64)
- Equivalent sequences in certain function spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 7(134), 85-91. (Z. Čanturija) **48** #12021 46E15
- The stability of the completeness and of the minimality in L^2 of a system of exponential functions. (Russian) *Mat. Zametki* **15** (1974), 213-219. (A. Olevskii) **50** #7946 42A64 (30A18)
- Interpolation of sequences from l^r by functions from H^p . (Russian) *Studies in differential equations and their applications. Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp. 201* (1974), 159-163. (Editors) **57** #16610 30A80 (46E15)
- The solvability of a certain integral equation with an initial condition. (Russian) *Differentsial'nye Uravneniya* **11** (1975), no. 12, 2283-2285, 2304. (N. K. Karapetjan) **52** #14877 45A05
- An equivalent definition of the H^p spaces in the half-plane, and some applications. (Russian) *Mat. Sb. (N.S.)* **96(138)** (1975), 75-82, 167. (B. Korenblum) **51** #5935 30A78
- The equiconvergence and equisummability of nonharmonic Fourier expansions and ordinary trigonometric series. (Russian) *Mat. Zametki* **18** (1975), no. 1, 9-17. (S. Baron) **52** #6310 42A56
- Expansions in exponential functions. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 4, 820-829, 886. (H. J. Landau) **52** #6258 41A30
- On the Müntz-Szász problem for the space $C[0, 1]$. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp. 260* (1975), 89-98. (G. Godini) **57** #965 41A10
- Estimates for entire functions of exponential type that belong to L^p on the real axis. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 1(181), 255-256. (V. P. Petrenko) **53** #13565 30A66
- Complete and minimal systems of exponentials in the spaces $L^p(-\pi, \pi)$, $1 < p < 2$. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp. 290* (1976), 63-69. (RŽMat **1977** #2 B83) **58** #17680 42A64
- A class of biorthogonal expansions in exponential functions. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 2, 393-415, 479. (H. J. Landau) **58** #1986 42A52

- Excesses of systems of exponential functions. (Russian) *Mat. Zametki* **22** (1977), no. 6, 803-814. (Z. Čanturija) **57** #17111 42A64 (33A10)
- The completeness of an exponential system in spaces of differentiable functions. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. No. 334* (1977), 98-103. (A. L. Brodskii) **58** #23336 42A64 (46E35)
- Expansions of functions in Dirichlet series on closed convex polygons. (Russian) *Sibirsk. Mat. Z.* **19** (1978), no. 4, 878-887, 956. (N. V. Rao) **58** #11435 30A84
- Sedmak, G.** (with Rusconi, L.) Un metodo di calcolo automatico a prefiltraggio adattivo dello spettro di potenza di un segnale stocastico. (English summary) *Calcolo* **8** (1971), 115-138. (Authors' summary) **46** #3187 94A05
- Sedol, Ja. Ja.** See **Sedols, J.**
- Sedola, H. M.** (with Bespalova, S. A.; Klokovs, J.) Methods for finding real roots. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, **12** (Russian), pp. 25-37. *Izdat. "Zinatne", Riga*, 1973. (I. Pāvaioliu) **49** #11794 65H05
- Sedols, J.** Determination of the probabilistic characteristics of a not fully accessible circuit with losses and waiting. (Russian) *Problems on the distribution of information* (Russian), pp. 177-180, 197. *Izdat. "Nauka", Moscow*, 1973. (Author's summary) **51** #15198 94A15
- (with Jonins, G.) An investigation of a full-availability circuit with repeated calls and advanced service. (Russian) *Methods of teletraffic theory in information distribution systems* (Russian), pp. 75-84. *Izdat. "Nauka", Moscow*, 1975. (Editors) **56** #10892 90B25
- Sedov, L. I.** ★Механика сплошной среды. Том I. (Russian) [Continuum mechanics. Vol. I.] With supplements by V. V. Lohin and the author: "Nonlinear tensor functions of several tensor arguments" (Prikl. Mat. Meh. **27** (1963), 393-417) and the author: "Models of continuous media with internal degrees of freedom" (ibid. **32** (1968), 771-785). *Izdat. "Nauka", Moscow*, 1970. 492 pp. (S. Zahorski (Zbl 206, 544)) **54** #1764 73.00 (78.00, 80.00)
- ★Механика сплошной среды. Том II. (Russian) [Continuum mechanics. Vol. II.] *Izdat. "Nauka", Moscow*, 1970. 568 pp. (Editors) **54** #1765 73.00 (76.00)
- ★Методы подобия и размерности в механике. (Russian) [Similarity and dimensional methods in mechanics] Seventh edition. *Izdat. "Nauka", Moscow*, 1972. 440 pp. (Editors) **50** #3732 76.00 (73.00)
- ★Теоретические модели. (Russian) [Theoretical models] *Makedon. Akad. Nauk i Umetnost., Skopje*, 1975. 27 pp. (Editors) **52** #4747 69.00 (73.00, 76.00)
- ★Мécanique des milieux continus. Tome I. Traduit de la deuxième édition russe par V. Platonov et revu par V. Parton. Avec des suppléments par V. Lokhine et l'auteur: "Fonctions tensorielles non linéaires de plusieurs arguments tensorielles" (Prikl. Mat. Meh. **27** (1963), 393-417) et par l'auteur: "Modèles des milieux continus à degrés de liberté" (ibid. **32** (1968), 771-785). *Éditions Mir, Moscow*, 1975. 539 pp. (1 plate) (Editors) **54** #1766 73.00 (78.00, 80.00)
- ★Мécanique des milieux continus. Tome II. Traduit de la deuxième édition russe par V. Platonov et revu par V. Parton. *Éditions Mir, Moscow*, 1975. 568 pp. (Editors) **54** #1767 73.00 (76.00)
- ★Механика сплошной среды. Том I. (Russian) [Continuum mechanics. Vol. I.] Third edition, revised and augmented. *Izdat. "Nauka", Moscow*, 1976. 535 pp. (Editors) **55** #7037 73.00 (80.00)
- ★Механика сплошной среды. Том II. (Russian) [Continuum mechanics. Vol. II.] Third edition, revised and augmented. *Izdat. "Nauka", Moscow*, 1976. 573 pp. (Editors) **55** #7038 73.00 (76.00, 80.00)
- Theoretical constructions of selection of actual events from the virtual ones. *Applications of methods of functional analysis to problems in mechanics* (Joint Sympos., IUTAM/IMU, Marseille, 1975), pp. 482-489. *Lecture Notes in Math.*, 503. Springer, Berlin, 1976. (Vadim Komkov) **58** #32190 70.49
- On prospective trends and problems in mechanics of continuous media. *Prikl. Math. Meh.* **40** (1976), no. 6, 963-980 (Russian); translated as *J. Appl. Math. Mech.* **40** (1976), no. 6, 917-931 (1977). (Gérard A. Maugin) **57** #14697 73.00
- ★Методы подобия и размерности в механике. (Russian) [Similarity and dimensional methods in mechanics] Eighth edition, revised. *Izdat. "Nauka", Moscow*, 1977. 438 pp. (V. Komkov) **56** #10351 76.00
- Perspective trends and problems in continuum mechanics. (Russian) *Vestnik Akad. Nauk SSSR* **1977**, no. 2, 36-49. (Editors) **57** #4741 73.00
- See also **Theoretical and applied mechanics**, **50** #11915; **General mechanics**, **50** #12525; **Mechanics of solid deformable bodies**, **52** #2319; **Hydromechanics**, **52** #2369; **Hydromechanics**, **53** #2123; **Mechanics in the USSR in the past 50 years in four volumes**, **54** #9235; **Mechanics in the USSR in the past 50 years in four volumes**, **54** #9288; **Problems: Mechanics of a solid deformable body**, **54** #12425; **Jahnke, E.**; et al., **56** #3366; **General mechanics**, **56** #4288; **Mechanics of solid deformable bodies**, **56** #4321; **Problems of hydrodynamics and continuum mechanics**, **57** #14699; **Mechanics of a deformable solid body**, **57** #18362 and **General mechanics**, **58** #8594
- Sedov, V. D.** See **Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics**, **47** #4666 (EA 47) and **Foundations of automatic control**, **53** #5066
- Sedov, V. N.** Functions that tend to a polynomial at infinity. (Russian) *Imbedding theorems and their applications* (Proc. Sympos., Baku, 1966) (Russian), pp. 204-212, 247. *Izdat. "Nauka", Moscow*, 1970. (J. Musielak) **47** #7416 46E35 (41A10)
- Weight spaces, and nonregular equations. (Russian) *Application of functional methods to the boundary value problems of mathematical physics* (Proc. Third Soviet-Czechoslovak Conf., Novosibirsk, 1971) (Russian), pp. 224-235. *Inst. Mat. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1972. (M. S. Agranovič) **51** #6399 46E35 (35J40)
- Weighted spaces. The imbedding theorem. (Russian) *Differencial'nye Uravnenija* **8** (1972), 1452-1462. (L. Cattabriga) **46** #9715 46E35
- Weight spaces. Boundary conditions. (Russian) *Differencial'nye Uravnenija* **8** (1972), 1835-1847, 1912. (J. Chrastina) **47** #2350 46E35
- Non-regular differential operators. Elliptic equations. (Russian) *Differencial'nye Uravnenija* **8** (1972), 2048-2061, 2113. (J. Nečas) **49** #839 35J40
- Sedová, Dagmar** Verallgemeinerung der Sätze von Poincaré und Perron für Systeme von Differenzengleichungen im linearen Raum. (Czech and Russian summaries) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **41** (1973), 91-95. (R. A. Rosenbaum) **51** #1179 39A10
- Beweis eines Perronschen Satzes. (Czech and Russian summaries) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **41** (1973), 97-105. (R. A. Rosenbaum) **51** #1180 39A10
- Sedova, G. L.** Simple waves and small perturbations in magnetizable and polar media. (Russian) *Izv. Akad. Nauk SSSR Meh. Židk. Gaza* **1974**, no. 6, 114-118. (Author's summary) **56** #14075 76.35
- Sedra, A. S.** (with Druzeta, A.) Multi-threshold circuits in the design of multi-state elements. *Conference Record of the 1973 International Symposium on Multiple-Logic* (Univ. Toronto, Toronto, Ont.), pp. 49-58. Office of Naval Res., Arlington, 1973. (Authors' summary) **51** #5187 94A20
- Sedrakjan, S. G.** The inversion of a convolution type transformation along curves. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Fiz.-Mat. Nauk* (1972), no. 6, 424-439, 479. (S. G. Samko) **48** #6836 44A35
- Sedraski, Joseph** (with deGraft-Johnson, K. T.) Estimation of domain means using two-phase sampling. *Biometrika* **60** (1973), 387-393. (P. W. Mielke, Jr.) **47** #562D05
- (with deGraft-Johnson, K. T.) Comparison of ratio estimators in two-phase sampling. *Ann. Inst. Statist. Math.* **26** (1974), 339-350. (P. W. Mielke, Jr.) **50** #1562D05
- (with Singh, Bahadur) Sample size allocation in two-phase sampling. *Comm. Statist.* **3** (1974), 1025-1040. (Jean Larisse) **51** #4489 62D05
- (with Liao, Henry) Sequential sampling for the comparison of domain means. *Biometrika* **62** (1975), no. 3, 690-693. (David Bellhouse) **53** #9539 62L05 (62D05)
- (with Singh, Bahadur) The preposterior distribution of the inverse of a sum of cross-product matrices. *Biometrika* **64** (1977), no. 3, 649-651. (W. E. Strawder) **58** #3198 62H10
- (with Brogan, Donna R.) Estimating one mean of a bivariate normal distribution using a preliminary test of significance and a two-stage sampling scheme. *Statist.—Theory Methods* **A7** (1978), no. 2, 173-186. (T. A. Bancroft) **58** #1862F10
- Sedraski, N.** (with Okamoto, Masashi) Estimation of the probabilities of misclassification for a linear discriminant function in the univariate normal case. *Ann. Inst. Statist. Math.* **23** (1971), 419-435. (M. Knott) **47** #9779 62H30
- Allocation of sequentially available units to treatment groups. (French summary) *Proceedings of the 39th Session of the International Statistical Institute* (Vienna, 1972), Vol. 2. *Bull. Inst. Internat. Statist.* **45** (1973), book 2, 393-400. (Thomas A. Bancroft) **51** #11873 62L05
- Sedunov, E. V.** (with Ermakov, S. M.) Randomized designs of regression experiments: one free point. (Russian) *Operations research and statistical modeling*, No. 1 (Russian), pp. 61-71. *Izdat. Leningrad. Univ., Leningrad*, 1972. (Ivar Petersen) **49** #6520 62K99 (65D30)
- Regression experiment designs that are unbiased in the L_2 metric. (Russian. English summary) *Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Vyp.* **4** (1973), 152. (Ivar Petersen) **49** #1700 62K05
- (with Ermakov, S. M.) Unbiased designs for regression experiments in a finite-dimensional space of functions. (Russian. English summary) *Vestnik Leningrad. Univ. No. 1 Mat. Meh. Astronom. Vyp.* **1** (1974), 12-20, 163. (Ivar Petersen) **49** #1700 62K99
- (with Ermakov, S. M.; Melas, V. B.) Some nontraditional approaches in the design of regression experiments. (Russian) *Operations research and statistical modeling*, No. 3 (Russian), pp. 163-193, 211. *Leningrad. Univ., Leningrad*, 1975. (Editors) **58** #31626 62K05
- On the choice of a method of estimation in a design procedure unbiased in metric for regression experiments. (Russian. English summary) *Teor. Veroyatn. i Primenen.* **21** (1976), no. 2, 435-441. (Ivar Petersen) **54** #3992 62K05
- (with Trofimov, A. I.; Jakovleva, N. G.) Construction of optimal randomized designs of experiments by linear programming methods. (Russian. English summary) *Kibernetika (Kiev)* **1977**, no. 5, 82-87. (Editors) **58** #20481 90C50 (90C05)
- See also **Karlin, Samuel**; et al., **56** #920
- Sedwick, J. L.** (with Elliott, David L.) Linearization of analytic vector fields in the transitive case. *J. Differential Equations* **25** (1977), no. 3, 377-390. (Arthur J. Kufner) **57** #525 22E05 (58H05, 57D25)
- Sedyh, E. I.** Evolution model of two interacting biological systems. *Avtomat. i Telemekh.* **1977**, no. 7, 122-134 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 7, part 2, 1046-1056. (J. M. Skowronski) **57** #2643 92A15
- Sedyh, E. V.** (with Ul'janov, V. N.; Borisov, Ju. P.) Optimization of a stationary random process according to criteria for the minimum of the integral and mean-square error. (Russian) *Automation of heavy duty power plants. Trudy VTI No. 1* (1974), 9-14. (V. N. Igolkin) **51** #9947 93E20
- Sedyh, V. D.** Singularities of the convex hull of a curve in R^3 . (Russian) *Funkcionaln. i Priložen.* **11** (1977), no. 1, 81-82. (A. V. Žubr) **58** #13082 57D45 (32C05)
- Sedykh, E. I.** See **Sedyh, E. I.**
- Sędzimir, Zbigniew** The concept of describing multigraphs and dimultigraphs by means of incidence lists. (Polish. English and Russian summaries) *Selected problems of foundations of systems theory. Prace Nauk. Inst. Cybernet. Techn. Politechn. Wrocław* **No. 25 Ser. Stud. i Materiały No. 17** (1976), 129-148. (B. Zelinka) **57** #2977 (05C99)
- Sędziw, Stanisław** (with Mamrila, Juraj) The existence of periodic solutions of a dynamical system in a cylindrical space. (Italian summary) *Boll. Un. Mat. Ital.* (1971), 119-122. (F. Odeh) **45** #661 34C35
- Uniqueness and existence of solutions of a boundary-value problem for a system of differential equations. *Zeszyty Nauk. Uniwers. Jagiello. Prace Mat.* **15** (1971), 141-146. (Hugo Teufel, Jr.) **48** #6526 34B15
- Periodic solutions of differential equations in the cylindrical space. *Ann. Math.* **26** (1972), 335-339. (H. C. Howard) **46** #7637 34C25
- Stability of flows in ventilation networks. (Russian summary) *Bull. Acad. Sci. Sér. Sci. Tech.* **21** (1973), 779-784. (Author's summary) **53** #15320 90B10
- On the existence of a solution of a certain nonlinear boundary value problem. *Zeszyty Nauk. Uniwers. Jagiello. Prace Mat.* **16** (1974), 31-33. (J. W. Bell) **58** #15320 90B10

- #13699 34B15
Stability of certain third order vector differential equations. (Russian summary) *Ukr. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), 15-21. (F. Brauer) #3447 34D20
(with Gustafson, G. B.) Solution space decompositions for n th order linear differential equations. *Canad. J. Math.* **27** (1975), no. 3, 508-512. (Allan C. Peterson) #13328 34A30 (34C10)
Periodic solutions of a system of nonlinear differential equations. *Proc. Amer. Math. Soc.* **48** (1975), 328-336. (D. Sweet) **50** #10445 34C25
ch. J. A., Jr. Injectives and homotopy. *Illinois J. Math.* **16** (1972), 446-453. (R. R. Schick) **45** #9322 55D99 (18G05)
ch. K. La métrisation des espaces vectoriels. Exposés faits au cours international post-universitaire, Mons, 1966. *Bull. Soc. Math. Belg.* **23** (1971), 60-72. (Editors) #15204 50-01
ss, A. Richard See *Handbook: Applied mathematics*, **49** #10206; *Nonlinear waves*, #7759 and *Nonlinear waves*, **58** #29036
ss, R. (with Yu, N. J.) Computational procedures for mixed equations with shock waves. *Computational methods in nonlinear mechanics (Proc. Internat. Conf., Austin, Tex., 1974)*, pp. 499-508. *Texas Inst. Comput. Mech., Austin, Tex.*, 1974. (Daniel Cuvillard) **54** #11979 76J65
ck, August See *Turner, R. Steven*, **58** #27053
ck, C. L., III (with Price, T. M.) Somewhere locally flat codimension one manifolds with 1-ULC complements are locally flat. *Trans. Amer. Math. Soc.* **193** (1974), 111-122. (T. B. Rushing) **49** #11520 57A45
(with Price, T. M.) A codimension two taming theorem. *Geometric topology (Proc. Conf., Park City, Utah, 1974)*, pp. 371-394. *Lecture Notes in Math.*, Vol. 438, Springer, Berlin, 1975. (R. C. Kirby) **52** #15476b 57A35 (57A45)
Locally homotopically unknotted embeddings of manifolds in codimension two. *Geometric topology (Proc. Conf., Park City, Utah, 1974)*, pp. 427-430. *Lecture Notes in Math.*, Vol. 438, Springer, Berlin, 1975. (R. C. Kirby) **52** #15476c 57A35 (57A45)
rg, O. On the reconstructibility of ensembles by measurements. (German summary) *Ann. Physik* **7** **32** (1975), no. 6, 433-444. (Author's summary) **54** #9546 82J60
A test of the linear response theory for irreversible processes. *Z. Naturforsch.* **33a** (1978), no. 2, 110-120. (Author's summary) **58** #14860 82J60
On the validity of the master equation for finite closed systems. *Z. Naturforsch.* **4** **33** (1978), no. 6, 627-637. (Etang Chen) **58** #14829 82J47
er, Claus Survey of some economic models with special reference to the problematic nature of data availability. *Progress in cybernetics and systems research (Second European Meeting, Vienna, 1974)*, Vol. II: Socio-economic systems, cybernetics of cognition and learning, systems education, cybernetics in organization and management, special aspects, pp. 392-404. *Hemisphere, Washington, D. C.*, 1975. (Editors) **56** #14572 90A10
er, Paul A note on partitioning a set of normal populations by their locations with respect to two controls. *Ann. Math. Statist.* **43** (1972), 2019-2023. (Yung L. Tong) **35** #1577 62F07
er, Raymond J. ★J. Willard Gibbs. American mathematical physicist par excellence. Men of Physics. Selected Readings in Physics. Pergamon Press, Oxford-New York-Toronto, Ont., 1974. vii + 290 pp. (1 plate) (Editors) **52** #13164 01A55 (01A60, 01A70)
müller, Gerhard ★Einführung in die Systemprogrammierung. Reihe Informatik, Band 11. Bibliographisches Institut, Mannheim-Vienna-Zurich, 1974. 480 pp. (A. L. Fuksman) **53** #14954 68-01
nussen, J. Virtuelle Z-Baum-Technik. (English summary) *Computing* **17** (1976), no. 2, 97-104. (Eberhard Lüdde) **55** #11758 68A50
änder, Jörg Eine Bemerkung zum dritten Algorithmus von Gomory zur Lösung reinganzzahliger linearer Optimierungsprobleme. *Wiss. Z. Techn. Hochsch. Leuna-Merseburg* **18** (1976), no. 1, 134-140. (Siegfried Schaible) **54** #2193 90C10
Über eine Methode zur Kopplung dualer Schnittebenenverfahren in der ganzzahligen linearen Optimierung. (Russian and English summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 3, 307-316. (Rainer Burkard) **57** #5090 90C10
bach, E. R. (with Smithson, Raymond E.) Prespaces and partially continuous functions. *J. Natur. Sci. and Math.* **14** (1974), no. 2, 111-126. (M. G. Murdeshwar) **55** #13376 54C60 (54A05)
See also *Wollan, G. N.*, **45** #1
bach, Marijean Common fixed point theorems of the alternative type. *Math. Japon.* **21** (1976), no. 3, 269-272. (R. Kannan) **55** #11116 47H10
Some fixed point theorems for a pair of mappings. *Math. Japon.* **22** (1977/78), no. 4, 443-448. (L. F. Guseman, Jr.) **58** #18397 54H25
enfreund, Alan Optimal allocation for a class of finite horizon processes. *Management Sci.* **15** (1968/69), 728-738. (O. Fajans (RŽMat 1970 5V453)) **55** #6854 65K05 (93D99)
ley, Robert T. (with Palais, Richard S.; Atiyah, M. F.; Borel, Armand; Floyd, E. E.; Shih, Weishu; Solovay, Robert M.; Rešetnikov, V. N.; Dynin, A. S.) ★Семинар по теореме Атьи-Зингера об индексе. (Russian) [Seminar on the Atiyah-Singer index theorem] With contributions by M. F. Atiyah, A. Borel, E. Floyd, R. T. Seeley, W. Shih and R. Solovay. Translated from the English by V. N. Rešetnikov. Edited by A. S. Dynin. Izdat. "Mir", Moscow, 1970. 359 pp. (Editors) **52** #15568 58G10
Fractional powers of boundary problems. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 2, pp. 795-801. *Gauthier-Villars, Paris*, 1971. (Editors) **58** #23157 35P05
Interpolation in L^p with boundary conditions. Collection of articles honoring the completion by Antoni Zygmund of 50 years of scientific activity, I. *Studia Math.* **44** (1972), 47-60. (J. Friberg) **47** #3981 46E35 (47F05)
Addendum to: "Extension of C^∞ functions defined in a half space". *Proc. Amer. Math. Soc.* **37** (1973), 622. (From the author's text) **46** #9716 46E35 (26A93)
lig, F. F. (with Göbber, F.) Conditions for the application of the steady-state approximation to systems of differential equations. *J. Math. Biol.* **2** (1975), no. 1, 79-86. (J. P. Kernevez) **52** #9614 65L05 (92A05)
liger, R. See *Meurers, Joseph*, **58** #21222
Seeling, Ronald On the analytic continuation of Dirichlet series. *Proc. Amer. Math. Soc.* **69** (1978), no. 1, 119-124. (M. E. Noble) **57** #6382 30A16
Seely, Justus (with Zyskind, George; Kempthorne, Oscar; Mexas, A.; Papaioannou, P.) ★Linear models, statistical information, and statistical inference. ARL 71-0076. Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio, 1971. vii + 165 pp. (T. Robertson) **48** #1395 62J05 (62B10, 62J10)
(with Zyskind, George) Linear spaces and minimum variance unbiased estimation. *Ann. Math. Statist.* **42** (1971), 691-703. (M. M. Siddiqui) **45** #1319 62J10
Quadratic subspaces and completeness. *Ann. Math. Statist.* **42** (1971), 710-721. (A. Fuchs) **45** #1302 62E10
Completeness for a family of multivariate normal distributions. *Ann. Math. Statist.* **43** (1972), 1644-1647. (C. Hayashi) **49** #9992 62B05 (62C07)
An example of an inadmissible analysis of variance estimator for a variance component. *Biometrika* **62** (1975), no. 3, 689-690. (U. B. Paik) **53** #9530 62J10
(with Birkes, David; Dodge, Yadolah) Spanning sets for estimable contrasts in classification models. *Ann. Statist.* **4** (1976), no. 1, 86-107. (M. Atiqullah) **52** #15861 62J05
(with Olsen, Anthony; Birkes, David) Invariant quadratic unbiased estimation for two variance components. *Ann. Statist.* **4** (1976), no. 5, 878-890. (Lubomir Kubáček) **54** #6386 62J05 (62C07, 62F10)
Estimability and linear hypotheses. *Amer. Statist.* **31** (1977), no. 3, 121-123. (D. G. Kabe) **56** #7032 62J05
Minimal sufficient statistics and completeness for multivariate normal families. *Sankhyā Ser. A* **39** (1977), no. 2, 170-185. (L. B. Klebanov) **57** #17903 62B05 (62J05)
See also *Survey of statistical design and linear models*, **51** #2039
Seese, Detlef G. Entscheidbarkeits- und Definierbarkeitsfragen der Theorie "netzartiger" Graphen. I. (Russian, English and French summaries) *Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* **21** (1972), 513-517. (D. Rödding) **49** #7133 02G05
Zur Entscheidbarkeit der monadischen Theorie 2. Stufe baumartiger Graphen. (Russian, English and French summaries) *Theoretische Kybernetik und mathematische Logik. Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* **24** (1975), no. 6, 768-772. (Author's summary) **58** #5157 02G05 (05C99)
Ein Unentscheidbarkeitskriterium. (Russian, English and French summaries) *Theoretische Kybernetik und mathematische Logik. Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* **24** (1975), no. 6, 772-783. (Author's summary) **58** #5158 02G05 (05C99)
Decidability of ω -trees with bounded sets—a survey. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Körnig, 1977)*, pp. 511-515. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (Wolfgang Thomas) **58** #16247 02G05
(with Tuschik, Hans Peter) Construction of nice trees. *Set theory and hierarchy theory, V (Proc. Third Conf., Bierutowice, 1976)*, pp. 257-271. *Lecture Notes in Math.*, Vol. 619, Springer, Berlin, 1977. (L. Bukovsky) **58** #10292 02B20 (02G05)
Second order logic, generalized quantifiers and decidability. *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 8, 725-732. (Stephen Comer) **57** #87 02G05
★Decidability of ω -trees with bounded sets. (German and Russian summaries) Report No. R-01/78. Zentralinstitut für Mathematik und Mechanik, Akademie der Wissenschaften der DDR, Berlin, 1978. 52 pp. (M. R. Krom) **58** #194 02G05 (06A10, 54E15)
Über unentscheidbare Erweiterungen von SC. (English summary) *Z. Math. Logik Grundlagen Math.* **24** (1978), no. 1, 63-71. (Author's summary) **57** #5724 02G05 (02B15)
Seeskin, Kenneth R. Many-valued logic and future contingencies. *Logique et Analyse (N.S.)* **14** (1971), 759-773; errata, *ibid.* **15** (1972), 665. (R. I. Goldblatt) **48** #62 02C05
Some remarks on truth and bivalence. *Logique et Analyse (N.S.)* **17** (1974), 101-109. (A. Tauts) **51** #77 02C99
Seet, L. T. C. (with Chadwick, P.) Wave propagation in a transversely isotropic heat-conducting elastic material. *Mathematika* **17** (1970), 255-274. (H. Kolsky) **45** #7301 35L05 (73.35)
(with Chadwick, P.) A note on wave functions for transversely isotropic and isotropic elastic materials. *Indian J. Mech. Math.* **12** (1974), no. 1-2, 41-44. (A. C. Srivastava) **54** #4247 73.35
Seetharaman, M. (with Mathews, P. M.) Poincaré and TCP invariance in the determination of wave equations for particles of arbitrary spin. *J. Mathematical Phys.* **13** (1972), 938-943. (J.-P. Antoine) **46** #6734 81.22
(with Mathews, P. M.; Simon, M. T.) Indecomposability of Poincaré-group representations over massless fields, and the quantization problem for electromagnetic potentials. *Phys. Rev. D* **3** **9** (1974), 1706-1710. (Authors' summary) **53** #12261 81.22
Seethoff, T. L. (with Shiflett, Ray C.) Doubly stochastic measures with prescribed support. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **41** (1977/78), no. 4, 283-288. (M. M. Rao) **57** #3354 28A65
Seever, G. L. (with Blatter, Jörg) Inclusions, interposition and approximation. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 257-261. Academic Press, New York, 1973. (B. Rodriguez-Salinas) **48** #11856 41A30
Algebras of continuous functions on hyper-stonian spaces. *Arch. Math. (Basel)* **24** (1973), 648-660. (H. S. Bear) **51** #8828 46J10
(with Blatter, Jörg) The disc algebra is not an existence subspace of its bidual. *J. Math. Anal. Appl.* **44** (1973), 88-91. (M. Abel) **48** #4713 46E25
(with Blatter, Jörg) Interposition of semi-continuous functions by continuous functions. *Analyse fonctionnelle et applications (Comptes Rendus Colloq. d'Analyse, Inst. Mat., Univ. Federal Rio de Janeiro, Rio de Janeiro, 1972)*, pp. 27-51. *Actualités Sci. Indust.*, No. 1367, Hermann, Paris, 1975. (J. Diestel) **55** #8749 46A99 (54C05)
(with Blatter, Jörg) Interposition and lattice cones of functions. *Trans. Amer. Math. Soc.* **222** (1976), 65-96. (Authors' summary) **55** #11013 46E05 (54E05, 41A65)
Šefel', S. Z. C^1 -smooth isometric imbeddings. (Russian) *Sibirsk. Mat. Ž.* **15** (1974),

- 1372-1393, 1432. (M. L. Gromov) **51** #6672 53C45
 C^1 -smooth surfaces of bounded positive extrinsic curvature. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 5, 1122-1123, 1133. (Leo Boček) **53** #6471 53C45
 (with Sabitov, I. H.) Connections between the order of smoothness of a surface and that of its metric. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 4, 916-925. (A. V. Pogorelov) **54** #13805 53C45
 Smoothness of the solution of Minkowski's problem. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 2, 472-475, 480. (V. T. Fomenko) **58** #2662 53C45 (52A50)
- Seff, David V.** See Whitehead, Earl Glen, Jr., **50** #4312
- Šeřal, Otakar** A note on the coding with linear systems. *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes* (Tech. Univ., Prague, 1971; dedicated to the memory of Antonín Špaček), pp. 793-795. *Academia, Prague*, 1973. (Robert Gray) **50** #12431 94A05 (93E10)
 See also *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)
- Šeřtel, Z. G.** (with Roitberg, Ja. A.) Green's formula and homeomorphism theorems for nonlocal elliptic problems. (Russian) *Dokl. Akad. Nauk SSSR* **201** (1971), 1059-1062. (A. Kufner) **46** #517 35J99 (46F05, 47F05)
 (with Roitberg, Ja. A.) Green's formula and a theorem on homeomorphisms for elliptic systems with boundary conditions that are not normal. (Russian) *Mat. Issled.* **7** (1972), no. 2(24), 143-157, 289. (J. Kačur) **48** #4508 35J55
 (with Roitberg, Ja. A.) Nonlocal problems for elliptic equations and systems. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 165-181. (G. Geymonat) **46** #9522 35J55 (47F05)
 (with Roitberg, Ja. A.) A Green's formula and solvability conditions for nonlocal elliptic boundary value problems. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 479-491, 574. (P. Szeptycki) **49** #837 35J40
 (with Roitberg, Ja. A.) Isomorphism theorems for nonlocal elliptic boundary value problems, and their applications. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 761-771, 860. (loose errata) (A. S. Dynin) **48** #11761 35J40 (58G99)
 (with Roitberg, Ja. A.) Optimal control of systems that may be described by general elliptic boundary value problems. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 4, 556-561, 576. (Claudia Simionescu) **54** #11133 49A20 (35J40)
 ★Теорія ймовірностей. (Ukrainian) [Probability theory] *Vidavniče Ob'ednannja "Višča Škola", Kiev*, 1977. 156 pp. (V. Komkov) **56** #13297 60-01
- Segal, A.** (with Praagman, N.) The finite-element method for time-dependent problems. *Delft Progress Rep.* **2** (1976/77), no. 2, 119-130. (Authors' summary) **58** #8360 65N30
- Segal, Daniel** A note on module automorphism groups over Noetherian rings. *Arch. Math. (Basel)* **23** (1972), 594-597. (B. A. F. Wehrfritz) **47** #3535 20E15 (20F55)
 Groups of automorphisms of infinite soluble groups. *Proc. London Math. Soc.* (3) **26** (1973), 630-652. (D. J. S. Robinson) **51** #10474 20E15
 A note on finitary permutation groups. *Arch. Math. (Basel)* **25** (1974), 470-471. (Peter M. Neumann) **50** #7363 20F99
 A residual property of finitely generated abelian-by-nilpotent groups. *J. Algebra* **32** (1974), 389-399. (L. G. Kovács) **54** #7630 20E25
 Normal subgroups of finitary permutation groups. *Math. Z.* **140** (1974), 81-85. (David McDougall) **50** #4761 20F30
 Groups whose finite quotients are supersoluble. *J. Algebra* **35** (1975), 56-71. (B. Amberg) **51** #10475 20E15
 (with Houghton, C. H.) Some sufficient conditions for groups to have one end. *J. London Math. Soc.* (2) **10** (1975), 89-96. (Robert G. Burns) **51** #5775 20E99
 On Abelian-by-polycyclic groups. *J. London Math. Soc.* (2) **11** (1975), no. 4, 445-452. (M. J. Tomkinson) **54** #2811 20E25
 (with Grunewald, Fritz J.) Residual nilpotence in polycyclic groups. *Math. Z.* **142** (1975), 229-241. (I. B. S. Passi) **52** #3334 20E25
 Unipotent groups of module automorphisms over polycyclic group rings. *Bull. London Math. Soc.* **8** (1976), no. 2, 174-178. (B. A. F. Wehrfritz) **53** #5755 20E99 (16A26)
 Irreducible representations of finitely generated nilpotent groups. *Math. Proc. Cambridge Philos. Soc.* **81** (1977), no. 2, 201-208. (J. F. Humphreys) **56** #3107 20C15
 (with Lennox, John C.; Stonehewer, Stewart E.) The lower central series of a join of subnormal subgroups. *Math. Z.* **154** (1977), no. 1, 85-89. (Thaddeus C. Hurley) **56** #3127 20E15
 On the residual simplicity of certain modules. *Proc. London Math. Soc.* (3) **34** (1977), no. 2, 327-353. (Thaddeus C. Hurley) **56** #12130 20E25
 (with Grunewald, Fritz J.) Conjugacy in polycyclic groups. *Comm. Algebra* **6** (1978), no. 8, 775-798. (J. Wiegold) **58** #11151 20F99 (20E15)
 (with Grunewald, Fritz J.) On polycyclic groups with isomorphic finite quotients. *Math. Proc. Cambridge Philos. Soc.* **84** (1978), no. 2, 235-246. (F. Pickel) **58** #11132 20E25
- Segal, David M.** (with Feder, Samuel) Immersions and embeddings of projective spaces. *Proc. Amer. Math. Soc.* **35** (1972), 590-592. (M. Mahowald) **47** #9644 57D40
 Halving the Milnor manifolds and some conjectures of Ray. *Proc. Amer. Math. Soc.* **39** (1973), 625-628. (R. E. Stong) **51** #4283 57D90
 Some applications of Landweber-Novikov operations. *Proc. Amer. Math. Soc.* **54** (1976), 342-344. (R. E. Stong) **52** #9255 57D90
- Segal, G.** (with Bott, Raoul) The cohomology of the vector fields on a manifold. *Topology* **16** (1977), no. 4, 285-298. (D. B. Fuks) **58** #31102 57D25
- Segal, Gerald A.** (with Wetmore, Ross W.; Wolf, Kathleen) Efficient methods for configuration interaction calculations. *Chem. Phys.* **30** (1978), no. 2, 269-297. (Authors' summary) **58** #4107 81.65
- Segal, Graeme B.** Equivariant stable homotopy theory. *Actes du Congrès International des Mathématiciens* (Nice, 1970), Tome 2, pp. 59-63. *Gauthier-Villars, Paris*, 1971. (Henning Hauschild) **54** #11319 55D40 (55E10, 57E15, 57D85)
 (with Atiyah, M. F.) Exponential isomorphisms for λ -rings. *Quart. J. Math. Oxford Ser. (2)* **22** (1971), 371-378. (H. Bass) **45** #344 18G99 (55J99)
 Permutation representations of finite p -groups. *Quart. J. Math. Oxford Ser. (2)* **23** (1972), 375-381. (D. B. Coleman) **48** #405 20C15
 Configuration-spaces and iterated loop-spaces. *Invent. Math.* **21** (1973), 213-240. (P. May) **48** #9710 55D35
 The stable homotopy of complex projective space. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 1-5. (J. P. May) **47** #7729 55B20 (55B15, 55E10)
 Operations in stable homotopy theory. *New developments in topology* (Proc. Symp. Algebraic Topology, Oxford, 1972), pp. 105-110. *London Math. Soc. Lecture Note No. 11, Cambridge Univ. Press, London*, 1974. (M. Mahowald) **49** #3917 55E10
 Categories and cohomology theories. *Topology* **13** (1974), 293-312. (J. P. May) **50** #5782 55B20
 (with Harris, Bernard) K_i groups of rings of algebraic integers. *Ann. of Math.* **101** (1975), 20-33. (Kenneth S. Brown) **52** #8222 18F25 (12A70)
 A classifying space of a topological group in the sense of Gel'fand-Fuks. (Rus. Funkcional. Anal. i Priložen. **9** (1975), no. 2, 48-50. (D. B. Fuks) **51** #11502 (57D30)
 (with McDuff, Dusa) Homology fibrations and the "group-completion" theorem. *Invent. Math.* **31** (1975/76), no. 3, 279-284. (Harold Hastings) **53** #6547 55D40
 The multiplicative group of classical cohomology. *Quart. J. Math. Oxford Ser. (2)* **26** (1975), no. 103, 289-293. (J. P. May) **52** #1667 55B20
 K -homology theory and algebraic K -theory. *K-theory and operator algebras* (Conf., Univ. Georgia, Athens, Ga., 1975), pp. 113-127. *Lecture Notes in Math., Vol. 58, Springer, Berlin*, 1977. (Jerome Kaminker) **58** #24242 55B15 (46M20, 58B15, 58G10)
 See also *New developments in topology*, **48** #5047
- Segal, Irving Ezra** Local noncommutative analysis. *Problems in analysis* (Lectures in Sympos. in honor of Salomon Bochner, Princeton Univ., Princeton, N.J., 1968), pp. 111-130. *Princeton Univ. Press, Princeton, N.J.*, 1970. (M. J. Westwater) **49** #1081.47
 Non-linear quantum processes and automorphism groups of C^* -algebras. *Actes du Congrès International des Mathématiciens* (Nice, 1970), Tome 2, pp. 419-426. *Gauthier-Villars, Paris*, 1971. (H. Araki) **54** #14620 81.46
 Causally oriented manifolds and groups. *Bull. Amer. Math. Soc.* **77** (1971), 958-959. (V. Guillemin) **48** #12432 53C50 (83.53)
 Construction of non-linear local quantum processes. II. *Invent. Math.* **14** (1972), 211-241. (M. J. Westwater) **45** #4761 81.31
 Singular perturbations of semi-group generators. *Linear operators and approximation* (Proc. Conf., Oberwolfach, 1971), pp. 54-61. *Internat. Ser. Numer. Math., Vol. 10, Birkhäuser, Basel*, 1972. (G. F. Webb) **52** #1370 47A55 (47D05)
 Symplectic structures and the quantization problem for wave equations. *Sympos. Mathematica, Vol. XIV (Convegno di Geometria Simplicetica e Fisica Matematica, INDAM, Rome, 1973)*, pp. 99-117. *Academic Press, London*, 1974. (Jean-Pierre Eckmann) **52** #15571 58G99 (81.35)
 A variant of special relativity and long-distance astronomy. *Proc. Nat. Acad. Sci. U.S.A.* **71** (1974), 765-768. (F. A. E. Pirani) **49** #8598 85.47
 Functional integration and interacting quantum fields. *Functional integration and applications* (Proc. Internat. Conf., London, 1974), pp. 157-168. *Clarendon Press, Oxford*, 1975. (From the introduction) **58** #19987 81.46
 ★Mathematical cosmology and extragalactic astronomy. *Pure and Applied Mathematics*, Vol. 68. *Academic Press [Harcourt Brace Jovanovich, Publishers]*, New York-London, 1976. ix + 204 pp. (A. Crumeyrolle) **58** #14894 83.35
 Space-time decay for solutions of wave equations. *Advances in Math.* **22** (1977), 3, 305-311. (A. Jeffrey (Zbl 344 35058)) **58** #11945 35L05 (35P25)
 Theoretical foundations of the chronometric cosmology. *Proc. Nat. Acad. Sci. U.S.A.* **73** (1976), no. 3, 669-673. (C. B. Collins) **53** #10112 83.47
 Interacting quantum fields and the chronometric principle. *Proc. Nat. Acad. Sci. U.S.A.* **73** (1976), no. 10, 3355-3359. (Wolfgang Lücke) **54** #4442 81.53 (83.53)
 Causality and symmetry in cosmology and the conformal group. *Group theory methods in physics* (Proc. Fifth Internat. Colloq., Univ. Montréal, Montréal, Qué., 1977), pp. 433-447. *Academic Press, New York*, 1977. (Helmuth K. Urbantke) **58** #58.33.22
 (with Kunze, Ray A.) ★Integrals and operators. Second revised and enlarged edition. *Grundlehren der Mathematischen Wissenschaften*, Band 228. *Springer-Verlag, Berlin-New York*, 1978. xiv + 371 pp. ISBN 3-540-08323-5 (S. K. Berberian) **58** #128-01 (47-01)
 See also *Problems: Linear operators and approximation*, **51** #6219; *Séminaire Équations aux Dérivées Partielles*, **52** #11265; *Deser, Stanley*, **56** #10712 and *Quantum theory and the structures of time and space*, **58** #25455
- Segal, Jack** (with Mardešić, Sibe) Shapes of compacta and ANR-systems. *Fund. Math.* (1971), no. 1, 41-59. (A. H. Kruse) **45** #7686 54C55
 (with Mardešić, Sibe) Equivalence of the Borsuk and the ANR-system approximation shapes. *Fund. Math.* **72** (1971), no. 1, 61-68. (errata insert) (A. H. Kruse) **46** #54C55
 (with Overton, Robert) A new construction of movable compacta. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6(26)** (1971), 361-363. (S. Mardešić) **48** #54C56
 Shape classification of projective plane-like continua. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6(26)** (1971), 365-371. (G. R. Gordh, Jr.) **48** #2989 54C56
 Shape theory. *Proceedings of the University of Oklahoma Topology Conference Dedicated to Robert Lee Moore* (Norman, Okla., 1972), pp. 296-304. *Univ. of Oklahoma Press, Norman, Okla.*, 1972. (R. R. Summerhill) **50** #11139 54C56
 Shape classifications. *Proceedings of the International Symposium on Topology and its Applications* (Budva, 1972), pp. 225-228. *Savez Društava Mat. Fiz. i Astron. Beograd*, 1973. (David Handel) **48** #12464 54C56 (54F20)
 (with Handel, David) An acyclic continuum with non-movable suspensions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 171-172. (S. Mardešić) **47** #5813 54C55 (55E05)
 (with Handel, David) Shape classification of (projective m -space)-like continua. *General Topology and Appl.* **3** (1973), 111-119. (G. E. Strecker) **48** #1155 54C56
 (with Handel, David) Finite shape classifications. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 37-45. (S. Mardešić) **47** #9532 54C56 (55E20)

- Movable shapes. *Topology Conference (Virginia Polytech. Inst. and State Univ., Blacksburg, Va., 1973)*, pp. 236-241. *Lecture Notes in Math.*, Vol. 375, Springer, Berlin, 1974. (S. Mardešić) **51** #4158 54C56
- (with Kozłowski, George) On the shape of 0-dimensional paracompacta. *Fund. Math.* **83** (1974), no. 2, 151-154. (S. Mardešić) **48** #12461 54C56
- (with Kozłowski, George) n -movable compacta and ANR-systems. *Fund. Math.* **85** (1974), 235-243. (R. R. Summerhill) **50** #11137 54C56
- (with Handel, David) On shape classifications and invariants. *General Topology and Appl.* **4** (1974), 109-124. (R. R. Summerhill) **49** #9802 54C56 (18A99, 54B25, 20)
- Movable continua and shape retracts. *Studies in topology (Proc. Conf., Univ. North Carolina, Charlotte, N.C., 1974; dedicated to Math. Sect. Polish Acad. Sci.)*, pp. 539-544. *demic Press*, New York, 1975. (J. E. Keesling) **51** #4159 54C56 (54F15)
- (with Kozłowski, George) Movability and shape-connectivity. *Fund. Math.* **93** (1976), no. 2, 145-154. (K. Kuperberg) **55** #4160 55D99
- Local behavior in shape theory. *General topology and its relations to modern analysis algebra, IV (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B*, pp. 419-439. *Soc. Czechoslovak Mathematicians and Physicists, Prague*, 1977. (R. C. Lacher) #18431 55D99 (54C56)
- (with Kozłowski, George) Locally well-behaved paracompacta in shape theory. *Adv. Math.* **95** (1977), no. 1, 55-71. (R. B. Sher) **56** #1301 55D99 (54C55)
- (with Kozłowski, George) Local behavior and the Vietoris and Whitehead theorems in shape theory. *Fund. Math.* **99** (1978), no. 3, 213-225. (J. Dugundji) **58** #2808 10S
- See also General topology and its relations to modern analysis and algebra, #3800
- M. (with Halfin, Shlomo) A priority queueing model for a mixture of two types of customers. *SIAM J. Appl. Math.* **23** (1972), 369-379. (N. U. Prabhu) **47** #5982 62S
- (with Heyman, D. P.) Conditional delays measured in events for the $M/M/c$ queue. *Operations Res.* **22** (1974), no. 3, 575-581. (Takehisa Fujisawa) **55** #4425 62S
- Sanford L. On $\Sigma(1/n)\sin(x/n)$. *J. London Math. Soc. (2)* **4** (1971/72), 385-393. (E. L. J. de) **45** #5617 40A05
- Dirichlet convolutions and summability: several old problems and a few new results. *Proceedings of the 1972 Number Theory Conference (Univ. Colorado, Boulder, Colo.)*, pp. 1-204. *Univ. Colorado, Boulder, Colo.*, 1972. (S. Ikehara) **52** #10621 10H15
- On convolutions with the Möbius function. *Proc. Amer. Math. Soc.* **34** (1972), 365-372. (R. Spira) **45** #8620 (E 47 #3335) 10K20
- Erratum: "On convolutions with the Möbius function". *Proc. Amer. Math. Soc.* **39** (1973), 652. (Editors) **47** #3335 10H25
- Addendum to: "On Tauberian theorems of Landau-Ingham type" (J. London Math. Soc. (2) **8** (1974), 570-576) by K. A. Jukes. *J. London Math. Soc. (2)* **9** (1974/75), 30-32. (S. Ikehara) **50** #13966 40E05
- Prime number theorem analogues without primes. *J. Reine Angew. Math.* **265** (1974), 1-22. (S. Ikehara) **50** #2097 10H15 (10H40)
- On an identity between infinite series of arithmetic functions. *Acta Arith.* **28** (1975/76), no. 4, 345-348. (T. M. Apostol) **52** #8065 10H99 (10A20)
- Ingham's summability method and Riemann's hypothesis. *Proc. London Math. Soc.* **30** (1975), 129-142. (S. Ikehara) **51** #3079 (E 55 #7945) 10H05 (40G05)
- On a functional inequality of Kemperman. *Colloq. Math.* **35** (1976), no. 1, 91-95. (J. B. Kemperman) **53** #6139 39A25
- Corrigendum: "Ingham's summability method and Riemann's hypothesis" (Proc. London Math. Soc. (3) **30** (1975), 129-142). *Proc. London Math. Soc. (3)* **34** (1977), no. 438. (Editors) **55** #7945 10H05
- (with Erdős, Paul) A note on Ingham's summation method. *J. Number Theory* **10** (1978), no. 1, 95-98. (S. Ikehara) **58** #549 10H15 (40G99)
- Riemann's example of a continuous 'non-differentiable' function. II. *Math. Intelligencer* **1** (1978/79), no. 2, 81-82. (Henryk Fast) **58** #15962b 01A55 (26A27)
- V. L. See *Studies in the theory of plates and shells*, **48** #3343
- V. M. (with Svirid, G. P.) Finite element forms for the formulation of problems in the study of visco-plastic flows. (Russian) *Dokl. Akad. Nauk BSSR* **20** (1976), no. 7, 636-668. (N. Cristescu) **54** #4278 73.65 (76.65)
- Adrian Dynamic file assignment in a computer network. II. Random rates of demand. *Proceedings of the IEEE Conference on Decision and Control including the 14th Symposium on Adaptive Processes (Houston, Tex., 1975)*, pp. 161-166. *Inst. Electr. Electron. Engrs.*, New York, 1975. (Author's summary) **56** #11442 93E20 (68A99)
- (with Kailath, Thomas) Radon-Nikodým derivatives with respect to measures induced by discontinuous independent-increment processes. *Ann. Probability* **3** (1975), no. 3, 449-464. (T. T. Kadota) **52** #15652 60G30 (60J35)
- (with Kailath, Thomas) The modeling of randomly modulated jump processes. *IEEE Trans. Information Theory* **IT-21** (1975), 135-143. (D. D. Swarder) **51** #2731 93E10
- (with Davis, Mark H. A.; Kailath, Thomas) Nonlinear filtering with counting observations. *IEEE Trans. Information Theory* **IT-21** (1975), 143-149. (D. D. Swarder) #2732 93E10
- The estimation of stochastic processes with applications to computer networks. *Proceedings of the IEEE-USSR Joint Workshop on Information Theory (Moscow, 1975)*, pp. 185-191. *Inst. Electr. Electron. Engrs.*, New York, 1976. (Author's summary) #18058 93E10 (94A05, 94A20)
- Basic models for dynamic routing in computer-communication networks. *Proceedings of the Ninth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1976)*, pp. 77-79. *Western Periodicals, North Hollywood, Calif.*, 1976. (Author's summary) **56** #17769 90B10 (94A20)
- Dynamic file assignment in a computer network. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 2, 161-173. (R. Rishel) **53** #12726 93E20 (68A99)
- Bit allocation and encoding for vector sources. *IEEE Trans. Information Theory* **IT-22** (1976), no. 2, 162-169. (S. Guisagu) **52** #16837 94A05 (94A10)
- Stochastic processes in estimation theory. *IEEE Trans. Information Theory* **IT-22** (1976), no. 3, 275-286. (Author's summary) **58** #9686 93E10 (60G35)
- (with Kailath, Thomas) Orthogonal functionals of independent-increment processes. *IEEE Trans. Information Theory* **IT-22** (1976), no. 3, 287-298. (S. Ikehara) **54** #1374 60H05
- Recursive estimation from discrete-time point processes. *IEEE Trans. Information Theory* **IT-22** (1976), no. 4, 422-431. (Author's summary) **57** #15696 93E10
- Optimal control of noisy finite-state Markov processes. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 2, 179-186. (R. Rishel) **56** #11443 93E20
- Statistical modelling and analysis for adaptive routing in computer networks. *Communication systems and random process theory (Proc. 2nd NATO Advanced Study Inst., Darlington, 1977)*, pp. 805-813. *NATO Advanced Study Inst. Ser., Ser. E: Appl. Sci.*, No. 25, Sijthoff & Noordhoff, Alphen aan den Rijn, 1978. (Author's summary) **58** #20876 94A20 (90B10)
- Centralized and decentralized control schemes for Gauss-Poisson processes. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 1, 47-57. (Katsuji Uosaki) **58** #9726 93E20 (60J75, 93E10)
- Segalman, Daniel (with Lawrence, Scott) A generalization of two inequalities involving means. *Proc. Amer. Math. Soc.* **35** (1972), 96-100. (J. V. Ryff) **46** #3721 26A86
- Segawa, Shigeo On a theorem of Collingwood. *Proc. Japan Acad.* **50** (1974), 712-713. (I. N. Baker) **51** #10637 30A72
- (with Nakai, Mitsuru) On a subsurface of Tōko Surface. *Tōhoku Math. J. (2)* **28** (1976), no. 4, 591-600. (Tadashi Kuroda) **54** #13069 30A48
- (with Nakai, Mitsuru) Harmonic dimensions related to Dirichlet integrals. *J. Math. Soc. Japan* **29** (1977), no. 1, 107-121. (Tadashi Kuroda) **56** #601 30A50
- (with Nakai, Mitsuru) Tōki covering surfaces and their applications. *J. Math. Soc. Japan* **30** (1978), no. 2, 359-373. (N. L. Alling) **57** #16575 30A48 (30A50, 31A05)
- On global cluster sets for functions meromorphic on some Riemann surfaces. *Nagoya Math. J.* **70** (1978), 1-6. (M. H. Heins) **58** #1135 30A48
- Sege, G. See Szegő, Gábor
- Segeda, Ju. N. Further invariance of Maxwell's equations. (Russian. English summary) *Boundary value problems of the electrodynamics of conducting media (Russian)*, pp. 218-231. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1976. (A. S. Alekseev) **57** #4837 78.35
- (with Nikitin, A. G.; Fušić, V. I.) Additional invariance of the Kemmer-Duffin and Rarita-Schwinger equations. (Russian. English summary) *Teoret. Mat. Fiz.* **29** (1976), no. 1, 82-93. (J. Niederle) **57** #8568 81.22 (22E05)
- (with Fušić, V. I.) The invariance groups of certain equations of relativistic quantum mechanics. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 6, 844-849, 864. (Authors' summary) **58** #32500 81.22
- Seginin, C. M. (with Emery, A. F.) Singularity programming: a numerical technique for determining the effect of singularities in finite difference solutions illustrated by application to plane elastic problems. *Internat. J. Numer. Methods Engrg.* **6** (1973), 367-380. (S. C. Das) **49** #4398 73.65
- Seginin, R. J. (with Lorimer, Peter) Ramsey numbers for multiple copies of complete graphs. *J. Graph Theory* **2** (1978), no. 1, 89-91. (William T. Trotter, Jr.) **58** #10618 05C99
- Segel, Lee A. Simplification and scaling. *SIAM Rev.* **14** (1972), 547-571. (Mary L. Boas) **48** #10030 (E 53 #9837) 65-01
- (with Lin, C. C.) ★Mathematics applied to deterministic problems in the natural sciences. With material on elasticity by G. H. Handelman. *Macmillan Publishing Co., Inc., New York; Collier Macmillan Publishers, London*, 1974. xix+604 pp. (Editors) **51** #4761 69.00
- (with Levin, Simon A.) Application of nonlinear stability theory to the study of the effects of diffusion on predator-prey interactions. *Topics in statistical mechanics and biophysics: a memorial to Julius L. Jackson*, pp. 123-152. *AIP Conf. Proc.*, No. 27, Amer. Inst. Phys., New York, 1976. (W. D. Lakin) **58** #15316 92A15
- ★Mathematics applied to continuum mechanics. With material on elasticity by G. H. Handelman. *Macmillan Publishing Co., Inc., New York; Collier Macmillan Publishers, London*, 1977. xviii+590 pp. (D. Ieşan) **58** #19516 73.00 (76.02)
- An introduction to continuum theory. *Modern modeling of continuum phenomena (Ninth Summer Sem. Appl. Math., Rensselaer Polytech. Inst., Troy, N.Y., 1975)*, pp. 1-60. *Lectures in Appl. Math.*, Vol. 16, Amer. Math. Soc., Providence, R.I., 1977. (From the introduction) **58** #19517 73.00
- See also Some mathematical questions in biology, **48** #1731; Transactions: Conference of Army Mathematicians, **49** #4737; Instability of continuous systems, **49** #10495 and Riley, N., **53** #9837
- Seegerberg, Krister ★Results in non-classical propositional logic. Doctoral dissertation, University of Uppsala. *Universitet Uppsala, Uppsala*, 1968. 30 pp. (Editors) **50** #1837 02Cxx
- Kripke-type semantics for preference logic. *Logic and value (essays dedicated to Thorild Dahlquist on his fiftieth birthday)*, pp. 128-134. *Filosofiska Studier*, No. 9, Filosof. Föreningen och Filosof. Inst., Uppsala Univ., Uppsala, 1970. (Kit Fine) **50** #4252 02C10
- A remark concerning the Brouwer system. (Swedish) *Proceedings of the First Scandinavian Logic Symposium (Åbo, 1968)*, pp. 166-169. *Filosofiska Studier*, No. 8, Filosof. Föreningen och Filosof. Inst., Uppsala Univ., Uppsala, 1970. (B. H. Mayoh) **50** #9539 02C10 (02G15)
- Modal logics with linear alternative relations. *Theoria* **36** (1970), 301-322. (Dov M. Gabbay) **47** #18 02C10
- ★An essay in classical modal logic. Vols. 1, 2, 3. *Filosofiska Studier*, No. 13, Filosofiska Föreningen och Filosofiska Institutionen vid Uppsala Universitet, Uppsala, 1971. Vol. 1: v+pp. 1-73; Vol. 2: pp. 74-170; Vol. 3: pp. 171-250. (David Makinson) **49** #4756 02C10
- Qualitative probability in a modal setting. *Proceedings of the Second Scandinavian Logic Symposium (Oslo, 1970)*, pp. 341-352. *Studies in Logic and the Foundations of Mathematics*, Vol. 63, North-Holland, Amsterdam, 1971. (B. Brainerd) **48** #68 02C10 (60A05)
- Post completeness in modal logic. *J. Symbolic Logic* **37** (1972), 711-715. (S. K. Thomason) **47** #4765 02C10
- Hallén's theorem on Post completeness. *Modality, morality and other problems of sense and nonsense*, pp. 206-209. *CWK Gleerup Bokförlag, Lund*, 1973. (Jerzy Kotas)

- 56 #11759 02C10 (02G20)
Two-dimensional modal logic. *J. Philos. Logic* 2 (1973), no. 1, 77-96. (Jerzy Kotas)
- 54 #12488 02C10
Proof of a conjecture of McKay. Collection of articles dedicated to Andrzej Mostowski on the occasion of his sixtieth birthday, III. *Fund. Math.* 81 (1974), 267-270. (Vladimir Lifšic) 50 #1849 02C15 (02H13)
(with Makinson, David) Post completeness and ultrafilters. *Z. Math. Logik Grundlagen Math.* 20 (1974), 385-388. (Kit Fine) 52 #2825 02C10 (02J05)
That every extension of S4.3 is normal. *Proceedings of the Third Scandinavian Logic Symposium (Univ. Uppsala, Uppsala, 1973)*, pp. 194-196. *Stud. Logic Found. Math.*, Vol. 82, North-Holland, Amsterdam, 1975. (M. J. Cresswell) 52 #5365 02C10
The truth about some Post numbers. *J. Symbolic Logic* 41 (1976), no. 1, 239-244. (S. K. Thomason) 55 #5393 02C10
A neglected family of aggregation problems in ethics. *Noûs* 10 (1976), no. 2, 221-244. (Prasanta K. Pattanaik) 58 #9434 92A20
Discrete linear future time without axioms. *Studia Logica* 35 (1976), no. 3, 273-278. (errata insert) (Jerzy Kotas) 55 #10245 02C10 (02G10)
See also **Deontic logic: introductory and systematic readings**, 56 #2790 (EA 55/56) and **Lemmon, E. J.**, 57 #15931
- Segercrantz, Jerry** On the connection between Minkowski space and plane non-euclidean geometries. *Soc. Sci. Fenn. Comment. Phys.-Math.* 40 (1970), 83-96. (S. Deser) 46 #10368 83.53
Remarks on cross-ratios and the determinant function. (Swedish. English summary) *Nordisk Mat. Tidskr.* 24 (1976), no. 3-4, 101-106, 134 (1977). (H.-O. Kreiss) 58 #10951 15A03 (15A15)
- Segerdahl, Carl-Otto** A survey of problems connected with the collective theory of risk, treated elsewhere. *Filip Lundberg Symposium on Risk Theory (Stockholm, 1968)*. *Skand. Aktuarietidskr.* 1969, suppl. 3-4, 132-139 (1971). (Editors) 49 #11750 62D05
Stochastic processes and practical working models or why is the Polya process approach defective in modern practice and how to cope with its deficiencies? *Skand. Aktuarietidskr.* 1970, 146-166. (D. R. Brillinger) 50 #3410 60K99 (62P05)
On some distributions in time connected with the collective theory of risk. *Skand. Aktuarietidskr.* 1970, 167-192. (Jacques Janssen) 53 #4436 62P05
(with Grandell, Jan) A comparison of some approximations of ruin probabilities. *Skand. Aktuarietidskr.* 1971, 143-158 (1972). (Y.-K. Chan) 50 #1358 60K99 (62P05)
See also **Symposium: Filip Lundberg, Risk Theory**, 48 #12666 (EA 49) and **Obituary: Segerdahl, Carl-Otto**, 50 #38
- Segers, Richard G.** A generalised function setting for dynamic optimal control problems. *Optimization methods for resource allocation (Proc. NATO Conf., Elsinore, 1971)*, pp. 279-296. *English Univ. Press, London*, 1974. (Werner Krabs) 51 #6536 49D35
- Segerstedt, T.** See **Scientists at work**, 53 #9
- Segeth, Karel** Universal approximation by hill functions. *Czechoslovak Math. J.* 22(97) (1972), 612-640. (Gilbert Strang) 46 #9600 41A15 (65D15)
A remark on a class of universal hill functions. *Proceedings of the Third Conference on Basic Problems of Numerical Mathematics (Prague, 1973)*. *Acta Univ. Carolinae—Math. et Phys.* 15 (1974), no. 1-2, 155-156. (G. A. Watson) 52 #11423 41A30 (65D15)
Universal approximation by systems of hill functions. (Czech summary) *Apl. Mat.* 19 (1974), 403-436. (J. R. Rice) 52 #9646 65N35
Universal approximation in the finite element method. *Theory of nonlinear operators (Proc. Fourth Internat. Summer School, Acad. Sci., Berlin, 1975)*, pp. 389-393. *Abh. Akad. Wiss. DDR Abt. Math.-Natur.-Tech., Jahrgang 1977*, 1, Akademie-Verlag, Berlin, 1977. (B. Kellogg) 57 #8085 65N99
- Segethová, Jitka** Elimination on sparse symmetric systems of a special structure. (Czech summary) *Apl. Mat.* 17 (1972), 448-460. (R. P. Tewarson) 47 #1262 65F05
Numerical construction of the hill functions. *SIAM J. Numer. Anal.* 9 (1972), 199-204. (Walter Gautschi) 46 #4682 65D15
- von Seggern, R.** Zur Lösung der Vlasovgleichung mit periodischen Randbedingungen. *Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972)*. *Z. Angew. Math. Mech.* 53 (1973), T146-T148. (T. Kahan) 50 #6396 82.35
- Seghier, Abdellatif** Prédiction d'un processus stationnaire du second ordre connu sur un intervalle fini. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 16, Aiii, A895-A898. (H. P. McKean, Jr.) 53 #6717 60G25
- Seglar, P.** On Balescu's generalized kinetic equation. (Italian and Russian summaries) *Nuovo Cimento B* (11) 30 (1975), no. 1, 9-20. (Carlo Cercignani) 56 #2140 82.47
On the Wigner distribution function and its factorization. *Phys. Lett. A* 59 (1976), no. 2, 87-88. (Author's summary) 54 #6745 81.35
(with Canivell, V.) Minimum-uncertainty states and pseudoclassical dynamics. *Phys. Rev. D* (3) 15 (1977), no. 4, 1050-1054. (Authors' summary) 56 #2105 81.60
(with Canivell, V.) Minimum-uncertainty states and pseudoclassical dynamics. II. *Phys. Rev. D* (3) 18 (1978), no. 4, 1082-1094. (Authors' summary) 58 #19995 81.47
- Segner, J. A.** See **Bikerman, Jacob J.**, 58 #10077
- Sego, Z. P.** See **Proceedings: International Congress of the International Federation of Automatic Control (IFAC)**, 51 #12360a
- Segovia, Carlos** (with Wheeden, Richard L.) Fractional differentiation of the commutator of the Hilbert transform. *J. Functional Analysis* 8 (1971), 341-359. (R. A. Hunt) 45 #2538 47G05 (26A33)
(with Wheeden, Richard L.) On weighted norm inequalities for the Lusin area integral. *Trans. Amer. Math. Soc.* 176 (1973), 103-123. (R. A. Hunt) 47 #483 31A05 (30A78, 42A40)
(with Macías, Roberto A.) ★ Alguns aspectos da teoria dos espaços de Hardy. (Portuguese) [Some aspects of the theory of Hardy spaces] *Monografias de Matemática Pura e Aplicada*, No. 5. [Monographs in Pure and Applied Mathematics, No. 5] *Universidade Estadual de Campinas, Campinas*, 1977. 30 pp. (M. Hervé) 58 #28515 30A78
(with Macías, Roberto A.) Weighted norm inequalities for parabolic fractional integrals. *Studia Math.* 61 (1977), no. 3, 279-291. (B. Muckenhoupt) 58 #11268 26A33 (44A15)
- (with Aguilera, Néstor) Weighted norm inequalities relating the g_λ^* and the functions. *Studia Math.* 61 (1977), no. 3, 293-303. (B. Muckenhoupt) 58 #130A78 (44A15)
- Segre, Beniamino** (with Bartocci, Umberto) Ovali ed altre curve nei piani di Gauss caratteristica due. *Acta Arith.* 18 (1971), 423-449. (D. Gallarati) 45 #4269 (14N05)
Proprietà elementari relative ai segmenti ed alle coniche sopra un campo quadratico ed una congettura di Seppo Ilkka per il caso dei campi di Galois. *Ann. Mat. Pura Appl.* (4) 96 (1972), 289-337. (A. Barlotti) 50 #14465 50D05
Il quadricentenario di Keplero. *Archimede* 24 (1972), no. 1-2, 1-5. (Not reviewed) 01A45
Inequalities concerning symmetric or almost-symmetric functions. *Commentarii Mathematici Helvetici* 44 (1969), 273-287. (A. E. Danese) 49 #3064 26A87
Strutture matematiche e realtà fisica. *Archimede* 25 (1973), 169-176. (See also #00026) 00A25
Some arithmetical problems on the use of the balance. (Italian summary) *Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 54 (1973), 912-923 (1974) (Roberts) 50 #12743 05A05
Generalizzazione di un procedimento di Levi-Civita atto a costruire soluzioni particolari di sistemi differenziali. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 55 (1973), 295-300 (1974). (A. Evyatar) 52 #11719
On finite sets of points in a graphic space. (Hungarian) Translated from the Hungarian by Antónia Földes. *Mat. Lapok* 24 (1973), 19-28 (1975). (Editors) 52 #10453 05B25 (50D35)
Sur les correspondances involutoires régulières dans les ensembles finis. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 309-311. (H. B. Mann) 50 #6896 05B30
Lucien Godeaux. *Boll. Un. Mat. Ital.* (4) 11 (1975), no. 3, 639-644. (Editors) 51 #12468 01A70
Un approccio al problema dei quattro colori. (English summary) *Rend. Accad. Naz. Lincei* 51 (1975/76), 171-230 (1977). (F. Harary) 58 #340 05C15
A ricordo di Enrico Bompiani. *Rend. Accad. Naz. Lincei* 51 (1975/76), 231-232 (1977). (Editors) 58 #10220 01A70
Sugli insiemi finiti di punti di uno spazio grafico. (English summary) Collection of articles dedicated to Mauro Picone on the occasion of his ninetieth birthday. *Rend. Accad. Naz. Lincei* 51 (1975), 37-63. (Francis Buekenhout) 51 #10129 05B25
Teorie combinatorie. *Colloquio Internazionale sulle Teorie Combinatorie (Roma, 1973)*, Tomo I, 7-12. *Atti dei Convegni Lincei*, No. 17, *Accad. Naz. Lincei, Roma*, 1973. (Bruno D'Amore) 55 #7791 05-02
Incidence structures and Galois geometries, with special regard to regular incidence correspondences, arcs, caps, segments and conics. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Roma, 1973)*, Tomo I, pp. 331-369. *Atti dei Convegni Lincei*, No. 17, *Accad. Naz. Lincei, Roma*, 1976. (A. Barlotti) 55 #150D30
Punti esplosivi (radianti o vibranti) delle equazioni differenziali ordinarie. *Ann. Mat. Pura Appl.* (4) 108 (1976), 97-107. (Richard Brown) 55 #134C05
Invarianti proiettivi integrali inerenti a certe coppie o terne di curve chiuse. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 61 (1976), 420-427 (1977). (Froim Marcus) 58 #30816 53A20
Leonard Roth. *Bull. London Math. Soc.* 8 (1976), no. 2, 194-202. (1 plate) (English summary) 53 #2598 01A70 (14-03, 50-03)
Enrico Bompiani. *Rend. Mat.* (6) 9 (1976), no. 3, I-XXXII. (Editors) 55 #01A70
(with Korchmáros, Gabriele) Una proprietà degli insiemi di punti di un piano di Galois caratterizzante quelli formati dai punti delle singole rette esterne ad una curva. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 62 (1976), no. 5, 613-619. (Joseph A. Thas) 58 #23992 50D30
See also **Geometrie**, 50 #8251; **Il pensiero di F. Enriques in un discorso di B. Segre**, 57 #2848; **Garnier, René**, 57 #12116; **Tallini, Giuseppe**, 58 #10226 and **Martini, Enzo**, 58 #21311
- Seguchi, Tsunetami** Errata: "Certain operators of Riemann-Liouville type and stationary processes" (*Math. Rep. College General Ed. Kyushu Univ.* 7 (1970), no. 2, 23-33) (*errata*). *Math. Rep. College General Ed. Kyushu Univ.* 8 (1971/72), no. 1, 1 loose p. (McKean, Jr.) 52 #12059 60G10 (26A33)
- Seguier, G.** (with Lesenne, J.) Conditions to be fulfilled for generalized symmetric related components with particular reference to the derivation of usual transformations. *Matrix Tensor Quart.* 28 (1977/78), no. 1, 1-10. (Authors' summary) 58 #294A20 (15A18)
- Séguier, Pierre** (with Genêt, Jean) Comportement des solutions d'équations différentielles non linéaires à argument retardé. (English summary) *C. R. Acad. Sci. Paris Sér. I* 281 (1975), no. 20, Aii, A843-A846. (Authors' summary) 54 #13262 34K15
(with Arino, Ovide) Solutions périodiques d'équations différentielles à argument retardé. Oscillations autour d'un point stationnaire, conditions suffisantes de non-existence. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), A145-A147. (Authors' summary) 56 #794 34K15
- Seguin, Fredrick Hampton** The stability of nonuniform rotation in relativistic astrophysics. *J. Astrophys. J.* 197 (1975), 745-765. (L. F. Oster) 51 #14882 85.35
- Séguin, G. E.** Bounds for certain cyclic AN-codes. *Information and Control* 23 (1974), 41-47. (R. J. McEliece) 48 #10656 94A10
On obtaining orbit representatives for a class of groups with operators. *SIAM Appl. Math.* 26 (1974), 772-775. (R. J. McEliece) 50 #2346 20F15
(with Liu, Ruey Wen) Relative primeness of two polynomials. *IEEE Trans. Circuits and Systems* CAS-22 (1975), 474-475. (P. Abellanas) 56 #331 12E01
On synchronizable binary cyclic codes. *IEEE Trans. Information Theory* IT-24 (1975), no. 5, 589-592. (F. J. Beutler) 52 #2749 94A15
(with Bhargava, Vijay K.; Stein, J. M.) Some (mk, k) cyclic codes in quasigroups. *IEEE Trans. Inform. Theory* 24 (1978), no. 5, 630-632. (Authors' summary) 58 #20781 94A10
- Segur, Harvey** A limitation on Long's model in stratified fluid flows. *J. Fluid Mech.*

- 71), 161-179. (R. R. Long) **47** #4529 76.35
- The Korteweg-de Vries equation and water waves. Solutions of the equation. I. *J. Appl. Mech.* **59** (1973), 721-736. (J. W. Miles) **49** #10252 76.35
- (with Ablowitz, Mark J.; Kaup, David J.; Newell, Alan C.) Method for solving the e-Gordon equation. *Phys. Rev. Lett.* **30** (1973), 1262-1264. (Harry E. Moses) #9967 81.35 (35Q99)
- (with Ablowitz, Mark J.; Kaup, David J.; Newell, Alan C.) Nonlinear-evolution equations of physical significance. *Phys. Rev. Lett.* **31** (1973), 125-127. (Harry E. Moses) **53** #9968 81.35 (35Q99)
- An alternative method to solve the Korteweg-de Vries equation? *Nonlinear wave motion (Proc. AMS-SIAM Summer Sem., Clarkson Coll. Tech., Potsdam, N.Y., 1972)*, 165-171. *Lectures in Appl. Math.*, Vol. 15, Amer. Math. Soc., Providence, R.I., 1974. (H. Knightly) **52** #8688 35Q99
- (with Hammack, Joseph L.) The Korteweg-de Vries equation and water waves. II. Comparison with experiments. *J. Fluid Mech.* **65** (1974), 289-313. (J. W. Miles) #2446 76.35
- (with Ablowitz, Mark J.; Kaup, David J.; Newell, Alan C.) The inverse scattering transform-Fourier analysis for nonlinear problems. *Studies in Appl. Math.* **53** (1974), no. 249-315. (Alwyn C. Scott) **56** #9108 35Q99 (58F99)
- (with Ablowitz, Mark J.) Asymptotic solutions and conservation laws for the nonlinear Schrödinger equation. I. *J. Mathematical Phys.* **17** (1976), no. 5, 710-713. (Corneliu Eftimiu) **56** #9115a 35Q99
- Asymptotic solutions and conservation laws for the nonlinear Schrödinger equation. II. *J. Mathematical Phys.* **17** (1976), no. 5, 714-716. (Corneliu Eftimiu) **56** #9115b 35Q99
- (with Ablowitz, Mark J.) Asymptotic solutions of the Korteweg-de Vries equation. *Studies in Appl. Math.* **57** (1976/77), no. 1, 13-44. (Alan Jeffrey) **58** #1757 35Q99 (58B40)
- (with Ablowitz, Mark J.) Exact linearization of a Painlevé transcendent. *Phys. Rev. Lett.* **38** (1977), no. 20, 1103-1106. (Mark Adler) **56** #1356 58F05
- (with Hammack, Joseph L.) The Korteweg-de Vries equation and water waves. III. Oscillatory waves. *J. Fluid Mech.* **84** (1978), no. 2, 337-358. (W. Michael Lai) **8** #19706 76.35
- 5, Pierre (with Keller, Robert) A numerical method of solution of the Boltzmann equation in a weakly ionized heterogeneous gas. *J. Computational Phys.* **24** (1977), no. 1, 3-69. (Ole J. Heilmann) **56** #4619 82.65 (76.54)
- ult, Allan (with Gupta, Bisham Chand) Some results in search designs with special reference to 2^m factorial experiments. *Metron* **33** (1975), no. 3-4, 379-388 (1978). (Authors' summary) **57** #17976 62K15
- See also Barnett, Vic, **56** #4060
- al, Sudarshan K. (with Dubois, Paul F.) Another proof of the invariance of Ulm's functions in commutative modular group rings. *Math. J. Okayama Univ.* **15** (1971/72), no. 37-139. (Bhama Srinivasan) **47** #6892 20K99
- (with Passi, Inder Bir S.) Isomorphism of modular group algebras. *Math. Z.* **129** (1972), 65-73. (Donald S. Passman) **47** #314 20C05
- Lie properties in modular group algebras. *Proceedings of the Conference on Orders, Group Rings and Related Topics (Ohio State Univ., Columbus, Ohio, 1972)*, pp. 152-160. *Lecture Notes in Math.*, Vol. 353, Springer, Berlin, 1973. (D. B. Coleman) **49** #5151 20C05
- (with Parmenter, M. M.) Idempotent elements and ideals in group rings and the intersection theorem. *Arch. Math. (Basel)* **24** (1973), 586-600. (Edward Formanek) **49** #350 16A26
- (with Passi, Inder Bir S.; Passman, Donald S.) Lie solvable group rings. *Canad. J. Math.* **25** (1973), 748-757. (A. Dress) **48** #4092 20C05
- (with Parmenter, M. M.; Passi, Inder Bir S.) Polynomial ideals in group rings. *Canad. J. Math.* **25** (1973), 1174-1182. (D. B. Coleman) **49** #5078 16A26
- (with Parmenter, M. M.) Uniqueness of the coefficient ring in some group rings. *Canad. Math. Bull.* **16** (1973), 551-555. (D. B. Coleman) **51** #5648 16A26
- Certain algebraic elements in group rings. *Arch. Math. (Basel)* **26** (1975), 139-143. (Donald S. Passman) **51** #5650 16A26
- (with Passi, Inder Bir S.) Lie dimension subgroups. *Comm. Algebra* **3** (1975), 59-73. (Donald S. Passman) **51** #5725 20C05
- (with Parmenter, M. M.) Non-Archimedean group algebras. *J. Number Theory* **7** (1975), no. 4, 376-384. (D. B. Coleman) **56** #5632 16A26
- Nilpotent elements in group rings. *Manuscripta Math.* **15** (1975), 65-80. (Donald S. Passman) **51** #671 20C05
- (with Fisher, James L.) Principal ideal group rings. *Comm. Algebra* **4** (1976), no. 4, 319-325. (J. R. J. Groves) **53** #515 16A26
- (with Fisher, James L.; Parmenter, M. M.) Group rings with solvable n -Engel unit groups. *Proc. Amer. Math. Soc.* **59** (1976), no. 2, 195-200. (Donald S. Passman) **54** #5289 16A26
- (with Cliff, Gerald H.) On the trace of an idempotent in a group ring. *Proc. Amer. Math. Soc.* **62** (1976), no. 1, 11-14 (1977). (Edward Formanek) **55** #395 16A26
- (with Zassenhaus, Hans J.) Group rings without nontrivial idempotents. *Arch. Math. (Basel)* **28** (1977), no. 4, 378-380. (D. B. Coleman) **56** #5635 16A26
- (with Zassenhaus, Hans J.) Integral group rings with nilpotent unit groups. *Comm. Algebra* **5** (1977), no. 2, 101-111. (D. B. Coleman) **56** #5634 16A26
- (with Zassenhaus, Hans J.) Group rings whose units form an FC-group. *Math. Z.* **153** (1977), no. 1, 29-35. (J. R. J. Groves) **55** #8158 20C05
- (with Cliff, Gerald H.) Group rings whose units form an FC-group. *Math. Z.* **161** (1978), no. 2, 163-168. (D. A. R. Wallace) **58** #11090 20C05 (16A26)
- gal, Surinder K. A generalization of a theorem of Z. Janko and J. G. Thompson. *J. Algebra* **25** (1973), 222-225. (W. J. Wong) **47** #5100 20D05
- Generalized projectors and Carter subgroups of finite groups. *Proc. Amer. Math. Soc.* **37** (1973), 347-351. (R. W. Carter) **47** #1934 20D10
- π_1 projectors of Π soluble groups. *J. Number Theory* **6** (1974), 124-127. (H. Lausch) **49** #2930 20D20
- On the existence of Cartan subgroups of finite groups. *J. Number Theory* **8** (1976), no. 1, 73-83. (Bhama Srinivasan) **53** #3139 20G40
- (with Playtiss, Ann Scrandis; Zassenhaus, Hans J.) Equidistributed permutation groups. *Comm. Algebra* **6** (1978), no. 1, 35-57. (Koichiro Harada) **57** #6152 20B10 (20B20)
- Sehgal, V. M. On fixed and periodic points for a class of mappings. *J. London Math. Soc.* (2) **5** (1972), 571-576. (W. A. Kirk) **47** #7722 54H25
- (with Bharucha-Reid, Albert T.) Fixed points of contraction mappings on probabilistic metric spaces. *Math. Systems Theory* **6** (1972), 97-102. (B. Schweizer) **46** #9956 54H25 (60B99)
- (with Morrison, Evelyn) A fixed point theorem for multifunctions in a locally convex space. *Proc. Amer. Math. Soc.* **38** (1973), 643-646. (K. Sieklucki) **47** #906 47H10 (54H25)
- (with Su, C. H.) Some fixed point theorems for nonexpansive mappings in locally convex spaces. (Italian summary) *Boll. Un. Mat. Ital.* (4) **10** (1974), 598-601. (E. Dubinsky) **52** #4047 47H10
- Some fixed and common fixed point theorems in metric spaces. *Canad. Math. Bull.* **17** (1974), 257-259. (Haskell Cohen) **51** #1796 54H25
- (with Husain, Syed A.) On common fixed points for a family of mappings. *Bull. Austral. Math. Soc.* **13** (1975), no. 2, 261-267. (Authors' summary) **55** #9057 54H25
- (with Su, C. H.) Some fixed point theorems for condensing multifunctions in locally convex spaces. *Proc. Amer. Math. Soc.* **50** (1975), 150-154. (C. J. Himmelberg) **52** #1430 47H10
- A fixed point theorem for a family of nonexpansive mappings. *Bull. Austral. Math. Soc.* **15** (1976), no. 1, 111-116. (Kok-Keong Tan) **54** #13644 47H10
- (with Husain, Syed A.) On some theorems of Tarafdar. *Bull. Austral. Math. Soc.* **15** (1976), no. 2, 213-221. (Heinrich Steinlein) **55** #8901 47H10
- (with Su, C. H.) Some fixed point theorems for nonexpansive multifunctions in locally convex spaces. *Bull. Inst. Math. Acad. Sinica* **4** (1976), no. 1, 49-53. (Authors' summary) **57** #13594 47H10
- (with Husain, Syed A.) A fixed point theorem for a semigroup of mappings with contractive iterates. *Jñānabha Sect. A* **6** (1976), 23-27. (From the introduction) **58** #31025 54H25
- (with Husain, Syed A.) A remark on a theorem of Kasahara. *Math. Japon.* **21** (1976), no. 1, 63-65. (From the introduction) **58** #31026 54H25
- (with Singh, Sankatha P.) On a fixed point theorem of Krasnoselskii for locally convex spaces. *Pacific J. Math.* **62** (1976), no. 2, 561-567. (M. Z. Nashed) **54** #1032 47H10
- (with Husain, Syed A.) A fixed point theorem in metric spaces. *Math. Japon.* **22** (1977/78), no. 4, 449-454. (L. F. Guseman, Jr.) **58** #18392 54H25
- A simple proof of a theorem of Ky Fan. *Proc. Amer. Math. Soc.* **63** (1977), no. 2, 368-369. (Ky Fan) **55** #8905 47H10
- (with Husain, Syed A.) A fixed point theorem with a functional inequality. *Publ. Inst. Math. (Beograd) (N.S.)* **21**(35) (1977), 89-91. (L. Górniewicz) **56** #13194 54H25
- (with Husain, Syed A.) Fixed point theorem for a nonlinear type contraction. *Internat. J. Math. Math. Sci.* **1** (1978), no. 1, 57-61. (Simeon Reich) **57** #10695 54H25
- Šehovcova, L. G. A kinetic equation for a weakly relativistic system with gravitational interaction. (Russian. English summary) *Teoret. Mat. Fiz.* **27** (1976), no. 2, 262-266. (Author's summary) **56** #7687 82.45
- Šehovcova, M. G. (with Lumel'skii, Ja. P.) On the question of the comparison of unbiased estimators and maximum likelihood estimators. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 271* (1973), 47-55. (J. H. Kučkarov) **52** #4501 62F10
- Sehposjan, Ė. V. (with Amatuni, A. C.; Pogojan, V. S.) Application of the Newton-Kantorovich method in elementary particle physics. (Russian) *International Conference: Mathematical Problems of Quantum Field Theory and Quantum Statistics (Moscow, 1972)*, Part II. *Trudy Mat. Inst. Steklov.* **136** (1975), 5-14, 437. (J. S. Joel) **58** #4106 81.65
- Šešter, B. L. The number of solutions of the two-point boundary value problem for a second order equation with discontinuous right-hand side. (Russian) *Differencial'nye Uravnenija* **11** (1975), 484-497, 588. (Russell C. Thompson) **51** #10741 34B15
- The unique solvability of a certain linear two-point boundary value problem. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 4, 687-693, 764-765. (M. Tvrdý) **52** #6087 34B05
- A certain boundary value problem for a system of ordinary differential equations. (Russian. Georgian and English summaries) *Sakharth. SSR Meen. Akad. Moambe* **80** (1975), no. 3, 541-544. (Russell C. Thompson) **53** #3401 34B15
- Šešter, D. Š. (with Arhipov, Ju. A.; Kac, L. I.; Šešter, L. Š.) The magnetoresistive effect in a variable magnetic field. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **19** (1976), no. 2, 312-320. (Authors' summary) **56** #10440 78.35
- Šešter, L. Š. (with Arhipov, Ju. A.; Kac, L. I.; Šešter, D. Š.) The magnetoresistive effect in a variable magnetic field. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **19** (1976), no. 2, 312-320. (Authors' summary) **56** #10440 78.35
- Šešter, V. L. The two-point boundary value problem for a second order ordinary differential equation with a discontinuous right-hand side. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* **9**(157) (1975), 19-31. (Š. Schwabik) **54** #13189 34B15
- Šehtman, I. See Bagdoev, A. G., **52** #12514
- Šehtman, V. B. Incomplete propositional logics. (Russian) *Dokl. Akad. Nauk SSSR* **235** (1977), no. 3, 542-545. (Jerzy Kotas) **57** #71 02C10 (02C15)
- A remark on: "Models for multiply model systems" (Z. Math. Logik Grundlagen Math. **16** (1970), 175-186) by M. K. Rennie. *Z. Math. Logik Grundlagen Math.* **23** (1977), no. 6, 555-558. (N. B. Cocchiarella) **57** #15973 02C10
- An undecidable superintuitionistic propositional calculus. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1978), no. 3, 549-552. (V. Ja. Kreinovič) **58** #10330 02C15 (02G05)
- Two-dimensional modal logics. (Russian) *Mat. Zametki* **23** (1978), no. 5, 759-772. (Wiesław Dziobiak) **58** #5068 02C10
- Šehtman, V. V. The test for the exactness of a finite free complex. (Russian) *Mat. Zametki* **17** (1975), no. 5, 711-716. (Chr. U. Jensen) **52** #10712 13C05
- Seib, Manfred Orthogonal polarities of finite projective planes of odd order. *Geometriae Dedicata* **1** (1973), no. 2, 179-181. (F. Wilke) **47** #5721 50D35
- Seibert, Peter Stability in dynamical systems. *Stability problems of solutions of differential*

- equations (*Proc. NATO Advanced Study Inst., Padua, 1965*), pp. 73-94. Edizioni "Oderisi", Gubbio, 1966. (Prem Bajaj) **53** #3438 34C35 (34D20)
- Relative stability and stability of closed sets. *Seminar on Differential Equations and Dynamical Systems, II* (Univ. Maryland, College Park, Md., 1969), pp. 185-189. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (Prem Bajaj) **52** #11881 54H20 (34C35)
- A general theory of Liapunov stability. *Ordinary differential equations* (*Proc. Conf., Math. Res. Center, Naval Res. Lab., Washington, D. C., 1971*), pp. 563-568. Academic Press, New York, 1972. (S. Ahmad) **54** #7976 34D20 (54H20)
- A unified theory of Liapunov stability. *Funkcial. Ekvac.* **15** (1972), 139-147. (N. P. Bhatia) **48** #11701 34D20
- (with Salzberg, Pablo M.) A necessary and sufficient condition for the existence of a Liapunov function. *Funkcial. Ekvac.* **16** (1973), 97-101. (W. Skrapek) **50** #7705 34D20
- (with Salzberg, Pablo M.) Remarks on a universal criterion for Liapunov stability. *Funkcial. Ekvac.* **18** (1975), no. 1, 1-4. (J. Auslander) **53** #6521 54H20 (34C35)
- Liapunov functions and the comparison principle. *Dynamical systems* (*Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974*), Vol. II, pp. 181-185. Academic Press, New York, 1976. (Editors) **58** #28915 34D20 (54H20)
- (with Salzberg, Pablo M.) Asymptoticity in general systems. *Applied general systems research* (*Internat. Conf., State Univ. New York, Binghamton, N.Y., 1977*), pp. 371-379. *NATO Conf. Ser.: Systems Sci.*, Vol. 5, Plenum, New York, 1978. (From the introduction) **58** #9624 93D05
- See also **Proceedings: International Conference on Nonlinear Oscillations**, **47** #8969
- Seibert, Wolfgang** (with Sauer, Günter; Wille, Rudolf) On free modular lattices over partial lattices with four generators. *Proceedings of the University of Houston Lattice Theory Conference* (Houston, Tex., 1973), pp. 332-382. *Dept. Math., Univ. Houston, Houston, Tex.*, 1973. (R. P. Dilworth) **53** #10671 06A30
- On subdirectly irreducible modular lattices of breadth 2. *Lattice theory* (*Proc. Colloq., Szeged, 1974*), pp. 355-377. *Colloq. Math. Soc. János Bolyai*, Vol. 14, North-Holland, Amsterdam, 1976. (Ralph Freese) **56** #201 06A30
- Seibicke, E.** Rechnergestützte Auswahl des Typs der Approximationsfunktion. *Z. Elek. Informations- und Energietechnik*, 7 (1977), no. 2, 148-172. (Author's introduction) **58** #31727 65D10
- Seibt, H.** Erweiterung von Halbgruppen durch wiederholte Quotientenbildung. II. *Acta Sci. Math.* (Szeged) **35** (1973), 195-206. (B. Pondělíček) **49** #3002 20M10
- Seibt, Peter** Cohomology of algebras and triple systems. *Comm. Algebra* **3** (1975), no. 12, 1097-1120. (From the author's introduction) **56** #3095 18H15 (18H25)
- Seichter, Ladislav** Ruled surfaces in a three-dimensional symplectic space. (Czech and Russian summaries) *Sb. Vysoké. Učení Tech. v Brně* **1972**, 181-189. (B. Rozenfel'd) **50** #14516 53A15
- Seid, H. A.** Cyclic multiplication operators on L_p -spaces. *Pacific J. Math.* **51** (1974), 542-562. (Tin Kin Wong) **50** #14340 47B37
- Characterization of the flip operator. *Proc. Amer. Math. Soc.* **46** (1974), 253-258. (Paul S. Muhly) **50** #2985 47B37
- The decomposition of multiplication operators on L_p -spaces. *Pacific J. Math.* **62** (1976), no. 1, 265-274. (S. Goldberg) **53** #14205 47B37 (28A65)
- Seide, Paul** ★Small elastic deformations of thin shells. Monographs and Textbooks on Mechanics of Solids and Fluids, No. 1. Noordhoff International Publishing, Leyden, 1975. xvi+654 pp. (V. Komkov) **53** #7193 73.35
- Seidel, B. S.** (with Liang, S. S.) The instability of superposed flow. *Quart. Appl. Math.* **36** (1978/79), no. 1, 57-72. (M. N. L. Narasimhan) **57** #14858 76.35
- Seidel, Ernst** ★Gruppentheoretische Eigenschaften der homomorphischen Lösungen des n -Körperproblems. Berichte der Mathematisch-statistischen Sektion, Forschungszentrum Graz, No. 32 (1975). *Mathematisch-statistische Sektion, Forschungszentrum Graz, Graz*, 1975. 48 pp. (Manfred Andrie) **57** #8240 70.22 (22E05, 58F05)
- Seidel, J. J.** (with Cameron, Peter J.; Goethals, Jean-Marie; Shult, Ernest E.) Line graphs, root systems, and elliptic geometry. *J. Algebra* **43** (1976), no. 1, 305-327. (M. Doob) **56** #182 05C99 (17B20)
- (with Larman, D. G.; Rogers, C. A.) On two-distance sets in Euclidean space. *Bull. London Math. Soc.* **9** (1977), no. 3, 261-267. (L. M. Kelly) **56** #16511 50B10
- Seidel, Johan J.** (with Delsarte, P.; Goethals, Jean-Marie) Orthogonal matrices with zero diagonal. II. *Canad. J. Math.* **23** (1971), 816-832. (L. D. Baumert) **48** #3765 05B20
- ★On two-graphs and Shult's characterization of symplectic and orthogonal geometries over GF(2). T.H.-Report, No. 73-WSK-02. *Department of Mathematics, Technological University Eindhoven, Eindhoven*, 1973. i+25 pp. (Francis Buckenhout) **54** #10047 05B25
- (with Berlekamp, Elwyn R.; van Lint, Jacobus H.) A strongly regular graph derived from the perfect ternary Golay code. *A survey of combinatorial theory* (*Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971*), pp. 25-30. North-Holland, Amsterdam, 1973. (E. A. Nordhaus) **51** #270 05C99
- (with Lemmens, P. W. H.) Equiangular lines. *J. Algebra* **24** (1973), 494-512. (J. J. Burckhardt) **46** #7084 05C30 (52A40)
- (with Cameron, Peter J.) Quadratic forms over GF(2). *Nederl. Akad. Wetensch. Proc. Ser. A* **76** = *Indag. Math.* **35** (1973), 1-8. (E. R. Berlekamp) **48** #6143 15A63
- (with Lemmens, P. W. H.) Equi-isoclinic subspaces of Euclidean spaces. *Nederl. Akad. Wetensch. Proc. Ser. A* **76** = *Indag. Math.* **35** (1973), 98-107. (H. W. Guggenheimer) **47** #2478 50Bxx
- Graphs and two-graphs. *Proceedings of the Fifth Southeastern Conference on Combinatorics, Graph Theory and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1974), pp. 125-143. *Congressus Numerantium*, No. X, Utilitas Math., Winnipeg, Man., 1974. (A. Gewirtz) **51** #283 05C99
- Metric problems in elliptic geometry. *The geometry of metric and linear spaces* (*Proc. Conf., Michigan State Univ., East Lansing, Mich., 1974*), pp. 32-43. *Lecture Notes in Math.*, Vol. 490, Springer, Berlin, 1975. (K. Strubecker) **53** #3858 50C05
- (with Goethals, Jean-Marie) The regular two-graph on 276 vertices. *Discrete Math.* **12** (1975), 143-158. (Donald E. Taylor) **52** #5471 05C25
- A survey of two-graphs. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie* (Rome, 1973), Tomo I, pp. 481-511. *Atti dei Convegni Lincei*, No. 17, Accad. Naz. Lincei, Rome, 1976. (From the introduction) **58** #27659 05C99 (50C25)
- Finite geometric configurations. *Foundations of geometry* (*Proc. Conf., Univ. Toronto, Toronto, Ont., 1974*), pp. 215-250. Univ. Toronto Press, Toronto, Ont., (David A. Drake) **53** #2691 05-02
- (with Delsarte, P.; Goethals, Jean-Marie) Spherical codes and designs. *Geom. Dedicata* **6** (1977), no. 3, 363-388. (Mikhail Deza) **58** #5302 05B99
- (with Bussemaker, F. C.; Čobeljč, S.; Cvetković, Dragoš M.) Cubic graphs with < 14 vertices. *J. Combinatorial Theory Ser. B* **23** (1977), no. 2-3, 234-235. (Robinson) **58** #5354 05C30
- (with Cameron, Peter J.; Goethals, Jean-Marie) The Krein condition, spherical designs, Norton algebras and permutation groups. *Nederl. Akad. Wetensch. Math.* **40** (1978), no. 2, 196-206. (Peter M. Neumann) **58** #16855 20C15 (50B05)
- See also van Lint, Jacobus H., **50** #4311 and **Problems: Geometry of metric linear spaces**, **53** #6419
- Seidel, Wladimir** (with Gauthier, Paul M.) Some applications of Arakélian's approximation theorems to the theory of cluster sets. (Armenian and Russian summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **6** (1971), no. 6, 458-460. (Zalcman) **46** #2062 30A72
- (with Hwang, Jun Shung; Schnitzer, Franz) Uniqueness theorems for bi-holomorphic functions. *Math. Z.* **122** (1971), no. 4, 366-370. (S. M. Shah) **52** #1130A76
- (with Brown, Léon; Gauthier, Paul M.) Complex approximation for vector-valued functions with an application to boundary behaviour. *Trans. Amer. Math. Soc.* **194** (1974), 149-163. (W. H. J. Fuchs) **49** #7452 30A82
- (with Brown, Léon; Gauthier, Paul M.) Possibility of complex asymptotic approximation on closed sets. *Math. Ann.* **218** (1975), no. 1, 1-8. (M. Harve) **54** #10610 30A82
- Seidelmann, P. K.** See **Copernicus and modern dynamical astronomy**, **48** #10246
- Seiden, Esther** (with Hedayat, A.) On a method of sum composition of orthogonal squares. *Atti del Convegno di Geometria Combinatoria e sue Applicazioni* (Univ. Perugia, 1970), pp. 239-256. *Ist. Mat., Univ. Perugia, Perugia*, 1971. (Charles C. Li) **49** #4804 05B15
- (with Hedayat, A.; Federer, Walter T.) Some families of designs for multiplex experiments: mutually balanced Youden designs when the number of treatments is prime power or twin primes. *I. Ann. Math. Statist.* **43** (1972), 1517-1527. (Chakravarti) **49** #10087 62K10
- On the problem of construction and uniqueness of saturated 2_R^{K-P} designs. *A survey of combinatorial theory* (*Proc. Internat. Sympos., Colorado State Univ., Fort Collins, 1971*), pp. 397-401. North-Holland, Amsterdam, 1973. (W. D. Wallis) **51** #199 05B15
- (with Ruiz, Felipe) On construction of some families of generalized Youden designs. Collection of articles dedicated to Jerzy Neyman on his 80th birthday. *Ann. Statist.* **2** (1974), 503-519. (K. Vijayan) **50** #15198 62K10
- (with Raftar, J. A.) Contributions to the theory and construction of balanced designs. *Ann. Statist.* **2** (1974), 1256-1273. (From the authors' summary) **54** #6401 05B05
- (with Ruiz, Felipe) Some results on construction of orthogonal Latin squares by method of sum composition. *J. Combinatorial Theory Ser. A* **16** (1974), 230-240. (Q. Longyear) **48** #8267 05B15
- (with Hedayat, A.) On the theory and application of sum composition of squares and orthogonal Latin squares. *Pacific J. Math.* **54** (1974), no. 2, 81-94. (Damaraju Raghavarao) **51** #10125 05B15 (62K10)
- (with Hedayat, A.; Raghavarao, D.) Further contributions to the theory of F -squares design. *Ann. Statist.* **3** (1975), 712-716. (K. Sarkadi) **53** #165 62K10
- (with Wu, Ching Jung) A geometric construction of generalized Youden designs for a power of a prime. *Ann. Statist.* **6** (1978), no. 2, 452-460. (J. Kiefer) **57** #162K99
- Seiden, Joseph** Entropie résiduelle et nombre d'extrémums de l'énergie d'échange spins dans un verre magnétique classique. (English summary) *C. R. Acad. Sci. Sér. A-B* **284** (1977), no. 16, B311-B314. (Author's summary) **55** #9794 82.47
- Seidenberg, Abraham** Construction of the integral closure of a finite integral domain. (Italian summary) *Rend. Sem. Mat. Fis. Milano* **40** (1970), 100-120. (H. E. Lashin) **45** #3396 13J99
- Saturation of an analytic ring. *Amer. J. Math.* **94** (1972), 424-430. (P. Samuel) **47** #8533 13J05 (32B05)
- The hyperplane sections of arithmetically normal varieties. *Amer. J. Math.* **94** (1972), 609-630. (K. Kiyek) **46** #9039 14C20
- Constructive proof of Hilbert's theorem on ascending chains. *Trans. Amer. Math. Soc.* **174** (1972), 305-312 (1973). (J. W. Brewer) **47** #3379 13E10 (02E99)
- Differential ideals in complete local rings. *Amer. J. Math.* **95** (1973), 52-59. (Cohn) **48** #11108 14B10 (12H05, 13H10)
- On the Chow form. *Math. Ann.* **212** (1974/75), 183-190. (Y. Nakai) **51** #1214C05
- What is Noetherian? (Italian summary) *Rend. Sem. Mat. Fis. Milano* **44** (1974), 55-61 (1975). (N. Greenleaf) **54** #4938 02E99 (13E05)
- Constructions in algebra. *Trans. Amer. Math. Soc.* **197** (1974), 273-313. (P. Samuel) **50** #2141 13A15 (02E10)
- The prime ideals of a polynomial ideal under extension of the base field. *Ann. Pura Appl.* (4) **102** (1975), 57-59. (Jean-Luc Chabert) **50** #13012 13F20 (12F05)
- Did Euclid's *Elements*, Book I, develop geometry axiomatically? *Arch. Hist. Exact Sci.* **14** (1975), no. 4, 263-295. (M. Kline) **55** #12408 01A20
- Construction of the integral closure of a finite integral domain. II. *Proc. Math. Soc.* **52** (1975), 368-372. (H. Kurke) **54** #12741 13B20 (02E99)
- Pappus implies Desargues. *Amer. Math. Monthly* **83** (1976), no. 3, 190-193. (Pickert) **53** #1399 50D35
- A wide spread root for ten. *Arch. History Exact Sci.* **16** (1976/77), no. 1, 1-10. (Richard L. Francis) **58** #4778 01A10

- Derivations and valuation rings. *Contributions to algebra (collection of papers dedicated to Ellis Kolchin)*, pp. 343-347. Academic Press, New York, 1977. (W. Heinzer) #5617 13A15 (13B10)
- Jerzy** (with Nowakowski, Jerzy; Kroszczyński, J.; Szyszkiewicz, J.; Oszywa, W.; Nowakowski, J. L.) ★Współczesne metody optymalizacji systemów komunikacyjnych. (Polish) [Modern optimization methods for telecommunication systems] Biblioteka Problemów Telekomunikacji, No. 8. [Library on Communication Problems, No. 8] Wydawnictwa Komunikacji i Łączności, Warsaw, 1975. 255 pp. (errata insert) (Editors) 52 #12955 94A05
- Bounds on the mean-square error and the quality of domain decisions based on partial information. *IEEE Trans. Information Theory* IT-17 (1971), 655-665. (M. A. Elman) 48 #5726 94A15
- A method of analysis of discrete communication feedback systems. *Information and Control* 29 (1975), no. 2, 125-140. (Giuseppe Longo) 53 #15542 94A05
- Karl-Heinrich** (with Schäuble, M.) Lagrange-Theorie, Lagrange-Methoden und allgemeinerungen. *Wiss. Z. Techn. Hochsch. Ilmenau* 18 (1972), no. 3, 69-101. (H. Rupp) 48 #4888 49D99 (90C30)
- ne, Stephen B.** (with Childress, J. A.) Topological properties of the space of homeomorphisms of n -dimensional euclidean space. *Michigan Math. J.* 20 (1973), 399-402 (1974). (M.-E. Hamstrom) 52 #9258 57E05
- (with Childress, J. A.) A continuous modulus of continuity. *Amer. Math. Monthly* 80 (1975), 253-254. (Joe A. Guthrie) 51 #11408 54C05
- n, Thomas I.** (with Mizel, Victor J.) Observation and prediction for the heat equation. II. *J. Math. Anal. Appl.* 38 (1972), 149-166. (W. F. Ames) 46 #2223 35K05
- (with Korsan, Robert J.) Endpoint formulas for interpolatory cubic splines. *Math. Comp.* 26 (1972), 897-900. (Authors' summary) 47 #2780 65D05
- A well-posed problem for the heat equation. *Bull. Amer. Math. Soc.* 80 (1974), 901-902. (L. A. Peletier) 54 #5621 35K05
- An inequality for complex matrices. *Linear Algebra and Appl.* 8 (1974), 327-330. (G. G. Moore, III) 50 #8109 47A05 (15A63)
- A remark on Talenti's semigroup. *Canad. Math. Bull.* 18 (1975), no. 4, 591-592. (J. Neuberger) 53 #11432 47D05
- Periodic solutions of a non-linear parabolic equation. *J. Differential Equations* 19 (1975), no. 2, 242-257. (From the author's introduction) 57 #10184 35B10 (35K55)
- Observation and prediction for one-dimensional diffusion equations. *J. Math. Anal. Appl.* 51 (1975), 165-175. (H. O. Fattorini) 55 #2309 93E10
- The solution of singular equations. I. Linear equations in Hilbert space. *Pacific J. Math.* 61 (1975), no. 2, 513-520. (C. Ilioi) 53 #7024 65J05 (47A50)
- Boundary observation and control for the heat equation. *Calculus of variations and control theory (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1975; dedicated to Laurence Chisholm Young on the occasion of his 70th birthday)*, pp. 321-351. (Math. Res. Center, Univ. Wisconsin, Publ. No. 36, Academic Press, New York, 1976. (J. Slemrod) 54 #5946 49E05 (35K99)
- Continuous dependence of forced oscillations for $u_t = \nabla \cdot \gamma(|\nabla u|) \nabla u$. *Dynamical Systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974)*, Vol. 1, pp. 13-275. Academic Press, New York, 1976. (Editors) 58 #29093 35B99 (35K55)
- Computational approaches to ill-posed problems: general considerations. *Proceedings of the 1976 Conference on Information Sciences and Systems (Tenth Annual Meeting, Johns Hopkins Univ., Baltimore, Md., 1976)*, pp. 258-262. Dept. Electr. Engrg., Johns Hopkins Univ., Baltimore, Md., 1976. (From the text) 58 #8244 65J05
- Observation and prediction for the heat equation. III. *J. Differential Equations* 20 (1976), no. 1, 18-27. (W. F. Ames) 52 #11326 35K05
- (with Chewning, William C., Jr.) A convergent scheme for boundary control of the heat equation. *SIAM J. Control Optimization* 15 (1977), no. 1, 64-72. (Claudia Ionescu) 55 #9557 65N10 (49A20)
- Observation and prediction for the heat equation. IV. Patch observability and controllability. *SIAM J. Control Optimization* 15 (1977), no. 3, 412-427. (W. F. Ames) 55 #8941 49E15
- See also Numerical solutions of boundary value problems for ordinary differential equations, 50 #8979
- W, A. S.** See Dictionary: Automatic control, 57 #5552
- W, Z. B.** A boundary value problem with a parameter for differential equations with retarded argument. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1973, no. 1, 53-60. (G. B. Gustafson) 50 #10487 34K10
- A boundary value problem for differential equations with retarded argument. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1973, no. 2, 129-133. (G. B. Gustafson) 53 #973 34K10
- A boundary value problem for differential equations with retarded argument. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 830-834, 863. (M. M. Konstantinov) 48 #9038 34K10
- A boundary value problem with two parameters for differential equations with retarded argument. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap.* 1974, no. 1 *Voprosy Prikl. Mat. i Kibernet.*, 104-114. (See RŽMat 1975 #12 B327) 4K10
- A boundary value problem with a parameter for systems of second order differential equations with retarded argument. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 671-677, 717. (G. B. Gustafson) 50 #7737 34K10
- A boundary value problem for differential equations with retarded argument. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* 31 (1975), no. 11, 3-6. (Editors) 57 #6729 34K10
- A boundary value problem for differential equations with deviating argument. (Russian) *Differentsial'nye Uravnenija* 12 (1976), no. 3, 562-566, 576. (K. Smítalová) 5 #804 34K10
- A boundary value problem with controlling parameters for second order differential equations with retarded argument. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 5, 690-695, 719. (A. Halanay) 54 #13258 34K10 (49A30)
- ova, Ė. R.** (with Trenogin, V. A.) Convergence of the method of lines for a class of elliptic equations. (Russian) *Differentsial and integral equations*, No. 3 (Russian), pp. 105-105, 299. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Authors' summary) 58 #31887 5N20
- Šeidvasser, M. A.** The optimal numbering of the vertices of a tree. (Russian) *Diskret. Analiz* No. 17 (1970), 56-74. (L. S. Mel'nikov) 45 #105 05C05
- Optimal ordering of the vertices of a directed tree. (Russian. English summary insert) *Kibernetika (Kiev)* 1972, no. 3, 134-139. (H. Sachs) 48 #139 05C05
- Assignments of graph vertices in lattices. (Russian) *Diskret. Analiz* No. 24 (1974), 84-94, 97. (W. Dörfler) 50 #12822 05C99
- The length and breadth of assignments of graphs in lattices. (Russian) *Problemy Kibernet.* No. 29 (1974), 63-102, 245. (L. S. Mel'nikov) 53 #201a (E 53 #201b) 05C35
- Erratum: "The length and breadth of assignments of graphs in lattices" (Problemy Kibernet. No. 29 (1974), 63-102). (Russian) *Problemy Kibernet.* No. 30 (1975), 342. (L. S. Mel'nikov) 53 #201b 05C35
- Seidž, Ėndriju P.** See Sage, Andrew P.
- pieper-Seier, Irene** See Pieper-Seier, Irene
- Seier, Werner** Kollineationen von Transformationsstrukturen. (English summary) *J. Geometry* 1 (1971), 183-195. (J. André) 46 #776 50A20
- Schwach affine Räume über Skalarsystemen und ihre Kollineationsgruppen. *Abh. Math. Sem. Univ. Hamburg* 39 (1973), 109-119. (G. Zappa) 49 #1310 50A20
- Isomorphismen verallgemeinerter Parallelstrukturen. (English summary) *J. Geometry* 3 (1973), 165-178. (A. Cronheim) 48 #12254 50D05
- Eine Kennzeichnung der schwach affinen Räume über Skalarsystemen. (English summary) *Manuscripta Math.* 8 (1973), 39-57. (G. J. Schellekens) 50 #3100 50D05
- Koordinatenbereiche vektoriell erzeugbarer schwach affiner Räume. *Abh. Math. Sem. Univ. Hamburg* 40 (1974), 77-85. (G. J. Schellekens) 51 #4019 50A20
- Über Hjelmlev-Strukturen. I, II. *Abh. Math. Sem. Univ. Hamburg* 42 (1974), 107-133; *ibid.* 42 (1974), 236-254. (David A. Drake) 51 #13856 50D35
- Der kleine Satz von Desargues in affinen Hjelmlev-Ebenen. *Geometriae Dedicata* 3 (1974), 215-219. (David A. Drake) 50 #1119 50D30 (05B25)
- Über Translationen in affinen Hjelmlev-Ebenen. *Abh. Math. Sem. Univ. Hamburg* 43 (1975), 224-228. (H. Lüneburg) 53 #3862 50D05
- Kettengeometrie über Hjelmlevringen. *Beiträge zur geometrischen Algebra (Proc. Sympos., Duisburg, 1976)*, pp. 299-303. *Lehrbücher u. Monographien aus dem Gebiete der Exakt. Wiss., Math. Reihe, Band 21, Birkhäuser, Basel*, 1977. (M. J. Kallaher) 57 #13683 50D35 (16A10)
- Seierstad, Atle** A local attainability property for control systems defined by nonlinear ordinary differential equations in a Banach space. *J. Differential Equations* 8 (1970), 475-487. (H. T. Banks) 45 #3900 34H05 (93C15)
- An extension to Banach space of Pontryagin's maximum principle. *J. Optimization Theory Appl.* 17 (1975), no. 3/4, 293-335. (A. Kósa) 54 #3546 49B30
- Compactness of sets of integrable functions with values in a Banach space. *Proc. Amer. Math. Soc.* 52 (1975), 204-208. (Author's summary) 57 #10422 46E40 (46G99)
- (with Sydsæter, Knut) Sufficient conditions in optimal control theory. *Internat. Econom. Rev.* 18 (1977), no. 2, 367-391. (Nancy L. Schwartz) 56 #13041 49B10
- Seif, A. A.** (with Hanafy, A. A. R.; Sakr, M. F.) Real-time least-squares estimation using successive integrations. *Information and Control* 36 (1978), no. 1, 42-55. (Ī. M. Stojanov) 57 #15720 93E25 (93B05, 93E10)
- Seif, Ali** Existenzbeweise mittels des Schauderschen Fixpunktsatzes für Lösungen mit vorgeschriebenen Singularitätenverhalten von partiellen komplexen Differentialgleichungen in einer komplexen Veränderlichen. *Math. Nachr.* 79 (1977), 283-290. (G. Wildenhain) 58 #29117 35C99 (30A88)
- Seif, Joseph B.** On the Green's function for the biharmonic equation in an infinite wedge. *Trans. Amer. Math. Soc.* 182 (1973), 241-260. (Manfred W. Kracht) 48 #4335 31B30
- Seifele, G.** See Scheifele, Gerhard
- Seiferas, Joel I.** (with Fischer, Michael J.; Meyer, Albert R.) Refinements of the nondeterministic time and space hierarchies. *14th Annual IEEE Symposium on Switching and Automata Theory (Iowa, Iowa City, Iowa, 1973)*, pp. 130-137. *IEEE Comput. Soc., Northridge, Calif.*, 1973. (Claus Peter Schnorr) 56 #10143 68A20
- (with Kleinberg, Eugene M.) Infinite exponent partition relations and well-ordered choice. *J. Symbolic Logic* 38 (1973), 299-308. (Andreas Blass) 49 #4782 04A20 (04A25)
- Observations on nondeterministic multidimensional iterative arrays. *Sixth Annual ACM Symposium on Theory of Computing (Seattle, Wash., 1974)*, pp. 276-289. *Assoc. Comput. Mach., New York*, 1974. (A. Ja. Dikovskii) 55 #1854 68A30
- (with Galil, Zvi) Recognizing certain repetitions and reversals within strings. *17th Annual Symposium on Foundations of Computer Science (Houston, Tex., 1976)*, pp. 236-252. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Daniel J. Rosenkrantz) 57 #14593 68A10
- (with McNaughton, Robert) Regularity-preserving relations. *Theoret. Comput. Sci.* 2 (1976), no. 2, 147-154. (S. Ginsburg) 53 #12111 68A30 (02F20)
- (with Leong, Benton) New real-time simulations of multithread tape units. *Conference Record of the Ninth Annual ACM Symposium on Theory of Computing (Boulder, Colo., 1977)*, pp. 239-248. *Assoc. Comput. Mach., New York*, 1977. (John P. Helm) 58 #8490 68A20 (02F15)
- Iterative arrays with direct central control. *Acta Informat.* 8 (1977), no. 2, 177-192. (Zvi Galil) 58 #3699 68A25
- Techniques for separating space complexity classes. *J. Comput. System Sci.* 14 (1977), no. 1, 73-99. (I. Hal Sudborough) 58 #13938 68A20 (68A25)
- Relating refined space complexity classes. *J. Comput. System Sci.* 14 (1977), no. 1, 100-129. (I. Hal Sudborough) 58 #13939 68A20 (68A25)
- (with Galil, Zvi) Real-time recognition of substring repetition and reversal. *Math. Systems Theory* 11 (1977/78), no. 2, 111-146. (Pavel Strnad) 57 #4669 68A30
- Linear-time computation by nondeterministic multidimensional iterative arrays. *SIAM J. Comput.* 6 (1977), no. 3, 487-504. (R. E. Stearns) 56 #7330 68A25 (02F15)
- (with Galil, Zvi) A linear-time on-line recognition algorithm for "palstar". *J. Assoc. Comput. Mach.* 25 (1978), no. 1, 102-111. (R. G. Buharev) 58 #3693 68A25
- (with Fischer, Michael J.; Meyer, Albert R.) Separating nondeterministic time complexity classes. *J. Assoc. Comput. Mach.* 25 (1978), no. 1, 146-167. (G. Wechsung)

- 57 #4627 68A20 (50-04)
(with Wagner, Robert A.) Correcting counter-automaton-recognizable languages. *SIAM J. Comput.* 7 (1978), no. 3, 357-375. (R. K. Shyamasundar) 58 #13947 68A25 (68A20, 68A30)
- Seifert, C. J.** (with Diestel, Joseph) An averaging property of the range of a vector measure. *Bull. Amer. Math. Soc.* 82 (1976), no. 6, 907-909. (A. de Korvin) 54 #7740 28A45 (46A40)
- The dual of Baernstein's space and the Banach-Saks property. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 26 (1978), no. 3, 237-239. (W. H. Ruckle) 58 #12305 46B99
- Seifert, Egon** (with Bialy, Horst) Bemerkungen zu einem einfachen nichtlinearen Optimierungsproblem. *Wiss. Z. Hochsch. Verkehrswesen "Friedrich List" Dresden* 23 (1976), no. 4-5, 996-997. (J. Falk) 57 #5108 90C30
- Seifert, Franz D.** (with Anisimov, A. V.) Zur algebraischen Charakteristik der durch kontext-freie Sprachen definierten Gruppen. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 11 (1975), no. 10-12, 695-702. (Jacques Sakarovitch) 54 #10425 20F10 (68A30)
- Eine Klassifizierung endlich erzeugbarer Gruppen durch formale Sprachen. *Z. Math. Logik Grundlagen Math.* 22 (1976), no. 5, 419-424. (Author's review) 58 #28175 20D05
- Seifert, George** Recurrence and almost periodicity in ordinary differential equations. *Advances in differential and integral equations (Conf. Qualitative Theory of Nonlinear Differential and Integral Equations, Univ. Wisconsin, Madison, Wis., 1968; in memoriam Rudolph E. Langer (1894-1968))*, pp. 119-121. *Studies in Appl. Math.*, No. 5, Soc. Indust. Appl. Math., Philadelphia, Pa., 1969. (Editors) 52 #8568 34C25
- Almost periodic solutions for limit periodic systems. (Russian summary) *Proceedings of the Fifth International Conference on Nonlinear Oscillations (Kiev, 1969). Vol. 2: Qualitative methods in the theory of nonlinear oscillations (Russian)*, pp. 458-463. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1970.* (J. A. Marlin) 47 #8984 34C25
- Almost periodic solutions by the method of averaging. *Japan-United States Seminar on Ordinary Differential and Functional Equations (Kyoto, 1971)*, pp. 123-133. *Lecture Notes in Math.*, Vol. 243, Springer, Berlin, 1971. (T. G. Proctor) 52 #14485 34C25
- (with Fink, A. M.) Nonresonance conditions for the existence of almost periodic solutions of almost periodic systems. *SIAM J. Appl. Math.* 21 (1971), 362-366. (J. O. C. Ezeilo) 46 #5744 34C25
- Almost periodic solutions for limit periodic systems. *SIAM J. Appl. Math.* 22 (1972), 38-44. (J. A. Marlin) 46 #7638 34C25
- Liapunov-Razumikhin conditions for stability and boundedness of functional differential equations of Volterra type. *J. Differential Equations* 14 (1973), 424-430. (K. Zima) 58 #11816 34K20 (45J05)
- Liapunov-Razumikhin conditions for asymptotic stability in functional differential equations of Volterra type. *J. Differential Equations* 16 (1974), 289-297. (R. D. Driver) 57 #829 34K20
- (with Grimmer, Ronald) Stability properties of Volterra integrodifferential equations. *J. Differential Equations* 19 (1975), no. 1, 142-166. (John M. Bownds) 52 #8839 45J05
- On a class of Volterra integrodifferential equations. *Dynamical systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974), Vol. II*, pp. 303-306. *Academic Press, New York, 1976.* (From the text) 58 #29907 45D05
- Positively invariant closed sets for systems of delay differential equations. *J. Differential Equations* 22 (1976), no. 2, 292-304. (K. Zima) 55 #811 34K15
- Positively invariant sets for differential equations. *Optimal control and differential equations (Proc. Conf., Univ. Oklahoma, Norman, Okla., 1977)*, pp. 331-335. *Academic Press, New York, 1978.* (Waldyr M. Oliva) 58 #2887 58F10
- Seifert, Hans-Günther** Über die Stetigkeit der Gesamtnachfragekorrespondenz in Abhängigkeit vom Preisniveau. *Siebente Oberwolfach-Tagung über Operations Research (1974)*, pp. 195-204. *Operations Research Verfahren, Band XXI*, Hain, Meisenheim am Glan, 1975. (Yves Balasko) 55 #2084 90A15
- Multicollinearity and the prediction error. (German, French and Russian summaries) *Statist. Hefte (N.F.)* 18 (1977), no. 4, 233-253. (V. K. Srivastava) 58 #13526 62J05
- (with Deistler, Manfred) Identifiability and consistent estimability in econometric models. *Econometrica* 46 (1978), no. 4, 969-980. (Authors' summary) 58 #18999 62P20
- Seifert, Hans-Jürgen** The causal boundary of space-times. *General Relativity and Gravitation* 1 (1970/71), no. 3, 247-259. (H. Rund) 52 #12689 83J3
- (with Yodzis, P.; Müller zum Hagen, Henning) On the occurrence of naked singularities in general relativity. *Comm. Math. Phys.* 34 (1973), 135-148. (M. Carmeli) 49 #10314 83J35
- (with Müller zum Hagen, Henning; Robinson, David C.) Black holes in static vacuum space-times. *General Relativity and Gravitation* 4 (1973), 53-78. (A. K. Guc) 53 #2283 83J3
- (with Müller zum Hagen, Henning) Two axisymmetric black holes cannot be in static equilibrium. *Internat. J. Theoret. Phys.* 8 (1973), 443-450. 55 #14056 83J3
- (with Müller zum Hagen, Henning; Yodzis, P.) On the occurrence of naked singularities in general relativity. II. *Comm. Math. Phys.* 37 (1974), 29-40. (M. Carmeli) 49 #10315 83J35
- (with Müller zum Hagen, Henning; Robinson, David C.) Black holes in static electrovac space-times. *General Relativity and Gravitation* 5 (1974), no. 1, 61-72. (H. S. P. Grässer) 53 #15251 83J35
- The causal structure of singularities. *Differential geometrical methods in mathematical physics (Proc. Sympos., Univ. Bonn, Bonn, 1975)*, pp. 539-565. *Lecture Notes in Math.*, Vol. 570, Springer, Berlin, 1977. (C. J. S. Clarke) 56 #10724 83J8
- (with Müller zum Hagen, Henning) On characteristic initial-value and mixed problems. *General Relativity and Gravitation* 8 (1977), no. 4, 259-301. (V. G. Pisarenko) 58 #29307 35L20 (83J35)
- Smoothing and extending cosmic time functions. *General Relativity and Gravitation* 8 (1977), no. 10, 815-831. (C. J. S. Clarke) 58 #4185 83J3
- Seifert, Herbert** Minimallflächen von vorgegebener topologischer Gestalt. *S.-B.*
- Heidelberger Akad. Wiss. Math.-Natur. Kl.* 1974, 5-16. (Robert Gulliver) 51 #53A10 (49F10)
- Komplexe mit Seitenzuordnung. *Nachr. Akad. Wiss. Göttingen Math.-Phys.* 1975, no. 6, 49-80. (H. W. Guggenheimer) 52 #4100 50C15 (20H10, 50B30)
- Seifert, Peter** Fehlerabschätzungen für Differenzenverfahren bei einer hyperbolischen Differentialgleichung. *Beiträge Numer. Math.* 2 (1974), 193-209. (B. Kellogg) 55 #65P05
- Seifert, Rainer** Zur Frage der Anwendbarkeit des diskreten Maximumprinzips auf Funktionen die Menge der zulässigen Steuerungen isolierte Punkte enthält. *Wiss. Z. Hochsch. Chem. Leuna-Merseburg* 13 (1971), 209-210. (From the introduction) 49 #11351 49B35
- Seifert, Ralph, Jr.** On prime binary relational structures. *Fund. Math.* 70 (1971), 187-203. (N. H. Williams) 46 #3407 08A05 (02J10)
- Seiffert, H.** See *Fachtagung: Gesellschaft für Informatik, Programmiersprachen*, 48 #10176
- Seiffert, Helmut** ★Einführung in die Logik. Logische Propädeutik und formale Logik. *Verlag C. H. Beck, Munich, 1973.* 231 pp. (Editors) 52 #13302 02-01
- Seiford, L.** (with Charnes, Abraham; Rousseau, J.) Complements, mollifiers and the propensity to disrupt. *Internat. J. Game Theory* 7 (1978), no. 1, 37-50. (H. Schmitz) 58 #4373 90D10
- (with Charnes, Abraham; Cooper, William W.) Extremal principles and optimization dualities for Khinchin-Kullback-Leibler estimation. (German and English summaries) *Math. Operationsforsch. Statist. Ser. Optim.* 9 (1978), no. 1, 21-29. (A. Schmitz) 58 #15219 90C99
- Seifulla, I. D.** (with Lazarev, V. G.; Pili', E. I.) A method of analysis of finite automata that are realized in a homogeneous medium with individual adjustment of elements. (Russian) *Computing systems, No. 3: Programming of computing equipment (Proc. All-Union Conf. Comput. Systems, Novosibirsk, 1967)* (Russian), pp. 69-79. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1968.* (G. Blohina (RZMat 1969 #745) 45 #9846 94A30 (68A25)
- Seifullaev, R. K.** (with Salaev, V. V.) A singular Cauchy operator along an operator. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap.* 1977, no. 3, 5-11. (M. Z. Berk) 58 #17724 45E05 (47G05)
- Šeĭtšov, B. M.** (with Makarov, V. L.; Titov, V. V.) A model for the formation of a production program of an industrial enterprise. (Russian) *Optimizacija No. 7(24)* 61-70, 146. 48 #3465 90A15
- Seĭkaziya, A.** (with Lubečenko, T. N.) Solution of an integro-partial differential equation with exponential coefficients. (Russian) *Studies in integro-differential equations in Kirgizia (Russian)*, pp. 320-333, 435. *Izdat. "Ilim", Frunze, 1977.* (Authors' summary) 58 #23447 45K05
- Seikkala, Seppo** (with Heikkilä, Seppo) On the estimation of solutions to functional differential equations. *Acta Univ. Oulu. Ser. A Sci. Rerum Natur.* No. 35 *Math. (1975)*, 9 pp. (M. Artola) 57 #6715 34K05
- (with Heikkilä, Seppo) On fixed points through cluster values of iterates. *Math. Anal.* 1 (1976/77), no. 6, 603-606. (S. Swaminathan) 58 #31024 54H25
- (with Heikkilä, Seppo) On the estimation of successive approximations in Banach spaces. *J. Math. Anal. Appl.* 58 (1977), no. 2, 378-383. (Jerome Eisenfeld) 55 #47H10 (65J05)
- Šeiko, T. Ī.** (with Rvačov, V. L.) On the solution of problems of the distribution of potential with flows in channels of complex shape. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* 1973, 990-993, 1053. (F. authors' summary) 48 #10320 78.35 (76.35)
- (with Man'ko, G. P.; Rvačov, V. L.) Some differential properties of a sufficiently complete system of R-functions. (Russian. English summary insert) *Kybernetika (Kiev)* 1976, no. 1, 76-78. (Authors' summary) 57 #4743 73.26
- Seiler, Andreas** Inégalité de Grunsky du type Garabedian-Schiffer pour des fonctions univalentes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 10, A755-A757. (M. M. Schiffer) 54 #13064 30A34
- Seiler, Eduard** On the consistency of the theory of limits in topological unions. I. (Romanian) *Problems of logic, Vol. V (Romanian)*, pp. 149-239. *Editura Acad. Bucharest, 1973.* (Editors) 58 #27478 02K05 (54A20)
- On the consistency of the theory of limits in topological unions. II. (Romanian. German summary) *Problems of logic, Vol. VI (Romanian)*, pp. 197-247. *Editura R.S.R., Bucharest, 1975.* (Constantin Milić) 57 #16046 02H05 (02G10, 02H05)
- On the noncontradiction of the theory of topological Boolean algebras. (Romanian. German summary) *Problems of logic, Vol. VII (Romanian)*, pp. 95-117. *Ed. Academica, Bucharest, 1977.* (From the summary) 58 #27370 02D99 (02G99)
- Seiler, Erhard** (with Schlieder, Siegfried) Some remarks on the "null plane development" of a relativistic quantum field theory. *Comm. Math. Phys.* 25 (1972), 62-68. (Güttinger) 45 #4772 81J46
- (with Schlieder, Siegfried) Remarks concerning the connection between properties of the 4-point-function and the Wilson-Zimmermann expansion. *Comm. Math. Phys.* 33 (1973), 137-159. (W. Güttinger) 49 #1985 81J47
- (with Kühn, J.) Light cone expansion and four point function. *Comm. Math. Phys.* 33 (1973), 253-257. (W. Güttinger) 49 #7833 81J46
- Schwinger functions for the Yukawa model in two dimensions with space cutoff. *Comm. Math. Phys.* 42 (1975), 163-182. (J. Glimm) 51 #12208 81J46
- (with Simon, Barry) Bounds in the Yukawa₂ quantum field theory: upper bound the pressure, Hamiltonian bound and linear lower bound. *Comm. Math. Phys.* 42 (1975), no. 2, 99-114. (M. J. Westwater) 54 #1998 81J47
- (with Simon, Barry) On finite mass renormalizations in the two-dimensional Yukawa model. *J. Mathematical Phys.* 16 (1975), no. 11, 2289-2293. (J. Glimm) 53 #7295 81J47
- (with Simon, Barry) An inequality among determinants. *Proc. Nat. Acad. U.S.A.* 72 (1975), no. 9, 3277-3278. (J. de Pillis) 55 #6225 47B10 (15A45)
- (with Simon, Barry) Nelson's symmetry and all that in the Yukawa₂ and ϕ^4_2 theories. *Ann. Physics* 97 (1976), no. 2, 470-518. (R. Hoegh-Krohn) 55 #81J47
- (with Fröhlich, Jürg) The massive Thirring-Schwinger model (QED₂) converges under perturbation theory and particle structure. *Helv. Phys. Acta* 49 (1976),

924. (E. S. Fradkin) **56** #2056 81.47
(with Osterwalder, Konrad) Gauge field theories on a lattice. *Ann. Physics* **110** (1978), no. 2, 440-471. (J. Glimm) **56** #17560 81.22
3. J. (with Oberoi, R. S.; Callaway, J.) Analytic evaluation of integrals in rational calculations of scattering theory. *J. Computational Phys.* **10** (1972), 466-474. Achuthan **48** #5561 81.49
- Rudolf (with Schroer, Bert; Swieca, Jorge Andre) Problems of stability for antum fields in external time-dependent potentials. *Phys. Rev. D* (3) **2** (1970), 7-2937. (M. J. Westwater) **48** #7836 81.46
(with Minkowski, Peter) Massive vector meson in external fields. *Phys. Rev. D* (3) **4** (1971), 359-366. (Kishin Mariwalla) **49** #6818 81.34
- Quantum theory of particles with spin zero and one half in external fields. *Comm. th. Phys.* **25** (1972), 127-151. (Y. Kato) **46** #1242 81.46
(with Aventini, P.) On the electronic spectrum of the diatomic molecular ion. *mm. Math. Phys.* **41** (1975), 119-134. (W. O. Amrein) **51** #7520 81.47
(with Uhlenbrock, Dietrich A.) Massive Thirring model and sine-Gordon theory. ench summary) *Les méthodes mathématiques de la théorie quantique des champs alloq. Internat. CNRS, No. 248, Marseille, 1975*, pp. 363-374. *Éditions Centre Nat. herche Sci., Paris, 1976*. (Authors' summary) **57** #18600 81.46
(with Grossmann, A.) Heat equation on phase space and the classical limit of antum mechanical expectation values. *Comm. Math. Phys.* **48** (1976), no. 3, 195-197. Wakita) **53** #12316 81.46
(with Uhlenbrock, Dietrich A.; Williams, David N.) On the bound states of the assless free field in two space-time dimensions. *Nuclear Phys. B* **116** (1976), no. 1, 3-140. (N. Mukunda) **54** #12014 81.22
(with Uhlenbrock, Dietrich A.) On the massive Thirring model. *Ann. Physics* **105** (1977), no. 1, 81-110. (D. A. Dubin) **56** #4538 81.47
- Particles with spin $S < 1$ in an external field. *Invariant wave equations (Proc. itore Majorana)* *Internat. School of Math. Phys., Erice, 1977*, pp. 165-196. *Lecture otes in Phys., Vol. 73, Springer, Berlin, 1978*. (Author's summary) **58** #14625 81.46
(with Combes, J. M.; Schrader, Robert) Classical bounds and limits for energy istributions of Hamilton operators in electromagnetic fields. *Ann. Physics* **111** (1978), . 1, 1-18. (Lawrence E. Thomas) **58** #8930 81.47
(with Schrader, Robert) A uniform lower bound on the renormalized scalar uclidean functional determinant. *Comm. Math. Phys.* **61** (1978), no. 2, 169-175. (Jean ichel Combes) **58** #14689 81.47 (58G10)
- See also **Troubles in the external field problem for invariant wave equations**, **2** #7335 and **Voros, A.**, **57** #7678
- ov, V. M. ★Динамические контактные задачи. (Russian) [Dynamical contact problems] *Izdat. "Naukova Dumka", Kiev, 1976*. 283 pp. (Vladimir Kerchman) **8** #3880 73.45
- P. "Metric" approach to certain Diophantine inequalities. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 1, 217-223, 245. (F. Schweiger) **8** #5567 10K15
- P. D. (with Pučin'jan, V. K.; Štein, M. E.) The problem of the optimal partitioning a graph and the composition of computer devices. (Russian) *Systems for the istribution of resources on graphs (Russian)*, pp. 118-126. (errata insert) *Vychisl. Centr ikad. Nauk SSSR, Moscow, 1970*. (W. Kwasowicz) **47** #9884 68A10 (94A20)
1. G. V. The finiteness of a basis for the identities of certain varieties of groups. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 1356-1359, 1368. (V. A. Artamonov) **49** #7356 20E10
- The maximality condition in nilpotent groups. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 3, 50-52. (B. Hartley) **50** #2340 20E15
- Certain varieties of Lie algebras. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 1, 194-199, 240. (Ju. A. Bahturin) **53** #13336 17B99 (08A15)
- Varieties of metabelian Lie A -algebras. I. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1977**, no. 4, 37-46. (Juri A. Bahturin) **58** #5819a 17B99
- Metabelian varieties of Lie A -algebras. (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 2(200), 209-210. (G. P. Kukin) **58** #5820 17B99
- Varieties of metabelian Lie A -algebras. II. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1978**, no. 3, 52-59. (Juri A. Bahturin) **58** #5819b 17B99
- berg, M. V. Homological properties of closed ideals that have a bounded approximated unit. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **27** (1972), no. 4, 39-45. (B. R. Gelbaum) **46** #9765 46M15 (46H25)
- The relative homological dimension of group algebras of locally compact groups. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **37** (1973), 308-318. (W. Żelazko) **48** #6965 46M20 (43A20)
- A characterization of the algebra $C(\Omega)$ in terms of cohomology groups. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 5(197), 203-204. (B. R. Gelbaum) **57** #1150 46M20 (46E25)
- bergas, I. M. (with Kolesnikov, M. A.) Sheffer functions in four-valued logic. (Russian) *Papers on engineering cybernetics, No. 3 (Russian)*, pp. 50-100. *Vychisl. Centr Akad. Nauk SSSR, Moscow, 1971*. (I. G. Rosenberg) **48** #10762 02C05 (94A20)
- nfeld, John H. (with Hwang, M.; Gavalas, G. R.) Optimal least-square filtering and interpolation in distributed parameter systems. *J. Math. Anal. Appl.* **39** (1972), 49-74. (M. Zakai) **46** #8728 93E10
(with Hwang, M.) Observability of nonlinear systems. *J. Optimization Theory Appl.* **10** (1972), 67-77. (S. F. Moon) **48** #8032 93B05
(with Yu, Thomas K.) Observability and optimal measurement location in linear distributed parameter systems. *Internat. J. Control* (1) **18** (1973), 785-799. (R. S. Bucy) **48** #5682 93B05
(with Lapidus, Leon) ★Mathematical methods in chemical engineering. Volume 3: Process modeling, estimation, and identification. Prentice-Hall International Series in the Physical and Chemical Engineering Sciences. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1974, xiii + 545 pp. (Editors) **51** #7406 69.00 (60-01, 93-02)
(with Chen, Wen H.) Estimation of parameters in distributed systems. *Identification of parameters in distributed systems (Joint Automat. Control Conf., Univ. Texas, Austin, Tex., 1974)*, pp. 69-89. *Amer. Soc. Mech. Engrs., New York, 1974*. (Y. Cherruault) **52** #16754 93B30 (93C20)
(with Chen, Wen H.) Optimal location of process measurements. *Internat. J. Control* **21** (1975), no. 6, 1003-1014. (Mark A. Aizerman) **52** #10174 93E10
(with Ajinkya, M. B.; Ray, W. Harmon; Yu, Thomas K.) The application of an approximate non-linear filter to systems governed by coupled ordinary and partial differential equations. *Internat. J. Systems Sci.* **6** (1975), 313-332. (N. U. Ahmed) **51** #5114 93E10
(with Gavalas, G. R.; Shah, P. C.) Parameter estimation in petroleum reservoirs. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 2, pp. 351-355. *Hemisphere, Washington, D.C., 1977*. (Authors' summary) **58** #15561 93E10
(with Koda, Masato) Numerical implementation of distributed parameter filters with application to problems in air pollution. *Distributed parameter systems: modelling and identification (Proc. IFIP Working Conf., Rome, 1976)*, pp. 42-69. *Lecture Notes in Control and Information Sci.*, Vol. 1, Springer, Berlin, 1978. (From the text) **58** #26483 93E20
(with Wengle, Hans) Pseudospectral solution of atmospheric diffusion problems. *J. Computational Phys.* **26** (1978), no. 1, 87-106. (Jiří Nedoma) **58** #9108 86.65
See also **Distributed parameter systems**, **58** #26194
- Šeinin, O. B. On the history of the de Moivre-Laplace limit theorems. (Russian) *History and methodology of natural sciences, No. IX: Mechanics, mathematics (Russian)*, pp. 199-211. *Izdat. Moskov. Univ., Moscow, 1970*. (F. Rapp) **49** #4060 60-03 (01A50)
Studies in the history of probability and statistics. XXIII. Daniel Bernoulli on the normal law. *Biometrika* **57** (1970), 199-202. (Author's summary) **47** #2702 62-03
Studies in the history of probability and statistics. XXV. On the history of some statistical laws of distribution. *Biometrika* **58** (1971), 234-236. (Author's summary) **47** #2704 62-03
D. Bernoulli's work on probability. (German summary) *RETE* **1** (1971/72), no. 3/4, 273-300. (From the introduction) **58** #15931 01A50 (62-03)
Finite random sums (a historical essay). *Arch. History Exact Sci.* **9** (1972/1973), no. 4-5, 275-305. (H. L. Seal) **56** #6770 60-03 (01A55)
R. J. Boscovich's work on probability. *Arch. History Exact Sci.* **9** (1972/73), no. 4-5, 306-324. (Editors) **57** #9413 01A50 (60-03)
Mathematical treatment of astronomical observations. (A historical essay). *Arch. History Exact Sci.* **11** (1973/74), 97-126. (N. Swerdlow) **56** #8262 01A05 (01A20, 01A35, 01A40)
On the prehistory of the theory of probability. *Arch. History Exact Sci.* **12** (1974), 97-141. (Editors) **58** #15810 01A20 (01A50, 60-03)
J. Kepler as a statistician. (French summary) With discussion. Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 2. Invited papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 2, 341-354, 355-360 (1976). (V. E. Thoren) **57** #5592 01A45 (62-03)
The appearance of Dirac's delta functions in the works of P. S. Laplace. (Russian) *Istor. Mat. Issled. Vyp.* **20** (1975), 303-308, 381. (Editors) **58** #4867 01A50
P. S. Laplace's work on probability. *Arch. History Exact Sci.* **16** (1976/77), no. 2, 137-187. (H. L. Seal) **58** #10115 01A55 (60-03)
Laplace's theory of errors. *Arch. History Exact Sci.* **17** (1977), no. 1, 1-61. (D. A. Sprott) **57** #1715 62-03 (60-03)
Early history of the theory of probability. *Arch. History Exact Sci.* **17** (1977), no. 3, 201-259. (Eberhard Knobloch) **56** #5148 01A45 (01A50, 60-03)
S. D. Poisson's work in probability. *Arch. History Exact Sci.* **18** (1977/78), no. 3, 245-300. (E. Seneta) **58** #13239 60-03 (01A55)
Previous publication of Legendre's attack on Gauss: "An attack on Gauss, published by Legendre in 1820" (Historia Math. **4** (1977), 31-35) by S. M. Stigler. *Historia Math.* **4** (1977), no. 4, 454. (Editors) **58** #15975 01A55 (62-03)
The probability theory of P.-S. Laplace. (Russian) *Istor.-Mat. Issled. Vyp.* **22** (1977), 212-224, 303. (H. Freudenthal) **58** #26977 01A50 (60-03)
See also **Studies in the history of statistics and probability**, **51** #1889; **Crombie, A.**, **58** #15869; **History of mathematics from antiquity to the beginning of the nineteenth century**, **58** #21190; **History of mathematics from antiquity to the beginning of the nineteenth century**, **58** #26944a; **History of mathematics from antiquity to the beginning of the nineteenth century**, **58** #26944b and **Ljapunov, A. M.**, **58** #27023
- Šeinin, R. L. See **Fu, King Sun**, **56** #13820
- Šeinkin, G. Ju. See **Nomography collection**, **48** #7641 and **Nomography collection**, **50** #6198
- Šeinkman, L. Ė. (with Šafranskiĭ, V. V.) Some models of planning a processing complex. (Russian) *The programmed method of control, No. 3 (Russian)*, pp. 4-18, 173. *Akad. Nauk SSSR Vychisl. Centr, Moscow, 1976*. (Authors' summary) **58** #9180 90B10 (90A05)
- Šeinman, R. P. Games against nature in problems of the organization and planning of a plant. (Russian. English summary) *Advances in game theory (Proc. Second All-Union Conf., Vilnius, 1971)* (Russian), pp. 325-328. *Izdat. "Mintis", Vilnius, 1973*. (Editors) **50** #6467 90B30
- Šeinov, V. P. Transfinite diameter and certain theorems of Pólya in the case of several complex variables. (Russian) *Sibirsk. Mat. Ž.* **12** (1971), 1382-1389. (E. J. Akutowicz) **45** #595 32A07
An invariant form of Pólya's inequalities. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 194-203, 239. (H. Tornehave) **49** #5390 32A10
- Seinsche, D. Unverschränkte Graphen und strategische Spiele in kombinatorischer Form. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **27** (1973), 297-334. (From the author's introduction) **56** #5368 05C99 (90D10)
On a property of the class of n -colorable graphs. *J. Combinatorial Theory Ser. B* **16** (1974), 191-193. (Rudolph Halin) **49** #2448 (E 54 #2510) 05C15
See also **Arditti, Jean-Claude; et al.**, **54** #2510
- Seip, Ulrich ★Kompakt erzeugte Vektorräume und Analysis. *Lecture Notes in Mathematics, Vol. 273. Springer-Verlag, Berlin-New York, 1972*. ix + 119 pp. (J. Lorenz (Zbl 242 #46003)) **57** #7645 58C20 (46G99, 46M99)
Differential calculus and Cartesian closedness. *Categorical topology (Proc. Conf., Mannheim, 1975)*, pp. 578-604. *Lecture Notes in Math.*, Vol. 540, Springer, Berlin, 1976.

- (Peter Michor) **55** #13467 58C20
- Seip-Hornix, E. A. M.** Stiefel-Whitney invariants of quadratic forms over local rings. *J. Algebra* **26** (1973), 258-279. (Ron Brown) **49** #219 10C05
- The Milnorring of a local ring. Colloque sur les Formes Quadratiques (Montpellier, 1975). *Bull. Soc. Math. France Suppl. Mem.* No. 48 (1976), 35-44. (Philippe Revoy) **58** #10976 15A63 (10C05, 13D15, 13H99)
- Seiranjan, A. P.** Optimal design of beams with constraints on the deflections. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* **28** (1975), no. 6, 24-33. (G. P. Cherepanov) **53** #15068 73A9
- Seiranova, M. I.** Approximate solution of systems of nonlinear singular integral equations by the method of mechanical quadratures. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap.* **1974**, no. 1 *Voprosy Prikl. Mat. i Kibernet.*, 154-164. (Ulrich Kosel) **54** #6531 65R05
- Seisov, Ju. B.** Iteration methods for the solution of problems of mathematical programming with quadratic restrictions. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1971**, no. 5, 3-8. (Marcel Rădulescu) **45** #3080 90C20
- Linear problems of the control of motion. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1972**, no. 3, 90-91. (C. E. Langenhop) **46** #5793 34H05 (49B10)
- The cone of attainability in the theory of optimal processes. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1972**, no. 5, 10-14. (G. Zatiašvili) **51** #6543 49E15
- (with Hudai-Verenov, M. G.) Development of mathematical scholarship in Turkmenistan. (Russian) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1974**, no. 1, 51-53. (Editors) **50** #9485 01A05
- Control systems with an integral invariant. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1974**, no. 4, 15-17. (RZMat **1975** #6 V728) **57** #17438 49A10
- Sufficient conditions for the convexity of sets of attainability. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1974**, no. 4, 109-110. (Constantin Vărsan) **54** #8407 49E15
- Sufficient conditions for optimality in the time-optimality problem. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1976**, no. 2, 97-99. (O. V. Vasil'ev) **54** #3543 49B10
- (with Balin, E. A.) On L. S. Pontrjagin's sufficient conditions for the optimality of extremals. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1976**, no. 3, 11-14. (G. N. Mil'shtein) **54** #3539 49B10
- Sufficient conditions of optimality for a certain class of objects with distributed parameters. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1976**, no. 5, 3-6. (F. M. Kirillova) **56** #13046 49B25
- (with Handovletov, M.) Sufficient optimality conditions. (Russian) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1976**, no. 6, 99-100. (From the authors' text) **56** #3709 49B10
- (with Balin, E. A.; Handovletov, M.) On sufficient optimality conditions. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* **1977**, no. 5, 3-5. (G. Zatiašvili) **57** #2687 93C99
- Seitalin, A. S.** Screw-periodic functions and their basic properties. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 8-10. (Not reviewed) **42A84**
- Orthogonal systems of functions. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 11-14. (Not reviewed) **42A52**
- The Fourier series of a screw-periodic function belonging to the space $\mathcal{L}(1+4x^2)$. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 14a-20. (Not reviewed) **42A84**
- Bessel's inequality and Parseval's formula. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 21-22. (Not reviewed) **42A52**
- Convergence of a Fourier series in the metric of $\mathcal{L}_2(1+4x^2)$. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 23. (Not reviewed) **42A20**
- A Fourier series in $C_n(x)$ and a Fourier series in $S_n(x)$. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 24-25. (Not reviewed) **42A52**
- Closed orthogonal systems. The Reisz-Fischer theorem. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 26-28. (Not reviewed) **42A52**
- Convergence of Fourier coefficients to zero. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 29-30. (Not reviewed) **42A16**
- Sufficient conditions for the convergence of the Fourier series of a screw-periodic function at a point. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 31-35. (Not reviewed) **42A84**
- Conditions for the uniform convergence of the Fourier series of a screw-periodic function. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 36-42. (Not reviewed) **42A84**
- Summability of a Fourier series by the Fejér method. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 43-46. (Not reviewed) **42A24**
- A qualitative study of a system of first order homogeneous linear differential equations with screw-periodic coefficients. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 49-53. (Not reviewed) **34C99**
- (with Seitalina, T. S.) A solution of the biharmonic problem. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 54-65. (See RZMat **1974** #11 B384) **31B30**
- See also **Proceedings: Seminar of the Departments of Theoretical Mechanics and Higher Mathematics**, **48** #3668
- Seitalina, T. S.** (with Seitalin, A. S.) A solution of the biharmonic problem. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 54-65. (See RZMat **1974** #11 B384) **31B30**
- Seitkazieva, A.** (with Imanaliev, M. I.) Asymptotic behavior of the solutions of a boundary value problem for nonlinear second order integro-differential equations with a small parameter multiplying the highest derivative. (Russian) *Studies in integro-differential equations in Kirgizia*, No. 8 (Russian), pp. 80-98, 332. Izdat. "Ilim", Frunze, 1971. (Authors' summary) **58** #17742 45J05
- (with Kakišov, K. B.) Theory of branching of solutions of boundary value problem for nonlinear second order integro-differential equations with a small parameter multiplying the highest derivative. (Russian) *Studies in integro-differential equations in Kirgizia*, No. 10 (Russian), pp. 16-39, 287. Izdat. "Ilim", Frunze, 1974. (Authors' summary) **57** #17164 45J05 (34K20)
- Linear systems of integrodifferential equations with deviating argument and exponential coefficients. (Russian) *Studies in integrodifferential equations in Kirgizia*, No. 10 (Russian), pp. 125-133, 292. Izdat. "Ilim", Frunze, 1974. (Author's summary) **57** #13423 45J05
- Linear difference systems with lag. (Russian) *Izv. Akad. Nauk Kirgiz. SSR* **1974**, no. 4, 16-21. (errata insert) (From the author's introduction) **57** #13269 (34K25)
- (with Kakišov, K. B.) Linear integrodifferential equations with exponential coefficients and a lag that depends linearly on the argument. (Russian) *Trudy Gos. Univ. Ser. Mat. Nauk* No. 9 (1974), 97-100. (See RZMat **1974** #9 B481)
- Linear hereditary systems with periodic coefficients. (Russian) *Studies in integro-differential equations in Kirgizia* (Russian), pp. 126-140, 431. Izdat. Frunze, 1977. (From the text) **58** #23460 45M10
- On the theory of differential and integro-differential equations with a singularly perturbed hereditary systems. (Russian) *Studies in integro-differential equations in Kirgizia* (Russian), pp. 223-229, 433. Izdat. "Ilim", Frunze, 1977. (Author's summary) **58** #22948
- Seitkazieva, Kulshaï** (with Kakišov, K. B.) Asymptotic methods in the theory of solution of singularly perturbed hereditary systems. (Russian) Collection of dedicated to the memory of the Balkan mathematicians Constantin Carathéodori, Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of their birth (Proc. Internat. Conf. on Integral, Differential and Functional E. (Bled, 1973) in connection with the first centenary of the birth of Josip Plemelj) *Balkanica* **3** (1973), 188-193. (Nicolae Luca) **52** #6350 45J05
- Some methods for the solution of ill-posed problems of mathematical analysis. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp. 9* (1974), 112-122. (Authors' summary) **57** #930 35R25 (86.35)
- Asymptotic estimates in the theory of the branching of periodic solutions of singularly perturbed integro-differential equations with several small parameters multiplying the highest derivative. (Russian) *Studies in integro-differential equations in Kirgizia* (Russian), pp. 178-201, 432. Izdat. "Ilim", Frunze, 1977. (Author's summary) **58** #23439 45J05 (45M05)
- (with Kakišov, K. B.) Asymptotic methods in the branching theory for solutions of singularly perturbed systems of differential equations in the critical case. (Russian) *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1977)*, Band I, Teil 1, pp. 391-397. Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., No. 3N, Akademie-Verlag, Berlin, 1977. (J. S. Joel) **58** #17372 34E15 (34C25)
- Seitz, Charles L.** An approach to designing checking experiments based on a model. *Theory of machines and computations (Proc. Internat. Sympos., Technion, Haifa, 1971)*, pp. 341-349. Academic Press, New York, 1971. (Amitava Bagchi) **54** #94A30
- Seitz, Gary M.** (with Kantor, William M.) Some results on 2-transitive groups. *Math. Z.* **13** (1971), 125-142. (H. Nagao) **47** #5113 20D99
- (with Hering, Christoph; Kantor, William M.) Finite groups with a split BN -pair of rank 1. *I. J. Algebra* **20** (1972), 435-475. (J. H. Walter) **46** #243 20C30
- (with Kantor, William M.) Finite groups with a split BN -pair of rank 1. *II. J. Algebra* **20** (1972), 476-494. (J. H. Walter) **46** #244 20C30
- (with Kantor, William M.; O'Nan, Michael E.) 2-transitive groups in which the stabilizer of two points is cyclic. *J. Algebra* **21** (1972), 17-50. (A. Kostrikin) **1972** #9 A156) **50** #10029 20B20
- (with Schacher, Murray M.) π -groups that are M -groups. *Math. Z.* **125** (1972), 43-48. (P. Fong) **47** #1940 20D20
- (with Fong, Paul) Groups with a (B, N) -pair of rank 2. *Finite groups '72 (Proc. Gainesville Conf., Univ. Florida, Gainesville, Fla., 1972)*, pp. 36-40. North-Holland Math. Studies, Vol. 7, North-Holland, Amsterdam, 1973. (Larry C. Grove) **50** #13243 20D05
- Flag-transitive subgroups of Chevalley groups. *Finite groups '72 (Proc. Gainesville Conf., Univ. Florida, Gainesville, Fla., 1972)*, pp. 122-125. North-Holland Math. Studies, Vol. 7, North-Holland, Amsterdam, 1973. (James F. Hurley) **50** #10040 (EA) **20C15**
- Flag-transitive subgroups of Chevalley groups. *Ann. of Math. (2)* **97** (1973) (C. Hering) **49** #5201 20G40
- (with Fong, Paul) Groups with a (B, N) -pair of rank 2. I, II. *Invent. Math.* **19** (1973), 1-57; *ibid.* **24** (1974), 191-239. (W. Feit) **50** #7335 20D25
- Solvable groups having system normalizers of prime order. *Trans. Amer. Math. Soc.* **183** (1973), 165-173. (D. E. Taylor) **50** #468 20D10
- Small rank permutation representations of finite Chevalley groups. *J. Algebra* **19** (1974), 508-517. (Larry C. Grove) **56** #3138 20G05
- (with Landázuri, Vicente) On the minimal degrees of projective representations of the finite Chevalley groups. *J. Algebra* **32** (1974), 418-443. (Larry C. Grove) **50** #13299 20G05
- Some representations of classical groups. *J. London Math. Soc. (2)* **10** (1975), 115-120. (G. Lusztig) **51** #5789 20G05
- (with Aschbacher, Michael) Involutions in Chevalley groups over fields of characteristic 2. *Nagoya Math. J.* **63** (1976), 1-91. (Bhama Srinivasan) **54** #10391 20C20
- (with Aschbacher, Michael) On groups with a standard component of known type. *Osaka J. Math.* **13** (1976), no. 3, 439-482. (J. L. Alperin) **55** #8161 20D05
- (with Curtis, Charles W.; Kantor, William M.) The 2-transitive permutation representations of the finite Chevalley groups. *Trans. Amer. Math. Soc.* **218** (1976), 1-59. (Edward Cline) **54** #10429 20G05
- Standard subgroups of type $L_n(2^a)$. *J. Algebra* **48** (1977), no. 2, 417-438. (Harada) **56** #8706 20D99
- (with Griess, Robert L., Jr.; Mason, David R.) Bender groups as standard subgroups. *Trans. Amer. Math. Soc.* **238** (1978), 179-211. (Ulrich Dempwolff) **57** #6180 20D05

- Károlyi Investigations in the Hajós theory of finite abelian groups. (Hungarian. German summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **21** (1973), 119-127. (L. Károlyi) **48** #6274 20K05
- (with Blicke, T.) ★The structure of systems. Report DM 74-2. Department of Mathematics, Karl Marx University of Economics, Budapest, 1974. 31 pp. (Paul C. Jämsen) **51** #2688 93A05
- (with Blicke, T.; Grega, B.) ★On semigroups of type α with special emphasis on certain applications in chemical engineering. DM 75-4. Department of Mathematics, Karl Marx University of Economics, Budapest, 1975. i + 18 pp. (John W. Hogan) **2** #639 20M99
- (with Blicke, T.; Balázs, J.) ★On a class of partial semigroups with special emphasis on certain applications in chemical engineering. Report 1975-3. Department of Mathematics, Karl Marx University of Economics, Budapest, 1975. i + 16 pp. (John W. Hogan) **52** #10938 20M99
- ★Investigations in the Hajós-Rédei theory of finite Abelian groups. DM 75-6. Department of Mathematics, Karl Marx University of Economics, Budapest, 1975. i + 43 pp. (K. M. Rangaswamy) **53** #655 20K99
- (with Puskás, Cs.) ★Investigations of group graphs. DM 77-2. Department of Mathematics, Karl Marx University of Economics, Budapest, 1977. 21 pp. (V. Krishnamoorthy) **56** #15485 05C25
- (with Matsen, F. A.) Perturbation expansion of the Dirac equation. *Amer. J. Phys.* **44** (1976), no. 7, 697-701. (Iraj Hormozdiani) **53** #9960 81J35
- Čech, V. V. The (0)-convergence in a set space. (Russian) *Optimizacija* **No. 2**(19) (1971), 119-137. (Harold H. McFaden) **46** #5989 46A40 (52A20)
- Čech, V. V. Symmetry in an infinite-dimensional Riemannian space. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1970**, no. 8(99), 94-102. (D. G. Ebin) **45** #1205 58B20 (53C35)
- A generalized symmetry space without dimension restriction. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. Vyp.* **83 Geometrija** (1971), 109-119. (Michał Lorens) **53** #11649 58B20 (53B20)
- Semireducible infinite-dimensional Riemannian spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 5(132), 77-83. (M. Craioveanu) **48** #12589 58B20
- Continuity of a linear operator with respect to the angle. (Russian) *Sverdlovsk. Gos. Ped. Inst. Naučn. Trudy Sb.* **219 Algebra i Mat. Anal.** (1974), 223-226. (A. Alexiewicz) **54** #3441 46A05
- On the question of the tensorial characterization of algebraic surfaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 7(158), 76-79. (M. Decuyper) **54** #8474 53A20 (14J25)
- A characteristic property of algebraic subvarieties in Hilbert space. (Russian) Differential equations, approximate methods of their solution. *Tjumen. Gos. Univ. Naučn. Trudy Sb.* **22** (1975), 72-77. (See RŽMat **1976** #10 B538; MR **58** #28740) **46C10**
- Collineation in a dimension-free projective space. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 6(181), 119-121. (E. J. F. Primrose) **58** #7374 50D20
- Sekaninová, Anna. See Sekaninová, Anna
- Sekanina, Milan (with Polák, Václav; Poláková, N.) Remarks to inner constellation in topological spaces. (Russian summary) *Spisy Přírod. Fak. Univ. Brno* **1969**, no. 507, 317-332. (J. M. Day) **45** #4341 54A05
- Embedding of the category of ordered sets in the category of semigroups. Lectures on the theory of ordered sets and general algebra (Abstracts, Summer Session, Harmonia, 1970). *Acta Fac. Rerum. Natur. Univ. Comenian. Math. Mimoriadne Číslo* (1971), 77-79. (M. Gould) **52** #3398 20M10
- On an algorithm for ordering of graphs. *Canad. Math. Bull.* **14** (1971), 221-224. (J. W. Moon) **46** #8880 05C10
- (with Sekaninová, Anna) On the number of polynomials in ordered algebra. *Czechoslovak Math. J.* **21(96)** (1971), 391-398. (J. Froemke) **46** #3401 06A70 (08A25)
- Polynomials in topological algebras. *Czechoslovak Math. J.* **21(96)** (1971), 431-436. (I. Gy. Maurer) **45** #323 16A80
- (with Chvalina, Jan) Realizations of closure spaces by set systems. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971)*, pp. 85-87. *Academia, Prague*, 1972. (H. Herrlich) **50** #8415 54B30 (54A05)
- Algebraische Operationen in universellen Algebren. *Studien zur Algebra und ihre Anwendungen (mit Anwendungen in der Mathematik, Physik und Rechenstechnik)*, pp. 83-86. *Schr. Zentralinst. Math. Mech. Akad. Wissensch. DDR, Heft 16, Akademie Verlag, Berlin*, 1972. (Gilbert Crombez) **49** #4908 08A25
- Realisation of ordered sets by means of universal algebras, especially by semigroups. *Theory of sets and topology (in honour of Felix Hausdorff, 1868-1942)*, pp. 455-466. *VEB Deutsch. Verlag Wissensch., Berlin*, 1972. (B. Csákány) **49** #4909 08A25
- (with Rosický, Jiří) Realizations of topologies by set-systems. *Topics in topology (Proc. Colloq., Keszthely, 1972)*, pp. 535-555. *Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam*, 1974. (J. S. Isbell) **50** #8418 54B30
- Adequate subcategories in the category of ordered sets. (Russian summary) *Scripta Fac. Sci. Natur. UJEP Brunensis—Math.* **4** (1974), no. 1, 43-52. (J. R. Isbell) **52** #10840 18B05
- On two constructions of Hamiltonian graphs. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 471-475. *Academia, Prague*, 1975. (Pavol Hell) **52** #5478 05C35
- Graphs and betweenness. *Mat. Casopis Sloven. Akad. Vied* **25** (1975), no. 1, 41-47. (Pavol Hell) **54** #10086 05C99 (08A05)
- Orderings of the system of all sublattices of a distributive lattice. *Lattice theory (Proc. Colloq., Szeged, 1974)*, pp. 379-393. *Colloq. Math. Soc. János Bolyai, Vol. 14, North-Holland, Amsterdam*, 1976. (V. S. Krishnan) **55** #10346 06A35
- Concrete categories with non-injective monomorphism. *Contributions to universal algebra (Colloq., József Attila Univ., Szeged, 1975)*, pp. 435-439. *Colloq. Math. Soc. János Bolyai, Vol. 17, North-Holland, Amsterdam*, 1977. (J. R. Isbell) **57** #3039 08A10
- Topologies on systems of subsets. *General topology and its relations to modern analysis and algebra, IV (Proc. Fourth Prague Topological Sympos., Prague, 1976)*, Part B, pp. 420-424. *Soc. Czechoslovak Mathematicians and Physicists, Prague*, 1977. (J. E. Keesling) **57** #13826 54B20
- Sekaninová, Anna (with Grätzer, George; Plonka, Jerzy) On the number of polynomials of a universal algebra. I. *Colloq. Math.* **22** (1970), 9-11. (J. Froemke) **45** #3289 08A25
- (with Sekanina, Milan) On the number of polynomials in ordered algebra. *Czechoslovak Math. J.* **21(96)** (1971), 391-398. (J. Froemke) **46** #3401 06A70 (08A25)
- On algebras having at most two algebraic operations depending on n variables. (Czech summary) *Časopis Pěst. Mat.* **98** (1973), 113-121, 212. (Gilbert Crombez) **48** #2031 08A25
- Sekiev, K. A. See Differential equations and their application, **50** #13681
- Sekennik, A. A. See Sukennik, A. A.
- Sekerina, N. N. Extension of functions of the class SB from a rectangular domain to the whole space. (Russian) *Collection of questions of mathematics and mechanics, No. 7 (Russian)*, pp. 145-152, 328. *Kazakh. Gos. Univ., Alma-Ata*, 1975. (Editors) **58** #30153 46E35
- Extension of functions of the class SB from an arbitrary bounded domain to the whole space. (Russian) *Collection of questions of mathematics and mechanics, No. 7 (Russian)*, pp. 153-159, 328. *Kazakh. Gos. Univ., Alma-Ata*, 1975. (Editors) **58** #30154 46E35
- Sekerž-Zen'kovič, Ja. I. Steady-state capillary-gravitational forced waves of finite amplitude on the surface of a liquid of finite depth. (Russian) *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Mushelišvili) (Russian)*, pp. 445-458. *Izdat. "Nauka", Moscow*, 1972. (E. Zeidler) **52** #9794 76J35
- The capillary gravitational steady-state waves of finite amplitude on the surface of a fluid flowing over a wavy bottom. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 302-305. (J. P. Guiraud) **48** #3360 76J45
- On steady composite capillary-gravitational waves of finite amplitude. *Prikl. Mat. Meh.* **39** (1975), no. 2, 298-305 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 2, 279-286. (J. P. Guiraud) **52** #7301 76J35
- On stable composite capillary-gravitational waves of finite amplitude on the surface of a fluid of finite depth. *Prikl. Mat. Meh.* **39** (1975), no. 6, 1023-1031 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 6, 982-989 (1976). (Author's summary) **57** #4811 76J35
- Sekerž-Zen'kovič, S. Ja. Waves generated by a source of harmonic oscillations that is located in a cylindrical layer of fluid. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **27** (1972), no. 6, 112-121. (L. Dragoš) **49** #1909 76J35 (76A1)
- (with Gabov, S. A.; Ruban, P. I.) Diffraction of Kelvin waves by a semi-infinite wall in a semi-bounded basin. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 6, 1512-1524, 1625. (E. Zeidler) **53** #12191 76J35
- (with Gabov, S. A.) Standing waves on the surface of a rotating cylindrical layer of a fluid. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 3, 65-75. (L. G. Chambers) **54** #11955 76J35
- Sekey, Andrew A. (with Langholz, Gideon) Feedback information rate and entropy in a discrete system. *Internat. J. Systems Sci.* **7** (1976), no. 9, 963-971. (Takeo Yukimachi) **56** #2658 94A15
- Seki, Hideo Improvement of Marko's model toward the inter-locutional communication theory. (Japanese. English summary) *Rep. Univ. Electro-Commun.* **No. 29** (1971), 1-6. (N. Zierler) **46** #6913 94A05
- Seki, Takakazu. See Hirose, Hideo. **57** #2816; Mishiaki, Yoshimasa; et al., **57** #2817; Hirayama, Akira, **58** #10007 and Hayashi, Tsuruchi, **58** #26732
- Sekigawa, Kouei On some hypersurfaces satisfying $R(X, Y) \cdot R_1 = 0$. *Hokkaido Math. J.* **1** (1972), 102-109. (H. Osborn) **47** #9490 53C40
- Notes on some 3- and 4-dimensional Riemannian manifolds. *Kōdai Math. Sem. Rep.* **24** (1972), 403-409. (F. Brickell) **49** #1430 53C20
- Notes on a Kählerian manifold of complex dimension 2. *Tensor (N.S.)* **23** (1972), 347-350. (Koichi Ogue) **49** #1450 53C55
- On some hypersurfaces satisfying $R(X, Y) \cdot R = 0$. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. II. *Tensor (N.S.)* **25** (1972), 133-136. (K. Nomizu) **48** #9622 53C45
- On some 3-dimensional Riemannian manifolds. *Hokkaido Math. J.* **2** (1973), 259-270. (G. R. Jensen) **50** #5689 53C20
- (with Sawaki, Sumio) Almost Hermitian manifolds with constant holomorphic sectional curvature. *J. Differential Geometry* **9** (1974), 123-134. (G. R. Jensen) **49** #3756 53C15
- On the Riemannian manifolds of the form $B \times_f F$. *Kōdai Math. Sem. Rep.* **26** (1974/75), 343-347. (R. L. Bishop) **55** #11171 53C25
- Some 3-dimensional Riemannian manifolds with constant scalar curvature. *Sci. Rep. Niigata Univ. Ser. A No. 11* (1974), 25-29. (Y. Katsurada) **51** #6657 53C20
- On some 3-dimensional compact Riemannian manifolds. *Tensor (N.S.)* **28** (1974), 95-101. (G. R. Jensen) **52** #4178 53C20
- Notes on some curvature homogeneous spaces. *Tensor (N.S.)* **29** (1975), no. 3, 255-258. (Shūichi Tanno) **51** #8994 53C35
- On some 3-dimensional complete Riemannian manifolds satisfying $R(X, Y) \cdot R = 0$. *Tōhoku Math. J. (2)* **27** (1975), no. 4, 561-568. (Y. Katsurada) **52** #15311 53C35
- On the k -th nullity spaces of curvature-like tensors. *Tensor (N.S.)* **30** (1976), no. 2, 127-132. (Huei-Shyong Lue) **55** #6331 53C20
- On some 4-dimensional Riemannian manifolds satisfying $R(X, Y) \cdot R = 0$. *Hokkaido Math. J.* **6** (1977), no. 2, 216-229. (K. L. Duggal) **56** #3771 53C35
- 3-dimensional homogeneous Riemannian manifolds. I. *Sci. Rep. Niigata Univ. Ser. A No. 14* (1977), 5-14. (O. Kowalski) **58** #12840a 53C30
- On some 3-dimensional curvature homogeneous spaces. *Tensor (N.S.)* **31** (1977), no. 1, 87-97. (Jarolím Bureš) **57** #4050 53C30 (53C25)
- A note on deformations of Riemannian metrics on 3-dimensional manifolds. *Tensor (N.S.)* **31** (1977), no. 1, 103-106. (Y. Muto) **57** #1349 53C20 (58H05)
- (with Yasuda, Motoo) Some variational problems of Riemannian metrics on 3-dimensional manifolds. *Tensor (N.S.)* **31** (1977), no. 2, 175-181. (Y. Muto) **57** #1350 53C20 (58H05)
- 3-dimensional homogeneous Riemannian manifolds. II. *Sci. Rep. Niigata Univ. Ser.*

- A No. 15 (1978), 71-78. (O. Kowalski) **58** #12840b 53C30
- Sekiguchi, Jirō** On an example of an irreducible prehomogeneous vector space. (Japanese) Theory of prehomogeneous vector spaces and its applications (Short Courses, Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1974). *Sūrikaiseikikenkyūsho Kōkyūroku* No. 238 (1975), 148-183. (T. Ono) **56** #3141 20G20
- Zonal spherical functions on some symmetric spaces. Proceedings of the Oji Seminar on Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., Kyoto, 1976). *Publ. Res. Inst. Math. Sci.* **12** (1976/77), supplement, 455-459. (Kenneth Johnson) **57** #1027 43A90
- On zonal harmonics of $SL(3, \mathbb{R})$. (Japanese) Various problems in algebraic analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku* No. 266 (1976), 259-274. **58** #29866 43A90
- (with Ōshima, Toshio) Boundary value problem on symmetric homogeneous spaces. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 3, 81-83. (A. Korányi) **56** #15830 22E30 (53C35, 43A85)
- (with Ōshima, Toshio) On various special characteristic functions on symmetric spaces. (Japanese) Research on microlocal analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikikenkyūsho Kōkyūroku* No. 295 (1977), 12-19. **58** #23360 43A85
- Sekiguchi, T.** (with Masubuchi, Masami; Kanoh, Hikeaki; Kawashima, Y.; Matsui, W.) Determination of the unique optimal trajectories in the second order optimal control systems. *Automatic and remote control III* (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966), Vol. 1, p. 48, Paper 24G, 8 pp. *Inst. Mech. Engrs., London*, 1967. (From the authors' introduction) **55** #11128 49A99
- See also Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360b
- Sekiguchi, Takashi** (with Ando, Tsuyoshi; Suzuki, Teruo) Approximation by positive operators. *Math. Z.* **131** (1973), 273-282. (S. K. Berberian) **47** #9326 47A99 (41A65)
- Positive approximants of normal operators. *Hokkaido Math. J.* **5** (1976), no. 2, 270-279. (T. Andō) **53** #11411 47B15 (47A55)
- Sekiguchi, Takeshi** Remarks on Caroli's condition. *Tōhoku Math. J.* (2) **24** (1972), 457-461. (D. L. Burkholder) **49** #9937 60G45
- On the Krickeberg decomposition of continuous martingales. *Séminaire de Probabilités, X* (Première partie, Univ. Strasbourg, Strasbourg, année universitaire 1974/1975), pp. 209-215. *Lecture Notes in Math.*, Vol. 511, Springer, Berlin, 1976. (A. N. Al-Hussaini) **55** #13568 60G45
- Sekiguchi, Takeshi** Note on the Krickeberg decomposition. *Tōhoku Math. J.* (2) **28** (1976), no. 1, 95-97. (Jacques Azéma) **53** #9369 60G45
- Sekiguchi, Tsutomu** On the l -number of l -cycles on an abelian variety. *Hiroshima Math. J.* **4** (1974), 83-88. (J.-E. Bertin) **50** #334 14K05 (14C99)
- On projective normality of Abelian varieties. *J. Math. Soc. Japan* **28** (1976), no. 2, 307-322. (Toshiyuki Maebashi) **53** #5611 14K05
- On projective normality of Abelian varieties. II. *J. Math. Soc. Japan* **29** (1977), no. 4, 709-727. (Toshiyuki Maebashi) **56** #15662 14K25 (14K05)
- Sekimoto, Shoji** Extended right precedence grammars and analyzing technique for them. *Information Processing in Japan* **12** (1972), 21-25. (W. Wechler) **48** #7677 68A30
- A practical method of constructing LR (1) parsers and on the properties peculiar to LR (1) grammars. *Information Processing in Japan* **12** (1972), 100-105. (A. B. Cremers) **54** #1732 68A30
- (with Mukai, Kuniaki; Sudo, Masaru) A method of minimizing LR(k) parsers. *Systems-Computers-Controls* **4** (1973), no. 5, 73-80. (Miroslav Hladký) **51** #14663 68A30
- (with Mukai, Kuniaki; Sudo, Masaru) A formal semantics for algorithmic languages based on Scott's logic. Proceedings of the Third Symposium on Basic Theory of Programs (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1973) and of the Workshop for Proof Theory about Algorithms (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1974). *Sūrikaiseikikenkyūsho Kōkyūroku* No. 236 (1975), 38-45. (Authors' summary) **58** #3631 68A05
- Sekimoto, Toshihiko** On the uniqueness of the shortest single axiom for the implicational calculus of propositions. *Proc. Japan Acad.* **48** (1972), 290-292. (G. Burle (RZMat 1973 #2 A53)) **51** #10019 02B05
- Propositional calculus and implicational propositional calculus. (Japanese) *J. Tsuda College No.* **5** (1973), 85-103. (K. Inoue) **49** #2247 02B05
- On some free pseudo-Boolean algebras. *J. Tsuda College No.* **6** (1974), 1-8. (From the introduction) **58** #5200 02J05 (08A25)
- Sekine, Katsuhiko** (with Kato, Yusuke) Bound states and asymptotic fields. *Progr. Theoret. Phys.* **52** (1974), 659-687. (E. Zeidler) **54** #1988 81A7
- Unitarity and asymptotic condition in a model with dipole ghost. *International Symposium on Mathematical Problems in Theoretical Physics* (Kyoto Univ., Kyoto, 1975), pp. 196-198. *Lecture Notes in Phys.*, 39, Springer, Berlin, 1975. (From the text) **58** #32602 81A7
- Sekine, Tomaharu** (with Kojima, Masakazu; Nishino, Hisakazu) An extension of Lemke's method to the piecewise linear complementarity problem. *SIAM J. Appl. Math.* **31** (1976), no. 4, 600-613. (Authors' summary) **58** #25966 90C05
- Sekistov, V. N.** (with Andrianov, V. A.) Application of complex geometric optics in the problem of radiography of the atmosphere in the case of superrefraction. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **21** (1978), no. 2, 240-252. (Authors' summary) **58** #14388 78A1
- Sekizawa, Masami** On conformal Killing tensors of degree 2 in Kählerian spaces. *TRU Math.* **6** (1970), 1-5. (C. I. Ispas) **51** #4092 53B35
- A theorem on a manifold of constant ϕ -holomorphic sectional curvature. *Tensor (N.S.)* **22** (1971), 151-154. (J. R. Vanstone) **45** #1073 53C25
- The nullity spaces of the conformal curvature tensor. *J. Math. Soc. Japan* **25** (1973), 125-131. (C. B. Allendoerfer) **46** #9901 53C20
- (with Tachibana, Shun-ichi) On the k -th relative nullity space of a Riemannian manifold in E^N . *Tamkang J. Math.* **5** (1974), no. 1, 133-138. (K. Yano) **51** #6633 53B25
- (with Tachibana, Shun-ichi) On the k -th nullity space of the Riemannian curvature tensor. *Tōhoku Math. J.* (2) **27** (1975), 25-30. (Shūichi Tanno) **51** #1668 53C20 (58A30)
- Completeness of the k -th nullity foliations. *J. Differential Geometry* **11** (1976), 461-465. (Hassan Akbar-Zadeh) **55** #8994 53C20
- (with Ogawa, Yōsuke) Hypersurfaces immersed in a conformally flat Riemannian manifold. *Natur. Sci. Rep. Ochanomizu Univ.* **27** (1976), no. 2, 77-87. (Bang-yang) **57** #13753 53B25
- Sekizawa, Sumiko** On a zero-free domain of $L(s, \chi)$. (Japanese) *J. Tsuda College* (1972), 6-18. (T. Kubota) **48** #11058 12A70
- Sekkappan, Rm.** (with Thompson, Mary E.) On a class of uniformly admissible estimators for finite populations. *Ann. Statist.* **3** (1975), 492-499. (V. P. Godambe) **50** #62C15
- Sekowska, Magdalena** Turbulent diffusion and space-time characteristic functional. *Zeszyty Nauk. Univ. Jagiello. Prace Mat. No.* **16** (1974), 35-41. (François) **50** #9163 76G60
- Sekrieru, I. V.** Certain properties of regular operators in KV - and KN -spaces. (Russian. English summary) *Gor'kov. Gos. Univ. Učen. Zap. No.* **105** (1969), 24-30. (E. Strzelecki) **45** #47B55 (46A40)
- Approximate computation of an eigen-pair of a strongly positive matrix with diagonal element. (Russian) *Prikl. Mat. i Programirovanie* No. 5 (1971), 96-100. (Schock) **45** #9475 65F15
- (with Slugin, S. N.) A projection method in a KH -space with unity. (Russian. English summary) *Akad. Sīince RSS Moldoven.* **1972**, no. 1, 89-91. (B. Jankó) **46** #2476 (65J05)
- Šekrladze, D. A.** (with Šlegija, R. S.; Gagošidze, T. A.) A certain servicing model for a group of machine tools. (Russian. English summary) *Vysš. Tehn. Šk. Tbil.* **1974**, no. 3, 78-83. (D. Obradović) **51** #2626 90B25
- Seksenbaev, K. S.** The Hopficity of a wreath product of two groups. (Russian. English summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1971**, no. 3, 50-54. (C. Holmes) **45** #6932 20F25
- Šeksnja, V. L.** (with Raskoša, V. L.) A condition for the optimal allocation of resources in the detection problem. (Russian) *Izv. Akad. Nauk Kirgiz. SSR* **1971**, no. 6, 18-21. (D. Koršunov) **45** #6527 94A20
- Sekuloski, Radojko M.** A generalization of S. Prešić's iterative method for the factorization of polynomials. (Serbo-Croatian. English summary) *Mat. Vesnik* **9(24)** (1972), 21-24. (Author's summary) **48** #1456 65H05
- Seland, Bjarne** Infinitesimal characterization of analytic vectors for representation of Lie groups on locally convex spaces. *Math. Scand.* **39** (1976), no. 2, 359-366. (Siegfried Grosser) **58** #16975 22E45
- Selbach, Martin** ★Klassifikationstheorie halbeinfacher algebraischer Gruppen. Diplomarbeit, Univ. Bonn, Bonn, 1973. Bonner Mathematische Schriften, Mathematisches Institut der Universität Bonn, Bonn, 1976. v + 140 pp. (F. D. Veldkamp) **55** #5759 20G15 (10C30)
- Selberg, Atle** Sieve methods. 1969 Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969), pp. 311-351. *Amer. Math. Soc., Providence, R.I.*, 1971. (H. L. Montgomery) **58** #27861 10H30
- Remarks on sieves. *Proceedings of the Number Theory Conference* (Univ. of Colorado, Boulder, Colo., 1972), pp. 205-216. *Univ. Colorado, Boulder, Colo.*, 1972. (H. E. Richman) **52** #10632 10H30
- Remarks on multiplicative functions. *Number theory day* (Proc. Conf., Rockefeller Univ., New York, 1976), pp. 232-241. *Lecture Notes in Math.*, Vol. 626, Springer-Verlag, Berlin, 1977. (J. W. Porter) **58** #5562 10H30
- See also Thue, Axel, **57** #46
- Selberg, Henrik L.** Über die Potenzreihen mit positiven Koeffizienten. *Norske Vidensk. Selsk. Skr. (Trondheim)* **1975**, no. 5, 6 pp. (Thomas McCoy) **54** #10578 30A10
- Über eine Klasse von Potenzreihen mit positiven Koeffizienten. (English summary) *Norske Vidensk. Selsk. Skr. (Trondheim)* **1977**, no. 2, 6 pp. (R. S. L. Srivastava) **58** #30A10
- Selberg, Sigmund** Einige neuere Ergebnisse in der analytischen Zahlentheorie. *Ann. und Vorträge des Gedenkolloquiums für Alexander Dinghas* (Freie Univ. Berlin, Berlin, 1975), pp. 22-35. *Math. Inst. der Freie Univ. Berlin, Berlin*, 1977. (R. Tijdeman) **57** #3049 10-01
- See also Thue, Axel, **57** #46
- Selbuz, Hasan** (with Başar, Tamer) Properties of Nash solutions of a two-stage nonzero-sum game. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 1, 1-6. (Norman P. Coleman, Jr.) **53** #2400 90D25
- Selby, Henry A.** See Notes: Lectures on mathematics in the behavioral sciences, **50**
- Selby, M. A.** On completeness with respect to the Carathéodory metric. *Canad. Bull. 17* (1974), 261-263. (R. B. Burckel) **50** #8084 46J15 (30A98)
- On maximal and complete regions. *Colloq. Math.* **32** (1974), 119-125. (Brannan) **50** #7495 30A18
- Selden, Annie Alexander** On the closure of bisimple ω -semigroups. *Semigroup Forum* (1976), no. 4, 373-379. (W. Wiley Williams) **54** #2863 22A15
- The kernel of the determining endomorphism of a bisimple ω -semigroup. *Semigroup Forum* **14** (1977), no. 3, 265-271. (W. E. Deskins) **56** #3179 22A15
- Selden, John** L -semirings. *J. Austral. Math. Soc.* **13** (1972), 391-394. (K. N. Thangachandran) **47** #394 22A15 (16A80)
- (with Eberhart, Carl) One-parameter inverse semigroups. *Trans. Amer. Math. Soc.* **168** (1972), 53-66. (D. B. McAlister) **45** #5258 20M10
- (with Bertman, Martha O.) Double ideals in compact semirings. *J. Austral. Math. Soc.* **15** (1973), 123-128. (A. B. Paalman-de Miranda) **50** #413 16A78
- Selden, Larry** A new representation of preferences over "certain \times uncertain" consequences: the "ordinal certainty equivalent" hypothesis. *Econometrica* **46** (1978), 1045-1060. (Rubin Saposnik) **58** #25866 90A05
- Seldin, Jonathan P.** (with Hindley, J. R.; Lercher, Bruce) ★Introduction to combinatorial logic. London Mathematical Society Lecture Notes, 7. Cambridge University Press, London-New York, 1972. iii + 170 pp. (H. B. Curry) **49** #25 02C20
- Equality in \mathfrak{F}_{21} . *J. Symbolic Logic* **38** (1973), 571-575. (R. Hindley) **49** #02C20
- Equality in \mathfrak{F}_{22} . *Logic Colloquium '73* (Bristol, 1973), pp. 433-444. *Studies and the Foundations of Mathematics*, Vol. 80, North-Holland, Amsterdam, 1973. (Kuzičev) **52** #2835 02C20

- arithmetic as a study of formal systems. *Notre Dame J. Formal Logic* **16** (1975), no. 1, 1-464. (A. S. Kuzičev) **54** #7184 02-01
- sequent calculus for type assignment. *J. Symbolic Logic* **42** (1977), no. 1, 11-28. (From the introduction) **58** #10336 02C20
- the Q -consistency of \mathfrak{S}_{22} . *Notre Dame J. Formal Logic* **18** (1977), no. 1, 117-127. (Lindley) **57** #76 02C20
- with Bunder, Maarten Wicher Visser) Some anomalies in Fitch's system *QD. J. Logic Logic* **43** (1978), no. 2, 247-249. (From the introduction) **58** #164 02C20
- Vasile Estimates of the transition intensities of a finite-state homogeneous Markov process. (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 2, 229-242. (Grigorescu) **54** #9009 62M05
- A problem of statistical inference for absorbing Markov chains. (Romanian. English summary) *Stud. Cerc. Mat.* **29** (1977), no. 4, 419-422. (Author's summary) **58** #13560 M05
- U. (with Kuncevič, I. M.; Olehnovič, N. M.) ★Таблицы тригонометрических функций для подсчета распределения электронной плотности в кристаллах. (Russian) [Tables of trigonometric functions for the computation of the distribution of electron density in crystals] *Izdat. "Nauka i Tehnika", Minsk*, 1967. 219 pp. ((RŽFiz #4 E295K)) **50** #6097 65A05
- with Kuncevič, I. M.; Olehnovič, N. M.) ★Tables of trigonometric functions for numerical computation of electron density in crystals. Translated from the Russian by the IPST staff. *Israel Program for Scientific Translations, Jerusalem*, 1971. ii + 218 pp. (Authors' summary) **50** #6098 65A05
- R. S. (with Mikadze, I. S.) A certain problem of partial reservation with renewal. (Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **58** (1973), 661-664. (Authors' review (RŽKibernet **1970** #12 G284)) **48** #7941 90B25
- The computation of the probabilities of unnecessary transfers of image messages chosen from storage. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **63** (1971), 25-28. (O. Gulyás) **47** #6161 68A50
- (with Mikadze, I. S.) Certain questions on the problem of determining the inductive capacity of digital computers. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **70** (1973), 45-48. (I. Kramosil) **49** #4307 6201
- (with Gagošidze, T. A.; Šekriladze, D. A.) A certain servicing model in a control system for a group of machine tools. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* **1974**, no. 8-83. (D. Obradović) **51** #2626 90B25
- A. M. A certain special class of line complexes in S_n . (Russian) *Trudy Irkutsk. gos. univ.* **66** (1969), 243-252. (1 foldout) (J. Vanžura) **46** #8078 53A35
- A certain class of line complexes in a four-dimensional noneuclidean space. (Russian) *Kalinin. Gos. Ped. Inst. Učen. Zap.* **74** (1970), 64-86. (N. Mihăileanu) **45** #1056 53A35
- Complexes containing normal line congruences in multidimensional noneuclidean spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 4(107), 83-107. (M. C. Aki) **45** #2600 53A35
- (with Akivis, M. A.) The structure of the manifold of isoclinic surfaces of an isoclinic three-web. (Russian) *Collection of articles on differential geometry (Russian)*, pp. 1-20. *Kalinin. Gos. Univ., Kalinin*, 1974. (K. Radziszewski) **54** #1111 53B25
- See also Proceedings: Republican Conference of Belorussian Mathematicians, 1966; Collection: Differential geometry, **53** #3902 and Collection: Differential geometry, **58** #30775
- V. V. A. (with Vasil'ev, N. D.; Ivkin, V. G.; Mozin, I. V.) A comparative estimate of the efficiency of some methods of multivariate optimization. (Russian) *Autometrija* **1977**, no. 3, 141-148, 152. (Authors' summary) **58** #15597 93E10
- Vasil'ev, G. S. See Proceedings: Republican Conference of Belorussian Mathematicians, **48** #3669
- Vasile, Clas-Olof Rationale of the cakravālā process of Jayadeva and Bhāskara II. (Swedish and German summaries) *Historia Math.* **2** (1975), 167-184. (A. I. Volodarskii) **50** #5581 01A35
- Vasilev, V. M. (with Kuncevič, V. M.; Letov, A. M.; Naumov, B. N.; Nelepin, R. A.; Petrov, B. N.; Platon, V. Ja.; Popov, E. P.; Pospelov, G. S.; Rozenvasser, E. N.; Smirnov, B. M.; Jusupov, R. M.) ★Точные методы исследования нелинейных систем автоматического управления. (Russian) [Exact methods for investigating nonlinear automatic control systems] Edited by R. A. Nelepin. *Nonlinear Automatic Control Systems*, Vol. 4. *Izdat. "Mašinostroenie", Moscow*, 1971. 323 pp. (Ljubomir Petrov) **50** #4040 93C10
- Vasilev, S. A. Estimation of the norm of the inverse operator for a functional equation of the second kind. (Russian) *Perm. Gos. Univ. Učen. Zap.* No. 218 (1969), 32-36. (errata) (S. Suljagić) **45** #4681 47A30
- Estimation of the norm of the inverse operator for a Fredholm integral equation. (Russian) *Perm. Gos. Univ. Učen. Zap.* No. 218 (1969), 229-233. (S. Suljagić) **45** #4682 65R05 (47A30)
- An estimate of the resolvent of a symmetric kernel. (Russian) *Perm. Gos. Univ. Učen. Zap.* No. 309 *Mat.—Problemy Nelinein. Anal.* (1974), 84-88. (Š. Schwabik) **51** #11040 45L05
- An estimate of the norm of an inverse operator by the method of orthogonal complements. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 2(177), 124-126. (C. Ilie) **58** #2366 47A30 (65J05)
- van, L. A. Topologically-covariant formulation of angular momentum theory. *Dinamika Fiz.* **11** (1970), 912-919 (Russian); translated as *Soviet J. Nuclear Phys.* **11** (1970), 509-512. (L. O'Riartaigh) **48** #10340 81.22
- (with Smorodinskii, Ja. A.) Clebsch-Gordan coefficients, viewed from different perspectives. *Uspehi Fiz. Nauk* **106** (1972), 3-45 (Russian); translated as *Soviet Physics Uspekhi* **15** (1972), 1-24. (Authors' summary) **51** #14780 81.22
- (with Karasev, V. P.) Finite differences, Clebsch-Gordan coefficients and hypergeometric functions. (Russian. English summary) *Teoret. Mat. Fiz.* **17** (1973), 7-78. (Authors' summary) **57** #8603 81.33
- A calculation of the Clebsch-Gordan coefficients, and its physical applications. (Russian) Group-theoretical methods in physics. *Trudy Fiz. Inst. Lebedev.* **70** (1973), 119-272. (V. I. Fuščić) **49** #8541 81.22
- (with Mahviladze, T. M.) A group-theoretic analysis of the coherence properties of certain physical systems (spontaneous radiation, modulated beams). (Russian) Group-theoretical methods in physics. *Trudy Fiz. Inst. Lebedev.* **70** (1973), 120-146, 272. (C. A. Hurst) **53** #4777 81.22
- (with Lizin, I. M.) Five-dimensional orthogonal groups, and certain aspects of quantum electrodynamics. (Russian) Group-theoretical methods in physics. *Trudy Fiz. Inst. Lebedev.* **70** (1973), 221-270, 272. (L. Méder) **49** #4456 81.22
- (with Karasev, V. P.) Hidden couplings and relationships in the theory of angular momentum. (Russian. English summary) *Teoret. Mat. Fiz.* **29** (1976), no. 1, 71-81. (C. A. Hurst) **57** #2234 81.22
- Coherent physics and its applications. (Russian) *Trudy Fiz. Inst. Lebedev.* **87** (1976), 3-20. (From the text) **58** #32650 82.22
- (with Kudrja, V. P.; Mahviladze, T. M.; Sinicyn, I. G.) Coherence effects and questions of radiation control in multilevel systems. (Russian) *Trudy Fiz. Inst. Lebedev.* **87** (1976), 38-54. (From the text) **58** #32668 82.45
- (with Karasev, V. P.) Difference methods and their role in the theory of coherence phenomena. (Russian) *Trudy Fiz. Inst. Lebedev.* **87** (1976), 55-91. (V. P. Kalašnikov) **58** #32649 82.22
- (with Rešetnjak, S. A.) A method for the integration of the Fokker-Planck equation. (Russian) *Z. Prikl. Meh. i Tehn. Fiz.* **1977**, no. 5, 13-16, 180. (M. Lawrence Glasser) **57** #2377 82.47
- (with Karasev, V. P.) Construction of the Wigner-Racah algebra of the group $SU(3)$. (Russian. English summary) *Teoret. Mat. Fiz.* **36** (1978), no. 2, 279-288. (Authors' summary) **58** #25482 81.22 (22E70)
- Šelepov, V. Ju. (with Bazaliĭ, B. V.) A certain mixed problem with a free boundary for the Laplace equation. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 320-323. (E. Ungureanu-David) **47** #9041 35J05
- (with Bazaliĭ, B. V.) The two-phase stationary Stefan problem. (Russian) *Mathematical physics*, No. 16 (Russian), pp. 52-61, 196. *Izdat. "Naukova Dumka", Kiev*, 1974. (A. Borzymowski) **49** #5559 35J25
- (with Bazaliĭ, B. V.) A certain stationary Stefan problem. (Ukrainian. English and Russian summaries) *Dopovidĭ Akad. Nauk Ukrain. RSR Ser. A* **1974**, 5-8, 91. (R. S. Levitin) **49** #7602 35K05 (35J05)
- (with Bazaliĭ, B. V.) A certain quasistationary thermophysical problem with a free boundary. (Russian. English summary) *Boundary value problems of the theory of heat conduction (Russian)*, pp. 45-56. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSSR, Kiev*, 1975. (V. P. Kalašnikov) **54** #4361 80.35
- (with Bazaliĭ, B. V.) A generalization of the stationary Stefan problem. (Russian) *Mat. Fiz. Vyp.* **17** (1975), 65-81, 189. (Authors' summary) **57** #10232 35J99 (30A88)
- Selesnick, Stephen A. (with Sankaran, S.) Some remarks on C^* -bigebras and duality. *Semigroup Forum* **3** (1971/72), no. 2, 108-129. (K. H. Hofmann) **45** #2493 46L05 (22D99, 46M99)
- Tensor products and injective G -modules for a compact group G . *J. London Math. Soc.* (2) **5** (1972), 368-375. (K. H. Hofmann) **47** #4019 46M05 (22C05, 22D99)
- (with Graves, William H.) An extension of the Stone representation for orthomodular lattices. *Colloq. Math.* **27** (1973), 21-30. (S. S. Holland, Jr.) **48** #3825 06A30
- A Hopf algebra approach to the Krein duality theorem. *Duke Math. J.* **40** (1973), 831-838. (K.-T. Chen) **48** #4195 22D10 (16A24)
- Watts cohomology for a class of Banach algebras and the duality of compact abelian groups. *Math. Z.* **130** (1973), 313-323. (S. Teleman) **49** #389 18H99
- Line bundles and harmonic analysis on compact groups. *Math. Z.* **146** (1976), no. 1, 53-67. (T. W. Palmer) **52** #8331 22D30 (32L05)
- Šelest, L. I. See Differential equations and their applications, **48** #3659
- Šelest, V. P. (with Piragas, K. A.) Aleksei Zinov'evič Petrov (1910-1972). (Russian) *Gravitation: problems, prospects (dedicated to the memory of A. Z. Petrov)* (Russian), pp. 5-8. *Izdat. "Naukova Dumka", Kiev*, 1972. (Editors) **48** #5800 01A70
- (with Kobuškin, A. P.) Some applications of the relativistic quark model. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jdra* **3** (1972), no. 3, 571-605. (Authors' summary) **58** #14612 81.46
- (with Bugriĭ, A. I.; Ėnkovskii, L. L.; Kobilinskii, M. A.) DAMA and Regge asymptotic behaviour. *Nuovo Cimento A* (11) **12** (1972), 377-386. (George Zipfel, Jr.) **49** #1961 81.30
- See also Gravitation: problems, prospects, **48** #7881 and Zav'jalov, O. I., **58** #25456
- Šelestov, D. K. The first Russian humanitarian journal. On the 170th anniversary of the publication of "Statističeskii Žurnal" by the Russian Academy of Science. (Russian) *Vestnik Akad. Nauk SSSR* **1977**, no. 5, 109-115. (Editors) **58** #21233 01A55
- Seleznev, A. I. (with Motova, I. V.; Volohin, V. A.) The completeness of systems of functions and universal series. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 11(186), 84-90. (C. Tanaka) **58** #22496 30A18
- (with Dodynova, L. K.) Some classes of universal series. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 12(187), 92-98. (D. M. Campbell) **58** #17056 30A10
- Seleznev, Ju. V. Systems research of complex thermodynamic processes. (Russian) *Akad. Nauk Ukrain. SSR Inst. Kibernet. Preprint No.* **33** (1977), 32 pp. (Vadim Komkov) **58** #32465 80.94 (94A15)
- Seleznev, L. I. (with Deič, M. E.) A generalized model of turbulence, useful for analysis of condensed-phase formation in turbulent flows. *Izv. Akad. Nauk SSSR Energetika i Transport* **3** (1974), 123-129; translated in *Fluid Mechanics—Soviet Res.* **4** (1975), no. 3, 11-18. (François Roudy) **52** #16278 76.60
- Seleznev, V. A. Hasemann's boundary value problem on Riemann surfaces in classes of quasiconformal contours and shifts. (Russian) *Dinamika Splošn. Sredy Vyp.* **13** (1973), 1-11. (A. Džuraev) **57** #6455 30A88
- Systems of singular equations on ΓQ -contours. (Russian) *Dinamika Splošn. Sredy Vyp.* **18** *Dinamika Židkost. so Svobod. Granicami* (1974), 243-248, 255. (Author's summary) **57** #6449 30A86 (45E05)
- Selezneva, T. V. (with Tutubalin, V. N.) Computation of the statistical characteristics of a long waveconducting curve in a two-wave model. (Russian. English summary) *Teor.*

- Verojatnost. i Primenen. **18** (1973), 94-108. (G. Tusnady) **46** #10487 94A05
- Selez'nova, F. G.** (with Eidel'man, S. D.) Boundary value problems for Petrovskii well-posed equations of positive genus in the plane. (Russian) *Differentsial'nye Uravneniya* **7** (1971), 1854-1868. (G. C. Barozzi) **46** #5830 35K35
- (with Eidel'man, S. D.) Estimation of the Poisson kernels for equations that are well posed in the sense of I. G. Petrovskii, with positive genus and two independent variables. (Russian) *Mathematical physics*, No. 12 (Russian), pp. 121-127, 169. *Izdat. "Naukova Dumka", Kiev*, 1972. (P. C. Fife) **49** #854 35K25
- (with Zarnitskaja, N. V.; Eidel'man, S. D.) A mixed problem for I. G. Petrovskii well-posed systems of equations with constant coefficients in a quarter-space. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 332-342, 461. (V. Barbu) **49** #818 35E99
- Selezov, I. T.** The concept of hyperbolicity in the theory of controllable dynamical systems. (Russian) *Cybernetics and computer technology*, No. 1: *Complex control systems* (Russian), pp. 131-137. *Naukova Dumka, Kiev*, 1969. (Author's summary) **45** #8979 35B35
- (with Dargeiko, M. M.) The stability of a magnetohydrodynamic flow near the surface of a magnetostriction crystal structure. (Russian) *Cybernetics and computer technology*, No. 5: *Complex control systems* (Russian), pp. 45-51. *Naukova Dumka, Kiev*, 1970. (Authors' summary) **45** #4740 76.35 (93D99)
- Construction of hyperbolic approximations of the equations of hydrodynamics. (Russian) *Gidromeh. (Kiev)* *Yyp.* **29** (1974), 3-7, 101. **58** #29467 35Q99
- (with Jakovlev, V. V.) An application of the method of polynomial operators to the solution of the problem of the diffraction of waves by an arbitrary inhomogeneity. (Russian) *Gidromeh. (Kiev)* *Yyp.* **31** (1975), 82-87, 111. (From the authors' introduction) **56** #17438 76.35
- See also **Komkov, Vadim**, **52** #4081
- Self, William M.** Some consequences of the Beurling-Helson theorem. *Rocky Mountain J. Math.* **6** (1976), no. 1, 177-180. (Y. Domar) **52** #8798 43A25
- Selfridge, J. L.** (with Erdős, Paul) Complete prime subsets of consecutive integers. *Proceedings of the Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1971), pp. 1-14. *Dept. Comput. Sci., Univ. Manitoba, Winnipeg, Man.*, 1971. (S. Ikehara) **49** #2597 10H15
- (with Guy, Richard K.) Interim report on aliquot series. *Proceedings of the Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1971), pp. 557-580. *Dept. Comput. Sci., Univ. Manitoba, Winnipeg, Man.*, 1971. (S. A. Burr) **49** #194 10-04
- (with Erdős, Paul) Some problems on the prime factors of consecutive integers. II. *Proceedings of the Washington State University Conference on Number Theory* (Pullman, Wash., 1971), pp. 13-21. *Dept. Math., Washington State Univ., Pullman, Wash.*, 1971. (T. M. Apostol) **47** #6625 10H15
- (with Guy, Richard K.) Primality testing with application to small machines. *Proceedings of the Washington State University Conference on Number Theory* (Washington State Univ., Pullman, Wash., 1971), pp. 45-51. *Dept. Math., Washington State Univ., Pullman, Wash.*, 1971. (D. H. Lehmer) **47** #8407 10-04
- (with Guy, Richard K.) The nesting and roosting habits of the laddered parenthesis. *Amer. Math. Monthly* **80** (1973), 868-876. (M. Agner) **50** #128 05A15
- (with Erdős, Paul) On a combinatorial game. *J. Combinatorial Theory Ser. A* **14** (1973), 298-301. (R. K. Guy) **48** #5655 90D05 (05A05)
- (with Ecklund, E. F., Jr.; Eggleton, Roger B.) Consecutive integers all of whose prime factors belong to a given set. *Proceedings of the Third Manitoba Conference on Numerical Mathematics* (Winnipeg, Man., 1973), pp. 161-162. *Utilitas Math., Winnipeg, Man.*, 1974. (Authors' summary) **57** #3059 10A25
- (with Guy, Richard K.; Lehmer, Derrick Henry; Wunderlich, Marvin C.) Second report on aliquot sequences. *Proceedings of the Third Manitoba Conference on Numerical Mathematics* (Winnipeg, Man., 1973), pp. 357-368. *Utilitas Math., Winnipeg, Man.*, 1974. (S. A. Burr) **50** #4455 10-04 (10A40)
- (with Ecklund, E. F., Jr.; Erdős, Paul) A new function associated with the prime factors of (n) . *Math. Comp.* **28** (1974), 647-649. (E. M. Horadam) **49** #2501 10A20
- (with Guy, Richard K.) Optimal coverings of the square. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. II, 745-799. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (Jacques Dubois) **51** #13873 52A45
- (with Wunderlich, Marvin C.) An efficient algorithm for testing large numbers for primality. *Proceedings of the Fourth Manitoba Conference on Numerical Mathematics* (Winnipeg, Man., 1974), pp. 109-120. *Congr. Numer., No. XII, Utilitas Math., Winnipeg, Man.*, 1975. (M. S. Cheema) **51** #5461 (EA 52) 10-04 (10A25)
- (with Erdős, Paul) The product of consecutive integers is never a power. *Illinois J. Math.* **19** (1975), 292-301. (T. M. Apostol) **51** #12692 10B05 (10A30)
- (with Cohen, Frederick R.) Not every number is the sum or difference of two prime powers. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his seventieth birthday. *Math. Comp.* **29** (1975), 79-81. (S. A. Burr) **51** #12758 10J15 (10-04)
- (with Brillhart, John D.; Lehmer, Derrick Henry) New primality criteria and factorizations of $2^m \pm 1$. *Math. Comp.* **29** (1975), 620-647. (Jean-Marie De Koninck) **52** #5546 10A25
- (with Guy, Richard K.) What drives an aliquot sequence? Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his seventieth birthday. *Math. Comput.* **29** (1975), 101-107. (S. A. Burr) **52** #5542 10A20 (10A40)
- (with Eggleton, Roger B.; Erdős, Paul) Computation of sequences maximizing least common multiples. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1975), pp. 293-303. *Congressus Numerantium*, No. XVI, *Utilitas Math., Winnipeg, Man.*, 1976. (M. Rahman) **54** #5106 10A99
- (with Eggleton, Roger B.; Erdős, Paul) The powers that be. *Amer. Math. Monthly* **83** (1976), no. 10, 801-805. (Editors) **58** #5476 10A05
- (with Eggleton, Roger B.) Consecutive integers with no large prime factors. *J. Austral. Math. Soc. Ser. A* **22** (1976), no. 1, 1-11. (Matti Jutila) **55** #12662 10H20
- See also *Proceedings: Washington State University Conference on Number Theory*, **47** #4904 and *Proceedings: Manitoba Conference on Numerical Mathematics*, **48** #7525
- Selgrade, James F.** Isolated invariant sets for flows on vector bundles. *Trans. Amer. Soc.* **203** (1975), 359-390. (Warren White) **51** #4322 (E 54 #1309) 58F20
- (with Franke, John E.) Abstract ω -limit sets, chain recurrent sets, and basic flows. *Proc. Amer. Math. Soc.* **60** (1976), 309-316 (1977). (M. C. Irwin) **54** #1158F20 (58F10)
- (with Churchill, Richard C.; Franke, John E.) A geometric criterion for hyperbolicity of flows. *Proc. Amer. Math. Soc.* **62** (1976), no. 1, 137-143 (1977). (Robinson) **55** #1382 58F15 (34C35)
- Erratum to: "Isolated invariant sets for flows on vector bundles" (Trans. Amer. Math. Soc. **203** (1975), 359-390). *Trans. Amer. Math. Soc.* **221** (1976), no. 1 (Warren White) **54** #1309 58F20
- (with Franke, John E.) Hyperbolicity and chain recurrence. *J. Differential Equations* **26** (1977), no. 1, 27-36. (Roger C. McCann) **57** #7685 58F15
- Seliandinas, V.** A study of the nonparametric method of selecting features of objects. Case of a continuous parameter space of the feature selection domains. (Lithuanian and English summaries) *Trudy Akad. Nauk Litov. SSR Ser. B* **1975** (578), 143-149. (Viorel Gh. Vodă) **49** #4339 68A45 (62G99)
- A study of a nonparametric method of selecting features of objects. II. The case of discrete parameter space for the domains of feature selection. (Russian, Lithuanian, English summaries) *Trudy Akad. Nauk Litov. SSR Ser. B* **1973**, no. 6(79), 143-149. (Viorel Gh. Vodă) **49** #11881 68A45 (62G99)
- Seljere, I.** The diffusion of an admixture from a linear source of constant yield in the presence of a wind drive. (Russian, Latvian and English summaries) *Latvian mathematical yearbook*, **14** (Russian), pp. 187-198. *Izdat. "Zinatne", Riga*, 1974. (Siemek) **52** #2385 76.35
- Selick, P.** (with Handelmann, David) A maximality criterion for nilpotent commutative matrix algebras. *Canad. Math. Bull.* **17** (1974), 125-126. (G. Krause) **50** #16A42
- Seliger, Susanne** See **Fuchs-Seliger, Susanne**
- Seligman, George B.** On two-dimensional algebraic groups. Collection of articles dedicated to the memory of Abraham Adrian Albert. *Scripta Math.* **29**, no. 3-4, 45-51 (1973). (T. Kambayashi) **53** #13244 14L15 (17B50)
- ★ Rational methods in Lie algebras. *Lecture Notes in Pure and Applied Mathematics*, Vol. 17. *Marcel Dekker, Inc., New York-Basel*, 1976. viii + 346 p. (Steinberg) **55** #428 17Bxx
- Representations of isotropic simple Lie algebras over general non-modular fields. *Lie theories and their applications (Proc. Ann. Sem. Canad. Math. Congr., Queen's Kingston, Ont., 1977)*, pp. 528-574. *Queen's Papers in Pure Appl. Math.*, No. 48, Queen's Univ., Kingston, Ont., 1978. (J. E. Humphreys) **58** #28094 17B10
- Seligman, Thomas H.** (with Moshinsky, Marcos; Wolf, Kurt Bernardo) Canonical transformations and the radical oscillator and Coulomb problems. *J. Mathematical Phys.* **13** (1972), 901-907. (W. Miller, Jr.) **46** #1225 81.22
- Group theory of α -cluster configurations. (Spanish summary) *Rev. Mexicana de Fisica* **22** (1973), no. 1-2, 151-170. (Author's summary) **55** #7165 81.22
- (with Kramer, P.; Moshinsky, Marcos) Complex extensions of canonical transformations and quantum mechanics. *Group theory and its applications*, Vol. 1, 249-332. *Academic Press, New York*, 1975. (A. O. Barut) **57** #2239 81.22
- (with Brunet, Michael) A connection between the representations of $U(n)$ and for representations of $U(n) \otimes U(n)$. *Rep. Mathematical Phys.* **8** (1975), no. 2, 23-33. (Authors' summary) **53** #13483 22E70 (81.22)
- (with Cantu, A. A.; Klein, D. J.; Matsen, F. A.) A second quantized formalism of valence bond theory. *Theoret. Chim. Acta* **38** (1975), no. 4, 341-354. (Authors' summary) **56** #10574 81.47
- Applications of group theory to nuclear reactions: a critical survey. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 38-58. *Lecture Notes in Phys.*, Vol. 50, Springer, Berlin, 1976. (From the introduction) **58** #25495 81.22
- (with Zahn, W.) Angular momentum projection in the two-center model by projection of Hilbert spaces. *Helv. Phys. Acta* **49** (1976), no. 2, 217-226. (J. Killian) **57** #6310 22E70 (81.22)
- (with Hackenbroich, H. H.; Zahn, W.) Analytic methods for refined resonance group calculations. I. Reduction to cluster modes. *Helv. Phys. Acta* **50** (1977), 723-740. (S. N. Biswas) **57** #14966 81.20
- (with Martignon, L.) A criterion for the applicability of an integral transform to n -body reaction calculations. *Nuclear Phys. A* **286** (1977), no. 1, 177-181. (S. Sengupta) **56** #7629 81.47
- (with Moshinsky, Marcos) Canonical transformations to action and angle variables and their representations in quantum mechanics. *Ann. Physics* **114** (1978), no. 2, 243-272. (Virendra Singh) **58** #25617 81.49 (49B99, 58F05)
- (with Kramer, P.; Moshinsky, Marcos) Nonbijective canonical transformations and their representation in quantum mechanics. *J. Mathematical Phys.* **19** (1978), 683-693. (Hans P. Künzle) **57** #18644 81.58 (58A15, 58F05)
- See also *Group theoretical methods in physics*, **56** #14208
- Selihanović, V. G.** Carl Friedrich Gauss (on the occasion of the 200th anniversary of his birth). (Russian) *Izv. Vysš. Učebn. Zaved. Geod. i Aérofor.* **1977**, no. 6, 13-15. (Editors) **58** #10221 01A70
- Šelija, G. A.** See *Studies in the theory of plates and shells*, **48** #3343
- Šelike, V. F.** (with Solov'ev, Ju. L.) Estimation of the state of dynamic systems under the action of disturbances. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 2, 17-22. (Russian); translated as *Engrg. Cybernetics* **12** (1974), 133-144. (V. N. Igolkin) **52** #7674 93E10
- Selim, M. A.** An application of M -systems to the construction of quadrature formulae suitable for the calculation of integrals of products of functions. (Russian) *Vychisl.* **10** (1976), 68-73, 186. (M. I. Levin) **57** #4487 65D30
- Abdou Selim, Michel** See **Abdou Selim, Michel**
- Šelipov, A. N.** Certain properties of the nucleus of an alternative ring. (Russian) *Issled.* **8** (1973), no. 2(28), 183-187, 195. (M. Slater) **48** #6201 17D05
- Seliškar, M.** (with Ribarič, Marjan) On optimization of stepsize in the continuation method. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 517-521. (Charles W. Groetsch) **51** #12003 65Q05

- anov, B. I. The cycle index of the exponentiation of groups. (Russian) *Kombinatornyi Anal.* No. 1 (1971), 79-90. (W. Imrich) **46** #3323 05A15
- Generalization of the problem of the number of decompositions of a finite set. (Russian) *Mat. Zametki* **10** (1971), 361-367. (G. O. H. Katona) **50** #4324 05A15
- The generating function of a certain statistic in a multinomial scheme with a countable number of outcomes. (Russian) *Kombinatornyi Anal. Vyp.* 2 (1972), 11-16. (J. G. Wendel) **56** #9625 60C05
- Enumeration of homogeneous hypergraphs with a simple cycle structure. (Russian) *Kombinatornyi Anal. Vyp.* 2 (1972), 60-67. (RZMat **1973** #6 V376) **58** #359 05C30
- (with Ljamin, V. N.) Enumeration problems for simple hypergraphs. (Russian) *Kombinatornyi Anal. Vyp.* 3 (1974), 57-67. (Editors) **58** #27618a 05C30
- (with Ljamin, V. N.) Hypertrees with a given number of end vertices and edges. (Russian) *Kombinatornyi Anal. Vyp.* 3 (1974), 68-71. (RZMat **1974** #12 V352) **58** #319 05C05
- (with Ljamin, V. N.) Random hypertrees and hyperforests. (Russian) *Mat. Zametki* **15** (1974), 641-650. (M. Skalsky) **50** #6917 05C30 (60C05)
- Additional remarks on homogeneous hypertrees and hyperforests. (Russian) *Combinatorial and asymptotic analysis* (Russian), pp. 137-146. Krasnojarsk. Gos. Univ., Krasnojarsk, 1975. (Editors) **58** #27660 05C99
- (with Ronzin, A. F.) Partitions of colored sets. (Russian) *Asymptotic and enumeration problems of combinatorial analysis* (Russian), pp. 77-88. Krasnojarsk. Gos. Univ., Krasnojarsk, 1976. (Editors) **58** #27510 05A05 (05B99, 05C15)
- (with Ljamin, V. N.) Enumeration problems for simple hypergraphs. II. (Russian) *Kombinatornyi Anal. Vyp.* 4 (1976), 88-95. (Editors) **58** #27618b 05C30
- A combinatorial approach to the Burman-Lagrange inversion formula. (Russian) *Combinatorial and asymptotic analysis*, No. 2 (Russian), pp. 153-169. Krasnojarsk. Gos. Univ., Krasnojarsk, 1977. (Editors) **58** #27517 05A10
- ivanov, I. A. The solvability of mixed Cauchy problems for a model system of filtration of a three-phase incompressible fluid. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **7**, no. 7 *Mat. Modelirovanie* (1976), 84-90. (From the author's introduction) **56** #17439 76.35
- ivanov, Ju. A. Biprojective Banach algebras, their structure, cohomology and relation with nuclear operators. (Russian) *Funkcional. Anal. i Priložen.* **10** (1976), no. 1, 89-90. (B. R. Gelbaum) **53** #8921 46M20 (46H25)
- Extensions of partial orders in neorings and neofields. (Russian) Quasigroups and combinatorics. *Mat. Issled. Vyp.* 43 (1976), 146-156, 209. (V. A. Artamonov) **58** #5458 08A15 (06A70, 20N10)
- Banach algebras of small global dimension zero. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 2 (188), 227-228. (B. R. Gelbaum) **53** #14131 46H25 (46M10)
- ivanov, Ju. V. (with Kaliman, Š. I.) The cohomology of operator algebras. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 5, 24-27. (B. R. Gelbaum) **50** #10851 46M20
- Homological dimension of cyclic Banach modules, and a homological characterization of metrizable compacta. (Russian) *Mat. Zametki* **17** (1975), 301-305. (Toma V. Tonev) **52** #15042 46M99
- The values assumed by the global dimension in certain classes of Banach algebras. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 1, 37-42. (B. R. Gelbaum) **51** #11113 46H25 (46M05)
- ivanov, V. L. The computability of some classes of enumerations. (Russian) *Probabilistic methods and cybernetics*, Vol. 12-13, pp. 157-170. Kazan. Univ., Kazan, 1976. (S. Marčenkova) (RZMat **1978** #8 V583) **58** #27396 02F20
- The numerations of families of general recursive functions. (Russian) *Algebra i Logika* **15** (1976), no. 2, 205-226, 246. (Igor Lavrov) **57** #16012 02F20
- Two theorems on computable numerations. (Russian) *Algebra i Logika* **15** (1976), no. 4, 470-484, 488. (Igor Lavrov) **56** #15387 02F25 (02F27)
- Enumerations of canonically computable families of finite sets. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 6, 1373-1380, 1437. (Author's summary) **58** #21555 02F99
- eliverstova, N. F. (with Vasil'ev, Ju. P.) The continuous stabilization method for the determination of the maximal eigenvalue of a completely continuous selfadjoint operator in Hilbert space. (Russian) *Differencial'nye Uravnenija i Vychisl. Mat. Vyp.* 6 (1976), part I, 108-112, 177. (F. Smithies) **58** #7165 47A70 (47B05, 65J05)
- elivohin, O. S. (with Aleksandrov, Ju. S.; Kovšev, M. N.; Sorokin, A. V.) The synthesis of statistically optimal automatic systems. (Russian) *Proceedings of the First All-Union Symposium on Statistical Problems in Engineering Cybernetics* (Moscow 1967), *Nonlinear and optimal systems* (Russian), pp. 104-119, 435. Izdat. "Nauka", Moscow, 1971. (V. N. Igolkin) **47** #8183 93E20
- (with Barabanov, A. T.) Asymptotic analysis of processes of controllable approach. *I. Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 2, 176-184, 223 (Russian); translated as *Engrg. Cybernet.* **15** (1977), no. 2, 152-159 (1978). (Peter A. Cook) **58** #9644 93D99
- seljag, L. K. (with Lenjuk, M. P.; Bukatar, M. I.) Random temperature stresses in an elastic half-space. (Russian) *Prikl. Meh.* **12** (1976), no. 5, 29-36, 141. **56** #13994 73.60
- seljakov, K. I. (with Nagirner, D. I.) Line radiation transfer when the profile of the absorption coefficient varies with the depth. (Russian. English summary) *Astrofizika* **11** (1975), no. 1, 61-75. (D. ter Haar) **54** #2129 85.45
- seljandin, V. I. See Seljandinas, V.
- seljankin, V. V. (with Melihov, A. N.; Berštein, L. S.; Hil', M. I.) Use of hypergraphs for arranging circuits in a unit. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 3, 202-207 (Russian); translated as *Engrg. Cybernet.* **12** (1974), no. 3, 157-162. (Michel Chein) **52** #7731 94A20
- selkin, M. V. Certain criteria for the solvability of finite groups. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1971**, no. 6, 113-115. (D. L. Barnett) **47** #1935 20D10
- Maximal subgroups of finite groups. (Russian) *Dokl. Akad. Nauk BSSR* **18** (1974), 969-972, 1050. (M. Herzog) **51** #5751 20D10
- The influence of maximal subgroups on the formation structure of finite groups. (Russian) *Finite groups* (Proc. Gomel Sem., 1973/1974) (Russian), pp. 151-163, 231. Izdat. "Nauka i Tehnika", Minsk, 1975. (V. M. Busarkin) **53** #8253 20D99
- Finite groups with given β -abnormal maximal subgroups. (Russian) *Finite groups* (Proc. Gomel Sem., Gomel, 1975-1977) (Russian), pp. 143-151, 175-176. Izdat. "Nauka i Tehnika", Minsk, 1978. (V. D. Mazurov) **58** #22286 20D25
- Šelkovenko, A. E. (with Hlebnikov, V. I.) The exact solutions of the Einstein-Maxwell equations in the Newman-Penrose formalism. II. Conformally plane metrics. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 7, 148-150. (N. V. Micevič) **55** #5155 83.53
- Šelkovič, V. M. (with Kakičev, V. A.) Solution of boundary problems for analytic functions of several variables in the algebras of Vladimirov. (Russian) *Mat. Zametki* **22** (1977), no. 1, 51-60. (S. I. Pinčuk) **56** #8887 32A10
- Šelkovnikov, F. A. (with Breneva, R. M.) A connection between the n -dimensional Laplace transform and the Ditkin-Botašev operational calculus. (Russian) *Irkutsk. Politehn. Inst. Trudy* No. 52 (1969), 144-150. (L. Berg) **46** #5957 44A45
- Selkow, Stanley M. (with Nastansky, Ludwig; Stewart, Neil-Frederick) The enumeration of minimal phylograms. *Bull. Math. Biology* **35** (1973), 525-533. (Torrence D. Parsons) **48** #13306 92A05
- (with Nastansky, Ludwig; Stewart, Neil-Frederick) An improved solution of the generalized Camin-Sokal model for numerical cladistics. *J. Theoret. Biol.* **49** (1974), no. 2, 413-424. (George F. Estabrook) **54** #4725 92A15
- (with Nastansky, Ludwig; Stewart, Neil-Frederick) Cost-minimal trees in directed acyclic graphs. (German summary) *Z. Operations Res. Ser. A-B* **18** (1974), A59-A67. (Torrence D. Parsons) **51** #2984 05C35
- (with Coray, Giovanni; Noetzel, A.) Order independence in local clustering algorithms. *Comput. Graphics and Image Processing* **4** (1975), no. 2, 120-132. (Robin Sibson) **53** #1857 62H30 (68A45)
- The tree-to-tree editing problem. *Information Processing Lett.* **6** (1977), no. 6, 184-186. (Guy Chaty) **56** #17193 68A10
- New bounds for the clique number of a graph. *Inform. Process. Lett.* **7** (1978), no. 4, 173-174. (Michael Bauer) **58** #389 05C99
- Sell, George R. (with Sacker, Robert J.) The existence of periodic solutions on two-manifolds. *Advances in differential and integral equations* (Conf. Qualitative Theory of Nonlinear Differential and Integral Equations, Univ. Wisconsin, Madison, Wis., 1968; in memoriam Rudolph E. Langer (1894-1968)), pp. 117-118. *Studies in Appl. Math.*, No. 5, Soc. Indust. Appl. Math., Philadelphia, Pa., 1969. (Roger C. McCann) **51** #9130 58F20 (34C35)
- (with Markus, L.) Problems on capture and control in conservative dynamical systems. *Advances in differential and integral equations* (Conf. Qualitative Theory of Nonlinear Differential and Integral Equations, Univ. Wisconsin, Madison, Wis., 1968; in memoriam Rudolf E. Larzle (1894-1968)), pp. 122-124. *Studies in Appl. Math.*, No. 5, Soc. Indust. Appl. Math., Philadelphia, Pa., 1969. (Editors) **53** #9009 49E15 (58F05, 58E15)
- Mathematical problems of space rescue. *Seminar on Differential Equations and Dynamical Systems, II* (Univ. Maryland, College Park, Md., 1969), pp. 190-195. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (J. S. Joel) **53** #14284 49E15 (58F05, 58E15)
- ★Topological dynamics and ordinary differential equations. Van Nostrand Reinhold Mathematical Studies, No. 33. *Van Nostrand Reinhold Co.*, London, 1971. ix + 199 pp. (W. Utz) **56** #1283 54H20 (34C35, 58F10)
- (with Naylor, Arch W.) ★Linear operator theory in engineering and science. Holt, Rinehart and Winston, Inc., New York-Montreal, Que.-London, 1971. xv + 624 pp. (From the authors' preface) **57** #1151 47-01
- Completion of a metric space. *Math. Mag.* **44** (1971), 182-184. (Editors) **45** #4366 54E50
- Topological dynamical techniques for differential and integral equations. *Ordinary differential equations* (Proc. Conf., Math. Res. Center, Naval Res. Lab., Washington, D. C., 1971), pp. 287-304. Academic Press, New York, 1972. (T. Ura) **54** #7919 34-02 (45-02)
- A characterization of smooth α -Lipschitz mappings on a Hilbert space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 668-674. (J. R. L. Webb (Zbl **254** #47088)) **50** #14394 47H10
- (with Sacker, Robert J.) On the existence of periodic solutions on 2-manifolds. *J. Differential Equations* **11** (1972), 449-463. (F. W. Wilson, Jr.) **45** #7755 57D25 (34C35)
- (with Sacker, Robert J.) A note on almost periodic differential equations. *Équations différentielles et fonctionnelles non linéaires* (Actes Conf. Internat. "Equa-Diff 73", Brussels / Louvain-la-Neuve, 1973), pp. 93-96. Hermann, Paris, 1973. (T. Yoshizawa) **53** #8569 34C35 (54H20)
- The geometric theory of Volterra integral equations—a preliminary report. *Proceedings of Equadiff III* (Third Czechoslovak Conf. Differential Equations and their Applications, Brno, 1972), pp. 139-143. *Folia Fac. Sci. Natur. Univ. Purkynianae Brunensis, Ser. Monograph., Tomus I, Purkyně Univ., Brno, 1973.* (V. Lakshmikantham) **49** #11170 45D05
- Dichotomies for differential and integral equations. *Symposium on Ordinary Differential Equations* (Univ. Minnesota, Minneapolis, Minn., 1972; dedicated to Hugh L. Turrittin), pp. 188-193. *Lecture Notes in Math.*, Vol. 312, Springer, Berlin, 1973. (C. Corduneanu) **54** #874 45D05 (34C10, 45M10)
- A note on almost periodic solutions of linear partial differential equations. *Bull. Amer. Math. Soc.* **79** (1973), 428-430. (C. Harvey) **47** #3804 35B15 (35G05)
- (with Sacker, Robert J.) Skew-product flows, finite extensions of minimal transformation groups and almost periodic differential equations. *Bull. Amer. Math. Soc.* **79** (1973), 802-805. (J. Auslander) **51** #9040 54H20
- (with Sacker, Robert J.) On the existence of nontrivial recurrent motions. *Duke Math. J.* **40** (1973), 815-819. (Karl Petersen) **48** #7237 54H20
- Differential equations without uniqueness and classical topological dynamics. *J. Differential Equations* **14** (1973), 42-56. (Roger C. McCann) **48** #4430 34C35 (54H20)
- Almost periodic solutions of linear partial differential equations. Collection of articles dedicated to Salomon Bochner. *J. Math. Anal. Appl.* **42** (1973), 302-312. (D. Ramakrishna Rao) **48** #4463 35B15
- A Tauberian condition and skew product flows with applications to integral equations. *J. Math. Anal. Appl.* **43** (1973), 388-396. (David L. Lovelady) **49** #1029

- 45D05 (34C35)
 The Floquet problem for almost periodic linear differential equations. *Ordinary and partial differential equations* (Proc. Conf., Univ. Dundee, Dundee, 1974), pp. 239-251. *Lecture Notes in Math.*, Vol. 415, Springer, Berlin, 1974. (From the author's introduction) **54** #7972 34D05 (34C25)
 (with Sacker, Robert J.) A note on Anosov diffeomorphisms. *Bull. Amer. Math. Soc.* **80** (1974), 278-280. (Waldyr M. Oliva) **48** #9765 58F15
 (with Sacker, Robert J.) Existence of dichotomies and invariant splittings for linear differential systems. I. *J. Differential Equations* **15** (1974), 429-458. (A. Morimoto) **49** #6209 54H20 (58F15)
 (with Markus, L.) Control in conservative dynamical systems: recurrence and capture in aperiodic fields. *J. Differential Equations* **16** (1974), no. 3, 472-505. (G. N. Mil'shtein) **54** #13689 49E15 (58F99, 34C35)
 (with Sacker, Robert J.) Finite extensions of minimal transformation groups. *Trans. Amer. Math. Soc.* **190** (1974), 325-334. (J. Auslander) **50** #3207 54H20
 (with Sacker, Robert J.) A spectral theory for linear almost periodic differential equations. *International Conference on Differential Equations* (Proc., Univ. Southern California, Los Angeles, Calif., 1974), pp. 698-708. Academic Press, New York, 1975. (Walter Eberhard) **54** #656 34D05 (34E10, 34C25)
 Generic theories in the qualitative study of ordinary differential equations. (Italian summary) Collection of articles dedicated to Giovanni Sansone on the occasion of his eighty-fifth birthday. *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, suppl., 182-188. (S. Ahmad) **52** #14491 34C35 (58F20)
 Functional analysis in the study of differential and integral equations. *Control theory and topics in functional analysis* (Internat. Sem., Internat. Centre Theoret. Phys., Trieste, 1974), Vol. II, pp. 201-217. Internat. Atomic Energy Agency, Vienna, 1976. (From the summary) **58** #22836 34C35 (47D05)
 Spectral theories for linear differential equations. *Control theory and topics in functional analysis* (Internat. Sem., Internat. Centre Theoret. Phys., Trieste, 1974), Vol. II, pp. 219-226. Internat. Atomic Energy Agency, Vienna, 1976. (Author's summary) **58** #22752 34B25 (34A30)
 (with Miller, Richard K.) Topological dynamics and its relation to integral equations and nonautonomous systems. *Dynamical systems* (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974), Vol. I, pp. 223-249. Academic Press, New York, 1976. (Authors' introduction) **58** #31282 58F99 (34C35, 45D05, 54H20)
 (with Sacker, Robert J.) Existence of dichotomies and invariant splittings for linear differential systems. II. *J. Differential Equations* **22** (1976), no. 2, 478-496. (A. Morimoto) **55** #13494 58F10 (34D35)
 (with Sacker, Robert J.) Existence of dichotomies and invariant splittings for linear differential systems. III. *J. Differential Equations* **22** (1976), no. 2, 497-522. (A. Morimoto) **55** #13495 58F10 (34D35)
 What is a dynamical system? *Studies in ordinary differential equations*, pp. 32-51. *Stud. in Math.*, Vol. 14, Math. Assoc. of America, Washington, D.C., 1977. (T. Ura) **57** #16840 34C35 (54H20, 58F99)
 The prodigal integral. *Amer. Math. Monthly* **84** (1977), no. 3, 162-167. (T. A. Botts) **55** #587 26A24
 (with Sacker, Robert J.) Lifting properties in skew-product flows with applications to differential equations. *Mem. Amer. Math. Soc.* **11** (1977), no. 190, iv+67 pp. (L. Janos) **56** #6632 54H20 (34K05, 58F10)
 Hyperbolic almost periodic solutions and toroidal limit sets. *Proc. Nat. Acad. Sci. U.S.A.* **74** (1977), no. 8, 3124-3125. (Author's summary) **58** #22819 34C25 (58F10)
 The center manifold theorem and the structure of a flow in the vicinity of an almost periodic motion. Local dynamical systems: integral and differential equations (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikikenkyūsho Kōkyūroku No. 303* (1977), 39-55. (Clark Robinson) **58** #24372 58F10 (34C25)
 (with Sacker, Robert J.) A spectral theory for linear differential systems. *J. Differential Equations* **27** (1978), no. 3, 320-358. (F. W. Wilson, Jr.) **58** #18604 58F99 (34B25, 54H20)
 The structure of a flow in the vicinity of an almost periodic motion. *J. Differential Equations* **27** (1978), no. 3, 359-393. (N. Fenichel) **58** #11704 34D05 (34D35)
Sellers, Wilfrid See **Studies in Wilfrid Sellers' philosophy**, **52** #10368
Selle, G. Lösung singularer Integralgleichungen der Elastizitätstheorie mit Hilfe von B-Splines. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T151-T153. (B. A. Bondarenko) **56** #7450 73G5
Selleri, F. (with Capasso, Vincenzo; Fortunato, Donato) von Neumann's theorem and hidden-variable models. *Riv. Nuovo Cimento* (1) **2** (1970), 149-199. (Jean Nuyts) **46** #8549 81.00
 (with Capasso, Vincenzo; Fortunato, Donato) Sensitive observables of quantum mechanics. *Internat. J. Theoret. Phys.* **7** (1973), 319-326. (Authors' summary) **50** #15708 81.47
 (with Fortunato, Donato) Sensitive observables on infinite-dimensional Hilbert spaces. *Internat. J. Theoret. Phys.* **15** (1976), no. 5, 333-338. (H. Araki) **54** #12033 81.46
 (with Tarozzi, G.) Is nondistributivity for microsystems empirically founded? (Italian and Russian summaries) *Nuovo Cimento B* (11) **43** (1978), no. 1, 31-40. (S. Gudder) **57** #8526 81.02
 See also **Foundations of quantum mechanics**, **52** #7333
Selleri, Fabio (with Podio-Guidugli, Paolo) Material stability restrictions on the response function in finite elasticity. (French summary) *J. Elasticity* **4** (1974), no. 2, 147-154. (Authors' summary) **57** #14725 73.35
Sellers, Peter H. An introduction to a mathematical theory of chemical reaction networks. I. *Arch. Rational Mech. Anal.* **44** (1971/72), 23-40. (A. C. Srivastava) **51** #12148 80.20
 An introduction to a mathematical theory of chemical reaction networks. II. *Arch. Rational Mech. Anal.* **44** (1971/72), 376-386. (A. C. Srivastava) **51** #12149 80.20
 (with Sankoff, David) Shortcuts, diversions, and maximal chains in partially ordered sets. *Discrete Math.* **4** (1973), 287-293. (E. Harzheim) **47** #1690 06A10
 An algorithm for the distance between two finite sequences. *J. Combinatorial Theory Ser. A* **16** (1974), 253-258. (R. J. McEliece) **49** #7150 05A05
 On the theory and computation of evolutionary distances. *SIAM J. Appl. Math.* **26** (1974), 787-793. (K. Dietz) **50** #1751 92A10
 An algorithm for compositions of a multiset. *J. Combinatorial Theory Ser. A* (1978), no. 3, 339-347. (A. L. Whiteman) **57** #16097 05A99
Sellers, S. (with Sen, A. R.; Smith, G. E. J.) The use of a ratio estimate in successive sampling. (French summary) *Biometrics* **31** (1975), no. 3, 673-683. (Kenneth R. Brewer) **52** #12149 (E 57 #7837) 62D05
 (with Sen, A. R.; Smith, G. E. J.) Corrections to: "The use of a ratio estimate in successive sampling" (Biometrics **31** (1975), no. 3, 673-683). *Biometrics* **33** (1977), no. 1, 767. (Editors) **57** #7837 62D05 (62F10)
Selliah, J. B. An inequality satisfied by the gamma function. *Canad. Math. Bull.* **19** (1976), no. 1, 85-87. (R. A. Horn) **54** #3050 33A15
 (with Olkin, Ingram) Estimating covariances in a multivariate normal distribution. *Statistical decision theory and related topics, II* (Proc. Sympos., Purdue Univ., La. Ind., 1976), 313-326. Academic Press, New York, 1977. (James Berger) **55** #9262C99 (62F10, 62C15)
Sellius, Godofredus See **Palm, L. C.**, **58** #21182
Selljabova, T. N. (with Sobolev, V. V.) The mutual growth of the coefficients of functions that are univalent in the half-plane. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1975), 768-770. (T. Kubo) **50** #7503 30A34
 (with Sobolev, V. V.) The study of extremal properties of a class of univalent conformal mappings of the half-plane onto itself. (Russian) *Some problems in modern function theory* (Proc. Conf. Modern Problems of Geometric Theory of Functions, Math., Acad. Sci. USSR, Novosibirsk, 1976) (Russian), pp. 142-145. *Akad. Nauk SSSR Sibsk. Otdel. Inst. Mat., Novosibirsk*, 1976. (Editors) **58** #22501 30A30
Selman, Alan L. Arithmetical reducibilities. I. *Z. Math. Logik Grundlagen Math.* **17** (1977), 335-350. (Stephen J. Garland) **46** #3285 02F35
 Completeness of calculi for axiomatically defined classes of algebras. *Math. Universitatis* **2** (1972), 20-32. (S. Comer) **47** #1725 08A25
 Applications of forcing to the degree-theory of the arithmetical hierarchy. *London Math. Soc.* (3) **25** (1972), 586-602. (C. G. Jockusch, Jr.) **47** #3155 02F35
 Arithmetical reducibilities. II. *Z. Math. Logik Grundlagen Math.* **18** (1972), 81-94. (Stephen J. Garland) **46** #3286 02F35
 Sets of formulas valid in finite structures. *Trans. Amer. Math. Soc.* **177** (1973), 491-504. (G. E. Minc) **47** #8272 02F30
 (with Ladner, Richard E.; Lynch, Nancy Ann) Comparison of polynomial time reducibilities. *Sixth Annual ACM Symposium on Theory of Computing* (Seattle, Wash., 1974), pp. 110-121. *Assoc. Comput. Mach., New York*, 1974. (John T. Gill) **54** #68A20 (02F30)
 (with Jones, Neil D.) Turing machines and the spectra of first-order formulas. *Symbolic Logic* **39** (1974), 139-150. (Robert M. Baer) **58** #5164 02G20 (02F30, 68A20, 68A25)
 Relativized halting problems. *Z. Math. Logik Grundlagen Math.* **20** (1974), 193-204. (Forbes D. Lewis) **52** #13350 02F30
 (with Ladner, Richard E.; Lynch, Nancy Ann) A comparison of polynomial time reducibilities. *Theoret. Comput. Sci.* **1** (1975), no. 2, 103-123. (John T. Gill) **52** #68A20
 (with Baker, Theodore P.) A second step toward the polynomial hierarchy. *Annual Symposium on Foundations of Computer Science* (Houston, Tex., 1976), pp. 7-16. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (John T. Gill) **56** #10131 68A20
 (with Book, Ronald V.; Wrathall, Celia; Dobkin, David P.) Inclusion complexity of tally languages and the Hartmanis-Berman conjecture. *Math. Systems Theory* **11** (1977/78), no. 1, 1-8. (Pavel Pudlák) **57** #4612 68A20 (68A30)
Selmer, Ernst S. On Viggo Brun's illustration of Leibniz' formula for π . *Nordisk Tidskr.* **19** (1971), 28-29, 60. (Editors) **48** #1427 65B10 (40A99)
 (with Skau, Ivar) Some applications of Finn Holme's method for determining $\sum_{n=1}^{\infty} 1/n^2$. (Norwegian. English summary) *Nordisk Mat. Tidskr.* **19** (1971), 120-124. (Authors' summary) **48** #749 40A25
 (with Mykkeltveit, Johannes) Linear recurrence in Boolean rings. Proof of K. conjecture. *Math. Scand.* **33** (1973), 13-17. (N. J. A. Sloane) **49** #170 010A35
 Remarks on an angle construction. (Norwegian. English summary) *Nordisk Tidskr.* **21** (1973), 11-28, 55. (E. J. F. Primrose) **48** #12232 50B05
 On the number of prime divisors of a binomial coefficient. *Math. Scand.* **39** (1971), no. 2, 271-281 (1977). (D. H. Lehmer) **56** #5406 10A25
 (with Greger, Karl) Random parking. (Swedish. English summary) *Nordisk Tidskr.* **24** (1976), no. 3-4, 123-131, 135 (1977). (Authors' summary) **58** #1360D05
 On the linear Diophantine problem of Frobenius. *J. Reine Angew. Math.* **293** (1977), 1-17. (Ezra Brown) **56** #246 10B05
 (with Beyer, Öyvind) On the linear Diophantine problem of Frobenius in variables. *J. Reine Angew. Math.* **301** (1978), 161-170. (E. L. Cohen) **58** #2710B05
 See also **Computers in number theory**, **47** #3285
Selmi, Giovanni Alcune proprietà dei tensori doppi covarianti aventi i nuclei coincidenti. *Pubbl. Ist. Mat. Appl. Fac. Ingegneria Univ. Stud. Roma No. 169 Quaderno No. 8* (1977), 37-42. (M. Pearl) **55** #12751 15A72
Sel'skii, Ju S. Solution of cylindrical-shell problems by the method of successive approximations. *Izv. Akad. Nauk SSSR Meh. Toerd. Tela* **1971**, 132-137 (Russian) translated as *Mechanics of Solids* **6** (1971), no. 6, 112-117. (F. V. Pohle) **50** #973.65
Selten, Reinhard (with Harsanyi, John C.) A generalized Nash solution for two-person bargaining games with incomplete information. *Management Sci.* **18** (1971/72), P80-P106. (B. O. Shubert) **45** #4838 90D05
 (with Marschak, Thomas A.) ★General equilibrium with price-making functions. *Lecture Notes in Economics and Mathematical Systems*, Vol. 91. Springer-Verlag, Berlin-New York, 1974. xi+246 pp. (Georg Bol) **50** #12167 90A15
 Reexamination of the perfectness concept for equilibrium points in extensive form games. *Internat. J. Game Theory* **4** (1975), issue 1-2, 25-55. (R. E. Stearns) **52** #1690D40
 A simple game model of kidnapping. *Mathematical economics and game theory*

- 39-155. *Lecture Notes in Econ. and Math. Systems*, Vol. 141, Springer, Berlin, 1977. (M. Maschler) 57 #2623 90D45
- The chain store paradox. *Theory and Decision* 9 (1978), no. 2, 127-159. (James W. Friedman) 58 #9317 90D10
- See also Colloque: *Théorie des Jeux*, 52 #16667
- er, S. M. See *Control in space*, 48 #8040
- er, Stanley E. (with Goldberg, Richard R.) Uniformly concentrated sequences and multipliers of Segal algebras. *J. Math. Anal. Appl.* 59 (1977), no. 3, 488-497. (Harald E. Crosgat) 55 #13159 43A22
- ko, O. I. (with Patereu, S. G.) A probabilistic GMDH algorithm with sequential discrimination of input features. *Avtomatika* 1973, no. 3, 37-43 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 6 (1973), no. 3, 29-33. (Authors' summary) 56 #10204 68A45 (62H30)
- GMDH algorithm with orthogonalized complete description for synthesis of models by the results of a planned experiment. *Avtomatika* 1974, no. 5, 32-42 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 7 (1974), no. 5, 24-33. (Authors' summary) 56 #15103 93E25
- ha, A. I. (with Butov, V. G.; Vasenin, I. M.) Application of the methods of nonlinear programming to the solution of variational gas dynamics problems. *Prikl. Mat. Meh.* 41 (1977), no. 1, 59-64 (Russian); translated as *J. Appl. Math. Mech.* 41 (1977), no. 1, 52-57. (From the authors' summary) 57 #8430 7649
- hina, V. V. The unique solvability of the problem of motion of a piston in a viscous gas. (Russian) *Dinamika Splošn. Sredy* No. 31 *Dinamika Židkosti so Svobod. Granicami* (1977), 132-150, 169. (From the summary) 58 #32363 7635
- (with Kažihov, A. V.) Unique global solution with respect to time of initial-boundary value problems for one-dimensional equations of a viscous gas. *Prikl. Mat. Meh.* 41 (1977), no. 2, 282-291 (Russian); translated as *J. Appl. Math. Mech.* 41 (1977), no. 2, 273-282. (Silvio Nocilla) 57 #8425 7645
- aggi, Renata Soluzioni fondamentali principali per equazioni ellittiche. (English summary) *Rend. Ist. Mat. Univ. Trieste* 5 (1973), 21-41. (P. C. Fife) 48 #6669 35J30
- (with Sisto, Irene) Sulla regolarità di certi potenziali ellittici. (English summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) 43 (1976), 372-380 (1977). (S. A. Tersenov) 58 #29187 35J55 (31B25)
- vi, Roberto Alcune osservazioni sulle algebre cilindriche speciali. (English summary) *Matematiche (Catania)* 27 (1972), 191-202. (U. Felgner) 50 #6836 02J15
- yanjkin, V. V. See *Seljankin, V. V.*
- adeni, Zbigniew Remarks on sums of sets. (Polish) *Wiadom. Mat.* (2) 11, no. 2, 181-185 (1970). (Editors) 56 #11797 04-01
- ★Banach spaces of continuous functions. Vol. I. *Monografie Matematyczne*, Tom 55. PWN—Polish Scientific Publishers, Warsaw, 1971. 584 pp. (errata insert) (H. E. Lacey) 45 #5730 46E15 (46M99)
- Relations between certain theories in functional analysis and general topology. *Actes du Colloque d'Analyse Fonctionnelle* (Univ. Bordeaux, Bordeaux, 1971), pp. 357-358. *Bull. Soc. Math. France, Mém. No. 31-32, Soc. Math. France, Paris, 1972.* (Editors) 50 #8104 46Mxx (54C40)
- Is the Cantorian mathematics symmetric? *Theory of sets and topology* (in honour of Felix Hausdorff, 1868-1942), pp. 467-471. *VEB Deutsch. Verlag Wissensch., Berlin, 1972.* (Marta C. Bunge) 52 #13310 02A05 (00A25, 18A15)
- ★Monads and their Eilenberg-Moore algebras in functional analysis. *Queen's Papers in Pure and Applied Mathematics*, No. 33. *Queen's University, Kingston, Ont.*, 1973. iii + 98 pp. (J. Wick Pelletier) 51 #3916 46Mxx (18C15)
- A simple topological proof that the underlying set functor for compact spaces is monadic. *TOPO 72—general topology and its applications* (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot), pp. 429-435. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (E. G. Manes) 50 #10008 18C15
- On classification, logical educational materials, categories, and automata. *Colloq. Math.* 31 (1974), 137-153. (A. K. Austin) 52 #9721 68A45
- On the works of W. Orlicz in functional analysis. (Polish) *Wiadom. Mat.* (2) 18 (1974), 191-199. (See *RŽMat* 1975 #7 B592) 01A70
- Some categorical characterizations of algebras of continuous functions. *Symposia Mathematica*, Vol. XVII (Convegno sugli Anelli di Funzioni Continue, INDAM, Roma, 1973), pp. 97-112. *Academic Press, London, 1976.* (J. Wick Pelletier) 54 #5858 46M15 (46E25)
- (with Świrszcz, Tadeusz) Reflective and coreflective subcategories of categories of Banach spaces and abelian groups. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 25 (1977), no. 11, 1105-1107. (R. Fritsch) 57 #16376 18A40
- See also Discussion: *Mathematical terms and symbols*, 56 #15244
- makov, N. V. (with Zinov'ev, V. A.) Equidistant q -ary codes with maximal distance and resolvable balanced incomplete block designs. *Problemy Peredači Informacii* 4 (1968), no. 2, 3-10 (Russian); translated as *Problems of Information Transmission* 4 (1968), no. 2, 1-7 (1971). (Authors' summary) 49 #12165 94A10
- (with Zinov'ev, A. A.) Complete and quasi-complete balanced codes. *Problemy Peredači Informacii* 5 (1969), no. 2, 14-18 (Russian); translated as *Problems of Information Transmission* 5 (1969), no. 2, 11-16. (Authors' summary) 46 #5039 94A10
- (with Zinov'ev, A. A.; Zaicev, G. V.) A class of maximum equidistant codes. *Problemy Peredači Informacii* 5 (1969), no. 2, 84-87 (Russian); translated as *Problems of Information Transmission* 5 (1969), no. 2, 65-68. (Authors' summary) 46 #5040 94A10
- (with Zinov'ev, V. A.) Balanced codes and tactical configurations. *Problemy Peredači Informacii* 5 (1969), no. 3, 28-36 (Russian); translated as *Problems of Information Transmission* 5 (1969), no. 3, 22-28. (N. J. A. Sloane) 53 #12748 94A10
- (with Zinov'ev, A. A.; Zaicev, G. V.) Uniformly close-packed codes. (Russian) *Problemy Peredači Informacii* 7 (1971), no. 1, 38-50. (R. N. Goss) 48 #3607 94A10
- (with Zaicev, G. V.; Zinov'ev, V. A.) Fast correlation decoding of block codes. (Russian) *Coding and discrete information transmission in communication systems* (Russian), pp. 74-85, 194-195. *Izdat. "Nauka", Moscow, 1976.* (Authors' summary) 58 #15688 94A10
- See also Symposium: *Information Theory*, 50 #9416
- Semaško, L. M. Some aspects of the relations of the fundamental laws of dialectic and formal logic. (Russian) *Tomsk. Gos. Univ. Učen. Zap. No. 85* (1970), 44-52. (Not reviewed) 02A05
- Šematorič, V. I. (with Zmievskaja, G. I.; Pjarnpuu, A. A.) Solution of modeled relaxation problems for rarefied gas mixtures by a statistical method of particles in cells. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 35* (1978), 66 pp. (From the summary) 58 #20273 8660 (7635)
- Šembel', V. I. The problem of minimizing the maximal shortage of production by projection. (Russian) *Mathematical methods of solution of economic problems* (Suppl. to *Ekonom. i Mat. Metody*), Collection No. 1, (Russian), pp. 76-83. *Izdat. "Nauka", Moscow, 1969.* (J. Szelecsán) 45 #6427 90C10
- Sember, J. J. (with Bennett, Grahame; Wilansky, Albert) Sections of sequences in matrix domains. *Trans. New York Acad. Sci.* (2) 34 (1972), no. 2, 107-112. (Robert DeVos) 55 #3600 40H05
- On unconditional section boundedness in sequence spaces. *Rocky Mountain J. Math.* 7 (1977), no. 4, 699-706. (D. J. H. Garling) 56 #6338 46A45
- Semčенок, M. S. (with Barancev, R. G.) Some generalizations of the method of asymptotic iterations with an extended domain of action of the asymptotic analysis. (Russian) *Asymptotic methods in systems theory*, No. 7 (Russian), pp. 156-161. *Irkutsk. Gos. Univ., Irkutsk, 1974.* (Editors) 57 #11074 65L99 (34E99)
- Šemec, N. A. See *Application of mathematical methods in the biological sciences, chemistry and chemical engineering*, 55 #1887
- Semenčenko, S. P. (with Galba, E. F.) A numerical solution of the Neumann problem for the Poisson equation. (Russian) *Numerical analysis and questions of optimization of computations* (Russian), pp. 3-12. *Inst. Kibernet., Akad. Nauk Ukrain. SSR, Kiev, 1976.* (Editors) 58 #31898 65N20
- Semenčuk, V. Ye. See *Semenčuk, V. E.*
- Semenov, O. V. The Carleman problem with a parameter. (Russian) *Ukrain. Mat. Ž.* 27 (1975), no. 3, 400-406, 431. (N. K. Karapetjanc) 52 #766 30A88
- Integral equations with a parameter. (Russian) *Georgian and English summaries* *Sakharth. SSR Mecn. Akad. Moambe* 82 (1976), no. 3, 537-540. (S. G. Samko) 54 #13492 45B05
- (with Bilan, E. P.) The isomorphism of R -normed modules. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 4, 524-526, 574. (Nicholas Young) 54 #11063 46H25
- Semenčuk, N. P. A generalized method for the summability of the Fourier integrals of differentiable functions. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1977, no. 1, 19-24, 139-140. (S. Baron) 56 #3564 42A76
- Semenčuk, V. E. (with Šil'man, S. V.) Search for extremum of functions using a priori Markov model of the gradients. *Izv. Akad. Nauk SSR Tehn. Kibernet.* 1974, no. 5, 25-31 (Russian); translated as *Engrg. Cybernetics* 12 (1974), no. 5, 21-27. (Bruce D. Craven) 53 #2384 90C40
- Semenčuk, V. N. A certain class of finite solvable groups. (Russian) *Dokl. Akad. Nauk BSSR* 20 (1976), no. 2, 104-105, 187. (P. Fong) 53 #5732 20D10
- Semenčuk, A. A. Singular integral equations with coefficients that have discontinuities of almost periodic type. (Russian) *Mat. Issled.* 6 (1971), no. 3(21), 92-114. (L. von Wolfersdorf) 45 #988 47G05 (45E99)
- (with Gohberg, Israel C.) The inversion of finite Toeplitz matrices and their continual analogues. (Russian) *Mat. Issled.* 7 (1972), no. 2(24), 201-223, 290. (A. Devinatz) 50 #5524 47B35
- See also *Spectral properties of operators*, 57 #1153
- Semendjajev, K. A. (with Bronštejn, I. N.) ★*Matematika. Poradnik encyklopedyczny.* (Polish) [Mathematics. An encyclopedic handbook] Fourth edition. Translated from the Russian by Stefan Czarnecki and Robert Bartoszyński. *Państwowe Wydawnictwo Naukowe, Warsaw, 1970.* 856 pp. (loose table) (Editors) 49 #10469 00A05
- (with Bronštejn, I. N.) ★*A guide-book to mathematics.* Translated from the Russian on the basis of the sixth German edition by Jan Jaworowski and Michael N. Bleicher. *Verlag Harri Deutsch, Frankfurt/Main-Zurich; distributed by Springer-Verlag New York, Inc., New York, 1971.* 783 pp. (loose supplement) (Editors) 49 #10470 00A05
- (with Bronštejn, I. N.) ★*A guide book to mathematics. Fundamental formulas, tables, graphs, methods.* Translated from the Russian on the basis of the sixth German edition by Jan Jaworowski and Michael N. Bleicher. Second printing. *Verlag Harri Deutsch, Zurich-Frankfurt/Main; Springer-Verlag New York, Inc., New York, 1973.* 783 pp. (loose supplement) (Editors) 49 #10471 00A05
- (with Bronštejn, I. N.) ★*Taschenbuch der Mathematik. Sechzehnte Auflage.* Übersetzt aus dem Russischen von Viktor Ziegler. *Verlag Harri Deutsch, Zurich-Frankfurt am Main, 1976.* xiii + 585 pp. *ISBN 3-87144-016-7* (Editors) 57 #5551 00A20
- Semenec', G. I. Questions on the foundations of geometry in the works of D. Hilbert and his contemporaries. (Ukrainian) *Narisi Īstor. Prirodoznav. i Tehn. Vyp.* 17 (1972), 16-21. (Editors) 57 #12093 01A60
- ★The early period of the history of the foundations of geometry. (Ukrainian) *Narisi Īstor. Prirodoznav. i Tehn. Vyp.* 19 (1974), 7-15, 134. (Editors) 58 #4789 01A20 (01A30)
- Semenihina, N. P. (with Sul'din, A. V.; Zabolin, V. I.) Certain operators in Hilbert space. (Russian) *Kazan. Gos. Univ. Učen. Zap.* 129 (1969), no. 4, 90-95. (From the introduction) 58 #7683 58B99 (47H99)
- Semeniuk-Polkowska, Maria On the morphological homonymy and the many-argument contrainstative distribution. *Rev. Roumaine Math. Pures Appl.* 17 (1972), 599-604. (M. Novotný) 46 #4802 68A30
- Examples of configurations of infinite orders. *Rev. Roumaine Math. Pures Appl.* 17 (1972), 923-934. (Eugene S. Santos) 47 #9906 68A30
- On various types of configurations on the T -domination in algebraic linguistics. *Rev. Roumaine Math. Pures Appl.* 18 (1973), 1253-1260. (J.-F. Perrot) 48 #12922 68A30
- On various types of syntactic configurations. *Rev. Roumaine Math. Pures Appl.* 19 (1974), 935-943. (M. Novotný) 52 #7219 68A30
- On the K -configurations in algebraic linguistics. *Rev. Roumaine Math. Pures Appl.* 19 (1974), 1043-1045. (M. Novotný) 50 #11872 68A30

- On configurations based on Franclová domination in algebraic linguistics. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **19**(67) (1975), no. 1-2, 171-180 (1976). (M. Novotný) **54** #14461 68A30
- On syntactic configurations and pseudoconfigurations in algebraic linguistics. *Rev. Roumaine Math. Pures Appl.* **20** (1975), no. 4, 475-492. (M. Novotný) **52** #7220 68A30
- On some types of syntactic configurations. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 8, 1117-1124. (M. Novotný) **54** #6578 68A30
- Semenjaka, E. N.** (with Grinberg, S. I.; Suharevskii, I. V.) Short wave asymptotic analysis of the Green's function of the problem of diffraction by a plane layer. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 670-682, 813. (A. Nikodémusz) **49** #8508 78.35 (35J05)
- Semenjik, A. L.** The investigation of the stability of sampled-data instrumental servomechanisms with step-by-step motors by the direct method of Ljapunov. (Russian) *Orbor i Peredača Informacii* No. 37 (1973), 75-83, 115. (Author's summary) **50** #6597 93D05
- Semenjuk, M. V.** The summability of series by the Lambert method. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 6, 840-846, 863. (M. S. Rangachari) **53** #13921 40G05
- Semenjuk, V. V.** (with Lenjuk, M. P.) General temperature fields in solid homogeneous spherical bodies. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 3, 267-271, 288. (L. Jentsch) **58** #14433 80.35
- Semenjuta, V. N.** Computation of the index of pseudodifferential operators on a manifold with a boundary at infinity. (Russian) *Mat. Issled.* **9** (1974), no. 2(32), 139-148, 252. (V. S. Rabinovič) **54** #11407 58G10
- Singular operator equations with a shift on the circle. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 6, 1301-1302. (From the text) **58** #23720 47B30 (45E05, 47G05)
- (with Hevelev, A. B.) A local principle for special classes of Banach algebras. (Russian) *Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk.* **1977**, no. 1, 15-17, 116. (Authors' summary) **58** #17855 46J10 (47G05)
- Semenko, A. I.** (with Vavilov, A. A.; Kozlov, Ju. M.; Maksimov, A. D.; Markov, S. I.; Pavlov, V. V.; Popov, E. P.; Starikova, M. V.; Topčeev, Ju. I.; Fedorov, S. M.; Hlypalo, E. I.; Hljamo, V. M.; Cvetkov, V. I.) ★Метод гармонической линеаризации в проектировании нелинейных систем автоматического управления. (Russian) [The method of harmonic linearization in the design of nonlinear automatic control systems] Edited by Ju. M. Topčeev. Nonlinear Automatic Control Systems, Vol. 1. *Izdat. "Mašinostroenie"*, Moscow, 1970. 567 pp. (errata insert) (S. P. Bingulac) **50** #6589 (EA 53) 93C10
- Semenko, K. G.** See Scientific Reports: Collection of papers by graduate students at Dnepropetrovsk State University, **48** #8171
- Semenko, M. P.** (with Kiiko, O. V.) Construction of generalized operator for smoothing of special type in control systems. *Avtomatika* **1975**, no. 1, 15-22 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* **8** (1975), no. 1, 11-17. (Ronald Hirschorn) **52** #10158 93C99 (45C05)
- Semenko, S. F.** The laws of sums and collective variables. (Russian) *Trudy Fiz. Inst. Lebedev.* **95** (1977), 175-198, 200. (Author's summary) **58** #25687 82.47
- Semenov, A. L.** Algorithmic problems for power series and for context-free grammars. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 50-52. (G. Wechsung) **48** #10216 68A30 (62F05)
- Regularity of languages that are k -linear for different k 's. (Russian) *Dokl. Akad. Nauk SSSR* **215** (1974), 278-281. (Armin Cremers) **50** #6224 68A30
- The Presburger nature of predicates that are regular in two number systems. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 2, 403-418, 479. (Constantin Ilieci) **56** #8349 02F43
- Semenov, A. M.** (with Kuharenko, N. V.) A quadratic functional and the solvability of problems of synthesizing linear regulators. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 6, 168-170, 223 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 6, 139-142. (Authors' summary) **56** #18023 93D99
- (with Zelener, B. V.; Mika, V. I.; Filinov, V. S.) Generalization of Mayer's theorems to the case of arbitrary nature of the interaction between the gas particles. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 3 562-565. (Not reviewed) 82.62
- Semenov, A. T.** Asymptotic expansions for the distribution of the number of hits into a section of a symmetric Bernoulli walk. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 816-826, 910. (E. Seneta) **48** #7386 60J15
- The asymptotic behavior of the distribution of the sojourn time of a random walk on the positive half-axis. (Russian) *Mat. Zametki* **15** (1974), 613-620. (D. A. Darling) **50** #5940 60J15
- Asymptotic expansions for the distribution of the sojourn time of a random walk in an interval. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 918-930, 959. (D. A. Darling) **50** #5939 60J15
- Sojourn time on the half-axis of semi-Markov random walk. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 4, 191-198, 247. (O. K. Zakusilo) **54** #3875 60K15
- Semenov, B. M.** (with Rodin, V. A.) The equivalence of the norms of symmetric spaces on a set of Rademacher series. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak.* No. 10 (1973), 88-96. (Not reviewed) 46E30
- Semenov, B. N.** The asymptotic behavior of eigenfunctions and eigenfrequencies of a multireflecting resonator. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **15** (1969), 176-186. (J. Muszyński) **45** #3977 35P20
- (with Rivkind, V. Ja) The solution of higher order quasilinear equations with an unbounded nonlinearity. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 9(172), 92-98. (I. Bock (Zbl 348 #35038)) **58** #6677 35J60 (65N99)
- Semenov, E. M.** Condensed scales of Banach spaces. (Russian) *Voronež. Gos. Univ. Trudy Sem. Funkcional. Anal. Vyp.* **10**, 130-141 (1968). (J. Peetre) **54** #961 46M35
- (with Krein, S. G.; Petunin, Ju. I.) Imbedding theorems and interpolation of linear operators. (Russian) *Imbedding theorems and their applications (Proc. Sympos., Baku, 1966) (Russian)*, pp. 127-131, 245. *Izdat. "Nauka"*, Moscow, 1970. (H. Triebel) **47** #2342 46E35 (46E30, 46M35)
- (with Edelštein, I. S.; Mitjagin, B. S.) The linear groups of C and L_1 are contractible. (Loose Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math.*
- Astronom. Phys.* **18** (1970), 27-33. (G. Neubauer) **49** #6274b 58D05 (47D10)
- (with Edelštein, I. S.; Mitjagin, B. S.) Letter to the editors: "The Linear groups C and L_1 are contractible" (Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. **18** (1970), 27-33). *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **18** (1970), 27-33. (G. Neubauer) **49** #6274c 58D05 (47D10)
- Certain numerical characteristics of symmetric spaces. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 1 Sb. Statei po Teorii Operacii i Uravnenii* (1970), 137-144. (B. Sadovskii) **54** #13550 46E30
- (with Kuricyn, Ju. G.; Petunin, Ju. I.) Čebyšev type inequalities in symmetric spaces. (Russian) *Mat. Zametki* **10** (1971), 195-205. (J. Peetre) **45** #7461 46E30
- (with Sedaev, A. A.) The possibility of describing interpolation spaces in terms of Peetre's K -method. (Russian) *Optimizacija* No. 4(21) (1971), 98-114. (S. D. Riemenschneider) **51** #6391 46E30 (46M35)
- (with Birman, M. Š.; Vilenkin, N. Ja.; Gorin, E. A.; Zabreiko, P. P.; Iohvidov, S.; Kadeč, M. I.; Kostjučenko, A. G.; Krasnosel'skii, M. A.; Krein, S. G.; Mityagin, B. S.; Petunin, Ju. I.; Rutickii, Ja. B.; Sobolev, V. I.; Stecenko, V. Ja.; Fadda, D.; Citlanadze, E. S.) ★Функциональный анализ. (Russian) [Functional analysis] Edited by S. G. Krein. Second edition, revised and augmented. Mathematical Research Library. *Izdat. "Nauka"*, Moscow, 1972. 544 pp. (Editors) **50** #5406 46-02 (46E30)
- (with Krein, S. G.) A certain property of equimeasurable functions. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 5 Sb. Statei po Teorii Operacii i Differencial. Uravnenii* (1972), 70-74. (H. Kogan (RŽMat 1973 #56) #5823 28A20
- (with Krein, S. G.) Interpolation of operators of weakened type. (Russian) *Funkcional. Anal. i Priložen.* **7** (1973), no. 2, 89-90. (S. D. Riemenschneider) **47** #46E35 (46E30, 46M35, 47B99)
- (with Braverman, M. Š.) Isometries of symmetric spaces. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 257-259. (E. R. Deal) **50** #2869 46B05 (46A45)
- (with Vasil'eva, O. A.) A certain class of multipliers. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 12 Sb. Statei po Prikl. Anal.* (1974) (Editors) **58** #1959 42A18
- A survey of the interpolation theory of linear operators. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Drobovych, 1973), Functional analysis and its applications (Russian)*, pp. 28-43. *Nauk SSSR Central. Ekonom.-Mat. Inst., Moscow*, 1975. (G. Godini) **57** #146M35
- (with Rodin, V. A.) Rademacher series in symmetric spaces. (Russian summary) *Anal. Math.* **1** (1975), no. 3, 207-222. (J. Musielak) **52** #8905 46E20 (42A56, 46E30)
- (with Braverman, M. Š.) Isometries of symmetric spaces. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 17 Teor. Operator. Uravnenii* 7-18. (Jöran Bergh) **58** #12325 46E30
- (with Krein, S. G.) Some interpolation theorems of the theory of linear operators and their applications. (Russian) *Imbedding theorems and their applications (Proc. All-Union Sympos., Alma-Ata, 1973) (Russian)*, pp. 64-68, 188. *Izdat. "Nauka"*, Moscow, 1974. (Jöran Bergh) **58** #2213 46E30 (46E35, 46M35)
- (with Mitjagin, B. S.) The space C^k is not an interpolation space between C^0 and C^n . (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 3, 543-546. (Jöran Bergh) **53** #14110 46E35 (46M35)
- (with Mitjagin, B. S.) Absence of interpolation of linear operators in spaces of smooth functions. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), 1289-1328, 1447. (Jöran Bergh) **58** #2234 46E35 (46M35)
- (with Gulisašvili, A. B.; Rodin, V. A.) Fourier coefficients of summable functions. (Russian) *Mat. Sb. (N.S.)* **102**(144) (1977), no. 3, 362-371. (W. R. Madych) **56** #42A60
- (with Buhvalov, A. V.; Veksler, A. I.; Vladimirov, D. A.; Vulič, B. Z.; Kaničev, L. V.; Lozinskii, S. M.) Grigorij Jakovlevič Lozanovskii: an obituary. (Russian) *Mat. Nauk* **33** (1978), no. 1(199), 199-202. (Editors) **58** #16018 01A70
- (with Berezans'kii, Ju. M.; Bogoljubov, N. N.; Dalec'kii, Ju. L.; Lavrent'ev, Selim Grigor'evič Krein (on the occasion of his seventieth birthday). (Russian) *Mat. Nauk* **33** (1978), no. 2(200), 217-224. (Editors) **57** #12102 01A70
- Semenov, G. A.** (with Bološin, S. B.; Osipov, A. V.) Description optimization by orthogonalization of the data of a passive experiment. *Izv. Akad. Nauk SSSR Tekhn. Kibernet.* **1973**, no. 3, 202-204 (Russian); translated as *Engrg. Cybernetics* **11** (1973), 535-538. (Steven Arnold) **53** #6902 62J05
- (with Alekseev, A. S.; Dobrinskii, V. I.; Nepročnov, Ju. P.) On the question of practical application of the theory of inverse dynamical problems of seismics. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 5, 1053-1056. (Jiří Nedoma) **57** #86.35
- Semenov, G. M.** A projective correspondence of second order series and pencils. (Russian) *Pskov. Ped. Inst. Fiz.-Mat. Fak. Učen. Zap. No. 31* (1966), 16-40. (Peter Brückner) **50** #11003 50D15
- A group space of three dimensions. (Russian) *Physical and mathematical problems of the Tenth Scientific Conf., Pskov, 1969*, No. 8 (Russian), pp. 113-129. *Pskov. Ped. Inst., Pskov*, 1970. (Editors) **58** #26647b 50A15
- Symmetries in spaces with Hilbert's axioms of incidence, order and congruence. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap. 374* (1970), no. 1 *Voprosy Differencial. Geom.*, 200-215. (B. Rozenfel'd (RŽMat 1971 #9 A547)) **58** #30700 50A25 (52A50)
- On the group space of n dimensions. (Russian) *Questions of differential geometry (non-Euclidean geometry) (Russian)*, pp. 169-175. *Moskov. Gos. Ped. Inst., Moscow* (1973). (J. Katerňák) **57** #10555 50A10
- Semenov, G. P.** (with Železnov, I. G.) ★Комбинированная оценка характеристик сложных систем. (Russian) [Combined estimation of the characteristics of complex systems] *Izdat. "Mašinostroenie"*, Moscow, 1976. 55 pp. (Editors) **57** #15721
- Semenov, I. P.** An approximate solution by the method of lines for a boundary value problem with a biharmonic operator in the disc. (Russian) *Kazan. Gos. Univ. Zap. 129* (1969), no. 3, 145-151. (M. Zlámal) **46** #1111 65N35
- Approximate solution by the method of lines of a boundary value problem for a fourth order elliptic equation. (Russian) *Functional analysis and its applications (Russian)*, pp. 97-103. *Izdat. Kazan. Univ., Kazan*, 1975. (Editors) **57** #18149 65N35

- (with Velez, G. D.; Soliev, Ju.) Interpolational quadrature and cubature formulas in multiple nodes for certain singular integrals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 2 (177), 10-20. (A. Cojbu) 58 #12139 41A55
- Approximate solution by the method of lines of a boundary value problem for an equation of elliptic type. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 186, 91-99. (Muri M. Gupta) 58 #19188 65M20
- ov, Ju. A. (with Belyi, A. G.) Kato's inequality, and semigroup product formulae. (Russian) *Funkcional. Anal. i Priložen.* 9 (1975), no. 4, 59-60. (A. B. Buche) 52 #15100 47D05 (35J10)
- (with Belyi, A. G.) One criterion of semigroup product convergence. *Lett. Math. Phys.* 1 (1975/77), no. 3, 201-208. (K. Gustafson) 57 #10495 47D05
- On the Lie-Trotter theorems in L^p -spaces. *Lett. Math. Phys.* 1 (1975/77), no. 5, 9-385. (R. Hoegh-Krohn) 58 #12514 47D05
- (with Kovalenko, V. F.) Essential self-adjointness of many-particle Hamiltonian operators of Schrödinger type with singular two-particle potentials. *Ann. Inst. H. Poincaré Sect. A (N.S.)* 26 (1977), no. 4, 325-332. (Lawrence E. Thomas) 55 #14018 47
- Schrödinger operators with L^p_{loc} -potentials. *Comm. Math. Phys.* 53 (1977), no. 3, 17-284. (T. Ushijima) 57 #13578 47F05 (47A40, 47D05)
- (with Belyi, A. G.; Kovalenko, V. F.) On the continuity of generalized eigenfunctions of the Schrödinger operator. *Rep. Mathematical Phys.* 12 (1977), no. 3, 37-310. (Teruo Ikebe) 58 #23149 35P05 (81.35)
- nov, Ju. M. The controllability of linear systems with constant coefficients. (Russian) *Mat. Sb. (N.S.)* 105(147) (1978), no. 2, 164-179, 287. (Ljubomir Lilov) 58 #9495 3B05
- The controllability of the equation $\dot{x} = ux$. (Russian) *Mat. Zametki* 23 (1978), no. 2, 53-259. (M. Vlach) 58 #20665 93B05 (14D20)
- nov, L. A. On a class of exceptional sets. (Russian) *Qualitative and approximate methods for the investigation of operator equations*, No. 1 (Russian), pp. 132-135. Jaroslav. Univ., Yaroslavl, 1976. (Editors) 58 #28348 26A24
- nov, N. N. (with Gol'danskiĭ, V. I.; Zel'dovič, Ja. B.; Kožušner, M. A.; Kondrat'ev, V. N.; Lifšic, I. M.; Novožilov, B. V.; Sokolov, N. D.; Tal'roze, V. L.; Hariton, Ju. B.) Aleksandr Solomonovich Kompaneets (obituary). *Uspehi Fiz. Nauk* 114 (1974), no. 3-4, 687-688. (Russian); translated as *Soviet Physics Uspekhi* 17 (1975), no. 6, 965-966. (Editors) 51 #12464 01A70
- nov, N. P. (with Lavinskii, G. V.; Petrenko, P. A.) Problems of estimation of algorithm and computation complexity in the design of control systems. (Russian. English summary insert) *US i M—Upravljajuschie Sistemy i Mašiny* 1977, no. 2(28), 1-13. (Not reviewed) 68A10 (02E10)
- nov, P. K. (with Sirazetdinov, T. K.) The stability of processes with distributed parameters with lag. (Russian) *Problems in analytical mechanics, stability and control theories (Second Četaev Conf., Kazan, 1973)* (Russian), pp. 280-284, 342. *Izdat. "Nauka", Moscow*, 1975. (Claudia Simionescu) 56 #13092 49E20 (35B35)
- nov, P. V. The spin group and the center of the Clifford algebra over an integral domain. (Russian) *Modern algebra*, No. 4 (Russian), pp. 137-147. *Leningrad. Gos. Ped. Inst., Leningrad*, 1976. (D. Palman) 57 #3174 15A66
- nov, V. M. Algebras on a Hilbert space that are generated by quadratic forms. (Russian) *Funkcional. Anal. i Priložen.* 5 (1971), no. 2, 89-90. (E. Gerlach) 54 #937 16J10
- The polynomial approximation of symmetric functions on Hilbert space. (Russian) *Funkcional. Anal. i Priložen.* 6 (1972), no. 1, 87-88. (E. Gerlach) 53 #14138 46J10 (41A63)
- The symmetric functions of class $D_2^2(H)$. *Funkcional. Anal. i Priložen.* 6 (1972), no. 1, 85-86. (E. Gerlach) 53 #14140 46J10 (41A63)
- (with Dorfman, I. Ja.) The normed algebras on a Hilbert ball that are generated by the functions $\sum_{k=1}^{\infty} |x_k|^2$. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 27 (1972), no. 3, 74-76. (E. Gerlach) 53 #14139 46J10 (41A63)
- (with Nemirovskii, A. S.) The polynomial approximation of functions on Hilbert space. (Russian) *Mat. Sb. (N.S.)* 92(134) (1973), 257-281, 344. (E. Gerlach) 58 #30211b 46G05 (41A65, 46E99)
- The structure of symmetric polynomials on the spaces l_p and $L_p[0,1]$. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 28 (1973), no. 2, 53-56. (F. Móricz) 49 #3527 46E30
- Algebras on the Hilbert ball that are generated by quadratic forms. (Russian) *Analysis in infinite-dimensional spaces. Trudy Kaf. Teorii Funkcii i Funkcional. Anal. Moskov. Gos. Univ. No. 1* (1974), 19-26. (E. Gerlach) 58 #30217 46G05 (46J10)
- nov, V. I. One-parameter groups of quasiconformal homeomorphisms in a Euclidean space. (Russian) *Sibirsk. Mat. Ž.* 17 (1976), no. 1, 177-193, 240. (P. Caraman) 53 #5864 30A60
- Semi-groups of some classes of transformations. (Russian) *Sibirsk. Mat. Ž.* 18 (1977), no. 4, 877-889, 958. (Pavel Doktor) 57 #3930 47H99
- nov, V. M. (with Haikin, N. M.; Mogila, V. G.) A certain method of solving a volume scheduling problem. (Russian) *Mathematical methods of solution of economic problems (Suppl. to Ekonom. i Mat. Metody)*, No. 5, (Russian), pp. 80-91. *Izdat. "Nauka", Moscow*, 1974. (V. D. Dimitrov) 52 #4984 90B35
- nov, V. N. The controllability of nonlinear dynamical systems. (Russian) *Cybernetics and computer technology* No. 8: *Complex control systems* (Russian), pp. 34-40. "Naukova Dumka", Kiev, 1971. (V. Lakshmikantham) 46 #3948 34H05 (49E05, 49E15)
- (with Kuhtenko, O. I.; Udilov, V. V.) Abstract systems theory. Its present state and trends in development. (Russian) *Cybernetics and computer technology*. No. 15: *Complex control systems* (Russian), pp. 4-22, 149. "Naukova Dumka", Kiev, 1972. (Authors' summary) 48 #1741 93A05
- The generalized Green's function of the Helmholtz operator and its connection with the normalization of the solution of an equation. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1972), 1337-1342, 1367. (Z. Janković) 49 #7630 35Q99
- Some abstract algebra models and methods for the study of controllable dynamical systems. (Russian) *Cybernetics and computer technology*, No. 23: *Complex control systems* (Russian), pp. 33-40, 155. "Naukova Dumka", Kiev, 1974. (W. M. Wonham) 52 #10104 93-02
- (with Kuhtenko, O. I.; Udilov, V. V.) Geometric and abstract algebraic methods in automatic control theory. (Russian) *Kibernet. i Vyčisl. Tehn. Vyp.* 27 (1975), 3-20, 157. (Editors) 58 #13067 57D25 (58E15, 93B05)
- Dynamical control systems on smooth manifolds. (Russian) *Kibernet. i Vyčisl. Tehn. Vyp.* 31 (1976), 36-44, 103. (A. Morimoto) 56 #3886 58F05 (93B05)
- Differential-geometric method for the study of controllable dynamical systems. (Russian) *Kibernet. i Vyčisl. Tehn.* 1978, no. 39, 63-71, 115. (Author's summary) 58 #26248 93B05 (57D25)
- Semenov, V. O. Calculation of Legendre functions of the second kind and their derivatives. (Russian) *Differential equations and their applications (Russian)*, pp. 121-124, 216. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1976. (Author's summary) 58 #31741 65D20 (33A45)
- Approximate solution of a system of integral equations by the five-point bi-parabolic interpolation method. (Russian) *Differential equations and their applications (Russian)*, pp. 125-126, 216. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1976. (Author's summary) 58 #31967 65R05
- See also *Nonlinear boundary value problems of mathematical physics*, 50 #1797
- Semenov, V. P. (with Dozmorov, I. M.) The Coulomb type solution in a Friedmann space. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1973, no. 6, 16-19. (B. Mielnik) 52 #9943 83.35
- The physical interpretation of the parameters in the generalized Kerr-NUT solution. I, II. (Russian) *Izv. Vysš. Učebn. Zaved. Fiz.* 1974, no. 12, 146-151; *ibid.* 1975, no. 2, 11-17. (Author's summary) 58 #25813 83.53
- Semenov, V. S. (with Karpušenko, E. Ja.) The optimal distribution of preventive maintenance tasks among the components of an information system. (Russian) *Automatic control and methods of electrical measurement (Proc. Seventh All-Union Conf., Novosibirsk, 1965)* (Russian), pp. 106-111. *Izdat. "Nauka", Sibirsk. Otdel., Novosibirsk*, 1971. (M. Mañas) 48 #3474 90B25
- Semenov, V. V. (with Batkov, A. M.; Borodin, Ju. I.; Gol'dfarb, L. S.; Ioannesian, A. B.; Krineckii, I. I.; Letov, A. M.; Petrov, V. V.; Popov, E. P.; Solodovnikov, V. V.; Topčeev, Ju. I.; Ulanov, G. M.; Šatalov, A. S.) ★Техническая кибернетика. Теория автоматического регулирования. Книга 3: Теория нестационарных, нелинейных и само-настраивающихся систем автоматического регулирования. Часть 1. (Russian) [Engineering cybernetics. Theory of automatic control. Vol. 3: Theory of nonstationary, nonlinear and selfadjusting systems of automatic control. Part 1] Edited by V. V. Solodovnikov. *Izdat. "Mašinstroenie", Moscow*, 1969. 607 pp. (Editors) 45 #9726 93-02
- Spectral analysis and synthesis of linear systems with variable and random parameters on finite intervals of time. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics (Tbilisi, 1968), Vol. 2: Theory of automatic control (Russian)*, pp. 317-327, 481. *Izdat. "Nauka", Moscow*, 1972. 48 #10601 93E10
- (with Rybin, V. V.) Spectral analysis of linear continuously discrete and discrete systems with variable parameters on finite time intervals. (Russian) *Adapt. Sistemy Avtomat. Upravlenija* No. 6 (1978), 106-116, 6. (From the authors' introduction) 57 #15649 93C55
- See also *Control in space*, 48 #13320
- Semenov, Yu. A. See *Semenov, Ju. A.*
- Semenova, A. E. (with Litvin, O. M.; Rvačov, V. L.) On the question of the construction of variational-difference schemes. (Russian) *Mathematical physics*, No. 13 (Russian), pp. 52-55, 192. "Naukova Dumka", Kiev, 1973. (J. Mikliček) 49 #8380 65M05
- Semenova, K. G. (with Dem'janovič, Ju. K.) Certain estimates of the results of intermediate computations in the sweep method. (Russian) *Metody Vyčisl.* 8 (1973), 51-61. (Walter Gautschi) 50 #1475 65F05 (65N20)
- On the question drawing up a variational-grid system with a boundary layer. (Russian) *Metody Vyčisl.* 10 (1976), 113-118, 187-188. (E. G. Djakonov) 57 #8043 65L10
- Semenova, N. M. See Čaplygin, S. A., 54 #9963
- Semenova, T. Ja. Nilpotent subgroups of FC-groups. (Russian) *Some questions on the theory of groups and rings (Russian)*, pp. 150-159, 177. *Inst. Fiz. im. Kirenskogo Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1973. (Author's summary) 58 #22306 20E25 (20E15)
- Semenova, T. V. A criterion for the solvability of a system of linear Diophantine equations and related questions of integer linear programming. (Russian) *Penz. Politehn. Inst. Učen. Zap. Mat. Meh.* 1975, no. 6, 21-27, 114. (Author's summary) 58 #5505 10B05 (90C05)
- Semenova, V. È. A certain property of continuous functions on subsets of Tihonov semi-fields. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1972, no. 9, 6-7. (Z. Semadeni) 48 #12447 54B10
- Continuous functions on subsets of Tihonov semifields. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1972, no. 11, 9-11. (Z. Semadeni) 48 #12448 54B10
- The ideals of the topological ring S_q . (Russian) *Funkcional. Anal. i Priložen.* 7 (1973), no. 1, 86-87. (S. Warner) 47 #6578 06A40 (16A80, 28A05)
- Homomorphisms of universal topological semifields. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1974, no. 6, 6-8. (J. Karásek) 51 #5569 12K05 (46A99)
- Semenov-Tjan-Sanskii, M. A. A certain property of the Kirillov integral. (Russian) *Differential geometry, Lie groups and mechanics. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 37 (1973), 53-65. (N. N. Shapovalov) 51 #13143 22E45
- Harmonic analysis on Riemannian symmetric spaces of negative curvature, and scattering theory. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), 1330-1333. (Ju. M. Berezanskiĭ) 52 #11485 43A85 (32N15, 47A40, 58G99)
- Harmonic analysis on Riemannian symmetric spaces of negative curvature, and scattering theory. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 40 (1976), no. 3, 562-592, 710. (J. S. Joel) 57 #7044 43A85 (10D20, 47A65)
- (with Faddeev, L. D.) On the theory of nonlinear chiral fields. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, no. 13 *Mat. Meh. Astronom. vyp.* 3, 81-88, 171. (I. M. Burban) 57 #18641 81.58 (58F99)
- See also *Lang, Serge*, 58 #16968
- Sementovskii, V. G. Pronormal subgroups of finite groups. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1973, no. 4, 12-16, 135. (J. Wiegold) 49 #10779 20D25
- Dispersive abnormal subgroups of finite groups. (Russian) *Dokl. Akad. Nauk BSSR*

- 18 (1974), 394-397, 473. (Sergei A. Syskin) 53 #10929 20D25
(with Poljakov, L. Ja.) Normally imbedded subgroups of finite groups. (Russian) *Finite groups (Proc. Gomel Sem., 1973/1974)* (Russian), pp. 121-128, 230. Izdat. "Nauka i Tekhnika", Minsk, 1975. (S. S. Levičenko) 53 #10925 (EA 54) 20D20
Pronormal dispersive projectors of finite groups. (Russian) *Finite groups (Proc. Gomel Sem., 1973/1974)* (Russian), pp. 164-179, 231. Izdat. "Nauka i Tekhnika", Minsk, 1975. (U. Schoenwaelder) 53 #10930 (EA 54) 20D25
- Semeran, V. A.** (with Romanov, V. A.) Identification of the dynamic characteristics of multidimensional plants using orthogonal Walsh functions. *Automat. i Telemekh.* 1974, no. 11, 173-178 (Russian. English summary); translated as *Automat. Remote Control* 35 (1974), no. 11, part 2, 1857-1862 (1975). (Authors' summary) 56 #11182 93B30
- Semerdzhev, Hr.** (with Iliev, Il.) Holonomic mechanical systems with two degrees of freedom that admit quadratic integrals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 2(117), 51-53. (J. F. Heyda) 45 #8902 34A05 (70.34)
(with Iliev, Il.) Relations between the first integrals of a nonholonomic mechanical system and of the corresponding system freed of constraints. *Prikl. Mat. Meh.* 36 (1972), 405-412 (Russian); translated as *J. Appl. Math. Mech.* 36 (1972), 381-388. (Djordje Djukic) 48 #7706 70.34
Padé approximants of functions that are defined by trigonometric series. (Russian. English summary) *Plovdiv. Univ. Naučn. Trud.* 13 (1975), no. 1, 409-420 (1977). (Author's summary) 58 #8155 65D15 (42A08, 65T05)
- Semesenko, M. P.** (with Varc'kii, V. K.; Požidaev, V. F.) Extrapolation of random processes by polynomials in the case of non-equidistant measurements. *Automatika* 1974, no. 3, 81-84 (Ukrainian); translated as *Soviet Automat. Control* 7 (1974), no. 3, 67-70. (Claude Carasso) 51 #7240 65D15 (93E10)
(with Gorškov, V. M.) Dependence of prediction accuracy of random processes on measurement errors. *Automatika* 1974, no. 4, 78-80 (Ukrainian); translated as *Soviet Automat. Control* 7 (1974), no. 4, 63-66. (Authors' summary) 50 #15321 65G05
(with Ramazanov, S. K.) The solution of optimal filtering equations. (Russian) *A study of systems with random perturbations* (Russian), pp. 39-46. Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev, 1977. (From the text) 58 #33436 93E10 (45B05)
Modeling of nonstationary processes. (Russian) *Akad. Nauk Ukrain. SSR Inst. Kibernet. Preprint No. 84* (1977), 51 pp. (Author's summary) 58 #9727 93E20
- Šemetkov, L. A.** (with Vedomnikov, V. A.; Monahov, V. S.) Certain classes of graphs with a given group. (Russian) *Dokl. Akad. Nauk BSSR* 15 (1971), 970-972. (H. Fleischer) 45 #6697 05C25
(with Lihuto, Ju. V.) The groups of automorphisms of graphs. (Russian) *Dokl. Akad. Nauk BSSR* 15 (1971), 1069-1070. (W. Imrich (Zbl 237 #05112)) 48 #3790 05C25
Complements and supplements to normal subgroups of finite groups. (Russian) *Ukrain. Mat. Ž.* 23 (1971), 678-689. (R. E. Peinado) 45 #6918 20F15
Sylow properties of finite groups. (Russian) *Dokl. Akad. Nauk BSSR* 16 (1972), 881-883, 966. (Sergei A. Syskin) 48 #11296 20D20
The formation properties of finite groups. (Russian) *Dokl. Akad. Nauk SSSR* 204 (1972), 1324-1327. (L. G. Kovács) 46 #255 20D99
The complementability of the F -coradical and the properties of the F -hypercenter of a finite group. (Russian) *Dokl. Akad. Nauk BSSR* 18 (1974), 204-206, 282. (Sergei A. Syskin) 50 #13268 20D25
Graduated formations of groups. (Russian) *Mat. Sb. (N.S.)* 94(136) (1974), 628-648, 656. (B. Hartley) 50 #4745 20D30
Subgroups of π -solvable groups. (Russian) *Finite groups (Proc. Gomel Sem., 1973/1974)* (Russian), pp. 207-212, 232. Izdat. "Nauka i Tekhnika", Minsk, 1975. (S. S. Levičenko) 53 #13402 (EA 54) 20D20
Two trends in the development of the theory of nonsimple finite groups. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 2(182), 179-198. (B. K. Durakov) 55 #3076 20D20
(with Kohno, A. P.; Kravčuk, M. I.; Poljakov, L. Ja.; Rusakov, S. A.) Sergei Antonovič Čuniĭin (on the occasion of his seventieth birthday). (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1975, no. 5, 129-130. (Editors) 52 #27 01A70
Factorization of nonsimple finite groups. (Russian) *Algebra i Logika* 15 (1976), no. 6, 684-715, 744. (N. D. Podufalov) 58 #5922 20D40
(with Kravčuk, M. I.; Čuniĭin, S. A.) All-Union Algebra Symposium in the City of Gomel. (Russian) Held June 30-July 3, 1975. *Uspehi Mat. Nauk* 31 (1976), no. 3(189), 239-242. (Editors) 54 #2 00A10
(with Vedomnikov, V. A.; Monahov, V. S.) The connectedness of the graph of the intersections of the subgroups of a finite simple group. (Russian) *Dokl. Akad. Nauk BSSR* 21 (1977), no. 5, 398-401, 475-476. (G. Pic) 57 #16398 20D05 (05C25, 20D30)
See also *Algebra, Topology, Geometry*, 49 #4697 and *Finite groups*, 52 #14011
- Semiguk, O. S.** (with Skiba, N. I.) General bases in certain spaces of analytic functions on Riemann surfaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp.* 26 (1976), 90-95, iii. (I. F. Kušničuk) 55 #1051 46E10 (30A98)
- Semik, V. P.** See *S'omik, V. P.*
- Semikolenov, G.** See *Gaiduk, Ju. M.*, 58 #21206
- Semin, F.** Sur les lignes géodésiques et sur celles de Darboux. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* 35 (1970), 167-179 (1972). (P. Drăgăilă) 49 #1336 53A05
Sur les champs de vecteurs tangentiels. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* 39 (1974), 69-106 (1975). (T. J. Willmore) 52 #11743 53A05
Champs de vecteurs tangentiels. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* 40 (1975), 176-215 (1978). (Bernard Rouxel) 58 #24028 53A05
- Semion, I. V.** (with Aizenberg, N. N.; Citkin, A. I.) Polynomial representations of logical functions. (Russian) *Automat. i Vyčisl. Tehn.* 1971, no. 2, 6-13. (I. G. Rosenberg) 46 #10498 94A20 (13F20)
- Šemjakin, E. I.** (with Hristianovič, S. A.) A contribution to the theory of ideal plasticity. *Inž. Ž. Meh. Toerd. Tela* 1967, no. 4, 86-97 (Russian); translated as *Mechanics of Solids* 2 (1967), no. 4, 59-65 (1971). (C. I. Borş) 46 #8511 73.35
(with Kuznecov, B. G.; Konovalov, A. N.; Šokin, Ju. I.) Nikolaĭ Nikolaevič Janenko. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR* 1971, no. 13, 123. (Editors) 45 #6563 01A70
- Šemjakina, T. K.** Analytic properties of the solutions of a certain class of third order differential equations. (Russian) *Differencial'nye Uravnenija* 11 (1975), no. 6, 1144-1146, 1152. (J. Rausen) 55 #744 34A20
Representation of the solutions of a certain class of third order differential equations. (Russian) *Differencial'nye Uravnenija* 12 (1976), no. 9, 1719-1722, 1727. (Nehari) 56 #16026 34A05
- Semon, Mark D.** (with Taylor, John R.) Scattering by potentials with Coulomb (Italian and Russian summaries) *Nuovo Cimento A* (11) 26 (1975), 48-58. (John Dollard) 54 #6746 81.35
(with Taylor, John R.) Cross sections for screened potentials. *J. Mathematical Physics* 17 (1976), no. 8, 1366-1370. (John Zorbas) 53 #12302 81.35
(with Taylor, John R.) Table errata: *Confluent hypergeometric functions* (Cambridge Univ. Press, New York, 1960) by L. J. Slater; *Formulas and theorems for the functions of mathematical physics* (Springer-Verlag, New York, 1966) by W. M. Olver; Oberhettinger and R. P. Soni. *Math. Comp.* 30 (1976), no. 135, 677-678. (E. T. Whittaker) 53 #5960 33A30
- Sempi, Carlo** Two uniqueness problems connected with Lewis' principle. (Italian summary) *Riv. Mat. Univ. Parma* (3) 2 (1973), 241-246. (Nicolae Angelescu) 52 #16447
The entropies with error. (Italian summary) *Rend. Mat.* (6) 9 (1976), no. 1, 1-10. (Forte) 54 #12371 94A15 (82.60)
(with Forte, Bruno) Maximizing conditional entropies: a derivation of the maximum entropy principle. (Italian summary) *Rend. Mat.* (6) 9 (1976), no. 4, 551-566 (1977). (Ian J. Good) 56 #4605 82.60 (82.49)
Sopra alcune proprietà dell'entropia dipendente dall'errore. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* 23 (1977), 25-28 (1978). (J. Aczél) 57 #94A15
(with Forte, Bruno) Pruning and measures of uncertainty. (French summary) *RAIRO Inform. Théor.* 12 (1978), no. 2, 157-168, v. (Robert Gray) 58 #9792 (28A65)
- Semple, J. G.** (with Tyrrell, J. A.) Normal elliptic scrollar varieties. *Ann. Mat. Pura Appl.* (4) 103 (1975), 11-28. (D. Gallarati) 51 #10361 14N05
- Semura, J. S.** (with Tuljapurkar, S. D.) Dynamic equilibrium under periodic perturbations in simple ecosystem models. *J. Theoret. Biol.* 66 (1977), no. 2, 327-343. (Brian D. Sleeman) 56 #14819 92A05
- Semušin, I. V.** (with Ponirko, S. O.) Adaptive Wiener filters for limited a priori information. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1971, no. 5, 215-220 (Russian); translated as *Engrg. Cybernetics* 9 (1971), no. 5, 967-972. (J. Capon) 46 #94A05
A certain method for the control of linear dynamical systems with possible interference. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* 1974, no. 4, 24-30. (A. A. Krasovskii) 50 #16004 93C05
Active adaptation of optimal discrete filters. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 5, 192-198 (Russian); translated as *Engrg. Cybernetics* 13 (1975), 151-157. (Author's summary) 56 #18059 93E10
- Semykina, T. D.** (with Šatilov, V. P.) One variational principle in the mechanics of continuous media and its application to the theory of viscous-plastic shells. *Izv. Akad. Nauk SSSR Meh. Toerd. Tela* 1976, no. 3, 172-175 (Russian); translated as *Mech. Solids* 11 (1976), no. 3, 167-170. (Authors' summary) 58 #3887 73.49
- Semyonov, E. M.** See *Semenov, E. M.*
- Sen, A. K.** (with Neuman, Charles P.) Galerkin's procedure, quasilinearization, and nonlinear boundary-value problems. *J. Optimization Theory Appl.* 9 (1972), 433-437. (Authors' summary) 46 #2877 65L10
(with Sengupta, Jati K.) The optimal capacity expansion policy for a multi-firm under a dynamic framework. *Metroecon.* 25 (1973), 41-65. (F. Giannessi) 52 #4977 90B30
(with De, P.; Pal, Alexander; Sarma, Debabrata; Choudhury, A. K.) Multidimensional realization of arbitrary switching functions with 2-level networks of isodistinct isobaric threshold gates. *Internat. J. Systems Sci.* 5 (1974), 555-573. (E. G. W. B. Wittenmark) 49 #12175 94A20
(with Sinha, Naresh K.) On-line estimation of the parameters of a multivariable system using matrix pseudo-inverse. *Internat. J. Systems Sci.* 7 (1976), no. 4, 461-470. (B. Wittenmark) 54 #12278 93B30
- Sen, A. K.** See *Sen, Amiya K.*
- Sen, A. K.** See *Sen, Ashish K.*
- Sen, A. R.** (with Martin, L. J.; Nedler, J. A.; Andrews, David F.; Bliss, C. I.; Patil, H. D.; Anderson, R. L.) Discussion. Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 1. *Bull. Inst. Internat. Statist.* 44 (1971) book 1, 242-244. (Bhagwandass) 51 #2240 62P99
Successive sampling with p ($p \geq 1$) auxiliary variables. *Ann. Math. Statist.* 43 (1972), 2031-2034. (David Bellhouse) 50 #15048 62D05
Some theory of sampling on successive occasions. *Austral. J. Statist.* 15 (1975), 105-110. (D. R. Brillinger) 49 #6432 62D05
On an integral-equation associated with problems of waves past a sloping beach. *Angew. Math. Mech.* 53 (1973), 642-644. (T. W. Kao) 52 #16270 76.42
(with Tourigny, J.; Smith, G. E. J.) On the line transect sampling method. (Authors' summary) *Biometrics* 30 (1974), 329-340. (M. Atiqullah) 50 #1460 62P99
(with Sellers, S.; Smith, G. E. J.) The use of a ratio estimate in successive sampling. (French summary) *Biometrics* 31 (1975), no. 3, 673-683. (Kenneth R. W. Mardia) 52 #12149 (E 57 #7837) 62D05
(with Sellers, S.; Smith, G. E. J.) Corrections to: "The use of a ratio estimate in successive sampling" (*Biometrics* 31 (1975), no. 3, 673-683). *Biometrics* 33 (1977), 767. (Editors) 57 #7837 62D05 (62F10)
- Sen, Amartya** (with Pattanaik, Prasanta K.) Necessary and sufficient conditions for rational choice under majority decision. *J. Econom. Theory* 1 (1969), 178-202. (B. G. Mirkin) 53 #10181 90A05 (92A20)
Interpersonal aggregation and partial comparability. *Econometrica* 38 (1970), 393-409. (G. Tintner) 52 #4949 (E 56 #4732) 90A10
(with Sengupta, Jati K.) Balanced growth path for an expanding multiproduct economy. *Internat. Econom. Rev.* 13 (1972), 553-567. (Dobre Ion) 53 #10209 90A15 (92A20)
(with Dasgupta, Partha; Starrett, David A.) Notes on the measurement of inequality. *J. Econom. Theory* 6 (1973), no. 2, 180-187. (From the authors' introduction)

- #7823 90A15
Minimal conditions for monotonicity of capital value. *J. Econom. Theory* **11** (1975), 3, 340-355. (Michael D. Intriligator) **53** #10208 90A15
- Poverty: an ordinal approach to measurement. *Econometrica* **44** (1976), no. 2, -231. (Andrew P. Sage) **56** #2262 90A15 (92A20)
- Welfare inequalities and Rawlsian axioms. *Foundational problems in the special sciences (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975), Part II*, pp. 271-292. *Univ. Western Ontario Ser. Philos. Sci., Vol. 10, Reidel, Dordrecht, 1977*. (Editors) **58** #4462a 92A20 (90A05)
- Non-linear social welfare functions: a reply to Professor Harsanyi: "Nonlinear social welfare functions: a rejoinder to Professor Sen" (*Foundational problems in the special sciences (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975), Part II*, pp. 293-296. *Univ. Western Ontario Ser. Philos. Sci., Vol. 10, Reidel, Dordrecht, 1977*) by J. C. Harsanyi.
- Foundational problems in the special sciences (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975), Part II*, pp. 297-302. *Univ. Western Ontario Ser. Philos. Sci., Vol. 10, Reidel, Dordrecht, 1977*. (Editors) **58** #4462c 92A20 (90A05)
- Social choice theory: a re-examination. *Econometrica* **45** (1977), no. 1, 53-89. (Aurice Salles) **56** #14836 92A20
- On weights and measures: informational constraints in social welfare analysis. *Econometrica* **45** (1977), no. 7, 1539-1572. (A. Rapoport) **56** #17923 92A20 (90A05)
- See also Justice and utility, including a symposium on Rawls, **49** #12112; Fine, Ben, #4732 and Harsanyi, John C., **58** #4462b
- Unitava (with Franklin, Mark A.) Comparison of exact and approximate variate generation methods for the Erlang distribution. *J. Statist. Comput. and Simulation* **4** (1975), no. 1, 1-18. (James E. Gentle) **57** #7938 65C10
- (with Katz, I. Norman; Franklin, Mark A.) Optimally stable parallel predictors for dams-Moulton correctors. *Comput. Math. Appl.* **3** (1977), no. 3, 217-233. (H. Shintani) **51** #11055 65L05
- Amiya K. Plasma transfer functions. *IEEE Trans. Plasma Sci.* **PS-3** (1975), no. 3, 163-167. (Helaman R. P. Ferguson) **56** #10646 82.35
- Ashish K. (with Srivastava, Muni S.) On a sequential selection procedure based on Wilcoxon statistic. *J. Statist. Res.* **6** (1972), 43-51. (J. Sethuraman) **50** #1435 62L10
- (with Srivastava, Muni S.) A sequential solution of Wilcoxon types for a slippage problem. *Multivariate statistical inference (Proc. Res. Sem., Dalhousie Univ., Halifax, N.S., 1972)*, pp. 217-229. *North-Holland, Amsterdam; American Elsevier, New York, 1973*. (R. H. Farrell) **49** #10016 62F07 (62L10)
- (with Srivastava, Muni S.) On sequential confidence intervals based on Wilcoxon type estimates. *Ann. Statist.* **1** (1973), 1200-1202. (Tze Leung Lai) **51** #11878 62L10
- (with Srivastava, Muni S.) On multivariate tests for detecting change in mean. *Sankhyā Ser. A* **35** (1973), 173-186. (G. Tintner) **48** #9985 62H15
- A theorem related to cartograms. *Amer. Math. Monthly* **82** (1975), 382-385. (W. C. Joyner) **51** #872 30A30
- (with Srivastava, Muni S.) On tests for detecting change in mean when variance is unknown. *Ann. Inst. Statist. Math.* **27** (1975), no. 3, 479-486. (N. Giri) **54** #3942 62F15
- (with Srivastava, Muni S.) On tests for detecting change in mean. *Ann. Statist.* **3** (1975), 98-108. (Ian B. MacNeill) **50** #15089 62F05
- See also Survey of statistical design and linear models, **51** #2039
- Bibhutibhusan ★An elementary treatise on Laplace transforms. *The World Press Private, Ltd., Calcutta*, 1969. iv + 111 pp. (Editors) **53** #8804 44A10
- See also Special issue: Sen, Bibhutibhusan, **49** #2220; Special issue: Sen, Bibhutibhusan, **49** #2221; Biography: Sen, Bibhutibhusan, **49** #7110 and Addresses: Sen, Bibhutibhusan, **49** #7111
- D. K. (with Vanstone, J. R.) On Weyl and Lyra manifolds. *J. Mathematical Phys.* **13** (1972), 990-993. (H. A. Eliopoulos) **47** #2967 83.53
- (with Evans, Geoffrey) Projective manifolds and projective theory of relativity. *J. Mathematical Phys.* **14** (1973), 1668-1674. (A. Raychaudhuri) **48** #10418 83.53
- (with Ihrig, Edwin) An exact solution of a scalar-tensor theory of gravitation. *J. Mathematical Phys.* **14** (1973), 1933-1934. (Authors' summary) **48** #13122 83.35
- (with Ihrig, E.) A class of singular space-times. *General Relativity and Gravitation* **5** (1974), no. 5, 593-597. (Authors' summary) **56** #17677 83.53
- A homomorphism theorem for the Poincaré group. *Internat. J. Theoret. Phys.* **10** (1974), 153-157. (Author's summary) **54** #9549 83.22
- (with Ihrig, Edwin) Uniqueness of timelike Killing vector fields. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **23** (1975), no. 3, 297-301. (Carl Brans) **52** #9962 83.53
- (with Ihrig, Edwin) Analytic singularities and geodesic completeness. I, II. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **23** (1975), no. 4, 349-356; *ibid.* (N.S.) **23** (1975), no. 4, 357-364. (H. Rund) **52** #7448 83.53
- (with Jeavons, J. S.; McIntosh, C. B. G.) A correction to the Sen and Dunn gravitational field equations. *J. Mathematical Phys.* **16** (1975), 320-321. (C. Gilbert) **55** #5142 83.35
- Unified structures on space-time. *Proceedings of the International Symposium on Relativity and Unified Field Theory (Calcutta, 1975-1976)*, pp. 239-246. *S. N. Bose Inst. Phys. Sci., Calcutta*, 1978. (Editors) **58** #25814 83.53
- Dilip Kumar Sur l'adjoint généralisé d'un opérateur. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 1, A13-A14. (Author's summary) **58** #12434 7A05
- H. (with Blumenthal, Leonard M.) Sine laws for Euclidean simplices. *Math. Student* **41** (1973), no. 3-4, 361-369 (1974). (O. Bottema) **52** #1531 52A50
- J. K. (with Basuthakur, S. N.; Milne, J. M.) Some new results on a class of periodically varying systems. *Internat. J. Electron.* **35** (1973), 257-266. (R. Liu) **48** #5730 94A20
- K. K. (with Kho, T. H.) Non-coherent scattering in transfer problems in spherical shell media. I. Frequency-independent source function. *Astrophys. and Space Sci.* **21** (1973), 39-57. (K.-H. Hauer) **48** #7907 85.45
- (with Leong, T. K.) Probabilistic model for radiative transfer problems in cylindrical shell media with complete redistribution in frequency. *Astrophys. and Space Sci.* **21** (1973), 59-72. (R. H. Wilson, Jr.) **50** #3876 85.45
- (with Kho, T. H.) Non-coherent scattering in transfer problems in spherical shell media. II. Frequency-dependent source function. *Astrophys. and Space Sci.* **21** (1973), 237-255. (K.-H. Hauer) **48** #7908 85.45
- (with Kho, T. H.) Non-coherent scattering in transfer problems in spherical shell media. III. A moving medium. *Astrophys. and Space Sci.* **25** (1973), no. 1, 247-261. (Y. Hayashi) **51** #9752 78.45
- (with Wilson, S. J.) On the resolvent kernel for the transfer problem in an homogeneous sphere. *J. Quant. Spectrosc. Radiat. Transfer* **13** (1973), no. 1, 83-85. (Authors' summary) **54** #2131 85.45
- (with Wilson, S. J.) Probabilistic model for resolvent kernel in non-coherent scattering spherical-shell media. *J. Quant. Spectrosc. Radiat. Transfer* **13** (1973), no. 8, 757-763. (Authors' summary) **54** #2132 85.45
- The weighted residual method and variational technique in the solution of differential equations. *Proceedings of the Singapore Mathematical Colloquium (Univ. Singapore, Singapore, 1977), Part 2. Math. Medley* **5** (1977), no. 3, 209-223. (Siegfried Filippi) **58** #3565 65P05 (73.65, 82.65)
- Sen, Kanwar Paths of an odd number of steps with final position unspecified. *J. Indian Statist. Assoc.* **7** (1969), 107-135. (Endre Csáki) **52** #1896 60J15
- Distribution of crossings in restricted paths. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 23-36. (J. H. B. Kemperman) **48** #9857a 60J15
- Paths crossing two and three lines. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 37-49. (J. H. B. Kemperman) **48** #9857b 60J15
- (with Ahuja, Y. L.) On certain probability models in random walk. *Calcutta Statist. Assoc. Bull.* **21** (1972), 71-76. (Y.-K. Chan) **50** #1341 60J15
- Restricted random walk with crossings, positive and total returns enumerated. *J. Math. Sci.* **7** (1972), 21-30 (1974). (See Zbl **346** #60041) 60J15
- (with Aneja, K. G.) Random walk and distributions of rank order statistics. *SIAM J. Appl. Math.* **23** (1972), 276-287. (I. Vincze) **47** #9770 62G30 (60J15)
- (with Aneja, K. G.) Maxima in random walk and related rank order statistics. *Studia Sci. Math. Hungar.* **7** (1972), 425-428. (I. Vincze) **48** #7384 60J15 (62G30)
- Restricted random walk with crossings, positive and total returns in three lines enumerated. *Calcutta Statist. Assoc. Bull.* **22** (1973), 121-127. (I. Vincze) **51** #11663 60J15
- (with Aneja, K. G.) Crossings and touchings in a restricted random walk. *Studia Sci. Math. Hungar.* **10** (1975), no. 1-2, 33-38. (S. G. Mohanty) **55** #9274 60J15
- (with Dua, Saroj; Khadilkar, Shobha) A modified random walk in the presence of partially reflecting barriers. *J. Appl. Probability* **13** (1976), no. 1, 169-175. (I. Vincze) **53** #4235 60J15
- (with Sindwani, Sushma) On fluctuations in coin tossing and random walk. *J. Korean Math. Soc.* **13** (1976), no. 1, 105-111. (Endre Csáki) **54** #1396a 60J15 (60C05)
- (with Sindwani, Sushma) On crossings, returns, positive returns and positive steps in random walk. *J. Korean Math. Soc.* **13** (1976), no. 1, 113-120. (Endre Csáki) **54** #1396b 60J15 (60C05)
- Sen, M. K. On the proximate order of $f^{(3)}(z) * g^{(2)}(z)$ and $[f(z) * g(z)]^{(6)}$. *Ann. Polon. Math.* **25** (1971), 1-7. (Fred Gross) **45** #5362 30A66
- On generalised semi ideals of semigroups. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 453-457. (T. E. Hall) **50** #13335 20M10
- On some growth properties of $f(z) * g(z)$. *Rev. Mat. Hisp.-Amer.* (4) **33** (1973), 59-68. (R. S. L. Srivastava) **48** #8791 30A64
- On pseudo ideals of semigroups. *Bull. Calcutta Math. Soc.* **67** (1975), no. 2, 109-114. (D. B. McAlister) **57** #6255 20M10
- On the generalised semi ideals of a semigroup. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10** (30) (1975), no. 1, 43-46. (J. Chacron) **51** #13104 20M20
- (with Chakraborty, B. C.) On the linear proximate type of an entire Dirichlet series. *Math. Student* **45** (1977), no. 1, 71-79 (1978). (M. E. Noble) **58** #28453 30A16
- On pseudo ideals of rings. *Nanta Math.* **10** (1977), no. 2, 158-160. (T. Albu) **58** #22159 16A40 (16A30)
- Sen, Pranab Kumar (with Puri, Madan Lal) On the estimation of location parameters in the multivariate one sample and two sample problems. *Metrika* **16** (1970), 58-73. (P. W. Mielke, Jr.) **47** #4383 62G05 (62G30, 62G35)
- (with Puri, Madan Lal; Gokhale, D. V.) On a class of rank order tests for independence in multivariate distributions. *Sankhyā Ser. A* **32** (1970), 271-298. (J. V. Deshpande) **45** #7896 62G30
- (with Puri, Madan Lal) ★Nonparametric methods in multivariate analysis. *John Wiley & Sons, Inc., New York-London-Sydney*, 1971. xi + 440 pp. (D. R. Truax) **45** #7893 62G99
- (with Ghosh, Malay) On a class of rank order tests for regression with partially informed stochastic predictors. *Ann. Math. Statist.* **42** (1971), 650-661. (T. Robertson) **46** #4646 62G10
- A note on weak convergence of empirical processes for sequences of ϕ -mixing random variables. *Ann. Math. Statist.* **42** (1971), 2131-2133. **45** #6064 60F05
- (with Ghosh, Malay) Sequential confidence interval for the regression coefficient based on Kendall's tau. *Calcutta Statist. Assoc. Bull.* **20** (1971), 23-36. (M. B. Woodroffe) **49** #10093 62L12
- (with Dutta, Kalyan) On the Bahadur representation of sample quantiles in some stationary multivariate autoregressive processes. *J. Multivariate Anal.* **1** (1971), no. 2, 186-198. (From the authors' summary) **46** #1036 62M10
- A further note on the asymptotic efficiency of Friedman's χ^2 -test. *Metrika* **18** (1971/72), 234-237. (G. E. Noether) **53** #9504 62G20
- (with Krishnaiah, Paruchuri R.) Some asymptotic simultaneous tests for multivariate moving average processes. *Sankhyā Ser. A* **32** (1971), 81-90. (T. V. Avadhani) **47** #4404 62M10
- (with Miller, Rupert G., Jr.) Weak convergence of U -statistics and von Mises' differentiable statistical functions. *Ann. Math. Statist.* **43** (1972), 31-41. (W. Hoeffding)

45 #9367 60F05

On weak convergence of extremal processes for random sample sizes. *Ann. Math. Statist.* **43** (1972), 1355-1362. (J. A. Beckman) **47** #1108 60B10 (60F05)

On a class of aligned rank order tests for the identity of the intercepts of several regression lines. *Ann. Math. Statist.* **43** (1972), 2004-2012. (E. S. Keeping) **50** #11625 62G10 (62J05)

A Hajek-Rényi type inequality for generalized U-statistics. *Calcutta Statist. Assoc. Bull.* **21** (1972), 171-179. (D. R. Truax) **51** #2082 62G10

On the Bahadur representation of sample quantiles for sequences of ϕ -mixing random variables. *J. Multivariate Anal.* **2** (1972), 77-95. (Author's summary) **46** #2718 60F05

Weak convergence and relative compactness of martingale processes with applications to some nonparametric statistics. *J. Multivariate Anal.* **2** (1972), 345-361. (B. L. S. Prakasa Rao) **48** #5137 60B10 (62G10)

(with Ghosh, Malay) On bounded length confidence interval for the regression coefficient based on a class of rank statistics. *Sankhyā Ser. A* **34** (1972), 33-52. (Jana Jurečková) **51** #2144 62G15

Finite population sampling and weak convergence to a Brownian bridge. *Sankhyā Ser. A* **34** (1972), 85-90. (Z. Šidák) **49** #10006 62E20 (62D05)

(with Puri, Madan Lal) Rank tests for some linear hypotheses in paired comparison designs. *Sankhyā Ser. A* **34** (1972), 257-264. (V. J. Yohai) **50** #1406 62G10

(with Ghosh, Malay) On strong convergence of regression rank statistics. *Sankhyā Ser. A* **34** (1972), 335-348. (A. K. Basu) **49** #6487 62G99 (62G30)

(with Puri, Madan Lal) On the robustness of rank order tests and estimates in the generalized multivariate one-sample location problem. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **22** (1972), 226-241. (I. R. Savage) **46** #6539 62G35

(with Puri, Madan Lal) On some selection procedures in two-way layouts. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **22** (1972), 242-250. (I. R. Savage) **46** #6528 62F07

Limiting behavior of regular functionals of empirical distributions for stationary ϕ -mixing processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **25** (1972/73), 71-82. (J. B. Robertson) **48** #7345 60F05 (60G10)

(with Ghosh, Malay) Asymptotic properties of some sequential nonparametric estimators in some multivariate linear models. *Multivariate analysis, III (Proc. Third Internat. Sympos., Wright State Univ., Dayton, Ohio, 1972)*, pp. 299-316. Academic Press, New York, 1973. (M. L. Puri) **51** #2204 62L12 (62E20, 62G05)

Some aspects of nonparametric procedures in multivariate statistical analysis. *Multivariate statistical inference (Proc. Res. Sem., Dalhousie Univ., Halifax, N.S., 1972)*, pp. 231-240. North-Holland, Amsterdam; American Elsevier, New York, 1973. (M. L. Puri) **51** #2152 62G99

(with Ghosh, Malay) On some sequential simultaneous confidence intervals procedures. *Ann. Inst. Statist. Math.* **25** (1973), 123-133. (T. Robertson) **48** #5255 62G15

(with Chatterjee, Shoutir Kishore) On Kolmogorov-Smirnov-type tests for symmetry. *Ann. Inst. Statist. Math.* **25** (1973), 287-299. (I. R. Savage) **48** #9952 62G10 (62E20)

An almost sure invariance principle for multivariate Kolmogorov-Smirnov statistics. *Ann. Probability* **1** (1973), 488-496. (Author's summary) **50** #3292 60B10 (62G10)

(with Bhattacharyya, B. B.; Suh, M. W.) Limiting behavior of the extremum of certain sample functions. *Ann. Statist.* **1** (1973), 297-311. (J. Sethuraman) **52** #15787 62E20

On fixed size confidence bands for the bundle strength of filaments. *Ann. Statist.* **1** (1973), 526-537. (J. Kiefer) **50** #3490 62L15

(with Puri, Madan Lal) A note on asymptotic distribution-free tests for subhypotheses in multiple linear regression. *Ann. Statist.* **1** (1973), 553-556. (V. J. Yohai) **51** #4537 62G10

(with Ghosh, Malay) A law of iterated logarithm for one-sample rank order statistics and an application. *Ann. Statist.* **1** (1973), 568-576. (M. Hušková) **51** #2139 62G10 (62E20)

Nonparametric procedures for certain stochastic processes with applications to clinical trials. (French summary) Proceedings of the 39th Session of the International Statistical Institute (Vienna, 1973), Vol. 2. *Bull. Inst. Internat. Statist.* **45** (1973), no. 2, 413-418. (Jana Jurečková) **51** #7137 62G10 (62J15)

(with Chatterjee, Shoutir Kishore) Nonparametric testing under progressive censoring. *Calcutta Statist. Assoc. Bull.* **22** (1973), 13-50. (G. Manija) **51** #2130 62G10

An asymptotically efficient test for the bundle strength of filaments. *J. Appl. Probability* **10** (1973), 586-596. (H. Taylor) **50** #8867 62L10 (62G10)

(with Williams, George W.) Asymptotically optimal sequential estimation of regular functionals of several distributions based on generalized U-statistics. *J. Multivariate Anal.* **3** (1973), 469-482. (R. H. Berk) **49** #6525 62L12

On weak convergence of empirical processes for random number of independent stochastic vectors. *Proc. Cambridge Philos. Soc.* **73** (1973), 139-144. (P. Jagers) **47** #4318 60F05 (60B10)

(with Ghosh, Malay) A Chernoff-Savage representation of rank order statistics for stationary ϕ -mixing processes. *Sankhyā Ser. A* **35** (1973), 153-172. (M. Hušková) **49** #1674 62G10 (62E20)

Asymptotic sequential test for regular functionals of distribution functions. (Russian summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 235-249. (J. Sethuraman) **48** #10004 62L10

On L^p -convergence of U-statistics. *Ann. Inst. Statist. Math.* **26** (1974), 55-60. (P. Warren) **50** #11405 60F15 (62E20)

(with Krishnaiah, Paruchuri R.) On a class of simultaneous rank order tests in MANCOVA. *Ann. Inst. Statist. Math.* **26** (1974), 135-145. (Malay Ghosh) **52** #6999 62G10 (62J10)

Weak convergence of generalized U-statistics. *Ann. Probability* **2** (1974), no. 1, 90-102. (Georg Neuhaus) **53** #6658 60B10 (62E20)

Weak convergence of multidimensional empirical processes for stationary ϕ -mixing processes. *Ann. Probability* **2** (1974), no. 1, 147-154. (C. S. Withers) **53** #6659 60B10

The invariance principle for one-sample rank-order statistics. *Ann. Statist.* **2** (1974), 49-62. (H. E. Reinhardt) **49** #10045 (E **56** #9805) 62G99 (60B10)

Almost sure behaviour of U-statistics and von Mises' differentiable functions. *Ann. Statist.* **2** (1974), 387-395. (P. W. Mielke, Jr.) **50** #15074 (60F05)

(with Ghosh, Malay) Sequential rank tests for location. Collection dedicated to Jerzy Neyman on his 80th birthday. *Ann. Statist.* **2** (1974), 540-549. (K. Basu) **51** #14469 (E **53** #14813) 62L10 (62G10)

Correction to: "The invariance principle for one-sample rank-order statistics." *Ann. Statist.* **2** (1974), 1358. (Editors) **56** #9805

(with Woolson, Robert F.) Asymptotic comparison of a class of multivariate multiparameter tests. *Comm. Statist.* **3** (1974), 813-828. (J. V. Deshpande) **51** 62H15 (62G20)

On the estimation of basic distributions in randomized response models. *Statist.* **3** (1974), 1081-1092. (Jana Jurečková) **51** #7128 62G05 (62G15)

On unbiased estimation for randomized response models. *J. Amer. Statist.* **7** (1974), 997-1001. (David Bellhouse) **55** #1557 62D05 (62G05)

(with Williams, George W.) On bounded maximum width sequential confidence ellipsoids based on generalized U-statistics. *J. Multivariate Anal.* **4** (1974), (Malay Ghosh) **54** #3961 62G15 (62L12)

(with Ghosh, Malay) Some invariance principles for rank statistics for independence. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **29** (1974), 93-101. (Rao) **50** #15133 62G10 (62E20)

(with Puri, Madan Lal) Distribution-free approaches to general linear models: survey of statistical design and linear models (Proc. Internat. Sympos., Colorado Univ., Ft. Collins, Colo., 1973), pp. 459-474. North-Holland, Amsterdam, 1975. (Adichie) **51** #11807 62G10

Rank statistics, martingales and limit theorems. *Statistical inference topics (Proc. Summer Res. Inst. Statist. Inference for Stochastic Processes, Indiana University, Bloomington, Ind., 1974, Vol. 2; dedicated to Z. W. Birnbaum)*, pp. 129-157. Academic Press, New York, 1975. (Georg Neuhaus) **53** #14611 60F05 (62G10, 60B10)

A two-dimensional functional permutational central limit theorem for linear statistics. *Ann. Probability* **4** (1976), no. 1, 13-26. (Georg Neuhaus) **52** #60B10 (62E20, 62G10)

An almost sure invariance principle for the extrema of certain sample functions. *Ann. Probability* **4** (1976), no. 1, 81-88. (Endre Csáki) **52** #15622 60F15 (62E20)

A note on invariance principles for induced order statistics. *Ann. Probability* **4** (1976), no. 3, 474-479. (Georg Neuhaus) **53** #11691 60B10 (62G30)

(with Ghosh, B. K.) Comparison of some bounds in estimation theory. *Ann. Statist.* **4** (1976), no. 4, 755-765. (A. C. Cohen) **54** #3936 (E **55** #1585) 62F10

(with Ghosh, Malay) Correction to: "Sequential rank tests for location." *Ann. Statist.* **4** (1976), no. 4, 821. (Adhir K. Basu) **53** #14813 62L10 (62G10)

Weak convergence of progressively censored likelihood ratio statistics and its asymptotic theory of life testing. *Ann. Statist.* **4** (1976), no. 6, 1247-1257. (Jean-Claude Chevalier) **54** #11621 62E20 (62N05, 62L10)

Asymptotically optimal rank order tests for progressive censoring. *Calcutta Statist. Assoc. Bull.* **25** (1976), no. 97-100, 65-78 (1977). (Yves Lepage) **57** #10910

(with Monti, Katherine L.) The locally optimal combination of independent statistics. *J. Amer. Statist. Assoc.* **71** (1976), no. 356, 903-911. (S. John) **54** #62F10 (62H15)

On weak convergence of a tail sequence of martingales. *Sankhyā Ser. A* **38** (1976), no. 2, 190-193. (David J. Scott) **57** #10776 60F05 (60B10, 60G45)

(with Bhattacharyya, B. B.) Asymptotic normality of the extremum of certain sample functions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **34** (1976), 113-118. (C. S. Withers) **53** #6685 60F05 (62E20)

Almost sure convergence of generalized U-statistics. *Ann. Probability* **5** (1977), no. 2, 287-290. (Jon A. Wellner) **55** #9391 62G05 (60F15)

(with Bhattacharyya, B. B.) Weak convergence of the Rao-Blackwell estimator of a distribution function. *Ann. Probability* **5** (1977), no. 3, 500-510. (Georg Neuhaus) **56** #1391 60B10 (62B99, 62G99)

Some invariance principles relating to jackknifing and their role in sequential analysis. *Ann. Statist.* **5** (1977), no. 2, 316-329. (W. Hoeffding) **56** #15466 (62E20, 62L10)

(with Ghosh, B. K.) Correction to: "Comparison of some bounds in estimation theory." (Ann. Statist. **4** (1976), no. 4, 755-765). *Ann. Statist.* **5** (1977), no. 4, 821. (Editors) **55** #1585 62F10

Tied-down Wiener process approximations for aligned rank order procedures with some applications. *Ann. Statist.* **5** (1977), no. 6, 1107-1123. (Rashid Ahmad) **56** #1391 62G10 (60B10, 62E20)

(with Majumdar, Hiranmay) Rank order tests for grouped data under progressive censoring. *Comm. Statist.—Theory Methods* **A6** (1977), no. 6, 507-524. (G. K. Bhattacharyya) **56** #1579 62G10

(with Khatri, C. G.; Krishnaiah, Paruchuri R.) A note on the joint distribution of correlated quadratic forms. *J. Stat. Plann. Inference* **1** (1977), no. 3, 299-307. (Nagase) **58** #8025 62H10

(with Neuhaus, Georg) Weak convergence of tail-sequence processes for distributions and averages. Dem Andenken an Karl Maruhn gewidmet. *Math. Sem. Giessen Heft* **123** (1977), 25-35. (Ludger Rüschendorf) **56** #16725 (62E20)

(with Ghosh, Malay) Sequential rank tests for regression. *Sankhyā Ser. A* **39** (1977), no. 1, 45-62. (James N. Adichie) **58** #3182 62G10 (62L10)

On Wiener process embedding for linear combinations of order statistics. *Ann. Statist.* **5** (1977), no. 2, 138-143. (Sándor Csörgő) **58** #3188 62G30 (60F05)

(with Puri, Madan Lal) Asymptotically distribution-free aligned rank order statistics for composite hypotheses for general multivariate linear models. *Z. Wahrsch. Verw. Gebiete* **39** (1977), no. 3, 175-186. (Jana Jurečková) **57** #17936 62G10

(with Saleh, A. K. Md. Ehsanes) Nonparametric estimation of location parameter after a preliminary test on regression. *Ann. Statist.* **6** (1978), no. 1, 154-168. (Prakash Gupta) **57** #7860 62G05

- (with Majumdar, Hiranmay) Nonparametric tests for multiple regression under aggressive censoring. *J. Multivariate Anal.* **8** (1978), no. 1, 73-95. (Jana Jurečková) #24706 62G10 (62J05, 62L99)
- An invariance principle for linear combinations of order statistics. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **42** (1978), no. 4, 327-340. (M. Csörgő) #3189 62G30 (60F05)
- Invariance principles for rank discounted partial sums and averages. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **42** (1978), no. 4, 341-352. (M. Csörgő) #13286 60F05 (62G30)
- See also International Association of Survey Statisticians Meeting on Randomized Response, **55** #1559
- Prodip** Stochastic observers for nonlinear systems. *J. Indian Inst. Sci.* **60** (1978), no. 5, 27-238. (Author's summary) **58** #26496 93E25 (60H99)
- R.** (with Niyogi, P.) Approximate transonic profile flow at incidence with shock. (German summary) *Acta Mech.* **30** (1978), no. 1-2, 65-77. (Nima Geffen) **58** #14315 #41
- R. N.** See **Sen, Rabindra Nath**
- R. N.** (with Borchers, Hans-Jürgen) Relativity groups in the presence of matter. *Comm. Math. Phys.* **42** (1975), 101-126. (Johan G. Belinfante) **51** #14796 81.46
- Rabindra Nath** Basic vectors of generalised Riemannian space. Special issue presented to Professor Bibhutibhusan Sen on the occasion of his seventieth birthday, part 1. *Indian J. Mech. Math. Special Issue* (1968/69), part 1, 95-104. (From the author's introduction) **53** #10149 83.53
- Cyclic structures of geometric objects involving a connection and Lie derivatives. Collection of articles commemorating Władysław Ślebodziński. *Colloq. Math.* **26** (1972), 149-261. (M. Kucharszewski) **49** #3714 53A55
- On affine connections in Riemannian, almost complex and almost Hermitian spaces. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. I. *Tensor (N.S.)* **25** (1972), 390-394. (A. Martínez Naveira) **49** #11413 53B05
- See also **Chaki, M. C.**, **55** #5350
- Rabindranath** Approximate iterative process in a supermetric space. *Bull. Calcutta Math. Soc.* **63** (1971), 121-123. (Eugene Allgower) **51** #7276 65H05 (47H15)
- On an iterative method for the approximate solution of nonlinear operator equations. I, II. *Bull. Calcutta Math. Soc.* **65** (1973), no. 3, 121-134; *ibid.* **65** (1973), 135-143. (Charles W. Groetsch) **52** #11682 47H15 (65J05)
- (with Mukherjee, Sulekha) On some generalized iterative methods for the solution of linear operator equations in a supermetric space. *Bull. Math. Soc. Sci. Math. R.S. Roumanie (N.S.)* **21**(69) (1977), no. 3-4, 425-431. (M. Z. Nashed) **57** #14434 65J05
- On a variant of Newton's method under relaxed differentiability conditions. *Bull. Math. Soc. Sci. Math. R.S. Roumanie (N.S.)* **22**(70) (1978), no. 1, 87-93. (J. Vandergraft) **57** #14408 65H05
- S.** On generalised Poisson's integral and Dirichlet problem. *Math. Ed. (Siwan)* **12** (1978), no. 2, A41-A46. (E. C. Schlesinger) **58** #22582 30A86 (31A10)
- S. N.** Scientific works in Sanskrit, translated into foreign languages and vice-versa in the 18th and 19th century A.D. *Indian J. History Sci.* **7** (1972), 44-70. (Editors) **58** #10222 01A70 (01A25)
- Epicyclic eccentric planetary theories in ancient and medieval Indian astronomy. With discussion by K. S. Shukla, S. M. Ansari, R. C. Gupta, D. S. Kothari and Ram Behari. Proceedings of the Symposium on Copernicus and Astronomy (New Delhi, 1973). *Indian J. History Sci.* **9** (1974), no. 1, 107-121, 142. (Author's summary) **58** #26761 01A25
- al-Birūnī on the determination of latitudes and longitudes in India. Proceedings of the Symposium on al-Birūnī and Indian Sciences (New Delhi, 1971). *Indian J. History Sci.* **10** (1975), no. 2, 185-197. (R. C. Gupta) **58** #4799 01A25 (01A30)
- See also **Ghosh, Samir Kumar**, **58** #26844
- Shankar** Ramification in p -adic Lie extensions. *Invent. Math.* **17** (1972), 44-50. (K. Shiratani) **47** #8490 12B10
- Lie algebras of Galois groups arising from Hodge-Tate modules. *Ann. of Math.* (2) **97** (1973), 160-170. (I. Stewart) **47** #3403 14L05 (17B50)
- Syam Kumar** Computation of matrix inverse by a power series method. *J. Indian Inst. Sci.* **53** (1971), 43-50. (J. Buchanan) **47** #1265 65F30
- (with Chanda, Manas) Numerical differentiation by extrapolation. *J. Indian Inst. Sci.* **53** (1971), 51-55. (F. Pecka) **45** #7982 65D25
- (with Chanda, Manas) A process for the selection of over-relaxation factor ω and the related computation for $Ax=b$. *J. Indian Inst. Sci.* **53** (1971), 111-119. (C. G. Cullen) **45** #7955 65F10
- Triangular decompositions and their applications in solving equations. *J. Indian Inst. Sci.* **53** (1971), 160-168. (B. Levinger) **45** #6838 15A21
- A second order process for solving polynomial equations. *J. Indian Inst. Sci.* **53** (1971), 169-175. (E. Frank) **45** #9482 65H05
- Properties of rotated and reflected matrices. *Matrix Tensor Quart.* **22** (1971/72), 50-65. (Author's introduction) **46** #7267 15A30
- (with Sankar, P. V.) Triangular partitioning for matrix inversion. *Internat. J. Control* (1) **15** (1972), 571-575. (O. Pokorná) **47** #9812 65F05
- (with Chanda, Manas) A general scheme for solving ordinary differential equations under two-point boundary conditions. *J. Indian Inst. Sci.* **54** (1972), 139-145. (Authors' summary) **47** #1296 65L10
- (with Krishnamurthy, E. V.) Algorithmic line-notation for the representation of knots. *Proc. Indian Acad. Sci. Sect. A* **77** (1973), 51-61. **47** #4243 55A25
- (with Krishnamurthy, E. V.) Rank-augmented LU-algorithm for computing generalized matrix inverses. *IEEE Trans. Computers* **C-23** (1974), 199-201. (W. C. Rheinboldt) **50** #8945 65F20
- (with Prabhu, S. S.) Optimal iterative schemes for computing the Moore-Penrose matrix inverse. *Internat. J. Systems Sci.* **7** (1976), no. 8, 847-852. (Authors' summary) **57** #14382 65F20
- Zekai** The joint prior probability distribution function of parameters in Bayesian estimation. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **29** (1976), no. 1, 102-110. (Mir Ali) **58** #3170 62F15
- žšov, S. I.** Group properties of solutions of equations of ideal plasticity with the von Mises yield condition. (Russian) *Dinamika Splošn. Sredy Vyp.* **28 Meh. Deform. Tverd. *Tela* (1977), 109-117, 178. (J. Mazumdar) **58** #14099 73.22**
- Senator, K.** Schauder and L_p estimates for a certain class of integro-differential boundary value problems. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 359-363. (F. Cardoso) **46** #4031 35S15 (47G05)
- Metric variation of a function. *Colloq. Math.* **35** (1976), no. 2, 253-265. (N. F. G. Martin) **54** #7717 26A45 (28A15)
- Freely solvable systems of linear inequalities. *Studia Math.* **57** (1976), no. 3, 191-198. (K. G. Murty) **55** #7401 90C25 (65K05)
- Senatov, P. K.** The stability of the system of eigenvalues and eigenfunctions of the Sturm-Liouville problem. (Russian) *Differencial'nye Uravneniya* **7** (1971), 1667-1671. (M. Kakabadze) **45** #633 34B25
- Letter to the editors. (Russian) *Differencial'nye Uravneniya* **8** (1972), 1332. (A. Corduneanu) **46** #4029 35Q99
- On the question of the stability of the solution of the Dirichlet problem for the equation $\operatorname{div}\{k(x)\operatorname{grad} u\} - q(x)u = -f(x)$. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 1296-1297. (C. Avramescu) **47** #9029 35B35
- Senatov, V. V.** (with Zolotarev, V. M.) Two-sided estimates of the Lévy metric. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **20** (1975), no. 2, 239-250. (R. M. Dudley) **51** #11613 60B10
- Refinement of estimates of stability for a theorem of H. Cramér. (Russian. English summary) Continuity and stability in problems of probability theory and mathematical statistics. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **61** (1976), 125-134, 138. (I. V. Ostrovskii) **55** #1405 60E05
- Some properties of metrics on a set of distribution functions. (Russian) *Mat. Sb. (N.S.)* **102**(144) (1977), no. 3, 425-434. (R. M. Dudley) **55** #9195 60B10
- Šenbrot, I. M.** Problems in designing centralized control systems of continuous productions. (Russian) *Trudy CNIIKA Vyp. 27 Voprosy Promysl. Kibernet.* (1970), 66-70, 90. (Author's summary) **54** #4619 90B30
- Application of graph theory to automated control systems of continuous processes. (Russian) *Engineering cybernetics, Vol. 8, Parts 1-2 (Russian)*, pp. 292-319, 362. *Akad. Nauk SSSR Vsesojuz. Inst. Nauch. i Tehn. Informacii, Moscow*, 1977. (Author's summary) **58** #15466 93C40
- Senčakova, N. V.** (with Zabreiko, P. P.) Computation of the Poincaré index for plane vector fields. (Russian) *Vestnik Jaroslav. Univ. Vyp.* **12** (1975), 38-45. (N. M. Bliznjakov) **56** #16676 58C25 (47H10)
- The computation of the Poincaré index of the zero singular point for vector fields with homogeneous components. (Russian) *Vestnik Jaroslav. Univ. Vyp.* **12** (1975), 103-124. (N. M. Bliznjakov) **56** #16461 47H10 (58C25)
- On the theory of singular points of plane vector fields. (Russian) *Qualitative and approximate methods for the investigation of operator equations, No. 1 (Russian)*, pp. 136-150. *Jaroslav. Gos. Univ., Yaroslavl*, 1976. (From the introduction) **58** #31103 57D25 (55C30, 58C25)
- Eigenfunctions of nonlinear operators and the index of a singular point. (Russian) *Qualitative and approximate methods for the investigation of operator equations, No. 1 (Russian)*, pp. 151-159. *Jaroslav. Gos. Univ., Yaroslavl*, 1976. (From the introduction) **58** #30572 47H15 (58C99)
- Senčenko, D. V.** The final σ -algebra of an inhomogeneous Markov chain with a finite number of states. (Russian) *Mat. Zametki* **12** (1972), 295-302. (J. H. Kučkarov) **47** #9720 60J10
- Senčenko, I. K.** (with Karnaukov, V. G.) A minimum principle for the transformed energy in dynamical problems of the linear theory of viscoelasticity. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 8, 712-715, 768. (P. P. Teodorescu) **56** #1904 73.49
- (with Karnauhov, V. G.) Approximate methods for the calculation of critical thermal states. (Russian) *Prikl. Meh.* **12** (1976), no. 4, 18-25, 140. **56** #17381 73.65
- (with Karnauhov, V. G.) Variational principles for isothermal problems of nonlinear viscoelasticity. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 10, 914-917, 960. (D. P. Rašković) **57** #14798 73.49
- (with Karnauhov, V. G.) A variational principle for coupled dynamic problems of linear viscoelasticity. (Russian) *Prikl. Meh.* **13** (1977), no. 8, 113-117, 144. (Authors' summary) **58** #14200 73.49
- (with Karnauhov, V. G.) Variational principles of linearized viscoelasticity theory. (Russian) *Prikl. Meh.* **14** (1978), no. 3, 14-20, 140. (W. Kec) **58** #14205 73.49
- Senčenkova, A. Ju.** (with Kozachenko, Ju. V.) Sufficient conditions for the sample differentiability of random processes. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 7* (1972), 75-80, 164. (M. Loève) **48** #3115 60G15
- Senčukov, V. F.** (with Man'ko, G. P.) On the solution of the boundary value problems of mathematical physics by the structural method. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1975**, no. 5, 405-408, 474. (B. I. Kvasov) **51** #14618 65P05
- (with Rvačov, V. L.; Man'ko, G. P.) Improving the quality of the solution structures of boundary value problems. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1975**, no. 11, 986-988. (B. I. Kvasov) **55** #4753 65P05 (35J99)
- (with Rvačov, V. L.) Difference forms in structures with suppression of the residual. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 5, 398-401, 473. (Authors' summary) **58** #8343 65N20
- (with Rvačov, V. L.) A connection between the differential operators of the method of R -functions. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 4, 472-478, 563. (G. W. Hedstrom) **56** #13721 65N30
- Sendaula, Henry M.** Optimal control of linear systems with time-varying lags. *Delay and functional differential equations and their applications (Proc. Conf., Park City, Utah, 1972)*, pp. 373-386. *Academic Press, New York*, 1972. (Ethelbert N. Chukwu) **53** #8995 49A30
- Optimal control of linear systems with time-varying lags. *IEEE Trans. Automatic Control* **AC-17** (1972), no. 5, 741-742. (Author's summary) **55** #14316 93C05
- Sendaula, Musoke** Observability of linear systems with time variable delays. *IEEE Trans. Automatic Control* **AC-19** (1974), 604-605. (Arild Thowsen) **55** #2212 (E 57 #9173) 93B05
- See also **Olbro, Andrzej W.**, **57** #9173

- Senden, W. L. M. M. (with Doornbos, R.) A comparison of two nonparametric k -sample slippage tests. Collection of articles in honour of Professor H. C. Hamaker. *Statistica Neerlandica* **26** (1972), no. 3, 145-154. (Rudolph J. Beran) **51** #4532 62G10
- Senderov, V. A. (with Azizov, T. Ja.) The spectrum and the invariant subspaces of unitary operators in Banach spaces with an indefinite metric. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **54** (1972), 13-16. (J. Bognár) **46** #711 47B50
- The rank of positivity of lineals of normed spaces with a J -metric. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 6(168), 251-252. (Björn Textorius) **53** #3665 46D05
- (with Iohvidov, E. I.) Fractional linear operator transformations and some of their applications. (Russian) *Voronež. Gos. Univ. Trudy Nauč.-Issled. Inst. Mat. VGU Vyp. 5 Sb. Statei Teor. Operator. i Differencial. Uravnenii* (1972), 52-58. (J. Bognár) **56** #16443 47B50
- (with Hachevič, V. A.) Normed J -spaces, and certain classes of linear operators in these spaces. (Russian) *Mat. Issled.* **8** (1973), no. 3(29), 56-75, 180. (J. Bognár) **50** #5437 46D05 (47B50)
- The characterization of certain classes of (H, G) -spaces. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 690-692, 718. (S. Kurepa) **48** #12009 46D05
- (with Azizov, T. Ja.) The structure and spectrum of J -unitary operators of certain classes. (Russian) *Voronež. Gos. Univ. Trudy Nauč.-Issled. Inst. Mat. VGU Vyp. 11 Sb. Statei Funkcional. Anal. i Priložen.* (1973), 3-9. (Ju. Šmul'jan (RŽMat 1974 #8 B654)) **57** #13569 47B50
- Sender, Wolfgang Über eine Verallgemeinerung des Testens einfacher Hypothesen. *Österreich. Akad. Wiss. Math.-Natur. Kl.S.-B. II* **180** (1972/73), 353-367. (A. Descloux) **49** #6454 62F05
- Über Stetigkeitseigenschaften im Zusammenhang mit Irrtumsfunktionen. *Arch. Math. (Basel)* **25** (1974), 444-448. (P. J. Huber) **50** #15090 62F05
- (with Hafner, Robert) Some asymptotic results on multiple matching. *J. Appl. Probability* **11** (1974), 479-492. (Dominique Foata) **51** #14209 60F05
- On the second moments of random determinants. *Studia Sci. Math. Hungar.* **9** (1974), no. 3-4, 279-283 (1975). (J. R. Blum) **53** #6669 60E05 (60F99)
- A note on the proof of the zero-one law of J. R. Blum and P. K. Pathak: "A note on the zero-one law" (Ann. Math. Statist. **43** (1972), 1008-1009). *Ann. Probability* **3** (1975), no. 6, 1055-1058. (Editors) **52** #1850 60F20
- On the moments of a certain class of random permanents. *Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the Eighth European Meeting of Statisticians* (Tech. Univ. Prague, Prague, 1974), Vol. A, pp. 515-522. Reidel, Dordrecht, 1977. (Author's introduction) **58** #24460 60C05 (15A15)
- Sendov, Blagovest H. (with Popov, V. A.) Approximation of functions of several variables by algebraic polynomials in the Hausdorff metric. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* **63** (1968/69), 61-76 (1970). (loose errata) (V. Veselinov) **45** #2385 41A50
- (with Bojanov, Borislav D.) On a property of a class of linear positive operators. (Russian summary) *Annuaire Univ. Sofia Fac. Math.* **64** (1969/70), 115-117 (1971). (J. Blatter) **47** #2238 41A35
- Parametric approximation. (Bulgarian. English summary) *Annuaire Univ. Sofia Fac. Math.* **64** (1969/70), 237-247 (1971). (V. Veselinov) **46** #7771 41A10
- (with Penkov, Boyan I.) On widths of the space of continuous functions. (Bulgarian. Russian and German summaries) *B'lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **10** (1969), 5-15. (Authors' summary) **45** #4035 41A65
- (with Popov, V. A.) A certain generalization of estimates for the approximation of functions by positive linear operators. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* **65** (1970/71), 191-200 (1972). (errata insert) (P. C. Sikkema) **49** #11111 41A35
- (with Popov, V. A.) Convergence of the derivatives of positive linear operators. (Bulgarian. Russian and English summaries) *B'lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **11** (1970), 107-115. (S. Rolewicz) **46** #713 47B55 (41A65)
- (with Popov, V. A.) Approximation of curves in the plane by polynomial curves. (Russian) *C. R. Acad. Bulgare Sci.* **23** (1970), 639-642. (J. Németh) **46** #9601 41A15
- (with Dimova, Stefka) Nets of curves in the plane. (Bulgarian) *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* **13**(46) (1970), 210-221. (V. Ryžkov (RŽMat 1971 #9 A563)) **57** #13669 50B99 (05B99)
- Charles Babbage (1791-1871) (on the occasion of the 100th anniversary of his death). (Bulgarian) *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* **14**(47) (1971), 331-339. (Editors) **53** #30 01A55 (01A70, 68-03)
- ★Изчислительна математика—стара и нова. (Bulgarian) [Numerical mathematics—old and new] Modern Mathematics Series, 1. *Izdat. Nauka i Izkustvo, Sofia*, 1972. 155 pp. (loose errata) (Editors) **50** #11704 65-01
- (with Popov, V. A.) The approximation of functions by spline functions and rational functions. (Russian) *Constructive theory of functions* (Proc. Internat. Conf., Varna, 1970) (Russian), pp. 89-94. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (D. D. Stancu) **54** #13391 41A15
- (with Popov, V. A.) An analogue of S. M. Nikol'skii's theorem on the approximation of functions by algebraic polynomials in the Hausdorff metric. (Russian) *Constructive theory of functions* (Proc. Internat. Conf., Varna, 1970) (Russian), pp. 95-105. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (Hans-Jürgen Albrand) **51** #3772 41A50
- (with Penkov, Boyan I.) Hausdorff metric and its applications. *Numerische Methoden der Approximationstheorie, Band 1* (Tagung, Math. Forschungsinst., Oberwolfach, 1971), pp. 127-146. *Internat. Schriftenreihe Numer. Math., Band 16*, Birkhäuser, Basel, 1972. (Editors) **51** #13517 41-02
- (with Kjurkčiev, Nikolai V.) Approximation by algebraic polynomials of functions that are different from zero only at one point. (Bulgarian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* **67** (1972/73), 573-579 (1976). (J. Szabados) **54** #10933 41A10
- (with Bojanov, T. P.) A problem of labyrinths. *C. R. Acad. Bulgare Sci.* **25** (1972), 583-585. (J. R. Blum) **45** #8553 05B30 (28A65)
- (with Popov, V. A.) Exact asymptotic behavior of the best approximation by algebraic and trigonometric polynomials in the Hausdorff metric. (Russian) *Mat. Sb.* (N.S.) **89**(131) (1972), 138-147, 167. (Hans-Jürgen Albrand) **46** #7779 41A50
- Convergence of Vallée-Poussin sums in Hausdorff distance. *C. R. Acad. Bulgare Sci.* **26** (1973), 1431-1432. (G. D. Taylor) **48** #9218 42A08
- Academician Ljubomir Iliev on his sixtieth birthday. (Bulgarian) *Fiz.-Mat. B'lgar. Akad. Nauk.* **16**(49) (1973), 139-141. (Editors) **53** #59 01A70
- (with Popov, V. A.) On a generalization of Jackson's theorem for best approximation. *J. Approximation Theory* **9** (1973), 102-111. (N. Passell) **50** #842A08 (41A50)
- Approximation of analytic functions in Hausdorff metric. *Functional analysis its applications* (Internat. Conf., Madras, 1973), pp. 490-500. *Lecture Notes in Math.*, 399, Springer, Berlin, 1974. (A. B. Németh) **55** #13131 41A50
- The order of best Hausdorff approximation for a certain class of analytic functions. (Russian) *C. R. Acad. Bulgare Sci.* **27** (1974), 1621-1623. (J. Szabados) **50** #141A50
- A certain method for the simultaneous approximate computation of all positive roots of an algebraic equation. (Russian) Collection of articles dedicated to Aleks. Petrovič Norden on the occasion of his seventieth birthday. *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 5(144), 185-187. (H. Shintani) **50** #15323 65H05
- Hausdorff approximation of function and point sets. Papers presented at the 11th Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 547-553. (R. Rice) **54** #817 41A50
- (with Popov, V. A.) Approximation of monotone functions by monotone polynomials in Hausdorff metric. *Rev. Anal. Numér. Théorie Approximation* **3** (1974), no. 1, 79-88. (John A. Roulier) **52** #1099 41A25
- Simultaneous approximation of all real zeroes of an algebraic polynomial. *Numerische Methoden der Approximationstheorie, Band 2* (Tagung, Math. Forschungsinst., Oberwolfach, 1973), pp. 131-137. *Internat. Schriftenreihe Numer. Math., Band 26*, Birkhäuser, Basel, 1975. (H. H. Goldstine) **52** #2183 65H05
- Hausdorff approximation of functions and point sets. *Topics in numerical analysis II* (Proc. Roy. Irish Acad. Conf., Univ. College, Dublin, 1974), pp. 175-184. *Acad. Press, London*, 1975. (John M. Karon) **54** #3225 41A10
- A modification of A. A. Gončar's theorem on the speed of rational approximation. (Russian) *Mat. Zametki* **17** (1975), 383-390. (Editors) **57** #6974 41A20
- Order of best Hausdorff polynomial approximation of certain functions. *Serdica* (1975), no. 1, 77-87. (Myron S. Henry) **52** #11422 41A25
- Approximation of the semicircle by algebraic polynomials. (Russian) Theorems and its applications (Collection of articles dedicated to Academician S. Mihailovič Nikol'skii on the occasion of his seventieth birthday). *Trudy Mat. Steklov.* **134** (1975), 278-282, 410-411. (J. Szabados) **52** #8731 41A25
- ★Математические модели процессов деления и дифференциации клеток. (Russian) [Mathematical models of cellular division and differentiation processes] *Izdat. Moskov. Univ., Moscow*, 1976. 58 pp. (H. A. Lauwerier) **58** #20580 92A01
- Best Hausdorff approximation with equidistant-knot spline functions. *C. R. Acad. Bulgare Sci.* **29** (1976), no. 12, 1717-1719. (Hans Strauss) **55** #8631 41A15
- Mathematical biology. (Bulgarian) *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* **15** (1976), no. 1, 47-53. (J. S. Joel) **56** #8063 92-01
- (with Penkov, Boyan I.; Popov, V. A.; Markov, Svetoslav M.) Hausdorff derivatives in F_λ . *Serdica* **2** (1976), no. 2, 131-137. (J. S. Lipiński) **58** #1054 26A01
- (with Bojanov, T. P.) Metric dimension, and approximation by polynomial curves on the plane. (Russian) *Serdica* **2** (1976), no. 4, 295-299. (J. Szabados) **56** #6141A10
- Exact estimation for the best Hausdorff spline approximation. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 2, 187-190. (L. L. Schumaker) **56** #3514 41A15
- Convergence of sequences of monotonic operators in A -distance. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 5, 657-660. (Sheldon Eisenberg) **56** #12716 41A25
- Segment arithmetic and segment limit. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 5, 955-958. (J. A. Grant) **58** #22427a 26A03
- Segment derivatives and Taylor's formula. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 5, 1093-1096. (J. A. Grant) **58** #22427b 26A03
- (with Andreev, Andrei S.; Popov, V. A.) Jackson's type theorems for one-dimensional polynomial and spline approximation. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 5, 1533-1536. (Manfred v. Golitschek) **58** #1939 42A08 (41A15)
- Best Hausdorff approximations by spline functions with equidistant nodes. (Russian) *PLISKA Studia Math. Bulgar.* **1** (1977), 79-92. (V. N. Malozemov) **58** #12104 41A15 (41A50)
- See also Mathematics and mathematical education. (Not reviewed) and Mathematics and mathematical education. **49** #4719
- Šendrik, V. S. (with Krasovskii, A. A.; Bukov, V. N.) Statistical dynamics of nonlinear continuous systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 6, 161-168. (Russian); translated as *Engrg. Cybernetics* **12** (1974), no. 6, 127-133. (Ruth Curjel) **53** #1734 60H10 (93E99)
- Synthesis of optimal controls by the prediction model method. (Russian) *Izv. Akad. Nauk SSSR* **224** (1975), no. 3, 561-562. (From the author's text) **56** #2593B15
- (with Krasovskii, A. A.; Bukov, V. N.) ★Универсальные алгоритмы оптимального управления непрерывными процессами. (Russian) [Universal algorithms for the optimal control of continuous processes] Теоретические Основы Технической Кибернетики. [Series in Theoretical Foundations of Engineering Cybernetics] *Izdat. "Nauka", Moscow*, 1977. 271 pp. (Vadim Komkov) **58** #20793C60
- Sends, M. See Sands, Matthew
- Senechal, Marjorie See Patterns of symmetry. **58** #5
- Senechalle, David A. Equations which characterize inner product spaces. *Proc. Am. Math. Soc.* **40** (1973), 209-214. (V. Zizler) **47** #7397 46C10
- Sénéor, Roland (with Soffer, J.) On the construction of physical states in the dual-resonance model. (Italian and Russian summaries) *Nuovo Cimento A* (11) **49** (1972), 641-654. (G. R. Allcock) **49** #6794 81.15
- (with Eckmann, Jean-Pierre; Magnen, J.) Decay properties and Borel summability for the Schwinger functions in $P(\phi)_2$ theories. *Comm. Math. Phys.* **39** (1974), 251-271. (M. J. Westwater) **51** #2514 81.32

- (with Blanchard, Philippe) Green's functions for theories with massless particles (in perturbation theory). *Ann. Inst. H. Poincaré Sect. A (N.S.)* **23** (1975), no. 2, 147-209. (Andre Graffi) **53** #7284 81.47
- The cluster expansion for Y_2 . *Quantum dynamics: models and mathematics (Proc. Sympos., Centre for Interdisciplinary Res., Bielefeld Univ., Bielefeld, 1975)*, pp. 103-124. *Phys. Austriaica, Suppl. XVI, Springer, Vienna, 1976*. (Author's introduction) **53** #32603 81.47
- Existence of Green's functions in perturbative Q.E.D. *Renormalization theory (Proc. NATO Advanced Study Inst., Erice, 1975)*, pp. 255-267. *NATO Advanced Study Institutes C: Math. and Phys. Sci., Vol. 23, Reidel, Dordrecht, 1976*. (From the introduction) **53** #25604 81.47
- (with Magnen, J.) The infinite volume limit of the ϕ_4^2 model. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **24** (1976), no. 2, 95-159. (Thomas Spencer) **53** #10009 81.47
- (with Eckmann, Jean-Pierre) The Maslov-WKB method for the (an-)harmonic oscillator. *Arch. Rational Mech. Anal.* **61** (1976), no. 2, 153-173. (Manfred Andrie) **53** #9939 81.34
- (with Magnen, J.) The Wightman axioms for the weakly coupled Yukawa model in two dimensions. *Comm. Math. Phys.* **51** (1976), no. 3, 297-313. (Tetz Yoshimura) **53** #7192 (EA 55/56) 81.46
- (with Osterwalder, Konrad) The scattering matrix is non-trivial for weakly coupled $\phi(\phi)$ models. *Helv. Phys. Acta* **49** (1976), no. 4, 525-535. (J. Glimm) **53** #15195 1.47
- (with Magnen, J.) Phase space cell expansion and Borel summability for the Euclidean ϕ_4^2 theory. *Comm. Math. Phys.* **56** (1977), no. 3, 237-276. (R. Höegh-Krohn) **53** #25595 81.47
- (with Heyde, C. C.) A note on the balance between random sampling and population size (on the 40th anniversary of G. Malécot's paper). *Genetics* **77** (1974), no. 3, 607-610. (Klaus Hinkelmann) **53** #2418 92A10 (92A15)
- (with Mandl, Petr) The theory of non-negative matrices in a dynamic programming problem. *Austral. J. Statist.* **11** (1969), 85-96. (S. Zlobec) **53** #15373 60C30 (15A48)
- (with Heyde, C. C.) Analogues of classical limit theorems for the supercritical Galton-Watson process with immigration. *Math. Biosci.* **11** (1971), 249-259. (M. M. Siddiqui) **45** #1272 60J80
- Sequential criteria for regular variation. *Quart. J. Math. Oxford Ser. (2)* **22** (1971), 565-570. (F. Brooks) **45** #3649 26A45
- Studies in the history of probability and statistics. XXXI. The simple branching process, a turning point test and a fundamental inequality: a historical note on I. J. Bienaymé. *Biometrika* **59** (1972), 680-683. (Authors' summary) **49** #6289 60-03 (01A55)
- Population projection variances and path analysis. *J. Amer. Statist. Assoc.* **67** (1972), 617-619. (Niels Keiding) **52** #16727 92A15
- (with Heyde, C. C.) Estimation theory for growth and immigration rates in a multiplicative process. *J. Appl. Probability* **9** (1972), 235-256. (K. Dietz) **49** #8127 (E 51 #4437) 60J80 (62M05)
- ★Non-negative matrices. An introduction to theory and applications. *Halsted Press [A division of John Wiley & Sons], New York, 1973*. x+214 pp. (B. Levinger) **52** #10773 15A48 (60J10)
- A Tauberian theorem of E. Landau and W. Feller. *Ann. Probability* **1** (1973), 1057-1058. (F. W. Steutel) **50** #10598 40E05 (60J80)
- On a genetic inequality. (French summary) *Biometrics* **29** (1973), 810-814. (S. Levin) **49** #2130 92A05
- (with Golub, Gene H.) Computation of the stationary distribution of an infinite Markov matrix. *Bull. Austral. Math. Soc.* **8** (1973), 333-341. (I. Văduva) **50** #8710 60J10 (68A10)
- The simple branching process with infinite mean. I. *J. Appl. Probability* **10** (1973), 206-212. (Norman Kaplan) **54** #1408 60J80
- (with Bojanic, Ranko) A unified theory of regularly varying sequences. *Math. Z.* **134** (1973), 91-106. (J. Galambos) **48** #11407 26A12
- (with Galambos, János) Regularly varying sequences. *Proc. Amer. Math. Soc.* **41** (1973), 110-116. (M. S. Ramanujan) **48** #2316 26A12
- On the historical development of the theory of finite inhomogeneous Markov chains. *Proc. Cambridge Philos. Soc.* **74** (1973), 507-513. (M. Iosifescu) **48** #9855 60J10
- An interpretation of some aspects of Karamata's theory of regular variation. *Publ. Inst. Math. (Beograd) (N.S.)* **15**(29) (1973), 111-119. (J. Mafić) **48** #8699 26A12
- On strong ergodicity of inhomogeneous products of finite stochastic matrices. *Studia Math.* **46** (1973), 241-247. (A. Paz) **48** #11168 15A51 (60J10)
- Regularly varying functions in the theory of simple branching processes. *Advances in Appl. Probability* **6** (1974), 408-420. (S. Dubuc) **54** #8905 60J80 (26A12)
- (with Golub, Gene H.) Computation of the stationary distribution of an infinite stochastic matrix of special form. *Bull. Austral. Math. Soc.* **10** (1974), 255-261. (Dean Isaacson) **51** #9212 60J10
- (with Heyde, C. C.) Notes on "Estimation theory for growth and immigration rates in a multiplicative process" (J. Appl. Probability **9** (1972), 235-256). *J. Appl. Probability* **11** (1974), 572-577. (K. Dietz) **51** #4437 60J80 (62M05)
- (with Heyde, C. C.) The genetic balance between random sampling and random population size. *J. Math. Biol.* **1** (1974/75), no. 4, 317-320. (Editors) **54** #2244 92A10
- (with Allen, Bronwyn; Anderssen, R. S.) ★Numerical investigation of infinite stochastic matrices. Technical Report, No. 48. *Computer Centre, Australian National University, Canberra, 1975*. iii+60 pp. (George P. H. Styan) **56** #1683 65F10 (65F15, 65F30)
- (with Heyde, C. C.) Bienaymé. (French summary) With discussion. *Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975)*, Vol. 2. *Invited papers. Bull. Inst. Internat. Statist.* **46** (1975), no. 2, 318-331, 355-360 (1976). (H. L. Seal) **57** #7821 62-03 (01A50)
- (with Galambos, János) Record times. *Proc. Amer. Math. Soc.* **50** (1975), 383-387. (Sidney I. Resnick) **51** #4353 60F05
- Normed-convergence theory for supercritical branching processes. *Stochastic Processes Appl.* **3** (1975), 35-43. (Torgny Lindvall) **50** #14979 60J80
- ★Regularly varying functions. *Lecture Notes in Mathematics*, Vol. 508. *Springer-Verlag, Berlin-New York, 1976*. v+112 pp. (N. H. Bingham) **56** #12189 26A12 (60E05)
- The principle of random union of gametes in a finite population. *Combinatorial mathematics, IV (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975)*, pp. 215-219. *Lecture Notes in Math., Vol. 560, Springer, Berlin, 1976*. (Klaus Hinkelmann) **55** #2190 92A10
- On a functional equation with asymptotically unique continuous solutions. *Aequationes Math.* **14** (1976), no. 3, 457-459. (B. Choczewski) **54** #3204 39A25 (26A12)
- (with Dubuc, Serge) The local limit theorem for the Galton-Watson process. *Ann. Probability* **4** (1976), no. 3, 490-496. (Norman Kaplan) **53** #9402 60J80
- On a contribution of Cauchy to linear regression theory. *Ann. Soc. Sci. Bruxelles Sér. I* **90** (1976), no. 3, 229-235. (H. L. Harter) **55** #6714 62J05 (62-03)
- (with Pentony, Susan J.) Partition of the genotypic variance and mean fitness change for autopolyploids. (German summary) *Biometrische Z.* **18** (1976), no. 4, 301-311. (Jon Stene) **56** #11079 92A10 (62P10)
- Some supplementary notes on one-type continuous-state branching processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **34** (1976), no. 1, 87-89. (Miloslav Jiřina) **53** #1768 60J80
- (with Heyde, C. C.) ★I. J. Bienaymé. Statistical theory anticipated. *Studies in the History of Mathematics and Physical Sciences*, No. 3. *Springer-Verlag, New York-Heidelberg, 1977*. xiv+172 pp. (1 plate) ISBN 0-387-90261-9 (H. L. Seal) **57** #2855 01A75 (62-03)
- (with Allen, Bronwyn; Anderssen, R. S.) Computation of stationary measures for infinite Markov chains. *Algorithmic methods in probability*, pp. 13-23. *Studies in the Management Sci., 7. North-Holland, Amsterdam, 1977*. (Authors' summary) **58** #31411 60J10 (65F10)
- (with Chatterjee, Samprit) Towards consensus: some convergence theorems on repeated averaging. *J. Appl. Probability* **14** (1977), no. 1, 89-97. (Richard Madsen) **55** #1475 60J10
- (with Hudson, Irene L.) A note on simple branching processes with infinite mean. *J. Appl. Probability* **14** (1977), no. 4, 836-842. (D. R. Grey) **57** #1677 60J80
- Šenfeld, Dž. See Shoenfeld, Joseph R.
- Senge, H. G. (with Straus, Ernst G.) PV-numbers and sets of multiplicity. *Proceedings of the Washington State University Conference on Number Theory (Washington State Univ., Pullman, Wash., 1971)*, pp. 55-67. *Dept. Math., Washington State Univ., Pullman, Wash., 1971*. (W. J. LeVeque) **47** #8452 10F05 (12A15)
- (with Straus, Ernst G.) PV-numbers and sets of multiplicity. *Collection of articles dedicated to the memory of Alfréd Rényi, II. Period. Math. Hungar.* **3** (1973), 93-100. (P. Szűs) **49** #4941 10F25 (12A15)
- Šengelaja, A. M. The computation of integral operators. (Russian. Georgian and English summaries) *V. I. Lenin. Sakharth. Politekh. Inst. Šrom.* **1973**, no. 6(162) *Math.*, 107-109. (C. Ilioi) **50** #1474 65D30
- Šengelija, Z. I. (with Trenogin, V. A.) On the Galerkin method. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **82** (1976), no. 1, 21-24. (Mieczysław Altman) **54** #14364 65J05
- Some remarks on the convergence of projective methods. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **84** (1976), no. 2, 297-299. (W. V. Petryshyn) **56** #6493 47H15 (65J05)
- Regularization of the search for approximate solutions. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **89** (1978), no. 2, 281-283. (Vadim Komkov) **58** #17915 47A50 (65J05)
- Sengenhorst, P. See *Fundamentals of mathematics*, **49** #8786
- Senger, R. L. (with Eisenfeld, Jerome; Mishelevich, D. J.; Bernfeld, Stephen R.) On the moments of exponential decay. *Nonlinear systems and applications (Proc. Internat. Conf., Univ. Texas, Arlington, Tex., 1976)*, pp. 481-489. *Academic Press, New York, 1977*. (D. Leviatan) **58** #3307 65D10
- Sengier-Diels, J. Espaces pseudo-riemanniens homogènes à quatre dimensions. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **60** (1974), 1469-1485. (J. P. Wilson) **52** #4203 53C50
- Sengoku, Masakazu On hybrid tree graphs. *Electron. Commun. Japan* **57** (1974), no. 5, 18-23. (Author's summary) **56** #15210 94A20 (05C05)
- Hybrid trees and hybrid tree graphs. *IEEE Trans. Circuits and Systems CAS-22* (1975), no. 10, 786-790. (H. Fleischer) **52** #7945 05C05
- Sen Gupta, Abhijit (with Chattopadhyay, D. K.; Choudhury, A. K.) Linearity testing and realization of sequential machines. *IEEE Trans. Computers* **C-23** (1974), no. 5, 524-527. (Armen Gabrielian) **52** #13016 94A25
- (with Chattopadhyay, D. K.; Choudhury, A. K.) On shift register realization of sequential machines. *Internat. J. Systems Sci.* **5** (1974), 1007-1024. (G. M. Tenengol'c) **50** #6665 94A25
- (with De Sarkar, S. C.; Chattopadhyay, D. K.; Choudhury, A. K.) Secondary state assignment using connected matrices. *Internat. J. Systems Sci.* **6** (1975), 443-464. (J. Černý) **52** #2772 94A25
- (with Chattopadhyay, D. K.; Palit, A.; Bandyopadhyay, A. K.; Basu, M. S.; Choudhury, A. K.) Realization of fault-tolerant and fail-safe sequential machines. *IEEE Trans. Computers* **C-26** (1977), no. 1, 91-96. (G. Saucier) **54** #14888 94A25
- Sengupta, Jati K. A system reliability approach to linear programming. (German summary) *Unternehmensforschung* **15** (1971), 112-129. (R. W. Cottle) **46** #6820 90C05
- A statistical reliability approach to linear programming. (German summary) *Unternehmensforschung* **15** (1971), 255-278. (J. J. Hunter) **48** #10026 62N05 (90C15)
- ★Stochastic programming. Methods and applications. *North-Holland Publishing Co., Amsterdam; American Elsevier Publishing Co. Inc., New York, 1972*. xi+313 pp. (O. Gürel) **52** #12779 90C15
- (with Tintner, Gerhard) ★Stochastic economics. Stochastic processes, control, and programming. *Academic Press, New York-London, 1972*. xi+315 pp. (Peter Kall) **53** #7374 90-02 (93E99)
- (with Sen, Amartya) Balanced growth path for an expanding multiproduct firm. *Internat. Econom. Rev.* **13** (1972), 553-567. (Dobro Ion) **53** #10209 90A15 (90C50)

- Fractile programming under extreme value distributions for the stochastic objective function. *J. Cybernet.* 2 (1972), no. 2, 48-60. (C. Berghaller) 49 #6927 90C15
- Chance-constrained linear programming with chi-square type deviates. *Management Sci.* 19 (1972), no. 3, 337-349. (Author's summary) 55 #12062 90C05 (90C15)
- Application of system reliability measures in chance-constrained programming. *Cahiers Centre Études Recherche Opér.* 15 (1973), 449-473. (J. T. Wong) 52 #16662 90C50 (90A05)
- (with Keller, Elmo A., Jr.) Relative efficiency of computing optimal growth by conjugate gradient and Davidson methods. *Internat. J. Systems Sci.* 4 (1973), 97-120. (Norihiko Adachi) 52 #12790 90C30
- (with Sen, A.) The optimal capacity expansion policy for a multi-product firm under a dynamic framework. *Metroecon.* 25 (1973), 41-65. (F. Giannessi) 52 #4977 90B30
- (with Keller, Elmo A., Jr.) Sensitivity analysis for optimal and feedback controls applied to growth models. *Stochastics* 1 (1973/74), 239-266. (M. Rössler) 50 #12163 90A15
- Estimating parameters of a linear programming model. *J. Cybernet.* 6 (1976), no. 3-4, 309-328. (E. A. Nurminskii) 56 #10959 90C15
- An iterative convex simplex method for geometric programming with applications. *Internat. J. Systems Sci.* 8 (1977), no. 1, 49-63. (Suresh Chandra) 58 #20437 90C25 (90C15)
- Sensitivity analysis for a linearized method of geometric programming. *Internat. J. Systems Sci.* 8 (1977), no. 2, 153-161. (A. D. Ioffe) 57 #2577 90C30 (49D99)
- Simulation of linear decision rules. *Internat. J. Systems Sci.* 8 (1977), no. 11, 1269-1280. (Author's summary) 58 #15020 90A05 (90B35)
- Sen Gupta, Malaya** On common fixed point of operators. *Bull. Calcutta Math. Soc.* 66 (1974), no. 3, 149-153. (S. P. Singh) 58 #2779 54H25
- Some results on fixed points in locally convex spaces. II. *Bull. Calcutta Math. Soc.* 66 (1974), no. 4, 203-206. (Editors) 57 #10519 47H10 (54H25)
- Sengupta, N. D.** On the time-dependent perturbation theory. *J. Phys. A.* 3 (1970), 618-624. (W. Wasow) 48 #7819 81.34
- On the inversion of a class of functions. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* 15(63) (1971), no. 4, 439-441 (1973). (Editors) 48 #1474 65L05
- The Ricci coefficients and the gravitational field equations. *Proceedings of the International Symposium on Relativity and Unified Field Theory (Calcutta, 1975-1976)*, 111-118. *S. N. Bose Inst. Phys. Sci., Calcutta*, 1978. (Not reviewed) 83.53
- Sengupta, P. R.** (with De, Saurendra Nath) Surface waves in micropolar elastic media. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* 22 (1974), 213-222. (V. Gheorghita) 54 #9246 73.35
- (with Bandyopadhyay, D. K.) Micropolar elastic waves in a cylindrical bore containing a fluid. I. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* 25 (1977), no. 8, 641-655. (I. Bryant Moodie) 58 #19538 73.35
- Sen Gupta, Prabir Kumar** On the convergence of eigenfunction expansions associated with a vector-matrix differential equation. *J. Indian Inst. Sci.* 60 (1978), no. 3, 89-110. (R. R. D. Kemp) 58 #11620 34B25
- Sengupta, S. B.** Some notes on some well-known results on the distance sets. *Indian J. Mech. Math.* 12 (1974), no. 1-2, 6-13. (T. Šalát) 54 #8068 40A05
- Sengupta, S. Sankar** (with Podrebarac, M. L.) Parametric linear programming: some extensions. (French summary) *INFOR—Canad. J. Operational Res. and Information Processing* 9 (1971), 305-319. (M. Yamasaki) 48 #3489 90C05
- (with Chow, Ray) A contribution to the theory of optimization with Markovian controls. *Information Sci.* 3 (1971), 59-75. (Title) 45 #6499 93E20
- (with Hildebrand, David K.) On the uses of probabilistic thinking in game theory. *Information Sci.* 6 (1973), 201-216. (P. Brock) 52 #7562 90D05
- (with Moore, John B.) Existence and control of Markov chains in systems of deterministic motion. *SIAM J. Control* 13 (1975), no. 5, 1103-1114. (K. Hinderer) 54 #11514 60J10
- (with Yeo, Gee Kin) ★Embedded invariants. A contribution to forecasting. With German and French summaries. *Angewandte Statistik und Ökonometrie*, Heft 6. *Vandenhoeck & Ruprecht, Göttingen*, 1977. 127 pp. (Peter M. Robinson) 57 #10799 60G25 (62M10, 62M20)
- (with Roumi, M. Ebrahim) Probability effects in the calculus of variations. *SM Arch.* 2 (1977), no. 1, 109-127. (From the authors' text) 57 #7310 49B15
- Sen Gupta, Sachi Bhusan** On the ratio set of some sets with positive measures. *Indian J. Mech. Math.* 6 (1968), 99-106. (William Eames) 49 #10845 28A10
- On the ratio sets of linear sets with positive measure. II. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* 13(61) (1969), no. 1, 35-40 (1970). (William Eames) 51 #5874 28A05
- On some new properties of the Cantor set. *Časopis Pěst. Mat.* 96 (1971), 270-277. (A. Zajta) 45 #187 10F40
- An (SD) set in the function space and application of infinite matrices on Cantor set. *Indian J. Math.* 14 (1972), 213-224. (F. C. Hsiang) 50 #12959 10L10
- Sengupta, Sailes Kumar** Lower semicontinuous stochastic games with imperfect information. *Ann. Statist.* 3 (1975), 554-558. (Author's summary) 57 #15500 90D15
- Comparison of eigenvectors of irreducible stochastic matrices. *Linear Algebra and Appl.* 12 (1975), no. 2, 101-110. (George P. H. Styan) 52 #3198 15A51
- Sengupta, Uday K.** (with Gerlach, Ulrich H.) Initial conditions for a perturbed spherically symmetric collapsing star. *Phys. Rev. D* (3) 18 (1978), no. 6, 1785-1788. (Authors' summary) 58 #25829 85.35
- Seničkin, V. N.** On Carleson's lemma concerning estimates of integrals of analytic functions. (Russian. English summary) *Vestnik Leningrad. Univ.* 1971, no. 19, 52-56. (L. I. Hedberg) 46 #3800 30A78
- The maximality of the algebra of functions that are continuous on the extended complex plane and analytic in the complement of a completely disconnected compactum. (Russian) *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 22 (1971), 130-138. (S. J. Sidney) 45 #2479 46J15
- An example of a thick polynomially convex compact subset of the space C^2 with a connected interior on which not every continuous function that is analytic at the interior points can be approximated uniformly by polynomials. (Russian) *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 22 (1971), 199-201. (J.-M. Ka 45 #3789 32E20
- An algebra of analytic functions continuous on the sphere with a perfect singularities, and polynomial approximation on thick compacta in C^n . (Russian) *Investigations on linear operators and the theory of functions, III. Zap. Nauchn. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 30 (1972), 172-173. (S. J. Sidney) 48 #12063 46J10
- The approximation of functions of several complex variables by polynomials on compact subsets of the space C^n . (Russian) *Mat. Sb. (N.S.)* 97(139) (1975), no. 278-300, 318. (Wiesław Pleśniak) 53 #877 32E30 (32E25, 46J15)
- See also *Investigations in linear operators and function theory*, 49 #5761 and *Investigations on linear operators and the theory of functions*, 52 #14241 (EA 53)
- Senik, P. M.** (with Vozniĭ, A. M.) Numerical inversion of a certain class of the incomplete Beta-function. (Russian) *Mathematical physics, No. 14 (Russian)*, pp. 160-164, "Naukova Dumka", Kiev, 1973. (E. L. Albasiny) 49 #4218 65D20
- (with Senik, S. G.) Construction of approximate solutions of two linear differential equations with periodic coefficients. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 265-268. (R. S. Levitin) 49 #7525 34C25 (34A25)
- (with Senik, S. G.) The mean square reducibility of a system of two linear differential equations with periodic coefficients. (Ukrainian. Russian summary) *L'viv. Politehn. Inst. No. 87 Mat. i Meh.* (1974), 115-121, 161. (D. Bobrowski) 52 #11203 34C20
- (with Senik, S. G.) Mean square reducibility of a system of two linear differential equations with quasiperiodic coefficients. (Ukrainian. Russian summary) *Visnik Politehn. Inst. No. 106* (1975), 156-159, 209. (Authors' summary) 58 #22794 34C20
- (with Sokil, B. I.) The construction of an optimal autonomous program-oscillator system with a strong nonlinearity. (Russian. English summary) *Dokl. Akad. Ukrain. SSR Ser. A* 1976, no. 7, 601-604, 671. (A. Halanay) 54 #9767 93C15
- (with Smereka, Ī. P.) The construction of approximate periodic solutions of a system of nonlinear autonomous differential equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1976, no. 12, 1081-1084. (E. S. Čičkin) 55 #65L99 (34E05)
- (with Smereka, Ī. P.; Sokil, B. Ī.) An asymptotic method and periodic Ateb-functions in the theory of essentially nonlinear oscillations. (Russian) *Analytical qualitative methods for the study of differential and differential-difference equations (Russian)*, pp. 143-156. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Gupta) 58 #22786 34C15
- (with Sokil, B. Ī.) The use of u -methods for a certain class of oscillatory systems. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 1, 94. (A. Halanay) 57 #16816 34C15 (34E05)
- Senik, S. G.** (with Senik, P. M.) Construction of approximate solutions of two differential equations with periodic coefficients. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 265-268, 286. (R. S. Levitin) 49 #7525 34C25 (34A25)
- (with Senik, P. M.) The mean square reducibility of a system of two differential equations with periodic coefficients. (Ukrainian. Russian summary) *L'viv. Politehn. Inst. No. 87 Mat. i Meh.* (1974), 115-121, 161. (D. Bobrowski) 52 #11203 34C20
- (with Senik, P. M.) Mean square reducibility of a system of two linear differential equations with quasiperiodic coefficients. (Ukrainian. Russian summary) *Visnik Politehn. Inst. No. 106* (1975), 156-159, 209. (Authors' summary) 58 #22794 34C20
- Construction of a nearly exact stationary asymptotic solution for an autonomous quasilinear system. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 106* (1975), 160-163, 209. (Author's summary) 58 #22734 34A45
- Senilov, A. S.** Certain properties of normal pseudocongruences of lines in S_4 . (Russian) *Trudy Irkutsk. Gos. Univ.* 66 (1969), 227-234. (A. Urban) 46 #6192 53A35
- Senin, A. G.** On the analysis of optimality criteria that can be used in the teaching pattern recognition. (Russian) *Avtometrija* 1971, no. 5, 20-25. (M. Arató) 49 #1068A45
- Filtering and detection of continuous signals from a discrete sequence with Poisson distribution. (Russian) *Avtometrija* 1974, no. 2, 38-44, 113. (L. I. Galka) 52 #10213 94A05 (93E10)
- Senior, J. K.** See McKay, John, 53 #4463
- Senior, T. B. A.** (with Keller, Joseph B.; Kleinman, Ralph E.) Dipole moments in Rayleigh scattering. *J. Inst. Math. Appl.* 9 (1972), 14-22. (A. M. Sessler) 45 #878.35
- (with Kleinman, Ralph E.) Rayleigh scattering cross sections. *Radio Sci.* 7 (1972), 937-942. (V. H. Weston) 48 #10315 78.35
- Low-frequency scattering by a dielectric body. *Radio Sci.* 11 (1976), no. 5, 477-485. (N. D. Sengupta) 54 #4351 78.45
- Senjukova, A. G.** (with Židkov, N. P.) Solution of systems of signum equations by methods of mathematical logic. (Russian) *Numerical methods and programming (Russian)*, pp. 288-297. *Izdat. Moskov. Univ., Moscow*, 1971. (V. P. Milantiev) 51 #14823 82.06
- Šenk, R.** A difference scheme for the differential equations of the Cosserat continuum. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* 1 (1970), no. 3, 56-69. (I. O. Bohachev) 49 #4434 76.65
- Senkienė, Elvyra** (with Tempelmanas, A.) Hilbert spaces with operator-valued reproducing kernels. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 12 (1972), 4, 207-217, 241. (E. Gerlach) 58 #23558 46E40 (46E20, 47D15, 60G99)
- (with Tempelmanas, A.) Hilbert spaces of operator-valued functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 13 (1973), no. 4, 197-204, 221. (E. Gerlach) 58 #23559 46E40 (46E20, 47D15)
- Certain linear statistical problems for vector-valued random functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 14 (1974), no. 4, 209-219. (Andrej Pázmán) 51 #14489 62M20
- Estimation of a parameter of a Gaussian Markov stationary random process. (Russian. Lithuanian and English summaries) *Teor. Optimal. Rešeníi-Trudy Proccsy Optimal. Upravlenija VI Sekcija Vyp.* 2 (1976), 47-57. (A. Ja. Dorogov) 55 #11529 62M10

- (with Žilinskas, Antanas) Estimation of the parameter of the Wiener process. (Lithuanian and English summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 3, 59-62, 4. (A. Ja. Dorogovcev) **58** #24791 62M05
- n, E. P. The unique determination of a convex surface from its metric and from the tations of the arcs of its curves. (Russian) *Ukrain. Geometr. Sb. No. 7* (1969), 4-115, 185 (1970). (M. Decuyper) **52** #11801 53C45
- Stability of the solutions of the equation $\det \|z_{ik}\| = \phi$. (Russian) *Ukrain. Geometr. Sb. No. 7* (1969), 116-117, 186 (1970). (H. Jacobowitz) **47** #9045 35J15
- Rigidity of convex hypersurfaces. (Russian) *Ukrain. Geometr. Sb. No. 12* (1972), 1-152, 170. (J. Szenthe) **49** #3790 (E 52 #1582) 53C45
- A supplement to the article: "Rigidity of convex hypersurfaces" (Ukrain. Geometr. Sb. No. 12 (1972), 131-152). (Russian) *Ukrain. Geometr. Sb. No. 17* (1975), 132-134, 148. (J. Szenthe) **52** #1582 53C45
- Bending of a convex surface with a given boundary zone. (Russian) *Ukrain. Geometr. Sb. Vyp. 20* (1977), 98-102, 4. (Author's summary) **58** #24141 53C45
- o, A. V. Solution of the transportation problem in a plant control system. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1970**, no. 3, 36-38 (Russian); translated as *Engng. Cybernetics* **8** (1970), no. 3, 450-453 (1971). (Author's summary) **45** #6400 90B05
- o, M. E. (with Ghosh, Sakti P.) String path search procedures for data base systems. *IBM J. Res. Develop.* **18** (1974), 408-422. (I. Kaufmann) **51** #9590 68A50
- on, Hülya Über die algebraische Abhängigkeit im arithmetischen Sinne von zwei Funktionen im Komplexen und im p -adischen Gebiet mit Anwendung auf einige Rationalitätsbeweise. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **37** (1972), 35-91 (1974). (S. V. Kotov) **50** #9807 10F35
- Über die Schneidersche Umkehrung des Eisensteinschen Satzes. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **39** (1974), 27-42 (1975). (P. Bundschuh) **52** #13666 10F35
- us, Algimantas Estimation of the moment of change in the parameters of an autoregressive sequence. (Russian. English and Lithuanian summaries) *Statist. Problemy Upravleniya—Trudy Sem. Processy Optimal. Upravleniya V Sekcija No. 7* (1973), 54-64. (M. I. Jadrénko) **52** #4557 62M10
- Erhard ★ Modelle und Modellinvarianz in endlichen, gradierten Algebren. Inauguraldissertation zur Erlangung der Würde eines Doktors der Philosophie vorgelegt der Philosophisch-naturwissenschaftlichen Fakultät der Universität Basel. *Universität Basel, Basel*, 1972. iii+47 pp. (Ernst Kunz) **49** #2709 13D99
- Der Funktor $\text{Ext}_R(\cdot, R)$ in endlichen, gradierten Algebren. *Comment. Math. Helv.* **48** (1973), 1-13. (E. A. Walker) **48** #11210 16A62
- e, K. D. (with Bucy, Richard S.; Hecht, C.) New methods for nonlinear filtering. (Loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle* **7** (1973), No. J-1, 3-54. (N. U. Ahmed) **48** #13431 94A05
- (with Bucy, Richard S.; Youssef, H.) Pipeline, parallel and serial realization of phase demodulators. *Differential games and control theory, II* (Proc. 2nd Conf., Univ. Rhode Island, Kingston, R.I., 1976), pp. 423-459. *Lecture Notes in Pure and Appl. Math.*, **10**. Dekker, New York, 1977. (Editors) **58** #33470 93E25
- e, Kenneth D. Machine independent Monte Carlo evaluation of the performance of dynamic stochastic systems. *Stochastics* **1** (1973/74), 215-238. (I. Văduva) **51** #11919 65C10
- etti, John T. (with Chaffin, Wilkie W.; Hinkelmann, Klaus) A procedure for optimal augmentation of multidimensional designs. *Comm. Statist.—Theory Methods* **A6** (1977), no. 7, 679-689. (U. B. Paik) **56** #9850 62K15
- ott, Linnea I. Extending point-finite covers. *General topology and its relations to modern analysis and algebra, III* (Proc. Third Prague Topological Sympos., 1971), pp. 93-398. *Academia, Prague*, 1972. (R. Hodel) **50** #5739 54D20
- (with Alò, Richard A.) Collectionwise normality and the extension of functions on product spaces. *Fund. Math.* **76** (1972), no. 3, 231-243. (V. J. Mancuso) **48** #1150 4C45 (54D15)
- Note on a problem of Katětov. *TOPO 72—general topology and its applications Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot*, pp. 436-442. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (M. Katětov) **51** #9025 54D20
- On extending continuous functions into a metrizable AE. *General Topology and Appl.* **8** (1978), no. 3, 219-228. (H. Wada) **58** #2700 54C45 (54C55, 55D05)
- Atsuro (with Fukunaga, Kunio; Kasai, Tamotsu) An algorithm for graph isomorphism. *Bull. Univ. Osaka Prefecture Ser. A* **26** (1977), no. 2, 61-74. (D. Ja. Kesel'man) **58** #10626 05C99 (68A10)
- Manabu (with Iwamoto, Kazutoshi; Sawada, Kiyoshi) Instability and oscillatory behavior of membrane-chemical reaction systems. *J. Theoret. Biol.* **72** (1978), no. 3, 77-588. (Uwe an der Heiden) **58** #9393 92A05
- A, P. S. (with Bartiš, M. Ja.) Methods of Runge type for solving nonlinear operator equations. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. SSR Ser. A* **1972**, 771-775, 859. (S. Fučík) **46** #8405 65H05 (47H15)
- (with Parasjuk, E. M.) A certain inverse problem for the logarithmic potential of a simple layer. (Ukrainian. Russian summary) *Visnik L'viv. Derz. Univ. Ser. Meh.-Mat.* **1974**, no. 9, 124-125, 139. (S. V. Temko) **53** #11074 31A25
- (with Bartiš, M. Ja.) The Runge method of third and fourth order convergence for the solution of nonlinear operator equations. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp.* **28** (1976), 85-93, 153. (Authors' summary) **57** #18071 65J05 (47H15)
- (with Bartiš, M. Ja.; Ščerbina, Ju. M.) An iteration-difference method for the solution of nonlinear operator equations. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp.* **29** (1976), 50-55, 152. (Authors' summary) **57** #18072 65J05
- Takatori (with Kajiri, Kenji; Uchinami, Seiichi; Tezuka, Yoshikazu) Methods of constructing weak precedence functions by postponement of error detection. *Systems-Computers-Controls* **7** (1976), no. 6, 19-26 (1977). (Miroslav Hladky) **58** #8469 68A10
- ev, L. V. See Cybernetics—in the service of Communism. **48** #10432
- ebova, E. Ja. A quasilinearization method for ordinary differential equations with deviating argument. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 2260-2263. (D. Bañnov) **47** #7179 34K10
- enac, Pierre (with Bourguignon, Jean-Pierre; Deschamps, A.) Conjecture de H. Hopf sur les produits de variétés. *Ann. Sci. École Norm. Sup. (4)* **5** (1972), 277-302. (N. J. Hicks) **49** #1420 53C20
- Calcul d'un invariant riemannien sur une variété compacte. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A917-A920. (A. P. Stone) **46** #9902 53C20
- (with Bourguignon, Jean-Pierre; Deschamps, A.) Quelques variations particulières d'un produit de métriques. *Ann. Sci. École Norm. Sup. (4)* **6** (1973), 1-16. (M. Klingmann) **49** #3762 53C20
- Senter, H. F. (with Dotson, W. G., Jr.) Approximating fixed points of nonexpansive mappings. *Proc. Amer. Math. Soc.* **44** (1974), 375-380. (Kok-keong Tan) **49** #11333 47H10
- Sentilles, F. Dennis Semigroups of operators in $C(S)$. *Canad. J. Math.* **22** (1970), 47-154. (From the author's introduction) **54** #1019 47D05
- Bounded continuous functions on a completely regular space. *Trans. Amer. Math. Soc.* **168** (1972), 311-336. (R. A. Raimi) **45** #4133 46E10 (54C35)
- (with Wheeler, Robert F.) Linear functionals and partitions of unity in $C_b(X)$. *Duke Math. J.* **41** (1974), 483-496. (Richard Haydon) **50** #10780 46E10
- ★ A bridge to advanced mathematics. *The Williams & Wilkins Co., Baltimore, Md.*, 1975. xiii+387 pp. (Editors) **51** #5 00A05
- (with Miller, Douglas R.) Translated renewal processes and the existence of a limiting distribution for the queue length of the $GI/G/s$ queue. *Ann. Probability* **3** (1975), no. 3, 424-439. (D. L. Iglehart) **53** #6789 60K25
- An L^1 -space for Boolean algebras and semireflexivity of $L^\infty(X, \Sigma, \mu)$. *Bull. Amer. Math. Soc.* **81** (1975), no. 6, 1096-1098. (R. A. Raimi) **52** #14958 46E10 (28A60)
- An L^1 -space for Boolean algebras and semireflexivity of spaces $L^\infty(X, \Sigma, \mu)$. *Trans. Amer. Math. Soc.* **226** (1977), 1-37. (Robert F. Wheeler) **55** #3774 46E30
- Sentis, Rémi Convergence de solutions d'équations différentielles multivoques. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 1623-1626. (F. S. Van Vleck) **50** #5073 34A99
- Équations différentielles à second membre mesurable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 2, A113-A116. (Guy Jumarie) **54** #13184 34A99 (34C35, 90D25)
- Sentlowitz, Michael (with Brett, William F.; Feldman, Emile B.) ★ An introduction to the history of mathematics, number theory and operations research. *MSS Information Corp., New York*, 1974. 165 pp. (J. Burlak) **50** #6746 01-01
- Sentman, Lee H. (with Karamcheti, Krishnamurty) Kinetic equations for a gas under the action of nonconservative forces. *J. Chem. Phys.* **48** (1968), 2181-2184. (A. Berroir) **47** #6246 82.45
- Sentoh, Keiko On simple groups of order $2^{23}p^c$ with a cyclic Sylow subgroup. *Natur. Sci. Rep. Ochanomizu Univ.* **27** (1976), no. 1, 11-18. (J. L. Alperin) **54** #5331 20D05
- Senturia, Jerome N. (with Puri, Prem S.) On a mathematical theory of quantal response assays. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. IV: Biology and health, pp. 231-247. *Univ. California Press, Berkeley, Calif.*, 1972. (Martin A. Hamilton) **53** #6960 62P10
- (with Puri, Prem S.) A semi-Markov storage model. *Advances in Appl. Probability* **5** (1973), 362-378. (M. L. Chaudhry) **49** #11670 60K30
- (with Puri, Prem S.) Further aspects of a semi-Markov storage model. *Sankhyā Ser. A* **36** (1974), no. 4, 369-378. (Peter Purdue) **52** #6920 60K30
- (with Puri, Prem S.) An infinite depth dam with Poisson input and Poisson release. *Scand. Actuar. J.* **1975**, no. 4, 193-202. (Emlyn Lloyd) **53** #4297 60K30
- (with Liu, Lon Mu) Computation of MINQUE variance component estimates. *J. Amer. Statist. Assoc.* **72** (1977), no. 360, part 1, 867-868. (C. R. Rao) **57** #10933 62J10
- Seo, Kenzo (with Alam, Khursheed; Thompson, James R.) A sequential sampling rule for selecting the most probable multinomial event. *Ann. Inst. Statist. Math.* **23** (1971), 365-374. (I. Guttman) **47** #2763 62L15
- Seo, Tae Kun (with Russell, William R.) Admissible sets of utility functions in expected utility maximization. *Econometrica* **46** (1978), no. 1, 181-184. (Jean-Louis Boursin) **57** #15314 90A10
- Seo, Tae Yeong (with Baik, Yong Bai) On C -conformal Killing tensor in a cosymplectic manifold. *Kyungpook Math. J.* **12** (1972), 171-178. (H. D. Pande) **46** #6224 53C15
- Sepe, Fabrizia Anelli presemplificabili ed a fattorizzazione unica. (English summary) *Rend. Mat. (6)* **7** (1974), 41-48. (P. Samuel) **50** #7112 13A05
- Šepelenko, V. N. The second fundamental problem of the plane theory of elasticity for a double orthotropic strip. (Russian) *Trudy Tomsk. Gos. Univ.* **163** (1963), 139-148. (J. L. Nowinski) **54** #4238 73.30
- Šepelev, G. I. (with Makarov, A. A.) Wigner function for hyperbolic rotation in the homogeneous Lorentz group. *Jadernaja Fiz.* **12** (1970), 1092-1095 (Russian); translated as *Soviet J. Nuclear Phys.* **12** (1971), 596-597. (Philip H. Butler) **50** #12022 81.22
- (with Smorodinskii, Ja. A.) Boost matrix elements in $O(3, 1)$ and continuation to $O(4)$. *Jadernaja Fiz.* **13** (1971), 441-453 (Russian); translated as *Soviet J. Nuclear Phys.* **13** (1971), 248-253. (N. Mukunda) **49** #8542 81.22
- (with Smorodinskii, Ja. A.) Matrix elements of the boost for the reduction $O(3, 1) \supset O(2, 1) \supset O(2)$. *Jadernaja Fiz.* **18** (1973), 934-943 (Russian); translated as *Soviet J. Nuclear Phys.* **18** (1974), 483-486. (J.-P. Antoine) **53** #7256 81.22
- Šepeleva, R. P. Sufficient conditions for the strong stability of a fourth order linear Hamiltonian equation with periodic coefficients. (Russian. English summary) *Vestnik Leningrad. Univ.* **1971**, no. 19, 70-74. (K. W. Chang) **46** #5774 34D99
- (with Jakubovič, V. A.) Critical frequencies of systems that are invariant with respect to inversion of time. (Russian. English summary) *Vestnik Leningrad. Univ.* **1972**, no. 7, 71-81. (N. Chafee) **45** #7186 34C15
- Critical frequencies of second order linear systems that are invariant with respect to reversal of time. (Russian. English summary) *Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Vyp.* **4** (1973), 65-72, 153. (C. Olech) **49** #751 34D10
- (with Jakubovič, V. A.) Critical frequencies of parametric resonance in the class of fractionally periodic equations that are invariant with respect to time reversal. (Russian. English summary) *Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp.* **3** (1974), 64-73, 156. (C. E. Langenhop) **50** #7699 34D10
- (with Jakubovič, V. A.) Critical frequencies of canonical fractional-periodic equations. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 3, 612-622, 646. (Š. Schwabik) **54** #10755 34C15

- Šepeljavi, A. I. (with Andreev, V. A.) Synthesis of optimal controls for discrete systems in the problem of minimizing a quadratic functional. (Russian. English and German summaries) *Elektron. Informatsionverarbeit. Kibernetik* 8 (1972), 549-567. (H. Benker (Zbl 265 #49012)) 50 #16023 93C55
- (with Andreev, V. A.) Synthesis of optimal controls for pulse-amplitude systems in the problem of minimizing functionals of quadratic type. (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 6(168), 225-226. (I. Muntean) 52 #15169 49A30
- Frequency criteria for absolute stability and instability of pulsewidth control systems. (Russian. English summary) *Vestnik Leningrad. Univ. Mat. Meth. Astronom.* No. 13 Vyp. 3 (1972), 77-85, 151. (Authors' summary) 54 #7066 93D99
- (with Andreev, V. A.) Synthesis of optimal controls for amplitude-pulse systems in the problem of minimizing the mean value of a functional of quadratic type. (Russian) *Sibirsk. Mat. Ž.* 14 (1973), 250-276, 460. (J. M. Skowroński) 48 #7090 49E30
- Šepel'kova, L. V. (with Haritonov, B. S.; Suhanov, G. B.) ★Комбинаторные задачи в вычислительной технике. (Russian) [Combinatorial problems in computer science] *Izdat. "Ilim", Frunze*, 1973, 51 pp. (errata insert) (I. Văduva) 50 #15431 68A15
- Šeper, Kajetan See **Mathematics and philosophy**, 58 #21414
- Šepilov, M. A. On the problem of designing irrigated beds. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1968, no. 8, 5-9. (Ll. G. Chambers) 53 #9870 76.49 (86.49)
- A method of solving linear and convex programming problems. (Russian) *Vladimir. Gos. Ped. Inst. Učen. Zap.* 38 (1971), 250-260. (S. Zlobec) 45 #4835 90C25
- An iterative method of solution of a linear programming problem. (Russian) *Vladimir. Gos. Ped. Inst. Učen. Zap.* 38 (1971), 261-279. (S. Zlobec) 45 #4818 90C05
- Continuous analogues of the penalty method for a convex programming problem. (Russian) *Èkonom. i Mat. Metody* 11 (1975), no. 1, 130-140. (RŽMat 1975 #7 V600) 57 #13649 49D45
- The generalized gradient method for convex programming problems. (Russian) *Èkonom. i Mat. Metody* 11 (1975), no. 4, 743-747. (RŽMat 1976 #2 V761) 57 #11756 90C25
- A generalized gradient method for finding the absolute minimum of a convex function. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 4, 52-57. (Author's summary) 56 #13639 65K05
- The generalized gradient method for extremal problems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 1, 242-247, 279. (A. B. Pevnyi) 53 #15367 90C25 (49D45)
- Šepkin, A. V. (with Kondrat'ev, V. V.; Nuriev, F. S.) An analysis of equilibrium situations in an active system for the load problem. (Russian) *Active systems, No. 2 (Russian)*, pp. 63-72, 126. *Inst. Problem Upravleniya, Moscow*, 1974. (A. I. Subbotin) 57 #5019 90A15 (90D40)
- Šepli, L. See **Shapley, L. S.**
- Seppälä, Veikko A Banach space exponential function concept. (Italian summary) *Rend. Mat.* (6) 4 (1971), 191-212. (J. V. Ryff) 47 #2456 47H99 (47D05)
- A note on the theory of limit processes for solving finite equations. *Numer. Math.* 20 (1972/73), 80-86. (J. Hurt) 47 #6086 65J05 (65H10)
- Solution of a family of initial condition problems in terms of the Banach space exponential function. *Rend. Mat.* (6) 5 (1972), 329-348. (From the summary) 49 #10989 34G05
- Some identities in the theory of the exponential function with applications. *Rend. Mat.* (6) 6 (1973), 595-606 (1974). (J. V. Ryff) 52 #1298 46G05 (47H99)
- Seppälä, Yrjö Constructing sets of uniformly tighter linear approximations for a chance constraint. *Management Sci.* 17 (1970/71), 736-749. (T. V. Avadhani) 47 #4641 90C15
- A chance-constrained programming algorithm. *Nordisk Tidskr. Informationsbehandling (BIT)* 12 (1972), 376-399. (A. Majthay) 48 #10499 90C15
- A stochastic multigoal investment model for the public sector. *Progress in operations research, Vols. I, II (Proc. Sixth Hungarian Conf., Eger, 1974)*, pp. 845-863. *Colloq. Math. Soc. János Bolyai, Vol. 12, North-Holland, Amsterdam*, 1976. (Prasanta K. Pattanaik) 55 #9833 90A05
- Šeptickaja, T. A. (with Klimov, N. I.; Pil'tjač, G. Z.) An estimate of the absolute constant in the Goldbach-Snirel'man problem. (Russian) *Studies in number theory, No. 4 (Russian)*, pp. 35-51. *Izdat. Saratov. Univ., Saratov*, 1972. (M. I. Israilov) 54 #2607 10J15
- de Sepulveda, Silvia See **Kuroš, A. G.**, 55 #5602
- Sequeira, Fernando M. An introduction to the theory of distributions. (Portuguese) *Gaz. Mat. (Lisboa)* 32 (1971), no. 121-124, 31-42. (C. P. Gupta) 49 #5821 46F05
- An introduction to the theory of distributions. II. (Portuguese) *Gaz. Mat. (Lisboa)* 33 (1972), no. 125-128, 25-36. (Editors) 58 #30166 46Fxx
- Quelques propriétés des espaces à bornés. *Portugal. Math.* 34 (1975), no. 1-2, 69-89. (H. Hogbe-Nlend) 52 #11521 46A09
- Šer, A. P. Construction of a system of Walsh functions. (Russian) *Uniform approximations and the moment problem (Russian)*, pp. 136-146, 151. *Dal'nevostočn. Naučn. Centr. Akad. Nauk SSSR, Vladivostok*, 1977. (Author's summary) 58 #29800 42A56
- Šér, E. N. The dynamics of a rectilinear isolated cut that grows at a constant rate under conditions of antiplane deformation. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* 1977, no. 4, 166-177, 193. (From the introduction) 57 #18390 73.35
- Sera, Toyoshi Pattern recognition by the codes of 3×3 elements with Karhunen-Löve orthogonal system. *Information Processing in Japan* 12 (1972), 106-112. (K. S. Fu) 47 #9914 68A45
- Serafimov, L. A. (with Genkin, G. G.; Gluzman, S. S.) Stabilization of a certain class of chemical engineering schemes. (Russian) *Dokl. Akad. Nauk SSSR* 226 (1976), no. 1, 147-150. (G. N. Mil'shtein) 52 #16784 93D15
- Serafin, B. (with Kiselewicz, Michał; Sosulski, W.) Existence theorem for functional-differential equation with compact convex valued solutions. *Demonstratio Math.* 9 (1976), no. 2, 229-237. (Hans-Otto Walther) 53 #11189 34K05
- Serafin, R. On some class of locally convex spaces connected with Saks spaces and two-norm spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 1121-1127. (Alan Shuchat) 56 #6326 46A05
- Serafin, Richard (with Shanks, Daniel) Quadratic fields with four invariants divisible by 3. *Math. Comp.* 27 (1973), 183-187. (Harvey Cohn) 48 #8436a (E 48 #8436b) 12A25 (12A50)
- See also **Shanks, Daniel**, 48 #8436b
- Serafin, Stanisław The rectifiability of curves by tangents. (Polish. English and Russian summaries) *Wyż. Szkół. Ped. Krakow. Rocznik Nauk.-Dydakt. No. 13 Prace Mat.* 39-65. (J. Mařík) 46 #5552 26A63
- On peakless functions. *Wyż. Szkół. Ped. Krakow. Rocznik Nauk.-Dydakt. No. 13 Prace Mat. Zeszyt 7* (1974), 157-160. (V. Ganapathy Iyer) 50 #2420 26A48
- Serafini, Paolo (with Pascoletti, Adriano; Schmitendorf, William E.) Comments on: "Cooperative games and vector-valued criteria problems" (IEEE Trans. Automat. Control AC-18 (1973), no. 2, 139-144) by W. E. Schmitendorf. With a reply by author. *IEEE Trans. Automatic Control* AC-21 (1976), no. 5, 806-808. (Allen Kl) 55 #7436 90D12 (90C99, 90A99)
- Serafin-Kołodziejczyk, Ewa (with Małek, Karol; Sawicki, Tadeusz; Szczepankiewicz, Eugeniusz) Sampling in the case of some particular random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* 14 Zastos. Mat. (1976), (Editors) 55 #6544c 60G10 (62M99)
- Seraji, H. (with Fallside, F.) Design of optimal multivariable systems by a frequency-domain technique. *Electron. Lett.* 7 (1971), 64-65. (Authors' summary) 47 #8154 93B35
- On pole-shifting using output feedback. *Internat. J. Control* 20 (1974), 721-726. (Author's summary) 52 #10120 93B05 (93C15)
- Deadbeat control of discrete-time systems using output feedback. *Internat. J. Control* 21 (1975), 213-223. (Edward J. Davison) 52 #2677 93C55
- Cyclicity of linear multivariable systems. *Internat. J. Control* 21 (1975), 497-507. (Ljubomir Lilov) 51 #2720 93D99
- (with Fallside, F.; Patel, R. V.) Review of a pole-zero assignment design method for linear multivariable systems. *Control system design by pole-zero assignment (Papers, Working Party, Cambridge University, 1974)*, pp. 43-50. *Academic Press, London*, 1977. (From the introduction) 58 #26276 93B99
- On output feedback control of linear multivariable systems. *Control system design by pole-zero assignment (Papers, Working Party, Cambridge Univ., Cambridge, 1974)*, pp. 196-210. *Academic Press, London*, 1977. (From the summary) 58 #26403 93B99
- (with Tarokh, M.) Proportional-plus-multiple derivative output feedback. A multivariable controller for pole placement. *Internat. J. Control* 25 (1977), 293-302. (S. P. Bhattacharyya) 58 #26348 93C45
- (with Tarokh, M.) Design of PID controllers for multivariable systems. *Internat. J. Control* 26 (1977), no. 1, 75-83. (S. P. Bhattacharyya) 57 #5247 93B25
- Comments on: "Pole assignment in linear systems with structurally constrained dynamic compensators" (Internat. J. Control 24 (1976), no. 6, 843-851) by R. Ahlberg. *Internat. J. Control* 26 (1977), no. 5, 819-820. (Editors) 57 #9225 93D15
- (with Patel, R. V.) A note on pole placement using dynamic compensators. *Internat. J. Control* 27 (1978), no. 4, 653-655. (S. P. Bhattacharyya) 58 #93B99
- Serant, D. An application of kinship process to the gene frequencies: linkage disequilibrium due to random drift in Mendelian genetics with reversible mutation in molecular genetics. *Theoret. Population Biology* 9 (1976), no. 1, 1-11. (Susan W) 56 #14822 92A10
- Šerb, Ioan (with Cimoca, Gh.) On a generalization of the notion of convex function. (Romanian. French summary) *Rev. Anal. Numer. Teoria Aproximației* 2 (1973), 131-136. (E. F. Beckenbach) 52 #10975 26A51
- Note concerning the divisors of the values of homogeneous arithmetic functions. (Romanian. French summary) *Rev. Anal. Numer. Teoria Aproximației* 3 (1974), 209-213 (1975). (H. J. Godwin) 52 #263 10B25
- Critères pour la convexité d'ordre n des fonctions. *Rev. Anal. Numér. Teoria Aproximației* 5 (1976), no. 1, 97-111 (1977). (Peter Bullen) 57 #16503 26A51
- Šerbač, A. I. (with Zadaeva, N. G.) Convergence of difference schemes for a system of second order nonlinear nonstationary equations. (Russian) *Dokl. Akad. Nauk BSSR* (1977), no. 12, 1064-1066, 1147. (Russell C. Thompson) 58 #8335 65N10
- Šerban, Doina See **Serban-Tofan, Doina**
- Šerban, R. (with Fabian, Cs.) A comparative study of "cutting plane" methods in nonlinear mathematical programming. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* 1977, no. 2, 43-53. (J. Parida) 56 #1790C30
- (with Dumitru, Vinčențiu; Moga, Sigrid) Numerical results on convergence of Kaplan penalty function in the SUMT method. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* 1977, no. 4, 53-67. (Marco Ga) 58 #3438 65K05
- See also **Dumitru, Vinčențiu**, 55 #14213
- Šerban-Tofan, Doina On some linear operators in ordered linear spaces. (Romanian. French summary) *Stud. Cerc. Mat.* 25 (1973), 1261-1264. (Ana Istrățescu) 50 #247B55
- On the integral representation of certain bounded linear operators. (Romanian. French summary) *An. Univ. Craiova Ser. A V-a No. 2*, 109-113 (1974). (R. Cristescu) 54 #8344 47B37
- On certain linear operators on spaces of vector sequences. (Romanian. French summary) *Stud. Cerc. Mat.* 26 (1974), 123-127. (R. C. Buck) 50 #8002 (E 48 #46A45)
- Bilinear operators on vector sequence spaces. (Romanian. French summary) *Cerc. Mat.* 26 (1974), 1159-1163. (R. Cristescu) 51 #1448 47A55 (46A40)
- Serbin, A. I. Permutation of the order of integration in an iterated integral with the Martinelli-Bochner kernel. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, 12(139), 64-72. (I. I. Bavrin) 49 #7475 32A25
- Conditions for the representation of functions by the Martinelli-Bochner integral. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 6(157), 136-142. (Guy L) 52 #11098 32A25
- Serbin, Hyman The operational calculus of Heaviside. *J. Inst. Math. Appl.* 11 (1975), 131-143. (R. S. Dahiya) 48 #11946 44A45
- Serbin, Steven M. A high-order method for the approximate identification of the matrix of a linear differential system. *J. Math. Anal. Appl.* 50 (1975), 607-613. (Abbas I. Karim) 51 #7661 93B30 (65L99)
- Computational investigations of least-squares type methods for the approximation of

- lution of boundary value problems. *Math. Comp.* **29** (1975), 777-793. (J. W. McLaurin) **52** #12363 65N30
- (with King, J. Thomas) Boundary flux estimates for elliptic problems by the perturbed variational method. (German summary) *Computing* **16** (1976), no. 4, 339-347. (Aganović) **54** #6524 65N99
- Accurate approximation of time-varying matrices of linear differential systems. *J. Math. Anal. Appl.* **57** (1977), no. 1, 27-35. (Arid Thowsen) **55** #7494 93B30 55D15
- na, A. I. The ruled surface of two projective brushes. (Russian) *Čečeno-Inguš. Gos. Ped. Inst. Učen. Zap.* **29** (1970), Ser. Fiz. Mat. no. 8, 3-6. (RŽMat **1971** #1 A549) **8** #30708 50B05
- (with Brykov, A. I.) Inversion on the dual plane, and its application. (Russian) *Mapping methods (Russian)*, pp. 3-13. *Čečeno-Inguš. Gos. Univ., Groznyi*, 1976. (W. Valiszewski) **58** #7435 53A40
- See also *Methods of the theory of analytic functions*, (Not reviewed)
- skii, E. V. Description of H -convex sets for a subspace of H that is spanned by a Chebyshev system. (Russian) *Application of functional analysis in approximation theory, No. 2 (Russian)*, pp. 110-115. Kalinin. Gos. Univ., Kalinin, 1974. (Editors) **58** #30102 46E15 (41A65, 90C99)
- A description of the H -convex sets that can be determined by a hyperplane. (Russian) *Application of functional analysis in approximation theory, No. 2 (Russian)*, pp. 112-120. Kalinin. Gos. Univ., Kalinin, 1974. (Author's introduction) **57** #13694 52A05
- Some properties of H -convex sets. (Russian) *Application of functional analysis in approximation theory (Russian)*, pp. 125-132, 156. Kalinin. Gos. Univ., Kalinin, 1977. (Author's summary) **58** #29691 41A50
- u, Mihaela (with Gheorghe, Florin-Christian; Obreja, George) The use of Markov chains in the exact evaluation of the O.C. and A.S.N. functions for a sequential sampling plan. (Romanian. English summary) *Stud. Cerc. Mat.* **27** (1975), no. 3, 303-312. (Harry I. Cohn) **54** #11681 62L10
- aroglu, M. (with Gürsey, Feza) Nonlinear realizations of broken $SU_3 \times SU_3$ for pseudoscalar mesons. (Italian and Russian summaries) *Nuovo Cimento A* (11) **7** (1972), 584-604. (M. Drăganu) **47** #6210 81.22
- (with Öngüt, G.) Two-parameter static and five-parameter stationary solutions of the Einstein-Maxwell equations. (Italian and Russian summaries) *Nuovo Cimento B* (11) **27** (1975), 213-228. (W. B. Bonnor) **51** #9731 83.35
- uckaja, L. F. A fixed point theorem for sequences of operators in a Banach space. (Russian) *A study of some projection-iterative methods for the solution of operator equations (Russian)*, pp. 39-45. *Akad. Nauk Ukrain. SSR Inst. Mat., Kiev*, 1977. (B. T. Poljak) **58** #7240 47H10
- juk, G. I. See *Theory of languages and methods of construction of programming systems*, **48** #7682
- juk, G. P. Functions of differential operators with variable coefficients in spaces of type S . (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 20 (1974), 141-149, 176. (Z. Zieležny) **52** #14989 46F10 (47F05)
- The Cauchy problem for systems of linear differential equations with variable coefficients. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp.* **22** (1975), 129-136, 163. (Z. Zieležny) **53** #11207 35G10
- juk, V. P. (with Bakan, L. A.) Reducing the order of the differential equation in studying transient processes in mechanical systems. *Avtomatika* **1972**, no. 5, 3-14, 92 (Ukrainian); translated as *Soviet Automat. Control* **5** (1972), no. 5, 1-11. (Kimio Kanai) **53** #15471 93C15
- jukov, A. I. The problem of determining the minimal Euler multigraph of a connected graph with weighted edges. (Russian) *Upravljajemye Sistemy* No. 12 (1974), 61-67, 88. (See RŽMat **1974** #9 V448) 05C35
- The covering problem. (Russian) *Optimal processes (Proc. Third All-Union Conf. Problems of Theoretical Cybernetics, Novosibirsk, 1974)*. *Upravljajemye Sistemy Vyp.* **14** (1975), 52-58, 76. (W. Dörfler) **57** #16145 05C99 (90B35)
- Euler contours on mixed graphs. (Russian) *Diskret. Analiz* No. 29 *Metody Diskret. Anal. v Teorii Kodov i Shem* (1976), 61-67, 102. (Author's summary) **58** #21821 05C35
- Reciprocal reducibility of some extremal problems in graph theory. (Russian) *Upravljajemye Sistemy* No. 15 *Diskret. Ėkstreml. Zadači* (1976), 68-73, 82. (A. N. Melihov) **58** #16404 05C35 (68A20)
- jukov, V. A. (with Serdjukova, L. E.) A certain method of identification of objects. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1971**, no. 11, 1176-1184. (B. Popović) **45** #8327 93B30
- Synthesis of adaptive systems by Lyapunov's direct method. *Avtomat. i Telemekh.* **1972**, no. 7, 85-92 (Russian. English summary); translated as *Automat. Remote Control* **33** (1972), no. 7, part 1, 1138-1144. (Author's summary) **56** #11264 93C40
- jukova, L. E. (with Serdjukov, V. A.) A certain method of identification of objects. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1971**, no. 11, 1176-1184. (B. Popović) **45** #8327 93B30
- jukova, N. L. See *Berman, G. N.*, **57** #5526
- jukova, S. I. The stability of the first boundary value problem in the presence of spectrum points on the unit circle. (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), 39-42. (A. Haimovici) **45** #1401 65N10 (35B35)
- A necessary and sufficient condition for the stability of a certain class of difference boundary value problems. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 52-55. (C. Illoiu) **47** #3868 39A10 (47B45, 65Q05)
- The stability of difference boundary value problems with two boundaries. (Russian) *Dokl. Akad. Nauk SSSR* **215** (1974), 282-285. (Murlu M. Gupta) **49** #4282 65Q05
- An example of a difference boundary value problem with instability of logarithmic type. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 250-253, 271. (R. Kodnár) **49** #4283 65Q05 (39A10)
- The stability of difference boundary value problems with oblique characteristics of constant sign. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 5, 1333-1339, 1363. (J. Miklíček) **52** #16070 65Q05 (39A10)
- The stability of boundary value problems for systems of difference equations of varying structure. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 3, 690-695, 804. (Author's summary) **58** #13769 65N20
- Asymptotic stability of a difference boundary value problem. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 3, 653-659, 812. (Editors) **58** #19210 65N20 (35K10)
- Serdobol'skii, V. I. (with Turčin, V. F.) The language REFAL and its use for transformation of algebraic expressions. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 3, 58-62. (Authors' summary) **46** #1148 68A30
- The statistical principle explaining the mechanism of nervous regulation. *Progress in cybernetics and systems research (Second European Meeting, Vienna, 1974), Vol. I: General systems, engineering systems, biocybernetics and neural systems*, pp. 342-348. *Hemisphere, Washington, D.C.*, 1975. (Uwe an der Heiden) **56** #17900 92A05
- Serdy, A. G. (with Hall, Charles A.; Luczak, R. W.) Numerical solution of steady state heat flow problems over curved domains. *ACM Trans. Math. Software* **2** (1976), no. 3, 257-274. (Stephen Hilbert) **54** #4135 65N10
- Serdyuk, V. P. See *Serdjuk, V. P.*
- Serdyukov, V. A. See *Serdjukov, V. A.*
- Serebchakov, V. A. See *Theory of languages and methods of construction of programming systems*, **48** #7682
- Serebrennikov, V. B. (with Šabad, A. E.) $SU(3)$ as a group of broken symmetry in the problems with arbitrary central dynamics. *Internat. J. Theoret. Phys.* **15** (1976), no. 10, 745-754. (Pierre Hillion) **56** #1995 81.22
- (with Šabad, A. E.) Group-induced quantization in central problems in mechanics. *Internat. J. Theoret. Phys.* **16** (1977), no. 7, 517-531. (A. H. Klotz) **58** #14523 81.22
- Serebrjakov, V. P. (with Gurskii, V. F.) Interpolation algorithms for determining the extremum of a symmetric function. (Russian) *Moskov. Aviacion. Inst. Ordžonikidze Trudy* No. 229 *Grafika i Prikl. Geometrija Poverhnosti VII* (1971), 90-99. (H. Zegeling) **50** #11737 65D99
- Serebrjakova, I. V. The classification of mixed difference equations. (Russian. English summary) *Trudy Sem. Teor. Differencial. Uravnenii s Otklon. Argumentom Univ. Družby Narodov Patrisa Lumumby* **8** (1972), 177-186. (A. Halanay) **49** #3292 34K99 (39A10)
- When and how differential equations with deviating argument made their appearance. (Russian. English summary) *Trudy Sem. Teor. Differencial. Uravnenii s Otklon. Argumentom Univ. Družby Narodov Patrisa Lumumby* **9** (1975), 3-30. (J. S. Joel) **58** #15932 01A50 (34-03)
- Serebrjakova, V. S. Conditions for the existence of circular motions of n -connected Foude pendulums of different mass. (Russian) *Ural. Politehn. Inst. Sb. No. 211 Differencial'nye Uravnenija i Teorija Uprugosti* (1973), 5-12, 120. (I. Muntean) **49** #732 34C15
- Serebrjannikov, O. F. ★ Heuristic principles and logical calculi. Edited by B. V. Biryukov. Translated from the Russian by D. Louvish. *Israel Program for Scientific Translations, Jerusalem*, 1972. iii + 182 pp. ISBN 0-7065-1277-4 (From the introduction) **58** #16186 02C99
- See also *Šupecki, Jerzy*; et al., (Not reviewed)
- Serebrjani, A. I. The automatic choice of an output criterion (the calculation of probability values of dependent symbols). (Russian. English and German summaries) *Naučn.-Tehn. Informacija (VINITI) Ser. 2. Informacionnye Processy i Sistemy* **1976**, no. 8, 7-14, 39-40. (Witold Lipski) **55** #11759 68A50
- Serebrjani, A. Z. (with Feigin, L. I.) Certain models of planning computer tasks. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Drobovych, 1974)*. *Convex programming (Russian)*, pp. 86-93. *Central. Ėkonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1976. (A. A. Pervozvanskiĭ) **56** #14650 90B35
- Serebrovskii, A. P. Concerning the regularization of a discrete Kalman filter. *Avtomat. i Telemekh.* **1975**, no. 3, 70-74 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 3, part 1, 413-418. (Author's summary) **56** #15058 93E10
- Serebrjannikov, O. F. See *Serebrjannikov, O. F.*
- Sereda, Ju. F. (with Logvinenko, V. N.) Equivalent norms in spaces of entire functions of exponential type. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp.* **20** (1974), 102-111, 175. (B. S. Mitjagin) **57** #17232 46E10 (32A15)
- Sereda, L. N. (with Oleško, A. Ja.) A certain problem of optimal inventory control. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 1, 134-136. (K. Zimmermann) **46** #1295 90B05
- Sereda, P. P. (with Verbitskii, I. Ė.) The norm of the complex extension of an operator. (Russian) *Mat. Issled.* **10** (1975), no. 3(37), 201-206, 245. (I. K. Marek) **54** #5864 47A30
- Sereda, V. A. The coincidence of nil-radicals in a certain class of alternative rings. (Russian) *Some questions on the theory of groups and rings (Russian)*, pp. 160-172, 177. *Inst. Fiz. im. Kirenskogo Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1973. (Author's summary) **58** #28112 17D05
- Seredenko, V. N. (with Grišin, V. A.) Numerical realization of variational methods for nonlinear problems of calculating plates that lie on a deformable foundation. (Russian) *Numerical analysis and questions of optimization of computations (Russian)*, pp. 52-73. *Inst. Kibernet., Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Editors) **58** #32296 73.65 (65P05)
- (with Grišin, V. A.) A study by a modified Ritz method of nonlinear problems on the calculation of a plate that lies on a deformable base. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev) Vyp.* **32** (1977), 79-88, 159. (Authors' summary) **58** #12632 49D15 (65N30)
- Seredjuko, Z. L. (with Lenjuk, M. P.) Generalized temperature fields in a spherical cone. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 5, 405-409, 481. (G. W. Hedstrom) **56** #12671 35Q99 (35C99)
- (with Lenjuk, M. P.) Temperature fields in complex unbounded cones. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 1, 9-14, 93. (V. P. Milant'ev) **58** #8839 80.35
- Šeremeta, M. M. Asymptotic behavior of functions of Mittag-Leffler type and their application. I, II. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 10* (1970), 97-111; *ibid.* No. 11 (1970), 41-54. (I. N. Baker) **45** #7065 30A70
- Gap power series of entire functions. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1971**, 894-898, 957. (K. W. Lucas) **45** #8842 30A64
- (with Gol'dberg, A. A.) The fixed points of entire functions. (Ukrainian. Russian

- summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1971**, no. 6, 5-8, 133. (W. K. Hayman) **46** #9349 30A66
- Lacunary power series of functions analytic in the disk. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1971**, no. 6, 28-36, 134. (R. P. Boas, Jr.) **46** #7509 30A64
- The coefficients of the power series expansion of entire functions. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 16* (1972), 41-44, 216. (I. N. Baker) **48** #8789 30A62
- A certain inequality for entire functions. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 121-125. (Peter Russev) **46** #2059 30A66
- The coefficients of the power series expansion of entire functions. II. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 17* (1973), 64-71, 243. (I. N. Baker) **48** #6418 30A66
- The membership of entire characteristic functions of probability laws in the convergence class. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukraïn. RSR Ser. A* **1975**, no. 8, 696-699, 764. (R. Cuppens) **54** #14042 60E05
- (with P'janylo, Ja. D.) The growth of entire functions that are represented by Dirichlet series. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 10(161), 91-93. (Shlomo Strelitz) **55** #10683 30A64
- A certain property of entire functions with real Taylor coefficients. (Russian) *Mat. Zametki* **18** (1975), no. 3, 395-402. (Peter Russev) **53** #3306 30A66
- (with Vinnickiĭ, B. V.) Asymptotic behavior of the coefficients of Dirichlet series that represent entire functions. (Russian) *Ukrain. Mat. Ž.* **27** (1975), 147-157, 284. (C. Tanaka) **51** #5927 30A64
- The k -logarithmic density of a sequence and its application to entire functions. I. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 25* (1976), 131-142, iv. (G. Halász) **56** #8850a 30A66
- The k -logarithmic density of a sequence, and its application to entire functions. II. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 25* (1976), 142-156, iv. (G. Halász) **56** #8850b 30A66
- The growth in an angle of entire functions that are defined by lacunary power series. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 3, 558-560. (I. N. Baker) **56** #15922 30A64
- Coefficient quasidensity of entire functions that have defect values. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 9 (184), 100-106. (I. N. Baker) **57** #3389 30A70 (30A66)
- (with Vinnickiĭ, B. V.) The coefficients of a Dirichlet series that defines an entire function. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 2, 232-237, 286. (Shlomo Strelitz) **55** #10684 30A64
- Entire functions that are represented by Dirichlet series. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1978**, no. 3(190), 90-98. (N. V. Rao) **58** #11401 30A64
- Šeremet'ev, M. P. See **Obituary: Šeremet'ev, M. P.**, **52** #13265
- Serena, Luigi Su una classe di gruppi finiti non risolubili che ammettono sottogruppi di Carter. *Matematiche (Catania)* **27** (1972), 373-382 (1973). (G. E. Wall) **49** #2931 20D25
- Remarks on functors in Lie algebras. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **60** (1976), no. 5, 557-563. (W. T. van Est) **58** #5811 17B40 (17B99)
- (with Gilotti, Anna Luisa) p -iniettori nei gruppi finiti p -risolubili. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **62** (1977), no. 4, 423-427. (F. Napolitani) **58** #22277 20D10
- Serenesi, E. (with Lieberman, David I.) Semicontinuity of Kodaira dimension. *Bull. Amer. Math. Soc.* **81** (1975), 459-460. (H. Kerner) **51** #8481 32J25 (14C30, 32G99)
- Serensen, S. V. See **Continuum mechanics and related problems of analysis**, **50** #6714
- Sereny, Aron (with Chu, C. K.) Boundary conditions in finite difference fluid dynamic codes. *J. Computational Phys.* **15** (1974), 476-491. (David F. Griffiths) **50** #1636 (E 51 #12134) 76G5
- See also **Sundström, Arne**, **51** #12134
- Šerer, K. See **Scherer, K.**
- Šereshevskii, I. A. (with Antonec, M. A.; Žislin, G. M.) Discrete spectrum of the Hamiltonian of a quantum n -particle system. (Russian. English summary) *Teoret. Mat. Fiz.* **16** (1973), no. 2, 235-246. (Authors' summary) **58** #14635 81A7
- (with Antonec, M. A.; Žislin, G. M.) Reduction in the study of the discrete spectrum of many-particle Hamiltonians. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 4, 761-764. (J. Wiesner) **52** #4884 81A7
- (with Antonec, M. A.; Žislin, G. M.) The infiniteness of the discrete spectrum of the energy operator of an n -particle system. (Russian) *Mat. Sb. (N.S.)* **99(141)** (1976), no. 1, 34-48, 135. (Woodford W. Zachary) **53** #12329 81A7
- (with Antonec, M. A.) Certain spaces of differentiable functions. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 2, 28-36. (J. Albrycht) **54** #916 46E35
- Quantization on infinite-dimensional Hermitian symmetric spaces. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1977**, no. 4, 28-36. (A. Morimoto) **57** #16718 32M15 (22E70, 58F05)
- See also **Jörgens, Konrad; et al.**, **58** #29409
- alavi-Sereshtki, M. M. See **Alavi-Sereshtki, M. M.**
- Seretov, V. G. (with Fominyh, Ju. F.) An application of quasiconformal mappings to the approximate construction of a conformal mapping. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 218* (1969), 77-81. (G. K. Kiremidjian) **46** #2024 30A30 (30A60)
- Variational formulae for quasiconformal mappings. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 218* (1969), 82-89. (G. K. Kiremidjian) **46** #2050 30A60
- Submanifolds in a Teichmüller space. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 218* (1969), 90-98. (G. K. Kiremidjian) **46** #2051 30A60
- Remarks on the structure of the Riemann period matrix. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 218* (1969), 99-103. (G. K. Kiremidjian) **46** #2035 30A46
- (with Dumkin, V. V.) A certain general extremal problem for quasiconformal mappings. (Russian) *Metric questions of the theory of functions and mappings*, No. 3 (Proc. Second Colloq. Theory of Quasiconformal Mappings and its Generalizations, dedicated to M. A. Lavrent'ev's seventieth birthday, Donetsk, 1970) (Russian), pp. 40-45. Izdat. "Naukova Dumka", Kiev, 1971. (R. Kühnau) **49** #9199 30A60
- Functionals of Dirichlet type, and harmonic quasiconformal mappings. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 808-810. (E. Reich) **48** #11494 30A60
- (with Dumkin, V. V.) A certain extremal property of Schottky-Ahlfors quasiconformal mappings. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 271* (1973), 56-62. (Apanasov) **54** #2952 30A52
- Certain extremal problems for quasiconformal mappings. (Russian) *Metric questions of the theory of functions and mappings*, No. V (Russian), pp. 164-171. "Naukova Dumka", Kiev, 1974. (I. A. Volynec) **52** #14285 30A60
- The Dirichlet principle, and extremal quasiconformal mappings of open Riemann surfaces. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1974), 558-560. (P. M. Tamarkin) **53** #8496 32G15 (30A60)
- Harmonic mappings, and univalent functions. (Russian) *Mathematical Notes*, No. 2. *Kuban. Gos. Univ. Nauchn. Trudy Vyp.* **180** (1974), 143-153, 166-167. (Kuz'mina) **55** #12911 30A60
- Uniqueness of extremal quasiconformal mappings of Teichmüller type. (Russian) *Mat. Zametki* **16** (1974), 213-220. (P. Caraman) **51** #5926 30A60
- Extremal quasiconformal mappings with a given boundary correspondence. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 4, 942-952, 957. (N. V. Rao) **58** #11402 30A60
- Serežkin, V. N. Reflection groups over a finite field of characteristic $p > 5$. (Russian) *Akad. Nauk SSSR* **227** (1976), no. 3, 574-575. (J. C. Fisher) **53** #13432 (E 57 #20G40)
- (with Zaleskii, A. E.) Linear groups generated by transvections. (Russian) *Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 1, 26-49, 221. (V. D. Mazurov) **54** #20G15
- Correction: "Reflection groups over a finite field of characteristic $p > 5$ " (Russian) *Akad. Nauk SSSR* **227** (1976), no. 3, 574-575. (Russian) *Dokl. Akad. Nauk SSSR* (1977), no. 3, 504. **57** #6223 20H15
- (with Zaleskii, A. E.) Linear groups that are generated by pseudoreflections. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 5, 9-16, 137. (Popov) **58** #16901 20G15 (10D20)
- Serfaty, Michel Sur les algèbres de Post libres. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1978), A611-A612. (I. Petrescu) **48** #10947 08A10 (02J05)
- Sur les polynômes postiens. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A677-A679. (I. Petrescu) **48** #10954 08A25
- Une méthode de résolution des équations postiennes à partir d'une solution particulière. *Discrete Math.* **17** (1977), no. 2, 187-189. (R. Cignoli) **56** #5286
- Serfling, R. J. Point processes for traffic flow. (French summary) Proceedings of the Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 2. *Inst. Internat. Statist.* **44** (1971), no. 2, 355-360. (Mark Brown) **52** #6921 60K05
- (with Grams, William F.) Convergence rates for U -statistics and related statistics. *Ann. Statist.* **1** (1973), 153-160. (G. E. Noether) **49** #1561 60F05 (62E20)
- Research in point processes, with applications in reliability and biometry. *Reliability and biometry: statistical analysis of lifelength* (Proc. Conf., Florida State Tallahassee, Fla., 1973), pp. 109-127. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, (R. V. Ambarcumjian) **50** #8693 (EA 51) 60G55 (62N05)
- Probability inequalities for the sum in sampling without replacement. *Ann. Statist.* (1974), 39-48. (B. Raja Rao) **54** #8976 62G10 (62D05)
- A general Poisson approximation theorem. *Ann. Probability* **3** (1975), no. 4, 726-731. (M. Iosifescu) **52** #1843 60F05
- (with Wackerly, Dennis D.) Asymptotic theory of sequential fixed-width confidence interval procedures. *J. Amer. Statist. Assoc.* **71** (1976), no. 356, 949-955. (J. Geertsema) **55** #6735 62L12
- The role of the Poisson distribution in approximating system reliability of k -out-of- n structures. *The theory and applications of reliability, with emphasis on Bayesian nonparametric methods*, Vol. I (Conf., Univ. South Florida, Tampa, Fla., 1975), 243-258. *Academic Press, New York*, 1977. (S. Blumenthal) **57** #10965 62N05
- (with Longnecker, M.) General moment and probability inequalities for the maximum partial sum. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 129-131. (L. Steiger) **58** #18664 60E05
- Some elementary results on Poisson approximation in a sequence of Bernoulli trials. *SIAM Rev.* **20** (1978), no. 3, 567-579. (J. Galambos) **58** #2993 60F05
- See also **Reliability and biometry: statistical analysis of lifelength**, **49** #1630
- Serfozo, Richard F. Functions of semi-Markov processes. *SIAM J. Appl. Math.* **20** (1973), 530-535. (J. Hachigian) **45** #7812 60K15
- Conditional Poisson processes. *J. Appl. Probability* **9** (1972), 288-302. (J. Kingman) **49** #6372 60J30
- Processes with conditional stationary independent increments. *J. Appl. Probability* (1972), 303-315. (J. F. C. Kingman) **49** #6371 60J30
- Semi-stationary processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **23** (1972), 125-132. (E. Çinlar) **47** #5942 60G10 (60F05, 60F15)
- (with Deb, Rajat K.) Optimal control of batch service queues. *Advances in Probability* **5** (1973), 340-361. (M. Yadin) **49** #6403 60K25
- Weak convergence of superpositions of randomly selected partial sums. *Probability* **1** (1973), 1044-1056. (B. L. S. Prakasa Rao) **51** #1921 60F05
- A replacement problem using a Wald identity for discounted variables. *Management Sci.* **20** (1973/74), 1314-1315. (C. Mohan) **50** #3908 90B25
- Large deviations of renewal processes. *Stochastic Processes Appl.* **2** (1974), 295-304. (C. G. Esseen) **50** #11401 60F10 (60K05)
- Functional limit theorems for stochastic processes based on embedded processes. *Advances in Appl. Probability* **7** (1975), 123-139. (D. L. Iglehart) **53** #6660 (60K15)
- Monotone optimal policies for Markov decision processes. *Stochastic systems modeling, identification and optimization, II* (Proc. Sympos., Univ. Kentucky, Lexington, Ky., 1975). *Math. Programming Stud.* No. 6 (1976), 202-215. (Jaap W. de Graaf) **56** #17838 90C40
- Compositions, inverses and thinnings of random measures. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **37** (1976/77), no. 3, 253-265. (Olav Kallenberg) **54** #11495 60G55
- (with Stidham, Shaler, Jr.) Semi-stationary clearing processes. *Stochastic Processes*

- 6 (1977/78), no. 2, 165-178. (Douglas P. Kennedy) 57 #17887 60K30
- M. See *Methods of approximate solution of differential and integral equations*, 12537
- A. G. The asymptotic behavior of the Jost function and of the eigenvalues of the problem. (Russian) *Differentsial'nye Uravneniya* 8 (1972), 925-927. (J. Wiesner) #3931 34E05
- Factorization of operator-valued functions that are Hölder continuous. (Russian) *hi Mat. Nauk* 27 (1972), no. 6(168), 253. (Jürgen Leiterer) 54 #982 47A65
- A factorization of operator-valued functions that are Hölder continuous. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 28 (1973), no. 3, 58-65. (B. Gelbaum) 49 #3577 47A65
- A local L_p -principle in the factorization problem. (Russian) *Uspehi Mat. Nauk* 29 (4), no. 6(180), 175-176. (D. Sarason) 53 #3684 46E40
- Theory of multiplicative hyperfunctions. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 1), 257-258. (J. S. Joel) 53 #13630 32C05 (46F15, 32C35)
- Uniform estimates for the $\bar{\partial}$ -problem in a Levi-Weil domain. (Russian) *Dokl. Akad. Nauk SSSR* 236 (1977), no. 5, 1080-1082. (S. I. Pinchuk) 56 #12319 32F15
- A. S. Parametric means of order k . (Russian) *Perm. Politehn. Inst. Sb. Naučn. dokl.* 170 (1975), 135-142. (D. A. Brannan) 58 #17053 30A06
- , A. V. (with Izoh, V. V.) The discretization of wave fields given in a circle. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1975, no. 2, 77-82, 141. (V. Milantiev) 52 #16297 78.65
- , E. A. Additive decompositions. (Russian) *Kuban. Gos. Univ. Naučn. Trudy Vyp. Issled. po Algebre* (1973), 6-19. (Editors) 56 #15609 12A55
- The splitting of the polynomials $f_n(x)$ over finite fields. (Russian) *Kuban. Gos. Univ. Naučn. Trudy Vyp. Issled. po Algebre* (1973), 20-33. (J. S. Joel) 56 #2970 12C05
- The Galois group of a class of equations. (Russian) *Kuban. Gos. Univ. Naučn. Trudy Vyp. Issled. po Algebre* (1973), 34-37. (J. S. Joel) 56 #2975 12F10
- An integral basis of algebraic fields. (Russian) *Mat. Zametki* 13 (1973), 229-234. (J. Rowkin) 49 #248 12A30
- See also *Proceedings: All-Union Symposium on Statistical Problems in Engineering Thermetics*, 47 #4666 (EA 47) and *Hercen Lectures*, 47 #4749
- , I. N. The existence of a solution with small growth for biregular differential systems with random perturbation. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 2088-2092, 2111. (A. Ja. Dorogovcev) 58 #1440 34F05 (60H10, 93E15)
- , Ju. A. (with Gupalo, Ju. P.; Rjazancev, Ju. S.) Growth of a bubble in a suspended layer when there is nonlinear interphase interaction. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* 1977, no. 6, 66-73. (M. Drăganu) 57 #18439 35
- , M. I. Locally normal completely F -factorizable groups. (Russian) *Trudy Altaisk. litehn. Inst. Vyp. 3* (1967), 122-126. (D. I. Zaicev) 54 #2816 20F15
- A certain test for the nilpotence of groups with a finite commutant. (Russian) *Trudy Altaisk. Politehn. Inst. No. 3* (1967), 127-131. (G. Pic) 52 #14052 20E15
- , M. V. Generalized transport equations in the theory of irreversible processes. (Russian. English summary) *Teoret. Mat. Fiz.* 21 (1974), no. 3, 402-414. (Author's summary) 57 #18668 82.45
- See also *Day, William Alan*, 51 #2483
- , N. D. The minimization of the number of arithmetic operations in problems with sparse symmetric matrices. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 5, 10-1120, 1370. (Author's summary) 57 #18058 65F30
- The correcting of the results of factorization by a modification of the nondegenerate quadratic matrix. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 18 (1978), no. 3, 546-553, 809. (Author's summary) 58 #19083 65F30
- , N. P. (with Meščerjakov, B. K.; Aleksandrova, E. A.) Solution of the Dirichlet problem for a homogeneous differential equation of elliptic type on an analog-digital computer complex, and methods for calculating the parameters of the automated modulation network. (Russian) *Penz. Politehn. Inst. Učen. Zap. Mat. Meh.* 1969, no. 2, -90. 54 #9118 65N99
- (with Meščerjakov, B. K.; Kozlov, E. S.) Peculiarities of solving inhomogeneous boundary value problems of elliptic type by means of an automated network analog computer. (Russian) *Penz. Politehn. Inst. Učen. Zap. Mat. Meh.* 1969, no. 2, 91-98. #9117 65N99
- (with Vaškevič, N. P.) ★ An introduction to computers. Translated from the Russian by Boris Kuznetsov [B. Kuznecov]. *Mir Publishers, Moscow*, 1976, 304 pp. (F. J. Murray) 56 #15112 94-01
- , S. A. On a filter property (resonance). *Avtomatika* 1977, no. 1, 78-81 (Ukrainian); translated as *Soviet Automat. Control* 10 (1977), no. 1, 63-66. (A. S. C. Naha) 57 #5319 93D10
- , S. F. (with Kilimnik, L. A.) Mathematical simulation of the shape of an aortal pressure wave. (Russian) *Dinamika Sistem Vyp. 6* (1975), 155-158, 179. (Authors' summary) 58 #15289 92A05
- , S. N. (with Kornev, Ju. N.; Piskunov, S. V.) Questions of the construction of algorithms for generalized substitutions with an isolated context. (Russian) *Vyčisl. Matem. No. 47* (1971), 117-130. (A. Salomaa) 47 #9898 68A30
- (with Kornev, Ju. N.; Piskunov, S. V.) A microprogram homogeneous processor that is oriented toward linear algebra problems. (Russian) *Optimizacija No. 6(23)* (1972), -64, 135. (Authors' summary) 48 #7656 68A10
- , V. I. (with Judae, A. V.; Čuročkina, G. G.) An algorithm for the computer search of the optimal tolerances on the parameters of a quadrupole with the use of adjustable elements. (Russian) *Avtomat. i Vyčisl. Tehn.* 1972, no. 1, 46-51. (Authors' summary) 46 #1462 94A20
- (with Artobolevskii, I. I.; Sobol', I. M.; Statnikov, R. B.) The use of electronic computers in the formulation of the optimal machine design problem. (Russian) *Dokl. Akad. Nauk SSSR* 233 (1977), no. 4, 567-570. (Authors' introduction) 58 #9467 A99
- , V. O. An iteration method for the solution of an integral equation that is nearly Abel's equation. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, no. 1 *Mat. eh. Astronom.*, vyp. 1, 71-76, 166. (J. Kofroň) 57 #13414 45E10 (65R05, 85.45)
- , V. S. A certain estimate of the domain of asymptotic stability for autonomous systems of equations. (Russian) *Differentsial'nye Uravneniya* 11 (1975), no. 10, 1832-1837, 1909. (D. Bobrowski) 52 #11215 34D05
- Sergeeva, A. I. Singular curves and hypersurfaces in the Galilei space. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap. 374* (1970), no. 1 *Voprosy Differentsial. Geom.*, 137-144. (B. Rozenfel'd (RŽMat 1971 #9 A580)) 58 #30822 53A25
- Spaces of antiinvolutions of the second kind for generalized complex lines. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 8 (1973), no. 6, 491-501, 510. (M. Decuyper) 50 #5652 53A40
- Sergeeva, L. V. On a generalization of diffusion processes. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 11* (1974), 158-165, 182. (A. D. Wentzell) 53 #6767 60J60
- Sergeeva, N. D. (with Karpova, L. M.) al-Fergani's proof of the fundamental theorem of stereographic projection. (Russian) *Voprosy Istor. Estestvozn. i Tehn.* 1972, no. 3(40), 50-53, 122. (Editors) 58 #26799 01A30
- See also *al-Birini, Abū'l-Rayhān Muḥammad ibn Aḥmad*, 58 #21336
- Sergeev-Al'bov, N. N. (with Godunov, S. K.) Equations of linear elasticity theory with point Maxwell sources of the realization of stresses. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* 1977, no. 4, 140-152, 192. 58 #32216 73.35
- Sergeičuk, V. V. (with Nazarova, L. A.; Roiter, A. V.; Bondarenko, V. M.) Application of modules over a dyad to the classification of finite p -groups that have an abelian subgroup of index p and to the classification of pairs of mutually annihilating operators. (Russian) Investigations on the theory of representations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 28 (1972), 69-92. (I. Reiner) 48 #11288 20D15 (15A21)
- The classification of metabelian p -groups. (Russian) *Matrix problems (Russian)*, pp. 150-161. *Akad. Nauk Ukrain. SSR Inst. Mat., Kiev*, 1977. (U. Schoenwaelder) 58 #11109 20D15
- See also *Investigations on the theory of representations*, 52 #2785 (EA 52)
- Sergeraert, Francis Un théorème de fonctions implicites sur certains espaces de Fréchet et quelques applications. *Ann. Sci. École Norm. Sup. (4)* 5 (1972), 599-660. (Eduard J. Zehnder) 54 #6182 58C15 (58C25, 58D05)
- Un théorème de fonctions implicites. Applications. (English summary) Colloque International sur l'Analyse et la Topologie Différentielle (Colloq. Internat. CNRS, No. 210, Strasbourg, 1972). *Ann. Inst. Fourier (Grenoble)* 23 (1973), no. 2, 151-157. (G. R. Belicikii) 52 #15539 58C15 (58C25)
- Expression explicite de certains polynômes de Thom. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A1661-A1663. (R. E. Stong) 47 #5889 57D45 (58C25)
- Une extension d'un théorème de fonctions implicites de Hamilton. Journées sur la Géométrie de la Dimension Infinie et ses Applications à l'Analyse et à la Topologie (Univ. Claude-Bernard-Lyon I, Lyon, 1975). *Bull. Soc. Math. France, Mém. No. 46* (1976), 163-171. (Jean-Paul Penot) 58 #13125 58C15
- Utilisation des flottants du hardware pour le calcul rationnel exact. Utilisation des calculateurs en mathématiques pures (Conf., Limoges, 1975). *Bull. Soc. Math. France Mém. No. 49-50* (1977), 187-194. (J. S. Joel) 58 #28657 32C40
- Feuilletages et difféomorphismes infiniment tangents à l'identité. *Invent. Math.* 39 (1977), no. 3, 253-275. (B. Cenkli) 57 #13973 57D30
- Sergeyev, S. A. See *Sergeev, S. A.*
- Sergienko, E. N. The growth of entire functions that admit a special estimation from below. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 15* (1972), 78-96. (R. P. Boas, Jr.) 46 #3788 30A64
- The growth of meromorphic functions that admit a special estimate from below. (Russian) *Dokl. Akad. Nauk SSSR* 208 (1973), 1298-1299. (W. H. J. Fuchs) 47 #8860 30A70 (31A05)
- The growth of meromorphic functions that admit a special lower bound. *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 21* (1974), 83-104, 128. (Author's summary) 57 #16591 30A64
- Sergienko, I. V. (with Kaspšič'ka, M. F.) The solution of a certain problem of the organization of the computing process on electronic computers. (Russian) *Mathematical provisioning of electronic digital computers and effective organization of the computing process (Proc. Sem., Kiev, 1968/1969)*, No. 4 (Russian), pp. 3-13. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (R. N. Goss) 46 #4780 (EA 46) 68A20
- (with Kaspšič'ka, M. F.) On the question of the construction of effective methods of solution of certain problems of organizing the computational process in an electronic computer. (Russian. English summary insert) *Kibernetika (Kiev)* 1969, no. 4, 67-74. (Authors' summary) 46 #1131 68A20
- (with Kaspšič'ka, M. F.) The design of the process of solution of problems on a computer complex. (Russian) *Mathematical provisioning of electronic digital computers, No. 1 (Russian)*, pp. 16-24. *Akad. Nauk Ukrain. SSR, Kiev*, 1970. (I. Šelihova (RŽMat 1971 #4 B1041)) 45 #9539 68A20
- (with Kaspšič'ka, M. F.) The method of the sloping vector in an application to convex discrete functions. (Russian. English summary insert) *Kibernetika (Kiev)* 1971, no. 6, 107-108. (C. Berghaller) 46 #4943 90C25
- (with Arhipova, T. T.; Roščin, V. O.) The solution of a certain integer linear programming problem. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 1, 79-86. (C. Berghaller) 48 #5644 90C10
- (with Arhipova, T. T.; Roščin, V. O.) The solution of a certain class of problems of organization of the computing process in data processing systems. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 4, 118-126. (Authors' summary) 58 #8428 68A05
- (with Arhipova, T. T.) The formalization and solution of certain problems of organizing the computing process in data processing systems. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 5, 11-18. (C. Berghaller) 49 #12081 90C10
- (with Parasjuk, I. N.) Some questions on the development and study of a certain class of multipurpose and special purpose automated data processing systems. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 6, 135-142. (W. Kwasowicz) 48 #12899 68A25
- (with Monicibovič, B. R.; Popov, B. A.) Peculiarities of best Čebyšev approximation of functions by certain rational expressions on small digital computers. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 4, 39-44. (James D. Fabrey) 53 #1909 65D15

- (with Kaspšić'ka, M. F.; Hil'chenko, V. I.) A certain approach to the solution of allocation problems. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 5, 51-60. (R. Salia) 53 #2326 90B05 (90C50, 68A10)
- (with Tesler, G. S.) Methods for fast division based on iteration processes. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 6, 21-25. (From the authors' introduction) 57 #14322 65B99 (65-04, 68A20)
- (with Mihalēvič, V. S.; Ljaško, I. I.; Stognii, A. O.; Kapitonova, Ju. V.) ★Віктор Михайлович Глушков. (Ukrainian) [Viktor Mihalovič Gluškov] Біобібліографія Вчених Української РСР. [Bibliography of Ukrainian Scientists] *Vidaen. "Naukova Dumka", Kiev*, 1975. 62 pp. (Editors) 57 #5634 01A70
- (with Arhipova, T. T.) Conditions for the coincidence of the local and global extrema in optimization problems. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 1, 113-115. (H. Schwetlick) 55 #11614 65K05 (90C30)
- (with Arhipova, T. T.; Roščin, V. O.) Application of the drop vector method to the solution of certain problems of the organization of a computing process in systems of computer networks. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 2, 124-128. (D. Obradović) 55 #4806 68A35 (90B35)
- (with Arhipova, T. T.) The method of possible trends and the drop vector method in integer programming. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 5, 125-128. (Authors' summary) 56 #10945 90C10
- (with Parasjuk, I. N.; Tukalevs'ka, N. I.) ★Автоматизированные системы обработки данных. (Russian) [Automated data processing systems] *Izdat. "Naukova Dumka", Kiev*, 1976. 256 pp. (Siegmar Gerber) 57 #18168 68-01
- (with Parasjuk, I. N.) On the question of the construction of an optimal system of program modules of automated data processing systems. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 2, 34-38. (Authors' summary) 57 #4579 68A05
- (with Guljanickii, L. F.; Kaspšić'ka, M. F.) Approaches and algorithms for the solution of optimization problems for the automation of computer and systems design. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 5, 61-71. (Authors' summary) 57 #18206 68A10 (90B05)
- (with Dorodnitsyn, A. A.; Kaspšić'ka, M. F.) An approach to the formalization of classification. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 6, 132-140. (Authors' summary) 57 #9109 92A05
- (with Ljaško, I. I.; Misteckii, G. E.; Skopeckii, V. V.) ★Вопросы автоматизации решения задач фильтрации на ЭВМ. (Russian) [Questions on the automation of the solution of filtration problems on an electronic computer] *Izdat. "Naukova Dumka", Kiev*, 1977. 287 pp. (V. Komkov) 57 #1828 65Dxx
- (with Gluškov, V. M.; Ivanov, V. V.; Mihalēvič, V. S.; Stognii, A. O.) Reserves for computational optimization. (Russian) *Akad. Nauk Ukrain. SSR Inst. Kibernet. Preprint No. 67* (1977), 53 pp. (Publisher's description) 58 #25110 68A20 (65-02)
- (with Lebedeva, T. T.; Roščin, V. O.) An approach to the solution of mathematical programming problems with mixed variables. (Russian. English summary insert) *Kibernetika (Kiev)* 1977, no. 2, 53-57. (Szymon Dolecki) 57 #5123 90C99
- (with Roščin, V. O.) On the question of the convergence of an algorithm for the solution of mathematical programming problems with mixed variables. (Russian. English summary insert) *Kibernetika (Kiev)* 1977, no. 3, 84-85. (Ștefan Țigan) 58 #8257 65K05 (90C30)
- (with Kaspšić'ka, M. F.) The concept of linearity and convexity in a discrete space. Combinatorial linear problems. I. (Russian. English summary insert) *Kibernetika (Kiev)* 1977, no. 5, 75-81. (Authors' summary) 58 #13710 65K05 (90C99)
- (with Skopeckii, V. V.) Problems on the study of data processing systems and the improvement of their efficiency. (Russian. English summary) *Kibernetika (Kiev)* 1977, no. 6, 61-72, 150. (Authors' summary) 58 #25189 68A99
- (with Ohrimenko, M. G.; Stukalo, O. S.) Efficient organization of the computations in the solution of systems of linear equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1978, no. 1, 67-70, 95. (L. B. Rall) 58 #13655 65F10 (65-04)
- See also Theory of languages and methods of construction of programming systems, 48 #7682; Software of electronic digital computers, 50 #11832 and Software of electronic digital computers, 50 #15253
- Sergienko, L. I.** (with Lebed', G. K.) The approximation of nonperiodic functions by Fejér sums. (Russian) *Studies in contemporary problems of summability and approximation of functions, and their applications* (Russian), pp. 41-44. *Dnepropetrovsk. Univ., Dnepropetrovsk*, 1972. (J. Szabados) 58 #6875 42A08
- Sergienko, N. P.** The quadrature-iterative method of solution of linear integral equations. (Russian) *Methods of approximate solution of differential and integral equations* (Russian), pp. 259-264. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) 58 #3592 65R05
- A certain two-sided method for the solution of linear operator equations. (Russian) *Methods of approximate solution of differential and integral equations* (Russian), pp. 265-272. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) 58 #3426 65J05 (47A50)
- (with Kurčenko, T. S.) Monotonicity questions in certain generalizations of the Čebyšev method. (Ukrainian. Russian summary) *Projective-iterative methods for the solution of differential and integral equations* (Ukrainian), pp. 93-99, 201. *Vidannya Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (Authors' summary) 57 #13601 47H15 (65J05)
- (with Kurčenko, T. S.) The convergence of certain modifications of the Čebyšev method. (Russian) *Mathematics collection* (Russian), pp. 95-98. *Izdat. "Naukova Dumka", Kiev*, 1976. (Editors) 58 #19114 65J05 (47H15)
- ★Исследование сходимости нестационарного двухточечного метода решения операторных уравнений. (Russian) [A study of the convergence of the nonstationary two-point method for the solution of operator equations] Preprint IM-77-1. *Akad. Nauk Ukrain. SSR Inst. Mat., Kiev*, 1977. 25 pp. (B. Jankó) 58 #8245 65J05 (47H15)
- Sergievs'kii, A. V.** (with Guščin, G. P.) On the numerical integration of a system of linear equations with a small imaginary parameter multiplying the derivative. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 15 (1975), no. 3, 627-634, 810. (J. Miklíček) 51 #14589 65L05
- Sergievs'kii, G. M.** (with Ter-Saakov, A. P.) Factor experiments in many-dimensional stochastic approximation of an extremum. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1970, no. 5, 134-139 (Russian); translated as *Engrg. Cybernetics* 8 (1970), no. 5, 94 (Authors' summary) 46 #3099 90C40
- Sergin, V. V.** An estimate of the remainder term in the central limit theorem for m -dependent random variables. (Russian. Lithuanian and English summaries) *L. Mat. Sb.* 16 (1976), no. 4, 245-250, 257. (Dominik Szydal) 54 #14053 60F05
- An estimate of the convergence rate in the central limit theorem for m -dependent random variables. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, *Mat. Meh. Astronom. vyp.* 2, 159-160, 167. (M. Iosifescu) 56 #6799 60F05
- Sergievs'kii, G. M.** See **Sergievs'kii, G. M.**
- Sergott, Ann M.** (with Uherka, D. J.) On the continuous dependence of the root polynomial on its coefficients. *Amer. Math. Monthly* 84 (1977), no. 5, 368-370. Brannan) 55 #8394 32A05
- Sergușov, S. A.** Application of Voronoi's functional methods to the summation of convolutions. (Russian) *Jaroslavl. Gos. Ped. Inst. Učen. Zap. No. 82 Anal. i Algebra* (1971), 76-84. (See *RŽMat* 1972 #5 B62) 40C99
- On the problem of prime-twins. (Russian) *Jaroslavl. Gos. Ped. Inst. Učen. Zap. No. 82 Anal. i Algebra* (1971), 85-86. (Editors) 58 #551 10H15
- Sergysels, Roland** (with **Sergysels-Lamy, Anne**) Élimination du temps et équation différentielle des trajectoires dans le problème des trois corps restreint, circulaire (English summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 58 (1972), 354-367. (D. Schmidt) 49 #1851a 70.34
- (with Balescu, Radu) Evolution equations of the coherence function in an inhomogeneous, relativistic plasma. I. General theory. *Transport Theory Statist. Phys.* 2 (1972), no. 4, 295-309. (Authors' summary) 56 #4611 82.62
- (with Balescu, Radu) Evolution equations of the coherence function in an inhomogeneous, relativistic plasma. II. Interpretation of the general equations; approximations. *Transport Theory Statist. Phys.* 2 (1972), no. 4, 311-319. (Authors' summary) 56 #4612 82.62
- (with **Sergysels-Lamy, Anne**) Application de la méthode de Hale et de la méthode de la moyenne à l'étude des solutions périodiques du problème restreint. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 59 (1973), 631-641. (D. Schmidt) 49 #1851b 70.34
- (with **Sergysels-Lamy, Anne**) Solutions périodiques et quasi-périodiques du problème restreint. II. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 60 (1974), 435-443. (E. Leimanis) 50 #9097 70.34
- Hale's method for the computation of periodic solutions of nonlinear differential equations. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 61 (1975), no. 11, 888-899. (I. N. Katz) 54 #1635 65L99
- Hale's E property and the averaging method. (French summary) *J. Mécanique* (1975), 65-72. (J. A. Morrison) 51 #6054 34C25
- Reduction of the three particle Toda lattice to one degree of freedom. *Theoret. Phys.* 54 (1975), no. 4, 1233-1234. (Carl Simon) 53 #15227 82.47
- Existence de la deuxième intégrale du problème restreint. *Astronom. and Astrophys.* 48 (1976), no. 2, 275-280. (Q. K. Ghori) 55 #1894 70.34
- Orbites périodiques asymétriques de deuxième sorte du problème restreint. *Internationale Konferenz über Nichtlineare Schwingungen* (Berlin, 1975), Band 1, pp. 253-260. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., N. Akademie-Verlag, Berlin*, 1977. (Richard Cushman) 58 #25219 70.41
- Existence de la deuxième intégrale du problème restreint. VII. *Internationale Konferenz über Nichtlineare Schwingungen* (Berlin, 1975), Band 1, Teil 2, pp. 261-266. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., N. Akademie-Verlag, Berlin*, 1977. (Richard Cushman) 58 #25220 70.41
- Sergysels-Lamy, Anne** (with **Sergysels, Roland**) Élimination du temps et équation différentielle des trajectoires dans le problème des trois corps restreint, circulaire (English summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 58 (1972), 354-367. (D. Schmidt) 49 #1851a 70.34
- (with **Sergysels, Roland**) Application de la méthode de Hale et de la méthode de la moyenne à l'étude des solutions périodiques du problème restreint. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 59 (1973), 631-641. (D. Schmidt) 49 #1851b 70.34
- (with **Sergysels, Roland**) Solutions périodiques et quasi-périodiques du problème restreint. II. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 60 (1974), 435-443. (E. Leimanis) 50 #9097 70.34
- Existence of periodic orbits of the second kind in the elliptic restricted problem of three bodies. *Celestial Mech.* 11 (1975), 43-51. (D. Schmidt) 51 #9605 70.34
- Serres, Caroline** Ergodic actions of product groups. *Pacific J. Math.* 70 (1977), 519-547. (Joel J. Westman) 58 #6062 22D40
- Šerief, V. A.** A description of the class of finite p -groups whose 2-maximal subgroup is abelian. I. (Russian) *Primary groups* (Proc. Sem. Algebraic Systems, No. 2 (Krasnoyarsk, 1970)) (Russian), pp. 25-53. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Fiz. i Matem. Nauk, Krasnoyarsk*, 1970. (Ja. G. Berkovič) 53 #13396 20D15
- A description of the class of finite p -groups whose 2-maximal subgroups are abelian. II. *Primary groups* (Proc. Sem. Algebraic Systems, No. 2 (Krasnoyarsk, 1970)), pp. 54-76. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Fiz. i Matem. Nauk, Krasnoyarsk*, 1970. (Ja. G. Berkovič) 53 #13397 20D15
- Šerifi, M. A.** (with Martynenko, Mih. D.; Muštenko, V. S.) The integral representation of biharmonic functions in domains with gaps. (Russian) *Dokl. Akad. Nauk BSSR* 19 (1974), 785-787, 859. (F. Baranski) 52 #8455 31B10
- (with Martynenko, Mih. D.; Muštenko, V. S.) Biharmonic functions in domains with slits. (Russian) *Dokl. Akad. Nauk BSSR* 19 (1975), 12-13, 89. (F. Baranski) 53 #8457 31B30
- Serikbaev, A. U.** (with Atahodžayev, M. A.) An exterior inverse problem for the Newtonian potential of a simple layer for a surface that is close to a given one. (Russian) *Boundary value problems for differential equations, 5* (Russian), pp. 38-64, 184. *Izdat. "Fan" SSR, Tashkent*, 1975. (Authors' summary) 58 #17614 35R30
- (with Atahodžayev, M. A.) A plane inverse problem of potential theory. (Russian) *Boundary value problems for differential equations and their applications* (Russian), pp. 40-50, 157. *Fan, Uzbek. SSR, Tashkent*, 1976. (Authors' summary) 58 #28553 31A25 (35R99)
- (with Atahodžayev, M. A.) The existence of a solution of the interior inverse problem

- arithmetic potential. (Russian) *Partial differential equations and their applications* (Russian), pp. 46-59, 182. Izdat. "Fan" Uzbek. SSR, Tashkent, 1977. (S. V. Temko) 22607 31A25
- v, Š. S. The accumulation of disturbances in certain linear systems with metric disturbances. (Russian) *Mathematics and mechanics*, No. 2, Part 2 (Russian), 82-188, 198. *Ministerstvo Vysš. i Sredn. Spec. Obrazovanija, Kazah. SSR, Alma-Ata*, (1970). (See RZMat 1971 #2 B240; MR 48 #17) 34D10
- The conditions for absolute stability of certain control systems with a single linear element. (Russian) *Collection of Sci. Works of Graduates, No. 7: Mathematics, Physics* (Russian), pp. 183-188. *Univ. Družby Narodov, Moscow*, 1970. (C. h) 46 #480 34H05
- (with Muhametjanov, I. A.) Necessary and sufficient conditions for the absolute stability of certain nonlinear systems. *Avtomat. i Telemekh.* 1970, no. 11, 11-18 (Russian. English summary); translated as *Avtomat. Remote Control* 1970, no. 11, 1726-1732. (Authors' summary) 56 #11341 93D99
- An estimate of the accuracy of an approximate solution of a linear system of differential equations. (Russian) *Collection of scientific works of postgraduates, No. XI: Mathematics and physics* (Russian), pp. 62-66. *Univ. Družby Narodov, Moscow*, 1972. (H. Atani) 49 #701 34A45
- See also *Mathematics and mechanics*, 48 #17
- A. V. (with Dušin, L. O.; Omel'čenko, O. Ja.) Modulation of electromagnetic waves in an isotropic inhomogeneous plasma. (Russian. English summary) *Ukrain. Fiz.* 21 (1976), no. 1, 101-106, 166. (Authors' summary) 56 #17638 82A5
- G. N. On the problem of game contact of motions for systems with lag. (Russian) *Vysš. Učebn. Zaved. Matematika* 1972, no. 5(120), 84-91. (A. B. Kuržanskii) #8675 90D25
- A certain differential game with integral pay-off. (Russian) *Differencial'nye uravnenija* 10 (1974), 1286-1292, 1342. (R. Petrović) 50 #12305 90D25
- Ju, A. An algebraic method of solving logic equations. *Izv. Akad. Nauk SSSR Tekhn. Kibernet.* 1972, no. 2, 114-124 (Russian); translated as *Engng. Cybernetics* 10 (1972), no. 2, 273-282. (Eugene M. Norris) 55 #12338 94A20
- va, I. A. (with Verlan', A. F.) On the question of the convergence of the iteration method for the approximation of a function of two variables. (Russian) *Točn. i Nadežn. Kibernet. Sistem.* No. 3 (1975), 10-12, 156. (See Zbl 321 41027) 65R05
- (with Verlan', A. F.) The solution of a Volterra integral equation of the first kind with a separating kernel. (Russian) *Mathematical simulation and the theory of electrical circuits*, No. 15 (Russian), pp. 17-19, 98. Izdat. "Naukova Dumka", Kiev, 1977. (A. Erdreanu) 58 #29908 45D05
- va, Z. M. Transparent summability nomograms. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* 31 (1963), no. mat., 122-127. (L. Bitay) 47 #1316 65S05
- Summability nomograms. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* 61 (1969), no. mat., 195-208. (L. Bitay) 47 #1315 65S05
- Interpolation tables of a function of several variables. (Russian) *Logic, algebra and numerical analysis*, Vol. 2, no. 2. *Ivanov. Gos. Ped. Inst. Učen. Zap.* 125 (1973), 136-163. (P. Mysovskii) 57 #7952 65D20
- Numerical differentiation of a function of several variables. (Russian) *Logic, algebra and numerical analysis*, Vol. 2, no. 2. *Ivanov. Gos. Ped. Inst. Učen. Zap.* 125 (1973), 164-174. (I. P. Mysovskii) 57 #7954 65D25
- wa, Hisamitsu A remark on the Choquet boundary of uniform algebras. *Res. Rep. Tsinghua Tech. College* 8 (1972), 149-151. (J. Garnett) 48 #875 46J10
- Exposed points in uniform algebras. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* 11, 5-138 (1972). (S. Fisher) 46 #9741 46J10
- Maximal and simplicial measures on abstract Choquet boundaries. *Res. Rep. Tsinghua Tech. College* 10 (1974), no. 1-2, 1-4. (From the introduction) 58 #7034 49A99 (46J10)
- danov, G. B. Flow of an inviscid perfectly conducting fluid past a thin profile in a transverse magnetic field. *Magnit. Gidrodinamika* 6 (1970), 67-73 (Russian); translated as *Magnetohydrodynamics* 6 (1970), 357-362 (1973). (M. N. L. Narasimhan) 48 #1586 76J35
- (with Putjata, V. I.) Flow of a compressible, perfectly conducting fluid over a thin foil in the presence of a transverse magnetic field. *Magnit. Gidrodinamika* 7 (1972), 40-44 (Russian); translated as *Magnetohydrodynamics* 7 (1971), 30-34 (1973). (T. Tsutsumi) 48 #7766 76J35
- Magnetohydrodynamic flow past a thin profile in an oblique magnetic field. *Magnit. Gidrodinamika* 10 (1974), no. 3, 27-30 (Russian); translated as *Magnetohydrodynamics* 10 (1974), no. 3, 264-267 (1976). (Giulio Mattei) 53 #15086 76J35
- nd, Carl Generating identities for Pell triples. *Fibonacci Quart.* 12 (1974), 121-128. (V. H. Mills) 50 #2062 10A35
- v, V. I. (with Celigorov, N. A.) An analysis of absolute stability for nonlinear sampled-data automatic systems by analytic methods. *Avtomat. i Telemekh.* 1975, no. 9, 1-66 (Russian. English summary); translated as *Avtomat. Remote Control* 36 (1975), no. part 1, 1434-1440 (1976). (Eliahu I. Jury) 54 #2299 93D99
- (with Solov'ev, V. N.; Celigorov, N. A.) Determination of the boundaries of the periodic stability domain of linearized digital automatic systems in the space of coefficients of the characteristic equation. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekh.* 1976, no. 6, 676-681, 708. (Authors' summary) 58 #20725 93D99
- (with Celigorov, N. A.) Solution of the generalized Routh-Hurwitz problem for harmonically linearized digital automatic systems by means of a digital computer. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1976, no. 10, 1064-1067, 1165. (Authors' summary) 58 #14353 65H10 (94-04)
- iev, M. (with Mihaïlov'skii, V. I.) Analytic rigidity of developable surfaces. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh.* No. 19 (1977), 103-111, 152. (Authors' summary) 58 #30936 53C45
- n, A. H. Estimation of the approximation by trigonometric interpolation polynomials for functions of the class $W_2^{(p)}$. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. Fiz.-Mat.* 1973, no. 2, 8-12, 87. (V. M. Kokilašvili) 50 #14030 42A08
- (with Kravcov, M. K.; Averbuh, N. D.) A certain algorithm for the solution of the assignment problem. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1975, no. 6, 102-105, 143. (Ulrich Eckhardt) 53 #4970 90C10
- Šerman, A. I. (with Coi, S.; Chai, S. M.) A certain problem of the synthesis of optimal networks. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1972, no. 3, 68-73. (M. Dragomirescu) 47 #1436 90B10
- (with Šankibaev, B. N.) An algorithm for the solution of a purely integer linear programming problem. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1973, no. 5, 87-90, 96. (O. Pokorná) 51 #5000 90C10
- (with Coi, S.) An approximate method for the solution of integer problems of linear programming (the method of admissible components). (Russian) *Coding theory and information modeling*, No. 2 (Russian), pp. 88-101, 246. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1975. (E. G. Gol'shtein) 58 #4310 90C10
- Šerman, D. I. A certain way of considering boundary value problems of the theory of functions and two-dimensional problems of elasticity theory. (Russian) *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Mushelishvili)* (Russian), pp. 635-665. Izdat. "Nauka", Moscow, 1972. (G. P. Cherepanov (Cherepanov)) 54 #4241 73.30 (30A88)
- A method of examining a pair of interdependent integral equations. *Prikl. Mat. Meh.* 37 (1973), 1078-1086 (Russian); translated as *J. Appl. Math. Mech.* 37 (1973), 1022-1030 (1974). (R. C. MacCamy) 49 #9560 45E99
- Šerman, E. B. (with Vaserštejn, L. N.; Čmil', V. I.) A multi-extremal problem for the growth and location of production with a concave objective function. (Russian) *Mathematical methods in economic research* (Russian), pp. 138-143. Izdat. "Nauka", Moscow, 1974. (Alexander M. Rubinov) 53 #15379 90C30
- Šerman, I. M. (with Faiziev, N. G.; Nuritdinov, Š.) Application of a certain class of target functions in the optimization of engineering processes. (Russian) *Dokl. Akad. Nauk UzSSR* 1976, no. 6, 16-18. (P. Neumann) 54 #9651 90B99
- Šerman, M. D. (with Golikov, V. I.) The oscillator in general relativity theory. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 9 (1973), 9-21. (RZFiz 1974 #6 B174) 58 #32730 83J34
- Šerman, P. B. The oriented rotation of Fredholm vector fields of zero index. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 4 (1970), 128-131. (S. Fučík) 54 #1279 58B15 (47H10)
- (with Borisovič, Ju. G.) The rotation of Fredholm vector fields. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU Vyp. 2* (1970), 31-38. (B. Sadovskii (RZMat 1971 #9 B676)) 58 #7680 58B15
- A theorem on a product of powers of Fredholm mappings of arbitrary index. (Russian) *Collection of papers by postgraduates, Vol. 2* (Russian), pp. 68-70. *Voronež. Gos. Univ. Voronezh.* 1972 (See RZMat 1974 #6 A679; MR 57 #9376) 58B15
- (with Borisovič, Ju. G.) Topology of Fredholm mappings, and periodic solutions of differential-difference equations. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak.* 1972, no. 7, 17-24. (J. K. Hale) 55 #805 34K15 (58E99)
- (with Borisovič, Ju. G.) Nonlinear Fredholm mappings and periodic solutions of differential difference equations. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 10 (1973), 12-25. (B. Sadovskii (RZMat 1974 #9 B1073)) 58 #22921 34K15 (58C99)
- Some criteria for the existence of a singular point of Fredholm mappings of index zero. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 10 (1973), 135-138. (J. S. Joel) 57 #7654 58C25 (58B15)
- A class of Fredholm mappings in a Hilbert space. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* 16 Sb. Statei po Nelineinym Operator. Uraon. i Priložen. (1975), 44-50. (Aurel Bejancu) 57 #10724 58B15
- See also *Eells, James, Jr.*, 52 #6771
- Šermenev, A. M. The motif of an abelian variety. (Russian) *Uspehi Mat. Nauk* 26 (1971), no. 3(159), 215-216. (J. W. S. Cassels) 45 #206 14K05
- The motif of a Weil hypersurface. (Russian) *Mat. Zametki* 12 (1972), 555-560. (Gerhard Pfister) 48 #2145 14F20 (14G13)
- Motif of an Abelian variety. (Russian) *Funkcional. Anal. i Priložen.* 8 (1974), no. 1, 55-61. (Gerhard Pfister) 49 #304 14K05 (14E10)
- Šermegor, T. D. (with Fokin, A. G.) Calculation of binary correlation functions of the elastic field of mechanical mixtures. *Inž. Ž. Meh. Tverd. Tela* 1968, no. 3, 73-81 (Russian); translated as *Mechanics of Solids* 3 (1968), no. 3, 47-51. (J. Murzewski) 47 #2895 73G60
- Integrular thermal relaxation in composition materials. (Russian) *Theory of multiphase media (Working Conf., Jablonna, 1974), Part I* (Polish), pp. 133-150. *Wydan. Polskiej Akad. Nauk, Wrocław, 1974.* (Editors) 56 #13961 73A5
- Šermet'eva, T. A. (with Dorogovcev, A. Ja.) The consistency of an estimate of a transition function. (Russian) *Theory of random processes, Questions of statistics and control* (Russian), pp. 30-39. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev.* 1974. (I. G. Žurbenko) 58 #8103 62M20
- sanz Serna, J. M. See *Sanz Serna, J. M.*
- Sernesi, Edoardo Alcune osservazioni sulla rappresentabilità di funtori. (English summary) *Ricerche Mat.* 19 (1970), 166-170. (A. H. Clark) 47 #299 18A25
- Small deformations of global complete intersections. (Italian summary) *Boll. Un. Mat. Ital.* (4) 12 (1975), no. 1-2, 138-146. (H. Kerner) 53 #454 14M10 (32G10)
- Some remarks on deformations of invertible sheaves. (Italian summary) *Boll. Un. Mat. Ital.* (5) 13a (1976), no. 1, 168-174. (O. Riemenschneider) 54 #10675 32G05 (14D15, 32G13)
- L-dimension and deformations. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part I, Williams Coll., Williamstown, Mass., 1975), pp. 285-288. Amer. Math. Soc., Providence, R. I., 1977.* (Editors) 56 #3357 32G13 (14D15)
- (with Lieberman, David I.) Semicontinuity of L-dimension. *Math. Ann.* 225 (1977), no. 1, 77-88. (H. Kerner) 55 #719 32G13 (14D15)
- Seroul, Raymond Cohomologie entière et KU-théorie d'un produit symétrique d'une surface de Riemann. *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A1536-A1538. (S. Y. Hussein) 46 #7554 32C35 (14E15)
- Anneau de cohomologie entière et KU*-théorie d'un produit symétrique d'une surface de Riemann. *Publ. Dép. Math. (Lyon)* 9 (1972), no. 4, 27-66. (I. G. MacDonald) 49 #2739 14F10 (55B15)
- Seroux, R. ★Algèbre linéaire et géométrie vectorielle. Avec une introduction par Jean Dhombres. Collection Nanta Iremica, Vol. 9. I.R.E.M. de Nantes, Université de Nantes,

- 1976, 219 pp. (loose errata) (H. Gross) **58** #5703 15-01
- Sarov, S. S.** (with Dubovskii, S. V.) Solving production-transportation problems of large dimensionality. *Avtomat. i Telemekh.* **1974**, no. 7, 121-124 (Russian); translated as *Automat. Remote Control* **35** (1974), no. 7, part 2, 1141-1144. (D. Jack Elzinga) **52** #4962 90B05
- (with Kupcov, L. P.) The search for the complete optimal solution in an integer linear programming problem. (Russian) *Control problems in technology, economics and biology* (Russian), pp. 109-121, 225. Nauka, Moscow, 1976. (Josef Kaška) **58** #32933 90C10
- (with Uzdemir, A. P.) Dynamic industrial-plant-location problem and a numerical method for solving it. I. *Avtomat. i Telemekh.* **1976**, no. 4, 120-127 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 4, part 2, 583-589. (Authors' summary) **57** #18786a 90B10 (90C50)
- (with Bur'jan, S. B.; Uzdemir, A. P.) Dynamic industrial-plant-location problem and a numerical method for solving it. II. *Avtomat. i Telemekh.* **1976**, no. 5, 112-121 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 5, part 2, 741-750. (From the introduction) **57** #18786b 90B10 (90C50)
- (with Bur'jan, S. B.; Uzdemir, A. P.) Dynamic industrial-plant-location problem and a numerical method for solving it. III. *Avtomat. i Telemekh.* **1976**, no. 8, 131-138 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 8, part 2, 1252-1259 (1977). (Authors' summary) **57** #18786c 90B10 (90C50)
- (with Bur'jan, S. B.; Uzdemir, A. P.) Method for solving the parametric problem of finding circulation of minimal cost in a network. *Avtomat. i Telemekh.* **1977**, no. 6, 73-84 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 6, part 1, 834-844. (Authors' summary) **57** #15372 90B10 (90C35)
- Sarov, V. S.** Generalized kernels of fractional order. (Russian) *Differentsial'nye Uravneniya* **12** (1976), no. 10, 1892-1902, 1920. (Author's summary) **55** #13095 35P05 (35J30)
- The absolute convergence of Fourier series in the eigenfunctions of an elliptic operator. (Russian) *Mat. Zametki* **19** (1976), no. 3, 435-448. (Jan Bochenek) **54** #13335 35P10
- The absolute convergence of Fourier series in generalized Nikol'skii classes. (Russian) *Differentsial'nye Uravneniya* **14** (1978), no. 3, 499-503, 573-574. (Todor G. Genčev) **58** #11995 35P10
- Serova, G. V.** The rate of convergence in the central limit theorem. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Yyp.* **17** (1977), 110-119, 165. (F. N. Galstjan) **56** #13326 60F05
- Serre, Jean-Pierre** ★Corps locaux. Deuxième édition. Publications de l'Université de Nancago, No. VIII. Hermann, Paris, 1968. 245 pp. (Editors) **50** #7096 12Bxx (14Gxx)
- ★Représentations linéaires des groupes finis. Deuxième édition, refondue. Hermann, Paris, 1971. 182 pp. (Editors) **50** #4718 20Cxx
- Groupes discrets-compactifications. *Colloque sur les Fonctions Sphériques et la Théorie des Groupes* (Univ. de Nancy, Nancy, 1971), Exp. No. 6 4 pp. Inst. Élie Cartan, Univ. Nancy, Nancy, 1971. (E. Vinberg) **55** #3103 20G30 (22E40)
- Cohomologie des groupes discrets. *Prospects in mathematics* (Proc. Sympos., Princeton Univ., Princeton, N.J., 1970), pp. 77-169. *Ann. of Math. Studies*, No. 70, Princeton Univ. Press, Princeton, N.J., 1971. (H. Bass) **52** #5876 22E40 (12A70, 20G10, 32N99)
- Cohomologie des groupes discrets. *Séminaire Bourbaki*, 23^{ème} année (1970/1971), Exp. No. 399, pp. 337-350. *Lecture Notes in Math.*, Vol. 244, Springer, Berlin, 1971. (Kenneth S. Brown) **54** #10491 22E40
- Conducteurs d'Artin des caractères réels. *Invent. Math.* **14** (1971), 173-183. (K. Shiratani) **48** #273 12A65 (13A15)
- ★Lineare Darstellungen endlicher Gruppen. In deutscher Sprache aus dem französischen übersetzt und herausgegeben von Günter Eisenreich. Akademie-Verlag, Berlin, 1972. vii + 102 pp. (Editors) **49** #10766 20Cxx
- ★Курс арифметики. (Russian) [A course in arithmetic] Translated from the French by A. I. Skopin. Edited by A. V. Mal'nev. Izdat. "Mir", Moscow, 1972. 184 pp. (Editors) **50** #4527 12-02 (10Cxx, 10Dxx)
- Propriétés galoisiennes des points d'ordre fini des courbes elliptiques. *Invent. Math.* **15** (1972), no. 4, 259-331. (J. W. S. Cassels) **52** #8126 14G25 (14K15)
- ★A course in arithmetic. Translated from the French. Graduate Texts in Mathematics, No. 7. Springer-Verlag, New York-Heidelberg, 1973. viii + 115 pp. (Editors) **49** #8956 12-02 (10Cxx, 10Dxx)
- ★Cohomologie Galoisienne. Cours au Collège de France, Paris, 1962-1963. Avec des textes inédits de J. Tate et de Jean-Louis Verdier. Quatrième édition. *Lecture Notes in Mathematics*, Vol. 5. Springer-Verlag, Berlin-New York, 1973. vii + 217 pp. (Editors) **53** #8030 12Gxx (20F20, 18H10)
- Formes modulaires et fonctions zêta p-adiques. *Modular functions of one variable, III* (Proc. Internat. Summer School, Univ. Antwerp, 1972), pp. 191-268. *Lecture Notes in Math.*, Vol. 350, Springer, Berlin, 1973. (K.-B. Gundlach) **53** #7949a (E 53 #7949b) 10D05
- Congruences et formes modulaires [d'après H. P. F. Swinnerton-Dyer]. *Séminaire Bourbaki*, 24^e année (1971/1972), Exp. No. 416, pp. 319-338. *Lecture Notes in Math.*, Vol. 317, Springer, Berlin, 1973. (From the author's introduction) **57** #5904a 10D05 (10D15)
- (with Borel, Armand) Corners and arithmetic groups. Avec un appendice: Arrondissement des variétés à coins, par A. Douady et L. Hérault. *Comment. Math. Helv.* **48** (1973), 436-491. (M. S. Raghunathan) **52** #8337 22E40
- Congruences and modular forms. Translated from the French (Séminaire Bourbaki, 24^e année (1971/1972), Exp. No. 416, pp. 319-338, *Lecture Notes in Math.*, Vol. 317, Springer, Berlin, 1973) by Ju. I. Manin. *Uspehi Mat. Nauk* **28** (1973), no. 2(170), 183-196. (From the authors' introduction) **57** #5904b 10D05 (10D15)
- Fonctions zêta p-adiques. *Journées Arithmétiques* (Grenoble, 1973), pp. 157-160. *Bull. Soc. Math. France, Mém. No. 37, Soc. Math. France, Paris, 1974.* (Editors) **51** #445 12A70
- Amalgames et points fixes. *Proceedings of the Second International Conference on the Theory of Groups* (Australian Nat. Univ., Canberra, 1973), pp. 633-640. *Lecture Notes in Math.*, Vol. 372, Springer, Berlin, 1974. (H. Bass) **51** #13057 20F25 (20H05)
- (with Deligne, Pierre) Formes modulaires de poids 1. *Ann. Sci. École Norm. Sup.* (4) **7** (1974), 507-530 (1975). (Stephen Gelbart) **52** #284 10D15 (12A65)
- Divisibilité des coefficients des formes modulaires de poids entier. *C. R. Acad. Paris Sér. A* **279** (1974), 679-682. (William F. Hammond) **52** #3060 10D05
- On a functorial property of power residue symbols. Erratum to: "Solution of congruence subgroup problem for $SL_n(n > 3)$ and $Sp_{2n}(n > 2)$ " by Hyman Bass, Milnor and Jean-Pierre Serre (Inst. Hautes Études Sci. Publ. Math. No. 33 (1959-1973). *Inst. Hautes Études Sci. Publ. Math. No. 44* (1974), 241-244. (R. Stein) **50** #12972 12A65 (20H05)
- ★Groupes algébriques et corps de classes. Deuxième édition. Publication de l'Institut de Mathématique de l'Université de Nancago, No. VII. Actualités Scientifiques et Industrielles, No. 1264. Hermann, Paris, 1975. 204 pp. ISBN 2-7056-1264-5 (J. S. Serre) **57** #6032 14K30 (12A65)
- Valeurs propres des opérateurs de Hecke modulo l. *Journées Arithmétiques* (Bordeaux Conf., Univ. Bordeaux, 1974), pp. 109-117. *Astérisque*, Nos. 24-25, Soc. Math. France, Paris, 1975. (Cary Queen) **52** #3061 10D05
- Correction to: "Formes modulaires et fonctions zêta p-adiques" (Modular functions of one variable, III (Proc. Internat. Summer School, Univ. Antwerp, 1972), pp. 191-268. *Lecture Notes in Math.*, Vol. 350, Springer, Berlin, 1973). *Modular functions of one variable, IV* (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972), pp. 149-150. *Lecture Notes in Math.*, Vol. 476, Springer, Berlin, 1975. (K.-B. Gundlach) **53** #7949b 10D05
- Valeurs propres des endomorphismes de Frobenius (d'après P. Deligne). *Séminaire Bourbaki*, Vol. 1973/1974, 26^{ème} année, Exp. No. 446, pp. 190-204. *Lecture Notes in Math.*, Vol. 431, Springer, Berlin, 1975. (J. S. Milne) **57** #3135 14G13
- Divisibilité de certaines fonctions arithmétiques. *Séminaire Delange-Pisot-P. 16^e année* (1974/75), *Théorie des nombres*, Fasc. 1, Exp. No. 20, 28 pp. Secrétariat Mathématique, Paris, 1975. (E. Grosswald) **52** #13644 10D15
- (with Mazur, Barry C.) Points rationnels des courbes modulaires $X_0(N)$ (d'après Ogg). *Séminaire Bourbaki* (1974/1975), Exp. No. 469, pp. 238-255. *Lecture Notes in Math.*, Vol. 514, Springer, Berlin, 1976. (Neal Koblitz) **58** #5681 14G25 (10D15, 14K15)
- Divisibilité de certaines fonctions arithmétiques. *Enseignement Math.* (2) **22** (1976), no. 3-4, 227-260. (Larry J. Goldstein) **55** #7958 10H25 (10D05)
- (with Borel, Armand) Cohomologie d'immeubles et de groupes S-arithmétiques. *Topology* **15** (1976), no. 3, 211-232. (H. Bass) **56** #5786 22E40
- ★Linear representations of finite groups. Translated from the second French edition by Leonard L. Scott. Graduate Texts in Mathematics, Vol. 42. Springer-Verlag, New York-Heidelberg, 1977. x + 170 pp. ISBN 0-387-90190-6 (W. Feit) **56** #8120 20Cxx
- ★Arbres, amalgames, SL_2 . Avec un sommaire anglais. Rédigé avec la collaboration de Hyman Bass. Astérisque, No. 46. Société Mathématique de France, Paris, 1977. 189 pp. (1 plate) (E. Vinberg) **57** #16426 20H10 (22E40)
- ★Cours d'arithmétique. Deuxième édition revue et corrigée. Le Mathématicien, No. 2. Presses Universitaires de France, Paris, 1977. 188 pp. (J. S. Joel) **58** #1610 10-01
- Modular forms of weight one and Galois representations. *Algebraic number theory and L-functions and Galois properties* (Proc. Sympos., Univ. Durham, Durham, 1975), pp. 193-268. Academic Press, London, 1977. (Stephen Gelbart) **56** #8497 10D15
- Représentations l-adiques. *Algebraic number theory* (Kyoto Internat. Sympos. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976), pp. 177-193. Japan Soc. Promotion of Science, Tokyo, 1977. (Kenneth Ribet) **57** #16310 14G25 (10D05)
- Majorations de sommes exponentielles. *Journées Arithmétiques de Caen* (Caen, Caen, 1976), pp. 111-126. *Astérisque* No. 41-42, Soc. Math. France, Paris, 1977. (Neal Koblitz) **56** #5457 10G05 (14G10)
- (with Stark, H. M.) Modular forms of weight 1/2. *Modular functions of one variable, VI* (Proc. Second Internat. Conf., Univ. Bonn, Bonn, 1976), pp. 27-67. *Lecture Notes in Math.*, Vol. 627, Springer, Berlin, 1977. (Larry J. Goldstein) **57** #12105 10D15
- Représentations linéaires des groupes finis "algébriques" (d'après Deligne-Lusztig). *Séminaire Bourbaki*, Vol. 1975/76, 28^{ème} année, Exp. No. 487, 256-273. *Lecture Notes in Math.*, Vol. 567, Springer, Berlin, 1977. (J. E. Humphreys) **55** #8200 20G05
- Sur le résidu de la fonction zêta p-adique d'un corps de nombres. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 4, A183-A188. (Yasumasa Akaya) **58** #22024 12B30 (12A70)
- See also **Modular functions of one variable**, **48** #2080; **Mathematics: Periodical collection of translations of foreign articles**, **49** #4722; **Mathematics: Periodical collection of translations of foreign articles**, **49** #4723; **Problems: Group theory**, **51** #656 (EA 51); **Vêlu, Jacques**, **52** #13851; **Collection: Serre, Jean-Pierre**, **53** #12821; **Collection: Serre, Jean-Pierre**, **54** #7156; **Modular functions of one variable**, **56** #257; **Modular functions of one variable**, **57** #9652 and **Lam, Tsit** **58** #5644
- Serres, Michel** ★Le système de Leibniz et ses modèles mathématiques. Tome I: États de la théorie. Presses Universitaires de France, Paris, 1968. ii + 394 + iii pp. (F. C. Kreiling) **56** #01A45 (02-03, 02Bxx)
- ★Le système de Leibniz et ses modèles mathématiques. Tome II: Schémas-p. Presses Universitaires de France, Paris, 1968. i-iii + 397-836. (F. C. Kreiling) **56** #01A45 (02-03, 02Bxx)
- Serret, J.-A.** See **Lagrange, Joseph Louis**, **55** #12436 and **Lagrange, Joseph Louis**, **55** #12437
- Serrin, J.** Existence theorems for some compressible boundary layer problems. *Advances in differential and integral equations* (Conf. Qualitative Theory of Nonlinear Differential and Integral Equations, Univ. Wisconsin, Madison, Wis., 1968; in memoriam Rudolf Langer (1894-1968)), pp. 35-42. *Studies in Appl. Math.*, No. 5, Soc. Indust. Appl. Math., Philadelphia, Pa., 1969. (D. R. Smith) **53** #8545 34B15 (76.34)
- (with Weinberger, H. F.) Curvature inequalities for surfaces over a disc. (Russian) *Certain problems of mathematics and mechanics (on the occasion of the seventieth birthday of M. A. Lavrent'ev)* (Russian), pp. 242-250. Izdat. "Nauka", Leningrad, 1970. (O. Fomenko) **57** #13713 53A10
- Boundary curvatures and the solvability of Dirichlet's problem. *Actes du Congrès International des Mathématiciens* (Nice, 1970), Tome 2, pp. 867-875. Gauthier-Villars, Paris, 1971.

- s, 1971. (Editors) **58** #23048 35365
 Gradient estimates for solutions of nonlinear elliptic and parabolic equations. *Contributions to nonlinear functional analysis (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1971)*, pp. 565-601. Academic Press, New York, 1971.
 ward A. Levine **53** #6095 35160
 (with Douglas, Jim, Jr.; Dupont, Todd) Uniqueness and comparison theorems for linear elliptic equations in divergence form. *Arch. Rational Mech. Anal.* **42** (1971), 168. (P. C. Fife) **52** #14637 35160
 A symmetry problem in potential theory. *Arch. Rational Mech. Anal.* **43** (1971), 318. (Gottfried Anger) **48** #11545 31B20
 A remark on the preceding paper of Herbert Amann: "A uniqueness theorem for linear elliptic boundary value problems" (*Arch. Rational Mech. Anal.* **44** (1971/72), 181). *Arch. Rational Mech. Anal.* **44** (1971/72), 182-186. (J. M. Cushing (Zbl 225 5042)) **53** #13830 35165
 (with Fosdick, Roger L.) Rectilinear steady flow of simple fluids. *Proc. Roy. Soc. London Ser. A* **332** (1973), 311-333. (W. P. Graebel) **48** #12991 76.35
 ★Foundations of classical thermodynamics. Lecture Notes in Mathematics.
 Department of Mathematics, University of Chicago, Chicago, Ill., 1975. iii+223 pp.
 dim Komkov **58** #32431 80.00
 (with Fosdick, Roger L.) Global properties of continuum thermodynamic processes. *Arch. Rational Mech. Anal.* **59** (1975), no. 2, 97-109. (S. Bhargava) **52** #7331 80.49
 The solvability of boundary value problems. *Mathematical developments arising in Hilbert problems (Proc. Sympos. Pure Math., Northern Illinois Univ., De Kalb, Ill., 1974)*, pp. 507-524. *Proc. Sympos. Pure Math., Vol. XXVIII, Amer. Math. Soc., Providence, R. I., 1976.* (F. J. Almgren, Jr.) **55** #814 35-02 (35-03, 49-03)
 Liouville theorems and gradient bounds for quasilinear elliptic systems. *Arch. Rational Mech. Anal.* **66** (1977), no. 3, 295-310. (R. N. Pederson) **57** #13176 35160
 (with Peletier, L. A.) Gradient bounds and Liouville theorems for quasilinear elliptic equations. *Ann. Scuola Norm. Pisa Cl. Sci. (4)* **5** (1978), no. 1, 65-104. (Michael Wegner) **58** #1609 35160 (35B45)
 J. L. Applications of a certain type of canonical transformations to celestial mechanics. (Spanish. English summary) *Obs. Astronom. Univ. Nac. La Plata Ser. Astronom.* **35** (1969), 30 pp. (F. Nahon) **46** #4823 70.57 (85.57)
 M. L. (with Čerskii, N. V.; Čanho Kan; Makogon, Ju. F.) On the question of the stability of the freezing front. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 3, 592-592. (Editors) **57** #8751 82.35
 K. A. I. Perturbation of bound states of a Dirac equation for an electron in a crystal-symmetry field. *Ž. Eksp. Teoret. Fiz.* **62** (1972), 1238-1247 (Russian. English summary); translated as *Soviet Phys. JETP* **35** (1972), 655-658. (Author's summary) **57** #14790 81.34
 Determination of closed form expressions for perturbation theory corrections to wave functions of bound states with the aid of the Sturm eigenfunction expansion. (Russian. English summary) *Teoret. Mat. Fiz.* **21** (1974), no. 2, 224-232. (Author's summary) **57** #15012 81.34
 See also **Problems in theoretical physics**, **50** #12007
 v, A. N. The connection between random metric spaces and Špaček spaces. (Russian) *Kazan. Gos. Univ. Učen. Zap.* **127** (1967), no. 3, 120-123. (errata insert) (L. Ramov (RŽMat 1969 #2 B546)) **56** #16727 60B99 (46A15, 54E99)
 A correction: "Boolean logics (Russiat) [Kazan. Gos. Univ. Učen. Zap. **128** (1968), 2, 48-62]." (Russian) *Kazan. Gos. Univ. Učen. Zap.* **130** (1970), no. 3, 83. (Editors) **57** #3126 94A20
 A general scheme for an integral with respect to measures that are given on the orthogonal projectors of a Hilbert space. (Russian) *Probabilistic methods and cybernetics, No. 1 (Russian)*, pp. 108-119. Izdat. Kazan. Univ., Kazan, 1971. (G. Arsene) **47** #5592 G10 (28A40, 47B99)
 The concept of charge in a noncommutative framework of measurement theory. (Russian) *Probabilistic methods and cybernetics, No. X-XI (Russian)*, pp. 68-72. Izdat. Kazan. Univ., Kazan, 1974. (József Szűcs) **57** #17306a 46L10
 States in a product of spaces. (Russian) *Probabilistic methods and cybernetics, No. XI (Russian)*, pp. 142-146. Izdat. Kazan. Univ., Kazan, 1974. (József Szűcs) **57** #17306b 46L10
 On the general theory of states on von Neumann algebras. (Russian) *Funkcional. anal. i Priložen.* **8** (1974), no. 3, 89-90. (József Szűcs) **50** #10846 46L10
 On the theory of states on von Neumann algebras. (Russian) *Theory of functions and functional analysis (Russian)*, pp. 82-97. Izdat. Kazan. Univ., Kazan, 1976. (G. Arsene) **56** #16394 46L10
 Every smooth weight is an l -weight. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **77**, no. 8(183), 88-91. (G. Arsene) **58** #12411 46L10
 The noncommutative analogue of the space L_1 . (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 1(199), 231-232. (F. H. Szafraniec) **58** #23634 46L10
 See also **Selected translations in mathematical statistics and probability**, **49** #4729; **Probabilistic methods and cybernetics**, **56** #5104 and **Collection: Papers by graduate students**, Kazan Univ., **56** #11672
 itov, O. E. (with Aref'ev, B. O.) Determination of parameters of controlled plants by the use of dynamic frequency characteristics. *Avtomatika* **1975**, no. 2, 38-44 (Russian. English summary); translated as *Soviet Automat. Control* **8** (1975), no. 2, 31-36. (Alberto Isidori) **52** #12883 93B30
 J. (with Monin, J. P.; Benayoun, Raphaël) ★Initiation to the mathematics of the processes of diffusion, contagion and propagation. Translated from the French by M. Anderson. *Methods and Models in the Social Sciences*, No. 4. Mouton, The Hague-Paris, 1976. iv+94 pp. (K. Dietz) **56** #4914 92A15
 Murat R. (with Kleindorfer, Paul R.) Equilibrium existence results for simple dynamic games. *J. Optimization Theory Appl.* **14** (1974), 613-631. (M. Rössler) **57** #12292 90D20
 (with Prem Prakash) Topological semivector spaces: convexity and fixed point theory. *Semigroup Forum* **9** (1974/75), no. 2, 117-138. (D. R. Henney) **51** #11063 A99
 The fundamental continuity theory of optimization on a compact space. I. *J. Optimization Theory Appl.* **16** (1975), no. 5-6, 549-558. (R. N. P. Singh) **52** #9032 A50 (90C30)
 On the existence of solutions to compact dynamic optimization problems. *J. Optimization Theory Appl.* **19** (1976), no. 3, 479-485. (Norman Levitt) **54** #8388 49A25
 (with Prem Prakash) Hyperspaces of topological vector spaces: their embedding in topological vector spaces. *Proc. Amer. Math. Soc.* **61** (1976), no. 1, 163-168 (1977). (J. E. Keesling) **54** #13831 54B20
 (with Prem Prakash) On the continuity of Cartesian product and factorisation. (Turkish summary) *J. Pure Appl. Sci.* **10** (1977), no. 2, 241-244. (E. Michael) **58** #30954 54B20
 Sertorio, L. (with Bassetto, A.; Toller, M.) Multiperipheral dynamics beyond models. (Italian and Russian summaries) *Nuovo Cimento A* (11) **11** (1972), no. 2, 447-475. (Authors' summary) **53** #7281 81.47
 (with Toller, M.) Eigenphases of the S-matrix at high energy. (Italian and Russian summaries) *Nuovo Cimento A* (11) **14** (1973), 21-51. (A. O. Barut) **50** #9276 82.62
 (with Feigenbaum, M.) Deduction of the differential equation for the bootstrap degeneracy. (Italian and Russian summaries) *Nuovo Cimento A* (11) **43** (1978), no. 1, 31-41. (Koichiro Matsuno) **57** #8735 81.60
 Servais, W. La dialectique de F. Gonseth et la pédagogie ouverte de la mathématique. Ferdinand Gonseth. *Rev. Internat. Philos.* **1970**, no. 3-4, 434-440. (Editors) **58** #26673 00A25
 Šeršavids, T. L. (with Saulis, L. I.) Multidimensional limit theorems for densities of distribution. (Russian. Georgian and English summaries) *Sakharth. SSR Mecl. Akad. Moambe* **60** (1970), 533-536. (J. H. Kučkarov) **45** #4486 60F05
 The uniform estimation of the rate of convergence in a multidimensional local limit theorem for densities. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **16** (1971), 765-767. (L. A. Shepp) **45** #1228 60F05
 On the calculation of the moments of a parametric estimator of the density of a distribution. (Russian. Georgian and English summaries) *Sakharth. SSR Mecl. Akad. Moambe* **72** (1973), 281-284. (A. M. Kagan) **51** #11781 62F10
 Certain statistics that are connected with a parametric estimator of the density of a distribution. (Russian. Georgian and English summaries) *Sakharth. SSR Mecl. Akad. Moambe* **75** (1974), 541-544. (R. H. Rodine) **50** #8791 62E20
 Mean square deviation of parametric estimates of the density of a distribution. (Russian. Georgian summary) *Tbilis. Sahelmc. Univ. Gamoqeneb. Math. Inst. Šrom.* **4** (1975), 249-255. (Š. A. Hašimov) **53** #11874 62G99 (62F10)
 An inequality for the characteristic function of a certain degenerate multivariate distribution. (Russian. Georgian and English summaries) *Sakharth. SSR Mecl. Akad. Moambe* **84** (1976), no. 2, 277-280. (Constantin Târcolea) **55** #6522 60E05
 Šeršavids, V. V. An inductive method of optimization of control systems using interpolation based on GMDH algorithms. *Avtomatika* **1976**, no. 3, 7-12 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* **9** (1976), no. 3, 5-9. (Kunihiko Ichikawa) **56** #11243 93C15
 Servodio, Frank J. Prehomogeneous vector spaces and varieties. *Trans. Amer. Math. Soc.* **176** (1973), 421-444. (M. S. Raghunathan) **47** #8712 20G05
 Principle irreducible Lie-algebra modules. *Proceedings of the International Conference on Representations of Algebras (Carleton Univ., Ottawa, Ont., 1974)*, Paper No. 25, 13 pp. *Carleton Math. Lecture Notes*, No. 9, Carleton Univ., Ottawa, Ont., 1974. (M. L. Tomber) **53** #5685 17B99
 Dense orbits in $Z(P)$ the singular hypersurface of a prehomogeneous vector space. *J. Pure Appl. Algebra* **10** (1977/78), no. 2, 169-175. (Amassa Fauntleroy) **57** #340 14L99 (20G05)
 Affine open orbits, reductive isotropy groups, and dominant gradient morphisms; a theorem of Mikio Sato. *Pacific J. Math.* **72** (1977), no. 2, 537-545. (David Birkes) **56** #12018 14L15 (20G20)
 Forms with 0-orthogonal Lie algebras. *Canad. Math. Bull.* **21** (1978), no. 1, 125-126. (F. Hirzebruch) **58** #5699 14M15 (10C05)
 fischer-Servi, Gisèle See Fischer-Servi, Gisèle
 Servi, Mario Questioni di algebra universale in una categoria astratta. II. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **15** (1970), 57-92 (1971). (V. Dlab) **47** #115 08A25 (18F99)
 Alcune proprietà delle relazioni su un oggetto di una categoria. *Symposia Mathematica, Vol. V (INDAM, Rome, 1969/70)*, pp. 149-171. Academic Press, London, 1971. (V. Dlab) **45** #342 18A99
 Un'osservazione sulla definizione di "struttura su un oggetto". (English summary) *Boll. Un. Mat. Ital. (4)* **4** (1971), 103-105. (M. L. Laplaza) **45** #3513 10A99
 Una questione di teoria dei modelli nelle categorie con prodotti finiti. (English summary) *Matematiche (Catania)* **26** (1971), 307-324 (1972). (G. Cherlin) **52** #79 02H05 (08A20, 18C99)
 Paracompletezza e isolamento. *Riv. Mat. Univ. Parma* (3) **1** (1972), 61-71. (G. Cherlin) **51** #151 02K15 (18A30)
 Su alcuni funtori che conservano le SH. (English summary) *Riv. Mat. Univ. Parma* (3) **3** (1974), 291-308. (Author's summary) **55** #10540 18C10
 Servien, Claude Espaces de fonctions entières et fonctionnelles analytiques. *Séminaire Pierre Lelong (Analyse, Année 1967-1968)*, pp. 57-71. *Lecture Notes in Math.*, Vol. 71, Springer, Berlin, 1968. (H. Tornehave) **52** #3945 46E25 (32A15, 46F15)
 Sur la topologie d'un espace de fonctions entières avec poids. *Séminaire Pierre Lelong (Analyse, Année 1974/75)*, pp. 90-95. *Lecture Notes in Math.*, Vol. 524, Springer, Berlin, 1976. (B. A. Taylor) **54** #13546 46E10 (32A15)
 Seryh, A. P. (with Onofraš, N. I.) Some questions of synthesis of seismic signals with respect to functions of indeterminacy. (Russian) *Bul. Akad. Štiinca RSS Moldoven.* **1971**, no. 1, 56-63, 94. (L. I. Gal'čuk) **52** #10214 94A05 (93E10)
 Seryi, E. A. (with Belonožko, P. A.) On the problem of synthesizing discrete correcting filters for the stabilization of dynamical objects linked by resonance. (Russian) *Discrete control systems (Russian)*, pp. 40-51. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1973 (See RŽMat 1974 #8 B908; MR **58** #4530) 93E10
 Šeršev, V. P. (with Sultangazin, U. M.; Kremlev, V. Ja.; Eržanov, R. Ž.) Difference methods for the solution of certain two-dimensional problems of functionally integrated structures. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1976**, no. 5, 42-47, 88. (Authors' summary) **56** #4439 78.65
 Seržanov, A. E. See **Proceedings: Republican Conference of Belorussian Mathematicians**,

48 #3669

- Sesekin, A. N.** (with Zavališčin, S. T.) Minimization of the integral estimate of the kinetic energy of a harmonic oscillator by an impulse control. *Prikl. Mat. Meh.* **38** (1974), 441-450 (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 409-418 (1975). (R. Liu) **50** #16012 93C15
- (with Zavališčin, S. T.) Singular solutions in optimization problems for dynamical systems with a quadratic quality test. (Russian) *Differentsial'nye Uravneniya* **11** (1975), no. 4, 665-671, 764. (Authors' summary) **56** #13096 49E99
- Sesekin, N. F.** (with Gol'denberg, M. M.) Infinite locally finite p -groups with invariant subgroups that are not completely decomposable. (Russian) *Sverdlovsk. Gos. Ped. Inst. Učen. Zap. No. 125 Mat. Vyp.* **4** (1971), 13-18. (F. Haimo) **52** #14056 20E25
- (with Tokareva, V. A.) The Frattini subgroup of almost polycyclic groups. (Russian) *Ural. Gos. Univ. Mat. Zap.* **8** (1972), no. 3, 100-103, 142 (1973). (J. Wiegold) **48** #4118 20D25
- Products of finitely generated abelian groups. (Russian) *Mat. Zametki* **13** (1973), 443-446. (F. Haimo) **49** #427 20F25
- (with Neešpapa, T. A.) Some criteria for the extremality of locally nilpotent groups. (Russian) *Sverdlovsk. Gos. Ped. Inst. Naučn. Trudy Sb. 219 Algebra i Mat. Anal.* (1974), 55-62. (D. I. Zaicev) **53** #619 20E25
- (with Neešpapa, T. A.) A certain condition for finiteness in groups of Fitting type. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9** no. 1, 61-65, 142 (1974). (B. Hartley) **52** #10887 20E15
- (with Beljaev, V. V.) Infinite groups of Miller-Moreno type. (Russian) *Acta Math. Acad. Sci. Hungar.* **26** (1975), no. 3-4, 369-376. (F. Haimo) **53** #8259 20E20
- (with Beljaev, V. V.; Trofimov, V. I.) Growth functions of semigroups and loops. (Russian) *Ural. Gos. Univ. Mat. Zap.* **10** (1977), no. 3 Issled. po Sovremen. Algebre, 3-8, 215. (Petr Němec) **58** #933 20M05 (20N05)
- See also **All-Union Colloquium: Algebra**, **58** #15767a and **All-Union Colloquium: Algebra**, **58** #15767b
- Šešelja, Branimir** (with Vojvodić, Gradimir) Implication in three-valued logic as an exponential function. (Serbo-Croatian. English summary) *Mat. Vesnik* **11(26)** (1974), 137-142. (János Demetrovics) **52** #5357 02C05
- (with Vojvodić, Gradimir) The structure of fuzzy equivalence relations and fuzzy congruence relations. (Serbo-Croatian. English summary) *Mat. Vesnik* **1(14)(29)** (1977), no. 2, 147-152. (V. D. Dimitrov) **57** #5762 04A99
- Seshadri, C. S.** Quotient spaces, modulo reductive algebraic groups and applications to moduli of vector bundles on algebraic curves. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1*, pp. 479-482. Gauthier-Villars, Paris, 1971. (P. E. Newstead) **54** #7463 14D20 (14F05)
- Quotient spaces modulo reductive algebraic groups. *Ann. of Math.* (2) **95** (1972), 511-536; errata, *ibid.* (2) **96** (1972), 599. (S. L. Kleiman) **46** #9044 14F05 (14C99, 14D20)
- (with Lakshmibai, V.; Musili, C.) Cohomology of line bundles on G/B . Collection of articles dedicated to Henri Cartan on the occasion of his 70th birthday. I. *Ann. Sci. École Norm. Sup.* (4) **7** (1974), 89-137. (S. I. Gelfand) **50** #7175 (E 52 #8138) 14M15 (20G05)
- Theory of moduli. *Algebraic geometry (Proc. Sympos. Pure Math., Vol. 29, Humboldt State Univ., Arcata, Calif., 1974)*, pp. 263-304. *Amer. Math. Soc., Providence, R. I.*, 1975. (H. Popp) **53** #428 14D20
- (with Lakshmibai, V.; Musili, C.) Correction to: "Cohomology of line bundles on G/B " (*Ann. Sci. École Norm. Sup.* (4) **7** (1974), 89-137). *Ann. Sci. École Norm. Sup.* (4) **8** (1975), no. 3, 421. (S. I. Gelfand) **52** #8138 14M15 (20G05)
- Geometric reductivity over arbitrary base. *Advances in Math.* **26** (1977), no. 3, 225-274. (V. L. Popov) **57** #6035 14L99 (14D20, 15A72)
- Moduli of vector bundles on curves with parabolic structures. *Bull. Amer. Math. Soc.* **83** (1977), no. 1, 124-126. (P. E. Newstead (Zbl 354 #14005)) **58** #27983 14F05
- See also **Dieudonné, Jean A.; et al.**, **50** #2160
- Seshadri, M. S.** (with Mathews, P. M.) Evaluation of the density matrix for an ensemble of anharmonic oscillators by a path integral approach. *Internat. J. Theoret. Phys.* **13** (1975), no. 4, 279-288. (L. S. Schulman) **53** #9925 81J28
- Seshadri, R.** (with Na, Tsung Y.) Invariant solution for nonlinear viscoplastic impact. *Indust. Math.* **25** (1975), no. 1, 37-44. (Yi-Yuan Yu) **52** #12485 73J35
- Seshadri, V.** (with Sain, Michael K.) Pole assignment and a theorem from exterior algebra. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 1, pp. 291-295. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) **58** #20670 93B20 (15A75)
- Seshadri, V. S.** (with Sachdev, P. L.) Quasi-simple wave solutions for acoustic gravity waves. *Phys. Fluids* **20** (1977), no. 6, 888-894. (L. M. Hocking) **56** #1930 76J35
- Seshadri, Vanamamalai** (with Menon, M. V.) A note on normal attraction to a stable law. *Canad. Math. Bull.* **14** (1971), 451-452. (R. G. Laha) **47** #5926 60F05
- (with Csörgő, Miklós) Characterizing the Gaussian and exponential laws via mappings onto the unit interval. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **18** (1971), 333-339. (Ja. Nikitin (RŽMat 1971 #12 V14)) **48** #3153 62E10 (60E05)
- (with Menon, M. V.) On the martingales upcrossings inequality. *Canad. Math. Bull.* **16** (1973), 453-454. (Adhir K. Basu) **48** #7361 60G45
- (with Csörgő, Miklós; Yalovsky, M.) Some exact tests for normality in the presence of unknown parameters. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 507-522. (S. Kotz) **49** #6448 62F05 (62G10)
- (with Shuster, Jonathan J.) Exact test for zero drift based on first passage times in Brownian motion. *Technometrics* **16** (1974), 133-134. (E. J. Williams) **49** #1710 62M05
- (with Haddock, A. G.) Bivariate probability distributions satisfying a certain summability condition. *Sankhyā Ser. A* **37** (1975), no. 1, 113-120. (Barry C. Arnold) **55** #11499 62H05
- (with Rao, D. V. R. L.) A finite-difference method for parameter-plane analysis. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 662-667. (Authors' summary) **56** #13535 65D20
- (with Kenkre, V. M.) Theory of the interplay of luminescence and vibrational relaxation: a master-equation approach. *Phys. Rev. A* (3) **17** (1978), no. 1, 223-237. (G.

Papanicolaou) **57** #2390 82.60

- Seshadri, Viswanatha** (with Krishnamurthi, V.) A simple and direct method of order of linear systems using Routh approximations in the frequency domain. *Trans. Automatic Control* **AC-21** (1976), no. 5, 797-799. (Jean-Michel Bismut) **58** #93C05
- Sesiano, Jacques** Un mémoire d'Ibn al-Haytham sur un problème arithmétique. *Centaurus* **20** (1976), no. 3, 189-195. (B. Rozenfel'd) **57** #12031 01A30 (10E01)
- Le traitement des équations indéterminées dans le *Badī' fi 'l-Hisāb* d'Al-Karajī. *Arch. History Exact Sci.* **17** (1977), no. 4, 297-379. (B. Rozenfel'd) **58** #01A30
- Šešić, Bodgan V.** Foundations of the logic of change and development. *Internat. Rev. No. 4* (1971), 150-167. **46** #1563 02C99
- Productive logic and foundations of a logic of variable predicates (LVP). *Logic Rev. No. 14* (1976), 142-159. (Not reviewed) 02C10
- Šeško, M. A.** On the approximate solution of the Riemann boundary value problem. (Russian) *Dokl. Akad. Nauk BSSR* **15** (1971), 773-776. (V. Mičić) **45** #574 (65E05)
- On the error estimate of interpolation quadrature formulas for Cauchy type integrals. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1972**, 101-105. (J. Kofroň) **46** #4686 65D30
- A certain method of approximation of a function of two variables. (Russian) *Akad. Nauk BSSR* **17** (1973), 885-887, 969. (Author's summary) **50** #14018
- (with Pyhteev, G. N.) Approximate computation of the Schwarz integral Hilbert integral by means of polylogarithms. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1973**, no. 2, 11-22, 134. (S. Burjšek) **49** #1739 65D20
- Representation of Cauchy type integrals along an open contour by polylogarithms. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 187-191, 269. (Walter G. Kelley) **47** #3688 30A86
- Application of Jacobi polynomials in the approximate solution of the Riemann boundary value problem. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1974**, no. 3, 21-27, 138-139. (S. G. Samko) **49** #10891 30A88 (65D30)
- An approximate solution of the Riemann boundary value problem in the case of an open contour. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 18-24, 140. (Author's summary) **57** #12864 30A88
- On the numerical solution of singular integral equations in the case of an open contour. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 139-140. (L. B. Rall) **51** #14619 65R05
- A representation of Cauchy type integrals with power singularity by means of special functions. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), 231-234, 244. (Tanaka) **52** #764 30A86
- The order of approximation of singular integrals with logarithmic-power singularity. (Russian) *Dokl. Akad. Nauk BSSR* **20** (1976), no. 11, 975-977, 1052. (S. G. Samko) **55** #936 41A10
- Convergence of quadrature processes for a singular integral. (Russian) *Izv. Učebn. Zaved. Matematika* **1976**, no. 12 (175), 108-118. (J. Kofroň) **57** #65D30
- On the numerical solution of singular integral equations of the first kind. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 8, 1493-1502, 1541-1542. (Author's summary) **58** #8411 65R05
- Methods for the approximate solution of singular integral equations (SIE). (Russian) *Dokl. Akad. Nauk BSSR* **21** (1977), no. 12, 1067-1069, 1147-1148. (A. V. Džurav) **58** #3593 65R05 (45L05)
- (with Rusak, V. N.) Convergence of an approximate solution of the Riemann boundary value problem. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 1, 25-33, 140. (L. A. Akse't'ev) **57** #655 30A88
- (with Makovoz, Ju. I.) Estimation of the error of a quadrature formula for a singular integral. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 1, 36-41, 140. (F. Pecka) **58** #8170 65D30
- di Sessa, A.** Quantization on hyperboloids and full space-time field expansion. *J. Mathematical Phys.* **15** (1974), 1892-1900. (J. Rosen) **50** #3819 81J33
- Šestakov, A. A.** The extension of Bendixon's method for a two-dimensional system to a multidimensional analytic system. (Russian) *Differentsial'nye Uravneniya* **6** (1970), 1708-1712. (T. Čanturija) **45** #8926 34C05
- The study by the generalized Briot-Bouquet method of the properties of solutions near singular initial values of a nonautonomous differential system. (Russian) *Differentsial'nye Uravneniya* **11** (1975), 470-483, 588. (Franz Kappel) **53** #34A20
- The power asymptotic behavior of a nonautonomous homogeneous and quasihomogeneous system. (Russian) *Differentsial'nye Uravneniya* **11** (1975), 1427-1436, 1531. (C. Olech) **52** #8577 34D05
- Tests for the instability of a set with respect to a nonautonomous differential system. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 5, 958-960, 968. (A. Corduneanu) **58** #1431 34D20
- Criteria for the stability of sets with respect to a nonautonomous differential system. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 6, 1079-1090, 1157. (A. Corduneanu) **58** #1432 34D20
- (with Šaripov, Š. R.) The connection between the Ljapunov exponents of a homogeneous and a quasihomogeneous system. (Russian) *Dokl. Akad. Nauk SSSR* (1978), no. 1, 63-66. (C. S. Coleman) **57** #6668 34D05 (34D20)
- Šestakov, I. P.** Certain classes of noncommutative Jordan rings. (Russian) *Algebra i Logika* **10** (1971), 407-448. (M. Slater) **46** #7333 17A15
- (with Širšov, A. I.; Kargapolov, M. I.; Bokut', L. A.; Kuz'min, E. N.; Širšov, M.) Konstantin Aleksandrovič Ževlakov. (Russian) *Mat. Zametki* **12** (1972), 21-22. (Editors) **47** #3138 01A70 (17D05)
- Noncommutative Jordan and right-alternative rings. (Russian) *Rings, I (Proc. Conf., Novosibirsk, 1973)*, pp. 13-18. *Inst. Mat. Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1973. (J. Šemrl) **55** #8118 17A15
- (with Ževlakov, K. A.) Local finiteness in the sense of Širšov. (Russian) *Algebra i Logika* **12** (1973), 41-73, 120. (G. P. Kukin) **53** #3039 17A15
- Generalization of alternative and commutative rings. *Algebra i Logika* **12** (1973), 74-83, 120. (G. P. Kukin) **53** #3039 17A15

- 712, 736. (G. P. Kukin) **52** #10834 17D05
- Generalized standard rings. (Russian) *Algebra i Logika* **13** (1974), 88-103, 122. (G. Kukin) **51** #10404 17A15
- (with Slin'ko, A. M.) Right representations of algebras. (Russian) *Algebra i Logika* **1974**, no. 5, 544-588, 605-606. (Authors' summary) **58** #16810 17D05
- Radicals and nilpotent elements of free alternative algebras. (Russian) *Algebra i Logika* **14** (1975), no. 3, 354-365, 370. (Harry F. Smith) **55** #447 17D05
- (with Ževlakov, K. A.; Slin'ko, A. M.; Širšov, A. I.) ★Альтернативные алгебры. т. I. (Russian) [Alternative algebras. Part I] Серия "Библиотека Кафедры алгебры и Математической Логики Новосибирского Университета", Вып. 17. Library of the Department of Algebra and Mathematical Logic of Novosibirsk State University" Series, No. 17] *Novosibirsk. Gos. Univ., Novosibirsk*, 1976. 77 pp. (Harry F. Smith) **57** #16365 17-02 (16A68, 17D05)
- (with Ževlakov, K. A.; Slin'ko, A. M.; Širšov, A. I.) ★Йордановы алгебры. (Russian) [Jordan algebras] *Novosibirsk. Gos. Univ., Novosibirsk*, 1976. 99 pp. (Editors) **58** #28105 17Cxx
- Centers of alternative algebras. (Russian) *Algebra i Logika* **15** (1976), no. 3, 362, 366-367. (G. V. Dorofeev) **57** #12622 17A30 (17D05)
- Absolute zero divisors and radicals of finitely generated alternative algebras. (Russian) *Algebra i Logika* **15** (1976), no. 5, 585-602, 606. (G. V. Dorofeev) **58** #22218 17D05
- Observability of controllable nonlinear dynamical systems. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* **1977**, no. 2, 139-141, 15-157. (Authors' summary) **57** #2661 93B05
- The interpolation of linear operators in spaces of measurable functions. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 3, 91-92. (J. Peetre) **50** #5455 E35 (46M35)
- The characteristic of sets in a space that is conjugate to a normed lattice. (Russian) *Zametki* **15** (1974), 915-924. (R. Cristescu) **50** #10752 46A40
- Complex interpolation in Banach spaces of measurable functions. (Russian. English summary) *Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Vyp. 4* (1974), 64-68, 1. (Jöran Bergh) **51** #8804 46E30 (46M35)
- Matrix representations of cascade couplings of quadrupoles. (Russian) *Steklov. Gos. Univ. Ser. III Fiz. Astronom.* **17** (1976), no. 2, 168-176. (Krzysztof Piecha) **55** #7621 94A20
- A universal method for the symbolic representation of cascade couplings of n -wire circuits. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **18** (1977), no. 11-19. (S. Rudeanu) **56** #18165 94A20
- Modules over rings with a power basis. (Russian) Modules and representations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **71** (1977), 259-281, 287-288. (L. A. Koifman) **58** #10870 13F20 (13A15, 13D99)
- On the generalization of a theorem of Euler. (Ukrainian. German and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 14* (1972), 111-112, 150. (S. Levičenko) **55** #12624 10A25 (10A10)
- The absolute stability of nonlinear automatic systems with double modulation. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), 376-388. (S. P. Bingulac) **47** #3078 93D99
- (with Šil'man, S. V.) Frequency conditions for the absolute stability of the zero solution of a system of non-linear difference equations with periodically varying coefficients. (Russian) *Problems of analytical mechanics, stability and control theories Proc. Second Četaev Conf., Kazan*, 1973, Vol. 2 (Russian), pp. 365-376, 418. *Kazan. Inžen. Inst., Kazan*, 1976. (Authors' summary) **58** #9653 93D99 (39A10)
- The existence of a solution of the integral equation for a lifting surface. (Russian. English summary) *Vestnik Leningrad. Univ. Ser. 19 Mat. Meh. Astronom. vyp. 4*, 102-107, 169. (L. G. Chambers) **53** #9866 45
- Asymptotic solutions of the magnetohydrostatic equations. *Ann. Mat. Pura Appl. (4)* **107** (1975), 185-210 (1976). (Giulio Mattei) **57** #7226 78.35 (76.35)
- (with Cenacchi, G.; Taroni, A.) Numerical solution of the MHD equilibrium equation for an axially symmetric free-boundary plasma in a torus with arbitrary cross-section. (Italian and Russian summaries) *Nuovo Cimento B* (11) **25** (1975), 9-294. (J. N. Kapur) **51** #7478 76.65
- (with Lo Surdo, Camillo) Nonaxisymmetric equilibria in tokamaks and ohmically heated stellarators. *Phys. Fluids* **18** (1975), 255-262. **50** #9152 76.35
- (with Lo Surdo, Camillo) Asymptotic stationary MHD regimes: inertial effects with infinite conductivity. (French summary) *Z. Angew. Math. Phys.* **27** (1976), no. 6, 7-708. (Cataldo Agostinelli) **56** #10444 78.35
- Large aspect ratio expansion of toroidal magnetofluid equilibria with anisotropic pressure. *Lett. Nuovo Cimento* (2) **20** (1977), no. 15, 537-545. **57** #14147 78.35
- Fisica matematica: matematica applicata o applicazione della matematica? (English summary) *Riv. Mat. Univ. Parma* (3) **3** (1974), 309-317. (K. Strubecker) **58** #8258 00A25
- Heat propagation in bodies with slits. (Russian) *Near and nonlinear boundary value problems* (Russian), pp. 223-231. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (Editors) **51** #12156 80.35
- (with Lenjuk, M. P.) The twice branched fundamental solution of the Cauchy problem for a certain B -parabolic equation. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1972**, 321-325, 381. (V. Lenjukovič) **46** #7679 35A20 (35R99)
- See also **Boundary value problems of mathematical physics**, **48** #1842 and **School: mathematical**, **56** #15261
- Simple bases in all closed classes of the algebra of logic. (Russian) *Algebra and number theory. Moskov. Gos. Ped. Inst. Učen. Zap. No. 375* (1971), 156-178. (G. Avriilov) (RZMat **1972** #5 V356) **52** #2767 94A20 (02J05)
- Bifurcation of the equilibrium of a hollow cylinder. (Russian) *Mathematical physics*, No. 9 (Russian), pp. 148-153. *Naukova Dumka, Kiev*, 1971. (A. Węczuk) **46** #2959 73.35
- Solution of the matrix equation $AX - XB = C$. (Russian) *Mat. Zametki* **19** (1976), no. 3, 449-451. (J. L. Brenner) **53** #10832 15A24
- The possibility of describing a gravitational field as a space with absolute parallelism. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1973**, no. 12, 83-85. (From the text) **58** #25815 83.53
- Diffraction of a plane electromagnetic wave by a circular cylinder with longitudinal slit. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **11** (1971), 719-737. (S. Kaliski) **46** #4861 78.35
- (with Kirilenko, A. A.; Masalov, S. O.) Diffraction of waves on a tape grid of the "Venetian blind" type. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 413-428. (A. Nikodémusz) **47** #6197 78.35 (78.65)
- (with Litvinenko, L. M.; Masalov, S. O.; Sologub, V. G.) ★Дифракция волн на решетках. (Russian) [Diffraction of waves by gratings] *Izdat. Har'kov. Univ., Kharkov*, 1973. 287 pp. (J. E. Rosenthal) **49** #4439 78.35
- (with Radin, A. M.) Diffraction of waves by a sphere with holes. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 838-841. (S. Kaliski) **48** #13011 78.35
- (with Litvinenko, L. M.; Prosvirnin, S. L.) A successive sharpening method for the numerical solution of Fredholm integral equations of the second kind. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1973**, 353-357, 383. (S. Maloň) **47** #9868 65R05
- (with Radin, A. M.) Diffraction of a plane wave by a sphere with a circular aperture. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 1232-1243, 1365. (J. E. Rosenthal) **50** #15607 78.35
- (with Veliev, E. I.; Sologub, V. G.) Diffraction of a plane H -polarized electromagnetic wave by a grid of circular cylinders with longitudinal slits. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 3, 243-248, 288. (Yu. S. Sayasov) **54** #4352 78.45
- (with Vinogradov, S. S.) The solution of a vector problem of diffraction by a sphere with an aperture. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 1, 60-63. (D. K. Cohoon) **58** #32417 78.35
- (with Masalov, S. O.; Sirenko, Ju. K.) The applicability of the truncation method to some infinite systems of equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 6, 539-543, 575. (D. K. Cohoon) **58** #32430 78.65
- (with Veliev, E. I.) Diffraction of waves by a grid of circular cylinders with longitudinal slits. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 5, 1234-1247, 1334. (V. M. Babič) **57** #2210 78.65
- (with Kirilenko, A. A.; Jašina, N. P.) A strict solution of the problem of a circular waveguide with a step discontinuity. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 6, 1482-1493, 1627. (Authors' summary) **56** #14177 78.65
- See **Goodstein, R. Louis**, **50** #4261
- Symmetry forms of symplectic quaternionic space and the corresponding limit spaces. (Russian) *Volž. Mat. Sb. No. 9* (1971), 93-105. (loose errata) (K. Radziszewski) **47** #2511 53A40 (50C25)
- An application of the Bergman-Nazarov method to the solution of the equations of nonlinear filtration theory. (Russian. German summary) *Vyčisl. Prikl. Mat. (Kiev) No. 17* (1972), 3-18. (B. Szafirski) **47** #1371 76.35
- The behavior of the solutions of nonlinear filtration problems near a curve of degeneracy of the domain of the hodograph of the velocity. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 4(143), 114-119. (Št. I. Gheorghită) **50** #9154 76.35
- (with Kosterin, A. V.) The application of the Ritz method to the solution of boundary value problems of nonlinear filtration. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 6(157), 51-55. (Jakub Siemek) **52** #12538 76.65
- (with Paškov, M. G.; Šešukova, F. I.) Solution of problems of nonlinear filtration on electrical networks. (Russian) *Modelling of nonstationary processes* (Russian), pp. 5-15. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Vadim Komkov) **58** #19807 76.65
- (with Paškov, M. G.; Šešukov, E. G.) Solution of problems of nonlinear filtration on electrical networks. (Russian) *Modelling of nonstationary processes* (Russian), pp. 5-15. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Vadim Komkov) **58** #19807 76.65
- Hybrid formulation of explicit formulae for higher order network sensitivities. *IEEE Trans. Circuits and Systems CAS-22* (1975), 475-478. (Authors' summary) **56** #8215 94A20
- Almansi analogue of Lamé's equations. *J. Math. Sci.* **6** (1971), 51-54 (1974). (Author's summary) **57** #14705 73.31
- See also **Milne-Thomson anniversary issue**, **48** #10739 and **Continuum mechanics and related problems of analysis**, **50** #6714
- Optimal service policies, just after idle periods, in two-server heterogeneous queueing systems. *Operations Res.* **25** (1977), no. 2, 356-360. (Jos H. A. de Smit) **57** #1705 60K25
- Unsteady laminar flow through pipes of cross-sections as a circular sector and a curvilinear quadrilateral with arbitrary time-varying pressure gradient. *Jñānabha Sect. A* **5** (1975), 97-104. (From the introduction) **57** #14870 76.35
- Unsteady motion of viscoelastic fluid due to rotation of a sphere. *Indian J. Pure Appl. Math.* **8** (1977), no. 3, 302-308. (Author's summary) **58** #19772 76.44
- Data compression techniques in logic testing: an extension of transition counts. *J. Design Automat. Fault-Tolerant Comput.* **1** (1976/77), no. 2, 99-114. (G. Saucier) **57** #5478 94A20
- (with Kodandapani, K. L.) Diagnosis of faults in linear tree networks. *IEEE Trans. Computers C-26* (1977), no. 1, 29-33. (G. Saucier) **54** #14885 94A20
- (with Steckelberg, James M.) On a relation between algebraic programs and Turing machines. *Information Processing Lett.* **6** (1977), no. 6, 180-183. (A. V. Anisimov) **58** #25085 68A05 (94A30)
- (with Kodandapani, K. L.) On combinatorial networks with restricted fan-out. *IEEE Trans. Computers C-27* (1978), no. 4, 309-318. (Ljudmil Dakovski) **57** #11951 94A20
- (with Tewari, K.) On injective near-ring modules. *Canad. Math. Bull.* **17** (1974), 137-141. (J. J. Malone) **50** #4670 16A76
- Completely periodic multithreshold functions. *IEEE Trans. Computers C-19* (1970), no. 4, 355-358. **56** #15211 94A20

- Sethi, A. S. (with Rajaraman, V.; Kenjale, P. S.) An error-correcting coding scheme for alphanumeric data. *Information Processing Lett.* 7 (1978), no. 2, 72-77. (Tai Yang Hwang) 58 #20798 94A10
- Sethi, Davinder P. S. Opportunistic replacement policies. *The theory and applications of reliability, with emphasis on Bayesian and nonparametric methods*, (Conf., Univ. South Florida, Tampa, Fla., 1975), Vol. 1, pp. 433-447. Academic Press, New York, 1977. (R. Subramanian) 57 #5048 90B25
- Sethi, P. L. (with Saxena, Ram Kishore) On the formal solution of quadruple integral equations. *Proc. Nat. Acad. Sci. India Sect. A* 42 (1972), 57-61. (S. L. Kalla) 50 #2838 45F10
- (with Saxena, Ram Kishore; Banerji, P. K.) Dual series equations associated with Bessel and hypergeometric functions. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secți. a Mat. (N.S.)* 19 (1973), no. 2, 391-394. (Philip Heywood) 52 #14879 45F10
- (with Saxena, Ram Kishore) Certain properties of bivariate distributions associated with generalized hypergeometric functions. (French summary) *Canad. J. Statist.* 1 (1973), no. 2, 171-180. (Minoru Siotani) 53 #6827 62E15
- (with Saxena, Ram Kishore) Relations between generalised Hankel and modified hypergeometric function operators. *Proc. Indian Acad. Sci. Sect. A* 78 (1973), 267-273. (H. M. Srivastava) 48 #11936 44A15 (26A33)
- (with Saxena, Ram Kishore) A formal solution of dual integral equations associated with H -function of two variables. *Univ. Nac. Tucumán Rev. Ser. A* 23 (1973), 121-130 (1974). (R. G. Buschman) 51 #6320 45F10
- (with Banerji, P. K.) Fractional integration and dual integral equations. *J. Indian Math. Soc. (N.S.)* 38 (1974), no. 1-4, 359-363 (1975). (S. K. Chatterjea) 52 #11508 45F10
- (with Saxena, Ram Kishore) On dual series relations involving series of Whittaker functions. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 17 (1974), no. 3, 201-205. (S. L. Kalla) 54 #13502 45F10 (33A15)
- (with Saxena, Ram Kishore; Banerji, P. K.) Triple integral equations involving H -function. *Bull. Calcutta Math. Soc.* 67 (1975), no. 4, 225-228. (R. G. Buschman) 56 #3596 45F10 (33A35)
- (with Saxena, Ram Kishore) Applications of fractional integration operators to triple integral equations. *Indian J. Pure Appl. Math.* 6 (1975), no. 5, 512-521. (K. N. Srivastava) 56 #3597 45F10
- (with Gupta, Om P.) On dual series equations. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 19 (1976), no. 1, 83-86. (R. P. Soni) 54 #13503 45F10
- (with Banerji, P. K.) A remark on the paper of Dwivedi: "On dual integral equations involving G -functions" (Proc. Nat. Acad. Sci. India A 41 (1971), 77-86) by A. P. Dwivedi and T. N. Trivedi. *Proc. Indian Acad. Sci. Sect. A* 85 (1977), no. 4, 186-190. (S. D. Bajpai) 56 #3594 45F10
- Sethi, Ravi (with Aho, Alfred V.; Ullman, Jeffrey D.) Code optimization and finite Church-Rosser systems. *Design and optimization of compilers* (Courant Comput. Sci. Sympos. 5, New York Univ., New York, 1971), pp. 89-105. Prentice-Hall Series in Automat. Comput., Prentice-Hall, Englewood Cliffs, N. J., 1972. (A. V. Anisimov) 55 #11664 68A05
- Complete register allocation problems. *Fifth Annual ACM Symposium on Theory of Computing* (Austin, Tex., 1973), pp. 182-195. *Assoc. Comput. Mach., New York*, 1973. (Kurt Mehlhorn) 56 #13789 68A20
- (with Bruno, John; Coffman, Edward G., Jr.) Algorithms for minimizing mean flow time. *Information processing 74* (Proc. IFIP Congress, Stockholm, 1974), pp. 504-510. North-Holland, Amsterdam, 1974. (Ian Munro) 54 #6928 90B35 (68A20)
- (with Cook, Stephen A.) Storage requirements for deterministic polynomial time recognizable languages. *Sixth Annual ACM Symposium on Theory of Computing* (Seattle, Wash., 1974), pp. 33-39. *Assoc. Comput. Mach., New York*, 1974. (Editors) 54 #9166 68A30 (68A20)
- (with Bruno, John; Coffman, Edward G., Jr.) Scheduling independent tasks to reduce mean finishing time. *Comm. ACM* 17 (1974), 382-387. (John C. Gittins) 50 #9338 90B35
- Testing for the Church-Rosser property. *J. Assoc. Comput. Mach.* 21 (1974), 671-679; errata, *ibid.* 22 (1975), 424. (R. Hindley) 51 #10053 02F10 (68A25)
- (with Downey, Peter J.) Correct computation rules for recursive languages (extended abstract). *16th Annual Symposium on Foundations of Computer Science* (Berkeley, Calif., 1975), pp. 48-56. *IEEE Computer Society, Long Beach, Calif.*, 1975. (Authors' summary) 56 #4217 68A05
- Complete register allocation problems. *SIAM J. Comput.* 4 (1975), no. 3, 226-248. (A. L. Rosenberg) 51 #14629 68A05
- (with Downey, Peter J.) Assignment commands and array structures. *17th Annual Symposium on Foundations of Computer Science* (Houston, Tex., 1976), pp. 57-66. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Jean Vuillemin) 56 #10102 68A05 (68A20)
- (with Comer, Douglas) Complexity of trie index construction (extended abstract). *17th Annual Symposium on Foundations of Computer Science* (Houston, Tex., 1976), pp. 197-207. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (E. M. Reingold) 56 #13776 68A20
- (with Coffman, Edward G., Jr.) Algorithms minimizing mean flow time: schedule-length properties. *Acta Informatic.* 6 (1976), no. 1, 1-14. (I. Gh. Ciobanu) 53 #10249 90B35 (68A20)
- (with Bruno, John) Code generation for a one-register machine. *J. Assoc. Comput. Mach.* 23 (1976), no. 3, 502-510. (K. H. V. Booth) 53 #14974 68A20
- (with Cook, Stephen A.) Storage requirements for deterministic polynomial time recognizable languages. *J. Comput. System Sci.* 13 (1976), no. 1, 25-37. (Armin Cremers) 54 #6547 68A20 (68A30)
- (with Garey, Michael R.; Johnson, David Stifler) The complexity of flowshop and jobshop scheduling. *Math. Oper. Res.* 1 (1976), no. 2, 117-129. (A. T. Amin) 54 #6930 90B35 (68A20)
- (with Johnson, Donald B.) A characterization of $LL(1)$ grammars. *Nordisk Tidskr. Informationsbehandling (BIT)* 16 (1976), no. 3, 275-280. (Daniel J. Rosenkrantz) 55 #11728 68A30
- (with Coffman, Edward G., Jr.) A generalized bound on LPT sequencing. (French summary) *Modèles, mesures; simulation de systèmes informatiques. Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Bleue* 10 (1976), no. B-2, 17-25. (Jan Weglarz) 56 #17782 90B35
- Scheduling graphs on two processors. *SIAM J. Comput.* 5 (1976), no. 1, 1-15. (M. Stancu-Minasian) 53 #2011 68A10 (90B35, 68A99)
- (with Downey, Peter J.) Correct computation rules for recursive languages. Semantics and correctness of programs. *SIAM J. Comput.* 5 (1976), no. 3, (Terese Marie McCloskey) 55 #11672 68A05 (68A30)
- (with Aho, Alfred V.) How hard is compiler code generation? *Autoruata, and programming* (Fourth Colloq., Univ. Turku, Turku, 1977), pp. 1-15. *Lecture Notes in Comput. Sci.*, Vol. 52, Springer, Berlin, 1977. (From the text) 58 #13833 68A05
- (with Prabhala, Bhaskaram) A comparison of instruction sets for stack operations. *Conference Record of the Ninth Annual ACM Symposium on Theory of Computing* (Boulder, Colo., 1977), pp. 132-142. *Assoc. Comput. Mach., New York*, 1977. (Booth) 57 #4580 68A05
- (with Bruno, John) Task sequencing in a batch environment with setup times. *Modelling and performance evaluation of computer systems* (Proc. Second International Workshop, Stresa, 1976), pp. 81-88. North-Holland, Amsterdam, 1977. (André Boute) 57 #4590 68A10 (90B35)
- (with Horvath, Edward C.; Lam, Shui) A level algorithm for preemptive scheduling. *J. Assoc. Comput. Mach.* 24 (1977), no. 1, 32-43. (C. F. Kelemen) 58 #90B35
- (with Comer, Douglas) The complexity of trie index construction. *J. Assoc. Comput. Mach.* 24 (1977), no. 3, 428-440. (Witold Lipski) 58 #3780 68A05
- On the complexity of mean flow time scheduling. *Math. Oper. Res.* 2 (1977), no. 3, 320-330 (1978). (Jacek Błażewicz) 57 #9043 90B35
- (with Lam, Shui) Worst case analysis of two scheduling algorithms. *Comput. 6* (1977), no. 3, 518-536. (Klaus Ecker) 58 #15115 90B35 (68A10)
- (with Downey, Peter J.) Assignment commands with array references. *Comput. Mach.* 25 (1978), no. 4, 652-666. (R. K. Shyamasundar) 58 #25067 (68A20)
- Conditional expressions with equality tests. *J. Assoc. Comput. Mach.* 25 (1978), no. 4, 667-674. (Jean Vuillemin) 58 #25084 68A05
- Sethi, Suresh P. (with Morton, Thomas E.) A mixed optimization technique for generalized machine replacement problem. *Naval Res. Logist. Quart.* 19 (1972), 471-481. (C. Mohan) 47 #10041 90B25
- Simultaneous optimization of preventive maintenance and replacement policies for machines: a modern control theory approach. *AIIE Trans.* 5 (1973), 156-163. (Schaible) 53 #4953 90B25
- Optimal control of the Vidale-Wolfe advertising model. *Operations Res.* 20 (1972), 998-1013. (Author's summary) 55 #14146 (E 55 #14147) 90A15 (93C99)
- (with McGuire, Timothy W.) An application of the maximum principle to heterogeneous labor model with retarded controls. *Optimal control theory and applications* (Proc. 14th Biennial Sem. Canad. Math. Congr., Univ. Western Ontario, London, Ont., 1973), Part II, pp. 338-384. *Lecture Notes in Econom. and Math. Systems*, Vol. 106, Springer, Berlin, 1974. (Authors' summary) 57 #5028 90A15
- Sufficient conditions for the optimal control of a class of systems with control lags. *J. Optimization Theory Appl.* 13 (1974), 545-552. (D. F. Lawden) 50 #49B35
- Optimal institutional advertising: minimum-time problem. *J. Optimization Theory Appl.* 14 (1974), 213-231. (Russell D. Rupp) 50 #3086 49E15
- Some explanatory remarks on the: "Optimal control of the Vidale-Wolfe advertising model" (Operations Res. 21 (1973), 998-1013). *Operations Res.* 22 (1974), 1119-1120. (Author's summary) 55 #14147 90A15 (93C99)
- (with Thompson, Gerald L.) A maximum principle for stochastic networks. *Proceedings of the XXth International Meeting of the Institute of Management Sciences* (Tel Aviv, 1973), Vol. 1, pp. 244-248. *Jerusalem Academic Press, Jerusalem*, 1973. (Authors' summary) 56 #10889 90B15
- (with Burdet, Claude-Alain) On the maximum principle for a class of dynamical systems with lags. *J. Optimization Theory Appl.* 19 (1976), no. 3, 445-455. (H. Chyng) 54 #7050 93C55
- A linear bang-bang model of firm behavior and water quality. *IEEE Transactions on Automatic Control* AC-22 (1977), no. 5, 706-714. (Author's summary) 56 #90A15
- (with McGuire, Timothy W.) Optimal skill mix: an application of the maximum principle for systems with retarded controls. *J. Optimization Theory Appl.* 23 (1977), no. 2, 245-275. (Nancy L. Schwartz) 58 #9578 93C30 (90A15)
- Nearest feasible paths in optimal control problems: theory, examples, and counterexamples. *J. Optimization Theory Appl.* 23 (1977), no. 4, 563-579. (Gerhard Meyer) 58 #23898 49B10
- (with Thompson, Gerald L.) Christmas toy manufacturer's problem: an application of the stochastic maximum principle. *Opsearch* 14 (1977), no. 3, 161-173. (M. S. Seshu) 57 #2512 90B15
- Dynamic optimal control models in advertising: a survey. *SIAM Rev.* 19 (1977), no. 4, 685-725. (Author's summary) 58 #25954 90B99 (93C99)
- Sethi, P. R. Systems with fast and slow time. (Russian summary) *Proceedings of International Conference on Nonlinear Oscillations* (Kiev, 1969), Vol. 1: *Analysis in the theory of nonlinear oscillations* (Russian), pp. 505-521. *Izdanie Inst. Mat. Nauk Ukrain. SSR, Kiev*, 1970. (J. A. Marlin) 47 #8987 34C30
- Ultimate behavior of a class of stochastic differential systems depends on a parameter. *Stability of stochastic dynamical systems* (Proc. Internat. Symp. Warwick, Coventry, 1972), pp. 273-282. *Lecture Notes in Math.*, Vol. 294, Springer, Berlin, 1972. (V. G. Kolomoiec) 53 #6042 34F05
- Method of averaging for systems bounded for positive time. *J. Math. Anal. Appl.* (1973), 621-631. (C. S. Coleman) 48 #4427 34C30
- (with Balachandra, M. B.) Some asymptotic results for systems with multiple time scales. *SIAM J. Appl. Math.* 27 (1974), 611-625. (Authors' summary) 58 #34C30 (93C15)
- (with Balachandra, M. B.) A generalization of the method of averaging for systems with two time scales. *Arch. Rational Mech. Anal.* 58 (1975), no. 3, 261-280. (Levitin) 53 #3435 34C30

- some new infinite time results for the method of averaging. (Russian summary) *Ann. Inst. Poincaré* 1977. (Author's summary) **58** #28867 34C25
- with Schapiro, Sherman M.) An estimate for the small parameter in the asymptotic analysis of non-linear systems by the method of averaging. (French and German summaries) *Internat. J. Non-Linear Mech.* **12** (1977), no. 3, 127-140. (W. S. Loud) 16838 34C30
- an, Jayaram (with Savage, I. Richard) Asymptotic distribution of the log likelihood ratio based on ranks in the two sample problem. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971), Vol. I: Theory of statistics*, pp. 437-458. Univ. California Press, Berkeley, Calif., 1972. (Jana Jurečková) **53** #11872 62G10 (62E20)
- with Rao, J. S.) Weak convergence of empirical distribution functions of random variables subject to perturbations and scale factors. *Ann. Statist.* **3** (1975), 299-313. (Z. W. Birnbaum) **53** #9463 62E20 (62G10)
- with Proschan, Frank) Simple multivariate inequalities using association. (Russian summary) *Teor. Veroyatnost. i Primenen.* **20** (1975), 197-198. (M. D. Perlman) 4346 60E05
- with Proschan, Frank) Stochastic comparisons of order statistics from homogeneous populations, with applications in reliability. *J. Multivariate Anal.* **6** (1976), no. 4, 608-616. (Z. W. Birnbaum) **55** #4511 62G30 (62N05)
- with Nevius, S. E.; Proschan, Frank) A stochastic version of weak majorization with applications. *Statistical decision theory and related topics. II (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976)*, pp. 281-296. Academic Press, New York, 1977. (Somesh Das Gupta) **56** #1596 62H99 (26A51)
- with Proschan, Frank) Schur functions in statistics. I. The preservation theorem. *Ann. Statist.* **5** (1977), no. 2, 256-262. (Somesh Das Gupta) **56** #1594 62H99 (62E10)
- with Nevius, S. E.; Proschan, Frank) Schur functions in statistics. II. Stochastic majorization. *Ann. Statist.* **5** (1977), no. 2, 263-273. (Somesh Das Gupta) **56** #1595 (62E10)
- with Hollander, Myles; Proschan, Frank) Functions decreasing in transposition with applications in ranking problems. *Ann. Statist.* **5** (1977), no. 4, 722-733. (Z. W. Birnbaum) **58** #7965 62E10 (62F07)
- with El-Newehi, E.; Proschan, Frank) A simple model with applications in natural reliability, extinction of species, inventory depletion and urn sampling. *Ann. Appl. Probability* **10** (1978), no. 1, 232-254. (Moshe Shaked) **57** #1602 (60K10)
- See also Lecam, L., **51** #9306
- V. (with Chatterjee, A.) A mixed finite element formulation for plate problems. *Math. J. Numer. Methods Engrg.* **4** (1972), 67-84. (J. Šveida) **45** #8122 73G5
- angaswamy V. A method to determine the expressive power of a set of functions. *IEEE Trans. Computers* **C-19** (1970), 1223-1225. (B. Hazeltine) **48** #5820 B99 (94A20)
- Erratum: "On the equivalence of strong and weak validity of rule schemes in the two-valued propositional calculus" (Notre Dame J. Formal Logic **11** (1970), 249-253). *Notre Dame J. Formal Logic* **15** (1974), 648. (J. Łukasiewicz) **50** #1832 02B05
- with Kodandapani, K. L.) Reed-Muller canonical forms in multivalued logic. *IEEE Trans. Comput.* **C-24** (1975), 628-636. (János Demetrovics) **51** #12429 94A20 (05)
- with Kodandapani, K. L.) A note on minimal Reed-Muller canonical forms of switching functions. *IEEE Trans. Computers* **C-26** (1977), no. 3, 310-313. (B. Hazeltine) 11584 94A20
- nji Generalized O(4) harmonics and Bethe-Salpeter equation for spinor-spinor system. *Progr. Theoret. Phys.* **42** (1969), 1394-1417. (S. N. Biswas) **46** #8575 (26)
- O(3,1) harmonics and its application to Bethe-Salpeter equation. *Progr. Theoret. Phys.* **46** (1971), 1248-1260. (V. S. Varadarajan) **46** #6735 81J22
- riaki Bargmann's inequalities in spaces of arbitrary dimension. *Publ. Res. Inst. Sci.* **9** (1973/74), 429-461. (H. Flaschka) **49** #5596 35P15 (81J35)
- A note on the generating function for the Coulomb wave functions. *Mem. Fac. Sci., Kyoto Univ.* **37** (1975), no. 3, 155-162. (P. J. Roberts) **53** #2176 81J33
- Asymptotic behavior of the eigenvalues in the Wick-Cutkosky model for large principal quantum number. *Progr. Theoret. Phys.* **56** (1976), no. 3, 919-925. (R. C. Mahajan) **54** #6735 81J34
- Reducibility of an Ising ferromagnet from Griffiths "equalities". *Progr. Theoret. Phys.* **55** (1976), no. 3, 683-691. (Author's summary) **56** #14485 82J62
- with Fukui, Ichio; Yoshida, Toshihiro) Spinor-spinor Bethe-Salpeter equation—gauge dependence in the nonrelativistic limit. *Progr. Theoret. Phys.* **58** (1977), no. 3, 1585-1593. (Authors' summary) **56** #10580 81J47
- uo An example of bounded commutative BCK-algebras. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 283-284. (W. Nemitz) **56** #15513 06A20
- Some examples of BCK-algebras. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 3, 400. (Javed Ahsan) **58** #16279 02J05 (06A40)
- A. (with Aziz, K.) A generalization of the additive correction methods for the iterative solution of matrix equations. *SIAM J. Numer. Anal.* **10** (1973), 506-521. (C. G. Fischer) **48** #10148 65N20
- ntonio-Mario À propos d'une condition conduisant à une théorie forcée saturée. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A645-A646. (M. Boffa) **49** #34 02H05
- On the propositional calculus P^1 . *Math. Japon.* **18** (1973), 173-180. (M. Rogava) 110020 02B05
- Multirelation fortement homogène et ses rapports avec les théories forcées. *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A535-A537. (M. Boffa) **51** #5284 02G20 (05)
- (with Sette, Sergio) Un théorème de représentation pour les catégories $EF_1(L)$. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 14, A549-A550. (G. Manes) **52** #10841 18B05
- ergio (with Sette, Antonio-Mario) Un théorème de représentation pour les catégories $EF_1(L)$. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 14, A549-A550. (E. G. Manes) **52** #10841 18B05
- 4, Ai, A549-A550. (E. G. Manes) **52** #10841 18B05
- Settle, J. G. (with Golder, E. R.) The Box-Müller method for generating pseudo-random normal deviates. *J. Roy. Statist. Soc. Ser. C Appl. Statist.* **25** (1976), no. 1, 12-20. (V. Dupač) **55** #1702 65C10
- (with Golder, E. R.) Monitoring schemes in short-term forecasting. *Operational Res. Quart.* **27** (1976), no. 2, part 2, 489-501. (C. W. J. Granger) **55** #11533 62M20
- Settle, Tom Propensity theories of probability unscathed: a reply to A. R. White (British J. Philos. Sci. **23** (1972), 35-43). *British J. Philos. Sci.* **23** (1972), 331-335. (Not reviewed) 60A05
- Sety, D. D. (with Lakshmikantham, V.; Mitchell, A. Richard) Method of quasilinearization and positivity of solutions in abstract cones. *J. Optimization Theory Appl.* **22** (1977), no. 3, 353-372. (I. Norman Katz) **56** #12475 34G05 (34C99)
- Setzer, C. Bennett Elliptic curves of prime conductor. *J. London Math. Soc.* (2) **10** (1975), 367-378. (M. Bašmakov) **51** #8121 14K15 (10D05, 14G25)
- Units in totally complex S_3 fields. *J. Number Theory* **10** (1978), no. 2, 244-249. (Veikko Ennola) **58** #585 12A45
- Elliptic curves over complex quadratic fields. *Pacific J. Math.* **74** (1978), no. 1, 235-250. (M. Bašmakov) **58** #10913 14G25 (10D05, 14K15)
- Sevaria, K. S. Some theorems on operational calculus. (Hindi. English summary) *Vijnana Parishad Amusandhan Patrika* **12** (1969), 11-17. (K. M. Saksena) **46** #4112 44A10 (33A30)
- A theorem on operational calculus. *Ganita* **21** (1970), no. 1, 99-102. (K. C. Gupta) **45** #7407 44A10
- Integration with respect to parameter. *Proc. Nat. Acad. Sci. India Sect. A* **45** (1975), no. 2, 121-126. (C. L. Parihar) **55** #730 33A30
- A relation involving Meijer's G-function and Kampé de Fériet function. (Hindi. English summary) *Vijnana Parishad Amusandhan Patrika* **18** (1975), no. 3, 275-279. (Aruna Srivastava) **55** #12968 33A35
- A new operational image in Laplace transform. (Hindi. English summary) *Vijnana Parishad Amusandhan Patrika* **19** (1976), no. 1, 35-38. (V. M. Bhise) **57** #7051 44A20
- Sevast'janov, B. A. ★ Ветвящиеся процессы. (Russian) [Branching processes] *Izdat. "Nauka", Moscow*, 1971. 436 pp. (F. L. Spitzer) **49** #9968 60J80
- Random mappings and decompositions of finite sets. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 129-142. (J. Galambos) **46** #2777 62E15 (60C05, 62G10)
- A Poisson limit law in a scheme of sums of dependent random variables. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 733-738. (M. Rabindranathan) **46** #10041 60F05
- ★ Verzweigungsprozesse. Übersetzt aus dem Russischen von Walter Warmuth. Mathematische Lehrbücher und Monographien. II. Abteilung: Mathematische Monographien, Band 34. Akademie-Verlag, Berlin, 1974. xi + 326 pp. (Editors) **53** #11785 60J80
- Renewal theory. (Russian) *Probability theory, Mathematical statistics, Theoretical cybernetics, Vol. 11 (Russian)*, pp. 99-128, 131. *Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1974. (F. L. Spitzer) **50** #5967 60K05 (60J15)
- (with Zubkov, A. M.) Controlled branching processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **19** (1974), 15-25. (P. Jagers) **49** #4109 60J80
- ★ Verzweigungsprozesse. Übersetzt aus dem Russischen von Walter Warmuth. R. Oldenbourg Verlag, Munich-Vienna, 1975. xi + 326 pp. (Editors) **53** #11786 60J80
- (with Kolčín, V. F.; Čistjakov, V. P.) ★ Случайные размещения. (Russian) [Random assignments] Теория Вероятностей и Математическая Статистика. [Monographs in Probability and Mathematical Statistics] *Izdat. "Nauka", Moscow*, 1976. 223 pp. (errata insert) (D. A. Darling) **57** #10758a 60C05 (60F05, 62G10)
- (with Kolčín, V. F.; Čistjakov, V. P.) ★ Random allocations. Translated from the Russian. Translation edited by A. V. Balakrishnan. Scripta Series in Mathematics. V. H. Winston & Sons, Washington, D.C.; distributed by Halsted Press [John Wiley & Sons], New York-Toronto, Ont.-London, 1978. xi + 262 pp. ISBN 0-470-99394-4 (D. A. Darling) **57** #10758b 60C05 (60F05, 62G10)
- Branching processes that are bounded from below. (Russian) *Dokl. Akad. Nauk SSSR* **238** (1978), no. 4, 811-813. (P. Jagers) **58** #13387 60J80
- See also Kaufmann, A., **51** #10110
- Sevast'janov, E. A. Certain estimates in integral metrics for the derivatives of rational functions. (Russian) *Mat. Zametki* **13** (1973), 499-510. (M. Tomić) **48** #2327 26A81
- Uniform approximations by piecewise monotone functions, and some applications of them to Φ -variations and Fourier series. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 27-30. (V. A. Popov) **50** #2767 41A30 (42A20)
- The dependence of the differential properties of a function on the speed of its rational approximations in the L_p metrics. (Russian) *Mat. Zametki* **15** (1974), 79-90. (Wiesław Pleśniak) **49** #11110 41A20
- (with Dolženko, E. P.) Approximations by rational functions in integral metrics, and differentiability in the mean. (Russian) *Mat. Zametki* **16** (1974), 801-811. (T. Bojanov) **52** #6255 41A20
- Piecewise monotone approximation, and Φ -variations. (Russian. English summary) *Anal. Math.* **1** (1975), no. 2, 141-164. (M. Tomić) **52** #8747 41A50 (26A45)
- Piecewise monotone and rational approximations, and uniform convergence of Fourier series. (Russian. English summary) *Anal. Math.* **1** (1975), no. 4, 283-295. (D. W. Solomon) **53** #1137 42A20
- (with Dolženko, E. P.) Approximations of functions in the Hausdorff metric. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 4, 768-770. (Luciana Lupaș) **54** #13409 41A50
- (with Dolženko, E. P.) Approximations of functions in the Hausdorff metric by means of piecewise monotone (in particular, rational) functions. (Russian) *Mat. Sb. (N.S.)* **101(143)** (1976), no. 4, 508-541. (T. Bojanov) **57** #17091 41A30
- Piecewise monotone and rational approximation and uniform convergence of Fourier series. (Russian) Presented at the International Conference on the Theory of Approximation of Functions, held at Kaluga, July 24-28, 1975. *Mat. Zametki* **20** (1976), no. 4, 619-624. (O. D. Gabisonija) **55** #3654 42A08 (41A20)
- (with Dolženko, E. P.) The dependence of properties of functions on the rate of

- their approximation by polynomials. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 42 (1978), no. 2, 270–304, 469–470. (B. Bojanov) 58 #6838 41A25 (41A50)
- Sevast'yanov, L. A. The Paley-Wiener theorem for the Heisenberg group. (Russian) *Trudy Univ. Družby Narod.* 80 (1976), no. 9 *Problemy Statist. Fiz. i Teor. Polja*, 122–126. (Editors) 58 #28277 22E30
- Sevast'yanov, N. P. Optimal impulse autocorrection. (Russian) *Avtomat. i Vychisl. Tehn.* 1969, no. 6, 51–53. (Author's summary) 45 #8328 93D15
- (with Nikol'skii, V. A.) Discrete regulation and optimal solutions in problems of the operative control of multiparameter processes with random perturbations. (Russian) *Avtomat. i Vychisl. Tehn.* 1972, no. 2, 59–62. (Ivar Petersen) 46 #3183 93E20
- (with Lisitsyn, N. N.) Discrete control processes and optimal solutions in problems of operative control of certain Markov objects. (Russian) *Avtomat. i Vychisl. Tehn.* 1972, no. 3, 68–71. (P. Brunovsky) 47 #3087 93E20
- ★Алгоритмы регулирования и дискретной коррекции в задачах оперативного управления. (Russian) [Algorithms for regulation and discrete correction in problems of operative control] *Izdat. "Zinatne", Riga*, 1975. 162 pp. (K. Amborski) 56 #4976 93C55
- (with Nikol'skii, V. A.; Lekarev, Ja. Z.; Žernakov, N. A.) ★Теория автоматического регулирования и управления. Вып. 4. (Russian) [Theory of automatic guidance and control. No. 4] *Rižsk. Inst. Inž. Graždan. Aviacii*, Riga, 1975. 165 pp. (From the publisher's description) 57 #15622 93Cxx
- Sevast'yanov, S. V. The asymptotic approach to certain problems of scheduling theory. (Russian) Optimal processes (Proc. Third All-Union Conf. Problems of Theoretical Cybernetics, Novosibirsk, 1974). *Upravljajemye Sistemy Vyp.* 14 (1975), 40–51, 76. (Author's summary) 58 #15121 90B35
- (with Perepelica, V. A.) A scheduling problem on a network. (Russian) *Upravljajemye Sistemy No. 15 Diskret. Ekstremal. Zadači* (1976), 48–67, 81. (From the introduction) 58 #9201 90B35
- Sevast'yanov, V. F. A certain property of MP-transformers of a special form. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 1, 149–150. (E. Stockii) 48 #5437 68A30
- Sevast'yanov, Boris A. See Sevast'yanov, B. A.
- Ševčenko, E. M. (with Vatel', I. A.) A class of linear synthesis problems. *Avtomat. i Telemekh.* 1971, no. 10, 15–22 (Russian. English summary); translated as *Avtomat. Remote Control* 1971, no. 10, part 1, 1539–1546 (1972). (H. Taylor) 53 #10438 93E10
- The principle of the best guaranteed result in control problems with several functionals. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 12 (1972), 517–521. (G. Zatiašvili) 46 #6125 49A30
- Ševčenko, E. N. (with Homenko, M. P.) ★KVP-графы. (Russian) [KVP-graphs] Preprint IM-77-17. *Akad. Nauk Ukrain. SSR Inst. Mat.*, Kiev, 1977. 48 pp. (Authors' review (RŽMat 1978 #5 V497 K)) 58 #21784 05C25
- (with Homenko, M. P.) On the problem of identifying and enumerating. (Russian) *Ukrain. Mat. Ž.* 30 (1978), no. 2, 201–211, 282. (G. P. Egoryčev) 58 #16391 05C30 (05C35)
- Ševčenko, G. V. Uniqueness conditions for the optimal control of a discrete linear time-optimality problem. (Russian) *Upravljajemye Sistemy No. 13* (1974), 69–71, 74. (See RŽMat 1975 #7 B579) 93C55
- An algorithm for solving linear discrete time-optimality problems. (Russian) *Upravljajemye Sistemy No. 16* (1977), 31–34, 81. (Author's summary) 58 #26360 93C55
- Ševčenko, Ju. A. (with Kudrjašov, A. B.; Čuban', V. D.) Some questions on the realization of the finite element method on an electronic computer. (Russian) *Programirovanie* 1976, no. 6, 35–43, 79. (M. Zlámal) 56 #7258 65N30 (65-04)
- Ševčenko, Ju. I. A congruence-oid of central quadratic hypercylinders in an affine space. (Russian) *Trudy Kaliningrad. Gos. Univ. Differencial'naja Geometr. Mnogoobraz. Figur* No. 2 (1971), 68–74. (J. Merza) 49 #3716 53A15
- Classes of affine connections. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 3 (1973), 163–170. (Ju. Lumiste (RŽMat 1974 #2 A587)) 58 #30840 53B05
- Connections in the principal bundles that are associated with tangentially degenerate surfaces in a projective space. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 7 (1976), 139–146, 155. (D. I. Papuc) 58 #18192 53A20
- Framings of a multidimensional surface in projective space. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 8 (1977), 135–150, 157. (Vladislav Goldberg) 58 #24065 53A20
- Ševčenko, Ju. M. Nonassociated flow law for plane trajectories of deformation of mean curvature. (Russian) *Prikl. Meh.* 13 (1977), no. 10, 133–140, 144. (Author's summary) 56 #13983 73J33
- Ševčenko, K. M. (with Homenko, M. P.) Calculation of the number of parts of an arbitrary graph that are isomorphic to another graph. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1976, no. 9, 785–790, 864. (H.-J. Voss) 56 #5354 05C30
- Ševčenko, N. V. Evaluation of positions of finite open games with the use of recursion relations. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1972, no. 2, 13–19 (Russian); translated as *Engrg. Cybernetics* 10 (1972), no. 2, 187–193. (G. Owen) 51 #2657 90D05
- Ševčenko, R. Ja. (with Oranskii, A. M.; Reihenberg, A. L.) A time-optimal iteration method for computing logarithms and exponentials. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* 1972, no. 1, 24–30, 95. (Walter Gautschi) 46 #6556 65D15
- Ševčenko, V. A. (with Čekalin, A. N.) A problem on the filtration of two fluids in many-layered deposits. (Russian) *Numerical methods in problems of technology and economics* (Russian), pp. 40–50. *Izdat. Kazan. Univ.*, Kazan, 1971. 55 #1941 76G65
- Ševčenko, V. I. Certain boundary value problems for a holomorphic vector. (Russian) *Mathematical physics, No. 8 (Russian)*, pp. 172–187. *Naukova Dumka*, Kiev, 1970. (S. A. Tersenov) 45 #7081 30A88
- Homotopy classification of the boundary value problems of oblique derivative type for a system of two harmonic functions. (Russian) *Mathematical physics, No. 7 (Russian)*, pp. 185–192. *Naukova Dumka*, Kiev, 1970. (R. Beals) 45 #3934 35J55
- Some remarks on the number of connected components of the set of second order elliptic systems. (Russian) *Mathematical physics, No. 8 (Russian)*, pp. 193–200. *Naukova Dumka*, Kiev, 1970. (R. Beals) 45 #3935 35J55
- A formula for the index of a problem of oblique derivative type for a system of harmonic functions with three independent variables. (Russian) *Mathematical physics, No. 10 (Russian)*, pp. 112–119. *Naukova Dumka*, Kiev, 1971. (M. A. Aizman) 46 #3821 31B20
- A homotopy classification of Hilbert boundary value problems for a holomorphic vector. (Russian) *Dokl. Akad. Nauk SSSR* 201 (1971), 1067–1069. (T. G. Ševčenko) 45 #8860 30A88
- A certain approach to the calculation of the index of spatial boundary value problems. (Russian. English and Georgian summaries) *Gamoqnebn. Math. Inst. Sem. Mošsen. Anotacie. No. 5* (1971), 9–12. (O. John) 46 #556 35Q99 (47F05)
- (with Gluščenko, A. A.) Certain boundary value problems of the potential type for a space layer. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1972, 586–589, 668. (V. L. Makarov) 46 #8445 65N30
- (with Gluščenko, A. A.) Solution of a certain class of boundary value problems for a filtration in space. (Russian. German summary) *Vychisl. Prikl. Mat. (Kiev)* 1972, 3–16. (I. O. Bohachevsky) 46 #8539 76G65
- (with Samoilenko, I. S.) The Riemann-Hilbert problem for a holomorphic vector with pseudodifferential boundary conditions. (Russian) *Mathematical physics, No. 8 (Russian)*, pp. 153–159, 194. *Naukova Dumka*, Kiev, 1973. (S. A. Tersenov) 45 #35F15 (30A88)
- Certain models of storage systems. (Russian) *Theory of random processes, No. 13 (Russian)*, pp. 133–137, 140. *Izdat. "Naukova Dumka"*, Kiev, 1973. (A. A. Ševčenko) 52 #4465 60K30 (90B05)
- Elliptic systems of three equations with four independent variables. (Russian) *Akad. Nauk SSSR* 210 (1973), 1300–1302. (M. A. Atahodžev) 48 #6674
- Computation of the index of the Hilbert problem for a holomorphic vector field. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1973, 127–130, 190. (S. G. Samko) 47 #7047 30A88
- On the question of the univalence of polynomial mappings. (Russian. Georgian and English summaries) *Gamoqnebn. Math. Inst. Sem. Mošsen. Anotacie. No. 8* (1973), 1–4. (V. L. Makarov) 49 #9170 30A06
- The Hölder continuity of the solutions of singular integral equations of the second kind. (Russian) *Mathematical physics, No. 15 (Russian)*, pp. 160–171, 182. *Izdat. "Naukova Dumka"*, Kiev, 1974. (Siegfried Pröbldorf) 49 #7855 47G05 (45E05)
- Computing the rotation of a certain vector field. (Russian) *Mathematical physics, No. 16 (Russian)*, pp. 185–190, 200. *Izdat. "Naukova Dumka"*, Kiev, 1974. (Bert-Wolfgang Schulze) 49 #3353 35Q99 (58G10)
- A certain model of inventory storage systems. (Russian) *Theory of random processes, No. 2 (*

- the first approximation of the solution of an equation with periodic coefficients that constructed from a correction compensation scheme. (Russian) *Asymptotic and variational methods in the theory of nonlinear oscillations* (Russian), pp. 208-217. *Izdanie Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971.* (W. S. Loud) **54** #4110 65L05 (45)
- V. N. (with Priluckii, M. H.) A certain approach to the composition of an annual performance plan. (Russian) *Studies in cybernetics* (Russian), pp. 18-20. *Izdat. et. Radio", Moscow, 1970.* (S. Krčević) **47** #8100 90B35
- with Talanov, V. A.) A certain problem of a dynamic transport network. (Russian) *Journal of oscillations, applied mathematics and cybernetics. Izv. Vysš. Učebn. Zaved. fizika* **15** (1972), 1113-1114. (J. Černý) **47** #10038 90B10
- with Remizova, O. L.) The construction of regular cut-offs in linear integer programming. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. No. 166 Teorija Kolebanii, Kibernet. i Kibernet.* (1973), 199-206. (E. Ja. Gabovič) **50** #12241 90C10
- The dual description of the cone generated over the integers by a finite set of vectors. (Russian) *Mat. Zametki* **14** (1973), 523-526. (George P. Barker) **53** #2985 39
- (with Ivanov, N. N.) The structure of a finitely generated semilattice. (Russian) *Iz. Akad. Nauk BSSR* **19** (1975), no. 9, 773-774, 857. (T. C. Brown) **52** #8075 15
- The solution of the elementary integer linear programming problem. (Russian) *Mathematical processes* (Proc. Third All-Union Conf. Problems of Theoretical Cybernetics, Novosibirsk, 1974). *Upravljajemye Sistemy Vyp.* **14** (1975), 69-73, 76-77. (E. G. Štein) **57** #15435 90C10
- A discrete analogue of the Farkas theorem, and the aggregation problem of a system near integer equations. (Russian. English summary insert) *Kibernetika* (Kiev) **1976**, 2, 99-101. (Author's summary) **56** #14695 90C10
- (with Ivanov, N. N.) The representation of a semigroup by a semigroup generated a finite set of vectors. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **6**, no. 2, 98-100, 142. (G. Pollák) **53** #13445 20M05
- ko, V. V. On the question of deterministic methods for top-down analysis. (Russian) *Journal of electronic digital computers* (Proc. Sem. Automation of Programming, Kiev, 1970/1971) (Russian), pp. 86-98. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1971. (M. Čulík) **52** #4732 68A30
- The parametrization of LL(k) grammars. (Russian) *Software of electronic digital computers* (Proc. Sem. Automation of Programming, Kiev, 1970/1971) (Russian), pp. 85-85. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1971. (A. Ja. Dikovskii) #7221 68A30
- (with Perevozčikova, O. L.; Ceitlin, G. E.) The construction of a two-sided analyzer ambiguous grammars. (Russian) *Languages of systems programming and methods for realization* (Russian), pp. 140-153. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1974. (Martti Penttonen) **57** #4662 68A30
- (with Šatrov, A. D.) Decomposition of the field in an open layered wave guide when guided waves are degenerate. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. fizika* **17** (1974), no. 11, 1692-1702. (Authors' summary) **56** #4432 7835
- A certain approach to the problem of syntactic analysis. (Russian. English summary insert) *Kibernetika* (Kiev) **1974**, no. 4, 30-38. (A. L. Fuksman) **53** #12112 68A30
- (with Perevozčikova, O. L.; Ceitlin, G. E.) Grammar models that are oriented to two-sided syntactic analysis of languages. (Russian. English summary insert) *Kibernetika* (Kiev) **1976**, no. 3, 1-11. (Authors' summary) **58** #3744 68A30
- Kenneth C. Computer system modelling and analysis: assessing some common assumptions. *Proceedings of the Seventh Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1974), pp. 37-39. *Western Periodicals, North Hollywood, Calif.*, 1974. (T. Rus) **56** #7942 90B99 (93A99)
- Scheduling for minimum total loss using service time distributions. *J. Assoc. Comput. Mach.* **21** (1974), 66-75. (N. Zierler) **49** #4558 90B35
- (with Su, Zaw Sing) A combinatorial approach to dynamic scheduling problems. *Oper. Res.* **26** (1978), no. 5, 836-844. (Authors' summary) **58** #20392 90B35
- V. V. Normally solvable operators in a family of Banach spaces. (Russian) *Trudy fiz. Gos. Univ. Ser. Mat. Nauk Vyp.* **12** (1976), 94-103. (RZMat 1977 #8 B623) #10461 47A50 (47B99)
- The spectrum of a linear operator in a family of Banach spaces that contains a dense space. (Russian) *Mat. Zametki* **22** (1977), no. 4, 495-498. (Andrei Raczy) #2360 47A10 (46M35)
- The spectrum of a general singular operator. (Russian) *Ukrain. Mat. Ž.* **29** (1977), 3, 423-426, 430. (P. A. Kučment) **56** #12930 47A10
- E. I. (with Bykov, Ja. V.; Živogljadova, L. V.) Sufficient conditions for the oscillation of the solutions of nonlinear finite difference equations. (Russian) *Differentsial'nye Uravnenija* **9** (1973), 1523-1524, 1551. (R. Kodnár) **48** #9151 (EA 51) 39A12
- (with Bykov, Ja. V.; Bykova, L. Ja.) Sufficient conditions for the oscillation of the solutions of nonlinear differential equations with deviating argument. (Russian) *Differentsial'nye Uravnenija* **9** (1973), 1555-1560, 1738. (G. B. Gustafson) **48** #6609 34K15
- (with Bykov, Ja. V.) Sufficient conditions for the oscillatory nature of the solutions of nonlinear finite difference equations. (Russian) *Differentsial'nye Uravnenija* **9** (1973), 1521-1524, 2301. (A. Halanay) **48** #9149 39A12
- (with Bykov, Ja. V.; Merzljakova, G. D.) The oscillation of the solutions of nonlinear difference equations. (Russian) *Differentsial'nye Uravnenija* **11** (1975), no. 8, 1470-1473, 1532. (A. Halanay) **52** #1075 39A10
- G. A. (with Bluvband, Z. M.) Influence of the properties of an information receiver on certain characteristics of a communication system. (Russian) *Obzor i predacha Informacii* No. 34 (1972), 23-26, 116. (Authors' summary) **47** #10126 40A05
- G. S. (with Malan'ina, G. A.; Hlebutina, V. I.) Finite minimal not completely factorizable groups. (Russian) *Mat. Zametki* **12** (1972), 157-162. (L. G. Kovács) #430 20F15
- (with Malan'ina, G. A.) A certain generalization of finite minimal nonsolvable groups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 7(134), 59-62. (B. Bartley) **49** #2925 20D10
- (with Malan'ina, G. A.) A certain class of solvable groups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 8(159), 64-69. (F. Haimo) **53** #8258 20E15
- (with Malan'ina, G. A.; Hlebutina, V. I.) Completely factorizable groups. (Russian) *Group theory and some questions of algebra. Perm. Gos. Univ. Učen. Zap. No. 343* (1975), 53-55, 104. (See RZMat 1977 #4 A205) 20F15
- Ševcov, V. I. Series in a certain system of analytic functions. (Russian) *Differentsial'nye Uravnenija i Vyčisl. Mat. Vyp.* **3** (1973), 23-39, 169. (W. H. J. Fuchs) **54** #13078 30A62
- On the question of the reconstruction of a function from the coefficients of its corresponding series in a certain system of analytic functions. (Russian) *Differentsial'nye Uravnenija i Vyčisl. Mat. Vyp.* **4** (1974), 18-29, 148. (W. H. J. Fuchs) **55** #8332 30A16
- Ševcov, V. K. The spectra of discretized functions that are formed on the basis of binary pseudorandom sequences of maximal period. (Russian) *Automatic control and methods of electrical measurements* (Proc. Eighth All-Union Conf., Vol. 1) (Russian), pp. 245-251. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1971.* (I. Vajda) **48** #10629 94A05
- Ševčuk, F. Ja. Two-dimensional pseudo-Euclidean Belov groups. (Russian) *Studies in algebra, mathematical analysis, and their applications* (Russian), pp. 30-34, 120-121. *Izdat. "Štiinca", Kishinev, 1977.* (Author's summary) **58** #23978 50B30 (20H15)
- Ševčuk, I. A. (with Dzjadik, V. K.) The limit values of a Cauchy type integral for functions of Zygmund classes. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 601-617, 716. (C. Tanaka) **47** #2065 30A72
- Constructive characterization of functions of the classes $D'H^{(k)}$ on closed sets with a piece-wise smooth boundary. (Russian) *Ukrain. Math. Ž.* **25** (1973), 81-90, 142. (B. Bojanov) **47** #5491 41A10 (30A82)
- Some remarks on functions whose modulus of continuity is of order $k > 2$. (Russian) *Questions in the theory of approximation of functions and its applications* (Russian), pp. 194-199. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1976.* (Editors) **58** #29520 39A10 (26A15)
- Body and contour properties of analytic functions in terms of the second modulus of continuity. (Russian) *Questions in the theory of approximation of functions and its applications* (Russian), pp. 200-204. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1976.* (Editors) **58** #28525 30A82 (41A10)
- Ševčuk, L. B. Questions on the numerical construction of ϕ -extremal polynomials, and their applications. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 5, 401-405, 474. (Author's summary) **57** #18043 65D99
- Ševčuk, P. S. (with Kolomičev, V. G.) Construction of asymptotic solutions of nonautonomous systems in the presence of strong dissipative forces. (Russian) *Asymptotic and qualitative methods in the theory of nonlinear oscillations* (Russian), pp. 78-87. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971.* (G. Niculescu) **51** #6071 34E10
- Ševečková, Jitka The five-group theorem. *Arch. Math. (Brno)* **13** (1977), no. 1, 51-54. (A. A. Klimowicz) **57** #3047 08A25 (20F99)
- Compact elements of the lattice of congruences in an algebra. (Czech and loose Russian summaries) *Časopis Pěst. Mat.* **102** (1977), no. 3, 304-311, 313. (E. T. Schmidt) **57** #3048 08A25
- Ševelev, A. G. See Ševelev, A. G.
- Ševelev, Ju. D. (with Kazeikin, S. N.; Tirsikii, G. A.) A three-dimensional boundary layer with equilibrium reactions of disassociation and ionization. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **8** (1977), no. 7, 53-65. (From the text) **58** #32337 7635
- Ševelev, Ju. P. (with Rjabyskin, B. S.; Kostyrin, Ju. M.; Briganec, A. V.) ★ Булева алгебра и логика поиска семантической информации. (Russian) [Boolean algebra and the logic of semantic information retrieval] A textbook. *Izdat. Tomsk. Univ., Tomsk, 1975.* 182 pp. (I. E. Strazdiņš) **55** #11760 68A50 (94A20)
- Ševelev, V. G. See *Proceedings: Republican Conference of Belorussian Mathematicians*, **48** #3669
- Ševelo, V. M. Some questions of the theory of oscillation of solutions of nonlinear nonautonomous differential equations. *Proceedings of the Fourth Conference on Nonlinear Oscillations* (Prague, 1967), pp. 251-256. *Academia, Prague, 1968.* (M. Švec) **51** #1071 34K15
- Comparison theorems for differential equations with retarded argument. (Russian) *Approximate and qualitative methods of the theory of differential and integral equations* (Russian), pp. 156-162. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971.* (G. S. Ladde) **51** #3650 34K15
- (with Odiarič, O. M.) The asymptotic behavior of monotone solutions of second order nonlinear differential equations with lag. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* **1971**, 1072-1075, 1148. (L. J. Grimm) **46** #3955 34K25 (34K20)
- (with Vareh, N. V.) The oscillation of the solutions of higher order linear differential equations with retarded argument. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 513-520, 574. (G. B. Gustafson) **46** #7676 34K15
- (with Vareh, N. V.) Certain properties of solutions of differential equations with lag. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 807-813, 862. (D. Bainov) **47** #2166 34K15
- (with Vareh, N. V.) Some oscillation theorems for higher order differential equations. (Russian) *Mathematical physics*, No. 13 (Russian), pp. 183-189, 195. "Naukova Dumka", Kiev, 1973. (A. D. Ziebur) **48** #11726 34K15
- (with Vareh, N. V.) On the question of the oscillation of the solutions of higher order nonlinear differential equations with retarded argument. (Russian) *Methods of approximate solution of differential and integral equations* (Russian), pp. 38-55. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973.* (Editors) **58** #1488 34K15
- (with Vareh, N. V.) The zeros of the solutions of nonlinear differential equations of higher orders with retarded argument. (Russian) *The method of integral manifolds in nonlinear differential equations* (Russian), pp. 81-101. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973.* (See RZMat 1974 #3 B276; MR **48** #11625) 34K15
- (with Odiarič, O. M.) Certain questions of the asymptotic behavior of the solutions of nonlinear differential equations with retarded argument. (Russian) *Differentsial'nye Uravnenija* **9** (1973), 637-646, 782. (K. Smítalová) **47** #9022 34K20
- (with Vareh, N. V.) The oscillation of the solutions of the equation $[r(t)y^{(n-1)}(t)]' + p(t)f(y(r(t))) = 0$. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 707-714, 719. (G. B. Gustafson) **48** #4455 34K15

- (with Odarič, O. M.) Certain theorems on the existence of nonoscillatory solutions of nonlinear differential equations with retardation of the argument. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukraїn. RSR Ser. A* 1974, 307-310, 380. (K. Smitalová) 50 #13818 34K15
- (with Vareh, N. V.; Gricai, A. G.) The oscillation of the solutions of certain systems of differential equations with retarded argument. (Russian) *Methods for the quantitative and qualitative study of differential and integral equations (Russian)*, pp. 20-38. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1975. (A. Elbert) 55 #813 34K15
- (with Mitropol'skii, Ju. O.) Some aspects of the theory of nonlinear oscillations of systems with lag (aftereffect). (Russian) *Prikl. Meh.* 12 (1976), no. 12, 3-11, 140. (L. Reizigš) 57 #3561 34K05
- (with Mitropol'skii, Ju. O.; Romanenko, O. Ju.; Šarkov'skii, O. M.) The state and prospects of development of the theory of differential equations with deviating argument. (Russian) Presented at the Fourth All-Union Conference on the Theory and Applications of Differential Equations with Deviating Argument (Kiev, 1975). *Ukrain. Mat. Ž.* 28 (1976), no. 2, 279-282. (Editors) 53 #8602 34Kxx
- (with Mitropol'skii, Ju. O.; Kurpel', M. S.; Lučka, A. Ju.) Jurii Dmitrievič Sokolov (on the occasion of his eightieth birthday). (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 6, 856. (Editors) 54 #7178 01A70
- (with Šarkov'skii, O. M.) Oscillatory nature and asymptotic behavior of the solutions of a class of differential equations with deviating argument. (Russian) *Problems of the asymptotic theory of nonlinear oscillations (Russian)*, pp. 257-263, 280. *Naukova Dumka, Kiev*, 1977. (Authors' summary) 58 #29015 34K15
- (with Vareh, N. V.; Gricai, A. G.) Some properties of the solutions of systems of differential equations with lag. (Russian) *Qualitative methods in the theory of differential equations with deviating argument (Russian)*, pp. 17-25. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Erwin Kozakiewicz) 58 #11808 34K15
- (with Vareh, N. V.) Conditions for oscillation of the solutions of systems of differential equations with retarded argument. (Russian) *Qualitative methods in the theory of differential equations with deviating argument (Russian)*, pp. 26-44. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (A. Halanay) 58 #17428 34K15
- (with Mitropol'skii, Ju. O.) The development of the oscillation theory of the solutions of differential equations with retarded argument. (Russian) *Ukrain. Mat. Ž.* 29 (1977), no. 3, 313-323, 427. (A. Halanay) 56 #800 34K15 (01A65)
- (with Mitropol'skii, Ju. O.; Koroljuk, V. S.) The Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR on the sixtieth anniversary of the October Revolution. (Russian) *Ukrain. Mat. Ž.* 29 (1977), no. 6, 715-732, 851. (E. M. Bruins) 58 #27096 00A15
- ★Осцилляция решений дифференциальных уравнений с отклоняющимся аргументом. (Russian) [Oscillation of the solutions of differential equations with deviating argument] *Izdat. "Naukova Dumka", Kiev*, 1978. 154 pp. (Pavol Marušiak) 58 #11804 34K15
- See also **Proceedings: International Conference on Nonlinear Oscillations**, 47 #8969
- Ševel'ov, A. G. Certain peculiarities in the analysis of sampled data systems with variable parameters on the bases of the discrete Laplace transform. (Russian) *Cybernetics and computer technology*, No. 2: *Discrete control systems (Russian)*, pp. 17-37. *Naukova Dumka, Kiev*, 1969. (Author's summary) 45 #9740 93D99
- Sufficient conditions for the asymptotic stability of automatic systems with variable parameters. (Russian) *Cybernetics and computer technology*, No. 1: *Complex control systems (Russian)*, pp. 72-82. *Naukova Dumka, Kiev*, 1969. (Author's summary) 45 #9757 93D99
- Analysis of systems with variable parameters. (Russian) *Cybernetics and computer technology*, No. 5: *Complex control systems (Russian)*, pp. 53-61. *Naukova Dumka, Kiev*, 1970. (V. M. Popov) 45 #8330 93C15
- The stability of automatic systems with variable parameters. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics (Tbilisi, 1968)*, Vol. 2: *Theory of automatic control (Russian)*, pp. 327-336, 481. *Izdat. "Nauka", Moscow*, 1972. (Stanislav K. Myškov and B. A. Eršov) 51 #5110 93D99
- An investigation of the quality of the transition process of sampled-data automatic systems with variable parameters. (Russian) *Cybernetics and computer technology*, No. 24: *Discrete control systems (Russian)*, pp. 10-14, 123. *Izdat. "Naukova Dumka", Kiev*, 1974. (Ju. M. Ermol'ev) 56 #2593 93E10
- Estimation of the quality of the transition process of sampled-data control systems. (Russian) *Cybernetics and computer technology*, No. 24: *Discrete control systems (Russian)*, pp. 15-19, 123. *Izdat. "Naukova Dumka", Kiev*, 1974. (Ju. M. Ermol'ev) 56 #2594 93E10
- Analysis of the stability of linear dynamical systems with variable parameters on the basis of Ljapunov's second method. (Russian) *Kibernet. i Vychisl. Tehn. Vyp.* 27 (1975), 129-134, 159. 58 #26387 93D05
- (with Movčan, L. T.) A method for the construction of the Ljapunov function for nonlinear sampled-data systems. (Russian) *Kibernet. i Vychisl. Tehn. Vyp.* 37 (1977), 108-110, 120. (K. B. Datta) 58 #15514 93D05 (34D20)
- (with Poluhin, A. V.) On absolute stability of the equilibrium position of a class of nonlinear systems. *Aviomatica* 1977, no. 2, 47-53 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 10 (1977), no. 2, 38-43. (P. C. Parks) 57 #9219 93D05 (93C15)
- (with Poluhin, A. V.) Estimation of the quality of transition processes in absolutely stable nonlinear systems. (Russian) *Kibernet. i Vychisl. Tehn.* 1978, no. 39, 109-111, 116. (Authors' summary) 58 #26418 93D99
- See also **Cybernetics and computer technology**, 48 #1736
- Sevely, Yves Études d'automatique sur une unité pilote d'absorption et son mélangeur. *Control theory, numerical methods and computer systems modelling (Internat. Sympos., IRIA LABORIA, Rocquencourt, 1974)*, pp. 704-727. *Lecture Notes in Econom. and Math. Systems*, Vol. 107, Springer, Berlin, 1975. (P. Fischer) 53 #5109 93C99
- Sever, Groze The principle of the majorant and the solution by the method of successive approximations of nonlinear operator equations defined in supermetric spaces. (Romanian. French summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* 18 (1972), 75-79. (B. Jankó) 46 #6069 47H15 (65J05)
- Severa, Miroslav Canonical formalism and statistical mechanics for some dissipative mechanical systems. *Acta Tech. ČSAV* 20 (1975), no. 6, 694-699. (A. Berroir) 52 #16431 82A5
- Severance, Dennis G. (with Eisner, Mark J.) Mathematical techniques for efficient segmentation in large shared databases. *J. Assoc. Comput. Mach.* 23 (1976), 619-635. (A. D. Booth) 55 #6999 68A50
- Ševerdjaev, A. Ju. (with Pinski, M. S.) Channel capacity with zero error and (Russian) *Problemy Peredači Informacii* 6 (1970), no. 1, 20-24. (S. Kotz) 46 #94A10
- List decoding in a memoryless Gaussian discrete channel. (Russian) *Problemy Peredači Informacii* 7 (1971), no. 3, 13-24. (A. A. Mullin) 49 #8738 94A10
- (with Has'minskii, R. Z.) A class of estimates for the shift parameter. *Problemy Peredači Informacii* 13 (1977), no. 2, 55-61. (Author's summary) 58 #93E10
- Severilov, V. A. (with Gorban', A. V.) Questions of analysis, synthesis and realization in designing complex teleological systems. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 3, 40-47. (V. M. Semenov) 56 #14915 93B99
- Severina, T. I. A model of accumulation of damage. *Izv. Akad. Nauk SSSR Kibernet.* 1975, no. 2, 100-102 (Russian); translated as *Engrg. Cybernetics* 13 (1975), 2, 74-76. (C. Mohan) 52 #12748 90B25 (62N05)
- Severinov, L. I. (with Belocerkovskii, O. M.) A conservative method for "flows", calculation of the circumfluence of a body of finite dimensions by a viscous heat-conducting gas. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 13 (1973), 385-391. (Simona Popp) 49 #8503 76G5
- Severne, G. Projection operators for inhomogeneous systems. *Transport Theory Phys.* 1 (1971), no. 2, 145-161. (S. Harris) 55 #5114 82A7
- (with van Calck, J.) Correlation dynamics for the inhomogeneous anharmonic oscillator. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 61 (1975), 40-62. (A. A. Maradudin) 51 #82A7
- (with van Calck, J.) Macroscopic transport equations for the inhomogeneous anharmonic solid. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 61 (1975), no. 3, 299-323. (A. Maradudin) 54 #9518 82A5
- (with Haggerty, M. J.) Kinetic theory for finite inhomogeneous gravitational systems. *Astrophys. and Space Sci.* 45 (1976), no. 2, 287-302. (W. H. Julian) 58 #85.60 (85A5)
- Ševernev, V. I. Statistical structure of the illumination field under a wavy surface. *Akad. Nauk SSSR Ser. Fiz. Atmosfer. i Okeana* 9 (1973), 596-607 (Russian); translated as *Izv. Acad. Sci. USSR Atmospher. Ocean. Phys.* 9 (1973), 332-337 (1974). (K. Sobczyk) 50 #9182 78G2
- Severo, Norman C. (with Desu, Mahamunulu M.; Gehan, Edmund A.) A two-stage estimation procedure when there may be spurious observations. *Biometrika* 61 (1974), 593-599. (Madanlal T. Wasan) 51 #9319 62F10
- (with Billard, L.) Solution of a class of partial differential equations with conditions. *SIAM J. Math. Anal.* 5 (1974), 918-919. (M. H. Protter) 50 #35Q99
- (with Kryscio, Richard J.) Computational and estimation procedures in multidimensional right-shift processes and some applications. *Advances in Appl. Probability* 7 (1975), 349-382. (K. Dietz) 51 #11728 60K99 (92A15)
- (with Saunders, Roy) A note on reversed conservative processes. *Stochastic Processes Appl.* 6 (1977/78), no. 2, 195-200. (K. Dietz) 57 #10842 60J99
- Sevestre, Gérard (with Mukhedkar, Dinkar; Bretault, Pierre) ★Aspects modernes de la fiabilité. *Les Presses de l'Université de Montréal, Montréal, Que.*, 1974. v + 148 pp. (André Laurent) 51 #2229 62N05
- Sevici, Constantin (with Popescu, Angel) Some remarks on the additive categorical separators. *Rev. Roumaine Math. Pures Appl.* 20 (1975), no. 5, 599-603. (G. M. Ziegler) 52 #3279 18E05
- Ševjakov, A. A. See **Control in space**, 48 #13320
- Ševjakov, O. V. (with Ževnin, A. A.; Toloknov, V. I.) Shuttle vehicle safety assurance during powered landing through adaptive control. *J. Astronaut. Sci.* 25 (1977), 143-149. (Lennart Ljung) 57 #18977 93C40 (93C10)
- Ševjakov, V. S. The formulas of the restricted predicate calculus that distinguish classes of models with simply computable predicates. (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 285-287. (Igor Lavrov) 49 #2346 02H05
- Ševkopljias, B. V. (with Šmelev, E. A.; Erzanov, R. Ž.) A certain class of problems. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1974, no. 5, 79-84. (B. T. Poljak) 50 #15340 65K05
- See also **Coding theory and information modeling**, 49 #6994
- Ševljakov, A. Ju. Extrapolation and interpolation of random processes. (Russian) *of random processes*, No. 3 (Russian), pp. 134-142, 160. *Izdat. "Naukova Dumka", Kiev*, 1975. (I. M. Stojanov) 51 #12396 93E10
- A certain generalization of the Kalman-Bucy equations. (Russian) *Theory of random processes*, No. 3 (Russian), pp. 142-149, 160. *Izdat. "Naukova Dumka", Kiev*, 1975. (I. M. Stojanov) 51 #12397 93E10 (60G35)
- Clark's formula for discontinuous processes. *Behavior of systems in random processes*, pp. 55-59. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1976. (R. Ševljakov) 57 #17820 60H05 (60Jxx)
- The representation of functionals of random processes. (Russian) *Theory of random processes*, No. 4 (Russian), pp. 105-113, 118. *Izdat. "Naukova Dumka", Kiev*, 1975. (N. Sirjaja) 54 #11490 60G45
- (with Funke, R.) A generalization of Clark's formula. (Russian) *Theory of random processes*, No. 5 (Russian), pp. 93-96, 114. *Izdat. "Naukova Dumka", Kiev*, 1977. (Lipcer) 57 #17821 60H05 (60Jxx)
- Integration of anticipating functionals. (Russian) *Theory of random processes*, No. 5 (Russian), pp. 106-109, 115. *Izdat. "Naukova Dumka", Kiev*, 1977. (Ju. M. Kabanov) 57 #17819 60H05 (60J65)
- An extended stochastic integral with respect to the Poisson process. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 4, 3-6. (Dominique Lepingle) 57 #10821 60H05
- The representation of functionals of processes with independent increments. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* 16 (1977), 158. (L. I. Gal'čuk) 56 #1477 60J30

- equations of filtering equations. (Russian. English summary) *Teor. Veroyatnost. i Statist. Vyp.* 16 (1977), 142–149, 158. (Z. A. Piranašvili) **56** #9672 60G35 (0)
- Ju. A.** (with Siz'ko, V. G.) The solution of the first fundamental problem for an us. (Russian) *Teoret. i Prikladna Meh. Vyp.* 1 (1970), 39–48, 110. (Authors' iary) **56** #5902 30A88
- Матричные алгоритмы в теории упругости неоднородных сред. (Russian) ix algorithms in the theory of elasticity of inhomogeneous media] *Izdat. Ob"ed. a Škola"*, Kiev, 1977. 215 pp. (M. O. Bašelevič) **58** #8685 73.45
- nov, G. D.** An equation for nonstationary transonic flows of an ideal gas. (Russian) *Izv. Akad. Nauk SSSR Meh. Židk. Gaza* 1977, no. 1, 105–109. (Author's nary) **57** #14871 76.35
- See also **Proceedings: Conference on Boundary Value Problems**, **49** #7061
- N.** The lattice of subsemigroups of a group as a symmetric lattice. (Russian) *Gos. Univ. Mat. Zap.* 7 (1969/70), no. 3, 234–238. (K. Drbohlav) **60** #1946 10 (06A20)
- Supplement to the paper "Semigroups of finite width" (Theory of Semigroups and I (Russian), pp. 325–351, Izdat. Saratov. Univ., Saratov, 1965). (Russian) *Theory migroups and its applications*, No. 2 (Russian), pp. 94–96. Izdat. Saratov. Univ., o, 1971. (Editors) **58** #16921 20M10
- with Martynov, L. M.) The attainable classes of algebras. (Russian) *Sibirsk. Mat. 2* (1971), 1363–1381. (G. Pollák) **45** #153 08A20
- (with Lender, V. B.) Attainable classes of lattices. (Russian) *Izv. Vysš. Učebn. ed. Matematika* 1972, no. 12(127), 111–115. (E. T. Schmidt) **48** #5937 06A20
- Densely imbedded ideals of algebras. (Russian) *Mat. Sb. (N.S.)* **88(130)** (1972), 228. (A. Astromoff) **46** #123 08A25
- (with Andrunakievich, V. A.; Baranović, T. M.; Belousov, V. D.; Berman, S. D.; skin, L. M.; Golovin, O. N.; Zavalo, S. T.; Kalužnin, L. A.; Plotkin, B. I.; ovskii, L. E.; Skornjakov, L. A.; Suprunenko, D. A.; Šmel'kin, A. L.) In orian Aleksandr Gennadijevič Kuroš (January 19, 1908–May 18, 1971). (Russian) ection of articles commemorating Aleksandr Gennadijevič Kuroš. *Trudy Moskov. . Obšč.* **29** (1973), 3–4. (Editors) **51** #7787 01A70
- (with Prosvirov, A. S.) Semigroups with isotone idealizer functions. (Russian) ection of articles commemorating Aleksandr Gennadijevič Kuroš. *Trudy Moskov. . Obšč.* **29** (1973), 235–246. (Št. Schwarz) **52** #3399 20M10
- On the theory of periodic semigroups. (Russian) Collection of articles dedicated to ksandr Petrovič Norden on the occasion of his seventieth birthday. *Izv. Vysš. Učebn. ed. Matematika* 1974, no. 5(144), 205–215. (E. Ja. Gabovič) **50** #13336 20M10
- An general theorem on semigroups with certain finiteness conditions. (Russian) *r. Zametki* **15** (1974), 925–935. (S. Lajos) **50** #13337 20M10
- Densely imbedded ideals of Lie algebras. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 199–238. (Juri A. Bahturin) **49** #367 17B40
- (with Prosvirov, A. S.) Idealizers of subsemigroups, and the structure of semigroups. (Russian) *Ural. Gos. Univ. Mat. Zap.* 9, no. 1, 66–83, 142–143 (1974). (errata insert) **3** **324** #20065 **57** #12742 20M10
- (with Budyko, M. I.; Gluskin, L. M.; Vagner, V. V.; Evseev, A. E.; Vulih, B. Z.; deev, D. K.) Evgenii Sergeevič Ljapun (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 3(183), 187–194. (Editors) **52** #7792 17D70
- See also **Sverdlovsk Symposium**, **45** #6958; **Studien zur Algebra und ihre endungen**, **48** #8172; **Clifford, A. H.; et al.**, **50** #4787; **Clifford, A. H.; et al.**, **50** #4788; **Transactions of the Moscow Mathematical Society**, **52** #10313; **All-Union oloquium: Algebra**, **58** #15767a and **All-Union Colloquium: Algebra**, **58** #15767b
- V. P.** Covariant derivatives of a spinor in Finsler geometry. (Russian) *Izv. Vysš. bn. Zaved. Fizika* 1973, no. 2, 43–49. (L. Tamássy) **49** #1390 53B40 (81.53)
- Spin differential forms in a unified spinor field theory. (Russian) *Izv. Vysš. Učebn. ed. Fizika* 1973, no. 4, 141–143. (J. Vanžura) **50** #12131 83.53
- Construction of a covariants theory of a spinor field. (Russian) *Izv. Vysš. Učebn. ed. Fiz.* 1975, no. 2, 60–62. (Not reviewed) 81.53
- anov, B. A.** See **Sevast'janov, B. A.**
- E. G.** (with Pereyra, Victor) Mesh selection for discrete solution of boundary lems in ordinary differential equations. *Numer. Math.* **23** (1974/75), 261–268. (W. iger) **57** #4527 65L10
- (with Meyer, Gunter H.) A finite element solution of degenerate interface problems. *Mathematics of finite elements and applications, II (Proc. Second Brunel Univ., Conf. . Math. Appl., Uxbridge, 1975)*, pp. 171–181. Academic Press, London, 1976. (inhard Scholz) **57** #18145 65N30
- Geoffrey L.** (with Presutti, Errico; Scacciatelli, E.; Wanderlingh, F.) Studies in the algebraic theory of nonequilibrium statistical mechanics: Dynamics of open and mechanically driven systems. *J. Mathematical Phys.* **13** (1972), 1085–1098. (E. J. oven) **53** #12419 82.46
- States and dynamics of infinitely extended physical systems. *Comm. Math. Phys.* **33** (1973), 43–51. (M. E. Mayer) **48** #13103 82.46
- Relaxation, amplification, and the KMS conditions. *Ann. Physics* **85** (1974), 377. (Y. Kato) **55** #5056 81.47
- Equilibrium and metastable states of classical systems. *International Symposium on theoretical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 510–515. *ture Notes in Phys.*, 39. Springer, Berlin, 1975. (Editors) **58** #32652 82.28
- Equilibrium and metastable states of classical systems. *Ann. Physics* **97** (1976), no. 55–79. (Author's summary) **56** #7695 82.46
- (with Araki, Huzihiro) KMS conditions and local thermodynamical stability of ntum lattice systems. *Comm. Math. Phys.* **52** (1977), no. 2, 103–109. (S. Harris) **53** #2371 82.47
- KMS conditions and local thermodynamical stability of quantum lattice systems. II. *mm. Math. Phys.* **55** (1977), no. 1, 53–61. (S. Harris) **57** #2372 82.47
- Metastable states of quantum lattice systems. *Comm. Math. Phys.* **55** (1977), no. 1, 66. (V. P. Kalašnikov) **57** #8800 82.47
- John L.** (with Grant, Leslie G.) A theory of equivalent active networks. *IEEE ns. Circuits and Systems CAS-23* (1976), no. 6, 350–354. (Authors' summary) **51** #11947 94A20
- Sewell, M. H.** (with Noble, Ben) On dual extremum principles in applied mathematics. *Transactions of the Seventeenth Conference of Army Mathematicians (U.S. Army Missile Command, Redstone Arsenal, Ala., 1971)*, pp. 615–737. U.S. Army Research Office (Durham, N.C.), Report No. 72-1, U.S. Army Res. Office-Durham, Durham, N.C., 1972. (Takashi Yahagi) **50** #8244 49H05
- Sewell, M. J.** (with Noble, Ben) On dual extremum principles in applied mathematics. *J. Inst. Math. Appl.* **9** (1972), 123–193. (Authors' summary) **46** #6133 49B35 (49B40)
- Some mechanical examples of catastrophe theory. *Bull. Inst. Math. Appl.* **12** (1976), no. 6, 163–172. (Editors) **58** #31182 58C25
- On Legendre transformations and elementary catastrophes. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 1, 147–163. (Martin Golubitsky) **55** #9154 58C25 (73.58)
- Certain examples of the application of catastrophe theory in mechanics. (Polish. Russian and English summaries) Translated from the English by S. Świączkowski. Edited by J. A. König. *Mech. Teoret. Stos.* **15** (1977), no. 3, 315–334. (V. Komkov) **57** #11242 70.58 (58C25)
- (with Herrera, Ismael) Dual extremum principles for non-negative unsymmetric operators. *J. Inst. Math. Appl.* **21** (1978), no. 1, 95–115. (M. M. Cvetanov) **58** #7276 49A25
- On Legendre transformations and umbilic catastrophes. *Math. Proc. Cambridge Philos. Soc.* **83** (1978), no. 2, 273–288. (C. P. Bruter) **58** #7689 58C25
- Sewiold, Krystyna** (with Krakowiak, Anna) On the continuous dependence of solutions of a boundary value problem for ordinary second-order differential equations. *Zeszyty Nauk. Uniwers. Jagiello. Prace Mat.* No. 15 (1971), 79–82. (R. Grimmer) **50** #2597 34B15
- Sextl, Roman U.** Introduction to general relativity. *Developments in high-energy physics (Proc. Internat. School Phys. "Enrico Fermi", Course LIV, Varenna, 197*

- géométrie analytique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 2, A87-A88. (Author's summary) **58** #11488 32B99 (14B99)
- Seydler, August** See Matyáš, Miloš, **58** #4945
- Seyedin, Massoud** Quasi-uniform spaces and topological homeomorphism groups. *Canad. Math. Bull.* **17** (1974), 97-98. (S. A. Naimpally) **50** #8455 54E15 (54H15)
- R_3 -quasi-uniform spaces and topological homeomorphism groups. *Proc. Amer. Math. Soc.* **52** (1975), 465-468. (S. A. Naimpally) **51** #11441 54E15
- On quasi-uniform convergence. *General topology and its relations to modern analysis and algebra, IV* (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B, pp. 425-429. *Soc. Czechoslovak Mathematicians and Physicists, Prague, 1977*. (P. Fletcher) **57** #1435 54E15
- Seymour, Brian R.** (with Mortell, Michael P.) Exact solutions of a functional equation arising in nonlinear wave propagation. *SIAM J. Appl. Math.* **30** (1976), no. 4, 587-596. (M. Kuczma) **53** #11254 39A15
- Weak shocks in dissipative systems. (French summary) *Z. Angew. Math. Phys.* **27** (1976), no. 1, 49-59. (A. Elcrat) **53** #12200 76J35
- (with Mortell, Michael P.) Second order hyperbolic equations with small nonlinearities. *SIAM J. Appl. Math.* **35** (1978), no. 4, 729-737. (Stanley H. Benton, Jr.) **58** #29347 35L60
- Seymour, P. A. H.** The 1919 solar eclipse expedition. The origins, achievement and influence of the Royal Observatory, Greenwich: 1675-1975 (Proc. 4th Joint Sympos. Internat. Astronom. Union and Union Internat. Histoire et Philos. Sci., Greenwich, 1975). *Vistas Astronom.* **20** (1976), no. 1-2, 207-209. (Editors) **58** #15995 01A60
- Seymour, P. D.** On incomparable collections of sets. *Mathematika* **20** (1973), 208-209. (D. J. Kleitman) **50** #122 05A05
- A note on a combinatorial problem of Erdős and Hajnal. *J. London Math. Soc.* (2) **8** (1974), 681-682. (M. S. Cheema) **50** #1894 05A05
- On the two-colouring of hypergraphs. *Quart. J. Math. Oxford Ser.* (2) **25** (1974), 303-312. (Alan Tucker) **51** #7927 05C15
- The forbidden minors of binary clutters. *J. London Math. Soc.* (2) **12** (1975/76), no. 3, 356-360. (Curtis Greene) **52** #13404 05A05
- (with Welsh, D. J. A.) Combinatorial applications of an inequality from statistical mechanics. *Math. Proc. Cambridge Philos. Soc.* **77** (1975), 485-495. (J. E. Graver) **51** #12554 05A20 (94A20)
- The max-flow min-cut property in matroids. *Proceedings of the Fifth British Combinatorial Conference* (Univ. Aberdeen, Aberdeen, 1975), pp. 545-549. *Congressus Numerantium, No. XV, Utilitas Math., Winnipeg, Man., 1976*. (W.-K. Chen) **52** #16575 90B10 (05B35)
- A forbidden minor characterization of matroid ports. *Quart. J. Math. Oxford Ser.* (2) **27** (1976), no. 108, 407-413. (W. T. Tutte) **55** #2622 05B35
- A note on the production of matroid minors. *J. Combinatorial Theory Ser. B* **22** (1977), no. 3, 289-295. (András Frank) **55** #12549 05B35
- The matroids with the max-flow min-cut property. *J. Combinatorial Theory Ser. B* **23** (1977), no. 2-3, 189-222. (András Frank) **57** #2960 05B35 (94A20)
- (with Welsh, D. J. A.) Percolation probabilities on the square lattice. *Advances in graph theory* (Cambridge Combinatorial Conf., Trinity College, Cambridge, 1977). *Ann. Discrete Math.* **3** (1978), 227-245. (W. T. Tutte) **58** #13410 60K35 (82.60)
- See also **Problems: Combinatorial mathematics**, **51** #172
- Seymour, R. M.** The real K -theory of Lie groups and homogeneous spaces. *Quart. J. Math. Oxford Ser.* (2) **24** (1973), 7-30. (S. Y. Hussein) **47** #7738 55F50 (57F10)
- Vector bundles invariant under the Adams operations. *Quart. J. Math. Oxford Ser.* (2) **25** (1974), 395-414. (Donald M. Davis) **53** #6560 55G25
- (with Friedlander, Eric M.) Two proofs of the stable Adams conjecture. *Bull. Amer. Math. Soc.* **83** (1977), no. 6, 1300-1302. (J. Stasheff) **56** #6659 55F50
- On the convergence of the Eilenberg-Moore spectral sequence. *Proc. London Math. Soc.* (3) **36** (1978), no. 1, 141-162. (J. P. May) **57** #17646 55H20
- Sezer, M. Erol** (with Hüseyin, Özyay) Graphical test for positive real matrices. (German summary) *AEÜ—Arch. Elektron. Übertragungstechn. Electron. Commun.* **28** (1974), 233-234. (Authors' summary) **56** #13562 65F15 (93B15, 94A20)
- (with Hüseyin, Özyay) A counterexample on: "On the controllability of composite systems" (IEEE Trans. Automatic Control **AC-16** (1971), 205-206) by F. M. Brach, Jr., J. W. Howze and J. B. Pearson. With a reply by the authors. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 683-684. (Editors) **57** #9176 93B05
- Comments on "A general solution to the output feedback eigenvalue assignment problem" (Internat. J. Control **24** (1976), no. 4, 509-528) by P. N. Paraskevopoulos. *Internat. J. Control* **26** (1977), no. 4, 655-656. (Y. T. Tsay) **57** #5245 93B25
- (with Hüseyin, Özyay) Stabilization of linear time-invariant interconnected systems using local state feedback. *IEEE Trans. Systems Man Cybernet.* **8** (1978), no. 10, 751-756. (Authors' summary) **58** #26404 93D15
- (with Hüseyin, Özyay) Input and output regularity of composite systems. *Internat. J. Control* **27** (1978), no. 5, 789-800. (T. Kaczorek) **58** #9496 93B05
- cohn-Sfetcu, S.** See Cohn-Sfetcu, S.
- Sfikas, Ioannis G.** An oscillation criterion for second order delay differential equations. *Bull. Soc. Math. Grèce (N.S.)* **12** (1971), no. 1, 41-44. (D. H. Chyung) **45** #7222 34K15
- On some boundary value problems for first and second order delay differential equations. *Bull. Soc. Math. Grèce (N.S.)* **12** (1971), no. 1, 127-137. (K. Zima) **45** #7223 34K10
- (with Staikos, Vasilios A.) Criteria for asymptotic and oscillatory character of functional differential equations of arbitrary order. (Italian summary) *Boll. Un. Mat. Ital.* (4) **6** (1972), 185-192. (J. S. Papadakis) **47** #5407 34K15
- (with Staikos, Vasilios A.) Oscillatory and asymptotic behavior of functional differential equations. *J. Differential Equations* **12** (1972), 426-437. (S. G. Deo) **48** #9044 34K15
- (with Staikos, Vasilios A.) Oscillations for forced second order nonlinear differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 25-30 (1974). (I. Kiguradze) **51** #6043 34C10
- On oscillation and asymptotic behavior of a certain class of differential equations with retarded argument. *Utilitas Math.* **3** (1973), 239-249. (J. S. Papadakis) **48** #678 34K15
- (with Staikos, Vasilios A.) Some results on oscillatory and asymptotic behavior of differential equations with deviating arguments. *Proceedings of the C. Carathéodory International Symposium (Athens, 1973)*, pp. 546-553. *Greek Math. Soc., Athens, 1973*. (I. Kiguradze) **57** #6743 34K15
- (with Staikos, Vasilios A.) Oscillations of differential equations with retarded arguments. *Hiroshima Math. J.* **4** (1974), 1-8. (D. V. V. Wend) **49** #11001 34K15
- (with Staikos, Vasilios A.) The effect of retarded actions on nonlinear oscillations. *Proc. Amer. Math. Soc.* **46** (1974), 259-264. (V. Lakshmikantham) **50** #7744
- (with Staikos, Vasilios A.) Oscillations of retarded differential equations. *Cambridge Philos. Soc.* **75** (1974), 95-101. (D. V. V. Wend) **48** #11727 34K15
- (with Staikos, Vasilios A.) Oscillatory and asymptotic properties of differential equations with retarded arguments. *Applicable Anal.* **5** (1975), no. 2, 141-148. (I. Kiguradze) **53** #8611 34K15
- (with Staikos, Vasilios A.) On the oscillation of bounded solutions of differential equations with deviating arguments. (Italian summary) *Atti Accad. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **58** (1975), no. 3, 318-322. (See Zbl. 34056) **34K15**
- (with Staikos, Vasilios A.) Forced oscillations for differential equations of arbitrary order. *J. Differential Equations* **17** (1975), 1-11. (Pavol Marušák) **50** #7746
- (with Staikos, Vasilios A.) Oscillatory and asymptotic characterization of the solutions of differential equations with deviating arguments. *J. London Math. Soc.* (2) **10** (1975), 39-47. (R. B. Grafton) **51** #8588 34K15
- The effect of the delay on the oscillatory and asymptotic behavior of n th order retarded differential equations. *J. Math. Anal. Appl.* **49** (1975), 748-757. (S. G. Deo) **51** #1072 34K15
- Retarded actions on oscillations. *Bull. Soc. Math. Grèce (N.S.)* **17** (1976) (Pavol Marušák) **58** #11805 34K15
- (with Staikos, Vasilios A.) Oscillations of differential equations with deviating arguments. *Funkcial. Ekvac.* **19** (1976), no. 1, 35-43. (G. S. Ladde) **54** #34K15
- On the oscillatory and asymptotic behavior of damped differential equations with retarded argument. *Hiroshima Math. J.* **6** (1976), no. 3, 429-450. (I. Kiguradze) **54** #13263 34K15
- (with Grammatikopoulos, M. K.; Staikos, Vasilios A.) On the types of nonoscillatory solutions of differential equations with deviating arguments. *Bull. Sci. Ibaraki Univ. Ser. A No. 9* (1977), 65-79. (R. E. Fennell) **57** #10177 34K15
- (with Grammatikopoulos, M. K.; Staikos, Vasilios A.) Asymptotic and oscillatory criteria for retarded differential equations. *J. Math. Anal. Appl.* **63** (1978), 591-605. (V. Sree Hari Rao) **58** #11818 34K25
- (with Stavroulakis, I. P.) On the oscillatory and asymptotic behavior of a class of differential equations with deviating arguments. *SIAM J. Math. Anal.* **9** (1978), 956-966. (I. Kiguradze) **58** #22935 34K15
- cavalli-Sforza, Luigi L.** See Cavalli-Sforza, Luigi L.
- Sgall, Petr** Formal sentence perspective in a generative description. *Prague studies in mathematical linguistics*, No. 2, pp. 203-225. *Univ. Alabama Press, University, Alabama* (See RZMat **1968** #12 V669; MR **54** #11870) **68A30**
- Stellung und Aufgaben der algebraischen Linguistik (Einführungsstudie). I. *Bull. Math. Linguist.* **22** (1974), 41-52. (M. Novotný) **55** #4804a 68A30
- Stellung und Aufgaben der algebraischen Linguistik (Einführungsstudie). II. *Bull. Math. Linguist.* **23** (1975), 53-74. (M. Novotný) **55** #4804b 68A30
- (with Plátek, Martin) A scale of context sensitive languages: applications to language. *Inform. and Control* **38** (1978), no. 1, 1-20. (B. Brainerd) **58** #68A30
- See also **Prague studies in mathematical linguistics**, **54** #11869; **Prague studies in mathematical linguistics**, **54** #11870; **Prague studies in mathematical linguistics**, **54** #11871; **Prague studies in mathematical linguistics**, **54** #11872 and **Prague studies in mathematical linguistics**, **57** #4679a
- Sgambati, Luciana** Sulla ricerca dell'estremo inferiore di una successione strettamente decrescente. *Matematiche (Catania)* **25** (1970), 96-105 (1971). (J. Mayer) **46** #06A10
- Sull'approssimazione degli zeri delle funzioni reali di una variabile reale e sulle soluzioni di certe equazioni funzionali. (English summary) *Rend. Accad. Sci. Mat. Napoli* (4) **37** (1970), 129-135. (I. A. Rus) **46** #7986 47H10
- Sulle applicazioni di R in R dotate di un punto unito attraente R . (English summary) *Rend. Ist. Mat. Univ. Trieste* **3** (1971), 62-74. (S. Swaminathan) **45** #26A18
- Su una classe di problemi al contorno per le equazioni fortemente quasi-ellittiche in un rettangolo. (English summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) **43** (1977), 381-410 (1977). (G. Geymonat) **58** #29236 35J99
- Sgarro, Andrea** A fuzzy Hamming distance. *Bull. Math. Soc. Sci. Math. R. S. Romania (N.S.)* **21** (1977), no. 1-2, 137-144. (Ronald E. Prather) **57** #11932 94A05
- Source coding with side information at several decoders. *IEEE Trans. Inform. Theory* **IT-23** (1977), no. 2, 179-182. (Nguyen Quang Duc) **55** #14413 (94A10)
- Sgibnev, M. S.** The distribution of the supremum of sums of independent terms with negative drift. (Russian) *Mat. Zametki* **22** (1977), no. 5, 763-770. (D. V. Wideman) **57** #7781 60J15 (60G50)
- Sgro, Joseph** Completeness theorems for continuous functions and product topologies. *Israel J. Math.* **25** (1976), no. 3-4, 249-272. (Author's summary) **58** #27452 (02B10, 54B10, 54C05)
- Completeness theorems for topological models. *Ann. Math. Logic* **11** (1977), 173-193. (Peter Schmitt) **57** #2878 02B20 (02H10)
- Maximal logics. *Proc. Amer. Math. Soc.* **63** (1977), no. 2, 291-298. (A. H. Stone) **58** #10409 02H10
- Sgroi, M.** (with Lappano, M.; Schiffrer, G.) A computational method for eigenvalues and eigenvectors. II. A simple three-body system. *Let. Nuovo Cimento* (2) **20** (1977), 569-572. (From the text) **58** #14089 70.65 (49G10)
- Sgroso, Anna** Principi di un metodo di proiezione triassiale. *Giorn. Mat. Battaglini* **3** (1965/67), 90-100. (W. Ströher (Zbl. **164**, 250)) **51** #1593a 50D15
- (with Muro, Maria) Proiezioni triassiali. *Giorn. Mat. Battaglini* (6) **3** (1993) (1994)

137. (W. Ströher (Zbl 164, 250)) 51 #1593b 50D15
- Shafar, P. See Conference: Optimization Techniques, 48 #5759
- Shafar, S. Investigation of stochastic flows on dynamic graphs. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Otdel. Tehn. Nauk. Izv. Inst. Tehn. Kibernet.* 11 (1969), 47-56 (1970). (I. V. Romanovskii) 46 #5063 94A20 (90B15)
- Optimal control of the stochastic flow on a dynamic graph when the information on flow is incomplete. (Russian) *Automat. i Vychisl. Tehn.* 1970, no. 6, 32-38. (I. V. Romanovskii) 45 #6529 94A20 (90B15)
- Defining of an optimal schedule in stationary processes. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Otdel. Tehn. Nauk. Izv. Inst. Tehn. Kibernet.* 1970, 29-51. (E. Orlovskii) 45 #8250 90B35
- Application of a certain class of functional recurrence equations to the solution of problem of product averaging. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Otdel. Tehn. Nauk. Izv. Inst. Tehn. Kibernet.* 13 (1971), 5-27. (B. Crstici) 74A 39A15 (90B30)
- Control of a discrete transportation process. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Otdel. Tehn. Kibernet.* 16 (1973), 21-34. (From the author's summary) 49 #2058 90B15
- (with Vasiliev, Vasil S.) A decomposition method for the solution of a class of integer programming problems. (Bulgarian. Russian and English summaries) *Problemi na Kibernet.* 6 (1977), 12-18. (Authors' summary) 58 #15150 90C10
- On saturation of the spline approximation. (Chinese) *Acta Math. Sinica* 19 (1976), 2, 83-87. 58 #29663 41A40 (41A15)
- Shafar, A. See El-Shaarawi, A.
- Shafar, A. E. See Šabad, A. E.
- Shafar, S. A. (with Evans, I. G.) A note on estimation in lognormal models. *J. Amer. Statist. Assoc.* 69 (1974), 779-781. (From the authors' summary) 51 #4514 62F10
- (with Evans, I. G.) New estimators (of smaller M.S.E.) for parameters of a normal distribution. *Biometrische Z.* 18 (1976), no. 6, 453-466. (Nanak Chand) 76F979 62F10
- (with Evans, I. G.) Point estimation in multiplicative models. *Econometrica* 44 (1976), no. 3, 467-473. (A. Hedayat) 53 #11932 62P20
- (with Evans, I. G.) Estimation in multiplicative models. *Proceedings of the Fifth Conference on Probability Theory (Brazov, 1974)*, pp. 293-296. *Editura Acad. R.S.R., Buzarest, 1977.* (G. Tintner) 56 #16976 62P20
- (with Evans, I. G.) Estimation of lognormal parameters. *Proceedings of the Fifth Conference on Probability Theory (Brazov, 1974)*, pp. 297-298. *Editura Acad. R.S.R., Buzarest, 1977.* (Henry M. Finucan) 57 #1743 62F10
- Optimum estimators for parameters of lognormal distribution. *Egyptian Statist. J.* 1977, no. 2, 15-52. 58 #31549 62F10
- A. B. See Šabat, A. B.
- V. L. See Šablov, V. L.
- Šablovskii, Yu. G. See Šablovskii, Ju. G.
- Šablovskii, V. K. See Šablovskii, V. K.
- Šabat, M. (with Kehat, E.) A direct method for the solution of large sparse systems of linear equations. *Comput. J.* 19 (1976), no. 4, 353-359. (D. M. Young, Jr.) 58 #19068 6505
- Šabat, John R. A class of surfaces in C^2 and their polynomial hulls. *J. London Math. Soc.* (2) 8 (1974), 691-698. (M. Herrera) 51 #3529 32E20
- A local property of the polynomial hull in C^N . *J. London Math. Soc.* (2) 14 (1976), 2, 235-239. (Herbert Alexander) 55 #10725 32E20
- Šabat, Richard Generation of the admissible boundary of a convex polytope. *Mathematical Systems Res.* 22 (1974), no. 1, 151-159. (P. McMullen) 54 #2206 90C25
- A. S. A. See Šadin, S. A.
- Šabat, Leslie E. On the number of solutions of congruences and equations in $GF[q, x]$. *Portugal. Math.* 30 (1971), 181-190. (S. D. Cohen) 47 #190 12C05
- On the number of solutions of a congruence in $GF[q, x]$. *Portugal. Math.* 32 (1973), 6, 5 (S. D. Cohen) 48 #2117 12C05
- Closed form expressions for several Ramanujan sums. *Portugal. Math.* 32 (1973), 1-153. (L. Carlitz) 47 #3355 12C25
- Several Euclidean Ramsey theorems. *Proceedings of the Fifth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1974)*, pp. 615-623. *Congressus Numerantium, No. X, Utilitas Math., Winnipeg, Man., 1974.* (B. L. Rothschild) 50 #9672 05C15
- On the existence of finite central groupoids of all possible ranks. I. *J. Combinatorial Theory Ser. A* 16 (1974), 221-229. (G. E. Wall) 49 #327 15A24 (20L99)
- All right triangles are Ramsey in E^2 . *Proceedings of the Seventh Southeastern Conference on Combinatorics, Graph Theory, and Computing (Louisiana State Univ., Baton Rouge, La., 1976)*, pp. 475-480. *Congressus Numerantium, No. XVII, Utilitas Math., Winnipeg, Man., 1976.* (S. A. Burr) 55 #12571 05C35
- All right triangles are Ramsey in E^2 . *J. Combinatorial Theory Ser. A* 20 (1976), no. 2, 85-389. (Rodney Angotti) 53 #13020 05C15
- See also Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 48 #10747
- Šabat, Valavali, A. (with Frick, Pieter A.) On stochastic bilinear systems. *Applications in research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Greece, 1976)*, Vol. 2, pp. 329-335. *Hemisphere, Washington, D.C., 1977.* (Authors' summary) 58 #15560 93E10
- Šabat, N. Kh. See Šadrina, N. H.
- Šadrina, Ahmad Two isotopically equivalent varieties of groupoids. *Publ. Math. Debrecen* 1970, 105-109 (1971). (S. M. Yusuf) 46 #3646 20L05
- (with Gerhard, J. A.) Semivarieties of idempotent semigroups. *Proc. London Math. Soc.* (3) 22 (1971), 667-680. (T. Tamura) 45 #2048 20M10
- On products of relational structures. *Acta Math. Acad. Sci. Hungar.* 24 (1973), 19. (A. I. Omarov) 52 #80 02H05 (08A20)
- Remarks on quasivarieties of algebras. *Arch. Math. (Brno)* 9 (1973), 67-71. (A. A. Tarski) 50 #6981 08A15
- On varieties closed under the construction of power algebras. *Bull. Austral. Math. Soc.* 11 (1974), 213-218. (V. Căzănescu) 51 #310 08A15
- A note on Mal'cevian varieties. *Canad. Math. Bull.* 17 (1974), no. 4, 609. (V. Căzănescu) 52 #3013 08A15
- Boolean groupoids. *Fund. Math.* 88 (1975), no. 2, 117-120. (R. S. Pierce) 52 #218 06A40 (08A15)
- Remarks on special homomorphic relations. *Period. Math. Hungar.* 6 (1975), no. 3, 255-265. (Evelyn Nelson) 52 #13575 08A05
- The number of proper minimal quasivarieties of groupoids. *Proc. Amer. Math. Soc.* 49 (1975), 54-58. (H. D'Alarcao) 51 #3029 08A15 (20L05)
- (with Hatcher, William S.) Categorical languages for algebraic structures. *Z. Math. Logik Grundlagen Math.* 21 (1975), no. 5, 433-438. (S. Comer) 52 #10408 02H10
- Constructions preserving the associative and the commutative laws. *J. Austral. Math. Soc. Ser. A* 21 (1976), no. 1, 112-117. (A. A. Iskander) 53 #7910 08A15 (20L05)
- Shafar, L. Expansion of cylindrical Bessel functions in terms of trigonometric functions. *J. Inst. Math. Appl.* 11 (1973), 227-230. (K. C. Sharma) 49 #661 33A40
- Shafarevich, I. R. See Šafarevič, I. R.
- Shafarevitch, E. R. See Šafarevič, I. R.
- Shafarevich, A. Zeros of pion-nucleon scattering amplitudes. *Nuclear Phys.* B35 (1971), 556-572. (P. Achuthan) 46 #1235 81J30
- Some topological and graphical aspects of phase contours. *J. Mathematical Phys.* 15 (1974), 1800-1807. (G. R. Allcock) 52 #16331 81J30
- Shaffer, Glenn ★ A mathematical theory of evidence. *Princeton University Press, Princeton, N.J., 1976.* xiii + 297 pp. (I. J. Good) 57 #4272 60A05
- A theory of statistical evidence. With a discussion by the author, I. J. Good and D. V. Lindley. *Foundations of probability theory, statistical inference, and statistical theories of science (Proc. Internat. Res. Colloq., Univ. Western Ontario, London, Ont., 1973)*, Vol. II, pp. 365-436. *Univ. Western Ontario Ser. Philos. Sci., Vol. 6, Reidel, Dordrecht, 1976.* (Editors) 58 #18637 60A05 (62A99)
- Shaffer, John (with Tamura, Takayuki) On exponential semigroups. I. *Proc. Japan Acad.* 48 (1972), 77-80. (H.-J. Hoehnke) 47 #5156 20M10
- Homomorphisms of free contents. *Semigroup Forum* 6 (1973), no. 3, 255-259. (T. E. Hall) 52 #10912 20M05
- Shaffer, Robert E. Problem 70-15 corrected, "A generalization of spherical harmonics". *SIAM Rev.* 15 (1973), 658-663. (B. R. Bhonsle) 48 #8892 33A45
- A new bound on the series $\psi(n/2 + 3/4) - \psi(n/2 + 1/4)$. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 412-460 (1973)*, 125-126. (M. E. Muldoon) 48 #4241 26A86 (33A70)
- On quadratic approximation. *SIAM J. Numer. Anal.* 11 (1974), 447-460. (P. Brock) 50 #10626 41A20 (65D15)
- Analytic inequalities obtained by quadratic approximation. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 577-598 (1977)*, 96-97. (A. McD. Mercer) 56 #12203 26A87
- Shaffer, Wayne J. The nontransitive consumer. *Econometrica* 42 (1974), 913-919. (Author's summary) 56 #2263 90A15
- (with Sonnenschein, Hugo F.) Some theorems on the existence of competitive equilibrium. *J. Econom. Theory* 11 (1975), no. 1, 83-93. (John Roberts) 53 #10210 90A15
- Preference relations for rational demand functions. *J. Econom. Theory* 11 (1975), no. 3, 444-455. (Ehud Kalai) 53 #12536 90A15
- (with Sonnenschein, Hugo F.) Equilibrium in abstract economies without ordered preferences. *J. Math. Econom.* 2 (1975), no. 3, 345-348. (Ryuzo Sato) 53 #2315 90A15
- (with Sonnenschein, Hugo F.) Equilibrium with externalities, commodity taxation, and lump sum transfers. *Internat. Econom. Rev.* 17 (1976), no. 3, 601-611. (John Roberts) 57 #15350 90A15
- Equilibrium in economies without ordered preferences or free disposal. *J. Math. Econom.* 3 (1976), no. 2, 135-137. (Andrew Postlewaite) 54 #12180 90A15
- Revealed preference and aggregation. *Econometrica* 45 (1977), no. 5, 1173-1182. (Andrew P. Sage) 57 #5002 90A05
- Revealed preference cycles and the Slutsky matrix. *J. Econom. Theory* 16 (1977), no. 2, 293-309. (Carl P. Simon) 57 #15315 90A10
- Shaffer, Dorothy Browne Lemniscates and equipotentials. Collection of articles dedicated to J. L. Walsh on his 75th birthday, VIII (Proc. Internat. Conf. Approximation Theory, Related Topics and their Applications, Univ. Maryland, College Park, Md., 1970). *J. Approximation Theory* 6 (1972), 431-438. (David R. Adams) 50 #2524 31B15
- The radius of convexity for a special class of meromorphic functions. *Bull. Amer. Math. Soc.* 79 (1973), 224-225. (S. Fisher) 51 #10628 30A68
- On bounds for the derivative of analytic functions. *Proc. Amer. Math. Soc.* 37 (1973), 517-520. (S. Fisher) 46 #9357 30A76
- Distortion theorems for a special class of analytic functions. *Proc. Amer. Math. Soc.* 39 (1973), 281-287. (S. Fisher) 47 #3662 30A32
- (with Rubinstein, Zalman) On the multivalence and order of starlikeness of a class of meromorphic functions. *Israel J. Math.* 17 (1974), 302-314. (Paul Eenigenburg) 50 #10228 30A32
- Radii of starlikeness and convexity for special classes of analytic functions. *J. Math. Anal. Appl.* 45 (1974), 73-80. (E. P. Merkes) 48 #8772 30A32
- (with Diaz, Joaquin B.) A generalization, to higher dimensions, of a theorem of Lucas concerning the zeros of the derivative of a polynomial of one complex variable. *Applicable Anal.* 6 (1976/77), no. 2, 109-117. (N. K. Govil) 55 #8325 30A08
- On the order of convexity and starlikeness of a special class of analytic and meromorphic functions. *J. Math. Anal. Appl.* 64 (1978), no. 1, 216-222. (Z. Rubinstein) 57 #16564 30A32
- Shaffer, J. C. (with Afshar, R.; Mueller, F. M.) Hilbert transformation of densities of states using Hermite functions. *J. Computational Phys.* 11 (1973), 190-209. (B. M. Agrawal) 52 #3894 44A15
- Shaffer, Juliet Popper Bidirectional unbiased procedures. *J. Amer. Statist. Assoc.* 69 (1974), 437-439. (Author's summary) 50 #6030 62F05
- Multiple comparisons emphasizing selected contrasts: an extension and generalization of Dunnett's procedure. (French summary) *Biometrics* 33 (1977), no. 2, 293-303. (Dennis O. Dixon) 56 #7042 62J15
- (with Lehmann, E. L.) On a fundamental theorem in multiple comparisons. *J.*

- Amer. Statist. Assoc.* **72** (1977), no. 359, 576-578. (Authors' summary) **58** #31623 62J15
- Shafi, Q.** (with Patani, A.; Schlindwein, M.) Topological charges in field theory. *J. Phys.* **A 9** (1976), no. 9, 1513-1520. (Håkan Snellman) **54** #2021 81.57
(with Honerkamp, J.; Patani, A.; Schlindwein, M.) On kink solutions in two space dimensions. *Lett. Nuovo Cimento* (2) **15** (1976), no. 4, 97-100. (Editors) **56** #4630 83.35
- Renormalization group and non-polynomial field theories. *Acta Phys. Austriaca* **48** (1977), no. 1, 51-53. (P. Rudra) **58** #19937 81.22
- Shafiullah** (with Lal, Krishna Bihari) On wave solutions of the field equations of general relativity. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **61** (1976), no. 1-2, 115-120 (1977). (J. R. Robinson) **57** #8901 83.53
- Shafqat Ali, M.** See **Ali, M. Shafqat**
- Shafquat Ali, M.** See **Ali, M. Shafqat**
- Shafranskiy, V. V.** See **Šafranskiĭ, V. V.**
- Shaftef, Timothy L.** (with Thompson, Gerald L.) A simplex-like algorithm for the continuous modular design problem. *Operations Res.* **25** (1977), no. 5, 788-807. (Werner Krabs) **57** #5074 90C05
- Shah, A. P.** Subscripts of a -gonal numbers which are squares. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 94-98 (1972). (Kenneth Yocom) **49** #2524 10A40
- Shah, Anupam N.** Pebble automata on arrays. *Comput. Graphics and Image Processing* **3** (1974), 236-246. (Eugene S. Santos) **51** #14675 68A45
- Shah, B. K.** (with Khatri, C. G.) An extension to a method of fitting regression curve $E(y) = \alpha + \delta x + \beta x^*$. *Comm. Statist.* **1** (1973), 365-370. (G. Manija) **49** #10078 62J05
(with Khatri, C. G.) Proof of conjectures about the expected values of the elementary symmetric functions of a noncentral Wishart matrix. *Ann. Statist.* **2** (1974), 833-836. (Author's summary) **50** #15156 62H10
Application of multinomial distribution to clinical trial. *Gujarat Statist. Rev.* **2** (1975), no. 2, 19-23. (S. K. Katti) **55** #9364 62E15
- Shah, Bharat** (with Branson, Michael H.) On GERT modeling of a class of finite queueing processes. *AIEE Trans.* **4** (1972), 43-48. (C. Mohan) **52** #2558 90B25
- Shah, D. K.** (with Phatak, A. G.) The ASN of the curtailed sampling plans under the hypergeometric probability law. *Estadística* **29** (1971), no. 111, 150-157 (1975). (Nanak Chand) **52** #15924 62N10
(with Phatak, A. G.) The maximum likelihood estimation under curtailed three class attributes plans. *Technometrics* **19** (1977), no. 2, 159-166. (K. Sarkadi) **56** #7084 62N10
- Shah, D. N.** (with Shah, Shantilal M.) A simplified method for determining the BLUE. *Gujarat Statist. Rev.* **2** (1975), no. 2, 12-18. (Mir Ali) **55** #4534 62J05
- Shah, G. M.** On multivalency of some analytic functions. *J. Natur. Sci. and Math.* **12** (1972), 113-121. (M. S. Robertson) **48** #11477 30A32
On the univalence of certain rational functions. *J. Natur. Sci. and Math.* **12** (1972), 131-149. (M. Reade) **49** #10869 30A32
On the univalence of some analytic functions. *Pacific J. Math.* **43** (1972), 239-250. (E. P. Merkes) **47** #2047 30A32
On holomorphic functions convex in one direction. *J. Indian Math. Soc. (N.S.)* **37** (1973), 257-276. (A. W. Goodman) **50** #13487 30A32
- Shah, H. G.** (with Carroll, B. D.; Jones, D. M.) An examination of algebraic test generation methods for multiple faults. *IEEE Trans. Computers* **C-23** (1974), no. 7, 743-745. (Jürgen Dassow) **52** #12990 94A20
- Shah, Jayant** Surjectivity of the period map in the case of quartic surfaces and sextic double planes. *Bull. Amer. Math. Soc.* **82** (1976), no. 5, 716-718. (C. A. M. Peters) **54** #5246 14J25 (14D20, 14J15)
- tahir Shah, K.** See **Tahir Shah, K.**
- Shah, K. N.** Unsteady flow of viscous incompressible fluid in a circular cylinder. *Vidya* **12** (1969), no. 2, 112-125. (D. R. Breach) **46** #10295 76.44
Explicit formulas for $\Sigma_{n-i}^n i^r$ ($\equiv S_r$) and Bernoulli's numbers B_n . *Vidya B* **15** (1972), no. 2, 106-117. (L. Carlitz) **52** #5552 10A35
- Shah, K. R.** (with Khatri, C. G.) Connectedness in row-column designs. *Comm. Statist.* **2** (1973), 571-573. (Authors' summary) **48** #7496 62K10
(with Khatri, C. G.) Estimation of location parameters from two linear models under normality. *Comm. Statist.* **3** (1974), 647-663. (H. Bandemer) **51** #9323 62F10 (62K10)
(with Bhargava, R. P.) Analysis of some mixed-models for block and split-plot designs. *Ann. Inst. Statist. Math.* **27** (1975), no. 2, 365-375. (R. Pfaffenberger) **54** #6391 62J10 (62K10)
Analysis of block designs—a review article. *Gujarat Statist. Rev.* **2** (1975), no. 2, 1-11. (Anant M. Kshirsagar) **55** #4438 62-02 (62K10)
(with Khatri, C. G.) Exact variance of combined inter- and intra-block estimates in incomplete block designs. *J. Amer. Statist. Assoc.* **70** (1975), 402-406. (C. H. Kapadia) **51** #14452 62K10 (62J10)
(with Khatri, C. G.) Some designs for two-way elimination of heterogeneity. *Sankhyā Ser. B* **37** (1975), no. 4, 418-428. (From the introduction) **58** #31633 62K10
(with Raghavarao, D.; Khatri, C. G.) Optimality of two and three factor designs. *Ann. Statist.* **4** (1976), no. 2, 419-422. (H. Bandemer) **52** #15880 62K05
(with Puri, S. C.) Application of MINQUE procedure to block designs. *Comm. Statist.—Theory Methods* **A5** (1976), no. 2, 191-196. (M. N. Das) **56** #1618 62K10
(with Dodge, Yadolah) Estimation of parameters in Latin squares and Graeco-Latin squares with missing observations. *Comm. Statist.—Theory Methods* **A6** (1977), no. 15, 1465-1472. (J. A. John) **58** #18929 62J10 (62K10)
Analysis of designs with two-way elimination of heterogeneity. *J. Stat. Plann. Inference* **1** (1977), no. 2, 207-216. (Anant M. Kshirsagar) **58** #18941 62K10 (62J05, 62K15)
(with Dodge, Yadolah) On the connectedness of designs. *Sankhyā Ser. B* **39** (1977), no. 3, 284-287. (Authors' summary) **58** #31647 62K15
- Shah, K. S.** See **Proceedings: IFAC World Congress**, **50** #12338
- Shah, K. Tahir** Conjugacy and stability theorems in connection with contraction of Lie algebras. *Rep. Mathematical Phys.* **6** (1974), no. 2, 171-181. (V. L. Popov) **52** #22E60 (15A72, 17B55)
On the principle of stability of invariance of physical systems. *Ann. Poincaré Sect. A (N.S.)* **25** (1976), no. 2, 177-182. (G. Costa) **54** #12063 81.57
- Shah, M. C.** (with Rathie, P. N.) Exact distribution of product of generalized F -variables. *Canad. J. Statist.* **2** (1974), no. 1, 13-24. (S. K. Katti) **52** #15782 62E15
(with Jain, S. K.; Rathie, P. N.) The exact distributions of certain likelihood criteria. *Sankhyā Ser. A* **37** (1975), no. 1, 150-163. (A. M. Mathai) **55** #6638
- Shah, Manilal** Use of Gegenbauer (ultraspherical) polynomials in potential theory. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **7** (1969), 257-261 (loose errata) (M. Nassif) **45** #607 33A45
Some results of generalized Meijer functions associated with Tchebichef polynomials of the second kind. (Romanian summary) *An. Univ. Timișoara Ser. Mat.* **8** (1970), 101-113. (S. Masood) **45** #3799 33A35
Applications of Gegenbauer (ultraspherical) polynomials in cooling of a cylinder. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **8** (1970), 21-24. (S. D. Bajpai) **49** #1934 80.33 (33A45)
Fourier series for generalised hypergeometric polynomials. (Russian and Romanian summaries) *Bul. Ști. Tehn. Inst. Politehn. Timișoara—Ser. Mat.-Fiz.-Mec. Teor. Apl.* **15** (1970), no. 1, 33-38. (S. Saran) **49** #643 33A30
On some relations involving generalized Sister Celine's polynomials. (Russian and Romanian summaries) *Bul. Ști. Tehn. Inst. Politehn. Timișoara—Ser. Mat.-Fiz.-Mec. Teor. Apl.* **15** (1970), no. 2, 103-114. (S. Saran) **49** #665 (EA 49) 33A30
On some results involving generalized hypergeometric polynomials and associated Legendre functions. *J. Indian Math. Soc. (N.S.)* **34** (1970), 89-97 (1971) (Bhonsle) **45** #2219 33A30 (33A45)
Some results involving generalized function of two variables. *J. Natur. Sci. and Math.* **10** (1970), 109-124. (Brij Mohan) **48** #590 33A35
Generalized function of two variables and potential about a spherical surface. *Natur. Sci. and Math.* **10** (1970), 247-268. (B. L. Sharma) **46** #9412 33A45
Generating relations for Bedient's polynomials. *Univ. Lisboa Revista Fac. Ci.* **13**, 203-208 (1970/71). (C. M. Joshi) **47** #513 (EA 48) 33A30
A result on generalized hypergeometric function and generalized Meijer function of two variables. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **17** (1971), 331-338. (S. K. Chatterjea) **46** #9402 33A30
On some relations involving generalized Sister Celine's polynomials. *Comm. Math. Univ. St. Paul.* **19** (1971), 81-91. (J. L. Fields) **45** #2220 33A30
On generalized Meijer function of two variables and some applications. *Comm. Math. Univ. St. Paul.* **19** (1971), 93-122. (U. C. Jain) **45** #2223 33A35
Some finite integrals involving generalized hypergeometric polynomials. *Sci. J.* **21** (1971), 257-264. (P. N. Rathie) **45** #8883 33A30
Generating relations for Bedient's polynomials. (Serbo-Croatian summary) *Mat. Ser. III* **6** (1971), 247-251. (S. Saran) **46** #7568 33A30
On Fourier series for generalized Meijer functions of two variables and applications. *Indian J. Pure Appl. Math.* **2** (1971), no. 3, 464-478. (S. Masood) **45** #3800 33A35
Applications of Gegenbauer (ultraspherical) polynomials in cooling of a cylinder. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **24** (1971), no. 2, 27-34. (Donaldson) **49** #666 33A45
Gegenbauer polynomials and heat production in a cylinder. *J. Mathematical Physics* **5** (1971), 351-360. (S. L. Kalla) **45** #8891 33A50 (80.33)
Certain relation involving generalized hypergeometric polynomials. *J. Sci. (Karachi)* **1** (1971/72), no. 1, 71-80. (Author's summary) **55** #5914 33A30
Expansion formulas for Meijer's G -functions of two variables in series of functions. *Jñānabha Sect. A* **1** (1971), no. 1, 35-44. (S. D. Bajpai) **46** #7581
Jacobi polynomial and potential theory. *Kyungpook Math. J.* **11** (1971) (Gilbert Walter) **46** #420 33A65 (35C05)
An extension on generalized hypergeometric polynomials. *Kyungpook Math. J.* **11** (1971), 93-99. (Author's summary) **52** #3623 33A30
A note on generalized Meijer functions of two variables. *Kyungpook Math. J.* **11** (1971), 199-207. (R. Hufstutler (Zbl 228 #33005)) **52** #828 33A35
Some results involving a generalized Meijer function. *Mat. Vesnik* **8** (23) (1971), 3-16. (A. Erdélyi) **45** #3801 33A35
On applications of Hermite polynomials. (Turkish summary) *METU J. Pure Appl. Sci.* **4** (1971), no. 3, 221-235. (C. K. Sharma) **52** #8516 33A30
Some results on generalized functions and their applications. *Proc. Nat. Acad. India Sect. A* **41** (1971), 241-255. (S. D. Bajpai) **47** #8924 33A35
Gegenbauer (ultraspherical) polynomial and heat production in a cylinder. (Romanian and Russian summaries) *Studia Univ. Babeș-Bolyai Ser. Math.-Math. (1971)*, no. 2, 83-90. **46** #2116 33A50 (80.33)
A result on Kampé de Fériet function. *Univ. Lisboa Revista Fac. Ci. A* **39**-43 (1971/72). (S. Saran) **47** #7074 33A30
Certain results involving Kampé de Fériet's functions. (Romanian summary) *Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **18** (1972), 93-99. (H. M. Srivastava) **46** #5685 33A30
Results on generalized hypergeometric and Jacobi polynomials. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **18** (1972), 101-104. (Delache) **46** #5686 33A30
Generalized Meijer function and temperature in a non-homogenous bar. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **10** (1972), 95-101. (Brij Mohan) **48** #4363 33A35
Expansion formula for a generalised hypergeometric polynomial in series of Laguerre polynomial. (Arabic summary) *Bull. College Sci. (Baghdad)* **12**-13 (1972/73), 53-57. (B. M. Agrawal) **50** #654 33A30
Jacobi polynomial and potential theory. *Bull. College Sci. (Baghdad)* **12**-13 (1972/73), 271-279. (V. L. Makarov) **49** #10896 31A05 (33A65)
Some results on generalizations of Fox's H -functions. *Bull. Soc. Math. Macédoine* **23** (1972), 13-24 (1973). (J. A. Donaldson) **49** #657 33A35
A result on Kampé de Fériet function. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **7** (27) (1972), 53-56. (L. J. Slater) **48** #582 33A30

- Two integral transform pairs involving H -functions. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **7**(27) (1972), 57-65. (P. Anandani) **50** #2827 44A20 (33A35)
- A note on a generalization of Edelman's addition theorem on G -functions. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **7**(27) (1972), 201-205. (B. L. Sharma) #7080 33A35
- Certain results involving generalized Meijer functions and associated Legendre functions. *Indian J. Mech. Math.* **10** (1972), 81-91. (R. S. Dahiya) **49** #10933 (EA **51**) 3A35
- On some problems of Fox's H -functions of two variables and Gegenbauer polynomials. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **25** (1972), no. 2, 111-120. (C. A) **50** #13653 33A35
- Heat conduction and extended Fox's H -function. (Turkish summary) *İstanbul Tek. Üniv. Fen Fak. Mecm. Ser. A* **37** (1972), 155-160 (1974). (R. G. Buschman) **50** #10355 3A35
- On some problems leading to generalized hypergeometric and Laguerre polynomials. *Kyungpook Math. J.* **12** (1972), 129-135. (T. S. Chihara) **46** #7567 A30
- Expansions formulae for Bessel functions in series of Bessel functions. *Mat. Vesnik* **4**(1972), 221-224. (Brij Mohan) **48** #2450 33A40
- On some results on H -functions associated with orthogonal polynomials. *Math. Student* **40**(1972), 331-336. (B. C. Carlson) **47** #8925 33A35
- Expansion formulae for H -functions in series of trigonometrical functions with their applications. *Math. Student* **40A**(1972), 56-66. (S. D. Bajpai) **50** #7611 33A35
- Expansion formulae for a generalized Meijer function in series of Jacobi polynomials. *Math. Student* **40A**(1972), 97-110. (B. M. Agrawal) **50** #13654 33A35
- On some problems leading to certain results involving generalized Meijer functions of two variables and associated Legendre functions. *Math. Student* **40A**(1972), 1-133. (H. E. Fettis) **48** #8882 33A35
- On generalized Meijer's G -functions of two variables and generalized Legendre's associated functions. *Math. Student* **40A**(1972), 157-168. (S. D. Bajpai) **50** #10356 A35
- An extension on generalized Meijer functions of two variables with applications. (Turkish summary) *METU J. Pure Appl. Sci.* **5** (1972), no. 3, 347-359. (C. M. Joshi) #3631 33A35
- On generalized Meijer's and associated generalized Legendre's functions. *Portugal. Math.* **31** (1972), 57-76. (B. L. Sharma) **46** #3853 33A35
- On some results involving Kampé de Fériet functions. *Bull. Calcutta Math. Soc.* **65**(1973), no. 3, 175-181. (S. Saran) **52** #6053 33A30
- A note involving a theorem on generalized hypergeometric polynomials. (Romanian summary) *Bull. Univ. Braşov Ser. A Mec. Apl.* **15** (1973), 3-7. (K. M. Saksena) #644 33A30
- A note on generalization of summation formula for Appell's function F_2 . *C. R. Acad. Bulgare Sci.* **26** (1973), 295-297. (S. Masood) **50** #7607 33A30
- On generalizations of some results and their applications. *Collect. Math.* **24** (1973), 209-266. (J. P. Singhal) **51** #954 33A35
- A new formula on generalized functions. *Indian J. Pure Appl. Math.* **4** (1973), 89-897. (Harold Exton) **51** #955 33A35
- A note involving partial differential equation related to heat conduction. *Indian J. Pure Appl. Math.* **4** (1973), no. 3, 333-340. (S. Delache) **48** #2572 35K05 (33A30)
- On a generalized Fox's H -function. *Indian J. Pure Appl. Math.* **4** (1973), no. 4, 421-427. (R. G. Buschman) **48** #8881 33A35
- On generalized functions involving classical polynomials. *Indian J. Pure Appl. Math.* **4** (1973), no. 5-6, 473-480. (Brij Mohan) **48** #8883 33A35
- A theorem on generalized Meijer function of two variables. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **26** (1973), no. 1, 30-38. (R. S. Dahiya) **50** #5051 33A35
- A note on generalization of Edelman's addition theorem on G -function. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **26** (1973), no. 2, 13-18. (V. L. Deshpande) #3240 33A35
- A summation formula on Kampé de Fériet function. *Kyungpook Math. J.* **13** (1973), 249-251. (V. L. Deshpande) **49** #3235 33A35
- Integrals involving generalised Meijer functions of two variables and generalized Legendre associated functions. *Labdev-J. Sci. Tech. Part A* **11** (1973), no. 3-4, 52-64. (V. L. Deshpande) **54** #3055 33A35
- A solution of the boundary value problem in heat conduction. *Mat. Vesnik* **10**(25) (1973), 117-122. (R. N. Pandey) **49** #658 33A35 (80.33)
- A note involving a theorem on generalized hypergeometric polynomials. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Brătianu, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 458-460. (S. Saran) #10345 33A30
- A recurrence formula on generalized Meijer function of two variables. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Brătianu, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 461-464. (J. P. Singhal) #10357 33A35
- Several properties of generalized Fox's H -functions and their applications. *Portugal. Math.* **32** (1973), 179-199. (Brij Mohan) **47** #5315 33A35
- On some applications related to Fox's H -functions of two variables. *Publ. Inst. Math. (Beograd) (N.S.)* **16**(30) (1973), 123-133. (S. P. Goyal) **50** #7612 33A35
- Some expansion formulae of Bessel functions. *Riv. Mat. Univ. Parma* (3) **2** (1973), 7-250. (Y. L. Luke) **52** #11145 33A40
- On generalized Rice's polynomial. *Riv. Mat. Univ. Parma* (3) **2** (1973), 281-285. (V. L. Deshpande) **52** #14414 33A65
- Some multiplication theorems involving Fox's H -functions of two variables. *Univ. Tucumán Rev. Ser. A* **23** (1973), 143-151 (1974). (P. Anandani) **51** #3571 A35
- On applications of inversion theorems of Laplace and Mellin transforms associated with Fox's H -functions of two variables. *Univ. Tucumán Rev. Ser. A* **23** (1973), 153-163 (1974). (C. Fox) **51** #3572 33A35 (44A10)
- Application of Hermite polynomials for certain properties of Fox's H -function of two variables. *Univ. Tucumán Rev. Ser. A* **23** (1973), 165-178 (1974). (S. L. Kalla) **52** #3632 33A35
- Some results connected with extended Fox's H -functions and their applications. (Hindi, English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 47-66. (S. D. Bajpai) **51** #956 33A35
- Fourier expansion formulas for generalized Meijer functions. (Hindi, English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 97-114. (K. C. Gupta) **48** #8884 33A35
- A summation formula for Kampé de Fériet's function. *Bull. Calcutta Math. Soc.* **66** (1974), no. 2, 73-75. (S. D. Bajpai) **52** #11134 33A30
- A new generalized theorem on Fox's H -function. *Gac. Mat. (Madrid)* (1) **26** (1974), 158-165. (S. D. Bajpai) **50** #10384 33A75
- On a generalization of MacRobert's multiplication formula for the E -function series. *Indian J. Pure Appl. Math.* **5** (1974), no. 4, 343-350. (K. M. Saksena) **52** #8523 33A35
- A note on Mellin inversion formula. *Indian J. Pure Appl. Math.* **5** (1974), no. 5, 464-469. (R. S. Dahiya) **52** #8524 44A15 (33A35)
- On multiplication theorem involving generalized functions. *Indian J. Pure Appl. Math.* **5** (1974), no. 9, 785-790. (B. L. Sharma) **55** #3354 33A30
- Problems on electrostatic potential in spherical regions. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **27** (1974), no. 1, 1-11. (Author's summary) **57** #14929 78.35
- Applications of Hermite polynomials for certain properties of Fox's H -function of two variables. *Kyungpook Math. J.* **14** (1974), 171-184. (Editors) **55** #733 33A35
- On a unified result involving generalized function of two variables. *Nanta Math.* **7** (1974), no. 1, 1-7. (R. G. Buschman) **50** #13655 33A35
- A result on Fox's H -function of two variables. *Nanta Math.* **7** (1974), no. 2, 47-52. (Y. L. Luke) **51** #5992 33A35
- An addition theorem on Fox's H -function of two variables. *Univ. Tucumán Rev. Ser. A* **24** (1974), no. 1-2, 49-55 (1975). (B. L. Sharma) **52** #11141 33A35
- On generalised functions of two variables connected with orthogonal polynomials. (Hindi, English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), 97-104. (V. L. Deshpande) **51** #957 33A35
- On applications of H -functions. *C. R. Acad. Bulgare Sci.* **28** (1975), no. 11, 1459-1462. (R. G. Buschman) **54** #7897 33A35
- On a generalization of certain formulas. *Gac. Mat. (Madrid)* (1) **27** (1975), no. 7-8, 198-207. (Gerald G. Bilodeau) **54** #13162 33A30
- A note involving a theorem on generalized hypergeometric polynomials. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **28** (1975), no. 2, 1-4. (Author's summary) **57** #12928 33A30
- A unified presentation of an integral equation. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **40** (1975), 9-16 (1978). (R. S. Dahiya) **58** #11548 33A35
- A note on the generalization of a summation formula for Appell's function F_2 . *Mat. Časopis Sloven. Akad. Vied* **25** (1975), no. 2, 135-138. (R. S. Dahiya) **52** #14403 33A30
- An extension of Rice's result on an integral equation. *Publ. Inst. Math. (Beograd) (N.S.)* **18**(32) (1975), 173-179. (S. L. Kalla) **52** #11142 33A35
- Expansion of Kampé de Fériet's function. *Publ. Inst. Math. (N.S.)* **18**(32) (1975), 165-172. (R. A. Askey) **51** #13307 33A30
- Some extensions involving classical orthogonal polynomials and generalized functions. *Univ. Tucumán Rev. Ser. A* **25** (1975), no. 1-2, 181-191 (1976). (V. L. Deshpande) **54** #7887 33A30
- Some extensions of the multiplication theorems. *Gac. Mat. (Madrid)* (1) **28** (1976), no. 3-4, 64-69. (V. L. Deshpande) **57** #3467a 33A30
- An expansion theorem for the H -function. *J. Reine Angew. Math.* **285** (1976), 1-6. (C. K. Sharma) **54** #7898 33A35
- Some results on generating functions. *J. Reine Angew. Math.* **288** (1976), 121-128. (Harold Exton) **54** #10705 33A35
- A result on an extension of Fox's H -function. *Kyungpook Math. J.* **16** (1976), no. 1, 71-75. (R. G. Buschman) **54** #7899 33A35
- Harmonic functions and boundary value problems. *Kyungpook Math. J.* **16** (1976), no. 2, 189-197. (S. P. Goyal) **54** #7806 31A25 (33A35)
- Mellin type of integral equations. (Romanian summary) *Univ. Braşov Lucrari Ştiinţ.* **18** (1976), 1-13. (C. L. Parihar) **57** #10376 44A20
- Some properties associated with generalized integral transform in two variables. (Romanian summary) *Univ. Braşov Lucrari Ştiinţ.* **18** (1976), 15-27. (I. Fenyő) **57** #13395 44A20
- Some extensions of the multiplication theorems. *Gac. Mat. (Madrid)* (1) **29** (1977), no. 1, 22-27. (V. L. Deshpande) **57** #3467b 33A30
- Some extensions of the multiplication theorems. *Gac. Mat. (Madrid)* (1) **29** (1977), no. 3-4, 84-88. (V. L. Deshpande) **57** #3467c 33A30
- A note on generalization of a summation formula for Appell's function F_2 . *Rev. Mat. Hisp.-Amer.* (4) **37** (1977), no. 1-2, 39-42. (S. Saran) **56** #16009 33A30
- Shah, N. C. (with Sheth, I. H.) Operators unitarily equivalent to their adjoints. *Math. Student* **41** (1973), no. 3-4, 298-300 (1974). (K. F. Klopstein) **51** #11171 47B20 (with Sheth, I. H.) On paranormal operators. *Math. Japon.* **19** (1974), 79-81. (Lawrence Fialkow) **50** #14330 47B20 (with Sheth, I. H.) Some results on quasi-hyponormal operators. *J. Indian Math. Soc. (N.S.)* **39** (1975), 285-291 (1976). (E. Durszt) **54** #992 47B20 (with Sheth, I. H.) The maximal vector subspace of an operator. *Math. Japon.* **20** (1975), no. 2, 181. (R. G. Douglas) **53** #3731 47A05 (with Sheth, I. H.) On the classes of operators. *Vidya B* **18** (1975), no. 1, 124-126. (Editors) **57** #10472 47A65 (47B20) (with Sheth, I. H.) The principal points of an operator. *Vidya B* **19** (1976), no. 2, 251-256. (Editors) **57** #10473 47A65 (47B20)
- Shah, P. C. (with Gavlas, G. R.; Seinfeld, John H.) Parameter estimation in petroleum reservoirs. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 2, pp. 351-355. Hemisphere, Washington, D.C., 1977. (Authors' summary) **58** #15561 93E10*
- Shah, S. M. M. See *Symposium: Mathematical Genetics*, **52** #12848
- Shah, Shantilal M. (with Parikh, N. T.) Misclassification in power series distribution in

- which the value one is sometimes reported as zero. *J. Indian Statist. Assoc.* **7** (1969), 11-19. (A. C. Cohen) **48** #9937 62F10
- (with Parikh, N. T.) On the distribution obtained by varying the number of trials in binomial distribution. *J. Indian Statist. Assoc.* **7** (1969), 77-81. (A. F. Ifram) **49** #10004 62E15
- (with Parikh, N. T.) Inflated power series distribution. *J. Indian Statist. Assoc.* **7** (1969), 91-96. (D. S. Tracy) **48** #5238 62F10 (62E10)
- On the bounds for the number of disjoint blocks in incomplete block designs. *J. Indian Statist. Assoc.* **8** (1969), 63-65. (I. M. Chakravarti) **48** #12748 62K10
- The displaced negative binomial distribution. *Calcutta Statist. Assoc. Bull.* **20** (1971), 143-152. (J. Pickands, III) **48** #7431 62E10
- On expectations of some functions of Poisson variates. *J. Math. Sci.* **7** (1972), 86-90 (1974). (Author's summary) **57** #14223 62E15
- On the existence of affine μ -resolvable BIBDs. *Applied statistics (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1974)*, pp. 289-293. North-Holland, Amsterdam, 1975. (M. N. Das) **52** #15886 62K10
- On some block structure properties of a BIBD. *Calcutta Statist. Assoc. Bull.* **24** (1975), no. 93-96, 127-130 (1976). (Damaraju Raghavarao) **55** #2602 05B05 (62K10)
- Use of a priori information in the estimation of a parameter in life testing. *Comm. Statist.* **4** (1975), 177-184. (T. Pitcher) **51** #2230 62N05
- (with Shah, D. N.) A simplified method for determining the BLUE. *Gujarat Statist. Rev.* **2** (1975), no. 2, 12-18. (Mir Ali) **55** #4534 62J05
- (with Rathod, V. R.) Testing equality of several exponential distributions. (French summary) *Canad. J. Statist.* **4** (1976), no. 1, 119-126. (Benjamin Epstein) **56** #6975 62F05
- A note on quasi-symmetric balanced incomplete block design. *Gujarat Statist. Rev.* **3** (1976), no. 1, 20-22. (S. S. Shrikhande) **53** #7813 05B05
- Bounds for the number of identical blocks in incomplete block designs. *Sankhyā Ser. B* **38** (1976), no. 1, 80-86. (Author's summary) **58** #31639 62K10
- An upper bound for the number of treatments common to any set of blocks of certain PBIB designs. *Sankhyā Ser. B* **39** (1977), no. 1, 76-83. (E. Seiden) **58** #31640 62K10 (05B05)
- On α -resolvability and affine α -resolvability of incomplete block designs. *Ann. Statist.* **6** (1978), no. 2, 468-471. (Damaraju Raghavarao) **57** #4441 62K10
- Shah, Shantilal N.** (with Shah, Swarupchand M.) A new class of functions of bounded index. *Trans. Amer. Math. Soc.* **173** (1972), 363-377. (T. Kövari) **47** #2060 30A66
- Functions of exponential type are differences of functions of bounded index. *Canad. Math. Bull.* **20** (1977), no. 4, 479-483. (Benjamin Lepson) **58** #28493 30A64
- Shah, Sirish L.** Comment on: "Disturbance rejection in linear systems" (Internat. J. Systems Sci. **5** (1974), 633-637) by S. P. Bhattacharyya. *Internat. J. Systems Sci.* **7** (1976), no. 4, 479-480. (W. M. Wonham) **53** #5106 93C45
- (with Seborg, Dale E.; Fisher, D. Grant) Disturbance localization in linear systems by eigenvector assignment. *Internat. J. Control* **26** (1977), no. 6, 853-869. (K. B. Datta) **57** #5258 93B35
- (with Fisher, D. Grant; Seborg, Dale E.) Eigenvalue invariance to system parameter variations by eigenvector assignment. *Internat. J. Control* **26** (1977), no. 6, 871-881. (K. B. Datta) **57** #5259 93B35
- Shah, Swarupchand M.** On entire functions of bounded index whose derivatives are of unbounded index. *J. London Math. Soc.* (2) **4** (1971), 127-139. (Fred Gross) **48** #534 30A64
- (with Sisarcick, Wood C.) On entire functions of exponential type. *J. Res. Nat. Bur. Standards Sect. B* **75B** (1971), 141-147. (A. Bailliet) **46** #9350 30A66
- Holomorphic functions with mean p -valent derivatives. *Math. Ann.* **193** (1971), 176-182. (L. R. Sons) **45** #2160 30A36
- (with Saxena, Subhash C.) ★Introduction to real variable theory. Intext Series in Advanced Mathematics. Intext Educational Publishers, Scranton, Pa.-Toronto, Ont.-London, 1972. xiii + 334 pp. (Editors) **50** #7436 26-01
- Analytic functions with univalent derivatives and entire functions of exponential type. *Bull. Amer. Math. Soc.* **78** (1972), 154-171. (J. Nikolaus) **45** #2157 30A36
- (with King, Amy C.) Indices of Lindelöf functions and their derivatives. *Rocky Mountain J. Math.* **2** (1972), no. 4, 579-593. (Günter Frank) **46** #9345 30A64
- Absolute Nörlund summability of Fourier series. Collection of articles dedicated to Gen-ichirō Sunouchi on his sixtieth birthday. *Tōhoku Math. J.* (2) **24** (1972), 309-318. (T. Pati) **51** #3786 42A28
- (with Shah, Shantilal N.) A new class of functions of bounded index. *Trans. Amer. Math. Soc.* **173** (1972), 363-377. (T. Kövari) **47** #2060 30A66
- (with Fricke, Gerd H.; Sisarcick, Wood C.) A characterization of entire functions of exponential type and M -bounded index. *Indiana Univ. Math. J.* **23** (1973/74), 405-412. (Fred Gross) **48** #11502 30A64
- (with Trimble, S. Y.) Entire functions with some derivatives univalent. *Canad. J. Math.* **26** (1974), 207-213. (F. R. Keogh) **50** #2493 30A66
- (with Trimble, S. Y.) Univalence of derivatives of functions defined by gap power series. *J. London Math. Soc.* (2) **9** (1974/75), 501-512. (T. H. MacGregor) **50** #13520 30A64
- (with Trimble, S. Y.) The order of an entire function with some derivatives univalent. *J. Math. Anal. Appl.* **46** (1974), 395-409. (D. Drasin) **49** #9209 30A66
- (with Fricke, Gerd H.) A note on means of entire functions. *Proc. Indian Acad. Sci. Sect. A* **80** (1974), 161-167. (S. K. Singh) **51** #891 30A66
- (with Fricke, Gerd H.) Entire functions satisfying a linear differential equation. *Nederl. Akad. Wetensch. Proc. Ser. A* **78**=*Indag. Math.* **37** (1975), 39-41. (D. V. V. Wend) **51** #13223 30A64
- (with Bell, R. A.) Approximation by oscillating generalized polynomials. *Tōhoku Math. J.* (2) **27** (1975), no. 2, 197-206. (L. L. Schumaker) **52** #8726 41A10
- Analytic functions with some derivatives univalent and a related conjecture. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **61** (1976), no. 5, 344-353 (1977). (D. E. Tepper) **58** #6236 30A64
- Entire functions whose Fourier transforms vanish outside a finite interval. *J. Math. Anal. Appl.* **53** (1976), no. 1, 174-185. (K. C. Gupta) **53** #810 30A64 (42A68)
- (with Trimble, S. Y.) Univalence of derivatives of functions defined by gap power series. II. *J. Math. Anal. Appl.* **56** (1976), no. 1, 28-40. (T. H. MacGregor) **54** #54 30A64 (30A32)
- (with Silverman, Herb) Entire functions with maximum deficiency sum and means. *Math. Ann.* **220** (1976), no. 2, 185-192. (W. H. J. Fuchs) **53** #5873 30A64
- Entire functions of bounded index. *Complex analysis (Proc. Conf., Univ. Kent, Lexington, Ky., 1976)*, pp. 117-145. *Lecture Notes in Math.*, Vol. 599, Springer, B. 1977. (Gerd H. Fricke) **56** #15923 30A64
- Exceptional values of entire characteristic functions. *Indian J. Pure Appl. Math.* (1977), no. 3, 261-267. (E. Lukacs) **57** #3388 30A64 (60E05)
- Polynomial approximation of an entire function and generalized orders. *J. Approximation Theory* **19** (1977), no. 4, 315-324. (O. P. Juneja) **55** #13132 (30A82)
- Approximation of meromorphic functions by rational functions on the positive axis, and error estimates. *Complex analysis (Proc. S.U.N.Y. Conf., Brockport, 1976)*, pp. 115-128. *Lecture Notes in Pure and Appl. Math.*, Vol. 36, Dekker, New York, 1978. (G. Meinardus) **58** #23268 41A20 (30A68, 41A25)
- See also **Complex analysis**, **56** #3260 and **Suffridge, Teddy J.**, **56** #11725
- Shah, Y. K.** (with Patel, I. D.) On generalised inflated power series distribution with application to Poisson distribution. *J. Indian Statist. Assoc.* **7** (1969), 20-25. (Mir Ali) **48** #7448 62F10
- (with Jaiswal, M. C.) On a discrete deterministic inventory model with demand varying in progression. *AIIE Trans.* **8** (1976), no. 4, 456-460. (C. Mohan) **57** #25 90B05
- (with Jaiswal, M. C.) A lot-size model for exponentially deteriorating inventory with finite production rate. *Gujarat Statist. Rev.* **3** (1976), no. 2, 1-15. (Knut Rikstad) **55** #7342 90B05
- (with Jaiswal, M. C.) An order-level inventory model for a system with constant rate of deterioration. *Opsearch* **14** (1977), no. 3, 174-184. (Roman Słowiński) **56** #14634 90B30
- Shaha, R. R.** On definite material schemes in relativistic magnetohydrodynamics. *Shivaji Univ.* **6** (1973), no. 11-12, 51-56. (Not reviewed) 76.53 (83.53)
- Definite magnetofluid scheme in general relativity. *Ann. Inst. H. Poincaré Séries (N.S.)* **20** (1974), 189-200. (A. H. Taub) **50** #9296 83.53
- Shahani, A. K.** (with Crease, D. M.) Towards models of screening for early detection of disease. *Advances in Appl. Probability* **9** (1977), no. 4, 665-680. (Authors' summary) **58** #15290 92A05
- See also **Discussion: Papers, International Association of Survey Statisticians**, **56** #4008
- Shahar, R.** (with Liron, Nadav) Stokes flow due to a Stokeslet in a pipe. *J. Fluid Mech.* (1978), no. 4, 727-744. (W. O. Criminale, Jr.) **58** #14285b 76.35
- Shaharir, M. Z.** (with Cohen, H. A.) The action principle in quantum mechanics. *Internat. J. Theoret. Phys.* **11** (1974), 289-303. (Authors' summary) **54** #14644 81.49
- The modified Hamilton-Schwinger action principle. *J. Phys. A* **7** (1974), 553-560. (Author's summary) **53** #10023 81.49
- Shahidi, Freydoon** Functional equation satisfied by certain L -functions. *Compositio Math.* **37** (1978), no. 2, 171-207. (Stephen Gelbart) **58** #16603 12A70 (10D15, 22E55)
- Shahin, M. M.** (with Gali, I. M.; Moussa, N.) Integral representation of generalized invariant positively determined kernels. (Arabic summary) *Proc. Math. Phys. Soc. Egypt* **41** (1976), 1-6. (J. M. G. Fell) **52** #5859 22D10 (47B37)
- Shahinpoor, M.** (with Ahmadi, Goodarz) Stability of Cosserat fluid motions. *Arch. Rational Mech. Anal.* **47** (1972), 188-194. (L. A. Segel) **49** #1910 (E **54** #930 76.35)
- (with Ahmadi, Goodarz) Universal stability of magneto-Cosserat fluid motions. (Italian summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **107** (1973), 343-352. (A. A. Blank) **51** #9635 76.35
- (with Ahmadi, Goodarz) Decay of the kinetic energy of a first-order Cosserat fluid. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **107** (1973), 353-356. (A. A. Blank) **51** #9635 76.35
- (with Ahmadi, Goodarz) Uniqueness in elastodynamics of Cosserat and micro-continua. *Quart. Appl. Math.* **31** (1973/74), 257-261. (V. Gheorghita) **53** #15052 73.35
- Plane waves and stability in thin elastic circular cylindrical shells. *Arch. Rational Mech. Anal.* **54** (1974), 267-280. (Yi-Yuan Yu) **50** #15530 73.35
- (with Ahmadi, Goodarz) Universal stability of magneto-micropolar fluid motions. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **12** (1974), 657-663. (E. G. Broadbent) **56** #1919 76.35
- Plane waves and Hadamard stability in generalized thin elastic rods. *Internat. Solids and Structures* **11** (1975), no. 7-8, 861-870. (Yi-Yuan Yu) **52** #9766 73.35
- Finite twist waves in liquid crystals. *Quart. J. Mech. Appl. Math.* **28** (1976), 223-232. (M. N. L. Narasimhan) **51** #9618 73.35
- (with Ahmadi, Goodarz) Stability of Cosserat fluid motions. II. The non-linear case. (German summary) *Acta Mech.* **28** (1977), no. 1-4, 153-163. (Authors' summary) **58** #32364 76.35
- Governing equations for simple continuum feathers. *Arch. Mech. (Arch. Stos.)* **30** (1978), no. 1, 113-117. (L. N. Tao) **58** #8667 73.35
- See also **Cowin, Stephen C.**; et al., **54** #9301
- malek-Shahmirzadi, Massoud** See **Malek-Shahmirzadi, Massoud**
- zaker-Shahrak, Ali Akbar** See **Zaker-Shahrak, Ali Akbar**
- Shahshahani, Mehrdad M.** Discontinuous subgroups of extensions of semi-simple groups. *Osaka J. Math.* **9** (1972), 273-286. (S. Murakami) **47** #8769 22E40
- Shahshahani, S.** Dissipative systems on manifolds. *Invent. Math.* **16** (1972), 177-180. (László Zsidó) **46** #6397 58F05
- Symplectic structures on integral manifolds. *Indiana Univ. Math. J.* **23** (1973/74), 209-211. (A. P. Stone) **47** #9476 (E **50** #5848) 53C15
- Erratum: "Symplectic structures on integral manifolds" (Indiana Univ. Math. J. (1973/74), 209-211). *Indiana Univ. Math. J.* **24** (1974), 93. (A. P. Stone) **50** #58F05
- Some examples of dynamical systems. *Control theory and topics in functional analysis (Internat. Sem., Internat. Centre Theoret. Phys., Trieste, 1974)*, Vol. I, pp. 227-234. *Internat. Atomic Energy Agency, Vienna, 1976*. (Editors) **58** #24373 78.35

See also **Dynamical systems**, 52 #11994

b, A. M. See **El-Shaieb, A. M.**

A. Statistical inference for Markov chains with lumped states. *Biometrika* 63 (1976), no. 1, 211-213. (Alan Agresti) 53 #6934 62M05

M. E. See **Saikin, M. E.**

(with England, A. H.) Orthogonal polynomial solutions to some mixed boundary-value problems in elasticity. II. *Quart. J. Mech. Appl. Math.* 30 (1977), no. 4, 414. (Roger D. Low) 56 #1732b 73J5

A. F. (with Lacoss, R. T.) More $A_1E + EA_2 = -D$ and $A_1X + XA_2 + D, X(0) = C$. *IEEE Trans. Automatic Control* AC-21 (1976), no. 3, 406. (Abbas I. Abdel Karim) 54 #11788 65L05 (65F15)

A. Absolute approximations to equilibrium in markets with non-convex preferences. *J. Math. Econom.* 3 (1976), no. 2, 185-196. (Author's summary) 55 #9882 0A15

Moshe A note on the exchangeable generalized Farlie-Gumbel-Morgenstern distributions. *Comm. Statist.* 4 (1975), no. 8, 711-721. (I. Olkin) 52 #7008 62H05

Bounds for the distributions and hazard gradients of multivariate random variables. *The theory and applications of reliability, with emphasis on Bayesian and parametric methods* (Conf., Univ. South Florida, Tampa, Fla., 1975), Vol. 1, pp. 1-242. Academic Press, New York, 1977. (Henry W. Block) 58 #18993 62N05

(with Greenwood, Priscilla) Fluctuations of random walk in R^d and storage systems. *Advances in Appl. Probability* 9 (1977), no. 3, 566-587. (N. H. Bingham) 54 #4336 60J15 (60K30)

A concept of positive dependence for exchangeable random variables. *Ann. Statist.* 1977, no. 3, 505-515. (Donald R. Jensen) 55 #9361 62E10 (62G30, 62N05)

Statistical inference for a class of life distributions. *Comm. Statist.—Theory Methods* A6 (1977), no. 13, 1323-1339. (William E. Thompson) 58 #13588 62N05 (62F10)

A family of concepts of dependence for bivariate distributions. *J. Amer. Statist. Soc.* 72 (1977), no. 359, 642-650. (Author's summary) 58 #31591 62H20 (62N05)

Uri (with Horowitz, Isaac M.) The state space and transfer function approaches in practical linear multivariable systems design. *Sensitivity, adaptivity and optimality* (Proc. Third IFAC Sympos., Ischia, 1973), pp. 195-201. Instrument Soc. Amer., Pittsburgh, Pa., 1973. (Jan C. Willems) 51 #2702 93C05

(with Speyer, Jason L.) Minimax design for a class of linear quadratic problems with parameter uncertainty. *IEEE Trans. Automatic Control* AC-19 (1974), 158-159. (Authors' summary) 54 #12299 93C99

(with Karcianias, N.) The use of zeros and zero-directions in model reduction. *Internat. J. Control* 23 (1976), no. 1, 113-135. (A. S. C. Sinha) 54 #9754 93B25

(with Kouvaritakis, B.) Asymptotic behaviour of root-loci of linear multivariable systems. *Internat. J. Control* 23 (1976), no. 3, 297-340. (S. P. Bhattacharyya) 54 #9762 93C05

The angles of departure and approach of the root-loci in linear multivariable systems. *Internat. J. Control* 23 (1976), no. 4, 445-457. (Y. T. Tsay) 54 #7034 93C05

A general transfer function approach to linear stationary filtering and steady-state optimal control problems. *Internat. J. Control* 24 (1976), no. 6, 741-770. (R. S. Bucy) 54 #5348 93E10

A general transfer-function approach to the steady-state linear quadratic Gaussian stochastic control problem. *Internat. J. Control* 24 (1976), no. 6, 771-800. (Lennart Ljung) 56 #15098 93E20

(with Kouvaritakis, B.) The zeros of linear optimal control systems and their role in high feedback gain stability design. *IEEE Trans. Automatic Control* AC-22 (1977), no. 4, 777-799. (Authors' summary) 56 #14902 93B25 (93D10, 93C45)

The zero properties of linear passive systems. *IEEE Trans. Automatic Control* AC-22 (1977), no. 6, 973-974. (Author's summary) 57 #15606 93B25 (93D10)

Design of general model-following control systems. *Internat. J. Control* 25 (1977), no. 1, 57-79. (Peter A. Cook) 55 #2234 93B99

The admissibility of desired transfer-function matrices. *Internat. J. Control* 25 (1977), no. 2, 213-228. (Bradley W. Dickinson) 56 #2521 93B25

The intersection of the root-loci of multivariable systems with the imaginary axis. *Internat. J. Control* 25 (1977), no. 4, 603-607. (Peter A. Cook) 56 #11172 93B25

(with Dixon, Michael) Generalized minimal realization of transfer-function matrices. *Internat. J. Control* 25 (1977), no. 5, 785-803. (From the summary) 56 #26258 93B15

Synthesis of non-linear time-varying feedback systems with significant parameter uncertainty. *Internat. J. Control* 27 (1978), no. 5, 769-782. (H. O. Fattorini) 58 #26288 93B99 (93C10)

shaft, Robin Erratum: "The analytical and recursive evaluation of two-center integrals" (M. Dutta) 50 #9257 81G5

(with Spruch, Larry) Rearrangement collisions at very high energies. *Phys. Rev. A* 8 (1973), 206-215. (Authors' summary) 52 #7372 81A5

Shahar, B. I. See **Shahar, B. I.**

Shahar, A. P. See **Shahar, A. P.**

Shahverdyan, S. V. See **Shahverdyan, S. V.**

Shah, C. M. (with Auerbach, Naftali; Hüfner, Jörg; Kerman, A. K.) A theory of phonon analog resonances. *Rev. Modern Phys.* 44 (1972), 48-125. (Authors' summary) 55 #9760 81A7

Shakir See **Musa ibn Shakir**

Shay, A. H. (with Havner, Kerry S.) A simple mathematical theory of finite distortional plastic hardening in single crystals. *Proc. Roy. Soc. London Ser. A* 358 (1977), no. 1692, 7-70. (J. L. Nowinski) 58 #8632 73J00

Shay, David Absolute continuity of Wiener processes. *J. Functional Analysis* 12 (1973), 21-334. (V. Ficker) 49 #9933 60G30 (60J65)

Analysis over discrete spaces. *J. Functional Analysis* 16 (1974), 258-288. (R. M. Dudley) 50 #9255 81G0

Shah, Peter B. Infinitely divisible elements in 3-manifold groups. *Knots, groups, and manifolds* (Papers dedicated to the memory of R. H. Fox), pp. 293-335. *Ann. of Math. Studies*, No. 84, Princeton Univ. Press, Princeton, N.J., 1975. (Benny Evans) 51 #11476

55A05 (57A10)

(with Jaco, William) Seifert fibered spaces in irreducible, sufficiently-large 3-manifolds. *Bull. Amer. Math. Soc.* 82 (1976), no. 5, 765-767. (J. S. Birman) 54 #3706 57A15

(with Jaco, William) Peripheral structure of 3-manifolds. *Invent. Math.* 38 (1976), no. 1, 55-87. (J. S. Birman) 55 #1357 57A10 (55A10)

(with Jaco, William) Surface homeomorphisms and periodicity. *Topology* 16 (1977), no. 4, 347-367. (J. S. Birman) 57 #4173 57A05

Shalhevet, Jacqueline A characterization of separating distinguished collections containing the maximum number of sets. *J. Combinatorial Theory Ser. A* 13 (1972), 105-115. (R. E. Greenwood) 45 #8536 05A05

Shalika, Joseph A. (with Tanaka, Shunichi) On an explicit construction of a certain class of automorphic forms. *Amer. J. Math.* 91 (1969), 1049-1076. (K. G. Ramanathan) 45 #181 10D15

(with Sally, Paul J., Jr.) The Plancherel formula for $SL(2)$ over a local field. *Proc. Nat. Acad. Sci. U.S.A.* 63 (1969), 661-667. (G. I. Ol'sanskii) 51 #813 22E50

Some conjectures in class field theory. 1969 *Number Theory Institute* (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969), pp. 115-122. *Amer. Math. Soc., Providence, R.I.*, 1971. (J. Dieudonné) 49 #10664 12A65 (10D20, 22E55, 32N15)

A theorem on semi-simple \mathcal{P} -adic groups. *Ann. of Math.* (2) 95 (1972), 226-242. (Roger E. Howe) 48 #2310 22E50

On the multiplicity of the spectrum of the space of cusp forms of GL_n . *Bull. Amer. Math. Soc.* 79 (1973), 454-461. (G. I. Ol'sanskii) 52 #5886 22E55 (10D20)

The multiplicity one theorem for GL_n . *Ann. of Math.* (2) 100 (1974), 171-193. (A. J. Coleman) 50 #545 22E50

(with Jacquet, H.) Hecke theory for $GL(3)$. *Compositio Math.* 29 (1974), 75-87. (S. Gelbart) 50 #7037 10D20 (12A70, 22E55, 32N10)

(with Jacquet, H.; Piatetski-Shapiro, I. I.) ★ Construction of cusp forms on $GL(3)$. Department of Mathematics, University of Maryland, Lecture Note, No. 16. *Department of Mathematics, University of Maryland, College Park, Md.*, 1975. i+85 pp. (Stephen Gelbart) 58 #16522 10D15 (22E55)

(with Jacquet, H.; Piatetski-Shapiro, I. I.) Construction de formes automorphes pour le groupe $GL(3)$. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 2, A91-A93. (Stephen Gelbart) 52 #13648 10D20

(with Jacquet, H.) A non-vanishing theorem for zeta functions of GL_n . *Invent. Math.* 38 (1976/77), no. 1, 1-16. (Mark E. Novodvorsky) 55 #5583 12A70 (10D20, 10H10)

(with Jacquet, H.) Comparaison des représentations automorphes du groupe linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 13, A741-A744. (Authors' summary) 55 #5539 10D15 (22E55)

Shalit, Jeffrey An interesting continued fraction. *Math. Mag.* 48 (1975), no. 4, 207-211. (S. A. Burr) 52 #13620 10A35

Predictable regular continued cotangent expansions. *J. Res. Nat. Bur. Standards Sect. B* 80B (1976), no. 2, 285-290. (K. E. Hirst) 55 #2734 10A30 (10F20)

(with Rosen, David) A continued fraction algorithm for approximating all real polynomial roots. *Math. Mag.* 51 (1978), no. 2, 112-116. (E. R. Hansen) 58 #8219 65H05

Ish-Shalom, Ariel See **Ish-Shalom, Ariel**

bar-Shalom, Yaakov See **Bar-Shalom, Yaakov**

Shalyukhin, Yu. N. See **Šaljuhin, Ju. N.**

Shamaly, A. (with Capri, Anton Z.) Propagation of nonlinear electromagnetic field theories. (French summary) *Canad. J. Phys.* 52 (1974), 917-918. (Authors' summary) 53 #12303 81J35

(with Capri, Anton Z.) Electrodynamics and propagation of a spin 3/2 field. (French summary) *Canad. J. Phys.* 52 (1974), 919-920. (Authors' summary) 53 #12290 81J35

Shaman, Paul (with Hinich, Melvin J.) Parameter estimation for an R -dimensional plane wave observed with additive independent Gaussian errors. *Ann. Math. Statist.* 43 (1972), 153-169. (T. Pitcher) 46 #1037 62M10

On the inverse of the covariance matrix for an autoregressive-moving average process. *Biometrika* 60 (1973), 193-196. 48 #10017 62M10

An approximate inverse for the covariance matrix of moving average and autoregressive processes. *Ann. Statist.* 3 (1975), 532-538. (Peter M. Robinson) 50 #15223 62M10

Approximations for stationary covariance matrices and their inverses with application to ARMA models. *Ann. Statist.* 4 (1976), no. 2, 292-301. (Rashid Ahmad) 53 #1888 62M10

Some Bayesian considerations in spectral estimation. *Biometrika* 64 (1977), no. 1, 79-84. (Author's summary) 58 #24803 62M15 (62F15)

Shamarin, A. F. See **Šamarin, A. F.**

Shamash, Y. Continued fraction methods for the reduction of discrete-time dynamic systems. *Internat. J. Control* 20 (1974), 267-275. (Hsi-han Yeh) 50 #6595 93C55

(with Rutman, R. S.) Design of multivariable systems via polynomial equations. *Internat. J. Control* 22 (1975), no. 5, 729-737. (Edward W. Kamen) 54 #9769 93C15

Minimal realization of a differential system. *Internat. J. Systems Sci.* 6 (1975), 645-652. (B. P. Zeigler) 52 #5106 93B20

Construction of the inverse of linear time-invariant multivariable systems. *Internat. J. Systems Sci.* 6 (1975), no. 8, 733-740. (I. H. Mufti) 52 #12880 93B25

(with Feinstein, J.) Inverse of linear systems. *Electron. Lett.* 12 (1976), no. 6, 139-140. (Stephen Barnett) 53 #10384 93B20

Closed-loop feedback systems using reduced-order models. *Electron. Lett.* 12 (1976), no. 24, 638-639. (R. M. DeSantis) 56 #11156 93B15

Continued fraction methods for the reduction of constant-linear multivariable systems. *Internat. J. Systems Sci.* 7 (1976), no. 7, 743-758. (Masao Ikeda) 53 #15445 93B15

(with Feinstein, J.) The decoupling of multivariable systems using matrix polynomial equations. *Internat. J. Systems Sci.* 7 (1976), no. 7, 759-768. (Authors' summary) 56 #11173 93B25

Padé-type methods for the reduction of linear time-invariant systems. *Applications*

- and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 2, pp. 426-430. Hemisphere, Washington, D.C., 1977. (Author's summary) **58** #15352 93A15
- Computing the minimal polynomial by using Koenig's theorem. *Electron. Lett.* **13** (1977), no. 6, 166-167. (Author's summary) **56** #2515 93B20
- (with Feinstein, J.) Spectral factorization of a rational matrix. *IEEE Trans. Information Theory* **IT-23** (1977), no. 4, 534-538. (Pl. Kannappan) **57** #5261 93B99
- (with Feinmesser, D.) Reduction of discrete time systems using a modified Routh array. *Internat. J. Systems Sci.* **9** (1978), no. 1, 53-64. (K. B. Datta) **57** #5297 93C55 (93D10)
- Shamina, V. A.** See **Šamina, V. A.**
- Shamir, Adi** (with Even, Shimon; Itai, Alon) On the complexity of timetable and multi-commodity flow problems. *16th Annual Symposium on Foundations of Computer Science (Berkeley, Calif., 1975)*, pp. 184-193. *IEEE Computer Society, Long Beach, Calif., 1975*. (A. T. Amin) **55** #2107 90B35
- (with Manna, Zohar) The optimal fixedpoint of recursive programs. *Seventh Annual ACM Symposium on Theory of Computing (Albuquerque, N. M., 1975)*, pp. 194-206. *Assoc. Comput. Mach., New York, 1975*. (G. Berry) **55** #13860 68A05
- (with Manna, Zohar) The theoretical aspects of the optimal fixedpoint. Semantics and correctness of programs. *SIAM J. Comput.* **5** (1976), no. 3, 414-426. (G. Berry) **55** #13861 68A05
- (with Even, Shimon; Itai, Alon) On the complexity of timetable and multicommodity flow problems. *SIAM J. Comput.* **5** (1976), no. 4, 691-703. (G. Berman) **57** #11691 90B10
- (with Wadge, William W.) Data types as objects. *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 465-479. *Lecture Notes in Comput. Sci., Vol. 52, Springer, Berlin, 1977*. (E. G. Wagner) **58** #19318 68A05
- (with Manna, Zohar) The optimal approach to recursive programs. *Comm. ACM* **20** (1977), no. 11, 824-831. (Giorgio Levi) **56** #13748 68A05
- (with Manna, Zohar) The convergence of functions to fixed points of recursive definitions. *Theoret. Comput. Sci.* **6** (1978), no. 2, 109-141. (John T. Gill) **57** #14583 68A05 (02F20)
- Shamir, Eliahu** (with Beeri, C.) Checking stacks and context-free programmed grammars accept p -complete languages. *Automata, languages and programming (Second Colloq., Univ. Saarbrücken, Saarbrücken, 1974)*, pp. 27-33. *Lecture Notes in Comput. Sci., Vol. 14, Springer, Berlin, 1974*. (S. A. Greibach) **54** #14462 68A30 (68A20)
- (with Eskin, Michael) Systèmes elliptiques surdéterminés dans des cônes convexes et la conjecture de Smith. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 16, A879-A882. (Monty Strauss) **53** #6114 35N99 (35J45)
- (with Bracha-Barak, Amnon) On the parallel evaluation of Boolean expressions. *SIAM J. Comput.* **5** (1976), no. 4, 678-681. (R. P. Brent) **58** #13911 68A20 (94A20)
- (with Eskin, Michael) Elliptic overdetermined differential systems in convex cones. *J. Analyse Math.* **32** (1977), 1-16. (From the text) **58** #23028 35J45 (32A15)
- See also *Algebraische Theorie abstrakter Automaten, formaler Sprachen und Halbgruppen*, **49** #10487 and *Trahtenbrot, B. A.; et al.*, **50** #4174
- Shamma, Shawky E.** Asymptotic behavior of Stekloff eigenvalues and eigenfunctions. *SIAM J. Appl. Math.* **20** (1971), 482-490. (I. Stakgold) **46** #5819 35J05
- (with Karp, Samuel N.) Asymptotic eigenfunctions of a scattering problem. *SIAM J. Appl. Math.* **22** (1972), 14-21. (Y. I. Kannai) **46** #4012 35P20
- Asymptotic eigenfunctions of mixed problems of Stekloff's type. (French summary) *Z. Angew. Math. Phys.* **23** (1972), 1-12. (Y. I. Kannai) **47** #654 (E 51 #1156) 35P20
- (with Karp, Samuel N.) Asymptotic eigenfunctions of a singular integro-differential equation. *SIAM J. Math. Anal.* **4** (1973), 116-127. (M. I. Imanaliev) **48** #4669 45J05
- On the asymptotic solutions of a generalized eigenvalue problem. (French summary) *Z. Angew. Math. Phys.* **24** (1973), 131-134. (Nicola Luca) **48** #812 45C05
- Addendum to: "Asymptotic eigenfunctions of mixed problems of Stekloff's type" (Z. Angew. Math. Phys. **23** (1972), 1-12): Extension to exterior problems. (French summary) *Z. Angew. Math. Phys.* **26** (1975), 255-256. (Y. I. Kannai) **51** #1156 35P20
- (with Squier, D. P.) Some representations of solutions of elliptic equations. *J. Math. Anal. Appl.* **54** (1976), no. 2, 480-496. (Maurizio Chicco) **53** #13821 35J25
- Shamos, Michael Ian** (with Hoey, Dan) Closest-point problems. *16th Annual Symposium on Foundations of Computer Science (Berkeley, Calif., 1975)*, pp. 151-162. *IEEE Computer Society, Long Beach, Calif., 1975*. (D. T. Lee) **54** #14441 68A20 (90C10)
- Geometric complexity. *Seventh Annual ACM Symposium on Theory of Computing (Albuquerque, N.M., 1975)*, pp. 224-233. *Assoc. Comput. Mach., New York, 1975*. (C. F. Kelemens) **57** #4628 68A20
- Geometry and statistics: problems at the interface. *Algorithms and complexity (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1976)*, pp. 251-280. *Academic Press, New York, 1976*. (I. Văduva) **55** #4780 68A20 (62-04)
- (with Hoey, Dan) Geometric intersection problems. *17th Annual Symposium on Foundations of Computer Science (Houston, Tex., 1976)*, pp. 208-215. *IEEE Comput. Soc., Long Beach, Calif., 1976*. (E. M. Reingold) **56** #13770 68A10 (68A20, 94A20, 90C05)
- (with Yuval, Gideon) Lower bounds from complex function theory. *17th Annual Symposium on Foundations of Computer Science (Houston, Tex., 1976)*, pp. 268-273. *IEEE Comput. Soc., Long Beach, Calif., 1976*. (Donald B. Johnson) **57** #14603 68A20
- (with Bentley, Jon Louis) Divide-and-conquer in multidimensional space. *Eighth Annual ACM Symposium on Theory of Computing (Hershey, Pa., 1976)*, pp. 220-230. *Assoc. Comput. Mach., New York, 1976*. (Fabrizio Luccio) **55** #13869 68A20
- (with Bentley, Jon Louis) Divide and conquer for linear expected time. *Information Processing Lett.* **7** (1978), no. 2, 87-91. (Jaroslav Morávek) **58** #3667 68A20
- Shampine, Lawrence F.** Heat transfer by conduction and radiation. *Indiana Univ. Math. J.* **21** (1971/72), 481-491. (J. Adler) **45** #4747 80.34 (80.45)
- (with Watts, Herman A.) Comparing error estimators for Runge-Kutta methods. *Math. Comp.* **25** (1971), 445-455. (J. Hurt) **45** #6196 65L99
- (with Watts, Herman A.) A-stable block implicit one-step methods. *Nordisk Tidskr. Informationsbehandling (BIT)* **12** (1972), 252-266. (A. R. Mitchell) **46** #6603 65L99
- (with Russell, Robert D.) A collocation method for boundary value problems. *Numer. Math.* **19** (1972), 1-28. (P. G. Ciarlet) **46** #4737 65L10
- Concentration-dependent diffusion. *Quart. Appl. Math.* **30** (1972/73), 441-451. (Bhargava) **54** #1899 80.35
- (with Allen, Richard C., Jr.) ★ Numerical computing: an introduction. *W. H. Saunders Co., Philadelphia-London-Toronto, Ont., 1973*. vii + 258 pp. (Editors) **50** #11705 65-01
- Local extrapolation in the solution of ordinary differential equations. *Math. Comp.* **27** (1973), 91-97. (T. E. Hull) **48** #10135 65L99
- Concentration-dependent diffusion. II. Singular problems. *Quart. Appl. Math.* **30** (1973), 287-293. (W. F. Ames) **54** #13325 35K55 (34C99)
- (with Dorr, Fred W.; Parter, Seymour V.) Applications of the maximum principle to singular perturbation problems. *SIAM Rev.* **15** (1973), 43-88. (F. Hoppenstedt) **47** #8995 34D15
- Limiting precision in differential equation solvers. *Math. Comp.* **28** (1974), 141-144. (Author's summary) **48** #7650 (E 49 #8366) 68A05
- Corrigenda: "Limiting precision in differential equation solvers" (Math. Comp. **28** (1974), 141-144). *Math. Comp.* **28** (1974), 1183. (Editors) **49** #8366 65L05
- (with Gordon, M. K.) ★ Computer solution of ordinary differential equations, initial value problem. *W. H. Freeman and Co., San Francisco, Calif., 1975*. x + 311 pp. (Zbl 347 #65001) **57** #18104 65Lxx
- Stiffness and non-stiff differential equation solvers. *Numerische Behandlungen (Tagung, Math. Forschungsinst., Oberwolfach, 1974)*, pp. 287-301. *Internat. Schriftenreihe Numer. Math., Band 27, Birkhäuser, Basel, 1975*. (W. H. Enright) **53** #12026 65L05
- (with Gordon, M. K.) Local error and variable order Adams codes. *Appl. Math. Comput.* **1** (1975), no. 1, 47-66. (C. W. Gear) **51** #9494 65L05
- Discrete least squares polynomial fits. *Comm. ACM* **18** (1975), 179-180. (McCormick) **51** #2247 65D10
- Concentration-dependent diffusion. III. An approximated solution. *Quart. Appl. Math.* **33** (1975/76), no. 4, 429-431. (See Zbl 356 #76068) **53** #7635 (76.35)
- (with Russell, Robert D.) Numerical methods for singular boundary value problems. *SIAM J. Numer. Anal.* **12** (1975), 13-36. (Ian Gladwell) **53** #4553 65L10
- (with Watts, Herman A.) Global error estimation for ordinary differential equations. *ACM Trans. Math. Software* **2** (1976), no. 2, 172-186. (J. Hurt) **54** #165L05
- Quadrature and Runge-Kutta formulas. *Appl. Math. Comput.* **2** (1976), no. 1, 161-171. (Abbas I. Abdel Karim) **53** #11980 65D30
- (with Watts, Herman A.; Davenport, S. M.) Solving nonstiff ordinary differential equations—the state of the art. *SIAM Rev.* **18** (1976), no. 3, 376-411. (W. H. Enright) **54** #1636 65L99
- Stiffness and nonstiff differential equation solvers. II. Detecting stiffness and Runge-Kutta methods. *ACM Trans. Math. Software* **3** (1977), no. 1, 44-53. (V. Enright) **56** #4175 65L05
- Limiting precision in differential equation solvers. II. Sources of trouble and strategies. *Math. Comp.* **32** (1978), no. 144, 1115-1122. (Author's summary) **58** #195L05
- See also *Numerical solutions of boundary value problems for ordinary differential equations*, **50** #8979
- Shamrikov, B. M.** See **Šamrikov, B. M.**
- Shams ad-Din as-Samarqandī** See **Ahmedov, A.**, **50** #20
- Shamsuddin, Ahmad** A note on a class of simple Noetherian domains. *J. London Math. Soc.* **2** (15 (1977)), no. 2, 213-216. (Donald S. Passman) **55** #8077 16A02 (16A01)
- Shanahan, Patrick** A unified proof of several basic theorems of real analysis. *Amer. Math. Monthly* **79** (1972), 895-898. (R. S. Booth) **46** #5538 (E 54 #7711) 26A15
- Addendum to: "A unified proof of several basic theorems of real analysis" (Amer. Math. Monthly **79** (1972), 895-898). *Amer. Math. Monthly* **81** (1974), 890-891. (R. S. Booth) **54** #7711 26A15
- See also **Gilmer, Robert; et al.**, **48** #5755
- Shanbhag, D. N.** On a vector-valued birth and death process. (French summary) *Biometris* **28** (1972), 417-425. (Author's summary) **47** #1144 60J80
- (with Basawa, I. V.) A note on serial correlation coefficients and related characterizations of gamma and exponential distributions. *Calcutta Statist. Assoc.* **21** (1972), 57-62. (Mir Ali) **49** #6440 62E10
- Some characterizations based on the Bhattacharyya matrix. *J. Appl. Probability* **9** (1972), 580-587. (B. Raja Rao) **49** #10003 62E10
- (with Ghosh, Pankaj) A note on the characterization of a U-shaped probability density function. *J. Appl. Probability* **9** (1972), 684-685. (B. L. S. Prakasa Rao) **49** #6435 62E10
- (with Clark, R. M.) Some characterizations for the Poisson distribution starting with a power-series distribution. *Proc. Cambridge Philos. Soc.* **71** (1972), 517-522. (E. L. Zbl 243 #62008) **48** #3160 62E10
- (with Tambouratzis, D. G.) Erlang's formula and some results on the dependent process for a loss system. *J. Appl. Probability* **10** (1973), 233-240. (U. Narayan) **53** #11804 60K25
- On the first emptiness of dams with Markovian inputs. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 501-506. (I. Cuculescu) **51** #9268 60K30
- Comments on Wang's paper. *Proc. Cambridge Philos. Soc.* **73** (1973), 473-475. (M. Siddiqui) **47** #4366 62E10
- Characterization for the queueing system $M/G/\infty$. *Proc. Cambridge Philos. Soc.* **74** (1973), 141-143. (A. Descloux) **48** #3142 60K25
- (with Rajamannar, G.) Some characterizations of the bivariate distribution of independent Poisson variables. *Austral. J. Statist.* **16** (1974), no. 2, 119-125. (Flusser) **52** #7009 62H05
- An elementary proof for the Rao-Rubin characterization of the Poisson distribution. *J. Appl. Probability* **11** (1974), 211-215. (B. L. S. Prakasa Rao) **50** #11575 62H05
- Some extensions of Takács's limit theorems. *J. Appl. Probability* **11** (1974), 752-755. (D. L. Iglehart) **53** #6794 60K25
- An extension of Lévy's result concerning indecomposability of the Wishart

- bution. *Proc. Cambridge Philos. Soc.* **75** (1974), 109-113. (M. D. Perlman) 12729 62H10
- (with Basawa, I. V.) On a characterization property of the multinomial distribution. *Astos Estadist. Investigación Oper.* **25** (1974), no. 1-2, 109-112. (S. G. Maloŕevskii) 4285 60E05
- (with Gani, J.) An extension of Raikov's theorem derivable from a result in metric theory. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **29** (1974), 33-37. (R. C. Cuppens) **50** #8643 60E05
- (with Gani, J.) A new decomposition of infinitely divisible distributions. *Ann. Probability* **3** (1975), 338-345. (R. Cuppens) **51** #6916 60E05
- (with Daley, Daryl J.) Independent inter-departure times in $M|G|1/N$ queues. *J. Statist. Soc. Ser. B* **37** (1975), 259-263. (Stig I. Rosenlund) **51** #14306 (E 57 878) 60K25
- Some results on the decomposability of the distribution of quadratic expressions. *Proc. Cambridge Philos. Soc.* **77** (1975), 553-558. (R. Cuppens) **53** #11697 60E05
- (with Isham, Valerie; Westcott, Mark) A characterization of the Poisson process by forward recurrence times. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), no. 3, 516-516. (Alan G. Hawkes) **52** #12113 60K05
- (with Rao, M. Bhaskara) A note on characterisations of probability distributions based on conditional expected values. *Sankhyā Ser. A* **37** (1975), no. 2, 297-300. (I. I. Jarski) **55** #9362 62E10
- On the structure of the Wishart distribution. *J. Multivariate Anal.* **6** (1976), no. 3, 355-355. (R. Cuppens) **54** #8797 60E05 (62H05)
- On a conjecture of T. Lewis. *Bull. Austral. Math. Soc.* **16** (1977), no. 2, 253-255. (E. C. C. Mac) **58** #2972 60E05
- On renewal sequences. *Bull. London Math. Soc.* **9** (1977), no. 1, 79-80. (John G. Terfield) **55** #1518 60K05
- An extension of the Rao-Rubin characterization of the Poisson distribution. *J. Multivariate Anal.* **14** (1977), no. 3, 640-646. (Barry C. Arnold) **56** #9769 62E10 (E05)
- (with Westcott, Mark) A note on infinitely divisible point processes. *J. Roy. Statist. Soc. B* **39** (1977), no. 3, 331-332. (Olav Kallenberg) **58** #7836 60G55
- (with Pestana, D.; Sreehari, M.) Some further results in infinite divisibility. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 2, 289-295. (F. W. Steutel) **56** #6789 60E05
- (with Sreehari, M.) On certain self-decomposable distributions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **38** (1977), no. 3, 217-222. (S. G. Maloŕevskii) **55** #9214 60E05
- See also Gerlach, Bernhard; et al., **57** #17878
- (with R. G. (with Banerjee, Mihir B.; Roy, Ranjan; Gupta, J. R.; Banerjee, Arvind) open disk theorem and its contributions to hydrodynamic stability. *Indian J. Pure Appl. Math.* **9** (1978), no. 2, 142-156. (Clarence M. Ablow) **57** #10269 35P15 (35)
- (with Banerjee, Mihir B.; Gupta, J. R.) On further reducing Howard's semi-circle. *Math. Phys. Sci.* **12** (1978), no. 1, 1-17. (Authors' summary) **58** #19680 7635
- Barbara A. (with Barnett, Stephen) Sensitivity of stable linear systems. *IEEE Trans. Automatic Control* **AC-17** (1972), 148-150. (Authors' summary) **55** #14338 60E05
- (with Barnett, Stephen) Sensitivity of convergent matrices and polynomials. *J. Math. Anal. Appl.* **43** (1973), 114-122. (Pl. Kannappan) **47** #5019 15A18
- (with Barnett, Stephen) On the bilinear transformation of companion matrices. *Near Algebra and Appl.* **9** (1974), 175-184. (W. Ledermann) **50** #4617 15A21
- (with Barnett, Stephen) Insensitivity of asymptotically stable matrices to variations in submatrices. *Internat. J. Systems Sci.* **6** (1975), 621-632. (P. C. Parks) **51** #5623 15A24
- Harold D. On an inequality for order statistics. *Ann. Math. Statist.* **42** (1971), 148-175. (R. H. Rodine) **49** #6485 62G30
- A Fibonacci probability function. *Fibonacci Quart.* **11** (1973), no. 5, 517-522. (M. J. Morgo) **50** #1299 60-01
- Brook, J. Richard (with Hatch, Douglas E.) Application of fractional differentiation to the modeling of hodograph linearities. *Fractional calculus and its applications (Proc. Internat. Conf., Univ. New Haven, West Haven, Conn., 1974)*, pp. 289-293. *Lecture Notes in Math.*, Vol. 457. Springer, Berlin, 1975. (R. K. Gupta) **57** #14832 7626
- John, Julius L. On non-simply-connected manifolds. *Proceedings of the Advanced Study Institute on Algebraic Topology* (1970), Vol. III, pp. 495-512. *Various Publ. Ser.*, **13**, Mat. Inst., Aarhus Univ., Aarhus, 1970. (R. C. Kirby) **49** #6246 57C25
- On non-simply-connected manifolds. *Algebraic topology (Proc. Sympos. Pure Math., Vol. XXII, Univ. Wisconsin, Madison, Wis., 1970)*, pp. 221-229. *Amer. Math. Soc.*, Providence, R.I., 1971. (M. Agoston (Zbl 226 #57007)) **50** #11275 57D65 (57C25)
- (with Cappell, Sylvain E.) On four dimensional surgery and applications. *Comment. Math. Helv.* **46** (1971), 500-528. (J. Milnor) **46** #905 57D65
- (with Lashof, Richard) Smoothing 4-manifolds. *Invent. Math.* **14** (1971), 197-210. (R. Kirby) **45** #4434 57D80
- Surgery on four-manifolds and topological transformation groups. *Proceedings of Second Conference on Compact Transformation Groups (Univ. Massachusetts, Amherst, Mass., 1971)*, Part I, pp. 441-453. *Lecture Notes in Math.*, Vol. 298. Springer, Berlin, 1972. (R. K. Lashof) **51** #1858 57A15 (57D65)
- (with Cappell, Sylvain E.; Lashof, Richard) A splitting theorem and the structure of 5-manifolds. *Symposia Mathematica*, Vol. X (Convegno di Geometria Differenziale, DAM, Rome, 1971), pp. 47-58. Academic Press, London, 1972. (R. C. Kirby) **51** #1838 57D10 (57D80)
- (with Cappell, Sylvain E.) Submanifolds, group actions and knots. I, II. *Bull. Amer. Math. Soc.* **78** (1972), 1045-1048; *ibid.* **78** (1972), 1049-1052. (J. P. Levine) **52** #4313 (57D40, 57C45, 57D65)
- Hermitian K -theory in topology. *Algebraic K-theory, III: Hermitian K-theory and geometric applications (Proc. Conf., Battelle Memorial Inst., Seattle, Wash., 1972)*, pp. 440. *Lecture Notes in Math.*, Vol. 343. Springer, Berlin, 1973. (Ronnie Lee) **52** #15503 57D65 (18F25)
- Some problems in Hermitian K -theory. *Algebraic K-theory, III: Hermitian K-theory and geometric applications (Proc. Conf., Seattle Res. Center, Battelle Memorial Inst., 1972)*, pp. 41-51. *Lecture Notes in Math.*, Vol. 343. Springer, Berlin, 1973. (J. A. Schafer) **50** #11276 57D65
- (with Cappell, Sylvain E.) Submanifolds of codimension two and homology equivalent manifolds. (French summary) Colloque International sur l'Analyse et la Topologie Différentielle (Colloq. Internat. CNRS, No. 210, Strasbourg, 1972). *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 2, 19-30. (J. P. Levine) **49** #11522 57C25 (57D40, 57D55, 57D65)
- (with Cappell, Sylvain E.) Nonlocally flat embeddings, smoothings, and group actions. *Bull. Amer. Math. Soc.* **79** (1973), 577-582. (Robert Wells) **47** #9635 57C40 (57C45)
- (with Cappell, Sylvain E.) Topological knots and knot cobordism. *Topology* **12** (1973), 33-40. (Roger Fenn) **47** #9632 57A70 (57C45)
- (with Cappell, Sylvain E.) The codimension two placement problem and homology equivalent manifolds. *Ann. of Math. (2)* **99** (1974), 277-348. (J. P. Levine) **49** #3978 57D40
- Spines and spinelessness. *Geometric topology (Proc. Conf., Park City, Utah, 1974)*, pp. 431-440. *Lecture Notes in Math.*, Vol. 438. Springer, Berlin 1975. (Roger Fenn) **53** #4080 57C35
- (with Cappell, Sylvain E.) Branched cyclic coverings. *Knots, groups and 3-manifolds (Papers dedicated to the memory of R. H. Fox)*, pp. 165-173. *Ann. of Math. Studies*, No. 84. Princeton Univ. Press, Princeton, N.J., 1975. (Wilbur Whitten) **52** #1712 57C40
- (with Cappell, Sylvain E.) Close codimension two embeddings of even dimensional manifolds. *Amer. J. Math.* **97** (1975), no. 3, 733-740. (Oscar Burlet) **52** #4314 57D40
- (with Cappell, Sylvain E.) Invariants of 3-manifolds. *Bull. Amer. Math. Soc.* **81** (1975), 559-562. (J. S. Birman) **51** #4209 55A25
- (with Cappell, Sylvain E.) Piecewise linear embeddings and their singularities. *Ann. of Math. (2)* **103** (1976), no. 1, 163-228. (Kenneth C. Millett) **53** #11629 57D40
- (with Cappell, Sylvain E.) There exist inequivalent knots with the same complement. *Ann. of Math. (2)* **103** (1976), no. 2, 349-353. (J. P. Levine) **54** #1238 57C45
- (with Cappell, Sylvain E.) Some new four-manifolds. *Ann. of Math. (2)* **104** (1976), no. 1, 61-72. (Allan Edmonds) **54** #6167 57D65 (57E25)
- (with Cappell, Sylvain E.) Construction of some new four-dimensional manifolds. *Bull. Amer. Math. Soc.* **82** (1976), no. 1, 69-70. (Mauricio Gutiérrez) **52** #15508 57D80 (57E25)
- (with Cappell, Sylvain E.) Fundamental groups, G -groups, and codimension two submanifolds. *Comment. Math. Helv.* **51** (1976), no. 3, 437-446. (J. W. Maxwell) **55** #9109 57C35
- (with Cappell, Sylvain E.) Singularities and immersions. *Ann. of Math. (2)* **105** (1977), no. 3, 539-552. (J. P. Levine) **56** #9537 57C35 (57D40)
- (with Cappell, Sylvain E.) Totally spineless manifolds. *Illinois J. Math.* **21** (1977), no. 2, 231-239. (L. S. Husch) **56** #1321 57C25 (57D65)
- (with Cappell, Sylvain E.) A note on the Smith conjecture. *Topology* **17** (1978), no. 1, 105-107. (Gerhard K. Ritter) **58** #2819 57A10 (55C35, 57E25)
- Shanbalt, Gerald A. Slowly varying linear functional differential equations. *IEEE Trans. Automatic Control* **AC-17** (1972), 166-167. (F. Hoppensteadt) **49** #7563 34K20
- A nonlinear variation-of-constants formula for functional differential equations. *Math. Systems Theory* **6** (1972/73), 343-352. (S. P. Hastings) **49** #778 34K05
- A note on asymptotic behaviour in linear discrete systems. *Internat. J. Control* (1) **17** (1973), 1339-1341. (Author's summary) **56** #11318 93D10
- Slowly varying, linear, neutral, functional, differential equations. *Internat. J. Control* (1) **18** (1973), 559-562. (R. E. Fennell) **48** #9052 34K20
- Perturbations of non-linear difference equations. *Internat. J. Systems Sci.* **4** (1973), 899-906. (G. R. Sell) **48** #11822 39A10
- Stability and small parameter perturbations of a critical neutral functional differential equation. *SIAM J. Appl. Math.* **25** (1973), 133-141. (J. K. Hale) **48** #6616 34K20
- Set stability for difference equations. *Internat. J. Control* (1) **19** (1974), 309-314. (B. Choczewski) **51** #10930 39A12
- n_∞ -similarity and stability. *Internat. J. Control* **19** (1974), 909-918. (Dahsoong Yü) **50** #806 39A12 (93D05)
- Set stability of hereditary systems. *Internat. J. Systems Sci.* **5** (1974), 399-402. (Robert M. Bullock) **49** #5525 34K20
- Some stability results for neutral functional differential equations. *Internat. J. Systems Sci.* **5** (1974), 453-456. (G. S. Ladde) **49** #9374 34K20
- Shanin, N. A. See Šanin, N. A.
- Shank, Herbert S. Graph property recognition machines. *Math. Systems Theory* **5** (1971), 45-49. (H. Jürgensen) **45** #6542 68A45
- Records of Turing machines. *Math. Systems Theory* **5** (1971), 50-55. (W. Vollmerhaus) **46** #7005 02F15 (94A25)
- (with Garfunkel, Solomon) On the undecidability of finite planar cubic graphs. *J. Symbolic Logic* **37** (1972), 595-597. (A. B. Slomson) **47** #4781 02G05 (05C10)
- The theory of left-right paths. *Combinatorial mathematics, III (Proc. Third Australian Conf., Univ. Queensland, St. Lucia, 1974)*, pp. 42-54. *Lecture Notes in Math.*, Vol. 452. Springer, Berlin, 1975. (C. Tartia) **52** #13492 05C35
- (with Dickey, Leroy J.; Kairies, Hans-Heinrich) On the functional equation $f(x) = \sum_{k=0}^{\infty} f(x+k)/k$ over finite rings. *Aequationes Math.* **13** (1975), no. 3, 229-232. (P. Javor) **53** #8707 39A40
- Left-right paths and the parity of the tree number. *Colloque sur la Théorie des Graphes (Paris, 1974)*, Cahiers Centre Études Recherche Opér. **17** (1975), no. 2-4, 385-386. (Editors) **52** #10498 05C35
- (with Dickey, Leroy J.; Kairies, Hans-Heinrich) Analogs of Bernoulli polynomials in fields Z_p . *Aequationes Math.* **14** (1976), no. 3, 401-404. (F. T. Howard) **53** #13103 10A40
- Shankar, Hari (with Bogda, Richard) The maximum term of a power series. *Math. Japon.* **19** (1974), no. 3, 195-203. (O. P. Juneja) **53** #3276 (E 54 #7763) 30A10
- (with Bogda, Richard) Addendum to "The maximum term of a power series" (Math. Japon. **19** (1974), no. 3, 195-203). *Math. Japon.* **21** (1976), no. 1, 111. (Editors)

54 #7763 30A10

Means and weighted means of analytic functions. *Complex analysis (Proc. S.U.N.Y. Conf., Brockport, N.Y., 1976)*, pp. 129-139. *Lecture Notes in Pure and Appl. Math.*, Vol. 36, Dekker, New York, 1978. (M. Nassif) 58 #1156 30A70

Shankar, R. More SO(3) monopoles. *Phys. Rev. D* (3) 14 (1976), no. 4, 1107-1116. (Author's summary) 56 #14232 81.22

Applications of topology to the study of ordered systems. (French summary) *J. Physique* 38 (1977), no. 11, 1405-1412. (G. V. Ramanathan) 57 #2380 82.55

Shankar, Rama (with Chandran, P.) Growth and decay of sonic discontinuities in non-equilibrium gas dynamics. *J. Mathematical and Physical Sci.* 11 (1977), no. 3, 237-246. (M. Honda) 57 #4812 76.35

Shankar, Ravindra See Symposium: Theory of Scheduling and its Applications, 48 #3481

Shankar, S. (with Atherton, D. P.) Graphical stability analysis of non-linear multivariable control systems. *Internat. J. Control* 25 (1977), no. 3, 375-388. (K. B. Datta) 56 #11344 93D99

Shankara, T. S. (with Lord, Eric A.) Analytic continuation of Moyal and operator algebras. *Internat. J. Theoret. Phys.* 7 (1973), 301-308. (Authors' summary) 50 #15699 81.46

(with Gomatam, Jagannathan) Continuous representations and generating functions. *J. Mathematical and Physical Sci.* 7 (1973), 213-225. (W. Miller, Jr.) 48 #4370 33A65

(with Srinivas, M. D.) Remarks on the Duffin bracket for nonconservative systems. *Lett. Nuovo Cimento* (2) 6 (1973), 321-324. (Not reviewed) 81.47

A brief note on a theorem of Levinson. *J. Math. Anal. Appl.* 51 (1975), no. 3, 577-579. (M. Carmeli) 51 #10937 39A15 (83.39)

On two Lie algebras of linear forms. *Internat. J. Theoret. Phys.* 15 (1976), no. 7, 497-499. (J. S. Joel) 54 #13958 58A10

Shanker, Gauri (with Saha, G. M.) On a generalized group-divisible family of association schemes and PBIB designs based on the schemes. *Sankhyā Ser. B* 38 (1976), no. 4, 393-404. (Authors' summary) 58 #31637 62K10

Shanker, Jai (with Agarwal, L. D.) Massive spheres with three variable-density distributions in general relativity. *Indian J. Pure Appl. Phys.* 12 (1974), no. 12, 854-856. (Authors' summary) 54 #12119 83.35

Shanker, M. U. (with Dhalwal, Ranjit S.) Singular integral equations in asymmetric thermoelasticity. (German summary) *J. Elasticity* 2 (1972), no. 1, 59-71. (Authors' summary) 57 #14783 73.45

Shanker, O. General integral involving Kampé de Fériet function. *Math. Student* 40A (1972), 193-199. (Harold Exton) 49 #645 33A30

(with Lal, Charanjit) Finite summation formulae associated with a class of generalized hypergeometric polynomials. *Ganita* 24 (1973), no. 2, 15-19. (S. K. Chatterjea) 50 #10346 33A30

On generating functions for classical polynomials. *J. Austral. Math. Soc.* 15 (1973), 389-392. (J. W. Brown) 48 #4372 33A65

A Watson's theorem for the double hypergeometric series. *Ganita* 27 (1976), no. 1-2, 73-78. (James M. Horner) 58 #6386 33A30

Shankin, Yu. P. See Šankin, Ju. P.

Shanks, Daniel Corrigenda: "Solutions of the Diophantine equations $x^2 + y^2 = l^2$, $y^2 + z^2 = m^2$, $z^2 + x^2 = n^2$ " (Math. Comp. 20 (1966), 144-147) by M. Lal and W. J. Blundon. *Math. Comp.* 23 (1969), no. 105, 219. (Editors) 53 #4468 65A05 (10B05)

Class number, a theory of factorization, and genera. 1969 *Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969)*, pp. 415-440. *Amer. Math. Soc., Providence, R.I.*, 1971. (W. Narkiewicz) 47 #4932 10C05 (10H10, 12A25, 12A50)

Gauss's ternary form reduction and the 2-Sylow subgroup. *Math. Comp.* 25 (1971), 837-853. (A. Peluso) 45 #6789 (E 58 #10735) 12A99

Corrigendum to: "On generating infinitely many solutions of the Diophantine equation $A^6 + B^6 + C^6 = D^6 + E^6 + F^6$ " (Math. Comp. 24 (1970), 453-454) by Simcha Brudno. *Math. Comp.* 25 (1971), no. 114, 409. (Editors) 53 #4469 65A05 (10B15)

Corrigendum to: "Statistical study of digits of some square roots of integers in various bases" (Math. Comp. 24 (1970), 455-473) by W. A. Beyer, N. Metropolis and J. R. Neergaard. *Math. Comp.* 25 (1971), no. 114, 409. (Editors) 53 #4470 65A05 (65D20)

The infrastructure of a real quadratic field and its applications. *Proceedings of the Number Theory Conference (Univ. Colorado, Boulder, Colo., 1972)*, pp. 217-224. *Univ. Colorado, Boulder, Colo.*, 1972. (D. H. Lehmer) 52 #10672 12A45

(with Weinberger, Peter J.) A quadratic field of prime discriminant requiring three generators for its class group, and related theory. *Acta Arith.* 21 (1972), 71-87. (T. Lepistö) 46 #9003 12A25 (12A50)

Fibonacci primitive roots. *Fibonacci Quart.* 10 (1972), no. 2, 163-168, 181. (T. M. Apostol) 45 #6747 10A10

(with Mann, Henry B.) A necessary and sufficient condition for primality, and its source. *J. Combinatorial Theory Ser. A* 13 (1972), 131-134. (H. W. Gould) 46 #5225 10A30

New types of quadratic fields having three invariants divisible by 3. *J. Number Theory* 4 (1972), 537-556. (T. Metsänkylä) 47 #1775 12A25 (12A50)

(with Lal, Mohan) Bateman's constants reconsidered and the distribution of cubic residues. *Math. Comp.* 26 (1972), 265-285. (R. G. Stoneham) 46 #1734 10H35

Systematic examination of Littlewood's bounds on $L(1, \chi)$. *Analytic number theory (Proc. Sympos. Pure Math., Vol. XXIV, St. Louis Univ., St. Louis, Mo., 1972)*, pp. 267-283. *Amer. Math. Soc., Providence, R.I.*, 1973. (P. J. Weinberger) 49 #2596 10H10 (12A70, 12-04)

Five number-theoretic algorithms. *Proceedings of the Second Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1972)*, pp. 51-70. *Congressus Numerantium, No. VII, Utilitas Math., Winnipeg, Man.*, 1973. (Harvey Cohn) 51 #8072 (EA 57) 12A50 (10-04)

(with Taylor, Larry) An observation on Fibonacci primitive roots. *Fibonacci Quart.* 11 (1973), no. 2, 159-160. (T. M. Apostol) 47 #3304 10A35

Proof of Krishnamurthy's conjecture. *J. Recreational Math.* 6 (1973), no. 1, 78-79. (K. S. Williams) 56 #11883 10A30

(with Serafin, Richard) Quadratic fields with four invariants divisible by 3. *M. Comp.* 27 (1973), 183-187. (Harvey Cohn) 48 #8436a (E 48 #8436b) 12A50 (12A50)

Table errata: "A note on the Catalan-Dickson conjecture" (Math. Comp. 27 (1973), 189-192). *Math. Comp.* 27 (1973), 1011. (J. M. Gandhi) 48 #3870 10A40 (10-04)

Corrigenda: "Quadratic fields with four invariants divisible by 3" (Math. Comp. 27 (1973), 183-187) by Daniel Shanks and Richard Serafin. *Math. Comp.* 27 (1973), 1011. (Harvey Cohn) 48 #8436b 12A25 (12A50)

Incredible identities. *Fibonacci Quart.* 12 (1974), 271, 280. (J. S. Joel) 50 #2116 52 #5617 12A15 (10A30, 10B10)

(with Guy, Richard K.) A constructed solution of $\sigma(n) = \sigma(n+1)$. *Fibonacci Quart.* 12 (1974), 299. (J. S. Joel) 50 #219 10A20

(with Neild, Carol) On the 3-rank of quadratic fields and the Euler product. *Math. Comp.* 28 (1974), 279-291. (T. Lepistö) 50 #4530 12A25 (12A65)

(with Wrench, John W., Jr.) Brun's constant. *Math. Comp.* 28 (1974), 293-295. *corrigenda, ibid.* 28 (1974), 1183. (H.-J. Kanold) 50 #4510 10H15 (10H25)

The simplest cubic fields. *Math. Comp.* 28 (1974), 1137-1152. (S. I. Genčur) 50 #4537 12A50 (12A30)

Non-hypotenuse numbers. *Fibonacci Quart.* 13 (1975), no. 4, 319-321. (Harvey Cohn) 52 #8062 10H25 (10B05)

Calculation and applications of Epstein zeta functions. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his seventieth birthday. *Math. Comp.* 29 (1975), 271-287. (P. J. Weinberger) 53 #13114a (E 53 #13114bc) 10H10 (10-04, 10H10)

Corrigenda: "Calculation and applications of Epstein zeta functions" (Math. Comp. 29 (1975), 271-287). *Math. Comp.* 29 (1975), no. 132, 1167. (P. J. Weinberger) 53 #13114b 10C15 (10-04, 10H10)

A survey of quadratic, cubic and quartic algebraic number fields (from a computational point of view). *Proceedings of the Seventh Southeastern Conference in Combinatorics, Graph Theory, and Computing (Louisiana State Univ., Baton Rouge, La., 1976)*, pp. 15-40. *Congressus Numerantium, No. XVII, Utilitas Math., Winnipeg, Man.*, 1976. (O. Taussky-Todd) 56 #11951 12-04 (12-02)

Class groups of the quadratic fields found by F. Diaz y Diaz. *Math. Comp.* 30 (1976), no. 133, 173-178. (T. Metsänkylä) 53 #2890 (E 53 #10753) 12A25 (12A50)

Table errata: "Regular continued fractions for π and γ " (Math. Comp. 25 (1975), 403); "Rational approximations to π " (ibid. 25 (1971), 387-392) by K. Y. Choong, L. Daykin and C. R. Rathbone. *Math. Comp.* 30 (1976), no. 134, 381. (Editors) 52 #65A05 (10-04, 10F20)

Corrigendum: "Class groups of the quadratic fields found by F. Diaz y Diaz" (Math. Comp. 30 (1976), no. 133, 173-178). *Math. Comp.* 30 (1976), no. 136, 900. (Editors) 53 #10753 12A25 (12A50)

Corrigendum: "Calculation and applications of Epstein zeta functions" (Math. Comp. 29 (1975), 271-287). *Math. Comp.* 30 (1976), no. 136, 900. (P. J. Weinberger) 53 #13114c 10C15 (10-04, 10H10)

Table errata: "Über die Lösung einiger unbestimmten Gleichungen vierten Grades" (Avh. Norske Vid. Akad. Oslo. I. 1934, no. 14, 1-35) by W. Ljunggren. *Math. Comp.* 25 (1977), no. 140, 1049-1050. (Editors) 56 #249 10B10

An observation about $L(1, \chi)$. *Utilitas Math.* 11 (1977), 297-298. (Audrey Terras) 56 #5464 10H10 (12A70)

Corrigenda: "Gauss's ternary form reduction and the 2-Sylow subgroup" (Math. Comp. 25 (1971), 837-853). *Math. Comp.* 32 (1978), no. 144, 1328-1329. (Editors) 58 #10735 10C05 (20-04)

See also Spohn, William G., Jr., 52 #5617

Shanks, J. A. Romberg tables for singular integrands. *Comput. J.* 15 (1972), 360-361. (Author's summary) 47 #9809 65D30

Shanks, John L. (with Justice, J. H.) Stability criterion for N -dimensional digital filters. *IEEE Trans. Automatic Control* AC-18 (1973), no. 3, 284-286. (Authors' summary) 55 #14395 94A05

(with Read, Randol R.; Treitel, Sven) Techniques for stabilizing two-dimensional finite difference operators. (French summary) Avec discussion. *Transformations ponctuelles et leurs applications (Colloq. Internat. CNRS, No. 229, Toulouse, 1973)*, 361-382, 384. *Éditions Centre Nat. Recherche Sci., Paris*, 1976. (From the author's introduction) 57 #15664 93D05

Shanks, M. E. (with Warner, Seth) Topologies on the rational field. *Bull. Amer. Math. Soc.* 79 (1973), 1281-1282 (1974). (Witold Własiński) 51 #5568 12J99

(with Warner, Seth) Locally bounded topologies on the rational field. *Fund. Math.* 92 (1976), no. 1, 57-61. (Witold Własiński) 54 #5204 12J99

Shanmugam, K. Sam (with Haralick, Robert M.) A computationally simple procedure for imagery data compression by the Karhunen-Loève method. *IEEE Trans. Systems, Man, and Cybernet.* SMC-3 (1973), 202-204. (E. S. Keeping) 50 #1452 62M99 (93E) 52 #10124 93B10

(with Jong, Mark T.) Identification of nonlinear systems in frequency domain. *IEEE Trans. Aerospace and Electron. Systems* AES-11 (1975), no. 6, 1218-1225. (Leonard Brown) 52 #10124 93B10

Comments on: "Discrete cosine transform" (IEEE Trans. Computers C-23 (1974), 90-93) by N. Ahmed, T. Natarajan and K. R. Rao. *IEEE Trans. Computers* C-23 (1975), 759. (Ian Gladwell) 51 #7352 65T05

A modified Parzen's estimate for nonparametric pattern recognition. *Proceedings of the Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976)*, pp. 344-349. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Manabu Ichino) 56 #17244 68A45

(with Lal, Manohar) Analysis and synthesis of a class of nonlinear systems. *IEEE Trans. Circuits and Systems* CAS-23 (1976), no. 1, 17-25. (R. Leonard Brown) 52 #10125 93B10

(with Jong, Mark T.) Determination of a transfer function from amplitude and frequency response data. *Internat. J. Control* 25 (1977), no. 6, 941-948. (Edward Kamen) 56 #14904 93B30

Shanno, David F. (with Weil, Roman L.) Management science: a view from non-linear programming. Twenty-fifth anniversary of the Association for Computing Machinery. *Comm. ACM* 15 (1972), no. 7, 542-549. (Author's summary) 55 #9970 90C30 (90C30)

- the simplex method in mixed integer and integer programming—a unified
tational view. (French summary) *INFOR—Canad. J. Operational Res. and
nation Processing* 11 (1973), 150–162. (E. G. Gol'stein) 48 #10497 90C10
- with Berg, Allen; Cheston, Grant A.) Restarts and rotations of quasi-Newton
ods. *Information processing 74 (Proc. IFIP Congr., Stockholm, 1974)*, pp. 557–561.
-Holland, Amsterdam, 1974. (Authors' summary) 57 #8010 65K05
- with Phua, Kang Hoh) Inexact step lengths and quasi-Newton methods.
nation processing 77 (Proc. IFIP Congr., Toronto, Ont., 1977), pp. 189–193. *IFIP
r. Ser., Vol. 7, North-Holland, Amsterdam, 1977*. (See Zbl 367 #65031; MR 56
91) 65K05
- with Phua, Kang Hoh) Numerical comparison of several variable-metric
ithms. *J. Optim. Theory Appl.* 25 (1978), no. 4, 507–518. (Albert Buckley)
26017 90C30
- with Phua, Kang Hoh) Matrix conditioning and nonlinear optimization. *Math.
ramming* 14 (1978), no. 2, 149–160. (Norihiko Adachi) 57 #14450 65K05
30
- A. G. (with Horadam, A. F.) Generating functions for powers of third order
rence sequences. *Duke Math. J.* 38 (1971), 791–794. (A. G. Law) 45 #7325
10 (05A15)
- (with Horadam, A. F.) Reciprocals of generalized Fibonacci numbers. *Fibonacci
rt.* 9 (1971), no. 3, 299–306, 312. (H. W. Gould) 46 #8957 10A35
- (with Horadam, A. F.) A generalized Pythagorean theorem. *Fibonacci Quart.* 9
1), no. 3, 307–312. (R. Finkelstein) 46 #3432 10A35
- (with Horadam, A. F.) Some properties of third-order recurrence relations.
nacci Quart. 10 (1972), no. 2, 135–145. (R. N. Jain) 45 #8626 10L10
- Iterative formulas associated with generalized third order recurrence relations.
M. J. Appl. Math. 23 (1972), 364–368. (L. K. Durst) 48 #10967 10A35
- (with Horadam, A. F.) Generalized Fibonacci number triples. *Amer. Math.
athly* 80 (1973), 187–190. (J. M. Gandhi) 48 #3863 10A35
- (with Bernstein, Leon) The Jacobi-Perron algorithm and the algebra of recursive
ences. *Bull. Austral. Math. Soc.* 8 (1973), 261–277. (G. Purdy) 49 #2519
35 (10A30)
- A generalization of the Hilton-Fern theorem on the expansion of Fibonacci and
as numbers. *Fibonacci Quart.* 12 (1974), 237–240. (S. A. Burr) 50 #12898
35
- Explicit expressions for powers of linear recursive sequences. *Fibonacci Quart.* 12
74), 281–287. (L. Carlitz) 50 #4469 10A35
- A method of Carlitz applied to the k th power generating function for Fibonacci
bers. *Fibonacci Quart.* 12 (1974), 293–299. (L. Carlitz) 50 #2063 10A35
A15)
- Some properties of a fundamental recursive sequence of arbitrary order. *Fibonacci
rt.* 12 (1974), 327–335. (Paul Hartung) 52 #3038 10A35
- (with Horadam, A. F.; Collings, S. N.) Some congruences for Fibonacci numbers.
nacci Quart. 12 (1974), 351–354. (S. I. Gendler) 50 #7011 10A35
- The Jacobi-Perron algorithm and Bernoulli's iteration. *Math. Student* 42 (1974),
56 (1975). (Luciano Biasini) 54 #11755 65H05
- Fibonacci analogs of the classical polynomials. *Math. Mag.* 48 (1975), 123–130. (L.
litz) 51 #6000 33A65
- (with Horadam, A. F.) Ward's Staudt-Clausen problem. *Math. Scand.* 39 (1976),
2, 239–250 (1977). (L. Carlitz) 56 #5411 10A40
- (with Alladi, Krishnaswami) On a property of consecutive Farey-Fibonacci
ctions. *Fibonacci Quart.* 15 (1977), no. 2, 153–155. (S. P. Mohanty) 56 #234
135
- Tribonacci numbers and Pascal's pyramid. *Fibonacci Quart.* 15 (1977), no. 3, 268,
(From the author's text) 56 #15548 10A35
- Fibonacci and Lucas numbers and the complexity of a graph. *Fibonacci Quart.* 16
78), no. 1, 1–4. (Bhagwandas) 58 #5415 05C99
- On the multiplication of recursive sequences. *Fibonacci Quart.* 16 (1978), no. 1,
32. (S. A. Burr) 58 #10703 10A35
- Pellian Diophantine sequences. *Fibonacci Quart.* 16 (1978), no. 2, 99–102. (Stanley
enkoski) 58 #10707 10A40
- n, C. See Juškevič, A. A., 58 #4900
- n, Christine Lattice ideals in the space of continuous functions. *Houston J. Math.* 3
77), no. 3, 441–452. (W. A. Feldman) 57 #1095 46E05
- The second dual of $C(X)$. *Pacific J. Math.* 72 (1977), no. 1, 237–253. (T. R. Jenkins)
#12324 46E27
- n, Claude E. (with Weaver, Warren) ★ Mathematische Grundlagen der
ormationstheorie. Übersetzt aus dem Englischen von Helmut Dressler. Scientia
va. R. Oldenbourg Verlag, Munich-Vienna, 1976. 143 pp. (Editors) 56 #8183
A15
- See also Key papers in the development of information theory, 52 #5177
- n, David L. Monoidal transforms of regular local rings. *Amer. J. Math.* 95 (1973),
–320. (Bruce Bennett) 48 #8492 13H05 (14E05)
- n, G. F. (with Skowronski, E. C.) Conditions for non-oscillatory response of
ultiple non-linear systems. *Internat. J. Control* (1) 15 (1972), 953–960. (Authors'
nmary) 47 #1510 93C10
- n, G. P. Strictly singular and strictly cosingular operators on topological vector
ces. *Proc. Roy. Irish Acad. Sect. A* 73, 303–308 (1973). (S. Goldberg) 48 #9354
805
- n, Richard T. Lazard's theorem in algebraic categories. *Algebra Universalis* 4
74), 226–228. (L. Bican) 50 #4694 18C10
- n, Robert E. Simulation: a survey with research suggestions. Collection of articles
operations research. *AIIE Trans.* 7 (1975), no. 3, 289–301. (Editors) 52 #15947
Cxx (62–02, 68–02)
- n, Robert W. A lower bound on the number of cells in arrangements of
erplanes. *J. Combinatorial Theory Ser. A* 20 (1976), no. 3, 327–335. (P. McMullen)
#14321 52A40 (05A20)
- r, R. F. (with Brualdi, Richard A.) A set intersection problem. *Linear Algebra and
pl.* 9 (1974), 143–147. (Michael S. Martin) 50 #6866 05A05
- r, Robert F. Regular endomorphism rings of free modules. *J. London Math. Soc.* (2)
4 (1971), 353–354. (C. Lemaire) 45 #304 16A64
- Shantaram, R. (with Harkness, William L.) On a certain class of limit distributions. *Ann.
Math. Statist.* 43 (1972), 2067–2071. (R. Cuppens) 50 #5901 60E05
- (with Stevens, Richard S.) Computer-generated van der Waerden partitions. *Math.
Comp.* 32 (1978), no. 142, 635–636. (Authors' summary) 58 #10714 10A45 (10–04)
- Šhanukov, M. H. The convergence of difference approximations in the third boundary
value problem for elliptic equations. (Russian) *Differential and integral equations, No. 1
(Russian)*, pp. 116–122. *Kabardino-Balkarsk. Gos. Univ., Nal'chik*, 1973. (Editors)
58 #31888 65N10
- The uniform convergence of difference schemes for elliptic equations. (Russian)
Differentsial'nye Uravnenija i Vyčisl. Mat. Vyp. 3 (1973), 39–52, 169. (M. Zlámal)
55 #1750 65N10
- A difference method for the solution of a certain loaded parabolic type equation.
(Russian) *Differentsial'nye Uravnenija* 13 (1977), no. 1, 163–167, 191. (Author's
summary) 58 #8334 65N10
- Shao, Chin Ch'ang Connection and gauge field theory. *J. Nat. Chiao Tung Univ.* 1 (1976),
247–261. (G. Costa) 54 #14647 81J3
- Quantization of gauge field. *J. Nat. Chiao Tung Univ.* 3 (1977), 77–92. (M.
Seetharaman) 58 #14524 81J2 (22E70)
- Shao, T. S. See Danloy, Bernard, 47 #7885
- Shao, Wei Hua Fundamental theory of contingent differential equations of Carathéodory
type. *Bull. Inst. Math. Acad. Sinica* 5 (1977), no. 1, 65–81. (C. Olech) 58 #12639
49E10 (34A99)
- Boundary value problems and periodic solutions for contingent differential
equations. *J. Math. Anal. Appl.* 57 (1977), no. 3, 610–624. (R. E. Fennell) 55 #5973
34G05 (34B15)
- Shapere, Dudley See Methodological and historical essays in the natural and social sciences,
52 #13078 and Structure of scientific theories, 52 #13085
- Shapin, Steven (with Hill, Susan) The Turner collection of the history of mathematics at
the University of Keele. *British J. Hist. Sci.* 6 (1972/73), no. 23, part 3, 336–337.
(Editors) 58 #27127 01A70
- The audience for science in eighteenth century Edinburgh. *Hist. of Sci.* 12 (1974),
95–121. (Editors) 58 #21184 01A50
- Shapira, R. (with Freeman, H.) Determining the minimum-area encasing rectangle for an
arbitrary closed curve. *Comm. ACM* 18 (1975), 409–413. (Jacques Dubois) 51 #12018
68A10 (52A40)
- Shapiro, Alan E. Kinematic optics: a study of the wave theory of light in the seventeenth
century. *Arch. History Exact Sci.* 11 (1973/74), 134–266. (J. A. Lohne) 57 #32
01A45
- Light, pressure, and rectilinear propagation: Descartes' celestial optics and
Newton's hydrostatics. *Studies in Hist. and Philos. Sci.* 5 (1974), 239–296. (Kristian
Peder Moesgaard) 58 #26928 01A45
- Archimedes's measurement of the sun's apparent diameter. *J. Hist. Astronom.* 6
(1975), 75–83. (From the text) 58 #4790 01A20
- Shapiro, B. (with Rosman, R.) Renormalization-group approach to a random resistor
network. *Phys. Rev. B* (3) 16 (1977), no. 11, 5117–5120. 56 #10439 78.22
- Shapiro, C. P. Bayesian classification: asymptotic results. *Ann. Statist.* 2 (1974), 763–774.
(D. V. Lindley) 50 #15030 62C10 (62H30)
- Classification by maximum posterior probability. *Ann. Statist.* 5 (1977), no. 1,
185–190. (D. V. Lindley) 55 #4528 62H30
- Shapiro, D. I. See Šapiro, D. I.
- Shapiro, Daniel B. Quadratic forms and similarities. *Bull. Amer. Math. Soc.* 81 (1975), no.
6, 1122–1124. (S. Böge) 52 #5569 10C05
- (with Wolf, Joseph A.) On isoclinic closure: correction to: "Elliptic spaces in
Grassmann manifolds" (Illinois J. Math. 7 (1963), 447–462) by J. A. Wolf. *Illinois J.
Math.* 19 (1975), 316–317. (Yung-Chow Wong) 52 #1573 53C30
- Cancellation of semisimple Hermitian pairings. *J. Algebra* 41 (1976), no. 1,
212–223. (Chih-Han Sah) 54 #345 15A63
- Spaces of similarities. *Conference on Quadratic Forms—1976 (Proc. Conf., Queen's
Univ., Kingston, Ont., 1976)*, pp. 616–624. *Queen's Papers in Pure and Appl. Math., No.
46, Queen's Univ., Kingston, Ont., 1977*. (Maurice Flamant) 58 #5516 10C05
- Spaces of similarities. I. The Hurwitz problem. *J. Algebra* 46 (1977), no. 1, 148–170.
(Horst Pfeuffer) 56 #11898a 10C05 (15A63)
- Spaces of similarities. II. Pfister factors. *J. Algebra* 46 (1977), no. 1, 171–181. (Horst
Pfeuffer) 56 #11898b 10C05 (15A63)
- (with Wadsworth, Adrian R.) Spaces of similarities. III. Function fields. *J. Algebra*
46 (1977), no. 1, 182–188. (Horst Pfeuffer) 56 #11898c 10C05 (15A63)
- (with Wadsworth, Adrian R.) On multiples of round and Pfister forms. *Math. Z.*
157 (1977), no. 1, 53–62. (Authors' review (Zbl 348 #15015)) 58 #21938 10C05
- Spaces of similarities. IV. (s, t) -families. *Pacific J. Math.* 69 (1977), no. 1, 223–244.
(Horst Pfeuffer) 57 #16193 10C05
- Shapiro, Eliezer Y. On the Lyapunov matrix equation. *IEEE Trans. Automatic Control*
AC-19 (1974), 594–596. (Raphael Loewy) 58 #10962a 15A24
- See also Montemayor, J. J.; et al., 58 #10962b
- Shapiro, G. S. See Šapiro, G. S.
- Shapiro, George S. Linear projections which implement balayage in Fourier transforms.
Proc. Amer. Math. Soc. 61 (1976), no. 2, 295–299. (Satoru Igari) 55 #987 43A25
- Balayage in Fourier transforms: general results, perturbation, and balayage with
sparse frequencies. *Trans. Amer. Math. Soc.* 225 (1977), 183–198. (Yves Meyer)
54 #13465 43A25 (42A44)
- Unique balayage in Fourier transforms on compact abelian groups. *Proc. Amer.
Math. Soc.* 70 (1978), no. 2, 146–150. (William M. Self) 57 #17118 43A05
- Balayage by Fourier transforms with sparse frequencies in compact abelian torsion
groups. *Proc. Amer. Math. Soc.* 71 (1978), no. 2, 253–256. (Nicholas Young) 58 #12205
43A25
- Shapiro, Harold N. On the convolution ring of arithmetic functions. *Comm. Pure Appl.
Math.* 25 (1972), 287–336. (J. Knopfmacher) 45 #3345 10K20
- (with Sparer, Gerson H.) Composite values of exponential and related sequences.
Comm. Pure Appl. Math. 25 (1972), 569–615. (J. Knopfmacher) 46 #8958 10A35
- A micronote on a functional equation. *Amer. Math. Monthly* 80 (1973), 1041. (I.

- Stamate) 48 #4560 39A20
Addition of functions in probabilistic number theory. *Comm. Pure Appl. Math.* 26 (1973), 55-84. (J. Kubilius) 51 #3107 10K20
(with Pollack, Richard M.) The next to last case of a factorial diophantine equation. *Comm. Pure Appl. Math.* 26 (1973), 313-325. (H.-J. Kanold) 50 #12915 10B20
(with Hausman, Miriam) On the mean square distribution of primitive roots of unity. *Comm. Pure Appl. Math.* 26 (1973), 539-547. (J. Knopfmacher) 48 #8418 10H35
(with Sparer, Gerson H.) On the units of cubic fields. Collection of articles dedicated to Wilhelm Magnus. *Comm. Pure Appl. Math.* 26 (1973), 819-835. (H. J. Godwin) 48 #11037 12A30
Integer vectors with interprimed components. *Math. Comp.* 27 (1973), 455-462. (G. Greaves) 49 #233 10H15
(with Pollack, Richard M.; Sparer, Gerson H.) On the graphs of I. Katai. *Comm. Pure Appl. Math.* 27 (1974), 669-713. (N. G. de Bruijn) 51 #12672 10A20 (05C35)
(with Friedrichs, Kurt O.) ★Integration of functionals. A seminar. Reprinting Courant Institute of Mathematical Sciences, New York University, New York, 1976. iv + 196 pp. (Editors) 58 #6143 28A40 (81.60)
Transfer theorems in probabilistic number theory. *Comm. Pure Appl. Math.* 29 (1976), no. 3, 227-260. (J. Kubilius) 54 #12702 10K20 (10H25)
(with Hausman, Miriam) Perfect ideals over the Gaussian integers. *Comm. Pure Appl. Math.* 29 (1976), no. 3, 323-341. (W.-D. Geyer) 54 #12704 12A05 (10A25)
(with Cofré-Matta, Alvaro) On the distribution of reduced residues in algebraic number fields. *Comm. Pure Appl. Math.* 30 (1977), no. 1, 13-39. (Matti Jutila) 55 #5558 10H30 (12A05)
(with Levine, Eugene) Vector spaces and linear inequalities. *Comm. Pure Appl. Math.* 30 (1977), no. 3, 339-346. (Norman P. Coleman, Jr.) 55 #2960 15A39 (90C05, 90D99)
(with Sparer, Gerson H.) Power-quadratic Diophantine equations and descent. *Comm. Pure Appl. Math.* 31 (1978), no. 2, 185-203. (R. Steiner) 58 #5509 10B15
- Shapiro, Harold S.** ★Smoothing and approximation of functions. Revised and expanded edition of mimigraphed notes (Matscience Report No. 55). Van Nostrand Reinhold Mathematical Studies. Van Nostrand Reinhold Co., New York-Toronto, Ont.-London, 1969. viii + 136 pp. (R. C. Buck) 54 #791 41-02
(with Boman, Jan) Comparison theorems for a generalized modulus of continuity. *Bull. Amer. Math. Soc.* 75 (1969), 1266-1268. (Editors) 58 #29640 41A30
Some function-theoretic problems motivated by the study of Banach algebras. *Proceedings of the NRL Conference on Classical Function Theory* (Math. Res. Center, Naval Res. Lab., Washington, D.C., 1970), pp. 95-113. *Math. Res. Center, Naval Res. Lab., Washington, D.C.* 1970. (A. Hallstrom) 48 #2775 46J10 (30A98)
★Topics in approximation theory. With appendices by Jan Boman and Torbjörn Hedberg. *Lecture Notes in Math.*, Vol. 187. Springer-Verlag, Berlin-New York, 1971. viii + 275 pp. (David A. Sprecher) 55 #10902 41-02
(with Boman, Jan) Comparison theorems for a generalized modulus of continuity. *Ark. Mat.* 9, 91-116 (1971). (B. Dresler) 49 #5651 41A25 (42A08)
Fourier multipliers whose multiplier norm is an attained value. *Linear operators and approximation* (Proc. Conf., Oberwolfach, 1971), pp. 338-347. *Internat. Ser. Numer. Math.*, Vol. 20. Birkhäuser, Basel, 1972. (Colin Bennett) 52 #11448 42A18
Bounded functions with one-sided spectral gaps. *Michigan Math. J.* 19 (1972), 167-172. (D. Waterman) 47 #5505 42A16
(with Fefferman, Charles L.) A planar face on the unit sphere of the multiplier space M_p , $1 < p < \infty$. *Proc. Amer. Math. Soc.* 36 (1972), 435-439. (R. E. Edwards) 46 #7783 42A18
Boundary values of bounded holomorphic functions. Collection of articles honoring the completion by Antoni Zygmund of 50 years of scientific activity, IV. *Studia Math.* 44 (1972), 355-358. (J. H. Hedlund) 48 #11551 32A10 (42A92)
Functions with a spectral gap. *Bull. Amer. Math. Soc.* 79 (1973), 355-360.
(Benjamin F. Logan, Jr.) 49 #7696 42A68
Regularity properties of the element of closest approximation. *Trans. Amer. Math. Soc.* 181 (1973), 127-142. (R. A. Askey) 47 #9142 42A08 (41A50)
(with Aharonov, Dov) A minimal-area problem in conformal mapping. (Abstract). *Proceedings of the Symposium on Complex Analysis* (Univ. Kent, Canterbury, 1973), pp. 1-5. *London Math. Soc. Lecture Note Ser.*, No. 12, Cambridge, Univ. Press, London, 1974. (W. E. Kirwan) 54 #526 30A30
(with Aharonov, Dov; Shields, Allen L.) Weakly invertible elements in the space of square-summable holomorphic functions. *J. London Math. Soc.* (2) 9 (1974/75), 183-192. (Arne Stray) 51 #1403 46J15 (30A98)
The winding of an analytic function. *Jber. Deutsch. Math.-Verein.* 76 (1974/75), no. 1, 38-40. (See Zbl 287 #30033) 30A90
Lebesgue constants for spherical partial sums. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, I. *J. Approximation Theory* 13 (1975), 40-44. (Henri Joris) 51 #11004 42A92
Majorant problems for Fourier coefficients. *Quart. J. Math. Oxford Ser.* (2) 26 (1975), 9-18. (L. Corwin) 51 #8722 42A32
The modulus of continuity of an analytic function. *Spaces of analytic functions* (Sem. Functional Anal. and Function Theory, Kristiansand, 1975), pp. 131-138. *Lecture Notes in Math.*, Vol. 512, Springer, Berlin, 1976. (W. H. J. Fuchs (Zbl 327 #30036)) 58 #11368 30A42
(with Aharonov, Dov) Domains on which analytic functions satisfy quadrature identities. *J. Analyse Math.* 30 (1976), 39-73. (Horst Tietz) 56 #5899 30A86
Convergence almost everywhere of convolution integrals with a dilation parameter. *Constructive theory of functions of several variables* (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976), pp. 250-266. *Lecture Notes in Math.*, Vol. 571, Springer, Berlin, 1977. (Z. Ditzian) 58 #23278 41A35
(with Pathak, Pramod K.) A characterization of certain weak*-closed subalgebras of L^∞ . *J. Math. Anal. Appl.* 58 (1977), no. 1, 174-177. (Y. Katznelson) 55 #6118 43A15
See also Problems: Linear operators and approximation, 51 #6219
- Shapiro, Harvey L.** (with Alò, Richard A.) Totally bounded uniformities. *Comment. Math. Prace Mat.* 17 (1973/74), 307-312. (Anthony D'Aristotle) 50 #3195 54E15
(with Alò, Richard A.) Countably paracompact, normal and collectionwise σ -spaces. *Nederl. Akad. Wetensch. Proc. Ser. A* 76 = *Indag. Math.* 35 (1973), 346-3 Swaminathan) 49 #6147 54D20
(with Alò, Richard A.) ★Normal topological spaces. *Cambridge Tracts in Mathematics*, No. 65. Cambridge University Press, New York-London, 1974. xii + 3 (James C. Smith) 52 #11808 54-02 (54D15, 54E15, 54C45)
(with Alò, Richard A.; Weir, Maurice D.) Realcompactness and Wallman realcompactification. *Portugal. Math.* 34 (1975), no. 1-2, 33-43. (Olav Njåstad) 52 #9186 54D60
(with Smith, F. A.) A note on extending locally finite collections. *Canad. J. Math.* 19 (1976), no. 1, 117-119. (L. I. Sennott) 54 #8564 54D15
(with Smith, F. A.) Even covers and collectionwise normal spaces. *Canad. J. Math.* 30 (1978), no. 3, 466-473. (James C. Smith) 57 #7524 54D15
(with Smith, F. A.) Neighborhoods of the diagonal and strong normality properties. *Proc. Amer. Math. Soc.* 71 (1978), no. 2, 329-333. (Richard A. Alò) 57 #1754D15
- Shapiro, Henry D.** Theoretical limitations on the efficient use of parallel memories. *Trans. Computers* C-27 (1978), no. 5, 421-428. (Amitava Bagchi) 57 #18300 68A05
- Shapiro, I. S.** See Šapiro, I. S.
- Shapiro, Isidor** (with Dym, Harry) Conditions for restricted translation operators to be S_p . *Proc. Amer. Math. Soc.* 63 (1977), no. 2, 251-258. (J. Siciak) 56 #6452 43A78 (30A78)
- Shapiro, Jack M.** (with Schechter, Martin) A generalized operational calculus developed from Fredholm operator theory. *Trans. Amer. Math. Soc.* 175 (1973), 439-466. (Gillfeather) 47 #2406 (EA 48) 47A60 (47B30)
(with Sonn, Jack) Free factor groups of one-relator groups. *Duke Math. J.* 44 (1974), 83-88. (I. D. Macdonald) 50 #487 20F05 (20J05)
A duality theorem for the representation ring of a compact connected Lie group. *Illinois J. Math.* 18 (1974), 79-106. (M. F. Atiyah) 49 #3936 55F50 (22E45)
On the algebraic structure of the K -theory of $G_2/SU(3)$ and $F_4/Spin(9)$. *Illinois J. Math.* 18 (1974), 509-515. (M. F. Atiyah) 51 #4248 55F50 (57F15)
(with Snow, Morris) The Fredholm spectrum of the sum and product of operators. *Trans. Amer. Math. Soc.* 191 (1974), 387-393. (Editors) 56 #12931 47A10
Conditions on a compact connected Lie group which insure a "Weyl character formula". *Proc. Amer. Math. Soc.* 51 (1975), 15-18. (D. L. Ragozin) 51 #322E45 (55A10)
On the homology and cohomology of the orthogonal and symplectic groups of finite field of odd characteristic. *Algebraic K-theory* (Proc. Conf., Northwestern Univ., Evanston, Ill., 1976), pp. 260-268. *Lecture Notes in Math.*, Vol. 551, Springer, Berlin-New York, 1976. (Bruno Harris) 58 #18446 55F40 (18H10)
On the cohomology of the classical linear groups. *Illinois J. Math.* 20 (1976), 589-597. (J. F. Adams) 54 #419 20G10 (57F10)
- Shapiro, Jay** T -torsion theories and central localizations. *J. Algebra* 48 (1977), 17-29. (B. Stenström) 56 #12047 16A08 (18E40)
A note on separable integral semigroup rings. *Comm. Algebra* 6 (1978), no. 10, 1073-1079. (E.-A. Behrens) 58 #11188 20M25
- Shapiro, Jeremy F.** (with Gorry, G. Anthony; Wolsey, Laurence A.) Relaxation methods for pure and mixed integer programming problems. *Management Sci.* 18 (1971), 229-239. (E. Balas) 47 #4640 90C10
(with Gorry, G. Anthony; Northup, William D.) Computational experience with group theoretic integer programming algorithm. *Math. Programming* 4 (1973), 171-180. (Csaba Fabian) 47 #4636 90C10
(with Fisher, Marshall L.) Constructive duality in integer programming. *SIAM J. Appl. Math.* 27 (1974), 31-52. (M. Rössler) 50 #3934 90C10
Brouwer's fixed point theorem and finite state space Markovian decision theory. *Math. Anal. Appl.* 49 (1975), 710-712. (M. Mañas) 51 #2654 90C40
(with Magnanti, Thomas L.; Wagner, Michael H.) Generalized linear programming solves the dual. *Management Sci.* 22 (1975/76), no. 11, 1195-1203. (See Zbl 300059) 90C05
(with Fisher, Marshall L.; Northup, William D.) Using duality to solve difficult optimization problems: theory and computational experience. *Nondifferentiable optimization*. *Math. Programming Stud.* No. 3 (1975), 56-94. (B. Ross Barmish) 56 #2367 90C10
A new constructive duality theory for mixed integer programming. *Symposium on Mathematical Programming*, Vol. XIX (Convegno sulla Programmazione Matematica e sue Applicazioni, INDAM, Roma, 1974), pp. 61-71. Academic Press, London, 1976. (Siegfried Schittkowski) 55 #7389 90C10
Sensitivity analysis in integer programming. *Studies in integer programming* (Workshop, Bonn, 1975), pp. 467-477. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (Nobuo Sannomiya) 58 #4318 90C10
(with Bell, David E.) A convergent duality theory for integer programming. *Operations Res.* 25 (1977), no. 3, 419-434. (Leon Cooper) 56 #2361 90C10
- Shapiro, Jesse M.** Domains of attraction for reciprocals of powers of random variables. *SIAM J. Appl. Math.* 29 (1975), no. 4, 734-739. (A. K. Aleškevičienė) 52 #460F05
On domains of normal attraction to stable distributions. *Houston J. Math.* 3 (1977), no. 4, 539-542. (Author's summary) 58 #24465 60E05 (60F05)
- Shapiro, Joel H.** On convexity and compactness in F -spaces with bases. *Indiana Univ. Math. J.* 21 (1971/72), 1073-1090. (J. T. Marti) 45 #4105 46A05
Weak topologies on subspaces of $C(S)$. *Trans. Amer. Math. Soc.* 157 (1971), 471-479. (Author's summary) 54 #3375 46E10
Noncoincidence of the strict and strong operator topologies. *Proc. Amer. Math. Soc.* 35 (1972), 81-87. (D. Vogt) 46 #6000 46E10
(with Taylor, Peter D.) Compact, nuclear, and Hilbert-Schmidt composition operators on H^2 . *Indiana Univ. Math. J.* 23 (1973/74), 471-496. (Paul S. Muhlenberg) 48 #4816 47B37
On the weak basis theorem in F -spaces. *Canad. J. Math.* 26 (1974), 1294-1300. (Peleczyński) 50 #7990 46A15

- (with Shields, Allen L.) Unusual topological properties of the Nevanlinna class. *r. J. Math.* **97** (1975), no. 4, 915-936. (D. Protas) **52** #11053 30A76
- (with Kalton, Nigel J.) An F -space with trivial dual and non-trivial compact morphisms. *Israel J. Math.* **20** (1975), no. 3-4, 282-291. (D. Vogt) **53** #6271 15
- Mackey topologies, reproducing kernels, and diagonal maps on the Hardy and Banach spaces. *Duke Math. J.* **43** (1976), no. 1, 187-202. (R. Rochberg (Zbl 534 5036)) **58** #17806 46E10 (30A78, 46A05)
- (with Kalton, Nigel J.) Bases and basic sequences in F -spaces. *Studia Math.* **56** (1976), no. 1, 47-61. (William Robinson) **54** #8215 46A35
- Remarks on F -spaces of analytic functions. *Banach spaces of analytic functions* *x. Pelczynski Conf., Kent State Univ., Kent, Ohio, 1976*, pp. 107-124. *Lecture Notes in Math.*, Vol. 604, Springer, Berlin, 1977. (D. Sarason) **58** #7050 46E10 (30A78)
- Zeros of functions in weighted Bergman spaces. *Michigan Math. J.* **24** (1977), no. 2, 255-256. (Charles Horowitz) **57** #3404 30A98
- Subspaces of $L^p(G)$ spanned by characters: $0 < p < 1$. *Israel J. Math.* **29** (1978), no. 248-264. (Y. Domar) **57** #17123 43A15 (46J15)
- Joseph Y. Projection operator techniques for compact groups. *J. Mathematical Analysis* **14** (1973), 1262-1270. (J.-L. Calais) **49** #6834 81A7
- J. L. Z. See Šapiro, L. Z.
- Leonard The structure of H -cascades. *Global differentiable dynamics* (Proc. Conf., Western Reserve Univ., Cleveland, Ohio, 1969), pp. 117-122. *Lecture Notes in Math.*, Vol. 235, Springer, Berlin, 1971. (Editors) **58** #12966 54H20
- On the structure of minimal flows. *Global differentiable dynamics* (Proc. Conf., Western Reserve Univ., Cleveland, Ohio, 1969), pp. 123-128. *Lecture Notes in Math.*, Vol. 235, Springer, Berlin, 1971. (From the text) **58** #12967 54H20
- Distal and proximal extensions of minimal flows. *Math. Systems Theory* **5** (1971), 88-88. (S. Ahmad) **46** #877 54H20
- Irregularities of distribution in dynamical systems. *Recent advances in topological dynamics* (Proc. Conf., Topological Dynamics, Yale Univ., New Haven, Conn., 1972; in honor of Gustav Arnold Hedlund), pp. 249-252. *Lecture Notes in Math.*, Vol. 318, Springer, Berlin, 1973. (Karl Petersen) **53** #1556 54H20
- (with Furstenberg, Harry; Keynes, Harvey B.) Prime flows in topological dynamics. *Israel J. Math.* **14** (1973), 26-38. (Karl Petersen) **47** #9588 54H20 (OK15)
- (with Petersen, Karl Endel) Induced flows. *Trans. Amer. Math. Soc.* **177** (1973), 35-390. (Zbigniew Nitecki) **48** #1200 54H20 (10K30)
- (with Brezin, Jonathan; Ellis, Robert) Recognizing G -induced flows. *Israel J. Math.* **17** (1974), 56-65. (V. Drobot) **50** #5852 58F15 (22E30)
- (with Ellis, Robert; Glasner, Shmuel) Proximal-isometric ($\mathcal{P}\mathcal{I}$) flows. *Advances in Math.* **17** (1975), no. 3, 213-260. (Karl Petersen) **52** #1652 54H20
- (with Ellis, Robert; Glasner, Shmuel) Algebraic equivalents of flow disjointness. *Illinois J. Math.* **20** (1976), no. 2, 354-360. (Karl Petersen) **53** #6520 54H20
- Louis W. Catalan numbers and "total information" numbers. *Proceedings of the 10th Southeastern Conference on Combinatorics, Graph Theory, and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1975), pp. 531-539. *Congressus Numerantium*, No. XIV, Utilitas Math., Winnipeg, Man., 1975. (Heiko Harborth) **53** #2704 05A19
- Upper triangular rings, ideals, and Catalan numbers. *Amer. Math. Monthly* **82** (1975), 634-637. (R. C. Mullin) **51** #5327 05A15 (10M20)
- A Catalan triangle. *Discrete Math.* **14** (1976), no. 1, 83-90. (W. F. Lunnon) **57** #7916 05A15
- Fibonacci numbers and upper triangular groups. *Fibonacci Quart.* **14** (1976), no. 3, 201-202. (M. S. Cheema) **54** #2833 20H20 (10A35)
- A short proof of an identity of Touchard's concerning Catalan numbers. *J. Combinatorial Theory Ser. A* **20** (1976), no. 3, 375-376. (F. T. Howard) **53** #10605 05A19
- (with Donaghey, Robert) Motzkin numbers. *J. Combinatorial Theory Ser. A* **23** (1977), no. 3, 291-301. (Authors' summary) **58** #21644 05A15
- Max S. See Mathematics encyclopedia, 55 #7667
- Norman Z. Real numbers and functions in the Kleene hierarchy and limits of recursive, rational functions. *J. Symbolic Logic* **34** (1969), 207-214. (C. G. Jockusch, Jr.) **53** #67 02F35
- (with Bigelow, James H.) Optimization problems with large parameters. *SIAM J. Appl. Math.* **24** (1973), 152-163. (Jürgen Gaddat) **53** #4982 90C30
- (with Bigelow, James H.) Implicit function theorems for mathematical programming and for systems of inequalities. *Math. Programming* **6** (1974), 141-156. (J. Galka) **49** #12093 90C30
- (with Bigelow, James H.) A scaling theorem and algorithms. *SIAM J. Appl. Math.* **33** (1977), no. 2, 348-352. (Dobre Ion) **57** #2531 90B99
- (with Shapley, L. S.) Values of large games. I. A limit theorem. *Math. Oper. Res.* **3** (1978), no. 1, 1-9. (G. Durr) **58** #9324 90D12
- (with Clasen, Richard J.; Garfinkel, David; Roman, Gruija-Catalin) A method for solving certain stiff differential equations. *SIAM J. Appl. Math.* **34** (1978), no. 4, 742-742. (W. H. Enright) **58** #13725 65L05
- ro, Perry Aggregation and the existence of a social utility function. *J. Econom. Theory* **16** (1977), no. 2, 475-480. (Author's summary) **57** #2472 90A10 (92A20)
- ro, R. A. Pseudo-Hermitian symmetric spaces. *Comment. Math. Helv.* **46** (1971), 29-548. (S. Kaneyuki) **46** #6246 53C35
- ro, Ralph Linear filtering. *Math. Comp.* **29** (1975), no. 132, 1094-1097. (M. L. Muncos) **52** #10187 93E10
- ro, S. H. On computing Bayes risks. *J. Amer. Statist. Assoc.* **68** (1973), 485-486. **51** #7121 62F15
- Estimation of location and scale parameters—a compromise. *Comm. Statist.* **4** (1975), no. 12, 1093-1108. (Bengi Ringnér) **53** #1822 62F10
- ro, Stephen D. Performance of heuristic bin packing algorithms with segments of random length. *Information and Control* **35** (1977), no. 2, 146-158. (Luigi Fratta) **58** #20493 90C99
- ro, Stewart Incomplete translations of complete logics. *Noire Dame J. Formal Logic* **18** (1977), no. 2, 248-250. (J. N. Crossley) **56** #11745 02B10
- ro, Stuart C. (with Shneiderman, Ben) Toward a theory of encoded data structures and data translation. *Internat. J. Comput. Information Sci.* **5** (1976), no. 1, 33-43. (David B. Benson) **53** #7108 68A05
- Shapiro, V. E. See Šapiro, V. E.
- Shapiro, Victor L. Holomorphic functions and Hausdorff dimension. *Ark. Mat.* **7**, 33-48 (1967). (Editors) **55** #5861 30A76
- Removable sets for pointwise solutions of the generalized Cauchy-Riemann equations. *Ann. of Math.* (2) **92** (1970), 82-101. (U. Kuran (Zbl 209, 414)) **55** #10819 35F05 (30A92)
- Removable sets for pointwise subharmonic functions. *Trans. Amer. Math. Soc.* **159** (1971), 001-012. (R. M. Hervé) **52** #11078 31A05
- (with Diederich, James R.) Removable sets for pointwise C^∞ solutions of elliptic partial differential equations. *J. Differential Equations* **11** (1972), 562-581. (D. T. Haimo) **45** #3925 35J15
- Singular integrals and spherical convergence. Collection of articles honoring the completion by Antoni Zygmund of 50 years of scientific activity. III. *Studia Math.* **44** (1972), 253-262. (R. A. Askey) **47** #2265 42A92 (40E05, 44A25)
- Sets of uniqueness on the 2-torus. *Trans. Amer. Math. Soc.* **165** (1972), 127-147. (R. A. Askey) **46** #7798 42A92 (43A55)
- One-sided conditions for functions harmonic in the unit disc. *Partial differential equations* (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971), pp. 483-490. *Amer. Math. Soc., Providence, R.I.*, 1973. (John W. Green) **49** #9227 31A05
- Algebraic integers and distributions on the N -torus. *J. Functional Analysis* **13** (1973), 138-153. (M. Balanzat) **50** #890 42A92 (10K05)
- Capacity and the nonlinear Navier-Stokes equations. *SIAM J. Math. Anal.* **4** (1973), 329-343. (D. E. Edmunds) **52** #1056 35Q10
- Positive Newtonian capacity and stationary viscous incompressible flow. *Indiana Univ. Math. J.* **24** (1974), 1-16. (W. F. Ames) **50** #2525 31B15 (35Q10, 76.46)
- (with Lippman, Gary E.) Capacity and absolute Abel summability of multiple Fourier series. *J. Approximation Theory* **10** (1974), 313-323. (W. C. Connett) **51** #1271 42A92
- Isolated singularities for solutions of the nonlinear stationary Navier-Stokes equations. *Trans. Amer. Math. Soc.* **187** (1974), 335-363. (D. E. Edmunds) **52** #1058 35Q10
- Isolated singularities in fluid flow and elasticity. *Arch. Rational Mech. Anal.* **58** (1975), no. 1, 95-101. (S. N. Murthy) **52** #12486 73.35 (76.35)
- A counterexample in the theory of planar viscous incompressible flow. *J. Differential Equations* **22** (1976), no. 1, 164-179. (D. E. Edmunds) **54** #13348 35Q10
- Isolated singularities in steady state fluid flow. *SIAM J. Math. Anal.* **7** (1976), no. 4, 577-601. (Jacques Mauss) **57** #10280 35Q10
- Generalized and classical solutions of the nonlinear stationary Navier-Stokes equations. *Trans. Amer. Math. Soc.* **216** (1976), 61-79. (J. W. Thomas) **52** #11375 35Q10
- Partial differential equations, Orlicz spaces, and measure functions. *Indiana Univ. Math. J.* **26** (1977), no. 5, 875-883. (RŽMat 1978 #7 B915) **58** #6653 35G05 (46E30)
- Superharmonic functions and Hausdorff measure. *J. Differential Equations* **27** (1978), no. 1, 28-45. (Vazgain Avannisian) **58** #11466 31B05
- The discrete equations of fluid flow and elasticity. *J. Math. Anal. Appl.* **62** (1978), no. 1, 125-139. (A. C. Srivastava) **58** #19594 73.35 (65N99)
- Shapley, L. S. (with Shubik, Martin) On market games. *J. Econom. Theory* **1** (1969), 9-25 (1970). (J. Rosenmüller) **52** #16673 90D12 (90A15)
- Cores of convex games. *Internat. J. Game Theory* **1** (1971/72), 11-26; errata, *ibid.* **1** (1971/72), 199. (R. E. Stearns) **46** #10430 90D99
- (with Fulkerson, D. R.) Minimal k -arc connected graphs. *Networks* **1** (1971/72), 91-98. (F. Harary) **45** #5019 05C10
- ★On balanced games without side payments. Report No. p-4910. *Rand Corp., Santa Monica, Calif.*, 1972. 38 pp. (loose errata) (Editors) **52** #12828 90D40
- (with Maschler, Michael; Peleg, Bezalel) The kernel and bargaining set for convex games. *Internat. J. Game Theory* **1** (1972), no. 2, 73-93. (H. W. Kuhn) **46** #10426 90D12
- (with Shubik, Martin) The assignment game. I. The core. *Internat. J. Game Theory* **1** (1972), no. 2, 111-130. (H. W. Kuhn) **46** #10382 90A15 (90D40)
- ★On balanced games without side payments—a correction. Report No. p-4910/1. The Rand Paper Series. *Rand Corp., Santa Monica, Calif.*, 1973. 6 pp. (Editors) **52** #12829 90D40
- On balanced games without side payments. *Mathematical programming* (Proc. Advanced Sem., Univ. Wisconsin, Madison, Wis., 1972), pp. 261-290. *Math. Res. Center Publ.*, No. 30, Academic Press, New York, 1973. (Louis J. Billera) **52** #10075 90D40
- (with Aumann, Robert J.) ★Values of non-atomic games. A Rand Corporation Research Study. *Princeton University Press, Princeton, N.J.*, 1974. xi + 333 pp. (Louis J. Billera) **51** #15031 90D40
- (with Scarf, Herbert) On cores and indivisibility. *J. Math. Econom.* **1** (1974), no. 1, 23-37. (Louis J. Billera) **54** #4601 90A15 (90D45)
- A note on the Lemke-Howson algorithm. Pivoting and extensions. *Math. Programming Stud.* **1** (1974), 175-189. (G. Owen) **55** #7437 90D12
- An example of a slow-converging core. *Internat. Econom. Rev.* **16** (1975), no. 2, 345-351. (Birgit Grodal) **55** #7326 90A15
- (with Shubik, Martin) Competitive outcomes in the cores of market games. *Internat. J. Game Theory* **4** (1975), no. 4, 229-237. (Nimrod Megiddo) **53** #2316 90A15 (90D45)
- (with Aumann, Robert J.) ★Значения для неатомических игр. (Russian) [Values of non-atomic games] Translated from the English by A. Ja. Kiruta, A. A. Korbut and A. I. Sobolev. Edited by N. N. Vorob'ev. *Izdat. "Mir", Moscow*, 1977. 357 pp. (Editors) **58** #15223 90Dxx (90-01)
- (with Shapiro, N. Z.) Values of large games. I. A limit theorem. *Math. Oper. Res.* **3** (1978), no. 1, 1-9. (G. Durr) **58** #9324 90D12
- See also Notes: Lectures on mathematics in the behavioral sciences, **50** #1699 and Studies in optimization, **50** #9349
- Shaposhnikova, G. A. See Šaposhnikova, G. A.

- Shapovalov, L. A. See Šapovalov, L. A.
- Shapovalov, V. N. See Šapovalov, V. N.
- Shapovalov, Ye. P. See Šapovalov, E. P.
- Shar, Albert O. $\pi_{mn-2}(S_{m-2}^n)$ contains an element of order m . *Proc. Amer. Math. Soc.* **34** (1972), 303-306. (R. E. Mosher) **45** #1166 55E40
- Localizations and the homotopy groups of certain complexes. *Quart. J. Math. Oxford Ser. (2)* **23** (1972), 249-257. (Author's review (Zbl **239**, 55015)) **58** #31069 55D99 (55H20)
- The homotopy groups of spaces whose cohomology is a Z_p truncated polynomial algebra. *Proc. Amer. Math. Soc.* **38** (1973), 172-178. (C. W. Patty) **46** #9975 55E05
- (with Copeland, Arthur H., Jr.) Images and pre-images of localization maps. *Pacific J. Math.* **57** (1975), no. 2, 349-358. (H. Scheerer) **53** #1584 55D99
- P -primary decomposition of maps into an H -space. *Pacific J. Math.* **59** (1975), no. 1, 237-240. (J. Stasheff) **53** #1583 55D45
- ϕ -Postnikov systems and extensions of H -spaces. *Proc. Amer. Math. Soc.* **49** (1975), 237-244. (J. Stasheff) **51** #4236 55D45
- (with Arkowitz, Martin; Murley, C. P.) The number of multiplications on H -spaces of type (3, 7). *Proc. Amer. Math. Soc.* **50** (1975), 394-398. (S. Gitler) **51** #4234 55D45
- Sharaf al-Din Muzaffar ibn Muhammad at-Tūsi See Rāshed, Roshdi, **56** #45
- Sharda A queueing problem with intermittently available server and arrivals and departures in batches of variable size. (German and Russian summaries) *Z. Angew. Math. Mech.* **48** (1968), 471-476. (J. G. C. Templeton) **49** #11663 60K25
- A queueing problem with batch arrivals and correlated departures. *Metrika* **20** (1973), 81-92. (Author's summary) **56** #6932 60K25
- On a certain type of priority queueing problem. *Metrika* **20** (1973), 93-100. (Author's summary) **56** #6933 60K25
- Sharfuddin, A. (with Husain, S. I.) Semi-symmetric metric connexions in almost contact manifolds. *Tensor (N.S.)* **30** (1976), no. 2, 133-139. (S. Takizawa) **54** #13776a (E **54** #13776b) 53C15
- (with Husain, S. I.) Erratum: "Semi-symmetric metric connexions in almost contact manifolds" (*Tensor (N.S.)* **30** (1976), no. 2, 133-139). *Tensor (N.S.)* **30** (1976), no. 3, 315. (S. Takizawa) **54** #13776b 53C15
- (with Husain, S. I.) Curvature tensors of semi-symmetric metric connexions in almost contact manifolds. *Tensor (N.S.)* **31** (1977), no. 3, 227-234. (Authors' introduction) **58** #30909 53C15
- Sharfuddin, M. Correlations between S_n and S'_n . *J. Natur. Sci. and Math.* **10** (1970), 35-43. (B. d'Orgeval) **45** #2556 50D20
- Geometry of correlations between two planes S_2 and S'_2 . *Punjab Univ. J. Math. (Lahore)* **5** (1972), 1-13. (B. Orbán) **47** #3407 14N10 (50D25)
- Shariq, Syed A. (with Van Landingham, H. F.) Numerical evaluation of compound Poisson distributions. *AIEE Trans.* **6** (1974), 50-54. (Sven-Åke Gustafson) **50** #8918 65D20 (60K99)
- Sharir, M. Characterization and properties of extreme operators into $C(Y)$. *Israel J. Math.* **12** (1972), 174-183. (Z. Semadeni) **47** #5574 46E15 (47B99)
- A note on extreme elements in $A_0(K, E)$. *Proc. Amer. Math. Soc.* **46** (1974), 244-246. (S. Kurepa) **51** #11075 46E05 (47D20)
- Extremal structure in operator spaces. *Trans. Amer. Math. Soc.* **186** (1974), 91-111. (J. F. Smith) **48** #12151 47D20 (46B05)
- A counterexample on extreme operators. *Israel J. Math.* **24** (1976), no. 3-4, 320-337. (J. G. Dhombres) **55** #11096 47B37 (46E15)
- A non-nice extreme operator. *Israel J. Math.* **26** (1977), no. 3-4, 306-312. (J. F. Smith) **56** #12970 47B37
- el-Sharkaway, Nahid Gamel See El-Sharkaway, Nahid Gamel
- Sharkawi, I. E. Boundary value problems for linear differential equations of operators. *Mat. Vesnik* **1(14)(29)** (1977), no. 3, 279-283. (H. I. Freedman) **58** #1341 34B05
- Sharlin, Harold Issadore William Thomson's dynamical theory: an insight into a scientist's thinking. *Ann. of Sci.* **32** (1975), 133-147. (M. Kline) **56** #5167 01A55
- Sharma, A. S. (with Buti, B.) Envelope solitons and holes for sine-Gordon and non-linear Klein-Gordon equations. *J. Phys. A* **9** (1976), no. 11, 1823-1826. (Authors' summary) **56** #10550 81.35
- Sharma, Ambikeshwar (with Leeming, David J.) A generalization of the class of completely convex functions. *Inequalities, III (Proc. Third Sympos., Univ. California, Los Angeles, Calif., 1969; dedicated to the memory of Theodore S. Motzkin)*, pp. 177-199. Academic Press, New York, 1972. (R. C. Buck) **49** #3132 30A66
- Some poised problems of interpolation. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 435-441. Akadémiai Kiadó, Budapest, 1972. (Darell J. Johnson) **54** #8084 41A05
- (with Alexits, György) The influence of Lebesgue functions on the convergence and summability of function series. *Acta Sci. Math. (Szeged)* **33** (1972), 1-10. (S. Izumi) **46** #9624 42A24
- (with Motzkin, Theodore S.) A sequence of linear polynomial operators and their approximation-theoretic properties. Collection of articles dedicated to J. L. Walsh on his 75th birthday, II (Proc. Internat. Conf. Approximation Theory, Related Topics and their Applications, Univ. Maryland, College Park, Md., 1970). *J. Approximation Theory* **5** (1972), 176-198. (R. A. Askey) **50** #832 41A05
- (with Pethe, S. P.) Modified Abel expansion and a subclass of completely convex functions. *SIAM J. Math. Anal.* **3** (1972), 546-558. (J. Siciak) **48** #2622 41A05 (26A51)
- Some poised and nonpoised problems of interpolation. *SIAM Rev.* **14** (1972), 129-151. (J. Prasad) **47** #2230 41A05
- (with Greville, Thomas N. E.; Schoenberg, Isaac Jacob) The spline interpolation of sequences satisfying a linear recurrence relation. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 365-367. Academic Press, New York, 1973. (Charles K. Chui) **52** #3806 41A15
- (with Motzkin, Theodore S.; Straus, Ernst G.) Averaging interpolation. *Spline functions and approximation theory (Proc. Sympos., Univ. Alberta, Edmonton, Alta., 1972)*, pp. 191-233. Internat. Ser. Numer. Math., Vol. 21, Birkhäuser, Basel, 1973. (A. K. Varma) **51** #13521 41A05
- (with DeVore, Ronald A.; Meir, A.) Strongly and weakly non-poised H -B interpolation problems. *Canad. J. Math.* **25** (1973), 1040-1050. (T. J. Rivlin) **49** #41A05
- (with Saxena, R. B.) Convergence of averaging interpolation operators. Collection of articles dedicated to Stanisław Gołąb on his 70th birthday, II. *Demonstratio Math.* (1973), 821-839 (1974). (J. R. Rice) **51** #1203 41A05
- (with Schoenberg, Isaac Jacob) Cardinal interpolation and spline functions. V. B -splines for cardinal Hermite interpolation. *Linear Algebra and Appl.* **7** (1973), 1-10. (R. Franke) **57** #17085 41A15
- (with Pethe, S. P.) Functions analogous to completely convex functions. *Ramanujan J. Math.* **3** (1973), no. 4, 591-617. (R. A. Askey) **47** #9123 41A05
- (with Meir, A.) Lacunary interpolation by splines. *SIAM J. Numer. Anal.* (1973), 433-442. (J. W. Jerome) **48** #6774 41A15 (65D05)
- (with Freud, Géza) Some good sequences of interpolatory polynomials. *Canad. Math. Bull.* **17** (1974), 233-246. (G. D. Taylor) **49** #3374 (E **56** #6189) 41A05
- (with Straus, Ernst G.) On the irreducibility of a class of Euler Frobenius polynomials. *Canad. Math. Bull.* **17** (1974), 265-273. (P. Lipow) **50** #13990 41A05
- (with Meir, A.; Tzimbalario, Jean) Hermite-Fejér type interpolation processes. *Anal. Math.* **1** (1975), no. 2, 121-129. (A. K. Varma) **52** #8724 41A05
- (with Tzimbalario, Jean) Quasi-Hermite-Fejér type interpolation of higher order. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-first birthday, IV. *J. Approximation Theory* **13** (1975), 431-442. (Werner Haussmann) **51** #6226 41A05
- (with Tzimbalario, Jean) A generalization of a result of Subbotin. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 557-567. Academic Press, New York, 1976. (C. Micchelli) **55** #3629 41A35
- (with Tzimbalario, Jean) A generalization of monosplines and perfect splines. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Calgary, Alberta, 1975; dedicated to the memory of Eckard Schmidt)*, pp. 257-267. Academic Press, New York, 1976. (V. A. Popov) **54** #10943 41A15
- (with Tzimbalario, Jean) Cardinal interpolation and generalized exponential B -splines. *Canad. J. Math.* **28** (1976), no. 2, 291-300. (Marc Atteia) **53** #8721 41A05
- (with Tzimbalario, Jean) Some inequalities between derivatives on bounded intervals. *Delta (Waukesha)* **6** (1976), no. 2, 78-91. (Chung Lie Wang) **54** #10526 26A84
- (with Tzimbalario, Jean) Landau-type inequalities for some linear differential operators. *Illinois J. Math.* **20** (1976), no. 3, 443-455. (C. A. Hall) **53** #11241 41A15 (26A84)
- (with Lee, Seng Luan) Cardinal lacunary interpolation by g -splines. I. The characteristic polynomials. *J. Approximation Theory* **16** (1976), no. 1, 85-96. (Werner Haussmann) **54** #3232 41A15
- (with Greville, Thomas N. E.; Schoenberg, Isaac Jacob) The spline interpolation sequences satisfying a linear recurrence relation. *J. Approximation Theory* **17** (1976), no. 3, 200-221. (M. Marsden) **54** #13388 41A15
- (with Lee, Seng Luan; Tzimbalario, Jean) A class of cardinal splines with Hermite type interpolation. *J. Approximation Theory* **18** (1976), no. 1, 30-38. (P. Lipow) **54** #10940 41A15
- (with Tzimbalario, Jean) A class of cardinal trigonometric splines. *SIAM J. Math. Anal.* **7** (1976), no. 6, 809-819. (Derek W. Arthur) **54** #5683 41A15
- (with Tzimbalario, Jean) Cardinal t -perfect L -splines. *SIAM J. Numer. Anal.* (1976), no. 6, 915-922. (C. Micchelli) **55** #3630 41A35
- (with Botto, M. A.) Averaging interpolation on sets with multiplicities. *Aequationes Math.* **15** (1977), no. 1, 63-72. (J. Prasad) **56** #3501 41A05
- (with Freud, Géza) Addendum: "Some good sequences of interpolatory polynomials" (*Canad. J. Math.* **26** (1974), 233-246). *Canad. J. Math.* **29** (1977), no. 1, 1163-1166. (G. D. Taylor) **56** #6189 41A05
- (with Tzimbalario, Jean) Quadratic splines. *J. Approximation Theory* **19** (1977), no. 2, 186-193. (Philip W. Smith) **55** #8632 41A15
- (with Tzimbalario, Jean) Classes of functions defined by differential inequalities. *Math. Anal. Appl.* **61** (1977), no. 1, 122-135. (Manfred v. Golitschek) **57** #3326 26A93 (30A64)
- (with Tzimbalario, Jean) Some linear differential operators, and generalized differences. (Russian) *Mat. Zametki* **21** (1977), no. 2, 161-172. (Paul Nevai) **55** #10405 41A05
- (with Tzimbalario, Jean) Some strongly non-poised H -B problems. *J. Math. Anal. Appl.* **63** (1978), no. 2, 521-524. (Helmut Brass) **58** #1839 41A05
- (with Tzimbalario, Jean) Landau-type inequalities for bounded intervals. *Publ. Math. Hungar.* **9** (1978), no. 3, 175-186. (M. Skalsky) **58** #11283 26A84
- See also Spline-Funktionen, **49** #9478
- Sharma, Ashok Kumar The expansive homeomorphisms. *Ganita* **22** (1971), no. 1, 21-24. (W. R. Utz) **45** #7695 54H20
- (with Upadhyay, M. D.) Orbit-filters and contraction mappings. *Ganita* **22** (1971), no. 1, 109-113. (W. R. Utz) **45** #7696 54H20
- (with Upadhyay, M. D.) Some properties of orbits. C. N. Srinivasengar dedicated volume. *Progr. Math. (Allahabad)* **6** (1972), no. 1, 15-20. (W. R. Utz) **53** #14454H20
- (with Upadhyay, M. D.) Asymptoticity of orbits. (Romanian summary) *An. Timișoara Ser. Ști. Mat.* **11** (1973), 91-95. (W. R. Utz) **53** #1557 54H20
- Geodesics. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **12** (1974), no. 2, 155-160 (1977). (Grattan P. Murphy) **57** #10683 54E35 (52A50)
- (with Paria, Gundhar) Helical flow of incompressible cholesteric liquid crystal between two coaxial circular cylinders having rotational and axial velocities. *Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **21(69)** (1977), no. 1-2, 93-102. (Authors' summary) **58** #19732 76.35
- Some results on common fixed points. *Indian J. Pure Appl. Math.* **8** (1977), no. 3, 389-393. (S. P. Singh) **57** #3922 47H10
- On some properties of hyperconnected spaces. *Mat. Vesnik* **1(14)(29)** (1977), no. 25-27. (O. T. Alas) **57** #13859 54D99
- Sharma, B. B. A problem of a deterministic queue. *Indian J. Pure Appl. Math.* **9** (1978), no. 1, 75-81. (U. Narayan Bhat) **57** #7809 60K25 (90B99)
- Sharma, B. K. (with Iseki, Kiyoshi; Sharma, P. L.) Contraction type mapping on 2-n

- e. *Math. Japon.* **21** (1976), no. 1, 67-70. (S. P. Singh) **54** #11303 54H25
(with Sharma, Bhagirath Lal) Contraction type mapping on general 2-metric space. *Tamkang J. Math.* **7** (1976), no. 2, 219-222. (Douglass L. Grant) **56** #13198 54H25
- B. L.** Some new formulae for hypergeometric series. *Kyungpook Math. J.* **16** (1976), no. 1, 95-99. (K. M. Saxena) **55** #5915 33A30
- B. M.** Waves in a heavy incompressible fluid of finite depth and of variable sity. *Indian J. Pure Appl. Math.* **8** (1977), no. 5, 527-537. (Author's summary) #8399 7635
- Bhagirath Lal** Integrals involving hypergeometric functions of two variables. *Proc. Acad. Sci. India Sect. A* **36** (1966), 713-718. (Y. L. Luke) **46** #3846 33A30
- An integral involving G-function. *Vikram-Quart. Res. J. Vikram Univ.* **10** (1966), 1, 3, 79-83. (R. G. Buschman) **47** #8926 33A35
- Formulae for Whittaker functions and hypergeometric series. *Bull. Math. Soc. Sci. th. R. S. Roumanie (N.S.)* **14**(62) (1970), 227-236 (1971). (B. R. Bhonsle) **50** #10348 3A30
- Some expansion formulae for Bessel and G-functions. *Bull. Math. Soc. Sci. Math. S. Roumanie (N.S.)* **14**(62) (1970), 367-373 (1971). (B. S. Tavathia) **48** #2445 A35
- An expansion formula for hypergeometric functions of two variables. *J. Math. kushima Univ.* **4** (1970), 33-36. (T. Erber) **45** #2221 (EA 55/56) (E 48 #2439) A30
- (with Jain, P. C.) Some generating functions of Appell function F_1 . *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 241-246. (C. M. Joshi) **45** #7118 33A30
- Integrals involving Appell functions. *Rev. Mat. Hisp.-Amer.* (4) **30** (1970), 3-12. (C. Parihar) **46** #7569 33A30 (44A20)
- (with Jain, P. C.) Some formulae for the generalised double hypergeometric nction. *Univ. Nac. Tucumán Rev. Ser. A* **20** (1970), 125-132. (C. M. Joshi) **45** #2218 33A30
- Sum of a series involving Laguerre polynomials and generalized functions of two riables. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.)* (1971), 117-122. (Editors) **46** #5692 33A35
- Expansion formulae for generalised function of two variables. *Bull. Math. Soc. Sci. ath. R. S. Roumanie (N.S.)* **15**(63) (1971), no. 2, 237-245 (1972). (K. M. Saxena) #11593 33A30
- (with Abiodun, R. F. A.) Some finite series for G-function. *Bull. Math. Soc. Sci. ath. R. S. Roumanie (N.S.)* **15**(63) (1971), no. 4, 473-480 (1973). (B. M. Agrawal) #2446 33A35
- (with Abiodun, R. F. A.) Summation of series involving generalized hypergeometric nctions of two variables. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6**(26) (1971), 253-264. (S. Saran) **46** #7563 33A30
- (with Abiodun, R. F. A.) A definite integral and application in the production of at in a cylinder. *An. Univ. Bucureşti Mat.-Mec.* **21** (1972), no. 2, 7-14. (Y. L. Luke) #3236 33A35
- An expansion formula for G-function. (Romanian summary) *An. Univ. Timişoara r. Şti. Mat.* **10** (1972), 89-94. (Harold Exton) **48** #4364 33A35
- An expansion formula for G-function. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **16**(64) (1972), no. 2, 235-239 (1973). (Y. L. Luke) **51** #5993 33A35
- An integral involving products of G-function and generalised function of two riables. *Rev. Mat. Hisp.-Amer.* (4) **32** (1972), 188-196. (From the author's ntroduction) **48** #6494 33A35
- Some expansion theorems for generalized function of two variables and Jacobi nynomials. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 93-102. (Author's summary) #2110 33A35
- (with Abiodun, R. F. A.) Formulae for hypergeometric functions of two variables. *n. Univ. Bucureşti Mat.-Mec.* **22** (1973), no. 2, 137-139. (S. Saran) **50** #10347 A30
- (with Abiodun, R. F. A.) New generating functions for the G-function. *Ann. Polon. ath.* **27** (1973), 159-162. (K. M. Saxena) **48** #11607 33A35
- Correction: "An expansion formula for hypergeometric functions of two variables" *J. Math. Tokushima Univ.* **4** (1970), 33-36. *J. Math. Tokushima Univ.* **7** (1973), 49. (Editors) **48** #2439 33A30
- Summation of a double hypergeometric series. *Matematiche (Catania)* **28** (1973), 9-32 (1974). (Aruna Srivastava) **50** #5049 33A30
- (with Jain, P. C.) Some new summation formulae. *Mathematica (Cluj)* **15**(38) (1973), 183-208. (R. N. Jain) **50** #10590 40A25 (33A30)
- (with Shreshtha, R. M.) Dual series equations involving Laguerre polynomials. (Italian summary) *Rend. Ist. Mat. Univ. Trieste* **5** (1973), 42-49. (S. L. Kalla) **48** #9312 45F10
- (with Abiodun, R. F. A.) Transformations for hypergeometric series. (Italian ummary) *Rend. Ist. Mat. Univ. Trieste* **5** (1973), 132-140. (Y. L. Luke) **50** #13633 A30
- (with Abiodun, R. F. A.) Fourier series for generalised function of two variables. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 25-33 (1974). (S. D. Bajpai) **51** #13303 A30
- Formulae for hypergeometric functions. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 3-37 (1974). (L. J. Slater) **52** #825 33A30
- Kapteyn series for G-function. *Univ. Nac. Tucumán Rev. Ser. A* **23** (1973), 39-43 (1974). (S. D. Bajpai) **51** #10712 33A35
- A formula for hypergeometric series and its application. (Romanian summary) *An. niv. Timişoara Ser. Şti. Mat.* **12** (1974), no. 2, 145-154 (1977). (R. K. Saxena) **7** #10015 33A30
- (with Manocha, H. L.) Fractional derivatives and summation. *J. Indian Math. Soc. (N.S.)* **38** (1974), no. 1-4, 371-382 (1975). (Philip Heywood) **52** #10971 26A33 3A30
- Characteristic classes of a manifold: their topological and homotopy invariance. *Math. Student* **42** (1974), 285-290 (1975). (T. tom Dieck) **54** #6151 57D20
- (with Abiodun, R. F. A.) Generating function for generalized function of two riables. *Proc. Amer. Math. Soc.* **46** (1974), 69-72. (H. M. Srivastava) **49** #9275 A30
- New generating functions for Appell function F_1 . *Proc. Nat. Acad. Sci. India Sect. A* **44** (1974), no. 4, 265-268. (V. L. Deshpande) **52** #14404 33A30
- Two new transformations of hypergeometric series. (Romanian summary) *An. Univ. Timişoara Ser. Şti. Mat.* **13** (1975), no. 2, 149-153 (1977). (R. K. Saxena) **57** #10016 33A30
- Sum of a double series. *Proc. Amer. Math. Soc.* **52** (1975), 136-138. (H. M. Srivastava) **52** #8517 33A30
- (with Abiodun, R. F. A.) A new generating function for a generalized function of two variables. *Proc. Amer. Math. Soc.* **53** (1975), no. 2, 379-384. (H. M. Srivastava) **52** #6059 33A35
- Some relations of double series. I, II. *Proc. Nat. Acad. Sci. India Sect. A* **45** (1975), no. 1, 16-20; *ibid.* **45** (1975), no. 1, 37-40. (R. N. Jain) **52** #11135 33A30
- On loops with left inverse property. *An. Şti. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.)* **22** (1976), no. 1, 15-17. (Pl. Kannappan) **57** #9900 20N05
- (with Sabinin, L. V.) On the existence of half-Bol loops. *An. Şti. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.)* **22** (1976), no. 2, 147-148. (R. Artzy) **55** #3132 20N05
- Laws for characterising M-loops. *Ann. Soc. Sci. Bruxelles Sér. I* **90** (1976), no. 1, 88-94. (D. A. Robinson) **52** #14128 20N05
- A special class of C. I. loops as groupoids with one law. *Ann. Soc. Sci. Bruxelles Sér. I* **90** (1976), no. 4, 284-288. (D. A. Robinson) **54** #12947 20N05
- A Watson's theorem for double series. *J. London Math. Soc.* (2) **13** (1976), no. 1, 95-96. (V. G. Čelidze) **57** #16733 33A30
- Some transformation formulae for hypergeometric series. *Kyungpook Math. J.* **16** (1976), no. 1, 107-112. (L. J. Slater) **54** #7888 33A30
- Summation of a double hypergeometric series. II. *Matematiche (Catania)* **31** (1976), no. 1, 90-93 (1977). (Aruna Srivastava) **58** #6387 33A30
- A note on hypergeometric functions of two variables. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), no. 2, 169-172. (R. K. Saxena) **53** #5961 33A30
- (with Khare, S. S.) Characteristic numbers for unoriented singular G-bordism. *Proc. Amer. Math. Soc.* **61** (1976), no. 1, 149-152 (1977). (R. E. Stong) **54** #11358 57D85
- Left loops which satisfy the left Bol identity. *Proc. Amer. Math. Soc.* **61** (1976), no. 2, 189-195 (1977). (D. A. Robinson) **54** #10467 20N05
- Some summation theorems for double series. *Proc. Nat. Acad. Sci. India Sect. A* **46** (1976), no. 3, 185-189. (Author's summary) **58** #1296 33A30
- An extension of Dougall's theorem. *Proc. Nat. Acad. Sci. India Sect. A* **46** (1976), no. 3, 233-235. (Author's summary) **58** #1297 33A30
- (with Abiodun, R. F. A.) Some new summation formulae for hypergeometric series of two variables. (Italian summary) *Rend. Ist. Mat. Univ. Trieste* **8** (1976), no. 1, 94-100. (Harold Exton) **54** #7889 33A30
- Commutative inverse property loops as groupoid with one law. (Italian summary) *Rend. Ist. Mat. Univ. Trieste* **8** (1976), no. 2, 142-147 (1977). (R. Artzy) **56** #15814 20N05
- A note on Carlitz's formula. *SIAM J. Math. Anal.* **7** (1976), no. 6, 820-823. (Harold Exton) **54** #5514 33A30
- Some relations between hypergeometric series. *Simon Stevin* **50** (1976/77), no. 2, 103-110. (James M. Horner) **54** #10700 33A30
- Whipples' formulae for double series. *Simon Stevin* **50** (1976/77), no. 3, 183-188. (L. J. Slater) **56** #5960 33A30
- (with Sharma, B. K.) Contraction type mapping on general 2-metric space. *Tamkang J. Math.* **7** (1976), no. 2, 219-222. (Douglass L. Grant) **56** #13198 54H25
- Left loops which satisfy the left Bol identity. II. *Ann. Soc. Sci. Bruxelles Sér. I* **91** (1977), no. 2, 69-78. (D. A. Robinson) **56** #3173 20N05
- On operational calculus. *Bull. Math. Soc. Sci. Math. R.S. Roumanie (N.S.)* **21**(69) (1977), no. 1-2, 145-156. (S. Saran) **58** #2067 44A45
- Two theorems in operational calculus. *Bull. Math. Soc. Sci. Math. R.S. Roumanie (N.S.)* **21**(69) (1977), no. 1-2, 157-163. (S. Saran) **58** #2068 44A45
- A generalization of Karlsson's formula. *Kyungpook Math. J.* **17** (1977), no. 1, 95-96. (S. K. Chatterjea) **58** #22698 33A30
- A generalization of Bailey's formula. *Simon Stevin* **51** (1977/78), no. 1, 57-62. (L. Carlitz) **57** #10017 33A30 (40B05)
- (with Johnson, K. W.) A variety of loops. *Ann. Soc. Sci. Bruxelles Sér. I* **92** (1978), no. 1-2, 25-41. (Ján Duplák) **58** #16930 20N05
- (with Johnson, K. W.) Construction of commutative weak inverse property loops of most orders. *Comm. Algebra* **6** (1978), no. 11, 1157-1168. (Ján Duplák) **58** #972 20N05
- SWIP loops and groupoids. *Kyungpook Math. J.* **18** (1978), no. 1, 5-10. (Tomas Kepka) **58** #16931 20N05
- Sharma, Bhu Dev** On mean-value representations in information theory. *Cahiers Centre Études Recherche Opér.* **13** (1971), 141-147. (Shunsuke Ihara) **53** #7617 94A15
- (with Singh, U. N.) R. S. Varma. *J. Math. Sci.* **6** (1971), i-viii (1974). (Editors) **57** #5638 01A70
- Uniqueness theorems of generalized entropy and information. *Proc. Indian Acad. Sci. Sect. A* **73** (1971), 11-18. (H. Umegaki) **45** #6516 94A15
- On mean-value entropy for continuous distributions. *Cahiers Centre Études Recherche Opér.* **14** (1972), 105-109. (S. Guiaşu) **52** #12986 94A15
- (with Mitter, Jagdish; Mathur, Yogeshwar Dayal) New measures of distortion. (Turkish summary) *Istanbul Univ. Fen Fak. Mecm. Ser. A* **37** (1972), 141-153 (1974). (Suguru Arimoto) **50** #12455 94A15
- On amount of information of type- β and other measures. *Metrika* **19** (1972), 1-10. (S. Kotz) **48** #13477 94A15
- (with Autar, Ram) Generalized functional equation of two variables in information theory. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle* **6** (1972), Sér. R-3, 85-98. (S. Guiaşu) **50** #12454 94A15
- (with Autar, Ram) On characterization of generalized inaccuracy measure in information theory. *J. Appl. Probability* **10** (1973), 464-468; *correction, ibid.* **10** (1973), 913. (Pl. Kannappan) **52** #10237 94A15
- (with Mathur, Yogeshwar Dayal; Mitter, Jagdish) Bounds on the rate-distortion function for geometric measure of distortion. (Loose French summary) *Rev. Française*

- Automat. Informat. Recherche Opérationnelle* 7 (1973), Sér. R-2, 29-38. (L. L. Campbell) 52 #5209 94A15
- (with Autar, Ram) An inversion theorem and generalized entropies for continuous distributions. *SIAM J. Appl. Math.* 25 (1973), 125-132; erratum, *ibid.* 27 (1974), 519. (Toby Berger) 50 #4117 94A15
- (with Mitter, Jagdish; Mathur, Yogeshwar Dayal) Geometric measure of distortion. (Italian and French summaries) *Statistica (Bologna)* 33 (1973), 589-597. (Authors' summary) 57 #5426 94A15
- (with Autar, Ram) Information-improvement functions. *Econometrica* 42 (1974), 103-112. (J. Aczél) 53 #10485 94A15 (39A30)
- (with Soni, Raminder Singh) A new generalized functional equation for inaccuracy and entropy of kind β . *Funkcial. Ekvac.* 17 (1974), 1-11. (Pl. Kannappan) 53 #7619 94A15
- (with Taneja, Inder Jeet) Functional measures in information theory. *Funkcial. Ekvac.* 17 (1974), 181-191. (Pl. Kannappan) 51 #15199 94A15
- (with Dass, Bal Kishan) Extended Varshamov-Gilbert and sphere-packing bounds for burst-correcting codes. *IEEE Trans. Information Theory* IT-20 (1974), 291-292; correction, *ibid.* IT-21 (1975), 115. (H. F. Mattson, Jr.) 52 #2727 94A10
- (with Gurdial) Bounds on distortion due to error for rates below and above the channel capacity. *Information and Control* 26 (1974), 272-279. (Suguru Arimoto) 50 #16114 94A15
- (with Mathur, Yogeshwar Dayal) Rate-distortion function under true and inaccurate probability schemes. (Turkish summary) *Istanbul Üni. Fen Fak. Mecm. Ser. A* 39 (1974), 17-26 (1975). (Robert Gray) 53 #7618 94A15
- (with Mehta, F. C.) A generalized sampling theorem for non-stationary random processes. *J. Cybernet.* 4 (1974), no. 3, 87-95. 56 #11499 94A05
- (with Gurdial) A modification of Forney's scheme and bounds on the probability of error and erasure over a discrete channel. *J. Cybernet.* 4 (1974), no. 4, 1-7. 56 #11535 94A15
- (with Taneja, Inder Jeet) On axiomatic characterization of information-theoretic measures. *J. Statist. Phys.* 10 (1974), 337-346. (Pl. Kannappan) 53 #7620 94A15
- (with Autar, Ram) Relative information functions and their type (α, β) generalizations. *Metrika* 21 (1974), 41-50. (L. L. Campbell) 50 #16141 94A20
- (with Autar, Ram) Generalized non-additive information-improvement. *Bull. Calcutta Math. Soc.* 67 (1975), no. 4, 245-250. (Authors' summary) 56 #18122 94A15
- (with Soni, Raminder Singh) Additive and non-additive measures of information of comparison and information improvement. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 11 (1975), no. 7-8, 489-504. (Pl. Kannappan) 52 #7720 94A15
- (with Dass, Bal Kishan) Bounds for burst-error and random-error correcting linear codes. *Indian J. Pure Appl. Math.* 6 (1975), no. 3, 294-302. (Zbl 366 #94027) 58 #33522 94A10
- (with Autar, Ram) On information-improvement. *Metrika* 22 (1975), 27-34. (H. R. Strong) 51 #2778 94A15
- (with Taneja, Inder Jeet) Entropy of type (α, β) and other generalized measures in information theory. *Metrika* 22 (1975), no. 4, 205-215. (George T. Duncan) 53 #2521 94A15
- (with Gupta, H. C.) On non-additive measures of inaccuracy. *Czechoslovak Math. J.* 26(101) (1976), no. 4, 584-595. (Giuseppe Longo) 55 #12309 94A15
- (with Autar, Ram) A functional equation of two variables in information theory. *Indian J. Pure Appl. Math.* 7 (1976), no. 2, 121-129. (J. Aczél) 57 #941 39A30 (94A15)
- Generalized binomial coefficients. *J. Combinatorics Information Syst. Sci.* 1 (1976), no. 3-4, 122-130. (M. E. Cohen) 57 #133 05A10
- (with Bhalla, Bhupinder Kaur) Multiple-cyclic codes. *J. Cybernet.* 6 (1976), no. 3-4, 285-307. (Tai Yang Hwang) 56 #5044 94A10
- Multiple decoding scheme and bounds on the probability of error and erasure over a multiple channel. *Kybernetika (Prague)* 12 (1976), no. 4, 213-222. (John C. Kieffer) 54 #12360 94A10
- (with Gupta, H. C.) Sub additive measures of relative information and inaccuracy. *Metrika* 23 (1976), no. 3, 155-165. (P. N. Rathie) 55 #10144 94A15
- (with Taneja, Inder Jeet) Three generalized-additive measures of entropy. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 13 (1977), no. 7-8, 419-433. (Authors' summary) 58 #26543 94A15
- (with Autar, Ram) On additive information improvement for continuous distributions. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* 12(32) (1977), no. 2, 373-380. (Inder Jeet Taneja) 58 #9803 94A15
- (with Gupta, Sat Narain) A note on special-purpose convolutional codes. *Indian J. Pure Appl. Math.* 8 (1977), no. 3, 320-326. (Bal Kishan Dass) 57 #11926 94A10
- (with Gurdial) Bound on distortion due to error for a minimum distortion decoding scheme. *Indian J. Pure Appl. Math.* 8 (1977), no. 5, 558-566. (Jack K. Wolf) 57 #9307 94A15
- (with Dass, Bal Kishan; Gupta, Sat Narain) A sufficient condition for the existence of high-density-burst correcting linear codes. *Indian J. Pure Appl. Math.* 8 (1977), no. 7, 816-820. (W. E. Clark) 57 #19080 94A10
- (with Goel, S. N.) A note on bounds for burst correcting codes with Lee weight consideration. *Information and Control* 33 (1977), no. 3, 210-216. (I. M. Chakravarti) 56 #2644 94A10
- (with Mittal, D. P.) New non-additive measures of relative information. *J. Combinatorics Information Syst. Sci.* 2 (1977), no. 4, 122-132. (Ram Autar) 57 #15744 94A15
- (with Gupta, Sat Narain) Block-wise error-protecting burst codes with weight constraint. *J. Cybernet.* 7 (1977), no. 1-2, 1-7. (Nguyen-Quang-Duc) 56 #15145 94A10 (94A05)
- (with Kaur, Bhupinder) Phased error correcting perfect codes. *J. Cybernet.* 7 (1977), no. 3-4, 227-247. (Jack K. Wolf) 56 #11517 94A10
- (with Dass, Bal Kishan) On linear codes correcting random and low-density burst errors. *Linear Algebra and Appl.* 16 (1977), no. 1, 5-18. (F. J. MacWilliams) 56 #18105 94A10
- (with Mohan, Man; Mitter, Jagdish) On the mean and variance of an estimate of "useful" information. (French and Italian summaries) *Statistica (Bologna)* 37 (1977), 4, 427-438. (Gordon Cook) 58 #31550 62F10
- (with Mohan, Man) Moments of an M.L.E. of entropy and "useful" information of degree β . *Indian J. Pure Appl. Math.* 9 (1978), no. 10, 987-992. (I. Vajda) 58 #26594A15
- (with Mohan, Man) An exact expression for the mean of an MLE of "useful" information. *Pure Appl. Math. Sci.* 7 (1978), no. 1-2, 29-33. (Authors' summary) 57 #1720 62B10 (94A15)
- (with Goel, S. N.) Bounds over codes correcting bursts having a given Lee-weight intensity. *Rev. Roumaine Math. Pures Appl.* 23 (1978), no. 6, 947-953. (Authors' summary) 58 #20799 94A10
- Sharma, C. K. Fourier series for Fox's H -function of two variables. *Defence Sci. Engng.* 12 (1972), 227-230. (U. C. Jain) 48 #2447 33A35
- (with Gupta, P. M.) On certain integrals involving Fox's H -function. *Indian J. Appl. Math.* 3 (1972), no. 6, 992-995. (C. L. Parihar) 49 #10934 33A35
- (with Gupta, P. M.) On Fourier series for Meijer's G -function of two variables. *Indian J. Pure Appl. Math.* 3 (1972), no. 6, 1073-1077. (C. L. Parihar) 50 #13633A35
- (with Dubey, G. K.) Generalized Jacobi transform. *Labdev-J. Sci. Tech. Part A* (1972), 103. (E. J. Scott) 47 #7350 44A15
- (with Dubey, G. K.) On Fourier series for generalized Fox H -functions. *Math. Student* 40A (1972), 147-156. (C. L. Parihar) 49 #651 33A35
- (with Gupta, P. M.) On certain transformation formulae and Fox's H -function of two variables. II. *Math. Student* 40A (1972), 239-252. (R. G. Buschman) 51 #59933A35
- (with Gupta, P. M.) On certain transformation formulae and Fox's H -function of two variables. I. *Indian J. Pure Appl. Math.* 4 (1973), 844-855. (R. G. Buschman) 51 #5994a 33A35
- On certain finite and infinite summation formulae of generalized Fox H -function. *Indian J. Pure Appl. Math.* 4 (1973), no. 3, 278-286. (R. K. Saxena) 49 #3233A35
- On finite summation for Fox's H -function of two variables. *Labdev-J. Sci. Tech. Part A* 11 (1973), no. 1-2, 4-7. (R. G. Buschman) 53 #13675 33A35
- Generalized Stieltjes transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 16 (1973), 123-129. (B. R. Bhonsle) 48 #9279 44A10
- On Fourier series for generalized Fox functions and their applications. *Indian J. Pure Appl. Math.* 5 (1974), no. 5, 501-507. (C. L. Parihar) 52 #8525 33A35
- An application of generalized Jacobi transform to solve a partial differential equation governing heat conduction in a moving anisotropic rectangular slab. *Indian J. Pure Appl. Math.* 6 (1975), no. 10, 1145-1153. (Author's summary) 57 #11383
- On some integrals involving generalized Fox H -function. III. *Labdev-J. Sci. Tech. Part A* 13 (1975), no. 3-4, 175-180 (1978). (Author's summary) 57 #12929 33A35
- Certain integral representations of the ω -2H transforms. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 18 (1975), no. 3, 251-260. (C. M. Joshi) 56 #33A30
- A generalized Laplace transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 20 (1977), no. 3, 227-235. (Author's summary) 57 #13390 44A10
- On some results involving generalized Laguerre polynomials. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 20 (1977), no. 3, 253-262. (Author's summary) 56 #16022 33A65
- Certain properties of the $3H$ -transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 20 (1977), no. 4, 291-305. (Author's summary) 57 #3755 44A15
- Sharma, C. L. Some functors on Grothendieck exact sequences of type I. *J. Math. Japan* 28 (1976), no. 1, 212-221. (Iqbalunnisa) 52 #10842 18B05
- Sharma, C. M. Time dependent solution of a complex standby redundant system with preemptive repeat repair discipline. *IEEE Trans. Reliab. R-23* (1974), no. 4, 283-287. (D. Hochstädter) 53 #2338 90B25
- Sharma, C. S. (with Rebelo, I.) A new proof of Kato's lemma on Schwinger's variational principle for scattering phase. *Phys. Lett.* 44A (1973), 29-30. (F. R. Halpern) 48 #81.49
- (with Rebelo, I.) A new differential calculus on a complex Banach space with application to variational problems of quantum theory. *Internat. J. Theoret. Phys.* (1975), no. 5, 323-336. (Authors' summary) 58 #18530 58C20 (46G05, 81.49)
- (with SriRankanathan, S.) A coordinate-free treatment of the minimax and maxmini theorems for eigenvalues of self-adjoint operators on a Hilbert space. *J. Math. Anal. Appl.* 48 (1975), no. 12, 1853-1862. (T. Kato) 55 #6224 47A70 (49G20)
- The evaluation of the radial part of the electron-electron interaction terms in atoms. *Molecular Phys.* 30 (1975), no. 3, 959-962. 55 #7171 81.33
- (with SriRankanathan, S.) A coordinate-free treatment of Bazzley lower bound for the eigenvalues of atomic Hamiltonians. *J. Phys. A* 9 (1976), no. 6, 889-895. (N. Bessis) 57 #15081 81.47
- Correlation energies in atoms. *Phys. Rep.* 26C (1976), no. 1, 67 pp. (M. Mariani) 54 #4401 81.35
- (with Mukherjee, M. K.) An extended characterisation theorem for quantum logic. *J. Phys. A* 10 (1977), no. 10, 1665-1671. (A. R. Marlow) 57 #18527 81.06 (06A05)
- Sharma, D. K. (with Udawadia, F. E.) Some uniqueness results related to building structure identification. *SIAM J. Appl. Math.* 34 (1978), no. 1, 104-118. (Alan Bradbury) 57 #5256 93B30 (70.00)
- Sharma, D. N. (with Singh, K. P.) Curvature collineations in certain gravitational space-times. *General Relativity and Gravitation* 6 (1975), no. 4, 397-408. (Elisa Udeschini Brinis) 54 #2111 83.53
- (with Singh, K. P.) Ricci and Maxwell collineations in a null electromagnetic field. *J. Phys. A* 8 (1975), no. 12, 1875-1881. (Barry Aronson) 53 #2284 83.53
- (with Singh, K. P.) Some collineation properties of null electromagnetic fields. *Progr. Math. (Allahabad)* 10 (1976), no. 1, 43-49. (Gérard A. Maugin) 55 #7283.53
- Sharma, Darbari L. (with Farooqui, A. S.) Singular solution of a water wave problem.

- ench, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **11** (1973), no. 167-278. (R. M. Gundersen) **56** #10387 76.35
(with Farooqui, A. S.) A theorem on electrical induction. *SIAM J. Appl. Math.* **26** (1974), 428-430. (Alexej Sitenko) **49** #1925 78.31
(with Kanwal, Ram P.) Singularity methods for elastostatics. (French summary) *J. Elasticity* **6** (1976), no. 4, 405-418. (A. Radu) **58** #19568 73.35
- 1. Divakar** Asymptotic equivalence of two estimators for an exponential family. *Ann. Statist.* **1** (1973), 973-980. (H. E. Reinhardt) **49** #1649 62E20
Some admissible estimators of scale parameter and natural parameter in an exponential family. *Sankhyā Ser. A* **35** (1973), 85-88. (Author's summary) **55** #4452 C15
- 2. A** note on S. Karlin's admissibility result for extreme value density: "Admissibility estimation with quadratic loss" (Ann. Math. Statist. **29** (1958), 406-436). *J. Indian Statist. Assoc.* **13** (1975), 67-69. (James Berger) **53** #14741 62C15
Estimation of the reciprocal of the scale parameter in a shifted exponential distribution. *Sankhyā Ser. A* **39** (1977), no. 2, 203-205. (Glen Meeden) **58** #3145 C15
- 3. A. G. C.** Hydromagnetic stability of spiral flows with density stratification. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **11** (1973), no. 3, 7-38.4. (R. R. Gold) **56** #4406 76.45 (85.45)
- 4. B. G. D.** (with Prusty, S.) Power system transient stability regions: transient stability limits involving saliency and the optimized Szegő's Liapunov function. *Internat. J. Control* (1) **19** (1974), 373-384. (A. N. V. Rao) **50** #6596 93D05
- 5. H. G.** (with Prakash, Anand) Flow of a second-order fluid in a curved pipe. *Indian J. Pure Appl. Math.* **8** (1977), no. 5, 546-557. (J. C. Burns) **57** #11318 76.35
- 6. H. N.** Convergence and inversion theorems for a generalized Weierstrass transform. *Ranchi Univ. Math. J.* **3** (1972), 67-81. (B. S. Tavathia) **47** #9188 4A15
- 7. I. A.** Evaluation of definite integrals by the method of convolution transformation. *Indian J. Math.* **15** (1973), 13-16. (E. Gesztelyi) **51** #1304 44A35
- 8. H. R.** (with Manocha, H. L.) A transformation formula for triple series. *Univ. Tucumán Rev. Ser. A* **20** (1970), 75-79. (F. P. Cass) **46** #404 33A30
- 9. I. C.** (with Swarup, K.) On duality in linear fractional functionals programming. (German summary) *Z. Operations Res. Ser. A-B* **16** (1972), A91-A100. (I. M. Lancu-Minasian) **46** #8665 90C30
- 10. J. A.** Transportation technique in non-linear fractional programming. *Trabajos Estadist.* **2** (1973), no. 1-2, 131-139. (J. Stoer) **50** #1730 90C30
(with Swarup, Kanti) A primal-like algorithm for zero-one integer fractional programming problem. *Trabajos Estadist.* **24** (1973), no. 3, 123-136. (D. Hochstädter) **2** #7541 90C10
- 11. L. D.** (with Trivedi, Hari Karan Nath) On the Einstein's law of gravitation in insler space. *Ganita* **23** (1972), no. 1, 13-18. (H. Rund) **47** #6261 83.53 (53B40)
(with Rastogi, S. C.) A study of some curves in a subspace of a Finsler space. *Ganita* **24** (1973), no. 1, 49-58. (R. B. Misra) **51** #4095 53B40
- 12. J. K.** (with Agrawal, S. C.) Time-cost trade-off in a transportation problem. *Acta Ci. Indica* **2** no. 2, 152-160 (1976). (Der-San Chen) **54** #6919 90B10
(with Agrawal, S. C.) A fixed-charge transportation problem. *Acta Ci. Indica* **2**, no. 278-280 (1976). (Vincențiu Dumitru) **56** #14730 90C30
(with Sharma, M. M.; Agrawal, S. C.) A particular convex programming problem and transportation technique. *Acta Ci. Indica* **3** (1977), no. 4, 353-356. (S. P. Aggarwal) **3** #20438 90C25
(with Swarup, Kanti) Indefinite quadratic programming and transportation technique. *Indian J. Pure Appl. Math.* **8** (1977), no. 9, 1029-1031. (B. Ross Barmish) **3** #4327 90C20
(with Swarup, Kanti) Time minimizing transportation problems. *Proc. Indian Acad. Sci. Sect. A* **86** (1977), no. 6, 513-518. (Jacques A. Ferland) **57** #15475 90C35
Extensions and special cases of transportation problem: a survey. *Indian J. Pure Appl. Math.* **9** (1978), no. 9, 928-940. (Author's summary) **58** #20494 90C99
- 13. A** note on the time minimizing solid transportation problem. *Pure Appl. Math. Sci.* (1978), no. 1-2, 41-42. (Author's summary) **57** #2543 90C05 (90C50)
- 14. Jai Prakash** On Euler summability of orthogonal series. *Indian J. Math.* **12** (1970), 107-110. (H. P. Dikshit) **46** #2307 40G05
(with Srivastava, Shambhunath) A few transformations applicable to the Lane-Emden equation. *Progr. Math. (Allahabad)* **4** (1970), no. 1, 37-42. (J. F. Clarke) **7** #7998 76.34
On the Nörlund summability of orthogonal series. *Progr. Math. (Allahabad)* **4** (1970), no. 2, 42-45. (L. Leindler) **46** #4059 40G05
On the (N, p_n) summability of orthogonal series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 207-212. (D. P. Gupta) **50** #886 42A60
(with Dwivedi, A. P.) Simultaneous dual integral equations associated with H -functions. *Proc. Nat. Acad. Sci. India Sect. A* **46** (1976), no. 3, 205-212. (Authors' summary) **58** #1293 33A30
- 15. A** integral theorem concerning with minimal properties of plane-symmetric polytropes. *Acta Ci. Indica* **3**, no. 2, 160-166 (1977). (Attay Kovetz) **57** #1251 2A40
(with Dwivedi, A. P.; Lal, Mange) Axisymmetric punch problem in an infinite elastic thick plate. *Acta Ci. Indica* **3** (1977), no. 4, 343-345. (G. Paria) **57** #14776 3.45
- 16. K. D.** (with Gupta, R. G.) A one-step method for the numerical solution of ordinary non-linear second-order differential equations based upon Lobatto four-point quadrature formula. *J. Austral. Math. Soc.* **15** (1973), 193-201. (F. Stenger) **48** #10127 65L05
- 17. K. K.** (with Chaki, M. C.) A particular conformally symmetric space. *Colloq. Math.* **35** (1976), no. 1, 87-90. (Dominic S. P. Leung) **53** #11518 (E 57 #7423) 3B20
(with Chaki, M. C.) Corrections to: "A particular conformally symmetric space" *Colloq. Math.* **35** (1976), no. 1, 87-90. *Colloq. Math.* **38** (1977), no. 1, 169. (Editors) **7** #7423 53B20
- 18. K. L.** (with Agrawal, H. L.) On construction of two-way designs. *J. Indian Statist. Assoc.* **13** (1975), 1-31. (M. N. Das) **54** #3993 62K10 (05B05)
(with Agrawal, H. L.) On construction of a series of two-way designs. *Calcutta Statist. Assoc. Bull.* **25** (1976), no. 97-100, 139-150 (1977). (A. Hedayat) **58** #13532 62K10
- 19. Sharma, K. L. S.** (with Mahalanabis, Amarendra K.) Harmonic analysis via Kalman filtering technique. *Proc. IEEE* **61** (1973), 391-392. (Authors' summary) **55** #14392 93E25
- 20. Sharma, L. K.** (with Varma, R. C.) Derivation of a few solvable potentials for the Schrödinger equation. *Indian J. Pure Appl. Phys.* **8** (1970), 66-69. (Authors' summary) **51** #9687 81.35
Potentials from modified Mathieu equation. *Proc. Indian Nat. Sci. Acad. Part A* **36** (1970), 230-238. (Editors) **45** #1502a 81.33
Solvable potentials from associated Legendre equation. *Proc. Indian Nat. Sci. Acad. Part A* **36** (1970), 239-245. (Editors) **45** #1502b 81.33
(with Singh, Fateh) Coulomb wave functions in terms of Jacobi polynomial and generalized confluent hypergeometric functions. *Indian J. Pure Appl. Math.* **3** (1972), no. 1, 142-147. (Mary L. Boas) **45** #8890 33A60
On redundant poles of the s -matrix. *Indian J. Pure Appl. Math.* **5** (1974), no. 6, 568-571. (Lindsay Dodd) **53** #12285 81.34
(with Choubey, Jyoti) Perturbation theory for large coupling constants. *Pramāṇa* **9** (1977), no. 3, 303-309. (Authors' summary) **56** #14258 81.35
- 21. Sharma, M. L.** (with Bondyopadhyay, Debdas) Fredholm approximants for the Lippmann-Schwinger equation. *J. Phys. A* **7** (1974), L57-L60. (Authors' summary) **53** #9691 65R05
See also Sundaramoorthy, G., **58** #26766
- 22. Sharma, M. M.** On absolute Cesàro summability of ultraspherical series. *Vikram* **13** (1969), no. 1-3, 131-142. (Author's summary) **56** #6273 42A60
On the absolute Nörlund summability of a factored ultraspherical series. *Vikram* **16** (1972), no. 1-3, 69-85. (D. P. Gupta) **56** #12754 42A24
On absolute Cesàro summability of Laplace series. *Math. Education* **8** (1974), A47-A52. (D. P. Gupta) **50** #878 42A24
On the absolute Nörlund summability of a factored ultraspherical series. *Nanta Math.* **7** (1974), no. 1, 18-29. (D. P. Gupta) **50** #5346 42A56 (33A45)
(with Chandra, Prem) On the convergence of series of Legendre polynomials. *Indian J. Pure Appl. Math.* **6** (1975), no. 3, 264-275. (P. Anandani) **55** #10953 42A56 (40G05)
On the absolute Cesàro summability of a series related to an ultraspherical series. *Math. Education* **9** (1975), no. 4, A81-A92. (D. P. Gupta) **53** #6220 42A56 (42A28)
(with Chandra, Prem) Absolute Riesz summability factors for Fourier series. *Nanta Math.* **8** (1975), no. 2, 1-8. (Shri Nivas Bhatt) **54** #3269 42A28
On Nörlund summability of Fourier-Jacobi series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 2, 143-152. (P. D. Kathal) **55** #972 42A56
(with Sharma, J. K.; Agrawal, S. C.) A particular convex programming problem and transportation technique. *Acta Ci. Indica* **3** (1977), no. 4, 353-356. (S. P. Aggarwal) **58** #20438 90C25
- 23. Sharma, N. K.** Spectra of conservative matrices. *Proc. Amer. Math. Soc.* **35** (1972), 515-518. (Kenneth A. Jukes) **46** #5891 40H05
Hausdorff operators. *Acta Sci. Math. (Szeged)* **35** (1973), 165-167. (D. Trutt) **49** #3588 47B37
Isolated points of the spectra of conservative matrices. *Proc. Amer. Math. Soc.* **51** (1975), 74-78. (F. W. Hartmann) **51** #8670 40C05 (15A18)
Banach algebra of conservative Hausdorff matrices. *Indiana Univ. Math. J.* **25** (1976), no. 11, 1035-1038. (F. W. Hartmann) **54** #10925 40H05
- 24. Sharma, O. P.** On certain kernel functions. *Proc. Nat. Acad. Sci. India Sect. A* **36** (1966), 649-660. (K. C. Gupta) **46** #5952 44A15
On self-reciprocal functions. *Proc. Nat. Acad. Sci. India Sect. A* **36** (1966), 719-733. (B. L. Sharma) **46** #9662 44A15
On self-reciprocal functions involving two complex variables. *Ganita* **22** (1971), no. 1, 59-76. (P. N. Rathie) **45** #7402 44A20
Certain infinite integrals involving H -function and MacRobert's E -function. *Labdev-J. Sci. Tech. Part A* **10** (1972), 9-13. (S. D. Bajpai) **47** #8927 33A35
A model for queues in series. *J. Appl. Probability* **10** (1973), 691-696. (C. Mohan) **51** #9260 60K25
- 25. Sharma, Onkar P.** A syntax-specification system for patterns. *J. Franklin Inst.* **295** (1973), 39-58. (R. Jakubowski) **58** #14010 68A45
- 26. Sharma, P. L.** (with Kathal, P. D.) A study of the matrix method of summability of the trigonometrical series. *Rend. Circ. Mat. Palermo* (2) **19** (1970), 243-270 (1971). (G. M. Petersen) **47** #9146 42A24
(with Sharma, R. M.) On the strong (L) summability of trigonometrical series. *Rend. Circ. Mat. Palermo* (2) **19** (1970), 281-293 (1971). (Gokulananda Das) **46** #5918 42A24
Proximity bases and subbases. *Pacific J. Math.* **37** (1971), 515-526. (Douglas Harris) **46** #4488 54E05
(with Naipally, S. A.) Functionally determined proximities and uniformities. *Proceedings of the University of Oklahoma Topology Conference Dedicated to Robert Lee Moore (Norman, Okla., 1972)*, pp. 234-240. *Univ. of Oklahoma, Norman, Okla., 1972.* (William Lindgren) **50** #8450 54E05
(with Naipally, S. A.) On two problems of Harris concerning RC-proximities. *Proc. Amer. Math. Soc.* **32** (1972), 312. (Douglas Harris) **45** #1110 54E05
Lattice-invariant topological properties. *Proc. Amer. Math. Soc.* **34** (1972), 565-569. (K. N. Sigmon) **45** #4345 54D20
Non-metrizable uniformities and proximities on metrizable spaces. *Canad. J. Math.* **25** (1973), 979-981. (M. G. Murdeshwar) **48** #1174 54Exx
(with Hunsaker, W. N.) Nearness structures compatible with a topological space. *Arch. Math. (Basel)* **25** (1974), 172-178. (H. Herrlich) **49** #6164 54E05
(with Jaiswal, Anuradha; Singh, Bijendra) Weakly N -almost periodic functions. *Math. Japon.* **19** (1974), no. 3, 263-266. (H. Burkili) **55** #3677 42A84
(with Jaiswal, Anuradha; Singh, Bijendra) A note on almost periodic functions. *Math. Japon.* **19** (1974), no. 3, 279-282. (A. Precupanu) **53** #8800 43A60
(with Hunsaker, W. N.) Proximity spaces and topological functors. *Proc. Amer.*

- Sharot, Trevor The generalized jackknife: finite samples and subsample sizes. *J.*

- ist. Assoc.* **71** (1976), no. 354, 451-454. (P. W. Mielke, Jr.) **53** #11830 62D05
- Charles R. See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, **52** #9427
- David H. (with Goldin, G. A.; Grodnik, J.; Powers, Robert T.) Nonrelativistic quantum algebra in the N/V limit. *J. Mathematical Phys.* **15** (1974), 88-100. (P. P. Sankaran) **50** #15695 81A46
- (with Moniz, E. J.) Absence of runaways and divergent self-mass in nonrelativistic quantum electrodynamics. *Phys. Rev. D* (3) **10** (1974), 1033-1036. (Authors' summary) #12298 81C35
- (with Menikoff, Ralph) Representations of a local current algebra: their dynamical termination. *J. Mathematical Phys.* **16** (1975), no. 12, 2341-2352. (B. Misra) #2051 82A46
- (with Menikoff, Ralph) Approximate representations of a local current algebra. *J. Mathematical Phys.* **16** (1975), no. 12, 2353-2360. (B. Misra) **54** #2052 82A46
- (with Menikoff, Ralph) A gauge invariant formulation of quantum electrodynamics with local currents. *J. Mathematical Phys.* **18** (1977), no. 3, 471-482. (Gerald A. Goldin) **55** #9759 81A46
- (with Menikoff, Ralph) A derivation of the virial expansion with application to idealized quantum field theory. *J. Mathematical Phys.* **19** (1978), no. 1, 135-150. (G. Goldstein) **57** #2369 82A46 (81A46)
- Henry, Jr. Enumeration of transitive, step-type relations. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 365-371. (V. Krishnamurthy) **50** #130 05A15
- Enumeration of vacuously transitive relations. *Discrete Math.* **4** (1973), 185-196. (E. Palmer) **47** #47 05A15
- Locally complete graphs. *Pacific J. Math.* **47** (1973), 243-250. (J. W. Moon) #1 #2002 05C99
- (with Bang, Chang M.) An elementary proof of Moon's theorem on generalized tournaments. *J. Combinatorial Theory Ser. B* **22** (1977), no. 3, 299-301. (Colin J. H. McDiarmid) **56** #176 05C20
- J. Franklin (with Welling, Priscilla) A simulation study of the error produced by approximation in separable concave programming. *Computational practice in mathematical programming*, 133-141. *Math. Programming Studies*, Vol. 4, North-Holland, Amsterdam, 1975. (B. Bercanu) **54** #6952 90C20
- (with Wagner, Michael H.) Generalized programming by linear approximation of the dual gradient: equality constraints. *Naval Res. Logist. Quart.* **22** (1975), 145-154. (R. W. Cottle) **51** #9791 90C05
- (with Wagner, Michael H.) Generalized programming by linear approximation of the dual gradient: convex programming case. *Management Sci.* **23** (1976/77), no. 12, 1307-1313. (J. Borwein) **58** #32961 90C25
- J. J. (with Moore, E.) Analysis of unsteady flow in open channels. *Internat. J. Math. Ed. Sci. Tech.* **7** (1976), no. 4, 377-393. (David F. Griffiths) **56** #14127 76F55
- Robert T. (with Patera, Jiri) Angular-momentum basis for a general J^n configuration. (Italian and Russian summaries) *Nuovo Cimento A* (11) **12** (1972), 665-376. (A. O. Barut) **48** #13034 81I22
- (with Kalnins, E. G.; Patera, Jiri; Winternitz, P.) Two-variable Galilei-group expansions of nonrelativistic scattering amplitudes. *Phys. Rev. D* (3) **8** (1973), 2552-2572. (Authors' summary) **50** #15640 81I22
- (with Kalnins, E. G.; Patera, Jiri; Winternitz, P.) Potential scattering and Galilei-invariant expansions of scattering amplitudes. *Phys. Rev. D* (3) **8** (1973), 527-3538. (Authors' summary) **50** #15656 81I31
- (with Hongoh, M.; Tilley, D. E.) Explicit $O(5)$ Wigner coefficients. *J. Mathematical Phys.* **15** (1974), 782-788. (A. Hartkämper) **51** #2504 81I22
- (with Patera, Jiri; Winternitz, P.) Nagel-Moshinsky operators for discrete unitary representations of $U(p, q)$. (Spanish summary) *Rev. Mexicana Fis.* **23** (1974), no. 1-2, 1-98. (From the authors' summary) **57** #6308 22E70
- (with Kalnins, E. G.; Patera, Jiri; Winternitz, P.) Elementary particle reactions and the Lorentz and Galilei groups. *Group theory and its applications*, Vol. III, pp. 369-464. Academic Press, New York, 1975. (Philip Huddleston) **56** #10495 81I22
- (with Moshinsky, Marcos; Patera, Jiri; Winternitz, P.) Everything you always wanted to know about $SU(3) \supset O(3)$. *Ann. Physics* **95** (1975), no. 1, 139-169. (L. O'Riifeartaigh) **53** #7253 81I22
- Internal-labeling operators. *J. Mathematical Phys.* **16** (1975), no. 10, 2050-2053. (L. O'Riifeartaigh) **52** #4865 81I22
- (with Patera, Jiri; Winternitz, P.; Zassenhaus, Hans J.) Casimir operators of subalgebras of the Poincaré Lie algebra and of real Lie algebras of low dimension. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 500-515. *Lecture Notes in Phys.*, Vol. 50, Springer, Berlin, 1976. (J. Niederle) **58** #5801 17B05 (17B35, 22E45)
- (with Patera, Jiri; Winternitz, P.; Zassenhaus, Hans J.) Subgroups of the similitude group of three-dimensional Minkowski space. (French summary) *Canad. J. Phys.* **54** (1976), no. 9, 950-961. (Vittorio Cantoni) **53** #9917 81I22
- (with Chacón, E.; Moshinsky, Marcos) $U(5) \supset O(5) \supset O(3)$ and the exact solution for the problem of quadrupole vibrations of the nucleus. *J. Mathematical Phys.* **17** (1976), no. 5, 668-676. (S. N. Biswas) **56** #10487 81I22
- (with Patera, Jiri; Winternitz, P.; Zassenhaus, Hans J.) Subgroups of the Poincaré group and their invariants. *J. Mathematical Phys.* **17** (1976), no. 6, 977-985. (S. Sankaran) **53** #10983 22E43
- (with Patera, Jiri; Winternitz, P.; Zassenhaus, Hans J.) Invariants of real low dimension Lie algebras. *J. Mathematical Phys.* **17** (1976), no. 6, 986-994. (J. F. Cornwell) **53** #8164 17B05
- (with Peccia, A.) Number of independent missing label operators. *J. Mathematical Phys.* **17** (1976), no. 7, 1313-1314. (Vittorio Cantoni) **53** #15147 81I22
- (with McKay, W.; Patera, Jiri) Branching rules and Clebsch-Gordan series for E_8 . *J. Mathematical Phys.* **17** (1976), no. 8, 1371-1375. (Authors' summary) **53** #9916 81I22
- (with Boyer, Charles P.; Winternitz, P.) Symmetry breaking interactions for the time dependent Schrödinger equation. *J. Mathematical Phys.* **17** (1976), no. 8, 1439-1451. (U. Cattaneo) **54** #4399 81I35
- (with Patera, Jiri; Winternitz, P.; Zassenhaus, Hans J.) Continuous subgroups of the fundamental groups of physics. III. The de Sitter groups. *J. Mathematical Phys.* **18** (1977), no. 12, 2259-2288. (S. Sankaran) **56** #14230 81I22
- (with Gaskell, R.; Peccia, A.) Generating functions for polynomial irreducible tensors. *J. Mathematical Phys.* **19** (1978), no. 4, 727-733. (U. Cattaneo) **57** #6305 22E70
- See also *Group theoretical methods in physics*, **56** #14208
- Sharp, Rodney Y. Cousin complex characterizations of two classes of commutative Noetherian rings. *J. London Math. Soc.* (2) **3** (1971), 621-624. (M. Nagata) **45** #3392 13E05
- Finitely generated modules of finite injective dimension over certain Cohen-Macaulay rings. *Proc. London Math. Soc.* (3) **25** (1972), 303-328. (W. V. Vasconcelos) **46** #5315 13H10
- (with Macdonald, I. G.) An elementary proof of the non-vanishing of certain local cohomology modules. *Quart. J. Math. Oxford Ser.* (2) **23** (1972), 197-204. (S. Yuan) **45** #8646 13C99
- The Euler characteristic of a finitely generated module of finite injective dimension. *Math. Z.* **130** (1973), 79-93. (A. V. Geramita) **47** #8518 13D99
- The Cousin complex and integral extensions of Noetherian domains. *Proc. Cambridge Philos. Soc.* **73** (1973), 407-415. (L. J. Ratliff, Jr.) **47** #222 13G05 (18G05)
- The construction of a module of finite projective dimension from a finitely generated module of finite injective dimension. *Comment. Math. Helv.* **50** (1975), 15-26. (R. M. Fossum) **51** #5577 13C15
- Ramification indices and injective modules. *J. London Math. Soc.* (2) **11** (1975), no. 3, 267-275. (Robert Long) **55** #338 13C10
- Dualizing complexes for commutative Noetherian rings. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), no. 3, 369-386. (Melvin Hochster) **52** #3138 13D99 (14B15)
- Some results on the vanishing of local cohomology modules. *Proc. London Math. Soc.* (3) **30** (1975), 177-195. (J. L. Dawson) **52** #379 13D99 (14B15)
- A note on Northcott's work on generalized Koszul complexes and Artinian modules. *Quart. J. Math. Oxford Ser.* (2) **26** (1975), 19-22. (H. Kurke) **52** #13801 13C15 (13D05)
- The effect on associated prime ideals produced by an extension of the base field. *Math. Scand.* **38** (1976), no. 1, 43-52. (L. C. A. van Leeuwen) **53** #5557 13A15
- Secondary representations for injective modules over commutative Noetherian rings. *Proc. Edinburgh Math. Soc.* (2) **20** (1976), no. 2, 143-151. (D. Kirby) **54** #2639 13C10
- The dimension of the tensor product of two field extensions. *Bull. London Math. Soc.* **9** (1977), no. 1, 42-48. (John D. Leadley) **55** #10435 12F99
- Acceptable rings and homomorphic images of Gorenstein rings. *J. Algebra* **44** (1977), no. 1, 246-261. (Idun Reiten) **56** #348 13H10
- Simplifications in the theory of tensor products of field extensions. *J. London Math. Soc.* (2) **15** (1977), no. 1, 48-50. (L. C. A. van Leeuwen) **55** #8026 13H10 (12F99)
- A note on the dimensions of commutative Noetherian domains. *J. London Math. Soc.* (2) **15** (1977), no. 3, 415-418. (W. V. Vasconcelos) **56** #2989 13C15
- (with Vámos, Peter) The dimension of the tensor product of a finite number of field extensions. *J. Pure Appl. Algebra* **10** (1977/78), no. 3, 249-252. (Paul M. Eakin) **57** #16271 12F20
- A commutative Noetherian ring which possesses a dualizing complex is acceptable. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 2, 197-213. (Maria Grazia Marinari) **56** #11986 13D99 (13E05)
- Local cohomology and the Cousin complex for a commutative Noetherian ring. *Math. Z.* **153** (1977), no. 1, 19-22. (Maria Grazia Marinari) **56** #450 18H20
- On the fibre rings of a formal power series extension. *Quart. J. Math. Oxford Ser.* (2) **28** (1977), no. 112, 487-494. (Daniel D. Anderson) **57** #9689 13E05
- (with Hall, Janet E.) Dualizing complexes and flat homomorphisms of commutative Noetherian rings. *Math. Proc. Cambridge Philos. Soc.* **84** (1978), no. 1, 37-45. (W. Vogel and P. Schenzel) **58** #648 13E05
- Sharp, Stephen A. Corrections to likelihood ratio tests of hypotheses concerning the parameters of Markov chains. *Biometrika* **62** (1975), no. 3, 595-598. (J. Gani) **53** #4418 62M05
- Sharp, W. T. (with Biedenharn, L. C.; de Vries, E.; van Zanten, A. J.) On quasi-ambivalent groups. *Canad. J. Math.* **27** (1975), 246-255. (Y. Lehrer-Ilamed) **52** #3438 22E70
- Sharpe, Charles B. An inverse problem associated with the discrete Schrödinger equation. *SIAM J. Appl. Math.* **32** (1977), no. 2, 405-417. (Hans Kaper) **55** #4700 65L99
- Sharpe, D. W. (with Vámos, Peter) ★Injective modules. Cambridge Tracts in Mathematics and Mathematical Physics, No. 62. Cambridge University Press, London-New York, 1972. xii + 190 pp. (R. A. Wiegand and S. M. Wiegand) **50** #13153 16A52 (13C10)
- Grade and the theory of linear equations. *Linear Algebra and Appl.* **18** (1977), no. 1, 25-32. (Lawrence S. Levy) **58** #16713 15A05 (13C99)
- Sharpe, F. R. (with Snyder, Virgil; Black, Amos H.; Coble, Arthur B.; Dye, Leaman A.; Emch, Arnold; Lefschetz, Solomon; Sisam, Charles H.) ★Selected topics in algebraic geometry. Second edition. Chelsea Publishing Co., New York, 1970. v + 484 pp. (From the publisher's description) **45** #21 01A75 (14-00)
- See also *Demographic genetics*, **52** #10091
- Sharpe, G. E. On the $(m+1)$ -terminal resistive-network problem. *Proc. Inst. Elec. Engrs.* **116** (1969), 503-509. (F. Lorrain) **46** #8778 94A20
- Sharpe, Kevin J. Two properties of R^N with a compact group topology. *Proc. Amer. Math. Soc.* **34** (1972), 267-269. (A. C. M. van Rooij) **45** #2083 22C05
- Compatible topologies and continuous irreducible representations. *Pacific J. Math.* **52** (1974), 227-231. (M. Rajagopalan) **50** #2390 22D10
- Compatible group topologies. *Proc. Amer. Math. Soc.* **53** (1975), no. 1, 237-239. (A. C. M. van Rooij) **53** #690 22A05
- Relating group topologies by their continuous points. *Proc. Amer. Math. Soc.* **57** (1976), no. 1, 179-182. (G. C. Elton) **54** #10475 22B99
- Sharpe, Michael J. Exact multiplicative functionals in duality. *Indiana Univ. Math. J.* **21** (1971/72), 27-60. (From the author's introduction) **55** #9287 60J40
- (with Getoor, Ronald K.) Conformal martingales. *Invent. Math.* **16** (1972), 271-308. (J. L. Doob) **46** #4603 60G45

- Discontinuous additive functionals of dual processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **21** (1972), 81-95. (F. B. Knight) **46** #4621 60J55
(with Gettoor, Ronald K.) Last exit times and additive functionals. *Ann. Probability* **1** (1973), 550-569. (S. J. Taylor) **50** #5951 60J55
(with Gettoor, Ronald K.) Last exit decompositions and distributions. *Indiana Univ. Math. J.* **23** (1973/74), 377-404. (Martin L. Silverstein) **48** #12654 60J45
A class of operators on excessive functions. *Pacific J. Math.* **44** (1973), 361-369. (J. Walsh) **47** #4344 60J45
(with Gettoor, Ronald K.) Balayage and multiplicative functionals. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **28** (1973/74), 139-164. (Jacques Azéma) **51** #9229 60J40
Homogeneous extensions of random measures. *Séminaire de Probabilités, IX (Seconde Partie, Univ. Strasbourg, Strasbourg, années universitaires 1973/1974 et 1974/1975)*, pp. 496-514. *Lecture Notes in Math.*, Vol. 465, Springer, Berlin, 1975. (J. Walsh) **55** #1505 60J55
(with Gettoor, Ronald K.) The Ray space of a right process. (French summary) Collection of articles dedicated to Marcel Brelot on the occasion of his 70th birthday. *Ann. Inst. Fourier (Grenoble)* **25** (1975), no. 3-4, xv, 207-233. (M. G. Šur) **53** #9396 60J50
Sharpe, Richard On the structure of the unitary Steinberg group. *Ann. of Math.* (2) **96** (1972), 444-479. (M. S. Raghunathan) **47** #8617 16A54 (57D65)
Surgery and unitary K_2 . *Algebraic K-theory, III: Hermitian K-theory and geometric applications (Proc. Conf. Seattle Res. Center, Battelle Memorial Inst., 1972)*, pp. 464-470. *Lecture Notes in Math.*, Vol. 343, Springer, Berlin, 1973. (A. A. Ranicki) **52** #4315 57D65 (18F25)
Surgery on compact manifolds: The bounded even dimensional case. *Ann. of Math.* (2) **98** (1973), 187-209. (J. Shaneson) **50** #1268 57D65
On the ovals of even-degree plane curves. *Michigan Math. J.* **22** (1975), no. 3, 285-288 (1976). (V. M. Harlamov) **52** #10748 14H45
(with Hsiang, Wu Chung) Parametrized surgery and isotopy. *Pacific J. Math.* **67** (1976), no. 2, 401-459. (D. Burghleale) **58** #13091 57E05 (57D60, 58D05)
Sharpe, William F. See Fama, Eugene F., **55** #9855
Sharpley, Robert Interpolation theorems for compact operators. *Indiana Univ. Math. J.* **22** (1972/73), 965-984. (Editors) **55** #11023 46E30 (46M35)
Spaces $\Lambda_2(X)$ and interpolation. *J. Functional Analysis* **11** (1972), 479-513. (M. Cotlar) **49** #9611 46E30
Characterization of intermediate spaces of M_s spaces. *Linear operators and approximation, II (Proc. Conf., Math. Res. Inst., Oberwolfach, 1974)*, pp. 205-214. *Internat. Ser. Numer. Math.*, **25** Birkhäuser, Basel, 1974. (Editors) **57** #1110 46E35 (46M35)
Interpolation of operators for Λ spaces. *Bull. Amer. Math. Soc.* **80** (1974), 259-261. (J. Friberg) **49** #9621 46E35
Interpolation of n pairs and counterexamples employing indices. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. *J. Approximation Theory* **13** (1975), 117-127. (S. D. Riemenschneider) **52** #11569 46E30
Fractional integration in Orlicz spaces. *Proc. Amer. Math. Soc.* **59** (1976), no. 1, 99-106. (E. R. Love) **53** #14107 46E30 (26A33)
Multilinear weak type interpolation of mn -tuples with applications. *Studia Math.* **60** (1977), no. 2, 179-194. (Colin Bennett) **55** #13230 46E30 (46M35, 44A25, 42A18)
Sharshekeev, O. Sh. See Šaršekeev, O. Š.
Sharyshev, O. O. See Šarišev, O. O.
Shastri, A. R. On the images of tori under degree one maps. *J. Indian Math. Soc. (N.S.)* **39** (1975), 227-243 (1976). (Nelson L. Max) **54** #6129 55D15
On nonapproximability of $K(\pi, n)$ -spaces by homogeneous spaces. *J. Math. Kyoto Univ.* **16** (1976), no. 3, 675-682. (M. Mimura) **56** #6689 57F20
Sums are not products. *J. London Math. Soc.* (2) **15** (1977), no. 2, 361-368. (C. L. Seebeck, III) **56** #9550 57D60
Shastri, Ajay Mitra Sanskrit literature known to al-Birūnī. With discussion. Proceedings of the Symposium on al-Birūnī and Indian Sciences (New Delhi, 1971). *Indian J. History Sci.* **10** (1975), no. 2, 111-138, 159. (A. I. Volodarskii) **57** #5577 01A30
Shastri, C. S. (with Rajagopal, A. K.) The Lorentz group symmetry of the hydrogen atom and the Coulomb T matrix. *J. Mathematical Phys.* **12** (1971), 2387-2394. (D. B. Fairlie) **45** #1507 81A5
Evaluation of the integral $\int_0^\infty (x^2 + k^2)^{-(\alpha+1)} x^p - J_\alpha(ax) J_\alpha(ax) dx$. *Bull. Calcutta Math. Soc.* **66** (1974), no. 2, 87-90. (A. de Castro Brzezicki) **52** #14406 33A40
(with Marwadi, P. R.) A bound on the number of bound states in the Schrödinger equation. *Pramāṇa* **7** (1976), no. 6, 415-422. (Authors' summary) **55** #5015 81J35 (35P15)
Shatas, Romas A. See Transactions: Conference of Army Mathematicians, **49** #4735 and Transactions: Conference of Army Mathematicians, **49** #4737
Shatilov, V. P. See Šatilov, V. P.
ibn al-Shatir See Livingston, John W., **56** #2734; Rosińska, Grażyna, **57** #9406; Janin, Louis; et al., **58** #26745 and Hartner, Willy, **58** #26783
Shatoff, H. D. (with Nemat-Nasser, Siavouche) A consistent numerical method for the solution of nonlinear elasticity problems at finite strains. *SIAM J. Appl. Math.* **20** (1971), 462-481. (F. Odeh) **45** #4733 73G5
Shatoff, Larry D. Excluded minors of combinatorial geometries. *Indiana Univ. Math. J.* **22** (1972/73), 827-832. (Author's summary) **54** #7297 05B35
Binary multiples of combinatorial geometries. *Rend. Sem. Mat. Univ. Padova* **48** (1972), 95-104 (1973). (R. K. Guy) **49** #10582 05B35
Binary multiples of combinatorial geometries. II. *Rend. Sem. Mat. Univ. Padova* **49** (1973), 237-240. (R. K. Guy) **49** #10583 05B35
Shatrov, A. D. See Šatrov, A. D.
Shatz, Stephen S. ★ Profinite groups, arithmetic, and geometry. *Annals of Mathematics Studies*, No. 67. Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1972. x + 252 pp. (F. Oort) **50** #279 12B20 (12A65, 12B25, 12G10, 14L20)
(with Hochsmann, K.) Norms of finite morphisms. *Abh. Math. Sem. Univ. Hamburg* **38** (1972), 125-140. (Lindsay N. Childs) **47** #3393 14E20 (12F15)
Degeneration and specialization in algebraic families of vector bundles. *Bull. Amer. Math. Soc.* **82** (1976), no. 4, 560-562. (Knud Løstved) **53** #10803 14F05 (14D20)
The decomposition and specialization of algebraic families of vector bundles. *Compositio Math.* **35** (1977), no. 2, 163-187. (Masaki Maruyama) **58** #16668 14F05
On subbundles of vector bundles over P^1 . *J. Pure Appl. Algebra* **10** (1977/78), no. 1, 315-322. (S. Y. Hussein) **57** #9700 14F05
Coverings of ruled surfaces and applications to vector bundles. I. *Proc. London Math. Soc.* (3) **35** (1977), no. 1, 89-112. (P. E. Newstead) **57** #16303 14F05
Fibre equivalence of vector bundles on ruled surfaces. *J. Pure Appl. Algebra* **10** (1977/78), no. 3, 201-205. (Knud Løstved) **58** #27984 14F05
Shaughnessy, Edward P. Codes with simple automorphism groups. *Arch. Math. (Basel)* **21** (1971), 459-466. (E. R. Berlekamp) **45** #6910 20B25 (94A10)
Shavel, Ira H. On surfaces obtained from quaternion algebras over real quadratic fields. *Bull. Amer. Math. Soc.* **82** (1976), no. 5, 727-730. (Don Zagier) **54** #12663 (14J25, 12A80)
A class of algebraic surfaces of general type constructed from quaternion algebras. *Pacific J. Math.* **76** (1978), no. 1, 221-245. (Fabrizio Catanese) **58** #28002 14D05 (10D05, 10D20, 14J25)
Shavell, Steven (with Kohn, Meir G.) The theory of search. *J. Econom. Theory* **9** (1975), no. 2, 93-123. (Norbert Schmitz) **58** #4291 90B40 (62L15)
Shavit, A. (with Zvirin, Y.) Macroscopic phenomenological relations for nonlinear processes in kinetic theory. *J. Statist. Phys.* **11** (1974), 291-316. (M. Dutta) **53** #108245
Shavitt, Isaiiah (with Bender, C. F.; Pipano, A.; Hosteny, R. P.) The iterative calculation of several of the lowest or highest eigenvalues and corresponding eigenvectors of large symmetric matrices. *J. Computational Phys.* **11** (1973), 90-108. (R. D. Glaser) **49** #4230 65F15
Computers and quantum chemistry. *Computer science and scientific computing (Proc. Third ICASE Conf., Williamsburg, Va., 1976)*, pp. 227-253. Academic Press, New York, 1976. (Paul F. Zweifel) **54** #14700 82G5
Shaviv, Giora (with Livio, Mario) On the stability of accretion disks. *Astronom. J.* **55** (1977), no. 1, 95-101. (L. F. Oster) **55** #7289 85J35
See also General relativity and gravitation, **55** #5133
Shaw, Alan C. Picture graphs, grammars, and parsing. *Frontiers of pattern recognition (Proc. Internat. Conf., Univ. Hawaii, Honolulu, Hawaii, 1971)*, pp. 491-510. Academic Press, New York, 1972. (Curtis R. Cook) **52** #16185 68A45 (68A30)
Shaw, B. I. (with Berger, C. A.) Intertwining, analytic structure, and the trace norm estimate. *Proceedings of a Conference on Operator Theory (Dalhousie Univ., Halifax, N.S., 1973)*, pp. 1-6. *Lecture Notes in Math.*, Vol. 345, Springer, Berlin, 1973. (C. A. Putnam) **50** #14327 47B20 (47B37)
(with Berger, C. A.) Selfcommutators of multicyclic hyponormal operators always trace class. *Bull. Amer. Math. Soc.* **79** (1973), 1193-1199. (1974). (C. R. Putnam) **51** #11168 47B20
Shaw, C. B., Jr. Improvement of the resolution of an instrument by numerical solution of an integral equation. *J. Math. Anal. Appl.* **37** (1972), 83-112. (G. F. Miller) **45** #4665R05
Best accessible estimation: convergence properties and limiting forms of the data and reduced versions. *J. Math. Anal. Appl.* **44** (1973), 531-552. (G. F. Miller) **51** #65C99 (45L05)
Shaw, D. E. (with Wunderlich, F. J.; Hones, M. J.) Argand diagrams of extended Fibonacci and Lucas numbers. *Fibonacci Quart.* **12** (1974), 233-234. (P. Brock) **50** #11830 65S05 (33A70)
Shaw, G. B. Degeneracy in the particle-in-a-box problem. *J. Phys. A* **7** (1974), 1537-1547. (P. Pascual) **51** #7522 81A7
Shaw, Gordon L. (with Little, W. A.; Ng, Karen O.) Absence of bounds of product normalized eigenvector components of non-symmetric probability matrices. *Math. Biosci.* **32** (1976), no. 1-2, 107-110. (Authors' summary) **58** #28044a (E 58 #28044) 15A51 (60J10)
See also Thompson, Rosemary; et al., **58** #28044b
Shaw, Howard A nonlinear elliptic boundary value problem. *Nonlinear functional analysis and differential equations (Proc. Conf., Mich. State Univ., East Lansing, Mich., 1975)*, pp. 339-346. *Lecture Notes in Pure and Appl. Math.*, Vol. 19, Marcel Dekker, New York, 1976. (A. Ambrosetti (Zbl 338 #35040)) **58** #6686 35J65
A nonlinear elliptic boundary value problem at resonance. *J. Differential Equations* **26** (1977), no. 3, 335-346. (Thomas T. Bowman) **57** #3631 35J65 (58E05)
Shaw, Hwei Hwung (with Anand, Subhash C.; Weisgerber, Frank E.) Direct solution of quadratic programming technique in elastic-plastic finite element analysis. *Comput. Struct.* **7** (1977), no. 2, 221-228. (Miloš Kojić) **57** #8343 73G5
Shaw, Jjin Chang See Shao, Chin Ch'ang
Shaw, John K. Whittaker constants for entire functions of several complex variables. *Pacific J. Math.* **38** (1971), 239-250. (A. K. Agarwal) **46** #3825 32A15
(with Buckholtz, James D.) Zeros of partial sums and remainders of power series. *Trans. Amer. Math. Soc.* **166** (1972), 269-284. (R. S. L. Srivastava) **45** #8810 30D15
(with Frank, James L.) On analytic functions with gaps. *J. London Math. Soc.* (2) **17** (1973), 577-582. (T. L. McCoy) **54** #13041 30A10
On coefficients and zeros of sections of power series. *Proc. Amer. Math. Soc.* **47** (1973), 567-570. (R. S. L. Srivastava) **47** #7008 30A08
(with Crofts, G. W.) Successive remainders of the Newton series. *Trans. Amer. Math. Soc.* **181** (1973), 369-383. (M. Marden) **47** #8825 30A08
(with Frank, James L.) Abel-Gončarov polynomial expansions. *J. Approximation Theory* **10** (1974), 6-22. (R. P. Boas, Jr.) **49** #10887 30A82
(with Buckholtz, James D.) On functions expandable in Lidstone series. *J. Math. Anal. Appl.* **47** (1974), 626-632. (Horst Tietz) **50** #584 30A16
(with Frank, James L.) Univalence of odd derivatives of even entire functions. *Reine Angew. Math.* **277** (1975), 1-4. (T. Kövari) **52** #11039 30A66
(with Buckholtz, James D.) Series expansions of analytic functions. II. *Pacific J. Math.* **56** (1975), no. 2, 373-384. (Horst Tietz) **52** #3494 30A18
(with Buckholtz, James D.) Generalized completely convex functions and Sturm-Liouville operators. *SIAM J. Math. Anal.* **6** (1975), no. 5, 812-828. (A. Shafer) **54** #5534 34B25 (41A30)
(with Frank, James L.) On analytic functions with gaps. II. *Acta Math. Acad. Sci. Hungaricae* **27** (1976), no. 1-2, 1-12. (A. Shafer) **54** #5534 34B25 (41A30)

- ir. 27 (1976), no. 1-2, 37-42. (Thomas McCoy) **54** #13042 30A10
- with Johnson, Lee W.; Riess, R. Dean) Accelerating convergence of eigenfunction
sions. *Math. Comp.* **30** (1976), no. 135, 469-477. (W. Niethammer) **54** #6445
(42A60)
- ries expansions and linear differential operators. *SIAM J. Math. Anal.* **7** (1976),
311-331. (O. Borůvka) **55** #762 34B25
- alytic properties of generalized completely convex functions. *SIAM J. Math.*
8 (1977), no. 2, 271-279. (S. J. Lee) **55** #5949 34B99
- onard Existence and approximation of solutions to an infinite set of linear
invariant differential equations. *SIAM J. Appl. Math.* **22** (1972), 266-279. (J. H.
ge) **46** #3875 34A10
- olutions for infinite-matrix differential equations. *J. Math. Anal. Appl.* **41** (1973),
383. (H. A. DeKleine) **47** #3728 34A10 (34A35)
- with Shooman, M. L.) Confidence bounds and propagation of uncertainties in
m availability and reliability computations. *Naval Res. Logist. Quart.* **23** (1976), no.
3-685. (Authors' summary) **56** #4094 62N05
- usy period control of queues based on waiting times at arrivals. *Operations Res.* **24**
(1976), no. 3, 543-563. (Stig I. Rosenlund) **53** #9426 (E 55 #9330) 60K25
- Errata: "Busy period control of queues based on waiting times at arrivals"
ations Res. **24** (1976), no. 3, 543-563. *Operations Res.* **25** (1977), no. 3, 538.
ors) **55** #9330 60K25
- See also Sensitivity, adaptivity and optimality. **49** #8697
- nda (with Spencer, A. J. M.) Impulsive loading of ideal fibre-reinforced
-plastic beams. I. Free beam under central impact. *Internat. J. Solids and Structures*
(1977), no. 9, 823-831. (Authors' summary) **58** #19595a 73.35
- (with Spencer, A. J. M.) Impulsive loading of ideal fibre-reinforced rigid-plastic
s. II. Beam with end supports. *Internat. J. Solids and Structures* **13** (1977), no. 9,
844. (Authors' summary) **58** #19595b 73.35
- (with Spencer, A. J. M.) Impulsive loading of ideal fibre-reinforced rigid-plastic
s. III. Cantilever beam. *Internat. J. Solids and Structures* **13** (1977), no. 9, 845-854.
ors' summary) **58** #19595c 73.35
- lary (with Traub, J. F.) On the number of multiplications for the evaluation of a
nomial and some of its derivatives. *J. Assoc. Comput. Mach.* **21** (1974), 161-167.
ors' summary) **49** #4298 68A10
- (with Traub, J. F.) Selection of good algorithms from a family of algorithms for
nomial derivative evaluation. *Information Processing Lett.* **6** (1977), no. 5, 141-145.
ef Mikloško) **58** #25125 68A20 (12-04, 65H05)
- onald Representations of the extended Poincaré group and generalized inducing.
eoretical methods in physics (Proc. Third Internat. Colloq., Centre Phys. Theor.,
seille, 1974), Vol. 2, pp. 371-377. Centre Nat. Recherche Sci., Centre Phys. Theor.,
seille, 1974. (Wayne J. Holman, III) **56** #15847 22E70
- (with Lever, Joseph) Irreducible multiplier corepresentations and generalized
icing. *Comm. Math. Phys.* **38** (1974), 257-277. (C.-H. Woo) **50** #6336 81.22
- (with Lever, Joseph) Irreducible multiplier corepresentations of the extended
acaré group. *Comm. Math. Phys.* **38** (1974), 279-297. (C.-H. Woo) **50** #6337
2
- Wigner 3j-symbols and the Lorentz group. *Group theoretical methods in physics*
rth Internat. Colloq., Nijmegen, 1975), pp. 537-547. *Lecture Notes in Phys.*, Vol. 50,
nger, Berlin, 1976. (Anthony J. Bracken) **58** #4023 81.22 (22E43)
- en Yen See Hsiao, Shêng Yen
- hankar (with Bhagat, Bikan) On a second-order matrix differential operator. *Proc.*
Am. Acad. Sci. Sect. A **79** (1974), 213-222. (William N. Everitt) **51** #3598 34B20
- ei Hwa See Shao, Wei Hua
- A. (with Chehata, C. G.) Relations on ordered groups. (Arabic summary) *Proc.*
Phys. Soc. A.R.E. (Egypt) No. 33 (1969), 11-14, i (1972). (A. H. Rhemtulla)
#7113 06A55
- Brice L. R. General absolute Borel-type methods. *J. Reine Angew. Math.* **245**
(1980), 81-90. (I. Volkov) **45** #769 40F05 (40G10)
- (with Yang, Kuo Shêng) Tauberian relations between the Abel-type and the
el-type methods of summability. *Manuscripta Math.* **5** (1971), 341-357. (D.
atan) **45** #2369 40E05
- On the product of the Cesàro and Borel-type methods of summability. *J. London*
h. Soc. (2) **7** (1973), 111-116. (R. A. Askey) **48** #753 40D25
- Iteration products of methods of summability and natural scales. *Manuscripta*
h. **13** (1974), 355-364. (L. Hoischen) **58** #23241a 40C10
- Addendum to: "Iteration products of methods of summability and natural scales".
Manuscripta Math. **14** (1974), 89. (L. Hoischen) **58** #23241b 40C10
- Maximum modulus theorems and Schwarz lemmata for sequence spaces. *Canad.*
h. Bull. **18** (1975), no. 4, 593-596. (Joaquín Bustoz) **53** #3291 30A42
- (with Borwein, David) On functional Cesàro and Hölder methods of summability.
ad. J. Math. **28** (1976), no. 5, 1058-1061. (Wolfgang Luh) **58** #1814 40G05
G10)
- (with Heagy, E. C.) On integral Abel-type and logarithmic methods of summability.
ad. Math. Bull. **20** (1977), no. 2, 207-213. (Amnon Jakimovski) **57** #6939
925
- Maximum modulus theorems and Schwarz lemmata for sequence spaces. II. *Canad.*
h. Bull. **21** (1978), no. 1, 79-84. (Joaquín Bustoz) **58** #2288 46G99 (30A42,
05, 46A45)
- (with Kratz, Werner) A strong-Riesz mean-value theorem with applications to
mability factor theorems. *J. Reine Angew. Math.* **298** (1978), 16-31. (D. C. Russell)
#6817 40F05
- (with Heagy, E. C.) On strong integral summability. *Proc. Edinburgh Math. Soc.* (2)
(1978/79), no. 1, 73-78. (F. P. Cass) **58** #1810 40C10
- Wave mechanics equivalent to classical mechanics. *Phys. Rev. A* (3) **13** (1976),
6, 2261-2264. (P. J. Roberts) **53** #9944 81.34
- Spin-s tachyons and the propagation of tachyon waves. A. Spin-s tachyons.
hons, monopoles, and related topics (Proc. First Session, Interdisciplinary Sem., Erice,
6), pp. 185-193. North-Holland, Amsterdam, 1978. (Editors) **58** #25630a 81.53
53)
- (with Miller, K. L.) Spin-s tachyons and the propagation of tachyon waves. B.
Propagation of tachyon waves. *Tachyons, monopoles, and related topics* (Proc. First
Session, Interdisciplinary Sem., Erice, 1976), pp. 189-193. North-Holland, Amsterdam,
1978. (Editors) **58** #25630b 81.53
- Shay, P. Brian Bipolynomial Hopf algebras $H^*(BSU; \mathbb{Z})$ et al. *J. Pure Appl. Algebra* **9**
(1976/77), no. 2, 163-168. (J. F. Adams) **56** #5629 16A24 (14L05)
- Representatives for P -typical curves. *J. Algebra* **45** (1977), no. 1, 94-101. (P. S.
Landweber) **55** #2933 (E 57 #6034) 14L05 (55F45)
- (with Aissen, Michael) Varieties of binary systems. *J. Combinatorial Theory Ser. A*
22 (1977), no. 1, 69-82. (K. A. Baker) **56** #11864 08A05
- mod p Wu formulas for the Steenrod algebra and the Dyer-Lashof algebra. *Proc.*
Amer. Math. Soc. **63** (1977), no. 2, 339-347. (Stanley Kochman) **56** #13216 55G05
(55F45)
- Erratum: "Representatives for P -typical curves" (*J. Algebra* **45** (1977), no. 1,
94-101). *J. Algebra* **51** (1978), no. 1, 326-334. (Editors) **57** #6034 14L05 (55B20,
57D90)
- Shaydourov, V. V. See Šaidurov, V. V.
- Shaykin, M. E. See Šaikin, M. E.
- Shchenkov, I. B. See Ščenkov, I. B.
- Shchepkin, A. V. See Ščepkin, A. V.
- Shcherbinin, É. V. See Ščerbinin, É. V.
- Shcherbinin, Yu. H. See Ščerbinin, Ju. G.
- Shea, Dale D. On the number of divisions needed in finding the greatest common divisor.
Fibonacci Quart. **11** (1973), no. 5, 508-510. (Harvey Cohn) **49** #2517 10A30
- Shea, Daniel F. (with Levin, Jacob J.) Asymptotic behaviour of bounded solutions of some
functional equations. *Contributions to nonlinear functional analysis* (Proc. Sympos.,
Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1971), pp. 501-522. Academic Press,
New York, 1971. (R. K. Miller) **52** #8848 45M05
- (with Levin, Jacob J.) Tauberian theorems and functional equations. *Ordinary*
differential equations (Proc. Conf., Math. Res. Center, Naval Res. Lab., Washington, D.C.,
1971), pp. 195-207. Academic Press, New York, 1972. (A. F. Izé) **54** #5669 40E05
(39A15)
- (with Levin, Jacob J.) On the asymptotic behavior of the bounded solutions of some
integral equations. I, II, III. *J. Math. Anal. Appl.* **37** (1972), 42-82; *ibid.* **37** (1972),
288-326; *ibid.* **37** (1972), 537-575. (Marvin Shinbrot) **46** #5971 45M05
- (with Drasin, David) Pólya peaks and the oscillation of positive functions. *Proc.*
Amer. Math. Soc. **34** (1972), 403-411. (V. Ganapathy Iyer) **45** #3650 26A48
- (with Miles, Joseph) An extremal problem in value-distribution theory. *Quart. J.*
Math. Oxford Ser. (2) **24** (1973), 377-383. (Fred Gross) **48** #2393 30A70
- (with Essén, Matts R.) Applications of Denjoy integral inequalities to growth
problems for subharmonic and meromorphic functions. *Proceedings of the Symposium*
on Complex Analysis (Univ. Kent, Canterbury, 1973), pp. 59-68. London Math. Soc.
Lecture Note Ser., No. 12, Cambridge Univ. Press, London, 1974. (W. H. J. Fuchs)
56 #8877 31B05 (30A68)
- (with Hellerstein, Simon) An extremal problem concerning entire functions with
radially distributed zeros. *Proceedings of the Symposium on Complex Analysis* (Univ.
Kent, Canterbury, 1973), pp. 81-87. London Math. Soc. *Lecture Note Ser.*, No. 12,
Cambridge Univ. Press, London, 1974. (I. N. Baker) **52** #14296 30A70
- (with Nohel, John A.) On the global behavior of a nonlinear Volterra equation.
International Conference on Differential Equations (Proc., Univ. Southern California, Los
Angeles, Calif., 1974), pp. 580-594. Academic Press, New York, 1975. (Zvi Artstein)
55 #3701 45D05
- (with Wainger, Stephen) Variants of the Wiener-Lévy theorem, with applications to
stability problems for some Volterra integral equations. *Amer. J. Math.* **97** (1975),
312-343. (R. K. Miller) **51** #8728 42A68 (45D05)
- (with Nohel, John A.) Stability of a nonlinear Volterra equation. (Italian summary)
Collection of articles dedicated to Giovanni Sansone on the occasion of his eighty-fifth
birthday. *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, suppl., 498-510. (Jorgen Frederiksen)
53 #1990 65R05
- (with Nohel, John A.) Stability of a nonlinear Volterra equation. *Dynamical*
systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974), Vol. II, pp.
297-302. Academic Press, New York, 1976. (From the text) **58** #29904 45D05
(34K20)
- (with Nohel, John A.) Frequency domain methods for Volterra equations.
Advances in Math. **22** (1976), no. 3, 278-304. (A. Corduneanu) **58** #17748 45J05
- (with Miles, Joseph) On the growth of meromorphic functions having at least one
deficient value. *Duke Math. J.* **43** (1976), no. 1, 171-186. (W. H. J. Fuchs) **56** #8852
30A70
- (with Drasin, David) Convolution inequalities, regular variation and exceptional
sets. *J. Analyse Math.* **29** (1976), 232-293. (Authors' review (Zbl) **343** #30013))
57 #17137 44A35 (30A64)
- (with Essén, Matts R.) An extremal problem in function theory. *Complex analysis*
(Proc. Conf., Univ. Kentucky, Lexington, Ky., 1976), pp. 40-45. *Lecture Notes in Math.*,
Vol. 599, Springer, Berlin, 1977. (S. Hellerstein) **57** #634 30A68
- (with Rao, N. V.) Growth problems for subharmonic functions of finite order in
space. *Trans. Amer. Math. Soc.* **230** (1977), 347-370. (H. L. Jackson) **56** #3319
31B05 (30A70)
- (with Hellerstein, Simon) Minimal deficiencies for entire functions with radially
distributed zeros. *Proc. London Math. Soc.* (3) **37** (1978), no. 1, 35-55. (M. O. Gonzalez)
58 #6247 30A70
- Shea, Gerald Statistical diagnosis and tests of factor hypotheses. *J. Amer. Statist. Assoc.* **73**
(1978), no. 362, 346-350. (Author's summary) **58** #24736 62H25 (62P10)
- Shea, William R. Some aspects of post-Renaissance astronomy. The origins, achievement
and influence of the Royal Observatory, Greenwich: 1675-1975 (Proc. 4th Joint
Sympos. Internat. Astronom. Union and Union Internat. Histoire et Philos. Sci.,
Greenwich, 1975). *Vistas Astronom.* **20** (1976), no. 1-2, 11-15. (J. S. Joel) **58** #10064
01A45 (01A50)
- ★Galileo's intellectual revolution. Middle period, 1610-1632. Second edition.
Science History Publications [Neale Watson Academic Publications, Inc.], New York,
1977. xi + 204 pp. ISBN 0-88202-006-4 (R. H. Atkin) **58** #10065 01A45
- Galileo and the justification of experiments. *Historical and philosophical dimensions*

- of logic, methodology and philosophy of science (*Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Part IV, Univ. Western Ontario, London, Ont., 1975*), pp. 81-92. *Univ. Western Ontario Sci. Philos. Sci.*, Vol. 12, Reidel, Dordrecht, 1977. (Editors) 58 #21145 01A45
- Shearer, James B.** (with McEliece, Robert J.) A property of Euclid's algorithm and an application to Padé approximation. *SIAM J. Appl. Math.* 34 (1978), no. 4, 611-615. (Robert M. McConnell) 58 #10845 12E05 (94A10)
- Shearer, M.** Bifurcation from a multiple eigenvalue. *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976)*, pp. 417-424. *Lecture Notes in Math.*, Vol. 564, Springer, Berlin, 1976. (Editors) 58 #30573 47H15 (58E05)
- Small solutions of a non-linear equation in Banach space for a degenerate case. *Proc. Roy. Soc. Edinburgh Sect. A* 79 (1977/78), no. 1-2, 35-49. (Norman Dancer) 57 #17428 47H15 (58B15, 58E05)
- Bifurcation in the neighbourhood of a non-isolated singular point. *Israel J. Math.* 30 (1978), no. 4, 363-381. (A. Vanderbauwhede) 58 #18547 58E05 (47H15)
- Shechter, Joel** See **Large-scale networks**, 50 #16064
- Shechter, D. P.** See **Advances in computers**, 50 #3630
- Shedler, Gerald S.** (with Oden, P. H.) A model of memory contention in a paging machine. Collection of articles in honor of George E. Forsythe (ACM Student Competition Award Papers). *Comm. ACM* 15 (1972), no. 8, 761-771. (Authors' summary) 55 #13903 68A50
- A queuing model of a multiprogrammed computer with a two-level storage system. *Comm. ACM* 16 (1973), 3-10. (K. Vairaran) 51 #14680 68A50
- (with Iglehart, Donald L.) Regenerative simulation of response times in networks of queues. *J. Assoc. Comput. Mach.* 25 (1975), no. 3, 449-460. (Erol Gelenbe) 58 #3108 60K25 (68A99)
- (with Lavenberg, Stephen S.) Derivation of confidence intervals for work rate estimators in a closed queuing network. *SIAM J. Comput.* 4 (1975), 108-124. (Authors' summary) 56 #9734 60K25
- (with Lewis, Peter A. W.) Simulation of nonhomogeneous Poisson processes with log linear rate function. *Biometrika* 63 (1976), no. 3, 501-505. (Arnold Levine) 57 #4378 62-04 (62E25)
- (with Lavenberg, Stephen S.) Stochastic modeling of processor scheduling with application to data base management systems. *IBM J. Res. Develop.* 20 (1976), no. 5, 437-448. (Erol Gelenbe) 54 #2178 90B35 (68A99)
- (with Lewis, Peter A. W.) Statistical analysis of non-stationary series of events in a data base system. *IBM J. Res. Develop.* 20 (1976), no. 5, 465-482. (E. C. Posner) 56 #1662 68A50
- (with Slutz, Donald) Derivation of miss ratios for merged access streams. *IBM J. Res. Develop.* 20 (1976), no. 5, 505-517. (Zbl 336 #68028) 57 #8234 68A99
- Shedletsky, John J.** (with McCluskey, Edward J.) The error latency of a fault in a sequential digital circuit. Special issue on fault-tolerant computing. *IEEE Trans. Computers* C-25 (1976), no. 6, 655-659. (Sudhakar M. Reddy) 54 #2355 94A20
- A rollback interval for networks with an imperfect self-checking property. Special issue on fault-tolerant computing. *IEEE Trans. Comput.* 27 (1978), no. 6, 500-508. (G. Saucier) 58 #9885 94A20
- Error correction by alternate-data retry. *IEEE Trans. Computers* C-27 (1978), no. 2, 106-112. (G. Saucier) 57 #5479 94A20
- (with McCluskey, Edward J.; Parker, Kenneth P.) Boolean network probabilities and network design. *IEEE Trans. Computers* C-27 (1978), no. 2, 187-189. (Authors' summary) 58 #4681 94A20
- Shee, S. C.** On the stabilities and chromatic number of a loop-graph. *Nanta Math.* 4 (1970), 8-14. (K. Wagner) 45 #6683 05C15
- On quasigroup graphs. *Nanyang Univ. J. Part I* 4 (1970), 44-66. (R. L. Hemminger) 45 #6695 05C25
- (with Teh, H. H.) On homogeneous quasigroup graphs and right associative subsets of a quasigroup. *Nanyang Univ. J. Part I* 4 (1970), 67-75. (From the introduction) 45 #6696 05C25 (20N99)
- On a class of point-symmetric graphs induced by quasigroups. *Nanta Math.* 5 (1971), no. 1, 92-107. (I. Z. Bouwer) 47 #8347 05C25 (20N05)
- The Petersen graph represented as a point-symmetric quasigroup graph. *Nanta Math.* 5 (1971), no. 1, 108-110. (A. Mowshowitz) 45 #5031 05C25
- Some structure theorems on lattice ordered modules. (Chinese summary) *Nanyang Univ. J. Part III* 6 (1972), 1-17. (S. J. Bernau) 54 #12599 06A70
- Algebraic extension of graphs. *Nanta Math.* 6 (1973), no. 1, 80-93. (Norman Biggs) 52 #175 05C25
- A note on the C-product of graphs. *Nanta Math.* 7 (1974), no. 2, 105-108. (L. V. Quintas) 52 #2968 05C99
- (with Teh, H. H.) ★Algebraic theory of graphs. *Lee Kong Chian Institute of Mathematics and Computer Science, Nanyang University, Singapore*, 1976. vi+168 pp. (A. T. White) 55 #7836 05C25
- Tabular algorithms for the shortest path and longest path. *Nanta Math.* 10 (1977), no. 2, 100-105. (E. Ja Gabovič) 58 #33576 94A20 (05C35, 90B10)
- Sheehan, D.** (with Shenton, L. R.; Bowman, Kimiko O.) Sampling moments of moments associated with univariate distributions. *J. Roy. Statist. Soc. Ser. B* 33 (1971), 444-457. (Benjamin Epstein) 47 #4368 62E15
- Sheehan, John** Smoothly embeddable subgraphs—a survey. *Combinatorics (Proc. Conf. Combinatorial Math., Math. Inst., Oxford, 1972)*, pp. 254-261. *Inst. Math. Appl., Southend-on-Sea*, 1972. (Seth R. Alpert) 49 #2444 05C10
- Fixing subgraphs. *J. Combinatorial Theory Ser. B* 12 (1972), 226-244. (Author's summary) 45 #8581 (E 50 #1988) 05C25
- Fixing subgraphs of s-regular graphs. *J. Combinatorial Theory Ser. B* 14 (1973), 100-103. (K. Wagner) 47 #1686 05C99
- Fixing subgraphs and Ulam's conjecture. *J. Combinatorial Theory Ser. B* 14 (1973), 125-131. (B. Manvel) 47 #4865 (E 50 #1988) 05C99
- Unstable trees. *Combinatorics (Proc. British Combinatorial Conf., Univ. Coll. Wales, Aberystwyth, 1973)*, pp. 141-144. *London Math. Soc. Lecture Note Ser.*, No. 13, Cambridge Univ. Press, London, 1974. (Neil Robertson) 52 #2897 05-02
- Non-bipartite graphs of girth 4. *Discrete Math.* 8 (1974), 383-402. (M. Behzad) 54 #176 05C99
- Erratum to: "Fixing subgraphs" (*J. Combinatorial Theory Ser. B* 12 (1972), 226-244) and "Fixing subgraphs and Ulam's conjecture" (*J. Combinatorial Theory Ser. B* 14 (1973), 125-131). *J. Combinatorial Theory Ser. B* 17 (1974), 312. (B. Manvel) 50 #1988 05C99
- Smoothly embeddable subgraphs. *J. London Math. Soc.* (2) 9 (1974/75), 212-213. (E. A. Nordhaus) 51 #229 05C10
- An extremal problem in finite graph theory. *Infinite and finite sets (Colloq. Math. Soc. János Bolyai, Vol. 10, North-Holland, Amsterdam, 1975)*, pp. 1235-1236. (J. A. Bondy) 51 #12604 05C35
- The multiplicity of Hamiltonian circuits in a graph. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 477-480. *Academia, Prague*, 1975. (J. A. Bondy) 53 #2747 05C35
- (with Bean, D. W. T.) Graphs with given girth and diameter. *Proceedings Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 123-124. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, Man., 1976. (Gary Haggard) 52 #13494 05C99
- (with Wright, E. M.) The number of Hamiltonian circuits in large, heavily edge-colored graphs. *Glasgow Math. J.* 18 (1977), no. 1, 35-37. (L. V. Quintas) 56 #5359 05C35
- Graphs with exactly one Hamiltonian circuit. *J. Graph Theory* 1 (1977), 37-43. (J. A. Bondy) 57 #176 05C35
- See also **Proceedings: British Combinatorial Conference**, 52 #7913 and **Proceedings: British Combinatorial mathematics**, 53 #141
- Sheela, B. V.** (with Ramamoorthy, P.) SWIFT—a new constrained optimization technique. *Comput. Methods Appl. Mech. Engrg.* 6 (1975), no. 3, 309-317. (Authors' summary) 56 #7194 65K05
- Sheer, A. F.** A uniformly asymptotic solution for incompressible flow past thin sharp-edged aerofoils at zero incidence. *Proc. Cambridge Philos. Soc.* 70 (1971), 135-155. (W. R. Sears) 45 #1475 76A1
- Sheets, Michael R.** (with Sternberg, Robert L.; Sternberg, Helen M.; Shigematsu, Abraham; Sternberg, Alice L.) Multiple Fourier analysis in rectifier problems. *Quart. Appl. Math.* 32 (1974/75), 293-315. (E. Lüneburg) 55 #7125 78A2
- Sheets, R. P.** Trace algebras. *Trans. Amer. Math. Soc.* 165 (1972), 389-423. (V. K. Rieckhoff) 45 #3429 15A03
- Sheets, Ronald** A criterion for the rigidity of fibered products of rigid algebras. *J. Algebra* 46 (1977), no. 1, 37-53. (Michael Schlesinger) 56 #8566 14D15
- Sheffer, I. M.** (with Krall, H. L.) On trigonometric polynomials satisfying difference equations. *J. Indian Math. Soc. (N.S.)* 39 (1975), 29-49 (1976). (J. S. Byrnes) 54 #42A04
- Sheffield, Charles** (with Schiffer, Menahem M.; Adler, Ronald J.; Mark, James) Geometry as complexified Schwarzchild geometry. *J. Mathematical Phys.* 14 (1973), 52-56. (Alan Barnes) 47 #8070 83J3
- (with Adler, Ronald J.) Classification of space-times in general relativity. *J. Mathematical Phys.* 14 (1973), 465-469. (M. D. Upadhyay) 49 #4514 83J3
- Sheffield, T. S.** (with Schafer, Ray E.) Inferences on the parameters of the exponential distribution. (French summary) *Biometrics* 29 (1973), 449-455. (Hubert J. Chen) 51 #14362 62F05
- Shehad, Naguy S. M.** (with Younis, Mohamed I.; Vogt, William G.) A symmetric and a programmed algorithm to guarantee positive definiteness of an associated quadratic form. *Modeling and simulation (Proc. Fifth Annual Pittsburgh Conf., Pittsburgh, Pittsburgh, Pa., 1974)*, Vol. 5, Part 2, pp. 1083-1088. *Instrument Soc. of America*, Pa., 1974. (K. B. Datta) 56 #11347 93D99
- el Shehawey, Elsayed F.** See **El Shehawey, Elsayed F.**
- Shei, Sun-sheng** (with Gonsalves, Richard J.) Semiclassical approach to lattice dynamics. *Nuclear Phys. B* 130 (1977), no. 2, 221-256. (K. J. Le Couteur) 57 #18554 81D99
- al-Sheikh-Khalil, Hassan** See **Al-Sheikh-Khalil, Hassan**
- Sheil-Smith, T. B.** On linear accessibility and the conformal mapping of convex domains. *J. Analyse Math.* 25 (1972), 259-276. (G. Schober) 47 #444 30A24
- On Bazilevič functions. *Quart. J. Math. Oxford Ser. (2)* 23 (1972), 135-141. (R. E. Deade) 45 #8847 30A32
- (with Ruscheweyh, Stephan) Hadamard products of Schlicht functions and the Pólya-Schoenberg conjecture. *Comment. Math. Helv.* 48 (1973), 119-135. (J. Cluzet) 48 #6393 (E 56 #5862) 30A32
- (with Ruscheweyh, Stephan) Corrigendum: "Hadamard products of schlicht functions and the Pólya-Schoenberg conjecture" (*Comment. Math. Helv.* 48 (1973), 119-135). *Comment. Math. Helv.* 48 (1973), 194. (Editors) 56 #5862 30A36
- On linearly accessible univalent functions. *J. London Math. Soc.* (2) 6 (1973), 385-398. (D. E. Tepper) 48 #4299 30A36
- On the convolution of analytic functions. *J. Reine Angew. Math.* 258 (1973), 137-152. (W. C. Royster) 47 #9295 46J99 (30A34, 30A42, 32A99)
- Some linear operators in function theory. *Proceedings of the Symposium on Complex Analysis (Univ. Kent, Canterbury, 1973)*, pp. 119-123. *London Math. Soc. Lecture Note Ser.*, No. 12, Cambridge Univ. Press, London, 1974. (W. C. Royster) 54 #30A98
- (with Saff, E. B.) Coefficient and integral mean estimates for algebraic and trigonometric polynomials with restricted zeros. *J. London Math. Soc.* (2) 9 (1974), 16-22. (Z. Rubinstein) 52 #3491 30A06 (42A04)
- Sheingorn, Mark E.** Poincaré series of polynomials bounded away from zero on a fundamental region. *Amer. J. Math.* 95 (1973), 729-749. (Marvin Knopp) 49 #30A58
- The characterizations of $(A_q(U))$. *J. Res. Nat. Bur. Standards Sect. B* 77B (1973), no. 3-4, 85-92. (Paul S. Muhly) 52 #14967 46E15 (30A98)
- (with Metzger, Thomas A.) Polynomial approximation in the Bers spaces. *Discontinuous groups and Riemann surfaces (Proc. Conf., Univ. Maryland, College Park, Md., 1973)*, pp. 369-377. *Ann. of Math. Studies*, No. 79, Princeton Univ. Press, Princeton, N.J., 1974. (J. Leherer) 50 #7541 30A82
- (with Bumcrot, Robert J.) Variations on continuity: sets of infinite limit. *Mag.* 47 (1974), 41-43. (N. Passell) 48 #8700 26A15
- (with Newman, Morris) Continuous solutions of a homogeneous functional equation. *Aequationes Math.* 13 (1975), no. 1/2, 47-59. (Roman Ger) 53 #3533

- 61) (E 58 #12062) 39A25
 (with Niebur, Douglas) Characterization of Fuchsian groups whose integrable forms
 founded. *Ann. Math. (2)* **106** (1977), no. 2, 239-258. (Marvin I. Knopp) **57** #6411
 A58
 (with Callahan, Thomas; Newman, Morris) Fields with large Kronecker constants.
Number Theory **9** (1977), no. 2, 182-186. (Charles J. Parry) **55** #12681 12A10
 (with Newman, Morris) Corrigendum to: "Continuous solutions of a homogeneous
 rational equation" (*Aequationes Math.* **13** (1975), no. 1-2, 47-59). *Aequationes Math.*
978, no. 1, 111. (Roman Ger) **58** #12062 39A15
 See also Wobst, Richard. **58** #12061
 O. B. See Šeĭnin, O. B.
 a, Izhak (with Tene, Yair; Epstein, Marcelo) A generalization of Potters' method.
Computers & Structures **4** (1974), 1099-1103. (R. P. Tewarson) **50** #1477 65F05
 M. A. (with Hamza, M. H.) Polynomial extrapolation in sampled-data control
 ms. *IEEE Trans. Automatic Control* **AC-16** (1971), 102-103. (Authors' summary)
#319 93C99
 (with Hamza, M. H.) On-line identification of distributed parameter systems.
 nch, German and Russian summaries) *Automatica—J. IFAC* **9** (1973), 689-698.
 (Authors' summary) **58** #4500 93B30 (93C20)
 (with Hamza, M. H.) On-line state estimation for distributed parameter systems.
Automatic Control Theory Appl. **5** (1977), no. 2, 41-47. (Arunabha Bagchi) **57** #5369
25
 Jacob Optimal source location to feed a lossy distribution tree. Large-scale
 works. *IEEE Trans. Circuit Theory* **CT-20** (1973), 246-250. (Jaroslav Nešetřil)
#16899 94A20
 L. See Problems: Hypergraphs, **50** #12824
 Saharon On the cardinality of ultraproduct of finite sets. *J. Symbolic Logic* **35**
70, 83-84. (Author's summary) **48** #3735 02H13
 Stability, the f.c.p., and superstability; model theoretic properties of formulas in first
 order theory. *Ann. Math. Logic* **3** (1971), no. 3, 271-362. (A. H. Lachlan) **47** #6475
105
 Two cardinal compactness. *Israel J. Math.* **9** (1971), 193-198. (John Baldwin)
#1581 02H05
 Every two elementarily equivalent models have isomorphic ultrapowers. *Israel J.*
Math. **10** (1971), 224-233. (J. L. Bell) **45** #6608 02H99
 (with Erdős, Paul) On problems of Moser and Hanson. *Graph theory and*
combinatorics (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1972; dedicated to
memory of J. W. T. Youngs), pp. 75-79. *Lecture Notes in Math.*, Vol. 303, Springer,
 Berlin, 1972. (A. L. Whiteman) **49** #2415 05A15
 Saturation of ultrapowers and Keisler's order. *Ann. Math. Logic* **4** (1972), 75-114.
 Benda) **45** #3187 02H99
 For what filters is every reduced product saturated? *Israel J. Math.* **12** (1972),
31. (M. Benda) **46** #3292 02H13
 (with Erdős, Paul) Separability properties of almost-disjoint families of sets. *Israel*
Math. **12** (1972), 207-214. (L. Bukovský) **47** #8312 04A20
 Uniqueness and characterization of prime models over sets for totally
 transcendental first-order theories. *J. Symbolic Logic* **37** (1972), 107-113. (John T.
 Baldwin) **47** #4787 02H05
 On models with power-like orderings. *J. Symbolic Logic* **37** (1972), 247-267.
 (Author's summary) **56** #5272 02H13 (02H05)
 (with Schmerl, James H.) On power-like models for hyperinaccessible cardinals. *J.*
Symbolic Logic **37** (1972), 531-537. (P. Štěpánek) **47** #6474 02H05
 A combinatorial problem; stability and order for models and theories in infinitary
 languages. *Pacific J. Math.* **41** (1972), 247-261. (M. Makkai) **46** #7018 02H10
B25, 04A20, 05A05
 A note on model complete models and generic models. *Proc. Amer. Math. Soc.* **34**
72, 509-514. (K. J. Barwise) **45** #3188 02H10
 First order theory of permutation groups. *Israel J. Math.* **14** (1973), 149-162;
ibid. **15** (1973), 437-441. (A. M. W. Glass) **54** #4972 02H15
 Notes on combinatorial set theory. *Israel J. Math.* **14** (1973), 262-277. (L.
 Bukovský) **48** #5864 04A20
 (with Moran, Gadi) Size direction games over the real line. III. *Israel J. Math.* **14**
73, 442-449. (Y. Kannai) **47** #10084 90D05
 There are just four second-order quantifiers. *Israel J. Math.* **15** (1973), 282-300. (J.
 Makowsky) **49** #20 02B15
 Differentially closed fields. *Israel J. Math.* **16** (1973), 314-328. (Carol Wood)
#8856 02H15 (12H05)
 (with Galvin, Fred) Some counterexamples in the partition calculus. *J.*
Combinatorial Theory Ser. A **15** (1973), 167-174. (R. J. Wilson) **48** #8240 04A20
C15
 Weak definability in infinitary languages. *J. Symbolic Logic* **38** (1973), 399-404.
 (M. Makkai) **51** #5263 02B25 (02H13)
 (with McKenzie, Ralph) The cardinals of simple models for universal theories.
Proceedings of the Tarski Symposium (Proc. Sympos. Pure Math., Vol. XXV, Univ.
of California, Berkeley, Calif., 1971), pp. 53-74. *Amer. Math. Soc., Providence, R.I.*, 1974.
 (Taylor) **50** #12711 02H15 (08A20)
 Category of uncountable theories. *Proceedings of the Tarski Symposium (Proc.*
Sympos. Pure Math., Vol. XXV, Univ. of California, Berkeley, Calif., 1971), pp. 187-203.
 (John T. Baldwin) **51** #10074 02G20
H05
 (with Erdős, Paul; Hajnal, András) On some general properties of chromatic
 numbers. *Topics in topology (Proc. Colloq., Keszthely, 1972)*, pp. 243-255. *Colloq. Math.*
János Bolyai, Vol. 8, North-Holland, Amsterdam, 1974. (J. E. Graver) **50** #9662
C15 (04A20)
 (with Milner, E. C.) Sufficiency conditions for the existence of transversals. *Canad.*
Math. Bull. **16** (1974), 948-961. (J. E. Graver) **51** #10107 04A20
 Infinite abelian groups, Whitehead problem and some constructions. *Israel J.*
- Math.* **18** (1974), 243-256. (Paul C. Eklof) **50** #9582 02K05 (02K35, 04A20, 20K35)
 A substitute for Hall's theorem for families with infinite sets. *J. Combinatorial*
Theory Ser. A **16** (1974), 199-208. (J. E. Graver) **48** #10824 05A05
 The Hanf number of omitting complete types. *Pacific J. Math.* **50** (1974), 163-168.
 (M. E. Nadel) **51** #132 02H05 (02B25)
 (with Milner, E. C.) Some theorems on transversals. *Infinite and finite sets (Colloq.,*
Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, pp. 1115-1126.
Colloq. Math. Soc. János Bolyai, Vol. 10, North Holland, Amsterdam, 1975. (James
 Baumgartner) **51** #12534 04A20
 Graphs with prescribed asymmetry and minimal number of edges. *Infinite and finite*
sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, pp.
 1241-1256. *Colloq. Math. Soc. János Bolyai, Vol. 10, North-Holland, Amsterdam, 1975.*
 (Hugo S. Sun) **51** #7944 05C35
 Notes on partition calculus. *Infinite and finite sets (Colloq., Keszthely, 1973;*
dedicated to P. Erdős on his 60th birthday), Vol. III, pp. 1257-1276. *Colloq. Math. Soc.*
János Bolyai, Vol. 10, North-Holland, Amsterdam, 1975. (E. C. Milner) **53** #10584
04A20
 Existence of rigid-like families of abelian p -groups. *Model theory and algebra (A*
memorial tribute to Abraham Robinson), pp. 384-402. *Lecture Notes in Math.*, Vol. 498,
 Springer, Berlin, 1975. (R. S. Pierce) **54** #425 20K10
 Why there are many nonisomorphic models for unsuperstable theories. *Proceedings*
of the International Congress of Mathematicians (Vancouver, B. C., 1974), Vol. 1, pp.
 259-263. *Canad. Math. Congress, Montreal, Que.*, 1975. (John T. Baldwin) **54** #10008
02H05
 The monadic theory of order. *Ann. of Math. (2)* **102** (1975), no. 3, 379-419.
 (Andreas Blass) **58** #10390 02G05 (02H10)
 Colouring without triangles and partition relation. *Israel J. Math.* **20** (1975), 1-12.
 (Karsten Steffens) **55** #109 04A20 (05C15)
 Categoricity in \aleph_1 of sentences in $L_{\omega_1, \omega}(Q)$. *Israel J. Math.* **20** (1975), no. 2,
 127-148. (F. R. Drake) **52** #83 02H10 (02B20, 02B25, 02G20)
 A compactness theorem for singular cardinals, free algebras, Whitehead problem
 and transversals. *Israel J. Math.* **21** (1975), no. 4, 319-349. (Paul C. Eklof) **52** #10410
02H13 (02K35, 04A20, 20K20)
 The lazy model-theoretician's guide to stability. *Comptes Rendus de la Semaine*
d'Étude en Théorie des Modèles (Inst. Math., Univ. Catholique Louvain,
Louvain-la-Neuve, 1975). Logique et Analyse (N.S.) **18** (1975), no. 71-72, 241-308. (John
 T. Baldwin) **58** #27447 02H05 (02G10, 02H15)
 A two-cardinal theorem. *Proc. Amer. Math. Soc.* **48** (1975), 207-213. (J. M. Plotkin)
50 #9573 02H05 (04A20)
 Generalized quantifiers and compact logic. *Trans. Amer. Math. Soc.* **204** (1975),
 342-364. (James H. Schmerl) **51** #12510 02H05 (02B20)
 (with Makowsky, Johann Andreas; Stavi, Jonathan) D -logics and generalized
 quantifiers. *Ann. Math. Logic* **10** (1976), no. 2, 155-192. (Bernd I. Dahn) **56** #15362
02B20 (02B25)
 Interpreting set theory in the endomorphism semi-group of a free algebra or in a
 category. *Ann. Sci. Univ. Clermont No. 60 Math. No. 13* (1976), 1-29. (U. Felgner)
58 #21622 02K99 (02H05)
 (with Amit, R.) The complete finitely axiomatized theories of order are dense.
Israel J. Math. **23** (1976), no. 3-4, 200-208. (From the authors' introduction) **58** #5162
02G20 (02H05, 06A05)
 Refuting Ehrenfeucht conjecture on rigid models. *Israel J. Math.* **25** (1976), no. 3-4,
 273-286. (John Rosenthal) **58** #5173 02H05
 (with Macintyre, Angus J.) Uncountable universal locally finite groups. *J. Algebra*
43 (1976), no. 1, 168-175. (U. Felgner) **55** #12511 02H15 (02H13, 20E25)
 Decomposing uncountable squares to countably many chains. *J. Combinatorial*
Theory Ser. A **21** (1976), no. 1, 110-114. (James Baumgartner) **53** #12958 04A20
(06A05)
 A two-cardinal theorem and a combinatorial theorem. *Proc. Amer. Math. Soc.* **62**
(1976), no. 1, 134-136 (1977). (James H. Schmerl) **55** #7764 02H05 (04A20, 02H13)
 (with Hodges, Wilfred; Lachlan, Alistair H.) Possible orderings of an indiscernible
 sequence. *Bull. London Math. Soc.* **9** (1977), no. 2, 212-215. (Douglas Cenzer)
57 #16085 04A20 (06A05)
 Remarks on cardinal invariants in topology. *General Topology and Appl.* **7** (1977),
 no. 3, 251-259. (Eric K. van Douwen) **58** #2674 54A25 (54B05, 54B10, 04A15)
 (with Hiller, Howard Lyn) Singular cohomology in L . *Israel J. Math.* **26** (1977), no.
 3-4, 313-319. (Paul C. Eklof) **56** #2820 02K05 (55B10)
 Decidability of a portion of the predicate calculus. *Israel J. Math.* **28** (1977), no.
 1-2, 32-44. (Author's summary) **58** #21562 02G05 (02B10, 02H05)
 Whitehead groups may be not free, even assuming CH. I. *Israel J. Math.* **28** (1977),
 no. 3, 193-204. (Paul C. Eklof) **57** #9538 02K05 (04A20, 05C15, 54E30)
 (with Litman, Ami) Models with few isomorphic expansions. *Israel J. Math.* **28**
(1977), no. 4, 331-338. (M. Yasuhara) **57** #9522 02H05
 (with Devlin, Keith J.) A weak version of \diamond which follows from $2^{\aleph_0} < 2^{\aleph_1}$. *Israel J.*
Math. **29** (1978), no. 2-3, 239-247. (Paul C. Eklof) **57** #9537 02K05 (04A20, 05C15)
 Jonsson algebras in successor cardinals. *Israel J. Math.* **30** (1978), no. 1-2, 57-64.
 (James Baumgartner) **58** #21572 02H05 (04A20)
 A weak generalization of MA to higher cardinals. *Israel J. Math.* **30** (1978), no. 4,
 297-306. (Keith Devlin) **58** #21606 02K05
 (with Avraham, U.; Devlin, Keith J.) The consistency with CH of some
 consequences of Martin's axiom plus $2^{\aleph_0} > \aleph_1$. *Israel J. Math.* **31** (1978), no. 1, 19-33.
 (Thomas J. Jech) **58** #21602 02K05
 On the number of minimal models. *J. Symbolic Logic* **43** (1978), no. 3, 475-480.
 (John T. Baldwin) **58** #10414 02H13
 (with Hiller, Howard Lyn; Huber, Martin) The structure of $\text{Ext}(A, \mathbb{Z})$ and $V = L$.
Math. Z. **162** (1978), no. 1, 39-50. (Paul C. Eklof) **58** #11171 20K20 (20K40,
 02H15)

- Sheldon, John W.** See **Origins of digital computers**, 50 #6760
- Sheldon, Philip B.** Two counterexamples involving complete integral closure in finite-dimensional Prüfer domains. *J. Algebra* 27 (1973), 462-474. (Robert Gilmer) 48 #11097 13F05
- Prime ideals in GCD-domains. *Canad. J. Math.* 26 (1974), 98-107. (James A. Huckaba) 48 #8471 13A15
- (with Boisen, Monte B., Jr.) The valuation structure of homomorphic images of Prüfer domains. *Proc. Amer. Math. Soc.* 46 (1974), 335-342. (Anne Grams) 53 #8049 13F05
- (with Arnold, Jimmy T.) Integral domains that satisfy Gauss's lemma. *Michigan Math. J.* 22 (1975), 39-51. (J. L. Mott) 51 #8104 13G05
- (with Boisen, Monte B., Jr.) Pre-Prüfer rings. *Pacific J. Math.* 58 (1975), no. 2, 331-344. (W. Heinzer) 53 #2928 13F05
- (with Boisen, Monte B., Jr.) A note on pre-arithmetical rings. *Acta Math. Acad. Sci. Hungar.* 28 (1976), no. 3-4, 257-259. (Chr. U. Jensen) 54 #7445 13F05
- (with Boisen, Monte B., Jr.) CPI-extensions: overrings of integral domains with special prime spectrums. *Canad. J. Math.* 29 (1977), no. 4, 722-737. (J. Ohm) 56 #5520 13B99 (13G05)
- Sheleg, A. U.** See **Seleg, A. U.**
- Shelepin, L. A.** See **Selepin, L. A.**
- Shelest, V. P.** See **Šelest, V. P.**
- Shelike, V. F.** See **Šelike, V. F.**
- Shell, Karl** Applications of Pontryagin's maximum principle to economics. *Mathematical systems theory and economics, I, II (Proc. Internat. Summer School, Varenna, 1967)*, pp. 241-292. *Lecture Notes in Operations Research and Mathematical Economics*, Vols. 11, 12, Springer, Berlin, 1969. (W. F. Tyndall) 48 #5613 90A15
- (with Phelps, Edmund S.) Public debt, taxation, and capital intensiveness. *J. Econom. Theory* 1 (1969), 330-346 (1970). (A. C. Williams) 55 #11980a (E 55 #11980b) 90A15
- The theory of Hamiltonian dynamical systems, and an application to economics. *The theory and application of differential games (Proc. NATO Advanced Study Inst., Univ. Warwick, Coventry, 1974)*, pp. 189-199. *NATO Adv. Study Inst. Ser., Ser. C: Math. and Phys. Sci.*, 13, Reidel, Dordrecht, 1975. (James W. Friedman) 58 #25894 90A15 (58F05)
- (with Cass, David) The structure and stability of competitive dynamical systems. Hamiltonian dynamics in economics. *J. Econom. Theory* 12 (1976), no. 1, 31-70. (Hildegard Dierker) 56 #2230 90A15
- See also **Chernick, Howard A.**, 55 #11980b and **Hamiltonian approach to dynamic economics**, 56 #4724
- Shell, Niel** Orthogonal transformations in non-Archimedean spaces. *Arch. Math. (Basel)* 23 (1972), 285-291. (A. F. Monna) 46 #7872 46B99
- Dimension of non-Archimedean Banach spaces. *Colloq. Math.* 28 (1973), 77-79. (E. Beckenstein) 48 #4696 46B05 (12J99)
- One point adjunctions. *Math. Student* 42 (1974), 99 (1975). (Kim-Peu Chew) 53 #1508 54C20
- Non-Archimedean orthogonality. *Arch. Math. (Basel)* 27 (1976), no. 1, 67-78. (A. F. Monna) 55 #13221 46B99
- Non-Archimedean adjoints. *Colloq. Math.* 37 (1977), no. 1, 69-73. (Author's summary) 58 #23708 47A99
- Maximal and minimal ring topologies. *Proc. Amer. Math. Soc.* 68 (1978), no. 1, 23-26. (V. N. Vitzitiu) 57 #299 12J99
- Shelnutt, J. William, III.** (with Moore, Albert H.; Harter, H. Leon) Linear estimation of the scale parameter of the first asymptotic distribution of extreme values. *IEEE Trans. Reliab. R-22* (1973), no. 5, 259-264. (Mir Ali) 53 #1823 62F10
- Shelton, A. K.** (with Pugh, A. C.) Improved algorithm for optimal stabilisation of linear systems. *Electron. Lett.* 11 (1975), no. 22, 528-529. (Authors' summary) 56 #7191 65K05
- (with Pugh, A. C.) On a new definition of strict system equivalence. *Internat. J. Control* 27 (1978), no. 5, 657-672. (Alan Bradshaw) 58 #15401 93B25
- Shelud'ko, O. I.** See **Šelud'ko, O. I.**
- Shelukha, A. I.** See **Šelukha, A. I.**
- Shelukhin, V. V.** See **Šelukhin, V. V.**
- Shelupsky, David** A proof of the binomial theorem. *Amer. Math. Monthly* 81 (1974), 390-393. (V. Ganapathy Iyer) 49 #3053 26-01
- Shemesh, Dan** On a theorem of A. Ostrowski. *Linear and Multilinear Algebra* 5 (1977/78), no. 2, 139-143. (M. Shafqat Ali) 58 #5715 15A15
- Shemyakin, E. I.** See **Šemjakín, E. I.**
- Shen, C.-K.** On the topology of some high dimensional almost complex manifolds. Collection of articles dedicated to Professor Tsing Houa Teng on the occasion of his 70th birthday. *Tamkang J. Math.* 4 (1973), no. 2, 1-4. (Shoshichi Kobayashi) 51 #4263 57D15 (53C15)
- Shen, C. N.** (with Bednarski, Stanislaw) Optimal schedules for rapid starting and loading of steam turbines. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 1: Process control-modeling and numerical control, Power-thermal processes and general applications, Paper No. 5.5, 7 pp.* *Internat. Fed. Automat. Control, Düsseldorf, 1971* [1972]. (Dusan Petrovacki) 51 #9903 93C99
- (with Cefola, P. J.) A parameter dependent spacecraft guidance boundary value problem. *AIAA J.* 9 (1971), 1975-1979. (From the authors' summary) 45 #6198 65L10
- Shen, C. Y.** An elementary result on exponential measure spaces. *Canad. Math. Bull.* 15 (1972), 277-278. (E. O. Elliott) 46 #3738 28A35
- A functional calculus approach to the Ursell-Mayer functions. *J. Mathematical Phys.* 13 (1972), 754-759. (M. E. Mayer) 46 #6771 8246
- On a certain class of transformations in statistical mechanics. *J. Mathematical Phys.* 14 (1973), 1202-1204. (H. Wakita) 48 #10408 8247
- A remark on the algebra $A(X)$. *Tamkang J. Math.* 7 (1976), no. 1, 37-40. (Ricardo Lima) 56 #4594 8246 (46J10)
- On Carathéodory's approach to the second law of thermodynamics. *Tamkang J. Math.* 7 (1976), no. 1, 95-104. (H. A. Buchdahl) 55 #13966 80S8
- Heat and mass transfer in porous media. *Tamkang J. Math.* 8 (1977), no. 2, 221-228. (From the text) 58 #32451 80S5
- Shen, Ch'ang K'eng** A remark on the almost complex structures of the connected complex projective planes. *Chinese J. Math.* 5 (1977), no. 2, 153-155. (Editors) 58 #24283 57D15
- Shen, Chang Si** (with Sun, Jing You; Wang, Shen Lin; Chen, Shi Jie) Application of finite element method in numerical weather forecasting. (Chinese) *Kexue Tongshu* (1977), no. 6, 263-266. (Not reviewed) 65N30
- Shen, D. W. C.** (with Lee, Henry E.) Optimal control of a class of distributed-parameter systems using gradient methods. *Proc. Inst. Elec. Engrs.* 116 (1969), 1237-1240. (Davies) 46 #6591 65K05
- (with Fairman, Frederick W.) Parameter identification for linear time-varying dynamic processes. *Proc. Inst. Elec. Engrs.* 117 (1970), 2025-2029. (R. N. Davies) 47 #3051 93B30
- (with Lee, Henry E.) Weighting function estimation in distributed-parameter systems. *Pattern recognition and machine learning (Proc. Japan-U.S. Sem. on Pattern Recognition, Nagoya, 1970)*, pp. 111-120. *Plenum Press, New York* (Bojan Popović) 56 #8111 93B30 (93C20)
- Shen, Hayley** (with Ames, William F.) On invariant solutions of the Korteweg-de Vries equation. *Phys. Lett.* 49A (1974), 313-314. (Authors' summary) 50 #11984
- (with Lonngren, Karl E.; Hsuan, H. C. S.; Malik, Norbert R.) Self-similar solutions of distributed linear and nonlinear networks. *IEEE Trans. Circuits and Systems* (1975), no. 11, 882-886. (Clarence M. Ablow) 52 #16289 7835
- (with Lonngren, Karl E.) Self-similar behavior of plasma fluid equations. *Engrg. Math.* 10 (1976), no. 2, 135-141. (C. Rogers) 53 #15085 (E 55 #7101)
- (with Lonngren, Karl E.) Correction to: "Self-similar behavior of plasma fluid equations. II." (J. Engrg. Math. 10 (1976), no. 2, 135-141). *J. Engrg. Math.* 11 (1976), no. 1, 89-91. (C. Rogers) 55 #7101 7635
- Shen, L. C.** (with Allen, G. D.) On the structure of principal ideals of operators. *Amer. Math. Soc.* 238 (1978), 253-270. (Norberto Salinas) 57 #7230 47B05
- Shen, Mei Chang** (with Keller, Joseph B.) Ray method of nonlinear wave propagation in a rotating fluid of variable depth. *Phys. Fluids* 16 (1973), 1565-1572. (P. C. Chen) 50 #9155 7635
- (with Keller, Joseph B.) Uniform ray theory of surface, internal and acoustic wave propagation in a rotating ocean or atmosphere. *SIAM J. Appl. Math.* 28 (1974), 857-875. (Maurice Bouix) 51 #4844 7635 (7835)
- (with Shih, S. M.) Uniform asymptotic approximation for viscous fluid flow over an inclined plane. *SIAM J. Math. Anal.* 6 (1975), 560-582. (R. Manohar) 52 #47641
- Ray method for surface waves on fluid of variable depth. *SIAM Rev.* 17 (1975), 38-56. (F. Ursell) 51 #14746 7635
- Surface waves on viscous fluid of variable depth. *Phys. Fluids* 19 (1976), 1669-1675. (W. O. Criminale, Jr.) 54 #9330 7641 (7635)
- (with Carasso, Alfred S.) On viscous fluid flow down an inclined plane. Development of roll waves. *SIAM J. Appl. Math.* 33 (1977), no. 3, 399-426. (T. A. Burton) 58 #19761 7641
- Shen, S. F.** (with Slinn, W. G. N.) Brownian diffusion in a nonuniform gas. *J. Phys. C* (1971), 291-305. (S. Harris) 46 #8604 8245
- (with Atassi, H.) A unified kinetic theory approach to external rarefied gas flow. Derivation of hydrodynamic equations. *J. Fluid Mech.* 53 (1972), 417-431. (T. A. Burton) 47 #2900 7635
- (with Habashi, W.) Local linearization of the finite element method and its applications to compressible flows. *Internat. J. Numer. Methods Engrg.* 10 (1976), 565-577. (Authors' summary) 56 #10434 7665
- Shen, Shou Shion** See **Ch'ên, Hsiu Hsiung**
- Shen, Sing Yao** See **Shen, Xin Yao**
- Shen, V. Y.** (with Krause, K. L.; Schwetman, H. D.) Analysis of several task-scheduling algorithms for a model of multiprogramming computer systems. *J. Assoc. Comput. Mach.* 22 (1975), no. 4, 522-550. (Richard A. DeMillo) 52 #12758 (E 55 #1490B35 (68A99))
- (with Krause, K. L.; Schwetman, H. D.) Errata: "Analysis of several task-scheduling algorithms for a model of multiprogramming computer systems." *Assoc. Comput. Mach.* 22 (1975), no. 4, 522-550. *J. Assoc. Comput. Mach.* 24 (1976), no. 3, 527. (Editors) 55 #14181 90B35 (68A05)
- (with Kafura, D. G.) Task scheduling on a multiprocessor system with independent tasks and memories. *SIAM J. Comput.* 6 (1977), no. 1, 167-187. (Erol Gelenbe) 55 #68A20
- Shen, Xin Yao** On the structure of group $\pi^n(K^{n+3})$. *Sci. Sinica* 17 (1974), no. 5, 601-606. (I. Pop) 55 #13419 55E55
- Shendge, G. R.** On a functional integral inequality. *Acta Math. Acad. Sci. Hungar.* (1973), 289-291. (V. Lakshmikantham) 49 #783 34K15
- Finite systems of functional differential inequalities and minimax solutions. *Math. Acad. Sci. Hungar.* 25 (1974), 21-30. (F. Hoppensteadt) 50 #13819
- A note on a finite system of functional integral inequalities. *Period. Math. Hungar.* 5 (1974), 219-222. (V. Lakshmikantham) 50 #7732 34K05
- (with Deo, S. G.) On the boundedness of solutions of functional differential systems. *Period. Math. Hungar.* 5 (1974), 269-276. (R. E. Fennell) 52 #34K20
- (with Joshi, S. R.) A note on hyperbolic functions. *Math. Student* 43 (1975), 197-200. (H. Hochstadt) 55 #12961 33A10 (34B99, 26A09)
- Šendrik, V. S.** See **Šendrik, V. S.**
- Shene, C. K.** The triangle area formula implies the parallel postulate. *Math. Mag.* (1972), 269-272. (S. R. Mandan) 46 #6137 50A05
- Sheng, C. L.** (with Sinha Roy, P. K.) An approach for the synthesis of multivariable threshold elements. *IEEE Trans. Computers* C-21 (1972), 913-920. (From the text) 56 #11624 94A20
- (with Mar, Henry Y. L.) Fast Hadamard transform using the H diagram. *Trans. Computers* C-22 (1973), 957-960. (Patrick P. Bergmans) 52 #7686 (68A10)
- (with Hwang, Jia Cherng; Hsieh, C. C.) On the modulo-two-sum decomposition of binary sequences of finite periods. *Internat. J. Electron.* 39 (1975), no. 1, 1-10.

- ers' summary) **56** #15139 94A10 (94A20)
- Finiteness in prime ideals in rings of global dimension two. *Proc. Amer. Math. Soc.* **1** (1973), 363-369. (A. V. Geramita) **48** #6081 13C15
- Application of two-point Padé approximants to some solid state problems. *Proceedings of the International Conference on Padé Approximants, Continued*
- ons and Related Topics (Univ. Colorado, Boulder, Colo., 1972; dedicated to the memory of H. S. Wall). *Rocky Mountain J. Math.* **4** (1974), 385-386. (Editors)
- 2003** 82.40
- K. Distribution of rational points on the real line. *J. Austral. Math. Soc.* **15** **1**, 243-256. (R. Güting) **48** #6010 10E30 (10F99)
- Graph embedding. *Nanta Math.* **6** (1973), no. 1, 36-40. (A. T. White) **48** #10904
- Dispersive and explosive mappings. *J. Austral. Math. Soc.* **20** (1975), part 1, 33-37. (in Marcus) **51** #10310 12D99 (15A63)
- (with Erdős, Paul) Distribution of rational points on the real line. *J. Austral. Math. Soc.* **20** (1975), no. 1, 124-128. (R. Güting) **52** #309 10H25
- Lines determined by lattice points in R^2 . *Nanta Math.* **10** (1977), no. 1, 77-81. (F. ter Blij) **57** #12405 10E05 (10J25)
- Lines determined by lattice points in R^n . *Nanta Math.* **10** (1977), no. 2, 194-200. (G. ves) **58** #27869a 10J25
- Lines containing q lattice points in $V \subset R^n$. *Nanta Math.* **11** (1978), no. 1, 71-77. (G. ves) **58** #27869b 10J25
- Lines determined by lattice points in non-convex regions. *Nanta Math.* **11** (1978), no. 1, 78-83. (G. Greaves) **58** #27869c 10J25
- See also **Proceedings: Australian Conference on Combinatorial Mathematics**, **10557**
- r, A. See Siegel, Carl Ludwig. (Not reviewed) and Vilenkin, N. Ja., **46** #5133
- r, S. See Vilenkin, N. Ja., **46** #5133
- Norman (with Thoe, Dale W.) Eigenfunction expansions and scattering theory for perturbations of $-\Delta$. *J. Math. Anal. Appl.* **36** (1971), 313-351. (J. B. McLeod) **45** #3978 P25 (47A70)
- (with Thoe, Dale W.) Resonant states and poles of the scattering matrix for perturbations of $-\Delta$. *J. Math. Anal. Appl.* **37** (1972), 467-491. (J. S. Howland) **47** #7730 35P25 (47A40)
- B. A. (with Malah, D.) Reduction and transformation of linear time-varying systems. *Internat. J. Control* (1) **16** (1972), 1127-1136. (P. E. chik) **47** #6357 93B10
- (with Suresh, B. R.) Exact realisation of 2-dimensional digital filters by separable systems. *Electron. Lett.* **12** (1976), no. 10, 242-244. (Shinichi Tamura) **53** #15583
- (with Kasarabada, C.) On the zeros of polynomials used in digital filters. *IEEE Trans. Circuits and Systems* **CAS-23** (1976), no. 7, 423-429. (Authors' summary) **51** #15185 94A20
- (with Belal, Ahmed A.) Scaling of linear time-varying networks, passivity, and losslessness. *IEEE Trans. Circuits and Systems* **CAS-24** (1977), no. 5, 247-251. (W.-K. a) **56** #2669 94A20
- M. J. Parasitics and the stability of equilibrium points of nonlinear networks. *IEEE Trans. Circuit Theory* **CT-18** (1971), 481-484. (Author's summary) **54** #4847
- A. T. (with Porter, Brian) Singular perturbation methods of asymptotic value assignment in multivariable linear systems. *Internat. J. Systems Sci.* **6** (1975), no. 7, 71-85. (S. P. Bhattacharyya) **54** #7027 93B25
- L. R. (with Bowman, Kimiko O.; Sheehan, D.) Sampling moments of moments associated with univariate distributions. *J. Roy. Statist. Soc. Ser. B* **33** (1971), 444-457. (Jamain Epstein) **47** #4368 62E15
- (with Bowman, Kimiko O.) Small sample properties of the maximum likelihood estimator associated with Fisher's linkage problem. *J. Statist. Comp. and Simulation* **1** (1972), no. 1, 71-85. (P. W. Mielke, Jr.) **45** #6111 62F10
- On note 3280: "The differentiation of a function by a function" (Math. Gaz. **54** (1970), no. 390, 389) by J. G. Colman. *Math. Gaz.* **56** (1972), no. 395, 39. (Editors) **51** #1259 26-03
- (with Consul, P. C.) Use of Lagrange expansion for generating discrete generalized probability distributions. *SIAM J. Appl. Math.* **23** (1972), 239-248. (S. Kotz) **47** #6005 62E10
- (with Consul, P. C.) On the multivariate generalization of the family of discrete probability distributions. *Multivariate statistical inference (Proc. Res. Sem., Dalhousie Univ., Halifax, N. S., 1972)*, pp. 13-23. North-Holland, Amsterdam; American Elsevier, New York, 1973. (G. C. Jain) **53** #11835 62E10 (60K25)
- (with Bowman, Kimiko O.) Space of solutions for a normal mixture. *Biometrika* **60** (1973), 629-636. (K. S. Fu) **49** #1650 62E99
- (with Consul, P. C.) Some interesting properties of Lagrangian distributions. *Ann. Statist.* **2** (1973), 263-272. (G. C. Jain) **53** #11836 62E10
- (with Bowman, Kimiko O.) Remarks on the distribution of $\sqrt{b_1}$ in sampling from a normal mixture, and normal type A distribution. *J. Amer. Statist. Assoc.* **68** (1973), no. 337, 1003. (M. Raghavachari) **51** #4493 62E15
- (with Consul, P. C.) On bivariate Lagrange and Borel-Tanner distributions and their queueing theory. *Sankhyā Ser. A* **35** (1973), 229-236. (P. Holgate) **58** #13508 60K25
- (with Bowman, Kimiko O.) Comments on higher order terms in moments of moments, moments of maximum likelihood estimators, regression residuals. *Proceedings of the Prague Symposium on Asymptotic Statistics (Charles Univ., Prague, 1973)*, Vol. II, pp. 323-344. Charles Univ., Prague, 1974. (B. L. S. Prakasa Rao) **51** #14353 62E20
- (with Hutcheson, Kermit) Some moments of an estimate of Shannon's measure of information. *Comm. Statist.* **3** (1974), 89-94. (L. L. Campbell) **49** #7016 94A15
- Sequences of irrational fraction approximants to some hypergeometric functions. *Proceedings of the International Conference on Padé Approximants, Continued*
- ctions and Related Topics (Univ. Colorado, Boulder, Colo., 1972; dedicated to the memory of H. S. Wall). *Rocky Mountain J. Math.* **4** (1974), 387-389. (Editors)
- 4214** 65D15
- (with Patel, Y. C.; Bowman, Kimiko O.) Maximum likelihood estimation for the parameters of the Hermite distribution. *Sankhyā Ser. B* **36** (1974), no. 2, 154-162. (Campbell B. Read) **52** #15804 62F10
- (with Bowman, Kimiko O.) Omnibus test contours for departures from normality based on $\sqrt{b_1}$ and b_2 . *Biometrika* **62** (1975), no. 2, 243-250. (N. L. Johnson) **52** #1976 62E15
- (with Bowman, Kimiko O.) The development of techniques for the evaluation of sampling moments. (French summary) *Internat. Statist. Rev.* **43** (1975), no. 3, 317-334. (Authors' introduction) **56** #1540 62E15
- (with Bowman, Kimiko O.) A new algorithm for summing divergent series. I. Basic theory and illustrations. *J. Comput. Appl. Math.* **2** (1976), no. 3, 151-167. (Walter Gautschi) **55** #13729 65B10
- (with Bowman, Kimiko O.) A new algorithm for summing divergent series. II. A two-component Borel summability model. *J. Comput. Appl. Math.* **2** (1976), no. 4, 259-266. (Walter Gautschi) **58** #3295a 65B10
- (with Consul, P. C.) A new functional equation with some solutions. *Rocky Mountain J. Math.* **6** (1976), no. 2, 321-330. (A. L. Ruhin) **53** #3532 39A15 (60K25)
- (with Bowman, Kimiko O.; Beauchamp, John J.) The distribution of the t -statistic under non-normality. *Internat. Statist. Rev.* **45** (1977), no. 3, 233-242. (D. S. Tracy) **58** #7968 62E15 (62E25)
- (with Bowman, Kimiko O.) A new algorithm for summing divergent series. III. Applications. *J. Comput. Appl. Math.* **3** (1977), no. 1, 35-51. (Walter Gautschi) **58** #3295b 65B10
- (with Bowman, Kimiko O.) Generalized continued fractions and Whittaker's approach. *J. Comput. Appl. Math.* **4** (1978), no. 1, 3-5. (David F. Dawson) **57** #13282 40A15
- (with Bowman, Kimiko O.) Asymptotic series and Stieltjes continued fractions for a gamma function ratio. *J. Comput. Appl. Math.* **4** (1978), no. 2, 105-111. (F. Götz) **58** #3323 65D20
- See also **Proceedings: Session of the International Statistical Institute**, **49** #8143 and **Proceedings: Session of the International Statistical Institute**, **49** #8144
- Shepanik, Ian (with Howard, Nigel) Boolean algorithms used in metagame analysis. *Cahiers Centre Études Recherche Opér.* **19** (1977), no. 1-2, 177-194. (Zbl **376** #90100) **58** #20541 90D99
- Shepanski, J. R. See Dirac, Paul Adrien Maurice, **57** #18520
- Shepard, H. K. (with Shih, C. C.) Optimized data extrapolation off the boundary of an analytic function. *Nuclear Phys.* **B42** (1972), 397-417. (Authors' summary) **56** #2005 81.30
- Shepard, Philip T. A finite arithmetic. *J. Symbolic Logic* **38** (1973), 232-248. (R. L. Goodstein) **48** #8210 02E99 (02F99, 02H10, 10N15)
- Shepard, R. L. (with Hocking, R. R.) Parametric solution of a class of nonconvex programs. *Operations Res.* **19** (1971), 1742-1747. (R. N. P. Singh) **46** #6589 65K05
- Shepard, Roger N. (with Kruskal, Joseph B.) A nonmetric variety of linear factor analysis. *Psychometrika* **39** (1974), 123-157. (K. G. Jöreskog) **50** #6058 62H25 (62P15)
- Representation of structure in similarity data: problems and prospects. *Psychometrika* **39** (1974), 373-421. (Robin Sibson) **54** #1526 62P15 (92A25)
- Shepardson, C. B. Generalized Hurwitz-Riemann formulas. *Indiana Univ. Math. J.* **23** (1973), 277-285. (Roger Fenn) **48** #5058 55C25 (30A70)
- Shepelev, G. I. See Šepelev, G. I.
- Shephard, Geoffrey C. (with McMullen, Peter) ★Convex polytopes and the upper bound conjecture. Prepared in collaboration with J. E. Reeve and A. A. Ball. London Mathematical Society Lecture Note Series, 3. Cambridge University Press, London-New York, 1971. iv + 184 pp. (H. S. M. Coxeter) **46** #791 52A25
- Diagrams for positive bases. *J. London Math. Soc.* (2) **4** (1971), 165-175. (G. T. Sallee) **45** #4277 52A25
- Polyhedral diagrams for sections of the non-negative orthant. *Mathematika* **18** (1971), 255-263. (D. W. Walkup) **45** #9247 52A25 (90C05)
- Sections and projections of convex polytopes. *Mathematika* **19** (1972), 144-162. (D. Barnette) **47** #4142 52A25
- (with Conway, John Horton; Coxeter, Harold Scott MacDonald) The centre of a finitely generated group. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. II. *Tensor (N.S.)* **25** (1972), 405-418; erratum, *ibid.* (N.S.) **26** (1972), 477. (W. Moser) **48** #11326 20F05
- Combinatorial properties of associated zonotopes. *Canad. J. Math.* **26** (1974), 302-321. (Joseph Zaks) **50** #14496 52A25
- (with McMullen, Peter; Schneider, Rolf) Monotypic polytopes and their intersection properties. *Geometriae Dedicata* **3** (1974), 99-129. (Joseph Zaks) **50** #5638 52A25
- (with Kömhoff, Magelone) Approximation problems for combinatorial isomorphism classes of convex polytopes. *Geometriae Dedicata* **3** (1974), 139-153. (P. McMullen) **50** #3116 52A25
- (with Perles, Micha A.) A construction for projectively unique polytopes. *Geometriae Dedicata* **3** (1974), 357-363. (E. Hertel) **50** #14495 52A25
- Subpolytopes of stack polytopes. *Israel J. Math.* **19** (1974), 292-296. (G. Ewald) **51** #6590 52A25
- (with Ewald, Günther) Stellar subdivisions of boundary complexes of convex polytopes. *Math. Ann.* **210** (1974), 7-16. (P. McMullen) **50** #3115 52A25
- Space-filling zonotopes. *Mathematika* **21** (1974), 261-269. (A. Florian) **51** #1585 50B30 (52A25)
- Convex polytopes with convex nets. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), no. 3, 389-403. (E. Jucović) **52** #11738 (EA **55/56**) 52A25
- (with Grünbaum, Branko) Incidence numbers of complexes and polytopes. *J. Combinatorial Theory Ser. A* **21** (1976), no. 3, 345-368. (A. K. Dewdney) **55** #12554 05C10 (57A15, 57A60)
- Additive frieze patterns and multiplication tables. *Math. Gaz.* **60** (1976), no. 413, 178-184. (J. S. Joel) **58** #16353 05B99 (50B30)
- (with Grünbaum, Branko) Perfect colorings of transitive tilings and patterns in the plane. *Discrete Math.* **20** (1977/78), no. 3, 235-247. (Jean-Claude Fournier) **58** #313 05B45 (50B30)
- (with Coxeter, Harold Scott MacDonald) Regular 3-complexes with toroidal cells. *J. Combinatorial Theory Ser. B* **22** (1977), no. 2, 131-138. (P. McMullen) **55** #11140 50B30 (52A25)

- (with Grünbaum, Branko) Tilings by regular polygons. Patterns in the plane from Kepler to the present, including recent results and unsolved problems. *Math. Mag.* **50** (1977), no. 5, 227-247. (H. S. M. Coxeter) **58** #18090 50B30 (01A05)
- (with Grünbaum, Branko) The eighty-one types of isohedral tilings in the plane. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 2, 177-196. (J. J. Burckhardt) **56** #6542 50B30
- (with Grünbaum, Branko) Do maximal line-generated triangulations of the plane exist? *Amer. Math. Monthly* **85** (1978), no. 1, 37-41. (O. Giering) **57** #3993 50D40 (50D20)
- Shephard, Ronald W.** ★Theory of cost and production functions. Princeton Studies in Mathematical Economics, 4. Princeton University Press, Princeton, N. J., 1970. xi+308 pp. (From the introduction) **54** #2160 90A99
- Comment on homogeneous production functions. *J. Econom. Theory* **4** (1972), no. 1, 101-102. **56** #10900 90B30
- (with Goldman, Steven Marc) On Eichhorn's generalization of homogeneous production functions. (German summary) *Z. Operations Res. Ser. A-B* **16** (1972), no. 5, A215-A219. (Michael D. Intriligator) **53** #7395 90A99
- ★Indirect production functions. Mathematical Systems in Economics, No. 10. Verlag Anton Hain, Meisenheim am Glan, 1974. v+99 pp. (Otto Opitz) **57** #11713 90B30 (90A10)
- Semi-homogeneous production functions and scaling of production. *Production theory (Proc. Internat. Sem., Univ. Karlsruhe, Karlsruhe, 1973)*, pp. 253-285. *Lecture Notes in Econom. and Math. Systems*, Vol. 99, Springer, Berlin, 1974. (From the introduction) **58** #4267 90B15
- (with Färe, Rolf) The law of diminishing returns. *Production theory (Proc. Internat. Sem., Univ. Karlsruhe, Karlsruhe, 1973)*, pp. 287-318. *Lecture Notes in Econom. and Math. Systems*, Vol. 99, Springer, Berlin, 1974. (G. Tintner) **52** #2535 90A10 (90B30)
- Dynamic indirect production functions. *Mathematical economics and game theory*, pp. 418-434. *Lecture Notes in Econ. and Math. Systems*, Vol. 141, Springer, Berlin, 1977. (Leonard J. Mirman) **55** #14176 90B30
- (with Färe, Rolf) Ray-homothetic production functions. *Econometrica* **45** (1977), no. 1, 133-146. (O. Opitz) **56** #7920 90B30
- A dynamic formulation of index functions for the theory of cost and production. *Theory and applications of economic indices (Proc. Internat. Sympos., Univ. Karlsruhe, Karlsruhe, 1976)*, pp. 417-448. *Physica-Verlag, Würzburg*, 1978. (See Zbl **381** #90031; MR **57** #2497) 90A15
- On household production theory. *Theory and applications of economic indices (Proc. Internat. Sympos., Univ. Karlsruhe, Karlsruhe, 1976)*, pp. 449-485. *Physica-Verlag, Würzburg*, 1978. (Edwin Burmeister) **58** #9199 90B30 (90A10)
- See also *Production theory*, **49** #8609; *Diewert, W. E.*, **55** #7335 and *Theory and applications of economic indices*, **57** #2497
- Shepherd, J. J.** (with Rosenblat, S.) On the asymptotic solution of the Lagerstrom model equation. *SIAM J. Appl. Math.* **29** (1975), 110-120. (D. R. Breach) **51** #9634 76.34 (76.41)
- A nonlinear singular perturbation problem on a semi-infinite interval. *J. Austral. Math. Soc. Ser. B* **20** (1977/78), no. 2, 226-240. (Author's summary) **58** #22865 34E15
- Asymptotic solution of a nonlinear singular perturbation problem. *SIAM J. Appl. Math.* **35** (1978), no. 1, 176-186. (Harold Exton) **57** #16787 34B15 (34E15)
- Shepherd, P.** (with Gourlay, A. R.; McLean, J. M.) Identification and analysis of the subsystem structure of models. *Appl. Math. Modelling* **1** (1977), no. 5, 245-252. (Ivar Gustavsson) **58** #15425 93B99 (90A15)
- Shepherd, P. J.** See *Zubarev, D. N.*, **57** #8491
- Shepherd, Raymond** (with Shult, Ernest E.) Corollaries of strongly embedded type from a theorem of Aschbacher. *Finite groups '72 (Proc. Gainesville Conf., Univ. Florida, Gainesville, Fla., 1972)*, pp. 126-130. *North-Holland Math. Studies*, Vol. 7, North-Holland, Amsterdam, 1973. (M. E. Harris) **50** #13248 20D05
- Shepherd, Roger A.** (with Rheinboldt, Werner C.) On a characterization of tridiagonal matrices by M. Fiedler. *Linear Algebra and Appl.* **8** (1974), 87-90. (George P. Barker) **48** #3987 15A21
- Shepherd, William L.** A class of cubic spline interpolation and approximation formulas. *Transactions of the Nineteenth Conference of Army Mathematicians (U.S. Army Training Device Agency, Naval Training Equipment Center, Orlando, Fla., 1973)*, pp. 1089-1104. *U.S. Army Research Office (Durham), Report No. 73-3, U.S. Army Research Office (Durham), Durham, N.C.*, 1973. (C. A. Hall) **49** #11763 65D05
- See also *Transactions: Conference of Army Mathematicians*, **49** #4735 and *Transactions: Conference of Army Mathematicians*, **49** #4736
- Shepherdson, J. C.** Computation over abstract structures: serial and parallel procedures and Friedman's effective definitional schemes. *Logic Colloquium '73 (Bristol, 1973)*, pp. 445-513. *Studies in Logic and the Foundations of Mathematics*, Vol. 80., North-Holland, Amsterdam, 1975. (Author's summary) **55** #7753 02F27 (68A05)
- (with Bezboruah, A.) Gödel's second incompleteness theorem for \mathcal{Q} . *J. Symbolic Logic* **41** (1976), no. 2, 503-512. (A. B. Slomson) **53** #7756 02G20
- On the definition of computable function of a real variable. *Z. Math. Logik Grundlagen Math.* **22** (1976), no. 5, 391-402. (A. H. Lachlan) **56** #102 02E15
- See also *Colloquium: Logic*, **51** #10015
- Shepley, Lawrence C.** Type I cosmologies. *Cargèse lectures in physics*, Vol. 6, pp. 227-260. Gordon and Breach, New York, 1973. (A. H. Taub) **56** #17684 83.53
- (with Duncan, D. P.) A numerical sufficient condition for deciding if a space-time is inextendible. (Italian and Russian summaries) *Nuovo Cimento B* (11) **24** (1974), 130-134. (J. K. Beem) **54** #2090 83.53
- (with Ryan, Michael P., Jr.) ★Homogeneous relativistic cosmologies. Princeton Series in Physics. Princeton University Press, Princeton, N.J., 1975. xv+320 pp. (From the preface) **58** #25810 83.53
- (with Criss, Thomas B.; Matzner, Richard A.; Ryan, Michael P., Jr.) Modern theoretical and observational cosmology. *General relativity and gravitation (Proc. Seventh Internat. Conf. (GR7), Tel-Aviv Univ., Ramat-Aviv, 1974)*, pp. 33-107. *Halsted Press, New York*, 1975. (Edward N. Glass) **57** #8876 83.53
- (with Duncan, D. P.) Boundaries of spacetimes. *J. Mathematical Phys.* **16** (1975), 485-492. (Kishore Marathe) **53** #4882 83.53
- Alfred Schild 1921-1977. *General Relativity and Gravitation* **8** (1977), no. 955-956. (Editors) **58** #10223 01A70
- (with Luehr, C. P.; Rosenbaum, M.; Ryan, Michael P., Jr.) Nonstandard connections given by nonstandard spinor connections. *J. Mathematical Phys.* **18** (1977), no. 5, 965-970. (A. Crumeyrolle) **56** #6558 53B30
- (with Hojman, Sergio A.; Rosenbaum, M.; Ryan, Michael P., Jr.) Gauge invariance, minimal coupling, and torsion. *Phys. Rev. D* (3) **17** (1978), no. 12, 3141-3146. (Authors' summary) **58** #14927 83.53
- Sheposjan, E. V.** (with Amatuni, A. C.; Magomedov, M. R.; Elbakjan, S. S.) Polarization losses of a relativistic charged particle in a plasma in the presence of a strong external high frequency electrical field. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Fiz.* **12** (1977), no. 4, 244-250, 301. (Authors' summary) **56** #17499 78.35
- Shepp, Lawrence A.** (with Marcus, Michael B.) Sample behavior of Gaussian processes. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. 11: Probability theory, pp. 421-434. Univ. California Press, Berkeley, Calif., 1972. (Simeon M. Berman) **53** #6710
- Covering the circle with random arcs. *Israel J. Math.* **11** (1972), 328-340. (Holgate) **45** #4468 60D05
- Covering the line with random intervals. *Z. Wahrscheinlichkeitstheorie und Gebiete* **23** (1972), 163-170. (H. Groemer) **48** #1284 60D05
- (with Logan, B. F., Jr.; Mallows, Colin L.; Rice, Stephen O.) Limit distributions for self-normalized sums. *Ann. Probability* **1** (1973), 788-809. (G. K. Eagleson) **50** #60F05
- (with Klauder, John R.; Ezawa, H.) On the divergence of certain integrals of the Wiener process. (French summary) Colloque International sur les Processus Gaussiens et les Distributions Aléatoires (Colloque Internat. du CNRS, No. 222, Strasbourg, 1974). *Ann. Inst. Fourier (Grenoble)* **24** (1974), no. 2, vi, 189-193. (H. P. McKean) **53** #6772 60J65
- (with Ezawa, H.; Klauder, John R.) A path space picture for Feynman-Kac averages. *Ann. Physics* **88** (1974), 588-620. (G. Della Riccia) **52** #4895 81.60
- (with Logan, B. F., Jr.) A birth and death model of neuron firing. *J. Probability* **11** (1974), 369-373. (S. K. Srinivasan) **52** #4445 60J85 (92A05)
- (with Logan, B. F., Jr.) Optimal reconstruction of a function from its projections. *Duke Math. J.* **42** (1975), no. 4, 645-659. (B. Dresler) **53** #1099 41A10
- (with Ezawa, H.; Klauder, John R.) Vestigial effects of singular potentials in diffusion theory and quantum mechanics. *J. Mathematical Phys.* **16** (1975), 781-788. (R. A. Minlos) **53** #4812 81.47 (60H10)
- (with Slepian, David) First-passage time for a particular stationary periodic Gaussian process. *J. Appl. Probability* **13** (1976), no. 1, 27-38. (A. M. Hurd) **53** #1712 60G15
- Correction to: "Radon-Nikodým derivatives of Gaussian measures" (*Ann. Statist.* **37** (1966), 321-354). *Ann. Probability* **5** (1977), no. 2, 315-317. (T. S. Ferguson) **55** #9254 60G30
- (with Gutmann, Sam) Orthogonal bases for two subspaces with all mutual angles acute. *Indiana Univ. Math. J.* **27** (1978), no. 1, 79-90. (K. Jacobs) **56** #146C05 (60J05)
- See also *Key papers in the development of information theory*, **52** #5177
- Sheppard, David A.** The factorial representation of balanced labelled graphs. *J. Math.* **15** (1976), no. 4, 379-388. (Richard K. Guy) **56** #5369 05C99
- Sheppard, Donald A.** (with Vranesic, Zvonko G.) Fault detection of binary sequence machines using R-valued test machines. *IEEE Trans. Computers* **C-23** (1974), 351-356. (Costică Cazacu) **52** #13017 94A25 (94A20)
- See also *Conference Record: International Symposium on Multiple-Valued Logic*, **50** #4244
- Sheps, Mindel C.** (with Menken, Jane A.) The sampling frame as a determinant of observed distributions of duration variables. *Population dynamics (Proc. Sympos., Res. Center, Univ. Wisconsin, Madison, Wis., 1972)*, pp. 57-87. Academic Press, New York, 1972. **55** #12170 92A15
- (with Menken, Jane A.) On estimating the risk of conception from censored population dynamics. *Population dynamics (Proc. Sympos., Res. Center, Univ. Wisconsin, Madison, Wis., 1972)*, pp. 167-200. Academic Press, New York, 1972. (R. Fischler) **55** #2197 (62P10)
- (with Menken, Jane A.) Distribution of birth intervals according to the sampling frame. *Theoret. Population Biology* **3** (1972), 1-26. (D. Ludwig) **48** #5668 (62P10)
- (with Menken, Jane A.) ★Mathematical models of conception and birth. With assistance of Annette P. Radick. The University of Chicago Press, Chicago, Ill., 1973. xxiii+428 pp. (K. Dietz) **48** #8014 92A15
- (with Menken, Jane A.) Estimation of heterogeneous risks from data on conceptions. *Proceedings of the Fourth Conference on Probability Theory (Braşov, 1973)*, pp. 439-460. Editura Acad. R. S. R., Bucharest, 1973. (P. W. A. Dayananda) **53** #192A15
- Sher, R. B.** A survey of some results in geometric topology. *J. Elisha Mitchell Sci. Soc.* **92** (1976), no. 3, 98-103. (Richard M. Schori) **56** #1315 57Axx
- Sher, Richard B.** (with Hollingsworth, John) Triangulating neighborhoods in topological manifolds. *General Topology and Appl.* **1** (1971), 345-348. (Roger Fenn) **45** #57C15
- Realizing cell-like maps in euclidean space. *General Topology and Appl.* **2** (1975), 75-89. (M. Craioveanu) **46** #2683 57A60
- (with Ball, B. J.) A theory of proper shape for locally compact metric spaces. *Amer. Math. Soc.* **79** (1973), 1023-1026. (J. Segal) **48** #12458 54C56
- (with Ball, B. J.) Embedding circle-like continua in E^3 . *Canad. J. Math.* **25** (1973), 791-805. (R. Bean) **48** #7227 54F20 (57A35)
- (with Ball, B. J.) Extending cell-like maps on manifolds. *Trans. Amer. Math. Soc.* **186** (1973), 229-246 (1974). (R. C. Lacher) **48** #7292 57A60
- (with Ball, B. J.) A theory of proper shape for locally compact metric spaces. *Math. 86* (1974), 163-192. (J. Segal) **51** #1724 54C56
- Property SUV^∞ and proper shape theory. *Trans. Amer. Math. Soc.* **190**

56. (R. C. Lacher) **49** #6140 54C56
oper shape theory and neighborhoods of sets in Q -manifolds. (Russian summary)
Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. **23** (1975), no. 3, 271-276. (R. C. Lacher) **52** #6725 57A20 (54C56)
Products and sums of absolute proper retracts. *Colloq. Math.* **33** (1975), no. 1, 2. (W. Kuperberg) **52** #15352 54C55
theory of absolute proper retracts. *Fund. Math.* **88** (1975), no. 3, 241-247. (W. Kuperberg) **52** #1618 54C55
The cardinality of positions of simple closed curves in E^3 is 2^{\aleph_0} . (Russian summary)
Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. **24** (1976), no. 11, 1007-1010. (S. M. Katyl) **55** #6355 54C55 (54A25, 57A10)
Locality at infinity and compactifications of ANR's. *Trans. Amer. Math. Soc.* **221** (1977), no. 1, 213-224. (Ju. M. Smirnov) **54** #13875 54F40 (54C55)
Extensions, retracts, and absolute neighborhood retracts in proper shape theory. *Math.* **96** (1977), no. 2, 149-159. (S. Mardesic) **58** #2704 54C56 (55D99)
Shape-dolocality at infinity and shape retraction. *Houston J. Math.* **3** (1977), no. 1, 124. (Ju. M. Smirnov) **55** #4147 55C15 (54A20)
The union of two Hilbert cubes meeting in a Hilbert cube need not be a Hilbert cube. *Proc. Amer. Math. Soc.* **63** (1977), no. 1, 150-152. (Author's summary) **31094** 57A20 (54F99)
with Keesling, James E.) Shape properties of the Stone-Čech compactification. *General Topology and Appl.* **9** (1978), no. 1, 1-8. (R. Frankiewicz and W. Kulpa) **17594** 54D35
Anis D. (with Shetty, C. M.) The rectilinear distance location-allocation problem. *Trans.* **9** (1977), no. 2, 136-143. (Authors' summary) **56** #4848 90C30
J. A. A note on vorticity. *J. Inst. Math. Appl.* **16** (1975), no. 2, 259-262. (Takayuki Nono) **53** #4708 76J26
★Vector fields. Vector analysis developed through its application to engineering physics. *Cambridge University Press, Cambridge-New York-Melbourne*, 1977. 329 pp. (S. Bhargava) **56** #10225 69J00
The current-content of Hartmann layers. (German summary) *Z. Angew. Math. Phys.* **28** (1977), no. 3, 449-466. (E. G. Broadbent) **56** #7470 76J35
Kenneth D. (with Cohen, Edgar A., Jr.) A defense allocation problem with deployment costs. *Naval Res. Logist. Quart.* **19** (1972), 525-537. (G. Raisbeck) **4609** 90B05
Multiple asymptotic expansions and singular problems. *SIAM J. Math. Anal.* **3** (1972), 263-271. (D. Bobrowski) **47** #576 34E05
On multiple asymptotic expansions. *SIAM J. Math. Anal.* **3** (1972), 272-284. (D. Bobrowski) **47** #577 34E05 (40B05, 41A60)
Nonoscillation of second-order, linear differential equations with retarded argument. *J. Math. Anal. Appl.* **41** (1973), 293-299. (J. K. Hale) **47** #5401 34K15
(with Wingate, John W.) Allocation of resources to offensive strategic weapon systems. *Naval Res. Logist. Quart.* **23** (1976), no. 1, 85-93. (F. Weinberg) **53** #2348 99
A. M. See Stellenbosch Algebra Research Group, **58** #5656
J. (with Wu, Min Yen; Dennison, J. C.) New transparent results for certain classes of linear time-varying systems. *Proceedings of the Ninth Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1976), pp. 56-58. *Western Periodicals, North Hollywood, Calif.*, 1974. (Kimio Kanai) **57** #5268 93C05 (30S)
(with Tan, Peter) An extension and application of Fisher's bivariate exponential distribution. *Comm. Statist.* **3** (1974), 455-462. (R. J. Buchler) **51** #2116 62F10
(with Tan, Peter) Some remarks on structural inference applied to Weibull distribution. *Statist. Hefte (N.F.)* **15** (1974), 335-341. (A. P. Dawid) **53** #6808 60S
(with Wu, Min Yen) On the commutative class of linear time-varying systems. *Internat. J. Control* **23** (1976), no. 3, 433-444. (Arie Feuer) **54** #2277 93C05
(with Wu, Min Yen) On explicit solution, stability, and reduction of a class of linear time-varying discrete-time systems. *Internat. J. Control* **25** (1977), no. 2, 303-310. (D. H. Chung) **56** #11281 93C55 (93D10)
Soraya Total regularity of quasi-Hausdorff transformations. (Arabic summary) *Proc. Math. Phys. Soc. A. R. E. (Egypt)* No. 33 (1969), 15-17, ii (1972). (G. U. Brauer) **4060** 40G05
Absolute Tauberian constants for Cesàro means. *Trans. Amer. Math. Soc.* **168** (1972), 233-241. (F. C. Hsiang) **45** #4013 40D10 (40G05)
Absolute Tauberian constants for Hausdorff transformations. *Canad. J. Math.* **26** (1974), 19-26. (H. P. Dikshit) **48** #11845 40G05
Absolute Tauberian constants for Cesàro means of a function. *Trans. Amer. Math. Soc.* **224** (1976), no. 2, 231-242 (1977). (Amnon Jakimovski) **54** #8076 40D10
Absolute Tauberian constants for Abel means of a function. *Indian J. Pure Appl. Math.* **8** (1977), no. 1, 1-9. (Kusum Soni) **58** #17644 40D10
Absolute Tauberian constants for quasi-Hausdorff series-to-series transformations. *Indian J. Pure Appl. Math.* **8** (1977), no. 3, 363-373. (M. S. Ramanujan) **57** #6938a 40D10
(with Awaad, Layla) On Tauberian estimates for quasi-Hausdorff transformations. *Indian J. Pure Appl. Math.* **8** (1977), no. 3, 374-378. (M. S. Ramanujan) **57** #6938b 40D10
F. A. (with Pabst, Günther) Indicator sets, reguli, and a new class of spreads. *Canad. J. Math.* **29** (1977), no. 1, 132-154. (Armin Herzog) **55** #3954 50D30
n, Andrew H. (with Eisenstat, Stanley C.; Schultz, Martin H.) The application of sparse matrix methods to the numerical solution of nonlinear elliptic partial differential equations. *Constructive and computational methods for differential and integral equations* (Indiana Univ., Bloomington, Ind., 1974), pp. 131-153. *Lecture Notes in Math.*, **430**, Springer, Berlin, 1974. (Editors) **58** #19252 65P05 (65F30)
(with Eisenstat, Stanley C.; Schultz, Martin H.) Applications of an element model Gaussian elimination. *Sparse matrix computations* (Proc. Sympos., Argonne Nat. Lab., Lemont, Ill., 1975), pp. 85-96. *Academic Press, New York*, 1976. (Michael S. Martin) **56** #17022 65F05 (68A20)
(with Liu, Wai Hung) Comparative analysis of the Cuthill-McKee and the reverse Cuthill-McKee ordering algorithms for sparse matrices. *SIAM J. Numer. Anal.* **13** (1976), no. 2, 198-213. (D. M. Young, Jr.) **58** #19064 65F05
On Newton-iterative methods for the solution of systems of nonlinear equations. *SIAM J. Numer. Anal.* **15** (1978), no. 4, 755-771. (Gene A. Kemper) **58** #3388 65H05
Sherman, B. Kinematic wave models for overland flow. *Quart. Appl. Math.* **35** (1977/78), no. 4, 435-444. (L. M. Hocking) **57** #14835 76J34
Sherman, B. Continuous dependence and differentiability properties of the solution of a free boundary problem for the heat equation. *Quart. Appl. Math.* **27** (1969/70), 427-439. (Zbl **191**, 395) **58** #22968 35B30 (35K05)
Limiting behavior in some Stefan problems as the latent heat goes to zero. *SIAM J. Appl. Math.* **20** (1971), 319-327. (D. T. Haimo) **45** #2336 35K05
Sherman, B. F. Cauchy completion of partially ordered groups. *J. Austral. Math. Soc.* **18** (1974), no. 2, 222-229. (From the author's introduction) **57** #12333 06A55
Cauchy completion of abelian tight Riesz groups. *J. Austral. Math. Soc.* **19** (1975), 62-73. (L. Fuchs) **53** #5417 06A60
A counterexample to H. Greenberg's algorithm for solving linear inequalities: "An algorithm for determining redundant inequalities and all solutions to convex polyhedra" (Numer. Math. **24** (1975), 19-26). *Numer. Math.* **27** (1976/77), no. 4, 491-492. (Ulrich Eckhardt) **55** #11626 65K05
An algorithm for finite conjoint additivity. *J. Mathematical Psychology* **16** (1977), no. 3, 204-218. (Byron J. T. Morgan) **57** #5204 92A25
Sherman, C. C. The K -theory of an equicharacteristic discrete valuation ring injects into the K -theory of its field of quotients. *Pacific J. Math.* **74** (1978), no. 2, 497-499. (Surender K. Gupta) **58** #647 13D15
Sherman, D. E. (with Long, R. W.) A direct method for solving large linear algebraic systems. *Matrix Tensor Quart.* **24** (1973/74), 107-122. (L. W. Ehrlich) **51** #9448 65F05
Sherman, D. I. See Šerman, D. I.
Sherman, Gary J. Groups in which every maximal partial order is exhaustive. *Proc. Amer. Math. Soc.* **40** (1973), 83-86. (J. C. Ault) **47** #6582 06A55
When do the periodic elements of a group form a subgroup? *Math. Mag.* **47** (1974), 279-281. (G. S. Mikaeljan) **50** #7361 20F50
What is the probability an automorphism fixes a group element? *Amer. Math. Monthly* **82** (1975), 261-264. (P. Erdős) **51** #8249 20D45 (10K20)
A probabilistic estimate of invariance for groups. *Amer. Math. Monthly* **85** (1978), no. 5, 361-363. (William H. Gustafson) **58** #861 20B99
Sherman, George C. (with Devaney, A. J.) Plane-wave representations for scalar wave fields. *SIAM Rev.* **15** (1973), 765-786. (Y. Hayashi) **50** #3774 78J35
(with Stannnes, Jakob J.; Lalor, Éamon) Asymptotic approximations to angular-spectrum representations. *J. Mathematical Phys.* **17** (1976), no. 5, 760-776. (Norman Bleistein) **53** #9880 78J35
(with Stannnes, Jakob J.) Radiation of electromagnetic fields in uniaxially anisotropic media. *J. Opt. Soc. Amer.* **66** (1976), no. 8, 780-788. (Y. Hayashi) **54** #1883 78J35
Sherman, M. J. (with Herrero, Domingo Antonio) Noncyclic vectors for S^* . *Proc. Amer. Math. Soc.* **48** (1975), 193-196. (Eric Nordgren) **51** #11158 47A65
Sherman, Malcolm J. Invariant subspaces containing all analytic directions. *J. Functional Analysis* **3** (1969), 164-172. (From the author's introduction) **53** #14206 47B37 (47A15)
Invariant subspaces containing all constant directions. *J. Functional Analysis* **8** (1971), 82-85. (D. Sarason) **45** #951 47A45 (47A15)
Disjoint maximal invariant subspaces. *Pacific J. Math.* **40** (1972), 373-374. (N. K. Nikol'skii) **47** #4028 47A15
Sherman, R. Error of the normal approximation to the sum of N random variables. *Biometrika* **58** (1971), 396-398. **47** #2649 60F05
Sherman, Seymour (with Heilmann, Ole J.; Kleitman, Daniel J.; Lieb, Elliott H.) Some positive definite functions on sets and their application to the Ising model. *Discrete Math.* **1** (1971/72), no. 1, 19-27. (T. Arai) **46** #10342 82J05 (05A05)
(with Thompson, Colin J.) Equivalences on eigenvalues. *Indiana Univ. Math. J.* **21** (1971/72), 807-814. (Marvin Marcus) **45** #5146 15A18
Positive definiteness and positive differences. *J. Combinatorial Theory Ser. A* **13** (1972), 14-16. (T. O. Philips) **46** #7364 (EA **47**) 20C35 (82J05)
Markov random fields and Gibbs random fields. *Israel J. Math.* **14** (1973), 92-103. (G. Della Riccia) **47** #9718 60J05 (60K35, 82J05)
See also Obituary: Sherman, Seymour, **58** #10252
Sherman, Thomas L. (with Ridenhour, Jerry R.) Conjugate points for fourth order linear differential equations. *SIAM J. Appl. Math.* **22** (1972), 599-603. (J. S. Bradley) **46** #2151 34C10
(with Barr, Dennis) Existence and uniqueness of solutions of three-point boundary value problems. *J. Differential Equations* **13** (1973), 197-212. (L. D. Fountain) **48** #11651 34B15
(with Gehrmann, James E.) Asymptotic behavior of solutions and their derivatives for linear differential equations. *Rocky Mountain J. Math.* **5** (1975), 275-282. (M. Švec) **51** #1007 34C10
(with Cashman, William T.) Trigonometry for $y^{(2n)} + y = 0$. (Polish summary) *Univ. Śląski w Katowicach Prace Naukowe No. 59 Prace Mat. No. 5* (1975), 13-18. (J. D. Kečkić) **54** #3103 34C99
(with Cashman, William T.) Trigonometry for $y^{(2n+1)} + y = 0$. (Polish summary) *Univ. Śląski w Katowicach Prace Naukowe No. 59 Prace Mat. No. 5* (1975), 19-23. (J. D. Kečkić) **54** #3104 34C99
Sherman, Thomas O. Fourier analysis on the sphere. *Trans. Amer. Math. Soc.* **209** (1975), 1-31. (Jean-Louis Clerc) **52** #11486 43A85
Fourier analysis on compact symmetric space. *Bull. Amer. Math. Soc.* **83** (1977), no. 3, 378-380. (Kenneth Johnson) **56** #3580 43A85 (22E45)
Šermegor, T. D. See Šermegor, T. D.
Sherrington, D. A class of exactly soluble random spin systems. *Phys. Lett. A* **58** (1976), no. 1, 36-38. (A. K. Rajagopal) **53** #12435 82J60
Sherry, T. N. (with Ne'eman, Y.) Affine extensions of supersymmetry: the finite case. *Nuclear Phys. B* **138** (1978), no. 1, 31-44. (Authors' summary) **58** #19935 81J22 (17A30)

- (with Ne'eman, Y.) Graded spin-extension of the algebra of volume-preserving deformations. *Phys. Lett. B* **76** (1978), no. 4, 413-416. (Authors' summary) **58** #14512 81.22 (17E05, 58D99)
- Sherstobitov, A. Ye.** See **Serstobitov, O. E.**
- Sherstyuk, A. I.** See **Serstjuk, A. I.**
- Servashidze, V. V.** See **Servashidze, V. V.**
- Sherwood, Howard** Sums of powers of integers and Bernoulli numbers. *Math. Gaz.* **54** (1970), no. 389, 272-274. (Editors) **58** #10708 10A40
Complete probabilistic metric spaces. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **20** (1971/72), 117-128. (B. Schweizer) **47** #5837 54E35 (54H25)
(with Anthony, J. M.; Taylor, Michael D.) Sequential convergence and probabilistic metric spaces. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 1177-1187. (B. Schweizer) **52** #4209 54A20
(with Taylor, Michael D.) Some PM structures on the set of distribution functions. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 1251-1260. (B. Schweizer) **52** #1819 60B99
A note on PM spaces determined by measure preserving transformations. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **33** (1975/76), no. 4, 353-354. (Alan Saleski) **53** #9165 54E99
- Sherwood, Judith** See **Population dynamics**, **52** #12855
- Sher'yazdanov, G. B.** See **Ser'yazdanov, G. B.**
- Sheshinski, Eytan** Relation between a social welfare function and the Gini index of income inequality. *J. Econom. Theory* **4** (1972), no. 1, 98-100. **56** #10843 90A15 (92A20)
(with Peles, Yoram) Integration effects of firms subject to regulation. *Bell J. Econom.* **7** (1976), no. 1, 308-313. (Not reviewed) 90A15
(with Lau, Lawrence J.; Stiglitz, Joseph E.) Efficiency in the optimum supply of public goods. *Econometrica* **46** (1978), no. 2, 269-284. (Mamoru Kaneko) **58** #4206 90A05
- Sheth, I. H.** On the norm of an operator. *Vidya* **13** (1970), no. 2, 217. (V. K. Balakrishnan) **51** #5632 15A60
A remark on a paper of T. Saitō. *Vidya* **14** (1971), no. 2, 44-45. (Henry R. Dowson) **48** #2796 47A10
(with Shah, N. C.) Operators unitarily equivalent to their adjoints. *Math. Student* **41** (1973), no. 3-4, 298-300 (1974). (K. F. Klopfenstein) **51** #11171 47B20
On a problem of T. Nieminen. *Vidya B* **16** (1973), no. 1, 70-71. (Editors) **57** #10471 47A65
On a conjecture of Istrătescu. *J. Indian Math. Soc. (N.S.)* **38** (1974), no. 1, 2, 3, 4, 337-338 (1975). (V. Istrătescu) **53** #6338 47A25
(with Shah, N. C.) On paranormal operators. *Math. Japon.* **19** (1974), 79-81. (Lawrence Fialkow) **50** #14330 47B20
Quasi-hyponormal operators. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 1049-1053. (N. Suzuki) **51** #6475 47B20
(with Shah, N. C.) Some results on quasi-hyponormal operators. *J. Indian Math. Soc. (N.S.)* **39** (1975), 285-291 (1976). (E. Durszt) **54** #992 47B20
(with Shah, N. C.) The maximal vector subspace of an operator. *Math. Japon.* **20** (1975), no. 2, 181. (R. G. Douglas) **53** #3731 47A05
(with Shah, N. C.) On the classes of operators. *Vidya B* **18** (1975), no. 1, 124-126. (Editors) **57** #10472 47A65 (47B20)
(with Shah, N. C.) The principal points of an operator. *Vidya B* **19** (1976), no. 2, 251-256. (Editors) **57** #10473 47A65 (47B20)
- Shetiya, V. S.** (with Gopalakrishna, H. S.) Coefficient estimates for spirallike mappings. *J. Karnatak Univ. Sci.* **18** (1973), 297-307. (R. J. Libera) **50** #588 30A32
(with Gopalakrishna, H. S.) On the real part of the derivatives of certain analytic functions. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 1-2, 22-25 (1976). (R. J. Libera) **56** #8829 30A32
(with Gopalakrishna, H. S.) Coefficient estimates for spirallike functions. *Ann. Polon. Math.* **35** (1977/78), no. 1, 1-9. (Evelyn M. Silvia) **58** #11356 30A34
- Shetty, C. M.** (with Bazaraa, Mokhtar S.; Goode, Jamie J.) A unified nonlinear duality formulation. *Operations Res.* **19** (1971), 1097-1100. (G. Opfer) **45** #9692 90C30
(with Bazaraa, Mokhtar S.; Goode, Jamie J.) Constraint qualifications revisited. *Management Sci.* **18** (1972), 567-573. (R. W. Cottle) **46** #10410 90C25
(with Trotter, L. E., Jr.) An algorithm for the bounded variable integer programming problem. *J. Assoc. Comput. Mach.* **21** (1974), 505-513. (Authors' summary) **58** #25983 90C10
(with Langley, Robert W.; Kennington, Jeff) Efficient computational devices for the capacitated transportation problem. *Naval Res. Logist. Quart.* **21** (1974), 637-647. (Kailash C. Kapur) **51** #4703 65S05 (90C05)
(with Bazaraa, Mokhtar S.; Goode, Jamie J.; Nashed, M. Z.) Nonlinear programming without differentiability in Banach spaces: necessary and sufficient constraint qualification. *Applicable Anal.* **5** (1975/76), no. 3, 165-173. (A. Göpfert) **53** #12592 90C30 (90C25, 49B30)
(with Bazaraa, Mokhtar S.) ★Foundations of optimization. Lecture Notes in Economics and Mathematical Sciences, Vol. 122. Springer-Verlag, Berlin-New York, 1976. vi + 193 pp. (Bruce D. Craven) **55** #2141 90C30 (52A20)
(with Vaish, Harish) The bilinear programming problem. *Naval Res. Logist. Quart.* **23** (1976), no. 2, 303-309. (Paul C. Kettler) **57** #5097 90C20
(with Sherali, Anis D.) The rectilinear distance location-allocation problem. *AIIE Trans.* **9** (1977), no. 2, 136-143. (Authors' summary) **56** #4848 90C30
(with Vaish, Harish) A cutting plane algorithm for the bilinear programming problem. *Naval Res. Logist. Quart.* **24** (1977), no. 1, 83-94. (K. Swarup) **56** #14704 90C20
- Shetty, D. J.** (with Amur, Krishna) On geodesic torsions of higher order and their generalisation. *Tensor (N.S.)* **29** (1975), no. 1, 83-84. (P. Stavre) **51** #13902 53B25
On the tangential vector fields. *J. Karnatak Univ. Sci.* **21** (1976), 130-138. (T. Okubo) **58** #24094 53B25
(with Amur, Krishna) Geodesic torsions of higher order and their generalisation in a subspace of a Riemannian space. *Tensor (N.S.)* **30** (1976), no. 1, 80-82. (M. A. Akivis) **55** #1239 53B20
(with Amur, Krishna) On duality of vectorfields. *Tensor (N.S.)* **31** (1977), no. 3, 292-294. (Yoshiaki Maeda) **57** #4052 53C40 (57D25)
- Sheu, C. Y.** See **Collection: Prager, William**, **50** #3723
- Sheu, Shy Shing** See **Hsü, Shih Hsiung**
- Sheu, Tsung Luen** (with Shiu, Jau Shyong) On the periodicity of linear recurrence second order in commutative rings. Collection of articles dedicated to Professor Houa Teng on the occasion of his 70th birthday. *Tamkang J. Math.* **4** (1973), 105-107. (J. M. Gandhi) **50** #7012 10A35
- Shevchenko, E. M.** See **Ševčenko, E. M.**
- Shevchenko, N. V.** See **Ševčenko, N. V.**
- Shevelev, A. G.** See **Ševel'ov, A. G.**
- Shevell, Steven K.** (with Atkinson, Richard C.) A theoretical comparison of list search models. *J. Mathematical Psychology* **11** (1974), 79-106. (Jana Zvárová) **50** #3668A50 (92A25)
- Shevelo, V. N.** See **Ševelo, V. M.**
- Shevernev, V. I.** See **Ševernev, V. I.**
- Sheviakov, O. V.** See **Ševjakov, O. V.**
- Sheynin, O. B.** See **Šeinin, O. B.**
- Shi, Gèn Huà** See **Shih, Kèn Hua**
- Shi, Song Ling** An example of five limit cycles occurring in the system of equations $dx/dt = \lambda x - y + \sum_{i+k=3} a_{ik} x^i y^k$, $dy/dt = x + \lambda y + \sum_{i+k=3} b_{ik} x^i y^k$. (Chinese) *Acta Math. Sinica* **18** (1975), no. 4, 300-304. **56** #3407 34C05
- Shiau, Chyi** (with Tan, Kok Keong; Wong, Chi Song) A class of quasi-nonexpansive multi-valued maps. *Canad. Math. Bull.* **18** (1975), no. 5, 709-714. (Simeon R. Breda) **53** #11439 47H10 (54H25)
(with Tan, Kok Keong; Wong, Chi Song) Quasi-nonexpansive multi-valued and selections. *Fund. Math.* **87** (1975), 109-119. (L. Górniewicz) **51** #8899 47H10 (54C65)
- Shiau, J. F.** (with McGill, D. J.) On the use of kinetic energy to determine general inertia forces in nonholonomic systems. *Trans. ASME Ser. E. J. Appl. Mech.* **39** (1972), 923-926. (Q. K. Ghor) **47** #1346 70.34
(with Marris, Andrew W.) Hamel's theorem: the three polynomial integrals. *Circ. Mat. Palermo (2)* **22** (1973), no. 1-2, 185-208. (R. Miron) **57** #4021a 53B20
(with Marris, Andrew W.) Hamel's theorem: the three polynomial integrals. *Rend. Circ. Mat. Palermo (2)* **22** (1973), no. 3, 209-216 (1974). (R. Miron) **57** #4021b 53A45
- Shiba, Hiroyuki** (with Ishimura, Norikazu) Effect of the magnetic field on the des Cloizeaux-Person spin-wave spectrum. *Progr. Theoret. Phys.* **57** (1977), no. 6, 1862-1873. (Authors' summary) **56** #14430 82.41
- Shiba, Masaaki** On the absolute convergence of Fourier series on a compact set. *Res. Miyagi Tech. College No. 2* (1965), 85-94. (Masako Izumi) **57** #17105 42A28
On the summability of a $\lambda(n)$ -lacunary orthogonal series. *Res. Rep. Miyagi College No. 3* (1966), 47-52. (Wolfgang Luh) **54** #3273 42A44
- Shiba, Masakazu** On the Riemann-Roch theorem on open Riemann surfaces. *J. Kyoto Univ.* **11** (1971), 495-525. (H. L. Royden) **45** #536 30A52
A formulation of the Riemann-Roch theorem in terms of differentials with singularities at the ideal boundary. *J. Math. Kyoto Univ.* **15** (1975), 1-18. (H. Koditz) **51** #3426 30A50 (14H40)
Notes on the existence of certain slit mappings. *Proc. Japan Acad.* **51** (1975), 687-690. (I. N. Baker) **52** #8396 30A30
Some general properties of behavior spaces of harmonic semiexact differentials on an open Riemann surface. *Hiroshima Math. J.* **8** (1978), no. 1, 151-164. (Y. Kusumoto) **58** #6222 30A52
- Shibahara, M.** See **Furuhashi, Rohzō**, **48** #7740
- Shibaoka, Yasumitsu** Nil submodules of simple ring. *J. Fac. Sci. Univ. Tokyo Ser. I* **19** (1972), 363-376. (A. O. Morris) **50** #13133 16A40
- Shibasaki, Ichiro** (with Kobayashi, Tsunehiro) Functional integral representation for Green's function of the dual resonance model. *Progr. Theoret. Phys.* **46** (1971), 968-984. (J. E. Marsden) **46** #4883 81.46
- Shibata, Chōkō** A study of extended Lie systems as Riemannian manifolds. *Res. Kushiro Tech. College* **5** (1971), 99-103. (loose errata) (R. H. Bowman) **48** #2533C30
(with Yasuda, Hiroshi) On extended Lie systems as Riemannian manifolds. Commemorative volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday. *III. Tensor (N.S.)* **26** (1972), 107-117. (T. Okubo) **57** #13772 53B99 (22E05)
(with Shimada, Hideo) On Riemannian manifold with the Killing property. *Rep. Kushiro Tech. College* **7** (1973), 133-139. (loose errata) (Shoshichi Kobayashi) **52** #1552 53B20
A note on extended Lie systems as Riemannian manifolds. *J. Hokkaido Univ. Sect. II A* **26** (1975), no. 1, 55-62. (P. Günther) **55** #6332 53C25
(with Matsumoto, Makoto) On the curvature tensor R_{ijkh} of C-reducible Finsler spaces. *J. Korean Math. Soc.* **13** (1976), no. 1, 141-144. (S. Kawaguchi) **54** #11177 53B40
(with Matsumoto, Makoto) Erratum: "On the curvature tensor r_{ijkh} of C-reducible Finsler spaces" (J. Korean Math. Soc. **13** (1976), no. 1, 141-144). *J. Korean Math. Soc.* **13** (1976), no. 2, 189. (Editors) **54** #13767 53B40
(with Shimada, Hideo; Azuma, Masayoshi; Yasuda, Hiroshi) On Finsler spaces with Randers' metric. *Tensor (N.S.)* **31** (1977), no. 2, 219-226. (Siegfried Schuster) **57** #17544 53B40
On Finsler spaces with Kropina metric. *Rep. Mathematical Phys.* **13** (1978), 117-128. (J. R. Vanstone) **58** #7470 53B40
- Shibata, Fumiaki** (with Takahashi, Yoshinori) Spin coherent state representation in non-equilibrium statistical mechanics. *J. Phys. Soc. Japan* **38** (1975), 656-668. (Authors' summary) **54** #2059 82.47
(with Takahashi, Yoshinori; Hashitsume, Natsuki) A generalized stochastic Liouville equation. Non-Markovian versus memoryless master equations. *J. Phys. Soc. Japan* **47** (1977), no. 4, 171-187. (Nina B. Maslova) **57** #2391 82.60
- Shibata, Hiroshi** (with Hata, Shiroh; Ohmatsu, Shigeru) On the modeling in the diffusion processes and its application to the control problems. (Japanese. English summary) *Systems and Control* **16** (1972), 225-235. (Tohru Katayama) **49** #2190 93E20
(with Hata, Shiroh; Ohmatsu, Shigeru) Optimal filter for a linear distributed-parameter system subject to state dependent noise by functional analysis. *Systems and Control* **17** (1973), 1-10. (Tohru Katayama) **50** #1000 93E20

- e. English summary) *Systems and Control* 6 (1972), 809–817. (Authors' summary) **47** #3090 94A05
Hidaka, Shunichi; Hata, Shiroy An iterative estimation for states and parameters of nonlinear system. *Systems-Computers-Controls* 3 (1972), no. 4, 1–8 (1973). or **49** #12139 93E10
Ohmatsu, Shigeru; Kawakami, Hakuhei; Hata, Shiroy Numerical analysis of optimal control for a stochastic distributed parameter system. *Bull. Univ. Osaka Prefecture Ser. A* 22 (1973), no. 1, 49–56. (Authors' summary) **56** #11439 93E20
Ohmatsu, Shigeru; Hata, Shiroy Digital simulation of the optimal filter for a linear distributed parameter system. *Bull. Univ. Osaka Prefecture Ser. A* 22 (1973), no. 1, 1–138. (R. S. Bucy) **50** #4073 93E10
Hata, Shiroy L_2 -bounded stability for a stochastic system. *Internat. J. Control* 18 (1973), 1275–1280. (Authors' summary) **54** #7079 93E15
Omatu, Sigeru; Hata, Shiroy Optimal boundary control for a linear distributed parameter system using functional analysis. *Information and Control* 24 (1974), 264–278. (N. U. Ahmed) **54** #2313 93E20
Mayeda, Hiroshi; Hata, Shiroy Analyses of stochastic stability for time distributed parameter systems. *Bull. Univ. Osaka Prefecture Ser. A* 24 (1973), no. 2, 167–173. (G. N. Mil'shtein) **56** #18066 93E15
Hata, Shiroy Stochastic stability for a multiloop nonlinear system. *IEEE Automatic Control AC-21* (1976), no. 4, 600–601. (Ludwig Arnold) **54** #7080
- Ishiyuki On Boardman's generating sets of the unoriented bordism ring. *Osaka J. Math.* 8 (1971), 219–232. (T. tom Dieck) **45** #7723 57D75
Note on the formal group law of unoriented cobordism theory. *Osaka J. Math.* 10 (1973), 33–42. (A. Dold) **49** #3967 57D75
On the stable and weakly complex bordism algebra of free periodic maps. *Trans. Amer. Soc.* 177 (1973), 199–220. (R. E. Stong) **47** #4283 57D85
Les images des générateurs canoniques de $\pi_n(MO)$ par l'homomorphisme de Steenrod. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 327–329. (J. W. Vick) **49** #3991
- On the stable and weakly complex bordism of free metacyclic actions. *Osaka J. Math.* 14 (1974), 171–180. (E. C. Turner) **50** #3252 57D85
On the stable bordism algebra of metacyclic groups. *Osaka J. Math.* 11 (1974), 331–346. (A. Dold) **50** #14811 57D85
Ishiki On semi-continuity of dilatational functionals. *Osaka J. Math.* 12 (1975), no. 1, 1–10. (Kenneth Goldberg) **51** #8415 30A60
On the defining properties of Teichmüller map. *Osaka J. Math.* 14 (1977), no. 1, 1–10. (C. MacLachlan) **56** #680 32G15 (30A60)
Yomi (with Yanagiwara, Hiroki) A Chebyshev quadrature formula for twelve points. *Bull. Fukuoka Univ. Ed. III* 23 (1973), 45–51. (L. W. Johnson) **49** #10130
- Yanagiwara, Hiroki; Fukutake, Takayoshi Chebyshev-type quadrature formulas for fourteen-seventeen nodes. *Bull. Fukuoka Univ. Ed. III* 24 (1974), 41–48. (S. M. Shah) **51** #2260 65D30
- Ishio See Applications of Walsh functions, 48 #8080
- Ishiei Selection of the order of an autoregressive model by Akaike's information criterion. *Biometrika* 63 (1976), no. 1, 117–126. (E. J. Hannan) **53** #6943 62M10
Convergence of least squares estimates of autoregressive parameters. *Austral. J. Stat.* 19 (1977), no. 3, 226–235. (A. Ja. Dorogovcev) **58** #18977 62M10
Okoko (with Huzino, Seiti) An elementary proof of R. W. Ritchie's theorem on the decomposition of squares. *Mem. Fac. Sci. Kyushu Univ. Ser. A* 31 (1977), no. 1, 9–14. (S. M. Shah) **56** #1818 68A30
- Kashi A possibility of wave instability in the magnetosheath. (Japanese. English translation) *Rep. Univ. Electro-Commun. No.* 29 (1971), 81–93. (loose errata) (Y. Kato) **40** #7835
- Ishio On a non-standard theory of topology and uniformity. *TRU Math.* 8 (1973), 15–25. (Author's summary) **55** #13401 54J05
- Ishio On the structure of an automaton and automorphisms. *Systems-Computers-Controls* 3 (1972), no. 6, 10–15 (1973). (I. Peák) **51** #9991
- Ishio On the homomorphisms of automata. *Systems-Computers-Controls* 4 (1973), no. 6, 1–10. (I. Peák) **51** #9992 94A30
On the structure of Abelian automata. *J. Comput. System Sci.* 13 (1976), no. 2, 1–10. (Aleksander Albicki) **54** #9895 94A30
Kokichi On the minimum modulus of a meromorphic algebroid function of order less than one half. *Kōdai Math. Sem. Rep.* 24 (1972), 142–145. (Y. Okubo) **46** #7514 30A70
Meromorphic functions of order less than one. *Mem. Defense Acad.* 14 (1974), 155–160. (S. M. Shah) **53** #13567 30A68
Shiro (with Asano, Takao; Takanami, Itsuo) General results on tour lengths in graphs and digraphs. *SIAM J. Comput.* 5 (1976), no. 4, 629–645. (Boleslaw Jezek) **56** #18127 94A20
Ishii (with Wulfman, Carl E.) Symmetry of Turing's morphogenetic equations. (Authors' summary) *Rev. Mexicana Fis.* 22 (1973), no. 1–2, 171–183. (Authors' summary) **46** #8022
- Ishisuo Some relations among various numerical invariants for links. *Osaka J. Math.* 11 (1974), 313–322. (L. Neuwirth) **50** #5779 55A25
Remarks on boundary links. *Math. Sem. Notes Kobe Univ.* 5 (1977), no. 1, 23–27. (Levinson) **57** #1471 55A25
Links with disconnected spanning surfaces. *Math. Sem. Notes Kobe Univ.* 5 (1977), no. 3, 435–442. (A. Černavskii) **58** #18408 55A25
Ishihara (with Hamner, Amnon) An equivalence between two error criteria. *IEEE Information Theory IT-21* (1975), no. 6, 702–703. (R. L. Kashyap) **52** #16838 (68A45)
- I. P. See Židkov, N. P.
V. P. See Šidlovskii, V. P.
- On the everywhere convergence of the rectangular Fourier partial sums of $C(T^2)$ functions. *Bull. Inst. Math. Acad. Sinica* 1 (1973), no. 2, 221–228. (D. Waterman) **47** #274 42A92
- Shieh, A. S. L. On the convergence of the conjugate gradient method for singular capacitance matrix equations from the Neumann problem of the Poisson equation. *Numer. Math.* 29 (1977/78), no. 3, 307–327. (Robert Beauwens) **58** #31951 65P05 (65F10)
- Shieh, C. J. See Collection; Busemann, Adolf, 52 #10303
- Shieh, Leang San (with Chen, C. F.) A single matrix formula for the closed form solution of the inverse z transform. *Internat. J. Electron.* 27 (1969), 535–548. (Authors' summary) **46** #10173 65D30
(with Goldman, M. J.) Continued fraction expansion and inversion of the Cauchy third form. *IEEE Trans. Circuits and Systems CAS-21* (1974), 341–345. (I. Väduva) **53** #1912 65D15
(with Navarro, Jose Mariano) Frequency-variation method for system identification. *IEEE Trans. Circuits and Systems CAS-21* (1974), 754–763. (Edward J. Davison) **52** #12887 93B30
(with Gaudiano, Frank F., Jr.) Matrix continued fraction expansion and inversion by the generalized matrix Routh algorithm. *Internat. J. Control* 20 (1974), 727–737. (I. Gladwell) **50** #8949 65F30
(with Gaudiano, Frank F., Jr.) Some properties and applications of matrix continued fraction. *IEEE Trans. Circuits and Systems CAS-22* (1975), no. 9, 721–728. (Edward J. Davison) **52** #12881 93B25
(with Wei, Y. J.; Yates, Robert) Minimal realizations of transfer-function matrices by means of matrix continued fraction. *Internat. J. Control* 22 (1975), no. 6, 851–859. (O. I. Nwokah) **54** #14343 65F30 (93B20)
On the inversion of matrix Routh array. *Internat. J. Control* 22 (1975), no. 6, 861–867. (O. I. Nwokah) **54** #14342 65F30 (93B20)
(with Cooke, M. P.) A multiport network synthesis using a matrix continued fraction. *Internat. J. Electron.* 43 (1977), no. 5, 449–459. (B. R. Myers) **56** #15174 94A20
(with Sacheti, Shailendra) A matrix in the block Schwarz form and the stability of matrix polynomials. *Internat. J. Control* 27 (1978), no. 2, 245–259. (H. R. Schwarz) **57** #5310 93D05
(with Yeung, C. K.; McInnis, Bayliss C.) Solution of state-space equations via block-pulse functions. *Internat. J. Control* 28 (1978), no. 3, 381–392. (Authors' summary) **58** #26349 93C45
- Shieh, Nam Rueih (with Ch'en, Chao Ti) On a sufficient condition for the convergence of multiple Fourier series. *Bull. Inst. Math. Acad. Sinica* 5 (1977), no. 2, 391–395. (R. L. Cooke) **57** #3738 42A92
- Shieh, R. C. Energy and variational principles for generalized (gyroscopic) conservative problems. (French, German and Russian summaries) *Internat. J. Non-Linear Mech.* 6 (1971), 495–509. (D. P. Rašković) **48** #12947 70A9
- Shieh, T. C. See Hsieh, Ts'ung Chih
- Shield, David Bounds on the Engel class of some group extensions. *Proc. Cambridge Philos. Soc.* 71 (1972), 179–188. (C. Y. Tang) **46** #3633 20F45
Power and commutator structure of groups. *B*

- College, Dublin, 1974). *Proc. Roy. Irish Acad. Sect. A* **74** (1974), 291-292. (B. E. Johnson) **50** #14275 47A10
- Cyclic vectors in some spaces of analytic functions. Spectral Theory Symposium (Trinity College, Dublin, 1974). *Proc. Roy. Irish Acad. Sect. A* **74** (1974), 293-296. (Joel H. Shapiro) **50** #14281 47A15 (47B37)
- (with Shapiro, Joel H.) Unusual topological properties of the Nevanlinna class. *Amer. J. Math.* **97** (1975), no. 4, 915-936. (D. Protas) **52** #11053 30A76
- (with Brown, Léon) Approximation by analytic functions uniformly continuous on a set. *Duke Math. J.* **42** (1975), 71-81. (Arne Stray) **51** #3458 30A82
- (with Duren, Peter L.) Restrictions of H^p functions to the diagonal of the polydisc. *Duke Math. J.* **42** (1975), no. 4, 751-753. (Daniel M. Oberlin) **53** #5923 32A10 (30A78)
- (with Rubel, Lee A.; Taylor, B. Alan) Mergelyan sets and the modulus of continuity of analytic functions. *J. Approximation Theory* **15** (1975), no. 1, 23-40. (Arne Stray) **54** #521 30A04
- (with Kim, Hong W.; Percy, Carl M.) Rank-one commutators and hyperinvariant subspaces. *Michigan Math. J.* **22** (1975), no. 3, 193-194 (1976). (J. P. Williams) **52** #11626 47A15
- (with Gamelin, Theodore W.; Garnett, John B.; Rubel, Lee A.) On badly approximable functions. *J. Approximation Theory* **17** (1976), no. 3, 280-296. (Tord H. Ganelius) **54** #2978 30A82
- (with Kim, Hong W.; Percy, Carl M.) Sufficient conditions for rank-one commutators and hyperinvariant subspaces. *Michigan Math. J.* **23** (1976), no. 3, 235-243 (1977). (C. M. Schneeberger) **57** #3881 47A15
- (with Rubel, Lee A.) Badly approximable functions and interpolation by Blaschke products. *Proc. Edinburgh Math. Soc.* (2) **20** (1976), no. 2, 159-161. (G. D. Taylor) **54** #7792 30A80 (30A98, 41A50)
- (with Anderson, J. M.) Coefficient multipliers of Bloch functions. *Trans. Amer. Math. Soc.* **224** (1976), no. 2, 255-265 (1977). (C. N. Linden) **54** #7787 30A78
- A survey of some results on invariant subspaces in operator theory. *Linear spaces and approximation* (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977), pp. 641-657. *Internat. Ser. Numer. Math.*, Vol. 40, Birkhäuser, Basel, 1978. (J. Rovnyak) **58** #17896 47A15
- (with Williams, David L.) Bounded projections, duality, and multipliers in spaces of harmonic functions. *J. Reine Angew. Math.* **299/300** (1978), 256-279. (J. H. Neuwirth) **58** #7053 46E15 (30A98)
- Shields, Paul C.** (with McCabe, Robert) A class of Markov shifts which are Bernoulli shifts. *Advances in Math.* **6**, 323-328 (1971). (Morris Schreiber) **45** #947 47A35 (28A65)
- (with Adler, Roy L.; Smorodinsky, Meir) Irreducible Markov shifts. *Ann. Math. Statist.* **43** (1972), 1027-1029. (I. Cuculescu) **46** #6468 60J10
- (with Adler, Roy L.) Skew products of Bernoulli shifts with rotations. *Israel J. Math.* **12** (1972), 215-222. (M. A. Akcoglu) **47** #3639 28A65
- ★The theory of Bernoulli shifts. Chicago Lectures in Mathematics. *The University of Chicago Press, Chicago, Ill.-London*, 1973. x + 118 pp. (Nathaniel Friedman) **56** #584 28A65
- (with Ornstein, Donald S.) An uncountable family of K -automorphisms. *Advances in Math.* **10**, 63-88 (1973). (J.-P. Conze) **52** #3480 28A65
- (with Ornstein, Donald S.) Mixing Markov shifts of kernel type are Bernoulli. *Advances in Math.* **10**, 143-146 (1973). (Michael Lin) **48** #501 28A05 (60J65)
- Cutting and independent stacking of intervals. *Math. Systems Theory* **7** (1973), 1-4. (R. L. Adler) **48** #502 28A65
- Weakly compact positive operators on summable functions. *Proc. Amer. Math. Soc.* **37** (1973), 456-458. (E. Størmer) **47** #4055 47B55 (46E30)
- Bernoulli shifts are determined by their factor algebras. *Proc. Amer. Math. Soc.* **41** (1973), 331-332. (R. L. Adler) **47** #8819 28A65
- (with Adler, Roy L.) Skew products of Bernoulli shifts with rotations. II. *Israel J. Math.* **19** (1974), 228-236. (M. A. Akcoglu) **51** #13188 28A65
- (with Gray, Robert Molten; Neuhoof, David L.) A generalization of Ornstein's \bar{d} distance with applications to information theory. *Ann. Probability* **3** (1975), 315-328. (U. Krengel) **51** #4369 60G35 (94A05)
- (with Thouvenot, Jean-Paul) Entropy zero \times Bernoulli processes are closed in the \bar{d} -metric. *Ann. Probability* **3** (1975), no. 4, 732-736. (Nathaniel Friedman) **52** #5942 28A65
- (with Thouvenot, Jean-Paul) Une remarque sur les isomorphismes de schémas de Bernoulli que préservent certains facteurs. (English summary) Conference on Ergodic Theory and Topological Dynamics (Kibbutz Lavi, 1974). *Israel J. Math.* **21** (1975), no. 2-3, 173-176. (U. Krengel) **53** #3262 28A65
- (with Grillenberger, Christian) Construction of strictly ergodic systems. III. Bernoulli systems. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **33** (1975/76), no. 3, 215-217. (Karl Petersen) **53** #768 28A65
- (with Feldman, Jerome A.) Total complexity and the inference of best programs. *Math. Systems Theory* **10** (1976/77), no. 3, 181-191. (S. Amarel) **55** #11742 68A45 (68A20)
- (with Neuhoof, David L.) Block and sliding-block source coding. *IEEE Trans. Information Theory* **IT-23** (1977), no. 2, 211-215. (Robert Gray) **56** #5062 94A15
- (with Gray, Robert Molten) The maximum mutual information between two random processes. *Information and Control* **33** (1977), no. 4, 273-280. (H. Umegaki) **56** #15154 94A15
- Weak and very weak Bernoulli partitions. *Monatsh. Math.* **84** (1977), no. 2, 133-142. (R. L. Adler) **57** #16542 28A65
- (with Neuhoof, David L.; Davisson, Lee D.; Ledrappier, François) The distortion-rate function for nonergodic sources. *Ann. Probability* **6** (1978), no. 1, 138-143. (Robert Gray) **57** #9308 94A15
- (with Neuhoof, David L.) Fixed-rate universal codes for Markov sources. *IEEE Trans. Information Theory* **IT-24** (1978), no. 3, 360-367. (Robert Gray) **58** #9798 94A15
- Shields, Robert W.** (with Pearson, J. Boyd, Jr.; Staats, Preston W., Jr.) Robust solutions to linear multivariable control problems. *IEEE Trans. Automatic Control* **AC-19** (1974), 508-517. (W. M. Wonham) **56** #11215 93C05
- (with Pearson, J. Boyd, Jr.) Structural controllability of multiinput linear systems. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 2, 203-212. (T. Kaczorek) **57** #93B05
- Shier, Douglas R.** A decomposition algorithm for optimality problems in tree-structured networks. *Discrete Math.* **6** (1973), 175-189. (M. Dragomirescu) **48** #13273 (90B10)
- (with Minieka, Edward) A note on an algebra for the k best routes in a network. *Inst. Math. Appl.* **11** (1973), 145-149. (G. Berman) **48** #13216 90B10
- Computational experience with an algorithm for finding the k shortest paths in a network. *J. Res. Nat. Bur. Standards Sect. B* **78B** (1974), 139-165. (F. Gianini) **50** #12195 90B10
- Maximizing the number of spanning trees in a graph with n nodes and m edges. *Res. Nat. Bur. Standards Sect. B* **78B** (1974), 193-196. (R. C. Read) **51** #505C35
- Inverting sparse matrices by tree partitioning. *J. Res. Nat. Bur. Standards Sect. B* **80B** (1976), no. 2, 245-257. (Iain S. Duff) **57** #14367 65F05
- Iterative methods for determining the k shortest paths in a network. *New York J. Math.* **2** (1976), no. 3, 205-229. (M. Sysło) **56** #2294 90B10
- (with Joel, Lambert S.; Stein, Marjorie L.) Planes, cubes and center-representations. *Amer. Math. Monthly* **84** (1977), no. 5, 360-363. (D. Barnette) **57** #1052A25
- Shieu, Shin-Dong** (with Chan, Shu Park) Topological formulation of symbolic dynamics and sensitivity analysis of active networks. *IEEE Trans. Circuits and Systems* **CAS-21** (1974), 39-45. (Zdeněk Ertinger) **53** #10506 94A20
- Shiffer, Victor** See Volkovyskii, L. I.; et al., **50** #4912; Kopčanova, N. V.; et al., **52** #4567 and Volkovyskii, L. I.; et al., **56** #3259
- Shiffman, Bernard** On the continuation of analytic curves. *Math. Ann.* **184** (1969), 268-274. (E. Gottschling) **46** #3828 32C25
- On the continuation of analytic sets. *Math. Ann.* **185** (1970), 1-12. (E. R. Žmat) **1970** #8 A458) **47** #8900 32C25
- Extending analytic subvarieties. *Symposium on Several Complex Variables* (City, Utah, 1970), pp. 208-222. *Lecture Notes in Math.*, Vol. 184, Springer, Berlin (E. J. Akutowicz) **46** #9387 32C25
- Extension of holomorphic maps into hermitian manifolds. *Math. Ann.* **194** (1972), 249-258. (J. Kajiura) **45** #598 32D05
- (with Cornalba, Maurizio) A counterexample to the "transcendental Bézout problem". *Ann. of Math.* (2) **96** (1972), 402-406. (O. Riemenschneider) **47** #32C25
- Extension of positive line bundles and meromorphic maps. *Invent. Math.* **15** (1972), no. 4, 332-347. (L. R. Hunt) **51** #10689 32D15
- Applications of geometric measure theory to value distribution theory for meromorphic maps. *Value distribution theory* (Proc. Tulane Univ. Program, Univ., New Orleans, La., 1972-1973), Part A, pp. 63-95, Dekker, New York, 1973. (M. Hardt) **51** #13295 32H25 (49F20)
- (with Harvey, Reese) A characterization of holomorphic chains. *Ann. of Math.* (2) **99** (1974), 553-587. (H. Tornehave) **50** #7572 32C25 (28A75, 58A25)
- Nevanlinna defect relations for singular divisors. *Invent. Math.* **31** (1975), 155-182. (Shoshichi Kobayashi) **55** #3330 32H25
- Extension of holomorphic maps. *Bull. Amer. Math. Soc.* **82** (1976), no. 2, 29-32. (H. Kerner) **53** #889 32H99 (32D15)
- Holomorphic and meromorphic mappings and curvature. *Math. Ann.* **222** (1976), no. 2, 171-194. (Shoshichi Kobayashi) **55** #3328 32H20 (32D20)
- Holomorphic curves in algebraic manifolds. *Bull. Amer. Math. Soc.* **83** (1977), 553-568. (Hirotaka Fujimoto) **55** #12956 32H25
- Holomorphic and meromorphic mappings and curvature. II. *Math. Ann.* **230** (1977), no. 1, 15-23. (Marcus Wright) **57** #12915 32H99 (32F10)
- Shifflett, Ray C.** Extreme Markov operators and the orbits of Ryff. *Pacific J. Math.* **46** (1972), 201-206. (Michael Lin) **46** #2008 28A65
- (with Seethoff, T. L.) Doubly stochastic measures with prescribed support. *Wahrscheinlichkeitstheorie und Verw. Gebiete* **41** (1977/78), no. 4, 283-288. (M. M. Shiffrin) **57** #3354 28A65
- Shiffrin, E. G.** See Siffrin, E. G.
- Shiga, Hiroo** On the parametrization of a family of analytic sets defined by a holomorphic mapping. *Sci. Papers College Gen. Ed. Univ. Tokyo* **22** (1972), 10-16. (H. Kerner) **48** #562 32C25 (32B99, 32H99)
- On the pair of functions on C^2 reduced to a pair of rational functions. *J. Kyoto Univ.* **15** (1975), 231-236. (J. A. Morrow) **51** #3545 32J05 (32G13)
- On the automorphism of C^2 with invariant axes. *J. Math. Soc. Japan* **29** (1977), 3, 529-535. (Jean-Pierre Vigué) **56** #12340 32M05
- Shiga, Hiroo** On spaces with a map $CP^n \rightarrow M$ of degree one. *Proc. Japan Acad.* **52** (1976), no. 1, 4-6. (J. W. Rutter) **53** #9252 57D65 (55D15)
- Shiga, Kiyoshi** On holomorphic extension from the boundary. *Nagoya Math. J.* **42** (1976), 57-66. (L. R. Hunt) **45** #3771 32D05
- A remark on a complete curve in complex Euclidean space. *Bull. Fac. Gen. Ed. Univ. No. 13* (1977), 191-193. (Bang-yen Chen) **57** #695 32C10
- Shiga, Kōji** The stable jet range of differential complexes. *Proc. Japan Acad.* **48** (1972), 49-51. (M. F. Atiyah) **48** #7314 58H05
- Cohomology of Lie algebras over a manifold. *Proc. Japan Acad.* **49** (1973), suppl., 69-72. (J. P. Wilson) **48** #4079 18H25 (58A20)
- Cohomology of Lie algebras over a manifold. I. *J. Math. Soc. Japan* **26** (1974), 324-361. (D. B. Fuks) **51** #4267 57D25 (58H05)
- Cohomology of Lie algebras over a manifold. II. *J. Math. Soc. Japan* **26** (1974), 587-607. (D. B. Fuks) **51** #4268 57D25 (58H05)
- Cohomology of Lie algebras over a manifold. *Manifolds—Tokyo 1973* (Internat. Conf., Tokyo, 1973), pp. 103-109. Univ. Tokyo Press, Tokyo, 1975. (I. M. James) **58** #13235 58H05
- (with Amemiya, Ichiro; Masuda, Kazuo) Lie algebras of differential operators. *Osaka J. Math.* **12** (1975), 139-172. (D. B. Fuks) **51** #11594 58H05 (57D55)
- (with Tsujishita, Toru) Differential representations of vector fields. *Kōdai Sem. Rep.* **28** (1976/77), no. 2-3, 214-225. (B. Cenkli) **56** #3851 57D25 (57D55)

- zo (with Nakao, Shintaro) On the uniqueness of solutions of stochastic differential equations with boundary conditions. *J. Math. Kyoto Univ.* **12** (1972), 8. (G. Papanicolaou) **46** #10069 60H10
- ky Manabe, Shojiro) On one-dimensional stochastic differential equations with sticky boundary conditions. *J. Math. Kyoto Univ.* **13** (1973), 595-603. (C. P.) **49** #11628 60H10
- th Takahashi, Yoichiro) Ergodic properties of the equilibrium process associated finitely many Markovian particles. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 6. (F. L. Spitzer) **53** #6801 60K35 (28A65)
- th Watanabe, Shinzo) Bessel diffusions as a one-parameter family of diffusion processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **27** (1973), 37-46. (David) **51** #4433 60J60
- th Higuchi, Yasunari) Some results on Markov processes of infinite lattice spin s . *J. Math. Kyoto Univ.* **15** (1975), 211-229. (T. M. Liggett) **51** #7056 60K35
- me problems related to Gibbs states, canonical Gibbs states and Markovian time ones. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **39** (1977), no. 4, 339-352. (P.'s introduction) **58** #31469 60K35
- Hiroshi) A correspondence between observable Hopf ideals and left coideal algebras. *Tsukuba J. Math.* **1** (1977), 149-156. (Mitsuhiro Takeuchi) **58** #5759 (14L15)
- Shinsel (with Yamamoto, Sumiyasu; Ikeda, Hideto; Ushio, Kazuhiko; Hamada, Noboru) On claw-decomposition of complete graphs and complete bigraphs. *Osaka Math. J.* **5** (1975), 33-42. (Michael S. Martin) **52** #205 05C99
- Shima, Sumiyasu; Ikeda, Hideto; Ushio, Kazuhiko; Hamada, Noboru) Construction of a new balanced file organization scheme with the least redundancy. *Information and Control* **28** (1975), 156-175. (K. H. V. Booth) **51** #7402 68A50
- su, Abraham (with Sternberg, Robert L.; Sheets, Michael R.; Sternberg, Helen; Sternberg, Alice L.) Multiple Fourier analysis in rectifier problems. II. *Quart. Math.* **32** (1974/75), 293-315. (E. Lüneburg) **55** #7125 78.42
- u, Kazuyasu (with Taguchi, Yukio; Tanaka, Azuma; Yamamoto, Kunio) On the surface dependence of some operator products and integrability. *Progr. Theoret. Phys.* **55** (1976), no. 1, 287-296. (Authors' summary) **54** #9462 81.47
- with Konishi, Gaku; Miyata, Hidenori; Saito, Takeshi) Collective excitations in gauge invariant superconductivity models. *Progr. Theoret. Phys.* **57** (1977), no. 6, -2126. (J. E. Lowther) **58** #8946 81.49
- V. S. See **Sigörm, V. S.**
- C. (with Shepard, H. K.) Optimized data extrapolation off the boundary of an analytic function. *Nuclear Phys.* **B42** (1972), 397-417. (Authors' summary) **56** #2005
- D. (with Etgen, Garret J.) Disconjugacy of third order differential equations with negative coefficients. *J. Math. Anal. Appl.* **41** (1973), 420-425. (H. A. DeKleene) **3754** 34C10
- with Etgen, Garret J.) Disconjugacy and oscillation of third order differential equations with nonnegative coefficients. *Proc. Amer. Math. Soc.* **38** (1973), 577-582. (E. Muldoon) **47** #8971 34C10
- with Etgen, Garret J.) On the oscillation of certain third order linear differential equations. *Proc. Amer. Math. Soc.* **41** (1973), 151-155. (R. E. Fennell) **47** #8972
- with Etgen, Garret J.) Conditions for the nonoscillation of third order differential equations with nonnegative coefficients. *SIAM J. Math. Anal.* **6** (1975), 1-8. (K. H.) **50** #10434 34C10
- T. (with Pittenger, Arthur O.) Coterminal families and the strong Markov property. *Bull. Amer. Math. Soc.* **78** (1972), 439-443. (S. J. Taylor) **45** #6077 60J35
- with Pittenger, Arthur O.) Coterminal families and the strong Markov property. *Amer. Math. Soc.* **182** (1973), 1-42. (E. B. Dynkin) **49** #1600 60J40
- ai Jan) A note on semigroup rings. *Nanta Math.* **6** (1973), no. 2, 38-39. (Uno) **49** #7382 20M25
- with Cha, Y. B.) Some algebraic properties of prefix codes. *Nanta Math.* **6** (1973), 60-64. (Horst Reichel) **51** #5158 94A10
- with Chen, Bang-yen; Chu, Ming Lun; Lai, Han Ch'ing; Pu, Hwang Wên; Yang, Shêng; Yeh, Neng Chê) Foreword. Collection of articles dedicated to Professor Tsing Houa Teng on the occasion of his 70th birthday. *Tamkang J. Math.* **4** (1973), no. 1. (Editors) **49** #7077 01A70
- Abelian regular languages and primitive star languages. Collection of articles dedicated to Professor Tsing Houa Teng on the occasion of his 70th birthday. *Tamkang J. Math.* **4** (1973), no. 2, 123-128. (K. Vairavan) **50** #15462 68A30
- Codes and factor theorems for subsets of a free monoid. *Utilitas Math.* **3** (1973), 159. (E. L. Cohen) **47** #10140 94A10
- with Thierrin, G.) Hypercodes. *Information and Control* **24** (1974), 45-54. (P.essen) **49** #10443 94A10
- with Thierrin, G.) Power-separating regular languages. *Math. Systems Theory* **8** (1974), no. 1, 90-95. (S. Ginsburg) **52** #2293 68A30
- with Viswanathan, T. M.) On the radicals of lattice-ordered rings. *Pacific J. Math.* **974**, no. 1, 257-260. (S. P. Bandyopadhyay) **51** #12657 06A70
- with Thierrin, G.) Ordered automata and associated languages. *Tamkang J. Math.* **4** (1974), no. 1, 9-20. (B. P. Zeigler) **51** #2810 94A30
- with Thierrin, G.) Left-noncounting languages. *Internat. J. Comput. Information* **4** (1975), 95-102. (G. E. Ceitin) **57** #1983 68A30
- Some free submonoids of the free monoid of prefix codes. *Semigroup Forum* **11** (1975), no. 1, 22-29. (Settimo Termini) **52** #16857 94A10 (20M05)
- with Thierrin, G.) Some properties of the (n, k) -languages. *Tamkang J. Math.* **6** (1975), no. 2, 281-284. (André Lentini) **54** #9184 68A30
- with Thierrin, G.) Preorder relations associated with developmental systems and languages. *Automata, languages, development*, pp. 301-311. North-Holland, Amsterdam, (Juhani Karhumäki) **57** #4670 68A30
- Every subsemigroup of a free semigroup with zero is not an R -semigroup. *Semigroup Forum* **12** (1976), no. 4, 380-382. (M. Satyanarayana) **54** #434 20M05
- Left cancellative subsemigroup of a semigroup. *Soochow J. Math. Natur. Sci.* **2** (1976), 25-33. (G. Pollák) **55** #8216 20M05
- with Thierrin, G.) Disjunctive languages and codes. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 171-176. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (P. Dömösi) **57** #18267 68A30
- (with Thierrin, G.) Codes and binary relations. *Séminaire d'Algèbre Paul Dubreil, 29ème année (Paris, 1975-1976)*, pp. 180-188. *Lecture Notes in Math.*, 586, Springer, Berlin, 1977. (Dorothy Bollman) **58** #33507 94A10 (68A30)
- Disjunctive languages on a free monoid. *Information and Control* **34** (1977), no. 2, 123-129. (Branislav Rován) **56** #1830 68A30
- A strongly primitive word of arbitrary length and its application. *Internat. J. Comput. Math.* **6** (1977/78), no. 3, 165-170. (E. Stockii) **57** #4671 68A30
- (with Thierrin, G.) Codes, languages and MOI schemes. (French summary) *RAIRO Informat. Théor.* **11** (1977), no. 4, 293-301, i. (Sorin Istrail) **58** #3751 68A30 (92A05)
- (with Reis, C. M.) A note on a problem of Hua. *Semigroup Forum* **14** (1977), no. 1, 7-13. (André Lentini) **57** #9875 20M05
- Strong codes. *Soochow J. Math. Natur. Sci.* **3** (1977), 9-16. (R. J. McEliece) **58** #20800 94A10
- (with Hwang, Jun Shung) Complete stable marriages. *Soochow J. Math. Natur. Sci.* **3** (1977), 41-51. (Peter Eades) **58** #10468 05A05 (05B15)
- Shih, Kên Hua) The least number of fixed points in the class of the map. (Chinese) *Acta Math. Sinica* **18** (1975), no. 3, 192-202. (Not reviewed) 54H25
- Shih, Kuang-yen) On the construction of Galois extensions of function fields and number fields. *Math. Ann.* **207** (1974), 99-120. (A. I. Vinogradov) **48** #11051 12A55 (14G05)
- Anti-holomorphic automorphisms of arithmetic automorphic function fields. *Ann. of Math.* (2) **103** (1976), no. 1, 81-102. (Yasutaka Ihara) **57** #5910 10D20 (10D25)
- Conjugations of arithmetic automorphic function fields. *Invent. Math.* **44** (1978), no. 1, 87-102. (Rita Hall) **58** #28007 14K10 (10D25)
- Shih, Kung Hsing) On the functional equations $P_n(x+y) = \sum_{k=0}^n \binom{n}{k} P_{n-k}(x) P_k(y)$. *Chinese J. Math.* **1** (1973), no. 1, 113-117. (Wazir Hasan Abdi) **52** #14726 39A25
- A proof of Professor C. C. Li's identity. *Chinese J. Math.* **1** (1973), no. 1, 119-121. (B. R. Handa) **52** #8158 15A24
- Shih, L. Y. Motion of elliptic ballooning for a traveling string. (German and Russian summaries) *Internat. J. Non-Linear Mech.* **10** (1975), no. 3-4, 183-191. (T. K. Caughey) **52** #7267 73.35
- The inverse scattering problem for a reflection system. *J. Phys. A* **9** (1976), no. 2, 217-224. (Harry E. Moses) **53** #2183 81.45
- Propagation of hydromagnetic disturbances in a spherical dynamo system. *Tensor (N.S.)* **31** (1977), no. 3, 295-300. (R. R. Gold) **57** #2126 76.35
- Shih, Lionel (with Gray, F. Gail; Thompson, Richard A.) Fault location in modular trees. *Proceedings of the Eighth Annual Southeastern Symposium on System Theory (Univ. Tennessee, Knoxville, Tenn., 1976)*, pp. 238-243. *Inst. Electr. Electron. Engrs., New York*, 1976. (Authors' summary) **58** #4695 94A20
- Shih, Mau Hsiang (with Chen, Ming Po) On sequences of quasi-contraction maps and fixed points. *Tamkang J. Math.* **6** (1975), no. 2, 291-292. (L. Janos) **55** #1335 54H25
- (with Hwang, Jia Cherng) A fixed point theorem in reflexive Banach spaces. *Comment. Math. Univ. St. Paul.* **25** (1976/77), no. 2, 95-96. (From the authors' introduction) **55** #6248 47H10
- (with Chen, Ming Po) On generalized contractive maps. *Math. Japon.* **21** (1976), no. 3, 281-282. (Editors) **55** #6398 54H25
- Shih, S. M. (with Shen, Mei Chang) Uniform asymptotic approximation for viscous fluid flow down an inclined plane. *SIAM J. Math. Anal.* **6** (1975), 560-582. (R. Manohar) **52** #9801 76.41
- Shih, Sung Ling See **Shi, Song Ling**
- Shih, Weishu (with Palais, Richard S.; Atiyah, M. F.; Borel, Armand; Floyd, E. E.; Seeley, Robert T.; Solovay, Robert M.; Rešetnikov, V. N.; Dynin, A. S.) ★Семинар по теореме Атьи-Зингера об индексе. (Russian) [Seminar on the Atiyah-Singer index theorem] With contributions by M. F. Atiyah, A. Borel, E. Floyd, R. T. Seeley, W. Shih and R. Solovay. Translated from the English by V. N. Rešetnikov. Edited by A. S. Dynin. *Izdat. "Mir", Moscow*, 1970. 359 pp. (Editors) **52** #15568 58G10
- Une remarque sur la formule de résidus. *Analyse globale*, pp. 205-211. *Sém. Math. Supérieures*, No. 42 (Été, 1969), Presses Univ. Montréal, Montréal, Que., 1971. (J. S. Joel) **49** #10905 32A25
- (with Singh Varma, H. O.) Sur les KO-classes caractéristiques des fibrés réels. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A1212-A1214. (A. Dold) **45** #1155 55F05
- Sur la topologie des espaces d'applications. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1895-A1896. (P. J. Kahn) **46** #6355 55E55
- (with Chou, Chin Ch'eng) Sur le microspectre d'un courant. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 8, A599-A602. (J. S. Joel) **58** #13118 58A25
- Un invariant algébrique associé à une application continue et le problème de Cauchy global. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 5, A333-A336. (Author's introduction) **56** #3901 58G15 (58C25)
- Shih, Yen Ping (with Wu, Wên T'eng; Chow, Hang Chun) Moments of discrete systems and application in model reduction. *Chem. Engrg. J.* **10** (1975), no. 2, 107-112. (Frank D. Burgoyne) **53** #2471 93C55
- (with Chu, C. K.) On optimal feedback control of a class of linear distributed systems. *J. Optimization Theory Appl.* **16** (1975), 327-338. (Yaakov Yavin) **51** #9885 93C05
- (with Chen, Wen Liang) Analysis and optimal control of time-varying linear systems via Walsh functions. *Internat. J. Control* **27** (1978), no. 6, 917-932. (S. Chakrabarti) **58** #15432 93C05 (93C50)
- (with Ku, Wei Kang) Piecewise constant solutions of integral equations via Walsh functions. (Chinese summary) *J. Chinese Inst. Engrs.* **1** (1978), no. 1, 81-85. (P. M. Anselone) **58** #19276 65R05 (45L10)
- yen Shih-chien See **Yen Shih-chien**
- Shiino, Tsutomu) A probabilistic consideration of sparse matrix. *Information Processing in Japan* **14** (1974), 51-56. (From the author's introduction) **57** #4505 65F35
- Shikano, Kiyohiro (with Toriwaki, Junichiro; Fukumura, Teruo) A wave propagation method for conversion of gray pictures into line figures. *Systems-Computers-Controls* **3**

- (1972), no. 5, 58-64 (1973). (Jana Zvárová) **49** #8448 68A45
- Shikata, Hoshihiro** On the cohomology of bigraded forms associated with foliated structures. *Bull. Soc. Math. Grèce (N.S.)* **15** (1974), 68-76. (Author's introduction) **58** #31107 57D30
- Shikata, Morikazu** Generation and error-correcting properties of 1-track m - n - p K - E codes for angle-position encoders. *Electron. Commun. Japan* **57** (1974), no. 7, 10-17. (Author's summary) **56** #15146 94A10
- Shikata, Yoshihiro** (with Mogi, Isamu) Some topological aspects of abstract variation theory. *Differential geometry (in honor of Kentaro Yano)*, pp. 451-457. Kinokuniya, Tokyo, 1972. (R. S. Palais) **48** #1262 58E05
- On a distance function between differentiable structures. *Geometry of manifolds (Proc. Sympos., RIMS, Kyoto Univ., Kyoto, 1972)*, pp. 102-111. *R. I. M. S. Sem. Rep. No. 158*, Res. Inst. Math. Sci. Kyoto Univ., Kyoto, 1972. (Midori Goto) **53** #4096 57D55 (58H05, 53C20)
- On a distance function between differentiable structures. *Nagoya Math. J.* **56** (1975), 53-60. (R. Schultz) **50** #14769 57D10 (53C20)
- Shikin, I. S.** See **Šikin, I. S.**
- Shilane, Lewis** Steenrod squares and reduction of structure group for fibrations. *Michigan Math. J.* **22** (1975), no. 2, 129-139. (S. Gitler) **52** #15456 55F20
- Filtered spaces admitting spectral sequence operations. *Pacific J. Math.* **62** (1976), no. 2, 569-585. (W. M. Singer) **55** #4169 55G10
- Shilepsky, Arnold C.** Extendible and homogeneously embedded simple closed curves. *Proceedings of the University of Oklahoma Topology Conference (Univ. Oklahoma, Norman, Okla., 1972)*, pp. 305-309. Univ. of Oklahoma, Norman, Okla., 1972. (T. B. Rushing) **51** #4214 55A30 (57A35)
- Homogeneity by isotopy for simple closed curves. *Duke Math. J.* **40** (1973), 463-472. (R. J. Daverman) **47** #7725 55A30 (54F50, 57A10)
- A rigid Cantor set in E^3 . (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 223-224. (R. Bean) **49** #9849 57A10
- Homogeneity and extension properties of embeddings of S^1 in E^3 . *Trans. Amer. Math. Soc.* **195** (1974), 265-276. (L. Neuwirth) **49** #6245 57A10 (55A30)
- Shilepsky, Carol Carter** (with Hannsen, Kenneth B.) A boundedness theorem for Volterra equations. *J. Differential Equations* **10** (1971), 378-387. (J. A. Nohel) **45** #2425 45D05
- A note on the asymptotic behavior of an integral equation. *Proc. Amer. Math. Soc.* **33** (1972), 111-113. (H. E. Gollwitzer) **46** #5973 45M05
- The asymptotic behavior of an integral equation with an application to Volterra's population equation. *J. Math. Anal. Appl.* **48** (1974), 764-779. (David L. Lovelady) **50** #7973 45M05
- Shilkret, Niel** See **Shell, Niel**
- Shiller, Robert J.** See **Sims, Christopher A.**, **55** #11552
- Shilletto, J. R.** Minimum models of analysis. *J. Symbolic Logic* **37** (1972), 48-54. (F. Fukson (RZMat 1973 #2 A65)) **51** #7872 02K30 (02F35)
- (with Ruoff, D.) Decompositions of n -gons into n -gons. *Geometriae Dedicata* **4** (1975), no. 2-4, 271-278. (E. W. Ellers) **53** #9019 50D05
- (with Ruoff, D.) Das Parallelenaxiom im affinen Raum. *Elem. Math.* **31** (1976), no. 1, 9-12. (Rodney Angotti) **53** #1381 50A05
- (with Ruoff, D.) Die Eindeutigkeit der Verbindungsebene im Raum. *Elem. Math.* **31** (1976), no. 5, 119-120. (E. Morgantini) **54** #11165 50D05
- (with Weston, J. H.) Cardinalities of dense sets. *General Topology and Appl.* **6** (1976), no. 2, 227-240. (Authors' summary) **56** #1250 54A25
- Shillington, E. Richard** (with Prentice, R. L.) Regression analysis of Weibull data and the analysis of clinical trials. *Utilitas Math.* **8** (1975), 257-276. (Benjamin Epstein) **53** #4434 62N05 (62J05)
- Shil'man, S. V.** See **Šil'man, S. V.**
- Shiloach, Y.** (with Perl, Yehoshua) Finding two disjoint paths between two pairs of vertices in a graph. *J. Assoc. Comput. Mach.* **25** (1978), no. 1, 1-9. (R. A. Melter) **58** #8474 68A10 (05C99)
- (with Cutler, M.) Permutation layout. *Networks* **8** (1978), no. 3, 253-278. (W.-K. Chen) **58** #20832 94A20
- Shilov, Georgi E.** See **Šilov, G. E.**
- Shilova, E. I.** See **Šilova, E. I.**
- Shima, Chikayoshi** Some considerations on the theory of random walk. (Japanese summary) *Bull. Dept. Gen. Ed. College Sci. Tech. Nihon Univ.* **17** (1975), no. 3, 32-35. (J. Gillis) **51** #7002 60J15
- Shima, Hirohiko** On homogeneous Kähler manifolds of solvable Lie groups. *J. Math. Soc. Japan* **25** (1973), 422-445. (J. A. Wolf) **47** #7658 53C30 (32M10, 53C55)
- On homogeneous Kähler manifolds with non-degenerate canonical Hermitian form of signature $(2, 2(n-1))$. *Osaka J. Math.* **10** (1973), 477-493. (Su-shing Chen) **48** #8860 32M10 (53C55)
- On locally symmetric homogeneous domains of completely reducible linear Lie groups. *Math. Ann.* **217** (1975), no. 1, 93-95. (Su-shing Chen) **52** #818 32M10
- On certain locally flat homogeneous manifolds of solvable Lie groups. *Osaka J. Math.* **13** (1976), no. 2, 213-229. (E. Vinberg) **54** #1131 53C30
- Homogeneous convex domains of negative sectional curvature. *J. Differential Geom.* **12** (1977), no. 3, 327-332. (Y. Tashiro) **58** #24127 53C30
- Symmetric spaces with invariant locally Hessian structures. *J. Math. Soc. Japan* **29** (1977), no. 3, 581-589. (E. Vinberg) **56** #9462 53C35
- Shima, Masasuke** (with Sawaragi, Yoshikazu) On the optimality of the boundary control for the two dimensional nonlinear control system which contains control variables linearly. (Japanese. English summary) *J. Japan Assoc. Automat. Control Engrs.* **12** (1968), 686-692. (Authors' summary) **50** #12366 93C10
- Singular control problem. (Japanese. English summary) *Systems and Control* **16** (1972), 942-952. (Editors) **47** #3058 93C15
- (with Ikeda, Saburo; Okamoto, Masaaki) Optimal control of a bilinear distributed parameter system—on the pattern of the optimal flow-rate control. (Japanese. English summary) *Systems and Control* **17** (1973), 689-697. (Authors' summary) **58** #33321 93C20
- (with Okamoto, Masaaki; Ikeda, Saburo) A sufficient condition for the optimality of a singular control in hyperbolic distributed parameter systems. (Japanese. English summary) *Systems and Control* **18** (1974), no. 11, 641-648. (Takashi Yahagi) **53** #93C20
- Shima, Susumu** (with Tabata, Tsuyoshi; Oyane, Moriya; Kawakami, Takashi) Upper bound theory for deformation of porous materials. *Mem. Fac. Engrg. Kyoto Univ.* (1976), no. 3, 117-137. (From the summary) **58** #19630 73A9
- Shimada, Hideo** On extended Lie systems as Riemannian manifold. *Res. Rep. K. Tech. College* **4** (1970), 203-206. (R. H. Bowman) **48** #2924 53B20
- (with Azuma, Masayoshi; Yasuda, Hiroshi) On extended Lie systems as Riemannian manifolds. II. *Tensor (N.S.)* **22** (1971), 127-132. (T. Okubo) **57** #1353B99 (22E05)
- (with Shibata, Chōkō) On Riemannian manifold with the Killing property. *Rep. Kushiuro Tech. College* **7** (1973), 133-139. (loose errata) (Shoshichi Kō) **52** #1552 53B20
- (with Yasuda, Hiroshi) On submanifolds of extended Lie systems. *Res. Kushiuro Tech. College* **9** (1975), 201-206. (loose errata) (From the summary) **58** #53B25
- On the Ricci tensors of particular Finsler spaces. *J. Korean Math. Soc.* **14** (1977/78), no. 1, 41-63. (Hassan Akar-Zadeh) **57** #1337 53B40
- (with Yasuda, Hiroshi) On Randers spaces of scalar curvature. *Rep. Math. Phys.* **11** (1977), no. 3, 347-360. (K. L. Duggal) **57** #10634 53B40
- (with Matsumoto, Makoto) On Finsler spaces with the curvature tensors P_{hijk} satisfying special conditions. *Rep. Mathematical Phys.* **12** (1977), no. 1, 77-81. (Rund) **57** #4036 53B40
- (with Shibata, Chōkō; Azuma, Masayoshi; Yasuda, Hiroshi) On Finsler spaces with Randers' metric. *Tensor (N.S.)* **31** (1977), no. 2, 219-226. (Siegfried S.) **57** #17544 53B40
- Shimada, Ippei** (with Hori, Jun-ichi) Phase transition between stationary states. II. Liapounoff function in Bénard problem. *Prog. Theoret. Phys.* **53** (1975), no. 2, 41-51. (M. Drăganu) **53** #10054 82J35
- (with Hori, Jun-ichi) Phase transition between stationary states. III. An equation for necessary and sufficient Liapounoff functions. *Prog. Theoret. Phys.* (1976), no. 2, 400-410. (M. Drăganu) **53** #10055 82J35
- Shimada, Kimie** Theorem prover for the intuitionistic propositional calculus and computer experiments on logics. *J. Tsuda College No. 7* (1975), 15-20. (G. E. Hughes) **51** #2371 68A40
- Shimada, Kimiki** A theorem prover for intuitionistic propositional logic. (Japanese) *Tsuda College No. 6* (1974), 39-44. (Editors) **58** #10331 02C15 (02-04, 68A40)
- Shimada, Nobuo** (with Wu, Ching-Mu) Bordism algebras of periodic transformations. *Osaka J. Math.* **10** (1973), 25-32. (J. W. Vick) **50** #11286 57D85 (57E15)
- (with Kono, Akira; Mimura, Mamoru) Cohomology of classifying spaces of associative H -spaces. *J. Math. Kyoto Univ.* **15** (1975), no. 3, 607-617. (R. K. L.) **52** #9262 57F15 (53C30)
- (with Kono, Akira; Mimura, Mamoru) On the cohomology mod 2 of the class space of the 1 connected exceptional Lie group E_7 . *J. Pure Appl. Algebra* **8** (1976), 267-283. (S. Gitler) **54** #3732 57F10 (55H20)
- (with Yagita, Nobuaki) Multiplications in the complex bordism theory with singularities. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 1, 259-293. (P. S. Landweber) **54** #3723 57D90 (55B20)
- Shimada, Ryosaku** (with Mine, Hisashi) Permutations and lattice operations in many-valued logic. *Systems-Computers-Controls* **1** (1970), no. 2, 24-32 (1971). (Authors' summary) **46** #8812 02C05
- Simplification of many-valued logic circuits. *Systems-Computers-Controls* **2** (1972), no. 1, 58-59 (1972). (From the author's introduction) **46** #3225 94A20
- (with Mine, Hisashi; Hasegawa, Toshiharu; Harada, Naofumi) Logical design of multi-line many-valued logic networks. *Systems-Computers-Controls* **4** (1973), 33-41. (T. C. Wesselkamper) **53** #15575 94A20 (06A20)
- (with Tamesada, Takeomi; Harada, Naofumi) Sequential logic networks with quasistable state and their logic analysis. *Systems-Computers-Controls* **7** (1976), 44-52 (1977). (R. Shirladze) **58** #20891 94A25
- (with Tamesada, Takeomi; Harada, Naofumi) Synthesis of sequential circuits having quasistable states. *Systems-Computers-Controls* **7** (1976), no. 2, 69-78 (1977). (Ljudmil Dakovski) **56** #8228 94A25
- Shimada, Toshiro** See **Operational Research**, **49** #12059
- Shimada, Yoshio** On the existence of solutions for system of linear partial differential equations with constant coefficients. *Proc. Japan Acad.* **47** (1971), 545-548. (Moyer) **46** #2209 35E99
- Shimakawa, Kazuhisa** Remarks on the coefficient ring of quaternionic oriented cohomology theories. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 1, 241-254. (Stong) **54** #11312 55B20 (57D90)
- Shimakura, Norio** Problèmes aux limites variationnels du type elliptique. *Ann. Sci. Norm. Sup. (4)* **2** (1969), 255-310. (P. Szeptycki (Zbl 181, 379-380)) **56** #135J35
- (with Fujiwara, Daisuke) Sur les problèmes aux limites elliptiques stables variationnels. *J. Math. Pures Appl. (9)* **49** (1970), 1-28. (N. Weck (Zbl 191, 56) #12579 35J40
- Quelques exemples des ξ -fonctions d'Epstein pour les opérateurs elliptiques dégénérés du second ordre. II. *Proc. Japan Acad.* **46** (1970), 1065-1069. (S. Dinevari) **45** #704 35J15
- Une remarque sur la régularité des solutions des problèmes aux limites généralisés de type elliptique dégénéré. *Proc. Japan Acad.* **47** (1971), 291-295. (J. Untermyer) **45** #7246 35D10
- Les fonctions de Green pour certains opérateurs paraboliques dégénérés du second ordre. *Proc. Japan Acad.* **47** (1971), 699-704. (J. E. Lagnese) **46** #135K99 (47F05)
- Problème de Dirichlet pour des opérateurs elliptiques dégénérés du second ordre. *Proc. Japan Acad.* **47** (1971), suppl. I, 861-866. (S. Delache) **47** #2187 35J70
- Sur les ξ -fonction d'Epstein pour des opérateurs elliptiques dégénérés. *Math. J. (2)* **26** (1974), 95-131. (W. J. Sweeney) **50** #7846 35P20 (10H10, 58E05)

- uations différentielles provenant de la génétique de population. *Séminaire*
 uie-Schwartz (1975/1976), *Équations aux dérivées partielles et analyse*
 nnelle, Exp. No. 15, 10 pp. Centre Math., École Polytech., Palaiseau, 1976.
 r's summary) **58** #20620 92A15 (35K10)
- uations différentielles provenant de la génétique des populations. *Tôhoku Math.*
 1977), no. 2, 287-318. (H. A. Lauwerier) **58** #20621 92A15 (35K99)
- Y. On an extension of the Grinberg theorem. *J. Combinatorial Theory Ser. B*
 78), no. 2, 169-180. (W. T. Tutte) **58** #5383 05C35
- A, Isao (with Burke, P. G.; Mackey, I.) R-matrix theory of electron-molecule
 ing. *J. Phys. B* **10** (1977), no. 12, 2497-2512. (Chung Y. Shen) **57** #11573
- matrix theory of atomic continuum processes. *J. Phys. B* **10** (1977), no. 13,
 2618. (Author's summary) **57** #2284 81.35
- Takashi Random recurrence time in ergodic theory. *Tôhoku Math. J. (2)* **23**
 1973), 273-287. (B. Weiss) **45** #2141 28A65 (60J99)
- S. N. See Šimanov, S. N.
- Masaki (with Kiyono, Takeshi) On the solution of Laplace's equation by
 n dual series equations. *SIAM J. Appl. Math.* **21** (1971), 245-257. (Authors'
 ary) **46** #2900 65N99
- with Kiyono, Takeshi) Numerical solution of integral equations in Chebyshev
 . *Numer. Math.* **21** (1973), 373-380. (Y. Ikebe) **51** #12010 65R05
- with Kiyono, Takeshi) Series equations involving Jacobi polynomials and mixed
 dary-value problems of the Laplace equation. *Quart. Appl. Math.* **31** (1973/74),
 3. (K. N. Srivastava) **54** #5761 45F10
- with Hinata, Masahiro; Kiyono, Takeshi) Numerical solution of Plateau's problem
 finite element method. *Math. Comp.* **28** (1974), 45-60. (J. Frehse) **48** #10151
 75 (49F10)
- ki, Takehide (with Noguchi, Shoichi; Ozumi, Juro) The empirical Bayes
 oach to unsupervised parameter estimation and classification problems for mixture
 utions. *Systems-Computers-Controls* **6** (1975), no. 4, 72-80. **56** #16926
 80 (68A45)
- ki, Toshio (with Akaza, Tohru) The Hausdorff dimension of the singular sets of
 ination groups. *Tôhoku Math. J. (2)* **25** (1973), 61-67. (L. Keen) **48** #2378
- tsu, H. (with Nishikawa, Yoshikazu; Ojika, Takeo; Okudaira, M.) An
 action-coordination algorithm with modified performance index for nonlinear
 control problems. *J. Optim. Theory Appl.* **25** (1978), no. 2, 229-245. (William
 in) **58** #15349 93A15 (93C10)
- Masaru See Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's
 ftieth birthday. **48** #15
- Osamu (with Fang, Russell) Unified analysis of a class of digital systems in
 tive noise and interference. *IEEE Trans. Comm.* **COM-21** (1973), 1075-1091. (J. P.
 schalkwijk) **49** #12146 94A05
- Tsunehiko On harmonic majoration. *Kôdai Math. Sem. Rep.* **28** (1976/77), no.
 278-283. (Lung Ock Chung) **57** #6475 31C05 (30A48)
- ski, Ehud Encadrement d'une frontière libre relative à un problème d'hydraulique.
 (ian summary) *Boll. Un. Mat. Ital. (4)* **12** (1975), no. 1-2, 66-67. (Hélie Lanchon)
 #16068 65N99 (76.49)
- ich, L. I. See Šimelevič, L. I.
- ura, Etsujiro (with Mori, Kinji) Optimal control of a nonlinear system with
 -delay. *Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 53* (1971), 72-79. (M. Q.
 bs) **47** #5682 49B10
- (with Matsumoto, Takashi) On a class of linear pursuit games. *J. Differential*
tions **11** (1972), 266-283. (L. Cesari) **45** #4844 90D25
- (with Uchida, Kenkô) On synthesis of feedback control in a linear system with
 -delay. *Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 65* (1974), 21-29; erratum,
No. 66 (1974), 77. (M. Q. Jacobs) **53** #5103 93C30
- (with Mori, K.) Linear differential games with delayed and noisy information.
 erential games: a collection of articles. *J. Optimization Theory Appl.* **13** (1974),
 -289. (Guy Jumarie) **49** #10382 90D25
- (with Ishizima, Shintaro; Mori, Kinji) A certain method for designing systems with
 archical input-output structures. (Japanese. English summary) *Systems and Control*
1974, no. 10, 596-603. (Masao Ikeda) **54** #4750 93B25
- (with Uchida, Kenkô) A note on mutual information in white Gaussian channels
 nonlinear feedback. *Information and Control* **37** (1978), no. 2, 178-181. (Shunsuke
 a) **58** #4647 94A15
- N. (with Fairweather, D. W.) The critical multitype branching process in random
 nvironment. *Math. Biosci.* **12** (1971), 293-302. (S. K. Srinivasan) **47** #1139 60J80
 15)
- (with Crow, L. H.) Maximum likelihood estimation of life-distributions from
 wal testing. *Ann. Math. Statist.* **43** (1972), 1827-1838. (R. J. Buehler) **50** #8890
 05 (62G05)
- (with Fairweather, D. W.) A multi-type branching process with immigration and
 om environment. *Math. Biosci.* **13** (1972), 299-324. (H. Kesten) **47** #2682
 0
- System failures and stochastic hazard rate. *Applications of statistics (Proc. Sympos.,*
ght State Univ., Dayton, Ohio, 1976), pp. 497-505. North-Holland, Amsterdam, 1977.
 (hor's summary) **58** #18994 62N05
- (with Crow, L. H.) Estimation of a multi-parameter failure rate using a general
 acement testing plan. *The theory and application of reliability, with emphasis on*
Bayesian and nonparametric methods, Vol. II (Conf., Univ. South Florida, Tampa, Fla.,
1975), pp. 299-333. Academic Press, New York, 1977. (H. L. Harter) 56 #9875
 05
- (with Tsokos, Chris P.) The Bayesian and nonparametric approach to reliability
 ies: a survey of recent work. *The theory and applications of reliability, with emphasis*
Bayesian and nonparametric methods (Conf., Univ. South Florida, Tampa, Fla., 1975),
I, pp. 5-47. Academic Press, New York, 1977. (Johannes S. Maritz) 57 #14306
 05
- (with Abdel-Hameed, Mohamed) Optimal replacement of damaged devices. *J.*
Probability **15** (1978), no. 1, 153-161. (H. Taylor) **57** #5045 90B25 (60K10)
- See also *Theory and applications of reliability, with emphasis on Bayesian and*
nonparametric methods, 56 #1521a and Theory and applications of reliability, with
emphasis on Bayesian and nonparametric methods, 56 #1521b
- Shimi, Tawfik N. (with Goebel, Kasimierz; Kirk, William A.) A fixed point theorem in
 uniformly convex spaces. (Italian summary) *Boll. Un. Mat. Ital. (4)* **7** (1973), 67-75. (M.
 Edelstein) **47** #9367 47H10
- Shimizu, Akinobu (with Okabe, Yasunori) On the pathwise uniqueness of solutions of
 stochastic differential equations. *J. Math. Kyoto Univ.* **15** (1975), no. 2, 455-466. (A. D.
 Wentzell (Ventcel')) **52** #1886 60H10
- Construction of a solution of a certain evolution equation. *Nagoya Math. J.* **66**
 (1977), 23-36. (Ju. M. Ryžov) **57** #7767 60H15
- Shimizu, Chikahiro (with Izuchi, Keiji) On measures with countable spectra. (Japanese)
 Approximation theory in functional analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto
 Univ., Kyoto, 1975). *Sûrikaiseikikenkyûsho Kôkyûroku No. 265* (1976), 1-9. (Satoru Igari)
58 #2017 43A10
- Shimizu, H. (with Kometani, K.) A study of self-organizing processes of nonlinear
 dynamic variables. *J. Statist. Phys.* **13** (1975), no. 6, 473-490. (K. Dietz) **56** #8069
 92A05
- See also *Theory of numbers, 56 #2953*
- Shimizu, Hideo Theta series and automorphic forms on GL(2). *Seminar on Modern*
Methods in Number Theory (Inst. Statist. Math., Tokyo, 1971), Paper No. 28, 6 pp. Inst.
Statist. Math., Tokyo, 1971. (Editors) 51 #10235 10D15 (32N15)
- Theta series and automorphic forms on GL₂. *J. Math. Soc. Japan* **24** (1972),
 638-683. (Rajat Tandon) **48** #11406 (E 54 #12658) 22E50 (10D15)
- A correction to: "Theta series and automorphic forms on GL₂," *J. Math. Soc. Japan*
24 (1972), 638-683. *J. Math. Soc. Japan* **26** (1974), 374-376. (Editors) **54** #12658
 10D15
- Some examples of new forms. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no.
 1, 97-113. (Stephen Gelbart) **56** #5436 10D15
- moore Shimizu, Iris See Moore Shimizu, Iris
- Shimizu, Kiyotaka Optimal satisfactory control: Formulation and analysis by Lagrangian
 technique. *Proc. Fac. Engrg. Keio Univ.* **23** (1970), 100-122 (1971). (Author's summary)
54 #2218 90C50 (49D99, 90D35)
- Necessary conditions for the pure strategies of static and dynamic games. *Keio*
Engrg. Rep. **24** (1971), 87-101. (J. H. Case) **48** #3511 90D05 (90D25)
- Two-level planning for multi-objective systems. *Keio Engrg. Rep.* **30** (1977), no. 8,
 69-83. (From the summary) **57** #18758 90A05 (65K05)
- Shimizu, Kunio On locally best estimators having a finite s-th absolute central moment.
Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. **23** (1976), no. 3, 97-102. (R. Ponnappalli)
56 #1560 62F10
- A note on the reduced IMSE estimation for extreme value densities. *TRU Math.* **12**
 (1976), 57-59. (H. L. Harter) **54** #6359 62F10
- Some properties of estimators having a finite s.a.c.m. *Rep. Statist. Appl. Res. Un.*
Japan. Sci. Engrs. **24** (1977), no. 2, 13-17. (From the introduction) **58** #31551
 62F10
- Shimizu, Ryoichi On the decomposition of stable characteristic functions. *Ann. Inst.*
Statist. Math. **24** (1972), 347-353. (Bernard Harris) **49** #6309 60E05
- On the remainder term for the central limit theorem. *Ann. Inst. Statist. Math.* **26**
 (1974), 195-201. (A. V. Nagaev) **51** #6934 60F05
- (with Davies, P. Laurie) On identically distributed linear statistics. *Ann. Inst.*
Statist. Math. **28** (1976), no. 3, 469-489. (E. Lukacs) **55** #4465 62E10 (60E05)
- Shimizu, T. Nonlinear-closed equations for the first and the second moments of
 macroscopic variables. *Phys. A* **83** (1975), no. 3, 486-504. (Piero de Mottoni)
54 #14639 81.47
- A new expansion of kinetic equations. *Phys. Lett. A* **54** (1975), no. 3, 194-196.
 (Author's summary) **56** #10673 82.47
- Theory of the relaxation and fluctuation from unstable and metastable states. *Phys.*
A **91** (1978), no. 3-4, 534-548. (Koichiro Matsuno) **57** #15158 82.60
- Shimizu, Tatsujiro Contribution to the theory of numerical integration of non-linear
 differential equations. I, II, III, IV, V. *TRU Math.* **2** (1966), 55-70; *ibid.* **4** (1968),
 80-93; *ibid.* **5** (1969), 51-66; *ibid.* **6** (1970), 47-58; *ibid.* **7** (1971), 45-57. (Jochen
 Werner) **47** #6097 65L05
- Errors in numerical integration of ordinary differential equations. *TRU Math.* **8**
 (1972), 27-32. (J. R. Cannon) **47** #9836 65L05
- Numerical integration of differential equations on $0 < x < \infty$. *TRU Math.* **9** (1973),
 63-67. (L. Fox) **50** #1516 65L05
- Contribution to the theory of numerical integration of non-linear differential
 equations. VI. *TRU Math.* **10** (1974), 83-96. (Jochen Werner) **53** #4548 65L05
- (with Oohashi, Tsunemichi) Rounding errors in floating point addition. *TRU*
Math. **11** (1975), 41-50. (R. P. Brent) **55** #4646 65G05
- Contribution to the theory of numerical integration of nonlinear differential
 equations. VII. *TRU Math.* **12** (1976), no. 1, 41-49. (Jochen Werner) **55** #4687
 65L05
- Contribution to the theory of numerical integration of nonlinear differential
 equations. VIII. *TRU Math.* **13** (1977), no. 2, 65-75. (Jochen Werner) **57** #14466
 65L05
- See also *Collection: Shimizu, Tatsujiro, 52 #10305 and Biography: Shimizu,*
Tatsujiro, 53 #7704
- Shimizu, Tetsuhiro On the Williamson's conjecture. *Proc. Japan Acad.* **46** (1970), no. 7,
 supplement, 766-767. (T. S. Liu) **45** #4168 46J99 (43A20)
- A remark on derived spaces. *Kôdai Math. Sem. Rep.* **23** (1971), 398-401. (G. I.
 Gaudry) **46** #4107 43A15
- A remark on multiplicative linear functionals on measure algebras. *Proc. Japan*
Acad. **47** (1971), 776-779. (R. Rieghof) **48** #4645 43A10
- The multipliers for vanishing algebras. *Proc. Japan Acad.* **47** (1971), suppl. I,
 894-896. (A. B. Simon) **47** #7332 43A22
- L-ideals of measure algebras. *Proc. Japan Acad.* **48** (1972), 172-176. (Colin C.
 Graham) **47** #7326 43A10
- (with Izuchi, Keiji) Topologies on groups and a certain L-ideal of measure algebras.
Tôhoku Math. J. (2) **25** (1973), 53-60. (J. H. Williamson) **52** #6322 43A10

- Independent sets and measure algebras. *Studia Math.* 59 (1976/77), no. 3, 209-225. (J. H. Williamson) 55 #6116 43A10
- Shimizu, Yoshiyuki** An analogue of the Paley-Wiener theorem for certain function spaces on the generalized Lorentz group. *J. Fac. Sci. Univ. Tokyo Sect. I* 16 (1969), 13-51. (From the author's introduction) 54 #868 43A90 (22E43, 22E30)
- Shimizu, Yuzi** Modules which have no co-irreducible submodules. *Hiroshima Math. J.* 2 (1972), 243-251. (R. B. Warfield, Jr.) 47 #6685 13F99
- Shimodaira, Hiroto** See Mikami, Yoshio, 58 #21023
- Shimodaira, Kazuo** Problems in the study of the history of mathematics in Japan. I, II. (Japanese) *Sūgakushi Kenkyū* 6 (1968), no. 1, 68-80; *ibid.* 6 (1968), no. 3, 45-56. (K. Inoue) 48 #26 01A25
- Problems in the study of the history of mathematics in Japan. III, IV, V, VI, VII, VIII, IX, X, XI. (Japanese) *Sūgakushi Kenkyū* No. 41 (1969), 15-25; *ibid.* No. 44 (1970), 49-59; *ibid.* No. 45 (1970), 49-61; *ibid.* No. 46 (1970), 43-56; *ibid.* No. 47 (1970), 44-53; *ibid.* No. 49 (1971), 55-64; *ibid.* No. 50 (1971), 56-63; *ibid.* No. 51 (1971), 46-52; *ibid.* No. 52 (1972), 21-26. (Not reviewed) 01A25
- Problems in the study of the history of mathematics in Japan. III, IV, V, VI, VII. (Japanese) *Sūgakushi Kenkyū* No. 42 (1969), 15-25; *ibid.* No. 44 (1970), 49-59; *ibid.* No. 45 (1970), 49-61; *ibid.* No. 46 (1970), 43-56; *ibid.* No. 47 (1970), 44-53. (Editors) 58 #26762 01A25
- See also Hayashi, Tsuruichi, 58 #26732
- Shimogaki, Tetsuya** (with Lorentz, Georg Gunther) Interpolation theorems for the pairs of spaces (L^p, L^∞) and (L^1, L^q) . *Trans. Amer. Math. Soc.* 159 (1971), 207-221. (S. D. Riemenschneider) 52 #1347 46M35 (46E30)
- (with Sakai, Yūji) Equimeasurability of functions and doubly stochastic operators. *Kōdai Math. Sem. Rep.* 24 (1972), 203-211. (J. V. Ryff) 46 #7945 47A35 (28A65, 46E30)
- Shimogaki, Yukio** (with Hamada, Taskashi) On the n -th power of a tree and its clique graph. *Proc. Fac. Sci. Tokai Univ.* 12 (1977), 11-14. (Dennis P. Geller) 57 #2963 05C05
- Shimoda, Hiroo** (with Miyatake, Osamu; Kurosaki, Itaru) Randomization of arithmetic random numbers. *Math. Japon.* 22 (1977), no. 1, 117-129. (Artenio De Matteis) 56 #7107 65C10 (10A30)
- (with Miyatake, Osamu; Ichimura, Minoru) Randomization of sequences of numbers. *Math. Japon.* 23 (1978/79), no. 1, 151-164. (Artenio De Matteis) 58 #19022 65C10
- Shimoiima, Kiyoko** (with Ichimura, Hiroshi) Statistical mechanics of quantum mixtures. I. A general formulation and its application to the binary hard-sphere system. *Progr. Theoret. Phys.* 57 (1977), no. 6, 1917-1931. (Authors' summary) 56 #14455 82A7
- Shimomura, Hiroaki** On the construction of invariant measure over the orthogonal group on the Hilbert space by the method of Cayley transformation. *Publ. Res. Inst. Math. Sci.* 10 (1974/75), 413-424. (François Arbaud) 51 #8363 28A40
- Some new examples of quasi-invariant measures on a Hilbert space. *Publ. Res. Inst. Math. Sci.* 11 (1975/76), no. 3, 635-649. (N. N. Vahanija) 54 #7738 28A40 (60B05)
- An aspect of quasi-invariant measures on R^∞ . *Publ. Res. Inst. Math. Sci.* 11 (1975/76), no. 3, 749-773. (N. N. Vahanija) 54 #7739 28A40 (60B05)
- Linear transformation of quasi-invariant measures. *Publ. Res. Inst. Math. Sci.* 12 (1976/77), no. 3, 777-800. (N. N. Vahanija (Vakhania)) 56 #8791 28A40 (60B05)
- Shimomura, Katsumi** (with Fujii, Kenso; Kobayashi, Teichi; Sugawara, Masahiro) KO -groups of lens spaces modulo powers of two. *Hiroshima Math. J.* 8 (1978), no. 3, 469-489. (Richard R. Patterson) 58 #22421 55B15
- Shimomura, Naohisa** Notes on the Brauer liftings of finite classical groups. *Hiroshima Math. J.* 6 (1976), no. 3, 489-525. (Bhama Srinivasan) 55 #520 20G05
- Shimony, Abner** Filters with infinitely many components. *Found. Phys.* 1 (1970/71), 325-328. (R. Piziak) 48 #13022 81.06
- Comment on the interpretation of inductive probabilities. *J. Statist. Phys.* 9 (1973), 187-191. (F. C. Auluck) 56 #14479 82.60
- (with Hultgren, Bror O., III) The lattice of verifiable propositions of the spin-1 system. *J. Mathematical Phys.* 18 (1977), no. 3, 381-394. (S. Gudder) 55 #4969 81.06
- See also Foundations of quantum mechanics, 52 #7333; Logic, methodology and philosophy of science, 55 #7657 and Carnap, Rudolf, 57 #4929
- Shimosakon, Takio** (with Kuriyama, Sennosuke; Nose, Toyokazu; Nakagiri, Daiju) An application of Markov processes to inventory management (the optimal inventory policy for obsolete commodities). (Japanese. English summary) *Mem. Osaka Inst. Tech. Ser. A* 19 (1974/75), no. 1, 7-18. (Masafumi Sasaki) 55 #2090 90B05
- (with Kuriyama, Sennosuke; Yoshimura, Koichi) A study of decision making under ignorance (a consideration of generalized maximum from pay-off matrix). (Japanese. English summary) *Mem. Osaka Inst. Tech. Ser. A* 20 (1975/76), no. 1, 19-27. (Authors' summary) 58 #9348 90D35 (90A05)
- (with Kuriyama, Sennosuke; Okumura, Takeshi; Minatoguchi, Mamoru) Studies of joint ordering policy for multi-item inventory management system. (Japanese. English summary) *Mem. Osaka Inst. Tech. Ser. A* 20 (1975/76), no. 1, 69-77. (Authors' summary) 58 #9167 90B05
- (with Kuriyama, Sennosuke; Okumura, Takeshi) Economic ordering policy for multi-items jointly replenished. *Mem. Osaka Inst. Tech. Ser. A* 20 (1975/76), no. 1, 91-97. (Authors' summary) 58 #9168 90B05
- (with Kuriyama, Sennosuke; Nose, Toyokazu; Tokioka, Hidekazu) An application of dynamic programming to obtain an optimal inventory transportation system for seasonal goods (an N -station inventory transshipment model). (Japanese. English summary) *Mem. Osaka Inst. Tech. Ser. A* 20 (1975/76), no. 2, 191-220. (Authors' summary) 56 #14617 90B05 (90C40)
- (with Kuriyama, Sennosuke; Nose, Toyokazu) A multi-commodity inventory system with substitutional property. *Mem. Osaka Inst. Tech. Ser. A* 21 (1976), no. 1, 29-43. (C. B. Garcia) 55 #7339 90B05
- (with Nishida, Toshio; Kodama, Masanori; Hamano, Masanobu) On the substitutional two-commodity inventory system. *Rep. Osaka Univ.* 27 (1977), no. 1364-1393, 307-315. (Authors' summary) 56 #17758 90B05
- Shimshoni, Michael** (with Fraenkel, Aviezer S.; Levitt, Jonathan) Characterization of the set of values $f(n)=[na]$, $n=1, 2, \dots$. *Discrete Math.* 2 (1972), no. 4, 335-345. (R. E. Greenwood) 46 #1743 10L10
- Shimura, Goro** On canonical models of arithmetic quotients of bounded symmetric domains. II. *Ann. of Math. (2)* 92 (1970), 528-549. (I. I. Pjateckii-Šapiro) 45 #1810D05
- ★Introduction to the arithmetic theory of automorphic functions. Kanô Memorial Lectures, No. 1. *Publications of the Mathematical Society of Japan*, No. 11. Iwanami Shoten, Publishers, Tokyo; Princeton University Press, Princeton, N.J., 1971. xiv+266. (A. N. Andrianov) 47 #3318 10D10 (12-02, 14K22)
- On arithmetic automorphic functions. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 343-348. Gauthier-Villars, Paris, 1971. (Editors) 57 #12530 14K15 (10D25, 14G25, 14K22)
- Class fields over real quadratic fields and Hecke operators. *Seminar on Methods in Number Theory (Inst. Statist. Math., Tokyo, 1971), Paper No. 6*, 17 pp. *Statist. Math., Tokyo*, 1971. (Editors) 51 #10296 12A65 (14K15)
- Class fields over real quadratic fields in the theory of modular functions. *Some complex variables, II (Proc. Internat. Conf., Univ. Maryland, College Park, Md., 1971)*, pp. 169-188. *Lecture Notes in Math.*, Vol. 185, Springer, Berlin, 1971. (A. N. Andrianov) 47 #3350 12A65 (10D05, 12A25, 14H40)
- On elliptic curves with complex multiplication as factors of the Jacobian modular function fields. *Nagoya Math. J.* 43 (1971), 199-208. (William F. Hamaker) 45 #5111 10D25 (14H05)
- Class fields over real quadratic fields and Hecke operators. *Ann. of Math. (2)* (1972), 130-190. (A. N. Andrianov) 47 #3351 12A65 (10D05, 14H40)
- On the field of rationality for an abelian variety. *Nagoya Math. J.* 45 (1973), 167-178. (M. J. Greenberg) 46 #5342 14K15 (14G05, 14K10)
- ★Введение в арифметическую теорию автоморфных функций. (Russian) [Introduction to the arithmetic theory of automorphic functions] Translated from English by A. A. Bel'skii. Edited by S. G. Gindikin. *Izdat. "Mir", Moscow*, 1973. 320 pp. (Editors) 49 #10639 10D10
- Complex multiplication. Notes by Willem Kuyk. *Modular functions of one variable, I (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 37-56. *Lecture Notes in Math.*, Vol. 320, Springer, Berlin, 1973. (Editors) 58 #16532a (E 58 #16532b) 10D25 (14K22)
- Modular forms of half integral weight. *Modular functions of one variable, I (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 57-74. *Lecture Notes in Math.*, Vol. 320, Springer, Berlin, 1973. (Editors) 58 #519a (E 58 #519b) 10D25 (14K22)
- On modular forms of half integral weight. *Ann. of Math. (2)* 97 (1973), 440-441. (I. Pjateckii-Šapiro) 48 #10989 10D15
- On the factors of the jacobian variety of a modular function field. *J. Math. Japan* 25 (1973), 523-544. (A. N. Andrianov) 47 #6709 14H40 (10D05, 12A70)
- On the trace formula for Hecke operators. *Acta Math.* 132 (1974), no. 3-4, 245-255. (M. Eichler (Zbl 285 #10018)) 58 #27783 10D15
- Correction to: "Modular forms of half integral weight" (*Modular functions of one variable, I (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 57-74. *Lecture Notes in Math.*, Vol. 320, Springer, Berlin, 1973). *Modular functions of one variable, IV (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 1-2. *Lecture Notes in Math.*, Vol. 476, Springer, Berlin, 1975. (Editors) 58 #519b (E 58 #519c) 10D25 (14K22)
- Correction to: "Complex multiplication". *Modular functions of one variable, IV (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, p. 145. *Lecture Notes in Math.*, Vol. 476, Springer, Berlin, 1975. (Editors) 58 #16532b 10D25 (14K22)
- On some arithmetic properties of modular forms of one and several variables. *Ann. of Math. (2)* 102 (1975), no. 3, 491-515. (Author's introduction) 58 #10758 10D15 (10D20)
- On the real points of an arithmetic quotient of a bounded symmetric domain. *Math. Ann.* 215 (1975), 135-164. (Author's introduction) 58 #27992 14G20 (10D20)
- On the Fourier coefficients of modular forms of several variables. *Nachr. Wiss. Göttingen Math.-Phys. Kl. II* 1975, no. 17, 261-268. (O. M. Fomenko) 58 #10D20
- On the holomorphy of certain Dirichlet series. *Proc. London Math. Soc. (3)* (1975), no. 1, 79-98. (I. I. Pjateckii-Šapiro) 52 #3064 10D15
- The special values of the zeta functions associated with cusp forms. *Comm. Appl. Math.* 29 (1976), no. 6, 783-804. (K.-B. Gundlach) 55 #7925 10D15 (14K22)
- Theta functions with complex multiplication. *Duke Math. J.* 43 (1976), 673-696. (S. Raghavan) 54 #12664 10D25 (10D20, 14K22)
- Unitary groups and theta functions. *Algebraic number theory (Kyoto Internat. Sympos., Res. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976)*, pp. 195-200. *Japan Promotion Sci., Tokyo*, 1977. (O. M. Fomenko) 57 #234 10D05 (14K25)
- On the derivatives of theta functions and modular forms. *Duke Math. J.* 44 (1978), no. 2, 365-387. (K.-B. Gundlach) 57 #5911 10D20
- On the periods of modular forms. *Math. Ann.* 229 (1977), no. 3, 211-221. (K.-B. Gundlach) 57 #3080 10D15
- On abelian varieties with complex multiplication. *Proc. London Math. Soc. (3)* (1977), no. 1, 65-86. (Author's introduction) 58 #28008 14K22 (12A65)
- On certain reciprocity-laws for theta functions and modular forms. *Acta Math.* (1978), no. 1-2, 35-71. (Larry J. Goldstein) 58 #10757 10D20 (12A65)
- The arithmetic of automorphic forms with respect to a unitary group. *Ann. of Math. (2)* 107 (1978), no. 3, 569-605. (K.-B. Gundlach) 58 #27797 10D20
- Shimura, Masamichi** A mixed-type non-parametric learning machine without a test set. *Pattern recognition and machine learning (Proc. Japan-U.S. Sem. Learning Process Control Systems, Nagoya, 1970)*, pp. 42-55. Plenum Press, New York, 1971. (S. Berkowitz) 56 #7372 68A45
- Application of fuzzy functions to pattern classification. *Electron. Commun. Japan* 55 (1972), no. 3, 103-109. (A. D. Koršunov) 48 #12929 68A45
- (with George, Frank H.) Rule-oriented methods in problem solving. *Artif. Intelligence* 4 (1973), 203-223. (S. Amarel) 49 #6703 68A45
- Fuzzy sets concept in rank-ordering objects. *J. Math. Anal. Appl.* 43 (1973), 717-733. (K. S. Fu) 51 #12420 94A15
- (with George, Frank H.) General consideration of four-layer series-coupled machines with learning mechanisms. *Kybernetik (Berlin)* 13 (1973), no. 2, 95-103.

- #10227 68A45
- h Imai, Toshio) Nonsupervised classification using the principal component. *Recognition* 5 (1973), 353-363. (S. Csibi) 52 #4530 62H30 (68A45)
- parametric learning using contextual information. *Information systems (Fourth Int. Sympos. Comput. and Information Sci., Miami Beach, Fla., 1972)*, pp. 481-493. Press, New York, 1974. (K. S. Fu) 56 #13833 68A45
- approach to pattern recognition and associative memories using fuzzy logic. *Sets and their applications to cognitive and decision processes (Proc. U. S.-Japan Univ. Calif., Berkeley, Calif., 1974)*, pp. 449-476. Academic Press, New York, 1975. (Authors' summary) 55 #11749 68A45
- h Mizoguchi, Riichiro) An approach to unsupervised learning classification. *Trans. Computers C-24* (1975), no. 10, 979-983. (M. Z. Nashed) 53 #9749
- Applications of fuzzy sets to pattern recognition. (Japanese) Fuzzy sets and their applications. *Systems and Control* 19 (1975), no. 5, 243-248. (Tadashige Ishihara) 2120 68A45
- h Mizoguchi, Riichiro) Nonparametric learning without a teacher based on estimation. *IEEE Trans. Computers C-25* (1976), no. 11, 1109-1117. (K. D. Ter) 55 #1868 68A45
- h Mizoguchi, Riichiro) A parametric learning method without a teacher-WDDM. *Systems-Computers-Controls* 7 (1976), no. 5, 91-96 (1977). (From the library) 58 #8570 68A45
- h Mizoguchi, Riichiro; Kizawa, Makoto) Piecewise linear discriminant functions in pattern recognition. *Systems-Comput.-Controls* 8 (1977), no. 1, 62-68. (Authors' summary) 58 #14007 68A45
- See also Fuzzy sets and their applications to cognitive and decision processes, 2264
- Michio) The explosion problem of branching stable processes. *J. Math. Kyoto Univ.* 14 (1974), 29-53. (F. B. Knight) 49 #1598 60J30
- The explosion problem of branching Lévy processes. *J. Math. Kyoto Univ.* 16 (1976), no. 2, 241-270. (N. H. Bingham) 57 #17863 60J80 (60J30)
- A note on explosion of branching Markov processes with extinction. *Proc. Japan Acad.* 52 (1976), no. 3, 109-112. (N. H. Bingham) 57 #17864 60J80
- A refinement of explosion condition for branching Lévy processes. *J. Math. Kyoto Univ.* 17 (1977), no. 2, 309-318. (N. H. Bingham) 56 #9718 60J80
- ng Sun On the category of vector lattices. *J. Korean Math. Soc.* 10 (1973), 77-80. (Rick Pelletier) 51 #13724 46M15 (46A40)
- oyong Prime ideals and sheaf representation of a pseudo symmetric ring. *Trans. Math. Soc.* 184 (1973), 43-60 (1974). (K. H. Hofmann) 49 #2825 16A34
- eon Pio (with Lee, Duk Hee) The imbedded Markov chain analysis of waiting of the single channel queue with a constant interarrival time, and Markovian service time. *Hak-sul Chi* 13 (1972), 655-659. (J. F. C. Kingman) 48 #9886 60K25
- un Chun Integral estimate for an elliptic system of partial differential operators meeting boundary operators. *J. Korean Math. Soc.* 6 (1969), 55-73. (M. Schechter) 6675 35J55
- An integral estimate for an elliptic system of partial differential equations. (Korean summary) *J. Korean Math. Soc.* 7 (1970), i, 1-5. (M. Schechter) 48 #6676 35J55
- with Kim, Jae Joo) On a criterion for obtaining full information about the known state of nature. *J. Korean Math. Soc.* 9 (1972), 75-84. (L. L. Campbell) 7427 62B10 (94A15)
- ng Sun (with Kim, Chi Young; Choi, Kil Nam) On the K -proximities. *Ingook Math. J.* 13 (1973), 69-80. (S. A. Naimpally) 48 #1176 54E05
- ng Tae Openness theorems on C' immersions and embeddings of some Hilbert manifolds. (Korean summary) *J. Korean Math. Soc.* 7 (1970), ii-iii, 25-28. (Richard A. Carter) 48 #9755 58D10
- A natural approach to Fredholm structures on Banach manifolds. *J. Korean Math.* 9 (1972), 85-89. (M. Craioveanu) 48 #12588 58B15
- ng Woo (with Valentin, Richard A.) Numerical analysis of fluid-hammer waves by the method of characteristics. *J. Computational Phys.* 20 (1976), no. 2, 220-237. (Amos Ruggeri) 54 #4332 76G5
- ra, Mitsuo (with Nishi, Mico) Codivisorial and divisorial modules over completely integrally closed domains. I. *Hiroshima Math. J.* 5 (1975), no. 2, 269-292. (R. M. Fossum) 51 #12826 13C10
- (with Nishi, Mico) Codivisorial and divisorial modules over completely integrally closed domains. II. *Hiroshima Math. J.* 5 (1975), no. 3, 461-471. (R. M. Fossum) 58051 13F05
- On flat extensions of Krull domains. *Hiroshima Math. J.* 5 (1975), no. 3, 517-524. (R. M. Fossum) 53 #8054 13G05
- Ilka Two- and three-dimensional firing-squad synchronization problems. *Automation and Control* 24 (1974), 163-180. (Petre Preoteasa) 51 #7757 94A30
- Yuriy S. See Šinakov, Ju. S.
- Marvin An inversion formula for analytic families of general Wiener-Hopf operators. Proceedings of an International Symposium on Operator Theory (Indiana Univ., Bloomington, Ind., 1970). *Indiana Univ. Math. J.* 20 (1971), no. 10, 945-948. (Balint) 53 #14201 47B35
- ra, Mitsuo (with Schnute, Jon) Kinetic theory and boundary conditions for fluids. *Canad. J. Math.* 25 (1973), 1183-1215. (S. Harris) 48 #10404 82A5
- (with Schnute, Jon) The Cauchy problem for the Navier-Stokes equations. *Quart. Math. Oxford Ser. (2)* 24 (1973), 457-474. (Howard Swann) 50 #13920 (E 54 #3187) 35Q10
- (with Kotorynski, W. P.) The initial value problem for a viscous heat-conducting fluid. *J. Math. Anal. Appl.* 45 (1974), 1-22. (W. F. Ames) 50 #13919 35Q10 (76.35)
- The energy equation for the Navier-Stokes system. *SIAM J. Math. Anal.* 5 (1974), 954. (D. E. Edmunds) 55 #8587 35Q10
- The initial value problem for surface waves under gravity. I. The simplest case. *Indiana Univ. Math. J.* 25 (1976), no. 3, 281-300. (E. Zeidler) 53 #7211 76.35 (999)
- (with Reeder, John) The initial value problem for surface waves under gravity. II. The simplest 3-dimensional case. *Indiana Univ. Math. J.* 25 (1976), no. 11, 1049-1071. (Zeidler) 55 #4910 76.35
- (with Welland, Robert R.) The Cauchy-Kowalewskaya theorem. *J. Math. Anal. Appl.* 55 (1976), no. 3, 757-772. (From the introduction) 58 #11827 35A10 (35R15, 46G05)
- A correction: "The Cauchy problem for the Navier-Stokes equations" (Quart. J. Math. Oxford Ser. (2) 24 (1973), 457-474) by Jon Schnute and Shinbrot. *Quart. J. Math. Oxford Ser. (2)* 27 (1976), no. 105, 135-137. (Howard Swann) 54 #3187 35Q10 (76.35)
- Entropy change and the no-slip condition. *Arch. Rational Mech. Anal.* 67 (1978), no. 4, 351-363. (L. N. Tao) 58 #19738 76.35
- (with Kaniel, Shmuel) The Boltzmann equation. I. Uniqueness and local existence. *Comm. Math. Phys.* 58 (1978), no. 1, 65-84. (H. Wakita) 57 #15133 82A6
- Shindiapin, G. P. See Šindjapin, G. P.
- Shindo, A. (with Tazaki, Eiichiro; Umeda, T.) Decentralized optimization of a chemical process by a feasible method. (French, German and Russian summaries) *Automatica—J. IFAC* 8 (1972), 543-554. (E. J. Haug, Jr.) 48 #13376 93C30
- Shindō, Kōji Exponential convolutions of arithmetic functions. *Sci. Rep. Hirosaki Univ.* 24 (1977), no. 1, 4-7. (W. Narkiewicz) 56 #15539 10A20
- Shiner, J. S. (with Mikulecky, Donald C.; Wiegand, W. A.) A simple network thermodynamic method for modeling series-parallel coupled flows. I. The linear case. *J. Theoret. Biol.* 69 (1977), no. 3, 471-510. (I. T. Frisch) 57 #19132a 94A20 (92A05)
- Shingo, Takaichi Interpolation by central first derivative except pivotal values. *Mem. Defense Acad.* 11 (1971), 161-166. (H. Brunner) 46 #8377 65D05
- Formulas of derivatives of Bessel functions. *Mem. Defense Acad.* 11 (1971), 167-171. (H. Brunner) 46 #8378 65D05
- Interpolation by pivotal values of functions in combination with first derivatives simultaneously. *Mem. Defense Acad.* 12 (1972), 175-179. (L. W. Johnson) 48 #5325 65D05
- Shingu, Mayumi (with Nagai, Noriko; Ohkawa, Yoko; Yagi, Sachiko; Iwata, Giiti) An improvement in the spherical approximation of an Ising spin system. *Natur. Sci. Rep. Ochanomizu Univ.* 28 (1977), no. 2, 59-66. (F. Rocca) 58 #20079 82A1
- Shinkai, Kenzo (with Nagase, Michihiro) Complex powers of non-elliptic operators. *Proc. Japan Acad.* 46 (1970), no. 7, supplement, 779-783. (J. Unterberger) 45 #985 47G05 (35S99)
- On symbols of fundamental solutions of parabolic systems. *Proc. Japan Acad.* 50 (1974), 337-341. (V. G. Sigillito) 51 #1085 35S05 (35C15)
- On the fundamental solution of a degenerate parabolic system. *Proc. Japan Acad.* 51 (1975), no. 10, 737-739. (V. G. Sigillito) 52 #14663 35K40
- The symbol calculus for the fundamental solution of a degenerate parabolic system with applications. *Osaka J. Math.* 14 (1977), no. 1, 55-84. (V. G. Sigillito) 56 #12605 35K25
- Shinkarik, T. K. See Šinkarik, T. K.
- Shinnar, Meir (with Sturm, Jacob) The maximal inscribed ball of a Fuchsian group. *Discontinuous groups and Riemann surfaces (Proc. Conf., Univ. Maryland, College Park, Md., 1973)*, pp. 439-443. *Ann. of Math. Studies*, No. 79, Princeton Univ. Press, Princeton, N.J., 1974. (J. Lehner) 50 #2487 30A58
- Shinnar, R. (with Katz, S.; Naor, Pinhas Paul) Moments of age and remaining life in renewal processes. *J. Appl. Probability* 10 (1973), 307-316. (L. de Haan) 50 #8739 60K05
- Shinoda, Juichi A note on Silver's extension. *Comment. Math. Univ. St. Paul.* 22 (1973/74), no. 2, 109-111. (M. Yasuhara) 49 #2382 02K30
- Some consequences of Martin's axiom and the negation of the continuum hypothesis. *Nagoya Math. J.* 49 (1973), 117-125. (K. A. Bowen) 47 #8296 02K05
- Shinoda, Ken-ichi The conjugacy classes of Chevalley groups of type (F_4) over finite fields of characteristic 2. *J. Fac. Sci. Univ. Tokyo Sect. I A Math.* 21 (1974), 133-159. (R. W. Carter) 50 #2356 20G40
- The conjugacy classes of the finite Ree groups of type (F_4) . *J. Fac. Sci. Univ. Tokyo Sect. I A Math.* 22 (1975), 1-15. (R. Steinberg) 51 #8281 20G40
- A characterization of odd order extensions of the Ree groups ${}^2F_4(q)$. *J. Fac. Sci. Univ. Tokyo Sect. I A Math.* 22 (1975), 79-102. (R. W. Carter) 51 #3291 20D05
- Shinoda, Shoji On directed 2-trees. *Electron. Commun. Japan* 54 (1971), no. 2, 55-57. (Not reviewed) 94A20
- (with Ohnri, Hiroshi) Okada's tree-generation method and the algebraic treatment of simple circuits. *Electron. Commun. Japan* 54 (1971), no. 3, 1-6. (I. T. Frisch) 48 #3631 94A20
- Systems of operations in finding some subgraphs of a directed graph. *Electron. Commun. Japan* 54 (1971), no. 7, 1-7. (A. C. Shershin) 46 #8893 05C20
- (with Kajitani, Yoji) Sparsity of nodal admittance matrix and its applications. *Electron. Commun. Japan* 56 (1973), no. 9, 74-81. (Kailash C. Kapur) 50 #4138 94A20
- A characteristic polynomial of a subdivision graph. *Bull. Fac. Sci. Engrg. Chuo Univ.* 19 (1976), 125-130. (Jin Akiyama) 57 #12302 05C99
- Shinofuji, Shizuo (with Gen, Mitsuo; Okuno, Haruo) An optimizing method in system reliability with failure-modes by implicit enumeration algorithm. *J. Operations Res. Soc. Japan* 19 (1976), no. 2, 99-116. (Santosh Kumar) 53 #15385 90C50 (90B25)
- Shinohara, Y. (with Valat, J.) On the junction points of optimal trajectories. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, pp. 36-37, Paper 19B, 6 pp. *Inst. Mech. Engrs., London*, 1967. (Takashi Yahagi) 51 #13835 49E99
- See also Proceedings: International Congress of the International Federation of Automatic Control (IFAC), 51 #12360b
- Shinohara, Yoshitane The geometric method and a generalized Bairstow method for numerical solution of polynomial equation. *J. Math. Tokushima Univ.* 4 (1970), 19-32. (W. M. Kincaid) 45 #4630 65H05
- A geometric method for the numerical solution of nonlinear equations and its application to nonlinear oscillations. *Publ. Res. Inst. Math. Sci.* 8 (1972), 13-42. (W. M. Kincaid) 47 #1280 65H10
- Numerical investigation of $\frac{1}{2}$ -subharmonic solutions to Duffing's equation. *Mem. Numer. Math. No. 1* (1974), 21-41. (G. D. Byrne) 51 #9499 65L10
- Numerical analysis of periodic solutions and their periods to autonomous differential systems. *J. Math. Tokushima Univ.* 11 (1977), 11-32. (Olavi Nevanlinna)

- 55 #8283 65L05 (34C25)
Minoru Urahe (1912–1975). *Mem. Numer. Math.* No. 4 (1977), ii. (Editors)
55 #7703 01A70
- Shinozaki, Nobuo** (with Sibuya, Masaaki; Tanabe, Kunio) Numerical algorithms for the Moore–Penrose inverse of a matrix: direct methods. *Ann. Inst. Statist. Math.* **24** (1972), 193–203. (R. P. Tewarson) **48** #3237 65F20
(with Sibuya, Masaaki; Tanabe, Kunio) Numerical algorithms for the Moore–Penrose inverse of a matrix: iterative methods. *Ann. Inst. Statist. Math.* **24** (1972), 621–629. **48** #3239 65F30
A note on estimating the mean vector of a multivariate normal distribution with general quadratic loss function. *Keio Engrg. Rep.* **27** (1974), 105–112. (Khurshed Alam) **51** #2056 62C07 (62H99)
(with Sibuya, Masaaki) The reverse order law $(AB)^- = B^-A^-$. *Linear Algebra and Appl.* **9** (1974), 29–40. (Donald W. Robinson) **50** #7200 15A09
(with Sibuya, Masaaki) Consistency of a pair of matrix equations with an application. *Keio Engrg. Rep.* **27** (1975), no. 10, 141–146. (A. R. Amir-Moéz) **52** #3191 15A24
Simultaneous estimation of the means of independent variables with unknown variances. *Keio Math. Sem. Rep.* No. 2 (1977), 75–79. (James Berger) **57** #10894 62F10 (62C99)
- Shinozaki, Yoshikata** On a method for the numerical solution of nonlinear equations in one variable. (Japanese) *Math. Rep. College General Ed. Kyushu Univ.* **8** (1971/72), no. 1, 11–19. (H. Shintani) **53** #7015 65H05
- Shinozawa, Shoji** (with Takahashi, Iwano) An algorithm for feasible solution to linear programs. *NEC Res. Development No.* 11 (1968), 70–75. (A. Ben-Israel) **45** #6418 90C05
- Shintani, Hiroshi** (with Kasai, Tamotsu; Imai, Mitsuru) Number of Hamiltonian circuits in basic series of incomplete graphs. *Bull. Univ. Osaka Prefecture Ser. A* **20** (1971), no. 2, 245–260. (R. C. Read) **46** #8908 05C99
- Shintani, Hisayoshi** Explicit and implicit difference formulas of higher order accuracy for one-dimensional heat equation. *J. Sci. Hiroshima Univ. Ser. A-I Math.* **34** (1970), 259–270. (D. T. Haimo) **45** #1413 65N05
On one-step methods utilizing the second derivative. *Hiroshima Math. J.* **1** (1971), 349–372. (L. Collatz) **47** #7916 65L05
On explicit one-step methods utilizing the second derivative. *Hiroshima Math. J.* **2** (1972), 353–368. (H. Brunner) **47** #9837 65L05
On the stability of finite-difference schemes of Lax–Wendroff type. *Hiroshima Math. J.* **4** (1974), 357–374. (Hong-Yun Kim) **54** #4129 65M10
(with Tomoeda, Kenji) Stability of difference schemes for nonsymmetric linear hyperbolic systems with variable coefficients. *Hiroshima Math. J.* **7** (1977), no. 1, 309–378. (Philip Brenner) **56** #7235 65M10
On one-step methods for ordinary differential equations. *Hiroshima Math. J.* **7** (1977), no. 3, 769–786. (A. Coşiu) **57** #18114 65L05
(with Hayashi, Yuichi) A posteriori error estimates and iterative methods in the numerical solution of systems of ordinary differential equations. *Hiroshima Math. J.* **8** (1978), no. 1, 101–121. (J. Hurt) **57** #3503 34B15 (65L10)
- Shintani, Takuro** On Dirichlet series whose coefficients are class numbers of integral binary cubic forms. *Proc. Japan Acad.* **46** (1970), 909–911. (R. Wallisser) **45** #1837 10C10
On zeta functions associated with the lattice of Hermitian forms with Gaussian integral coefficients. *Seminar on Modern Methods in Number Theory* (Inst. Statist. Math., Tokyo, 1971), Paper No. 29, 4 pp. *Inst. Statist. Math., Tokyo*, 1971. (Audrey A. Terras) **52** #304 10H10 (12A70)
On zeta functions associated with prehomogeneous vector spaces. *Seminar on Modern Methods in Number Theory* (Inst. Statist. Math., Tokyo, 1971), Paper No. 40, 8 pp. *Inst. Statist. Math., Tokyo*, 1971. (Editors) **51** #10298 12A70
(with Sato, Mikio) On zeta functions associated with prehomogeneous vector spaces. *Proc. Nat. Acad. Sci. U.S.A.* **69** (1972), 1081–1082. (T. Kubota) **45** #5140 14G10 (10H05)
(with Sato, Mikio) On zeta functions associated with prehomogeneous vector spaces. *Ann. of Math.* (2) **100** (1974), 131–170. (T. Kubota) **49** #8969 12A70 (10H10)
On zeta-functions associated with the vector space of quadratic forms. *J. Fac. Sci. Univ. Tokyo Sect. I A Math.* **22** (1975), 25–65. (Stephen Haris) **52** #5590 10H10 (10C15)
On construction of holomorphic cusp forms of half integral weight. *Nagoya Math. J.* **58** (1975), 83–126. (Stephen Gelbart) **52** #10603 10D15
(with Ando, Tsuyoshi) Best approximants in L^1 space. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **33** (1975/76), no. 1, 33–39. (M. M. Rao) **52** #1860 60G25 (41A65, 46E30)
On evaluation of zeta functions of totally real algebraic number fields at non-positive integers. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **23** (1976), no. 2, 393–417. (Larry J. Goldstein) **55** #266 10C15 (12A95, 10D20, 12A70)
Two remarks on irreducible characters of finite general linear groups. *J. Math. Soc. Japan* **28** (1976), no. 2, 396–414. (David B. Surowski) **54** #2825 20G05
On an explicit formula for class- $Proc. Japan Acad. **52** (1976), no. 4, 180–182. (Stephen Gelbart) **53** #10991 22E50 (10D20)
On Kronecker limit formula for real quadratic fields. *Proc. Japan Acad.* **52** (1976), no. 7, 355–358. (Don Zagier) **58** #596 12A70 (12A20)
On values at $s=1$ of certain L functions of totally real algebraic number fields. *Algebraic number theory* (Kyoto Internat. Sympos., Res. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976), pp. 201–212. *Japan Soc. Promotion Sci., Tokyo*, 1977. (Larry J. Goldstein) **56** #11962 12A70
On a Kronecker limit formula for real quadratic fields. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 1, 167–199. (Larry J. Goldstein) **57** #277 12A70 (10C15, 10D20)
On irreducible unitary characters of a certain group extension of $GL(2, C)$. *J. Math. Soc. Japan* **29** (1977), no. 1, 165–188. (Mark E. Novodvorsky) **55** #8257 22E45 (10D15)
On certain ray class invariants of real quadratic fields. *Proc. Japan Acad.* **53** (1977),$
- no. 3, 128–131. (Larry J. Goldstein) **55** #2685 12A70 (12A70, 12A95)
On special values of the L -functions of algebraic number fields. (Japanese) *S* **29** (1977), no. 3, 204–216. (Yasumasa Akagawa) **58** #5599 12A70 (10H10)
On certain ray class invariants of real quadratic fields. *J. Math. Soc. Japan* **29** (1978), no. 1, 139–167. (K. Ramachandra) **58** #16599 12A65 (10D25)
(with Burkholder, D. L.) Approximation of L^1 -bounded martingales by martingales of bounded variation. *Proc. Amer. Math. Soc.* **72** (1978), no. 1, 166–169. (Chatterji) **58** #13332 60G45
- Shinwari, S. A. Khan** Basis in Banach space and its topological dual. *Punjab Univ. Math. (Lahore)* **5** (1972), 15–21. (M. V. Subbarao) **50** #953 46B15
- Shin'ya, Hitoshi** Spherical functions on locally compact groups. *J. Math. Kyoto Univ.* (1972), 55–85. (J. Ernest) **45** #461 (E 46 #293) 22E45
Supplement to my paper: "Spherical functions on locally compact groups." *Math. Kyoto Univ.* **12** (1972), 385–392. (J. Ernest) **46** #293 22D20
★Spherical functions and spherical matrix functions on locally compact groups. Lectures in Mathematics, Department of Mathematics, Kyoto University, No. 7. *Kinokuniya Book-Store Co., Ltd., Tokyo*, 1974. iii + 90 pp. (E. A. Thieleker) **50** #22D12
Spherical matrix functions on locally compact groups. *Proc. Japan Acad.* **50** (1974), 368–373. (R. G. Laha) **50** #14076 43A90
Spherical matrix functions on locally compact groups of a certain type. *J. Kyoto Univ.* **17** (1977), no. 3, 501–509. (Jacques Faraut) **58** #2035 43A90 (22E45)
- Shioda, Tetsuji** Rational points of Jacobi's quartic curve $y^2 = (1 - \sigma^2 x^2)(1 - x^2/a^2)$. *Seminar on Modern Methods in Number Theory* (Inst. Statist. Math., Tokyo, Paper No. 30, 3 pp. *Inst. Statist. Math., Tokyo*, 1971. (Editors) **51** #12858 14K01
On elliptic modular surfaces. *J. Math. Soc. Japan* **24** (1972), 20–59. (William Hammond) **55** #2927 14J25 (10D20, 32J15)
On rational points of the generic elliptic curve with level N structure over the field of modular functions of level N . *J. Math. Soc. Japan* **25** (1973), 144–157

- with Uchiyama, Saburō) On some properties of the dyadic Champernowne series. *Acta Math. Acad. Sci. Hungar.* **26** (1975), 9-27. (R. G. Stoneham) **52** #324 25
- with Ito, Shunji) A construction of β -normal sequences. *J. Math. Soc. Japan* **27** (1975), 20-23. (M. S. Waterman) **50** #9829 10K25 (28A65)
- with Kaneiwa, Ryūji; Tamura, Jun-ichi) A proof of Perron's theorem on phantime approximation of complex numbers. *Keio Engrg. Rep.* **28** (1975), no. 12, 147. (L. C. Eggan) **55** #2783 10F20
- Ergodic properties of a complex continued fraction transformation. *International Conference on Dynamical Systems in Mathematical Physics (Rennes, 1975)*, pp. 177-179. *Risque*, No. 40, Soc. Math. France, Paris, 1976. (T. W. Cusick) **56** #8501 10F20
- (with Kaneiwa, Ryūji; Tamura, Jun-ichi) Some properties of complex continued fractions. *Comment. Math. Univ. St. Paul.* **25** (1976/77), no. 2, 129-143. (L. C. Eggan) #27722 10A30 (10F20)
- Some ergodic properties of a complex continued fraction algorithm. *Keio Engrg. Rep.* **29** (1976), no. 7, 73-86. (L. C. Eggan) **54** #10161 10F20
- Some ergodic properties of a complex continued fraction algorithm. Characteristics of arithmetic functions (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Ikasekikenkyūsho Kōkyūroku No. 274* (1976), 17-36. (Roland Fischer) **56** #11944 10 (10F20)
- Masahiro) Some results on formal power series and differentiable functions. *Publ. Inst. Math. Sci.* **12** (1967/77), no. 1, 49-53. (J. Bochnak) **54** #3742 58C05 52S, 32C05
- Differentiable functions equivalent to analytic functions. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 113-121. (P. T. Church) **49** #6272 58C25 (26A93, 57D45)
- Transformations of germs of differentiable functions through changes of local ordinates. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 123-140. (G. R. Belickij) #4307 58C25
- On germs of differentiable functions in two variables. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 319-324. (G. R. Belickij) **49** #6270 58C25 (32B99)
- On canonical forms of singularities of C^∞ function germs of higher co-dimension. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 463-475. (G. R. Belickij) **49** #6271 58C25
- Sur l'ensemble des équations aux dérivées partielles régulièrement hyperboliques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 20, A1, 199-A1202. (Maria Cinquini-Cibrario) **54** #742 35L30
- Sur la factoriabilité de l'anneau des fonctions analytiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 4, A253-A255. (Author's summary) #15968 32B05 (32C05)
- ni, Koshichi (with Ogura, Yukio) On invariant measures of critical multitype Galton-Watson processes. *Osaka J. Math.* **13** (1976), no. 1, 83-98. (E. Seneta) #11784 60J80
- ni, Minoru (with Honda, Masaru) Estimate of the correlation coefficient based on 2 samples. (Japanese) *J. Japan Statist. Soc.* **1** (1970/71), no. 2, 45-53. (Not reviewed) F10
- ki, Akira (with Nishida, Fujio) A new decoding method of redundant residue polynomial codes. *Bull. Univ. Osaka Prefecture Ser. A* **24** (1975), no. 1, 101-112. (Carlos P. Hartmann) **54** #7111 94A10
- (with Nishida, Fujio; Tanaka, Hatsukazu) Error correction in residue number systems with t -design. *Systems-Computers-Controls* **7** (1976), no. 3, 1-9 (1977). (W. E. Stark) **57** #9302 94A15
- na, L. B. See Šipilina, L. B.
- y, Frederic B., II Convergence of adaptive decisions. *Adaptive economic models Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis.*, 1974, pp. 247-272. *Math. Res. Center Univ. Wisconsin, Publ. No. 34*, Academic Press, New York, 1975. (From the introduction) **58** #15021 90A05
- an, Jerome S. (with Roberts, Sanford M.) Extension of the Goodman-Lance method to adjoints. *Internat. J. Comput. Math.* **3**, 75-84 (1971). (F. M. Pascal) **47** #4452 L10
- (with Roberts, Sanford M.) ★Two-point boundary value problems: shooting methods. *Modern Analytic and Computational Methods in Science and Mathematics*, no. 31. American Elsevier Publishing Co., Inc., New York, 1972. xiv + 277 pp. (D. Greenspan) **48** #1477 65L10
- (with Roberts, Sanford M.) The epsilon variation method in two-point boundary-value problems. *J. Optimization Theory Appl.* **12** (1973), 136-151. (J. Švejda) #11790 65L10
- (with Roberts, Sanford M.) An iteration perturbation technique. *J. Computational Phys.* **16** (1974), 285-297. (A. R. Mitchell) **51** #7294 65L05
- (with Roberts, Sanford M.) The extended continuation method and invariant imbedding. *J. Math. Anal. Appl.* **45** (1974), 32-42. (T. E. Hull) **48** #12850 65L10
- (with Roberts, Sanford M.) On the Miele-Iyer modified quasilinearization method. *Optimization Theory Appl.* **14** (1974), 381-391. (Robert D. Russell) **50** #8992 L10
- (with Roberts, Sanford M.) On the closed form solution of Troesch's problem. *J. Computational Phys.* **21** (1976), no. 3, 291-304. (Frank G. Hagin) **54** #4122 65L10 48B15
- (with Roberts, Sanford M.) A new derivation of the Scott formulation of invariant imbedding. *J. Math. Anal. Appl.* **64** (1978), no. 2, 480-487. (J. R. Cash) **58** #19165 L10
- K. O., Jr. (with Aggarwal, J. K.) An error analysis for a vector model of two-dimensional recursive filters. *IEEE Trans. Acoust. Speech Signal Processing* **SSP-24** (1976), no. 4, 339-341. (N. S. Kambo) **53** #12784 94A20
- R. E. W. A simple derivation of the error in Simpson's rule. *Math. Gaz.* **54** (1970), 389, 292-293. (Not reviewed) 65D30
- ee, D. E. Four new factors of Fermat numbers. *Math. Comp.* **32** (1978), no. 143, 941. (J. Papp) **57** #12359 10A25 (10-04)
- uji, Takeshi Generalized transformation functional of a continuum model of the dual amplitude. *Progr. Theoret. Phys.* **46** (1971), 1218-1247. (P. Achuthan) **46** #6761 47
- (with Hayashi, Kenji) Spacetime structure explored by elementary particles: microscopic origin for the Riemann-Cartan geometry. *Progr. Theoret. Phys.* **57** (1977), no. 1, 302-317. (Authors' summary) **58** #9068 83S3
- (with Hayashi, Kenji; Kasuya, Masahiro) Elementary particles and Weyl's gauge field. *Progr. Theoret. Phys.* **57** (1977), no. 2, 431-440. (Authors' summary) **55** #5153 83S3 (81.22)
- (with Hayashi, Kenji; Kasuya, Masahiro) Conformal phase group and electromagnetism. *Progr. Theoret. Phys.* **57** (1977), no. 5, 1781-1794. (A. O. Barut) **57** #8555 81.22
- (with Hayashi, Kenji) Gravity, nonintegrable phase factor and motion associated with a closed curve. *Progr. Theoret. Phys.* **58** (1977), no. 1, 353-361. (Authors' summary) **57** #11611 83S3
- Shirahata, Hiroshi (with Daiguji, Hisaaki; Fukunaga, Shintaro) Numerical method for time-dependent two-dimensional viscous flows. I. Fundamental method. *Bull. JSME* **19** (1976), no. 128, 136-144. (C. R. Illingworth) **55** #9715 76.65
- (with Daiguji, Hisaaki; Fukunaga, Shintaro) Numerical method for time-dependent two-dimensional viscid flow. II. Pure states for general $P(\phi)_2$ theories: cocoon flows. II. Extension to prescribed pressure at duct ends. *Bull. JSME* **19** (1976), no. 128, 145-153. (C. R. Illingworth) **55** #9716 76.65
- Shirahata, Shingo On tests of symmetry for discrete populations. *Austral. J. Statist.* **16** (1974), no. 2, 83-90. (M. Hušková) **52** #7000 62G10
- Locally most powerful rank tests for independence. *Bull. Math. Statist.* **16** (1974/75), no. 1-2, 11-21. (M. Hušková) **51** #2140 62G10
- Locally most powerful rank tests for independence with censored data. *Ann. Statist.* **3** (1975), 241-245. (M. Iosifescu) **50** #15134 62G10
- On the asymptotic normality of rank statistics for the two-sample problem. *Ann. Statist.* **4** (1976), no. 2, 400-405. (M. Raghavachari) **53** #9464 62E20 (62G10)
- Tests for independence in infinite contingency tables. *Ann. Statist.* **4** (1976), no. 3, 542-553. (W. J. Conover) **53** #9502 62G10
- (with Yanagawa, Takashi) Ranked set sampling theory with selective probability matrix. *Austral. J. Statist.* **18** (1976), no. 1-2, 45-52. (Mankal N. Murthy) **56** #4007 62D05
- Some nonparametric tests based on the order stratification method for the two-sample problem. *Bull. Math. Statist.* **17** (1976), no. 1-2, 33-47. (W. J. Conover) **55** #6681 62G10
- Some nonparametric tests based on the order stratification method for the c -sample problem. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **30** (1976), no. 2, 267-273. (Jana Jurečková) **54** #14231 62G10
- Tests of partial correlation in a linear model. *Biometrika* **64** (1977), no. 1, 162-164. (Rashid Ahmad) **56** #9807 62H20 (62G10)
- Shirai, Katsuhiko Fluctuations in nonlinear oscillatory systems with random noise. *Electron. Commun. Japan* **53** (1970), no. 9, 20-28. (F. J. Beutler) **46** #8731 93E10
- Analysis of noise in nonlinear oscillatory systems. *Mem. School Sci. Engrg. Waseda Univ. No. 37* (1973), 1-42. (N. U. Ahmed) **51** #5151 94A05
- (with Matsuyama, Yasuo; Akizuki, Kageo) Stochastic properties of neurons with shunt type inhibition. *Systems-Computers-Controls* **5** (1974), no. 4, 26-33 (1975). (D. Kannan) **52** #7583 92A05 (60J70)
- (with Akizuki, Kageo; Yamada, Takumi) Behaviour of bistable oscillatory system with random external force. *Bull. JSME* **20** (1977), no. 143, 548-553. (Ju. M. Kabanov) **56** #11467 93E99 (34F05)
- Shirai, Kokio Intuitionistic predicate calculus with ε -symbol. *Ann. Japan Assoc. Philos. Sci.* **4**, 49-67 (1971). (D. Nelson) **45** #3164 02E05
- On the intuitionistic predicate calculus with the ε -symbol. (Japanese) *Sūgaku* **24** (1972), no. 4, 269-279. (Editors) **58** #27353 02C15
- Intuitionistic version of the Łoś-Tarski-Robinson theorem. *Ann. Japan Assoc. Philos. Sci.* **4** (1975), no. 5, 323-332. (From the introduction) **58** #10332 02C15 (02D99, 02H10)
- A relation between transfinite induction and mathematical induction in elementary number theory. *Tsukuba J. Math.* **1** (1977), 91-124. (H. Schwichtenberg) **58** #16188 02D05
- Shirai, Kumie (with Murata, Kentarō) On divisor theory in an Archimedean lattice-ordered semigroup. *Seminar on Semigroup Theory (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977)*. *Sūrikaiseikenkyūsho Kōkyūroku No. 292* (1977), 160-167. (Authors' summary) **58** #21888 06A50 (20M10)
- Shirai, Susumu Central class numbers in central class field towers. *Proc. Japan Acad.* **51** (1975), no. 6, 389-393. (Yoshiomi Furuta) **52** #5628 12A50 (12A65)
- Shirai, Yashiaki See *Psychology of computer vision*, **52** #16087
- Shirai, Yasuyoshi (with Ibaraki, Toshihide; Hasegawa, Toshiharu) Minimal representation of combinatorial optimization problems by finite-state positively monotone models. *Systems-Computers-Controls* **7** (1976), no. 1, 70-79 (1977). (Authors' summary) **58** #33590 94A25 (68A10, 68A25)
- Shiraishi, Masafumi (with Araki, Huzihiro) On quasifree states of the canonical commutation relations. I. *Publ. Res. Inst. Math. Sci.* **7** (1971/72), 105-120. (D. Babbitt) **47** #2387 46L99 (46K99, 81.46)
- Shiraishi, Risai On the convolutions of currents in \mathbb{R}^n . *J. Sci. Hiroshima Univ. Ser. A-I Math.* **32** (1968), 147-166. (Author's introduction) **58** #31154 58A20 (46F10)
- Shiraishi, Kenichi Manifolds which do not admit Anosov diffeomorphisms. *Nagoya Math. J.* **49** (1973), 111-115. (Robert Wells) **49** #4045 58F15
- On Anosov diffeomorphisms. (Japanese) *Sūgaku* **26** (1974), no. 2, 97-108. (Midori Goto) **54** #6209 58F15
- Some conditions on Anosov diffeomorphisms. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973)*, pp. 205-209. Univ. Tokyo Press, Tokyo, 1975. (Warren White) **51** #11588 58F15
- Boundedness and convergence of solutions of Duffing's equation. *Nagoya Math. J.* **66** (1977), 151-166. (W. S. Loud) **55** #8474 34C10
- A generalization of the Levinson-Massera's equalities. *Nagoya Math. J.* **67** (1977), 121-138. (Ju. E. Glikli) **56** #9592 58F10 (34C35)
- Shiraishi, Masayuki (with Sunahara, Yoshifumi; Aihara, Shin'ichi) The stochastic observability for noisy non-linear stochastic systems. *Internat. J. Control* **22** (1975), no. 4, 461-480. (H. J. Kushner) **54** #12323 93E10
- Shirakawa, Hiroshi The construction of a special flow for a geodesic flow on a surface of constant negative curvature. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 201-203

- (1972). (W. Szlenk) **47** #2637 58F10 (28A65)
A proof of strongly mixing property of a horocycle flow. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 204-207 (1972). (W. Szlenk) **47** #2638 58F10 (28A65)
Entropy of the geodesic flow on a Riemannian space of negative definite curvature. (Japanese) *Sūgaku* **24** (1972), no. 3, 210-213. **58** #31273 58F15
- Shirakawa, Isao** (with Ariyoshi, Hiromu; Ozaki, Hiroshi) A graph-theoretic technique of computing the sparse admittance matrix. *Electron. Commun. Japan* **53** (1970), no. 11, 41-48. (W.-K. Chen) **46** #8769 94A20
(with Togawa, Akihiko; Ozaki, Hiroshi) Network decomposition for block-pivoted condensations on impedance matrices. *Electron. Commun. Japan* **54** (1971), no. 7, 8-13. (Authors' summary) **49** #11793 65F99 (94A20)
(with Ariyoshi, Hiromu; Ozaki, Hiroshi) Decomposition of a graph into compactly connected two-terminal subgraphs. *IEEE Trans. Circuit Theory* **CT-18** (1971), 430-435. (W.-K. Chen) **47** #4854 05C99 (94A20)
(with Ozaki, Hiroshi; Ariyoshi, Hiromu) Decomposition of a graph into compactly connected two-terminal subgraphs. *Tech. Rep. Osaka Univ.* **21** (1971), 337-349. (M. Behzad) **50** #9713 05C99 (94A20)
(with Sakamoto, Akio; Ozaki, Hiroshi) Ordering of pivotal operations on sparse systems of equations. *Information Processing in Japan* **12** (1972), 84-89. (R. P. Tewarson) **47** #7906 65F05
(with Sakamoto, Akio; Ozaki, Hiroshi) Sparsity-oriented ordering of pivotal operations on network equations. *SIAM J. Appl. Math.* **24** (1973), 121-129. (Authors' summary) **55** #14435 94A20 (65F20)
Exploitation of sparsity in system analysis. (Japanese) *Systems and Control* **17** (1973), 653-661. (RZMat **1974** #7 V686) **52** #5102 93A10 (65F05, 90C05)
(with Kyan, Seiki; Ozaki, Hiroshi) Bipartite network associated with optimal pivoting problem. *Electron. Commun. Japan* **57** (1974), no. 12, 17-24. (Authors' summary) **56** #13573 65F30 (94A20)
(with Tsukiyama, Shuji; Ozaki, Hiroshi) A survey: generating all the cycles of a digraph. *2nd USA-Japan Computer Conference Proceedings (Tokyo, 1975)*, pp. 92-96. AFIPS Press, Montvale, N.J., 1975. (Luigi Fratta) **58** #25103 68A10 (05C20, 05C35)
(with Tsukiyama, Shuji; Ozaki, Hiroshi) An algorithm for generating the cycles of a digraph. *Electron. Commun. Japan* **58** (1975), no. 4, 8-15. (Luigi Fratta) **58** #25102 68A10 (05C20)
(with Ting, Benjamin S.; Kuh, Ernest S.) The multilayer routing problem: algorithms and necessary and sufficient conditions for the single-row single-layer case. Special issue on large-scale networks and systems. *IEEE Trans. Circuits and Systems* **CAS-23** (1976), no. 12, 768-778. (Authors' summary) **57** #5488 94A20
(with Tran Dinh Am; Tsukiyama, Shuji; Ozaki, Hiroshi) An algorithm for generating all the directed paths and its application. *Information Processing in Japan* **16** (1976), 31-35. (D. H. Younger) **57** #1964 68A10 (05C20)
A survey of the analysis of the complexity of combinatorial problems. (Japanese) *Systems and Control* **20** (1976), no. 8, 395-404. (Editors) **57** #18230 68A20
(with Tran Dinh Am; Tsukiyama, Shuji; Ozaki, Hiroshi) An algorithm for generating all the paths between two vertices in a digraph and its application. *Tech. Rep. Osaka Univ.* **26** (1976), no. 1308-1336, 411-418. (Authors' summary) **58** #9182 90B10 (05C30)
(with Kubo, Noboru; Tsukiyama, Shuji; Ariyoshi, Hiromu) An algorithm for finding a maximal cut. *Electron. Commun. Japan* **60** (1977), no. 4, 30-37. (Narsingh Deo) **58** #13888 68A10 (68A20, 94A20)
(with Tsukiyama, Shuji; Ide, Mikio; Ariyoshi, Hiromu) A new algorithm for generating all the maximal independent sets. *SIAM J. Comput.* **6** (1977), no. 3, 505-517. (Takao Ozawa) **57** #16142 05C99 (68A10)
- Shiraki, Mitsunobu** Compact T_1 -space and the family of finite topological spaces. *Rep. Fac. Sci. Kagoshima Univ.* **9** (1976), 1-5. (C. R. Borges) **56** #6602 54D20 (54B25)
Quasi polytopes and finite topological spaces. *Rep. Fac. Sci. Kagoshima Univ.* **9** (1976), 7-13. **58** #24010 52A25
- Shiraki, Takanori** Note on closed Baire sets. *Mem. Ehime Univ. Natur. Sci. Ser. A* **6**, no. 1, 1-5 (1968). (W. M. Fleischman) **51** #1719 54C50
On some properties of $N(m)$ -spaces. *Mem. Ehime Univ. Natur. Sci. Ser. A* **6**, no. 2, 9-14 (1969). (Joe A. Guthrie) **48** #2997 54D20
(with Ishii, Tadashi) Some properties of wM -spaces. *Proc. Japan Acad.* **47** (1971), 167-172. (loose addendum) (D. R. Traylor) **45** #2658 54E35
A note on spaces with a uniform base. *Proc. Japan Acad.* **47** (1971), suppl. II, 1036-1041. (C. E. Aull) **47** #5819 54D20
 M -spaces, their generalization and metrization theorems. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 57-67 (1971). (R. Hodel) **46** #4495 54E35
- Shirakura, Teruhiro** On balanced arrays of 2 symbols, strength 2l, m constraints and index set $\{\mu_0, \mu_1, \dots, \mu_{2l}\}$ with $\mu_l = 0$. *J. Japan Statist. Soc.* **5** (1974/75), no. 2, 53-56. (Author's summary) **58** #13536 62K10 (05B05)
(with Yamamoto, Sumiyasu; Kuwada, Masahide) Balanced arrays of strength 2l and balanced fractional 2^m factorial designs. *Ann. Inst. Statist. Math.* **27** (1975), 143-157. (D. V. Chopra) **51** #11868 62K15
(with Kuwada, Masahide) Note on balanced fractional 2^m factorial designs of resolution 2l+1. *Ann. Inst. Statist. Math.* **27** (1975), no. 2, 377-386. (M. N. Das) **52** #15891 62K15
Optimal balanced fractional 2^m factorial designs of resolution VII, $6 \leq m < 8$. *Ann. Statist.* **4** (1976), no. 3, 515-531. (K. Sarkadi) **54** #1501 62K15
Balanced fractional 2^m factorial designs of even resolution obtained from balanced arrays of strength 2l with index $\mu_1 = 0$. *Ann. Statist.* **4** (1976), no. 4, 723-735. (I. M. Chakravarti) **54** #6407 62K15
A note on the norm of alias matrices in fractional replication. *Austral. J. Statist.* **18** (1976), no. 3, 158-160. (D. V. Chopra) **57** #17979 62K15
Contributions to balanced fractional 2^m factorial designs derived from balanced arrays of strength 2l. *Hiroshima Math. J.* **7** (1977), no. 1, 217-285. (Peter J. Cameron) **55** #2619 05B30 (05A15, 62K15)
- Shirali, Satish** (with Limaye, Balmohan V.) Korovkin's theorem for positive functionals on n -normed algebras. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 163-172 (1977).
- (Hisashi Choda) **58** #12396 46K05 (41A35, 46J10)
Uniform convergence of a Galerkin-type method for a non-linear boundary value problem. *Ann. Polon. Math.* **34** (1977), no. 3, 221-231. (I. Norman Katz) **56** #165N30
Extension of positive functionals. *Arch. Math. (Basel)* **29** (1977), no. 3, 313-319. (Maltese) **57** #1134 46K05
On eigenfunctions of nonlinear heat generation. (Italian summary) *Z. Angew. Phys.* **28** (1977), no. 1, 141-149. (Theodore Laetsch) **55** #857 35J65
- Shirao, Yoshiaki** (with Kido, Masao) On the periodic solutions of nonautonomous piecewise linear systems with asymmetric characteristics. *Bull. Univ. Osaka Pref. Ser. A* **26** (1977), no. 1, 25-37. (J. Jarník) **57** #10102 34C25 (65L05)
- Shiraso, Takeo** On the Kummer extensions of degree p^n over a local number field. *Fac. Ed. Utsunomiya Univ. Sect. 2 No. 25* (1975), 1-7. (Helmut Koch) **53** #12B15
- Shiratani, Katsumi** Kummer's congruence for generalized Bernoulli numbers and its application. *Seminar on Modern Methods in Number Theory (Inst. Statist. Math., 1971)*, Paper No. 31, 7 pp. *Inst. Statist. Math., Tokyo*, 1971. (Editors) **51** #10A40 (12A70)
A generalization of Vandiver's congruence. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **26** (1971), 144-151. (H. J. Godwin) **46** #5289 12B25
Kummer's congruence for generalized Bernoulli numbers and its application. *Fac. Sci. Kyushu Univ. Ser. A* **26** (1972), 119-138. (J. Fresnel) **50** #12976 (10A40)
On Euler numbers. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **27** (1973), 1-5. (L. J. Mordell) **47** #3307 10A40
Über eine Anwendung elliptischer Funktionen auf das biquadratische Reziprozitätsgesetz. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, II. *J. Reine Angew. Math.* **268/269** (1974), 203-208. (K. Wohlfahrt) **50** #2050 10A15 (10D05)
On certain values of p -adic L -functions. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **27** (1974), 59-82. (Yvette Amice) **53** #8022 12B30 (10A40, 12A50)
On some operators for p -adic uniformly differentiable functions. *Japan. J. Math. (N.S.)* **2** (1976), no. 2, 343-353. (Daniel Barsky) **56** #8543 12B40 (12B30)
(with Kanemitsu, Shigeru) An application of the Bernoulli functions to character sums. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **30** (1976), no. 1, 65-73. (M. I. Mordell) **54** #249 10G05
(with Kanemitsu, Shigeru) Applications of Bernoulli functions to Dirichlet character sums. (Japanese) Characteristics of arithmetic functions (Proc. Sympos. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikenkyūsho Kōkyūroku* **1** (1976), 148-151. (Akira Takaku) **56** #15578 10G05
On a kind of p -adic zeta functions. *Algebraic number theory (Kyoto Univ. Sympos., Res. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976)*, pp. 213-217. *Japan. Promotion Sci., Tokyo*, 1977. (Lawrence Washington) **56** #8538 12A70
On a formula for p -adic L -functions. *J. Fac. Sci. Univ. Tokyo Sect. IA* **24** (1977), no. 1, 45-53. (Yasumasa Akagawa) **56** #320 12B30 (12A70)
- Shiratori, Norio** (with Noguchi, Shoichi; Ozumi, Juro) On buffering in loop computer networks. *Systems-Computers-Controls* **7** (1976), no. 3, 50-58 (1977). (Andor) **57** #9339 94A20
(with Noguchi, Shoichi) Buffering at bypass point and effects of bypass computer networks. *Systems-Comput.-Controls* **8** (1977), no. 2, 1-10 (1978). (Andor) **58** #26584 94A20
- as-Shirazi Mahmud ibn Mas'ud Qutb ad-Din** See Muzafarova, H. R., **54** #9924; Livingston, John W., **56** #2734 and Muzafarova, H. R., **58** #26705
- Shirey, James** Restricting a Schauder basis to a set of positive measure. *Trans. Am. Math. Soc.* **184** (1973), 61-71. (H. J. Landau) **48** #9251 42A64
The convergence of series for various choices of sign in Banach spaces. *Can. Math. Bull.* **27** (1975), 475-480. (D. J. H. Garling) **51** #6392 46E30 (42A56)
- Shirkot, K. S.** (with Singh, Surjit) Unsteady flow of a Rivlin-Ericksen liquid in a channel. *Acta Phys. Acad. Sci. Hungar.* **42** (1977), no. 3, 201-205. (Hilmi D. Shirkot) **57** #14872 7635
- Shirkov, D. V.** See Širkov, D. V.
- Shirley, John W.** Sir Walter Raleigh and Thomas Harriot. *Thomas Harriot: Renaissance scientist*, pp. 16-35. (2 plates) Clarendon Press, Oxford, 1974. (J. S. Joel) **58** #101A45
See also Thomas Harriot: Renaissance scientist, **58** #4961
- Shirmin, G. I.** See Širmin, G. I.
- Shirn, Matthias** Einige Bemerkungen zum Zusammenhang von Logik, Mathematik und Sprachphilosophie bei Frege. *Studien zu Frege, Band I*, pp. 13-26. *Problemata, Frommann-Holzboog, Stuttgart*, 1976. (Editors) **58** #27262 02A05 (01A55, 01A65)
- Shirokov, Ju. M.** See Širokov, Ju. M.
- Shirokov, L. E.** See Širokov, L. E.
- Shirokov, M. I.** See Širokov, M. I.
- Shirokov, V. A.** See Širokov, V. A.
- Shirota, Taira** On the propagation speed of hyperbolic operator with mixed boundary conditions. *J. Fac. Sci. Hokkaido Univ. Ser. I* **22** (1972), 25-31. (R. Hersh) **46** #35L35
(with Agemi, Rentaro) On necessary and sufficient conditions for L^2 -well-posedness of mixed problems for hyperbolic equations. II. *J. Fac. Sci. Hokkaido Univ. Ser. I* **22** (1972), 137-149. (A. Elcrat) **46** #7721 35L35
On mixed problems for hyperbolic equations. (Japanese) *Sūgaku* **24** (1972), 1-13. **58** #29352 35L99
On certain L^2 -well posed mixed problems for hyperbolic system of first order. *Japan Acad.* **50** (1974), 143-147. (Alan Jeffrey) **53** #1045 35L50
On structures of L^2 -well-posed mixed problems for hyperbolic operators. *Integral operators and partial differential equations (Colloq. Internat., Univ. Nice, 1974)*, pp. 235-254. *Lecture Notes in Math.*, Vol. 459, Springer, Berlin, 1975. (A. I. Nirenberg) **54** #10878 35L50
(with Ohkubo, Toshio) On structures of certain L^2 -well-posed mixed problems for hyperbolic systems of first order. *Hokkaido Math. J.* **4** (1975), 82-158. (H.-O. Kato) **52** #1032 35L50

- with Sato, Shinsaku) Remarks on modified symmetrizers for 2×2 hyperbolic problems. *Hokkaido Math. J.* 5 (1976), no. 1, 120-138. (H.-O. Kreiss) 55 #13106 15 (35L55)
- I. A. The absolute convergence of Fourier-Walsh series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 64 (1971), 273-276. (S. elbrojti) 46 #7786 42A28 (42A56)
- the absolute convergence and summability of simple and multiple Fourier-Walsh (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 69 (1973), 17-20. (R. L. Cooke) 48 #9248 42A56
- with Čavčanidze, V. V.) Optimal systems, and quantity of information. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 80 (1975), no. 76. (Authors' summary) 57 #2673 93C05 (94A15)
- alemi's theorem for multiple trigonometric series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 81 (1976), no. 2, 293-296. (R. L. e) 55 #6110 42A92
- an optimal linear filter, and the quantity of information. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 82 (1976), no. 1, 49-51. (E. Rtinger) 53 #15564 94A15
- e, N. M. (with Volosevič, P. P.; Gordeziani, D. G.; Kurdjumov, S. P.; Lacabidze, ; Levanov, E. I.; Meladze, G. V.; Okroašvili, T. G.; Popov, Ju. P.) Problems in dynamics and in magnetic fluid dynamics with account taken of the sources (sinks) mass, pulse and energy. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Preprint No. 45* (1978), 35 pp. (Authors' summary) 58 #19755 76.35 (76.65)
- re, R. L. A certain family of functions of the algebra of logic with a given number of variables. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 64 (1971), 529-532. (G. Wechsung) 45 #4902 94A20
- A certain scheme of probabilistic transformers. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 66 (1972), 293-296. (A. Salomaa) #1477 94A20
- Representability of r -fractions by means of the operations of multiplication and addition. (Russian. Georgian and English summaries) *Gamqeneb. Math. Sem. Mohsen. Anotacie. No. 7* (1973), 23-25. (A. A. Mullin) 48 #1814 94A20 (H15)
- Synthesis of probabilistic transformers in the code of "diagonal" vectors. (Russian. Georgian summary) *Math. Kibernet. Zogiet. Sakith. Gamokw. No. 1* (1973), 81-86. (A. Koršunov) 48 #13534 94A35
- (with Kalandarišvili, N. G.) The recognition algorithm of an automaton with finite memory. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 71 (1973), 61-63. (Armin Cremers) 49 #8762 94A30
- ev, A. N. See Širjaev, A. N.
- Oved (with Edmonds, Jack) Extremal and acute bijections between finite point sets. *Inequalities, III* (Proc. Third Sympos., Univ. California, Los Angeles, Calif., 1969; dedicated to the memory of Theodore S. Motzkin), pp. 93-96. Academic Press, New York, 1970. (Robert E. Bixby) 52 #10444 05A20
- (with Pollard, Harry) Variations on the binomial series. *Amer. Math. Monthly* 79 (1972), 495-499. (L. Ariaga) 45 #9054 42A68
- (with Flatto, Leopold) A proof of Cauchy's integral theorem using Bernstein polynomials. *Approximation theory* (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973), pp. 345-346. Academic Press, New York, 1973. (Y. Komatu) 49 #9166 30A02
- On the discrete version of Wirtinger's inequality. *Amer. Math. Monthly* 80 (1973), 1-760. (G. D. Chakerian) 48 #1050 52A40
- (with Haber, Seymour) An integral related to numerical integration. *Bull. Amer. Math. Soc.* 79 (1973), 930-932. (B. K. Lahiri) 47 #7288 41A55
- (with Flatto, Leopold) A proof of Cauchy's integral theorem. *J. Approximation Theory* 7 (1973), 386-390. (Horst Tietz) 49 #7456 30A86
- (with Bojanic, Ranko) On the precision of uniform approximation of continuous functions by certain linear positive operators of convolution type. Collection of articles dedicated to Isaac Jacob Schoenberg on his 70th birthday, II. *J. Approximation Theory* 8 (1973), 101-113. (M. W. Müller) 49 #7662 41A35
- A characterization of functions having Zygmund's property. *J. Approximation Theory* 9 (1973), 395-397. (S. Izumi) 50 #5292 41A25
- (with Arms, R. J.) A representation of the norm in finite-dimensional normed linear spaces. *Linear Algebra and Appl.* 7 (1973), 173-174. (P. D. Morris) 47 #7385 30B5 (15A60)
- (with Haber, Seymour) Improper integrals, simple integrals, and numerical quadrature. *J. Approximation Theory* 11 (1974), 1-15. (Henning Esser) 50 #5309 45A55
- (with Bojanic, Ranko) Approximation of continuous, periodic functions by discrete linear positive operators. *J. Approximation Theory* 11 (1974), 231-235. (R. Feinerman) #5327 42A08
- (with Chui, Charles K.; Smith, Philip W.) Padé approximants as limits of best rational approximants. *J. Approximation Theory* 12 (1974), 201-204. (Gerhard Merz) #10625 41A20
- Characterization of smoothness properties of functions by means of their degree of approximation by splines. *J. Approximation Theory* 12 (1974), 365-371. (J. W. Jerome) #13991 41A15
- (with Reddy, A. R.) A class of rational approximations on the positive real axis—a survey. *J. Approximation Theory* 12 (1974), 425-434. (A. Magnus) 51 #3759 41A20
- On the degree of approximation by step functions. *J. Approximation Theory* 12 (1974), 435-436. (J. W. Jerome) 50 #13992 41A15
- (with DeSanto, John A.) Numerical solution of a singular integral equation in random rough surface scattering theory. *J. Computational Phys.* 15 (1974), 286-292. (P. P. H. Z) 49 #10171 65R05
- (with Bojanic, Ranko) Degree of L_1 approximation to integrable functions by modified Bernstein polynomials. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, I. *J. Approximation Theory* 13 (1975), 66-72. (S. Drobnies) 50 #10612 41A10
- On saturation with splines. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, IV. *J. Approximation Theory* 13 (1975) 491-494. (J. W. Jerome) 51 #6243 41A40
- (with Lewis, James T.) L_p convergence of monotone functions and their uniform convergence. *J. Approximation Theory* 14 (1975), no. 4, 281-284. (V. A. Popov) 52 #3464 28A20 (41A30)
- (with Groetsch, C. W.) On the degree of approximation by Bernstein polynomials. *J. Approximation Theory* 14 (1975), no. 4, 317-318. (H. J. Biesterfeldt, Jr.) 52 #1093 41A10
- (with Reddy, A. R.) A characterization of entire functions $\sum_{k=0}^{\infty} a_k z^k$ with all $a_k > 0$. *J. Approximation Theory* 15 (1975), no. 1, 83-84. (J. L. Fields) 53 #8419 30A64
- (with Cargo, G. T.) Least p th powers of deviations. *J. Approximation Theory* 15 (1975), no. 4, 335-355. (Werner Haussmann) 54 #894 46B05 (41A65)
- (with Bacopoulos, A.; Taylor, Gerald D.) Relative approximation. *J. Approximation Theory* 15 (1975), no. 4, 356-365. (B. N. Sahney and P. Goyalaya) 52 #14752 41A10
- (with Travis, S.) L_p convergence of generalized convex functions and their uniform convergence. *J. Approximation Theory* 15 (1975), no. 4, 366-370. (R. S. Booth) 52 #14209 28A20 (26A51, 41A50)
- (with Chui, Charles K.; Smith, Philip W.) Best local approximation. *J. Approximation Theory* 15 (1975), no. 4, 371-381. (James Lewis) 55 #6080 41A50
- (with Osgood, Charles F.) On simple integrability and bounded coarse variation. *Approximation theory, II* (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976), pp. 491-501. Academic Press, New York, 1976. (J. A. Siddiqi) 55 #8275 26A42
- (with Osgood, Charles F.) The dominated integral. *J. Approximation Theory* 17 (1976), no. 2, 150-165. (H. E. Fettes) 54 #6467 65D30 (26A42)
- (with Passow, Eli; Raymon, Louis) Piecewise monotone interpolation and approximation with Müntz polynomials. *Trans. Amer. Math. Soc.* 218 (1976), 197-205. (F. Perrin) 53 #3548 41A05
- (with Osgood, Charles F.) Numerical quadrature of improper integrals and the dominated integral. *J. Approximation Theory* 20 (1977), no. 1, 139-152. (A. M. Cohen) 56 #7128 65D30 (41A55)
- (with Verma, G. R.) On Lipschitz condition and Zygmund's property for functions of several variables. *General inequalities* (Proc. First Internat. Conf., Math. Res. Inst., Oberwolfach, 1976), I, pp. 115-123. Birkhäuser, Basel, 1978. (Luciana Lupaş) 58 #17007 26A69
- (with Lewis, James T.; Osgood, Charles F.) Infinite Riemann sums, the simple integral, and the dominated integral. *General inequalities* (Proc. First Internat. Conf., Math. Res. Inst., Oberwolfach, 1976), I, pp. 233-242. Birkhäuser, Basel, 1978. (Peter Bullen) 58 #11272 26A39
- (with Haber, Seymour) On the nonomnipotence of regular summability methods. *Adv. in Math.* 28 (1978), no. 3, 231-232. (B. Kuttner) 58 #12071 40C05
- See also *Inequalities*, 48 #5761; *Collection: Walsh, Joseph L.*, 48 #8156; *Collection: Walsh, Joseph L.*, 48 #8157; *Collection: Walsh, Joseph L.*, 48 #8158; *Collection: Walsh, Joseph L.*, 48 #8159; *Collection: Walsh, Joseph L.*, 48 #8160; *Collection: Walsh, Joseph L.*, 48 #8161; *Collection: Walsh, Joseph L.*, 48 #8162 and *Collection: Walsh, Joseph L.*, 48 #8163
- Shishido, Harunori (with Mine, Hisashi; Ohmoto, Munehiro) Bayes procedures for truncated sequential game identifying an alternative of different sampling plans. *Mem. Fac. Engrg. Kyoto Univ.* 37 (1975), no. 2, 114-126. (Dan Anbar) 52 #9434 62C10 (90D15)
- (with Mine, Hisashi) A method of determining characteristic functions for cooperative differential games without side payment. *Mem. Fac. Engrg. Kyoto Univ.* 38 (1976), no. 4, 169-181. (A. I. Subbotin) 55 #10043 90D25
- Shishkin, A. D. See Šiškin, A. D.
- Shishkov, D. B. See Šiškov, D. B.
- Shishmakov, V. S. See Šišmakov, V. S.
- Shishov, V. I. See Šišov, V. I.
- Šitikova, K. V. See Šitikova, K. V.
- Shitovitz, Benjamin Oligopoly in markets with a continuum of traders. *Econometrica* 41 (1973), 467-501. (Author's summary) 55 #14148 90A15
- On some problems arising in markets with some large traders and a continuum of small traders. *J. Econom. Theory* 8 (1974), no. 4, 458-470. (M. Ali Khan) 57 #15351 90A15
- (with Greenberg, Joseph) Advantageous monopolies. *J. Econom. Theory* 16 (1977), no. 2, 394-402. (Ehud Kalai) 57 #5011 90A15
- Shiu, Elias S. W. Growth of numerical ranges of powers of Hilbert space operators. *Michigan Math. J.* 23 (1976), no. 2, 155-160. (Pier Luigi Papini) 54 #966 47A10 (47B44)
- Commutators and numerical ranges of powers of operators. *Pacific J. Math.* 65 (1976), no. 2, 517-523. (Hong W. Kim) 55 #11098 47B47 (47A10)
- Cyclically monotone linear operators. *Proc. Amer. Math. Soc.* 59 (1976), no. 1, 127-132. (J. P. Williams) 53 #14167 47A10 (47B44)
- Shiu, Peter Triangular numbers—two applications. *Math. Gaz.* 55 (1971), no. 391, 34-38. (Editors) 58 #488 10A35
- A generalization of some convergence tests. *Math. Gaz.* 56 (1972), no. 397, 227-228. (Editors) 58 #6800 40A05
- How slowly can a series converge? *Math. Gaz.* 56 (1972), no. 398, 285-288. (Editors) 58 #6801 40A05
- A new construction of the real numbers. *Math. Gaz.* 58 (1974), 39-46. (See Zbl 276 #26002) 26-01
- Note on a result of Erdős and Mirsky. *J. London Math. Soc.* (2) 17 (1978), no. 2, 228-230. (J. L. Selfridge) 58 #5486 10A20
- Shiue, Jau Shyong On a theorem of uniform distribution of sequences of g -adic integers and a notion of independence. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 50 (1971), 90-93. (I. Niven) 46 #3459 10F40
- (with Kuipers, Lauwerens) On the distribution modulo M of sequences of generalized Fibonacci numbers. *Tamkang J. Math.* 2 (1971), no. 2, 181-186. (H. G. Meijer) 46 #5231 10A40
- (with Kuipers, Lauwerens) Asymptotic distribution modulo m of sequences of integers and the notion of independence. (Italian summary) *Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Sez. Ia* (8) 11 (1972/73), 63-90. (J. Kubilius) 51 #3106 10K20 (10K05)

- (with Kuipers, Lauwerens) A distribution property of a linear recurrence of the second order. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 6-10. (Calvin T. Long) **48** #3862 10A35
- (with Kuipers, Lauwerens) A distribution property of the sequence of Lucas numbers. *Elem. Math.* **27** (1972), 10-11. (B. M. Stewart) **46** #144 10F40 (10A40)
- (with Kuipers, Lauwerens) A distribution property of the sequence of Fibonacci numbers. *Fibonacci Quart.* **10** (1972), no. 4, 375-376, 392. (R. D. Stalley) **47** #3302 10A35
- (with Bundschuh, Peter) Solution of a problem on the uniform distribution of integers. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 172-177 (1974). (I. Danicic) **51** #3072 10F40
- (with Kuipers, Lauwerens) Remark on a paper by Duncan and Brown on the sequence of logarithms of certain recursive sequences. *Fibonacci Quart.* **11** (1973), no. 3, 292-294. (I. Niven) **48** #11025 10K05
- (with Hu, Ming Hung) Some remarks on the uniform distribution of a linear recurrence of the second order. Collection of articles dedicated to Professor Tsing Houa Teng on the occasion of his 70th birthday. *Tamkang J. Math.* **4** (1973), no. 2, 101-103. (Calvin T. Long) **49** #10631 10A35 (10F40)
- (with Sheu, Tsung Luen) On the periodicity of linear recurrence of second order in commutative rings. Collection of articles dedicated to Professor Tsing Houa Teng on the occasion of his 70th birthday. *Tamkang J. Math.* **4** (1973), no. 2, 105-107. (J. M. Gandhi) **50** #7012 10A35
- A remark of a paper by Bundschuh. Collection of articles dedicated to Professor Tsing Houa Teng on the occasion of his 70th birthday. *Tamkang J. Math.* **4** (1973), no. 2, 129-130. (Editors) **50** #224 10A35
- (with Bundschuh, Peter) A generalization of a paper by D. D. Wall. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), 135-144. (L. Carlitz) **51** #5476 10A35
- (with Kuipers, Lauwerens; Niederreiter, Harald) Uniform distribution of sequences in the ring of Gaussian integers. *Bull. Inst. Math. Acad. Sinica* **3** (1975), no. 2, 311-325. (I. Niven) **54** #2612 10K05 (10L10)
- On a paper by C. R. Johnson and M. Newman: "Triangles generated by powers of triplets on the unit circle" (J. Res. Nat. Bur. Standards Sect. B **77B** (1973), no. 3-4, 137-141). (Chinese summary) Collection of articles in commemoration of the 75th anniversary of the founding of Soochow University. *Soochow J. Math. Natur. Sci.* **1** (1975), 17-20. (W. W. Adams) **53** #7998 10M20
- (with Chien, Wei Hua) On a class of sequential games. (Chinese summary) Collection of articles in commemoration of the 75th anniversary of the founding of Soochow University. *Soochow J. Math. Natur. Sci.* **1** (1975), 21-31. (M. Mañas) **53** #10336 90D20
- (with Kuipers, Lauwerens) Ein Gleichverteilungskriterium. *Elem. Math.* **31** (1976), no. 6, 137-139. (Marthe Grandet) **55** #12651 10F40
- (with Meijer, H. G.) Uniform distribution in Z_n and $Z_{g_1} \times \dots \times Z_{g_r}$. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), no. 3, 200-212. (L. Kuipers) **54** #10169 10F40
- On a generalization of a theorem of Johnson and Newman. *Soochow J. Math. Natur. Sci.* **2** (1976), 57-61. (Charles R. Johnson) **55** #5657 15A15 (65F99)
- (with Chao, Wen Min) On the Boolean rings. *Yokohama Math. J.* **24** (1976), no. 1-2, 93-96. (R. A. Melter) **54** #10096 06A40
- (with Kuipers, Lauwerens) Ein Kriterium für die C-Gleichverteilung mod 1. (English summary) *Z. Angew. Math. Phys.* **27** (1976), no. 6, 883-884. (R. C. Buck) **56** #292 10K05
- (with Niederreiter, Harald) Equidistribution of linear recurring sequences in finite fields. *Nederl. Akad. Wetensch. Proc. Ser. A* **80** = *Indag. Math.* **39** (1977), no. 5, 397-405. (L. Kuipers) **57** #3085 10F40 (12C20)
- (with Huang, Chih Ping) A complete residue system in the integral quaternions. *Soochow J. Math. Natur. Sci.* **3** (1977), 77-82. (K. Nageswara Rao) **58** #5477 10A10 (12A20)
- (with Huang, Chih Ping) Complete residue systems in the ring of matrices of rational integers. *Internat. J. Math. Math. Sci.* **1** (1978), no. 2, 217-225. (Jack Sonn) **58** #617 12F05
- See also Ikehata, Shūichi, **57** #5852
- Shiva, Sajjan G.** (with Allard, P. E.; Tavares, Stafford E.) A note on the decomposition of cyclic codes into cyclic classes. *Information and Control* **22** (1973), 100-106. (R. J. McEliece) **48** #8096 94A10
- (with Ahmed, Nasiruddin; Georganas, Nicolaos D.) Order preserving measures of information. *J. Appl. Probability* **10** (1973), 666-670. (J. Aczél) **50** #12456 94A15
- (with Yip, Pui Wah; Cohen, E. L.) Permutation-decodable binary cyclic codes. *Electron. Lett.* **10** (1974), 467-468. (F. J. MacWilliams) **53** #10480 94A10
- (with Tavares, Stafford E.) On binary majority-logic decodable codes. *IEEE Trans. Information Theory* **IT-20** (1974), 131-133. (G. M. Tenengol'c) **51** #2773 94A10
- (with Tavares, Stafford E.; Bhargava, Vijay K.) Some rate- $p/(p+1)$ quasi-cyclic codes. *IEEE Trans. Information Theory* **IT-20** (1974), 133-135. (F. J. MacWilliams) **53** #7604 94A10
- (with Bhargava, Vijay K.; Tavares, Stafford E.) Difference sets of the Hadamard type and quasi-cyclic codes. *Information and Control* **26** (1974), no. 4, 341-350. (Vera Pless) **52** #7697 94A10
- Generation of prime implicants of a Boolean function from minterm sublists. *Proceedings of the Eighth Annual Southeastern Symposium on System Theory* (Univ. Tennessee, Knoxville, Tenn., 1976), pp. 244-245. *Inst. Electr. Electron. Engrs., New York*, 1976. (Ljudmil Dakovski) **58** #4696 94A20
- (with Guevara, E.; Currie, R.) Even-weighted codes for error detection. *Electron. Lett.* **12** (1976), no. 10, 258-259. (J.-M. Goethals) **54** #7108 94A10
- Class of majority-logic-decodable codes with a minimum distance of 4. *Electron. Lett.* **12** (1976), no. 22, 599-600. (Peter Hammond) **55** #2351 94A10
- Shivakumar, P. N.** Diagonally dominant infinite matrices in linear equations. *Utilitas Math.* **1** (1972), 235-248. (R. P. Tewarson) **46** #4696 65F05
- (with Wong, R.) Linear equations in infinite matrices. *Linear Algebra and Appl.* **7** (1973), 53-62. (N. Gastinel) **47** #4424 15A06 (47A50)
- (with Chew, Kim Ho) A sufficient condition for nonvanishing of determinants. *Proc. Amer. Math. Soc.* **43** (1974), 63-66. (J. L. Brenner) **48** #11145 15A15
- (with Chew, Kim Ho) Iterations for diagonally dominant matrices. *Canad. Math. Bull.* **19** (1976), no. 3, 375-377. (G. Maess) **55** #9506 65F10 (15A06)
- On some aspects of infinite matrices. *Proceedings of the Conference on Mathematical Algebra, Computational Methods and Number Theory* (Mysore, 1976), Paper No. 5, 24-27. *Matscience Report No. 87, Inst. Math. Sci., Madras*, 1977. (Thomas A. Atchison) **56** #7153 65F99
- (with Chew, Kim Ho) On the conformal mapping of a circular disc with a curvilinear polygonal hole. *Proc. Indian Acad. Sci. Sect. A* **85** (1977), no. 6, 406-414. (Opfer) **56** #15898 30A28
- See also **Proceedings: Manitoba Conference on Numerical Mathematics**, **48** #1015
- Shivamoggi, B. K.** Inviscid theory of stability of parallel compressible flows. (Author's summary) *J. Mécanique* **16** (1977), no. 2, 227-255. (Author's summary) **56** #43076.35
- Shive, Robert A., Jr.** (with Johnson, William B.) Linear contraction mappings. *Pacific Math.* **30** (1971), 41-44. (A. Alexiewicz) **46** #4152 46A30 (47A99)
- (with Baker, James D.) On the existence of ψ -integrals. *Rend. Circ. Mat. Palermo* (2) **21** (1972), 293-304. (S. Foglio) **50** #560 26A42
- Shivpuri, Saroj** (with Chadha, S. S.) A simple class of parametric linear fractional functionals programming. *Z. Angew. Math. Mech.* **53** (1973), 644-646. (G. O. Roberts) **50** #3945 90C30
- (with Chadha, S. S.) Parametrization of a generalized linear and piece-wise linear programming. *Trabajos Estadist. Investigación Oper.* **28** (1977), no. 2-3, 151-160. (Author's summary) **58** #25974 90C10
- (with Rani, Oma) An algorithm for linear fractional functionals programming problems. (German and Russian summaries) *Z. Angew. Math. Mech.* **57** (1977), no. 75-80. (R. N. Kaul) **56** #10937 90C05 (90C30)
- Shiwa, Yasuhiro** The mode-coupling theory for the nematic mesophase near the clearing point. *Progr. Theoret. Phys.* **58** (1977), no. 1, 77-91. (Author's summary) **56** #10682.60
- Shizuma, Ryoji** (with Uno, Saeko) On tangential maps. *Sci. Rep. Tokyo Woman's Christian College No. 32-34* (1974), 383-385. (Ulrich Koschorke) **54** #6165 57M10
- Shizuta, Yasushi** (with Asano, Kiyoshi) Global solutions of the Boltzmann equation on a bounded convex domain. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 1, 1-4. (Paul L. Davis) **57** #6861 35L50
- Shizuya, Ken-ichi** Anomalous dimensions and the renormalization group equations. *Nuclear Phys. B* **73** (1974), 339-350. (Author's summary) **50** #9207 81.22
- Škol'nyi, E. I.** See Škol'nyi, E. I.
- Škol'nyy, Ye. I.** See Škol'nyi, E. I.
- Škurskii, B. I.** See Škurskii, B. I.
- Šlafman, Sh. M.** See Šlafman, Š. M.
- Shlesinger, Michael F.** Asymptotic solutions of continuous-time random walks. *J. Statistical Phys.* **10** (1974), 421-434. (R. Kubo) **51** #12248 82.60
- Random walks and gamma functions. *Statistical mechanics and statistical methods in theory and application* (Proc. Sympos., Univ. Rochester, Rochester, N.Y., 1976), 507-519. Plenum, New York, 1977. (V. L. Girko) **58** #25715 82.60
- (with Landman, Uzi; Montroll, Elliott W.) Random walks and generalized master equations with internal degrees of freedom. *Proc. Nat. Acad. Sci. U.S.A.* **74** (1977), no. 2, 430-433. (Ian Lerche) **54** #14687 82.60
- Shlezinger, M. I.** See Šlezinger, M. I.
- Shlifer, Eliezer** (with Gavish, Bezalel; Schweitzer, Paul J.) The zero pivot phenomenon in transportation and assignment problems and its computational implications. *Mathematical Programming* **12** (1977), no. 2, 226-240. (J. T. Howson, Jr.) **56** #2349 90C05 (90B10)
- (with Brosh, Israel; Schweitzer, Paul J.) Generalized Markovian decision processes. (German summary) *Z. Operations Res. Ser. A-B* **21** (1977), no. 5, A173-A186. (S. S. Kumar) **56** #14734 90C40
- See also **Proceedings: International Meeting of the Institute of Management Sciences**, **54** #2161 and **Proceedings: International Meeting of the Institute of Management Sciences**, **54** #2162
- Shliferstein, Abe R.** (with Chien, Y. T.) Some properties of image-processing operation projection sets obtained from digital pictures. *IEEE Trans. Computers* **C-26** (1977), no. 10, 958-970. (Allen Klinger) **56** #17245 68A45
- Shliomovich, B. M.** See Šlimovič, B. M.
- Shloma, A. M.** See Šloma, A. M.
- Shlomov, Y.** See Bar-Shlomo, Y.
- Shlosman, S. B.** (with Dobrušin, R. L.) Absence of breakdown of continuous symmetries in two-dimensional models of statistical physics. *Comm. Math. Phys.* **42** (1975), no. 1, 1-10. (Authors' summary) **54** #12074 82.22
- Shmal'gauzen, V. I.** See Šmal'gauzen, V. I.
- Shmelev, A. B.** See Šmelev, A. B.
- Shmelev, V. V.** See Šmelev, V. V.
- Shmueli, K.** (with Steinberg, Avraham M.) On the terminal control problem. *J. Optimization Theory Appl.* **11** (1973), 313-320. (Authors' summary) **56** #11245 93C15
- Shmueli, Zahava** Some embeddings of infinite-dimensional spaces. *Israel J. Math.* **12** (1972), 5-10. (R. F. Dickman, Jr.) **47** #5850 54F45
- The structure of Galois connections. *Pacific J. Math.* **54** (1974), no. 2, 209-220. (Evelyn Nelson) **51** #12630 06A15
- Fixed points of antitone mappings. *Proc. Amer. Math. Soc.* **52** (1975), 503-504. (Dietmar Dorninger) **51** #10182 06A20
- Increasing and decreasing operators on complete lattices. *J. Combinatorial Theory Ser. A* **21** (1976), no. 3, 369-383. (T. S. Blyth) **54** #12588 06A23
- On bounded ρ -semigroups. *Proc. Amer. Math. Soc.* **58** (1976), 37-43. (Frank R. Smith) **56** #15524 06A50
- Shmukler, Yuliya** See Šmukler, Julija
- Shmul'jan, B. L.** See Šmul'jan, B. L.
- Shmul'yan, B. L.** See Šmul'jan, B. L.
- Shneiderman, Ben** (with Shapiro, Stuart C.) Toward a theory of encoded data structures and data translation. *Internat. J. Comput. Information Sci.* **5** (1976), no. 1, 33-43. (E. S. Shneiderman) **54** #12588 06A23

- son) 53 #7108 68A05
 N. A. (with Zames, G.) Dither in nonlinear systems. *IEEE Trans. Automatic Control* AC-21 (1976), no. 5, 660-667. (A. S. C. Sinha) 54 #7039 93C10 (93D99)
 with Zames, G.) Structural stabilization and quenching by dither in nonlinear systems. *IEEE Trans. Automatic Control* AC-22 (1977), no. 3, 352-361. (Bradley W. Sinson) 56 #18019 93C10 (93D10)
 S. (with Burns, Daniel, Jr.; Diederich, Klas) Distinguished curves in pseudoconvex boundaries. *Duke Math. J.* 44 (1977), no. 2, 407-431. (S. I. Pinčuk) #3354 32F15 (32C05)
 (with Burns, Daniel, Jr.; Wells, R. O., Jr.) Deformations of strictly pseudoconvex domains. *Invent. Math.* 46 (1978), no. 3, 237-253. (S. I. Pinčuk) 58 #1265 32G10 (15)
 Steven (with Guillemin, V.) Some stable results on the cohomology of the local infinite-dimensional Lie algebras. *Trans. Amer. Math. Soc.* 179 (1973), 175-280. (S. Moran) 48 #6198 17B55 (18H25, 58H05)
 (with Burns, Daniel, Jr.) Pseudoconformal geometry of hypersurfaces in $C^n + 1$. *Nat. Acad. Sci. U.S.A.* 72 (1975), 2433-2436. (R. O. Wells, Jr.) 52 #3609 32C05 (32C05)
 (with Burns, Daniel, Jr.) Spherical hypersurfaces in complex manifolds. *Invent. Math.* 33 (1976), no. 3, 223-246. (Shoshichi Kobayashi) 54 #7875 32M10 (32F99, 32G99)
 Continuous cohomology for compactly supported vectorfields on R^n . *Trans. Amer. Math. Soc.* 217 (1976), 364-377. (Claude Lamoureux) 54 #6162 57D30 (58H05, 52S)
 (with Burns, Daniel, Jr.) Real hypersurfaces in complex manifolds. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part 2, Williams Coll., Williamstown, Mass., 1975)*, pp. 141-168. *Amer. Math. Soc., Providence, R.I.*, 1977. (S. I. Pinčuk) #8896 32C05 (32H99, 32F15)
 nan, David A. Solution to a class of optimization problems with amplitude constraints. *IEEE Trans. Comm. COM-23* (1975), no. 9, 979-983. (K. S. Miller) #11452 49A99 (94A05)
 A. I. See Šnipp, A. I.
 E. E. See Šnol, E. E.
 J. (with Hartwig, Robert E.) Group inverses and Drazin inverses of bidiagonal and angular Toeplitz matrices. *J. Austral. Math. Soc. Ser. A* 24 (1977), no. 1, 10-34. (Peter Lancaster) 57 #3150 15A09
 Robert C. Certain Artinian rings are Noetherian. *Canad. J. Math.* 24 (1972), 53-556. (M. Djabali) 45 #6848 16A46
 The ring of endomorphisms of a finite dimensional module. *Israel J. Math.* 11 (1972), 309-314. (J. P. Jans) 45 #3464 16A64
 A note on the prime radical. *J. Math. Soc. Japan* 24 (1972), 374-376. (E. M. Patterson) 46 #1829 16A21
 Polynomial rings over finite dimensional rings. *Pacific J. Math.* 42 (1972), 251-257. (E.-A. Behrens) 47 #6748 16A08 (16A18, 16A22)
 Orders in self-injective cogenerator rings. *Proc. Amer. Math. Soc.* 35 (1972), 393-398. (J. Luh) 46 #1827 16A18
 Dual generalizations of the Artinian and Noetherian conditions. *Pacific J. Math.* 54 (1974), no. 2, 227-235. (Victor Camillo) 53 #13303 16A46
 Classical quotient rings. *Trans. Amer. Math. Soc.* 190 (1974), 43-48. (J. C. Robson) #2811 16A08
 On orders in rQF -2 rings. *Math. Scand.* 38 (1976), no. 2, 192-198. (V. C. Cateforis) #12823 16A36
 er, Allan D. (with Srinivasan, V.) Linear programming techniques for multidimensional analysis of preferences. *Psychometrika* 38 (1973), 337-369. (Authors' summary) 54 #6436 62P15 (90C05)
 (with Srinivasan, V.) Estimating the weights for multiple attributes in a composite criterion using pairwise judgments. *Psychometrika* 38 (1973), 473-493. (E. J. Williams) #8216 62H30 (62J15)
 a, Kenjiro (with Asano, Keizō) ★Daisugaku, I. (Japanese) [Algebra. I] Twelfth printing. Gendai Sugaku [Modern Mathematics], 4. Iwanami Shoten, Tokyo, 1971. +210 pp. (Editors (TK)) 58 #26631 00A05
 See also Nagao, Hiroshi, 58 #16036
 Mohd. Hypersurfaces of a Sasakian manifold with antinormal (f, g, u, v, λ) -structure. *I. Kyungpook Math. J.* 17 (1977), no. 1, 79-84. (K. Yano) #53775 53C40
 Hypersurfaces of a nearly Sasakian manifold with quasi-normal (f, g, u, λ) structure. *Proc. Indian Acad. Sci. Sect. A* 85 (1977), no. 6, 537-545. (David Blair) #717545 53B99 (53C15)
 (with Sinha, B. B.) Almost contact metric submanifold with special quater symmetric metric connexion. *Pure Appl. Math. Sci.* 5 (1977), no. 1-2, 1-6. (Y. Tashiro) #717564 53C25
 maker, Edward M. (with Farooqui, A. S.) On completeness and uniqueness of the elastic-plastic notched half space under anti-plane shear. *Utilitas Math.* 8 (1975), 25-346. (R. Muki) 52 #12470 7330
 Limit analysis with multiple load parameters for non-standard materials. (French summary) *Z. Angew. Math. Phys.* 26 (1975), 99-104. (S. N. Murthy) 51 #4811 34A9
 Velocity discontinuities in elastic-plastic boundary value problems. *Utilitas Math.* 2 (1977), 53-63. (J. W. Craggs) 58 #19596 7335
 nfeld, Peter S. Highly proximal and generalized almost finite extensions of minimal sets. *Pacific J. Math.* 66 (1976), no. 1, 265-280. (M. Shmuel Glasner) 56 #1284 4H20
 nfield, Joseph R. ★Degrees of unsolvability. Dedicated to S. C. Kleene. North-Holland Mathematics Studies, No. 2. North-Holland Publishing Co., Amsterdam-London; American Elsevier Publishing Co., Inc., New York, 1971. vii+111 pp. (S. K. Thomason) 49 #4768 02F30
 Martin's axiom. (Hungarian) Translated by László Csirmaz. *Mat. Lapok* 25 (1974), no. 1-2, 77-85 (1977). (Editors) 56 #2823 02K05 (04A20, 04A30)
 ★Математическая логика. (Russian) [Mathematical logic] Translated from the English by I. A. Lavrov and I. A. Mal'cev. Edited by Ju. L. Eršov. Математическая
- Логика и Основания Математики. [Monographs in Mathematical Logic and Foundations of Mathematics] Izdat. "Nauka", Moscow, 1975. 527 pp. (Editors) 53 #87 02-02
 Martin's axiom. *Amer. Math. Monthly* 82 (1975), 610-617. (D. A. Martin) 51 #10087 02K05
 The decision problem for recursively enumerable degrees. *Bull. Amer. Math. Soc.* 81 (1975), no. 6, 973-977. (R. A. Di Paola) 52 #7882 02F30 (02G05)
 Degrees of classes of RE sets. *J. Symbolic Logic* 41 (1976), no. 3, 695-696. (From the introduction) 58 #5140 02F30
 ★Степени неразрешимости. (Russian) [Degrees of unsolvability] With supplements by C. E. M. Yates, A. H. Lachlan and L. Feiner. Translated from the English by I. A. Lavrov and S. S. Gončarov. Edited by Ju. L. Eršov. Математическая Логика и Основания Математики. [Monographs in Mathematical Logic and Foundations of Mathematics] Izdat. "Nauka", Moscow, 1977. 192 pp. (Editors) 57 #5718 02F30 (02F50)
 Quantifier elimination in fields. *Non-classical logics, model theory and computability (Proc. Third Latin-Amer. Sympos. Math. Logic. Campinas, 1976)*, pp. 243-252. *Stud. Logic Found. Math.*, Vol. 89, North-Holland, Amsterdam, 1977. (Carol Wood) 57 #100 02H15 (12L05)
 See also Handbook: Mathematical logic, 58 #27475
 Shoesmith, D. J. (with Smiley, T. J.) Deducibility and many-valuedness. *J. Symbolic Logic* 36 (1971), 610-622. (H. B. Curry) 46 #29 02C99
 Shogan, Andrew W. Sequential bounding of the reliability of a stochastic network. *Operations Res.* 24 (1976), no. 6, 1027-1044. (Carl M. Harris) 55 #2100 90B25
 A recursive algorithm for bounding network reliability. *IEEE Trans. Reliab. R-26* (1977), no. 5, 322-327. (Narsingh Deo) 57 #5480 94A20
 Bounding distributions for a stochastic PERT network. *Networks* 7 (1977), no. 4, 359-381. (Author's summary) 58 #15096 90B15
 A decomposition algorithm for network reliability analysis. *Networks* 8 (1978), no. 3, 231-251. (Masafumi Sasaki) 58 #15106 90B25
 Shohara, Aki (with Omura, Jim K.) On convergence of distortion for block and tree encoding of symmetric sources. *IEEE Trans. Information Theory IT-19* (1973), 573-577. (I. Csiszár) 52 #2745 94A15
 Shohdohji, Tsutomu A study of an algorithm for obtaining the optimum of a multimodal function of one variable. (Japanese. English summary) *J. Operations Res. Soc. Japan* 19 (1976), no. 4, 295-307. (Author's summary) 56 #1717 65K05 (90C30)
 An algorithm for obtaining global optima for multi-variable multi-modal functions. (Japanese. English summary) *J. Operations Res. Soc. Japan* 20 (1977), no. 4, 311-320. (Author's summary) 56 #17082 65K05 (49D30)
 Shoikhet, B. A. See Šoihet, B. A.
 Shoji, Kazuhiko (with Fujii, Katsuhiko) Verification of the Aizerman and/or Kalman conjecture. *IEEE Trans. Automatic Control* AC-17 (1972), no. 3, 406-408. (Mark A. Aizerman) 55 #14339 93D10
 (with Fujii, Katsuhiko; Sato, Mitsutake) Asymptotic stability in-the-large of the control systems with hysteresis elements. (Japanese. English summary) *Systems and Control* 16 (1972), 335-340. (Authors' summary) 47 #1514 93D05
 Shoji, Kunitaka (with Yamada, Miyuki) D^* -simple inverse semigroups. *Proceedings of the First Symposium on Semigroups (Shimane Univ., Matsue, 1977)*, pp. 13-28. *Shimane University, Matsue, 1977*. (T. E. Hall) 58 #953 20M10
 (with Yamada, Miyuki) Orthogonal semigroups on which Green's relations are compatible. II. Seminar on Semigroup Theory (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikikenkyūsho Kōkyūroku* No. 292 (1977), 65-72. (Authors' summary) 58 #6000b 20M05
 Shoji, Toshiaki The conjugacy classes of Chevalley groups of type (F_4) over finite fields of characteristic $p \neq 2$. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* 21 (1974), 1-17. (J. E. Humphreys) 50 #10109 20G40
 Shokin, Yu. I. See Šokin, Ju. I.
 Sholander, M. C. (with Leach, E. B.) Extended mean values. *Amer. Math. Monthly* 85 (1978), no. 2, 84-90. (A. Lupaş) 58 #22428 26A09
 Sholl, Howard A. (with Yang, Shou Chung) Design of asynchronous sequential networks using READ-ONLY memories. *IEEE Trans. Computers C-24* (1975), 195-206. (Authors' summary) 57 #15768 94A20
 Sholomov, L. A. See Šolomov, L. A.
 Shonick, William Corrigendum: "A stochastic model for occupancy-related random variables in general-acute hospitals" (J. Amer. Statist. Assoc. 65 (1970), 1474-1500). *J. Amer. Statist. Assoc.* 68 (1973), 251. (D. L. Iglehart) 53 #10260 90B35
 (with Jackson, James R.) An improved stochastic model for occupancy related random variables in general-acute hospitals. *Operations Res.* 21 (1973), 952-965. (D. L. Iglehart) 50 #6474 90B99
 Shonkwiler, R. W. On generalized resolvents and an integral representation of Nevanlinna. *J. Math. Anal. Appl.* 40 (1972), 723-734. (A. Devinatz) 48 #4807 47B25
 Multiparameter resolvents. *J. Math. Anal. Appl.* 52 (1975), no. 2, 344-350. (A. Devinatz) 52 #1408 47D05 (47A60)
 Multiparameter resolvents. II. *J. Math. Anal. Appl.* 54 (1976), no. 2, 547-557. (A. Devinatz) 54 #967 47A10 (47D05)
 Consequences of the growth and division model for mitochondria assuming no cellular control. *Bull. Math. Biology* 39 (1977), no. 5, 613-618. (Niels Keiding) 57 #11824 92A05
 Multi-parameter spectral measures, generalized resolvents, and functions of positive type. *Rocky Mountain J. Math.* 7 (1977), no. 1, 83-101. (A. G. Gibson) 55 #6226 47B15 (47A60)
 (with Christensen, Mark J.) Lag time in microbe growth as an age-dependent branching process with two phase types. *Bull. Math. Biology* 40 (1978), no. 3, 347-358. (Charles J. Mode) 58 #20550 92A05 (60J85)
 (with Faulkner, Gary D.) Cosine representations of abelian \ast -semigroups and generalized cosine operator functions. *Canad. J. Math.* 30 (1978), no. 3, 474-482. (S. Kurepa) 58 #17952 47D05 (47A20)
 Shooman, M. L. (with Amster, S. J.) Software reliability: an overview. *Reliability and fault tree analysis (Conf., Univ. California, Berkeley, Calif., 1974)*, pp. 655-685. *Soc. Indust. Appl. Math., Philadelphia, Pa.* 1975. (Frederick N. Fritsch) 56 #1768 68A05

- (with Shaw, Leonard) Confidence bounds and propagation of uncertainties in system availability and reliability computations. *Naval Res. Logist. Quart.* **23** (1976), no. 4, 673-685. (Authors' summary) **56** #4094 62N05
- Shoop, Richard A.** (with Powell, Robert E.) The Gibbs phenomenon for generalized Taylor and Euler transforms. *Canad. J. Math.* **27** (1975), 384-395. (R. A. Askey) **52** #1139 42A24
- Shoosmith, John N.** A high-order finite-difference method for the solution of two-point boundary-value problems on a uniform mesh. *Numerical solutions of boundary value problems for ordinary differential equations* (Proc. Sympos., Univ. Maryland, Baltimore, Md., 1974), pp. 355-369. Academic Press, New York, 1975. (Robert D. Russell) **54** #9096 65L10
- Shorack, Galen R.** Functions of order statistics. *Ann. Math. Statist.* **43** (1972), 412-427. (M. F. Neuts) **46** #1001 62E20 (62G30)
- (with Ruymgaart, F. H.; van Zwet, Willem R.) Asymptotic normality of nonparametric tests for independence. *Ann. Math. Statist.* **43** (1972), 1122-1135. (Z. Govindarajulu) **49** #4156 62G10
- Convergence of quantile and spacings processes with applications. *Ann. Math. Statist.* **43** (1972), 1400-1411. (P. K. Sen) **50** #11588 62E20 (60B10)
- The best test of exponentiality against gamma alternatives. *J. Amer. Statist. Assoc.* **67** (1972), 213-214. **47** #1182 62F05
- Convergence of reduced empirical and quantile processes with application to functions of order statistics in the non-I.I.D. case. *Ann. Statist.* **1** (1973), 146-152. (G. E. Noether) **49** #1549 60B10 (62G30)
- Random means. *Ann. Statist.* **2** (1974), 661-675. (Masafumi Akahira) **54** #3965 62G35 (62E20)
- (with Pyke, Ronald) Correction to: "Weak convergence of a two-sampled empirical process and a new approach to Chernoff-Savage theorems" (Ann. Math. Statist. **39** (1968), 755-771). *Ann. Probability* **3** (1975), no. 6, 1068. (P. J. Bickel) **52** #6963 62E20
- (with Smythe, R. T.) Inequalities for $\max |S_k|/b_k$ where $k \in N^+$. *Proc. Amer. Math. Soc.* **54** (1976), 331-336. (David J. Scott) **53** #4220 60G45 (60G50, 60B10)
- Robust studentization of location estimates. *Statistica Neerlandica* **30** (1976), no. 3, 119-141. (P. J. Huber) **56** #4051 62G35
- (with Wellner, Jon A.) Linear bounds on the empirical distribution function. *Ann. Probability* **6** (1978), no. 2, 349-353. (J. M. Steele) **57** #7743 60F15 (62G30)
- Shorh, Alan McK.** Filter constructions in Boolean valued model theory. *Z. Math. Logik Grundlagen Math.* **18** (1972), 193-200. (A. Sochor) **47** #8291 02J10 (02H10)
- Completely additive measure and integration. *Proc. Amer. Math. Soc.* **53** (1975), no. 2, 453-459. (W. A. J. Luxemburg) **52** #3461 28A10 (02H25)
- Shore, Richard A.** Minimal α -degrees. *Ann. Math. Logic* **4** (1972), 393-414. (H. Luckhardt (Zbl 262 02039)) **51** #5278 02F30 (02F27)
- (with Kleinberg, Eugene M.) Weak compactness and square bracket partition relations. *J. Symbolic Logic* **37** (1972), 673-676. (M. Benda) **48** #1927 02K35 (04A20)
- Square bracket partition relations in L . *Fund. Math.* **84** (1974), no. 2, 101-106. (Keith Devlin) **51** #7880 04A20 (02K25, 02K35)
- S_n sets which are Δ_n -incomparable (uniformly). *J. Symbolic Logic* **39** (1974), 295-304. (J. C. Owings, Jr.) **54** #7229 02F27 (02F30, 02K10)
- Cohesive sets: countable and uncountable. *Proc. Amer. Math. Soc.* **44** (1974), 442-445. (Manuel Lerman) **49** #7128 02F27 (02K05, 02K35)
- The irregular and non-hyperregular α -e. degrees. *Israel J. Math.* **22** (1975), no. 1, 28-41. (Barry Cooper) **55** #2537 02F27 (02F30)
- Splitting an α -recursively enumerable set. *Trans. Amer. Math. Soc.* **204** (1975), 65-77. (Manuel Lerman) **52** #60 02F27
- The recursively enumerable α -degrees are dense. *Ann. Math. Logic* **9** (1976), no. 1-2, 123-155. (Manuel Lerman) **52** #2852 02F27 (02F30)
- (with Leggett, Anne) Types of simple α -recursively enumerable sets. *J. Symbolic Logic* **41** (1976), no. 3, 681-694. (From the introduction) **58** #5127 02F27
- On the jump of an α -recursively enumerable set. *Trans. Amer. Math. Soc.* **217** (1976), 351-363. (Stephen G. Simpson) **54** #12504 02F27
- Determining automorphisms of the recursively enumerable sets. *Proc. Amer. Math. Soc.* **65** (1977), no. 2, 318-325. (Curt Christian) **56** #5248 02F25
- Controlling the dependence degree of a recursively enumerable vector space. *J. Symbolic Logic* **43** (1978), no. 1, 13-22. (A. Nerode) **58** #10365 02F27
- Nowhere simple sets and the lattice of recursively enumerable sets. *J. Symbolic Logic* **43** (1978), no. 2, 322-330. (J. C. Owings, Jr.) **58** #10362 02F25
- See also **Handbook: Mathematical logic, Part C**, **58** #5109
- Shores, Thomas S.** On the star condition. *Arch. Math. (Basel)* **23** (1972), 1-9. (W. E. Deskins) **46** #5468 20F45
- The structure of Loewy modules. *J. Reine Angew. Math.* **254** (1972), 204-220. (C. Năstăsescu) **47** #6778 16A64
- Injective modules over duo rings. *Pacific J. Math.* **40** (1972), 695-702. (H. H. Storrer) **46** #9114 16A52
- (with Wiegand, Roger) Decompositions of modules and matrices. *Bull. Amer. Math. Soc.* **79** (1973), 1277-1280. (T. Albu) **49** #7253 13C05 (13F05)
- Decomposition of torsion classes. *Math. Japon.* **18** (1973), 181-185. (M. Teply) **49** #9029 16A50
- A chain condition for groups. *Rocky Mountain J. Math.* **3** (1973), 83-89. (R. Göbel) **50** #482 20E15
- Bézout rings and their modules. *Ring theory* (Proc. Conf., Univ. Oklahoma, Norman, Okla., 1973), pp. 63-73. *Lecture Notes in Pure and Applied Mathematics*, Vol. 7, Dekker, New York, 1974. (D. Kirby) **48** #8480 13C05
- (with Wiegand, Roger) Some criteria for Hermite rings and elementary divisor rings. *Canad. J. Math.* **26** (1974), 1380-1383. (D. Kirby) **50** #4571 13F05
- (with Lewis, William J.) Serial modules and endomorphism rings. *Duke Math. J.* **41** (1974), 889-909. (R. B. Warfield, Jr.) **50** #4567 13C05
- (with Wiegand, Roger) Rings whose finitely generated modules are direct sums of cyclics. *J. Algebra* **32** (1974), 152-172. (J. W. Brewer) **50** #4568 13C05
- Loewy series of modules. *J. Reine Angew. Math.* **265** (1974), 183-200. (M. Teply) **48** #8486 13E99
- On generalized valuation rings. *Michigan Math. J.* **21** (1974), 405-407. (Warner) **51** #3138 13A15 (20M10)
- Modules over semihereditary Bezout rings. *Proc. Amer. Math. Soc.* **211**-213. (R. Gilmer) **50** #2156 13F10
- (with Larsen, Max D.; Lewis, William J.) Elementary divisor rings and presented modules. *Trans. Amer. Math. Soc.* **187** (1974), 231-248. (D. Kirby) **13F05**
- (with Fuelberth, John D.; Kuzmanovich, James) Splitting torsion free commutative rings. *Bull. Austral. Math. Soc.* **13** (1975), no. 3, 457-464. (N. 52 #13789 13C05
- A continuity criterion for functors. *Math. Ann.* **217** (1975), no. 2, 161-171. (Isbell) **51** #12976 18A30
- A topological criterion for primary decomposition. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 3-4, 383-387. (T. Albu) **55** #2873 13C10
- Shorey, T. N.** On a theorem of Ramachandra. *Acta Arith.* **20** (1972), 215-221. (L. 47 #146 10F25
- Algebraic independence of certain numbers in the P -adic domain. *Nederl. Wetensch. Proc. Ser. A 75=Indag. Math.* **34** (1972), 423-435. (R. Wallisser) **47** #10F35
- P -adic analogue of a theorem of Tijdeman and its application. *Nederl. Wetensch. Proc. Ser. A 75=Indag. Math.* **34** (1972), 436-442. (R. Wallisser) **47** #10F35
- (with Ramachandra, K.) On gaps between numbers with a large prime factor. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday, I. *Acta Arith.* **24** (1973), 99-111. (R. Tijdeman) **48** #10H15
- On gaps between numbers with a large prime factor. II. *Acta Arith.* **25** (1973), 365-373. (R. Tijdeman) **49** #8941 10F10
- Linear forms in the logarithms of algebraic numbers with small coefficients. *Indian Math. Soc. (N.S.)* **38** (1974), no. 1, 2, 3, 4, 271-284 (1975); *ibid.* **38** (1975), 2, 3, 4, 285-292 (1975). (W. W. Adams) **53** #2856 10F35
- On the sum $\sum_{k=1}^n |2^k - \alpha_k|$, α_k algebraic numbers. *J. Number Theory* **248**-260. (S. V. Kotov) **50** #249 (EA 50) 10F35
- (with Ramachandra, K.; Tijdeman, Robert) On Grimm's problem relating factorisation of a block of consecutive integers. *J. Reine Angew. Math.* **271** 109-124. (P. Bundschuh) **51** #384 10H15 (10F35)
- On linear forms in the logarithms of algebraic numbers. *Acta Arith.* **30** (1976), no. 1, 27-42. (R. Tijdeman) **54** #246 10F35
- (with Erdős, Paul) On the greatest prime factor of $2^p - 1$ for a prime p and expressions. *Acta Arith.* **30** (1976), no. 3, 257-265. (R. Tijdeman) **54** #7402
- (with Tijdeman, Robert) On the greatest prime factors of polynomials at points. *Compositio Math.* **33** (1976), no. 2, 187-195. (S. V. Kotov) **54** #12640 (10F35)
- (with Ramachandra, K.; Tijdeman, Robert) On Grimm's problem relating factorisation of a block of consecutive integers. II. *J. Reine Angew. Math.* **281** 192-201. (P. Bundschuh) **55** #287 10H15
- (with Tijdeman, Robert) New applications of Diophantine approximations to Diophantine equations. *Math. Scand.* **39** (1976), no. 1, 5-18. (A. J. van der 56 #5425 10B25 (10F35)
- Some applications of linear forms in logarithms. *Séminaire Delange-Pisot 17e année: 1975/76. Théorie des nombres: Fasc. 1, Exp. No. 3, 8 pp. Secrétariat Paris, 1977.* (R. Tijdeman) **56** #8469 10-02 (10F35)
- (with Van der Poorten, Alfred J.; Tijdeman, Robert; Schinzel, Andrzej) Applications of the Gel'fond-Baker method to Diophantine equations. *Trans. theory: advances and applications* (Proc. Conf., Univ. Cambridge, Cambridge, 1975-77. Academic Press, London, 1977. (John H. Loxton) **57** #12383 10B45
- See also **Mignotte, Maurice**, **53** #7971
- Shorrock, Richard A.** A limit theorem for inter-record times. *J. Appl. Probability* **219**-223. (M. F. Neuts) **45** #4487 (E 50 #3309) 60F05
- On record values and record times. *J. Appl. Probability* **9** (1972), 316-320. (Anderson) **50** #3361 60J30 (60G55)
- Correction: "A limit theorem for inter-record times" (J. Appl. Probability **219**-223). *J. Appl. Probability* **9** (1972), 877. (C. W. Anderson) **50** #3309
- Record values and inter-record times. *J. Appl. Probability* **10** (1973), (Sidney I. Resnick) **50** #8658 60F05
- On discrete time extremal processes. *Advances in Appl. Probability* **6** (1974), 580-592. (S. I. Resnick) **50** #1312 60B10 (60J30, 60J75)
- Extremal processes and random measures. *J. Appl. Probability* **12** (1975), (Author's summary) **55** #1457 60G55
- (with Brown, Mark; Ross, Sheldon M.) Evacuation of a Yule process with immigration. *J. Appl. Probability* **12** (1975), no. 4, 807-811. (D. L. Iglehart) **53** 60K99 (62L15)
- (with Zidek, James V.) An improved estimator of the generalized variance. *Statist.* **4** (1976), no. 3, 629-638. (Pi-Erh Lin) **53** #14773 62F10 (62C15)
- Short, Donald R.** An Euler characteristic formula for maps between manifolds. *Univ. Math. J.* **24** (1974/75), 733-740. (K. Aoki) **50** #14773 57D20 (57D40)
- (with Elwin, John D.) Branched immersions onto compact orientable surfaces. *Pacific J. Math.* **54** (1974), 113-122. (K. Aoki) **50** #14774 57D20 (57D40)
- (with Elwin, John D.) Branched immersions between 2-manifolds of higher topological type. *Pacific J. Math.* **58** (1975), no. 2, 361-370. (Robert Gulliver) **52** #1535 53A10
- Short, Robert A.** (with Goldberg, Jack) Soviet progress in the design of fault digital machines. *IEEE Trans. Computers* **C-20** (1971), 1337-1352. (Authors' summary) **46** #6640 68-01
- Shortliffe, Edward H.** (with Buchanan, Bruce G.) A model of inexact reasoning in medicine. *Math. Biosci.* **23** (1975), 351-379. (P. Holgate) **52** #2651 92A99
- Shostak, R.** See also **Šostak, R. Ja.**
- Shostak, Robert E.** (with Baker, Brenda) Gossips and telephones. *Discrete Math.* **3**, 191-193. (From the authors' introduction) **46** #68 05A05
- On the role of unification in mechanical theorem proving. *Acta Inf.*

- 77), no. 3, 319-323. (Charles G. Morgan) **55** #1869 68A45
 computation graphs. *Artificial Intelligence* **7** (1976), no. 1, 51-64. (John K. Ham) **54** #6584a (E **54** #6584b) 68A40 (02D99)
 corrigendum: "Refutation graphs" (*Artificial Intelligence* **7** (1976), no. 1, 51-64).
Artificial Intelligence **7** (1976), no. 3, 283. (John K. Debenham) **54** #6584b 68A40 (9)
- In the SUP-INF method for proving Presburger formulas. *J. Assoc. Comput. Mach.* **77**, no. 4, 529-543. (Author's summary) **58** #13992 68A40 (02G05)
 an algorithm for reasoning about equality. *Comm. ACM* **21** (1978), no. 7, 583-585. (Juškevičienė) **58** #4976 02-04 (02B10)
 Louis M. (with Akcasu, A. Ziya; Lellouche, Gerald S.) ★Mathematical methods for clear reactor dynamics. Nuclear Science and Technology, Vol. 7. Academic Press, York-London, 1971. xii + 460 pp. (Not reviewed) 82.00
 David A. A singular boundary problem for $-u'' + qu = \lambda u$. *Rend. Circ. Math.* **mo** (2) **21** (1972), 47-63. (H. Herold) **48** #4397 34B25
 Magdi M. (with Knorr, Georg) Numerical integration of the Vlasov equation. *J. Mathematical Phys.* **14** (1974), no. 1, 84-92. (L. Fox) **52** #16217 70.65
 with Gagné, Réal R. J.) A multistep technique for the numerical solution of a dimensional Vlasov equation. *J. Computational Phys.* **23** (1977), no. 3, 242-262. 25723 82.65
 with Gagné, Réal R. J.) Numerical solution of a two-dimensional Vlasov equation. *Computational Phys.* **25** (1977), no. 2, 94-103. (Authors' summary) **56** #14490 3
- Rashad M. (with Darling, Byron T.) Exact coupled set of ordinary differential functions for states of spherical symmetry of a three-body bound-state system. *Phys. A* (3) **12** (1975), no. 6, 2264-2271. (T. Sasakawa) **52** #16341 81.34
 W. W. (with Mordeeson, John N.) p -bases of inseparable field extensions. *Arch. Math. (Basel)* **24** (1973), 44-49. (E. Inaba) **47** #6665 12F15
 A. A. R. (with Wilson, D. B.; Tsao, H. Y.) A method for numerically solving n -order non-homogeneous linear differential equations with variable coefficients. *Internat. J. Numer. Methods Engrg.* **7** (1973), 235-240. (C. Froese Fischer) **48** #10136 99
- John B. A proof of the existence of a general equilibrium with ad valorem commodity taxes. *J. Econom. Theory* **8** (1974), no. 1, 1-25. (Hildegard Dierker) #9152 90A15
 Applying fixed point algorithms to the analysis of tax policies. *Fixed points: Algorithms and applications* (Proc. First Internat. Conf., Clemson Univ., Clemson, S.C., 1974), pp. 403-434. Academic Press, New York, 1977. (Michael D. Intriligator) #2490 90A15 (90C50)
 A. E. See Applications of Walsh functions, **48** #8080
 Ralph E. (with Ting, Tsuan Wu) Pseudoparabolic partial differential equations. *SIAM J. Math. Anal.* **1** (1970), 1-26. (Editors) **55** #10857 35K99
 (with Ting, Tsuan Wu) Asymptotic behavior of solutions of pseudo-parabolic partial differential equations. *Ann. Mat. Pura Appl.* (4) **90** (1971), 241-258. (Howard A. Fine) **47** #5414 35B40
 Weak solutions of nonlinear evolution equations of Sobolev-Galpern type. *J. Differential Equations* **11** (1972), 252-265. (J. E. Lagnese) **45** #2342 35R20 (47H15)
 Existence and representation theorems for a semilinear Sobolev equation in Banach space. *SIAM J. Math. Anal.* **3** (1972), 527-543. (G. Ladas) **47** #3788 34G05 (H15)
 Degenerate evolution equations and applications. *Indiana Univ. Math. J.* **23** (73/74), 655-677. (J. E. Lagnese) **48** #12157 47F05 (35R20)
 Equations with operators forming a right angle. *Pacific J. Math.* **45** (1973), 362. (J. E. Lagnese) **47** #7517 47D05 (47B44)
 Continuity of maximal monotone sets in Banach space. *Proc. Amer. Math. Soc.* **42** (73), 543-546. (R. Kannan) **48** #12172 47H05
 The final value problem for evolution equations. *J. Math. Anal. Appl.* **47** (1974), 5-72. (H. O. Fattorini) **50** #5131 34G05 (47D05)
 Quasi-reversibility of first and second order parabolic evolution equations. *Properly posed boundary value problems* (Conf., Univ. New Mexico, Albuquerque, N.M., 1974), pp. 76-84. *Res. Notes in Math.*, no. 1, Pitman, London, 1975. (Author's introduction) **57** #16889 34G05 (35K99, 47D05)
 The Sobolev equation. I. *Applicable Anal.* **5** (1975), no. 1, 15-22. (Tapas Mazumdar) #3195 35R20
 The Sobolev equation. II. *Applicable Anal.* **5** (1975), no. 2, 81-99. (Tapas Mazumdar) **54** #3196 35R20
 A nonlinear parabolic-Sobolev equation. *J. Math. Anal. Appl.* **50** (1975), 183-190. (J. E. Lagnese) **50** #13924 35Q99 (47H15)
 Nonlinear degenerate evolution equations and partial differential equations of mixed type. *SIAM J. Math. Anal.* **6** (1975), 25-42. (J. A. Goldstein) **52** #15154a (E **52** #15154b) 47H15 (35R20)
 A priori error estimates for approximation of parabolic boundary value problems. *SIAM J. Numer. Anal.* **12** (1975), 456-463. (G. W. Hedstrom) **52** #12355 65N15
 (with Carroll, Robert Wayne) ★Singular and degenerate Cauchy problems. *Mathematics in Science and Engineering*, Vol. 127. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1976. viii + 333 pp. ISBN 0-12-161450-6 (J. E. Lagnese) **57** #834 35-02 (58G99)
 Errata to: "Nonlinear degenerate evolution equations and partial differential equations of mixed type" (*SIAM J. Math. Anal.* **6** (1975), 25-42). *SIAM J. Math. Anal.* **1976**, no. 3, 358. (J. A. Goldstein) **52** #15154b 47H15 (35R20)
 Regularization and approximation of second order evolution equations. *SIAM J. Anal.* **7** (1976), no. 4, 461-472. (M. Arvola) **54** #10794 34G05 (35R20)
 ★Hilbert space methods for partial differential equations. Monographs and Studies in Mathematics, Vol. 1. Pitman, London-San Francisco, Calif.-Melbourne, 1977. + 196 pp. ISBN 0-273-01012-3 (P. Szepietki) **57** #16922 35-01 (47-01)
 Well-posed problems for some nonlinear dispersive waves. *J. Math. Pures Appl.* (9) (1977), no. 2, 123-135. (Alan Jeffrey) **56** #16176 35Q99 (76.35)
 (with Goldstein, Jerome A.; Radin, Charles) Convergence rates of ergodic limits for semigroups and cosine functions. *Semigroup Forum* **16** (1978), no. 1, 89-95. (G. F. Webb) **58** #7204 47D05 (47A35)
- See also Advances in differential and integral equations, **50** #10389
 Showers, D. K. (with Blair, David E.) Almost contact manifolds with Killing structure tensors. II. *J. Differential Geometry* **9** (1974), 577-582. (K. Yano) **49** #11420 53C15
 (with Blair, David E.; Yano, Kentaro) Nearly Sasakian structures. *Kōdai Math. Sem. Rep.* **27** (1976), no. 1-2, 175-180. (R. Miron) **53** #9081 53C25
 (with Blair, David E.) A note on quaternionic geometry. *Michigan Math. J.* **23** (1976), no. 4, 331-335 (1977). (Yoshiaki Maeda) **55** #13352 53C55
 Špapak, V. D. See Špalek, V. D.
 Špalevskiy, E. K. See Špilevskis, E.
 Špilevski, Edward See Špilevskis, E.
 Špil'foigel, E. I. See Špil'foigel, E. I.
 Špol'skii, Ė. V. See Špol'skii, Ė. V.
 Shrader-Frechette, Maurice (with Riehm, Carl) The equivalence of sesquilinear forms. *J. Algebra* **42** (1976), no. 2, 495-530. (G. E. Wall) **55** #380 15A63
 Complementary rational numbers. *Math. Mag.* **51** (1978), no. 2, 90-98. (Stanley J. Benkoski) **58** #10698 10A30
 Shrauner, J. E. (with Hammer, C. L.; DeFacio, Brian) Path-integral representation for the S matrix. *Phys. Rev. D* (3) **18** (1978), no. 2, 373-384. (Authors' summary) **58** #20006 81.47
 Shreider, Yu. A. See Šreider, Ju. A.
 Shreshtha, R. M. A theorem on a generalised Laplace transform. *Ranchi Univ. Math. J.* **2** (1971), 42-48. (S. K. Bose) **46** #7810 44A15
 On generalised Laguerre polynomials. *Ranchi Univ. Math. J.* **4** (1973), 54-64. (T. S. Chihara) **49** #5427 33A65
 (with Sharma, Bhagirath Lal) Dual series equations involving Laguerre polynomials. (Italian summary) *Rend. Ist. Mat. Univ. Trieste* **5** (1973), 42-49. (S. L. Kalla) **48** #9312 45F10
 Generating functions for classical polynomials. *Ranchi Univ. Math. J.* **5** (1974), 28-33. (H. L. Manocha) **56** #711 33A65
 A note on a theory of integral transforms. *Ranchi Univ. Math. J.* **7** (1976), 87-91. (L. Arteaga) **58** #29873 44A05
 Polynomials defined by a differential operator having a confluent hypergeometric form. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 10, 1389-1391. (R. K. Saxena) **57** #10018 33A30
 Generating functions for generalized hypergeometric series. *C. R. Acad. Bulgare Sci.* **31** (1978), no. 4, 389-391. (S. Masood) **58** #11547 33A30
 Shreve, David C. Approximation of translation invariant operators. *Studia Math.* **41** (1972), 35-43. (I. I. Hirschman, Jr.) **47** #796 46E30 (42A92, 47B99)
 Interior estimates in L^p for elliptic difference operators. *SIAM J. Numer. Anal.* **10** (1973), 69-80. (C. Illoio) **47** #4464 65N10
 L^p approximation of Fourier transforms and certain interpolating splines. *Math. Comput.* **28** (1974), 779-787. (J. H. Bramble) **52** #4683 65T05 (42A68)
 (with Brenner, Philip) The discrete Fourier-transform and L^p approximation of functions. *Math. Scand.* **36** (1975), no. 2, 271-278. (Donald Kershaw) **52** #1101 41A35
 Error estimates for approximation of translation invariant operators. *Studia Math.* **53** (1975), no. 2, 191-202. (Jörgen Löfström) **52** #8907 46E30 (42A18)
 Approximation of commutators of singular integrals. *Studia Math.* **56** (1976), no. 1, 1-20. (M. Jodeit, Jr.) **57** #3730 42A40 (44A25)
 Shreve, Steve (with Bertsekas, Dimitri P.) Equivalent stochastic and deterministic optimal control problems. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes* (Clearwater, Fla., 1976), pp. 705-709. *Inst. Electr. Electron. Engrs., New York*, 1976. (Authors' summary) **57** #2722 93E20
 Shreve, Warren E. A converse problem in matrix differential equations. *Canad. Math. Bull.* **16** (1973), 401-403. (James S. Muldowney) **49** #9304 34A30
 Oscillation in first order nonlinear retarded argument differential equations. *Proc. Amer. Math. Soc.* **41** (1973), 565-568. (J. S. Papadakis) **51** #8587 34K15
 Shreyder, Yu. A. See Šreider, Ju. A.
 Shridhar, M. (with Miller, W. C.; Jullien, G. A.; Loh, N. K.) System identification using Fokker-Planck techniques. *Modeling and simulation* (Proc. Fifth Annual Pittsburgh Conf., Univ. Pittsburgh, Pittsburgh, Pa., 1974), Vol. 5, Part 2, pp. 1027-1032. *Instrument Soc. Amer., Pittsburgh, Pa.*, 1974. (Authors' summary) **56** #11181 93B30
 (with Balatoni, N.) A generalized cubic spline technique for identification of multivariable systems. *J. Math. Anal. Appl.* **47** (1974), 78-90. (Leonard Weiss) **50** #12355 93B30
 (with Balatoni, N.) Cubic-spline identification of distributed-parameter systems. *J. Math. Anal. Appl.* **54** (1976), no. 1, 286-299. (Ivar Gustavsson) **53** #15473 93C20
 (with Ahmed, M. S.) System identification by stochastic approximation using a suboptimal gain algorithm. *Applications and research in information systems and sciences* (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 2, pp. 315-320. *Hemisphere, Washington, D.C.*, 1977. (Authors' summary) **58** #15587 93E10
 Shrikhande, Mohan S. On hereditary and cohereditary modules. *Canad. J. Math.* **25** (1973), 892-896. (R. S. Cunningham) **51** #10389 16A50
 Strongly regular graphs and quasi-symmetric designs. *Utilitas Math.* **3** (1973), 297-309. (J. J. Seidel) **47** #8326 05Bxx
 (with Bridges, W. G.) Special partially balanced incomplete block designs and associated graphs. *Discrete Math.* **9** (1974), 1-18. (Judith Q. Longyear) **49** #8880 05B05
 Strongly regular graphs and group divisible designs. *Pacific J. Math.* **54** (1974), no. 2, 199-208. (Bhagwandas) **53** #12979 05B05
 On a class of negative Latin square graphs. *Utilitas Math.* **5** (1974), 293-303. (Charles C. Lindner) **49** #10612 05C99
 (with Bose, R. C.; Bridges, W. G.) A characterization of partial geometric designs. *Discrete Math.* **16** (1976), no. 1, 1-7. (W. M. Kantor) **54** #7287 05B20
 (with Bose, R. C.; Bridges, W. G.) Linear transforms on block multigraphs of partial geometric designs. *J. Combinatorics Information Syst. Sci.* **1** (1976), no. 1, 9-16. (Renu Laskar) **58** #21708 05B30 (05B25)
 Shrikhande, N. (with McMillan, D. R., Jr.) On the simple connectivity of a quotient space. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **12**(32) (1977), no. 1, 113-124. (K. Kuperberg) **58** #18415 55C15 (55B05, 55D10)

- Shrikhande, S. S.** (with Bhat, Vasanti N.) Graphs derivable from $L_3(5)$ graphs. *Sankhyā Ser. A* **33** (1971), 315-350. (Authors' summary) **46** #1655 05C99 (62K10)
 (with Hedayat, A.) Experimental designs and combinatorial systems associated with Latin squares and sets of mutually orthogonal Latin squares. *Sankhyā Ser. A* **33** (1971), 423-432. (Authors' summary) **47** #1214 62K10 (05B15)
 (with Bose, R. C.) Some further constructions for $G_2(4)$ graphs. *Studia Sci. Math. Hungar.* **6** (1971), 127-132. (J. J. Seidel) **49** #2463 05C99
 (with Bhat, Vasanti N.) Seidel-equivalence in $LB_3(6)$ graphs. *Aequationes Math.* **8** (1972), 271-280. (Jane W. Di Paola) **48** #3814 05C99
 (with Bose, R. C.) Geometric and pseudo-geometric graphs ($q^2+1, q+1, 1$). *J. Geometry* **2** (1972), 75-94. (W. D. Wallis) **46** #1612 05B05 (05C99)
 (with Singhi, Navin M.) Generalised residual designs. *Utilitas Math.* **1** (1972), 191-201. (J. Schönheim) **47** #3196 05B05
 Strongly regular graphs and symmetric 3-designs. *Survey of combinatorial theory (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971)*, pp. 403-409. North-Holland, Amsterdam, 1973. (Derek Smith) **50** #9616 05B05
 (with Bose, R. C.) Embedding the complement of an oval in a projective plane of even order. *Discrete Math.* **6** (1973), 305-312. (H. Hanani) **48** #5889 05B25
 (with Singhi, Navin M.) Embedding of quasi-residual designs with $\lambda=3$. *Utilitas Math.* **4** (1973), 35-53. (J. F. Lawless) **48** #3760 05B05
 (with Singhi, Navin M.) Embedding of quasi-residual designs. *Geometriae Dedicata* **2** (1974), 509-517. (J. F. Lawless) **49** #81 05B05
 Strongly regular graphs containing strongly regular subgraphs. *Proc. Indian Nat. Sci. Acad. Part A* **41** (1975), no. 3, 195-203. (Author's summary) **58** #27661 05C99
 (with Singhi, Navin M.) Construction of geometroids. *Utilitas Math.* **8** (1975), 187-192. (D. K. Ray-Chaudhuri) **56** #8393 05B05
 (with Bose, R. C.; Singhi, Navin M.) Edge regular multigraphs and partial geometric designs with an application to the embedding of quasi-residual designs. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973)*, Tomo I, pp. 49-81. *Atti dei Convegni Lincei*, No. 17, Accad. Naz. Lincei, Rome, 1976. (René Laskar) **58** #21709 05B30 (05B25, 05C99)
 Affine resolvable balanced incomplete block designs: a survey. *Aequationes Math.* **14** (1976), no. 3, 251-269. (Sanpei Kageyama) **53** #10610 05B05
 (with Singhi, Navin M.) On the λ -design conjecture. *Utilitas Math.* **9** (1976), 301-318. (L. D. Baumert) **57** #9577 05B30
 See also **Problems: Combinatorial theory**, **46** #8855; **Survey of combinatorial theory**, **50** #1889 and **Clatworthy, Willard H.**, **54** #4029
- Shrivastava, B. M.** Integration of certain products involving Kampé de Fériet's function and the generalized H -function. *Jñānabha Sect. A* **3** (1973), 85-93. (P. Anandani) **51** #13308 33A30
 (with Singh, Dinesh) On some results involving the products of generalized hypergeometric functions. *Vidya B* **16** (1973), no. 1, 60-69. (From the introduction) **58** #1298 33A30
 (with Singh, Fateh) A generalized integral transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 139-146. (R. S. Dahiya) **51** #8759 44A30
 (with Singh, Fateh) Some bilinear and bilateral generating relations involving hypergeometric functions of three variables. *Jñānabha Sect. A* **4** (1974), 111-118. (C. M. Joshi) **52** #3624 33A30
 (with Singh, Fateh) On some new generating relations. *Ranchi Univ. Math. J.* **5** (1974), 60-66. (H. L. Manocha) **56** #702 33A40
 Generating functions for Jacobi, Laguerre and generalized Rice polynomials. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), no. 4, 297-301. (C. M. Joshi) **54** #13176 33A65
 Solvable potentials for the Chebyshev and associated Laguerre equations. *Jñānabha Sect. A* **5** (1975), 81-87. (Author's summary) **57** #12943 33A65 (81.35)
 (with Singh, Fateh) On some integral relations of Fox's H -function with applications. *Ranchi Univ. Math. J.* **6** (1975), 48-53. (R. C. Varma) **57** #12937 33A35
 On some new results involving double and triple hypergeometric functions. *Kyungpook Math. J.* **16** (1976), no. 2, 209-214. (S. Saran) **55** #3355 33A30
 (with Singh, Fateh) Applications of Jacobi polynomials to a non-linear differential equation associated with the H -function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 1, 25-34. (H. M. Srivastava) **55** #734 33A35
 (with Singh, Fateh) Some Neumann expansions for Meijer's G -function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 1, 93-96. (P. N. Rathie) **54** #13172 33A35
 Bilinear generating relations for Jacobi and Laguerre polynomials. *Vidya B* **20** (1977), no. 2, 150-156. (N. K. Thakare) **57** #16747 33A65
- Shrivastava, Prakash Narain** On generalised Stirling numbers and polynomials. *Riv. Mat. Univ. Parma* (2) **11** (1970), 233-237. (R. C. Varma) **47** #2115 33A70 (05A10)
 Certain operational formulae. *J. Indian Math. Soc. (N.S.)* **36** (1972), 133-141. (S. K. Chatterjea) **48** #11623 33A65
 Some operational formulas and a generalised generating function. *Math. Education* **8** (1974), A19-A22. (S. K. Chatterjea) **50** #662 33A65
 Inversion of an integral involving Bessel polynomials. *Math. Education* **10** (1976), no. 4, A99-A103. (S. K. Chatterjea) **55** #3692 44A20 (33A40)
 On a generalization of Humbert polynomials. *Publ. Inst. Math. (Beograd) (N.S.)* **22**(36) (1977), 245-253. (B. M. Agrawal) **57** #6547 33A65
- Shriver, Bruce** See **Proceedings: Hawaii International Conference on System Sciences**, **58** #19322c
- Štár'kov, Yu. M.** See **Štár'kov, Ju. M.**
- Shtein, D. I.** See **Štein, D. I.**
- Shtein, M. Sh.** See **Štein, M. Š.**
- Shteinvol'f, L. I.** See **Šteinvol'f, L. I.**
- Shter, I. M.** See **Šter, I. M.**
- Shterenlikht, L. M.** See **Šterenliht, L. M.**
- Shteyn, B. Ye.** See **Štein, B. E.**
- Shteyn, M. Ye.** See **Štein, M. E.**
- Shtil'man, M. S.** See **Štil'man, M. S.**
- Shtokalo, I. Z.** See **Štokalo, Ī. Z.**
- Shtokhamer, Roman** Generating functional for covariant time-ordered products of currents. *J. Mathematical Phys.* **14** (1973), 623-629. (L. S. Schulman) **50** #9229 81.46
 (with Newton, Roger G.) Finite total three-particle scattering rates. *Phys. Rev.* (3) **14** (1976), no. 2, 642-657. (Adriaan Tip) **54** #1995 81.47
 (with Schulman, L. S.) Thermodynamic arrow for a mixing system. *Internat. Theoret. Phys.* **16** (1977), no. 4, 287-298. (Khawaja Tahir Shah) **57** #8946 83 (58F15)
- Shu, Li Hua** Energy transmission properties of a pure phase series. (Chinese) *Acta Mathematica Sinica* **17** (1974), no. 1, 20-27. **56** #15127 94A05
- Shu, V. S.** (with David, Herbert Aron) Robustness of location estimators in the presence of an outlier. *Contributions to survey sampling and applied statistics*, pp. 235-248. Academic Press, New York, 1978. (M. M. Siddiqui) **58** #18887 62G35
- Shub, Michael** (with Hirsch, Morris W.; Pugh, Charles C.) Invariant manifolds. *Amer. Math. Soc.* **76** (1970), 1015-1019. (A. Katok (RŽMat 1971 #7 A594)) **45** #158F15 (57D30)
 (with Smale, S.) Beyond hyperbolicity. *Ann. of Math.* (2) **96** (1972), 587-591. (K. Meyer) **47** #563 34C40 (58F15)
 Structurally stable diffeomorphisms are dense. *Bull. Amer. Math. Soc.* **78** (1972), 817-818. (H. Suzuki) **46** #6398 58F10 (57D35)
 (with Pugh, Charles C.) Ergodicity of Anosov actions. *Invent. Math.* **15** (1973), 1-23. (Karl Sigmund) **45** #4456 58F10
 Morse-Smale diffeomorphisms are unipotent on homology. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 489-491. Academic Press, New York, 1973. (J. W. Robbin) **48** #9772 58F99
 Stability and genericity for diffeomorphisms. *Dynamical systems (Proc. Sympos. Univ. Bahia, Salvador, 1971)*, pp. 493-514. Academic Press, New York, 1973. (J. W. Robbin) **48** #9764 58F10
 (with Levine, Harold I.) Stability of foliations. *Trans. Amer. Math. Soc.* **184** (1974), 419-437. (F. J. Echarte Reula) **48** #9750 58A30 (57D30)
 Dynamical systems, filtrations and entropy. *Bull. Amer. Math. Soc.* **80** (1974), 27-41. (J. W. Robbin) **48** #12603 58F10
 (with Sullivan, Dennis) A remark on the Lefschetz fixed point formula for differentiable maps. *Topology* **13** (1974), 189-191. (R. S. Palais) **50** #3274 58F10
 (with Palis, Jacob, Jr.; Pugh, Charles C.; Sullivan, Dennis) Genericity theorems in topological dynamics. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to C. Zeeman on his fiftieth birthday)*, pp. 241-250. *Lecture Notes in Math.*, Vol. 317. Springer, Berlin, 1975. (W. L. Reddy (Zbl 341 #54053)) **58** #31268 58F15 (28A05)
 (with Nitecki, Zbigniew) Filtrations, decompositions, and explosions. *Amer. Math. Soc.* **97** (1975), no. 4, 1029-1047. (C. S. Hartzman) **52** #15561 58F10
 (with Pugh, Charles C.) Axiom A actions. *Invent. Math.* **29** (1975), no. 1, 7-38. (K. Arrowsmith) **51** #14158 58F10
 (with Sullivan, Dennis) Homology theory and dynamical systems. *Topology* (1975), 109-132. (J. W. Robbin) **53** #4141 58F10 (57D50)
 (with Williams, Robert F.) Entropy and stability. *Topology* **14** (1975), no. 3, 329-338. (Zbigniew Nitecki) **54** #3760 * 58F10
 The Lefschetz fixed-point formula; smoothness and stability. *Dynamical systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974)*, Vol. I, pp. 13-24. Academic Press, New York, 1976. (Editors) **58** #31253 58F10 (58F20)
 (with Hirsch, Morris W.; Pugh, Charles C.) ★Invariant manifolds. *Lecture Notes in Mathematics*, Vol. 583. Springer-Verlag, Berlin-New York, 1977. ii + 149 pp. (M. Irwin) **58** #18595 58F15 (58F10)
 Alexander cocycles and dynamics. *Dynamical systems, Vol. III—Warsaw, 1975*, 395-413. *Astérisque*, No. 51, Soc. Math. France, Paris, 1978. (L. A. Bunimović) **58** #24374 58F10 (28A65, 34D20)
- See also **Dynamical systems**, **52** #11994 and **Pugh, Charles C.**, **58** #31271
- Shubert, Bruno O.** Sequential optimization of multimodal discrete function with bounded rate of change. *Management Sci.* **18** (1972), 687-693. (G. Berman) **49** #6938 90B05 (65K05)
 A sequential method seeking the global maximum of a function. *SIAM J. Numer. Anal.* **9** (1972), 379-388. (J. Falk) **47** #4444 49D10 (65D30)
 (with Anderson, Calvin M.) Testing a simple symmetric hypothesis by a finite-memory deterministic algorithm. *IEEE Trans. Information Theory* **IT-19** (1972), 644-647. (T. Nemetz) **52** #4545 62L10 (62C10)
 Finite-memory classification of Bernoulli sequences using reference samples. *IEEE Trans. Information Theory* **IT-20** (1974), 384-387. (Author's summary) **57** #2068A45 (94A25)
 A flow-graph formula for the stationary distribution of a Markov chain. *IEEE Trans. Systems, Man Cybernet.* **SMC-5** (1975), no. 5, 565-566. (A. Paz) **52** #4460J10 (94A20)
- Shubert, H. A.** (with Lin, C. C.) On numerical evaluation of a convolution-type integral. *Proc. IEEE* **61** (1973), 1513-1515. (Walter Gautschi) **51** #7254 65D30
- Shubik, Martin** (with Shapley, L. S.) On market games. *J. Econom. Theory* **1** (1969), 9-17. (J. Rosenmüller) **52** #16673 90D12 (90A15)
 A theory of money and financial institutions: fiat money and noncooperative equilibrium in a closed economy. *Internat. J. Game Theory* **1** (1971/72), 243-268. (J. Williams) **48** #1663 90A15 (90D45)
 (with Shapley, L. S.) The assignment game. I. The core. *Internat. J. Game Theory* (1972), no. 2, 111-130. (H. W. Kuhn) **46** #10382 90A15 (90D40)
 (with Whitt, W.) Fiat money in an economy with one nondurable good and credit (a noncooperative sequential game). *Topics in differential games*, pp. 401-414. North-Holland, Amsterdam, 1973. (David Schmeidler) **50** #12173 90A15 (90D12)
 (with Bradley, Gordon H.) A note on the shape of the Pareto optimal surface. *Econom. Theory* **8** (1974), no. 4, 530-538. (Carl P. Simon) **57** #15297 90A05
 Mathematical models for a theory of money and financial institutions. *Adaptive economic models (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, 1974)*, pp. 513-574. *Publ. Math. Res. Center Univ. Wisconsin*, No. 34, Academic Press, New York, 1975. (Andrew Schotter) **58** #9153 90A15

- (with Shapley, L. S.) Competitive outcomes in the cores of market games. *Internat. Game Theory* 4 (1975), no. 4, 229-237. (Nimrod Megiddo) 53 #2316 90A15 D45
- Banks, insurance and futures markets of a trading economy with money, exogenous certainty and an optimal bankruptcy rule. *Mathematical economics and game theory*, 668-682. *Lecture Notes in Econ. and Math. Systems*, Vol. 141, Springer, Berlin, 1977. (J. H. Roberts) 56 #14607 90A15
- (with Dubey, Pradeep) Trade and prices in a closed economy with exogenous certainty, different levels of information, money and compound futures markets. *Stochastics* 45 (1977), no. 7, 1657-1980. (M. Ali Khan) 56 #14582 90A15
- (with Dubey, Pradeep) A closed economy with exogenous uncertainty, different levels of information, money, futures and spot markets. *Internat. J. Game Theory* 6 (1977), no. 4, 231-248. (Andrew Postlewaite) 57 #5150 90D40 (90A15)
- (with Dubey, Pradeep) A closed economic system with production and exchange modelled as a game of strategy. *J. Math. Econom.* 4 (1977), no. 3, 253-287. (From the production) 58 #15042 90A15
- (with Levitan, R.) Duopoly with price and quantity as strategic variables. *Internat. Game Theory* 7 (1978), no. 1, 1-11. (Rubin Sapoznik) 57 #15533 90D40 (90B05)
- (with Dubey, Pradeep) A theory of money and financial institutions. 28. The non-cooperative equilibria of a closed trading economy with market supply and bidding strategies. *J. Econom. Theory* 17 (1978), no. 1, 1-20. (Y. C. Ho) 57 #5147 90D35 (90A15)
- Bitidze, N. I. See Šubitidze, N. I.
- Bladze, A. M. See Šublade, A. M.
- Blukov, A. V. See Šubnikov, A. V.
- Blum, Alan H. Integral representation theorems in topological vector spaces. *Trans. Amer. Math. Soc.* 172 (1972), 373-397. (J. J. Uhl, Jr.) 47 #826 46G10 (28A45, 78B99)
- Vector measures and the spectral theorem. *Vector and operator valued measures and applications* (Proc. Sympos., Alta, Utah, 1972), pp. 339-341. Academic Press, New York, 1973. (D. R. Lewis) 49 #3589 47B37 (28A45)
- Vector measures and scalar operators in locally convex spaces. *Michigan Math. J.* (1977), no. 3, 303-310. (N. J. Kalton) 58 #12497 47B40 (46G10)
- Bole, R. H. (with Barr, Donald R.) A note on Kuiper's V_n statistic. *Biometrika* 60 (1973), 663-664. (C. G. Khatri) 49 #11711 62G10
- Bor, Taketumi Character groups of toral Lie algebras. *Hiroshima Math. J.* 3 (1973), 257-276. (J. E. Humphreys) 50 #417 17B05
- A note on coalgebras and rational modules. *Hiroshima Math. J.* 6 (1976), no. 2, 297-304. (Gavin Wraith) 53 #10853 16A24
- Bord, John H. (with Grubbs, Frank E.) A new formulation of Lanchester combat theory. *Operations Res.* 21 (1973), 926-941. (Norman P. Coleman, Jr.) 50 #6602 90E05
- (with Grubbs, Frank E.) Stopping rules for war games or combat simulations with exponential life-times. *Operations Res.* 23 (1975), no. 4, 824-829. (Kare M. Mjelde) 55 #7457 90D99 (90D15)
- Burt, H. H., Jr. See Time series and ecological processes, 57 #5155
- Čamili Šujuja, ibn Aslam ibn Muhammad ibn Šujuja See abū Kāmil Šujuja, ibn Aslam ibn Muhammad ibn Šujuja
- Čechman, I. G. See Šuhman, I. G.
- Čechman, Anjali Almost f -3-structure. *Yokohama Math. J.* 24 (1976), no. 1-2, 1-11. (K. Yano) 54 #13777 53C15
- Čechman, Anjan The existence postulate and non-regular systems of modal logic. *Notre Dame J. Formal Logic* 13 (1972), 369-378. (A. Tauts) 46 #5111 02C10
- Consistent, independent, and distinct propositions. *Notre Dame J. Formal Logic* 13 (1972), 399-406. (A. Tauts) 46 #5112 02C10
- Errata: "Decision procedures for Lewis system $S1$ and related modal systems" *Notre Dame J. Formal Logic* 11 (1970), 141-180. *Notre Dame J. Formal Logic* 14 (1973), 584. (Editors) 48 #8203 02C10
- Consistent, independent, and distinct propositions. II. *Notre Dame J. Formal Logic* 17 (1976), no. 1, 135-136. (A. Tauts) 53 #96 02C10
- Čechman, D. P. On a solution of a nonhomogeneous basic hypergeometric second differential equation. *Ganita* 25 (1974), no. 2, 53-62. (W. A. Al-Salam) 54 #5515 3A30 (39A10)
- Certain binomial identities. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* 11(31) (1976), no. 2, 231-237. (Louis Comtet) 55 #7803 05A19
- (with Kanchan, P. K.) Sum of linear and linear fractional programming. *Acta Scienc. Indica* 4 (1978), no. 2, 199-201. (K. G. Murty) 58 #26018 90C30
- Čechman, G. K. An invariant test for the homogeneity of variances in a two-way classification. (French summary) *Biometrics* 28 (1972), 1063-1072. (J. Kiefer) 49 #6455 62F05 (62J10)
- Some exact tests of hypotheses about Grubbs's estimators. (French summary) *Biometrics* 29 (1973), 373-377. (V. P. Godambe) 48 #12692 62F05
- Čechman, H. C. (with Misra, M.) A class of conformal space-times. *Vidya B* 18 (1975), no. 1, 115-120. (From the authors' introduction) 57 #11622 83S3
- (with Patel, L. K.) On cylindrically symmetric cosmological models. *Vidya B* 20 (1977), no. 1, 35-40. (Richard Sigal) 58 #9080 83S3
- Čechman, Hari Shanker On projective curvature tensor in a special Kawaguchi space. *Tensor N.S.* 30 (1976), no. 2, 198-200. (S. Kawaguchi) 55 #4009 53B25
- (with Pande, H. D.) On infinitesimal conformal transformation in a Finsler space. *Indian J. Pure Appl. Math.* 8 (1977), no. 3, 288-294. (H. Rund) 57 #1335 53B40
- (with Pande, H. D.) On the decomposition of curvature tensor fields K^i_{jkl} and H^i_{jkl} in recurrent Finsler spaces. *Indian J. Pure Appl. Math.* 8 (1977), no. 4, 418-424. (J. K. Chakrabarti) 58 #7466 53B40
- (with Pande, H. D.) Projective symmetry in a special Kawaguchi space. *Publ. Math. Debrecen* 25 (1978), no. 1-2, 117-122. (K. Yano) 58 #12809 53B40
- Čechman, Kripa Shankar Hindu mathematics in the seventh century as found in Bhāskara I's commentary on the *Āryabhaṭīya*. *Ganita* 22 (1971), no. 1, 115-130. (E. B. Allen) 5 #3148 01A25
- Hindu mathematics in the seventh century as found in Bhāskara I's commentary on the *Āryabhaṭīya*. II. *Ganita* 22 (1971), no. 2, 61-78. (E. B. Allen) 46 #8795 01A25
- Hindu mathematics in the seventh century as found in Bhāskara I's commentary on the *Āryabhaṭīya*. III, IV. *Ganita* 23 (1972), no. 1, 57-79; *ibid.* 23 (1972), no. 2, 41-50. (E. B. Allen) 48 #27 01A25
- Hindu astronomer Vateśvara and his works. *Ganita* 23 (1972), no. 2, 65-74. (R. C. Gupta) 57 #12021 01A25
- The *Pañcasiddhāntikā* of Varāhamihira. I. (errata insert) *Ganita* 24 (1973), no. 1, 59-73. (Editors) 58 #26763 01A25
- Use of hypotenuse in the computation of the equation of the centre under the epicyclic theory in the school of Āryabhaṭa I. *Indian J. History Sci.* 8 (1973), 43-57. 58 #26764 01A25
- The *Pañcasiddhāntikā* of Varāhamihira. I. With discussion by S. D. Sinhal. Proceedings of the Symposium on Copernicus and Astronomy (New Delhi, 1973). *Indian J. History Sci.* 9 (1974), no. 1, 62-76, 141 (1975). (Author's summary) 58 #26765 01A25
- See also Rai, R. N., 58 #26760 and Sen, S. N., 58 #26761
- Shukla, N. D. (with Srivastava, S. R.) Pooling of regression coefficients when conditional variances are unknown. *Trabajos Estadist.* 24 (1973), no. 1-2, 141-147. (Burt S. Holland) 54 #6389 62J05
- Almost unbiased product-type estimator. *Metrika* 23 (1976), no. 3, 127-133. (Mankal N. Murthy) 55 #9356 62D05
- Shukla, R. (with Roy, B. B.) Logical interpretation of probability calculus and derivation of many valued logic. *Ranchi Univ. Math. J.* 4 (1973), 11-14. (A. Tauts) 49 #7117 02C05
- (with Jha, M. N.) Unique convergence of sequences in T_{11} -space. *Progr. Math. (Allahabad)* 9 (1975), no. 1, 23-28. (Frank Siwiec) 53 #9141 54D10
- (with Jha, M. N.) 0-sequence and unique convergence in a topological space. *Progr. Math. (Allahabad)* 9 (1975), no. 2, 9-12. (Ray Gazik) 53 #3974 54A20
- Shukla, R. K. Application of ultraspherical potential approximation in certain nonlinear differential equations. *J. of M.A.C.T.* 5 (1972), 45-51. (H. Hochstadt) 48 #8927 34A45
- Application of Gegenbauer polynomials to nonlinear differential equations with periodic coefficients and their stability. *Jñānabha Sect. A* 2 (1972), 75-87. (H. Hochstadt) 51 #13370 34C25
- (with Garde, R. M.) Jacobi polynomial potential approximation for a Duffing's equation. *Proc. Natl. Acad. Sci. India Sect. A* 42 (1972), 213-219. (M. E. Muldoon) 49 #10955 34A45
- Shukla, R. S. (with Pande, H. C.) Synthesis of 4-terminal reactive networks. *Proc. Inst. Elec. Engrs.* 115 (1968), 49-56. (W.-K. Chen) 46 #5060 94A20
- Shukla, Sahab Lal Intuitionist treatment of some spaces of sequences. *Nederl. Akad. Wetensch. Proc. Ser. A* 75 = *Indag. Math.* 34 (1972), 139-151. (D. Nelson) 47 #9239 46A45 (02E05)
- On intuitionist analogues of classically inseparable spaces. *Nederl. Akad. Wetensch. Proc. Ser. A* 75 = *Indag. Math.* 34 (1972), 221-226. (B. van Rootselaar) 46 #4161 46A45 (02E05)
- On some linear spaces which coincide classically but are different intuitionistically. *Nederl. Akad. Wetensch. Proc. Ser. A* 75 = *Indag. Math.* 34 (1972), 275-277. (B. van Rootselaar) 46 #4162 46A45 (02E05)
- On a new method in intuitionist linear analysis. *Compositio Math.* 26 (1973), 181-202. (B. van Rootselaar) 48 #10778 02E05 (46B05)
- Shukla, V. (with Srinath, Mandyam D.) Optimal filtering in linear distributed parameter systems with multiple time delays. *Internat. J. Control* (1) 16 (1972), 673-687. (B. Rozovskiĭ (RŽMat 1973 #2 V101)) 51 #5128 93E10
- (with Srinath, Mandyam D.) Sequential estimation in linear systems with multiple time delays. *Information and Control* 22 (1973), 471-486. (Katsuji Uosaki) 52 #5154 93E10
- Shukla, Wagish (with Srivastava, Arun K.) Local reflectivity + stable reflectivity = reflectivity. *General Topology and Appl.* 5 (1975), 61-68. (G. E. Strecker) 52 #528 18A40 (54B30)
- (with Srivastava, Arun K.) A topology for automata: a note. *Information and Control* 32 (1976), no. 2, 163-168. (Itsuo Takanami) 55 #12362 94A30
- Shukla, Y. B. (with Sharma, P. L.; Dixit, S. S.) On almost Borel summability of Fourier series. *Tamkang J. Math.* 8 (1977), no. 1, 61-65. (B. N. Sahney) 56 #12755 42A24
- On the sequence of Fourier coefficients. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 20 (1977), no. 1, 25-33. (Author's summary) 56 #3543 42A16
- Shukurian, Ju. H. See Šukurjan, Ju. G.
- ruiz Shulcloper, José See Ruiz Shulcloper, José
- Shuler, Kurt E. (with Bedeaux, Dick; Lakatos-Lindenberg, Katja) On the relation between master equations and random walks and their solutions. *J. Mathematical Phys.* 12 (1971), 2116-2123. (J. Gillis) 45 #1534 (EA 55/56) 82.62 (60J15)
- (with Lakatos-Lindenberg, Katja; Freeman, J.; Lie, T. J.) First passage time and extremum properties of Markov and independent processes. *J. Statist. Phys.* 12 (1975), 217-251. (Authors' summary) 56 #16804 60J25 (82.60)
- (with Silver, H.; Lakatos-Lindenberg, Katja) Two-dimensional anisotropic random walks. *Statistical mechanics and statistical methods in theory and application* (Proc. Sympos., Univ. Rochester, Rochester, N.Y., 1976), pp. 463-505. Plenum, New York, 1977. (Authors' summary) 58 #18796 60K35 (82.60)
- (with Oppenheim, Irwin; Weiss, George H.) Stochastic theory of nonlinear rate processes with multiple stationary states. *Phys. A* 88 (1977), no. 2, 191-214. (Authors' summary) 58 #8987 82.44
- (with Cukier, R. I.; Levine, H. B.) Nonlinear sensitivity analysis of multiparameter model systems. *J. Computational Phys.* 26 (1978), no. 1, 1-42. (Pierre Lorian) 57 #5257 93B35
- (with Matsuo, Kazuhiro; Lakatos-Lindenberg, Katja) Stochastic theory of nonlinear rate processes with multiple stationary states. II. Relaxation time from a metastable state. *J. Statist. Phys.* 19 (1978), no. 1, 65-75. (Authors' summary) 58 #25709 82.60
- Shulman, A. David Detection based on uncertain error cost: a minimax approach. *IEEE Trans. Information Theory* IT-17 (1971), 202-203. (P. Neumann) 46 #1369 90D35 (62C10)

- Shulman, Herbert** Secondary obstructions to foliations. *Topology* **13** (1974), 177-183. (José Masa) **49** #9855 57D30
- The double complex of Γ_k . *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973), Part 1*, pp. 313-314. *Amer. Math. Soc., Providence, R.I.*, 1975. (J. S. Joel) **51** #11504 55F40 (57D30)
- (with Bott, Raoul; Stasheff, James Dillon) On the de Rham theory of certain classifying spaces. *Advances in Math.* **20** (1976), no. 1, 43-56. (D. B. Fuks) **53** #6583 57D30
- (with Tischler, David) Leaf invariants for foliations and the Van Est isomorphism. *J. Differential Geometry* **11** (1976), no. 4, 535-546. (D. B. Fuks) **56** #9549 57D30
- Shult, Ernest E.** On a class of doubly transitive groups. *Illinois J. Math.* **16** (1972), 434-445. (D. A. Robinson) **45** #5211 20B20
- Characterizations of certain classes of graphs. *J. Combinatorial Theory Ser. B* **13** (1972), 142-167. (J. J. Seidel) **47** #80 05C99 (20F99)
- The graph extension theorem. *Proc. Amer. Math. Soc.* **33** (1972), 278-284. (M. D. Hestenes) **45** #3547 20B99
- A note on Janko's simple group of order 175,560. *Proc. Amer. Math. Soc.* **35** (1972), 342-348. (M. Herzog) **46** #5429 20D05
- (with Shepherd, Raymond) Corollaries of strongly embedded type from a theorem of Aschbacher. *Finite groups '72 (Proc. Gainesville Conf., Univ. Florida, Gainesville, Fla., 1972)*, pp. 126-130. *North-Holland Math. Studies, Vol. 7, North-Holland, Amsterdam, 1973*. (M. E. Harris) **50** #13248 20D05
- On fusion in 2-Sylow intersections. *Finite groups '72 (Proc. Gainesville Conf., Univ. Florida, Gainesville, Fla., 1972)*, pp. 131-137. *North-Holland Math. Studies, Vol. 7, North-Holland, Amsterdam, 1973*. (Thomas Laffey) **50** #13265 20D20
- (with Hale, Mark P., Jr.) Equiangular lines, the graph extension theorem, and transfer in triply transitive groups. *Math. Z.* **135** (1973/74), 111-123. (Peter M. Neumann) **49** #5144 20B20
- (with Herzog, Marcel) Groups with central 2-Sylow intersections of rank at most one. *Proc. Amer. Math. Soc.* **38** (1973), 465-470. (Authors' summary) **55** #3062 20D05 (20D20)
- Groups, polar spaces and related structures. *Combinatorics, Part 3: Combinatorial group theory (Proc. Advanced Study Inst., Breukelen, 1974)*, pp. 130-161. *Math. Centre Tracts, No. 57, Math. Centrum, Amsterdam, 1974*. (J. J. Seidel) **52** #176 05C25 (20G15)
- Geometric characterizations in finite group theory. *Proceedings of the Second International Conference on the Theory of Groups (Australian Nat. Univ., Canberra, 1973)*, pp. 641-654. *Lecture Notes in Math., Vol. 372, Springer, Berlin, 1974*. (C. R. J. Clapham) **50** #13271 20D99 (05C25)
- (with Buekenhout, Francis) On the foundations of polar geometry. *Geometriae Dedicata* **3** (1974), 155-170. (F. D. Veldkamp) **50** #3091 50A20
- On subgroups of type $Z_p \times Z_p$. *J. Algebra* **32** (1974), 119-131. (J. L. Alperin) **50** #475 20D40
- (with Drake, David A.) Construction of Hjelslev planes from (t, k) -nets. *Geometriae Dedicata* **5** (1976), no. 3, 377-392. (T. G. Ostrom) **57** #17491 50D35
- (with Cameron, Peter J.; Goethals, Jean-Marie; Seidel, J. J.) Line graphs, root systems, and elliptic geometry. *J. Algebra* **43** (1976), no. 1, 305-327. (M. Doob) **56** #182 05C99 (17B20)
- (with Dressler, Robert E.) A simple proof of the Zolotareff-Frobenius theorem. *Proc. Amer. Math. Soc.* **54** (1976), 53-54. (Richard T. Bumby) **52** #10563 10A15
- See also **Finite groups**, **50** #460; **Problems: Group theory**, **51** #656 (EA 51) and **Combinatorics**, **52** #7912
- Shults, J. Kenneth** (with Chang, Sin Chung) Calculation of the asymptotic diffusion lengths for highly anisotropic particle transport. *J. Computational Phys.* **20** (1976), no. 3, 336-345. (Paul F. Zweifel) **54** #6835 82G65
- Shultz, Frederic W.** A characterization of state spaces of orthomodular lattices. *J. Combinatorial Theory Ser. A* **17** (1974), 317-328. (R. J. Greechie) **51** #297 06A30
- (with Alfsen, Erik M.) On the geometry of noncommutative spectral theory. *Bull. Amer. Math. Soc.* **81** (1975), no. 5, 893-895. (K. Jacobs) **51** #13720 46L99 (46A99)
- (with Alfsen, Erik M.) Non-commutative spectral theory for affine function spaces on convex sets. *Mem. Amer. Math. Soc.* **6** (1976), no. 172, xii + 120 pp. (Alan J. Ellis) **54** #943 46L05 (46A99)
- Events and observables in axiomatic quantum mechanics. *Internat. J. Theoret. Phys.* **16** (1977), no. 4, 259-272. (M. J. Mączyński) **56** #14210 81O6
- (with Alfsen, Erik M.) State spaces of Jordan algebras. *Acta Math.* **140** (1978), no. 3-4, 155-190. (Gerhard Janssen) **57** #12630 17C99 (46K10)
- (with Alfsen, Erik M.; Størmer, Erling) A Gelfand-Neumark theorem for Jordan algebras. *Advances in Math.* **28** (1978), no. 1, 11-56. (R. Arens) **58** #2292 46H99 (17C99, 46L99)
- Shultz, Harris S.** Multiplication of operators by C^∞ functions. *Canad. Math. Bull.* **14** (1971), 579-581. (Jaime Lesmes) **47** #2363 46F10
- Linear operators and operational calculus. II. *Studia Math.* **41** (1972), 1-25. (See Zbl 237 #44006) 44A45
- An algebra of distributions on an open interval. *Trans. Amer. Math. Soc.* **169** (1972), 163-181. (D. Myers) **46** #7889 46F05
- A very weak topology for the Mikusinski field of operators. *Pacific J. Math.* **47** (1973), 251-255. (L. Berg) **48** #4663 44A40
- An algebraic approach to distributions on an open interval. *Publ. Math. Debrecen* **20** (1973), 73-77. (R. A. Struble) **48** #2752 46F05
- Shum, Daniel T.** On integral inequalities related to Hardy's. *Canad. Math. Bull.* **14** (1971), 225-230. (D. C. Benson) **47** #2019 26A86
- A general and sharpened form of Opial's inequality. *Canad. Math. Bull.* **17** (1974), no. 3, 385-389. (D. Boyd) **51** #8354 26A86
- On a class of new inequalities. *Trans. Amer. Math. Soc.* **204** (1975), 299-341. (D. Boyd) **50** #10183 26A84
- Shum, Kar Ping** (with Anusiak, J.) Remarks on finite topological spaces. *Colloq. Math.* **23** (1971), 217-223. (E. Nunally) **48** #4978 54A05
- (with Hoo, Cheong S.) On algebraic radicals in mobs. *Colloq. Math.* **25** (1972), 25-35. (G. E. Dimitroff) **46** #1956 22A15
- (with Hoo, Cheong S.) On the nilpotent elements of semigroups. *Colloq. Math.* **25** (1972), 211-224, 325. (K. N. Sigmon) **48** #4184 22A15
- On the boundary of algebraic radicals in topological semigroups. *Acta Math. Sci. Hungar.* **25** (1974), 15-19. (Anne L. Hudson) **51** #13122 22A15
- (with Hoo, Cheong S.) On compact N -semigroups. *Czechoslovak Math. J.* **24** (1974), 552-562. (J. M. Day) **51** #10521 22A15
- On compressed ideals in topological semigroups. *Czechoslovak Math. J.* **25** (1975), 261-273. (M. Friedberg) **51** #5835 (E 54) #12957 22A15
- (with Stewart, Patrick N.) Completely prime ideals and idempotents in mobs. *Czechoslovak Math. J.* **26** (1976), no. 2, 211-217. (M. Friedberg) **58** #11200 22A15
- Correction to the paper: "On compressed ideals in topological semigroups" (*Czechoslovak Math. J.* **25** (1975), 261-273). *Czechoslovak Math. J.* **26** (1976), no. 3, 506. (M. Friedberg) **54** #12957 22A15
- On the Frattini ideal in compact semigroups. (Russian summary) *Math. Slovaca* (1976), no. 4, 309-315. (Jimmie D. Lawson) **55** #559 22A15
- abu-Shumays, I. K.** See **Abu-Shumays, I. K.**
- Shumel, A. S.** See **Šumei, A. S.**
- Shumovsky, A. G.** See **Šumovskii, A. G.**
- Shumovsky, A. S.** See **Šumovskii, A. S.**
- Shumway, R. H.** (with Unger, A. N.) Linear discriminant functions for stationary time series. *J. Amer. Statist. Assoc.* **69** (1974), 948-956. (M. Arató) **57** #10957 62N01 (62B10)
- Shun, D. H.** Green's functions for composite media. *Internat. J. Engrg. Sci.* **16** (1978), 7, 475-482. (R. Kodnár) **58** #14162 73J35
- Shundo, Shuzi** (with Hosoi, Tsutomu) A finer classification of intermediate propositional logics. *J. Tsuda College No. 9* (1977), 5-15. (L. L. Maksimova) **57** #12184a 02C15
- Some results concerning the new classification of intermediate propositional logics. *J. Tsuda College No. 9* (1977), 17-27. (L. L. Maksimova) **57** #12184b 02C15
- Shupp, Franklin R.** Dynamic limit pricing in a mature market. *Mathematical economics and game theory*, pp. 435-445. *Lecture Notes in Econ. and Math. Systems, Vol. 100, Springer, Berlin, 1977*. (Leonard J. Mirman) **55** #14149 90A15
- Shurais, Yu. M.** See **Šuraic, Ju. M.**
- Shurbet, G. L.** (with Lewis, Truman O.; Boullion, Thomas L.) Consistency of systems of linear matrix equations. *Indust. Math.* **22** (1972), 55-64. (R. P. Tewarson) **48** #3115A24 (65F30)
- Shusta, Thomas J.** Enumeration of minimal convolutional encoders. *IEEE Trans. Information Theory* **IT-23** (1977), no. 1, 127-132. (Bal Kishan Dass) **56** #2645 94A10
- Shuster, Jonathan J.** (with Miura, C.) Two-way analysis of reciprocals. *Biometrika* (1972), 478-481. (N. Giri) **50** #15184 62J10 (62F05)
- The validation of a petition by a sample survey. *Comm. Statist.* **3** (1974), 291-300. (P. W. Mielke, Jr.) **49** #1639 62D05
- (with Seshadri, Vanamamalai) Exact test for zero drift based on first passage time in Brownian motion. *Technometrics* **16** (1974), 133-134. (E. J. Williams) **49** #17162M05
- (with Yang, Mark C. K.) A distribution-free approach to quantal response assays. *Canad. J. Statist.* **3** (1975), no. 1, 57-70. (Martin A. Hamilton) **52** #15932 62P10
- (with Downing, Daryl J.) Two-way contingency tables for complex sampling schemes. *Biometrika* **63** (1976), no. 2, 271-276. (Graham J. G. Upton) **55** #15762F05
- (with Dietrich, F. H.) Quantal response assays by inverse regression. *Comm. Statist.—Theory Methods* **A5** (1976), no. 4, 293-305. (Authors' summary) **58** #31688 62P10
- The precision of an estimator due to Ryan. *Comm. Statist.—Theory Methods* (1976), no. 9, 867-874. (Author's summary) **58** #24688 62F10
- Shutters, W. A.** (with Fuller, Kent R.) Projective modules over non-commutative semigroup rings. *Tohoku Math. J.* **27** (1975), no. 3, 303-311. (K. A. Byrd) **55** #8103 16D10
- Shvab, N. D.** See **Švab, N. D.**
- Shvarts, A. S.** See **Švarc, A. S.**
- Shvarts, L. B.** See **Švarc, L. B.**
- Shvartsburg, A. B.** See **Švarcberg, A. B.**
- Shvetskii, B. I.** See **Švečkii, B. I.**
- Shwayder, David S.** On the determination of reference by sense. *Studien zu Frege, Band III*, pp. 85-95. *Problemata, No. 44, Frommann-Holzboog, Stuttgart, 1976*. (Editorial) **58** #27187 02-03 (01A55, 02A05)
- Shwimer, Joel** On the n -job, one-machine, sequence-independent scheduling problem with tardiness penalties: a branch-bound solution. *Management Sci.* **18** (1971/72), B301-B313. (Author's summary) **45** #1580 90B35
- See also **Symposium: Theory of Scheduling and its Applications**, **48** #3481
- Emmons, Hamilton**, **53** #6782
- Shy, Carl M.** See **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9427
- Shyamasundar, R. K.** (with Krishnamurthy, E. V.) Algorithms for constructing hierarchical graphs. *IEEE Trans. Systems Man Cybernet.* **SMC-4** (1974), no. 5, 459-461. (Author's summary) **53** #9707 68A10 (05C35)
- Necessary and sufficient conditions for a power language to be deterministically reducible. *Internat. J. Comput. Math.* **5** (1975), no. 2, 133-142. (S. Ginsburg) **52** #12435 68A10
- (with Kuich, Werner) The structure generating function of some families of languages. *Information and Control* **32** (1976), no. 1, 85-92. (Etsuro Moriya) **54** #68A30
- A note on linear precedence functions. *Information Processing Lett.* **5** (1976), no. 81. (Kenneth B. Salomon) **55** #6983 68A30
- Precedence parsing using Domolki's algorithm. *Internat. J. Comput. Math.* **6** (1977/78), no. 2, 105-114. (Immo O. Kerner) **57** #11197 68A30
- Shyr, Hui Jen** See **Shih, Hui Jan**
- Shyr, Jih Min** On relative class numbers of certain quadratic extensions. *Bull. A. M. S.* **81** (1975), 500-502. (Stephen Haris) **51** #5555 12A50 (12A85)
- On the norm form of a finite Galois extension over \mathbb{Q} . *Bull. Amer. Math. Soc.* (1975), 619-621. (Lawrence Verner) **50** #12970 12A50 (10C10, 20G30)
- Class numbers of totally positive binary forms over totally real number fields. *Amer. Math. Soc.* **83** (1977), no. 2, 286-288. (T. Ono) **55** #5577 12A50 (10C15)

- A generalization of Dirichlet's unit theorem. *J. Number Theory* **9** (1977), no. 2, 217. (William C. Waterhouse) **55** #10574 20G30 (12A45, 10C30)
- On some class number relations of algebraic tori. *Michigan Math. J.* **24** (1977), no. 65-377. (From the introduction) **58** #10819 12A50 (10C15)
- See Do Tan Si
- See Ho-Van Thi-Si
- See Jan Si
- Chong See Special issue: Fault-tolerant computing, **54** #1693
- Optimum spacings of elementary treatment contrasts in symmetrical 2-factor PA designs. (French summary) *Canad. J. Statist.* **5** (1977), no. 2, 227-234. (D. V. J. Pra) **58** #18946 62K15
- Some properties of connectedness in two-way designs. *Comm. Statist.—Theory Methods* **A6** (1977), no. 12, 1165-1169. (K. R. Shah) **58** #13539 62K99
- sa S. (with Kshirsagar, Anant M.) C-matrix of confounded designs in symmetrical factorial experiments. *Comm. Statist.* **3** (1974), 1015-1024. (U. B. Paik) **51** #4584 115
- Jilla Eine parametrische Formulierung des Verfahrens von Hildreth und d'Esopo. (English and Czech summaries) *Ekonom.-Mat. Obzor* **8** (1972), 277-283. (M. Rössler) **#4647** 90C20
- On updating formulas for least squares solutions and pseudo-inverses. *J. Comput. Appl. Math.* **3** (1977), no. 4, 293-297. (Robert Todd Gregory) **57** #1851 65F20
- On prediction intervals for samples from normal distribution. (Chinese summary) *Nanyang Univ. J. Part III* **8/9** (1974/75), 46. (From the authors' introduction) **55** #6666 62F25 (62A99)
- Control of large-scale systems. (Russian) [Monitoring the operation of large-scale systems] *Izdat. "Mashinostroenie", Moscow*, 1977. 356 pp. (Vadim Komkov) **58** #26224 93A15
- The functional $X_{n,m}^{\lambda}$; its application to the reconstruction of integrals over horospheres and hyperboloids. (Russian) *Functional analysis, No. 1 (Russian)*, pp. 2-240. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk*, 1973. (RZMat **1974** #7 B844) **#1013** 22E30 (43A85)
- Integral problems in a matrix space that are connected with the functional $X_{n,m}^{\lambda}$. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 8(135), 101-112. (Author's summary) **57** #10375 44A15 (46F99)
- Integral geometry on planes of a matrix space. (Russian) Harmonic analysis on groups. *Moskov. Gos. Zaočn. Ped. Inst. Sb. Naučn. Trudov Vyp. 39* (1974), 68-76. (Authors' summary) **58** #17695 43A85 (22E25, 53C65)
- Structure of Φ -Euclidean spaces. (Russian) *Functional analysis, No. 9: Harmonic analysis on groups (Russian)*, pp. 156-166. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk*, 1977. (V. Vinberg) **58** #2649 53C30 (32M10)
- Integral geometry on horospheres and hyperboloids in Φ -Euclidean spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 12(187), 131-134. (Rolf Blanke) **58** #28304 22E45 (43A85, 53C65)
- Some binary derivation systems. *J. Assoc. Comput. Mach.* **21** (1974), 175-190. (K. D. Günther) **49** #8670 90C99 (68A40)
- Comparison theorems for nonoscillatory solutions of a second-order differential equation with retarded argument. (Russian) *Differencial'nye Uravnenija (Tashkent)* **11** (1975), 177-186. (See RZMat **1976** #11 B330) **34K15**
- The effects of the scattering of gravitational and electromagnetic wave packets in the gravitational field of a "black hole". (Russian) *Dokl. Akad. Nauk SSSR* **249** (1973), 815-821. (V. G. Pisarenko) **48** #7899 83J53 (85J53)
- Effect of interconvertibility of electromagnetic and gravitational waves in strong external electromagnetic fields and the propagation of waves in the field of a charged "black hole". *Prikl. Mat. Meh.* **38** (1974), no. 6, 1063-1071. (M. Carmeli) **51** #14851 83J35
- The interaction of short gravitational waves with electromagnetic waves in arbitrary external electromagnetic fields. *Ž. Èksper. Teoret. Fiz.* **66** (1974), 1187-1199. (Russian. English summary; translated as Soviet Phys. JETP **39** (1974), 579-585 (1975). (Author's summary) **53** #12454 83J55
- Wave fields outside a collapsing charged star. *Ž. Èksper. Teoret. Fiz.* **67** (1974), no. 4, 1233-1249. (Russian. English summary; translated as Soviet Phys. JETP **40** (1974), no. 4, 613-620 (1975). (Giulio Mattei) **53** #2292 85J35
- Nonlinear excitation mechanism for shock waves in bounded systems with resonance of transverse oscillations. (Russian) *Izv. Akad. Nauk SSSR Meh. Židk. Gaza* **1976**, no. 2, 131-139. (From the summary) **57** #14873 76J35
- The calculation of large deflections of elastic membranes with a rigid centre under the action of a pressure drop. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1977**, no. 2, 93-100. (E. Ungureanu-David) **57** #2044 73J34
- Optimal linear filters for the preliminary processing of patterns. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 5, 127-133. (M. Arató) **53** #2506 94A05 (68A45)
- Finding optimal estimates of a linear functional in the space $L_2(\Omega)$. (Russian) *Pattern recognition (Russian)*, pp. 66-74. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1975. (V. N. Igolkin) **58** #4583 93E20
- See also Pattern recognition, **56** #10212 and Pattern recognition, **58** #32143
- Some models of inverse problems for the interpretations of geothermal anomalies on the basis of the regularization method. (Russian) *Modelling of nonstationary processes (Russian)*, pp. 44-53. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Editors) **58** #20277 86J65
- Normed spaces with maximal bias. (Russian) *Trudy Tomsk. Gos. Univ.* **1973**, Voprosy Mat. Vyp. **5** (1974), 23-38. (T. Figiel) **55** #3755 46B05
- Mathematical questions. No. 3. *Trudy Tomsk. Gos. Univ.* **220** (1975), 16-28. (S. Łojasiewicz) **54** #3400 46F10
- Retracts in topological linear spaces. (Russian) *Mathematical questions, No. 3. Trudy Tomsk. Gos. Univ.* **220** (1975), 67-77. (C. Bessaga) **55** #4182 57A17 (46A99, 52A05)
- Certain questions on the acceleration of the search for solutions in sequential optimization algorithms. (Russian) *Mathematical methods for the study and optimization of systems (Proc. Sem. Theory of Optimal Decisions, Kiev, 1970) (Russian)*, pp. 193-200. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (W. W. Breckner) **52** #7130 65K05
- Successive optimization algorithms in the problem of designing extended objects. (Russian) *Theory of optimal decisions (Russian)*, pp. 56-67. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1973. (RZMat **1974** #4 V550; MR **57** #11725) **65K05**
- (with Mihalevič, V. S.; Šor, N. Z.; Žurbenko, N. G.; Momot, A. I.; Trubin, V. A.; Jun, G. N.) ★Вычислительные методы выбора оптимальных проектных решений. (Russian) [Numerical methods for the selection of optimal design decisions] *Izdat. "Naukova Dumka", Kiev*, 1977. 178 pp. (V. Komkov) **57** #2588 90C50
- Sibirskii, K. S. (with Pleškan, I. I.) Isochronism of a system with quadratic nonlinearities. (Russian) *Mat. Issled.* **6** (1971), no. 4(22), 140-154. (Alan Weinstein) **45** #2262 34C15
- (with Čirkova, I. A.) Discontinuous dispersive dynamical systems. (Russian) *Mat. Issled.* **6** (1971), no. 4(22), 165-175. (D. Newton) **45** #4390 54H20 (34C35)
- The problem of an algebraic integral in the case of the center. (Russian) *Differencial'nye Uravnenija* **8** (1972), 2211-2214. (G. Eisenreich) **47** #3752 34C05
- (with Gasinskaja, E. F.) Affine invariants of a system with quadratic nonlinearities. (Russian) *Differencial'nye Uravnenija* **9** (1973), 1371-1382, 1547. (C. S. Coleman) **50** #670 34A99
- (with Pleškan, I. I.) On the problem of the center for systems with discontinuous right-hand sides. (Russian) *Differencial'nye Uravnenija* **9** (1973), 1817-1825, 1925. (C. S. Coleman) **48** #4405 34C05
- (with Čeban, N. K.) A classification of the Poisson stable points in dispersive dynamical systems. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 801-804. (D. Newton) **48** #3031 54H20 (34C35)
- (with Čirkova, I. A.) On the theory of discontinuous dispersive dynamical systems. (Russian) *Dokl. Akad. Nauk SSSR* **211** (1973), 1302-1305. (O. Hájek) **48** #12493 54H20
- (with Gasinskaja, E. F.; Marinčuk, A. V.) A minimal polynomial basis for the orthogonal invariants of two third order matrices. (Russian) *Mat. Issled.* **8** (1973), no. 4(30), 19-27, 195. (I. Enescu) **51** #8154 15A72
- (with Byčkov, V. P.) ★Развитие математики в Молдавской ССР: краткий очерк. (Russian) [The development of mathematics in the Moldavian SSR: a brief survey] *Izdat. "Știința", Kishinev*, 1974. 47 pp. (Editors) **50** #4207 01A60
- (with Andrunakievič, V. A.; Lazarenko, B. R.; Radaucan, S. I.; Čalyi, G. V.; Drumja, A. V.; Proka, V. E.) For the Academy of Sciences of the USSR, 250 years. (Russian) *Bul. Akad. Științe RSS Moldoven.* **1974**, no. 2, 3-28. (Editors) **50** #12570 01A60 (01A05)
- (with Vulpe, N. I.) Affine classification of a quadratic system. (Russian) *Differencial'nye Uravnenija* **10** (1974), 2111-2124, 2307. (C. E. Langenhop) **50** #13729 34C20
- (with Gasinskaja, E. F.) Construction of all minimal polynomial bases of orthogonal invariants of a pair of 3×3 matrices. (Russian) *Mat. Issled.* **9** (1974), no. 3(33), 53-63, 213. (I. Enescu) **51** #8153 15A72
- ★Introduction to topological dynamics. Translated from the Russian by Leo F. Boron. *Noordhoff International Publishing, Leiden*, 1975. ix + 163 pp. (Editors) **50** #10452 34C35 (54H20, 58Fxx)
- (with Čeban, N. K.) Poisson stability in dispersive dynamical systems. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 8, 1416-1426, 1531. (J. K. Hale) **53** #6029 34C35 (54H20)
- (with Kirnickaja, E. F.; Popa, M. N.) New applications of the affine invariants of a quadratic differential system. (Russian) *Mat. Issled.* **10** (1975), no. 2 (36), 137-149, 284. (C. S. Coleman) **53** #13723a 34C05
- (with Vulpe, N. I.) Affinely invariant coefficient conditions for the topological distinctness of quadratic systems. (Russian) *Mat. Issled.* **10** (1975), no. 3(37), 15-28, 238. (C. S. Coleman) **53** #13723b 34C05
- ★Алгебраические инварианты дифференциальных уравнений и матриц. (Russian) [Algebraic invariants of differential equations and matrices] *Izdat. "Știința", Kishinev*, 1976. 268 pp. (errata insert) (C. S. Coleman) **58** #22728a 34A25 (15A72, 22E05, 34C20, 53A55)
- (with Taku, V. D.) Algebraic invariants of multidimensional differential systems. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 2, 281-291, 379. (C. S. Coleman) **55** #13005 34C20 (34A25)
- (with Dang Din' Bik) Affine classification of a cubic differential system. (Russian) *Studies in algebra, mathematical analysis, and their applications (Russian)*, pp. 43-52, 121. *Izdat. "Știința", Kishinev*, 1977. (Authors' introduction) **58** #22723 34A25 (15A72, 53A45)
- Algebraic invariants of differential equations. (Russian) *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2*, pp. 269-277. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn.*, No. 4N, Akademie-Verlag, Berlin, 1977. (C. S. Coleman) **58** #22728b 34A25 (15A72, 22E05, 34C20, 53A55)
- (with Vulpe, N. I.) Affine classification and concomitants of a quadratic system. (Russian) *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2*, pp. 379-382. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn.*, No. 4N, Akademie-Verlag, Berlin, 1977. (C. S. Coleman) **58** #22728c 34A25 (15A72, 22E05, 34C20, 53A55)
- (with Vulpe, N. I.) Geometric classification of a quadratic differential system. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 5, 803-814, 963. (Stefan Balint) **58** #1415 34C99
- (with Šubě, A. S.) Semi-dynamical systems on the line. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 12, 2207-2212, 2302. (Ju. E. Glikli) **57** #4148 54H20
- (with Erugin, N. P.; Bogdanov, Ju. S.; Izobov, N. A.; Makarov, I. P.) Boris Pavlovič Demidovič. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 12, 2280-2283. (Editors) **58** #16022 01A70
- (with Erugin, N. P.; Bogdanov, Ju. S.; Atahodžev, A. K.; Artykov, A. R.) Isaak Samoilovič Kukles. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 12, 2284-2287. (Editors) **58** #16023 01A70

- (with Popa, M. N.) Affine classification of a system with quadratic nonlinearities and not single valued canonical form. (Russian) *Differentsial'nye Uravneniya* 14 (1978), no. 6, 1028-1033, 1148-1149. (V. A. Golubeva) 58 #17326 34C20 (53A15)
- See also Boundary value problems for differential equations, 58 #1319 and Andrunakievich, V. A.; et al., 58 #10152
- Sibirskii, V. K.** The generalized parametric Steiner problem on graphs. (Russian) *Bul. Akad. Štiinca RSS Moldoven.* 1976, no. 3, 22-26, 92. (Author's summary) 58 #320 05C05
- Sibirsky, K. S.** See Sibirskii, K. S.
- Sibjak, A.** See Szybiak, A.
- Sibley, David S.** Permanent and transitory income effects in a model of optimal consumption with wage income uncertainty. *J. Econom. Theory* 11 (1975), no. 1, 68-82. (Richard Kihlstrom) 53 #12540 90A99 (49C99)
- (with McCabe, James L.) Optimal foreign debt accumulation with export revenue uncertainty. *Internat. Econom. Rev.* 17 (1976), no. 3, 675-686. (Wolfgang Mayer) 56 #7856 90A15
- The demand for labor in a dynamic model of the firm. *J. Econom. Theory* 15 (1977), no. 2, 252-265. (Alberto Chilosi) 56 #17743 90A15
- Sibley, David A.** A metric for weak convergence of distribution functions. *Rocky Mountain J. Math.* 1 (1971), no. 3, 427-430. (J. R. Blum) 47 #2641 60B10
- Certain finite linear groups of prime degree. *J. Algebra* 32 (1974), 286-316. (Edward Cline) 51 #5790 20G05
- Finite linear groups with a strongly self-centralizing Sylow group. I, II. *J. Algebra* 36 (1975), no. 1, 158-166; *ibid.* 36 (1975), no. 2, 319-332. (Henry S. Leonard, Jr.) 52 #3305 20C15
- Exceptional characters of finite groups with a Frobenius subgroup. *Proceedings of the Conference on Finite Groups (Univ. Utah, Park City, Utah, 1975)*, pp. 385-388. Academic Press, New York, 1976. (J. F. Humphreys) 53 #5718 20C15
- Coherence in finite groups containing a Frobenius section. *Illinois J. Math.* 20 (1976), no. 3, 434-442. (W. Feit) 54 #390 20C15
- Height of exceptional character degrees. *Proc. Amer. Math. Soc.* 69 (1978), no. 1, 16-18. (Leo J. Alex) 57 #6166 20C15
- A counterexample in the theory of finite groups. *Proc. Amer. Math. Soc.* 69 (1978), no. 1, 19-20. (W. Feit) 58 #5877 20C15 (20D99)
- Sibner, Lesley M.** (with Sibner, Robert J.) A constructive proof of the Riemann-Roch theorem for curves. *Contributions to analysis (a collection of papers dedicated to Lipman Bers)*, pp. 401-405. Academic Press, New York, 1974. (J. S. Joel) 54 #13150 32L05 (58G10, 14F10)
- Non-linear Hodge theory: compact manifolds. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 121-127. Internat. Atomic Energy Agency, Vienna, 1974. (Józef Dodziuk) 55 #9134 58A10
- (with Sibner, Robert J.) A note on the Atiyah-Bott fixed point formula. *Pacific J. Math.* 53 (1974), 605-609. (J. S. Joel) 57 #4258 58G05 (32L05)
- (with Sibner, Robert J.) A maximum principle for compressible flow on a surface. *Proc. Amer. Math. Soc.* 71 (1978), no. 1, 103-108. (Hsin-Yang Yeh) 58 #2846 58A10 (58G10)
- Sibner, Robert J.** An elementary proof of a theorem concerning infinitely connected domains. *Proc. Amer. Math. Soc.* 37 (1973), 459-461. (H. Renggli) 46 #9317 30A30
- (with Sibner, Lesley M.) A constructive proof of the Riemann-Roch theorem for curves. *Contributions to analysis (a collection of papers dedicated to Lipman Bers)*, pp. 401-405. Academic Press, New York, 1974. (J. S. Joel) 54 #13150 32L05 (58G10, 14F10)
- Non-linear Hodge theory: manifolds with boundary. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 129-135. Internat. Atomic Energy Agency, Vienna, 1974. (Józef Dodziuk) 55 #9135 58A10
- (with Sibner, Lesley M.) A note on the Atiyah-Bott fixed point formula. *Pacific J. Math.* 53 (1974), 605-609. (J. S. Joel) 57 #4258 58G05 (32L05)
- (with Sibner, Lesley M.) A maximum principle for compressible flow on a surface. *Proc. Amer. Math. Soc.* 71 (1978), no. 1, 103-108. (Hsin-Yang Yeh) 58 #2846 58A10 (58G10)
- Sibold, K.** (with Clark, T. E.; Piguet, O.) Renormalization theory in superspace. *Ann. Physics* 109 (1977), no. 2, 418-467. (Authors' summary) 58 #14539 81J30
- Sibony, Daniel** Le théorème de James. *Séminaire de Théorie du Potentiel, dirigé par M. Brelot, G. Choquet et J. Deny: 1967/68, Exp. 4, 5 pp.* Secrétariat mathématique, Paris, 1969. (From the author's introduction) 57 #7118 46A99
- Sibony, Moïse** (with Bardos, Claude) Sur l'approximation d'une classe de problèmes d'évolution non linéaires. *Séminaire Lions, 1 (1968/1969), Analyse numérique, Exp. 2, 14 pp.* Secrétariat Mathématique, Paris, 1969. (J. Frehse (Zbl 201, 180)) 51 #1505 47H15
- Contrôle des systèmes gouvernés par des équations aux dérivées partielles. *Séminaire Lions, 1: (1968/1969), Analyse numérique, Exp. 3, 40 pp.* Secrétariat Mathématique, Paris, 1969. (J. H. George) 46 #4727 65K05
- Méthodes itératives pour les équations et inéquations aux dérivées partielles non linéaires de type monotone. (English summary) *Calcolo* 7 (1970), 65-183. (Zbl 225 #35010) 58 #31952 65P05
- Contrôle des systèmes gouvernés par des équations aux dérivées partielles. *Rend. Sem. Mat. Univ. Padova* 43 (1970), 277-339. (From the author's introduction) 54 #1044 49A20 (35B35)
- (with Brézis, Haïm) Équivalence de deux inéquations variationnelles et applications. *Arch. Rational Mech. Anal.* 41 (1971), 254-265. (M. Biroli) 49 #11070 35Q99 (73.47)
- Sur l'approximation d'équations et inéquations aux dérivées partielles non linéaires de type monotone. *J. Math. Anal. Appl.* 34 (1971), 502-564. (From the author's introduction) 54 #8375 47H15
- Some numerical techniques for optimal control governed by partial differential equation. *Numerische Methoden bei Optimierungsaufgaben (Tagung, Math. Forschungsinst., Oberwolfach, 1971)*, pp. 123-136. Internat. Schriftenreihe Numer. Math., Band 17, Birkhäuser, Basel, 1973. (Author's introduction) 58 #3450 65K05 (49J15)
- (with Geymonat, Giuseppe) Approximation de certaines équations paraboliques non linéaires. *Calcolo* 13 (1976), no. 2, 213-256. (Rudolf Gorenflo) 56 #13150 65N30 (35K60, 65M15)
- Sur la stabilité des inégalités paraboliques de type monotone. (English summary) *Theory of nonlinear operators (Proc. Fourth Internat. Summer School, Acad. Sci., B. 1975)*, pp. 239-264. Abh. Akad. Wiss. DDR Abt. Math.-Natur.-Tech., Jahrgang 1975, Akademie-Verlag, Berlin, 1977. (G. Geymonat) 58 #29284 35K99 (47H15, 65N30)
- Sur une méthode itérative de résolution de problèmes aux limites elliptiques linéaires. (Czech and loose Russian summaries) *Apl. Mat.* 22 (1977), no. 4, 291-303. (Szeptycki) 56 #10045 65N10 (35J05)
- Sibony, Nessim** (with Ferrier, Jean-Pierre) Approximation polynomiale pondérée sous-variété totalement réelle de C^n . *Séminaire Choquet, 10e année (1970/71), Initiation à l'analyse, Fasc. 2, Exp. No. 22, 9 pp.* Secrétariat Mathématique, Paris, 1971. (Ed.) 57 #16685 32E30
- Approximation pondérée de fonctions holomorphes dans un ouvert de C^n . *Séminaire Choquet, 10e année (1970/71), Initiation à l'analyse, Fasc. 2, Exp. No. 22, 9 pp.* Secrétariat Mathématique, Paris, 1971. (Editors) 57 #16687 32E30
- Approximation pondérée de fonctions holomorphes dans un ouvert de C^n . *Acad. Sci. Paris. Sér. A-B* 273 (1971), A503-A505. (B. M. Weinstock) 45 #5432 32E30
- Prolongement analytique des fonctions holomorphes bornées. *C. R. Acad. Sci. Sér. A-B* 275 (1972), A973-A976. (H. Kerner) 47 #7062 32D15 (32F05)
- (with Ferrier, Jean-Pierre) Approximation polynomiale pondérée sur une sous-variété totalement réelle de C^n . *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A175-A177. (B. M. Weinstock) 47 #8907 32E30
- Approximation polynomiale pondérée sur un domaine d'holomorphe de C^n . *Acad. Sci. Paris. Sér. A-B* 276 (1973), A249-A252. (B. M. Weinstock) 48 #32E30
- Prolongement analytique des fonctions holomorphes bornées. *Séminaire Choquet, 10e année (1970/71), Initiation à l'analyse, Fasc. 2, Exp. No. 22, 9 pp.* Secrétariat Mathématique, Paris, 1971. (Editors) 57 #16687 32E30
- Approximation de fonctions à valeurs dans un Fréchet, par des fonctions holomorphes. (English summary) *Ann. Inst. Fourier (Grenoble)* 24 (1974), no. 4, 167-179 (1975). (B. M. Weinstock) 51 #934 32E30 (46G20)
- Fibrés holomorphes et métrique de Carathéodory. *C. R. Acad. Sci. Paris Sér. A* (1974), 261-264. (Martin Schottenloher) 50 #5037 32L05 (32H15, 32E10)
- (with Wermer, John) Generators for $A(\Omega)$. *Trans. Amer. Math. Soc.* 194 (1974), 103-114. (B. M. Weinstock) 54 #7856 32E25 (46J15)
- Un exemple de compact polynomialement convexe dans C^2 . *Bull. Soc. France* 103 (1975), no. 2, 141-147. (E. L. Stout) 52 #8498 32E20 (46J15)
- (with Hakim, Monique) Frontière de Šilov et spectre de $A(\bar{D})$ pour des domaines faiblement pseudoconvexes. (English summary) *C. R. Acad. Sci. Paris Sér. A* (1975), no. 22, Aii, A959-A962. (R. Michael Range) 52 #11113 32E25 (32F15)
- Prolongement des fonctions holomorphes bornées et métrique de Carathéodory. *Invent. Math.* 29 (1975), no. 3, 205-230. (Y.-T. Siu) 52 #6029 32D05 (32H15)
- Noyau de Bergman et applications biholomorphes dans des domaines strictement pseudo-convexes (d'après Charles Fefferman). *Séminaire Bourbaki (1974/1975: Exposé Nos. 453-470), Exp. No. 463, pp. 145-158. Lecture Notes in Math., Vol. 514. Springer, Berlin, 1976. (John E. Fornaess) 56 #12328 32H10 (32F15)*
- Multi-dimensional analytic structure in the spectrum of a uniform algebra. *Structure of analytic functions (Sem. Functional Anal. and Function Theory, Kristiansand, 1973-1974), Lecture Notes in Math., Vol. 512, Springer, Berlin, 1976. (T. W. Gamelin) 58 #30277 46J15 (32E25)*
- Approximation polynomiale pondérée dans un domaine d'holomorphie d'ordre n . (English summary) *Ann. Inst. Fourier (Grenoble)* 26 (1976), no. 2, x, 71-99. (B. M. Weinstock) 55 #3317 32E30
- (with Ferrier, Jean-Pierre) Approximation pondérée sur une sous-variété totalement réelle de C^n . (English summary) *Ann. Inst. Fourier (Grenoble)* 26 (1976), no. 2, 101-115. (B. M. Weinstock) 55 #3318 32E30
- Valeurs au bord de fonctions holomorphes et ensembles polynomialement convexes. *Journées sur les Fonctions Analytiques (Toulouse, 1976)*, pp. 300-313. *Lecture Notes in Math., Vol. 578, Springer, Berlin, 1977. (B. M. Weinstock) 58 #17203 32E20 (32F15)*
- Principe du maximum sur une variété C^1 et équations de Monge-Ampère complexes. *Séminaire Pierre Lelong (Analyse) (année 1975/76)*, pp. 14-27. *Lecture Notes in Math., Vol. 578, Springer, Berlin, 1977. (G. M. Henkin) 58 #1255 32F05*
- (with Hakim, Monique) Quelques conditions pour l'existence de fonctions psh sur des domaines pseudoconvexes. *Duke Math. J.* 44 (1977), no. 2, 399-406. (John E. Fornaess) 56 #15988 32F15 (32E25)
- Sibson, Robin** (with Jardine, Nicholas) ★Mathematical taxonomy. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons Ltd., London-New York-Sydney, 1971. xvii + 286 pp. (D. Vaida) 55 #14258 92A05
- Order invariant methods for data analysis. With discussion by D. G. Kendall, Gower, J. S. Ross, J. E. Doran, P. A. K. Covey-Crump, G. C. Wall, D. R. Cox, Prentice, R. M. Cormack and Carl-Axel Moberg, and a reply by Robin Sibson. *J. Statist. Soc. Ser. B* 34 (1972), 311-349. (A. D. McLaren) 49 #1628 62-02 (62N01)
- SLINK: an optimally efficient algorithm for the single-link cluster method. *Comput. J.* 16 (1973), 30-34. (Author's summary) 47 #9915 68A45
- D_A -optimality and duality. *Progress in statistics (European Meeting Statist. Budapest, 1972)*, Vol. II, pp. 677-692. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974. (J. Kiefer) 51 #11860 62K05*
- (with Kenny, Alan) Coefficients in D -optimal experimental design. *J. Roy. Statist. Soc. Ser. B* 37 (1975), 288-292. (Valery Fedorov) 52 #2069 62K05
- (with McGinley, W. G.) Dissociated random variables. *Math. Proc. Cambridge Philos. Soc.* 77 (1975), 185-188. (P. Révész) 51 #6940 60F15
- Distance distributions. *Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the European Meeting of Statisticians (Tech. Univ. Prague, Prague, 1974)*, Vol. 1, pp. 527-530. Reidel, Dordrecht, 1977. (J. M. Steele) 58 #13303 60F15 (62H30)

- (with Green, P. J.) Computing Dirichlet tessellations in the plane. *Comput. J.* **21** (8), no. 2, 168-173. (Heiko Harborth) **58** #5300 05B45 (50B30, 52A45)
 See also Laycock, P. J., **50** #3427; Wynn, Henry P., **50** #3479 and Multivariate statistical methods: among-groups covariation, **51** #14407
- Leon H. (with Comstock, Craig) Stochastic differential equations and their application to randomly time-varying control systems. *Internat. J. Control* **25** (1977), no. 47-656. (Ludwig Arnold) **56** #18085 93E99
 (with Adomian, G. A.) Stochastic Green's formula and application to stochastic differential equations. *J. Math. Anal. Appl.* **60** (1977), no. 3, 743-746. (D. Kannan) #17823 60H10 (34F05)
- Masaaki Generalized inverses of mappings. *Sankhyā Ser. A* **33** (1971), 301-310. J. Plemmons **47** #387 (E **55** #5776) 20M20 (15A09)
 (with Shinozaki, Nobuo; Tanabe, Kunio) Numerical algorithms for the Moore-Penrose inverse of a matrix: direct methods. *Ann. Inst. Statist. Math.* **24** (1972), 1-203. (R. P. Tewarson) **48** #3237 65F20
 (with Yanagimoto, Takemi) Stochastically larger component of a random vector. *Ann. Inst. Statist. Math.* **24** (1972), 259-269. (J. H. Stapleton) **48** #12685 62E99
 (with Yanagimoto, Takemi) Test of symmetry of a one-dimensional distribution against positive biasedness. *Ann. Inst. Statist. Math.* **24** (1972), 423-434. (I. R. Savage) #11627 62G10
 (with Shinozaki, Nobuo; Tanabe, Kunio) Numerical algorithms for the Moore-Penrose inverse of a matrix: iterative methods. *Ann. Inst. Statist. Math.* **24** (1972), 621-629. **48** #3239 65F30
 The Azumaya-Drazin pseudoinverse and the spectral inverses of a matrix. *Sankhyā Ser. A* **35** (1973), 95-102. (A. R. Amir-Moéz) **50** #347 15A09
 (with Shinozaki, Nobuo) The reverse order law $(AB)^- = B^-A^-$. *Linear Algebra and Appl.* **9** (1974), 29-40. (Donald W. Robinson) **50** #7200 15A09
 (with Shinozaki, Nobuo) Consistency of a pair of matrix equations with an application. *Keio Engrg. Rep.* **27** (1975), no. 10, 141-146. (A. R. Amir-Moéz) **52** #3191 15A24
 Corrigendum: "Generalized inverses of mappings" (Sankhyā Ser. A **33** (1971), 301-310). *Sankhyā Ser. A* **37** (1975), no. 2, 309. (Editors) **55** #5776 20M20
 (with Yanagimoto, Takemi) Isotonic tests for spread and tail. *Ann. Inst. Statist. Math.* **28** (1976), no. 3, 329-342. (T. Robertson) **55** #6683 62G10
 (with Yanagimoto, Takemi) Test of symmetry of a bivariate distribution. *Sankhyā Ser. A* **38** (1976), no. 2, 105-115. (M. Hušková) **57** #17938 62G10
- Ma, Yasutaka A boundary value problem in the complex plane. *Analytic theory of differential equations* (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1970), pp. 28-144. *Lecture Notes in Math.*, Vol. 183, Springer, Berlin, 1971. (Richard Brown) **52** #14431 34A20
 Perturbation at an irregular singular point. *Japan-United States Seminar on Ordinary Differential and Functional Equations* (Kyoto, 1971), pp. 148-168. *Lecture Notes in Math.*, Vol. 243, Springer, Berlin, 1971. (D. A. Lutz) **52** #11163 34A20
 (with Harris, William A., Jr.) Asymptotic distribution of eigenvalues. *Ordinary differential equations* (Proc. Conf., Math. Res. Center, Naval Res. Lab., Washington, D. C., 1971), pp. 121-125. *Academic Press*, New York, 1972. (Walter Eberhard) **54** #10736 34B25
 (with Cameron, Robert H.) An entire solution of the functional equation $(\lambda + f(\omega))(\omega^{-1}\lambda) = 1$, $(\omega^5 = 1)$. *Symposium on Ordinary Differential Equations* (Univ. Minnesota, Minneapolis, Minn., 1972; dedicated to Hugh L. Turrill), pp. 194-202. *Lecture Notes in Math.*, Vol. 312, Springer, Berlin, 1973. (D. A. Lutz) **52** #11162 44A20
 (with Hsieh, Po Fang) On distribution of zeros of solutions of a second order linear differential equation with polynomial coefficients. *J. Math. Anal. Appl.* **43** (1973), 101-113. (H. A. DeKleine) **47** #3755 34C10 (34A20)
 ★Uniform simplification in a full neighborhood of a transition point. *Memoirs of the American Mathematical Society*, No. 149. *American Mathematical Society*, Providence, R. I., 1974. vi + 106 pp. (C. A. Swanson) **55** #13020 34E05 (34C20)
 (with Kimura, Toshihisa) Essential singular points of solutions of an algebraic differential equation. *J. Reine Angew. Math.* **272** (1974), 127-149. (R. Gérard) **51** #8508 34A20 (14B99, 57D30)
 ★Global theory of a second order linear ordinary differential equation with a polynomial coefficient. *North-Holland Mathematics Studies*, Vol. 18. *North-Holland Publishing Co.*, Amsterdam-Oxford; *American Elsevier Publishing Co., Inc.*, New York, 1975. xv + 290 pp. ISBN 0-7204-2609-X (W. Wasow) **58** #6561 34E05
 Subdominant solutions admitting a prescribed Stokes phenomenon. *International Conference on Differential Equations* (Univ. Southern California, Los Angeles, Calif., 1974), pp. 709-738. *Academic Press*, New York, 1975. (Peter Smith) **53** #13691 44A20
 (with Kimura, Toshihisa) On a method of solving the initial value problem for the wave equation. *Proc. Amer. Math. Soc.* **50** (1975), 205-215. (A. D. Solomon) **51** #6108 35C15 (35L05)
 A study on generation of nonuniqueness. *Dynamical systems* (Proc. Internat. Sympos., Brown Univ., Providence, R. I., 1974), Vol. II, pp. 243-248. *Academic Press*, New York, 1976. (From the text) **58** #28902 34D10 (34C25)
 Asymptotic methods. *Studies in ordinary differential equations*, pp. 236-276. *Stud. in Math.*, Vol. 14, Math. Assoc. of America, Washington, D. C., 1977. (W. Wasow) **57** #16869 34E05
 Stokes phenomena. *Bull. Amer. Math. Soc.* **83** (1977), no. 5, 1075-1077. (R. Gérard) **56** #720 34A20 (58A15)
 (with Gérard, Raymond) Étude de certains systèmes de Pfaff au voisinage d'une singularité. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 1, A57-A60. (Authors' summary) **55** #1374 58A15 (34A20)
 (with Kato, Junji) Catastrophic deformation of a flow and non-existence of almost periodic solutions. *J. Fac. Sci. Univ. Tokyo Sect. 1A Math.* **24** (1977), no. 2, 267-279. (R. K. Miller) **57** #6636 34C25 (58F10)
 See also Symposium: Ordinary Differential Equations, **51** #6007
- Michel (with Coletta, Michel) Information utile dans les pseudoquestionnaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 8, A443-A446. (Authors' summary) **56** #2651 94A15
- Sicha, Jeffrey ★A metaphysics of elementary mathematics. *The University of Massachusetts Press*, Amherst, Mass., 1974. x + 444 pp. (Robert P. McArthur) **54** #9921 00A25 (02A05)
- Sichel, M. (with Yin, Y. K.) Viscous transonic flow in relaxing gases. (German and Russian summaries) *Z. Angew. Math. Mech.* **56** (1976), no. 7, 315-329. (M. Honda) **54** #1860 76.41 (76.35)
- Sichler, Jiri One-to-one and onto homomorphisms of bounded lattices. *Algebra Universalis* **1** (1971/72), 267. (Editors) **45** #5058 08A05 (06A20)
 Nonconstant endomorphisms of lattices. *Proc. Amer. Math. Soc.* **34** (1972), 67-70. (G. Georgescu) **45** #126 06A20
 Weak automorphisms of universal algebras. *Algebra Universalis* **3** (1973), 1-7. (M. Gould) **48** #8354 08A25
 Testing categories and strong universality. *Canad. J. Math.* **25** (1973), 370-385. (A. Pultr) **47** #6805 18B15
 (with Chvátal, Václav) Chromatic automorphisms of graphs. *J. Combinatorial Theory Ser. B* **14** (1973), 209-215. (M. E. Watkins) **47** #8336 05C15
 (with Newman, M. F.) Free products of Hopf groups. *Math. Z.* **135** (1973/74), 69-72. (K. Appel) **48** #11336 20F25
 (with Fried, Ervin) Homomorphisms of commutative rings with unit element. *Pacific J. Math.* **45** (1973), 485-491. (P.-A. Grillet) **49** #270 13A99 (20M15)
 (with Grätzer, George) Agassiz sum of algebras. *Colloq. Math.* **30** (1974), 57-59. (V. Căzănescu) **51** #5450 08A10
 (with Grätzer, George) Free products of Hopfian lattices. Collection of articles dedicated to the memory of Hanna Neumann, VI. *J. Austral. Math. Soc.* **17** (1974), 234-245. (L. Beran) **50** #4420 06A20
 (with Grätzer, George) On generating free products of lattices. *Proc. Amer. Math. Soc.* **46** (1974), 9-14. (R. P. Dilworth) **49** #8907 06A20
 (with Fried, Ervin) Integral domains form a universal category. *Proceedings of the Conference on Algebraic Aspects of Combinatorics* (Univ. Toronto, Toronto, Ont., 1975), pp. 169-181. *Congressus Numerantium*, No. XIII, Utilitas Math., Winnipeg, Man., 1975. (A. Pultr) **55** #3023 18B15 (16A02)
 Note on free products of Hopfian lattices. *Algebra Universalis* **5** (1975), no. 1, 145-146. (L. Beran) **53** #5390 06A20
 (with Grätzer, George) Free decompositions of a lattice. *Canad. J. Math.* **27** (1975), 276-285. (Evelyn Nelson) **51** #5430 06A20
 (with Adams, M. E.) V-free products of Mopfian lattices. *Math. Z.* **151** (1976), no. 3, 259-262. (L. Beran) **56** #5373 06A20
 (with Adams, M. E.) Bounded endomorphisms of lattices of finite height. *Canad. J. Math.* **29** (1977), no. 6, 1254-1263. (V. S. Krishnan) **56** #5374 06A20
 (with Fried, Ervin) Homomorphisms of integral domains of characteristic zero. *Trans. Amer. Math. Soc.* **225** (1977), 163-182. (A. Pultr) **54** #10372 18B15 (16A02)
 (with Adams, M. E.) A note on finitely generated Hopfian lattices. *Algebra Universalis* **8** (1978), no. 3, 381-383. (R. Beazer) **57** #9616 06A20
 (with Adams, M. E.) Homomorphisms of bounded lattices with a given sublattice. *Arch. Math. (Basel)* **30** (1978), no. 2, 122-128. (Pavol Hell) **58** #21876 06A20 (05C25)
- Siciak, Józef Separately analytic functions and envelopes of holomorphy of some lower dimensional subsets of C^n . *Séminaire Pierre Lelong (Analyse)*, (année 1967-1968), pp. 21-32. *Lecture Notes in Math.*, Vol. 71, Springer, Berlin, 1968. (A. Hirschowitz) **51** #10687 32D10
 Analytic functions in topological vector spaces. (Polish and Russian summaries) *Proceedings of the Fifth Conference on Analytic Functions* (Univ. Mariae Curie-Skłodowska, Lublin, 1970). *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **22-24** (1968/70), 165-166 (1972). (Editors) **49** #5843 46G20 (32A99)
 A generalization of a polynomial lemma of Leja. *Ann. Polon. Math.* **25** (1971/72), 149-156. (F. T. Birtel) **46** #330 30A06
 (with Bochnak, Jacek) Remarks on domains of holomorphy in topological vector spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 9-12. (F. T. Birtel) **45** #592 32D05 (46A05)
 (with Bochnak, Jacek) Polynomials and multilinear mappings in topological vector spaces. *Studia Math.* **39** (1971), 59-76. (S. Dineen) **47** #2364 46G05 (32A99, 47H99)
 (with Bochnak, Jacek) Analytic functions in topological vector spaces. *Studia Math.* **39** (1971), 77-112. (S. Dineen) **47** #2365 46G05 (32A99, 47H99)
 Approximation of functions of several complex variables by polynomials. (Polish) *Wiadom. Mat.* (2) **12**, no. 2, 285-294 (1971). (Editors) **57** #3454 32E30
 A polynomial lemma and analytic mappings in topological vector spaces. *Séminaire Pierre Lelong (Analyse)*, (année 1970-1971), pp. 131-142. *Lecture Notes in Math.*, Vol. 275, Springer, Berlin, 1972. (Ph. Noverraz) **52** #1307 46G99
 (with Ligočka, Ewa) Weak analytic continuation. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 461-466. (J. Horváth) **47** #5896 58B10 (32K05, 46G20)
 Weak analytic continuation from compact subsets of C^n . *Proceedings on Infinite Dimensional Holomorphy* (Internat. Conf., Univ. Kentucky, Lexington, Ky., 1973), pp. 92-96. *Lecture Notes in Math.*, Vol. 364, Springer, Berlin, 1974. (Editors) **57** #16679 32D15
 Holomorphic continuation of harmonic functions. Collection of articles dedicated to the memory of Tadeusz Ważewski. *Ann. Polon. Math.* **29** (1974), 67-73. (Stephan Vági) **50** #5017 32D15 (31B05, 43A85)
 (with Nguyen Thanh Van) Remarques sur l'approximation polynomiale. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 95-98. (B. M. Weinstock) **50** #643 32E30
 An extremal problem in a class of plurisubharmonic functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 8, 563-568. (Guy Lavelle) **55** #8410 32F05
 A generalization of Ostrowski's theorem on lacunary power series. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 8, 569-574. (L. R. Hunt) **54** #10665 32D15
 (with Rusek, Kamil) Maximal analytic extensions of Riemann domains over topological vector spaces. *Infinite dimensional holomorphy and application* (Proc. Internat. Sympos., Univ. Estadual de Campinas, São Paulo, 1975), pp. 347-377.

- 38

- 1-A793. (Horst Tietz) 53 #5884 30A82
(with Malliavin, Paul) Classes de fonctions monogènes et approximation par des mes d'exponentielles sur un arc rectifiable de C . (English summary) *C. R. Acad. Paris Sér. A-B* 282 (1976), no. 18, A1091-A1094. (Hors Tietz) 53 #8434 82
(with Ferrier, Jean-Pierre) Convexité polynomiale et approximation pondérée sur aines sous-variétés réelles de C^n . *J. Math. Pures Appl.* (9) 55 (1976), no. 4, 445-466. R. Shackell) 55 #8408 32E20 (32E30)
See also Ferrier, Jean-Pierre, 57 #16684
Rafat N. A note on Fourier-Stieltjes coefficients. *Bull. Math. Soc. Sci. Math. R. S. umanie (N.S.)* 15(63) (1971), no. 4, 481-484 (1973). (Gokulananda Das) 48 #789 A24
Some properties of Fourier-Stieltjes coefficients of a function of Wiener's class V_p . *Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* 16(64) (1972), no. 1, 105-112 (1973). (ordon Woodward) 48 #9224 42A16
The order of Fourier coefficients of function of higher variation. *Proc. Japan Acad.* (1972), 569-572. (R. A. Askey) 48 #783 42A16
On density of Fourier coefficients. *Canad. Math. Bull.* 16 (1973), 93-103. (ung-ming Chen) 48 #4606 42A16
Determination of jump of a function in V_p by means of its Fourier-Stieltjes coefficients. *Rend. Circ. Mat. Palermo* (2) 23 (1974), no. 2-3, 135-144 (1975). (G. M. tersen) 54 #779 40C05
Integrability of a function of Wiener's class. *Bull. Math. Soc. Sci. Math. R. S. umanie (N.S.)* 19(67) (1975), no. 3-4, 365-370 (1977). (M. Bożejko) 56 #3553 A32
A note on a theorem of Alexits and Králík. *Acta Math. Acad. Sci. Hungar.* 27 (1976), no. 1-2, 77-79. (S. Aljančić) 53 #13980 42A32
Fourier-Young coefficients of a function of Wiener's class V_p . *Canad. J. Math.* 28 (1976), no. 4, 753-759. (Y. Katznelson) 58 #17676 42A16
A note on convergence of Fourier series of a function on Wiener's class V_p . *Canad. Math. Bull.* 20 (1977), no. 2, 243-247. (Masako Izumi) 56 #16240 42A20
A strengthened form of a theorem of Zygmund on integrability of a function. *J. Math. Anal. Appl.* 60 (1977), no. 1, 87-92. (P. G. Rooney) 56 #12749 42A16
qui, A. (with Prasad, Y. N.) Integral relations involving Fox's H -function. *Jñānabha Sect. A* 4 (1974), 77-86. (R. S. Dahiya) 52 #3630 33A35
(with Prasad, Y. N.) Some theorems on a double integral transform. *Jñānabha Sect. A* 4 (1974), 119-127. (C. Fox) 52 #3897 44A30
(with Prasad, Y. N.) Application of generalized function in the production of heat a cylinder. *Defence Sci. J.* 25 (1975), no. 3, 107-114. (Authors' summary) 57 #12933 33A35 (35K05)
(with Prasad, Y. N.) On some integral relations involving Fox's H -function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 18 (1975), no. 2, 115-121. (U. C. Jain) 52 #11139 33A35
(with Prasad, Y. N.) Some operational techniques in the theory of special functions. *Indian J. Pure Appl. Math.* 7 (1976), no. 7, 769-776. (W. A. Al-Salam) 58 #23374 44A15 (33A65)
(with Prasad, Y. N.) Fourier series for H -function of two variables. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 19 (1976), no. 4, 303-310. (R. K. Saxena) 56 #692 33A30
(with Prasad, Y. N.) Application of generalized functions of variables in vibrations of a circular membrane. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 20 (1977), no. 2, 113-122. (Authors' summary) 57 #738 33A35
(with Prasad, Y. N.) Fourier series for H -function of two variables. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 20 (1977), no. 2, 173-181. (Authors' summary) 56 #16015 33A35
qui, A. H. See Siddiqi, A. H.
qui, J. A. See Siddiqi, J. A.
qui, M. Moinuddin (with Eicker, Patrick J.; Mielke, Paul W., Jr.) A matrix occupancy problem. *Ann. Math. Statist.* 43 (1972), 988-996. (P. Holgate) 46 #929 OC05
(with Biondini, Ronald W.) Record values in Markov sequences. *Statistical inference and related topics (Proc. Summer Res. Inst. Statist. Inference for Stochastic Processes, Indiana Univ., Bloomington, Ind., 1974, Vol. 2; dedicated to Z. W. Birnbaum)*, pp. 291-352. Academic Press, New York, 1975. (George L. O'Brien) 52 #12081 DJ05
(with Biondini, Ronald W.) The joint distribution of record values and inter-record mes. *Ann. Probability* 3 (1975), no. 6, 1012-1013. (George L. O'Brien) 52 #15616 OF05
See also Proceedings: Session of the International Statistical Institute, 49 #8143
nikov, V. M. Some k -valued pseudo-random sequences and nearly equidistant codes. *Problemy Peredači Informacii* 5 (1969), no. 1, 16-22 (Russian); translated as Problems of Information Transmission 5 (1969), no. 1, 12-16. (Author's summary) 46 #5041 4A10
The mutual correlation of sequences. (Russian) *Dokl. Akad. Nauk SSSR* 196 (1971), 531-534. (C. Reischer) 47 #4713 94A10
The reciprocal correlation of sequences. (Russian) *Problemy Kibernet.* No. 24 (1971), 15-42. (C. Reischer) 45 #6511 94A10
The spectrum of weights of binary Bose-Chaudhuri-Hocquenghem codes. (Russian) *Problemy Peredači Informacii* 7 (1971), no. 1, 14-22. (I. Vajda) 48 #10657 94A10
The densest packing of balls on the surface of the n -dimensional Euclidean sphere, and the number of vectors of a binary code with prescribed code distance. (Russian) *Dokl. Akad. Nauk SSSR* 213 (1973), 1029-1032. (E. Jucović) 48 #12319 52A45 94A10
New estimates for the closest packing of spheres in n -dimensional Euclidean space. (Russian) *Mat. Sb. (N.S.)* 95(137) (1974), 148-158, 160. (E. Hertel) 50 #14502 2A45
Upper bounds for the number of points of a binary code with a given code distance. (Russian) *Problemy Peredači Informacii* 10 (1974), no. 2, 43-51. (Author's summary) 7 #19081 94A10
Upper bounds on the cardinality of a binary code with a given minimum distance. Translated from the Russian by A. M. Odlyzko (Problemy Peredači Informacii 10 (1974), no. 2, 43-51). *Information and Control* 28 (1975), no. 4, 292-303. (Editors) 52 #12974 94A10
Sidenblad, Paul See Notes and comments from Math. Mag., 52 #3
Sidenko, M. I. Construction and an application of certain systems of functions. (Russian) *Methods of approximate solution of differential and integral equations* (Russian), pp. 273-286. Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973. (Editors) 58 #1339 34A50 (65L05)
The representation of the functions of an L -basis. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 106-112, 143. (A. A. Juščenko) 49 #10952 34A30
(with Burlachenko, V. P.) Approximation according to V. K. Dzjadky's method of the solution of a certain problem connected with an equation of hyperbolic type. (Russian) *Methods for the quantitative and qualitative study of differential and integral equations* (Russian), pp. 5-19. Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1975. (From the authors' introduction) 53 #14925 65M05
(with Burlachenko, V. P.) The approximation, by the method of V. K. Dzjadky, of solutions of problems for equations of hyperbolic type. (Russian) *Differencial'nye Uravnenija* 12 (1976), no. 5, 857-864, 957. (A. Pelczar) 54 #10867 35L15 (35A35)
Sidenko, M. R. Nonlinear problems for a system of two heat-radiating gray bodies that are separated by a diathermal medium. (Russian. English summary) *Boundary value problems of mathematical physics* (Russian), pp. 169-187. Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971. (I. R. Juhnovskii) 50 #9184 (EA 51) 80.35
Investigation of a certain heat conduction problem in a system of two bodies when there is radiant heat exchange between them. (Russian. English summary) *Nonlinear boundary value problems of mathematical physics* (Russian), pp. 75-103. Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973. (A. Borzymowski) 51 #14762 80.35
A nonstationary problem of heat conductivity in a system of diathermally separated bodies. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 492-501, 574. (E. Sánchez Palencia) 49 #9425 35K60
(with Berezovskaja, L. M.; Leženin, F. F.) Solution of the stationary problem of heat conduction with radiation for an infinite hollow cylinder with a linear radiation source. (Russian. English summary) *Boundary value problems of the theory of heat conduction* (Russian), pp. 69-92. Izdanie Inst. Mat. Akad. Ukrain. SSR, Kiev, 1975. (B. Vujanovic) 53 #12232 80.35
The stabilization as $t \rightarrow \infty$ of the solution of an initial boundary value problem of heat conduction with a boundary condition for radiation. (Russian) *Analytic, numerical and analog methods in heat conduction problems* (Russian), pp. 97-114, 238. Izdat. "Naukova Dumka", Kiev, 1977. (V.-V. Olariu) 57 #16929 35B40 (35K05)
Some mathematical models for the calculation of the temperature field of a cylindrical emitter of a thermo-emission transformer of energy. (Russian) *Nonlinear differential equations in applied problems* (Russian), pp. 48-65, 213. Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1977. (Editors) 58 #14434 80.35
See also Linear and nonlinear boundary value problems, 50 #9466
Sidenko, N. I. See Sidenko, M. I.
Sidenko, N. R. See Sidenko, M. R.
Sideriades, Lefteri Sur une méthode balisto-stroboscopique de détermination approchée des solutions périodiques des équations différentielles non linéaires en régime autonome. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 347-349. (T. Ura) 50 #13715a 34C05
Sur une méthode balisto-stroboscopique de détermination approchée des solutions périodiques des équations différentielles non linéaires en régime autonome. Application à l'équation de Van der Pol. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 375-378. (T. Ura) 50 #13715b 34C05
(with Jaumes, Gérard) Sur la classification des points singuliers d'une récurrence non linéaire d'ordre 3. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 7, A471-A473. (T. Ura) 52 #6113 34C35 (93D99)
Sur une classe d'équations différentielles non linéaires en régime autonome. Recherche des solutions périodiques par une méthode balisto-stroboscopique. Application à l'équation de van der Pol. (Russian summary) *Internat. J. Non-Linear Mech.* 10 (1975), no. 3-4, 155-166. (C. Carton-Lebrun) 52 #8557 34C05
Sur la détermination d'un système continu non linéaire associé à un système discret non linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 6, A345-A348. (Author's summary) 56 #4938 93A99
Sur une classe de récurrences conservatives du deuxième ordre: distribution des cycles et notions de stabilité. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 3, A207-A209. (Author's summary) 55 #13496 58F10 (93D05)
(with Hayek, Alfred; Jitapunkul, Somchai) Sur deux exemples numériques de récurrences conservatives du deuxième ordre. *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 4, A261-A264. (Authors' summary) 55 #2266 93D05
Sideridis, A. (with Levin, David; Papamichael, N.) On the use of conformal transformations for the numerical solution of harmonic boundary value problems. *Comput. Methods Appl. Mech. Engrg.* 12 (1977), no. 2, 201-218. (Authors' summary) 58 #13795 65N35 (65E05)
Sidharth, B. G. Spectra of n -electron atoms for certain potentials. *Bull. Calcutta Math. Soc.* 67 (1975), no. 3, 137-145. (Francesco Guerra) 58 #14690 81.47
On the phase shifts for certain classes of potentials. (Italian and Russian summaries) *Nuovo Cimento A* (11) 46 (1978), no. 3, 419-430. (Author's summary) 58 #19959 81.34 (34B25)
Sidhu, Gursharan Singh (with Kailath, Thomas; Mori, M.) Development of fast algorithms via innovations decompositions. *Proceedings of the Seventh Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1974), pp. 192-195. Western Periodicals, North Hollywood, Calif., 1974. (Authors' summary) 57 #15697 93E10
(with Morf, Martin; Kailath, Thomas) Some new algorithms for recursive estimation in constant, linear, discrete-time systems. *IEEE Trans. Automatic Control* AC-19 (1974), 315-323. (See Zbl 279 #93043) 93C05
(with Kailath, Thomas) Development of new estimation algorithms by innovations analysis and shift-invariance properties. *IEEE Trans. Information Theory* IT-20 (1974), 759-762. (Tohru Katayama) 50 #4075 93E10
(with Casti, John) A rapprochement of the theories of radiative transfer and linear

- stochastic estimation. *Appl. Math. Comput.* **1** (1975), no. 4, 295-323. (N. U. Ahmed) 53 #5130 93E10 (80.45)
- (with Casti, John) X and Y functions for planetary atmosphere with Lambert law reflecting surfaces. *Astrophys. J.* **196** (1975), 607-612. (R. G. Langebartel) **51** #7575 85.45
- (with Desai, Uday B.) New smoothing algorithms based on reversed-time lumped models. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 4, 538-541. (H.-J. Engelbert) **54** #4792 93E10
- (with Weinert, Howard L.; Byrd, R. H.) Stochastic error analysis of spline approximation. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 1, pp. 1070-1073. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) **58** #19036 65D15
- (with Bierman, Gerald J.) Integration-free interval doubling for Riccati equation solutions. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 5, 831-834. (Authors' summary) **56** #14923 93B99
- (with Desai, Uday B.) A method of orthogonal directions. III. Estimation algorithms of Chandrasekhar and Cholesky types for discrete-time, nonconstant models. *J. Math. Anal. Appl.* **61** (1977), no. 3, 797-812. (Authors' summary) **57** #6921 39A10
- (with Weinert, Howard L.) On uniqueness conditions for optimal curve fitting. *J. Optimization Theory Appl.* **23** (1977), no. 2, 211-216. (Joseph Ford) **56** #13524 65D10 (93B05)
- A note on the Bezoutian matrix and the controllability and observability of linear systems. (Russian summary) *Problems of Control and Information Theory/Problemy Upravleniya i Teorii Informacii* **6** (1977), no. 2, 129-136. (Alan Bradshaw) **57** #5235 93B05
- (with Weinert, Howard L.) A stochastic framework for recursive computation of spline functions. I. Interpolating splines. *IEEE Trans. Information Theory* **IT-24** (1978), no. 1, 45-50. (G. Wahba) **58** #3306 65D05 (60G35, 93E10)
- Sidi, Avram** Computation of the Chebyshev-Padé table. *J. Comput. Appl. Math.* **1** (1975), no. 2, 69-71. (Frank D. Burgoyne) **52** #4580 65D20
- On the approximation of square-integrable functions by exponential series. *J. Comput. Appl. Math.* **1** (1975), no. 4, 229-234. (C. Micchelli) **55** #10921 41A30
- Best rational function approximation to Laplace transform inversion using a window function. *J. Comput. Appl. Math.* **2** (1976), no. 3, 187-194. (H. E. Fettis) **57** #18044 65D99 (41A20, 44A10)
- Uniqueness of Padé approximants from series of orthogonal polynomials. *Math. Comp.* **31** (1977), no. 139, 738-739. (E. W. Cheney) **56** #6211 41A20
- Sidi, Marcel** (with Horowitz, Isaac M.; Rosenbaum, Patrick; Wu, Min Yen) A synthesis theory for nonlinear systems with plant uncertainty. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975)*, Part 1, Paper No. 37.2, 7 pp. *IFAC, Düsseldorf*, 1975. (Authors' summary) **58** #33459 93E20
- Synthesis of sampled feedback systems for prescribed time domain tolerances. *Internat. J. Control* **26** (1977), no. 3, 445-461. (Author's summary) **58** #9536 93B99
- See also *Sensitivity, adaptivity and optimality*, **49** #8697
- Sidjarov, S.** An initial value problem for integro-differential equations with retarded argument. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap.* **1974**, no. 1 *Voprosy Prikl. Mat. i Kibernet.*, 115-119. (D. Bainov) **54** #10801 34K05 (45J05)
- A multipoint boundary value problem for systems of integrodifferential equations with retarded argument. (Russian. English and Azerbaijani summaries) *Azerbaidžan. Gos. Univ. Učen. Zap.* **1974**, no. 2-3 *Fiz. i Mat.*, 95-102. (S. D. Miluševa) **54** #11010 45J05 (34K10)
- (with Ahmedov, K. T.) A boundary value problem with a parameter for integro-differential equations with retarded argument. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **18** (1974), no. 5, 13-17, 65. (M. I. Imanaliev) **52** #1222 45J05
- Sidiskis, Bonis** Intervals as musical notations that transmit information on natural sound sequences. (Russian. English summary) *Mat. Metody v Social. Nauk.—Trudy Sem. Processy Optimal. Upravleniya, II Sekcija Vyp.* **2** (1973), 113-127. (Editors) **57** #15539 90D99
- Sidjakov, D. F.** (with Denisov, G. G.) The influence of internal friction on transverse oscillations of a rotating elastic disc. (Russian) *Theory of oscillations, applied mathematics and cybernetics*, No. 1 (Russian), pp. 222-245. *Gor'kov. Gos. Univ., Gorky*, 1973. (Authors' introduction) **58** #25237 73.34
- Sidki, Said N.** Intersection of chains of subgroups of a finite group. *Monatsh. Math.* **75** (1971), 333-337. (R. Schmidt) **46** #7377 20D30 (06A20)
- Automorphism of a finite group scalar on the cosets of a subgroup. *Proc. Amer. Math. Soc.* **32** (1972), 399-402. (M. P. Hale, Jr.) **46** #254 20D45
- (with Hule, Harald) Full ideals over the ring of integers. (Portuguese) *Acad. Brasil. Ci.* **47** (1975), no. 1, 5-17. (P. Samuel) **54** #301 13F20
- Some commutation patterns between involutions of a finite group. I. *J. Algebra* **39** (1976), no. 1, 52-65. (Wolfgang Knapp) **54** #2802 (EA 54) 20D99
- Some commutation patterns between involutions of a finite group. II. *J. Algebra* **39** (1976), no. 1, 66-74. (Wolfgang Knapp) **54** #2803 20D99
- Sidler, L. E.** (with Merenkov, A. P.) A class of mixed systems of equations, and a method for solving them. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 98-106, 309. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Authors' summary) **57** #8099 65R05
- Sidljär, M. M.** Finding an approximate analytic solution of a certain nonlinear equation of filtration. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No.* **8** (1969), 174-176. **45** #4741 76.35
- A certain method of solution of a coupled thermoelasticity problem. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukraïn. RSR Ser. A* **1973**, 509-511, 573. (L. Jentsch) **48** #1575 73.35
- See also *Mathematical physics*, **46** #1531
- Sidlovskaja, L. V.** (with Korobeinikov, V. P.) Numerical solution of problems of an explosion in a moving gas. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **6** (1975), no. 4, 56-68. (From the introduction) **58** #32395 76.65 (65N30)
- Sidlovskaja, N. A.** (with Gavurin, M. K.; Belyh, V. M.) Certain special methods of the numerical integration of ordinary differential equations. (Russian) *Metody Vychisl. No.* (1971), 15-23. (E. L. Albasiny) **47** #1290 65L05
- (with Gavurin, M. K.; Belyh, V. M.) The numerical solution of quasilinear equations of parabolic or hyperbolic type. (Russian) *Metody Vychisl.* **9** (1974), 22-28, 181. (G. I. Sulhanišvili) **53** #4558 65M05 (65L05)
- A remark on grid integration of the two-dimensional heat equation. (Russian) *Metody Vychisl.* **9** (1974), 28-31, 181. (G. I. Sulhanišvili) **53** #4559 65M05 (65L05)
- Sidlovskii, A. B.** The arithmetic properties of the values of analytic functions. (Russian) *Proceedings of the International Conference on Number Theory (Moscow, 1971)*, *Trudy Mat. Inst. Steklov.* **132** (1973), 169-202, 266. (S. V. Kotov) **48** #10999 10F35
- See also *Gelfond, A. O.*, **50** #6771; *Proceedings: International Conference on Number Theory*, **51** #5463; *Chandrasekharan, Komaravolu*, **51** #12734; *Polosuev, M.*; et al., **52** #7815; *Problems of the theory of Diophantine approximations*, **53** #1400 and *Kozlov, V. Ja.*; et al., **54** #32
- Sidlovskii, V. P.** Singular perturbations in one-dimensional unsteady motion of a real gas. *Prikl. Mat. Meh.* **39** (1975), no. 6, 1051-1059 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 6, 1009-1017 (1976). (Author's summary) **57** #8421 76.41
- Development of dynamical perturbations at the initial stage of a point explosion in heat-conducting gas. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1978**, no. 1, 55-62, 17. (From the summary) **58** #14296 76.35
- See also *Numerical methods in the theory of rarefied gases*, **57** #8450
- Sidney, Jeffrey B.** An extension of Moore's due date algorithm. Incorporating the result of discussion by Hamilton Emmons and John Rau. *Symposium on the Theory of Scheduling and its Applications (North Carolina State Univ., Raleigh, N. C., 1972)*, pp. 393-398. *Lecture Notes in Economics and Mathematical Systems*, Vol. 86, *Springer, Berlin*, 1973. (Authors' summary) **55** #12035 90B35
- Decomposition algorithms for single-machine sequencing with precedence relations and deferral costs. *Operations Res.* **23** (1975), no. 2, 283-298. (Tadashi Kurisu) **56** #4801 90B35
- Optimal single-machine scheduling with earliness and tardiness penalties. *Operations Res.* **25** (1977), no. 1, 62-69. (Jozef Grabowski) **56** #2332 90B35
- See also *Mitten, L. G.*; et al., **52** #7516
- Sidney, S. J.** High-order non-local uniform algebras. *Proc. London Math. Soc.* (3) (1971), 735-752. (B. R. Gelbaum) **45** #5761 46J10
- On the Šilov and Bishop decompositions of a uniform algebra. *Duke Math. J.* (1972), 551-559. (E. L. Stout) **46** #6041 46J10
- A note on enveloped measures. *Proc. Amer. Math. Soc.* **37** (1973), 167-168. (Gamelin) **46** #9742 46J10
- More on high-order non-local uniform algebras. *Illinois J. Math.* **18** (1974), 177-192. (B. R. Gelbaum) **49** #1126 46J10
- Lebesgue measure is a representing measure. *Proc. Amer. Math. Soc.* **46** (1974), 214-216. (R. H. Cox) **50** #2920 46J10
- An example in the theory of non-local uniform algebras. *J. London Math. Soc.* (2) **10** (1975), 36-38. (Arne Stray) **51** #3907 46J10
- Weakly dense subgroups of Banach spaces. *Indiana Univ. Math. J.* **26** (1977), no. 981-986. (G. J. O. Jameson) **56** #16337 46B15
- Sidonskii, O. B.** Investigation of the rate of convergence of certain difference problems means of mathematical experimentation. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* (1971), no. 1, 106-114. **47** #9863 65Q05
- Difference equations for hypergeometric functions. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 791-793. (B. S. Popov) **46** #5687 33A30 (39A10)
- Functional partial difference relations for hypergeometric functions. (Russian) *Dokl. Akad. Nauk SSSR* **216** (1974), 990-993. (I. Stamate) **51** #950 33A30 (39A10)
- Dual operators on a group. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 547-550. (C. Teleman) **52** #3635 33A75
- (with Belousov, P. V.) The group of triangular matrices and parabolic cylindrical functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1978**, no. 2(189), 3. (Authors' introduction) **58** #16957 22E25
- Sidorenko, A. D.** A certain class of solutions of quasilinear systems of equations. (Russian) *Differencial'nye Uravneniya* **8** (1972), 2102-2105, 2116. (Simona Popp) **48** #6702 35K55
- A variant of the problem with a contact discontinuity for systems of three quasilinear equations. (Russian) *Differencial'nye Uravneniya* **9** (1973), 774-777, 778. (Jacobowitz) **47** #5454 35L60
- A theorem on the impossibility of a gradient catastrophe for a certain class multidimensional systems of quasilinear equations. (Russian) *Differencial'nye Uravneniya* **10** (1974), 1328-1331, 1343. (Piero Bassanini) **50** #13857 35F20
- A problem with a contact discontinuity for a system of three quasilinear equations. (Russian) *Differencial'nye Uravneniya* **14** (1978), no. 3, 504-511, 574. (J. F. Heywood) **58** #23111 35L50
- Sidorenko, E. A.** Certain variants of systems of logical inference. (Russian) *Nonclassical logic (Russian)*, pp. 52-59. *Izdat. "Nauka", Moscow*, 1970. (H. B. Curry) **47** #8259 02C99
- Independence in systems of logical inference. (Russian) *Nonclassical logic (Russian)*, pp. 60-64. *Izdat. "Nauka", Moscow*, 1970. (H. B. Curry) **47** #8260 02C99
- See also *Zinov'ev, A. A.*, **51** #7809 and *Zinov'ev, A. A.*, **51** #7810
- Sidorenko, V. P.** A class of error correcting codes for a lattice configuration. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 3, 3-12. (Author's summary) **58** #15684 94A10
- Sidorenko, V. R.** An upper bound on the length of q -ary codes. (Russian) *Problemy Peredači Informacii* **11** (1975), no. 3, 14-20. (Author's summary) **58** #4619 94A10
- (with Gabidulin, E. M.) A general bound for code size. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 4, 31-35. (Ezio M. Biglieri) **58** #4608 94A10
- Sidorevič, M. P.** (with Lukaševič, N. A.) A class of second order linear differential equations. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1977**, no. 1, 12-16, 92. (Avramescu) **57** #12962 34A30
- Sidoriga, T. M.** Synthesis of optimal control in a time-optimality problem for dynamical systems. (Russian) *Differencial'nye Uravneniya (Rjazan') Vyp.* **9** (1977), 127-132. (Author's summary) **57** #9203 93C15
- A scheme for the solution of the time optimal problem for a dynamical system

- near with respect to the control. (Russian) *Differentsial'nye Uravneniya* (Ryazan) (1978), 155-158. (Author's summary) **58** #26321 93C15
- Properties of the control operator. (Russian) *Differentsial'nye Uravneniya* (Ryazan) (1978), 159-165. (Author's summary) **58** #23899 49B10
- françois** The geometrical concept of intermediate configuration and plastic finite strain. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech.)* **25** (1973), no. 2, 299-309. (Author's summary) **54** #4272 73.53
- re les restrictions à imposer à l'énergie de déformation d'un matériau lastique. C. R. Acad. Sci. Paris Sér. A **279** (1974), 379-382. (W. Prager) **129** 73.49
- a modèle viscoélastique non linéaire avec configuration intermédiaire. (English summary) *J. Mécanique* **13** (1974), 679-713. (P. Villaggio) **51** #9629 73.53
- n the formulation of plasticity and viscoplasticity with internal variables. (Polish Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **27** (1975), no. 5-6, 807-819. (Madan) **53** #15053 73.35
- variables internes en viscoélasticité. I. Variables internes scalaires et tensorielles. sh summary) *J. Mécanique* **14** (1975), no. 3, 545-566. (Gérard A. Maugin) **4528a** (E **54** #14529) 73.53
- variables internes en viscoélasticité. II. Milieux avec configuration intermédiaire. sh summary) *J. Mécanique* **14** (1975), no. 4, 571-595. (Gérard A. Maugin) **14528b** 73.53
- variables internes en viscoélasticité. III. Milieux avec plusieurs configurations édiarres. (English summary) *J. Mécanique* **15** (1976), no. 1, 85-118. (Gérard A. Maugin) **54** #14528c 73.53
- ee also **Valanis, K. C.**, **54** #14529
- A. A.** (with Bernstein, A. V.) The characteristic properties of Fisher's k -statistics. (Russian) English summary *Teor. Veroyatnost. i Primenen.* **17** (1972), 766-768. (R. H. H. ne) **46** #10099 (EA **51**) 62A99
- (with Bernstein, A. V.) Estimation of the set of expectations of a normal population. (Russian) English summary *Teor. Veroyatnost. i Primenen.* **17** (1972), 768-773. (R. H. H. ne) **47** #1184 (EA **51**) 62F10
- See also **Computer technology and questions of cybernetics**, **47** #9874
- A. F.** Method of solution of certain boundary value problems for nonlinear elastic equations and propagation of weak shock waves. *Prikl. Mat. Meh.* **36** (1972), 434 (Russian); translated as *J. Appl. Math. Mech.* **36** (1972), 401-408. (Jerome J. Nefted) **48** #6713 35L60 (76.35)
- (with Gavrilushkin, I. B.) On a class of solutions of the nonlinear equation for the city potential. *Prikl. Mat. Meh.* **38** (1974), 264-270 (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 237-244. (L. M. Hocking) **50** #11974 76.35
- On certain representations of solutions of non-linear boundary value problems in dynamics. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **27** (1975), no. 4, 591-597. (Silvio Nocilla) **53** #2131 76.35
- Some representations of solutions of quasilinear hyperbolic equations. (Russian) *Metody Meh. Splošn. Sredy* **6** (1975), no. 4, 106-115. (Author's introduction) **29100** 35C10 (35L40)
- (with Veršinin, S. V.) On the behavior of solutions of equations for double waves in neighborhood of the quiescent region. *Prikl. Mat. Meh.* **39** (1975), no. 6, 1043-1050 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 6, 1000-1008 (1976). (Authors' summary) **57** #4818 76.44
- A. M.** The symmetric continuity of functions of two variables. (Russian) *Theory Functions and Functional Analysis* (Russian), pp. 72-76. Izdat. Kazan. Univ., Kazan, (Henryk Fast) **57** #16507 26A54 (26A45)
- E. A.** Topologically transitive cylindrical cascades. (Russian) *Mat. Zametki* **14** (1973), 441-452. (N. G. Markley) **50** #1225 54H20
- A certain class of minimal sets. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 4(172), 226. (N. G. Markley) **54** #1189 54H20
- See also **Qualitative theory of differential equations**, **52** #11191
- I. M.** (with Korotaeva, I. P.) Investigation of nonlinear automatic control systems in the case of biharmonic processes. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1969**, no. 5, 158 (Russian); translated as *Engng. Cybernetics* **1969**, no. 5, 139-147 (1970). **48329** 93C10
- (with Geraščenko, E. I.; Erman, V. L.; Il'in, I. P.; Kozlov, Ju. M.; Korotaeva, I. Makar'ev, B. M.; Pal'tov, I. P.; Popov, E. P.; Samoïlov, V. E.; Borskiĭ-Pavlovskii, S. S.; Fedorov, S. M.; Hlypalo, E. I.; Ščerbakov, V. A.) *Методы синтеза нелинейных систем автоматического управления.* (Russian) [Methods for the synthesis of nonlinear automatic control systems.] Edited by S. M. Sidorov. Nonlinear Automatic Control Systems, Vol. 3. Izdat. "Mašinostroenie", Moscow, 1970. 416 pp. (Stanislav K. Myškov) **52** #7629 93C10
- (with Gončarova, L. E.; Kozlovskaja, A. A.; Rabinovič, B. I.) Construction of a control system with a standard model. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 1039-1039. (L. Mikołajczyk) **49** #2159 93C15
- I. S.** (with Kristal'nyi, B. V.; Raskina, A. A.) Methodological and technological aspects of describing the paradigms of information retrieval languages of object-symbol (Russian) *Voprosy Informacion. Teorii i Praktiki* No. 1 (1976), 100-120. (Not reviewed) **68A45**
- Ju. E.** Nonbiased rule for detection of radar signals in noise of unknown power. *Izvestiia. Elektron.* **17** (1972), 2186-2189 (Russian); translated as *Radio Engng. Electron. Phys.* **17** (1972), 1747-1750. (Author's summary) **56** #5037 94A05
- Ju. V.** (with Evgrafov, M. A.; Bežanov, K. A.; Fedorjuk, M. V.; Šabunin, M. I.) Recueil de problèmes sur la théorie des fonctions analytiques. Traduit du russe. Sous direction de M. Evgrafov. Éditions Mir, Moscow, 1974. 445 pp. (Editors) **51** #3406 01
- (with Vladimirov, V. S.; Mihaïlov, V. P.; Vašarin, A. A.; Karimova, H. H.; Šabunin, M. I.) ★Сборник задач по уравнениям математической физики. (Russian) [Collection of problems on the equations of mathematical physics] Izdat. "Nauka", Moscow, 1974. 271 pp. (Editors) **52** #14556 35-02
- (with Vladimirov, V. S.; Mihaïlov, V. P.; Šabunin, M. I.; Karimova, H. H.; Vašarin, A. A.) ★Recueil de problèmes d'équations de physique mathématique. Traduit du russe par Irina Pétrova. Éditions Mir, Moscow, 1976. 264 pp. (Editors) **5988** 35-01
- Sidorov, L. A.** See **Accuracy and reliability of cybernetic systems**, **47** #9873 and **Cybernetics and computer technology**, **48** #1517
- Sidorov, N. A.** (with Zorik, L. V.) The investigation of a certain integral equation with deviating argument. (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 36-41. (Nicolae Luca) **47** #9200 45G99
- The problem of finding solutions of nonlinear integral equations near a branch point by the method of two-step iterations. (Russian) *Trudy Irkutsk. Gos. Univ.* **74** (1970), Ser. Mat. no. 6, 23-28. (See RŽMat **1972** #12 B428) 45L05
- (with Trenogin, V. A.) An investigation of the bifurcation points and nontrivial branches of the solutions of nonlinear equations. (Russian) *Differential and integral equations*, No. 1 (Russian), pp. 216-247. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (G. Vainikko) **52** #1446 47H15
- The Cauchy problem for a certain class of differential equations. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 1521-1524. (K. R. Schneider) **46** #5787 34G05
- Variational methods in the theory of the bifurcation points of nonlinear operators. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 255-270, 315-316. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Author's summary) **57** #1215 47H15
- The branching of the solutions of differential equations with a degeneracy. (Russian) *Differentsial'nye Uravneniya* **9** (1973), 1464-1481, 1549. (B. V. Loginov) **49** #7632 35R20 (47H15)
- Investigation of linear differential equations with constant operators in the degenerate case. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 178-182, 302. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Author's summary) **58** #28966 34G05
- (with Trenogin, V. A.) Regularization in the sense of A. N. Tihonov of some problems in bifurcation theory. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 183-193, 302. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (From the introduction) **58** #30574 47H15 (58C99, 58E05, 65J05)
- (with Trenogin, V. A.) Regularization of the computation of the real solutions of nonlinear equations in the neighborhood of a branch point. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 5, 1049-1052. (Ulrich Kosel) **54** #1036 47H15
- A study of the continuous solutions of the Cauchy problem in the neighborhood of a branch point. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 9(172), 99-110. (A. Szép) **58** #11761 34G05 (34C25)
- (with Loginov, B. V.) Calculation of the eigenvalues and eigenvectors of bounded operators by the method of false perturbations. (Russian) *Mat. Zametki* **19** (1976), no. 1, 105-108. (Author's summary) **58** #7164 47A70
- The optimal selection of initial approximations of the solutions of regularized equations in bifurcation theory. (Russian) *Mat. Zametki* **20** (1976), no. 2, 273-278. (B. V. Loginov) **55** #1172 47H15
- (with Trenogin, V. A.) An approach to the regularization problem based on the perturbation of linear operators. (Russian) *Mat. Zametki* **20** (1976), no. 5, 747-752. (Karl-Heinz Förster) **56** #3658 47A55 (47B30)
- (with Trenogin, V. A.) Tihonov regularization of the problem of bifurcation points of nonlinear operators. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 2, 402-413, 480. (Ulrich Kosel) **54** #1037 47H15 (65J05)
- Two-step regularization of the computation of the solutions of nonlinear equations in the neighborhood of a bifurcation point. (Russian) *Partial differential equations and their applications* (Russian), pp. 120-129, 183. Izdat. "Fan" Uzbek. SSR, Tashkent, 1977. (Author's summary) **58** #24925 65J05 (47H05)
- (with Trenogin, V. A.) Regularisation of computation of branching solutions of nonlinear equations. *Singular perturbations and boundary layer theory* (Proc. Conf., École Centrale, Lyon, 1976), pp. 491-505. *Lecture Notes in Math.*, Vol. 594, Springer, Berlin, 1977. (From the authors' text) **56** #17063 65J05 (47H15)
- (with Loginov, B. V.) Calculation of the eigenvalues and eigenelements of linear operators by the method of false perturbations. (Russian) Uzbek summary *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 5, 26-29, 102. (Gh. Adam) **58** #13690 65J05 (47A70)
- Regularization of linear differential equations with constant operators in the degenerate case. (Russian) *Differentsial'nye Uravneniya* **14** (1978), no. 3, 556-560, 576. (B. V. Loginov) **57** #16890 34G05
- (with Trenogin, V. A.) Regularization of simple solutions of nonlinear equations in the neighborhood of a bifurcation point. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 1, 180-185, 239. (Alexander Alenicyn) **58** #7698 58E05 (47H15)
- See also **Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region**, **46** #1532
- Sidorov, O. P.** On the calculation of stationary temperature field. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* **1971**, no. 3, 84-91. (L. Jentsch) **45** #9602 80.35 (80.30)
- Sidorov, V. M.** (with Zaharov, V. D.; Stanjukovič, K. P.) Plane wave solutions of Einstein's equations with a cosmological term in the weak field approximation. (Russian) *Problemy Teor. Gravitacii i Élement. Častic Vyp.* **6** (1975), 97-108. (RŽFiz **1975** #11 B111) **57** #8937 83.53
- Relative displacements of free probe particles in the field of a strong gravitational wave. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 1, 82-85. (V. G. Pisarenko) **58** #32739 83.35
- Sidorov, V. V.** Similarity of mass surfaces in asymptotic domains for the spherical aggregation of a cold catalyzed universe. (Russian) *Dokl. Akad. Nauk UzSSR* **1975**, no. 10, 16-17. (Editors) **56** #10729 85.35
- Sidorov, Y.** See also **Sidorov, Ju. V.**
- Sidorov, Yu. E.** See **Sidorov, Ju. E.**
- Sidorova, G. A.** (with Bendrikov, G. A.) An application of the root locus method to the study of the absolute stability of nonlinear systems by the criterion of V. M. Popov. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **17** (1976), no. 2, 177-186. (V. M. Popov) **55** #2269 93D10
- Sidorova, I. S.** See **Proceedings: Conference on Boundary Value Problems**, **49** #7061
- Sidorova, V. K.** (with Moiseenko, B. D.; Roždusterskii, B. L.) Spectral characteristics of difference schemes, and conditions for the numerical simulation of limiting flow regimes of a viscous fluid. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 1499-1515, 1630.

- (Murli M. Gupta) **50** #15587 76.65
(with Levitan, Ju. L.; Moiseenko, B. D.; Roždestvenskii, B. L.) Spectra of plane Poiseuille flow and the problem of the solution of Navier-Stokes equations in the case of large Reynolds numbers. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 1, 252-258, 272. (Authors' summary) **57** #11307 76.35
- Sidorovič, V. G.** (with Budak, B. M.; Gaponenko, Ju. L.) The direct method of solving a certain ill-posed inverse problem. (Russian) *Solutions of Stefan problems (Russian)*, pp. 226-234. *Moskov. Gos. Univ., Moscow*, 1970. (V. K. Ivanov (RŽMat **1971** #9 B694)) **58** #3401 65J05 (49D99)
- Sidoruk, R. M.** Elements of the geometric theory of distinguishability. (Russian) *Naučn.-Issled. i Proekt. Inst. Mehanizacii i Avtomatizacii Upravljenija Proizv. v Avtomobil. Promyšl. (NIUAVTOPROM) Trudy Vyp. 1* (1971), 44-56. (L. Bitay) **55** #6296 50B10
- Sidov, L. I.** Nonnilpotent subgroups of finite groups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 11(174), 87-97. (Sergei A. Syskin) **57** #3244 20D10
- Sidristy, B. A.** An equivalent transfer from the description of a computer in F-language to a microprogram description. (Russian) *Vyčisl. Sistemy No. 34* (1969), 19-37. (D. Pospelov (RŽMat **1970** #4 V614)) **45** #9545 68A30
(with Ilovaikii, I. V.) ★ Основы теории проектирования цифровых машин и систем. (Russian) [Foundations of the theory of design of digital machines and systems] *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk*, 1976. 128 pp. (errata insert) (Siegm. Gerber) **55** #7627 94A25 (94A20, 94A30, 68A25)
- Siebert, J. W.** (with Willemze, F. G.) Tribute to H. C. Hamaker. Collection of articles in honour of Professor H. C. Hamaker. *Statistica Neerlandica* **26** (1972), no. 3, 3-7. (Editors) **50** #12604 01A70
- Sieben, John T.** (with Singh, S. K.) On α -points of entire and meromorphic functions. *Bull. Soc. Math. Grèce (N.S.)* **15** (1974), 1-6. (From the introduction) **58** #28496 30A66
- Siebeneicher, Christian** λ -Ringstrukturen auf dem Burnsideing der Permutationsdarstellungen einer endlichen Gruppe. *Math. Z.* **146** (1976), no. 3, 223-238. (William H. Gustafson) **52** #10861 20C05
- Siebenmann, Laurence C.** Topological manifolds. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 133-163. Gauthier-Villars, Paris, 1971. (R. C. Kirby) **54** #11335 57-02
On suspensions of homology spheres. *Arch. Math. (Basel)* **23** (1972), 318. (Perrin Wright) **47** #1064 57A60
Deformation of homeomorphisms on stratified sets. I, II. *Comment. Math. Helv.* **47** (1972), 123-136; *ibid.* **47** (1972), 137-163. (R. C. Kirby) **47** #7752 57A35 (57D30)
Approximating cellular maps by homeomorphisms. *Topology* **11** (1972), 271-294. (R. C. Kirby) **45** #4431 57A60
Les stratifiés topologiques et les polyèdres. (English summary) Colloque International sur l'Analyse et la Topologie Différentielle (Colloques Internationaux du Centre National de la Recherche Scientifique, Strasbourg, 1972). *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 2, 159-161. (Editors) **51** #14081 57C40
(with Guillou, Lucien; Hähl, H.) Les voisinages ouverts réguliers. *Ann. Sci. École Norm. Sup. (4)* **6** (1973), 253-293. (M. L. Curtis) **48** #9732 57C40
Regular (or canonical) open neighborhoods. *General Topology and Appl.* **3** (1973), 51-61. (J. Kister) **51** #6831 57C40 (57A40)
L'invariance topologique du type simple d'homotopie (d'après T. Chapman et R. D. Edwards). *Séminaire Bourbaki, 25ème année (1972/1973), Exp. No. 428*, pp. 186-209. *Lecture Notes in Math., Vol. 383*, Springer, Berlin, 1974. (F. Laudenbach) **55** #9103 57A20 (57C10)
(with Guillou, Lucien; Hähl, H.) Les voisinages ouverts réguliers: critères homotopiques d'existence. *Ann. Sci. École Norm. Sup. (4)* **7** (1974), 431-461 (1975). (M. L. Curtis) **50** #14766 57C40
(with Scharlemann, Martin G.) The Hauptvermutung for C^∞ homeomorphisms. II. A proof valid for open 4-manifolds. *Compositio Math.* **29** (1974), 253-264. (B. J. Sanderson) **51** #11533 57D10 (57C25, 57D05)
(with Kirby, Robion C.) Normal bundles for codimension 2 locally flat imbeddings. *Geometric topology (Proc. Conf., Park City, Utah, 1974)*, pp. 310-324. *Lecture Notes in Math., Vol. 438*, Springer, Berlin, 1975. (T. B. Rushing) **53** #4072 57A35
(with Scharlemann, Martin G.) The Hauptvermutung for smooth singular homeomorphisms. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973)*, pp. 85-91. *Univ. Tokyo Press, Tokyo*, 1975. (B. J. Sanderson) **51** #9075 57D10 (57C25, 57D05)
Chapman's classification of shapes: a proof using collapsing. *Manuscripta Math.* **16** (1975), no. 4, 373-384. (Richard M. Schori) **55** #4185 57A20 (54C56)
(with Chapman, T. A.) Finding a boundary for a Hilbert cube manifold. *Acta Math.* **137** (1976), no. 3-4, 171-208. (R. J. Daverman) **54** #13922 57A20
(with Kirby, Robion C.) ★ Foundational essays on topological manifolds, smoothings, and triangulations. With notes by John Milnor and Michael Atiyah. *Annals of Mathematics Studies*, No. 88. Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1977. vii+355 pp. (Ronald J. Stern) **58** #31082 57-02 (57Axx)
- de Siebenthal, J.** Le rôle des modèles en mathématique. *Verhandlungen der Schweizerischen Naturforschenden Gesellschaft, Wissenschaftlicher Teil*, 152. Jahresversammlung (Lucerne, 1972), pp. 272-281. Birkhäuser, Basel, 1972. (Editors) **57** #5557 00A25
- Sieber, Luitgard** See Kemeny, John G.; et al., **55** #7644
- Sieber, Norbert** (with Sebastian, Hans-Jürgen) Ein mathematisches Modell zur Optimalregelung von Versorgungssystemen. (English and Russian summaries) *Math. Operationsforsch. Statist.* **5** (1974), no. 9, 661-685. (D. Hochstädter) **51** #2612 90B05
(with Sebastian, Hans-Jürgen; Gnaudschn, Dietrich) Über geschlossene Lösungen zur Optimalregelung eines speziellen Versorgungssystems mittels dynamischer Optimierung. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 3, 453-469. (K. Hinderer) **56** #11003 90C40 (90C50)
- Siebert, Eberhard** Stetige Halbgruppen von Wahrscheinlichkeitsmaßen auf lokalkompakten maximal fastperiodischen Gruppen. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **25** (1972/73), 269-300. (N. H. Bingham) **48** #12621 60B15 (43A35)
- Über die Erzeugung von Faltungshalbgruppen auf beliebigen lokalkompakten Gruppen. *Math. Z.* **131** (1973), 313-333. (Wilfried Hazod) **56** #12768a 43A05 (60B15, 43A65)
Einbettung unendlich teilbarer Wahrscheinlichkeitsmasse auf topologischen Gruppen. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **28** (1973/74), 227-234. (Klaus Schmidt) **50** #14875 60B15 (43A10)
Einige Bemerkungen zu den Gauss-Verteilungen auf lokalkompakten abelschen Gruppen. (English summary) *Manuscripta Math.* **14** (1974), 41-55. (L. Corwin) **52** #12036 60B15
Absolut-Stetigkeit und Träger von Gauss-Verteilungen auf lokalkompakten Gruppen. *Math. Ann.* **210** (1974), 129-147. (N. H. Bingham) **50** #14876 60B15
Convergence and convolutions of probability measures on a topological group. *Ann. Probability* **4** (1976), no. 3, 433-443. (K. R. Parthasarathy) **54** #1334 60B15
On the generation of convolution semigroups on arbitrary locally compact groups. *Arch. Math. (Basel)* **28** (1977), no. 2, 139-148. (Wilfried Hazod) **56** #12768b 43A05 (60B15, 43A65)
On the Lévy-Chintschin formula on locally compact maximally almost periodic groups. *Math. Scand.* **41** (1977), no. 2, 331-346. (Wilfried Hazod) **58** #6918 43A05 (60B15)
Two theorems on Poisson measures on a topological group. *Manuscripta Math.* (1978), no. 2, 179-190. (G. M. Fel'dman) **58** #2954 60B15
A new proof of the generalized continuity theorem of Paul Lévy. *Math. Ann.* (1978), no. 3, 257-259. (S. Teleman) **57** #13376 43A05 (60B15)
- Siebert, Gert** (with Grassmann, Hubert) Kohomologie und Dekomponierbarkeit von Automaten. (English and Russian summaries) *Elektron. Informationsverarbeit. Kybernetik* **10** (1974), 17-36. (Heinrich Seidel) **51** #12981 18B20 (94A30)
(with Grassmann, Hubert) Snapper's complex, redundancy, and definability of automata. *Math. Nachr.* **77** (1977), 267-295. (Ronald E. Prather) **56** #5085 94A30
Siebert, Hartmut Einige Analoga zum Satz von Siegel-Walfisz. *Zahlen-theorie (Tagung Math. Forschungsinst. Oberwolfach, 1970)*, pp. 173-184. *Ber. Math. Forschungsinst. Oberwolfach, No. 5, Bibliographisches Inst., Mannheim*, 1971. (H. Halberstam) **51** #10H25 (10H20)
(with Wolke, Dieter) Über einige Analoga zum Bombierischen Primzahlsatz. *Math. Z.* **122** (1971), no. 4, 327-341. (S. L. Segal) **53** #13146 10H25 (10H15)
On a question of P. Turán. *Acta Arith.* **26** (1974/75), no. 3, 303-305. (Jean-L. Deshouillers) **51** #12752 10H30
Montgomery's weighted sieve for dimension two. *Monatsh. Math. Phys.* (1976), no. 3, 327-336. (S. L. Segal) **54** #12690 10H30
- Siebert, Manfred** See Gauss-Gesellschaft Göttingen, **52** #13116
- Siebert, William M.** See Some mathematical questions in biology, **48** #1732
- Siefer, J.** Vorschlag für ein vollständiges Potential der Thermodynamik. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T153-T155. (M. Dutta) **56** #7504 80.31
(with Herrmann, N.) Zur Konvergenz des Gitterrostverfahrens. *Z. Angew. Math. Mech.* **58** (1978), no. 6, 103-104. (Editors) **58** #19227 65N30 (73.65)
- Siefkes, Dirk** Decidable extensions of monadic second order successor arithmetic. *Automatentheorie und formale Sprachen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 441-472. *Bibliographisches Inst., Mannheim*, 1970. (Akira Nakamura) **56** #8354 02G05 (68A25, 02F10)
Undecidable extensions of monadic second order successor arithmetic. *Z. Math. Logik Grundlagen Math.* **17** (1971), 385-394. (M. R. Krom) **45** #1763 02G05
(with Büchi, J. Richard) Axiomatization of the monadic second order theory of the monadic second order theory of all countable ordinals (Decidable theories, II) 129-217. *Lecture Notes in Math., Vol. 328*, Springer, Berlin, 1973. (Zbl **298** #02G10) **58** #198 02G10 (06A05)
The recursive sets in certain monadic second order fragments of arithmetic. *Math. Logik Grundlagenforsch.* **17** (1975), no. 1-2, 71-80. (Wolfgang Thomas) **52** #13362 02G05 (02F10, 68A20)
Degrees of circuit complexity. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Köln, 1977)*, pp. 522-531. *Lecture Notes in Comput. Sci., Vol. 1*, Springer, Berlin, 1977. (Claus-Peter Schnorr) **58** #8496 68A20 (94A20)
(with Fleischmann, Klaus; Mahr, Bernd) Bounded concatenation theory as a uniform method for proving lower complexity bounds. *Logic Colloquium 76 (Osney Mead, Oxford, 1976)*, pp. 471-490. *Studies in Logic and Found. Math., Vol. 87*, North-Holland, Amsterdam, 1977. (Authors' summary) **58** #16242 02F50 (68A20)
See also Monadic second order theory of all countable ordinals, **49** #10534
- Jahrestagung: Gesellschaft für Informatik**, **51** #14622
- Siegel, Alan R.** On the Müntz-Szász theorem for $C[0, 1]$. *Proc. Amer. Math. Soc.* **36** (1972), 161-166. (D. E. Wulbert) **46** #5899 41A30
- Siegel, Andrew F.** Random space filling and moments of coverage in geometrical probability. *J. Appl. Probab.* **15** (1978), no. 2, 340-355. (Gedalia Ailam) **58** #2560D05
- Siegel, Armand** (with Burke, Terence) Approximate functional integral methods in statistical mechanics. I. Moment expansions. *J. Mathematical Phys.* **13** (1972), 1681-1694. (G. W. Johnson) **47** #1410 82.28
- Siegel, C.** (with Laska, E.; Meisner, M.) Contributions to the theory of optimal resource allocation. *J. Appl. Probability* **9** (1972), 337-359. (J. C. Gittins) **49** #8637 90B05
- Siegel, Carl Ludwig** ★ Vorlesungen über ausgewählte Kapitel der Funktionentheorie. II. *Mathematisches Institut der Universität, Göttingen*, 1965. iii+250 pp. (Not reviewed) **30A58**
★ Vorlesungen über ausgewählte Kapitel der Funktionentheorie. Teil III. *Mathematisches Institut der Universität, Göttingen*, 1966. iii+304 pp. (Editors) **57** #16317a 14Kxx (32Nxx)
Einige Erläuterungen zu Thues Untersuchungen über Annäherungswerte algebraischer Zahlen und diophantische Gleichungen. *Nachr. Akad. Wiss. Gött. Math.-Phys. Kl. II* **1970**, 169-195. (F. Beukers) **56** #250 10B15 (10F30)
★ Topics in complex function theory. Vol. II: Automorphic functions and automorphic integrals. Translated from the German by A. Shenitzer and M. Tretkoff. *Interscience Tracts in Pure and Applied Mathematics*, No. 25. Wiley-Interscience [A division of Wiley & Sons, Inc.], New York-London-Sydney, 1971. ix+193 pp. (Not reviewed) **30A58**

- th Moser, Jürgen K.) ★Lectures on celestial mechanics. Translation by Charles de. Die Grundlehren der mathematischen Wissenschaften, Band 187. Springer-Verlag, New York-Heidelberg, 1971. xii + 290 pp. (Julian I. Palmore) 0464 70.00 (58F05)
- ver Moduln Abelscher Funktionen. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. I*, 79-96. (J. Lehner) **47** #3400 14G25 (10D20)
- riodische Lösungen von Differentialgleichungen. *Nachr. Akad. Wiss. Göttingen Phys. Kl. II* **1971**, 261-283. (J. W. Heidel) **46** #7639 34C25
- gebraische Abhängigkeit von Wurzeln. *Acta Arith.* **21** (1972), 59-64. (H. S. Butts) 760 12A99
- urzeln Heckscher Zetafunktionen. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. I*, 11-20. (O. H. Körner) **47** #158 10H10
- ur Theorie der quadratischen Formen. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. I* **1972**, 21-46. (Horst Pfeuffer) **47** #140 10C05
- Topics in complex function theory. Vol. III: Abelian functions and modular ones of several variables. Translated from the original German by E. Gottschling M. Tretkoff. Interscience Tracts in Pure and Applied Mathematics, No. 25. Interscience [A Division of John Wiley & Sons, Inc.], New York-London-Sydney, 1971. ix + 244 pp. (Editors) **57** #16317b 14Kxx (32Nxx)
- ormen algebraischer Zahlen. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. II* **1971**, 197-215. (K. Shiratani) **49** #7237 12A45 (10B45)
- beitrag zum Problem der Stabilität. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. II*, 74, no. 3, 23-58. (F. Brauer) **53** #3448 34D20
- ur Summation von L-Reihen. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. II* **1971**, no. 18, 269-292. (Judith Sunley) **58** #597 12A70
- ee also Collection: Siegel, Carl Ludwig, **48** #209; Collection: Siegel, Carl Ludwig, **210**; Collection: Siegel, Carl Ludwig, **48** #211; Collection: Siegel, Carl Ludwig, **2034**; Collection: Siegel, Carl Ludwig, **48** #2035; Maass, Hans, **49** #8938; ie, Erich, **51** #7795; Collection: Siegel, Carl Ludwig, **53** #12822 and Thue, Axel, **46**
2. The stationary waiting time and other variables in single-server queues with priorities at the beginning of a busy period. (Polish summary) *Zastos. Mat.* **13** (2/73), 465-479. (H. L. Seal) **48** #1347 60K25
- (with Müller, Irmfried) About two inhomogeneous Wiener-Hopf integral equations and their interpretation for delayed random walks and queueing models $GI/G/1$ with "warming-up". (German and Russian summaries) *Elektron. Informationsverarbeitung und Kommunikationstechnik* **10** (1974), no. 10, 609-626. (E. Arjas) **53** #11799 60K25
- Verallgemeinerung einer Irrfahrt im R^1 und deren Bedeutung für Warteschlangensysteme mit verzögertem Bedienungsbeginn. (English and Russian summaries) *Math. Operationsforsch. Statist.* **5** (1974), no. 6, 465-486. (František Zitek) **51** #1780 60K25
- (with Rossberg, H.-J.) Die Bedeutung von Kingmans Integralungleichungen bei der Approximation der stationären Wartezeitverteilung im Modell $GI/G/1$ mit und ohne Verzögerung beim Beginn einer Beschäftigungsperiode. (English and Russian summaries) *Math. Operationsforsch. Statist.* **5** (1974), No. 9, 687-699. (T. Kawata) **51** #14316 60K25
- bschätzungen für die Wartezeitverteilungen und ihrer Momente beim Wartemodell $GI/G/1$ mit und ohne "Erwärmung". (English and Russian summaries) *Z. Angew. Math. Mech.* **54** (1974), 609-619. (F. L. Spitzer) **50** #5981 60K25
- (with Rossberg, H.-J.) The $GI/G/1$ model with warming-up time. (Polish summary) *Zastos. Mat.* **14** (1974), 17-26. (N. U. Prabhu) **48** #7417 60K25
- (with Rossberg, H.-J.) On Kingman's integral inequalities for approximations of the waiting time distribution in the queueing model $GI/G/1$ with and without warming-up time. (Polish summary) *Zastos. Mat.* **14** (1974), 27-30. (N. U. Prabhu) **48** #7418 60K25
- (with Rossberg, H.-J.) A new method of investigating the steady-state distribution of the waiting time for the queueing system $GI/G/1$ with "warm-up". (Russian. Polish summary) *Zastos. Mat.* **14** (1974/75), no. 4, 537-547. (M. A. Fainberg) **53** #4294 60K25
- (with Rossberg, H.-J.) Continuation of convergence in the central limit theorem. (Russian summary) *Teor. Veroyatnost. i Primenen.* **20** (1975), no. 4, 885-887. (Sujit K. Ghosh) **55** #13542 60F05
- Jerold k -invariants in local coefficient theory. *Proc. Amer. Math. Soc.* **29** (1971), 167-174. (J. W. Vick) **46** #6344 55B25
- On a space between BH and B_∞ . *Pacific J. Math.* **60** (1975), no. 2, 235-246. (Jean-Michel Lemaire) **53** #6556 55F15
- On the construction of the Bockstein spectral sequence. *Trans. Amer. Math. Soc.* **235** (1975), 203-224. (S. Gitler) **52** #15465 55H25
- (with Calder, Allan) Homotopy and Kan extensions. *Categorical topology (Proc. Conf., Mannheim, 1975)*, pp. 152-163. *Lecture Notes in Math.*, Vol. 540, Springer, Berlin, 1976. (John Roy Dennett) **55** #13407 55B05
- A new proof of Caristi's fixed point theorem. *Proc. Amer. Math. Soc.* **66** (1977), no. 1, 44-56. (S. Swaminathan) **56** #16606 54H25
- (with Calder, Allan) Homotopy and uniform homotopy. *Trans. Amer. Math. Soc.* **235** (1978), 245-270. (Harold Hastings) **56** #16619 55D99 (54E99)
- John H. See *Perspectives in biometrics*, **58** #31689
- Martha J. The asymptotic behavior of a divergent linear birth and death process. *Advances in Appl. Probability* **8** (1976), no. 2, 315-338. (Andrew D. Barbour) **53** #6776 0J80
- S. (with Hastings, Stuart) On some solutions of the Falkner-Skan equation. *Thematika* **19** (1972), 76-83. (K. Stewartson) **48** #4401 34B30 (76.34)
- W. On the classical limit of quantum mechanics. *Acta Phys. Polon. B* **7** (1976), no. 1, 29-38. (F. L. Girko) **53** #15214 81.60
- etter, Jill See *Matthews, G. V. T.*, **54** #11536 and *Kendall, David G.*, **54** #11537
- A. J. F. (with Monroe, James L.) GKS inequalities for arbitrary spin Ising ferromagnets. *J. Statist. Phys.* **10** (1974), 237-244. (Authors' summary) **56** #7723 62
- ed, Pierre Morphismes q -convexes et images directes. *C. R. Acad. Sci. Paris Sér. B* **277** (1973), A307-A309. (Y.-T. Siu) **48** #8836 32C35
- Un théorème de finitude pour les morphismes q -convexes. *Comment. Math. Helv.* **49** (1974), 417-459. (Y.-T. Siu) **51** #3514 32C35 (32F10)
- Siegmán, A. E. Hermite-Gaussian functions of complex argument as optical-beam eigenfunctions. *J. Opt. Soc. Amer.* **63** (1973), 1093-1094. (Y. Hayashi) **48** #7789 78.35
- Siegmán, William L. (with Rubinfeld, Lester A.) A nonlinear model for double-diffusive convection. *SIAM J. Appl. Math.* **29** (1975), no. 3, 540-557. (W. O. Crimale, Jr.) **51** #14741 76.35
- (with Matkowsky, Bernard J.) The flow between counter-rotating disks at high Reynolds number. *SIAM J. Appl. Math.* **30** (1976), no. 4, 720-727. (T. W. Kao) **54** #9291 76.41 (76.34)
- (with Rubinfeld, Lester A.) Nonlinear dynamic theory for a double-diffusive convection model. *SIAM J. Appl. Math.* **32** (1977), no. 4, 871-894. (Authors' summary) **58** #8725 76.34
- Siegmund, David (with Chow, Y. S.; Robbins, Herbert) ★Great expectations: the theory of optimal stopping. Houghton Mifflin Co., Boston, Mass., 1971. xii + 141 pp. (W. Sudderth) **48** #10007 62L15 (60G40)
- (with Robbins, Herbert) A convergence theorem for non negative almost supermartingales and some applications. *Optimizing methods in statistics (Proc. Sympos., Ohio State Univ., Columbus, Ohio, 1971)*, pp. 233-257. Academic Press, New York, 1971. (P. Révész) **49** #8097 60G45 (62L20)
- (with Robbins, Herbert) A class of stopping rules for testing parametric hypotheses. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. IV: Biology and health, pp. 37-41. Univ. California Press, Berkeley, Calif., 1972. (R. A. Wijsman) **53** #6924 62L05
- (with Robbins, Herbert) On the law of the iterated logarithm for maxima and minima. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. III: Probability theory, pp. 51-70. Univ. California Press, Berkeley, Calif., 1972. (R. J. Tomkins) **53** #4198 60F15
- (with Robbins, Herbert) Statistical tests of power one and the integral representation of solutions of certain partial differential equations. *Bull. Inst. Math. Acad. Sinica* **1** (1973), no. 1, 93-120. (M. Iosifescu) **47** #9737 60J65 (35K05)
- (with Robbins, Herbert) The expected sample size of some tests of power one. Collection of articles dedicated to Jerzy Neyman on his 80th birthday. *Ann. Statist.* **2** (1974), 415-436. (R. A. Wijsman) **56** #7055 62L10
- (with Robbins, Herbert) Sequential tests involving two populations. *J. Amer. Statist. Assoc.* **69** (1974), 132-139. (Adhir K. Basu) **52** #7044 62L10
- Large deviation probabilities in the strong law of large numbers. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **31** (1974/75), 107-113. (N. D. C. Veraverbeke) **51** #1924 60F10
- (with Pollak, Moshe) Approximations to the expected sample size of certain sequential tests. *Ann. Statist.* **3** (1975), no. 6, 1267-1282. (R. H. Farrell) **53** #6927 62L10
- Error probabilities and average sample number of the sequential probability ratio test. *J. Roy. Statist. Soc. Ser. B* **37** (1975), no. 3, 394-401. (M. B. Woodroffe) **53** #11907 62L10
- The time until ruin in collective risk theory. (German, French and Italian summaries) *Mitt. Verein. Schweiz. Versicherungsmath.* **75** (1975), no. 2, 157-166. (Hans U. Gerber) **52** #12281 62P05
- (with Robbins, Herbert) Sequential estimation of p in Bernoulli trials. *Studies in probability and statistics (papers in honour of Edwin J. G. Pitman)*, pp. 103-107. North-Holland, Amsterdam, 1976. (M. B. Woodroffe) **54** #11686 62L12
- The equivalence of absorbing and reflecting barrier problems for stochastically monotone Markov processes. *Ann. Probability* **4** (1976), no. 6, 914-924. (D. J. Daley) **55** #4386 60J05 (60J25)
- Importance sampling in the Monte Carlo study of sequential tests. *Ann. Statist.* **4** (1976), no. 4, 673-684. (M. B. Woodroffe) **54** #6410 62L10 (65C05)
- (with Robbins, Herbert; Chow, Y. S.) ★Теория оптимальных правил остановки. (Russian) [The theory of optimal stopping rules] Translated from the English by A. A. Novikov. Edited by A. N. Shiryaev. *Izdat. "Nauka", Moscow, 1977. 167 pp.* (Editors) **57** #14294 62L15 (60G40)
- (with Lai, Tze Leung; Robbins, Herbert) Sequential decision about a normal mean. *Statistical decision theory and related topics. II (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976)*, pp. 213-221. Academic Press, New York, 1977. (Lionel Weiss) **55** #4552 62L10
- (with Lai, Tze Leung) A nonlinear renewal theory with applications to sequential analysis. I. *Ann. Statist.* **5** (1977), no. 5, 946-954. (J. R. Blum) **56** #3935 60G40 (62L10)
- Repeated significance tests for a normal mean. *Biometrika* **64** (1977), no. 2, 177-189. (R. A. Wijsman) **58** #8076 62L10 (62F05)
- See also *Optimizing methods in statistics*, **48** #9900
- Siegmund-Schultze, Rainer (with Fleischmann, Klaus) The structure of reduced critical Galton-Watson processes. *Math. Nachr.* **79** (1977), 233-241. (Dean H. Fearn) **57** #1674 60J80
- Siegmund-Schultze, Reinhard Prime und extrem nichtprime dynamische Systeme. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* **26** (1977), no. 2, 143-144. (Manfred Denker) **56** #8815 28A65
- Sieklicki, Karol Generalized retractions and fixed points. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 945-949. (W. Kuperberg) **46** #2660 54H25
- On geometry and topology. (Polish) *Wiadom. Mat.* (2) **15** (1972), 17-24. (J. S. Joel) **58** #10135 01A60 (54-01, 57-01)
- A fixed point problem and the Hilbert cube. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 421-426. (W. Kuperberg) **50** #3209 54H25 (54F20)
- Shift-invariant subsets of the Hilbert cube. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 12, 1265-1272. (D. E. Sanderson) **53** #1566 54H25
- ★Geometria i topologia. Część I. (Polish) [Geometry and topology. Part I] Geometria. [Geometry] Biblioteka Matematyczna, Tom 53. [Mathematics Library, Vol.

- 53) Państwowe Wydawnictwo Naukowe, Warsaw, 1978. 469 pp. (L. Janos) **58** #12878 54-01
- The scientific activity of Professor Karol Borsuk. (Polish) *Wiadom. Mat.* (2) **20**, no. 2, 172-174 (1978). (Editors) **57** #9439 01A70
- See also Białynicki-Birula, Andrzej; et al., **58** #4890
- Sielken, Robert L., Jr. (with Hartley, H. O.) Two linear programming algorithms for unbiased estimation of linear models. *J. Amer. Statist. Assoc.* **68** (1973), 639-641. (Samprit Chatterjee) **50** #11645 62J05
- Stopping times for stochastic approximation procedures. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **26** (1973), 67-75. (D. Siegmund) **49** #6527 62L20
- (with Hartley, H. O.) A "super-population viewpoint" for finite population sampling. (French summary) *Biometrics* **31** (1975), 411-422. (David Bellhouse) **52** #6943 62D05
- Siemaszko, Czesław Maximum principle for differential open-loop games of pursuit in Banach spaces. (Polish and Russian summaries) *Control Cybernet.* **4** (1975), no. 3-4 5-29. (F. M. Kirillova) **54** #14800 90D25
- Siemens, David F., Jr. Fitch-style rules for many modal logics. *Notre Dame J. Formal Logic* **18** (1977), no. 4, 631-636. (J. Michael Dunn) **58** #16158 02C10
- Siemendjajew, K. A. See Semendjajev, K. A.
- Siemieniuch, J. L. Properties of certain rational approximations to e^{-x} . *Nordisk Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 2, 172-191. (Hans-Peter Blatt) **55** #13739 65D20 (41A20)
- (with Gladwell, I.) Analysis of explicit difference methods for a diffusion-convection equation. *Internat. J. Numer. Methods Engrg.* **12** (1978), no. 6, 899-916. (G. W. Hedstrom) **58** #3566 65P05
- Siemon, Helmut Algebraische Betrachtungen zum Fundamentalsatz der Zahlentheorie. *Math.-Phys. Semesterber.* **19** (1972), 118-129. (F. van der Blij) **52** #3020 10-01
- Die Gesamtheit aller disjunkten multiplikativen Gruppen in Restklassen-Ringen. Bemerkung zu einer Arbeit von J. Ziegenbalg (*Praxis Math.* **17** (1975), no. 7, 185-188). *Praxis Math.* **17** (1975), no. 10, 270-272. (Not reviewed) 20-01
- Siems, W. F. (with Poshusta, R. D.) A group theoretical approach to geminal product matrix elements. *J. Chem. Phys.* **64** (1976), no. 1, 6-26. **56** #4580 82.20
- Sieniawski, Lesław A. An algebraic approach to the static objects. (Russian summary) *Systems Sci.* **2** (1976), no. 3, 73-79. (Jerzy Jaroń) **55** #2224 93B25
- Sienicki, J. J. (with Aks, S. Ø.; Varga, B. B.) Small energy denominators in interacting quantum systems: bound states. *J. Mathematical Phys.* **16** (1975), no. 9, 1928-1933. (G. P. Bava) **53** #2179 81.35
- Sienkiewicz, K. (with Lukierski, Jerzy) Generalized free fields and the representations of Weyl group. *J. Mathematical Phys.* **15** (1974), 344-349. (W. Güttinger) **49** #10273 81.22
- Sienkiewicz, W. (with Lukierski, Jerzy) Generalized free fields and the representations of Weyl group. II. Reducible representations. *J. Mathematical Phys.* **16** (1975), 901-904. (W. Güttinger) **51** #9677 81.22
- Sieradski, Allan J. Non-uniqueness of homotopy factorizations into irreducible polyhedra. *Fund. Math.* **72** (1971), no. 2, 97-99. (M. Arkowitz) **45** #2707 55D15
- Square roots up to homotopy type. *Amer. J. Math.* **94** (1972), 73-81. (Brayton Gray) **45** #5998 55D15
- Stabilization of self-equivalences of the pseudoprojective spaces. *Michigan Math. J.* **19** (1972), 109-119. (E. B. Curtis) **45** #9326 55E05
- (with Dyer, Micheal N.) A homotopy classification of 2-complexes with finite cyclic fundamental group. *Bull. Amer. Math. Soc.* **79** (1973), 75-77. (Brayton Gray) **46** #9958 55A20
- (with Dyer, Micheal N.) Trees of homotopy types of two-dimensional CW-complexes. I. *Comment. Math. Helv.* **48** (1973), 31-44; corrigendum, *ibid.* **48** (1973), 194. (Perrin Wright) **51** #14074 57C10
- (with Dyer, Micheal N.) Trees of homotopy types of 2-dimensional CW complexes. II. *Trans. Amer. Math. Soc.* **205** (1975), 115-125. (W. Metzler) **54** #13907 55D15
- Combinatorial isomorphisms and combinatorial homotopy equivalences. *J. Pure Appl. Algebra* **7** (1976), no. 1, 59-95. (W. Metzler) **53** #9227 57C10 (55D10, 20F05)
- A semigroup of simple homotopy types. *Math. Z.* **153** (1977), no. 2, 135-148. (Götz Brunner) **55** #11237 55A20
- Non-cancellation and a related phenomenon for the lens spaces. *Topology* **17** (1978), no. 1, 85-93. (Roger Fenn) **57** #17631 55D15 (57E10)
- Siering, E. Über lineare Formen und ein Problem von Frobenius. I. *J. Reine Angew. Math.* **271** (1974), 177-202. (W. H. Mills) **52** #5544 10A20 (10B35)
- Sierksma, Gerard Carathéodory and Helly-numbers of convex-product-structures. *Pacific J. Math.* **61** (1975), no. 1, 275-282. (L. A. Santaló) **53** #1421 52A40
- Relationships between Carathéodory, Helly, Radon and exchange numbers of convexity spaces. *Nieuw Arch. Wisk.* (3) **25** (1977), no. 2, 115-132. (P. Gruber (Zbl 354 #52005)) **58** #24020 52A50
- Sierocki, Ireneusz (with Jacak, Witold; Tchoń, Krzysztof) A plan to define time in systems theory. (Polish. English and Russian summaries) Selected problems in the foundations of systems theory. *Prace Nauk. Inst. Cybernet. Techn. Politechn. Wrocław. No. 25 Ser. Stud. i Materiały No. 17* (1976), 39-61. (Authors' summary) **56** #17939 93A10
- Sierpińska, A. Radicals of rings of polynomials in non-commutative indeterminates. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 805-808. (Anthony E. Hoffman) **49** #5072 16A21
- Sierpiński, Kazimierz The mixed problem for the heat conductivity equation with a nonlinear boundary condition. I, II. (Polish. Russian and English summaries) *Biul. Wojsk. Akad. Tech.* **19** (1970), no. 12(220), 51-62; *ibid.* **19** (1970), no. 12(220), 63-69. (E. J. Scott) **45** #3972 35K05
- Sierpiński, Wacław ★Arytmetyka teoretyczna. (Polish) [Theoretical arithmetic] With the cooperation of Jerzy Łoś. Fourth, unrevised edition. Biblioteka Matematyczna, Tom 7. [Mathematics Library, Vol. 7] Państwowe Wydawnictwo Naukowe, Warsaw, 1968. 273 pp. (Editors) **50** #9756 10-02
- ★250 problèmes de théorie élémentaire des nombres. Traduit de l'anglais par Patrick Mehr. Collection Hachette Université. *Classiques Hachette, Paris*, 1972. 176 pp. (Editors) **52** #241 10-02
- ★Oeuvres choisies. Tome I: Bibliographie, théorie des nombres et analyse mathématique. Publié par les soins de Stanisław Hartman et Andrzej Schinzel. Contenant des articles sur la vie et les travaux de Sierpiński, par Kazimierz Kuratowski, Andrzej Schinzel et Stanisław Hartman. Comité de rédaction: Stanisław Hartman, Kazimierz Kuratowski, Edward Marczewski, Andrzej Mostowski, Andrzej Schinzel, Roman Sikorski, Marcell Stark. *PWN—Éditions Scientifiques de Pologne, Warsaw*, 1976. 300 pp. (1 plate) (Editors) **54** #2405 01A75
- ★Oeuvres choisies. Tome II: Théorie des ensembles et ses applications, travaux des années 1908-1929. Publié par les soins de Stanisław Hartman, Kazimierz Kuratowski, Edward Marczewski, Andrzej Mostowski et Andrzej Schinzel. Contenant des articles sur les travaux de Sierpiński sur la théorie des ensembles et ses applications, par Andrzej Mostowski, Stanisław Hartman et Kazimierz Kuratowski. Comité de rédaction: Stanisław Hartman, Kazimierz Kuratowski, Edward Marczewski, Andrzej Mostowski, Andrzej Schinzel, Roman Sikorski et Marcell Stark. *PWN—Éditions Scientifiques de Pologne, Warsaw*, 1975. 780 pp. (1 plate) (Editors) **54** #2406 01A75
- (with Kuratowski, Kazimierz) ★Oeuvres choisies. Tome III. Théorie des ensembles et ses applications, travaux des années 1930-1966. Publié par les soins de Stanisław Hartman, Kazimierz Kuratowski, Edward Marczewski, Andrzej Mostowski et Andrzej Schinzel. Comité de rédaction: Stanisław Hartman, Kazimierz Kuratowski, Edward Marczewski, Andrzej Mostowski, Andrzej Schinzel, Roman Sikorski et Marcell Stark. *PWN—Éditions Scientifiques de Pologne, Warsaw*, 1976. 688 pp. (1 plate; errata in (Editors) **54** #2407 01A75
- See also Kuratowski, Kazimierz, **46** #9a; Schinzel, Andrzej, **46** #9b; Bibliography: Sierpiński, Wacław, **46** #9c; Kurepa, Đuro, **48** #37; Rotkiewicz, Andrzej, **48** #2032; Luzin, N. N., **52** #13282; Dimovski, Iv., **53** #46; Schinzel, Andrzej, **53** #57; Marczewski, Edward, **56** #11719 and Correspondence: Gheorghiu, Titeica, **58** #10244
- Siersma, Dirk The singularities of C^∞ -functions of right-codimension smaller or equal than eight. *Nederl. Akad. Wetensch. Proc. Ser. A* **76**=*Indag. Math.* **35** (1973), 31-44. (G. R. Belicij) **51** #11574 58C25
- ★Classification and deformation of singularities. With Dutch and English summaries. Doctoral dissertation, University of Amsterdam. *University of Amsterdam, Amsterdam*, 1974. ii + 115 pp. (1 foldout) (Gordon Wassermann) **50** #3267 58C25 (32C40)
- Periodicities in Arnold's lists of singularities. *Real and complex singularities (Ninth Nordic Summer School/NAVF Sympos. Math., Oslo, 1976)*, pp. 497-524. (S. Siersma and Noordhoff, Alphen aan den Rijn, 1977. (Alan H. Durfee) **57** #7647 58C25 (with Hazewinkel, Michiel; Hesselink, Wim H.; Veldkamp, Ferdinand D.)
- ubiquity of Coxeter-Dynkin diagrams (an introduction to the A-D-E problem). *Nederl. Arch. Wisk.* (3) **25** (1977), no. 3, 257-307. (J. S. Joel) **58** #10879 14B05 (16B10, 17B10, 20H15, 32C40, 58C25)
- Sieskind, M. Applications of a group theoretical theorem. Generalization of the equality of crystalline and molecular vibrations in their general rectilinear coordinate system. Particular case of MoS_2 . Application to the shell model. (French summary) *J. Phys. Chem.* **37** (1976), no. 7-8, 909-923. (Author's summary) **55** #7229 82.20
- Siess, J. (with Lumley, John L.; Zeman, Otto) The influence of buoyancy on turbulent transport. *J. Fluid Mech.* **84** (1978), no. 3, 581-597. (D. A. Nield) **57** #8512
- Sietmann, Günter See Collection: Schmidt, Adam, **52** #7752
- Sietmann, R. H. (with Hellwig, K.-E.) More about operators generated by partial isometries. (German summary) *Ann. Physik* (7) **33** (1976), no. 3, 199-206. (P. Benioff) **54** #9449 81.47
- Sieveking, M. An algorithm for division of powerseries. (German summary) *Comput. Arch. Elektron. Rechnen* **10** (1972), 153-156. (Author's summary) **47** #1257 65D99
- Sieveking, Malte Ein Dominationsprinzip für Paare harmonischer Räume. *Rev. Roum. Math. Pures Appl.* **21** (1976), no. 4, 443-464. (D. H. Armitage) **53** #13616 31D10 (with von zur Gathen, Joachim) A bound on solutions of linear integer equations and inequalities. *Proc. Amer. Math. Soc.* **72** (1978), no. 1, 155-158. (Z. Waksman) **58** #18159 52A40 (15A39, 90C10)
- See also Komplexität von Entscheidungsproblemen—ein Seminar, **57** #18232
- Sievers, Gerald L. (with Killeen, Timothy J.; Hettmansperger, Thomas P.) An elementary theorem on the probability of large deviations. *Ann. Math. Statist.* **43** (1972), 181-192. (J. Sethuraman) **52** #15833 (E 52 #15834) 62G20 (60F10)
- (with Killeen, Timothy J.; Hettmansperger, Thomas P.) Correction to: "An elementary theorem on the probability of large deviations" (*Ann. Math. Statist.* (1972), 181-192). *Ann. Statist.* **2** (1974), 1357. (J. Sethuraman) **52** #15834 60F10 (60F10)
- Multivariate probabilities of large deviations. *Ann. Statist.* **3** (1975), no. 4, 897-910. (T. P. Hettmansperger) **51** #1813 62G30
- Probabilities of large deviations for empirical measures. *Ann. Statist.* **4** (1976), 766-770. (Ju. V. Borovskikh) **54** #3913 62E20 (60F10)
- (with Doksum, Kjell A.) Plotting with confidence: graphical comparisons of sample populations. *Biometrika* **63** (1976), no. 3, 421-434. (G. E. Noether) **56** #1580 62G15
- Estimates of location: a large deviation comparison. *Ann. Statist.* **6** (1978), no. 1, 610-618. (Rudolph J. Beran) **58** #13461 62E20 (60F10, 62G05)
- Siewert, C. E. (with Schnatz, T. W.) Radiative transfer in a Rayleigh-scattering atmosphere with true absorption. *J. Mathematical Phys.* **11** (1970), 2733-2739. (Ueno) **46** #10354 82.45
- (with Burniston, E. E.) An exact analytical solution of Kepler's equation. *Czechoslovak J. Mech.* **6** (1972), 294-304. (M. Drăganu) **51** #9596 70.30
- (with Burniston, E. E.; Mullikin, T. W.) Steady-state solutions in the two-body theory of neutron diffusion. *J. Mathematical Phys.* **13** (1972), 1461-1465. (M. Drăganu) **46** #8598 82.45
- On the half-range orthogonality theorem appropriate to the scattering of polarized light. *J. Quant. Spectrosc. Radiat. Transfer* **12** (1972), no. 4, 683-694. (Pekka Silvennoinen) **54** #9525 82.45
- (with Burniston, E. E.) Exact analytical solutions basic to a class of two-body problems. *Celestial Mech.* **7** (1973), 225-235. (Alan Jupp) **48** #3322 70.34
- (with Burniston, E. E.) Exact analytical solutions of $ze^z = a$. *J. Math. Anal.*

-), 626-632. (Pl. Kannappan) **48** #10094 65H05 (39A15)
- h Burniston, E. E.) The use of Riemann problems in solving a class of differential equations. *Proc. Cambridge Philos. Soc.* **73** (1973), 111-118. (S. A. v) **47** #1273 65H05
- h Burniston, E. E.) Exact analytical solutions of the transcendental equation S . *SIAM J. Appl. Math.* **24** (1973), 460-466. (S. A. Tersenov) **48** #1453
- h Burkart, A. R.) On double zeros of $x - \tanh(ax + b)$. (German summary) *Z. Math. Phys.* **24** (1973), 435-438. (Authors' summary) **48** #2433 33A10
- h Burniston, E. E.) Further results concerning exact analytical solutions basic to orbits. *Celestial Mech.* **10** (1974), 5-15. (Alan Jupp) **51** #9595 70.30
- h Kriese, J. T.; Chang, T. S.) Elementary solutions of coupled model equations kinetic theory of gases. (French, German, Italian and Russian summaries) *J. Engrg. Sci.* **12** (1974), 441-470. (Authors' summary) **56** #17640 82.45
- h Doggett, W. O.) An exact analytical solution for the position-time relationship inverse-distance-squared force. (French, German, Italian and Russian summaries) *J. Engrg. Sci.* **12** (1974), 861-863. (F.-O. Speck) **56** #7490 78.30
- h Burniston, E. E.) Solutions of the equation $ze^z = a(z + b)$. *J. Math. Anal.* **6** (1974), 329-337. (S. A. Tersenov) **49** #9171 30A08 (65H05)
- h Burniston, E. E.) An exact analytical solution of $x \coth x = \alpha x^2 + 1$. *J. Appl. Math.* **2** (1976), no. 1, 19-21. (L. Lorch) **54** #7879 33A10
- h Burniston, E. E.) Half-space analysis basic to the time-dependent BGK model kinetic theory of gases. *J. Mathematical Phys.* **18** (1977), no. 3, 376-380. (Pekka J. J. J.) **55** #7240 82.45
- h an exceptional case concerning plasma oscillations. *J. Mathematical Phys.* **18** (1977), no. 12, 2509-2510. (Pekka Silvennoinen) **57** #2366 82.45
- h Half-space analysis basic to the linearized Boltzmann equation. (German summary) *Angew. Math. Phys.* **28** (1977), no. 3, 531-535. (Author's summary) **56** #14443
- h Burniston, E. E.) On the solution of certain algebraic equations. *J. Comput. Math.* **4** (1978), no. 1, 37-39. (Luciano Biasini) **57** #14399 65H05
- h Kriese, J. T.) Half-range orthogonality relations basic to the solution of dependent boundary value problems in the kinetic theory of gases. (Italian summary) *Z. Angew. Math. Phys.* **29** (1978), no. 2, 199-205. (M. Drăganu) **58** #9000
- h Burniston, E. E.) On incorporating linear constraints into H-matrix calculations. (German summary) *Z. Angew. Math. Phys.* **29** (1978), no. 5, 846-850. (Authors' summary) **58** #20090 82.45
- h Lucjan (with Smałkówna, Henryka) On the coefficients of meromorphic convex functions. (Polish and Russian summaries) Proceedings of the Fifth Conference on Analytic Functions (Univ. Mariae Curie-Skłodowska, Lublin, 1970). *Ann. Mariae Curie-Skłodowska Sect. A* **22-24** (1968/70), 167-170 (1972). (V. Liniš) **10607** 30A34
- h Sharp estimation of the coefficients of bounded univalent functions close to identity. *Studia Math. Rozprawy Mat.* **86** (1971), 149 pp. (J. A. Jenkins (Zbl 229 #30019)) **10661** 30A34
- h the maximum of the functional $a_3 - aa_2^2$ in classes of quasiconvex functions. (Russian and English summaries) *Zeszyty Nauk. Politech. Łódz. No. 134* **1971**, no. 28 (1971), 5-21. (J. G. Krzyż) **52** #733 30A34
- h Dziubiński, Izidor) Sharp estimation of the functional $|a_4|$ in the class of convex functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math.* **20** (1972), 365-366. (Editors) **46** #3769 30A34
- h Dziubiński, Izidor) Sharp estimation of the coefficients of quasi-starlike functions close to identity. *Demonstratio Math.* **4** (1972), 247-250. (R. J. Libera) **3114** 30A34
- h Daniel P. (with Goel, Prabhakar) Comments on: "Multiple fault detection in functional networks" (IEEE Trans. Computers **C-21** (1972), 31-36) by J. W. Gault, Robinson and S. M. Reddy. With a reply by J. W. Gault, J. P. Robinson and S. M. Reddy. *IEEE Trans. Computers* **C-23** (1974), 333-334. (Siegmund Gerber) **52** #7727
- See also **Special issue: Fault-tolerant computing**, **54** #1693
- h Joseph Étude d'une algèbre booléenne temporelle. *C. R. Acad. Sci. Paris Sér. A-B* (1972), A1343-A1346. (M. Stojaković) **47** #1705 06A40 (94A20)
- h Étude d'une algèbre booléenne temporelle. *Rev. Française Automat. Informat. Recherche Opérationnelle* **7** (1973), no. J-2, 45-56. (S. Amarel) **52** #5224 94A20
- h Gerhard Zeitbereichsentwurf von Abtastsystemen mit Begrenzungen mittels der Programmierung. (English summary) *Regelungstech. Prozeß-Datenverarbeitung* **18** (1973), no. 2, 57-65. (M. Rössler) **52** #5118 93C10 (90C05)
- h I. Stochastic Grundlagen des Kalman-Bucy-Filters. Wahrscheinlichkeitsrechnung und Zufallsprozesse. Methoden der Regelungstechnik. R. Oldenbourg Verlag, Munich-Vienna, 1975. 259 pp. ISBN 3-486-34791-8 (Editors) **16718** 60-01 (93E10)
- h with Brammer, Karl) ★ Kalman-Bucy-Filter. Deterministische Beobachtung und statistische Filterung. Methoden der Regelungstechnik. R. Oldenbourg Verlag, Munich-Vienna, 1975. 232 pp. ISBN 3-486-34661-X (Editors) **56** #18036 93E10
- h I. See **Soviet statistics in half a century (1917-1967)**, **50** #15017
- h I. Methodological questions on information science. (Russian) *Voprosy Filos.* **no. 7**, 105-113. (Author's summary) **58** #10144 01A65 (94A15)
- See also **Information transmission on radio channels containing statistically inhomogeneous media**, **55** #2330
- h G. (with Kolosov, B. V.) On a particular boundary value problem arising in the investigation of closed stationary separation zones in an incompressible fluid. *Prikl. Meh.* **39** (1975), no. 5, 835-844 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 5, 802-811 (1976). (R. K. Gupta) **54** #4295 76.35
- h On Batchelor's theorem concerning the circulatory region. (Russian) *Izv. Akad. Nauk SSSR Meh. Zhidk. Gaza* **1976**, no. 1, 140-143. (From the author's text) **57** #8402
- h A. The possible rate of decrease of the solutions of elliptic equations. (Russian) *Mat. Sb. (N.S.)* **89(131)** (1972), 616-629, 672. (J. Kačur) **50** #755 35J15 (35B40)
- h Theorems of Liouville type for higher order elliptic equations. (Russian) *Trudy Moskov. Mat. Obšč.* **33** (1975), 263-278 (1976). (G. W. Hedstrom) **58** #17488 35J30
- h Šifrin, S. N. (with Berezanskii, Ju. M.) A generalized symmetric power moment problem. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 291-306. (errata insert) (B. R. Gelbaum) **45** #9178 47A65 (44A50, 47B99, 81.47)
- h Infinite-dimensional symmetric analogues of the Stieltjes problem of moments. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 696-701, 718. (B. R. Gelbaum) **51** #1463 47A99
- h An infinite-dimensional smooth symmetric power problem of moments on nuclear spaces. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 6, 793-802, 862. (R. W. Shonkwiler (Zbl 358 #44003)) **58** #7203 47B99 (44A50, 46G99)
- h Šifrina, E. M. See **Poincaré, Henri**, **52** #2804 and **Ioffe, A. F.**, **54** #2402
- h Šigaev, M. N. (with Amangel'diev, B. R.; Šmulev, S. A.) Vector optimization problems. (Russian) *Optimization and simulation of complex systems (Russian)*, pp. 41-47, 165. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (Tomas Gal) **56** #17841 90C99
- h (with Amangel'diev, B. R.; Šmulev, S. A.) The structure and properties of vector optimization problems. I. (Russian) *Optimization and simulation of complex systems (Russian)*, pp. 48-57, 166. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (Tomas Gal) **57** #11758a 90C30
- h (with Amangel'diev, B. R.; Šmulev, S. A.) The structure and properties of vector optimization problems. II. *Optimization and simulation of complex systems (Russian)*, pp. 58-62, 166. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (Tomas Gal) **57** #11758b 90C30
- h Sigal, E. I. (with Markus, A. S.) The multiplicity of the characteristic number of an analytic operator function. (Russian) *Mat. Issled.* **5** (1970), no. 3(17), 129-147. (E. Gerlach) **47** #868 47A65 (47B30)
- h (with Gohberg, Israel C.) Global factorization of a meromorphic operator-function and some of its applications. (Russian) *Mat. Issled.* **6** (1971), no. 1(19), 63-82. (E. Gerlach) **47** #2410 47A65 (30A68, 47B30)
- h (with Gohberg, Israel C.) The root multiplicity of the product of meromorphic operator functions. (Russian) *Mat. Issled.* **6** (1971), no. 2(20), 33-50, 158. (D. Sarason) **46** #2461 47A65
- h (with Gohberg, Israel C.) An operator generalization of the logarithmic residue theorem and Rouché's theorem. (Russian) *Mat. Sb. (N.S.)* **84(126)** (1971), 607-629. (E. Gerlach) **47** #2409 47A65 (30A68, 47B30)
- h Partial multiplicities of a product of operator-valued functions. (Russian) *Mat. Issled.* **8** (1973), no. 4(30), 65-79, 196. (B. R. Gelbaum) **49** #11295 47A65
- h Sigal, G. B. See **Segal, Graeme B.**
- h Sigal, I. H. Successive analysis of variants in the solution of extremal problems. (Russian) *Systems for the distribution of resources on graphs (Russian)*, pp. 63-84. (errata insert) *Vychisl. Centr. Akad. Nauk SSSR, Moscow*, 1970. (E. Ja. Gabovici) **47** #8102 90B35
- h (with Davydov, È. G.) Application of the penalty function method in integer programming problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 1, 28-31 (Russian); translated as *Engrg. Cybernetics* **10** (1972), no. 1, 21-24. (Robert G. Jeroslow) **54** #4638 90C10
- h (with Botvinnik, A. H.) Choice of the optimal version of means of conveyance. (Russian) *Ekonom. i Mat. Metody* **9** (1973), 1130-1136. (K. Zimmermann) **48** #10474 90B35
- h (with Korbut, A. A.; Finkel'shtein, Ju. Ju.) The branch and bound method. A survey of theory, algorithms, programs and applications. (Russian. German and English summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 2, 253-280. (Authors' summary) **56** #14682 90C10
- h Sigal, I. M. (with Sigalov, A. G.) Invariant description, with respect to transpositions of identical particles, of the energy operator spectrum of quantum-mechanical systems. (Russian. English summary) *Teoret. Mat. Fiz.* **5** (1970), no. 1, 73-93. (Authors' summary) **57** #2321 81.47
- h Asymptotic completeness of multiparticle systems. (Russian) *Dokl. Akad. Nauk SSSR* **204** (1972), 795-798. (K. Kumar) **46** #706 47A70 (35P10, 81.47)
- h On the diagonalization of the Schrödinger operator in the Fok space. (Russian. English summary) *Teoret. Mat. Fiz.* **10** (1972), no. 2, 249-258. (Author's summary) **57** #15082 81.47
- h On the discrete spectrum of the Schrödinger operators of multiparticle systems. *Comm. Math. Phys.* **48** (1976), no. 2, 137-154. (J. Weidmann) **54** #13344 35P99 (81.47)
- h On the point spectrum of the Schrödinger operators of multiparticle systems. *Comm. Math. Phys.* **48** (1976), no. 2, 155-164. (J. Weidmann) **54** #13345 35P99 (81.47)
- h On quantum mechanics of many-body systems with dilation-analytic potentials. *Bull. Amer. Math. Soc.* **84** (1978), no. 1, 152-154. (F. C. Auluck) **56** #17603 81.47
- h Sigal, Richard F. A symmetry of Petrov-type N spaces. *J. Mathematical Phys.* **14** (1973), 1434-1436. (J. Charles-Renaudie) **54** #12147 83.53
- h A note on proper homothetic motions. *General Relativity and Gravitation* **5** (1974), no. 6, 737-739. (C. B. Collins) **54** #6876 83.53
- h Conformal invariance and the six-dimensional formalism. *Internat. J. Theoret. Phys.* **11** (1974), 45-68. (Author's summary) **54** #9487 81.53
- h Note on conserved currents and the conformal group. *Lett. Nuovo Cimento* (2) **9** (1974), 385-387. (From the author's text) **56** #4468 81.22
- h Sigalotti, Luciano Particolari processi markoffiani d'arrivo che si arrestano in intervalli finiti di tempo e che presentano la scambiabilità degli incrementi. (English summary) *Rend. Ist. Mat. Univ. Trieste* **7** (1975), no. 2, 173-181. (G. G. Vrăncianu) **54** #8884 60J25
- h Sigalov, A. G. (with Sigal, I. M.) Invariant description, with respect to transpositions of identical particles, of the energy operator spectrum of quantum-mechanical systems. (Russian. English summary) *Teoret. Mat. Fiz.* **5** (1970), no. 1, 73-93. (Authors' summary) **57** #2321 81.47
- See also **Die Hilbertschen Probleme**, **49** #10488
- h Sigalov, G. G. Analyzing nonlinear systems with the aid of moment equations. *Avtomat. i Telemekh.* **1970**, no. 6, 37-47 (Russian. English summary); translated as *Automat. Remote Control* **1970**, no. 6, 897-906. (I. H. Mufti) **46** #4992 93B99

- Linear optimal filtering of scalar fields. (Russian) *Dokl. Akad. Nauk BSSR* 17 (1973), 603-606, 676. (V. N. Igolkin) 50 #4076 93E10
- Sigalov, I. E.** The uniqueness of the solution of the Cauchy problem for quasiparabolic systems with variable coefficients. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 28 (1973), no. 4, 15-23. (V. Djurikovič) 48 #11785 35A05 (35K30)
- Šiganov, I. S.** (with Grigorevskii, N. V.) Some modifications of the Dudley metric. (Russian. English summary) Continuity and stability in problems of probability theory and mathematical statistics. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov (LOMI)* 61 (1976), 17-24, 135. (R. M. Dudley) 54 #14032 60B10
- Sigel, G.** See Siegel, G.
- Sigel, James L.** (with Reading, John F.) Exact solution of the one-dimensional Schrödinger equation with δ -function potentials of arbitrary position and strength. *Phys. Rev. B* (3) 5 (1972), no. 2, 556-565. (Authors' summary) 52 #12596 81.35
- Sigg, B.** (with Mennig, J.) Comparison of power series solutions to the stationary monoenergetic neutron transport equation for slabs. *Helv. Phys. Acta* 50 (1977), no. 4, 467-477. (John Crank) 56 #14202 80.65
- Sigh, Bagat** See Singh, Bhagat
- Sigillito, Vincent G.** (with Fox, David W.) Bounds for energies of radial lithium. (German summary) *Z. Angew. Math. Phys.* 23 (1972), 392-411. (H. Wakita) 47 #1398 81.47
(with Pirkle, J. C., Jr.) A priori inequalities and norm error bounds for solutions of a third order diffusion-like equation. *SIAM J. Appl. Math.* 25 (1973), 69-71. (W. Liniger) 48 #3267 65N15
Exponential decay of functionals of solutions of a pseudoparabolic equation. *SIAM J. Math. Anal.* 5 (1974), 581-585. (V. R. Gopala Rao) 50 #13848 35B30 (35K99)
A priori inequalities and the Dirichlet problem for a pseudo-parabolic equation. *SIAM J. Math. Anal.* 7 (1976), no. 2, 222-229. (T. W. Ting) 54 #5631 35K99 (35A35)
(with Elcrat, Alan R.) An explicit a priori estimate for parabolic equations with applications to semilinear equations. *SIAM J. Math. Anal.* 7 (1976), no. 5, 746-753. (From the authors' introduction) 57 #10238 35K10
A priori inequalities and approximate solutions of the first boundary value problem for $D^2u=f$. *SIAM J. Numer. Anal.* 13 (1976), no. 2, 251-260. (R. B. Kelman) 56 #4171 65K05 (65N99)
(with Fox, David W.) Steady state oscillations in a buoyant fluid. (German summary) *Z. Angew. Math. Phys.* 27 (1976), no. 6, 757-773. (J. W. Miles) 55 #13941 76.35
★Explicit a priori inequalities with applications to boundary value problems. Research Notes in Mathematics, Vol. 13. Pitman Publishing, London-San Francisco, Calif.-Melbourne, 1977. iii + 103 pp. (J. Bouillet (Zbl 352 #35002)) 58 #17459 35B45 (35A35)
(with Elcrat, Alan R.) Coercivity for a third order pseudoparabolic operator with applications to semilinear equations. *J. Math. Anal. Appl.* 61 (1977), no. 3, 841-849. (R. E. Showalter) 58 #11936 35K99 (35Q99)
(with Kuttler, James R.) Bounding eigenvalues of elliptic operators. *SIAM J. Math. Anal.* 9 (1978), no. 4, 768-778. (L. E. Payne) 58 #11996 35P15 (49G05)
- Šigin, A. G.** (with Kutepov, V. P.) The formal transformations of microprograms. (Russian) Questions of the theory of electronic digital mathematical machines (Proc. Sem., Kiev, 1968), No. 3 (Russian), pp. 10-33. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (V. D'jačenko (RŽMat 1970 #2 V581)) 45 #8064 68A30 (94A30)
(with Dzegelenok, I. I.) Generation of a predicting filter on a program model of a computer. (Russian) *Vychisl. Sistemy No. 34* (1969), 114-128. (From the authors' introduction) 46 #1501 94A30 (68A25, 94A05)
(with Dzegelenok, I. I.) The behavior of an A-automaton in a nonstationary discrete medium. (Russian) *Vychisl. Sistemy No. 34* (1969), 139-150. (Authors' introduction) 46 #1502 94A30 (68A25)
- Sigl, Rudolf** Der Beitrag der Satellitengeodäsie zur Erdmessung. (English summary) Festschrift zur 200. Wiederkehr des Geburtstages von Carl Friedrich Gauss. *Abh. Braunschweig. Wiss. Gesellsch.* 27 (1977), 193-226. (Editors) 58 #15996 01A60 (86.00)
- Sigler, L. E.** ★Exercises in set theory. First published in 1966. Springer-Verlag, New York-Heidelberg, 1976. iii + 134 pp. (Editors) 53 #12951 04-01
★Algebra. Undergraduate Texts in Mathematics. Springer-Verlag, New York-Heidelberg, 1976. xi + 419 pp. (Paul M. Eakin) 57 #10 00A05
- Sigler, R.** See Control in space, 48 #8041
- Sigmar, D. J.** (with Hirshman, S. P.) Approximate Fokker-Planck collision operator for transport theory applications. *Phys. Fluids* 19 (1976), no. 10, 1532-1540. (Edward W. Larsen) 54 #4472 82.47
- Signon, Kermit** A simple proof of the Künneth theorem for Alexander cohomology. *Aequationes Math.* 12 (1975), 32-38. (Claude Schochet) 51 #4250 55J25
(with Hu, Hung Tzaw) Continuously factorable groupoids. *Semigroup Forum* 12 (1976), no. 3, 251-264. (Anne L. Hudson) 54 #454 22A15
A universal construction of universal coefficient sequences. *Publ. Math. Debrecen* 25 (1978), no. 1-2, 21-27. (Jimmie D. Lawson) 58 #18455 55J20
- Sigmund, D.** See Siegmund, David
- Sigmund, Karl** On the prevalence of zero entropy. *Israel J. Math.* 10 (1971), 281-288. (U. Sachdeva-Ahuja) 45 #7022 28A65 (60G99)
Ergodic averages for axiom A diffeomorphisms. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 20 (1971), 319-324. (J. C. Oxtoby) 46 #7480 28A65 (58F99)
On the space of invariant measures for hyperbolic flows. *Amer. J. Math.* 94 (1972), 31-37. (R. Ellis) 46 #2009 28A65 (54H20)
On mixing measures for axiom A diffeomorphisms. *Proc. Amer. Math. Soc.* 36 (1972), 497-504. (Zbigniew Nitecki) 46 #8265 58F15 (28A65)
Invariant measures for continuous transformations. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972), Vol. III, pp. 137-161. Internat. Atomic Energy Agency, Vienna, 1974. (Peter Walters) 55 #8318 28A65
Normal and quasiregular points for automorphisms of the torus. *Math. Systems Theory* 8 (1974/75), no. 3, 251-255. (P. Gerl) 52 #8073 10K25
On the time evolution of statistical states for Anosov systems. *Math. Z.* 138 (1974), 183-189. (J. W. Robbin) 50 #11325 58F15 (28A65)*
- On dynamical systems with the specification property. *Trans. Amer. Math. Soc.* (1974), 285-299. (J. Auslander) 50 #4898 28A65 (54H20)
- Propriétés générales et exceptionnelles des états statistiques de systèmes dynamiques. *Séminaire de Probabilités, IX (Seconde Partie, Univ. Strasbourg, Str., années universitaires 1973/1974 et 1974/1975), pp. 294-304. Lecture Notes in Math.* 465, Springer, Berlin, 1975. (Ethan M. Coven) 54 #13037 28A65 (58F99)
(with Bauer, Walter) Topological dynamics of transformations induced on the space of probability measures. *Monatsh. Math.* 79 (1975), 81-92. (D. Newton) 51 #54H20
(with Denker, Manfred; Grillenberger, Christian) ★Ergodic theory on compact spaces. Lecture Notes in Mathematics, Vol. 527. Springer-Verlag, Berlin-New York, 1976. iv + 360 pp. (W. Parry) 56 #15879 28A65 (54H20)
Sur la répartition des orbites de certains systèmes dynamiques. *Séminaire de Probabilités, 1975-1976 (Univ. Bordeaux I, Talence), Exp. No. 27, 16 pp. Lecture Notes in Math., Centre Nat. Recherche Sci., Talence, 1976. (Gérard Rauzy) 56 #28A65 (10K05, 58F15)*
- Nombres normaux et théorie ergodique. *Théorie ergodique (Actes Journées Ergodiques, Rennes, 1973/1974), pp. 202-215. Lecture Notes in Math., Vol. 532, Springer-Verlag, Berlin, 1976. (B. Volkmann) 58 #568 10K25 (10K05, 28A65)*
- On the distribution of periodic points for β -shifts. *Monatsh. Math.* 82 (1976), 247-252. (W. Parry) 54 #5442 28A65
On minimal centers of attraction and generic points. *J. Reine Angew. Math.* (1977), 72-79. (Zbigniew Nitecki) 58 #2766 54H20 (28A65, 58F10)
On the connectedness of ergodic systems. *Manuscripta Math.* 22 (1977), 27-32. (W. Parry) 56 #5839 28A65
Affine transformations on the space of probability measures. *Dynamical Systems, Vol. III—Warsaw, pp. 415-427. Asterisque, No. 51, Soc. Math. France, Paris, 1977. (Nathaniel Friedman) 58 #1093 28A65*
- Signaevskii, V. A.** (with Širokov, F. V.) Minimal coverings of a finite set. I. (Russian) *Diskret. Analiz No. 21* (1972), 72-94, 97. (J. B. Roberts) 48 #8278a 05B40
(with Širokov, F. V.) Minimal coverings of a finite set. (Russian) *Dokl. Akad. Nauk SSSR* 207 (1972), 1066-1069. (J. B. Roberts) 47 #3216 05B40
(with Širokov, F. V.) Minimal coverings of a finite set. II. Connected coverings. (Russian) *Diskret. Analiz No. 22* (1973), 57-78, 81. (J. B. Roberts) 48 #8278b 05B40
Probabilistic partition of a set into two parts. (Russian) *Combinatorial and asymptotic analysis, No. 2 (Russian), pp. 94-99. Krasnojarsk. Gos. Univ., Krasnojarsk, 1977. (Editors) 58 #27535 05A17 (60C05)*
- Signell, Svante** (with Ström, Torbjörn) Analysis of periodically switched linear circuits. *IEEE Trans. Circuits and Systems CAS-24* (1977), no. 10, 531-541. (András Székely) 58 #4700 94A20
- Signore, Monique** Sur les conditions supplémentaires en théorie cinétique relativiste. *Acad. Sci. Paris Sér. A-B* 274 (1972), A1131-A1134. (Author's summary) 45 #82.45
- Šigorin, V. S.** Criterion for structural stability of a type of system. *Avtomatika i Telemekhanika* 1977, 49-53 (Ukrainian. Russian and English summaries; translated as Soviet Automat. 10 (1977), no. 5, 37-40. (A. A. Martynuk) 57 #18995 93D05
- Sigorskii, V. P.** (with Petrenko, A. I.) ★Алгоритмы анализа электронных схем. (Russian) [Algorithmic analysis of electronic circuits] "Tekhnika", Kiev, 1970. (See RŽMat 1971 #5 V601) 94A20
(with Petrenko, A. I.) ★Алгоритмы анализа электронных схем. (Russian) [Algorithms for the analysis of electronic circuits] "Tekhnika", Kiev, 1970. (Editors) 53 #2543 94A20 (68A55)
(with Petrenko, A. I.) ★Algorithmic analysis of electronic circuits. Translated from the Russian by Carroll O. Wilde. Edited by Sydney R. Parker. Point Loma Press, Carmel, Calif., 1975. v + 593 pp. (Editors) 53 #2544 94A20 (68A55)
(with Koljada, Ju. V.) Generalization of a certain method for the numerical solution of nonlinear circuits. (Russian) *Electronic mathematical simulation and optimization processes (Proc. Res. Sem., Kiev, 1975) (Russian), pp. 7-12. Izdat. "Naukova Dumka", Kiev, 1976. (From the text) 58 #9848 94A20
(with Koljada, Ju. V.; Borovs'ka, T. T.) Some numerical aspects of the iterative approximations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR. A* 1976, no. 3, 214-217, 286. (B. Jankó) 54 #4084 65H05
(with Koljada, Ju. V.) Coordinate-wise modification of Matveev's method. (English summary) *Teoret. Elektrotehn. No. 20* (1976), 97-102, 161. (D. Ilioi) 58 #65H10
(with Koljada, Ju. V.) On the question of numerical analysis of the stationary states of nonlinear circuits. (Russian) *Mathematical simulation and the theory of electrical circuits, No. 15 (Russian), pp. 59-65, 99. Izdat. "Naukova Dumka", Kiev, 1977. (J. Švejda) 56 #17127 65H10
(with Koljada, Ju. V.) A method for the numerical analysis of nonlinear circuits. (Russian) *Elektronika i Modelirovanie Vyp. 16* (1977), 87-89, 127. 57 #1898**
- Sigrist, François** H-applications d'une sphère dans une sphère. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 50 (1971), 128-130. (E. Brown) 46 #4530 55D45
(with Suter, Ueli) On symplectic Stiefel manifolds. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 52 (1972), 493-497. (R. Ellis) 48 #5070 55F10 (55B15)
(with Suter, Ueli) Eine Anwendung der K-Theorie in der Theorie der H-spaces. *Math. Helv.* 47 (1972), 36-52. (C. S. Hoo) 46 #6350 55D45
Détermination des groupes $J(CP^n)$ et $J(HP^n)$. Applications. *Symposia Mathematica, Vol. XI (Convegno di Geometria, INDAM, Rome, 1972), pp. 21-32. Academic Press, London, 1973. (J. F. Adams) 48 #12504 55B15 (55E50, 55G40)
(with Suter, Ueli) Cross-sections of quaternionic Stiefel manifolds. *Symposia Mathematica, Vol. XI (Convegno di Geometria, INDAM, Rome, 1972), pp. 33-44. Academic Press, London, 1973. (M. F. Atiyah) 49 #3943 55G40
(with Suter, Ueli) Cross-sections of symplectic Stiefel manifolds. *Trans. Amer. Math. Soc.* 184 (1973), 247-259. (J. F. Adams) 48 #5071 55F10 (55B15)
Deux propriétés des groupes $J(CP^{2n})$. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 50 (1971), 131-133. (E. Brown) 46 #4531 55D45**

- Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 5, 413-415 (1976). (J. F. Adams) 596 55F50
- (with Suter, Ueli) Sur les groupes fondamentaux des H -espaces de rang 2. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 12, A887-A889. (Guido) **54** #11324 55D45
- (Klaus) Restricted Liapunov stability and stabilization of ordinary differential equations. (German summary) *Z. Angew. Math. Phys.* **25** (1974), 37-46. (Author's summary) **54** #5566 34D20
- (S. T.) Linear multistep methods with variable matrix coefficients. *Conference Applications of Numerical Analysis (Univ. Dundee, Dundee, 1971)*, pp. 327-331. *Re Notes in Math.*, Vol. 228, Springer, Berlin, 1971. (R. L. Brown) **50** #15352 (EA) 65C05
- (with Lambert, J. D.) Multistep methods with variable matrix coefficients. *SIAM J. Numer. Anal.* **9** (1972), 715-733. (G. Maeß) **47** #6095 65L05
- (S. T.) See *Mechanics of fracture*, **56** #7400
- (N. I.) Inequalities of S. N. Bernstein-A. A. Markov type for analytic functions. *Azerbajjani and English summaries Akad. Nauk Azerbaidžan. SSR Dokl.* **31** (1975), no. 8, 9-14. (G. V. Kuz'mina) **55** #666 30A78
- (with Ibragimov, I. I.) Best polynomial approximation in a space of analytic functions. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 2, 280-283. (R. P. Boas) **54** #10612 30A82 (30A66)
- (with Ibragimov, I. I.) The best approximation in the mean of analytic functions in space A_p ($|z| < 1$). (Russian) *Special questions in the theory of functions (Russian)*, pp. 36. Izdat. "Elm", Baku, 1977. (V. M. Kokilašvili) **58** #11428 30A82
- (with Ibragimov, I. I.) The constructive characterization of a certain class of functions of a complex variable. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 4, 791. (Anthony G. O'Farrell) **56** #15942 30A82
- (G. G.) One generalization of the traveling salesman problem. I. *Avtomat. i Telemekh.* **1971**, no. 8, 116-123 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 8, part 2, 1265-1271 (1972). (M. Rössler) **48** #10483 35J35
- (G. G.) One generalization of the traveling salesman problem. II. *Avtomat. i Telemekh.* **1971**, no. 142-147 (Russian. English summary); translated as *Automat. Remote Control* **32**, no. 10, part 2, 1658-1663. (M. Rössler) **51** #2632 90B35
- (G. G.) A certain generalization of the problem of two travelling salesmen. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **66** (1972), 1-656. (E. Ja. Gabovič) **46** #1316 90B35
- (with Piontkovskii, A. A.) Non-Bellman functionals for extremal problems of the binational type. *Avtomat. i Telemekh.* **1974**, no. 4, 128-134 (Russian. English summary); translated as *Automat. Remote Control* **1974**, no. 4, part 2, 632-637. (M. Rössler) **48** #10483 35J35
- (G. G.) See *Control in space*, **48** #8041
- (G. G.) (with Das, K. P.) Modulational instability of elliptically polarized transverse electromagnetic wave in a cold plasma. *Czechoslovak J. Phys.* **27B** (1977), no. 12, 588-1377. (G. P. Bava) **57** #8476 7841
- (N. R.) An asymptotic estimate of the spectral function of the Laplace operator. (Russian) *Numerical analysis and mathematical physics*, No. 2 (Russian), pp. 173-181. *Gos. Gos. Ped. Inst. im. Lenina, Moscow*, 1975. (Editors) **58** #29419 35P20
- (E. D.) (with Malahovskaja, R. M.) Certain formulas for the realization of operators, and for their application to the solution of integrodifferential equations. (Russian) *Mathematical questions*, No. 3. *Trudy Tomsk. Gos. Univ.* **220** (1975), 46-56. (S. Rabinovič) **54** #928 46F10 (45K05)
- (S. Hong) See *Nguyen Si Hong*
- (S. B.) (with Banerjee, Kali S.) Biased estimation in weighing designs. *Sankhyā* **36** (1974), part 1, 55-66. (A. Hedayat) **51** #9382 62J05
- (S. B.) (with Eršov, Ju. I.) An application of the integral transformations method to the solution of boundary value problems of the theory of neutron transport. (Russian) *Vychisl. Mat. i Mat. Fiz.* **12** (1972), 639-655. (B. Kellogg) **46** #4897 8245
- (with Eršov, Ju. I.) The solution of transport theory problems in spherical geometry. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **13** (1973), 1534-1543, 1637. (Hans Kaper) **51** #13100 8245
- (with Šiškov, L. K.) Analysis of the equation of neutron transport under conditions of an infinite energy axis. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **14** (1974), 705-716, 813. (Hans Kaper) **50** #1674 8245
- (with Krjanev, A. V.) An application of the methods of partial orderings to the solution of problems of the nonlinear statics of nuclear reactors. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* **20** (1975), 73-74. (Editors) **51** #11391 8047 (47H99)
- (with Eršov, Ju. I.) ★Методы решения краевых задач теории переноса. (Russian) [Methods for the solution of boundary value problems of transport theory] *Atomizdat, Moscow*, 1977. 193 pp. (M. Drăganu) **58** #14800 8245
- (S. B.) (with Krein, S. G.) Linear differential equations on a Lie group. (Russian) *Funkcional. Anal. i Priložen.* **4** (1970), no. 1, 52-61. (J. S. Joel) **55** #12868 22E30 (5R20)
- (S. B.) Linear differential equations on Lie semigroups. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* **1** Sb. Stati po Teorii Operatornyh Uravnenii **1970**, 175-197. **54** #14018 58G99
- (S. B.) The generation of a representation of a Lie group by one-parameter subgroups. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* **5** Sb. Stati po Operator. i Differencial. Uravnenii (1972), 148-156. (Author's introduction) **57** #5798 22E45 (22E30)
- (S. B.) Spaces of analytic functions in a domain with a corner point. (Russian) *Mat. Zametki* **18** (1975), no. 3, 411-420. (M. I. Nagnibida) **52** #14959 46E10 (30A98)
- (S. B.) The L_p -spaces of functions that are analytic in a domain with a piecewise analytic boundary. (Russian) *Mat. Zametki* **20** (1976), no. 4, 537-548. (M. I. Nagnibida) **52** #2201 46E15 (30A98)
- (S. B.) See also *Collection: Papers by postgraduates in mathematics and mechanics*, **47** #4748
- (S. B.) A certain method of scheme realization of signal conjunction in a potential-pulse system of elements. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **19** (1970), 172-176. (I. M. Havel) **50** #4139 94A20
- (S. B.) Certain questions on the structural synthesis of logical schemes. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **21** (1972), 253-257. (R. Shirladze) **50** #4170 94A30
- (S. B.) A certain method of forming vector-time switching functions from microprograms. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **22** (1973), 22-30. (R. Shirladze) **50** #4168 94A30
- (S. B.) A certain method for the minimization of vector-time switching functions. (Russian) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **22** (1973), 111-114. (R. Shirladze) **50** #4169 94A30
- (S. B.) The extension of the possibilities of a language for the analytical description of logical schemes. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **22** (1973), 131-138. (errata insert) (M. Tetruašvili) **51** #5196 94A20
- (S. B.) Conjunction of signals in a potential element structure. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **22** (1973), 246-257. (M. Tetruašvili) **50** #12471 94A20
- (S. B.) Disjunction of signals in a potential element structure. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **22** (1973), 373-378. (R. Shirladze) **52** #2768 94A20
- (S. B.) The method of forming vector-time switching functions from microprograms. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **23** (1974), 19-25. (M. Tetruašvili) **51** #12432 94A20
- (S. B.) Once again on the method for generating vector-time switching functions from microprograms. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **23** (1974), 140-154. **51** #12433 94A20
- (S. B.) New operators in a language for the analytic description of logical schemes. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **24** (1975), no. 2, 135-140. (S. Rudeanu) **56** #8216 94A20
- (S. B.) The language of vector switching functions to describe logic circuits. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 2, 116-124, 221 (Russian); translated as *Engng. Cybernet.* **15** (1977), no. 2, 94-102 (1978). (RŽMat **1977** #8 V526) **58** #33578 94A20
- (S. B.) Šijački, Djordje (with Vujičić, Milan; Herbut, Fedor) Generalized semidirect product in group extensions. *J. Mathematical Phys.* **13** (1972), 1755-1759. (J. S. Rose) **49** #5190 20F25
- (S. B.) (with Herbut, Fedor; Vujičić, Milan) Minimal extensions as generalized semidirect products. *J. Mathematical Phys.* **14** (1973), 1121-1124. (Philip H. Butler) **48** #431 20F25 (8122)
- (S. B.) (with Vujičić, Milan; Herbut, Fedor) Generalized semidirect product in group unifications. *J. Mathematical Phys.* **14** (1973), 1516-1518. (F. R. Halpern) **48** #5521 8120
- (S. B.) (with Herbut, Fedor; Vujičić, Milan; Božović, Ivan B.) Generalized semidirect product. *Group theoretical methods in physics (Proc. Third Internat. Colloq., Centre Phys. Théor., Marseille, 1974)*, Vol. 2, pp. 441-446. (Centre Nat. Recherche Sci., Centre Phys. Théor., Marseille, 1974. (Philip Huddleston) **57** #2229 8120
- (S. B.) The unitary irreducible representations of $\bar{SL}(3, R)$. *J. Mathematical Phys.* **16** (1975), 298-311. (Author's summary) **52** #4866 8122
- (S. B.) (with Browne, Sean) On the irreducible representations of the Lorentz group. *Ann. Physics* **99** (1976), no. 1, 92-126. (Wayne J. Holman, III) **54** #2882 22E43 (22E70)
- (S. B.) Sijpesteijn, P. J. (with Bruins, E. M.; Worp, K. A.) A Greek mathematical papyrus. *Janus* **61** (1974), 296-312. (A. G. Molland) **57** #5568 01A20 (01A15)
- (S. B.) Šik, František Struktur und Realisierung von Verbandsgruppen. IV. Spezielle Typen von Realisierungen. (Spanish summary) *Mem. Fac. Ci. Univ. Habana Ser. Mat.* **1**, no. 7, fasc. 6, 19-44 (1968). (W. C. Holland) **48** #5950 06A55
- (S. B.) Verbandsgruppen, deren Komponentenverband kompakt erzeugt ist. *Arch. Math. (Brno)* **7** (1971), 101-121. (Klaus Keimel) **47** #101 06A55
- (S. B.) Closed and open sets in topologies induced by lattice ordered vector groups. *Czechoslovak Math. J.* **23(98)** (1973), 139-150. (F. D. Pedersen) **47** #8387 06A55
- (S. B.) Modular and distributive equalities in lattices. *Mat. Časopis Sloven. Akad. Vied* **23** (1973), 342-351. (Joel Berman) **49** #162 06A30
- (S. B.) Šik, M. L. (with Berkinblit, M. B.; Vasil'ev, Ju. M.) The work of I. M. Gel'fand in biology. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 1 (175), 232-240. (Editors) **52** #7828 01A70 (92-03)
- (S. B.) Sikarev, A. A. Optimal non-coherent reception in channels with fluctuating and concentrated interference. (Russian) *Problemy Peredači Informacii* **6** (1970), no. 2, 109-118. (Author's summary) **52** #7692 94A05
- (S. B.) The noise stability of optimal incoherent dispersed reception in channels with fluctuating and concentrated interference. (Russian) *Problemy Peredači Informacii* **7** (1971), no. 4, 97-101. (Author's summary) **52** #7693 94A05
- (S. B.) Sikarskie, David L. (with Lou, Chao Lin) A new type of non-linear approximation with application to the Duffing equation. (French, German and Russian summaries) *Internat. J. Non-Linear Mech.* **9** (1974), 179-191. (A. R. Gourlay) **52** #2230 65L99
- (S. B.) Sikdar, Kripasindhu Decompositions of the state space, homomorphisms and products of semigroup acts. *Czechoslovak Math. J.* **24(99)** (1974), 511-521. (C. F. Keleman) **50** #10144 22A99
- (S. B.) On topological machines. *J. Comput. System Sci.* **14** (1977), no. 1, 17-48. (István Babcsányi) **55** #10170 94A30 (20M35)
- (S. B.) Sikdar, S. (with Jeswani, P. T.) A new approach to machine generation of random variables with any distribution. *IEEE Trans. Reliab.* **27** (1978), no. 1, 55-57. (J. H. Halton) **58** #13612 65C10
- (S. B.) Sikharulidze, G. G. See *Siharulidze, G. G.*
- (S. B.) Šikin, E. V. The regular imbedding in the large in R^3 of metrics of class C^4 of negative curvature. (Russian) *Mat. Zametki* **14** (1973), 261-266. (A. V. Pogorelov) **48** #4969 53C45
- (S. B.) (with Poznjak, Ė. G.) Surfaces of negative curvature. (Russian) *Algebra. Topology. Geometry. Vol. 12 (Russian)*, pp. 171-207. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1974. (M. L. Gromov) **53** #11548 53C45
- (S. B.) The global isometric immersion in R^3 of certain metrics of nonpositive curvature.

- (Russian) *Dokl. Akad. Nauk SSSR* **215** (1974), 61-63. (A. V. Pogorelov) **49** #7962 53C40
- Isometric imbeddings in E^3 of noncompact domains of nonpositive curvature. (Russian. English summary) *Problems in geometry*, Vol. 7 (Russian), pp. 249-266, 302. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Nauch. i Tehn. Informacii*, Moscow, 1975. (J. Szenthe) **58** #18294 53C40
- The regularity of horocyclic coordinates. (Russian) *Mat. Zametki* **17** (1975), 475-484. (J. Szenthe) **53** #11537 53C20
- The existence of solutions of the system of Peterson-Codazzi and Gauss equations. (Russian) *Mat. Zametki* **17** (1975), no. 5, 765-781. (Ju. Burago) **52** #15317 53C40
- Šikin, G. N. (with Kolpakov, V. P.) Axially symmetric solutions of Einstein's system of equations and of the nonlinear equation of a mass-free scalar field. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **29** (1974), no. 1, 107-109. (R. I. Pimenov) **52** #7450 83.53
- (with Zaicev, N. A.) Conformally flat nonstationary solutions in general relativity theory and scalar-tensor theories of gravitation. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 6 (1975), 31-38. (RŽFiz **1975** #11 B149) **57** #8938 83.53
- Nonstationary solutions of selfsimilar type for Einstein's systems of equations and for a massless scalar field in an orthogonal metric. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 6 (1975), 38-41. (RŽFiz **1975** #11 B125) **57** #8928 83.53
- Certain properties of the solutions of equations of the interaction of a scalar and electromagnetic field in outer gravitational fields. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 7 (1976), 168-174. (From the author's introduction) **56** #4687 83.53
- (with Zaicev, N. A.) Plane-symmetric and cylindrically symmetric solutions of Einstein's equations in the presence of a mass-free scalar field. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 8 (1977), 77-84. (Kishore Marathe) **58** #9088 83.53
- Šikin, I. S. Gravitational fields with groups of motions on two-dimensional transitivity hypersurfaces in a model with matter and a magnetic field. *Comm. Math. Phys.* **26** (1972), 24-38. (M. Carmeli) **45** #8204 83.22
- Sikrijavii, V. Ja. The solution of boundary value problems connected with an operator of pseudospherical differentiation. (Russian) *Uspehi Mat. Nauk* **25** (1970), no. 6(156), 231-232. (E. Gerlach) **45** #931 47B99 (46J10, 46N05)
- On the theory of boundary value problems for equations with an operator of pseudospherical differentiation. (Russian) *Uspehi Mat. Nauk* **26** (1971), no. 4(160), 247-248. (E. Gerlach) **45** #932 47B99 (46J10, 46N05)
- The operator of quasidifferentiation, and related boundary value problems. (Russian) *Trudy Moskov. Mat. Obšč.* **27** (1972), 195-246. (E. Gerlach) **58** #30219 46G05 (46J99)
- An invariant Laplace operator as an operator of pseudospherical differentiation. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **27** (1972), no. 3, 66-73. (E. Gerlach) **46** #4273 47B99 (47F05)
- Boundary value problems for a multiplicatively generated quasidifferentiation operator. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 1313-1320, 1367. (E. Gerlach) **58** #30220c 46G05 (35R15, 46J99)
- Boundary value problems for a multiplicatively generated quasidifferentiation operator. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 406-409, 432. (E. Gerlach) **58** #30220a 46G05 (35R15, 46J99)
- A family of means and the quasidifferentiation operator generated by it. (Russian) Analysis in infinite-dimensional spaces. *Trudy Kaf. Teorii Funkcii i Funkcional. Anal. Moskov. Gos. Univ. No. 1* (1974), 27-38. (E. Gerlach) **58** #30220b 46G05 (35R15, 46J99)
- Sufficient conditions for the existence of the Gâteaux-Lévy means. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 5(179), 239-240. (E. Gerlach) **58** #30222a 46G05 (46J99)
- The dependence of a nonlocal solution of the Cauchy problem on a parameter. (Russian) *Differentsial'nye Uravnenija* **11** (1975), no. 7, 1343-1346, 1352. (E. Gerlach) **58** #30223a 46G05 (34A10, 35R15)
- Fundamental domains for the Laplace operator in Hilbert space. (Russian) *Funkcional. Anal. i Priložen.* **9** (1975), no. 2, 93-94. (E. Gerlach) **58** #30222b 46G05 (46J99)
- Linear quasidifferential equations. (Russian) *Ukrain. Mat. Ž.* **27** (1975), 121-127, 144. (E. Gerlach) **58** #30223b 46G05 (34A30, 35R15)
- Sikrijavii, V. Ja. See *Transactions of the Moscow Mathematical Society*, **50** #9478
- Sikivie, P. (with Weiss, Nathan) Screening solutions to classical Yang-Mills theory. *Phys. Rev. Lett.* **40** (1978), no. 22, 1411-1413. (Franco Strocchi) **57** #18546 81.22 (55F15)
- Sikk, J. Complementary spaces of Fourier coefficients with a rate. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **355** (1975), 222-235. (S. Aljančić) **53** #11295a 42A24
- Certain T^λ -constructive spaces and multipliers of class $(X_{T^\lambda}, X_{U^\lambda})$. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **374** (1975), 163-179. (S. Aljančić) **53** #11295b 42A24
- Multipliers, T^λ -complementary spaces, and the Fourier coefficients of certain classes of functions. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **374** (1975), 180-185. (S. Aljančić) **53** #11295c 42A24
- Multipliers of the classes $(X_{T^\lambda}, X_{U^\lambda})$. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **430** (1977), 70-74. (From the introduction) **58** #17781 46A45 (42A18)
- Imbedding theorems, and multipliers. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **431** (1977), 112-118. (From the summary) **58** #29762 42A18
- Sikkema, Carl D. (with Kinoshita, Shin'ichi) Penetration indices of arc-and-ball pairs and uncountably many quasi-translations of the 3-sphere. *Michigan Math. J.* **20** (1973), 309-319. (B. J. Ball) **48** #12535 57A10
- Sikkema, P. C. Über die Schürerschen linearen positiven Operatoren. I. *Nederl. Akad. Wetensch. Proc. Ser. A* **78** = *Indag. Math.* **37** (1975), 230-242. (G. Mühlbach) **51** #10962 41A35
- Über die Schürerschen linearen positiven Operatoren. II. *Nederl. Akad. Wetensch. Proc. Ser. A* **78** = *Indag. Math.* **37** (1975), 243-253. (G. Mühlbach) **51** #10963 41A35
- Über eine Verallgemeinerung zweier Sätze von G. G. Lorentz. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), no. 1, 76-90. (W. J. K. Sikkema) **53** #1100 41A10
- (with Schurer, F.; Steutel, F. W.) On the degree of approximation with Bernstein polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), 231-239. (Helmut Brass) **53** #6155 41A10
- Estimations involving a modulus of continuity for a generalization of Korovkin operations. *Linear spaces and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977)*, pp. 289-303. *Internat. Ser. Numer. Math.*, Vol. 40, Birkhäuser, Basel, (Walter Schempp) **58** #17663 41A35
- Siklos, S. T. C. Two completely singularity-free NUT spacetimes. *Phys. Lett. A* **59** (1976), no. 3, 173-174. (Author's summary) **57** #8929 83.53
- Occurrence of whimper singularities. *Comm. Math. Phys.* **58** (1978), no. 3, 255-260. (J. R. Vanstone) **57** #8930 83.53
- Siklóssy, Laurent (with Rich, A.; Marinov, V.) Breadth-first search: some surprising results. *Artificial Intelligence* **4** (1973), 1-27. (W. D. Maurer) **48** #10221 68A05
- See also *Cybernetics collection*, **48** #5714
- Sikora, M. (with Abramowicz, M. A.; Jaroszyński, M.) Relativistic, accreting disks. *Astronom. and Astrophys.* **63** (1978), no. 1-2, 221-224. (R. L. Ingraham) **57** #8928 85.53
- Sikorskaja, E. P. (with Plotnikov, V. I.) Optimization of a controlled object described by a nonlinear system of hyperbolic equations. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), 346-357. (L. von Wolfersdorf) **46** #2521 49B25
- Sikorski, Roman (with Rasiowa, Helena) ★The mathematics of metamathematics. edition. *Monografie Matematyczne*, Tom 41. PWN—Polish Scientific Publishers, Warsaw, 1970. 519 pp. (Editors) **49** #8807 02-02 (02Bxx, 02Cxx, 02Jxx)
- (with Woyciecha, K.) On the existence of strictly positive measures. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 721-722. (D. A. Kappos) **46** #3745 28A60
- Differential modules. *Colloq. Math.* **24** (1971/72), 45-79. (From the introduction) **58** #2845 58A05
- Address presented September 3, 1969 at the inauguration of the Jubilee of the Mathematical Society. (Polish) Ninth Congress of Polish Mathematicians (Kraków, 1969). *Wiadom. Mat.* (2) **12**, no. 2, 214-225 (1971). (Editors) **53** #7683 00A10
- (with Rasiowa, Helena) ★Математика метаматематики. (Russian) [The mathematics of metamathematics] Translated from the English by V. A. Jankov. in *Mathematical Logic and the Foundations of Mathematics. Izdat. "Nauka", Moscow, 1972*. 591 pp. (Editors) **50** #4232 02-02 (02Bxx, 02Cxx, 02Jxx)
- ★Wstęp do geometrii różniczkowej. (Polish) [Introduction to differential geometry] Biblioteka Matematyczna, Tom 42. [Mathematics Library, Vol. 42] Państwowe Wydawnictwo Naukowe, Warsaw, 1972. 369 pp. (V. Komkov) **57** #7400 53-01 (58-01)
- Abstract exterior differential. Collection of articles commemorating Władysław Ślebodziński. *Colloq. Math.* **26** (1972), 55-58. (P. Corsini) **51** #3204 15A75 (58-01)
- ★Diferenciální a integrální počet. Funkce více proměnných. (Czech) [Differential and integral calculus. Functions of several variables] Translated from the revised and supplemented Polish edition by Ilya Černý. *Academia, Prague*, 1973. 400 pp. (Editors) **50** #4841 26-02 (28-02)
- (with Antosik, Piotr; Mikusiński, Jan) ★Theory of distributions. The sequential approach. Elsevier Scientific Publishing Co., Amsterdam; PWN—Polish Scientific Publishers, Warsaw, 1973. xiv + 273 pp. (Z. Zielezński) **51** #1383 46Fxx (44A40)
- Quasi-inverses of morphisms. Collection of articles dedicated to Andrzej Mostowski on the occasion of his sixtieth birthday. IV. *Fund. Math.* **81** (1974), 343-358. (Laplaža) **49** #10752 18A20
- (with Antosik, Piotr; Mikusiński, Jan) ★Теория обобщенных функций. (Russian) [Theory of distributions] Секвенциальный подход. [The sequential approach] Translated from the English by V. V. Žarinov. Edited by E. D. Solomentsev. "Mir", Moscow, 1976. 311 pp. (Editors) **54** #924 46Fxx (44A40)
- ★Rachunek różniczkowy i całkowy. Funkcje wielu zmiennych. (Polish) [Differential and integral calculus. Functions of several variables] Fourth edition. Biblioteka Matematyczna, Tom 28. [Mathematics Library, Vol. 28] Państwowe Wydawnictwo Naukowe, Warsaw, 1977. 563 pp. (Editors) **58** #6093 26-01
- See also *Congress: Polish Mathematicians*, **52** #13067; *Sierpiński, Waclaw*, **54** #2405 and *Sierpiński, Waclaw*, et al., **54** #2407
- Sikorski, Ju. G. (with Tereščenko, M. Ī.) A certain method of finding particular solutions of nonhomogeneous Bessel and Legendre equations. (Russian) *Mathematical Problems*, No. 9 (Russian), pp. 177-181. *Naukova Dumka*, Kiev, 1971. (B. A. Bondarenko) **45** #3802 33A45
- (with Tereščenko, M. Ī.) The construction of particular solutions of linear inhomogeneous differential equations with vicinity of an irregular singular point. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 807-812. (M. Bertolino) **45** #3845 34C40
- (with Tereščenko, M. Ī.) Nonhomogeneous linear differential equations of regular case. (Russian) *Mathematical physics*, No. 11 (Russian), pp. 133-137. *Naukova Dumka*, Kiev, 1972. (J. W. Macki) **46** #7613 34A25 (34E20)
- Necessary and sufficient conditions for the existence of a particular polynomial solution of an inhomogeneous linear differential equation. (Ukrainian. English and Russian summaries) *Visnik Kiiev. Univ. Ser. Mat. Meh.* No. 14 (1972), 97-99. (Author's summary) **57** #12955 34A05
- (with Tereščenko, M. Ī.) Conditions for the existence of closed solutions to an inhomogeneous differential equation with polynomial coefficients. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 558-563, 576. (J. Rausen) **52** #14424 34A05
- Sikorski, R. See *Sikorski, Roman*
- Šikulová, Marie Stochastic model of accelerated testing methods of fatigue. (Czech summary) *Apl. Mat.* **19** (1974), 392-402. (R. Subramanian) **51** #4816 73G20
- A contribution to stochastic approximation methods. (Czech. Russian summary) *Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně B-43* (1974), 21-31. (V. I. Šikulová) **56** #7060 62L20
- The use of successive stochastic approximations for the determination of f

Vysoké. Učení Tech. v Brně 1974, no. 1-4, 13-19. (V. Fabian) 53 #6930

A. Recurrent analysis of variance of transient processes. (Russian) *Computer in mechanical engineering (Russian)*, pp. 122-130. *Akad. Nauk Beloruss. SSR Inst. bernet.*, Minsk, 1971 (1972). (Author's summary) 50 #16041 93E10
also *Computer science in mechanical engineering*, 50 #6713

(with Goldberg, Joshua N.) Equations of motion in the null formalism. *Relativity and Gravitation* 7 (1976), no. 9, 757-766. (Authors' summary) 117 83.53 (70.53)

u. Time-periodic solution of the system of boundary layer equations. *Prikl. zh.* 36 (1972), 460-470 (Russian); translated as *J. Appl. Math. Mech.* 36 (1972), (W. R. Sears) 48 #7769 76.35

Continuation of a T -periodic boundary layer. (Russian) *Uspehi Mat. Nauk* 27 no. 3(165), 215-216. (O. Vejvoda) 52 #14704 35Q99

Asymptotic integration of the system of equations for a boundary layer by the method of averaging. (Russian) *Dokl. Akad. Nauk SSSR* 213 (1973), 63-66. (Djordje) 50 #9156 76.35

Construction of the solution of a nonstationary Prandtl system by the line method with respect to time. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 2(170), 243-244. (J. W. S.) 56 #6162 35Q99 (76.35)

Construction of the solution of the system of equations for a boundary layer by the method with respect to time. (Russian) *Trudy Sem. Petrovsk. Vyp.* 2 (1976), 1. (Janusz Mika) 56 #1947 76.65

N. (with Rozenfel'd, T. K.) On a form of representation of Boolean functions. *Dokl. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 1, 137-140 (Russian); translated as *Cybernetics* 11 (1973), no. 1, 116-120. (Authors' summary) 55 #14434 94A20

A. (with Solnceva, T. V.) Some complements to the method of potentials and to approximate methods of linear programming. (Russian) *Trudy Nauch. Ob"ed. Inst. Fiz.-Mat. Fak. Ped. Inst. Dal'n. Vostok.* 9 (1968), 60-71. (J. Abrahm) 63J1 90C05

(with Hovanskii, G. S.) Nomographic representation of generalized equations of third and fourth nomographic order and of successive linear interpolation formulae in three and four entries. (Russian) *Nomography collection*, No. 9 (Russian), pp. 36, 194. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1973. (L. Bal) 49 #6667

G. S. See *Questions on numerical mathematics and programming*, 53 #2575

L. Radiation damping oscillations of the "whispering gallery" type at a resonant boundary. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Fizika* 20 (1977), no. 6, 876-886. (C. Corduneanu) 57 #14890 76.41

See also *Mathematical problems in the theory of wave propagation*, 48 #5773

P. Some questions on the instability of difference systems. (Russian) *Sibirsk. Zh.* 15 (1974), 1332-1337, 1431. (B. Choczewski) 50 #7866 39A10

(with Judaev, G. S.) The stability of difference systems with respect to part of the elements. (Russian) *Differentsial'nye Uravneniya* 11 (1975), no. 5, 909-913, 949-950. (I. Jeffer) 51 #13505 39A30

(with Judaev, G. S.) On the stability of difference schemes. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 2 (177), 111-115. (Wolfgang Hahn) 58 #1785 65Q05, 93Dxx

On the optimal stabilization of difference systems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 12(187), 99-107. (Author's introduction) 58 #23214 39A10

N. A. (with Dolginov, A. Z.; Gnedin, Ju. N.) Photon polarization and frequency in multiple scattering. (Russian summary) *J. Quant. Spectrosc. Radiat. Transfer* 17(70), no. 7, 707-754. (P. Achuthan) 52 #2444 81.35

O. (with Krivošein, L. E.; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet) Études des systèmes mathématiques aux opérateurs non linéaires. I. Problème posé de valeurs initiales pour une nouvelle classe d'équations intégral-différentielles aux opérateurs non linéaires et aux dérivées partielles du premier ordre. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 60 (1974), 387-395. (Authors' summary) 13609 45J05

(with Krivošein, L. E.; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet Namuk) Problemi sistemati matematiki di struttura composita. II. Problema di valori integrali per un sistema misto di equazioni integro-differenziali non lineari a derivate parziali. (English summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 106(1974), no. 5-6, 779-788. (Authors' summary) 52 #8720 45K05

(with Krivošein, L. E.; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet Namuk) Systèmes différentiels possédant la structure complexe. VI. Recherche des solutions exactes aux conditions initiales concernant certains systèmes intégral-différentiels non linéaires aux opérateurs paraboliques. (Russian and Romanian summaries) *Bul. Şti. Inst. Politehn. Timişoara Ser. Mat. Fiz. Mec. Teoret. Apl.* 19(33) (1974), no. 2, 71. (From the authors' summary) 55 #8720 45K05

(with Toader, M.) On the stability of certain dynamical systems. (Romanian. English summary) *Bul. Univ. Braşov Ser. A Mec. Apl.* 16 (1974), no. 1, 11-18. (Authors' summary) 57 #6672 34D20

N. See *Silaev, V. N.*

Robert (with Gellar, Ralph) The algebra of Fibonacci representations. *Fibonacci Quart.* 14 (1976), no. 4, 289-326. (D. A. Klarner) 57 #12368 10A35

On the Fibonacci property of Wythoff pairs. *Fibonacci Quart.* 14 (1976), no. 4, 380-384. (J. Benkoski) 54 #12622 10A35

(with Gellar, Ralph) A noninvertible unweighted bilateral shift. *Proc. Amer. Math. Soc.* 51 (1976), no. 2, 225-226 (1977). (K. K. Oberai) 54 #13619 47B37

On the N canonical Fibonacci representations of order N . *Fibonacci Quart.* 15 (1977), no. 1, 57-66, 34. (Morton Abramson) 55 #5512 10A35

On Wythoff's Nim and Fibonacci representations. *Fibonacci Quart.* 15 (1977), no. 1, 3. (Avezzi S. Fraenkel) 55 #12132 90D05

g, Eugene The Le Chatelier principle as a corollary to a generalized envelope theorem. *J. Econom. Theory* 3 (1971), 146-155. (From the author's introduction) 7872 90A15

On the revision of comparative statics methodology in economics, or, how to do comparative statics on the back of an envelope. *J. Econom. Theory* 7 (1974), no. 2, 172. (From the introduction) 58 #4245 90A15

Silberger, Allan J. An elementary construction of the representations of $SL(2, GF(q))$. *Osaka J. Math.* 6 (1969), 329-338. (D. Livingstone) 45 #410 20C30

On work of Macdonald and $L^2(G/B)$ for a p -adic group. *Harmonic analysis on homogeneous spaces (Proc. Sympos. Pure Math., Vol. XXVI, Williams Coll., Williamstown, Mass., 1972)*, pp. 387-393. *Amer. Math. Soc., Providence, R.I.*, 1973. (S. I. Gel'fand) 49 #3048 22E50

(with Howe, Roger E.) Why any unitary principal series representation of SL_n over a p -adic field decomposed simply. *Bull. Amer. Math. Soc.* 81 (1975), 599-601. (E. A. Thieleker) 51 #5855 22E50

Convexity for a simply connected p -adic group. *Bull. Amer. Math. Soc.* 81 (1975), no. 5, 910-912. (S. I. Gel'fand) 51 #13067 (EA 52) 20G25

(with Howe, Roger E.) Any unitary principal series representation of $(GL)_n$ over a p -adic field is irreducible. *Proc. Amer. Math. Soc.* 54 (1975), 376-378. (G. I. Ol'sanskii) 54 #10508 22E50

Irreducible representations of a maximal compact subgroup of pgl_2 over the p -adics. *Math. Ann.* 229 (1977), no. 1, 1-12. (G. I. Ol'sanskii) 57 #3318 22E50

The Langlands quotient theorem for p -adic groups. *Math. Ann.* 236 (1978), no. 2, 95-104. (G. I. Ol'sanskii) 58 #22413 22E50 (20G05)

The Knapp-Stein dimension theorem for p -adic groups. *Proc. Amer. Math. Soc.* 68 (1978), no. 2, 243-246. (Author's summary) 58 #11245 22E50

Silberger, D. M. Borders and roots of a word. *Portugal. Math.* 30 (1971), 191-199. (R. C. Lyndon) 46 #1934 20M05

(with Ehrenfeucht, Andrzej) Universal and point universal terms. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 6, 399-402. (J. R. Isbell) 53 #13442 20M05

(with Ehrenfeucht, Andrzej) Decomposing a transformation with an involution. *Algebra Universalis* 7 (1977), no. 2, 179-190. (B. Węglorz) 55 #10273 04A20

Uniformly deep families of k -membered subsets of n . *J. Combinatorial Theory Ser. A* 22 (1977), no. 1, 31-37. (D. P. Roselle) 54 #12533 05A05

Silbermann, Bernd Über eine Klasse von singulären Integralgleichungen, deren Symbol nicht mehr als eine endliche Anzahl von Nullstellen ganzzahliger und gebrochener Ordnung aufweist. *Math. Nachr.* 47 (1970), 245-260. (R. C. MacCamy) 46 #5960 45E05

Über eine Klasse einseitig invertierbarer singulärer Integraloperatoren nicht normalen Typs in gewissen Paaren von Banach-Räumen. I, II. *Math. Nachr.* 51 (1971), 327-342; *ibid.* 52 (1972), 297-313. (F. Smithies) 48 #7022 47G05 (45E05)

Über einen Zugang zu einer Klasse eindimensionaler singulärer Integraloperatoren nicht normalen Typs. *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* 13 (1971), 135-142. (Jürgen Leiterer) 50 #14109 45E05 (47G05)

(with Pröbldorf, Siegfried) Über die normale Auflösbarkeit des singulären Integraloperators vom nicht normalen Typ. *Math. Nachr.* 55 (1973), 73-88. (H. Amann) 47 #9360 47F05

(with Pröbldorf, Siegfried) Über die normale Auflösbarkeit von Systemen singulärer Integralgleichungen vom nicht normalen Typ. *Math. Nachr.* 56 (1973), 131-144. (Jürgen Leiterer) 48 #9462 47G05 (45E05)

(with Köhler, Uwe) Einige Ergebnisse über Φ_+ -Operatoren in lokalkonvexen, topologischen Vektorräumen. *Math. Nachr.* 56 (1973), 145-153. (J. A. Van Casteren) 48 #12131 47B30

(with Köhler, Uwe) Über algebraische Eigenschaften einer Klasse von Operatorenmatrizen und eine Anwendung auf singuläre Integraloperatoren. *Math. Nachr.* 57 (1973), 245-258. (Jürgen Leiterer) 48 #9432 47A65

Zur Theorie eindimensionaler singulärer Integraloperatoren nicht normalen Typs mit stückweise stetigen Koeffizienten. *Math. Nachr.* 57 (1973), 371-384. (Jürgen Leiterer) 48 #9464 47G05

Über paarige Operatoren nicht normalen Typs. *Math. Nachr.* 60 (1974), 79-95. (Jürgen Leiterer) 50 #14337 47B35 (47G05)

(with Pröbldorf, Siegfried) Ein Projektionsverfahren zur Lösung abstrakter singulärer Gleichungen vom nicht normalen Typ und einige seiner Anwendungen. *Math. Nachr.* 61 (1974), 133-155. (F. Smithies) 51 #8865 47A50 (45E10, 47B35)

(with Pröbldorf, Siegfried) Ein Projektionsverfahren zur Lösung singulärer Gleichungen vom nicht normalen Typ. *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* 16 (1974), 367-376. (Jürgen Leiterer) 51 #6461 47A50 (47G05)

Über die einseitige Invertierbarkeit gewisser Klassen paariger Operatoren nicht normalen Typs. *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* 16 (1974), 377-381. (Jürgen Leiterer) 52 #11635 47A50 (45E10)

Über eine Klasse singulärer Integraloperatoren nicht normalen Typs mit stückweise stetigen Koeffizienten. 5. Tagung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975), Heft 2, pp. 305-308. *Wiss. Schr. Techn. Hochschule Karl-Marx-Stadt, Techn. Hochschule, Karl-Marx-Stadt*, 1975. (H. Amann) 55 #3880 47G05 (45E05)

(with Pröbldorf, Siegfried) Verallgemeinerte Projektionsverfahren zur Lösung singulärer Gleichungen vom nicht normalen Typ. *Math. Nachr.* 68 (1975), 7-28. (R. D. Moyer) 53 #14179 47A50 (47B35)

Ein Projektionsverfahren für schwach ausgeartete singuläre Integralgleichungen. *Z. Angew. Math. Mech.* 55 (1975), no. 9, 525-527. (R. C. MacCamy) 53 #1199 45E05

(with Pröbldorf, Siegfried) The convergence of the reduction and the collocation methods for systems of singular integral equations. (Russian) *Dokl. Akad. Nauk SSSR* 226 (1976), no. 3, 516-519. (R. V. Dudučava) 54 #9121 65R05

(with Pröbldorf, Siegfried) General theorems on the convergence of projection methods for operator equations in Banach spaces. (Russian) *Dokl. Akad. Nauk SSSR* 230 (1976), no. 3, 527-529. (F. Smithies) 55 #3840 47A55

Ein Projektionsverfahren für einen diskreten Wiener-Hopf'schen Operator, dessen Koeffizientensymbole Nullstellen nicht ganzzahliger Ordnung besitzen. *Math. Nachr.* 74 (1976), 191-199. (Manfred Kremer) 54 #13618 47B35 (47G05)

(with Pröbldorf, Siegfried) Einige allgemeine Sätze zur Theorie der Projektionsverfahren für lineare Operatorgleichungen in Banachräumen. *Math. Nachr.* 75 (1976), 61-72. (F. Smithies) 55 #6215 47A50 (65J05)

(with Pröbldorf, Siegfried) ★ Projektionsverfahren und die näherungsweise Lösung singulärer Gleichungen. Mit einer englischen und einer russischen Zusammenfassung. Teubner-Texte zur Mathematik. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1977.

- 226 pp. (L. B. Rall) **58** #13602 65-02 (45Exx, 47A50, 65J05)
(with Meyer, Christian) Die Indexformel für eine Klasse von ausgetarteten
singulären Integraloperatoren mit Carlemanscher Verschiebung. *Demonstratio Math.* **10**
(1977), no. 1, 155-167. (Zbl 359 #45004) **58** #2465 47G05 (45E05)
See also Mihlin, S. G., **50** #733
- Silberstein, Esther** Multifoliations on $M^n \times S^1$ where M^n is a stably parallelizable
manifold. *Proc. London Math. Soc.* (3) **35** (1977), no. 3, 463-482. (Bruce L. Reinhart)
58 #24294 57D30
- Silbey, Robert** (with Metiu, Horia; Ross, John; George, Thomas F.) On symmetry
properties of reaction coordinates. *J. Chem. Phys.* **61** (1974), 3200-3209. (Authors'
summary) **53** #12262 81.22
- Sil'chenko, Ju. T.** (with Sobolevskii, P. O.) Solvability in the large of the first boundary
value problem for a certain class of quasilinear one-dimensional parabolic equations.
(Russian) *Differentsial'nye Uravneniya* **8** (1972), 1904-1905, 1915. (T. Styš) **47** #3846
35K20
(with Sobolevskii, P. O.) The nonlocal existence theorem for a one-dimensional
quasilinear parabolic equation. (Russian. Lithuanian and German summaries) *Litovsk.
Mat. Sb.* **12** (1972), no. 1, 213-215, 241. (J. Chabrowski) **47** #7229 35K55
Second order equations with variable operators that generate semigroups with
singularities. (Russian) *Collection of articles on numerical mathematics and theoretical
cybernetics*, No. 13 (Russian), pp. 38-50. Voronezh. Gos. Univ., Voronezh, 1974 (1975).
(From the introduction) **58** #30487 47D05 (34G05)
Second order equations with operators that generate semigroups with singularities.
(Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 4, 763-765, 776. (Janusz Mika)
57 #13060 34G05 (47D05)
- Silcock, Howard L.** Metanilpotent groups satisfying the minimal condition for normal
subgroups. *Math. Z.* **135** (1973/74), 165-173. (David McDougall) **51** #711 20E15
On the construction of soluble groups satisfying the minimal condition for normal
subgroups. *Bull. Austral. Math. Soc.* **12** (1975), 231-257. (J. S. Wilson) **51** #10476
20E15
Representations of metabelian groups satisfying the minimal condition for normal
subgroups. *Bull. Austral. Math. Soc.* **14** (1976), no. 2, 267-278. (John S. Wilson)
54 #7616 20D30
Generalized wreath products and the lattice of normal subgroups of a group.
Algebra Universalis **7** (1977), no. 3, 361-372. (J. A. Hulse) **56** #488 20F30 (06A35)
- Silde, O.** (with Čistjakova, A. Š.) Some differential equations of motion for systems with
linear coupling equations. (Russian. German summary) *Tallin Politehn. Inst. Toimetised*
No. 393 (1976), 31-38, iii. (Authors' summary) **54** #14491 70.53
- Sil'dos, H.** (with Gabovič, E. Ja.) A class of semigroups that are rich in endomorphisms.
(Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **431** (1977),
3-36. (Št. Schwarz) **58** #6004 20M10
- Silenko, P. N.** Einstein spaces with pure radiation. (Russian) *Moskov. Oblast. Ped. Inst.
Učen. Zap.* **227**, no. 9, part 2, 99-102 (1970). (R. Salia) **45** #4792 83.53
(with Dozmorov, I. M.) The radiation problem in the general theory of relativity.
(Russian) *Moskov. Oblast. Ped. Inst. Učen. Zap.* **227**, no. 9, part 2, 103-107 (1970). (R.
Salia) **45** #4791 83.53
- Silevitch, M. B.** (with Golden, K. I.; Kaïman, G.) Nonlinear fluctuation-dissipation
theorem. *J. Statist. Phys.* **6** (1972), 87-118. (Authors' summary) **56** #7678 82.41
- Šilhavý, Miroslav** On transformation laws for plastic deformations of materials with elastic
range. *Arch. Rational Mech. Anal.* **63** (1976), no. 2, 169-182. (Zbl 357 #73033)
58 #32293 73.53
A note on the existence of entropy in classical thermodynamics. (Polish and Russian
summaries) *Arch. Mech. (Arch. Mech. Stos.)* **29** (1977), no. 2, 289-298. (Author's
summary) **56** #4440 80.00
(with Kratochvíl, Jan) A theory of inelastic behavior of materials. I. Ideal inelastic
materials. *Arch. Rational Mech. Anal.* **65** (1977), no. 2, 97-129. (J. P. Boehler)
58 #14097a 73.00
(with Kratochvíl, Jan) A theory of inelastic behavior of materials. II. Inelastic
materials. *Arch. Rational Mech. Anal.* **65** (1977), no. 2, 131-152. (J. P. Boehler)
58 #14097b 73.00
(with Day, William Alan) Efficiency and the existence of entropy in classical
thermodynamics. *Arch. Rational Mech. Anal.* **66** (1977), no. 1, 73-81. (H. A. Buchdahl)
56 #7501 80.26
- Silhol, R.** Géométrie algébrique sur un corps non algébriquement clos. *Comm. Algebra* **6**
(1978), no. 11, 1131-1155. (Jose M. Aroca) **58** #16646 14A25
- Silin, R. A.** (with Samohin, G. S.) Quadrature formulae of Gauss type for a triangle.
(Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukraïn. RSR Ser. A*
1973, 703-705, 764. (F. Pecka) **48** #1439 65D30
- Silin, V. B.** (with Zakovrjašin, A. I.) Design of optimal filters that forecast the parameters
of radioelectronic systems. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1970**,
no. 4, 400-405. (O. A. Glonti) **45** #6508 94A05
- Silina, I. R.** A numerical method for solving a minimax problem of control theory.
(Russian. English summary) *Vestnik Leningrad. Univ.* **1976**, no. 7 Mat. Meh. Astronom.
vyp. 2, 76-81, 163. (Author's summary) **56** #9412 49D10 (65K05)
- Silio, Charles B., Jr.** (with Conner, Michael E.) Unit period states of linear sequential
machines over residue class rings. *Proceedings of the 1976 Conference on Information
Sciences and Systems (Tenth Annual Meeting, Johns Hopkins Univ., Baltimore, Md.,
1976)*, pp. 499-503. Dept. Electr. Engrg., Johns Hopkins Univ., Baltimore, Md., 1976. (D.
Bollman) **57** #15773 94A25
(with Conner, Michael E.) Lattice properties of linear state assignment over residue
class rings. *Proceedings of the Seventh International Symposium on Multiple-Valued
Logic (Charlotte, N.C., 1977)*, pp. 64-69. IEEE Comput. Soc., Long Beach, Calif., 1977.
(B. Reusch) **58** #15725 94A25
- Silivri, I.** (with Cebeci, Tuncer; Berkant, N.; Keller, Herbert Bishop) Turbulent boundary
layers with assigned wall shear. *Comput. & Fluids* **3** (1975), 37-49. (R. Peyret)
52 #7316 76.65
- Šiljak, Dragoslav D.** Nonnegative polynomials: A criterion. *Proc. IEEE* **58** (1970),
1370-1371. (Author's summary) **46** #4711 65H05 (93D99)
Algebraic criterion for absolute stability, optimality and passivity of dynamic
systems. *Proc. Inst. Elec. Engrs.* **117** (1970), 2033-2036. (T. Kaczorek) **52** #7612
93B25 (93D99)
- (with Weissenberger, S.) Regions of exponential boundedness for the prob
Lur'e. (German summary) *Regelungstech. Prozess-Datenverarbeitung* **18** (1970),
69-71. **56** #11319 93D10
(with Weissenberger, S.) A construction of the Lur'e-Liapunov function.
Regelungstech. Prozess-Datenverarbeitung **18** (1970), no. 10, 455-456. (Edward J. Da
52 #12913 93D05
New algebraic criteria for positive realness. *J. Franklin Inst.* **291** (1971), 105
(Jan C. Willems) **45** #9819 94A20 (30A76, 93D99)
(with Sun, C. K.) Exponential absolute stability of discrete systems. (Germa
Russian summaries) *Z. Angew. Math. Mech.* **51** (1971), 271-275. (N. Harris
McClamroch) **53** #12700 93D05
Singular perturbation of absolute stability. *IEEE Trans. Automatic Contr*
(1972), no. 5, 720. (Author's summary) **55** #14355 93D99
Stability of large-scale systems under structural perturbations. *IEEE Trans*
Systems, Man, and Cybernet. **SMC-2** (1972), 657-663. (Jan C. Willems) **47** #4
93A15
(with Sun, C. K.) On exponential absolute stability. *Internat. J. Control*
(1972), 1003-1008; corrigendum, *ibid.* (1) **17** (1973), 448. (K. R. Meyer) **47** #4
93D99
On stability of large-scale systems under structural perturbations. *Sensitivity,
adaptivity and optimality (Proc. Third IFAC Sympos., Ischia, 1973)*, pp. 440-443.
Instrument Soc. Amer., Pittsburgh, Pa., 1973. (Jan C. Willems) **51** #2721 93D
(with Grujić, Ljubomir T.) Asymptotic stability and instability of large-scale
systems. *IEEE Trans. Automatic Control* **AC-18** (1973), 636-645. (Peter J. M
54 #2290 93D05
(with Grujić, Ljubomir T.) On stability of discrete composite systems. *IEEE*
Automatic Control **AC-18** (1973), no. 5, 522-524. (Authors' summary) **55** #1
93D99
Algebraic criteria for positive realness relative to the unit circle. *J. Frankli*
296 (1973), 115-122. (Jan C. Willems) **49** #4624 93D99 (65E05, 94A20)
(with Weissenberger, S.) Regions of absolute ultimate boundedness for discre
systems. (German summary) *Regelungstech. Prozess-Datenverarbeitung* **21** (1973),
329-332. (Authors' summary) **56** #11302 93D05
A criterion for nonnegativity of polynomial matrices with application to
theory. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Elektron. Telekomun. Autom*
79-No. 96 (1973), 163-172. (Jochen Werner) **49** #6986 93D99
Comments on: "Stability test for two-dimensional recursive filters" (IEEE
Audio Electroacoust. **AU-21** (1973), no. 4, 366-372) by B. D. O. Anderson and
Jury. With a reply by Anderson and Jury. *IEEE Trans. Acoust. Speech Signal*
Processing **ASSP-22** (1974), no. 6, 473-474. (R. Liu) **55** #2281 93D99
(with Grujić, Ljubomir T.) Exponential stability of large-scale discrete sy
Internat. J. Control **19** (1974), 481-491. (Peter Stavroulakis) **49** #6982 93D0
Connective stability of competitive equilibrium. *Automatica-J. IFAC* **11** (19
4, 389-400. (O. I. Nwokah) **54** #7067 93D99
Stability criteria for two-variable polynomials. *IEEE Trans. Circuits and*
CAS-22 (1975), 185-189. (Elihu I. Jury) **54** #2300 93D99 (94A05)
(with Ladde, Gangaram S.) Connective stability of large-scale stochastic sy
Internat. J. Systems Sci. **6** (1975), no. 8, 713-721. (Authors' summary) **56** #1
93E15
On total stability of competitive equilibrium. *Internat. J. Systems Sci.* **6** (19
10, 951-964. (Anjan Mukherji) **53** #15309 90A15 (93D05)
(with Ladde, Gangaram S.) Stability of multispecies communities in ra
varying environment. *J. Math. Biol.* **2** (1975), no. 2, 165-178. (W. J. Padgett) **53**
92A15
When is a complex ecosystem stable? *Math. Biosci.* **25** (1975), no. 1-2, 25-50
Pao) **57** #5168 92A05 (93D05)
(with Karmarkar, J. S.) Maximization of absolute stability regions by mathe
programming methods. (German summary) *Regelungstech.* **23** (1975), no. 2, 59-
Leonard Brown) **53** #10412 93D05 (93C50)
(with Sundareshan, S. K.) Large-scale systems: optimality vs. reliability. *Di*
in large-scale systems, many-person optimization and decentralized control (Proc. S
Wakefield, Mass., 1975), pp. 411-425. Plenum, New York, 1976. (Peter A.
56 #11220 93C05 (93A15)
Multilevel stabilization of large-scale systems: a spinning flexible spacecraft.
Automatica-J. IFAC **12** (1976), no. 4, 309-320. (Peter A. Cook) **55** #2283
(with Sundareshan, Malur K.) A multilevel optimization of large-scale c
systems. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 1, 79-84. (O. I. N
53 #7562 93C15 (93D99, 93A15)
Competitive economic systems: stability, decomposition, and aggregation.
Trans. Automatic Control **AC-21** (1976), no. 2, 149-160. (Author's summary) **55**
90A15
(with Vukčević, M. B.) Decentralization, stabilization, and estimation of lar
linear systems. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 3, 363-366
Nwokah) **56** #2493 93A15 (93C05, 93D99)
(with Vukčević, M. B.) Large-scale systems: stability, complexity, reliability.
Recent trends in systems theory. *J. Franklin Inst.* **301** (1976), no. 1/2, 49-69. (C
Moylan) **53** #15499 93D15
On pure structure of dynamic systems. *Nonlinear Anal.* **1** (1976/77), no. 4, 3
(From the introduction) **58** #33305 93A99 (34C99)
Alexandr Michailovich Liapunov (1857-1918). Articles on the historical
background of control theory. *Trans. ASME Ser. G. J. Dynamic Systems, Meas*
and Control **98** (1976), no. 2, 121-122. (Editors) **55** #10209 90-03 (01A70)
(with Vukčević, M. B.) Decentrally stabilizable linear and bilinear large-scale
systems. Routh centenary issue. *Internat. J. Control* **26** (1977), no. 2, 288-305. (C
J. Davison) **58** #15537 93D15
On reachability of dynamic systems. *Internat. J. Systems Sci.* **8** (1977)
321-338. (Ethelbert N. Chukwu) **58** #26249 93B05 (93A15)
(with Barnett, Stephen) Routh's algorithm: a centennial survey. *SIAM*
(1977), no. 3, 472-489. (Elihu I. Jury) **56** #4985 93D10 (34D05)
(with Jocić, Ljubomir B.; Ribbens-Pavella, Mania) Multitachine power s

- decomposition, and aggregation. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 2, 325-332. (Authors' summary) **58** #15506 93D05
- (Vukčević, M. B.) On decentralized estimation. *Internat. J. Control* **27** (1978), no. 1-3, 131-131. (Ivar Gustavsson) **58** #15353 93A15 (93E10)
- Control in space. **48** #8040 and Willems, Jan C., **58** #33388
- See *Proceedings: Interuniversity Scientific Conference of the Mathematical and Pedagogical Institutes of the Ural Region*, **46** #1532
- ★ Вопросы качественной теории нелинейных оболочек. (Russian) [Problems of the qualitative theory of nonlinear shells] *Izdat. "Štincea", Kishinev*, 1974. (G. V. Vasiliev (Zbl **291** #73053)) **51** #12081 73.35
- (Vyrilan, P. M.) ★ Устойчивость нелинейных оболочек. (Russian) [Stability of nonlinear shells] *Izdat. "Štincea", Kishinev*, 1977. 104 pp. (Editors) **57** #8314
- Four-parameter direction field in three-dimensional projective space. (Russian) Geometry collection, No. 9. *Trudy Tomsk. Gos. Univ.* **212** (1972), 72-86. (I. A. Krasovskii) **48** #4940 53A55
- the projective differential geometry of a four-parameter direction field in three-dimensional space. (Russian) Geometry collection, No. 10. *Trudy Tomsk. Gos. Univ.* **212** (1972), 87-99. (M. Decuyper) **51** #4071 53A20
- Sull'esistenza di onde straordinarie di discontinuità in una membrana elastica. (English summary) *Boll. Un. Mat. Ital.* (4) **10** (1974), 467-480. (D. R. Sauter) **51** #9619 73.35
- Schoenberg, Isaac Jacob) On semi-cardinal quadrature. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1972)*. 461-467. Academic Press, New York, 1973. (Walter Gautschi) **52** #14781
- the numerical evaluation by splines of Fourier transforms. *J. Approximation Theory* **74** (1974), 32-51. (G. D. Taylor) **50** #9026 65T05
- (Schoenberg, Isaac Jacob) On semicardinal quadrature formulae. *Math. Ann.* **28** (1974), 483-497. (Walter Gautschi) **49** #6571 65D30
- (Chukwu, Eitelbert Nwaku) Complete controllability to a closed target set. *Approximation Theory Appl.* **21** (1977), no. 3, 369-383. (Authors' summary) **58** #23946 93B15
- P. Estimation of the median and other percentiles of an unknown continuous distribution. *Skand. Aktuarietidskr.* **1971**, 90-96 (1972). (A. P. Basu) **2124** 62G05
- (with Vainikko, G.; Karpenko, L. M.) Solution of integral equations with nonlocal kernels. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **25** (1976), no. 2, 118-123. (G. F. Miller) **54** #6532 65R05
- (with Passy, Ury) One-at-a-time dynamic programming over polytope. *Mathematica-V. IFAC* **11** (1975), no. 5, 499-508. (Santosh Kumar) **53** #2388 90C47
- S. V. Combining the Monte Carlo method with methods of search for the extremum in problems of the optimization of stochastic systems. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **14** (1971), 1014-1021. (B. Bereanu) **6900** 93E20 (65K05)
- Frequency conditions of absolute stability of nonlinear automatic systems with periodic linear part. *Avtomat. i Telemekh.* **1972**, no. 2, 164-168 (Russian. English summary); translated as *Automat. Remote Control* **33** (1972), no. 2, part 2, 308-313. (Ja. B. Šestakova) **52** #12921 93D99
- (with Šestakova, T. M.) The absolute stability of nonlinear automatic systems with periodic modulation. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **1972**, 376-388. (S. P. Bingulac) **47** #3078 93D99
- Methods for investigating the dynamics of linear automatic systems with periodic modulation. (Russian. English summary) Theory of oscillations, applied mathematics and cybernetics. *Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), no. 11, 1682-1691. (Authors' summary) **56** #17990 93C05
- Application of the method of generating functions to the determination of continuous periodic motions of piecewise continuous nonlinear systems. (Russian) *Problems of oscillations, applied mathematics and cybernetics*, No. 1 (Russian), pp. 33-46. (Mosk. Gos. Univ., Gorky, 1973. (From the introduction) **58** #26309 93C10
- Sensitivity equations of stochastic controllable systems. (Russian) *Gor'kov. Gos. Učebn. Zap. No. 166 Teorija Kolebanii, Prikl. Mat. i Kibernet.* (1973), 163-174. (From the author's introduction) **50** #16042 93E10
- The method of generating functions in the theory of continuous dynamical systems. (Russian) *Dinamika Sistem Vyp.* **3** (1974), 3-29. (RŽMat **1975** #6 B448) **58** #20711
- (with Semčuk, V. E.) Search for extremum of functions using a priori Markov model of the gradients. *Izv. Akad. Nauk SSR Tehn. Kibernet.* **1974**, no. 5, 25-31 (Russian); translated as *Engrg. Cybernetics* **12** (1974), no. 5, 21-27. (Bruce D. Craven) **52384** 90C40
- (with Alekseeva, A. N.) Determination of the boundary of the stability domain for a second order differential equation with periodic coefficients and constant lag. (Russian) *Dinamika Sistem Vyp.* **8** (1975), 110-121, 164. (Authors' summary) **58** #13747
- (with Šestakova, T. M.) Frequency conditions for the absolute stability of the zero solution of a system of non-linear difference equations with periodically varying coefficients. (Russian) *Problems of analytical mechanics, stability and control theories*. Second Četaev Conf., Kazan, 1973, Vol. 2 (Russian), pp. 365-376, 418. Kazan. Univ. Inst., Kazan, 1976. (Authors' summary) **58** #9653 93D99 (39A10)
- Algebraic criteria for absolute stability of nonlinear discrete systems. *Avtomat. i Telemekh.* **1977**, no. 12, 48-55 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 12, part 1, 1783-1789 (1978). (Ljubomir Lilov) **58** #20722 93D25 (39A12)
- An application of the method of generating functions to the determination of periodic motions of discontinuous nonlinear systems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 1 (176), 118-127. (E. Leimanis) **56** #8991 34C25
- (with Mizukami, Koichi) The minimal time control of multi-system problems with energy constrained inputs. *Internat. J. Control* (1) **13** (1971), 1105-1115. (H. Chyung) **46** #4993 93B99
- (with Gavrilov, N. K.) Three-dimensional dynamical systems that are close to systems with a structurally unstable homoclinic curve. I. (Russian) *Mat. Sb. (N.S.)* **88**(130) (1972), 475-492. (L. Reizigš) **46** #9456 34C35 (58F10)
- (with Afraimovič, V. S.) Singular trajectories of dynamical systems. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 3(165), 189-190. (L. Reizigš) **53** #14548 58F20
- (with Lerman, L. M.) The classification of structurally stable nonautonomous second order systems with a finite number of cells. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 544-547. (D. Newton) **48** #3077 58F10 (34C40)
- (with Gavrilov, N. K.) Three-dimensional dynamical systems that are close to systems with a structurally unstable homoclinic curve. II. (Russian) *Mat. Sb. (N.S.)* **90**(132) (1973), 139-156, 167. (L. Reizigš) **48** #12599 58F10 (34C35)
- (with Afraimovič, V. S.) The singular sets of Morse-Smale systems. (Russian) *Trudy Moskov. Mat. Obšč.* **28** (1973), 181-214. (M. Eisenberg) **53** #4142 58F15
- (with Afraimovič, V. S.) Small periodic perturbations of autonomous systems. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 739-742. (L. Reizigš) **49** #3276 34D10 (58F10)
- (with Afraimovič, V. S.) Certain global bifurcations connected with the disappearance of a fixed point of saddle-node type. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1974), 1281-1284. (Ju. G. Borisovič and Ju. E. Glikli) **51** #11589 58F99 (34C05)
- (with Afraimovič, V. S.) The attainable transitions from Morse-Smale systems to systems with several periodic motions. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **38** (1974), 1248-1288. (A. Morimoto) **54** #11401 58F20 (34C25)
- (with Morozov, A. D.) On the mathematical theory of the synchronization of oscillations. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 6, 1340-1343. (Q. K. Ghori) **55** #1892 70.34
- Theory of bifurcations of dynamical systems, and dangerous boundaries. (Russian) *Dokl. Akad. Nauk SSSR* **224** (1975), no. 5, 1046-1049. (L. Reizigš) **52** #12006 58F99
- (with Afraimovič, V. S.; Bykov, V. V.) The origin and structure of the Lorenz attractor. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 2, 336-339. (V. Komkov) **57** #2150 76.58
- See also *Proceedings: International Conference on Nonlinear Oscillations*, **47** #8969 and *Transactions of the Moscow Mathematical Society*, **50** #9479
- Šilov, A. F. (with Stepančuk, V. F.) A boundary value problem with boundary conditions of conjugation type. (Russian) *Differencial'nye Uravnenija* **11** (1975), 366-370, 398. (W. Kecs) **51** #8602 35C10
- Šilov, V. N. On the verification of optimal algorithms for the recognition of the states of systems on the basis of three-valued logic. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 2, 1-6. **57** #18213 68A10
- Optimality criteria for languages, metalanguages and models of information sources. (Russian. English summary insert) *Kibernetika (Kiev)* **1978**, no. 1, 45-49. (Author's summary) **58** #20820 94A15
- Šilov, V. P. (with Golodnikov, A. N.) Convergence of the analogue of Arrow-Hurwitz in the solution of limit extremal problems. (Russian) *Methods of operations research and reliability theory in systems analysis (Russian)*, pp. 105-113. (1 foldout) *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1976. (Jürgen Guddat) **58** #32953 90C25
- Šilov, G. E. (with Gelfand, I. M.) ★ Generalized functions. Vol. 1. Properties and operations. Translated from the Russian by Eugene Saletan. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1964 [1977]. xviii + 423 pp. (Editors) **55** #8786a 46Fxx
- (with Gelfand, I. M.) ★ Generalized functions. Vol. 3. Theory of differential equations. Translated from the Russian by Meinhard E. Mayer. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1967 [1977]. x + 222 pp. (Editors) **55** #8786c 46Fxx
- (with Gelfand, I. M.) ★ Generalized functions. Vol. 2. Spaces of fundamental and generalized functions. Translated from the Russian by Morris D. Friedman, Amiel Feinstein and Christian P. Peltzer. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1968 [1977]. x + 261 pp. (Editors) **55** #8786b 46Fxx
- On the theory of countably normed spaces. (Russian) *Voronež. Gos. Univ. Trudy Sem. Funkcional. Anal. Vyp.* **10**, 166-170 (1968). (W. Słowikowski) **54** #13516 46A05 (28A45)
- ★ Математический анализ: Функции одного переменного. Часть 3. (Russian) [Mathematical analysis: Functions of one variable. Part 3] *Izdat. "Nauka", Moscow*, 1970. 352 pp. (L. Mirsky) **47** #1 00-01 (26-01, 46-01)
- Some solved and unsolved problems of the theory of functions on Hilbert space. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **25** (1970), no. 2, 66-68. (E. Gerlach) **54** #935 46J10
- (with Gelfand, I. M.; Kostjučenko, A. G.; Levitan, B. M.; Lopatinskiĭ, Ja. B.; Sobolev, S. L.) Zaid Ismailovič Halilov (on his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **26** (1971), no. 3(159), 221-224. (1 plate) (Editors) **45** #18 01A70
- ★ Математический анализ. Функции нескольких вещественных переменных. Части 1-2. (Russian) [Mathematical analysis. Functions of several real variables. Parts 1-2] *Izdat. "Nauka", Moscow*, 1972. 622 pp. (See Zbl **278** #26003) 26-01
- ★ Analyse mathématique: fonctions d'une variable. 1ère et 2e parties. Traduit du russe par Vitali Kharine. Éditions Mir, Moscow, 1973. 456 pp. (Editors) **49** #8776 00A05 (26-01)
- ★ Analyse mathématique: fonctions d'une variable. 3e partie. Traduit du russe par Vitali Kharine. Éditions Mir, Moscow, 1973. 300 pp. (Editors) **49** #8777 00A05 (46-01)
- ★ Mathematical analysis. Vol. 1: Elementary real and complex analysis. Revised English edition translated from the Russian and edited by Richard A. Silverman. *The M. I. T. Press, Cambridge, Mass.-London*, 1973. xi + 516 pp. (Editors) **55** #10175 00A05 (26-01)
- ★ Elementary functional analysis. Revised English edition translated from the Russian and edited by Richard A. Silverman. *The M. I. T. Press, Cambridge, Mass.-London*, 1974. vii + 334 pp. (R. G. Bartle) **53** #3630 46-01
- ★ An introduction to the theory of linear spaces. Translated from the Russian by Richard A. Silverman. Reprint of the 1961 edition. Dover Books on Advanced Mathematics. Dover Publications, Inc., New York, 1974. ix + 310 pp. (Editors) **55** #8058 15-01 (46-01)

- On the theory of means for functions on the Hilbert ball. (Russian) *Analysis in infinite-dimensional spaces. Trudy Kaf. Teorii Funktsii i Funktsional. Anal. Moskov. Gos. Univ.* No. 1 (1974), 59–65. (E. Gerlach) **58** #30221 46G05 (35R15, 46J99)
- (with Vilenkin, N. Ja.; Uspenskii, V. A.; Ljubič, Ju. I.; Šor, L. A.) ★ Quelques applications des mathématiques. Méthode des approximations successives. Gamme simple (structure de l'échelle musicale). Quelques applications de la mécanique aux mathématiques. Méthode cinématique dans les problèmes de géométrie. Traduit du russe par Djilali Embarek. Initiation aux Mathématiques. Editions Mir, Moscow, 1975. 279 pp. (Editors) **56** #8251 00A05
- On the Fredholm-Riesz theorem. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 1, 59–63. (N. Tița) **53** #6346 47B05
- ★ Linear algebra. Revised English edition. Translated from the Russian and edited by Richard A. Silverman. Dover Publications, Inc., New York, 1977. xi+387 pp. ISBN 0-486-63518-X (Editors) **57** #6043 15–01
- (with Gurevič, B. L.) ★ Integral, measure and derivative: a unified approach. Translated from the Russian and edited by Richard A. Silverman. Revised English edition. Dover Books on Advanced Mathematics. Dover Publications, Inc., New York, 1977. xiv+233 pp. ISBN 0-486-63519-8 (Editors) **57** #6342 28–01 (26–01)
- See also **Mathematics in the USSR**, **52** #2789; **Analysis in infinite-dimensional spaces**, **52** #8929 and **Aleksandrov, P. S.**; et al., **53** #12836
- Šilov, I. A. Solution of the Cauchy problem for certain systems of linear partial differential equations by means of multiplicative integrals. (Russian) *Differentsial'nye Uravnenija* **11** (1975), no. 5, 940–941, 952. (Author's summary) **57** #16935 35C99
- Šilova, E. I. (with Ščerbinin, E. V.) Some aspects of the theoretical analysis of three-dimensional MHD flow in a diffuser. *Magnit. Gidrodinamika* **7** (1971), 11–17 (Russian); translated as *Magnetohydrodynamics* **7** (1971), 9–14 (1973). (Rishi Ram) **48** #12996 76.35
- Šilova, G. D. See **Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region**, **46** #1532
- Silova, G. I. The decomposition of multiple limit cycles of the second kind. (Russian) Collection of articles dedicated to the memory of Mazit Ifatovič Al'muhamedov. *Volž. Mat. Sb. No. 16* (1973), 314–322. (I. Muntean) **51** #1001 34C05
- Šilova, Ju. V. See **Theory of languages and methods of construction of programming systems**, **48** #7682
- Šilovskaja, O. K. Expansion in the eigenfunctions of linear differential operators. (Russian) *Differential and integral equations (Russian)*, pp. 53–79. Izdat. Saratov. Univ., Saratov, 1972. (Boris Pavlov) **51** #13346 34B25
- Expansion in the eigenfunctions of a second order differential operator in the case of nonregular boundary conditions. (Russian) *Studies in differential equations and the theory of functions (Russian)*, pp. 58–74. Izdat. Saratov. Univ., Saratov, 1973. (B. S. Popov) **51** #8534 34B25
- Šil'jut, A. B. (with Vinokurov, V. G.) The Radon-Nikodým theorem for operator-valued measures. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 1, 81–83. (A. Badrikian) **58** #6150 28A45 (46G10)
- Šitler, E. P. (with Cirulis, T. T.) Nonstationary temperature behavior of a conductor with a nonlinear heat source. (Russian. English summary) *Latvijas PSR Zinātņu Akad. Vestis Fiz. Tehn. Zinātņu Sēr.* **1973**, no. 1, 68–78, 124–125. (J. Ignaczak) **48** #3374 80.35 (80.65)
- See also **Nonlinear boundary value problems of mathematical physics**, **50** #1797
- Silva, Alessandro Successioni crescenti di Q -coppie di Runge di varietà analitiche complesse. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 431–440 (1974). (Y.-T. Siu) **52** #3601 32E15 (32C35)
- An n -Runge approximation theorem. (Italian summary) *Boll. Un. Mat. Ital.* (4) **8** (1973), 286–289. (J.-M. Kantor) **49** #10918 32E15
- An n -Runge approximation theorem. *Univ. Genova Pubbl. Ist. Mat.* (2) No. 55 (1973), i+6 pp. (Editors) **52** #14375 32E15
- Un teorema di passaggio al limite per la coomologia di una varietà analitica complessa. (English summary) *Univ. Genova Pubbl. Ist. Mat.* (2) No. 88 (1973), i+4 pp. (Editors) **52** #11103 32C35
- Un teorema di passaggio al limite per la coomologia di una varietà analitica complessa. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), 43–44. (C. Bănică) **54** #3015 32C35
- Behnke-Stein theorem for analytic spaces. *Trans. Amer. Math. Soc.* **199** (1974), 317–326. (Y.-T. Siu) **51** #3528 (E 52 #3602) 32E15
- Addendum to: "Behnke-Stein theorem for analytic spaces" (Trans. Amer. Math. Soc. **199** (1974), 317–326). *Trans. Amer. Math. Soc.* **212** (1975), 417–418. (Y.-T. Siu) **52** #3602 32E15
- Embedding strongly (1, 1)-convex-concave spaces in $C^N \times P_M$. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part 2, Williams Coll., Williamstown, Mass., 1975)*, pp. 41–44. *Amer. Math. Soc., Providence, R. I.*, 1977. (Shigeo Nakano) **56** #3353 32F10
- Relative vanishing theorems. I. Applications to ample divisors. *Comment. Math. Helv.* **52** (1977), no. 4, 483–489. (M. Schneider) **57** #726 32L10
- Rungescher Satz and a condition for Steinness for the limit of an increasing sequence of Stein spaces. (French summary) *Ann. Inst. Fourier (Grenoble)* **28** (1978), no. 2, vi, 187–200. (Claudio Rea) **58** #22656 32E10
- da Silva, Carisa Abud See **Da Silva, Carisa Abud**
- da Silva, Eurípides Alves (with Tadini, Wilson Mauricio) Jacobian extensions of ideals. (Portuguese. English summary) *Naturalia* **1** (1975), 99–130. (K. R. Mount) **58** #31183a 58C25
- Topological transversality. (Portuguese. English summary) *Naturalia* **3** (1977), 103–111. (Editors) **58** #31115 57D45 (58C25)
- (with Tadini, Wilson Mauricio) Algebra of truncated formal series. (Portuguese. English summary) *Naturalia* **3** (1977), 113–120. (K. R. Mount) **58** #31183b 58C25
- andrade e Silva, J. See **Andrade e Silva, J.**
- dias da Silva, J. A. See **Dias da Silva, J. A.**
- sebastião e Silva, José See **Sebastião e Silva, José**
- crespo da Silva, Marcelo R. M. See **Crespo da Silva, Marcelo R. M.**
- da Silva Lobo, Hamílcar The mathematicians of the peninsula (the only ones!) and the science of the discoveries. Résumé of certain chapters of a book in preparation: *Toward*
- the paideia of a glorious epic. (Spanish) *Proceedings of the Ninth Annual Confer. Spanish Mathematicians (Granada, 1968)* (Spanish), pp. 329–344. *Inst. "Jorge Mat., Madrid*, 1971. (J. Vernet) **57** #2821 01A30 (01A40)
- See also **Proceedings: Annual Conference of Spanish Mathematicians**, **49** #7
- Silva Oliveira, J. Sur une méthode de résolution de l'équation $U'(t) + b_1 U(t) + b_2 U(t - \omega) = f(t)$. *Portugal. Math.* **34** (1975), no. 1–2, 49–68. (Z. Zieleżny) **55** #13038 34K05 (46F10)
- Silva-Rehermann, Celial The differential as optimal linear approximation. (Spanish) *Fac. Ci. Univ. Habana Ser. Mat.* **1** no. 7, fasc. 6, 1–10 (1968). (R. A. Tapia) **48** #46G05
- Espaces de liaison. *Ciencias Ser. I Mat. No. 1* (1970), i+13 pp. (M. G. Murdeshwar) **47** #5827 54E05
- Sur la métrisation des espaces semi-métriques. *Proceedings of the International Symposium on Topology and its Applications (Buda, 1972)*, pp. 213–218. *Savez Dr. Mat. Fiz. i Astronom., Belgrade*, 1973. (V. S. Krishnan) **48** #9673 54E35
- Rectification et extension de la communication "Sur l'invariance de la connexité" (Proc. Internat. Sympos. on Topology and its Applications (Herceg-Novi, 1968), 285–290, *Savez Društava Mat. Fiz. i Astronom., Belgrade*, 1969). *Proceedings of International Symposium on Topology and its Applications (Buda, 1972)*, pp. 219–220. *Savez Društava Mat. Fiz. i Astronom., Belgrade*, 1973. (O. T. Alas) **49** #3819 54E35
- Silveira, Hamilton Medeiros (with Landau, Ioan Doré) Un théorème de stabilité pour une classe de systèmes à contre-réaction. (English summary) *C. R. Acad. Sci. Paris Sér. A* **287** (1978), no. 3, A161–A162. (Authors' summary) **58** #15538 93D15
- (with Landau, Ioan Doré) Un théorème pour la synthèse des systèmes adaptatifs avec modèle. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), A263–A265. (From the summary) **58** #26405 93D15
- da Silveira, Miguel See **Da Silveira, Miguel**
- Silvennoinen, Pekka (with Zweifel, Paul F.) Multigroup transport equation with a separable kernel. *J. Quant. Spectrosc. Radiat. Transfer* **11** (1971), no. 6, 869–877. (Pao) **56** #7688 82.45
- (with Zweifel, Paul F.) Two-group transport equation with a separable kernel. *Transport Theory Statist. Phys.* **1** (1971), no. 3, 239–260. (From the authors' summary)

- s (with Eakin, Paul M.) Rings which are almost polynomial rings. *Trans. Math. Soc.* **174** (1972), 425-449 (J. T. Arnold) **46** #9028 13F20
- (with Johnson, Wells) A model for permutations. *Amer. Math. Monthly* **81** (1974), 503-506. (E. A. Bertram) **50** #2318 20B05
- h Austern, N.; Tabakin, F.) Multiple scattering theory with target nucleus. *Amer. J. Phys.* **45** (1977), no. 4, 361-366. (Authors' summary) **56** #2052
- ray On extremal figures admissible relative to rectangular lattices. *Pacific J. Math.* **40** (1972), 451-457. (G. D. Chakerian) **46** #6168 52A40
- the constructibility of rational angles. *Elem. Math.* **33** (1978), no. 2, 42-44. (L.athi) **57** #17480 50B05
- A double system of difference equations. (Russian. Lithuanian and German) *Litovsk. Mat. Sb.* **13** (1973), no. 2, 159-162, 265. (M. Kuczma) **48** #6738
- Bernard W.** Limit theorems for dissociated random variables. *Advances in Probability* **8** (1976), no. 4, 806-819. (Robin Sibson) **55** #4349 60F05
- a Gaussian process related to multivariate probability density estimation. *Math. Cambridge Philos. Soc.* **80** (1976), no. 1, 135-144. (Matthew Goldstein) **53** #6866 05
- weak and strong uniform consistency of the kernel estimate of a density and its derivatives. *Ann. Statist.* **6** (1978), no. 1, 177-184. (Paul Deheuvels) **57** #10904
- distances on circles, toruses and spheres. *J. Appl. Probability* **15** (1978), no. 1, 43. (J. S. Rao) **57** #4303 60F05
- , Dennis (with Ting, Peter D.) Regge trajectories and the pomeron slope in the multiperipheral model. *Nuclear Phys. B35* (1971), 445-465. (Virendra Singh) **1236** 81.30
- , Edward A sufficient condition for the lower semicontinuity of parametricals. *Trans. Amer. Math. Soc.* **167** (1972), 465-469. (E. Baiada) **45** #5844 0 (28A75)
- strong quasi-convexity. *Pacific J. Math.* **46** (1973), 549-554. (W. T. Reid) **9488** 49A15
- A necessary condition in the calculus of variations. *Proc. Amer. Math. Soc.* **37** (1972), 462-464. (H. S. P. Grasser) **47** #7555 49B25
- lower semicontinuity of parametric integrals. *Trans. Amer. Math. Soc.* **175** (1973), 508. (L. Cesari) **46** #9842 49F20 (49A50)
- n, Fred N. (with Spigac, Georgios P.) Deterministic equivalents for stochastic doubly line balancing. *AIIE Trans.* **8** (1976), no. 2, 280-282. (Ivo M. I. Dirickx) **17787** 90B35 (90C15, 90C50)
- in, Gary J. Primal decomposition of mathematical programs by resource allocation. I. Basic theory and a direction-finding procedure. *Operations Res.* **20** (1972), 74. (L. Grosse (Zbl **249** #90058)) **51** #2613 90B05
- Primal decomposition of mathematical programs by resource allocation. II. Computational algorithm with an application to the modular design problem. *Operations Res.* **20** (1972), 75-93. (L. Grosse (Zbl **249** #90059)) **51** #2614 90B05
- in, Gerald Strong convergence of functions on Köthe spaces. *Trans. Amer. Math. Soc.* **165** (1972), 27-35. (R. H. Cox) **45** #881 46A45 (46E30)
- The strong topology on a rearrangement invariant Köthe space. *Math. Ann.* **202** (1973), 285-294. (D. H. Fremlin) **48** #4692 46A45 (46E30)
- an, Harvey F. (with Pearson, Allan E.) On deconvolution using the discrete Fourier transform. *IEEE Trans. Audio Electroacoust.* **AU-21** (1973), no. 2, 112-118. (M. C. Ung) **52** #16839 94A05 (42A76, 65T05)
- an, Herb Properties of Pólya peaks. *Rocky Mountain J. Math.* **1** (1971), no. 4, 65-66. (D. Drasin) **45** #2171 30A70
- On a class of close-to-convex functions. *Proc. Amer. Math. Soc.* **36** (1972), 477-484. (Nikolaus) **47** #2048 30A32
- ★Complex variables. *Houghton Mifflin Co., Boston, Mass.-London*, 1975. xi + 415 (Editors) **50** #10210 30-01
- (with Schild, Albert) Convolutions of univalent functions with negative coefficients. *Polish and Russian summaries* *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **29** (1975), 99-107 (1977). (Paul Eenigenburg) **56** #15902 30A32
- Products of starlike and convex functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **29** (1975), 109-116 (1977). (Carl P. McCarty) **608** 30A32
- Univalent functions with negative coefficients. *Proc. Amer. Math. Soc.* **51** (1975), 116. (Louis Brickman) **51** #5910 30A32
- Linear combinations of convex mappings. *Rocky Mountain J. Math.* **5** (1975), 631. (F. R. Keogh) **52** #3504 30A32
- (with Shah, Swarupchand M.) Entire functions with maximum deficiency sum and means. *Math. Ann.* **220** (1976), no. 2, 185-192. (W. H. J. Fuchs) **53** #5873 170
- Convexity theorems for subclasses of univalent functions. *Pacific J. Math.* **64** (1976), no. 1, 253-263. (M. Reade) **54** #2944 30A32
- Extreme points of univalent functions with two fixed points. *Trans. Amer. Math. Soc.* **219** (1976), 387-395. (G. Schober) **54** #2945 30A32
- (with Silvia, E. M.) On linear combinations of convex functions of order β . *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 6, 851-855. (A. W. Goodman) **57** #609 30A32
- (with Telage, D. N.) Spiral functions and related classes with fixed second coefficient. *Rocky Mountain J. Math.* **7** (1977), no. 1, 111-116. (R. J. Libera) **56** #3273 0A32
- (with Telage, D. N.) Extremal properties of a subclass of close-to-convex functions. *Rocky Mountain J. Math.* **7** (1977), no. 2, 371-376. (Louis Brickman) **56** #3274 0A32
- (with Schild, Albert) Some properties of schlicht functions with "small" coefficients. *Complex analysis (Proc. S.U.N.Y. Conf., Brockport, N.Y., 1976)*, pp. 105-114. *Lecture Notes in Pure and Appl. Math.*, Vol. 36, Dekker, New York, 1978. (E. Netanyahu) **17069** 30A32
- Applications of a theory of Zmorović. *Complex analysis (Proc. S.U.N.Y. Conf., Brockport, N.Y., 1976)*, pp. 141-157. *Lecture Notes in Pure and Appl. Math.*, Vol. 36, Dekker, New York, 1978. (W. M. Causey) **57** #16565 30A32 (30A36)
- (with Silvia, E. M.) Convex families of starlike functions. *Houston J. Math.* **4** (1978), no. 2, 263-268. (D. Drasin) **58** #1120 30A32 (30A34)
- (with Ziegler, Martin) Functions of positive real part with negative coefficients. *Houston J. Math.* **4** (1978), no. 2, 269-275. (D. Drasin) **58** #1121 30A32 (30A34)
- Silverman, Jeremiah N.** (with van Leuven, Jon C.) Variational constraints on perturbed eigenvalues and their perturbation expansions. *J. Chem. Phys.* **67** (1977), no. 7, 2955-2963. (Authors' summary) **56** #10551 81.35 (81.49)
- Silverman, Joseph H.** Mean and variance for covering sets of congruences. *Math. Mag.* **51** (1978), no. 2, 120-122. (J. B. Kelly) **58** #10806 10L05
- Silverman, Leonard M.** Realization of linear dynamical systems. *IEEE Trans. Automatic Control* **AC-16** (1971), 554-567. (D. Obradović) **46** #6869 93B15
- (with Payne, H. J.) Input-output structure of linear systems with application to the decoupling problem. *SIAM J. Control* **9** (1971), 199-233. (Edward J. Davison) **46** #4997 93B25 (93C45)
- (with Payne, Harold J.) On the discrete time algebraic Riccati equation. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 3, 226-234. (Authors' summary) **56** #11194 93B99
- (with Morse, A. Stephen) Structure of index-invariant systems. *SIAM J. Control* **11** (1973), 215-225. (W. M. Wonham) **48** #10554 93B05
- (with Powell, Steven R.) Modeling of two-dimensional covariance functions with application to image restoration. *IEEE Trans. Automatic Control* **AC-19** (1974), 8-13. (S. Cambanis) **53** #2507 94A05 (60G35)
- (with Dragavon, E. J.) Discrete-time algorithm for Riccati equations. *Proceedings of the Eighth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1975)*, pp. 78-79. *Western Periodicals Co., North Hollywood, Calif.*, 1975. (Edward J. Davison) **52** #2678 93C55
- (with Emre, Erol) Relatively prime polynomial matrices: algorithms. *Proceedings of the IEEE Conference on Decision and Control including the 14th Symposium on Adaptive Processes (Houston, Tex., 1975)*, pp. 191-198. *Inst. Electr. Electron. Engrs., New York*, 1975. (Arie Feuer) **58** #15397 93B25
- Discrete Riccati equations: alternative algorithms, asymptotic properties, and system theory interpretations. *Control and dynamic systems, Advances in theory and applications*, Vol. 12, pp. 313-386. *Academic Press, New York*, 1976. (Lennart Ljung) **53** #7559 93B99
- (with Emre, Erol; Glover, Keith) Generalized dynamic covers for linear systems with applications to deterministic identification and realization problems. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 1262-1267. *Inst. Electr. Electron. Engrs., New York*, 1976. (Authors' summary) **56** #17974 93B30
- (with Glover, Keith) Characterization of structural controllability. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 4, 534-537. (David L. Elliott) **54** #12263 93B05
- (with Emre, Erol) Minimal dynamic inverses for linear systems with arbitrary initial states. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 5, 766-769. (Bradley W. Dickinson) **54** #7021 93B20
- (with Jonckheere, Edmond A.) The general discrete-time linear-quadratic control problem. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 1, pp. 1239-1244. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) **58** #20708 93C55
- (with Emre, Erol; Glover, Keith) Generalized dynamic covers for linear systems with applications to deterministic identification and realization problems. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 1, 26-35. (Authors' summary) **56** #2523 93B30 (93B20)
- (with Emre, Erol) New criteria and system theoretic interpretations for relatively prime polynomial matrices. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 2, 239-242. (T. Kaczorek) **56** #14876 93B05
- (with Bittanti, Sergio; Guardabassi, Guido; Maffezzoni, C.) Periodic systems: controllability and the matrix Riccati equation. *SIAM J. Control Optimization* **16** (1978), no. 1, 37-40. (V. Gourishankar) **57** #15593 93B05
- See also **Panda, S. P.**, **47** #1507
- Silverman, R. S.** (with Nádas, Arthur) Optimal tests for the non-existence of immortals. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 701-724. *Colloq. Math. Soc. János Bolyai*, Vol. 9, North Holland, Amsterdam, 1974. (M. Iosifescu) **51** #4506 62F05
- Silverman, Richard A.** ★Complex analysis with applications. *Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1974. x + 274 pp. (Editors) **50** #4908 30-01
- See also **Smirnov, V. I.**, **49** #10708; **Lebedev, N. N.**, **50** #2568; **Fihhtengol'c, G. M.**, **50** #7427; **Akivis, M. A.**; et al., **50** #13067; **Arnol'd, V. I.**, **50** #13679; **Kolmogorov, A. N.**; et al., **51** #13617; **Šilov, G. E.**, **53** #3630; **Tolstov, G. P.**, **54** #13429; **Šilov, G. E.**, **55** #8058; **Šilov, G. E.**, **55** #10175; **Markusevič, A. I.**, **56** #3258; **Fihhtengol'c, G. M.**, **57** #549; **Fihhtengol'c, G. M.**, **57** #3683a; **Fihhtengol'c, G. M.**, **57** #3683b; **Fihhtengol'c, G. M.**, **57** #3683c; **Šilov, G. E.**, **57** #6043; **Šilov, G. E.**; et al., **57** #6342; **Rozanov, Ju. A.**, **57** #17738; **Boltjanskii, V. G.**, **58** #18074; **Akivis, M. A.**; et al., **58** #22096 and **Arnol'd, V. I.**, **58** #22707
- Silverman, Robert Jerome** (with Bruen, Aiden A.) Switching sets in $PG(3, q)$. *Proc. Amer. Math. Soc.* **43** (1974), 176-180. (D. A. Foulser) **48** #12265 50D30 (05Bxx)
- Some (v, k, λ) -designs and Hadamard matrices derived from orthogonal Latin squares. *Proceedings of the Seventh Southeastern Conference on Combinatorics, Graph Theory, and Computing (Louisiana State Univ., Baton Rouge, La., 1976)*, pp. 481-485. *Congressus Numerantium*, No. XVII, Utilitas Math., Winnipeg, Man., 1976. (S. K. Tharthare) **55** #5464 05B15
- Silverman, Ruth** Decomposition of plane convex sets. I. *Pacific J. Math.* **47** (1973), 521-530. (H. Hadwiger) **49** #6029 52A10
- Decomposition of plane convex sets. II. Sets associated with a width function. *Pacific J. Math.* **48** (1973), 497-502. (H. Hadwiger) **54** #3581 52A10
- A characterization of convex surfaces of Helly-type. *Arch. Math. (Basel)* **27** (1976), no. 6, 640-644. (H. E. Debrunner) **55** #6307 52A35
- (with Baidon, John D.) On starshaped sets and Helly-type theorems. *Pacific J. Math.* **62** (1976), no. 1, 37-41. (Marilyn Breen) **53** #14317 52A30 (52A35)

- See also **Proceedings: Conference on Convexity and Combinatorial Geometry**, 48 #9547
- Silverstein, Harry S.** von Wright's deontic logics. *Philos. Studies* **25** (1974), 365-371. (John Bacon) **58** #153 02C10
- Silverstein, Jack W.** Asymptotics applied to a neural network. *Biol. Cybernet.* **22** (1976), no. 2, 73-84. (Author's summary) **58** #4426 92A05 (92A25)
(with Grenander, Ulf) Spectral analysis of networks with random topologies. *SIAM J. Appl. Math.* **32** (1977), no. 2, 499-519. (J. D. Cowan) **57** #15755 94A20
- Silverstein, Martin L.** (with Wheeden, Richard L.) Superharmonic functions on Lipschitz domains. *Studia Math.* **39** (1971), 191-198. (W. Schneider) **47** #3699 31B05
Dirichlet spaces and random time change. *Illinois J. Math.* **17** (1973), 1-72. (J. Walsh) **50** #1345 60J45
★Symmetric Markov processes. Lecture Notes in Mathematics, Vol. 426. Springer-Verlag, Berlin-New York, 1974. x + 287 pp. (M. Fukushima) **52** #6891 60J50 (60J45)
Symmetric Markov chains. *Ann. Probability* **2** (1974), 681-701. (Yasuyoshi Inagaki) **52** #9380 60J10
The reflected Dirichlet space. *Illinois J. Math.* **18** (1974), 310-355. (Michael Sharpe) **50** #8724 60J45
Classification of stable symmetric Markov chains. *Indiana Univ. Math. J.* **24** (1974), 29-77. (Masatoshi Fukushima) **50** #3368 60J50
Symmetric jump processes. *Trans. Amer. Math. Soc.* **192** (1974), 79-96. (Thomas G. Kurtz) **50** #1344 60J25 (60J75, 60K35)
★Boundary theory for symmetric Markov processes. Lecture Notes in Mathematics, Vol. 516. Springer-Verlag, Berlin-New York, 1976. xvi + 314 pp. (M. Fukushima) **56** #9708 60J50
The sector condition implies that semipolar sets are quasi-polar. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **41** (1977/78), no. 1, 13-33. (Mamoru Kanda) **57** #7784 60J45 (31C25)
- Silverstone, Harris J.** Analytical evaluation of multicenter integrals of r_{12}^{-1} with Slater-type atomic orbitals. I. (1-2)-type three-center integrals. *J. Chem. Phys.* **48** (1968), 4098-4106. (P. J. Roberts) **48** #10349a 81.33
Analytical evaluation of multicenter integrals of r_{12}^{-1} with Slater-type atomic orbitals. II. Three-center nuclear-attraction integrals. *J. Chem. Phys.* **48** (1968), 4106-4108. (P. J. Roberts) **48** #10349b 81.33
(with Kay, Kenneth G.) Analytical evaluation of multicenter integrals of r_{12}^{-1} with Slater-type atomic orbitals. III. (2-2)-type three-center integrals. *J. Chem. Phys.* **48** (1968), 4108-4115. (P. J. Roberts) **48** #10349c 81.33
(with Kay, Kenneth G.) Analytical evaluation of multicenter integrals of r_{12}^{-1} with Slater-type atomic orbitals. IV. Four-center integrals by Taylor series method. *J. Chem. Phys.* **51** (1969), 956-961. (P. J. Roberts) **48** #10349d 81.33
(with Kay, Kenneth G.; Todd, H. David) Dirac delta functions in the Laplace-type expansion of $r^n Y_l^m(\theta, \phi)$. *J. Chem. Phys.* **51** (1969), 2359-2362. (R. C. Varma) **50** #10381 33A70
(with Kay, Kenneth G.; Todd, H. David) Bipolar expansion for $r_{12}^2 Y_l^m(\theta_{12}, \phi_{12})$. *J. Chem. Phys.* **51** (1969), 2363-2367. (R. C. Varma) **50** #10380 33A70
(with Kay, Kenneth G.) Analytical evaluation of multicenter integrals of r_{12}^{-1} with Slater-type atomic orbitals. V. Four-center integrals by Fourier-transform method. *J. Chem. Phys.* **51** (1969), 4287-4304. (P. J. Roberts) **48** #10349e 81.33
(with Kay, Kenneth G.) Analytical evaluation of multicenter integrals of r_{12}^{-1} with Slater-type atomic orbitals. VI. Asymptotic expansions for large internuclear distances. *J. Chem. Phys.* **53** (1970), 4269-4285. (P. J. Roberts) **48** #10349f 81.33
Explicit solution for the wavefunction and energy in degenerate Rayleigh-Schrödinger perturbation theory. *J. Chem. Phys.* **54** (1971), 2325-2335. (P. Achuthan) **49** #1986 81.47
(with Holloway, Thomas T.) Explicit formulas in degenerate Rayleigh-Schrödinger perturbation theory for the energy and wave function, based on a formula of Lagrange. *Phys. Rev. A* (3) **4** (1971), no. 6, 2191-2199. (Authors' summary) **56** #10605 81.47
- Silvert, William** Periodic coordinates in quantum mechanics. *Phys. Rev. D* (3) **2** (1970), 3079-3081. (P. Pascual) **49** #1943 81.00
(with Smith, William Robert) Optimal exploitation of a multi-species community. *Math. Biosci.* **33** (1977), no. 1-2, 121-134. (Authors' summary) **58** #33158 92A15
- Silverster, J. R.** On the K_2 of a free associative algebra. *Proc. London Math. Soc.* (3) **26** (1973), 35-56. (F. Pickel) **47** #1841 16A06 (16A54, 18F25)
- Silverster, P.** (with Hsieh, Ming-Shan) Finite-element solution of 2-dimensional exterior-field problems. *Proc. Inst. Elec. Engrs.* **118** (1971), 1743-1748. (R. E. Barnhill) **48** #12872 65N30
- Silvestre, Joaquim** General monopolistic equilibrium under non-convexities. *Internat. Econom. Rev.* **18** (1977), no. 2, 425-434. (Murat R. Sertel) **58** #20323 90A15
A model of general equilibrium with monopolistic behavior. *J. Econom. Theory* **16** (1977), no. 2, 425-442. (J. Rosenmüller) **57** #2491 90A15
Increasing returns in general non-competitive analysis. *Econometrica* **46** (1978), no. 2, 397-402. (Andrew Postlewaite) **57** #5029 90A15
- Sil'vestrov, D. S.** Limit distributions for a superposition of random functions. (Russian) *Dokl. Akad. Nauk SSSR* **199** (1971), 1251-1252. (V. Perlov (RŽMat 1972 #1 V77)) **48** #9815 60F05
The convergence of stochastic processes in the uniform topology. (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), 43-44. (J. H. Kučkarov) **45** #1241 (EA 45) 60G17
Limit theorems for functionals of integral form of diffusion processes. (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), 545-547. (J. H. Kučkarov) **45** #7819 60J60
Limit theorems for semi-Markov processes. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1971**, 987-989, 1052. (M. I. Jadrénko) **47** #5980 60K15 (60F05)
The limit of a composite random function. (Russian) *Mat. Zametki* **10** (1971), 113-123. (H. G. Tucker) **45** #1242 (E 55 #9233) 60E05 (60G99)
Limit theorems for semi-Markov summability schemes. I. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 4* (1971), 153-170. (B. I. Penkov) **45** #2810 60K15
The convergence of composite random functions in the J -topology. (Russian) *Dokl. Akad. Nauk SSSR* **202** (1972), 539-540. (A. D. Wentzell (Ventcel')) **45** #2784 60G17
- Limit distributions for sums of random variables that are defined on a countable Markov chain with absorption. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1972**, 337-340, 382. (E. Seneta) **46** #2746 60J10
Estimation of the rate of convergence for sums of random variables that are defined on a countable Markov chain with absorption. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1972**, 436-438, 478. (E. Seneta) **46** #2724 60F99
The convergence of weakly dependent processes in the uniform topology. I. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 6* (1972), 109-117. (Štěpán) **48** #1279 60B10 (60F05)
The convergence of weakly dependent processes in the uniform topology. II. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 7* (1972), 132-166. (P. Révész) **48** #9791 60B10 (60J65)
Remarks on the limit of a composite random function. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 707-715. (P. Révész) **47** #5932 (E 52 #438) 60F05
(with Masol, V. I.) Record values of the occupation time of a semi-Markov process. (Ukrainian. English and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh. No. 1* (1972), 81-89, 149. (Authors' summary) **56** #9720 60K15
The convergence of random fields that are stopped at a random point. (Russian. English summary) *Random processes and statistical inference, No. 3* (Russian), pp. 165-169. Izdat. "Fizmatgiz", Moscow, 1973. (P. Révész) **51** #11630 60F05 (60G40)
Limit theorems for semi-Markov processes with countable set of states. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 8* (1973), 145-157, 179. (O. Zakusilo) **56** #13327 60F05 (60J15, 60K15)
Conditions for the convergence of a superposition of random processes in the J -topology. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 605-608. (S. A. Book) **48** #7330 60B10
★Предельные теоремы для сложных случайных функций. (Russian) [Limit theorems for composite random functions] *Izdat. Ob"ed. "Višša Škola" pri K. I. Gosudarstv. Univ., Kiev*, 1974. 318 pp. (Editors) **54** #3811 60F05 (60B10, 60K15)
(with Poliščuk, V. S.) Cyclic conditions for the convergence of sums of random variables defined by a recurrent Markov chain. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1975**, no. 9, 790-792, 860. (J. Kučkarov) **54** #3812 60F05 (60J05)
Letter to the editors: "The limit of a composite random function" (Mat. Zametki (1971), 113-123). (Russian) *Mat. Zametki* **18** (1975), no. 1, 151. (Editors) **55** #9233 60F05
(with Mil'ošina, R. I.) Limit theorems for functionals of integral form, of a Wiener process that is controlled by a Markov chain. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 2, 118-122, 190. (A. K. Aleskevičienė) **54** #1400 60J65 (60B10)
(with Tursunov, G. T.) General conditions for the convergence of sums of controlled random variables. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 9, 782-785, 864. (J. G. Wendel) **54** #8778 60B10
A generalization of the renewal theorem. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 11, 978-982, 1052. (Gh. Oprisan) **58** #3080 60K05
(with Tursunov, G. T.) Certain limit theorems for queueing systems $M/G/1$. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 6, 10-12. (M. A. Fainberg) **55** #1530 60K25
(with Mirzamedov, M. A.; Tursunov, G. T.) On the applications of limit theorems for composite random functions to certain problems in statistics. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 14* (1976), 124-137, 157. (Sándor Csörgő) **55** #1602 62G05 (60F05, 62E20)
Maximally coinciding random variables with given distributions. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 1, 16-19, 95. (I. I. Kotlar) **58** #2973 60E05 (60B05)
Conditions for the convergence of randomly stopped processes of Markovian type in the J -topology. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 8, 697-698, 764. (D. Surgailis) **57** #10777 60F05
(with Tursunov, G. T.) General limit theorems for sums of controlled random variables. I. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 1* (1977), 120-134, 165. (Serban Grigorescu) **56** #9618 60B10 (60J10)
(with Mišura, Ju. S.) A remark on the iterated weak limit of the superposition of random functions. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 1* (1978), 101-105, 182. (J. H. Kučkarov) **58** #24483 60F05
The renewal theorem in the scheme of series. I. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 18* (1978), 144-161, 183. (John C. Wierman) **58** #7890 60K05
- See also **Selected translations in mathematical statistics and probability**, 49 #4 and **Major, Peter; et al.**, 52 #4385
- Sil'vestrov, E. E.** See **Mathematics and mechanics**, 50 #6724
- Sil'vestrova, E. M.** Finite Markov stochastic automata with discrete time. I, II. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 3, 122-133; *ibid.* **1972**, no. 26-30. (R. Shirladze) **46** #8791 94A35
A certain adaptive system of inventory control. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 4, 102-105. (R. Saliya) **52** #16559 90B05
- Silvey, S. D.** ★Statistical inference. Library of University Mathematics. Penguin Books, Baltimore, Md., 1970. 192 pp. (Editors) **52** #1941 62-01
(with Titterton, D. M.) A geometric approach to optimal design theory. *Biometrika* **60** (1973), 21-32. (J. Wolfowitz) **48** #12747 62K05
(with Titterton, D. M.) A Lagrangian approach to optimal design. *Biometrika* (1974), 299-302. (R. H. Farrell) **51** #9389 62K05
★Statistical inference. Reprinting. Monographs on Statistical Subjects. Chapman and Hall, London; Halsted Press [John Wiley & Sons], New York, 1975. 192 pp. (Editor) **52** #1942 62-01
See also **Wynn, Henry P.; et al.**, 47 #9765; **O'Neill, R.; et al.**, 47 #9785; **Laycock, P. J.**, 50 #3427 and **Wynn, Henry P.**, 50 #3479
- Silvia, E. M.** (with Eenigenburg, Pål J.) A coefficient inequality for Bazilevič functions.

- Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 27 (1973), 5-12 (1975). (L. A. Akse't'ev) 52 #8408 30A34
- On a subclass of spiral-like functions. *Proc. Amer. Math. Soc.* 44 (1974), 411-420. M. Reade) 49 #7433 30A32
- A variational method on certain classes of functions. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 5, 549-557. (W. E. Kirwan) 54 #534 30A32
- (with Silverman, Herb) On linear combinations of convex functions of order β . *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 6, 851-855. (A. W. Goodman) 57 #609 30A32
- p -valent classes related to functions of bounded boundary rotation. *Rocky Mountain J. Math.* 7 (1977), no. 2, 265-274. (B. G. Eke) 55 #8340 30A32
- (with Silverman, Herb) Convex families of starlike functions. *Houston J. Math.* 4 (1978), no. 2, 263-268. (D. Drasin) 58 #1120 30A32 (30A34)
- e, D. See **Conference: Optimization Techniques**, 48 #5759
- Lak Chong A study of the optimal control of nonlinear automatic control systems described by Volterra series. (Korean. English summary) *Su-hak kwa Mul-li* 17 (1973), no. 4, 3-18. (Editors) 54 #9773 93C22 (49A99)
- Soon-Kiong On ring of which every prime kernel functor is symmetric. *Nanta Math.* 7 (1974), no. 2, 69-70. (D. C. Murdoch) 51 #5670 16A62
- Prime ideals and symmetric idempotent kernel functors. *Rev. Un. Mat. Argentina* 27 (1974/75), no. 2, 59-64. (J. Kuzmanovich) 54 #7519 16A08
- Localizing prime idempotent kernel functors. *Proc. Amer. Math. Soc.* 47 (1975), 335-337. (J. K. Luedeman) 51 #5669 16A62
- Prime ideals and symmetric idempotent kernel functors. *Nanta Math.* 9 (1976), no. 2, 121-124. (A. G. Heinicke) 56 #12071 16A66 (18E40)
- On closed partitions on the state set of a semi-automaton. *Nanta Math.* 10 (1977), no. 1, 95-99. (Siegfried Gottwald) 57 #5518 94A30
- (with Luedeman, John K.; McMorris, F. R.) Semigroups for which every totally irreducible S -system is injective. *Comment. Math. Univ. Carolinae* 19 (1978), no. 1, 27-35. (B. M. Schein (Šain)) 57 #16446 20M30
- nan, Marwan A. Comments on: "On the inversion of a particular matrix" (IEEE Trans. Automatic Control AC-17 (1972), no. 3, 374-375) by R. E. Hoard and F. L. Huband. *IEEE Trans. Automatic Control AC-17* (1972), no. 6, 843. (Charles R. Johnson) 54 #2679 15A09 (65F05)
- (with Cruz, José B., Jr.) A Stackelberg solution for games with many players. *IEEE Trans. Automatic Control AC-18* (1973), no. 3, 322-324. (Authors' summary) 55 #14236 90D12
- (with Cruz, José B., Jr.) Sampled-data Nash controls in non-zero-sum differential games. *Internat. J. Control* (1) 17 (1973), 1201-1209. (L. A. Petrosjan) 48 #5659 90D25
- (with Cruz, José B., Jr.) On the solution of the open-loop Nash Riccati equations in linear quadratic differential games. *Internat. J. Control* (1) 18 (1973), 57-63. (Norman P. Coleman, Jr.) 48 #1727 90D25
- (with Cruz, José B., Jr.) On the Stackelberg strategy in nonzero-sum games. *J. Optimization Theory Appl.* 11 (1973), 533-555. (Norman P. Coleman, Jr.) 48 #10534 90D25
- (with Cruz, José B., Jr.) Additional aspects of the Stackelberg strategy in nonzero-sum games. *J. Optimization Theory Appl.* 11 (1973), 613-626. (Norman P. Coleman, Jr.) 51 #5047 90D25
- A note on the stabilizing solution of the algebraic Riccati equation. *Internat. J. Control* 20 (1974), 239-241. (R. Liu) 50 #4058 93D99 (34A99)
- (with Takayama, Takashi) Dynamic duopoly game: differential game theoretic approach. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975)*, Part 1, Paper No. 23.4, 7 pp. IFAC, Düsseldorf, 1975. (Authors' summary) 58 #33059 90D40 (90D25)
- (with Cruz, José B., Jr.) Nash equilibrium strategies for the problem of armament race and control. *Management Sci.* 22 (1975/76), no. 1, 96-105. (J. Rosenmüller) 53 #12623 90D20
- (with Takayama, Takashi) Optimum monopolist control in a dynamic market. *IEEE Trans. Systems Man Cybernet. SMC-6* (1976), no. 12, 799-807. (George M. Constantinides) 57 #2492 90A15 (93B99)
- Stackelberg optimization of two-level systems. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 7, 554-557. (Andrzej Gościński) 56 #14982 93C99 (93A15)
- mader, Christian G. ★On Dirichlet's boundary value problem. An L^p -theory based on a generalization of Gårding's inequality. *Lecture Notes in Mathematics*, Vol. 268. Springer-Verlag, Berlin-New York, 1972. iv + 238 pp. (M. Schechter (Zbl 242 #35027)) 57 #13169 35J40
- (with Louhivaara, Ilppo Simo) Über nichtelliptische lineare partielle Differentialoperatoren mit konstanten Koeffizienten. *Ann. Acad. Sci. Fenn. Ser. A I No.* 513 (1972), 22 pp. (M. Schechter) 48 #9075 35E99 (47F05)
- Über eine Koerzitivitätsungleichung in $W_0^{m,p}$. (English summary) *Manuscripta Math.* 9 (1973), 29-51. (Z. C. Motteler) 48 #4500 35J30
- Die Gårdingsche Ungleichung in der L^p -Theorie und ihre Anwendungen. *Topics in analysis (Colloq. Math. Anal., Jyväskylä, 1970)*, pp. 311-326. *Lecture Notes in Math.*, Vol. 419, Springer, Berlin, 1974. (Zbl 308 #35012) 57 #16968 35J30
- Bemerkungen über Schrödinger-Operatoren mit stark singulären Potentialen. *Math. Z.* 138 (1974), 53-70. (E. Müller-Pfeiffer) 50 #2675 35J10 (47F05)
- (with Leinfelder, Herbert) Bemerkungen über nichtlineare Störungen von Schrödinger-Operatoren. (English summary) *Manuscripta Math.* 17 (1975), no. 2, 187-204. (Woodford W. Zachary) 52 #6168 35J10 (35P05)
- Another approach to the Dirichlet problem for very strongly nonlinear elliptic equations. *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976)*, pp. 425-437. *Lecture Notes in Math.*, Vol. 564, Springer, Berlin, 1976. (Editors) 58 #29211 35J65
- (with Louhivaara, Ilppo Simo) Über das verallgemeinerte Dirichletproblem für koerzitive lineare partielle Differentialgleichungen. *Ann. Acad. Sci. Fenn. Ser. A I Math.* 2 (1976), 327-343. (Gerd Grubb) 57 #13143 35D05 (35G15)
- Über schwache Lösungen des Dirichletproblems für streng nichtlineare elliptische Differentialgleichungen. *Math. Z.* 150 (1976), no. 1, 1-26. (Erkki Pehkonen) 54 #8018 35J65 (35D05)
- Essential self-adjointness of Schrödinger operators bounded from below. *Math. Z.* 159 (1978), no. 1, 47-50. (E. Müller-Pfeiffer) 57 #10210 35J10 (35P05)
- Simahin, V. A. (with Dmitriev, Ju. G.; Koškin, G. M.; Tarasenko, F. L.; Šulenin, V. P.) ★Непараметрическое оценивание функционалов по стационарным выборкам. (Russian) [Nonparametric estimation of functionals from stationary samples] *Izdat. Tomsk. Gos. Univ., Tomsk*, 1974. 91 pp. (errata insert) (Š. A. Hašimov) 58 #8005 62G05
- Simakova, E. N. A certain nonlinear differential game. (Russian) *Kibernetika (Kiev)* 1968, no. 1, 98-100. (Author's summary) 45 #8303 90D25
- Problem of pursuit and evasion. *Automat. i Telemekh.* 1970, no. 8, 11-17 (Russian. English summary); translated as *Automat. Remote Control* 1970, no. 8, 1205-1211. (Author's summary) 46 #1365 90D25
- A certain class of nonlinear differential games. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics (Tbilisi, 1968)*, Vol. 1: *Optimal and adaptive systems* (Russian), pp. 74-78, 306. *Izdat. "Nauka", Moscow*, 1972. (Editors) 48 #8005 90D25
- The quality problem in pursuit games for inertial systems. I. Construction and solution of the auxiliary differential game. *Automat. i Telemekh.* 1974, no. 10, 24-31 (Russian. English summary); translated as *Automat. Remote Control* 35 (1974), no. 10, part 1, 1559-1565 (1975). (Author's summary) 56 #11039 90D25
- The quality problem in pursuit games for inertial systems. II. The quality problem in pursuit games subject to normal-acceleration constraints. *Automat. i Telemekh.* 1974, no. 11, 13-22 (Russian. English summary); translated as *Automat. Remote Control* 35 (1974), no. 11, part 1, 1716-1724 (1975). (Author's summary) 56 #11040 90D25
- Simakova, L. A. Plus-matrix-valued functions of bounded characteristic. (Russian) *Math. Issled.* 9 (1974), no. 2(32), 149-171, 252-253. (E. Durszt) 51 #3955 47B99
- Meromorphic plus-matrix valued functions. (Russian) *Mat. Issled.* 10 (1975), no. 1(35), 287-292, 304. (E. Durszt) 52 #4020 47B50 (15A60)
- (with Arov, D. Z.) The boundary values of a convergent sequence of J -contractive matrix-valued functions. (Russian) *Mat. Zametki* 19 (1976), no. 4, 491-500. (Authors' summary) 58 #6278 30A96 (30A68, 47B15)
- Simanaitis, D. J. (with Hájek, Otomar) Limit points which are not sequentially attainable. *Math. Systems Theory* 5 (1971), 289-291. (D. C. Kent) 46 #2659 54H20 (34C35)
- Simančuk, V. I. (with Bagrov, V. G.; Gitman, D. M.; Meškov, A. G.; Fedosov, N. I.; Šapovalov, A. V.; Šapovalov, V. N.) New exact solutions of the Dirac equation. IV. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1975, no. 8, 73-79. (Editors) 58 #32526 81.35
- Šimanov, S. N. (with Markušin, E. M.) Approximate analytic design of controls for systems with time lag. *Automat. i Telemekh.* 1968, no. 3, 13-20 (Russian. English summary); translated as *Automat. Remote Control* 1968, no. 3, 367-374. (P. K. C. Wang) 52 #16758 93C05
- (with Kazeeva, N. I.) A fundamental theorem on critical cases of difference systems. (Russian) *Differencial'nye Uravnenija* 7 (1971), 910-918, 950. (I. Stamate) 45 #2345 39A10
- (with Krupnova, N. I.) The instability of the solutions of linear systems of differential equations with lag. (Russian) *Differencial'nye Uravnenija* 8 (1972), 1963-1968, 2110. (S. R. Bernfeld) 48 #6615 34K20
- (with Krupnova, N. I.) Criterion of stability of linear systems with variable coefficients and time lag. *Prikl. Mat. Meh.* 36 (1972), 533-536 (Russian); translated as *J. Appl. Math. Mech.* 36 (1972), 502-506. (D. Bainov) 48 #9048 34K20
- (with Dolgii, Ju. F.) Stability of a certain system of differential equations with periodic lag. (Russian) *Differencial'nye Uravnenija* 9 (1973), 560-562, 591. (C. V. Coffman) 50 #2651 34K20
- (with Kazeeva, N. I.) Stability of the solution of systems of difference equations of order $n+2$ for the critical case of a pair of complex roots of modulus one. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 5(132), 20-27. (A. Halanay) 48 #6740 39A12
- (with Kazeeva, N. I.) A theorem on critical cases of systems of difference equations. (Russian) *Differencial'nye Uravnenija* 12 (1976), no. 2, 234-240, 378. (Wolfgang Hahn) 53 #6141 39A30
- (with Kazeeva, N. I.) Stability of systems of difference equations in the critical case of two pairs of complex roots that are equal mod one. (Russian) *Ural. Gos. Univ. Mat. Zap.* 10, no. 2 *Issled. Sovremen. Mat. Anal.*, 170-176, 219 (1977). (Wolfgang Hahn) 57 #13270 39A12 (34D99)
- See also **Proceedings: International Conference on Nonlinear Oscillations**, 47 #8968
- Simão, F. R. A. (with Auberson, G.; Epele, L.; Mahoux, G.) Rigorous absolute bounds for pion-pion scattering. I. Solving a first extremum problem. *Nuclear Phys. B73* (1974), no. 2, 314-338. (F. C. Auluck) 52 #4868 81.30
- (with Auberson, G.; Epele, L.; Mahoux, G.) Rigorous absolute bounds for pion-pion scattering. II. Solving modified Szegő-Meiman problems. *Ann. Inst. H. Poincaré Sect. A* 22 (1975), no. 4, 317-366. (F. C. Auluck) 52 #4869 (E 56 #2002) 81.30
- (with Auberson, G.; Mahoux, G.) Semi-phenomenological bounds for the pion-pion coupling constant. *Nuclear Phys. B* 113 (1976), no. 2, 285-302. (S. Aramaki) 56 #4519 81.47
- (with Auberson, G.; Epele, L.; Mahoux, G.) Addendum: "Rigorous absolute bounds for pion-pion scattering. II. Solving modified Szegő-Meiman problems" (Ann. Inst. H. Poincaré Sect. A 22 (1975), no. 4, 317-366). *Ann. Inst. H. Poincaré Sect. A (N.S.)* 26 (1977), no. 1, 107-108. (F. C. Auluck) 56 #2002 81.30
- Simar, Léopold Maximum likelihood estimation of a compound Poisson process. *Ann. Statist.* 4 (1976), no. 6, 1200-1209. (Rashid Ahmad) 55 #1603 62G05 (62M99)
- A note on Stieltjes moment sequences. *SIAM J. Math. Anal.* 8 (1977), no. 3, 533-534. (G. O. Okikolu) 55 #3697 44A50
- Simart, Georges (with Picard, Charles-Émile) ★Théorie des fonctions algébriques de deux variables indépendantes. Tome I, II. Réimpression corrigée (en un volume) de l'édition en deux volumes de 1897 et 1906. *Chelsea Publishing Co., Bronx, N.Y.*, 1971. Tome I: xiv + 244 pp.; Tome II: ii + 52 pp. (bound as one) (Editors) 52 #13285 01A75
- Simary, M. A. Series involving products of E -functions. (Arabic summary) *Proc. Math. Phys. Soc. A.R.E. No.* 34 (1970), 55-61 (1972). (V. L. Deshpande) 48 #11608 33A35

- 175-779 (1973). (S. N. Murthy) **48** #3366 76.65
(with Pavlov, K. B.; Romanov, A. S.) Hydrodynamic stability of a Poiseuille flow of a non-Newtonian viscoplastic fluid. (Russian) *Izv. Akad. Nauk SSSR Meh. Zhidk. Gaza* **1974**, no. 6, 152-154. (Authors' summary) **56** #14071 76.35
Influence of three-dimensional finite perturbations on the stability of Hartmann flow. *Magnit. Gidrodinamika* **10** (1974), no. 3, 17-22 (Russian); translated as *Magnetohydrodynamics* **10** (1974), no. 3, 256-260 (1976). (M. Honda) **53** #15087 76.35
- li, Maria** (with Montangero, Carlo; Pacini, Giuliano; Turini, Franco) Information management in context trees. *Acta Inform.* **10** (1978), no. 1, 85-94. (K. H. V. Booth) **58** #14008 68A45 (68A50)
- ić, Slobodan K.** (with Cvetković, Dragoš M.) On enumeration of certain types of sequences. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 412-460 (1973), 159-164. (R. W. Robinson) **48** #5875 05A15
A note on faces and cycles. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 412-460 (1973), 227-230. (Rudolf Halin) **48** #5897 05C10
(with Cvetković, Dragoš M.) Some remarks on the complement of a line graph. *Publ. Inst. Math. (Beograd) (N.S.)* **17**(31) (1974), 37-44. (L. W. Beineke) **51** #5406 05C99
(with Lacković, Ivan B.) On weighted arithmetic means which are invariant with respect to k -th order convexity. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 461-497 (1974), 159-166. (J. V. Ryff) **52** #5912 26A86
(with Cvetković, Dragoš M.) Graph equations for line graphs and total graphs. *Discrete Math.* **13** (1975), no. 4, 315-320. (L. W. Beineke) **53** #7859 05C99
Graph equation $L^*(G) = \bar{G}$. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 498-541 (1975), 41-44. (B. Manvel) **53** #213 05C99
(with Cvetković, Dragoš M.; Lacković, Ivan B.) Graph equations, graph inequalities and a fixed point theorem. *Publ. Inst. Math. (Beograd) (N.S.)* **20**(34) (1976), 59-66. (L. W. Beineke) **57** #178 05C99
- ming, Rainer** See **Schimming, Rainer**
- nguyên Sĩ Minh** See **Nguyễn Sĩ Minh**
- nion, Andrei J.** Une procédure pour le calcul du flot optimal dans un réseau antisymétrique. *Rev. Française Informat. Recherche Opérationnelle* **5** (1971), Sér. V-3, 77-81. (J.-M. Pla) **48** #3632 94A20
- imonescu, Claudia Lidia** (with Simionescu, Cornel) Compact space forms of the integrable groups G_{31} and invariant connections. (Romanian. French summary) *Bul. Inst. Politehn. Braşov Ser. A Mec.* **13** (1971), 3-9. (V. Dumitraş) **47** #991 53C30
Sur la représentation intégrale de la solution de l'équation à dérivée aréolaire. *Math. Balkanica* **1** (1971), 219-228. (M. O. Gonzalez) **45** #5605 35Q99 (30A02, 46N05)
An optimal control problem. (Romanian. English summary) *Bul. Univ. Braşov Ser. C Mat. Fiz. Chim. Şti. Natur.* **15** (1973), 11-15. (A. Kósa) **51** #11229 49A25
Formal solutions in optimal control. *Proceedings of the 1976 Conference on Information Sciences and Systems (Tenth Annual Meeting, Johns Hopkins Univ., Baltimore, Md., 1976)*, pp. 252-257. Dept. Electr. Engrg., Johns Hopkins Univ., Baltimore, 1976. (Marshall Slemrod) **57** #18970 93C20
Optimal control problems in Sobolev spaces with weights. *SIAM J. Control Optimization* **14** (1976), no. 1, 137-143. (J. E. Rubio) **55** #3905 49A20
(with Simionescu, Cornel) An optimal control problem in hydrodynamics. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 2, pp. 472-476. Hemisphere, Washington, D.C., 1977. (Authors' summary) **58** #19739 76.35 (93C10)
Computational aspects for a control program. *Information processing 77 (Proc. IFIP Congr., Toronto, Ont., 1977)*, pp. 925-928. IFIP Congr. Ser., Vol. 7, North-Holland, Amsterdam, 1977. (A. A. Melikjan) **58** #26334 93C20
Numerical methods for a generalized optimal control problem. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977)*, Part 1, pp. 370-379. *Lecture Notes in Control and Inform. Sci.*, Vol. 6, Springer, Berlin, 1978. (Author's summary) **58** #15459 93C22
- imonescu, Cornel** On the Riemannian spaces associated with a cubic form. (Romanian) *Stud. Cerc. Mat.* **22** (1970), 331-334. (E. Vamanu) **46** #8103 53B30
The classification of the integrable groups G_4 . (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 919-929. (Virgil Obădeanu) **47** #9659 22E25 (53C10)
Harmonic tensors and space forms of Lie groups. (Romanian. French summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **17** (1971), 167-169. (N. Mihăileanu) **46** #8127 53C20
(with Simionescu, Claudia Lidia) Compact space forms of the integrable groups G_{31} and invariant connections. (Romanian. French summary) *Bul. Inst. Politehn. Braşov Ser. A Mec.* **13** (1971), 3-9. (V. Dumitraş) **47** #991 53C30
Compact space forms of certain solvable groups G_4 . (Romanian. French summary) *Stud. Cerc. Mat.* **25** (1973), 385-394. (V. Oproiu) **50** #7407 22E25
(with Simionescu, Claudia Lidia) An optimal control problem in hydrodynamics. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 2, pp. 472-476. Hemisphere, Washington, D.C., 1977. (Authors' summary) **58** #19739 76.35 (93C10)
- imonescu, Florentina** The grammar of the minuet. (Romanian. French summary) *Stud. Cerc. Mat.* **28** (1976), no. 2, 243-249. (Editors) **58** #13982 68A30
- imonescu, I.** On the reduction of differential equations of Lagrange type to linear equations. (Romanian. French summary) *Lucrări Şti. Inst. Ped. Galaţi* **4** (1970), 37-42. (A. Kósa) **47** #2117 34A05 (35A99)
- imirad, Constantin** A certain method for the reduction of a perturbation applied to systems with a small parameter. (Romanian. English summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **19** (1973), 227-237. (From the author's summary) **49** #10978 34D10
Fonctions δ -oscillantes. *An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **23** (1977), no. 2, 367-380. (G. U. Brauer) **58** #6100 26A15
- imis, Aron** ★Projective moduli and maximal spectra of certain quotient rings. *Notas e Comunicações de Matemática*, No. 37. Instituto de Matemática, Universidade Federal de Pernambuco, Pernambuco, 1971. i+20 pp. (R. A. Wiegand) **48** #8483 13C10
Projective moduli and maximal spectra of certain quotient rings. *Trans. Amer. Math. Soc.* **170** (1972), 125-136. (R. A. Wiegand) **47** #8513 13C10
On the Krull-Schmidt theorem for orders over valuation rings. *An. Acad. Brasil. Ci.* **45** (1973), 45-47. (K. W. Roggenkamp) **48** #4030 16A48 (40Axx)
Going down for monoidal transforms. *Bol. Soc. Brasil. Mat.* **4** (1973), no. 2, 111-119. (Hamet Seydi) **56** #8547 13B20
Residual finiteness of commutative rings and schemes. *Canad. J. Math.* **25** (1973), 960-972. (G. A. Efroymson) **48** #6087 13D99 (14K99)
On the cancellation problem for projective varieties. *Comm. Algebra* **2** (1974), 535-557. (G. Horrocks) **53** #429 14D20
A note on cancellation for polarized varieties. *An. Acad. Brasil. Ci.* **48** (1976), no. 3, 365-368. (Robert Speiser) **57** #3131 14E35
- Simizu, Kensuke** Properties and graphical expression of the link-structure of feedback loops in feedback-type digital counters. *Systems-Computers-Controls* **5** (1974), no. 2, 71-78 (1975). (Mike Sablatash) **51** #15224 94A20
- Šimjalis, Česlovas** See **Šimelis, Česlovas**
- Simkhovich, S. L.** See **Simbović, S. L.**
- Simkin, G. N.** See **Cybernetics—in the service of Communism**, **48** #10432
- Simkin, M. M.** On incorrectness of digital models of non-single-valued nonlinearities. *Automat. i Telemekh.* **1975**, no. 9, 198-202 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 9, part 2, 1561-1565 (1976). (S.-F. Sburian) **54** #4739 93A99
(with Gusak, P. P.) Nonlinear filtering performance estimation. *Avtomat. i Telemekh.* **1975**, no. 12, 88-94 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 12, part 1, 2008-2014 (1976). (S. G. Tzafestas) **53** #15511 93E10
See also **Problems of the theory of sampled-data control systems**, **50** #4045
- Šimko, N. A.** (with Galuškina, A. I.; Degtjarev, Ju. I.; Kalinin, B. N.; Kostjuk, G. A.; Markov, V. N.; Pupkov, K. A.; Sačkov, V. N.) ★Основы кибернетики. (Russian) [Foundations of cybernetics] Математические основы кибернетики. [Mathematical foundations of cybernetics] Edited by K. A. Pupkov. "Vyssjaia Škola", Moscow, 1974. 416 pp. (Editors) **50** #9089 69.00
- Šimning, R.** See **Schimming, R.**
- Simmonds, James G.** (with Danielson, D. A.) Nonlinear shell theory with a finite rotation vector. I, II. *Nederl. Akad. Wetensch. Proc. Ser. B* **73** (1970), 460-468; *ibid.* **73** (1970), 469-478. (S. C. Das) **46** #8514 73.35
Pointwise displacement errors in linear shell theory resulting from errors in the stress-strain relations. (German summary) *Z. Angew. Math. Phys.* **23** (1972), 265-269. (A. Radu) **47** #6186 73.65
(with Koiter, W. T.) Foundations of shell theory. *Theoretical and applied mechanics (Proc. Thirteenth Internat. Congr., Moscow Univ., Moscow, 1972)*, pp. 150-176. Springer, Berlin, 1973. (H. J. Weinitschke) **56** #4335 73.35
(with Tropf, C. G.) The fundamental (normal point load) solution for a shallow hyperbolic paraboloidal shell. *SIAM J. Appl. Math.* **27** (1974), 102-120. (J. W. Craggs) **50** #11932 73.35
Rigorous expunction of Poisson's ratio from the Reissner-Meissner equations. *Internat. J. Solids and Structures* **11** (1975), no. 9, 1051-1056. (R. W. Dickey) **51** #14698 73.34
(with Bradley, M. R.; Nicholson, J. W.) Stress-intensity factors for arbitrarily oriented cracks in shallow shells. *Trans. ASME Ser. E. J. Appl. Mech.* **45** (1978), no. 1, 135-141. (M. Sokolowski) **58** #8675 73.41
- Simmons, A.** (with Erdős, Paul; Lovász, László; Straus, Ernst G.) Dissection graphs of planar point sets. *A survey of combinatorial theory (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971)*, pp. 139-149. North-Holland, Amsterdam, 1973. (A. C. Shershin) **51** #241 05C20
- Simmons, Carver S.** (with Garrod, Claude) Rigorous statistical mechanics for nonuniform systems. *J. Mathematical Phys.* **13** (1972), 1168-1176. (Derek W. Robinson) **53** #2247 82.49
(with Garrod, Claude) The density of a nonuniform system in the thermodynamic limit. *J. Mathematical Phys.* **14** (1973), 1075-1087. (V. P. Milantiev) **52** #4831 80.60
- Simmons, Donald M.** Common-stock transaction sequences and the random-walk model. *Operations Res.* **19** (1971), 845-861. (D. S. Adorno) **45** #8251 90B99
★Linear programming for operations research. Holden-Day, Inc., San Francisco, Calif.-London-Amsterdam, 1972. xii+288 pp. (C. B. Garcia) **54** #6944 90C05
- Simmons, George F.** ★Differential equations with applications and historical notes. International Series in Pure and Applied Mathematics. McGraw-Hill Book Co., New York-Düsseldorf-Johannesburg, 1972. xvii+465 pp. (J. S. Joel) **58** #17258 34-01
- Simmons, Gustavus J.** Correlation properties of pseudo-Rademacher-Walsh codes. *Applications of Walsh functions (Proc. Sympos., Washington, D.C., 1971)*, pp. 84-87. Naval Research Laboratory, Washington, D.C., 1971. (L. Welch) **50** #4110 94A10
Combinatorial properties of plane partitions. *Studia Sci. Math. Hungar.* **6** (1971), 335-339. (H. T. Croft) **45** #8537 05A17 (28A05)
An extremal problem in the uniform covering of finite sets. *J. Combinatorial Theory Ser. A* **13** (1972), 183-197. (J. E. Graver) **46** #1622 05B40
On palindromic squares of non-palindromic numbers. *J. Recreational Math.* **5** (1972), no. 1, 11-19. (Stanley J. Benkoski) **54** #10121 10A30
A quadrilateral-free arrangement of sixteen lines. *Proc. Amer. Math. Soc.* **34** (1972), 317-318. (C. Ballester Pereyra) **45** #4259 50D20
A generalized converse to a lemma of L. Lovász. *Acta. Math. Acad. Sci. Hungar.* **24** (1973), 143-149. (Jane W. Di Paola) **47** #4866 05C99
(with Entringer, Roger C.) Sums of valences in bigraphs. *J. Combinatorial Theory Ser. A* **14** (1973), 93-101. (L. W. Beineke) **46** #8902 05C99
Sums of valences in bigraphs. II. *J. Combinatorial Theory Ser. B* **15** (1973), 256-263. (L. W. Beineke) **48** #8308 05C99
(with Entringer, Roger C.) Some properties of components of bigraphs. Collection of articles dedicated to the memory of Alfréd Rényi, II. *Period. Math. Hungar.* **3** (1973), 167-174. (R. C. Read) **48** #8269 05B25
A maximal 2-arrangement of sixteen lines in the projective plane. *Period. Math. Hungar.* **4** (1973), 21-23. (P. McMullen) **48** #12260 50D20
(with Steck, G. P.) On the distributions of R_{min}^+ and (D_{min}^+, R_{min}^+) . *Studia Sci. Math.*

- Hungar. **8** (1973), 79-89. (H. E. Reinhardt) **49** #4133 62E15 (62G10)
- Synch-sets: a variant of difference sets. *Proceedings of the Fifth Southeastern Conference on Combinatorics, Graph Theory and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1974), pp. 625-645. *Congressus Numerantium*, No. X, *Utilitas Math.*, Winnipeg, Man., 1974. (W. H. Mills) **50** #9628 05B30
- On a problem of Erdős concerning a 3-coloring of the unit sphere. *Discrete Math.* **8** (1974), 81-84. (B. Manvel) **48** #8291 05C15
- Command graphs. *Infinite and finite sets* (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, pp. 1277-1349. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (Richard D. Ringeisen) **53** #13045 05C99 (94A20)
- Bounds on the chromatic number of the sphere. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory, and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1975), pp. 541-548. *Congressus Numerantium*, No. XIV, *Utilitas Math.*, Winnipeg, Man., 1975. (F. Bernhart) **53** #2730 05C15
- (with Davis, J. A.) Pair designs. *Comm. Statist.* **4** (1975), 255-272. (Authors' summary) **55** #1653 62J15 (62K99)
- The chromatic number of the sphere. *J. Austral. Math. Soc. Ser. A* **21** (1976), no. 4, 473-480. (P. Erdős) **54** #7303 05C15
- (with Davis, J. A.; Entringer, Roger C.; Graham, Ronald L.) On permutations containing no long arithmetic progressions. *Acta Arith.* **34** (1977/78), no. 1, 81-90. (Robert Meyer) **58** #10705 10A40
- (with Abbott, H. L.) How many 3-term arithmetic progressions can there be if there are no longer ones? *Amer. Math. Monthly* **84** (1977), no. 8, 633-635. (Carl Pomerance) **57** #3056 10A20 (10L99)
- See also **Complements and comments**, **48** #1835 and **Problems: Infinite sets**, **52** #114
- Simmons, H. E.** (with Merrifield, R. E.) Mathematical description of molecular structure: molecular topology. *Proc. Natl. Acad. Sci. U.S.A.* **74** (1977), no. 7, 2616-2619. (N. Trinajstić) **57** #11551 82.54
- The lattice theoretic part of topological separation properties. *Proc. Edinburgh Math. Soc.* (2) **21** (1978/79), no. 1, 41-48. (Á. Császár) **58** #12910 54D10 (54D15)
- Simmons, Harry** Existentially closed structures. *J. Symbolic Logic* **37** (1972), 293-310. (James H. Schmerl) **51** #12518 02H13
- A possible characterization of generic structures. *Math. Scand.* **31** (1972), 257-261 (1973). (G. Cherlin) **52** #81 02H05
- Le nombre de structures génériques d'une théorie. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A487-A489. (U. Felgner) **49** #2347 02H05
- Une construction du "forcing-compagnon" d'une théorie. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A563-A566. (U. Felgner) **49** #2348 02H05
- (with Macintyre, Angus J.) Gödel's diagonalization technique and related properties of theories. *Colloq. Math.* **28** (1973), 165-180. (M. Yasuhara) **48** #10792 02D99 (02G20)
- (with Goldrei, D. C.; Macintyre, Angus J.) The forcing companions of number theories. *Israel J. Math.* **14** (1973), 317-337. (S. Comer) **48** #5853 02H20
- The word problem for absolute presentations. *J. London Math. Soc.* (2) **6** (1973), 275-280. (M. Greendlinger) **49** #7360 20F10
- An omitting types theorem with an application to the construction of generic structures. *Math. Scand.* **33** (1973), 46-54. (James H. Schmerl) **48** #10798 02H05
- The use of injective-like structures in model theory. *Compositio Math.* **28** (1974), 113-142. (J.-L. Krivine) **50** #4289 02H05
- Topological aspects of suitable theories. *Proc. Edinburgh Math. Soc.* (2) **19** (1974/75), no. 4, 383-391. (M. Yasuhara) **52** #7894 02J05 (02D99)
- (with Fisher, Edward R.; Wheeler, William H.) Elementary equivalence classes of generic structures and existentially complete structures. *Model theory and algebra (A memorial tribute to Abraham Robinson)*, pp. 131-169. *Lecture Notes in Math.*, Vol. 498, Springer, Berlin, 1975. (B. Węglorz) **53** #7763 02H05 (02H13)
- The complexity of T^f and omitting types in F_T . *Model theory and algebra (A memorial tribute to Abraham Robinson)*, pp. 403-407. *Lecture Notes in Math.*, Vol. 498, Springer, Berlin, 1975. (M. Boffa) **53** #7766 02H05 (02F35, 02H13)
- (with Macintyre, Angus J.) Algebraic properties of number theories. *Israel J. Math.* **22** (1975), no. 1, 7-27. (S. Comer) **53** #2671 02H15 (02F50)
- Counting countable e.c. structures. *Comptes Rendus de la Semaine d'Étude en Théorie des Modèles* (Inst. Math., Univ. Catholique Louvain, Louvain-la-Neuve, 1975). *Logique et Analyse (N.S.)* **18** (1975), no. 71-72, 309-357. (John Cowles) **57** #12203 02H05 (02G20)
- Each regular number structure is biregular. *Israel J. Math.* **23** (1976), no. 3-4, 347-352. (J. M. Plotkin) **54** #2456 (E 54 #12518) 02H20
- Large and small existentially closed structures. *J. Symbolic Logic* **41** (1976), no. 2, 379-390. (John T. Baldwin) **54** #87 02H05
- Existentially closed models of basic number theory. *Logic Colloquium 76* (Oxford, 1976), pp. 325-369. *Studies in Logic and Found. Math.*, Vol. 87, North-Holland, Amsterdam, 1977. (A. I. Omarov) **58** #5186 02H15
- Correction to: "Each regular number structure is biregular" (*Israel J. Math.* **23** (1976), no. 3-4, 347-352). *Israel J. Math.* **26** (1977), no. 1, 95. (Editors) **54** #12518 02H20
- Simmons, L. M., Jr.** (with Durand, Loyal; Fishbane, Paul M.) Expansion formulas and addition theorems for Gegenbauer functions. *J. Mathematical Phys.* **17** (1976), no. 11, 1933-1948. (Tom Koornwinder) **54** #10712 33A50
- Simmons, M. D.** (with White, G. W. T.) The decentralized profit maximization of interconnected production systems. I. The theory of price coordination. *Internat. J. Control* **25** (1977), no. 5, 705-719. (Wolfgang Mayer) **56** #7924a 90B30 (90A15, 90A05)
- (with White, G. W. T.) The decentralized profit maximization of interconnected production systems. II. Price coordination and buffer storage. *Internat. J. Control* **25** (1977), no. 5, 721-744. (Wolfgang Mayer) **56** #7924b 90B30 (90A15, 90A05)
- Simmons, Peter** A note on budgeting, separability, and generalized separability. *Econometrica* **46** (1978), no. 2, 455-458. (From the author's text) **57** #8987 90A05
- Simmons, R. F.** See **Computer models of thought and language**, **48** #1549
- Simmons, S. M.** A converse Steinhilber theorem for locally compact groups. *Proc. Amer. Math. Soc.* **49** (1975), 383-386. (Paul Milnes) **51** #6286 43A05 (28A70)
- Simms, David J.** A short proof of Bargmann's criterion for the lifting of projective representations of Lie groups. *Rep. Mathematical Phys.* **2** (1971), no. 4, 283-287. (Wojtyński) **45** #5275 43A80
- (with Andrić, Manfred) Constants of motion and Lie group actions. *J. Mathematical Phys.* **13** (1972), 331-336. (M. Carmeli) **45** #8148 81.22
- (with Miller, John J. H.) On the coefficients of an asymptotic expansion of spherical functions on symmetric spaces. *Proc. Amer. Math. Soc.* **37** (1973), 448-452. (J. A. Wolf) **47** #721 43A90 (22E30)
- Bohr-Sommerfeld orbits and quantizable symplectic manifolds. *Proc. Cambria Philos. Soc.* **73** (1973), 489-491. (J. Śniatycki) **52** #11998 58F05 (81.58)
- (with Miller, John J. H.) On the differential equation for spherical functions on certain symmetric spaces. *Proc. Roy. Irish Acad. Sect. A* **73**, 19-24 (1973). (Kenneth Johnson) **50** #10697 43A90
- The metilinear structure of the circular polarisation of the plane. *Group theoretical methods in physics* (Proc. Third Internat. Colloq., Centre Phys. Theor., Marseille, 1974), Vol. 1, pp. 72-76. *Centre Nat. Recherche Sci., Centre Phys. Theor., Marseille*, 1974. (J. Śniatycki) **56** #9590 58F05 (81.58)
- Geometric quantization of energy levels in the Kepler problem. *Symposia Mathematica*, Vol. XIV (Convegno di Geometria Simplettica e Fisica Matematica, INDAM, Rome, 1973), pp. 125-137. *Academic Press, London*, 1974. (J. Śniatycki) **52** #6784 58F05
- Metilinear structures and a geometric quantisation of the harmonic oscillator (French summary) With questions by J. Tarski and A. Crumeyrolle and replies by the author. *Géométrie symplectique et physique mathématique* (Colloq. Internat. CNRS, Marseille, 1975. (Hans P. Künzle) **58** #2883 58F05 (81.58)
- An application of polarisations and half-forms. *Non-commutative harmonic analysis (Actes Colloq., Marseille-Luminy, 1974)*, pp. 195-197. *Lecture Notes in Math.*, Vol. 498, Springer, Berlin, 1975. (N. N. Šapovalov) **52** #15559 58F05 (22E45)
- Symplectic structure and quantisation. *Quantum theory and the structures of time and space* (Conf., Feldafing, 1974), pp. 247-252. *Hanser, Munich*, 1975. (Editors) **58** #31173 58F05 (22E45)
- (with Woodhouse, Nicholas M. J.) ★Lectures in geometric quantization. *Lecture Notes in Physics*, 53. *Springer-Verlag, Berlin-New York*, 1976. iii + 166 pp. ISBN 3-540-07860-6 (Vadim Komkov) **58** #32470 81.00 (58F05)
- A survey of the applications of geometric quantisation. *Group theoretical methods in physics* (Fourth Internat. Colloq., Nijmegen, 1975), pp. 111-116. *Lecture Notes in Physics*, Vol. 50, Springer, Berlin, 1976. (Editors) **58** #13174 58F05 (22E70)
- An outline of geometric quantisation (d'après Kostant). *Differential geometric methods in mathematical physics* (Proc. Sympos., Univ. Bonn, Bonn, 1975), pp. 1-1. *Lecture Notes in Math.*, Vol. 570, Springer, Berlin, 1977. (Editors) **57** #4243 58F05 (22E45, 81.58)
- Serre duality for polarised symplectic manifolds. *Rep. Mathematical Phys.* **17** (1977), no. 2, 213-217. (I. Vaisman) **57** #1579 58G99 (53C15, 32C05)
- See also **Proceedings: International Colloquium on Group Theoretical Methods in Physics**, **48** #10342
- Simó, Carlos** Solution of Lambert's problem by means of regularization. (Spanish) *Colloq. Math.* **24** (1973), 231-247. (L. F. Oster) **50** #12140 85.34
- Application of the Levi-Civita transformation to the determination of orbits. (Spanish) *Rev. Mat. Hisp.-Amer.* (4) **33** (1973), 275-288. (K. Kirchgraber) **50** #9098 70.34
- On a conjecture of A. Pérez de Vargas and M. Quirós. (Spanish) *Gac. Mat. (Madrid)* (1) **26** (1974), 166-167. (T. Zamfirescu) **51** #7895 05A19
- Simoda, Seturo** Sur un type de l'induction et sa dilatation aux ensembles totalement ordonnés. *Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci.* **19** (1970), 107-111. (C. Y. Pao) **46** #5533 26A03
- Simoes, Plinio** On a class of minimal cones in R^n . *Bull. Amer. Math. Soc.* **80** (1973), 488-489. (F. J. Almgren, Jr.) **48** #9531 49F10
- Simões-Pereira, J. M. S.** A note on the cycle multiplicity of line-graphs and total graphs. *J. Combinatorial Theory Ser. B* **12** (1972), 194-200. (S. Hedetniemi) **46** #5173 05C35
- Connectivity, line-connectivity and J -connection of the total graph. *Math. Ann.* **271** (1972), 48-57. (W. T. Tutte) **45** #8568 05C99
- On subgraphs as matroid cells. *Math. Z.* **127** (1972), 315-322. (A. J. Schwen) **47** #6522 05B35 (05C99)
- A note on graphs with prescribed clique and point-partition numbers. *J. Combinatorial Theory Ser. B* **14** (1973), 256-258. (J. Mitchem) **47** #3257 05C99
- (with Zuzarte, Isabel Maria S. N.) Some remarks on a game with graphs. *Recreational Math.* **6** (1973), no. 1, 54-60. (M. Mañás) **55** #2667 05C99
- On matroids on edge sets of graphs with connected subgraphs as circuits. *Proc. Amer. Math. Soc.* **38** (1973), 503-506. (D. J. A. Welsh) **47** #3214 05B35
- Matroids, graphs and topology. *Proceedings of the Fifth Southeastern Conference on Combinatorics, Graph Theory and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1974), pp. 145-155. *Congressus Numerantium*, No. X, *Utilitas Math.*, Winnipeg, Man., 1974. (Ann Miller) **50** #9635 05B35
- On graphs uniquely partitionable into n -degenerate subgraphs. *Infinite and finite sets* (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, 1351-1364. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (D. R. Lick) **53** #2758 05C99
- On matroids on edge sets of graphs with connected subgraphs as circuits. *Discrete Math.* **12** (1975), 55-78. (J. Sheehan) **54** #7298 05B35
- Subgraphs as circuits and bases of matroids. *Discrete Math.* **12** (1975), 79-88. (W. Ingleton) **52** #7940 05B35
- A survey of k -degenerate graphs. *Graph Theory Newslett.* **5** (1975/76), no. 6, 1-1. (A. T. White) **55** #199 05C99
- Joins of n -degenerate graphs and uniquely (m, n) -partitionable graphs. *J. Combinatorial Theory Ser. B* **21** (1976), no. 1, 21-29. (A. T. White) **54** #7304 05C99
- (with Escalante, F.) Just two total graphs are complementary. *Monatsh. Math. Phys.* **126** (1976), no. 1, 5-13. (L. W. Beineke) **53** #7860 05C99

- A note on finite topologies and switching functions. *Discrete Math.* **18** (1977), no. 3, 99-310. (A. Ádám) **57** #5481 94A20 (02B05, 54B15)
- See also **Problems: Infinite sets**, **52** #114
- kin, P. L. Certain questions on infinitesimal affine deformations of developable surfaces. (Ukrainian. French and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh.* **Vo. 14** (1972), 62-71, 148. (A. K. Guc) **56** #16518 53A05
- Certain special infinitesimal bendings of surfaces of revolution. (Ukrainian. French and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh.* **No. 16** (1974), 72-78, 175. Author's summary **56** #6575 53C45
- Some boundary value problems on infinitesimal bendings of surfaces of revolution. (Ukrainian. English and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh.* **No. 17** (1975), 90-95, 179. (A. V. Pogorelov) **57** #7475 53C45
- Infinitesimal bendings under which various geometric properties of the surfaces are preserved. (Ukrainian. English and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh.* **No. 18** (1976), 65-69, 143. (Author's summary) **58** #7515 53C45
- on, Albert (with Migliuolo, Stefano) Nonlinear saturation of two unstable modes; survival competition. *Phys. Fluids* **20** (1977), no. 11, 1855-1863. (Ian Lerche) **57** #2356 82.35
- ub-Simon, Alice See Chaljub-Simon, Alice
- on, András (with Stahl, János) Optimum, prices and equilibrium in international trade. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* **5** (1972), 181-195. (Authors' summary) **48** #3467 90A15
- on, Anne-Marie Schémas en groupes, images fermées et adhérence schématique. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **58** (1972), 1316-1324. (J.-E. Bertin) **47** #8557 14L15 (14E25)
- Un théorème d'affinité de schéma en groupes quotient. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **58** (1972), 1325-1337. (J.-E. Bertin) **47** #8558 14L15
- Déformations des groupes unipotents commutatifs. *C. R. Acad. Sci. Paris. Sér. A-B* **274** (1972), A1439-A1440. (M. Miyanishi) **46** #3514 14D15 (14L15)
- Structure des groupes unipotents commutatifs. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A347-A349. (M. Miyanishi) **48** #303 14L20
- on, Barry Coupling constant analyticity for the anharmonic oscillator. (With appendix) *Ann. Physics* **58** (1970), 76-136. (Authors' summary) **54** #4397 81.34 (34E20, 35J10)
- On the influence or finiteness of the number of bound states of an N -body quantum system. I. *Helv. Phys. Acta* **43** (1970), no. 6/7, 607-630. (Author's summary) **56** #14332 81.47
- (with Graffi, S.; Grecchi, V.) Borel summability: application to the anharmonic oscillator. *Phys. Lett.* **32B** (1970), 631-634. (W. Biegert) **48** #10395 81.65
- Borel summability of the ground-state energy in spatially cutoff $(\phi^4)_2$. *Phys. Rev. Lett.* **25** (1970), no. 22, 1583-1586. (Y. Kato) **52** #16395 81.47
- ★Quantum mechanics for Hamiltonians defined as quadratic forms. Princeton Series in Physics. Princeton University Press, Princeton, N. J., 1971. xv + 244 pp. (Thomas Spencer) **56** #14207 81.00
- Determination of eigenvalues by divergent perturbation series. *Advances in Math.* **7**, 240-253 (1971). (J. S. Howland) **45** #9186 47A55
- Wave operators for classical particle scattering. *Comm. Math. Phys.* **23** (1971), 37-48. (Teruo Ikebe) **45** #3967 35J10 (70.35)
- Convergence of time dependent perturbation theory for autoionizing states of atoms. *Phys. Lett.* **36A** (1971), 23-24. (K. Kumar) **48** #7853 81.47
- (with Reed, Michael C.) ★Methods of modern mathematical physics. I. Functional analysis. Academic Press, New York-London, 1972. xvii + 325 pp. (P. R. Chernoff) **58** #12429a 47-02 (81.47)
- The anharmonic oscillator: a singular perturbation theory. *Cargèse lectures in physics*, Vol. 5, pp. 383-414. Gordon and Breach, New York, 1972. (Jean-Pierre Eckmann) **56** #10518 81.34
- (with Reed, Michael C.) A spectral mapping theorem for tensor products of unbounded operators. *Bull. Amer. Math. Soc.* **78** (1972), 730-733. (P. A. Fillmore) **45** #9175 47B15
- Quadratic form techniques and the Balslev-Combes theorem. *Comm. Math. Phys.* **27** (1972), 1-9. (H. Baumgärtel) **47** #9989 81.47 (47F05)
- (with Guerra, Francesco; Rosen, Lon) Nelson's symmetry and the infinite volume behavior of the vacuum in $P(\phi)_2$. *Comm. Math. Phys.* **27** (1972), 10-22. (J. Glimm) **46** #10334 81.47
- (with Høegh-Krohn, Raphael) Hypercontractive semigroups and two dimensional self-coupled Bose fields. *J. Functional Analysis* **9** (1972), 121-180. (S. Gudder) **45** #2528 47A55 (81.47)
- On the Glimm-Jaffe linear lower bound in $P(\phi)_2$ field theories. *J. Functional Analysis* **10** (1972), 251-258. (H. Araki) **49** #10299 81.47
- Summability methods, the strong asymptotic condition, and unitarity in quantum field theory. *Phys. Rev. Lett.* **28** (1972), 1145-1146. (Fritz Schwarz) **54** #1933 81.30
- A remark on groups with the fixed point property. *Proc. Amer. Math. Soc.* **32** (1972), 623-624. (R. C. Busby) **46** #296 22D40
- Continuum embedded eigenvalues in a spatially cutoff $P(\phi)_2$ field theory. *Proc. Amer. Math. Soc.* **35** (1972), 223-226. (L. Streit) **45** #6322 81.46
- (with Rosen, Lon) The $(\phi^2)_2$ field Hamiltonian for complex coupling constant. *Trans. Amer. Math. Soc.* **165** (1972), 365-379. (M. J. Westwater) **45** #1522 81.47
- Resonances in n -body quantum systems with dilatation analytic potentials and the foundations of time-dependent perturbation theory. *Ann. of Math. (2)* **97** (1973), 247-274. (K. Kumar) **50** #6378 81.47
- Essential self-adjointness of Schrödinger operators with singular potentials. *Arch. Rational Mech. Anal.* **52** (1973), 44-48. (T. Ushijima) **49** #3312 35J10
- (with Guerra, Francesco; Rosen, Lon) The vacuum energy for $P(\phi)_2$: Infinite volume limit and coupling constant dependence. *Comm. Math. Phys.* **29** (1973), 233-247. (J. Glimm) **48** #7843 81.47
- Correlation inequalities and the mass gap in $P(\phi)_2$. *Comm. Math. Phys.* **31** (1973), 127-136. (W. Güttinger) **48** #7837 81.46
- (with Griffiths, Robert B.) The $(\phi^4)_2$ field theory as a classical Ising model. *Comm. Math. Phys.* **33** (1973), 145-164. (Abel Klein) **55** #2018 82.60
- Positivity of the Hamiltonian semigroup and the construction of Euclidean region fields. *Helv. Phys. Acta* **46** (1973/74), 686-696. (Jean Michel Combes) **52** #2434 81.22
- Ergodic semigroups of positivity preserving self-adjoint operators. *J. Functional Analysis* **12** (1973), 335-339. (Ju. M. Berezanskii) **50** #10900 47D05 (81.47)
- (with Reed, Michael C.) Tensor products of closed operators on Banach spaces. *J. Functional Analysis* **13** (1973), 107-124. (M. Schechter) **50** #1036 47A60
- Quadratic forms and Klauder's phenomenon: a remark on very singular perturbations. *J. Functional Analysis* **14** (1973), 295-298. (M. Schechter) **50** #10873 47A55 (35P99)
- Essential self-adjointness of Schrödinger operators with positive potentials. *Math. Ann.* **201** (1973), 211-220. (John Cannon) **49** #1987 81.47
- Schrödinger operators with singular magnetic vector potentials. *Math. Z.* **131** (1973), 361-370. (J. S. Howland) **48** #698 35J10 (47F05)
- Uniform crossnorms. *Pacific J. Math.* **46** (1973), 555-560. (S. Teleman) **49** #3561 46M05
- ★The $P(\phi)_2$ Euclidean (quantum) field theory. Princeton Series in Physics. Princeton University Press, Princeton, N. J., 1974. xx + 392 pp. (Raymond Streater) **58** #8968 81.60
- (with Guerra, Francesco; Rosen, Lon) The pressure is independent of the boundary conditions for $P(\phi)_2$ field theories. *Bull. Amer. Math. Soc.* **80** (1974), 1205-1207. (M. J. Westwater) **50** #9243 81.47
- (with Lieb, Elliott H.) On solutions to the Hartree-Fock problem for atoms and molecules. *J. Chem. Phys.* **61** (1974), 735-736. **53** #12382 81.49
- Absence of positive eigenvalues in a class of multiparticle quantum systems. *Math. Ann.* **207** (1974), 133-138. (J. M. Combes) **48** #7827 81.35
- Pointwise bounds on eigenfunctions and wave packets in N -body quantum systems. I, II. *Proc. Amer. Math. Soc.* **42** (1974), 395-401; *ibid.* **45** (1974), 454-456. (Teruo Ikebe) **54** #5646 35P99 (81.47)
- (with Reed, Michael C.) ★Methods of modern mathematical physics. II. Fourier analysis, self-adjointness. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1975. xv + 361 pp. (P. R. Chernoff) **58** #12429b 47-02 (81.47)
- Bose quantum field theory as an Ising ferromagnet: recent developments. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 543-553. *Lecture Notes in Phys.*, **39**. Springer, Berlin, 1975. (Author's summary) **58** #32637 81.60 (82.60)
- Approximation of Feynman integrals and Markov fields by spin systems. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 2, pp. 399-402. *Canad. Math. Congress, Montreal, Que.*, 1975. (From the author's introduction) **55** #14025 81.60
- (with Guerra, Francesco; Rosen, Lon) The $P(\phi)_2$ Euclidean quantum field theory as classical statistical mechanics. I, II. *Ann. of Math. (2)* **101** (1975), 111-189; *ibid.* (2) **101** (1975), 191-259. (R. A. Minlos) **51** #14836 82.46 (81.46)
- Correlation inequalities and the mass gap in $P(\phi)_2$. II. Uniqueness of the vacuum for a class of strongly coupled theories. *Ann. of Math. (2)* **101** (1975), 260-267. (W. Güttinger) **51** #9711 81.47
- (with Guerra, Francesco; Rosen, Lon) Correlation inequalities and the mass gap in $P(\phi)_2$. III. Mass gap for a class of strongly coupled theories with nonzero external field. *Comm. Math. Phys.* **41** (1975), 19-32. (Authors' summary) **55** #7198 81.47
- Existence of the scattering matrix for the linearized Boltzmann equation. *Comm. Math. Phys.* **41** (1975), 99-108. (Pekka Silvennoinen) **53** #4856 82.47
- (with Seiler, Erhard) Bounds in the Yukawa₂ quantum field theory: upper bound on the pressure, Hamiltonian bound and linear lower bound. *Comm. Math. Phys.* **45** (1975), no. 2, 99-114. (M. J. Westwater) **54** #1998 81.47
- (with Rosen, Jay) Global support properties of stationary ergodic processes. *Duke Math. J.* **42** (1975), 51-55. (R. A. Minlos) **52** #2488 81.60
- (with Faris, William) Degenerate and non-degenerate ground states for Schrödinger operators. *Duke Math. J.* **42** (1975), no. 3, 559-567. (R. Høegh-Krohn) **52** #2464 81.47
- (with Seiler, Erhard) On finite mass renormalizations in the two-dimensional Yukawa model. *J. Mathematical Phys.* **16** (1975), no. 11, 2289-2293. (J. Glimm) **53** #7295 81.47
- (with Seiler, Erhard) An inequality among determinants. *Proc. Nat. Acad. Sci. U.S.A.* **72** (1975), no. 9, 3277-3278. (J. de Pillis) **55** #6225 47B10 (15A45)
- Pointwise bounds on eigenfunctions and wave packets in N -body quantum systems. III. *Trans. Amer. Math. Soc.* **208** (1975), 317-329. (Teruo Ikebe) **54** #5647 35P99 (81.47)
- On the genericity of nonvanishing instability intervals in Hill's equation. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **24** (1976), no. 1, 91-93. (H. Hochstadt) **57** #12992 34B25 (58F10)
- (with Guerra, Francesco; Rosen, Lon) Boundary conditions for the $P(\phi)_2$ Euclidean field theory. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **25** (1976), no. 3, 231-334. (Thomas Spencer) **55** #14014 81.47
- The bound state of weakly coupled Schrödinger operators in one and two dimensions. *Ann. Physics* **97** (1976), no. 2, 279-288. (M. S. P. Eastham) **53** #8646 35J10
- (with Seiler, Erhard) Nelson's symmetry and all that in the Yukawa₂ and $(\phi^4)_2$ field theories. *Ann. Physics* **97** (1976), no. 2, 470-518. (R. Høegh-Krohn) **55** #11862 81.47
- (with Rosen, Jay) Fluctuations in $P(\phi)$ processes. *Ann. Probability* **4** (1976), no. 2, 155-174. (R. Høegh-Krohn) **55** #6586 60J60
- (with Fröhlich, Jürg; Spencer, Thomas) Infrared bounds, phase transitions and continuous symmetry breaking. *Comm. Math. Phys.* **50** (1976), no. 1, 79-95. (O. Penrose) **54** #9530 82.47
- (with Deift, P.) On the decoupling of finite singularities from the question of asymptotic completeness in two body quantum systems. *J. Functional Analysis* **23** (1976), no. 3, 218-238. (Adriaan Tip) **55** #5042 81.47
- (with Dyson, Freeman J.; Lieb, Elliott H.) Phase transitions in the quantum Heisenberg model. *Phys. Rev. Lett.* **37** (1976), no. 3, 120-123. (Chanchal K. Majumdar) **55** #5119 82.60
- A remark on Nelson's best hypercontractive estimates. *Proc. Amer. Math. Soc.* **55** (1976), no. 2, 376-378. (J. Glimm) **53** #4825 81.47
- Analysis with weak trace ideals and the number of bound states of Schrödinger operators. *Trans. Amer. Math. Soc.* **224** (1976), no. 2, 367-380. (Stefan Balint)

- 54 #11109 47F05 (81.35)
 (with Reed, Michael C.) ★Методы современной математической физики. 1: Функциональный анализ. (Russian) [Methods of modern mathematical physics. 1: Functional analysis] Translated from the English by A. K. Pogrebkov and V. N. Suško. With a preface by N. N. Bogoljubov. Edited by M. K. Polivanov. Izdat. "Mir", Moscow, 1977. 357 pp. (Editors) 58 #12430a 47-02 (81.47)
 (with Lieb, Elliott H.) The Thomas-Fermi theory of atoms, molecules and solids. *Advances in Math.* 23 (1977), no. 1, 22-116. (F. C. Auluck) 55 #1964 81.35
 Notes on infinite determinants of Hilbert space operators. *Advances in Math.* 24 (1977), no. 3, 244-273. (Author's summary) 58 #2401 47B10
 (with Fröhlich, Jürg) Pure states for general $P(\phi)_2$ theories: construction, regularity and variational equality. *Ann. of Math.* (2) 105 (1977), no. 3, 493-526. (J. Glimm) 55 #9767 81.60
 (with Blankenbecler, R.; Goldberger, M. L.) The bound states of weakly coupled long-range one-dimensional quantum Hamiltonians. *Ann. Physics* 108 (1977), no. 1, 69-78. (R. G. Newton) 56 #14250 81.34
 Scattering theory and quadratic forms: on a theorem of Schechter. *Comm. Math. Phys.* 53 (1977), no. 2, 151-153. (Francesco Premuda) 55 #6212 47A40 (81.47)
 (with Lieb, Elliott H.) The Hartree-Fock theory for Coulomb systems. *Comm. Math. Phys.* 53 (1977), no. 3, 185-194. (Johan G. Belinfante) 56 #10566 81.46
 Geometric methods in multiparticle quantum systems. *Comm. Math. Phys.* 55 (1977), no. 3, 259-274. (W. O. Amrein) 58 #14691a 81.47
 (with Deift, P.) A time-dependent approach to the completeness of multiparticle quantum systems. *Comm. Pure Appl. Math.* 30 (1977), no. 5, 573-583. (David Pearson) 56 #17590 81.47
 An abstract Kato's inequality for generators of positivity preserving semigroups. *Indiana Univ. Math. J.* 26 (1977), no. 6, 1067-1073. (Woodford W. Zachary) 57 #1194 47D05 (81.47)
 On the absorption of eigenvalues by continuous spectrum in regular perturbation problems. *J. Functional Analysis* 25 (1977), no. 4, 338-344. (Harro Heuser) 56 #3659 47A55 (81.47)
 (with Reed, Michael C.) The scattering of classical waves from inhomogeneous media. *Math. Z.* 155 (1977), no. 2, 163-180. (James S. Howland) 58 #1746 35P25 (47A40)
 Lower semicontinuity of positive quadratic forms. *Proc. Roy. Soc. Edinburgh Sect. A* 79 (1977/78), no. 3-4, 267-273. (K. Veselić) 58 #23685 47A55
 (with Reed, Michael C.) ★Methods of modern mathematical physics. IV. Analysis of operators. *Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London*, 1978. xv+396 pp. ISBN 0-12-585004-2 (P. R. Chernoff) 58 #12429c 47-02 (81.47)
 (with Reed, Michael C.) ★Методы современной математической физики. 2: Гармонический анализ. Самосопряженность. (Russian) [Methods of modern mathematical physics. 2: Harmonic analysis. Selfadjointness] Translated from the English by A. K. Pogrebkov and V. N. Suško. Edited by M. K. Polivanov. Izdat. "Mir", Moscow, 1978. 395 pp. (Editors) 58 #12430b 47-02 (81.47)
 (with Avron, J. E.) Analytic properties of band functions. *Ann. Physics* 110 (1978), no. 1, 85-101. (Tuan W. Chen) 57 #14992 81.30
 N body scattering in the two-cluster region. *Comm. Math. Phys.* 58 (1978), no. 2, 205-210. (W. O. Amrein) 58 #14691b 81.47
 A canonical decomposition for quadratic forms with applications to monotone convergence theorems. *J. Funct. Anal.* 28 (1978), no. 3, 377-385. (T. Kato) 58 #17937 47B25
 (with Dyson, Freeman J.; Lieb, Elliott H.) Phase transitions in quantum spin systems with isotropic and nonisotropic interactions. *J. Statist. Phys.* 18 (1978), no. 4, 335-383. (Derek W. Robinson) 58 #14819 82.47
 (with Herbst, I. W.) Stark effect revisited. *Phys. Rev. Lett.* 41 (1978), no. 2, 67-69. (Authors' summary) 58 #14542 81.30
 See also *Studies in mathematical physics*, (Not reviewed); Lieb, Elliott H.; et al., 49 #10294; *Constructive quantum field theory*, 52 #16310; *Mathematics of contemporary physics*, 53 #7; Jansen, K.-H.; et al., 54 #10888 and Matthes, Klaus; et al., 58 #24538
 Simon, Carl P. A 3-dimensional Abraham-Smale example. *Proc. Amer. Math. Soc.* 34 (1972), 629-630. (J. Bochnak) 45 #4457 58F10
 Instability in Diff' (T^3) and the nongenericity of rational zeta functions. *Trans. Amer. Math. Soc.* 174 (1972), 217-242. (J. W. Robbin) 47 #5903 58F20
 Bounded orbits in mechanical systems with two degrees of freedom and symmetry. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 515-525. *Academic Press, New York*, 1973. (Alan Weinstein) 49 #4366 70.58 (58F05)
 (with Saigal, Romesh) Generic properties of the complementarity problem. *Math. Programming* 4 (1973), 324-335. (R. W. Cottle) 48 #3504 90C30 (54C99)
 A bound for the fixed-point index of an area-preserving map with applications to mechanics. *Invent. Math.* 26 (1974), 187-200. (C. S. Hartzman) 50 #5856 (E 52 #12002) 58F20
 (with Titus, Charles J.) Removing index-zero singularities with C^1 -small perturbations. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to E. C. Zeeman on his fiftieth birthday)*, pp. 278-286. *Lecture Notes in Math.*, Vol. 468, Springer, Berlin, 1975. (E. Looijenga (Zbl 332 #34046)) 58 #31254 58F10
 (with Titus, Charles J.) The fixed point index of symplectic maps. (French summary) With a question by W. Klingenberg and an answer by Simon. *Géométrie symplectique et physique mathématique (Colloq. Internat. C.N.R.S., Aix-en-Provence, 1974)*, pp. 19-28. *Éditions Centre Nat. Recherche Sci., Paris*, 1975. (Donald G. Saari) 57 #1550 58C25
 (with Titus, Charles J.) Characterization of optima in smooth Pareto economic systems. Papers presented at the Colloquium on Mathematical Economics (Univ. California, Berkeley, Calif., 1974). *J. Math. Econom.* 2 (1975), no. 2, 297-330. (Yieh Hei Wan) 53 #2317 90A15 (58E15)
 Addendum to: "A bound for the fixed-point index of an area-preserving map with applications to mechanics" (Invent. Math. 26 (1974), 187-200). *Invent. Math.* 32 (1976), no. 1, 101. (Editors) 52 #12002 58F20
 Conditions for constrained Pareto optima on a Banach space with a finite number of criteria. *Dynamical systems (Proc. Internat. Sympos., Univ. Florida, Gainesville, Fla., 1976)*, pp. 323-334. *Academic Press, New York*, 1977. (G. Chichilnisky) 56 #17744 90A15 (58E15)
 (with Saari, Donald Gene) Singularity theory of utility mappings. I. *J. Math. Econom.* 4 (1977), no. 3, 217-251. (Stephen Schecter) 58 #24331 58C25 (58E15)
 See also *Dynamical systems*, 52 #11994
 Simon, Gary Additivity of information in exponential family probability laws. *J. Amer. Statist. Assoc.* 68 (1973), 478-482. (T. Nemetz) 51 #11739 62B10
 Alternative analyses for the singly-ordered contingency table. *J. Amer. Statist. Assoc.* 69 (1974), 971-976. (Author's summary) 55 #1572 (E 55 #1573) 62F01
 Corrigenda: "Alternative analyses for the singly-ordered contingency table". *Amer. Statist. Assoc.* 69 (1974), 971-976. *J. Amer. Statist. Assoc.* 70 (1975), 4 (Editors) 55 #1573 62F05
 Computer simulation swindles, with applications to estimates of location and dispersion. *J. Roy. Statist. Soc. Ser. C Appl. Statist.* 25 (1976), no. 3, 266-274. (Author's summary) 56 #1547 62E25 (65C05)
 Multivariate generalization of Kendall's tau with application to data reduction. *Amer. Statist. Assoc.* 72 (1977), no. 358, 367-376. (Rashid Ahmad) 56 #9818 62F01 (62G99)
 Simon, Hans (with Stahl, Kurt) ★Mathematik. Elfte Auflage. Nachschlagebücher Grundlagentäfelchen. VEB Fachbuchverlag, Leipzig, 1975. 670 pp. (Editors) 52 #13092 00A20
 Simon, Herbert A. Theories of bounded rationality. *Decision and organization (a volume in honor of Jacob Marschak)*, pp. 161-176. *Studies in Mathematical and Managerial Economics*, Vol. 12, North-Holland, Amsterdam, 1972. (Manfred Kochen) 54 #6892 90A05
 (with Groen, Guy J.) Ramsey eliminability and the testability of scientific theories. *British J. Philos. Sci.* 24 (1973), 367-380. (Mario Bunge) 56 #5203 02A05
 The psychological concept of "losing move" in a game of perfect information. *Philos. Nat. Acad. Sci. U.S.A.* 71 (1974), 2276-2279. (J. H. Blau) 49 #10389 90D40
 (with Kadane, Joseph B.) Optimal problem-solving search: all-or-none solution. *Artificial Intelligence* 6 (1975), no. 3, 235-247. (S. Amarel) 52 #7235 68A45
 (with Ijiri, Yuji) Some distributions associated with Bose-Einstein statistics. *Philos. Nat. Acad. Sci. U.S.A.* 72 (1975), 1654-1657. (Bruce M. Hill) 52 #6958 62B10 (82.62)
 (with Kadane, Joseph B.) Problems of computational complexity in artificial intelligence. *Algorithms and complexity (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1976)*, pp. 281-299. *Academic Press, New York*, 1976. (Karel Čech) 56 #10144 68A20 (68A45, 68A10)
 (with Newell, Allen) Computer science as empirical inquiry: symbols and search. *Comm. ACM* 19 (1976), no. 3, 113-126. (Editors) 57 #4555 68-01
 Bradie on Polanyi on the Meno paradox. *Philos. Sci.* 43 (1976), no. 1, 147-158. (Rucker) 57 #5661 02A05
 Identifiability and the status of theoretical terms. *Basic problems in methodology of linguistics (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Part 1, Univ. Western Ontario, London, Ont., 1975)*, pp. 43-61. *Univ. Western Ontario J. Philos. Sci.*, Vol. 11, Reidel, Dordrecht, 1977. (Editors) 58 #21406 02A05
 (with Kadane, Joseph B.) Optimal strategies for a class of constrained sequential problems. *Ann. Statist.* 5 (1977), no. 2, 237-255. (S. Blumenthal) 57 #4442 62B10 (90B40)
 See also *Contemporary developments in mathematical psychology*, 50 #6554
 Simon, Hermann Normalizer conditions and group-theoretical properties. *Rend. C. Mat. Palermo* (2) 20 (1971), 163-170 (1972). (A. H. Rhemtulla) 48 #6262 20F30
 Simon, Imre (with Brzozowski, Janusz A.) Characterizations of locally testable events. *Discrete Math.* 4 (1973), 243-271. (I. Peák) 47 #7948 68A25
 Piecewise testable events. *Automata theory and formal languages (Second GI Conf., Kaiserslautern, 1975)*, pp. 214-222. *Lecture Notes in Comput. Sci.*, Vol. 33, Springer, Berlin, 1975. (Derrick Wood) 55 #530 20M05 (68A25)
 (with Mandel, Arnaldo) On finite semigroups of matrices. *Theoret. Comput. Sci.* (1977/78), no. 2, 101-111. (W. Wechler) 57 #12749 20M20 (20M35)
 Simon, Istvan (with Porter, Thomas) Random insertion into a priority queue structure. *IEEE Trans. Software Engrg.* SE-1 (1975), no. 3, 292-298. (Amitava Bagchi) 52 #468A10
 (with Gill, John T., III) Polynomial reducibilities and upward diagonalization. *Conference Record of the Ninth Annual ACM Symposium on Theory of Computation (Boulder, Colo., 1977)*, pp. 186-194. *Assoc. Comput. Mach., New York*, 1977. (Editors) 58 #25126 68A20
 Simon, J. (with Nemetz, Tibor O. H.) Self-information and optimal codes. *Topics in information theory (Second Colloq., Keszthely, 1975)*, pp. 457-468. *Colloq. Math.*, János Bolyai, Vol. 16, North-Holland, Amsterdam, 1977. (See Zbl 363 #94021; MR #2620) 94A10
 Simon, Jacques (with Flato, Moshé) Field theory on curved space time and the T theorem. *Phys. Scripta* 3 (1971), no. 2, 53-54. (W. Israel) 53 #7353 83.53
 (with Flato, Moshé; Snellman, Håkan; Sternheimer, Daniel) Simple facts about analytic vectors and integrability. *Ann. Sci. École Norm. Sup.* (4) 5 (1972), 423-434. (A. Thieleke) 51 #13135 22E45
 Existence et unicité des solutions d'équations et d'inéquations d'évolution. *Ann. Sci. École Norm. Sup.* (4) 5 (1972), 435-454. (S. Kantorovitch) 51 #13136 47D05
 On the integrability of representations of infinite dimensional real Lie algebras. *Comm. Math. Phys.* 28 (1972), 39-46. (C. Isham) 46 #7447 22E45 (81.22)
 (with Flato, Moshé) Wightman formulation for the quantization of the gravitational field. *Phys. Rev. D* (3) 5 (1972), no. 2, 332-341. (S. A. Fulling) 54 #14717 83.53 (81.53)
 (with Flato, Moshé; Sternheimer, Daniel) Sur l'intégrabilité des représentations antisymétriques des algèbres de Lie compactes. *C. R. Acad. Sci. Paris Sér. A-B* (1973), A939-A942. (Rolf Sulanke) 49 #2864 17B15 (22E45)
 (with Flato, Moshé) Separate and joint analyticity in Lie groups representations.

- Functional Analysis* **13** (1973), 268-276. (A. J. Coleman) **49** #5232 22E45
 Une majoration et quelques résultats sur le comportement à l'infini de solutions
 l'équations fortement non linéaires. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 421-424.
 Author's summary **55** #10856 35K55
 (with Pinczon, Georges) Sur la 1-cohomologie des groupes de Lie semisimples. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 455-458. (W. T. van Est) **52** #663 22E45
 57D30
 (with Flato, Moshé; Sternheimer, Daniel) Remarks on an axiomatic approach to
 quantum gravity. *Helv. Phys. Acta* **47** (1974), 114-118. (H. Araki) **50** #9226 81.46
 Quelques propriétés de solutions d'équations et d'inéquations d'évolution
 paraboliques non linéaires. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* **2** (1975), no. 4,
 585-609. (M. Biondi) **52** #14664 35K55
 A Gårding domain for representations of some Hilbert Lie groups. *Lett. Math. Phys.* **1** (1975/76), no. 1, 23-29. (D. Milićić) **54** #476 22E65 (22E45, 81.22)
 (with Pinczon, Georges) On the 1-cohomology of Lie groups. *Lett. Math. Phys.* **1** (1975/76), no. 1, 83-91. (S. Murakami) **53** #3208 22E45 (58F05)
 (with Magnin, Louis) Lie algebras associated with topological nilpotent groups. *Rep. Mathematical Phys.* **8** (1975), no. 2, 171-180. (Carl Wulfsberg) **54** #10510
 22E60
 Régularité de solutions de problèmes nonlinéaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 23, A1351-A1354. (D. Pascali) **56** #13011
 47H15 (35D10)
 (with Flato, Moshé; Pinczon, Georges) Non linear representations of Lie groups. *Ann. Sci. École Norm. Sup. (4)* **10** (1977), no. 3, 405-418. (G. L. Litvinov) **58** #22399
 22E45 (22E99)
 Analyticité jointe et séparée dans les représentations des groupes de Lie réductifs. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 4, A199-A202. (Author's summary) **56** #15838 22E45
 (with Flato, Moshé) Non-linear equations and covariance. *Lett. Math. Phys.* **2** (1977/78), no. 2, 155-160. (Martine J. Perrin) **57** #3320 22E70 (81.22)
 on, Janos (with Hartmanis, Juris) On the power of multiplication in random access machines. *15th Annual Symposium on Switching and Automata Theory* (1974), pp. 13-23. *IEEE Comput. Soc., Long Beach, Calif., 1974*. (R. E. Stearns) **54** #4193 68A25 (68A20)
 (with Hartmanis, Juris) On the structure of feasible computations. *Vierte Jahrestagung der Gesellschaft für Informatik (Berlin, 1974)*, pp. 3-51. *Lecture Notes in Comput. Sci., Vol. 26, Springer, Berlin, 1975*. (Claude Benzenen) **52** #12401 68A20
 (with Hartmanis, Juris) On the structure of feasible computations. *Advances in computers, Vol. 14, pp. 1-43. Academic Press, New York, 1976*. (John T. Gill) **54** #9149 68A20
 (with Galil, Zvi) A note on multiple-entry finite automata. *J. Comput. System Sci.* **12** (1976), no. 3, 350-351. (Michel Fliess) **53** #15587 94A30
 On the difference between one and many (preliminary version). *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 480-491. *Lecture Notes in Comput. Sci., Vol. 52, Springer, Berlin, 1977*. (John T. Gill) **56** #17207 68A20
 On feasible numbers (preliminary version). *Conference Record of the Ninth Annual ACM Symposium on Theory of Computing (Boulder, Colo., 1977)*, pp. 195-207. *Assoc. Comput. Mach., New York, 1977*. (Author's summary) **58** #32066 68A20
 Polynomially bounded quantification over higher types and a new hierarchy of the elementary sets. *Non-classical logics, model theory and computability (Proc. Third Latin-Amer. Sympos. Math. Logic, Campinas, 1976)*, pp. 267-281. *Stud. Logic Found. Math., Vol. 89, North-Holland, Amsterdam, 1977*. (Cristian Calude) **58** #179 02F15 (68A20, 68A25)
 on, Jean Claude (with Diday, Edwin) Classification automatique. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A1003-A1005. (C. F. Picard) **48** #3633 94A20
 Complexity, compression and recognition of patterns. *Proceedings of the Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976)*, pp. 489-493. *IEEE Comput. Soc., Long Beach, Calif., 1976*. (Author's summary) **58** #13940 68A20
 (with Jablon, Claude) ★Applications des modèles numériques en physique. *Interdisciplinary Systems Research, No. 53. Birkhäuser Verlag, Basel-Stuttgart, 1978*. iv + 283 pp. *ISBN 3-7643-1001-4* (E. G. Djakonov) **58** #24829 65-01 (65C99, 65P05, 69.00)
 See also Computer oriented learning processes, **55** #13899 and Digital image processing and analysis, **58** #19435
 on, Jonathan An algebraic classification of knots in S^3 . *Ann. of Math. (2)* **97** (1973), 1-13. (R. J. Daverman) **46** #9959 55A25
 Roots and centralizers of peripheral elements in knot groups. *Math. Ann.* **222** (1976), no. 3, 205-209. (J. S. Birman) **54** #6123 55A25
 Compactification of covering spaces of compact 3-manifolds. *Michigan Math. J.* **23** (1976), no. 3, 245-256 (1977). (Benny Evans) **55** #4178 57A10 (55A10)
 On the problems of determining knots by their complements and knot complements by their groups. *Proc. Amer. Math. Soc.* **57** (1976), no. 1, 140-142. (L. Neuwirth) **53** #6533 55A25
 Fibered knots in homotopy 3-spheres. *Proc. Amer. Math. Soc.* **58** (1976), 325-328. (Author's summary) **58** #31054 55A40
 on, Kurt (with Stubberud, Allen R.) Singular problems in linear estimation and control. *Advances in control systems: theory and applications, Vol. 8, pp. 53-88. Academic Press, New York, 1971*. (V. Komkov) **56** #15059 93E10
 on, L. See Simon, Leon
 on, L. The approximation of the solutions of boundary value problems in unbounded domains. (Russian) *Differentsial'nye Uravneniya* **9** (1973), 1482-1492, 1550. (Ja. A. Roitberg) **52** #6178 35J40
 The approximation of solutions of boundary value problems in domains with unbounded boundary. (Russian) *Mat. Sb. (N.S.)* **91**(133) (1973), 488-499, 629. (A. Haimovici) **48** #9098 35J40
 Approximation of the solutions of an elliptic equation in \mathbb{R}^n by the solutions of boundary value problems in a ball of large radius. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 3, 12-21. (G. C. Barozzi) **50** #5175 35J40
 Simon, Leon (with Michael, J. H.) Sobolev and mean-value inequalities on generalized submanifolds of \mathbb{R}^n . *Comm. Pure Appl. Math.* **26** (1973), 361-379. (David Kinderlehrer) **49** #9717 49F10 (46E35)
 Global estimates of Hölder continuity for a class of divergence-form elliptic equations. *Arch. Rational Mech. Anal.* **56** (1974), 253-272. (G. Albinus) **50** #5183 35J65
 (with Schoen, Richard; Yau, Shing Tung) Curvature estimates for minimal hypersurfaces. *Acta Math.* **134** (1975), no. 3-4, 275-288. (Robert Gulliver) **54** #11243 53C40 (49F10)
 Boundary regularity for solutions of the non-parametric least area problem. *Ann. of Math. (2)* **103** (1976), no. 3, 429-455. (H. Beckert) **58** #30681 49F10 (35J67)
 (with Spruck, Joel) Existence and regularity of a capillary surface with prescribed contact angle. *Arch. Rational Mech. Anal.* **61** (1976), no. 1, 19-34. (Editors) **58** #7339 49F10 (35J65, 35Q99)
 Remarks on curvature estimates for minimal hypersurfaces. *Duke Math. J.* **43** (1976), no. 3, 545-553. (João Lucas Marques Barbosa) **54** #6040 53C40 (49F10)
 Interior gradient bounds for non-uniformly elliptic equations. *Indiana Univ. Math. J.* **25** (1976), no. 9, 821-855. (G. Wilken) **54** #727 35J65
 (with Schoen, Richard; Almgren, Frederick J., Jr.) Regularity and singularity estimates on hypersurfaces minimizing parametric elliptic variational integrals. I, II. *Acta Math.* **139** (1977), no. 3-4, 217-265. (William K. Allard) **57** #7333 49F22
 On some extensions of Bernstein's theorem. *Math. Z.* **154** (1977), no. 3, 265-273. (Jean E. Taylor) **56** #6534 49F10
 On a theorem of de Giorgi and Stampacchia. *Math. Z.* **155** (1977), no. 2, 199-204. (U. D'Ambrosio) **56** #13102 49F22 (35J20)
 Equations of mean curvature type in 2 independent variables. *Pacific J. Math.* **69** (1977), no. 1, 245-268. (Klaus Steffen) **56** #13099 49F10 (35J20)
 de Simon, Luciano (with Torelli, Giovanni) Linear second order differential equations with discontinuous coefficients in Hilbert spaces. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* **1** (1974), 131-154 (1975). (H.-W. Rohde) **52** #9005 47F05 (35R05)
 Sulla p -sommabilità di funzioni a valori vettoriali. (English summary) *Rend. Ist. Mat. Univ. Trieste* **6** (1974), 71-76. (J. Diestel) **50** #986 46E40
 Simon, M. T. (with Mathews, P. M.; Seetharaman, M.) Indecomposability of Poincaré-group representations over massless fields, and the quantization problem for electromagnetic potentials. *Phys. Rev. D* (3) **9** (1974), 1706-1710. (Authors' summary) **53** #12261 81.22
 Simon, Max See Festschrift: Weber, Heinrich, **50** #12626
 Simon, P. Verallgemeinerten Walsh-Fourier Reihen. I. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **16** (1973), 103-113 (1974). (D. J. Eustice) **50** #14046 42A56
 Verallgemeinerte Walsh-Fourierreihen. II. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 3-4, 329-341. (D. J. Eustice) **57** #10349 42A56
 (with Pál, Jenő) On a generalization of the concept of derivative. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 1-2, 155-164. (P. L. Butzer and W. Splettstößer) **56** #9176 42A56
 (with Pál, Jenő) On the generalized Butzer-Wagner type a.e. differentiability of integral function. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **20** (1977), 157-165. (C. W. Onneweer) **57** #7017 42A56
 (with Ciesielski, Zbigniew; Sjölin, Per) Equivalence of Haar and Franklin bases in L_p spaces. *Studia Math.* **60** (1977), no. 2, 195-210. (F. Schipp) **55** #6103 42A56
 Simon, Petr A note on Rudin's example of Dowker space. *Comment. Math. Univ. Carolinae* **12** (1971), 825-834. (Mary Ellen Rudin) **47** #9541 54D20 (54G20)
 A note on Rudin's example of Dowker space. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971)*, pp. 399-400. *Academia, Prague, 1972*. (Chen-tung Liu) **50** #8444 54D30 (54G20)
 A note on cardinal invariants of square. *Comment. Math. Univ. Carolinae* **14** (1973), 205-213. (A. H. Stone) **49** #3807 54A25
 (with Preiss, David) A weakly pseudocompact subspace of Banach space is weakly compact. *Comment. Math. Univ. Carolinae* **15** (1974), 603-609. (V. Pták) **51** #11071 46B05 (54D30)
 On continuous images of Eberlein compacts. *Comment. Math. Univ. Carolinae* **17** (1976), no. 1, 179-194. (S. Swaminathan) **53** #11348 46B99
 Uniform atoms on ω . *General topology and its relations to modern analysis and algebra, IV (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B*, pp. 430-433. *Soc. Czech. Mathematicians and Physicists, Prague, 1977*. (Author's summary) **56** #13171 54E15
 On natural metropies. *Comment. Math. Univ. Carolinae* **18** (1977), no. 3, 467-482. (J. M. Aarts) **58** #24201 54E15 (54A05)
 Covering of a space by nowhere dense sets. *Comment. Math. Univ. Carolinae* **18** (1977), no. 4, 755-761. (V. V. Miškin) **57** #4068 54A25
 A somewhat surprising subspace of $\beta\mathbb{N} - \mathbb{N}$. *Comment. Math. Univ. Carolin.* **19** (1978), no. 2, 383-388. (Anthony D'Aristotle) **58** #12923 54D35
 An example of maximal connected Hausdorff space. *Fund. Math.* **100** (1978), no. 2, 157-163. (L. Janos) **58** #7557 54D30 (54A25)
 Simon, R. (with Hoel, David G.; Weiss, George H.) Sequential tests for composite hypotheses with two binomial populations. *J. Roy. Statist. Soc. Ser. B* **38** (1976), no. 3, 302-308. (Authors' summary) **58** #31651 62L10
 Simon, Richard M. (with Lee, Richard Char Tung) On the optimal solutions to AND/OR series-parallel graphs. *J. Assoc. Comput. Mach.* **18** (1971), 354-372. (S. L. Hakimi) **45** #3237 05C99
 Stationary properties of a two-echelon inventory model for low demand items. *Operations Res.* **19** (1971), no. 3, 761-773. (Author's summary) **56** #10863 (E 56 #10864) 90B05
 The reliability of multicomponent systems subject to cannibalization. *Naval Res. Logist. Quart.* **19** (1972), 1-14. (A. P. Basu) **47** #6046 62N05
 (with Weiss, George H.; Hoel, David G.) Sequential analysis of binomial clinical trials. *Biometrika* **62** (1975), 195-200. (Dan Anbar) **51** #9396 62L05 (62P10)
 Application of optimization methods to the hematological support of patients with disseminated malignancies. *Math. Biosci.* **25** (1975), no. 1-2, 125-138. (F. Giannessi) **52** #16560 90B05 (92A05)
 See also Kruse, W. Karl; et al., **56** #10864

- Simon, Udo** Zum H -Statz in der mehrdimensionalen Differentialgeometrie. *Differentialgeometrie im Grossen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 299-305. *Ber. Math. Forschungsinst. Oberwolfach, Heft 4, Bibliographisches Inst., Mannheim*, 1971. (Carlos E. Harle) **54** #11244 53C40
- Pseudogeodätische Linien auf Flächen. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 325-330 (M. D. Upadhyay) **47** #999 53C45
- II-Verbiegungen von Eiflächen. *Arch. Math. (Basel)* **22** (1971), 319-324. (C. B. Allendoerfer) **45** #2629 53C45
- On the inner geometry of the second fundamental form. *Michigan Math. J.* **19** (1972), 129-132. (N. J. Hicks) **46** #6250 53C40
- (with Huck, H.; Roitzsch, R.; Vortisch, W.; Walden, R.; Wegner, Bernd; Wendland, Wolfgang L.) ★Beweismethoden der Differentialgeometrie im Grossen. *Lecture Notes in Mathematics*, Vol. 335. *Springer-Verlag, Berlin-New York*, 1973. 168 pp. (T. Nagano) **51** #6666 53C40
- (with Glässner, Ekkehart) Zur Geometrie der zweiten Grundform. *Überblicke Mathematik, Band 6*, 197-242. *Bibliographisches Inst., Mannheim*, 1973. (C.-C. Hsiung) **51** #11373 53C45
- Charakterisierungen von Relativsphären und Ellipsoiden. *Arch. Math. (Basel)* **24** (1973), 100-104. (J. Merza) **49** #9754 53A15
- Compact conformally symmetric Riemannian spaces. *Math. Z.* **132** (1973), 173-177. (C.-C. Hsiung) **48** #7164 53C20
- On differential operators of second order on Riemannian manifolds with nonpositive curvature. *Colloq. Math.* **31** (1974), 223-229. (J. D. Zund) **51** #1674 53C30
- A further method in global differential geometry. *Abh. Math. Sem. Univ. Hamburg* **44** (1975), 52-69 (1976). (K. Nomizu) **52** #15315 53C40
- Characterizations of the sphere by the curvature of the second fundamental form. *Proc. Amer. Math. Soc.* **55** (1976), no. 2, 382-384. (M. Glasner) **53** #9095 53C45
- Submanifolds with parallel mean curvature vector and the curvature of minimal submanifolds of spheres. *Arch. Math. (Basel)* **29** (1977), no. 1, 106-112. (M. L. Curtis) **57** #4053 53C40
- Einstein spaces isometrically diffeomorphic to a sphere. *Manuscripta Math.* **22** (1977), no. 1, 1-5. (Ju. Burago) **57** #17565 53C25 (53C45)
- Isometries with spheres. *Math. Z.* **153** (1977), no. 1, 23-27. (From the introduction) **58** #18276 53C25
- Curvature bounds for the spectrum of closed Einstein spaces. *Canad. J. Math.* **30** (1978), no. 5, 1087-1091. (R. S. Millman) **58** #18277 53C25 (58G99)
- Simonavičius, J.** (with Žukauskas, K. P.) Reliability of logical elements with account taken of factors that increase the probability of their fault-free performance. II. Calculation of the probability of fault-free performance with account taken of a change each time in the sets of input signals. (Russian. Lithuanian and English summaries) *Trudy Akad. Nauk Litov. SSR Ser. B* **1974**, no. 1(80), 163-168. (Authors' introduction) **58** #4697 94A20
- Simoncini, L.** (with Ciompi, P.) The boundary graphs: an approach to the diagnosability with repair of digital systems. *Computing systems 1974 (Proc. Third Texas Conf., Univ. Texas, Austin, Tex., 1974)*, Paper No. 9-3, 9 pp. *IEEE Comput. Soc., Long Beach, Calif.*, 1974. (Authors' summary) **56** #18134 94A20
- Simone, Carla** (with De Michelis, Giorgio) Semantic characterization of flow diagrams and their decomposability. *Automata, languages and programming (Second Colloq., Univ. Saarbrücken, Saarbrücken, 1974)*, pp. 81-96. *Lecture Notes in Comput. Sci., Vol. 14, Springer, Berlin*, 1974. (Karel Čulík) **55** #6910 68A05
- Un modello di λ -calcolo fortemente equivalente agli schemi ricorsivi. (English summary) *Calcolo* **11** (1974), 111-125. (H. B. Curry) **54** #69 02C20 (68A05)
- (with De Michelis, Giorgio) Well formed programs optimal with respect to structural complexity. *Fünfte Jahrestagung der Gesellschaft für Informatik (Dortmund, 1975)*, pp. 179-195. *Lecture Notes in Comput. Sci., Vol. 34, Springer, Berlin*, 1975. (A. L. Rosenberg) **55** #6911 68A05
- (with De Michelis, Giorgio; Lanzarone, G. A.) Program proving: exit and return jumps in structured programs. *GI-6. Jahrestagung (Stuttgart, 1976)*, pp. 121-132. *Informatik-Fachberichte, Band 5, Springer, Berlin*, 1976. (Giovanni Uccella) **58** #8433 68A05
- Simone, Joseph N.** On number theoretic functions which satisfy $f(x+y) = f(x) + f(y)$. *Math. Mag.* **46** (1973), 213-215. (M. S. Cheema) **48** #2045 10A20
- Metric components of continuous images of ordered compacta. *Pacific J. Math.* **69** (1977), no. 1, 269-274. (L. E. Ward, Jr.) **55** #6386 54F20
- A property of hereditarily locally connected continua related to arcwise accessibility. *J. Austral. Math. Soc. Ser. A* **25** (1978), no. 1, 35-40. (R. F. Dickman, Jr.) **57** #10685 54F15
- Simonenko, I. B.** On the question of the index problem. (Russian) *Mathematical analysis and its applications, Vol. II (Russian)*, pp. 99-105. *Izdat. Rostov. Univ., Rostov-on-Don*, 1970. (V. Komkov) **56** #9332 47G05
- (with Kolybel'nikova, O. K.) The capacitance of a circular conducting disc that is situated on a dielectric layer of small thickness. (Russian) *Mathematical analysis and its applications, Vol. II (Russian)*, pp. 117-131. *Izdat. Rostov. Univ., Rostov-on-Don*, 1970. (V. Komkov) **56** #10443 78.35
- Approximation-moment scales, and interpolation theorems. (Russian) *Mathematical analysis and its applications, Vol. III (Russian)*, pp. 37-52. *Izdat. Rostov. Univ., Rostov-on-Don*, 1971. (S. D. Riemschneider) **51** #13726 46M35 (46E35)
- (with Čekulaeva, A. A.) The capacity of a condenser that consists of infinite bands. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1972**, no. 4, 362-365. (Z. Rubinstein) **46** #3816 31A15
- Justification of the averaging method for the convection problem in a field of rapidly oscillating forces and for other parabolic equations. (Russian) *Mat. Sb. (N.S.)* **87(129)** (1972), 236-253. (Ja. A. Roitberg) **45** #4218 47F05 (35B99)
- Higher approximations of the averaging method for parabolic equations. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 1255-1257. (L. Cattabriga) **49** #5570 35K35
- Higher approximation of the averaging method for abstract parabolic equations. (Russian) *Mat. Sb. (N.S.)* **92(134)** (1973), 541-549, 647. (L. Cattabriga) **49** #5506 34G05 (35K35)
- Problems of electrostatics in an inhomogeneous medium. The case of a thin dielectric with a large dielectric constant. I. (Russian) *Differencial'nye Uravneniya* **17** (1974), 301-309, 373. (A. Nikodémusz) **50** #3771 78.31 (31B15)
- Characteristic bisingular equations in spaces of summable functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 2(141), 115-120. (D. Przeworska-Rolewicz) **50** #1059 47G05 (45E05)
- Problems of electrostatics in an inhomogeneous medium. The case of a thin dielectric with a large dielectric constant. II. (Russian) *Differencial'nye Uravneniya* **17** (1975), no. 10, 1870-1878, 1910-1911. (A. Nikodémusz) **53** #9881 78.35
- (with Borodickii, M. P.) A certain variational problem of varying dimension. (Russian) *Funkcional. Anal. i Priložen.* **9** (1975), no. 4, 63-64. (M. L. Gromov) **52** #11992 58E10 (49A50)
- A certain limit problem of heat conduction in a nonhomogeneous medium. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 6, 1291-1300, 1371. (V.-V. Olariu) **54** #8023 35K05
- More on the Trefftz method. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* **1976**, no. 2, 10-12, 116. (G. Albinus) **55** #9572 31A30 (65N30)
- Some bounds for power quasipolynomials. (Russian) *Mat. Sb. (N.S.)* **100(142)** (1976), no. 1, 89-101, 165. (V. Veselinov) **56** #5816 26A84 (41A10)
- Simonenko, R. A.** The overconvergence of a sequence of polynomials of best approximation. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 8(111), 122-126. (G. Halász) **45** #5376 30A82
- Simoni, A.** (with Zaccaria, F.; Sudarshan, E. C. G.) On kernels realizing associative multiplications between phase-space functions. (Italian and Russian summaries) *Nuovo Cimento B* (11) **5** (1971), 134-142. (K. Kumar) **47** #8047 81.47
- (with Caratù, G.; Marmo, G.; Vitale, B.; Zaccaria, F.) Homogeneous canonical transformations in phase space: On necessary conditions for the existence of symplectic actions of simple Lie groups on differentiable manifolds. (Italian and Russian summaries) *Nuovo Cimento B* (11) **19** (1974), 228-238. (G. R. Allcock) **49** #4491 81.57 (57E20)
- (with Caratù, G.; Marmo, G.; Vitale, B.; Zaccaria, F.) Lagrangian and Hamiltonian formalisms: an analysis of classical mechanics on tangent and cotangent bundles. (Italian and Russian summaries) *Nuovo Cimento B* (11) **31** (1976), no. 152-172. (Tudor S. Rațiu) **53** #7183 70.58
- de Simoni, Sergio** See **De Simoni, Sergio**
- Simonija, V. T.** The characters of the representation of group $SU(n)$. (Russian. Georgian and English summaries) Collection of articles on algebra, 1. *Sakharth. SSR Mec. Akad. Math. Inst. Šrom.* **46** (1975), 65-70. (Wayne J. Holman, III) **52** #14170 22E70
- Characters of irreducible representations of the groups $SU(2)$, $SU(3)$. (Russian. Georgian and English summaries) Collection of articles on algebra, 1. *Sakharth. SSR Mec. Akad. Math. Inst. Šrom.* **46** (1975), 71-76. (Wayne J. Holman, III) **52** #14171 22E70
- Characters of irreducible representations of the group $SU(n)$. (Russian. Georgian and English summaries) Collection of articles on algebra, 1. *Sakharth. SSR Mec. Akad. Math. Inst. Šrom.* **46** (1975), 133-145. (Wayne J. Holman, III) **52** #14172 22E70
- Simonis, J.** (with Peters, C. A. M.) A secant formula. *Quart. J. Math. Oxford Ser. (2)* **27** (1976), no. 106, 181-189. (S. L. Kleiman) **54** #7492 14N10 (14E25, 14C99)
- Simonis, Juriaan** A class of indecomposable algebraic vector bundles. *Math. Ann.* **15** (1971), 262-278. (P. E. Newstead) **45** #275 14F05
- Simonius, M.** Overlapping resonances and unitarity of the scattering matrix. *Nuclear Phys. A* **218** (1974), 53-60. (P. Achuthan) **48** #10383 81.47
- Simonjan, A. H.** The mean number of level crossings of the difference between a Gaussian stationary process and its approximating polygon. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **61** (1975), no. 4, 205-209. (G. M. Molčan) **53** #6712 60G15
- The probability of the deviation of a Gaussian random process from an approximating random curve. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **66** (1978), no. 2, 84-90. (Jack Cuzick) **58** #13320 60G15 (60F15, 60G17)
- Simonjan, L. A.** See **Simonjans, L.**
- Simonjan, S. A.** (with Kotov, Ju. I.; Zolotarev, V. P.) An approach to the study of continuous mappings. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1978**, no. 1, 10-15. (M. Hušek) **57** #13828 54C05
- Simonjan, S. G.** A certain one-dimensional scattering problem in the quasi-classical approximation. (Russian) *Differencial'nye Uravneniya* **7** (1971), 759-762. (Authors' summary) **45** #7191 34E05
- Some asymptotic estimates of a differential system with periodic perturbations. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **11** (1976), no. 3, 263-274, 289. (J. W. Macki) **56** #9016 34E15 (34C25)
- (with Fedorjuk, M. V.) The asymptotic behavior of multipliers and instability zones of Hill's system. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **11** (1976), no. 5, 411-423, 481. (A. Corduneanu) **57** #16850 34D05
- Simonjans, L.** Certain examples of Lie groups and algebras. (Russian) *Sibirsk. Mat. Ž.* **19** (1971), 837-843. (H. de Vries) **45** #3499 17B45 (22E60, 57E20)
- (with Plotkin, B. I.; Krop, L. E.) Some connections between group varieties and varieties of group representations. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1975), 1072-1075. (J. Wiegold) **52** #5802 20E10
- The embedding of a locally nilpotent Lie algebra in a locally nilpotent associative algebra. (Russian. Latvian summary) *Latvian mathematical yearbook*, 16 (Russian), 46-51, 272. *Izdat. "Zinatne", Riga*, 1975. (G. P. Kukin) **52** #3260 17B60
- Verbal wreath products in linear representations of groups and Lie algebras. (Russian) *Latvišsk. Mat. Ežegodnik Vyp.* **18** (1976), 170-189, 223. (loose errata) (V. Artamonov) **57** #3260 20F25 (20E10, 17B99)
- Simonnard, Michel** ★Programmation linéaire: technique du calcul économique. 2: Extensions. Deuxième édition revue et augmentée, avec la participation de Xavier Chouet. Collection Finance et Économie Appliquée, Vol. 40. *Dunod, Paris-Brussels-Montreal, Que.*, 1973. xxiv + 282 pp. (Zbl) **285** #90049 **57** #18811 90C05
- Simonne, Michel** Différentiabilité de la composition. *C. R. Acad. Sci. Paris Sér. A-B* **2**

- 72), A565-A568. (S. Foglio) **45** #4145 46G05
 Complétude de $L(\bar{F}, \bar{E})$ et $C^*(F, X)$. *C. R. Acad. Sci. Paris. Sér. A-B* **275** (1972), 107-A909. (Jean-François Colombeau) **47** #789 46E10 (54C35)
 Dérivabilité des flots locaux d'une application C^1 . *C. R. Acad. Sci. Paris Sér. A-B* **5** (1972), A1339-A1341. (Jean-François Colombeau) **46** #9733 46G05
 Calcul différentiel dans les espaces non normales. *Cahiers Topologie Géom.*
Différentielle **13** (1972), 411-437; *ibid.* **14** (1973), 3-40. (Jean-François Colombeau) **1** #11249 46G05
 Applications analytiques entre espaces localement convexes complexes. *Esquisses arithmétiques*, No. 20, Exp. No. 2, ii + 21 pp. *Fac. Sci. Univ. Paris VII, Paris*, 1973. (Soo ong Chae) **51** #11566 58B10 (46G20)
 Sur le théorème de Frobenius. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), 187-A189. (Jean-François Colombeau) **47** #5588 46G05 (26A96)
 Différentiabilité d'ordre infini des applications analytiques complexes. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A1049-A1051. (Martin Schottenloher) **48** #12056 5G20
 Caractérisation des applications analytiques et ensembles équicontinus de telles applications. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A1099-A1102. (Martin Schottenloher) **48** #12057 46G20
 Équations aux différentielles totales dans les espaces localement-convexes. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 1117-1118. (Jean-François Colombeau) **50** #2911 6G05 (35A05)
 Une formule de calcul différentiel. *Esquisses mathématiques*, No. 23, Exp. No. 3, + 5 pp. *Fac. Sci., Univ. Paris VII, Paris*, 1975. (Jean-François Colombeau) **54** #13969 58C20 (46G05)
 Calcul différentiel entre espaces vectoriels quasi-topologiques. *Esquisses mathématiques*, No. 24, Exp. No. 1, iv + 73 pp. *U.E.R. Math., Univ. Amiens, Amiens*, 1976. (Peter Michor) **54** #11375 58C20 (46G05)
 Feuilletages et sous-fibres intégrables. *Esquisses Mathématiques*, No. 28, pp. -iii + 1-65. *U. E. R. Math., Univ. Amiens, Amiens*, 1977. (Csaba Hatvany) **58** #18513 58-02 (57D30)
 Simonov, A. A. A study of piecewise monotone transformations of an interval by the methods of symbolic dynamics. (Russian) *Dokl. Akad. Nauk SSSR* **238** (1978), no. 5, 1063-1066. (A. Császár) **58** #12968 54H20 (26A48)
 Simonov, A. S. The solvability of the Dirichlet problem for a quasilinear elliptic equation. (Russian) *Dal'nevostochn. Mat. Sb.* **1** (1970), 109-112. (M. Anne Dow) **52** #14632 15J40
 A certain iteration method for nonlinear elliptic equations. (Russian) *Applied questions in mathematical analysis* (Russian), pp. 118-126. *Tul'sk. Gos. Ped. Inst., Tula*, 1972. (S. N. Kružkov) **51** #1112 35J65
 See also *Applied questions in mathematical analysis*, **48** #5771
 Simonov, I. V. The stability and asymptotic estimation of the solution of an inverse problem with a small parameter. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 1, 263-267, 286. (Author's summary) **58** #6782 35R30
 Simonov, Ju. A. (with Badaljan, A. M.) Perturbation theory for potentials with a core. *Jadernaja Fiz.* **11** (1970), 1112-1124 (Russian); translated as *Soviet J. Nuclear Phys.* **11** (1970), 618-624. (T. Sasakawa) **48** #10352 81A35
 (with Sadovoi, A. A.) Account of higher harmonics in the method of hyperspherical functions. *Jadernaja Fiz.* **13** (1971), 990-1004 (Russian); translated as *Soviet J. Nuclear Phys.* **13** (1971), 569-576. (P. Pascual) **48** #10381 81A7
 (with Badaljan, A. M.) Asymptotic behavior of the wave function for three particles. *Jadernaja Fiz.* **17** (1973), 441-455 (Russian); translated as *Soviet J. Nuclear Phys.* **17** (1973), 225-231. (Authors' summary) **50** #15671 81J35
 (with Badaljan, A. M.) Unitarity and analyticity in reactions involving two and three particles in the final state. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* **6** (1975), no. 2, 299-346. (Authors' summary) **57** #11429 81J30
 Analytical properties and unitarity relations for the resonance-particle amplitude. *Jadernaja Fiz.* **22** (1975), no. 4, 845-859 (Russian); translated as *Soviet J. Nuclear Phys.* **22** (1975), no. 4, 437-444. (H. Ezawa) **56** #2006 81J30
 The unitarity condition for the resonance-particle amplitude. *Nuclear Phys. A* **266** (1976), no. 1, 163-172. (Author's summary) **53** #15162 81J30
 See also *Feynman, Richard P.; et al.*, **55** #9633b
 Simonov, M. I. Sur les recherches d'Euler dans le domaine des équations différentielles. *Rev. Histoire Sci. Appl.* **21** (1968), no. 2, 131-156. (Author's summary) **58** #26978 01A50
 (with Smirnov, S. V.) A certain method of Euler for the calculation of the roots of equations. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **44** (1969), no. mat., 115-118. (C. Ilieoi) **47** #1277 65H05
 Hyperbolic differential equations in the works of Euler and Cauchy. (Russian) *Studies in the history of mathematics*, No. 19 (Russian), pp. 132-142, 301. *Izdat. "Nauka", Moscow*, 1974. (Editors) **58** #10091 01A50 (01A55)
 (with Lapko, A. F.; Rumšiskii, L. Z.; Sadovskii, L. E.) Conference of Chairmen of Departments of General and Special Mathematics of National Institutions of Higher Education. (Russian) Held in Moscow, June 2-12, 1975. *Uspehi Mat. Nauk* **31** (1976), no. 2 (188), 255-262. (Editors) **53** #5215 00A10
 See also *History of mathematics from antiquity to the beginning of the nineteenth century*, **58** #21190 and *History of mathematics from antiquity to the beginning of the nineteenth century*, **58** #26944b
 Simonov, R. O. The medieval Russian system of large numbers. (Russian) *History and methodology of natural sciences*, No. IX: mechanics, mathematics (Russian), pp. 212-217. *Izdat. Moskov. Univ., Moscow*, 1970. (G. Chogoshvili) **46** #6977 01A35
 Written materials from the eighth to the eleventh centuries as sources of the mathematical culture of the Slavs. (Russian) *History and methodology of the natural sciences*, No. XIV: Mathematics, mechanics (Russian), pp. 173-180. *Izdat. Moskov. Univ., Moscow*, 1973. (Ja. Matvišin (RŽMat 1974 #1 A14)) **58** #21072 01A35
 The structure of the process of composition of Kirik of Novgorod's *Lessons* (1136). (Russian) *Studies in the history of mathematics*, No. 18 (Russian), pp. 264-277, 338. *Izdat. "Nauka", Moscow*, 1973. **58** #26820a 01A35
 On a disagreement in the evaluation of Kirik of Novgorod's *Lessons*. (Russian. English summary) *Voprosy Istor. Estestvozn. i Tehn.* **1974**, no. 1(46), 41-43, 123, 134. (Editors) **58** #26819 01A35
 ★Математическая мысль Древней Руси. (Russian) [Mathematical thinking in ancient Russia] Серия "История Науки и Техники". [Series in the History of Science and Technology] *Izdat. "Nauka", Moscow*, 1977. 120 pp. (L. Guggenbuhl) **58** #15863 01A35
 The formation of the old Russian numerals. (Russian) *Istor.-Mat. Issled. Vyp.* **22** (1977), 237-241, 304. (Editors) **58** #15862 01A35
 The Cyrillic number system in Russian historiography. (Ukrainian. Russian summary) *Narisi Istor. Prirodzn. i Tehn.* **24** (1978), 21-26, 118. (Editors) **58** #15906 01A45 (01A75)
 Simonov, V. M. A maximum principle for a certain class of dynamical systems with aftereffect. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 1, 96-103. (Author's summary) **58** #2541 49B10
 (with Buslenko, N. P.) Category-theoretic representation of dynamical systems. (Russian) *Programirovanie* **1976**, no. 5, 65-73, 104. (Aleksander Albicki) **58** #9444 93A05 (18C15)
 (with Buslenko, N. P.) Categorical description of complex systems. (Russian) *Programirovanie* **1977**, no. 1, 82-94, 104. (Albert Jugel) **58** #15330 93A05 (18B99, 68A99)
 (with Buslenko, N. P.) Categorical decomposition of complex systems. (Russian) *Programirovanie* **1977**, no. 4, 83-94, 96. (Aleksander Albicki) **58** #16824 18B20
 Simonov, Yu. A. See Simonov, Ju. A.
 Simonova, S. N. A multilinear system with losses with an incoming semi-Markovian flow of requirements. (Russian. English summary insert) *Kibernetika (Kiev)* **1967**, no. 6, 48-53. (I. Kovalenko) **45** #7851 60K25
 Simonovits, Andriás The theory of teams. (Hungarian) *Sigma—Mat.-Közgazdasági Folyóirat* **3** (1970), 285-302. (J. Szelezsán) **45** #6530 94A20
 Direct comparison of different priority queuing disciplines. *Studia Sci. Math. Hungar.* **8** (1973), 225-243. (John C. Gittins) **51** #2633 90B35 (60K25)
 One cause for the underestimation or overestimation of the Leontiev inverse. (Hungarian. Russian and English summaries) *Sigma—Mat.-Közgazdasági Folyóirat* **6** (1973), 308-315. (Author's summary) **54** #12181 (E 57 #5030) 90A15
 Remarks on the determination of the harmonic volume and price proportions in the dynamic input-output model. (Hungarian. English and Russian summaries) *Sigma—Mat.-Közgazdasági Folyóirat* **6** (1973), 225-235. (Author's summary) **56** #7873 90A15
 On discretionary queuing discipline. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 725-736. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam*, 1974. (D. L. Iglehart) **51** #11710 60K25
 Erratum: "One cause for the underestimation or overestimation of the Leontiev inverse" (Sigma—Mat.-Közgazdasági Folyóirat **6** (1973), 308-315). (Hungarian) *Sigma—Mat.-Közgazdasági Folyóirat* **7** (1974), 191. (Editors) **57** #5030 90A15
 A note on the underestimation and overestimation of the Leontief inverse. *Econometrica* **43** (1975), 493-498. (Author's summary) **56** #2264 90A15
 Some properties of a decentralized adjustment process. *Management Sci.* **22** (1975/76), no. 8, 883-891. (O. Gulyás) **54** #4581 90A05
 (with Kornai, János) Problems of regulation in von Neumann economies. (Hungarian. Russian and English summaries) *Sigma—Mat.-Közgazdasági Folyóirat* **8** (1975), no. 2-3, 81-99. (Authors' summary) **55** #9869 90A15
 (with Kornai, János) Regulation based on orders in a certain von Neumann economy. (Hungarian. English and Russian summaries) *Sigma—Mat. Közgazdasági Folyóirat* **8** (1975), no. 4, 281-289. (Authors' summary) **55** #9870 90A15
 (with Kornai, János) Control problems in von Neumann economic systems. (Russian) *Ekonom. i Mat. Metody* **12** (1976), no. 6, 1125-1140. (D. Obradović) **58** #20306 90A15
 (with Kornai, János) Decentralized control problems in Neumann-economies. *J. Econom. Theory* **14** (1977), no. 1, 44-67. (Trout Rader) **55** #11968 90A15
 See also *Benassy, Jean Pascal*, **50** #12156
 Simonovits, Miklós (with Erdős, Paul) Some extremal problems in graph theory. *Combinatorial theory and its applications, I (Proc. Colloq., Balatonfüred, 1969)*, pp. 377-390. *North-Holland, Amsterdam*, 1970. (W. G. Brown) **46** #84 05C15
 Extremal graph problems with conditions. *Combinatorial theory and its applications, III (Proc. Colloq., Balatonfüred, 1969)*, pp. 999-1012. *North-Holland, Amsterdam*, 1970. (P. Erdős) **46** #95 05C35
 (with Erdős, Paul) An extremal graph problem. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 275-282. (W. G. Brown) **45** #1790 05C35
 On colour-critical graphs. *Studia Sci. Math. Hungar.* **7** (1972), 67-81. (F. Bernhart) **47** #4841 05C15
 (with Erdős, Paul) On a valence problem in extremal graph theory. *Discrete Math.* **5** (1973), 323-334. (D. R. Lick) **49** #7175 05C35
 (with Brown, W. G.; Erdős, Paul) Extremal problems for directed graphs. *J. Combinatorial Theory Ser. B* **15** (1973), 77-93. (Jaroslav Nešetřil) **52** #7952 05C20
 (with Berge, Claude) The coloring numbers of the direct product of two hypergraphs. *Hypergraph Seminar (Proc. First Working Sem., Ohio State Univ., Columbus, Ohio, 1972; dedicated to Arnold Ross)*, pp. 21-33. *Lecture Notes in Math., Vol. 411, Springer, Berlin*, 1974. (R. K. Guy) **51** #2989 05C99
 Note on a hypergraph extremal problem. *Hypergraph Seminar (Proc. First Working Sem., Ohio State Univ., Columbus, Ohio, 1972; dedicated to Arnold Ross)*, pp. 147-151. *Lecture Notes in Math., Vol. 411, Springer, Berlin*, 1974. (László Lovász) **51** #2987 05C35
 Extremal graph problems with symmetrical extremal graphs. Additional chromatic conditions. *Discrete Math.* **7** (1974), 349-376. (A. K. Dewdney) **49** #2459 05C35
 (with Bondy, John Adrian) Cycles of even length in graphs. *J. Combinatorial Theory Ser. B* **16** (1974), 97-105. (W. G. Brown) **49** #4851 05C35
 The extremal graph problem of the icosahedron. *J. Combinatorial Theory Ser. B* **17** (1974), 69-79. (L. V. Quintas) **51** #7945 05C35
 (with Erdős, Paul; Sós, Vera T.) Anti-Ramsey theorems. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. II, pp. 633-643. *Colloq. Math. Soc. János Bolyai, Vol. 10, North-Holland, Amsterdam*, 1975. (Rudolf Halin) **52** #164 05C15

- On graphs not containing large saturated planar graphs. *Infinite and finite sets* (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, pp. 1365-1386. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (J. Sedláček) 52 #201 05C99
- (with Erdős, Paul) On a problem of M. D. Hirschhorn (Amer. Math. Monthly 80 (1973), no. 6, part 1, 675-677). *Amer. Math. Monthly* 83 (1975), no. 1, 23-26. (T. Šalát) 52 #10619b 10H15
- (with Bollobás, Béla; Erdős, Paul) On the structure of edge graphs. II. *J. London Math. Soc.* (2) 12 (1975/76), no. 2, 219-224. (S. Znam) 58 #5358 05C35
- (with Berge, Claude) Colouring numbers of the direct product of two hypergraphs. *Proc. Indian Nat. Sci. Acad. Part A* 41 (1975), no. 3, 264-274. (Stephane Foldes) 58 #27636 05C99 (05C15)
- (with Lovász, László) On the number of complete subgraphs of a graph. *Proceedings of the Fifth British Combinatorial Conference* (Univ. Aberdeen, Aberdeen, 1975), pp. 431-441. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, Man., 1976. (J. W. Moon) 52 #13481 05C30
- On Paul Turán's influence on graph theory. *J. Graph Theory* 1 (1977), no. 2, 102-116. (W. G. Brown) 56 #2870 05C35 (01A70, 05B20)
- See also **Problems: Hypergraphs**, 50 #12824 and **Problems: Graph theory**, 52 #2932
- Simons, Dirk** See **Dictionary: Educational cybernetics**, 53 #7671
- Simons, Donald A.** Singular perturbation analysis of the scattering of Rayleigh waves by thin surface layers. *Quart. Appl. Math.* 35 (1977/78), no. 2, 203-211. (Editors) 56 #10302 73.41
- Reflection of Rayleigh waves by strips, grooves, and periodic arrays of strips or grooves. *J. Acoust. Soc. Amer.* 63 (1978), no. 5, 1291-1301. (Author's summary) 58 #19608 73.41
- Simons, Gordon** (with Johnson, Norman L.) On the convergence of binomial to Poisson distributions. *Ann. Math. Statist.* 42 (1971), 1735-1736. (E. Lukacs) 49 #9910 60F05
- Generalized distribution functions: the linearly ordered case with applications to nonparametric statistics. *Ann. Probability* 2 (1974), 501-508. (T. Robertson) 50 #8630 60B05 (62G10)
- Generalized distribution functions: the σ -lower finite case. *Ann. Probability* 3 (1975), no. 3, 492-502. (T. Robertson) 51 #11624 60E05
- (with Stout, William F.) Weak convergence to stable laws by means of a weak invariance principle. *Empirical distributions and processes* (Selected Papers, Meeting on Math. Stochastics, Oberwolfach, 1976), pp. 127-137. *Lecture Notes in Math.*, Vol. 566, Springer, Berlin, 1976. (Wim Vervaat) 55 #6537 60F05
- An interesting application of Fatou's lemma. *Amer. Statist.* 30 (1976), no. 3, 146. (From the author's text) 56 #3909 60-01
- (with Eisenberg, Bennett; Ghosh, B. K.) Properties of generalized sequential probability ratio tests. *Ann. Statist.* 4 (1976), no. 2, 237-251. (R. A. Wijsman) 52 #15897 62L10
- An improved statement of optimality for sequential probability ratio tests. *Ann. Statist.* 4 (1976), no. 6, 1240-1243. (R. A. Wijsman) 54 #14263 62L10
- (with Cambanis, Stamatis; Stout, William F.) Inequalities for $EK(X, Y)$ when the marginals are fixed. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 36 (1976), no. 4, 285-294. (Giorgio Dall'Aglio) 54 #8790 60E05
- An unexpected expectation. *Ann. Probability* 5 (1977), no. 1, 157-158. (Giorgio Dall'Aglio) 55 #9215 60E05
- (with Rootzén, Holger) On the exponential boundedness of stopping times of invariant SPRT's. *Ann. Statist.* 5 (1977), no. 3, 571-575. (R. A. Wijsman) 55 #4553 62L10
- (with Stout, William F.) A weak invariance principle with applications to domains of attraction. *Ann. Probability* 6 (1978), no. 2, 294-315. (P. Révész) 57 #10778 60F05
- (with Eisenberg, Bennett) On weak admissibility of tests. *Ann. Statist.* 6 (1978), no. 2, 319-332. (R. A. Wijsman) 57 #7830 62C15 (62L10)
- Some extensions of the Hewitt-Savage zero-one law. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 42 (1978), no. 2, 167-173. (J. R. Blum) 57 #10788 60F20
- Simons, Jack** (with Dalggaard, Esper) Equations-of-motion formulation of many-body perturbation theory. *J. Phys. B* 10 (1977), no. 14, 2767-2779. (Authors' summary) 56 #14261 81.35
- Simons, James** (with Lawson, H. Blaine, Jr.) On stable currents and their application to global problems in real and complex geometry. *Ann. of Math.* (2) 98 (1973), 427-450. (F. J. Almgren, Jr.) 48 #2881 49F20 (32C10, 53C40)
- (with Chern, Shiing Shen) Characteristic forms and geometric invariants. *Ann. of Math.* (2) 99 (1974), 48-69. (R. L. Bishop) 50 #5811 57D20
- See also **Integral currents and minimal surfaces**, 48 #12194 and **Mathematics: Periodical collection of translations of foreign articles**, 50 #12533
- Simons, Johannes Leonardus** ★Conditional recurring sequences. With a Dutch summary. Doctoral dissertation, Delft Institute of Technology, Delft. *Technische Hogeschool Delft, Delft*, 1976. 53 pp. (Jau Shyong Shue) 54 #7361 10A35 (68A10)
- Simons, Leo** Logic without tautologies. *Notre Dame J. Formal Logic* 15 (1974), 411-431. (N. C. A. da Costa) 51 #2896 02G20 (02C05)
- Simons, Stephen** Critères de faible compacité en termes du théorème du minimaux. *Séminaire Choquet, 10e année* (1970/71), *Initiation à l'analyse*, Fasc. 2, Exp. No. 24, 5 pp. *Formal Analysis Mathématique*, Paris, 1971. (Zbl 221 #46002) 57 #17218 46A99
- Formes sous-linéaires minimales. *Séminaire Choquet, 10e année* (1970/71), *Initiation à l'analyse*, Fasc. 2, Exp. No. 23, 8 pp. *Secrétariat Mathématique*, Paris, 1971. (Zbl 221 #46001) 57 #17217 46A99
- (with Spuhler, P.) $\Lambda(\alpha)$ -nuclear maps and quasi- $\Lambda(\alpha)$ -nuclear maps. *Troisième Colloque sur l'Analyse Fonctionnelle* (Liège, 1970), pp. 19-20. *Vander, Louvain*, 1971. (W. H. Ruckle) 52 #14916 46A45
- Un théorème de convergence avec frontière. *Actes du Colloque d'Analyse Fonctionnelle* (Univ. Bordeaux, Bordeaux, 1971), pp. 359-363. *Bull. Soc. Math. France Mém.*, No. 31-32, Soc. Math. France, Paris, 1972. (K. Floret) 52 #11538 46A99
- Local reflexivity and (p, q) -summing maps. *Math. Ann.* 198 (1972), 335-344. (Bor-Luh Lin) 48 #4697 46B05 (47B10)
- A convergence theorem with boundary. *Pacific J. Math.* 40 (1972), 703-708. (K. Floret) 47 #755 46A05
- Maximinimax, minimax, and antiminimax theorems and a result of R. C. James. *Pacific J. Math.* 40 (1972), 709-718. (K. Floret) 47 #756 46A05
- On Ptak's combinatorial lemma. *Pacific J. Math.* 40 (1972), 719-721. (K. Floret) 47 #757 46A05
- If E' has the metric approximation property then so does (E, E') . *Math. Ann.* 20 (1973), 9-10. (N. Tița) 49 #7737 46B15
- (with Leih, T. J.) Splitting quasnorms and metric approximation properties. *Stud. Math.* 47 (1973), 207-238. (Irmtraud Stephani) 49 #3580 46B10 (46B99)
- Convergence theorems, Hahn-Banach and Choquet theorems, minimax theorem and James's theorem. *Analyse fonctionnelle et applications* (Comptes Rendus Colloq. d'Analyse, Inst. Mat., Univ. Federal Rio de Janeiro, Rio de Janeiro, 1972), pp. 271-272. *Actualités Sci. Indust.*, No. 1367, Hermann, Paris, 1975. (K. Floret) 52 #11539 46A99
- (with Leih, T. J.) Totally splitting norms and the classification of Banach spaces. *An. Acad. Brasil. Ci.* 47 (1975), no. 2, 183-191. (Daniel R. Lewis) 55 #13216 46B10 (47B10, 46L20)
- On the Dunford-Pettis property and Banach spaces that contain c_0 . *Math. Ann.* 21 (1975), no. 3, 225-231. (V. Pták) 53 #6290 46B10
- The simultaneous existence of linear functionals. *Studia Math.* 54 (1975/76), no. 239-243. (Bor-Luh Lin) 53 #1219 46A99
- Weak compactness in locally convex vector lattices. *Arch. Math. (Basel)* 29 (1977), no. 5, 537-548. (R. J. Nagel) 58 #2146 46A40
- (with Rouse, S.) A non-linear Boltzmann equation with analytic solutions. *J. Phys. A* 11 (1978), no. 2, 423-434. (Nina B. Maslova) 57 #11567 82.60
- See also **Colloque: Analyse Fonctionnelle**, 52 #8854
- Simons, William** Monotonicity in some nonoscillation criteria for differential equations. *Differential Equations* 13 (1973), 124-126. (H. A. DeKleine) 48 #11671 34C10
- Disconjugacy criteria for systems of self-adjoint differential equations. *J. London Math. Soc.* (2) 6 (1973), 373-381. (P. Hartman) 47 #5372 34C10
- (with Trapp, George E., Jr.) Excludable and includable points. *Proc. West Virginia Acad. Sci.* 45 (1973), 332-334. (W. J. Firey) 50 #5629 52A10
- (with Mays, Michael; Schleusner, John W.) Open sets from disjoint closed intervals. *Proc. West Virginia Acad. Sci.* 45 (1973), 358-359. (William Eames) 50 #4843 26A03
- (with Trapp, George E., Jr.) Separating points by spheres. *Discrete Math.* 10 (1974), 163-166. (H. E. Debrunner) 50 #8261 50B05
- A disconjugacy condition for systems of self-adjoint differential equations. *Proc. West Virginia Acad. Sci.* 46 (1974), 100-106. (H. C. Howard) 51 #8520 34B10 (34C10)
- Simonsen, W.** On the solution of a functional equation concerning mortality formulae. *Skand. Aktuarietidskr.* 1971, 80-89 (1972). (K. S. Miller) 50 #817 39A30 (62P05)
- On the solution of a maximum-likelihood equation of the negative binomial distribution. *Scand. Actuar. J.* 1976, no. 4, 220-231. (B. K. Ghosh) 55 #1586 62F10
- (with Beyer, Jan E.; Keiding, Niels) The exact behaviour of the maximum likelihood estimator in the pure birth process and the pure death process. *Scand. Statist.* 3 (1976), no. 2, 61-72. (C. C. Heyde) 54 #9007 62M05 (60J80)
- Simovici, Dan A.** (with Reischer, Corina) On the reduced form of the linear Boolean automata. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 16 (1970), 479-485. (B. Reusch) 46 #10522 94A30
- (with Reischer, Corina) On the matrix equation $PAP^T = B$ in the two-element Boolean algebra and some applications in graph theory. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 17 (1971), 263-274. (Frank W. Ower) 46 #5145 15A24 (05C99)
- (with Reischer, Corina) Linear Boolean automata. *Wiss. Z. Techn. Hochschule Ilmenau* 17 (1971), no. 3, 83-96. (David C. Rine) 47 #10162 94A30
- (with Reischer, Corina) Cascades of linear Boolean automata. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 18 (1972), 235-242. (I. G. Ševjakov (RŽMat 1972 #12 V253)) 47 #6401 94A30
- (with Reischer, Corina) Lattice characterizations for codes. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 52 (1972), 287-290. (I. G. Maurer) 48 #4163 20M05
- (with Reischer, Corina) On the existence of a periodic analog of a finite connect automaton. *IEEE Trans. Computers* C-21 (1972), 208-211. (Authors' summary) 54 #7143 94A30
- (with Reischer, Corina) On some generalizations of Lie algebras. *Mat. Časopis Sloven. Akad. Vied* 22 (1972), 19-28. (T. S. Ravisankar) 47 #294 17B60
- On some measures on free semigroups induced by semiautomata. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 55 (1973), 4-9 (1974). (Jürgensen) 51 #15251 94A30 (68A25)
- (with Cazacu, C.) A new approach of some problems concerning polynomials over finite fields. *Information and Control* 22 (1973), 503-511. (S. D. Cohen) 48 #3925 12C05
- (with Reischer, Corina) On some properties of linear Boolean automata. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 20 (1974), 167-171. (M. A. Harrison) 50 #4167 94A30
- On the cardinal sequential outer measures. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 20 (1974), no. 2, 433-452. (H. Jürgensen) 54 #14891 94A30 (20M35, 28A10)
- (with Reischer, Corina) On a formalization of abstract modular networks. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* 20(24) (1974), no. 1-2, part I, 9-11. (W. K. Chen) 49 #10463 94A30
- On cardinal sequential outer measures. *Mathematical foundations of computer science 1975* (Fourth Sympos., Mariánské Lázně, 1975), pp. 405-410. *Lecture Notes Comput. Sci.*, Vol. 32, Springer, Berlin, 1975. (I. Peak) 52 #16918 94A30
- On the theory of reduction of semilatticial automata. *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 22 (1976), no. 1, 107-110. (I. Peak) 55 #12363 94A30
- Decomposition of time-varying automata. *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 23 (1977), no. 1, 1-11. (I. Peak) 56 #12363 94A30

- Mat. (N.S.)* **22** (1976), no. 2, 243-248. (Editors) **57** #2788 94A30
- ovljević, J. L. A note on the general functions and constants of Keplerian motion. (Serbo-Croatian. English summary) *Acad. Serbe Sci. Arts Glas* **283** (1972), no. 35, 53-62. (Author's summary) **58** #32179 7034
- On a general method of celestial mechanics. (Serbo-Croatian. English summary) *Acad. Serbe Sci. Arts Glas* **283** (1972), no. 35, 63-78. (Author's summary) **58** #32180 7034
- mplicius See Sabra, A. I., **56** #8275
- mpson, Alan Analytical inversion of a quasi-orthogonal matrix arising in linear mode control theory. *J. Franklin Inst.* **292** (1971), 303-306. (N. K. Bose) **46** #7256 15A09 (65R05)
- Scanning Kron's determinant. *Quart. J. Mech. Appl. Math.* **27** (1974), 27-43. (H. E. Fettis) **49** #6587 65F15
- mpson, Harold See Button, Lilian G., **52** #5293
- mpson, J. Timothy (with Kelman, Robert B.) An algorithm for solving a dual cosine series. *Comput. Math. Appl.* **1** (1975), no. 2, 195-199. (R. P. Srivastav) **55** #6147 45F10 (65R05)
- (with Kelman, Robert B.; Maheffy, Jonathan P.) Algorithms for classic dual trigonometric equations. *Comput. Math. Appl.* **3** (1977), no. 3, 203-215. (Gheorghe Micula) **57** #1947 65R05
- mpson, James E. Locally convex algebras. I. Representations. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 935-941. (Pak-Ken Wong) **47** #7430 46H05
- Complete uniformities. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1241-1244. (R. W. Bagley) **47** #5832 54E15
- Locally convex algebras. III. Arens multiplication. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 359-370. (Pak-Ken Wong) **55** #8797 46H05
- (with Druffel, Larry E.; Schmidt, Douglas C.) A partitioning isomorphism algorithm for directed graphs using the F matrix. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory, and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1975), pp. 251-264. *Congressus Numerantium*, No. XIV, *Utilitas Math.*, *Winnipeg, Man.*, 1975. (C. Tartia) **54** #2515 05C20 (68A10)
- (with Behzad, Mehdi) Eccentric sequences and eccentric sets in graphs. *Discrete Math.* **16** (1976), no. 3, 187-193. (S. F. Kapoor) **55** #10314 05C35
- Locally convex algebras. II. Spectra. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 8, 1155-1165. (Pak-Ken Wong) **57** #3857 46H05
- mpson, John C. (with Dorfman, Donald D.; Saslow, Carl F.) Learning models for a continuum of sensory states reexamined. *J. Math. Psych.* **12** (1975), 178-211. (Barry C. Arnold) **51** #9860 92A25
- mpson, R. Bruce (with Cohen, Donald S.) Positive solutions of nonlinear elliptic eigenvalue problems. *J. Math. Mech.* **19** (1969/70), 895-910. (From the authors' introduction) **55** #8525 35B25
- Existence and error estimates for solutions of a discrete analog of nonlinear eigenvalue problems. *Math. Comp.* **26** (1972), 359-375. (Stephen Hilbert) **47** #4466 65N25
- (with Hacker, F.) Multiple positive solutions of spherically symmetric nonlinear boundary value problems. *J. Math. Anal. Appl.* **43** (1973), 357-372. (Clarence M. Ablow) **48** #6661 35J25
- A technique for analysing adaptive quadrature strategies. *Proceedings of the Third Manitoba Conference on Numerical Mathematics* (Winnipeg, Man., 1973), pp. 369-378. *Utilitas Math.*, *Winnipeg, Man.*, 1974. (F. Pecka) **49** #8294 65D30
- (with Malcolm, Michael A.) Local versus global strategies for adaptive quadrature. *ACM Trans. Math. Software* **1** (1975), 129-146. (Thomas A. Atchison) **51** #7248 65D30
- A method for the numerical determination of bifurcation states of nonlinear systems of equations. *SIAM J. Numer. Anal.* **12** (1975), 439-451. (V. Pereyra) **52** #9595 65H10
- (with Lam, David C. L.) Centered differencing and the box scheme for diffusion convection problems. *J. Computational Phys.* **22** (1976), no. 4, 486-500. (Authors' summary) **57** #15165 82G5
- mpson, R. J. (with Power, Henry M.) Applications of high frequency signal injection in non-linear systems. *Internat. J. Control* **26** (1977), no. 6, 917-943. (A. M. Steinberg) **58** #20689 93C10
- mpson, S. G. Forcing and models of arithmetic. *Proc. Amer. Math. Soc.* **43** (1974), 193-194. (Author's summary) **55** #7765 02H05 (02H13)
- mpson, Stephen G. (with Sacks, Gerald E.) The α -finite injury method. *Ann. Math. Logic* **4** (1972), 343-367. (H. Luckhardt) **51** #5277 02F27
- (with Lerman, Manuel) Maximal sets in α -recursion theory. *Israel J. Math.* **14** (1973), 236-247. (R. A. Shore) **47** #8271 02F27
- Degree theory on admissible ordinals. *Generalized recursion theory* (Proc. Sympos., Univ. Oslo, Oslo, 1972), pp. 165-193. *Studies in Logic and Foundations of Math.*, Vol. 79, North-Holland, Amsterdam, 1974. (Editors) **58** #27405 02F27
- Post's problem for admissible sets. *Generalized recursion theory* (Proc. Sympos., Univ. Oslo, Oslo, 1972), pp. 437-441. *Studies in Logic and Foundations of Math.*, Vol. 79, North-Holland, Amsterdam, 1974. (D. A. Martin) **52** #7881 02F27
- (with Kreisel, Georg; Minc, G. E.) The use of abstract language in elementary metamathematics: some pedagogic examples. *Logic Colloquium* (Boston, Mass., 1972-1973), pp. 38-131. *Lecture Notes in Math.*, Vol. 453, Springer, Berlin, 1975. (Editors) **58** #16190 02D99
- Minimal covers and hyperdegrees. *Trans. Amer. Math. Soc.* **209** (1975), 45-64. (C. G. Jockusch, Jr.) **52** #13351 02F30
- (with Jockusch, Carl G., Jr.) A degree-theoretic definition of the ramified analytical hierarchy. *Ann. Math. Logic* **10** (1976), no. 1, 1-32. (G. E. Sacks) **58** #10370 02F30
- First-order theory of the degrees of recursive unsolvability. *Ann. of Math.* (2) **105** (1977), no. 1, 121-139. (C. G. Jockusch, Jr.) **55** #5423 02F30
- See also Handbook: Mathematical logic, **56** #15351 and Handbook: Mathematical logic, Part C, **58** #5109
- mpson, Vincent P. Optimum solution structure for a repairable inventory problem. *Operations Res.* **26** (1978), no. 2, 270-281. (E. S. Boylan) **57** #15368 90B05
- mpson, William A. (with Frame, J. Sutherland) The character tables for $SL(3, q)$, $SU(3, q^2)$, $PSL(3, q)$, $PSU(3, q^2)$. *Canad. J. Math.* **25** (1973), 486-494. (G. E. Wall)
- 49** #398 20C30
- Irreducible odd representations of $PSL(n, q)$. *J. Algebra* **28** (1974), 291-295. (G. Lusztig) **49** #5194 20G05
- Sims, Benjamin T. Some generalizations of the contraction mapping theorem. *Rend. Circ. Mat. Palermo* (2) **21** (1972), 64-70. (Edwin Duda) **48** #5044 54H25
- (with Leuschen, J. E.) Stronger forms of connectivity. *Rend. Circ. Mat. Palermo* (2) **21** (1972), 255-266. (G. L. Cain, Jr.) **50** #3187 54D05
- ★Fundamentals of topology. *Macmillan Publishing Co., Inc., New York; Collier Macmillan Publishers, London*, 1976. x+179 pp. (A. Császár) **54** #3638 54-01 (55-01)
- Sims, Brailey (with de Barra, G.; Giles, J. R.) On the numerical range of compact operators on Hilbert spaces. *J. London Math. Soc.* (2) **5** (1972), 704-706. (F. Smithies) **47** #4044 47A10
- On a connection between the numerical range and spectrum of an operator on a Hilbert space. *J. London Math. Soc.* (2) **8** (1974), 57-59. (S. K. Berberian) **49** #3566 47A10
- (with Giles, J. R.; Joseph, G.; Koehler, Donald O.) On numerical ranges of operators on locally convex spaces. *J. Austral. Math. Soc. Ser. A* **20** (1975), no. 4, 468-482. (John Duncan) **52** #6459 47A10
- On the existence of support maps with dense images. *J. Austral. Math. Soc. Ser. A* **23** (1977), no. 4, 504-510. (R. C. James) **58** #2167 46B05
- (with Giles, J. R.; Gregory, David A.) Characterisation of normed linear spaces with Mazur's intersection property. *Bull. Austral. Math. Soc.* **18** (1978), no. 1, 105-123. (I. Namioka) **58** #12295 46B10
- Sims, C. A. See Girault, Maurice; et al., **53** #4422
- Sims, C. S. (with Melsa, James L.) A survey of specific optimal techniques in control and estimation. *Internat. J. Control* (1) **14** (1971), 299-308. (Authors' summary) **46** #6118 49-02 (93-02)
- (with Lee, A. Y.) Adaptive estimation and stochastic control of uncertain models. *Internat. J. Control* **19** (1974), 625-639. (Pan-Tai Liu) **52** #5150 93E10
- Sims, Charles C. Determining the conjugacy classes of a permutation group. *Computers in algebra and number theory* (Proc. SIAM-AMS Sympos. Appl. Math., New York, 1970), pp. 191-195. *SIAM-AMS Proc.*, Vol. IV, Amer. Math. Soc., Providence, R.I., 1971. (H. Kimura) **49** #2901 20-04
- The existence and uniqueness of Lyons' group. *Finite groups '72* (Proc. Gainesville Conf., Univ. Florida, Gainesville, Fla., 1972), pp. 138-141. *North-Holland Math. Studies*, Vol. 7, North-Holland, Amsterdam, 1973. (Editors) **50** #7358 20F10
- The influence of computers on algebra. *The influence of computing on mathematical research and education* (Proc. Sympos. Appl. Math., Vol. 20, Univ. Montana, Missoula, Mont., 1973), pp. 13-30. *Amer. Math. Soc., Providence, R.I.*, 1974. (Hale F. Trotter) **50** #10024 20-04
- (with Leon, Jeffrey S.) The existence and uniqueness of a simple group generated by $\{3, 4\}$ -transpositions. *Bull. Amer. Math. Soc.* **83** (1977), no. 5, 1039-1040. (A. R. Camina) **56** #3113 20D05
- Sims, Christopher A. Distributed lag estimation when the parameter space is explicitly infinite-dimensional. *Ann. Math. Statist.* **42** (1971), 1622-1636. (J. Wolfowitz) **50** #8884 62M10
- Discrete approximations to continuous time distributed lags in econometrics. *Econometrica* **39** (1971), 545-563. (E. J. Hannan) **48** #10448 90A20
- Distributed lags. With comments by David M. Grether, Zvi Griliches and Robert J. Shiller. *Frontiers of quantitative economics* (Invited Papers, *Econometric Soc. Winter Meetings, Toronto, Ont.*, 1972), Vol. II, pp. 289-338. *Contributions to Economic Analysis*, Vol. 87, North-Holland, Amsterdam, 1974. (A. L. Nagar) **55** #11552 62P20
- A note on exact tests for serial correlation. *J. Amer. Statist. Assoc.* **70** (1975), 162-165. (Arthur Cohen) **51** #2217 62M10
- Sims, Julie A. (with Holton, Derek A.) Graphs with stability index one. *J. Austral. Math. Soc. Ser. A* **22** (1976), no. 2, 212-220. (Douglas D. Grant) **54** #10067 05C25
- (with Stacey, K. C.; McAvaney, K. L.) The stability index of the product of a path and a tree. *Combinatorial mathematics, IV* (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), pp. 220-231. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (Douglas D. Grant) **55** #2642 05C25
- An extension of Dilworth's theorem. *J. London Math. Soc.* (2) **16** (1977), no. 3, 393-396. (V. S. Krishnan) **57** #192 06A20
- A complete class of matroids. *Quart. J. Math. Oxford Ser. (2)* **28** (1977), no. 112, 449-451. (Thomas Brylawski) **58** #5297 05B35
- (with Holton, Derek A.) The Cartesian product of two graphs is stable. *Theory and applications of graphs* (Proc. Internat. Conf., Western Mich. Univ., Kalamazoo, Mich., 1976), pp. 286-303. *Lecture Notes in Math.*, Vol. 642, Springer, Berlin, 1978. (J. Sheehan) **58** #21783 05C25
- Sims, S. E. (with McMath, John S.; Hallum, C. R.) On the properties of a matrix valued derivative utilizing the Moore-Penrose inverse. *Linear Algebra and Appl.* **18** (1977), no. 3, 281-291. (I. Fennell Burns) **58** #8201 65F20 (15A99)
- Simsarjan, R. A. (with Roizen, M. I.) Random-number generators with adaptive functional transformers. *Axiomat. i Telemekh.* **1974**, no. 7, 76-82. (Russian); translated as *Axiomat. Remote Control* **1974**, no. 7, part 1, 1103-1108. (Authors' summary) **57** #10992 65C10
- Simson, Daniel κ -flat and κ -projective modules. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 109-114. (B. L. Osofsky) **47** #3450 16A50
- On the structure of flat modules. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 115-120. (B. L. Osofsky) **47** #3451 16A50
- Some remarks on the ring of structural numbers. *Demonstratio Math.* **4** (1972), 215-222. (J. T. Arnold) **50** #2142 13A15
- (with Kiełpiński, Roman) On the lattice of ideals in the ring of structural numbers. *Demonstratio Math.* **5** (1973), 45-55. (J. T. Arnold) **50** #2143 13A15
- (with Kiełpiński, Roman) Decomposability of elements in the ring of structural numbers. *Demonstratio Math.* **5** (1973), 57-68. (J. T. Arnold) **50** #2144 13A15
- On colimits of injectives in Grothendieck categories. *Ark. Mat.* **12** (1974), 161-165. (B. Stenström) **51** #652 18E15
- Functor categories in which every flat object is projective. (Russian summary)

- Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 375-380. (J. L. Palmquist) **50** #2307 18G05
- On projective resolutions of flat modules. *Colloq. Math.* **29** (1974), 209-218. (T. Cheatham) **50** #13147 16A50
- Stable derived functors of the second symmetric power functor, second exterior power functor and Whitehead gamma functor. *Colloq. Math.* **32** (1974), 49-55. (Y. C. Wu) **50** #10020 18G10
- (with Tyc, Andrzej) Brown's theorem for cohomology theories on categories of chain complexes. *Comment. Math. Prace Mat.* **18** (1974/75), no. 2, 285-296. (Raphael Zahler) **52** #11894 55B20
- (with Tyc, Andrzej) Connected sequences of stable derived functors and their applications. *Dissertationes Math. (Rozprawy Mat.)* **111** (1974), 67 pp. (Pierre J. Malraison, Jr.) **51** #14030 55B35 (18G10)
- A remark on projective dimension of flat modules. *Math. Ann.* **209** (1974), 181-182. (T. Albu) **49** #9031 16A60
- (with Kiełpiński, Roman) On pure homological dimension. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), 1-6. (Chr. U. Jensen) **53** #10872 16A60
- On pure global dimension of locally finitely presented Grothendieck categories. *Fund. Math.* **96** (1977), no. 2, 91-116. (Chr. U. Jensen) **58** #845 18E15 (16A64)
- Pure semisimple categories and rings of finite representation type. *J. Algebra* **48** (1977), no. 2, 290-296. (Chr. U. Jensen) **57** #380 16A64 (18E10)
- (with Kiełpiński, Roman; Tyc, Andrzej) Exact sequences of pairs in commutative rings. *Fund. Math.* **99** (1978), no. 2, 113-121. (Chr. U. Jensen) **58** #638 13C05
- Simsonas, A.-J.** The eigenoscillations of thin plates with lumped masses. (Russian. Lithuanian and English summaries) *Lietuvsk. Mat. Sb.* **17** (1977), no. 2, 197-202, 222. (Z. Kączkowski) **56** #13935 73J35 (35P99)
- Simundich, Thomas M.** Characterizing distributed parameter systems by pattern recognition. *Proceedings of the Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976)*, pp. 22-25. *IEEE Comput. Soc., Long Beach, Calif., 1976.* (W. Greblicki) **57** #18288 68A45 (93C20)
- Šimura, Goro** See Shimura, Goro
- hoang hien Sin'** See Hoang Hien Sin'
- Sin, Ku Yöng** Direct determination of quasi-minimal states for completely-specified sequential circuits. (Korean summary) *UIT Rep.* **5** (1974), no. 1, 29-32. (Author's summary) **55** #7626 94A25
- (with Pak, Wön Sim) Fast computing algorithm of constrained minimization. (Korean summary) *Ulsan Inst. Tech. Rep.* **7** (1976), no. 1, 9-17. (V. V. Ivanov) **57** #18097 65K05
- ibn Sinā, Abū 'Alī al-Husayn ibn 'Abdallāh** See Ibn Sinā, Abū 'Alī al-Husayn ibn 'Abdallāh
- Sinaceur, Hourya** Cauchy et Bolzano. (English summary) *Rev. Histoire Sci. Appl.* **26** (1973), no. 2, 97-112. (Joseph W. Dauben) **56** #11707 01A55
- Sinaceur, Mohammed-Allal** L'infini et les nombres. Commentaires de R. Dedekind à "Zahlen". La correspondance avec Keferstein. (English summary) *Rev. Hist. Sci.* **27** (1974), 251-278. (H. C. Kennedy) **58** #21234 01A55
- Philosophie et mathématiques: A. G. Kästner et G. W. Leibniz. *Akten des II. Internationalen Leibniz-Kongresses (Hannover, 1972), Band II: Wissenschaftstheorie und Wissenschaftsgeschichte*, pp. 93-103. *Studia Leibnitiana Suppl., Vol. XIII*, Steiner, Wiesbaden, 1975. (I. Grattan-Guinness) **58** #21185 01A50
- Sinai, Ja. G.** (with Minlos, R. A.) Investigation of the spectra of stochastic operators that arise in lattice gas models. (Russian. English summary) *Teoret. Mat. Fiz.* **2** (1970), no. 2, 230-243. (Authors' summary) **57** #15153 82.60
- Mesures invariantes des y -systèmes. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 929-940. *Gauthier-Villars, Paris, 1971.* (Editors) **58** #24386 58F15
- (with Livšic, A. N.) Invariant measures that are compatible with smoothness for transitive C -systems. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 1039-1041. (W. Szlenk) **47** #5902 58F15 (28A65)
- Ergodic properties of a gas of one-dimensional hard globules with an infinite number of degrees of freedom. (Russian) *Funkcional. Anal. i Priložen.* **6** (1972), no. 1, 41-50. (V. Drobot) **45** #6345 82.46 (28A65, 54H20)
- (with Helemskii, A. Ja.) A description of differentiations in algebras the type of algebras of local observables of spin systems. (Russian) *Funkcional. Anal. i Priložen.* **6** (1972), no. 4, 99-100. (W. Faris) **47** #6233 81.46
- Construction of the dynamics for one-dimensional systems of statistical mechanics. (Russian. English summary) *Teoret. Mat. Fiz.* **11** (1972), no. 2, 248-258. (Author's summary) **57** #15115 82.22 (28A65, 58F15)
- Gibbs measures in ergodic theory. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 4(166), 21-64. (L. A. Bunimovič) **53** #3265 28A65 (58F15)
- (with Bunimovič, L. A.) The fundamental theorem of the theory of scattering billiards. (Russian) *Mat. Sb. (N.S.)* **90(132)** (1973), 415-431, 479. (D. Newton) **51** #3395 28A65
- (with Gurevič, B. M.; Suhov, Ju. M.) Invariant measures of dynamical systems of one-dimensional statistical mechanics. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 5 (173), 45-82. (L. A. Bunimovič) **53** #3266 28A65 (82.60, 58F15)
- (with Pirogov, S. A.) Phase transitions of the first kind for small perturbations of the Ising model. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 1, 25-30. (D. Ja. Petrina) **51** #2560 82.46
- (with Suhov, Ju. M.) On an existence theorem for the solutions of Bogoljubov's chain of equations. (Russian. English summary) *Teoret. Mat. Fiz.* **19** (1974), 344-363. (Authors' summary) **57** #8762 82.45
- Construction of a cluster dynamic for the dynamical systems of statistical mechanics. (Russian. English summary) Collection of articles dedicated to the memory of Ivan Georgievič Petrovskii. *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 1, 152-158. (H. S. Green) **49** #8563 82.58
- (with Katok, A. B.; Stepin, A. M.) The theory of dynamical systems and general transformation groups with invariant measure. (Russian) *Mathematical analysis, Vol. 13* (Russian), pp. 129-262. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1975.* (L. A. Bunimovič) **58** #28430 28A65 (58F15)
- (with Bleher, P. M.) Critical indices for Dyson's asymptotically-hierarchical models. *Comm. Math. Phys.* **45** (1975), no. 3, 247-278. (See RŽMat **1976** #7 B503) 82.47
- (with Dinaburg, E. I.) The one-dimensional Schrödinger equation with quasiperiodic potential. (Russian) *Funkcional. Anal. i Priložen.* **9** (1975), no. 4, 8-21. (G. Kolomic) **57** #10076 34B25
- (with Pirogov, S. A.) Phase diagrams of classical lattice systems. (Russian. English summary) *Teoret. Mat. Fiz.* **25** (1975), no. 3, 358-369. (Authors' summary) **58** #3268 82.47
- ★Introduction to ergodic theory. Translated by V. Scheffer. *Mathematical Notes* **18**. *Princeton University Press, Princeton, N.J., 1976.* 144 pp. ISBN 0-691-08182-4. (From the introduction) **58** #28437 28A65 (58F99)
- Some rigorous results in the theory of phase transitions. *Statistical physics (Proc. IUPAP Internat. Conf. Statist. Phys., Budapest, 1975)*, pp. 139-149. *North-Holland, Amsterdam, 1976.* (Douglas Henderson) **57** #15116 82.22
- Self-similar probability distributions. (Russian. English summary) *Teor. Veroyatnos i Primenen.* **21** (1976), no. 1, 63-80. (Hermann Rost) **53** #11726 60G15 (82.60K15)
- (with Pirogov, S. A.) Phase diagrams of classical lattice systems. (Continuation) (Russian) *Teoret. Mat. Fiz.* **26** (1976), no. 1, 61-76. (Authors' summary) **58** #32712 82.60 (58F15, 60K35)
- (with Anšelevič, V. V.) Some questions on noncommutative ergodic theory. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 4 (190), 151-167. (József Szűcs) **55** #6204 46L99 (81.28, 82.46)
- (with Aleksandrov, P. S.; Gel'fand, I. M.; Kolmogorov, A. N.; Maikov, E. V.; Maslov, V. P.; Oleinik, O. A.; Smoljanov, O. G.; Tihomirov, V. M.) In memory of Sergei Vasil'evič Fomin. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 4 (190), 199-212. (plate) (Editors) **54** #29 01A70
- (with Pirogov, S. A.) Ground states in two-dimensional boson quantum field-theory. *Ann. Physics* **109** (1977), no. 2, 393-400. (Authors' summary) **58** #14619 81.46
- Billiard trajectories in a polyhedral angle. (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 1(199), 229-230. (D. Newton) **58** #7733 58F15 (28A65)
- Sinai, Y. L.** (with Clarke, J. F.) The wave system attached to a slender body in supersonic relaxing gas stream. Basic results: the cone. *J. Fluid Mech.* **79** (1977), no. 499-524. (M. Honda) **55** #7088 76.35
- (with Clarke, J. F.) The wave system attached to a finite slender body in supersonic relaxing gas stream. *J. Fluid Mech.* **84** (1978), no. 4, 717-741. (From the authors' introduction) **57** #4813 76.35
- Sinai, Ya. G.** See Sinai, Ja. G.
- Šinakanjan, A. S.** Certain questions of coding and realization of Boolean function systems. (Russian) *Automata theory (Proc. Sem., Kiev, 1969), No. 1* (Russian), pp. 48-69. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (L. Šolomov (RŽMat **1970** #7 V364)) **45** #9837 94A30
- Šinakov, Ju. S.** (with Levin, B. R.) Limiting form of the Bayes estimate of the regression coefficients in the presence of nonstationary noise. *Problemy Peredači Informacii* (1967), no. 1, 27-34 (Russian); translated as *Problems of Information Transmission* (1967), no. 1, 22-27 (1969). (Authors' summary) **45** #7882 62J05 (94A05)
- (with Levin, Boris R.) Asymptotic properties of Bayes estimates of parameters of signal masked by interference. *IEEE Trans. Information Theory* **IT-18** (1972), 102-107. (D. V. Lindley) **51** #11745 62C10 (93E10)
- Sinanjan, N. O.** The summability of orthogonal series by linear methods in the metric $L_p[0, 1]$, $0 < p < 1$. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* (1972), 13-16. (I. Szalay) **48** #800 42A60
- The relation between the convergence and the summability of general orthogonal series. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **10** (1975), no. 1, 23-42, 92. (F. Móricz) **52** #3869 42A60
- Sinanjan, S. O.** Differential properties of the Banach algebra of analytic functions on certain compactum without interior points. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **6** (1971), no. 2-3, 210-220. (V. P. Havi) **47** #2329 46E25 (30A44)
- The connection between the extremality of the coefficients of a Laurent series and the completeness of a set of analytic functions in the space of continuous functions. (Russian) *Mat. Zametki* **15** (1974), 221-228. (D. A. Brannan) **50** #2464 30A18
- (with Mel'nikov, M. S.) Questions of the theory of approximation of functions of complex variable. (Russian) *Current problems in mathematics, Vol. 4* (Russian), pp. 143-250. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1975.* (A. B. Németh (Zbl 333 #30021)) **58** #17109 30A82 (41A10)
- Quasianalyticity, generated by the metric of an L^p -space. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **12** (1977), no. 6, 423-431. 493. (L. I. Hedberg) **58** #22598 30A98
- The completeness of analytic functions, and the extremality of the coefficients of a Laurent series. (Russian) *Mat. Zametki* **22** (1977), no. 2, 277-283. (Anthony O'Farrell) **57** #643 30A82
- Sinanoglu, Oktay** (with Herrick, David R.) Transition probabilities and radial overlap for the hydrogen atom and the algebra of $O(3, 2)$. *Chem. Phys. Lett.* **12** (1971/72), 310-313. **50** #15638 81.22
- (with Herrick, David R.) Non-invariance groups in physics and chemistry: the $o(f, 2)$ algebra and the spherical harmonics in f dimensions. (Spanish summary) *Rev. Mexicana Fis.* **22** (1973), no. 1-2, 1-14. (From the authors' summary) **55** #7156 81.22
- Šinčel', A.** See Schinzel, Andrzej
- Šinčel', Andrej** See Schinzel, Andrzej
- Sinčić, D.** (with Bailey, J. E.) Optimal periodic control of variable time-delay systems. *Internat. J. Control* **27** (1978), no. 4, 547-555. (S.-C. Huang) **58** #15469 93C50
- Sinclair, A. T.** See *Proceedings: Oberwolfach Conference on Celestial Mechanics*, 47 #7979
- Sinclair, Allan M.** The states of a Banach algebra generate the dual. *Proc. Edinburgh Math. Soc. (2)* **17** (1970/71), 341-344. (N. Suzuki) **47** #828 46H05
- (with Crabb, Michael J.) On the boundary of the spatial numerical range. *Bull. London Math. Soc.* **4** (1972), 17-19. (B. Yood) **46** #7929 47A10
- (with Paterson, Alan L. T.) Characterisation of isometries between C^* -algebras. *London Math. Soc. (2)* **5** (1972), 755-761. (J. M. G. Fell) **48** #2783 46L05

- Annihilator ideals in the cohomology of Banach algebras. *Proc. Amer. Math. Soc.* 3 (1972), 361-366. (B. E. Johnson) **45** #4164 46L05
- The Banach algebra generated by a hermitian operator. *Proc. London Math. Soc.* 3 (1972), 681-691. (Wai-Mee Ching) **46** #4198 46H05
- Fixed point theorems applied to numerical range. *Math. Colloq. Univ. Cape Town* 8 (1973), 181-187. (Kenneth J. Harrison) **56** #6433 47A10
- (with Tullo, Alan W.) Noetherian Banach algebras are finite dimensional. *Math. Ann.* **211** (1974), 151-153. (S. J. Sidney) **50** #8081 46H10
- Homomorphisms from C^* -algebras. *Proc. London Math. Soc.* (3) **29** (1974), 435-452. (G. A. Elliott) **50** #10834 (E 52 #11612) 46L05
- A discontinuous intertwining operator. *Trans. Amer. Math. Soc.* **188** (1974), 259-267. (J. W. M. Ford) **50** #14320 47A99
- Homomorphisms from $C_0(R)$. *J. London Math. Soc.* (2) **11** (1975), no. 2, 165-174. (B. E. Johnson) **51** #13689 46H05
- (with Laursen, Kjeld B.) Lifting matrix units in C^* -algebras. II. *Math. Scand.* **37** (1975), no. 1, 167-172. (Wai-Mee Ching) **53** #1281 46L05
- ★ Automatic continuity of linear operators. London Mathematical Society Lecture Note Series, No. 21. Cambridge University Press, Cambridge-New York-Melbourne, 1976. iii + 92 pp. (Nicholas P. Jewell) **58** #7011 46-02 (46H05, 47A99)
- (with Jewell, Nicholas P.) Epimorphisms and derivations on $L^1(0,1)$ are continuous. *Bull. London Math. Soc.* **8** (1976), no. 2, 135-139. (B. E. Johnson) **53** #6326 46H05
- Corrigendum: "Homomorphisms from C^* -algebras" (Proc. London Math. Soc. (3) **29** (1974), 435-452). *Proc. London Math. Soc.* (3) **32** (1976), no. 2, 322. (G. A. Elliott) **52** #11612 46L05
- (with Allan, Graham R.) Power factorization in Banach algebras with a bounded approximate identity. *Studia Math.* **56** (1976), no. 1, 31-38. (Peter Dixon) **53** #14130 46H25
- clair, Annette Approximation of extremal functions in H^p by an iterative method. Collection of articles dedicated to J. L. Walsh on his 75th birthday, VII. *J. Approximation Theory* **6** (1972), 320-331. (T. Kövari) **54** #10605 30A78
- Determination of extremal functions in H^p by a Fortran program. *SIAM J. Numer. Anal.* **10** (1973), 137-146. (D. Gaier) **47** #1245 65K05
- clair, B. (with Drake, Stillman; Coxeter, Harold Scott MacDonald; Jones, Charles V.; Tropp, Henry S.; Scriba, Christoph J.; Mahoney, Michael Sean; Struik, Dirk J.) A memorial tribute to Kenneth O. May. *Historia Math.* **5** (1978), no. 1, 3-12. (Editors) **56** #15322 01A70
- clair, George Edward A finitely additive generalization of the Fichtenholz-Lichtenstein theorem. *Trans. Amer. Math. Soc.* **193** (1974), 359-374. (T. A. Botts) **54** #5423 28A35
- clair, James W. (with Bartels, Richard H.; Conn, Andrew R.) Minimization techniques for piecewise differentiable functions: the I_1 solution to an overdetermined linear system. *SIAM J. Numer. Anal.* **15** (1978), no. 2, 224-241. (Ja. I. Al'ber) **58** #19079 65F20 (65K05)
- cov, D. M. ★ Работы по неголономной геометрии. (Russian) [Papers on nonholonomic geometry] Edited and annotated by Ja. P. Blank, D. Z. Gordevskii, A. S. Leibin and M. A. Nikolaenko. "Višča Škola", Kiev, 1972. 294 pp. (loose errata) (Editors) **50** #9518 01A75 (53-03)
- See also Blank, Ja. P., **47** #6415
- covec, Richard F. On the solution of the equations arising from collocation with cubic B-splines. *Math. Comp.* **26** (1972), 893-895. (Author's summary) **47** #2783 65L10 (65N35)
- (with Lee, E. T. Y.) Spline function collocation methods for linear boundary value problems. *Bull. Inst. Math. Acad. Sinica* **1** (1973), no. 1, 41-55. (F. Perrin) **48** #3259 65L10
- (with Madsen, Niel K.) The numerical solution of nonlinear partial differential equations. *Computational methods in nonlinear mechanics (Proc. Internat. Conf., Austin, Tex., 1974)*, pp. 371-380. Texas Inst. Comput. Mech., Austin, Tex., 1974. (W. F. Ames) **53** #4561 65M20
- (with Heydweiller, J. C.) A stable difference scheme for the solution of hyperbolic equations using the method of lines. *J. Computational Phys.* **22** (1976), no. 3, 377-388. (Authors' summary) **56** #13678 65M20
- On the relative efficiency of higher order collocation methods for solving two-point boundary value problems. Papers on the numerical solution of two-point boundary-value problems (NSF-CBMS Regional Res. Conf., Texas Tech Univ., Lubbock, Tex., 1975). *SIAM J. Numer. Anal.* **14** (1977), no. 1, 112-123. (Ranbir S. Sandhu) **56** #13664 65L10 (65N35)
- deev, B. P. An algorithm for transforming a syntax to a form that is suited for one-pass parsing. (Russian) *Programirovanie* **1975**, no. 4, 36-44, 95. (Armin Cremers) **57** #8198 68A30
- deljář, Jaroslav (with Tuzar, Antonin) Introduction to the theory of stability of control systems. (Czech) *Kybernetika (Prague)* **6**, 7 (1970)/(1971), suppl., 185pp. (Editors) **56** #8125 93Dxx
- Sampled-data control systems with variable structure and a nonlinear link working with incomplete information. (Czech and Russian summaries) *Information Processing Machines* **17** (1974), 13-32. (D. L. Gustafson) **50** #16025 93C55
- The minimum value of $\sum_{n=1}^{\infty} [n e(n)]^2$ as the quality control criterion. *Kybernetika (Prague)* **10** (1974), 509-515. (D. Obradović) **51** #15087 90C30 (90C50)
- The quadratic criterion of control process quality using the exponential weighting function. *Kybernetika (Prague)* **11** (1975), no. 6, 411-414. (Claude Carasso) **53** #12694 93C30 (90C50)
- der, R. M. (with Baur, M. E.) Zeros of the grand canonical partition function: generalization of a result of Lee and Yang. *J. Mathematical Phys.* **17** (1976), no. 12, 2166-2168. (Masuo Suzuki) **57** #11525a 82.30
- (with Baur, M. E.) Erratum: "Zeros of the grand canonical partition function: generalization of a result of Lee and Yang" (J. Mathematical Phys. **17** (1976), no. 12, 2166-2168). *J. Mathematical Phys.* **18** (1977), no. 8, 1708. (Masuo Suzuki) **57** #11525b 82.30
- ndjapić, G. P. (with Mogilevič, L. I.) Certain problems of non-Hugoniot flows. (Russian) *Proceedings of a Conference on Boundary Value Problems (Kazan, 1969)* (Russian), pp. 187-191. Izdat. Kazan. Univ., Kazan, 1970. (From the authors' introduction) **51** #4838 76.35
- (with Kleiner, B. G.) On a certain class of exact particular solutions of the short-wave equations. *Prikl. Mat. Meh.* **34** (1970), 1150-1158 (Russian); translated as *J. Appl. Math. Mech.* **34** (1970), 1087-1096 (1971). (P. Germain) **47** #9946 76.35
- Šindler, A. A. See *Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region*, **46** #1532 and *Differential equations, approximate methods of their solution*, **58** #28740
- Sindler, Ju. B. ★ Метод двухступенчатого статистического анализа и его приложения в технике. (Russian) [The method of two-stage statistical analysis and its applications in technology]. Izdat. "Nauka", Moscow, 1973. 191 pp. (N. L. Johnson) **48** #3208 62Nxx
- Sin Don Ha Mathematical programming problems with several criteria. (Russian) *Optimizacija Vyp.* **18**(35), (1976), 76-81, 161. (A. B. Pevnyi) **56** #14708 90C25
- Sindwani, Sushma (with Sen, Kanwar) On fluctuations in coin tossing and random walk. *J. Korean Math. Soc.* **13** (1976), no. 1, 105-111. (Endre Csáki) **54** #1396a 60J15 (60C05)
- (with Sen, Kanwar) On crossings, returns, positive returns and positive steps in random walk. *J. Korean Math. Soc.* **13** (1976), no. 1, 113-120. (Endre Csáki) **54** #1396b 60J15 (60C05)
- Šindžiškašvili, O. N. A certain application of integral transforms in the problem of the theory of elasticity for an inhomogeneous strip. (Georgian. Russian summary) Collection of articles on the equations of mathematical physics, 5. *Sakharth. SSR Mecn. Akad. Math. Inst. Šrom.* **49** (1975), 54-60. (M. O. Bašeleišvili) **54** #4263 73.44
- Sine, Robert An example in the theory of stable Markov operators. *Israel J. Math.* **14** (1973), 283-284. (Michael Lin) **48** #902 47A35
- (with Jamison, Benton) Sample path convergence of stable Markov processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **28** (1973/74), 173-177. (Michael Lin) **50** #11451 60J05 (60J30)
- Convergence theorems for weakly almost periodic Markov operators. *Israel J. Math.* **19** (1974), 246-255. (Shlomo Horowitz) **51** #8375 28A65 (60J05)
- The Borsuk-Tietze linear extension with a side condition. *J. Approximation Theory* **14** (1975), no. 3, 188-190. (Richard A. Alò) **52** #11822 54C20 (46E15)
- On local uniform mean convergence for Markov operators. *Pacific J. Math.* **60** (1975), no. 2, 247-252. (Michael Lin) **53** #1738 60J05
- Convex combinations of uniformly mean stable Markov operators. *Proc. Amer. Math. Soc.* **51** (1975), 123-126. (Michael Lin) **51** #11139 47A35 (60J05)
- A characterization of the ball in R^3 . *Amer. Math. Monthly* **83** (1976), no. 4, 260-261. (J. M. Wills) **53** #1404 52A10
- Sample path convergence of stable Markov processes. II. *Indiana Univ. Math. J.* **25** (1976), no. 1, 23-43. (Michael Lin) **52** #12082 60J05
- (with Atalla, Robert E.) Random Markov mappings. *Math. Ann.* **221** (1976), no. 3, 195-199. (Humphrey S. Fong) **53** #14170 47A35 (60J05, 28A65)
- Sequential convergence to invariance in $BC(G)$. *Proc. Amer. Math. Soc.* **55** (1976), no. 2, 313-317. (R. Jajte) **54** #854 43A07 (28A65)
- A note on the ergodic properties of homeomorphisms. *Proc. Amer. Math. Soc.* **57** (1976), no. 1, 169-172. (W. Parry) **53** #6522 54H20 (60J05, 28A65)
- (with Montgomery, John T.; Thomas, Edward S., Jr.) Weakly almost periodic systems. *An. Ști Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **23** (1977), no. 1, 93-95. (E. Hemmingsen) **57** #10692 54H20
- (with Pakula, Lewis) On a theorem of Furstenberg and the structure of topologically ergodic measures. *Proc. Amer. Math. Soc.* **65** (1977), no. 1, 52-56. (Authors' summary) **58** #22484 28A65 (60J05)
- (with Lin, Michael) The individual ergodic theorem for non-invariant measures. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **38** (1977), no. 4, 329-331. (Yves Derriennic) **57** #9939 28A65
- (with Lin, Michael; Montgomery, John T.) Change of velocity and ergodicity in flows and in Markov semi-groups. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **39** (1977), no. 3, 197-211. (R. J. Nagel) **56** #6888 60J35 (47A35, 47D05)
- Sinegub, G. G. (with Kosjakin, A. A.; Filaretov, G. F.) Experimental investigation of the accuracy of numerical methods in computing correlation functions. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst.* **68** (1969), 93-102. **45** #1310 62F05
- Sinel'nikov, A. A. (with Pastore, G. L.; Roiz, B. A.) Stochastic optimization in a multi-extremal case. (Russian. English summary insert) *Kibernetika (Kiev)* **1978**, no. 2, 135-137. (Editors) **58** #26480 93E20
- Sinervo, Jyrki (with Blomberg, Hans) Algebraic theory for ordinary linear time-invariant difference systems. *Acta Polytech. Scand. Math. and Comput. Mach. Ser. No. 21* (1971), 35 pp. (loose errata) (I. Fenyő) **47** #5475 39A10 (39A12, 44A40)
- Sinestrari, Eugenio Accretive differential operators. (Italian summary) *Boll. Un. Mat. Ital. B (5)* **13** (1976), no. 1, 19-31. (D. E. Edmunds) **54** #13636 47F05 (35G05)
- (with Vernole, Paola) Semi-linear evolution equations in interpolation spaces. *Nonlinear Anal.* **1** (1976/77), no. 3, 249-261. (Maurice Gaultier) **58** #30575 47H15 (34G05, 35K99)
- Sing, Charles F. (with Rothman, Edward D.; Templeton, Alan R.) A model for analysis of population structure. *Genetics* **78** (1974), no. 3, 943-960. (Klaus Hinkelmann) **53** #2417 92A10 (92A15)
- (with Rothman, Edward D.) A consideration of the chi-square test of Hardy-Weinberg equilibrium in a non-multinomial situation. *Ann. Human Genetics* **39** (1975/76), no. 2, 141-145. (L. Demetrius) **54** #4018 62P10 (92A10)
- See also *Symposium: Mathematical Genetics*, **52** #12848
- Sing, Fuk Yum Some results on matrices with prescribed diagonal elements and singular values. *Canad. Math. Bull.* **19** (1976), no. 1, 89-92. (R. C. Thompson) **54** #12808 15A42
- (with Au-Yeung, Yik Hoi) A remark on the generalized numerical range of a normal matrix. *Glasgow Math. J.* **18** (1977), no. 2, 179-180. (P. A. Fillmore) **56** #8594 15A18
- Sing, P. See Singh, Pratap
- Sing, S. K. See Singh, S. K.
- Singal, Asha Rani (with Arya, Shashi Prabha) On pairwise almost regular spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6**(26) (1971), 335-343. (H. J. Biesterfeldt, Jr.) **46** #6316 54E55
- (with Singal, M. K.) Bitopological ordered spaces. Volume dedicated to the

- memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 440-447 (1972). (D. R. Brown) **49** #3857 54E55
- A note on mildly paracompact spaces. *Yokohama Math. J.* **19** (1971), 1-5. (J. E. Vaughan) **45** #2661 54D20
- (with Arya, Shashi Prabha) Some new separation axioms in topological ordered spaces. *Math. Student* **40A** (1972), 231-238. (H. Herrlich) **48** #9678 54F05
- Strongly m -paracompact spaces. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 265-273 (1974). (C. E. Aull) **53** #3999 54D20
- (with Singal, M. K.) Mildly normal spaces. *Kyungpook Math. J.* **13** (1973), 27-31. (H.-J. Kowalsky (Zbl 266 #54006)) **50** #14657 54D15
- (with Arya, Shashi Prabha) A note on countably paracompact spaces. *Kyungpook Math. J.* **14** (1974), 63-70. (W. M. Fleischman) **54** #6086 54D20
- (with Singal, M. K.) On some pairwise normality conditions in bitopological spaces. *Publ. Math. Debrecen* **21** (1974), 71-81. (G. H. M. Thomas) **50** #11182 54E55
- (with Arya, Shashi Prabha) A note on D_1 -spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10(30)** (1975), no. 1, 151-153. (Ivan L. Reilly) **54** #3654 54D20
- Singal, M. K.** On strongly-paracompact and pointwise-paracompact spaces. *Math. Seminar* **5**, 12-31 (1968). (D. J. Lutzer) **46** #8174 54D20
- Some recent work on paracompact spaces. *Math. Student* **38** (1970), 139-164. (Editors) **46** #855 54D20
- (with Arya, Shashi Prabha) On a characterisation of compactness. *Rend. Circ. Mat. Palermo* (2) **19** (1970), 213-216. (J. Greever) **46** #6296 54D30
- Some generalizations of paracompactness. *General topology and its relations to modern analysis and algebra, III* (Proc. Conf., Kanpur, 1968), pp. 245-263. *Academia, Prague*, 1971. (C. E. Aull) **45** #7671 54D20
- (with Jain, Pushpa) On subparacompact and countably subparacompact spaces. *Bull. Austral. Math. Soc.* **5** (1971), 289-304. (R. Hodel) **45** #5955 54D20
- (with Mathur, Asha) On E_1 -closed and minimal E_1 -spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6(26)** (1971), 173-178. (C. E. Aull) **45** #9288 54D15
- (with Mathur, Asha) On minimal almost-regular spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6(26)** (1971), 179-185. (C. E. Aull) **45** #9281 54D15
- (with Mathur, Asha) A note on almost completely regular spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6(26)** (1971), 345-350. (H. J. Biesterfeldt, Jr.) **46** #6286 54D15
- (with Deb, Mamata) On monotone and quasi-compact mappings. *Israel J. Math.* **10** (1971), 218-223. (G. S. Ungar) **45** #7687 54C10
- (with Singal, Asha Rani) Bitopological ordered spaces. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 440-447 (1972). (D. R. Brown) **49** #3857 54E55
- (with Mathur, Asha) A note on minimal topological spaces. *Israel J. Math.* **12** (1972), 204-206. (H. Herrlich) **47** #2551 54D25
- (with Jain, Pushpa) m -subparacompact spaces. *Jñānabha Sect. A* **2** (1972), 143-158. (G. H. M. Thomas) **51** #1736 54D20
- P. L. Bhatnagar: man and mathematician. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 1-12 (1974). (Editors) **52** #10338 01A70
- (with Arya, Shashi Prabha) A survey of countably paracompact spaces. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 337-372 (1974). (S. Swaminathan) **53** #1520 54D20
- (with Arya, Shashi Prabha) A note on the locally finite sum theorem. *Mathematika* **19** (1972), 121-127. (G. L. Cain, Jr.) **47** #9511 54A05
- (with Mathur, Asha) Some weaker forms of countable compactness. *Rocky Mountain J. Math.* **2** (1972), no. 4, 569-577. (C. E. Aull) **47** #2554 54D30
- (with Arya, Shashi Prabha) On m -paracompact spaces. II. *Comment. Math. Prace Mat.* **17** (1973), 215-218. (K. Nagami) **48** #2998 54D20
- (with Singal, Asha Rani) Mildly normal spaces. *Kyungpook Math. J.* **13** (1973), 27-31. (H.-J. Kowalsky (Zbl 266 #54006)) **50** #14657 54D15
- (with , Lal, Sunder) Biquasi-proximity spaces and compactification of a pairwise proximity space. *Kyungpook Math. J.* **13** (1973), 41-49. (S. A. Naimpally) **48** #1178 54E05
- (with Jain, Pushpa) A note on n -spaces. *Kyungpook Math. J.* **13** (1973), 203-210. (V. J. Mancuso) **52** #9175 54D20 (54C10)
- (with , Lal, Sunder) Local proximity ordered spaces. *Math. Student* **41** (1973), no. 3-4, 269-275 (1974). (S. P. Arya) **52** #9187 54E05 (54F05)
- (with Mathur, Asha) On nearly compact spaces. II. (Italian summary) *Boll. Un. Math. Ital.* (4) **9** (1974), 670-678. (R. Arens) **49** #9810 54D30
- (with Jain, Pushpa) Some generalisations of metacompact spaces. *Kyungpook Math. J.* **14** (1974), 145-164. (Stephen Willard) **52** #1631 54D30
- (with Arya, Shashi Prabha) A note on sum theorems for the expandability properties. *Math. Student* **42** (1974), 154-158 (1975). (James Chew) **53** #4000 54D20
- (with Sinha, D. K.) XXXIX Annual Conference of Indian Mathematical Society (Jadavpur, December 28-30, 1973). *Math. Student* **42** (1974), 225-229 (1975). (Editors) **52** #10299 00A10
- (with Jain, Pushpa) Semiparacompact spaces. *Period. Math. Hungar.* **5** (1974), 243-248. (R. Hodel) **50** #5740 54D20
- (with Singal, Asha Rani) On some pairwise normality conditions in bitopological spaces. *Publ. Math. Debrecen* **21** (1974), 71-81. (G. H. M. Thomas) **50** #11182 54E55
- (with Mathur, Asha) On minimal almost normal spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10(30)** (1975), no. 1, 145-149. (C. E. Aull) **52** #4230 54D15
- (with , Lal, Sunder) On PR -proximities and regular spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10(30)** (1975), no. 2, 359-365. (Authors' summary) **56** #1266 54E05
- (with , Lal, Sunder) A note on proximities and pairwise regular spaces. *Kyungpook Math. J.* **15** (1975), 25-31. (S. A. Naimpally) **51** #6742 54E05
- (with Arya, Shashi Prabha) More sum theorems for topological spaces. *Pacific J. Math.* **59** (1975), no. 1, 1-7. (C. E. Aull) **52** #9169 54D20
- (with Arya, Shashi Prabha) On the closure-preserving sum theorem. *Proc. Amer. Math. Soc.* **53** (1975), no. 2, 518-522. (C. R. Borges) **52** #4216 54B99
- (with Arya, Shashi Prabha) Sum theorems for the covering dimension of total normal spaces. *Publ. Math. Debrecen* **22** (1975), no. 3-4, 195-198. (K. Nagami) **52** #9194 54F45
- (with , Lal, Sunder) Proximity ordered spaces. *J. London Math. Soc.* (2) **14** (1976), no. 3, 393-404. (M. G. Murdeshwar) **55** #13384 54E05
- (with Mathur, Asha) A note on lightly compact spaces. *Publ. Math. Debrecen* (1976), no. 3-4, 177-182. (R. W. Bagley) **54** #11281 54D30
- (with Arya, Shashi Prabha) On a theorem of Michael-Morita-Hanai. *General topology and its relations to modern analysis and algebra, IV* (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B, pp. 434-444. *Soc. Czechoslovak Mathematicians and Physicists, Prague*, 1977. (E. Michael) **57** #4076 54C10
- Singal, R. P.** An integral involving Kampé de Fériet function. *Indian J. Engrg. Math.* (1969), no. 1, 46-50. (B. R. Bhonsle) **48** #583 33A30
- Transformation formulae for Kampé de Fériet hypergeometric function. *Indian Pure Appl. Math.* **2** (1971), no. 4, 610-614. (L. J. Slater) **45** #7119 33A30
- Transformations of double hypergeometric functions. *Math. Student* **40A** (1972), 200-202. (Harold Exton) **48** #11594 33A30
- Transformation formulae for the modified Kampé de Fériet function. *Math. Student* **40A** (1972), 327-330. (Harold Exton) **49** #646 33A30
- A transformation formula for double hypergeometric series. *Rocky Mountain J. Math.* **3** (1973), 377-381. (R. N. Pandey) **52** #6054 33A30
- A Watson sum for non-terminating double hypergeometric series. *Jñānabha Sect. A* **6** (1976), 45-47. (Indira Aggarwala) **58** #28714 33A30
- Singare, V. M.** (with Pachpatte, B. G.) Comparison theorems on difference equations of the Volterra type. *Math. Education* **7** (1973), A45-A47. (From the authors' introduction) **48** #4553 39A12
- Singatullin, R. S.** Some theorems on stationary axially-symmetric gravitation fields. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 6 (1969), 89-93. (RŽFiz **1970** #7 V22) **58** #32807 83.53
- Stationary cylindrically-symmetric gravitation fields in a vacuum. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 6 (1969), 94-96. (RŽFiz **1970** #7 V228) **58** #32808 83.53
- Matter in symmetrical conformally flat space-time. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 6 (1969), 97-106. (Editors) **58** #32809 83.53
- Complete modeling of the paths of motion of test particles in axially symmetric gravitational fields. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 7 (1970), 29-31. (RŽFiz **1971** #3 B148) **58** #32810 83.53
- Modeling of paths of motion of test particles in stationary axially symmetric gravitational fields. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 7 (1970), 68-70. (RŽFiz **1971** #3 B149) **58** #32811 83.53
- The total simulation of axially symmetric gravitation fields. (Russian) *Izv. Vyšš. Učebn. Zaved. Matematika* **1971**, no. 2(105), 90-95. (W. M. Tulczyjew) **48** #13165 83.53
- Exact wave solutions of Einstein-Maxwell equations that are determined by Einstein and Rosen solutions. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 9 (1973), 67-70. (RŽFiz **1974** #6 B188) **58** #32740 83.53
- Some theorems on the dynamics of a test particle in relativity theory. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1974), 848-850. (R. I. Pimenov) **51** #12278 83.53
- An invariant transformation of spaces of general relativity theory that are determined by a mapping of the paths of test particles. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 2, 325-327. (R. I. Pimenov) **52** #7463 83.53
- Properties of gravitational fields that are determined by a mapping of the trajectories of charged bodies in the special theory of relativity. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 13 (1976), 116-121. (From the text) **58** #32812 83.53
- Mapping the trajectories of test bodies in the pseudo-Riemannian spaces V_4 and V_3 . (Russian) *Mat. Zametki* **19** (1976), no. 6, 933-938. (R. I. Pimenov) **54** #11216 53B30 (83.53)
- Singbal-Vedak, K.** Semigroups of operators on a locally convex space. *Comment. Math. Prace Mat.* **16** (1972), 53-74. (S. Kantorovitz) **48** #12149 (EA **49**) 47D05
- Singeorzan, Ion Corvin** La première société astronomique roumaine et ses fondateurs. (English summary) *Noesis, II* (Travaux Colloq. Comité Roumain d'Histoire Philos. Sci. Bucharest, 1973), pp. 211-217. *Editura Acad. R.S.R., Bucharest*, 1974. (Author's summary) **58** #21264 01A60
- Singer, B. H.** (with Flehinger, Betty J.; Louis, Thomas A.; Robbins, Herbert) Reducing the number of inferior treatments in clinical trials. *Proc. Nat. Acad. Sci. U.S.A.* (1972), 2993-2994. (Lionel Weiss) **46** #2798 62L05
- Singer, Burton** Some asymptotic results in a model of population growth. II. Positive recurrent chains. *Ann. Math. Statist.* **42** (1971), 1296-1315. (Author's summary) **46** #6492 60J99
- (with Brézin, Haim; Rosenkrantz, Walter A.) An extension of Khintchine's estimate for large deviations to a class of Markov chains converging to a singular diffusion. *Comm. Pure Appl. Math.* **24** (1971), 705-726. (J. Walsh) **45** #9393 60J15
- (with Spierman, Seymour) Trace inequalities for mixtures of Markov chains. *Advances in Appl. Probability* **9** (1977), no. 4, 747-764. (Richard Madsen) **57** #16555 60J10 (60J20)
- Singer, D.** Dynamik von durch stoffliche Ströme verkoppelten Systemen. *Regelungstechnik-Prozess-Datenerarbeit*, **18** (1970), no. 1, 11-16. (T. Kaczorek) **52** #10114 93A10
- Singer, David** (with Gluck, Herman; Krigelman, Kenneth) The converse to the Gauss-Bonnet theorem in PL. *J. Differential Geometry* **9** (1974), 601-616. (M. Gromov) **52** #11785 53C20
- Preassigning curvature of polyhedra homeomorphic to the two-sphere. *J. Differential Geometry* **9** (1974), 633-638. (M. L. Gromov) **52** #15496 57D20 (53C45)
- (with Gluck, Herman) Geodesic fields and construction of nontriangulable cut loci. *Differential geometry* (Proc. Conf., Michigan State Univ., East Lansing, Mich., 1976), pp. 1-15. *Dept. Math., Michigan State Univ., East Lansing, Mich.*, 1976. (Sheila Cartwright) **55** #11276 57D70 (53C20)

- (with Gluck, Herman) Deformations of geodesic fields. *Bull. Amer. Math. Soc.* **82** (1976), no. 4, 571-574. (Sheila Carter) **54** #3624 53C20 (57D70)
- (with Gluck, Herman) The existence of nontriangulable cut loci. *Bull. Amer. Math. Soc.* **82** (1976), no. 4, 599-602. (Sheila Carter) **54** #3625 53C20 (57D70)
- (with Gluck, Herman) Scattering problems in differential geometry. *Geometry and topology (Proc. III Latin Amer. School of Math., Inst. Mat. Pura Aplicada CNPq, Rio de Janeiro, 1976)*, pp. 191-229. *Lecture Notes in Math.*, Vol. 597, Springer, Berlin, 1977. (Sheila Carter) **57** #17561 53C20 (57D70)
- (with Hilton, Peter John; Roitberg, Joseph) On G -spaces, Serre classes and G -nilpotency. *Math. Proc. Cambridge Philos. Soc.* **84** (1978), no. 3, 443-454. (Guido Mislin) **58** #13015 55D99
- Stable orbits and bifurcation of maps of the interval. *SIAM J. Appl. Math.* **35** (1978), no. 2, 260-267. (R. H. Atkin) **58** #13206 58F20 (58C25)
- er, I. M. Future extensions of index theory and elliptic operators. *Prospects in mathematics (Proc. Sympos., Princeton Univ., Princeton, N.J., 1970)*, pp. 171-185. *Ann. of Math. Studies*, No. 70, Princeton Univ. Press, Princeton, N.J., 1971. (R. S. Palais) **49** #8061 58G10
- (with Ray, D. B.) R -torsion and the Laplacian on Riemannian manifolds. *Advances in Math.* **7**, 145-210 (1971). (J. W. Robbin) **45** #4447 58F20 (53C20)
- Operator theory and periodicity. Proceedings of an International Symposium on Operator Theory (Indiana Univ., Bloomington, Ind., 1970). *Indiana Univ. Math. J.* **20** (1971), no. 10, 949-951. (Jerome Kaminker) **56** #3646 46M20 (46L99, 47B30, 58G10)
- (with Coburn, L. A.; Douglas, Ronald G.; Schaeffer, David G.) C^* -algebras of operators on a half-space. II. Index theory. *Inst. Hautes Études Sci. Publ. Math.* No. 40 (1971), 69-79. (H. Widom) **50** #10884 47B30 (46L05)
- (with Coburn, L. A.; Douglas, Ronald G.) An index theorem for Wiener-Hopf operators on the discrete quarter-plane. Collection of articles dedicated to S. S. Chern and D. C. Spencer on their sixtieth birthdays. *J. Differential Geometry* **6** (1972), 587-593. (R. S. Palais) **47** #9675 58G10
- (with Atiyah, M. F.) The index of elliptic operators. IV, V. (Russian) Translated from the English (*Ann. of Math.* (2) **93** (1971), 119-138; *ibid.* (2) **92** (1970), 139-149) by S. I. Gelfand. *Uspehi Mat. Nauk* **27** (1972), no. 4(166), 161-188. (Editors) **52** #6792 58G10
- Recent applications of index theory for elliptic operators. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971)*, pp. 11-31. *Amer. Math. Soc., Providence, R.I.*, 1973. (A. S. Dynin) **49** #6286 58G10
- (with Ray, D. B.) Analytic torsion. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971)*, pp. 167-181. *Amer. Math. Soc., Providence, R.I.*, 1973. (M. L. Gromov) **49** #4053 58G05
- (with Coburn, L. A.; Moyer, R. D.) C^* -algebras of almost periodic pseudo-differential operators. *Acta Math.* **130** (1973), 279-307. (R. G. Douglas) **54** #3495 47C10 (35S05, 47B35, 58G10)
- (with Ray, D. B.) Analytic torsion for complex manifolds. *Ann. of Math.* (2) **98** (1973), 154-177. (M. F. Atiyah) **52** #4344 58G05 (32C10)
- (with Atiyah, M. F.; Patodi, Vijay Kumar) Spectral asymmetry and Riemannian geometry. *Bull. London Math. Soc.* **5** (1973), 229-234. (V. W. Guillemin) **48** #9776 58G99 (35P05)
- Eigenvalues of the Laplacian and invariants of manifolds. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 1, pp. 187-200. *Canad. Math. Congress, Montreal, Que.*, 1975. (Shūkichi Tanno) **54** #8758 58G99 (58G10)
- (with Duistermaat, J. J.) Isomorphismes entre algèbres d'opérateurs pseudo-différentiels. *Séminaire Goulaouic-Lions-Schwartz 1974-1975: Équations aux dérivées partielles linéaires et non linéaires*, Exp. No. 24, 9 pp. *Centre Math., École Polytech., Paris*, 1975. (J. S. Joel) **58** #2913 58G15 (47G05)
- (with Atiyah, M. F.; Patodi, Vijay Kumar) Spectral asymmetry and Riemannian geometry. I. *Math. Proc. Cambridge Philos. Soc.* **77** (1975), 43-69. (Kh. Knapp) **53** #1655a 58G10 (57E15, 57D85)
- (with Atiyah, M. F.; Patodi, Vijay Kumar) Spectral asymmetry and Riemannian geometry. II. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), no. 3, 405-432. (Kh. Knapp) **53** #1655b 58G10 (57E15, 57D85)
- (with Thorpe, John A.) ★Lecture notes on elementary topology and geometry. Reprint of the 1967 edition. Undergraduate Texts in Mathematics. *Springer-Verlag, New York-Heidelberg*, 1976. viii + 232 pp. (Editors) **54** #1273 58-01 (53-01)
- (with Duistermaat, J. J.) Order-preserving isomorphisms between algebras of pseudo-differential operators. *Comm. Pure Appl. Math.* **29** (1976), no. 1, 39-47. (Bert-Wolfgang Schulze) **53** #6644 58G15 (47G05)
- (with Atiyah, M. F.; Patodi, Vijay Kumar) Spectral asymmetry and Riemannian geometry. III. *Math. Proc. Cambridge Philos. Soc.* **79** (1976), no. 1, 71-99. (Kh. Knapp) **53** #1655c 58G10 (57E15, 57D85)
- Some remarks on operator theory and index theory. K -theory and operator algebras (*Proc. Conf., Univ. Georgia, Athens, Ga.*, 1975), pp. 128-138. *Lecture Notes in Math.*, Vol. 575, Springer, Berlin, 1977. (R. D. Moyer) **57** #7699 58G10 (46L99, 46M20)
- (with Atiyah, M. F.; Hitchin, N. J.) Deformations of instantons. *Proc. Nat. Acad. Sci. U.S.A.* **74** (1977), no. 7, 2662-2663. (Mi-Soo Smith) **56** #16627 55F15 (81.55, 32G13, 58G10)
- See also Differentialgeometrie im Großen, **48** #9596 and K -theory and operator algebras, **56** #15254
- ger, Ivan ★Bases in Banach spaces. I. Die Grundlehren der mathematischen Wissenschaften, Band 154. *Springer-Verlag, New York-Berlin*, 1970. viii + 668 pp. (R. C. James) **45** #7451 46B15
- (with Lin, Bor Luh) On conditional bases of l^2 . *Comment. Math. Prace Mat.* **15** (1971), 135-139. (T. A. Cook) **47** #786 46C05
- On biorthogonal systems and total sequences of functionals. *Math. Ann.* **193** (1971), 183-188. (M. V. Subbarao) **50** #2880 46B15
- (with Davis, William J.; Dean, David W.) Multipliers and unconditional convergence of biorthogonal expansions. *Pacific J. Math.* **37** (1971), 35-39. (J. Blatter) **47** #2316 46B15
- (with Dean, David W.; Sternbach, Leonard) On shrinking basic sequences in Banach spaces. *Studia Math.* **40** (1971), 23-33. (Bor-Luh Lin) **46** #5998 46B15
- On set-valued metric projections. *Linear operators and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1971)*, pp. 217-233. *Internat. Ser. Numer. Math.*, Vol. 20, Birkhäuser, Basel, 1972. (R. B. Holmes) **51** #10974 41A65
- On best approximation in normed linear spaces by elements of subspaces of finite codimension. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1245-1256. (A. J. Lazar) **47** #7297 41A65
- On minimal sequences of type l_+ and bounded biorthogonal systems in Banach spaces. *Czechoslovak Math. J.* **23(98)** (1973), 11-14. (N. J. Kalton) **47** #5561 46B15
- (with Deutsch, Frank; Pollul, Walter) On set-valued metric projections, Hahn-Banach extension maps, and spherical image maps. *Duke Math. J.* **40** (1973), 355-370. (D. E. Wulbert) **47** #2313 46B05
- On normed linear spaces which are proximal in every superspace. *J. Approximation Theory* **7** (1973), 399-402. (Karl Scherer) **49** #11122 41A65 (46B10)
- On pseudo-complemented subspaces of Banach spaces. *J. Functional Analysis* **13** (1973), 223-232. (T. A. Cook) **50** #8015 46B05
- On biorthogonal systems and total sequences of functionals. II. *Math. Ann.* **201** (1973), 1-8. (H. E. Lacey) **52** #3933 46B15
- On separable π_λ and dual π_λ spaces. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 1109-1121. (J. T. Marti) **48** #6897 46B15
- On a problem of moments of S. Rolewicz. *Studia Math.* **48** (1973), 95-98. (Ju. A. Šaškin) **48** #11999 46B05
- (with Davis, William J.) Boundedly complete M -bases and complemented subspaces in Banach spaces. *Trans. Amer. Math. Soc.* **175** (1973), 187-194. (A. J. Lazar) **47** #5559 46B15
- ★The theory of best approximation and functional analysis. Conference Board of the Mathematical Sciences Regional Conference Series in Applied Mathematics, No. 13. *Society for Industrial and Applied Mathematics, Philadelphia, Pa.*, 1974. vii + 95 pp. (J. Horváth) **51** #10967 41A50
- On the extension of basic sequences to bases. *Bull. Amer. Math. Soc.* **80** (1974), 771-772. (William B. Johnson) **49** #11220 46B15
- On some duality theorems for bases, finite dimensional decompositions and π systems. *Math. Ann.* **211** (1974), 337-343. (C. Bessaga) **50** #8026 46B15
- Generalizations of methods of best approximation to convex optimization in locally convex spaces. I. Extension of continuous linear functionals and characterizations of solutions of continuous convex programs. *Hommage au Professeur Miron Nicolescu pour son 70e anniversaire*, II. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 65-77. (V. L. Levin) **50** #946 46A99 (41A65)
- On the problem of non-smoothness of non-reflexive second conjugate spaces. *Bull. Austral. Math. Soc.* **12** (1975), no. 3, 407-416. (R. C. James) **52** #3930 46B10
- Geometric properties of the norm and basic sequences in Banach spaces. *Bull. Austral. Math. Soc.* **13** (1975), no. 3, 325-335. (K. Sundaresan) **53** #1227 46B10 (46B15)
- Some characterizations of reflexivity. *Proc. Amer. Math. Soc.* **52** (1975), 166-168. (From the introduction) **58** #23511 46B10
- (with van Dulst, D.) On Kadec-Klee norms on Banach spaces. *Studia Math.* **54** (1975/76), no. 3, 205-211. (William B. Johnson) **52** #14937 46B10
- Some extensions of a dual of the Hahn-Banach theorem, with applications to separation and Helly type theorems. *Bull. Austral. Math. Soc.* **15** (1976), no. 2, 277-291. (M. V. Subbarao) **55** #1046 46B99
- Enflo-Rosenthal basis sets in Banach spaces. *Serdica* **2** (1976), no. 3, 247-251. (V. K. Balakrishnan) **56** #3620 46B15
- (with Bacopoulos, A.) On convex vectorial optimization in linear spaces. *J. Optimization Theory Appl.* **21** (1977), no. 2, 175-188. (Wolfgang Wetterling) **55** #9986 (E 58 #15244) 90C25
- (with Bacopoulos, A.) Errata corrigé: "On convex vectorial optimization in linear spaces" (*J. Optimization Theory Appl.* **21** (1977), no. 2, 175-188). *J. Optimization Theory Appl.* **23** (1977), no. 3, 473-476. (Wolfgang Wetterling) **58** #15244 90D25
- (with Bacopoulos, A.; Godini, G.) Infima of sets in the plane and applications to vectorial optimization. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 3, 343-360. (P. L. Yu) **58** #13703 65K05
- Singer, Ivan J. Positiveness of the reproducing kernel in the space $PD(R)$. *Nagoya Math. J.* **48** (1972), 67-72. (W. H. Ow) **47** #8842 30A52
- Dirichlet finite solutions of $\Delta u = Pu$. *Proc. Amer. Math. Soc.* **32** (1972), 464-468. (Y. K. Kwon) **49** #9191 30A48
- Boundary isomorphism between Dirichlet finite solutions of $\Delta u = Pu$ and harmonic functions. *Nagoya Math. J.* **50** (1973), 7-20. (Y. Kusunoki) **47** #8841 30A48
- Singer, Michael A product theorem for lattices over orders. *Math. Scand.* **29** (1971), 50-54. (Melvin Hochster) **47** #206 13C10
- Extensions of self-dual orders. *Proc. Cambridge Philos. Soc.* **70** (1971), 5-7. (K. W. Roggenkamp) **45** #256 13H10
- An elementary proof of the invertible powers theorem. *Proc. Cambridge Philos. Soc.* **73** (1973), 289-291. (R. M. Fossum) **47** #198 13A15
- On the graded ring associated with an integral group ring. *Comm. Algebra* **3** (1975), no. 11, 1037-1049. (I. B. S. Passi) **52** #5781 20C05
- Determination of the augmentation terminal for all finite abelian groups of exponent 4. *Comm. Algebra* **4** (1976), no. 7, 639-645. (I. B. S. Passi) **53** #13371 20C05
- On the augmentation terminal of a finite Abelian group. *J. Algebra* **41** (1976), no. 1, 196-201. (Donald S. Passman) **53** #13294 16A26
- One parameter subgroups and nonstandard analysis. *Manuscripta Math.* **18** (1976), no. 1, 1-13. (Labib Haddad) **53** #700 22D05 (02H25)
- Determination of the augmentation terminal for finite abelian groups. *Bull. Amer. Math. Soc.* **83** (1977), no. 6, 1321-1322. (Donald S. Passman) **56** #5636 16A26
- (with Ford, David) Relations in $Q_n(Z_n \times Z_n)$ and $Q_n(Z_n \times Z_n)$. *Comm. Algebra* **5** (1977), no. 1, 83-86. (Donald S. Passman) **54** #12874 20C05
- Determination of the augmentation terminal for all finite abelian groups of exponent 8. *Comm. Algebra* **5** (1977), no. 1, 87-100. (I. B. S. Passi) **55** #3050 20C05

- Principal lattices over commutative orders. *J. Pure Appl. Algebra* **11** (1977/78), no. 1-3, 243-244. (L. A. Koifman) **58** #767 16A18 (16-04)
- Singer, Michael F.** Elementary solutions of differential equations. *Pacific J. Math.* **59** (1975), no. 2, 535-547. (Peter Blum) **52** #10704 12H05
- Solutions of linear differential equations in function fields of one variable. *Proc. Amer. Math. Soc.* **54** (1976), 69-72. (K. Okugawa) **52** #8103 12H05
- (with Rosenlicht, Maxwell) On elementary, generalized elementary, and Liouvillian extension fields. *Contributions to algebra (collection of papers dedicated to Ellis Kolchin)*, pp. 329-342. Academic Press, New York, 1977. (R. Cohn) **57** #5976 12H05
- Functions satisfying elementary relations. *Trans. Amer. Math. Soc.* **227** (1977), 185-206. (Author's summary and introduction) **58** #27930 12H05
- A class of differential fields with minimal differential closures. *Proc. Amer. Math. Soc.* **69** (1978), no. 2, 319-322. (Carol Wood) **57** #5737 02H13 (12H05)
- Singer, Robert A.** (with Sea, Ronald G.) Addition to "Increasing the computational efficiency of discrete Kalman filters" (IEEE Trans. Automatic Control **AC-16** (1971), 254-257). *IEEE Trans. Automatic Control* **AC-17** (1972), 180. (Editors) **49** #4629 93E10 (94A05)
- (with Sea, Ronald G.) New results in optimizing surveillance system tracking and data correlation performance in dense multitarget environments. *IEEE Trans. Automatic Control* **AC-18** (1973), 571-582. (S. G. Tzafestas) **54** #4793 93E10
- See also **System sensitivity analysis**, **52** #12863
- Singer, Seymour** The singular Cauchy problem for a non-linear hyperbolic equation. *Ann. Mat. Pura Appl.* (4) **89** (1971), 1-29. (J. Smoller) **46** #7724 35L60
- Singer, William M.** Extension theory for connected Hopf algebras. *J. Algebra* **21** (1972), 1-16. (R. G. Larson) **47** #8597 16A24
- Steenrod squares in spectral sequences. I, II. *Trans. Amer. Math. Soc.* **175** (1973), 327-336; *ibid.* **175** (1973), 337-353. (A. H. Clark) **47** #7739 55G10
- Squaring operations and the algebraic EHP sequence. *J. Pure Appl. Algebra* **6** (1975), 13-29. (Donald M. Davis) **54** #3699 55G10
- The algebraic EHP sequence. *Trans. Amer. Math. Soc.* **201** (1975), 367-382. (Harold Hastings) **52** #6720 55H15 (18G15, 55E35)
- Iterated loop functors and the homology of the Steenrod algebra. *Bull. Amer. Math. Soc.* **82** (1976), no. 2, 290-292. (Donald M. Davis) **53** #1581 55D35 (18G35)
- The construction of certain algebras over the Steenrod algebra. *J. Pure Appl. Algebra* **11** (1977/78), no. 1-3, 53-59. (Tetsuya Aikawa) **57** #7598 55G10
- Iterated loop functors and the homology of the Steenrod algebra. *J. Pure Appl. Algebra* **11** (1977/78), no. 1-3, 83-101. (J. P. May) **57** #17644 55H15
- Singerman, David** Automorphisms of compact non-orientable Riemann surfaces. *Glasgow Math. J.* **12** (1971), 50-59. (J. Lewittes) **45** #5347 30A46
- Finitely maximal Fuchsian groups. *J. London Math. Soc.* (2) **6** (1972), 29-38. (A. M. Macbeath) **48** #529 30A58
- Symmetries of Riemann surfaces with large automorphism group. *Math. Ann.* **210** (1974), 17-32. (William Harvey) **50** #13505 30A58
- On the structure of non-Euclidean crystallographic groups. *Proc. Cambridge Philos. Soc.* **76** (1974), 233-240. (F. A. Sherk) **50** #501 20H15
- (with Macbeath, A. M.) Spaces of subgroups and Teichmüller space. *Proc. London Math. Soc.* (3) **31** (1975), no. 2, 211-256. (William Abikoff) **53** #882 32G15 (22E40, 30A58)
- Automorphisms of maps, permutation groups and Riemann surfaces. *Bull. London Math. Soc.* **8** (1976), no. 1, 65-68. (Norman Biggs) **52** #14019 20B25
- (with Jones, Gareth A.) Theory of maps on orientable surfaces. *Proc. London Math. Soc.* (3) **37** (1978), no. 2, 273-307. (M. L. Marx) **58** #21744 05C10 (30A46, 55A10)
- satyabanta Singh, A.** See **Satyabanta Singh, A.**
- Singh, Amar Jit** (with Esogube, Augustine M. O.) Reduction of dimensionality in dynamic programming revisited: a comparative study and analysis of three algorithms. *Opsearch* **12** (1975), no. 3-4, 59-79. (From the authors' summary) **55** #8935 49D20
- Singh, Avinash C.** (with Žurbenko, I. G.) The power of the optimal asymptotic tests of composite statistical hypotheses. *Proc. Nat. Acad. Sci. U.S.A.* **72** (1975), 577-580. (S. John) **50** #15091 62F05
- Singh, Avtar** (with Dhaliwal, Ranjit S.) Two diametral cracks in a circular disc. *Indian J. Pure Appl. Math.* **9** (1978), no. 4, 343-357. (S. N. Murthy) **58** #14173 73.45
- Singh, Awadhesh Kumar** (with Singh, Uday Pratap) On Kaehlerian conharmonic recurrent and Kaehlerian conharmonic symmetric spaces. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **62** (1977), no. 2, 173-179. (K. Yano) **58** #24100 53B35
- (with Lal, Shiva Narain) An analogue of Banach's contraction principle for 2-metric spaces. *Bull. Austral. Math. Soc.* **18** (1978), no. 1, 137-143. (Kok-Keong Tan) **58** #31029 54H25
- (with Singh, Uday Pratap) Curvature collineations in a recurrent Riemannian space. *J. Math. Phys. Sci.* **12** (1978), no. 4, 307-313. (P. Stavre) **58** #12780 53B20
- (with Singh, Uday Pratap) Theory of Lie-derivatives and motions in Hermitian spaces. *J. Math. Phys. Sci.* **12** (1978), no. 4, 315-324. (T. Suguri) **58** #12799 53B35
- Singh, B.** See **Singh, Baldev**
- Singh, B.** See **Singh, Bhagat**
- Singh, B. M.** Triple equations involving Fourier-Bessel series. *Indian J. Engrg. Math.* **2** (1969), no. 1, 38-45. (T. Erber) **48** #2698 45F10
- On a mixed boundary value problem in electrostatics. *J. Mathematical and Physical Sci.* **5** (1971), 239-248. (Y. Hayashi) **45** #8142 78.45
- A formal solution of dual integral equations. *Labdev—J. Sci. Tech. Part A* **9** (1971), 20-23. (S. L. Kalla) **46** #5966 45F05
- Triple integral equations involving inverse Mellin transforms. *Defence Sci. J.* **22** (1972), 153-158. (S. Masood) **47** #2293 45F05
- (with Dange, A. V.) On four integral equations involving Legendre functions of imaginary argument. *Math. Education* **6** (1972), A23-A28. (R. G. Buschman) **45** #5685 45H05
- (with Machwe, V. G.) On the mixed boundary value problem of steady state heat conduction in a domain formed by cementing two-plano-convex solids. *Defence Sci. J.* **23** (1973), 1-10. (Authors' summary) **48** #5517 80.45
- On triple trigonometrical equations. *Glasgow Math. J.* **14** (1973), 174-178. (K. N. Srivastava) **48** #6849 45F10
- (with Gupta, P. M.) Electrostatic field of two parallel coplanar condensers. *Indian J. Pure Appl. Math.* **5** (1974), no. 2, 119-127. (K. N. Srivastava) **51** #14756 78.45
- (with Gupta, P. M.) On triple equations involving Fourier Bessel series. *Indian J. Pure Appl. Math.* **5** (1974), no. 9, 775-784. (S. L. Kalla) **55** #1008 45F10
- Quadruple integral equations involving inverse Mellin transforms. *Z. Angew. Math. Mech.* **54** (1974), 201-203. (R. P. Srivastav) **50** #10723 45F10
- The solution of quadruple integral equations involving modified Hankel functions. *Z. Angew. Math. Mech.* **54** (1974), 439-441. (S. L. Kalla) **50** #10724 45F10
- On mixed boundary value problem in electrostatics. *Indian J. Pure Appl. Math.* (1975), no. 2, 166-176. (S. Kaliski) **55** #4952 78.65
- Quadruple trigonometrical integral equations and their application to electrostatics. *J. Mathematical and Physical Sci.* **9** (1975), no. 5, 459-469. (K. N. Srivastava) **55** #3349 45F10 (78.45)
- On series equation and its application to elasticity. *Labdev—J. Sci. Tech. Part A* (1975), no. 1-2, 48-55. (I. M. Longman) **54** #1774 73.33
- A short note on triple trigonometrical integral equations. *Z. Angew. Math. Mech.* (1976), no. 1, 59. (S. L. Kalla) **54** #3325 45F10
- (with Jain, R. K.) A short note on quadruple integral equations and its application to steady-state heat conduction problem. *Z. Angew. Math. Mech.* **56** (1976), no. 118-120. (S. L. Kalla) **54** #3324 45F10
- (with Dubey, G. K.; Srivastava, D. N.) The solution of quadruple trigonometric integral equations and their application to a crack problem. *Indian J. Pure Appl. Math.* **8** (1977), no. 10, 1145-1156. (Editors) **58** #29924 45F10
- (with Dhaliwal, Ranjit S.) Two coplanar Griffith cracks in an infinite elastic layer under torsion. *J. Engrg. Math.* **11** (1977), no. 4, 337-347. (Alok Nath Chakrabarti) **58** #8676 73.44
- Singh, Bahadur** (with Sedransk, Joseph) Sample size allocation in two-phase sampling. *Comm. Statist.* **3** (1974), 1025-1040. (Jean Larisse) **51** #4489 62D05
- (with Sedransk, Joseph) The preposterior distribution of the inverse of a sum of two cross-product matrices. *Biometrika* **64** (1977), no. 3, 649-651. (W. E. Strawderman) **58** #3198 62H10
- Singh, Baldev** (with Pande, H. D.) On projective recurrent Finsler spaces of the first order. *Rend. Accad. Naz. XL (4)* **24/25** (1973/74), 275-280 (1975). (M. Yoshida) **57** #7439 53B40
- (with Pande, H. D.) Recurrent Finsler spaces with pseudo projective tensor field. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 1-2, 70-79 (1975). (J. K. Beem) **53** #3936 53B40
- (with Pande, H. D.) The special infinitesimal projective transformation in an n -dimensional special Kawaguchi space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 6, 570-575 (1975). (T. N. Srivastava) **54** #8506 53B40
- (with Pande, H. D.) ★An W_n^1 recurrent Finsler space. *Progr. Math.* **8** (1974), no. 1, 41-46. (S. Gofarb) **51** #6643 53B40
- (with Pande, H. D.) On a special Kawaguchi space with recurrent tensor field. *Acta Ci. Indica* **3**, no. 1, 73-78 (1977). (H. S. P. Grässer) **57** #1333 53B40
- (with Pande, H. D.) On existence of the affinely connected Finsler space with recurrent tensor fields. *Indian J. Pure Appl. Math.* **8** (1977), no. 3, 295-301. (M. Run) **57** #1336 53B40
- Singh, Balvir** (with Ullah, Aman) Estimation of seemingly unrelated regressions with random coefficients. *J. Amer. Statist. Assoc.* **69** (1974), 191-195. (Bhagwandass) **51** #14443 62J05 (62P20)
- (with Nagar, Anirudh L.; Choudhry, N. K.; Raj, Baldev) On the estimation structural change: a generalization of the random coefficients regression model. *Internat. Econom. Rev.* **17** (1976), no. 2, 340-361. (P. Fortunati) **54** #9033 62P20
- (with Ullah, Aman) The consumption function: the permanent income versus the habit persistence hypothesis. *Rev. Econom. Statist.* **58** (1976), no. 1, 96-103. (Anjum Mukherji) **56** #14608 90A15
- Singh, Balwant** Effect of a permissible blowing-up on the local Hilbert functions. *Invent. Math.* **26** (1974), 201-212. (Bernard Teissier) **50** #4584 14E15
- On the group of automorphisms of function field of genus at least two. *J. Pure Appl. Algebra* **4** (1974), 205-229. (P. Roquette) **50** #13047 14H05 (12A90)
- A numerical criterion for the permissibility of a blowing-up. *Compositio Math.* (1976), no. 1, 15-28. (José M. Aroca) **54** #7456 14B05
- (with Abhyankar, Shreeram Shankar) Embeddings of certain curves in the affine plane. *Amer. J. Math.* **100** (1978), no. 1, 99-175. (A. A. Iarrobino, Jr.) **58** #16663 14E25 (14H99)
- Singh, Bani** (with Lal, Jia) Magnetohydrodynamic axial flow in a triangular pipe under transverse magnetic field. *Indian J. Pure Appl. Math.* **9** (1978), no. 2, 101-115. (J. Colonias) **57** #8446 76.65
- Singh, Bhagat** Certain self-reciprocal functions. *Univ. Rajasthan Studies Math.* **19** 13-22. (C. Fox) **48** #2674 44A05
- (with Dahiya, R. S.) The generalized Erdélyi-Kober operators and self-reciprocal functions relating to $x_{\rho, k, m}(x)$. *Bull. Math. Soc. Sci. Math. R.S. Roumanie (N.S.)* **14**(6) (1970), 139-145 (1971). (K. Karpov (RZMat 1972 #5 B28)) **52** #1181 44A15
- (with Mainra, V. P.) On the asymptotic expansion of $\tilde{\omega}_{\mu, \nu}(x)$. *J. Birla Inst. Tech. and Sci.* **2** (1970), 64-70. (M. E. Muldoon) **51** #5996 33A40 (41A60)
- (with Dahiya, R. S.) Fourier series of Meijer's G -function of higher order. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sec. I a Mat. (N.S.)* **17** (1971), 111-116. (C. L. Parihar) **46** #5690 33A35
- (with Dahiya, R. S.) On Hankel transformation involving hypergeometric function. *Bull. Math. Soc. Sci. Math. R.S. Roumanie (N.S.)* **15**(63) (1971), no. 3, 271-275 (1972). (R. K. Saxena) **51** #5985 33A35
- (with Dahiya, R. S.) Multiple integrals and Fourier series expansions associated with hypergeometric polynomials. *Bull. Soc. Math. Grèce (N.S.)* **12** (1971), no. 120-126. (B. S. Tavathia) **45** #7400 44A20
- (with Dahiya, R. S.) On Meijer's G -function. *Proc. Indian Acad. Sci. Sect. A* (1971), 167-171. (V. M. Bhise) **45** #7126 33A35
- (with Dahiya, R. S.) On certain series, integrals of products of the generalized hypergeometric polynomials and H -functions. *Acta Mexicana Ci. Tecn.* **6** (1972), 10-22. (V. M. Bhise) **48** #4360 33A30

- (with Dahiya, R. S.) Integral transforms of Bessel product functions and their integrals. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **10** (1972), 47-52. (K. Soni) **48** #6832 44A20
- (with Dahiya, R. S.) On Fox's H -function. *Indian J. Pure Appl. Math.* **3** (1972), no. 3, 493-495. (S. D. Bajpai) **46** #9404 33A35
- (with Dahiya, R. S.) Certain theorems on Watson's kernel $\tilde{\omega}_{\alpha, \beta}(x)$. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **25** (1972), no. 2, 13-21. (E. L. Koh) **50** #14083 44A15
- (with Dahiya, R. S.) On trigonometrical series of Kampé de Fériet's double hypergeometric function of higher order. *Kyungpook Math. J.* **12** (1972), 267-271. (C. L. Parihar) **47** #8915 33A30
- (with Dahiya, R. S.) On Laplace and Hankel transformation. *Bull. Soc. Math. Grèce (N.S.)* **14** (1973), 152-156. (V. P. Mainra) **50** #14082 44A15
- A necessary and sufficient condition for the oscillation of an even order nonlinear delay differential equation. *Canad. J. Math.* **25** (1973), 1078-1089. (J. S. Bradley) **48** #9043 34K15
- On the oscillation of certain second-order non-linear delay equation. *Indian J. Pure Appl. Math.* **4** (1973), 782-797. (N. Onuchic) **50** #2649 34K15
- (with Dahiya, R. S.) Comparative oscillation of non-homogeneous even order delay differential equations. *Indian J. Pure Appl. Math.* **4** (1973), no. 4, 374-378. (V. Staikos) **48** #9041 34K15
- (with Dahiya, R. S.) On oscillatory behavior of even order delay equations. *J. Math. Anal. Appl.* **42** (1973), 183-190. (H. E. Gollwitzer) **48** #2524 34K15
- (with Dahiya, R. S.) A Lyapunov inequality and nonoscillation theorem for a second order non-linear differential-difference equation. *J. Mathematical and Physical Sci.* **7** (1973), 163-170. (S. P. Hastings) **50** #2644 34K15
- Oscillation and nonoscillation of even-order nonlinear delay-differential equations. *Quart. Appl. Math.* **31** (1973), 343-349. (Erwin Kozakiewicz) **55** #8516 34K15
- Certain recurrence relations for the G -function. (Spanish) *República. Venezuela Bol. Acad. Ci. Fis. Mat. Natur.* **33** (1973), no. 98, 89-92. (Editors) **53** #8523 33A35
- Certain recurrence relations for the G -function. *República. Venezuela Bol. Acad. Ci. Fis. Mat. Natur.* **33** (1973), no. 98, 93-96. (R. K. Saxena) **54** #622 33A35
- A note on fractional integration. (Spanish) *República. Venezuela Bol. Acad. Ci. Fis. Mat. Natur.* **33** (1973), no. 100, 91-93. (Editors) **52** #11493 44A15 (26A33)
- A note on fractional integration. *República. Venezuela Bol. Acad. Ci. Fis. Mat. Natur.* **33** (1973), no. 100, 95-97. (Editors) **52** #11492 44A15 (26A33)
- (with Dahiya, R. S.) On Stieltjes transformation. *Tamkang J. Math.* **4** (1973), 15-17. (L. Debnath) **49** #1019 44A15
- (with Dahiya, R. S.) Nonoscillation of third order retarded equations. *Bull. Austral. Math. Soc.* **10** (1974), 9-14. (V. Staikos) **49** #9372 34K15
- (with Dahiya, R. S.) On the asymptotic properties of non-linear differential-difference equations. *Indian J. Pure Appl. Math.* **5** (1974), no. 3, 254-257. (H. A. DeKleine) **51** #13354 34C10 (34K15)
- (with Dahiya, R. S.) On oscillation of second-order retarded equations. *J. Math. Anal. Appl.* **47** (1974), 504-512. (J. K. Hale) **50** #7745 34K15
- (with Dahiya, R. S.) On the oscillation of a second-order delay equation. *J. Math. Anal. Appl.* **48** (1974), 610-617. (J. S. Bradley) **50** #7738 34K15
- Comparative study of asymptotic nonoscillation and quick oscillation of second order linear differential equations. *J. Mathematical and Physical Sci.* **8** (1974), 363-376. (Stanley B. Eliason) **55** #3424 34C10
- (with Dahiya, R. S.) On some results involving generalized hypergeometric polynomials. *Portugal. Math.* **33** (1974), 101-107. (F. Götzte) **48** #8864 33A30
- On fourth order retarded differential equations and their forced non-oscillations. *Tamkang J. Math.* **5** (1974), 203-211. (R. E. Fennell) **50** #13820 34K15
- Some theorems on Stieltjes's transform and k -transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), no. 3, 171-175. (K. M. Saxena) **55** #3690 44A15
- Comparison theorems for even order differential delay equations. *Bull. Calcutta Math. Soc.* **67** (1975), no. 1, 23-28. (A. Elbert) **53** #11193 34K15
- Damp nonoscillation in third order retarded equations. *Funkcial. Ekvac.* **18** (1975), no. 1, 5-13. (R. E. Fennell) **52** #14552 34K20
- (with Dahiya, R. S.) Certain results on nonoscillation and asymptotic nature on delay equations. *Hiroshima Math. J.* **5** (1975), 7-15. (R. B. Grafton) **51** #3646 34K15
- Impact of delays on oscillation in general functional equations. *Hiroshima Math. J.* **5** (1975), no. 3, 351-361. (J. S. Papadakis) **54** #10808 34K15
- On the nonoscillation of integro-differential difference equation of first order. *J. Mathematical and Physical Sci.* **9** (1975), no. 5, 423-440. (John M. Bownds) **55** #6152 45J05
- Nonoscillation of forced fourth order retarded equations. *SIAM J. Appl. Math.* **28** (1975), 265-269. (N. Onuchic) **50** #13821 34K15
- Asymptotic nature of nonoscillatory solutions of n th order retarded differential equations. *SIAM J. Math. Anal.* **6** (1975), no. 5, 784-795. (A. F. Izé) **55** #3479 34K15
- Forced oscillations in general ordinary differential equations. *Tamkang J. Math.* **6** (1975), 5-11. (V. Staikos) **51** #8544 34C10
- Relations between $mF_n(1)$ series. *Tamkang J. Math.* **6** (1975), no. 2, 121-130. (M. Nassif) **54** #7890 33A30
- (with Arora, J. L.) A system of linear equations, and their solution. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 4, 487-492, 573. (R. C. Thompson) **52** #3186 15A06
- Eventually vanishing oscillatory solutions of second order retarded equations. *Bull. Calcutta Math. Soc.* **68** (1976), no. 1, 25-29. (R. D. Driver) **58** #29016 34K15
- (with Dahiya, R. S.) On the nonoscillation of Lienard type retarded equations. *Funkcial. Ekvac.* **19** (1976), no. 1, 11-18. (Curtis C. Travis) **54** #5589 34K15
- Forced nonoscillations in fourth order functional equations. *Funkcial. Ekvac.* **19** (1976), no. 3, 227-237. (K. Schmitt) **55** #8517 34K15
- Forced oscillations in general ordinary differential equations with deviating arguments. *Hiroshima Math. J.* **6** (1976), no. 1, 7-14. (K. Zima) **53** #6054 34K15
- (with Yadava, S. R.) On generalized convolution transform in two variables. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **29** (1976), no. 2, 51-71. (S. D. Bajpai)
- 58** #2045 44A10
- Asymptotic nonoscillations in fourth order retarded differential equations. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 53-67 (1977). (István Györi) **56** #12506 34K15
- Asymptotically vanishing oscillatory trajectories in second order retarded equations. *SIAM J. Math. Anal.* **7** (1976), no. 1, 37-44. (W. J. Coles) **54** #13264 34K15
- General functional differential equations and their asymptotic oscillatory behavior. *Yokohama Math. J.* **24** (1976), no. 1-2, 125-132. (Hans-Otto Walther) **54** #13265 34K15
- Vanishing nonoscillations of Lienard type retarded equations. *Hiroshima Math. J.* **7** (1977), no. 1, 1-8. (V. Staikos) **55** #3480 34K15
- Forced nonoscillations in second order functional equations. *Hiroshima Math. J.* **7** (1977), no. 3, 657-665. (From the introduction) **58** #17425 34K15
- Singh, Bijai** (with Sharma, Rishi Ram; Sharma, V. D.) Some generalised integrals involving elliptic function with application to astrophysics. *J. Sci. Res. Banaras Hindu Univ.* **23** (1972/73), no. 2, 9-14. (Authors' summary) **55** #3347 33A25
- Singh, Bijendra** (with Sharma, P. L.; Jaiswal, Anuradha) Weakly N -almost periodic functions. *Math. Japon.* **19** (1974), no. 3, 263-266. (H. Burkili) **55** #3677 42A84
- (with Sharma, P. L.; Jaiswal, Anuradha) A note on almost periodic functions. *Math. Japon.* **19** (1974), no. 3, 279-282. (A. Precupanu) **53** #8800 43A60
- (with Sharma, P. L.; Jaiswal, Anuradha) Semifield valued almost periodic functions on groups. Collection of articles dedicated to Tatsujiro Shimizu on the occasion of his 77th birthday. *Math. Japon.* **20** (1975), special issue, 25-32. (J. W. Baker) **53** #6242 43A60
- (with Sharma, P. L.; Jaiswal, Anuradha) An integral of Cesaro-Perron type. *Math. Japon.* **20** (1975), no. 1, 107-111. (Peter Bullen) **52** #8352 26A39
- (with Jaiswal, Anuradha) On approximation problem in non-Archimedean quasi-normed spaces. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 1, paper no. XV, 2 pp. (I. Namioka) **55** #1045 46B99
- (with Jaiswal, Anuradha) The Hahn-Banach extension theorem in normed linear spaces over topological semifield. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 1, paper no. XVI, 3 pp. (I. Namioka) **54** #898 46B05 (46A99)
- (with Jaiswal, Anuradha) A generalisation of Iséki's fixed point theorem. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 2, paper no. XXV, 2 pp. (S. P. Singh) **53** #6371 47H10
- (with Jaiswal, Anuradha) A common fixed points of mappings. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 2, paper no. XXVI, 3 pp. (I. Namioka) **54** #1195 54H25
- (with Jaiswal, Anuradha) Nonstandard analysis of weakly almost periodic functions. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 2, paper no. XXXIII, 4 pp. (L. D. Kugler) **54** #850 42A84
- (with Jaiswal, Anuradha) Semifield metrizable. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 2, paper no. XXIV, 4 pp. (Haskell Cohen) **54** #6096 54E99 (22A99)
- (with Iséki, Kiyoshi; Jaiswal, Anuradha) Non-Archimedean Banach space valued almost periodic functions. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 2, paper no. XXXIV, 10 pp. (A. C. M. van Rooij) **53** #14026 43A60
- (with Jaiswal, Anuradha) Fixed point theorem in metric space over topological semifields. *Math. Japon.* **21** (1976), no. 2, 187-195. (I. A. Rus) **55** #1339 54H25
- (with Tripathi, C. L.) Summability in topological semifield. I. *Tamkang J. Math.* **7** (1976), no. 2, 151-156. (Zbl 379 #40014) **58** #30060 46A99
- (with Tripathi, C. L.) Summability in topological semifield. II. *Tamkang J. Math.* **8** (1977), no. 1, 1-9. (Zbl 388 #40009) **58** #30061 46A99
- Singh, Carol** Two inversion integrals. *Riv. Mat. Univ. Parma* (2) **11** (1970), 165-168. (U. C. Jain) **48** #2687 44A20
- An integral equation with Jacobi polynomial in the kernel. *Riv. Mat. Univ. Parma* (2) **11** (1970), 313-316. (K. N. Srivastava) **47** #744 45H05 (44A15)
- An inversion integral for a Whittaker transform. *Riv. Mat. Univ. Parma* (2) **11** (1970), 277-280. (K. N. Srivastava) **47** #743 45H05 (26A33, 44A15)
- On a class of integral equations. *Riv. Mat. Univ. Parma* (4) **1** (1975), 1-7. (K. N. Srivastava) **56** #993 45E10
- On the behaviour of failure frequency bounds. *IEEE Trans. Reliab.* **R-26** (1977), no. 1, 63-66. (William E. Thompson) **55** #6753 62N05
- Sufficient optimality criteria in nonlinear programming for generalized equality-inequality constraints. *J. Optimization Theory Appl.* **22** (1977), no. 4, 631-635. (R. L. Graves) **56** #10983 90C30
- Singh, Chanan** (with Billinton, Roy) Frequency and duration concepts in system reliability evaluation. *IEEE Trans. Reliab.* **R-24** (1975), no. 1, 31-36. (R. Subramanian) **55** #12021 90B25
- Singh, Chanchal** (with Farr, William H.) Saddle-point optimality criteria of continuous time programming without differentiability. *J. Math. Anal. Appl.* **59** (1977), no. 3, 442-453. (Robert A. Abrams) **56** #4849 90C30
- A sufficient optimality criterion in continuous time programming for generalized convex functions. *J. Math. Anal. Appl.* **62** (1978), no. 3, 506-511. (Nagata Furukawa) **58** #20439 90C25 (49B15)
- Saddlepoint of continuous time programming having inequality and equality constraints. *J. Math. Anal. Appl.* **64** (1978), no. 2, 354-359. (From the introduction) **58** #4303 90C05
- Singh, D. M.** On isotropic areal spaces of the submetric class. *Bull. Calcutta Math. Soc.* **66** (1974), 9-11. (S. Kawaguchi) **51** #11333 53B40
- Singh, D. N.** (with Singh, K. P.) Petrov classification of the cylindrically symmetric gravitational field. *J. Phys. A* **2** (1969), 28-33. (M. Carmeli) **47** #2970 83J53
- Singh, Daroga** (with Singh, Padam) New systematic sampling. *J. Stat. Plann. Inference* **1** (1977), no. 2, 163-177. (David Bellhouse) **58** #13447 62D05
- Singh, Darshan** Some properties of totally geodesic, geodesically parallel hypersurfaces of a Riemannian space. *Vidya* **11** (1968), no. 2, 133-136. (A. P. Stone) **46** #2589 53B25
- Interior space. *Vidya* **11** (1968), no. 2, 182-189. (C. W. Patty) **45** #9278 54A05
- Use of boundary and exterior operations to define a topology on a non-null set. *Vidya* (1971), no. 2, 46-55. (W. J. Pervin) **48** #1129 54A05
- Basic topological space. *Vidya B* **16** (1973), no. 1, 72-76. (Not reviewed) **54A05**
- (with Patel, L. K.) Lid space. *Vidya B* **16** (1973), no. 2, 65-70. (Authors' summary) **58** #24160 54A05 (54B17)

- (with Patel, L. K.) Generalized closed sets and ultracompact spaces. *Vidya B* 17 (1974), no. 1, 80-84. (Authors' summary) 58 #24185 54D10
- (with Patel, L. K.) Some results related to the modules P^n and H^n . *Vidya B* 17 (1974), no. 2, 128-133. (Authors' summary) 57 #12886 32-01
- Singh, Dasharath** On Ackermann's theory of sets. *Notre Dame J. Formal Logic* 18 (1977), no. 4, 591-595. (Zbl 332 #02065) 58 #21614 02K10
- Singh, Didar** On four-part mixed boundary value problem of elasticity. *Indian J. Pure Appl. Math.* 6 (1975), no. 6, 597-603. (Author's summary) 58 #25283 73.45 (45F10)
- Singh, Dinesh** (with Shrivastava, B. M.) On some results involving the products of generalized hypergeometric functions. *Vidya B* 16 (1973), no. 1, 60-69. (From the introduction) 58 #1298 33A30
- (with Mishra, Babban Prasad) Summability factor on Abel type methods. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 57 (1974), no. 6, 506-510 (1975). (Kazuo Ishiguro) 58 #1823 40G10
- (with Mishra, Babban Prasad) Summability factors on (A, λ) methods. *Univ. Nac. Tucumán Rev. Ser. A* 25 (1975), no. 1-2, 131-134 (1976). (S. M. Mazhar) 54 #13371 40G99
- (with Mishra, Babban Prasad) Note on a theorem of Bosanquet. *Acta Math. Acad. Sci. Hungar.* 28 (1976), no. 3-4, 225-229. (D. C. Russell) 54 #10920 40D05
- (with Mishra, Babban Prasad) Some theorems on Abel type summability methods. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 60 (1976), no. 3, 219-223. (J. Mařík) 57 #3689 40G99
- (with Mishra, Babban Prasad) Some Tauberian theorems on A_λ summability methods of integrals. *Mat. Vesnik* 13(28) (1976), no. 3, 295-303. (Amnon Jakimovski) 57 #6942 40E05
- Singh, Fateh** Certain integrals involving H -function. *Indian J. Math.* 12 (1970), 67-73. (C. L. Parihar) 46 #2111 33A35
- Expansion formulae for Kampé de Fériet and radial wave functions and heat conduction. *Defence Sci. J.* 21 (1971), 265-272. (B. R. Bhonsle) 46 #2098 33A30 (81.35)
- Application of E -operator to evaluate a definite integral. *J. Indian Math. Soc. (N.S.)* 35 (1971), 217-225 (1972). (C. M. Joshi) 47 #514 33A30
- Application of E -operator in evaluating certain finite integrals. *Defence Sci. J.* 22 (1972), 105-112. (R. G. Buschman) 47 #3718 33A35
- Use of special functions in the production of heat in a cylinder. *Defence Sci. J.* 22 (1972), 215-220. (S. D. Bajpai) 47 #3837 35K05 (33A30)
- (with Sharma, L. K.) Coulomb wave functions in terms of Jacobi polynomial and generalized confluent hypergeometric functions. *Indian J. Pure Appl. Math.* 3 (1972), no. 1, 142-147. (Mary L. Boas) 45 #8890 33A60
- (with Varma, R. C.) Application of E -operator to evaluate a definite integral and its application in heat conduction. *J. Indian Math. Soc. (N.S.)* 36 (1972), 325-332 (1973). (C. Fox) 48 #4365 33A35
- Some expansions for generalized G -function of two variables. *Math. Education* 6 (1972), A67-A71. (B. L. Sharma) 46 #9408 33A35
- Integration of certain products involving H -function and double hypergeometric function. II. *Math. Student* 40A (1972), 47-55. (H. M. Srivastava) 56 #5961 33A30
- On some results associated with a generalised Meijer function. *Math. Student* 40A (1972), 291-296. (V. M. Bhise) 48 #11598 33A35
- Some integrals involving the product of the H -functions and the double hypergeometric function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 15 (1972), 171-176. (H. M. Srivastava) 47 #8928 33A35
- (with Shrivastava, B. M.) A generalized integral transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 16 (1973), 139-146. (R. S. Dahiya) 51 #8759 44A30
- (with Shrivastava, B. M.) Some bilinear and bilateral generating relations involving hypergeometric functions of three variables. *Jñānabha Sect. A* 4 (1974), 111-118. (C. M. Joshi) 52 #3624 33A30
- (with Shrivastava, B. M.) On some new generating relations. *Ranchi Univ. Math. J.* 5 (1974), 60-66. (H. L. Manocha) 56 #702 33A40
- (with Singh, Nam Prasad) Evaluation of an integral involving generalised Fox's H -function and generalised Legendre associated function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 17 (1974), 71-80. (S. D. Bajpai) 50 #10358 33A35
- Application of E -operator to evaluate an infinite integral and free oscillation of water in a lake. *Math. Education* 9 (1975), A7-A12. (S. E. Bajpai) 51 #10713 33A35
- (with Shrivastava, B. M.) On some integral relations of Fox's H -function with applications. *Ranchi Univ. Math. J.* 6 (1975), 48-53. (R. C. Varma) 57 #12937 33A35
- (with Shrivastava, B. M.) Applications of Jacobi polynomials to a non-linear differential equation associated with the H -function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 19 (1976), no. 1, 25-34. (H. M. Srivastava) 55 #734 33A35
- (with Shrivastava, B. M.) Some Neumann expansions for Meijer's G -function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 19 (1976), no. 1, 93-96. (P. N. Rathie) 54 #13172 33A35
- Singh, Gurdial** (with Kokotović, Petar V.) Optimization of coupled non-linear systems. *Internat. J. Control* (1) 14 (1971), 51-64. (Norman P. Coleman, Jr.) 46 #8708 93C10 (34H05, 65K05)
- Singh, Harpreet** (with Puri, Satish; Lal, Mohan) Transformation of time-varying autonomous systems to companion form. *Electron. Lett.* 10 (1974), 24. (Not reviewed) 93C50
- (with Lal, Manohar) Improved algorithm for state-space synthesis. *Electron. Lett.* 10 (1974), 268. (Authors' summary) 56 #14892 93B15 (93B20)
- (with Parthasarathy, R.) On continued fraction inversion by Routh's algorithm. *IEEE Trans. Automatic Control* AC-20 (1975), 278-279. (Authors' summary) 56 #1669 65D15
- (with Kamal, A. K.; Puri, Satish; Nanda, N. K.) On the evaluation of transition matrices in finite fields. *Internat. J. Systems Sci.* 6 (1975), 561-564. (Authors' summary) 51 #7751 94A25
- (with Parthasarathy, R.) Inversion of matrix continued fraction by matrix Routh array. *IEEE Trans. Automatic Control* AC-21 (1976), no. 2, 283-284. (Thomas A. Atchison) 57 #11000 65D20
- (with Parthasarathy, R.) On continued fraction inversion by Routh's algorithm. *IEEE Trans. Automatic Control* AC-21 (1976), no. 3, 394. (Authors' summary) 54 #1562 65D99
- (with Sohal, J. S.) On sensitivity invariance of multi-input multi-output networks. *Proc. IEEE* 64 (1976), no. 4, 560. (Authors' summary) 56 #15215 94A20
- (with Gargash, B. C.; Mital, Dinesh P.) Comment on the paper: "Minimal realization of linear systems" (*Internat. J. Control* 23 (1976), no. 4, 575-585) by A. C. Tsoi. *Internat. J. Control* 26 (1977), no. 3, 491-492. (Editors) 57 #11846 93-04
- Singh, I. J. P.** (with Sinha, B. B.) On some H -star(*) curvature tensors in Kahler manifold. *Kyungpook Math. J.* 14 (1974), 7-14. (T. Ohkubo) 51 #1690 53C55
- (with Sinha, B. B.) On almost contact metric hypersurface of a Kahler manifold. *Proc. Indian Acad. Sci. Sect. A* 80 (1974), 282-288. (Koichi Ogiue) 51 #13904 53B35
- (with Sinha, B. B.) On H -curvature tensors in almost product and almost decomposable manifold. II. *Indian J. Pure Appl. Math.* 6 (1975), no. 4, 416-422. (T. Suguri) 56 #16532 53B35
- (with Sinha, B. B.) Generalised (f, g, u, v, λ) -structure. *Proc. Indian Acad. Sci. Sect. A* 81 (1975), 1-8. (S. Takizawa) 51 #6647 53C15
- (with Sinha, B. B.) Some properties of Sasakian manifold. *Progr. Math. (Allahabad)* 9 (1975), no. 2, 43-49. (David Blair) 58 #12837 53C25
- (with Sinha, B. B.) On an affine connection in almost contact manifold. *Indian J. Pure Appl. Math.* 7 (1976), no. 1, 1-12. (David Blair) 58 #12825 53C15
- (with Sinha, B. B.) On H -curvature tensors in almost product and almost decomposable manifold. *Indian J. Pure Appl. Math.* 7 (1976), no. 1, 28-31. (T. Suguri) 56 #16531 53B35
- (with Sinha, B. B.) On (f, g, u, v) -structure. *Indian J. Pure Appl. Math.* 7 (1976), no. 5, 490-496. (J. R. Vanstone) 58 #24114 53C15
- Singh, I. P.** (with Aggarwal, N. N.; Kulkarni, S. V.) A complex system with preemptive priority repairs and failure priority. *Pure Appl. Math. Sci.* 7 (1978), no. 1-2, 43-46. (Author's summary) 57 #2515 90B25
- Singh, Inderjit** (with Poole, George; Boullion, Thomas L.) A class of Hessenberg matrices with known pseudoinverse and Drazin inverse. *Math. Comp.* 29 (1975), 615-619. (Authors' summary) 51 #4648 65F20
- Singh, J.** (with Lele, Sheela) Asymptotic power of an ANOVA test procedure involving preliminary test of significance. *J. Sci. Res. Banaras Hindu Univ.* 21 (1970/71), no. 1-2, 31-37. (Authors' summary) 55 #4537 62J10
- (with Pandey, B. N.; Hirano, Katuomi) On the utilization of a known coefficient of kurtosis in the estimation procedure of variance. *Ann. Inst. Statist. Math.* 25 (1973), 51-55. (A. C. Cohen) 48 #9939 62F10
- (with Srivastava, S. R.) Asymptotic power and efficiency of a sometimes pool test procedure in a component of variance model. *Progr. Math. (Allahabad)* 9 (1975), no. 2, 17-21. (S. A. Hašimov) 53 #9531 62J10
- (with Bhatkulic, S. G.) Pooling two censored samples from exponential populations. *Proc. Indian Acad. Sci. Sect. A* 85 (1977), no. 5, 263-271. (T. D. Dwivedi) 56 #13432 62F10 (62F20)
- (with Pandey, B. N.) A note on estimation of variance in exponential density. *Sankhyā Ser. B* 39 (1977), no. 3, 294-298. (Authors' summary) 58 #31546 62F10
- Singh, J. M.** Complete metric space of sub- α -algebras. *Probability and information theory II*, pp. 165-180. *Lecture Notes in Math.*, Vol. 296, Springer, Berlin, 1973. (J. C. Oxtoby) 50 #14859 60A10
- Singh, J. P.** See Singh, Jodh Pal
- Singh, Jagbir** Paired comparison rankings by linear programming. *Comm. Statist.* 1 (1973) 351-364. (Herbert T. David) 53 #9535 62J15
- Estimation in a simple linear model using prior beliefs. *Canad. J. Statist.* 2 (1974) no. 2, 277-283. (Stanley L. Sclove) 53 #9522 62J05
- (with Mayer, Lawrence S.; Willke, Thomas A.) Utilizing initial estimates in estimating the coefficients in a linear model. *J. Amer. Statist. Assoc.* 69 (1974), 219-222. (B. G. Patel) 51 #11776 62F10 (62J05)
- (with Gupta, Radhey S.) Derivation of a paired comparison model. *Applied statistics (Proc. Conf., Dalhousie Univ., Halifax, N. S., 1974)*, pp. 295-300. North-Holland, Amsterdam, 1975. (Dennis O. Dixon) 56 #4068 62J15
- A note on the Stirling distribution of the second kind. *Comm. Statist.* 4 (1975), no. 8, 753-759. (Campbell B. Read) 52 #9445 62E15
- A note on paired comparison rankings. *Ann. Statist.* 4 (1976), no. 3, 651-654. (Emil Spjøtvoll) 54 #1497 62J15 (62F07)
- (with Gupta, Radhey S.) A paired comparison model allowing for ties. *Scand. J. Statist.* 5 (1978), no. 1, 65-68. (Jeffrey A. Robinson) 57 #14287 62J15
- A characterization of positive Poisson distribution and its statistical application. *SIAM J. Appl. Math.* 34 (1978), no. 3, 545-548. (V. Seshadri) 57 #10874 62E10
- Singh, Jagjit** ★Mathematical ideas: their nature and use. Reprinting of the 1959 original. Radius Book, Hutchinson, London, 1972. x + 312 pp. (Editors) 50 #1789 00A05
- Singh, Jai** On $M/M/c$ queueing system with finite number of sources. *Math. Education* 7 (1973), A70-A73. (T. L. Saaty) 48 #7419 60K25
- A note on technical obsolescence of n -machines. *Opsearch* 11 (1974), 35-41. (F. Giannessi) 50 #12206 90B25
- On multiple parallel channels with a finite source. *Jñānabha Sect. A* 5 (1975), 1-7. (From the author's summary) 57 #14186 60K25
- (with Gupta, P. M.) On $M/M/c$ queueing with finite number of sources and time dependent parameters. *Labdev—J. Sci. Tech. Part A* 13 (1975), no. 3-4, 146-150 (1978). (Authors' summary) 58 #3104 60K25
- A finite queueing system with preemptive priorities and multiserver facility. *Pure Appl. Math. Sci.* 6 (1977), no. 1-2, 43-46. (G. C. Jain) 57 #17883 60K25
- Singh, Jodh Pal** On the means of an entire function and its derivatives. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm.* Ser. A 33 (1968), 63-67 (1971). (M. E. Noble) 46 #3791 30A66
- A theorem on proximate order B of an entire function. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* 33 (1968), 111-116 (1971). (L. R. Sons) 46 #5621 30A66

- On the mean values of an entire function represented by a Dirichlet series. *Aligarh J. Math.* **1** (1971), 87-94. (R. S. L. Srivastava) **47** #2058 30A62
- Approximation of an entire function. *Yokohama Math. J.* **19** (1971), no. 2, 105-108. (S. K. Bose) **53** #8436 30A82
- On the mean values of an entire function represented by a Dirichlet series. II. (Turkish summary) *Comm. Fac. Sci. Univ. Ankara Sér. A* **22** (1973), 161-165. (R. S. L. Srivastava) **48** #11497 30A62
- A remark on a paper of Parthasarathy. *Math. Education* **7** (1973), A12. (S. K. Bose) **#6419** 30A66
- A theorem concerning the means of an entire function and its derivatives. *Gac. Mat. (Madrid)* **(1)** **26** (1974), 205-209. (O. P. Juneja) **57** #629 30A64
- Growth of geometric means of an entire function. *Publ. Math. Debrecen* **21** (1974), 1-169. (Y. Komatu) **50** #4947 30A64
- On the lower order of an entire Dirichlet series. *Proc. Amer. Math. Soc.* **52** (1975), 199-211. (C. Tanaka) **51** #10623 30A62
- On the degree of approximation of an entire function. *Comment. Math. Prace Mat.* **9** (1976), no. 1, 139-146. (S. Hellerstein) **55** #6061 41A10 (30A82)
- A growth aspect of entire functions of infinite order. *Publ. Math. Debrecen* **23** (1976), no. 3-4, 249-253. (D. Gaier) **55** #662 30A64
- (with Pathak, Ram Shankar) Unsteady flow of a dusty viscous fluid through a tube with sector of a circle as cross-section. *Indian J. Pure Appl. Math.* **8** (1977), no. 3, 314-319. (Authors' summary) **58** #19740 7635
- (with Pathak, Ram Shankar) Unsteady flow of a dusty viscous fluid through a uniform pipe with sector of a circle as cross-section. *Indian J. Pure Appl. Math.* **8** (1977), no. 6, 696-701. (Wei Lai) **58** #8753 7635
- (with K. Bidhi) A queueing system with random additional service facility. (French summary) *RAIRO Rech. Opér.* **12** (1978), no. 3, 311-318, v. (Frank A. Haight) **53** #13403 60K25
- (with K. D. (with Srivastava, Ramesh Chandra) Almost Hermitian manifolds with torsion. *Mat. Vesnik* **8(23)** (1971), 125-134. (I. Vaisman) **45** #4334 53C55
- (with Srivastava, Ramesh Chandra) R-geodesics and R-asymptotic lines. *Ann. Polon. Math.* **26** (1972), 165-173. (E. Bompiani) **46** #4415 53B25
- (with Vohra, Umesh Chandra) Some structures on an f-structure manifold. *Ann. Polon. Math.* **27** (1972/73), 85-91. (David Blair) **48** #12393 53C15
- (with Nigam, Aruna) On p-product-conformal killing tensor fields. *C. R. Acad. Bulgare Sci.* **25** (1972), 445-448. (G. D. Ludden) **46** #8128 53C20
- (with Nigam, Aruna) Contravariant almost analytic vector fields in an (f, g, u, v, λ) -structure manifold. *C. R. Acad. Bulgare Sci.* **26** (1972), 1301-1304. (A. Martinez Naveira) **49** #3757 53C15
- (with Vohra, R. K.) Linear connections in an $f(3, -1)$ -manifold. *C. R. Acad. Bulgare Sci.* **26** (1972), 1305-1307. (T. J. Willmore) **49** #3758 53C15
- (with Vohra, Umesh Chandra) Invariant submanifolds of f-structure manifold. *Univ. Lisboa Revista Fac. Ci. A* **(2)** **14**, 123-131 (1972/73). (Y. Katsurada) **49** #1415 53C15
- (with Vohra, Umesh Chandra) On some structures defined by algebraic equations. *Ann. Polon. Math.* **28** (1973), 181-188. (R. Miron) **48** #4947 53B35
- (with Nigam, Aruna) On almost decomposable vector fields. *Demonstratio Math.* **5** (1973), 69-81. (P. Stavre) **48** #2927 53B30
- (with Srivastava, Nilima) On some strictly almost analytic vector fields in a cotangent bundle. (Serbo-Croatian summary) *Glasnik Math. Ser. III* **8(28)** (1973), 31-138. (Y. Mutô) **47** #9477 53C15
- (with Srivastava, Nilima) On some strictly almost analytic vector fields in tangent bundles. *Mat. Vesnik* **10(25)** (1973), 9-18. (H. W. Guggenheimer) **48** #2935 53C15
- (with Vohra, R. K.) Integrability conditions of $(1, 1)$ tensor field f satisfying $f^2 = 0$. *Demonstratio Math.* **7** (1974), 85-92. (K. Yano) **50** #3145 53C15
- (with Srivastava, Nilima) On some f-structure manifolds with torsion. *Demonstratio Math.* **7** (1974), 183-196. (I. Vaisman) **49** #11423 53C15
- (with Srivastava, Nilima) Some almost Hermitian quaternion manifolds. *Demonstratio Math.* **7** (1974), 287-296. (A. Gray) **51** #4099 53C15
- (with Nigam, Aruna) On generalizations of product-conformal Killing vectors. *Demonstratio Math.* **7** (1974), 411-422. (K. Yano) **50** #8343 53B20
- (with Vohra, R. K.) Some linearly independent f-structures. *Ganita* **26** (1975), no. 2, 59-58. (F. Brickell) **55** #8990 53C15
- (with Vohra, R. K.) Invariant submanifolds of an $(\tilde{f}_{(1)}, \tilde{f}_{(2)})$ -manifold. *Demonstratio Math.* **9** (1976), no. 1, 65-76. (Y. Katsurada) **53** #1485 53C40
- (with Vohra, R. K.) Some almost analytic vector fields in (f, g, u, v, λ) -structure manifold. *Demonstratio Math.* **9** (1976), no. 3, 333-357. (K. Yano) **54** #13779 53C15
- (with Srivastava, Nilima) Strictly almost analytic vectors in a cotangent bundle of a manifold with a non linear connection. *Rev. Mat. Hisp.-Amer.* **(4)** **36** (1976), no. 5-6, 79-188. (Y. Mutô) **55** #4033 53C15
- (with Singh, Rakeshwar) Some $f(3, \epsilon)$ structure manifolds. *Demonstratio Math.* **10** (1977), no. 3-4, 637-645. (David Blair) **58** #18259 53C15
- (with Singh, Rakeshwar) On some (ef_1, ef_2) structure manifolds. *Demonstratio Math.* **10** (1977), no. 3-4, 663-670. (J. D. Zund) **57** #7448 53C15
- (with K. K.) Unsteady flow of a conducting dusty viscous liquid in an annulus. *Acta Ci. Indica* **3**, no. 3, 264-268 (1977). (P. D. S. Verma) **57** #2127 7635
- (with Verma, B. G.) Propagation of spherical magneto gas dynamic shock in a radiative gas. *Defence Sci. J.* **27** (1977), no. 3, 115-122. (Authors' summary) **57** #8409 7635
- (with Verma, B. G.) Propagation of a magnetogasdynamic shock wave at the boundary of a conducting gas. *Indian J. Pure Appl. Math.* **9** (1978), no. 4, 332-342. (S. I. Pai) **57** #8410 7635
- (with K. P. See Singh, Krishna P.)
- (with K. P. (with Singh, D. N.) Petrov classification of the cylindrically symmetric gravitational field. *J. Phys. A* **2** (1969), 28-33. (M. Carmeli) **47** #2970 8353
- Some properties of Riemannian spaces expressible as products of surfaces. *Progr. Math. (Allahabad)* **4** (1970), no. 2, 11-14. (B. K. Datta) **47** #2968 8353 (53B30)
- (with Roy, S. R.) Classification of electromagnetic fields. *Indian J. Pure Appl. Math.* **3** (1972), no. 3, 532-534. (B. K. Datta) **47** #2969 8353
- (with Ram, Shri) Rotational effect on a test particle in the gravitational field of NUT metric. C. N. Srinivasengar dedication volume. *Progr. Math. (Allahabad)* **6** (1972), no. 1, 86-88. (H. A. Buchdahl) **48** #13166 8353
- (with Ram, Shri) Curvature collineation for plane symmetric cosmological model. *Indian J. Pure Appl. Math.* **5** (1974), no. 3, 241-245. (S. Deser) **51** #12279 8353
- (with Srivastava, M. C.) Petrov classification of a non-static axially symmetric toroidal distribution. *Indian J. Pure Appl. Math.* **5** (1974), no. 6, 543-555. (A. Crumeyrolle) **53** #15280 8353
- (with Sharma, D. N.) Curvature collineations in certain gravitational space-times. *General Relativity and Gravitation* **6** (1975), no. 4, 397-408. (Elisa Udeschini Brinis) **54** #2111 8353
- (with Ram, Shri) Curvature collineations in some cosmological models. *Indian J. Pure Appl. Math.* **6** (1975), no. 9, 1023-1030. (Barry Aronson) **57** #2443 8353
- (with Abdussattar) A plane-symmetric null electromagnetic field. *Indian J. Pure Appl. Math.* **6** (1975), no. 11, 1225-1230. (K. L. Duggal) **57** #8931 8353
- (with Sharma, D. N.) Ricci and Maxwell collineations in a null electromagnetic field. *J. Phys. A* **8** (1975), no. 12, 1875-1881. (Barry Aronson) **53** #2284 8353
- (with Ram, Shri) Electromagnetic fields conformal to some non-empty space-times. *Indian J. Pure Appl. Math.* **7** (1976), no. 5, 497-505. (Ilija Lukačević) **58** #32813 8353
- (with Sharma, D. N.) Some collineation properties of null electromagnetic fields. *Progr. Math. (Allahabad)* **10** (1976), no. 1, 43-49. (Gérard A. Maugin) **55** #7285 8353
- Singh, K. R. (with Lumley, John L.) Extension of Heisenberg's model for spectral transfer to second order fluids in turbulent flow. *Appl. Sci. Res.* **24** (1971), 187-202. (J. Bass) **47** #6193 7641
- Singh, Kamar J. (with Sandhu, Ranbir S.) Reduced integration for improved accuracy of finite element approximations. *Comput. Methods Appl. Mech. Engrg.* **14** (1978), no. 1, 23-37. (From the summary) **58** #13790 65N30
- Singh, Kanhaiya Lal On some fixed point theorems. *Riv. Mat. Univ. Parma* **(2)** **10** (1969), 13-21. (A. T.-M. Lau) **45** #2689 54H25 (47H10)
- Some further extensions of Banach's contraction principle. *Riv. Mat. Univ. Parma* **(2)** **10** (1969), 139-155. (M. Edelstein) **45** #5988 54H25 (47H10)
- Non-expansive mappings in Banach spaces. II. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **14(62)** (1970), 237-246 (1971). (J.-P. Gossez) **48** #4857 47H10
- Nonexpansive mappings and fixed point theorems in Banach spaces. *Riv. Mat. Univ. Parma* **(2)** **12** (1971), 179-187. (Bruce Calvert) **50** #14395 47H10
- (with Deb, S.; Gardner, B.) On contraction mappings. *Riv. Mat. Univ. Parma* **(3)** **1** (1972), 143-151. (L. Janos) **50** #14723 54H25
- (with Srivastava, S.) Construction of fixed points for quasi-nonexpansive mappings. II. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **18(66)** (1974), no. 3-4, 367-378 (1976). (A. T.-M. Lau) **57** #1213 47H10
- Fixed point theorems for densifying maps. I. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 283-288 (1974). (From the author's introduction) **54** #11121 47H10
- Some applications of Darbo's theorem. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* **(8)** **58** (1975), no. 6, 880-886. (Editors) **55** #8907 47H10
- Eigenvalues of densifying mappings. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* **(8)** **59** (1975), no. 1-2, 34-39 (1976). (Norman Dancer) **56** #6487 47H10
- Two theorems characterizing increasing k-set contraction mappings. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* **(8)** **59** (1975), no. 6, 749-757 (1976). (Norman Dancer) **58** #2486 47H10 (54H25)
- Some applications of Darbo's theorem. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **19(67)** (1975), no. 1-2, 181-187 (1976). (M. Z. Nashed) **55** #8906 47H10
- Some applications of Kuratowski's measure of noncompactness. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* **(8)** **60** (1976), no. 4, 422-432. (J. Kolomy) **58** #7243 47H10 (47H15)
- Fixed point theorems for quasi-nonexpansive mappings. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* **(8)** **61** (1976), no. 5, 354-363 (1977). (T. E. Williamson, Jr.) **58** #2485 47H10
- A note on the spectra of uniformly increasing densifying mappings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 11, 969-972. (Alfonso Vignoli) **56** #1149 47H10
- Solvability of linear and nonlinear operator equations involving densifying mappings. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **20(68)** (1976), no. 3-4, 403-414 (1977). (Mieczyslaw Altman) **58** #18018 47H15
- (with Srivastava, S.) Some fixed point theorems. *Nanta Math.* **9** (1976), no. 2, 202-206. (L. F. Guseman, Jr.) **56** #13199 54H25
- (with Srivastava, S.) Construction of fixed point for densifying maps. II. *Riv. Mat. Univ. Parma* **(4)** **2** (1976), 147-153. (From the introduction) **58** #17994 47H10
- Some properties of increasing densifying mappings. *Nonlinear systems and applications* (Proc. Internat. Conf., Univ. Texas, Arlington, Tex., 1976), pp. 671-685. Academic Press, New York, 1977. (Sadayuki Yamamuro) **57** #17403 47H10
- Convergence of sequence of iterates of generalized contractions. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* **(8)** **62** (1977), no. 2, 154-159. (Gary Faulkner) **58** #7241 47H10
- Fixed and common fixed points for generalized contraction mappings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 8, 767-773. (Kok-Keong Tan) **58** #7242 47H10
- A note on common fixed points. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **22(70)** (1978), no. 1, 95-98. (Lee Mohler) **58** #12987 54H25
- Singh, Kesar On relative efficiencies of L-estimators. *Sankhyā Ser. B* **39** (1977), no. 1, 26-35. (Author's summary) **58** #31566 62G05 (62G20, 62G35)
- Singh, Krishna P. (with Paul, Burton) A method for solving ill-posed integral equations of the first kind. *Comput. Methods Appl. Mech. Engrg.* **2** (1973), 339-348. (G. T. Symm) **51** #7339 65R05
- (with Paul, Burton; Woodward, W. S.) Contact stresses for multiply-connected regions—the case of pitted spheres. *The mechanics of the contact between deformable bodies* (Proc. Sympos. Internat. Union of Theoret. and Appl. Mech. (IUTAM), Enschede,

- 1974), pp. 264-281. *Delft Univ. Press, Delft*, 1975. (From the authors' text) **56** #14024 73.65
- Singh, Kuldip** A special case of the vanishing of a (G, σ) -product in a (G, σ) -space. *Canad. Math. Bull.* **14** (1971), 231-233. (R. Morris) **48** #6149 15A69
- Singh, Lal Bahadur** Absolute Nörlund summability of a factored Fourier series. *Indian J. Math.* **12** (1970), 189-194. (B. N. Sahney) **46** #4094 42A28
- (with Bhatt, Shri Nivas) On the absolute Nörlund summability of a Fourier series. *Indian J. Math.* **14** (1972), 83-89. (W. Beekmann) **48** #6796 42A28
- On the absolute Nörlund summability of a series related to a Fourier series. *Jñānabha Sect. A* **4** (1974), 67-76. (G. Sunouchi) **52** #3862 42A28
- Singh, Lambodar P.** (with Maharana, Jnanadeva) Bounds on average multiplicity. *Lett. Math. Phys.* **1** (1975/77), no. 4, 345-349. (P. P. Divakaran) **57** #14997 81.30
- (with Maharana, Jnanadeva) Erratum: "Bounds on average multiplicity" (*Lett. Math. Phys.* **1** (1975/77), no. 4, 345-349). *Lett. Math. Phys.* **1** (1975/77), no. 6, 545. (Editors) **58** #25506 81.30
- Singh, M. C.** (with Murthy, M. N.) On the concepts of best and admissible estimators in sampling theory. *Sankhyā Ser. A* **31** (1969), 343-354. (M. E. Thompson) **45** #4569 62D05
- (with Rao, J. N. K.) On the choice of estimator in survey sampling. *Austral. J. Statist.* **15** (1973), 95-104. (P. K. Bhattacharya) **50** #1372 62D05
- (with Mishra, A. K.) The normal modes of non-linear symmetric systems by group representation theory. (German and Russian summaries) *Internat. J. Non-Linear Mech.* **9** (1974), 463-480. (N. D. Sengupta) **51** #4763 70.20
- (with Mishra, A. K.) Normal modes of nonlinear discrete symmetric systems by group representation theory. *Group theoretical methods in physics (Proc. Fifth Internat. Colloq., Univ. Montréal, Montreal, Que., 1976)*, pp. 403-415. *Academic Press, New York*, 1977. (J. F. Cornwell) **58** #3820 70.34 (20C35)
- (with Brar, G. S.) Similarity solution of wave propagation in nonhomogeneous elastic rods. *J. Acoust. Soc. Amer.* **63** (1978), no. 4, 1009-1013. (Peter J. Chen) **58** #14163 73.35
- Singh, M. P.** (with Roy, A. S.) Interpenetrating sub-samples—with and without replacement. *Metrika* **20** (1973), 230-239. (U. B. Paik) **51** #4488 62D05
- (with Tessier, R.) Some estimators for domain totals. *Proceeding of the Symposium on Statistics and Related Topics (Carleton Univ., Ottawa, Ont., 1974)*, Paper No. 28, 17 pp. *Carleton Univ., Ottawa, Ont.*, 1975. (Kenneth R. W. Brewer) **54** #1433 62D05
- Singh, Madan G.** (with Tamura, Hiroyuki) Modelling and hierarchical optimization for oversaturated urban road traffic networks. *Internat. J. Control* **20** (1974), 913-934. (F. Weinberg) **51** #4967 90B20
- Practical methods for the control and state estimation of large interconnected dynamical systems. (Loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* **8** (1974), no. J-3, 5-45. (H. Tamura) **51** #5076 93A10
- (with Coales, John F.) A heuristic approach to the hierarchical control of multivariable serially connected dynamical systems. *Internat. J. Control* **21** (1975), 575-586. (T. Kaczorek) **51** #7665 93C30
- Multi-level state estimation. *Internat. J. Systems Sci.* **6** (1975), 533-555. (N. U. Ahmed) **51** #9926 93E10
- (with Galy, Jean) A note of the convergence of infeasible dynamical hierarchical controllers. *Internat. J. Systems Sci.* **6** (1975), no. 8, 701-711. (S. P. Bingulac) **52** #12893 93C10
- (with Hassan, Mohammed F.) The optimization of non-linear systems using a new two level method. *Automatica-J. IFAC* **12** (1976), no. 4, 359-363. (B. L. Ovsievich) **55** #2146 90C30
- (with Hassan, Mohammed F.) A comparison of two hierarchical optimization methods. *Internat. J. Systems Sci.* **7** (1976), no. 6, 603-611. (J. P. Babary) **54** #1604 65K05
- (with Titli, André; Galy, Jean) Méthodes de décomposition-coordination en calcul des variations et couplage par variables d'état. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* **10** (1976), no. J-1, 19-29. (Guy Jumarie) **57** #18908 93A15
- ★Dynamical hierarchical control. *North-Holland Publishing Co., Amsterdam-New York-Oxford*, 1977. xvi + 257 pp. ISBN 0-444-85002-3 (Joseph D. Cole) **58** #9606 93C99 (93A15)
- (with Hassan, Mohammed F.) A two level prediction algorithm for non-linear systems. *Automatica-J. IFAC* **13** (1977), no. 1, 95-96. (B. L. Ovsievich) **56** #2546 93C10
- (with Titli, André) Hierarchical feedback control for large dynamical systems. *Internat. J. Systems Sci.* **8** (1977), no. 1, 31-47. (David N. Burghes) **58** #33211 93A15 (65K05)
- (with Hassan, Mohammed F.) Local and global optimal control for non-linear systems using two-level methods. *Internat. J. Systems Sci.* **8** (1977), no. 12, 1375-1383. (Norihiko Adachi) **57** #11878 93C10
- (with Waterman, Michael S.; Smith, T. F.; Beyer, W. A.) Additive evolutionary trees. *J. Theoret. Biol.* **64** (1977), no. 2, 199-213. (George F. Estabrook) **58** #20585 92A05 (05C05)
- (with Hassan, Mohammed F.; Salut, Gérard; Titli, André) A decentralized computational algorithm for the global Kalman filter. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 2, 262-268. (Authors' summary) **58** #15566 93E10 (93A15, 93E25)
- (with Hassan, Mohammed F.) A hierarchical structure for computing near optimal decentralized control. *IEEE Trans. Systems Man Cybernet.* **8** (1978), no. 7, 575-579. (Benson Kurtaran) **58** #12598 49B15 (93A15)
- See also **Conference: Optimization Techniques**, **48** #5759
- Singh, Mahabir** (with Maggu, Parkash Lal) Multi-input source queueing model with blocking. *Pure Appl. Math. Sci.* **6** (1977), no. 1-2, 37-42. (Nasser Hadidi) **57** #10850 60K25
- Singh, Manjit** (with Bala, Shakti) On the zeros of entire functions. *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **35** (1970), 103-108 (1972). (J. D. DeFree) **48** #11507 30A66
- (with Gupta, J. S.) Quadratic mean function of entire functions defined by Dirichlet series. *Bull. Soc. Math. Belg.* **24** (1972), 370-374. (A. K. Agarwal) **49** #585 30A66
- (with Gupta, J. S.) Derivative of generalized quadratic mean function of entire functions defined by Dirichlet series. *Ann. Polon. Math.* **27** (1973), 279-287. (R. S. Srivastava) **49** #575 30A62
- (with Gupta, J. S.) Logarithmic mean function of entire functions defined by Dirichlet series. *Publ. Math. Debrecen* **20** (1973), 13-19. (M. E. Noble) **50** #7518 30A62
- Singh, Manohar** (with Arya, J. C.) Controllable infinitesimal deformations superposed on homogeneously deformed compressible elastic dielectrics. *Utilitas Math.* **6** (1973), 45-60. (P. D. S. Verma) **50** #11999 78.53
- (with Malik, S. K.) Nonlinear magneto-acoustic dispersive waves. *Astrophys. Space Sci.* **48** (1977), no. 1, 47-52. (Authors' summary) **56** #10644 82.35
- (with Trehan, S. K.) On the stability of twisted magnetic fields. *Astrophys. Space Sci.* **53** (1978), no. 1, 165-172. (Authors' summary) **58** #19848 78.53
- Singh, Nam Prasad** A definite integral involving generalized Fox's H -function with applications. *Kyungpook Math. J.* **13** (1973), 253-264. (C. L. Parihar) **49** #3242 33A35
- (with Singh, Fateh) Evaluation of an integral involving generalised Fox's H -function and generalised Legendre associated function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), 71-80. (S. D. Bajpai) **50** #10358 33A35
- On some generating functions for the H -function of two variables. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 2, 153-157. (J. Singhal) **55** #8428 33A30
- (with Anandani, Parmanand) Integration of generalized H -function of two variables with respect to the parameters. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 3, 221-226. (C. L. Parihar) **55** #8429 33A35
- Some transformations and identities involving H -function of two variables. *Kyungpook Math. J.* **17** (1977), no. 2, 203-209. (R. G. Buschman) **57** #3473 33A35
- Identities for the H -function of two variables. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 4, 385-392. (From the author's summary) **57** #6538 33A35
- Singh, Naunihal** (with Cunningham, L.) A two unit standby redundant system with standby failure and repair waiting time. (German and Russian summaries) *Math. Operationsforsch. Statist.* **4** (1973), no. 6, 453-462. (Authors' summary) **55** #5190 90B25
- (with Ghosal, Amitava; Loo, S. G.) ★Examples & exercises in operations research. *Studies in Operations Research, Vol. 4. Gordon and Breach Science Publishers, London-New York-Paris*, 1975. ix + 262 pp. (C. B. Garcia) **55** #14155 90Bxx (90-xx)
- (with Jain, Gopi C.) On bivariate power series distributions associated with Lagrange expansion. *J. Amer. Statist. Assoc.* **70** (1975), no. 352, 951-954. (Ju. Borovskikh) **52** #12168 62E20 (60K25)
- (with Than Pe) A test for interaction terms in a split-plot design. *Biometrical J.* (1977), no. 8, 653-663. (H. L. Harter) **57** #10939 62K10 (62J10)
- (with Than Pe) Corrigendum to: "A test for interaction terms in a split plot design" (*Biometrical J.* **19** (1977), no. 8, 653-663). *Biometrical J.* **20** (1978), no. 2, (loose error) (Editors) **58** #18942 62K10 (62J10)
- Singh, Niranjan** On the absolute summability factors of conjugate series of Fourier series. *Bull. Calcutta Math. Soc.* **61** (1969), 13-18. (Yung-ming Chen) **45** #7384 42A28 (42A28)
- Absolute summability factors of infinite series. (Turkish summary) *Comm. Fac. Sci. Univ. Ankara Sér. A* **20** (1971), 41-51. (L. Leindler) **48** #757 40G05
- On the absolute Nörlund summability of a Fourier series. *Comm. Fac. Sci. Univ. Ankara Sér. A* **23** (1974), no. 3, 19-23. (F. C. Hsiang) **55** #3662 42A24
- Singh, Om P.** On the non-Riemannian spaces. *Kyungpook Math. J.* **12** (1972), 43-54. (Drăgilă) **46** #4412 53B05
- On the structure of multiple parameter intrinsic derivatives. Collection of articles dedicated to Professor P. L. Bahatnagar on his sixtieth birthday. *Math. Student* (1972), 318-328 (1974). (R. H. Bowman) **53** #1455 53A50
- On the deformed areal spaces. *Publ. Math. Debrecen* **19** (1972), 43-59 (1973). (Juergen Kern) **49** #1391 53B40
- On the construction of multiple parameter extensors of higher order. *Kyungpook Math. J.* **13** (1973), 265-273. (R. H. Bowman) **49** #6057 53A45
- On the projective motion in a projective Finsler space of recurrent curvature. *Mat. Vesnik* **10(25)** (1973), 105-110. (H. D. Pande) **50** #1159 (E **51** #11335) 53B40
- On the conformal areal spaces of the submetric class. The transformation curvature tensors. *Math. Nachr.* **58** (1973), 145-159. (Juergen Kern) **50** #3137 53B40
- On the conformal areal spaces of the submetric class. II. The deductions of some identities. *Math. Nachr.* **58** (1973), 161-168. (Juergen Kern) **50** #3138 53B40
- On the homothetic transformations in areal spaces of the submetric class. *Publ. Math. Debrecen* **20** (1973), 1-12. (S. Kawaguchi) **49** #1392 (E **54** #11220) 53B40
- On the curvature collineation in an areal space of submetric class. *Tensor (N.S.)* (1974), 263-268. (T. Ohkubo) **51** #1649 53B40
- On the theory of deformed subspaces in an areal space of the submetric class. *Kyungpook Math. J.* **15** (1975), no. 2, 281-301. (Juergen Kern) **53** #1469 53B40
- On the deduction of Bianchi identity in an areal space of general type. *Math. Nachr.* **66** (1975), 191-193. (T. Ohkubo) **51** #8977 53B40
- A remark "On the projective motion in a projective Finsler space of recurrent curvature" (*Mat. Vesnik* **10(25)** (1973), 105-110). *Yokohama Math. J.* **23** (1975), no. 1-4. (H. D. Pande) **51** #11335 53B40
- On the deformed areal spaces. II. *Ann. Mat. Pura Appl.* (4) **109** (1976), 135-144. (From the author's introduction) **55** #1241 53B40
- The groups of homothetic transformations in areal spaces of the submetric class. *Publ. Math. Debrecen* **23** (1976), no. 1-2, 63-73. (Juergen Kern) **54** #6014 53B40
- Erratum: "On the homothetic transformations in areal spaces of the submetric class" (*Publ. Math. (Debrecen)* **20** (1973), 1-12). *Publ. Math. Debrecen* **23** (1976), 3-4, 347. (Editors) **54** #11220 53B40
- On p -isotropic and torsion-recurrent areal spaces of the submetric class. *Tensor (N.S.)* **30** (1976), no. 1, 1-11. (H. Rund) **54** #13770 53B40
- Singh, P. N.** (with Roy, S. R.) Einstein's interior field equations in elastic media. *J. Phys.*

- 6 (1973), 1862-1866. (Authors' summary) **50** #15820 83.35
Padam (with Singh, Daroga) New systematic sampling. *J. Stat. Plann. Inference* **1** 977, no. 2, 163-177. (David Bellhouse) **58** #13447 62D05
Paramjit (with Jain, Pawan Kumar) On modified deficient values of a meromorphic function and its derivatives. *Indian J. Pure Appl. Math.* **7** (1976), no. 2, 224-240. (Zbl **71** #30027) **58** #22561 30A70
 (with Chugh, Vasdev Lal) On Nevanlinna's proximity function. *Riv. Mat. Univ. Parma* **4** (2) (1976), 83-94. (Editors) **58** #22560 30A70
Prahlad (with Yadav, N. S.) A note on inversive quasigroups. *Aligarh Bull. Math.* **2** 972, 15-20. (S. M. Yusuf) **54** #7681 20N05
 On inversive quasigroups. *Ranchi Univ. Math. J.* **3** (1972), 26-28. (R. Artzy) **7** #6928 20N05
 (with Yadav, N. S.) An analogue in ring theory of the Jordan-Hölder theorem for groups. *Ranchi Univ. Math. J.* **6** (1975), 83-84. (From the authors' introduction) **7** #9752 16A46
Pratap On fractional integrals. *Univ. Rajasthan Studies Math.* **1965**, 23-38. (S. K. Chatterjea) **48** #6828 44A15 (26A33)
 Certain theorems on generalised Hankel transform. *Bull. Math. Soc. Sci. Math. R. Roumanie (N.S.)* **15**(63) (1971), no. 4, 485-495 (1973). (P. Anandani) **48** #2681 4A15
 Certain theorems on the Meijer K_r -transform. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 482-493. (Wazir Hasan Abdi) **45** #826 44A15
 Certain double integrals. *Kyungpook Math. J.* **12** (1972), 119-128. (K. M. Saksena) **46** #3859 33A40
 Certain theorems on self-reciprocal functions. *Publ. Inst. Math. (Beograd) (N.S.)* **15**(29) (1973), 121-126. (V. P. Mainra) **48** #11937 44A15
 Certain theorems on generalised Hankel transform. *Riv. Mat. Univ. Parma* **4** (2) 1976, 21-32. (V. P. Mainra) **56** #6294 44A15
h, Prem (with Srivastava, R. S. L.) On the proximate type and λ -proximate type of an entire function represented by Dirichlet series. *J. Math. (Jabalpur)* **2** (1966), 3-10. (S. K. Bose) **52** #11043 30A66
 (with Chandra, Susheel) On certain classes of the analytic functions. *Indian J. Pure Appl. Math.* **4** (1973), 745-748. (T. H. MacGregor) **50** #2470 30A32
 (with Bajpai, P. L.) The radius of convexity of certain analytic functions in the unit disc. *Indian J. Pure Appl. Math.* **5** (1974), no. 8, 701-707. (S. D. Bernardi) **55** #640 30A32
 (with Bajpai, P. L.) The radius of starlikeness of certain analytic functions. *Proc. Amer. Math. Soc.* **44** (1974), 395-402. (M. S. Robertson) **49** #5330 30A32
 (with Chandra, Susheel) Certain subclasses of the class of functions regular and univalent in the unit disc. *Arch. Math. (Basel)* **26** (1975), 60-63. (Louis Brickman) **51** #3413 30A32
 (with Chandra, Susheel) An integral transformation of some classes of regular univalent functions. *Indian J. Pure Appl. Math.* **6** (1975), no. 11, 1270-1275. (R. J. Libera) **57** #3371 30A32
 (with Bajpai, P. L.) The radius of univalence of certain analytic functions. *Ann. Polon. Math.* **32** (1976), no. 2, 119-128. (S. D. Bernardi) **54** #10591 30A36
 (with Das, R. N.) On properties of certain subclasses of close-to-convex functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **30** (1976), 15-22 (1978). (John G. Milcetic) **58** #17068 30A32
 (with Das, R. N.) On the coefficient bounds of a subclass of analytic functions in the unit disc. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 153-158 (1977). (M. S. Robertson) **56** #3277 30A34
 (with Das, R. N.) On subclasses of schlicht mapping. *Indian J. Pure Appl. Math.* **8** (1977), no. 8, 864-872. (E. Zlotkiewicz) **58** #6201 30A32
 (with Das, R. N.) The radius of starlikeness of certain subclasses of analytic functions. *Publ. Math. Debrecen* **25** (1978), no. 1-2, 97-106. (M. S. Robertson) **58** #11349 30A32
h, Punyatta Free convection effects on fluctuating boundary layer from a horizontal plate. *Acta Phys. Acad. Sci. Hungar.* **42** (1977), no. 4, 369-376. (A. Corduneanu) **57** #14874 76J35
 Lagrangian thermodynamics as a particular case of governing principle of dissipative processes. *Acta Phys. Acad. Sci. Hungar.* **43** (1977), no. 2, 133-140. (Author's summary) **58** #19879 80J53
 (with Bhattacharya, D. K.) Application of G.P.D.P. to heat conduction problem. *Indian J. Pure Appl. Math.* **9** (1978), no. 5, 407-416. (M. Carrasi) **58** #14435 80J35
h, R. B. (with Demin, V. G.) About the motion of a heavy flexible string attached to the satellite in the central field of attraction. (Russian summary) *Celestial Mech.* **6** (1972), 268-277. (A. C. Garibaldi) **49** #8460 70J35
 (with Pandey, R. N.) A different representation of the generalized polynomial set $\tilde{R}_p(x, y)$. *Acta Ci. Indica* **3** (1977), no. 4, 378-382. (T. S. Chihara) **57** #12945 33A70
 (with Pandey, R. N.) Finite difference formula for the generalized polynomial $\tilde{R}_p(x, y)$. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 4, 331-335. (Authors' summary) **57** #6917 39A05
h, R. N. (with Rajput, B. S.) Reduction of generalized electromagnetic fields to the irreducible representation of Lorentz group for non-zero mass system. *Indian J. Pure Appl. Phys.* **8** (1970), 439-443. (Harry E. Moses) **51** #9680 81J22
 (with Scott, C. K.) Evaluation of nuclear matrix elements involving harmonic oscillator wave functions. *Canad. J. Phys.* **52** (1974), 324-329. **53** #12278 81J33
 (with Mishra, R. S.; Pandey, H. B.) Sasakian manifold equipped with certain conditions. *Ganita* **27** (1976), no. 1-2, 33-36. (Jarolim Bureš) **58** #12836 53C25
 (with Mishra, R. S.) On a specified affine connexion in an almost contact manifold. *Indian J. Pure Appl. Math.* **8** (1977), no. 1, 84-89. (P. Drăgăilă) **57** #1344 53C15
 (with Mishra, R. S.) On birecurrent Kähler manifold. *Publ. Math. Debrecen* **25** (1978), no. 1-2, 61-68. (K. Yano) **58** #12798 53B35
h, R. N. P. (with Rajamani, V. S.) Minimal-time control of distributed-parameter systems with multiple-norm constraints on the control function. *Internat. J. Control* **1** (1972), 241-254. (C. P. Tsokos) **48** #1000 49B99
h, R. S. See Singh, Radhey S.
h, R. S. On the reciprocity of product of two surfaces. *Indian J. Pure Appl. Math.* **9** (1978), no. 4, 318-319. (Sotirios Persides) **57** #18727 83J53 (53B30)
Singh, Radhey S. On the Glivenko-Cantelli theorem for weighted empiricals based on independent random variables. *Ann. Probability* **3** (1975), 371-374. (F. Papangelou) **51** #9173 60F15 (62G10)
 Empirical Bayes estimation with convergence rates in noncontinuous Lebesgue exponential families. *Ann. Statist.* **4** (1976), no. 2, 431-439. (Johannes S. Maritz) **52** #15760 62C25
 Nonparametric estimation of mixed partial derivatives of a multivariate density. *J. Multivariate Anal.* **6** (1976), no. 1, 111-122. (V. D. Konakov) **54** #1465 62G05
 On the rate for uniform strong consistency of empirical distributions of independent nonidentically distributed multivariate random variables. *J. Multivariate Anal.* **6** (1976), no. 2, 338-342. (Endre Csáki) **53** #14756 62E20
 Improvement on some known nonparametric uniformly consistent estimators of derivatives of a density. *Ann. Statist.* **5** (1977), no. 2, 394-399. (V. D. Konakov) **55** #11486 62G05
 Applications of estimators of a density and its derivatives to certain statistical problems. *J. Roy. Statist. Soc. Ser. B* **39** (1977), no. 3, 357-363. (Author's summary) **58** #31565 62G05
 On conditions for Taylor expansion with integral form of the remainder. *Progr. Math. (Allahabad)* **11** (1977), no. 1-2, 99-100. (R. S. Booth) **56** #8763 26A06
 Sequence-compound estimation with rates in non-continuous Lebesgue-exponential families. *Sankhyā Ser. A* **39** (1977), no. 1, 63-81. (V. Susarla) **58** #18816 62C25
 (with Tracy, Derrick S.) Strongly consistent estimators of k -th order regression curves and rates of convergence. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **40** (1977), no. 4, 339-348. (Paul Deheuvels) **57** #10883 62E20 (62G05)
Singh, Raghuvaraj (with Singh, Uday Pratap) Partial differential equations for the generalized polynomial $M_p(x, y)$. *Progr. Math. (Allahabad)* **11** (1977), no. 1-2, 15-24. (B. R. Bhonsle) **57** #739 33A35
Singh, Raj Kishor Eberlein integral and polynomial interpolation. *Czechoslovak Math. J.* **21**(96) (1971), 638-643. (W. Niethammer) **45** #2885 65D05
 (with Srivastava, S. R.) Testing of the mean using apriori information. *Proc. Nat. Acad. Sci. India Sect. A* **42** (1972), 68-74. (S. John) **49** #6456 62F05
 Compact and quasnormal composition operators. *Proc. Amer. Math. Soc.* **45** (1974), 80-82. (Warren R. Wogen) **50** #1043 47B37
 A relation between composition operators on $H^2(D)$ and $H^2(P^+)$. *Pure Appl. Math. Sci.* **1** (1974/75), no. 2, 1-5. (S. V. Hruščev) **56** #12971 47B37
 Normal and Hermitian composition operators. *Proc. Amer. Math. Soc.* **47** (1975), 348-350. (Warren R. Wogen) **50** #8153 47B37
 Invertible composition operators on $L^2(\lambda)$. *Proc. Amer. Math. Soc.* **56** (1976), 127-129. (Warren R. Wogen) **53** #3776 47B37
 Composition operators induced by rational functions. *Proc. Amer. Math. Soc.* **59** (1976), no. 2, 329-333. (Glenn R. Luecke) **54** #5895 47B37
 (with Kumar, Ashok) Multiplication operators and composition operators with closed ranges. *Bull. Austral. Math. Soc.* **16** (1977), no. 2, 247-252. (Authors' summary) **58** #12495 47B37
 (with Gupta, D. K.) Normal and invertible composition operators. *Bull. Austral. Math. Soc.* **18** (1978), no. 1, 45-54. (G. D. Allen) **57** #17370 47B37 (47B15)
 (with Komal, B. S.) Composition operator on l^p and its adjoint. *Proc. Amer. Math. Soc.* **70** (1978), no. 1, 21-25. (G. M. Leibowitz) **58** #7193 47B37
Singh, Rajbeer (with Mishra, B. N.) On uniform approximation using convexity concepts. *Math. Education* **5** (1971), A34-A38. (E. W. Cheney) **46** #7767 41-01
Singh, Rajinder Admissible estimators of θ' in some extreme value densities. *Canad. Math. Bull.* **14** (1971), 411-414. (S. Kotz) **46** #10126 62F10
 Admissible estimators of λ' in gamma distribution with quadratic loss. *Trabajos Estadist.* **23** (1972), no. 1-2, 129-134. (M. A. Hamdan) **48** #3173 62F10 (62C15)
 (with Raghavarao, D.) Application of linked block designs in successive sampling. *Applied statistics (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1974), pp. 301-309. North-Holland, Amsterdam, 1975. (D. V. Chopra) **52** #9523 62K10 (62D05)
 Some admissible estimators in extreme value densities. *Canad. Math. Bull.* **18** (1975), no. 1, 105-110. (Arthur Cohen) **52** #6938 62C15
 (with Raghavarao, D.) Applications of PBIB designs in cluster sampling. *Proc. Indian Nat. Sci. Acad. Part A* **41** (1975), no. 3, 281-288. (Authors' summary) **58** #31506 62D05 (62K10)
 (with Raghavarao, D.; Federer, Walter T.) Application of higher associate class PBIB designs in multidimensional cluster sampling. *Estadística* **30** (1976), no. 115, 202-209. (K. Vijayan) **54** #11603 62D05 (62K10)
Singh, Rakeshwar (with Singh, K. D.) Some $f(3, e)$ structure manifolds. *Demonstratio Math.* **10** (1977), no. 3-4, 637-645. (David Blair) **58** #18259 53C15
 (with Singh, K. D.) On some (ef_1, ef_2) structure manifolds. *Demonstratio Math.* **10** (1977), no. 3-4, 663-670. (J. D. Zundt) **57** #7448 53C15
Singh, Ram A theorem on bounded analytic functions. *Publ. Math. Debrecen* **18** (1971), 183-185 (1972). (D. Protas) **46** #7518 30A76
 (with Chichra, Pran Nath) Convex sum of univalent functions. *J. Austral. Math. Soc.* **14** (1972), 503-507. (F. R. Keogh) **47** #7014 30A32
 On Bazilevič functions. *Proc. Amer. Math. Soc.* **38** (1973), 261-271. (S. D. Bernardi) **47** #449 30A32
 (with Singh, Vikramaditya) On a class of bounded starlike functions. *Indian J. Pure Appl. Math.* **5** (1974), no. 8, 733-754. (Carl P. McCarty) **55** #647 30A32
 (with Singh, Vikramaditya) On a class of functions schlicht in the unit disc. *Indian J. Pure Appl. Math.* **7** (1976), no. 1, 116-120. (S. K. Bajpai) **57** #610 30A32
 A sufficient condition for univalence. *Publ. Math. Debrecen* **25** (1978), no. 1-2, 1-3. (M. S. Robertson) **58** #6205 30A32
Singh, Ram Chandra (with Agrawal, B. D.) Generating relations for the associated Jacobi's functions. *J. Sci. Res. Banaras Hindu Univ.* **21** (1970/71), no. 1-2, 1-5. (From the authors' introduction) **55** #3361 33A65
Singh, Rana P. (with Tracy, Derrick S.) Matrix derivative approach to analysis of covariance structures. (French summary) Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 2. *Bull. Inst. Internat. Statist.* **44** (1971), book 2, 392-396. (K. G. Jöreskog) **51** #9374 62H99
 (with Tracy, Derrick S.) Some modifications of matrix differentiation for evaluating*

- Jacobians of symmetric matrix transformations. *Symmetric functions in statistics (Proc. Sympos. in Honor of Paul S. Dwyer, Univ. Windsor, Windsor, Ont., 1971)*, pp. 203-224. Univ. Windsor, Windsor, Ont., 1972. **49** #7273 15A15
- (with Tracy, Derrick S.) A new matrix product and its applications in partitioned matrix differentiation. *Statistica Neerlandica* **26** (1972), 143-157. (Marvin Marcus) **52** #454 15A69 (62P20)
- Generalized Struve's function and its recurrence relations. *Ranchi Univ. Math. J.* **5** (1974), 67-75. (C. M. Joshi) **56** #16004 33A15
- (with Tracy, Derrick S.) Some applications of matrix differentiation in the general analysis of covariance structures. *Sankhyā Ser. A* **37** (1975), no. 2, 269-280. (Authors' summary) **58** #24763 62J10
- (with Wang, K. U.) Piecewise solution of large-scale multicommodity flow problem by nonlinear diaptics. *Ninth Annual Asilomar Conference on Circuits, Systems, and Computers (Pacific Grove, Calif., 1975)*, pp. 92-96. Western Periodicals, North Hollywood, Calif., 1976. (See Zbl **364** #90106; MR **54** #9825) 90B10 (94A20)
- Singh, Randhir** A note on the use of incomplete multi-auxiliary information in sample surveys. *Austral. J. Statist.* **19** (1977), no. 2, 105-107. (Claes-M. Cassel) **56** #16865 62D05
- Singh, Rattan** An inversion formula for Fox-H-transform. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 57-64. (U. C. Jain) **45** #7403 44A20
- Generating functions of a generalized polynomial. *J. Indian Math. Soc. (N.S.)* **36** (1972), 127-131. (S. K. Chatterjea) **48** #11621 33A65
- Singh, Ravindra** (with Raghavarao, D.; Sodhi, J. S.) A new assumption in spring balance weighing designs leading to a sampling application. *Calcutta Statist. Assoc. Bull.* **20** (1971), 83-88. (D. A. Sprott) **46** #10147 62K99 (62D05)
- (with Sukhatme, B. V.) Optimum stratification in sampling with varying probabilities. *Ann. Inst. Statist. Math.* **24** (1972), 485-494. (P. K. Bhattacharya) **48** #5219 62D05
- A note on sampling over two occasions. *Austral. J. Statist.* **14** (1972), 120-122. (Pramod K. Pathak) **52** #1965 62D05
- On Pathak and Rao's estimate in PPS with replacement sampling over two occasions. *Sankhyā Ser. A* **34** (1972), 301-303. (J. Sedransk) **49** #4128 62D05
- (with Sukhatme, B. V.) Optimum stratification with ratio and regression methods of estimation. *Ann. Inst. Statist. Math.* **25** (1973), 627-633. (M. Atiqullah) **50** #1373 62D05
- (with Parkash, Dev) Optimum stratification for equal allocation. *Ann. Inst. Statist. Math.* **27** (1975), no. 2, 273-280. (C. Hayashi) **52** #12151 62D05
- A note on optimum stratification in sampling with varying probabilities. *Austral. J. Statist.* **17** (1975), no. 1, 12-21. (C. Hayashi) **52** #12150 62D05
- A note on optimum stratification for equal allocation with ratio and regression methods of estimation. *Austral. J. Statist.* **19** (1977), no. 2, 96-104. (C. Hayashi) **56** #13416 62D05
- Singh, S. K.** (with Sreenivasulu, V.) Corrigendum to: "A note on entire functions" (İstanbul Üniv. Fen Fak. Mecm. Ser. A **30** (1965), 71-75 (1968)). (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **35** (1970), 101-102. (1972). (Editors) **52** #8434 30A66
- (with Gopalakrishna, H. S.) Exceptional values of entire and meromorphic functions. *Math. Ann.* **191** (1971), 121-142. (L. R. Sons) **45** #555 (EA **46**) 30A70
- (with Kulkarni, V. N.) Characteristic function of a meromorphic function and its derivative. *Ann. Polon. Math.* **28** (1973), 123-133. (Fred Gross) **48** #4315 30A70
- (with Sarangi, Sangappa Mallapa) On Nevanlinna modified deficiency. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 341-347 (1974). (N. Toda) **51** #10632 30A70
- (with Gopalakrishna, H. S.) Applications of proximate order. *Riv. Mat. Univ. Parma* (3) **2** (1973), 125-157. (S. M. Shah) **52** #14294 30A66
- (with Sieben, John T.) On a -points of entire and meromorphic functions. *Bull. Soc. Math. Grèce (N.S.)* **15** (1974), 1-6. (From the introduction) **58** #28496 30A66
- (with Eifler, Larry Q.) A note on the maximum modulus of $1/\Gamma(z)$. *Demonstratio Math.* **7** (1974), 423-425. (M. Hervé) **52** #3523 30A64
- (with Barker, George Phillip) A note on the order of meromorphic functions. *J. Indian Math. Soc. (N.S.)* **39** (1975), 321-323 (1976). (S. Hellerstein) **54** #7781 30A68
- (with Barker, George Phillip) A note on transcendental meromorphic functions. *Bull. Calcutta Math. Soc.* **68** (1976), no. 1, 23-24. (I. N. Baker) **56** #15927 30A68
- On the maximum modulus and the means of an entire function. *Mat. Vesnik* **13(28)** (1976), no. 2, 211-213. (L. R. Sons) **56** #3291 30A64
- (with Gopalakrishna, H. S.) Growth of entire and meromorphic functions. *Comment. Math. Univ. St. Paul.* **26** (1977/78), no. 1, 3-15. (W. K. Hayman) **56** #15924 30A66 (30A68)
- Singh, S. L.** A note on the convergence of sequence of iterates. *J. Natur. Sci. and Math.* **17** (1977), no. 1, 69-71. (Editors) **58** #30542 47H10
- On common fixed points of commuting mappings. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 131-134. (L. E. Ward, Jr.) **56** #16607 54H25
- Generalized diminishing orbital diametral sum. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 3, 295-312. (Kenneth J. Brown) **57** #17614 54H25
- (with Tewari, B. M. L.) On common fixed points and commuting mappings. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 3, 361-366. (I. A. Rus) **57** #13906 54H25
- Application of a common fixed point theorem. *Math. Sem. Notes Kobe Univ.* **6** (1978), no. 1, 37-40. (R. E. Smithson) **58** #7592 54H25
- Singh, S. N.** See **Singh, Sahjendra N.**
- Singh, S. N.** Zeros and orthogonality of the polynomial set $C_n(x, y)$. *J. Sci. Res. Banaras Hindu Univ.* **20** (1969/70), no. 2, 95-97. (From the author's introduction) **55** #5933 33A70
- Some formulae for classical polynomials. *J. Sci. Res. Banaras Hindu Univ.* **20** (1969/70), no. 2, 154-157. (S. K. Chatterjea) **55** #10751 33A65
- General asymptotic behavior and n th differential formulae for classical polynomials. *J. Sci. Res. Banaras Hindu Univ.* **21** (1970/71), no. 1-2, 19-24. (From the author's introduction) **56** #5974 33A65
- Some special properties of classical polynomials. *J. Sci. Res. Banaras Hindu Univ.* **21** (1970/71), no. 1-2, 75-79. (From the author's introduction) **56** #5975 33A65
- Recurrence relations for the polynomial set $C_n(x, y)$. *J. Sci. Res. Banaras Hindu Univ.* **21** (1970/71), no. 1-2, 175-179. (Author's summary) **55** #5931 33A65
- Partial differential equations and its other solutions for $C_n(x, y)$. C. N. Srinivasangar dedication volume. *Progr. Math. (Allahabad)* **6** (1972), no. 1, 21-26. (R. G. Buschman) **48** #8870 33A30
- (with Prasad, Y. N.) Integrals involving the H -function of two variables. *Jñānabha Sect. A* **6** (1976), 95-101. (R. G. Buschman) **58** #28722 33A35
- (with Prasad, Y. N.) Some theorems on integral representations of generalized multiple transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **1** (1976), no. 2, 105-116. (P. N. Rathie) **54** #13486 44A20
- (with Prasad, Y. N.) On some theorems on the generalized multiple transform. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 363-375. (C. M. Joshi) **56** #16270 44A05
- (with Prasad, Y. N.) On some theorems on the generalized multiple transform. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys.* **3** (1977), no. 2, 235-252 (1978). (N. C. Jain) **58** #2059 44A30
- (with Prasad, Y. N.) Multiple integrals involving the generalized function of two variables. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys.* **3** (1977), no. 2, 253-265 (1978). (C. M. Joshi) **58** #6950 44A20 (33A30)
- (with Prasad, Y. N.) Some expansion formulae for H -function of two variables involving Jacobi polynomials. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **21(6)** (1977), no. 1-2, 123-132. (P. Anandani) **57** #10021 33A35
- (with Prasad, Y. N.) Some expansion formulae for H -function of two variables involving Jacobi polynomials. (Turkish summary) *İstanbul Tek. Üniv. Bül.* **30** (1977), no. 2, 58-68. (See RZMat **1978** #11 B41) 33A30
- (with Chakrabarty, K. C.) On estimating the risk of conception from censored and truncated data. *Progr. Math. (Allahabad)* **11** (1977), no. 1-2, 101-109. (Robert Bartoszyński) **57** #1817 62P10 (62F10)
- (with Prasad, Y. N.) An application of the H -function of several complex variables in the production of heat in a cylinder. *Pure Appl. Math. Sci.* **6** (1977), no. 1-2, 57-66. (Authors' summary) **58** #14414 80J33
- (with Rai, P. N.) Bilateral generating functions for a new class of generalized Hermite polynomials. *Bull. Inst. Math. Acad. Sinica* **6** (1978), no. 1, 61-65. (Mourad H. Ismail) **58** #11557 33A65
- Singh, S. N.** (with Ojha, S. N.) The effects of thermal and electrical conductivities on the growth and decay of weak discontinuities in presence of radiation. *Pure Appl. Math. Sci.* **6** (1977), no. 1-2, 65-70. (Authors' summary) **58** #14382 78J35
- Singh, S. P.** See **Singh, Sankatha P.**
- Singh, S. P.** See **Singh, Surendra Pratap**
- Singh, S. P.** (with Lal, Krishna Bihari) The wave solutions of non-symmetric unified field theories of Einstein, Bonnor and Schrödinger. *Tensor (N.S.)* **23** (1972), 369-375. (W. Bonnor) **48** #13115 83J34
- Singh, S. S.** (with Lal, Krishna Bihari) The commutation formulae involving partial derivatives and projective covariant derivatives in a Finsler space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **49** (1970), 250-257 (1971). (D. Pande) **45** #4337 53B40
- (with Lal, Krishna Bihari) On Kählerian spaces with recurrent Bochner curvature tensor. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 213-220. (R. Miron) **46** #8104 53B35
- (with Lal, Krishna Bihari) Commutation formulae in conformal Finsler space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 346-351 (1972). (J. K. Beem) **48** #7150 53B40
- (with Lal, Krishna Bihari) Commutation formulae in conformal Finsler space. *Ann. Mat. Pura Appl.* (4) **91** (1972), 119-127. (J. K. Beem) **46** #8109 53B40
- On Kählerian recurrent and Ricci-recurrent spaces of second order. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **106** (1972), 509-518. (W. S. Piper) **47** #9467 53B35
- On Kählerian projective symmetric and Kählerian projective recurrent spaces. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 75-81. (K. Yano) **50** #5671 53B35
- Some theorems on Kählerian spaces with parallel Bochner curvature tensor. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 205-209. (K. Yano) **50** #5672 53B35
- On a Kählerian space with recurrent holomorphic projective curvature tensor. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 214-218 (1974). (K. Yano) **53** #3935 53B35
- Conharmonic transformations of Einstein-Kähler spaces with Bochner curvature tensor. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1974), no. 6, 559-564 (1975). (V. Oproiu) **54** #8503 53B35
- On Kählerian recurrent spaces of second order with Bochner curvature tensor. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **108** (1974), no. 5-6, 717-722. (T. Ohkubo) **52** #6599 53B35
- Singh, Sahib** The number of decompositions of an integer as a sum of two squares GF(p^n). *Indian J. Pure Appl. Math.* **4** (1973), no. 7-8, 606-611. (I. Gerst) **50** #28412C05
- Stufe of a finite field. *Fibonacci Quart.* **12** (1974), 81-82. (A. L. Whiteman) **50** #2131 12C15
- Analysis of each integer as sum of two cubes in a finite integral domain. *Indian Pure Appl. Math.* **6** (1975), no. 1, 29-35. (K. Thanigasalam) **53** #13174 12C15 (10B35, 10A45)
- The Stufe of some integral domains. *Delta (Waukesha)* **6** (1976), no. 1, 34-42. (W. S. Cassels) **54** #2617 12A35 (10B35)
- Singh, Sahjendra N.** (with Rugh, Wilson J.) Decoupling in a class of nonlinear systems by state variable feedback. *Trans. ASME Ser. G. J. Dynamic Systems, Measurement and Control* **94** (1972), 323-329. (S. E. Moskowitz) **47** #10102 93B15
- (with Rugh, Wilson J.) Weak decoupling in linear and nonlinear systems. (French, German and Russian summaries) *Automatica—J. IFAC* **9** (1973), 731-738. (Authors' summary) **58** #4513 93C10
- (with Rugh, Wilson J.) Decoupling in linear time-variable systems using output feedback. *Internat. J. Control* (1) **17** (1973), 321-336. (Guy Jumarie) **47** #4673 93B15

- Decoupling in a class of nonlinear systems by output feedback. *Information and Control* **26** (1974), 61-81. (T. Kaczorek) **50** #12349 (E **52** #7630) 93B15
- Erratum: "Decoupling in a class of nonlinear systems by output feedback" *Information and Control* **26** (1974), 61-81). *Information and Control* **29** (1975), no. 3, 4. (T. Kaczorek) **52** #7630 93C10
- Observability in non-linear systems with unmeasurable inputs. *Internat. J. Systems* **6** (1975), no. 8, 723-732. (S. P. Bingulac) **55** #7482 93B05
- Stability of 2-degree-of-freedom gyro in a spinning vehicle. *IEEE Trans. Aerospace and Electron. Systems* **AES-12** (1976), no. 4, 514-517. (Alan Bradshaw) **54** #9215 93A05
- Samar** (with Kambo, N. S.) Best exponential upper bounds to error probability obtainable by random coding for binary symmetric channels. *Information and Control* (1972), 261-279. (A. D. Wyner) **48** #8103 94A10
- (with Kambo, N. S.) Best asymptotic value of the error exponent with random coding on discrete memoryless channels. *J. Appl. Probability* **9** (1972), 327-336. (L. L. Campbell) **49** #4660 94A15
- (with Kambo, N. S.) Best exponential upper bounds to error probability obtainable by random coding for binary erasure channels. *Sankhyā Ser. A* **34** (1972), 275-284. (P. Mielke, Jr.) **49** #4650 94A10
- (with Kambo, N. S.) The capacities of certain special channels with arbitrarily varying channel probability functions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **9** (1974), 331-344. (Suguru Arimoto) **58** #26536 94A15
- (with Kambo, N. S.) Kraft inequality for decoding with respect to non-balanced distortion measures. *IEEE Trans. Information Theory* **IT-21** (1975), 102-104. (L. L. Campbell) **52** #10238 94A15
- (with Kambo, N. S.) Source code error bound in the excess rate region. *IEEE Trans. Information Theory* **IT-23** (1977), no. 1, 65-70. (Authors' summary) **58** #26524 94A10
- Sankatha P.** (with Sinha, B. B.) On recurrent spaces of second order in Finsler spaces. *J. Sci. Res. Banaras Hindu Univ.* **20** (1969/70), no. 2, 37-42. (Authors' summary) **55** #6322 53B40
- On commuting functions and fixed points. *Riv. Mat. Univ. Parma* (2) **10** (1969), 1-94. (W. A. Kirk) **45** #1146 54H25
- (with Norris, C. W.) Fixed point theorems in generalized metric spaces. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **14**(62) (1970), 87-91(1971). (D. G. Bourgin) **50** #1503 54H25
- (with Dube, L. S.) On multi-valued contraction mappings. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **14**(62) (1970), 307-310 (1971). (W. J. Gray) **48** #1202 54H25
- On sequence of contraction mappings. *Riv. Mat. Univ. Parma* (2) **11** (1970), 227-231. (W. A. Kirk) **47** #2451 47H10 (54H25)
- (with Zoritto, F.) On fixed point theorems in metric spaces. *Ann. Soc. Sci. Bruxelles Sér. I* **85** (1971), 117-123. (M. A. Geraghty) **46** #2661 54H25
- On fixed points. *Publ. Inst. Math. (Beograd) (N.S.)* **11**(25) (1971), 29-32. (N. Hadasch) **46** #6111 47H10 (54H25)
- (with Riggio, M. I.) On a theorem of J. B. Diaz and F. T. Metcalf. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **53** (1972), 246-249 (1973). (P. Mankiewicz) **49** #3615 47H10
- (with Holden, B. J.) Some fixed point theorems. *Bull. Soc. Roy. Sci. Liège* **41** (1972), 458-461. (P. M. Fitzpatrick) **47** #2452 47H10
- (with Veitch, Mary) Fixed point theorems for mappings with a convexity condition. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 279-282 (1974). (Haskell Cohen) **54** #1033 47H10
- (with Dube, L. S.) On sequence of mappings and fixed points. *Nanta Math.* **5** (1972), no. 2, 84-89. (W. A. Kirk) **47** #9597 54H25
- Fixed point theorems in metric spaces. *Riv. Mat. Univ. Parma* (3) **1** (1972), 37-40. (W. J. Gray) **51** #4203 54H25
- (with Norris, C. W.) Fixed point theorems in generalized metric space. *Riv. Math. Univ. Parma* (3) **1** (1972), 47-51. (S. K. Kaul) **51** #4201 54H25
- (with Yadav, R. K.) On the convergence of the sequence of iterates. *Ann. Soc. Sci. Bruxelles Sér. I* **87** (1973), 279-284. (Heinrich Steinlein) **48** #12177 47H10
- On a theorem of Reinermann. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 46-48. (Author's summary) **57** #10520 47H10
- Fixed point theorems for a sum of non linear operators. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 558-561 (1974). (Simeon Reich) **50** #10928 47H10
- Densifying mappings in metric spaces. *Math. Student* **41** (1973), no. 3-4, 433-436 (1974). (Joe A. Guthrie) **52** #9206 54H25
- ★ On fixed point theorems. Seminar in Analysis, 1973-1974. *MATSCIENCE—The Institute of Mathematical Sciences, Madras*, 1974. 157 pp. (J. L. Solomon ≠ Singh, S. P. ≠ Surjeet) **55** #9011 54H25 (47H10)
- (with Deb, S.) Fixed point theorems in topological vector spaces. *Ann. Soc. Sci. Bruxelles Sér. I* **88** (1974), 273-280. (J. Daneš) **50** #5564 47H15
- On the convergence of sequence of iterates. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 6, 502-505 (1975). (Authors' summary) **55** #8908 47H10
- On fixed point theorems. *Seminar in Analysis*, 1974, pp. 1-37. *Matscience*, No. 5, 1974. (S. P. ≠ Singh, S. P. ≠ Surjeet) **55** #8908 47H10
- On common fixed points for mappings. *Math. Japon.* **21** (1976), no. 3, 283-284. (S. K. Kaul) **55** #1343 54H25
- On common fixed points for mappings. *Math. Sem. Notes Kobe Univ.* **4** (1976), no. 1, 17-18. (R. C. O'Brien) **55** #1344 54H25
- (with Sehgal, V. M.) On a fixed point theorem of Krasnoselskii for locally convex spaces. *Pacific J. Math.* **62** (1976), no. 2, 561-567. (M. Z. Nashed) **54** #1032 47H10
- (with Meade, B. A.) On common fixed point theorems. *Bull. Austral. Math. Soc.* **16** (1977), no. 1, 49-53. (S. T. Lin) **55** #11234 54H25
- (with Meade, B. A.) An extension of a fixed point theorem. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 3, 443-446. (Mo Tak Kiang) **57** #10697 54H25
- (with Ray, Barada Kinkar) Fixed point theorems in Banach spaces. *Indian J. Pure Appl. Math.* **9** (1978), no. 3, 216-221. (Krishna M. Das) **57** #10517 47H10
- Jai Singh, Sawai** See **Jai Singh, Sawai, II**
- Singh, Shaligram** (with Prasad, R. L.) An aspect of the geometry of Hilbert spaces. *Progr. Math.* **8** (1974), no. 1, 31-40. (K. F. Klopfenstein) **51** #3871 46C05
- (with Singh, Uday Narayan) Some generalised fixed point theorems. *Ann. Soc. Sci. Bruxelles Sér. I* **89** (1975), no. 3, 369-374. (Harold Bell) **51** #14015 54H25
- (with Prasad, Damodar) Some results on commutator subgroups. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 1, 37-40. (John F. Bowers) **56** #8703 20F35
- (with Prasad, Damodar) Strongly-solvable groups. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 233-238. (B. Amagber) **56** #15772 20E15
- (with Prasad, Ram Lakhani) Structure of tangent space of a smooth Hilbert manifold. *Progr. Math. (Allahabad)* **11** (1977), no. 1-2, 25-34. (J. Eells) **56** #9565 58B10
- Singh, Shanker** (with Sze, Daniel; Singh, Vijendra Pal) Pulse-mode asynchronous sequential circuits. *Proceedings of the Eighth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1975)*, pp. 148-150. *Western Periodicals Co., North Hollywood, Calif.*, 1975. (C. Tartia) **51** #5197 94A20
- Singh, Sheo Ram** On the absolute harmonic summability of the conjugate series of a Fourier series. *J. Sci. Res. Banaras Hindu Univ.* **20** (1969/70), no. 1, 280-285. (G. Sunouchi) **54** #842 42A28
- (with Lal, Shiva Narain) On the Nörlund summability of a series associated with the derived series of a Fourier series. (Arabic summary) *Proc. Math. Phys. Soc. A.R.E.* **36** (1972), 79-86 (1975). (M. F. Timan) **53** #8767 42A24
- (with Stauffer, A. D.) A convergence proof for the Kohn variational method. *Lett. Nuovo Cimento* (2) **10** (1974), 401-404. (Not reviewed) 81.49
- (with Stauffer, A. D.) A unified formulation of the variational methods in scattering theory. (Italian and Russian summaries) *Nuovo Cimento B* (11) **22** (1974), 139-152. (John Nuttall) **50** #6380 81.49
- (with Stauffer, A. D.) A convergence proof for the Schwinger variational method for the scattering amplitude. *J. Phys. A* **8** (1975), no. 9, 1379-1383. (Nadine Bessis) **55** #5062 81.49
- (with Stauffer, A. D.) Variational methods for bound-state problems. (Italian and Russian summaries) *Nuovo Cimento B* (11) **25** (1975), 547-556. (John Nuttall) **52** #12636 81.49
- (with Zerner, M. C.) On the inversion of the classical second virial coefficient. *J. Statist. Phys.* **14** (1976), no. 4, 351-357. (M. Lawrence Glasser) **54** #12076 82.31
- Some convergence properties of the Bubnov-Galerkin method. *Pacific J. Math.* **65** (1976), no. 1, 217-221. (J. A. Erdos) **54** #8325 47A50 (65J05)
- (with Nuttall, J.) Orthogonal polynomials and Padé approximants associated with a system of arcs. *J. Approximation Theory* **21** (1977), no. 1, 1-42. (R. A. Askey) **58** #6833 41A20 (42A52)
- (with Zerner, M. C.) The collocation variational method for solving Fredholm integral equations and an application to potential scattering. *J. Phys. A* **10** (1977), no. 8, 1281-1286. (Iraj Hormozdian) **57** #4549 65R05 (45B05)
- Singh, Shree Dhar** (with Mishra, R. S.) Some properties of pseudo H -projective curvature tensor in a differentiable manifold equipped with KH -structure. *Indian J. Pure Appl. Math.* **6** (1975), no. 4, 444-450. (R. Miron) **56** #1214 53B35
- (with Mishra, R. S.) Pseudo H -projective changes in GF-structure. *Indian J. Pure Appl. Math.* **6** (1975), no. 11, 1309-1316. (Authors' summary) **57** #13744 53B20
- (with Mishra, R. S.) On GF-structure. *Indian J. Pure Appl. Math.* **6** (1975), no. 11, 1317-1325. (K. L. Duggal) **57** #7432 53B35
- Singh, Sudarshan Pal** (with Liu, Ruey Wen) Existence of state equation representation of linear large-scale dynamical systems. Large-scale networks. *IEEE Trans. Circuit Theory CT-20 (1973), 239-246. (Authors' summary) **54** #9742 93A15*
- Singh, Sukhjot** A 3-dimensional absolute retract. *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 443-448. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (James W. Cannon) **51** #6755 54F40 (57A10)
- A 3-dimensional irreducible compact absolute retract which contains no disc. *Fund. Math.* **84** (1974), no. 3, 229-235. (V. J. Mancuso) **49** #6192 54F40
- n -adic decompositions and retracts. *Studies in topology (Proc. Conf., Univ. North Carolina, Charlotte, N.C., 1974; dedicated to Math. Sect. Polish Acad. Sci.)*, pp. 545-551. Academic Press, New York, 1975. (James W. Cannon) **51** #6756 54F40 (57A10)
- On a question of Borsuk on FAR's. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 3, 267-269. (James W. Cannon) **52** #1700 57A10 (54C56, 54F20)
- On some shape invariant. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 1, 71-74. (Y. Kodama) **52** #15358 54C56 (55-XX)
- Decompositions, F -stability and FR -stability. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 9, 767-771. (R. B. Sher) **54** #11269 54C56
- 3-dimensional AR's which do not contain 2-dimensional ANR's. *Fund. Math.* **93** (1976), no. 1, 23-36. (D. R. McMillan, Jr.) **55** #6414 55C15
- Singh, Surendra Pratap** (with Sinha, B. B.) On the recurrent tensor fields of Finsler spaces. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **33** (1968), 117-124 (1971). (S. Watanabe) **46** #4422 (EA **46**) 53B40
- (with Sinha, B. B.) Generalised Finsler spaces of recurrent curvature. *Progr. Math. (Allahabad)* **3** (1969), no. 1-2, 85-92. (J. K. Beem) **46** #819 (EA **46**) 53B40
- (with Sinha, B. B.) On decomposition of recurrent curvature tensor fields in Finsler spaces. *Bull. Calcutta Math. Soc.* **62** (1970), 91-96. (K. Takano) **45** #5934 53B40
- (with Sinha, B. B.) On decomposition of recurrent curvature tensor fields. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 105-110. (S. Watanabe) **46** #9893 53B40
- (with Sinha, B. B.) K^* -curves of a subspace of a Finsler space. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 157-161. (T. Ohkubo) **46** #8110 53B40
- (with Sinha, B. B.) On recurrent Finsler spaces. *Rev. Roumaine Math. Pures Appl.* **16** (1971), 977-986. (S. Kawaguchi) **45** #1098 53B40
- (with Sinha, B. B.) On pseudo-projective tensor fields. *Tensor (N.S.)* **22** (1971), 317-320. (S. Watanabe) **45** #2639 53B40
- (with Sinha, B. B.) Recurrent Finsler space of second order. *Yokohama Math. J.* **19** (1971), no. 2, 79-85. (M. Yoshida) **53** #14346 53B40
- (with Sinha, B. B.) A generalization of Gauss and Codazzi equations for the first

- curvature of Cartan. C. N. Srinivasengar dedication volume. *Progr. Math. (Allahabad)* **6** (1972), no. 1, 1-6. (S. Golab) **48** #12376 53B40
- A special Kawaguchi space of recurrent curvature tensor field of second order. *Tensor (N.S.)* **23** (1972), 174-178. (A. Kawaguchi) **46** #6257 53C60
- (with Sinha, B. B.) Recurrent Finsler spaces of second order. II. *Indian J. Pure Appl. Math.* **4** (1973), no. 1, 45-50. (Editors) **58** #12810 53B40
- Decompositions of recurrent curvature tensor field in a special Kawaguchi space. *Tensor (N.S.)* **27** (1973), 1-6. (T. Ohkubo) **52** #4160 53B20
- Generalisation of Gauss-Codazzi equations in a generalised Finsler space. *Yokohama Math. J.* **21** (1973), 103-114. (S. Kawaguchi) **49** #1393 53B40
- On decomposition of curvature tensor field in a recurrent special Kawaguchi space of second order. *Jñānabha Sect. A* **5** (1975), 17-26. (From the author's introduction) **57** #13757 53B35
- On decomposition of recurrent curvature tensor fields in generalised Finsler spaces. *Kyungpook Math. J.* **15** (1975), no. 2, 201-212. (H. D. Pande) **54** #6015 53B40
- Veblen identity and some tensors in Finsler space. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys.* **2** (1976), no. 2, 285-294. (Yoshihiro Ichijō) **55** #11168 53B40
- Singh, Surjeet** (with Kumar, Ravinder) Rings in which each principal ideal is power of a prime ideal. *Aligarh Bull. Math.* **1** (1971), 13-24. (errata insert) (J. L. Mott) **47** #1790 13A99
- (with Kumar, Ravinder) (KE)-domains and their generalizations. *Arch. Math. (Basel)* **23** (1972), 390-397. (J. L. Mott) **47** #8505 13A15
- Principal ideals and multiplication rings. II. *J. London Math. Soc.* (2) **5** (1972), 613-623. (J. L. Mott) **47** #1800 13F99
- (with Khan, Mohammad Nasim) On pre-self injective rings. *Arch. Math. (Basel)* **24** (1973), 499-504. (A. Zaks) **49** #277 13C10
- (KE)-domains. *Pacific J. Math.* **46** (1973), 561-574. (J. L. Mott) **48** #11098 13G05
- Quasi-injective and quasi-projective modules over hereditary Noetherian prime rings. *Canad. J. Math.* **26** (1974), 1173-1185. (G. Michler) **50** #4662 16A52 (16A50)
- (with Zameeruddin, Qazi) Commutative self-injective rings. *Arch. Math. (Basel)* **26** (1975), 36-39. (J. L. Mott) **51** #10321 13C10
- Modules over hereditary Noetherian prime rings. *Canad. J. Math.* **27** (1975), no. 4, 867-883. (J. C. Robson) **52** #10787 16A14
- (with Jain, S. K.) Quasi-injective and pseudo-injective modules. *Canad. Math. Bull.* **18** (1975), no. 3, 359-366. (M. Teplý) **53** #531 16A52
- (with Jain, S. K.) Rings with quasi-projective left ideals. *Pacific J. Math.* **60** (1975), no. 1, 169-181. (J. P. Jans) **52** #496 16A50
- (with Geol, S. C.; Jain, S. K.) Rings whose cyclic modules are injective or projective. *Proc. Amer. Math. Soc.* **53** (1975), no. 1, 16-18. (Z. Papp) **52** #3234 16A52
- Modules over hereditary Noetherian prime rings. II. *Canad. J. Math.* **28** (1976), no. 1, 73-82. (J. C. Robson) **53** #8114 16A12
- (with Mohammad, Asrar) Rings in which every finitely generated left ideal is quasi-projective. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 195-205 (1977). (G. Eisenreich) **56** #5650 16A48 (16A50)
- (with Jain, S. K.; Symonds, R. G.) Rings whose proper cyclic modules are quasi-injective. *Pacific J. Math.* **67** (1976), no. 2, 461-472. (V. C. Cateforis) **54** #12829 16A52
- Some decomposition theorems in abelian groups and their generalizations. *Ring theory (Proc. Conf., Ohio Univ., Athens, Ohio, 1976)*, 183-189. *Lecture Notes in Pure and Appl. Math.*, Vol. 25, Dekker, New York, 1977. (J. C. Robson ≠ Singh, Surjeet ≠ s. p.) **55** #8107 16A64
- (with Mohamed, Saad) Weak q -rings. *Canad. J. Math.* **29** (1977), no. 4, 687-695. (J. P. Jans) **56** #415 16A52
- (with Goel, V. K.; Jain, S. K.) Semiprime rings with finite length w.r.t. an idempotent kernel functor. *Israel J. Math.* **28** (1977), no. 1-2, 110-112. (K. A. Byrd) **56** #8603 16A12 (18E40)
- (with Mohamed, Saad) Generalizations of decomposition theorems known over perfect rings. *J. Austral. Math. Soc. Ser. A* **24** (1977), no. 4, 496-510. (RŽMat) **1978** #12 A410 **58** #22172 16A48
- (with Talwar, Sudha) Pure submodules of modules over bounded (hnp)-rings. *Arch. Math. (Basel)* **30** (1978), no. 6, 570-577. (J. K. Luedeman) **58** #11017 16A62 (18E40)
- Singh, Surjit** (with Shirkot, K. S.) Unsteady flow of a Rivlin-Ericksen liquid in a rotating channel. *Acta Phys. Acad. Sci. Hungar.* **42** (1977), no. 3, 201-205. (Hilmi Demiray) **57** #14872 7635
- Singh, Surjit** (with Rajwade, A. R.) The number of solutions of the congruence $y^2 \equiv x^4 - a \pmod{p}$. *Enseignement Math.* (2) **20** (1974), 265-273. (J. Blass) **53** #2826 10B10 (10A10)
- Pseudo-valuation and pseudo norm. *Rend. Sem. Mat. Univ. Padova* **51** (1974), 83-96 (1975). (A. F. Monna) **51** #12811 12J20
- Note on a paper of P. M. Cohn. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), part 2, 211-213. (P. M. Cohn) **51** #12812 12J20
- Singh, T.** (with Lal, Krishna Bihari) On cylindrical wave solutions of Bonnor's and Schrödinger's unified field equations. *Tensor (N.S.)* **23** (1972), 151-156. **46** #6780 83.53
- (with Lal, Krishna Bihari) On cylindrical wave solutions of gauge-invariant generalization equations of field theories with asymmetric fundamental tensor. *Tensor (N.S.)* **23** (1972), 185-192. (H. A. Buchdahl) **48** #3437 83.53
- (with Lal, Krishna Bihari) On cylindrical wave solutions of gauge-invariant generalization equations of field theories with asymmetric fundamental tensor. II. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday. Vol. I. *Tensor (N.S.)* **24** (1972), 217-223. **48** #5595 83.53
- A plane symmetric solution of Einstein's field equations of general relativity containing zero-rest-mass scalar fields. *General Relativity and Gravitation* **5** (1974), no. 6, 657-662. (Colin B. G. McIntosh) **54** #2112 83.53
- Generalized plane wave solutions of Einstein-Maxwell equations in the presence of null currents and null fluids. *J. Mathematical and Physical Sci.* **9** (1975), no. 6, 499-504. (W. B. Bonnor) **52** #9945 83.35
- Solutions of a scalar-tensor theory from Einstein's theory. *J. Mathematical Phys.* (1975), no. 10, 2109-2111. (Fritz Schwarz) **52** #7464 83.53
- Cylindrically symmetric solutions of a scalar-tensor theory of gravitation. *J. Mathematical Phys.* **16** (1975), no. 12, 2517-2519. (P. C. Vaidya) **52** #7439 83.35
- On some Brans-Dicke fields generated from Einstein's vacuum fields. *Indian Pure Appl. Math.* **7** (1976), no. 5, 482-489. (Author's summary) **58** #32814 83.53
- Cylindrical wave solutions of a scalar-tensor theory. *General Relativity and Gravitation* **8** (1977), no. 2, 109-113. (Author's summary) **58** #25753 83.35
- An exact solution of a scalar-tensor theory of gravitation. *Proc. Indian Acad. Sci. A* **85** (1977), no. 2, 90-98. (Edward N. Glass) **55** #11907 83.53
- (with Yadav, R. B. S.) Cylindrically symmetric self-gravitating fluids with pressure equal to energy density. *Indian J. Pure Appl. Math.* **9** (1978), no. 9, 900-905. (Author's summary) **58** #20177 83.35
- Singh, Tikam** Absolute Riesz summability of factored Fourier series. *Jñānabha Sect. A* (1974), 129-140. (L. Leindler) **52** #3863 42A28
- (with Chandra, Prem) On the absolute Riesz summability of series related to Fourier series and its conjugate series. *Ranchi Univ. Math. J.* **6** (1975), 62-82. (M. Timan) **57** #13349 42A28
- Absolute summability factors for Laguerre series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **18** (1975), no. 3, 191-196. (D. P. Gupta) **55** #10956 42A56
- On absolute summability factors of Fourier-Hermite series. *Bull. Calcutta Math. Soc.* **68** (1976), no. 2, 125-130. (S. Baron) **57** #3734 42A56
- (with Pathak, Ram Shankar) Non-homogeneous generalized hypergeometric transform. *Kyungpook Math. J.* **16** (1976), no. 2, 177-182. (C. M. Joshi) **55** #613 44A20
- Absolute summability of Laguerre series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 1, 9-13. (D. P. Gupta) **55** #973 42A56
- On local property of $[N, p_n]$ -summability of Laguerre series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **19** (1976), no. 1, 87-91. (D. P. Gupta) **55** #974 42A56
- On the absolute Nörlund summability factors of infinite series. *Indian J. Pure Appl. Math.* **8** (1977), no. 1, 60-67. (E. Reimers) **56** #16201 40G05
- Degree of approximation by harmonic means of Fourier-Laguerre expansions. *Publ. Math. Debrecen* **24** (1977), no. 1-2, 53-57. (A. Meir) **56** #6271 42A56
- Degree of approximation by Cesàro means of Fourier-Laguerre series. *Indian Pure Appl. Math.* **9** (1978), no. 4, 394-399. (D. P. Gupta) **57** #10337 42A08
- On absolute Nörlund summability. *Pure Appl. Math. Sci.* **7** (1978), no. 1-2, 11-14. (S. M. Mazhar) **57** #6944 40F05
- Singh, U. N.** (with Sharma, Bhu Dev) R. S. Varma. *J. Math. Sci.* **6** (1971), i-viii (1972). (Editors) **57** #5638 01A70
- (with Mangla, Kanta) Operators with inverses similar to their adjoints. *Proc. Amer. Math. Soc.* **38** (1973), 258-260. (T. Andô) **46** #9786 (E **48** #9414) (E **49** #7829) 47B15
- (with Mangla, Kanta) Erratum: "Operators with their inverses similar to their adjoints" (Proc. Amer. Math. Soc. **38** (1973), 258-260). *Proc. Amer. Math. Soc.* (1974), 467. (Editors) **49** #7829 47B15
- Singh, Uday Bir** (with Singh, Uday Pratap) Geodesic torsion of a curve of a Finsler hypersurface. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Nat.* (8) **55** (1973), 210-213 (1974). (H. Rund) **50** #14561 53B40
- Special union and hyperasymptotic curves of a Kähler hypersurface. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **39** (1974), 11-16 (1975). (N. Prakash) **54** #11217 53B35
- (with Singh, Uday Pratap) Geodesic torsion of a curve in a Finsler space. *Tensor (N.S.)* **30** (1976), no. 1, 44-46. (R. B. Misra) **55** #4018 53B40
- (with Singh, Uday Pratap) G -union and G -special curves of a Finsler subspace. *Math. Phys. Sci.* **12** (1978), no. 1, 85-97. (H. D. Pande) **58** #18239 53B40
- Singh, Uday Pratap** On relative curvature tensors in the subspace of a Riemannian space. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **33** (1968), 69-75 (1971). (Miron) **46** #6215 53B25
- (with Prasad, Baij Nath) On hyper Darboux lines in Finsler subspace. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **34** (1969), 83-90 (1971). (M. Yoshida) **46** #4421 53B40
- (with Prasad, Baij Nath) On intrinsic normal curvature of a curve of a Finsler hypersurface. (Arabic summary) *Proc. Math. Phys. Soc. A.R.E. No.* **34** (1970), 81-84 (1972). (H. Rund) **48** #12377 53B40
- On union curves and pseudogeodesics of a subspace of a Riemannian space. *Mat. Hisp.-Amer.* (4) **30** (1970), 251-256. (A. Rapcsák) **45** #7648 53C40
- (with Prasad, Baij Nath) On union curves in a Kaehler hypersurface. *Ann. Math. Pura Appl.* (4) **89** (1971), 159-168. (H. S. Park) **47** #5762 53B35
- (with Prasad, Baij Nath) Special curvature collineations in Finsler space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **50** (1971), 122-127. (Makoto Matsumoto) **46** #818 53B40
- The curvature of a congruence of a Finsler hypersurface. *Progr. Math. (Allahabad)* **5** (1971), no. 1-2, 20-29. (H. Rund) **47** #7638 53B40
- (with Prasad, Baij Nath) On relative associate intrinsic curvature vector. *Univ. Tucumán Rev. Ser. A* **21** (1971), 7-13. (S. Golab) **50** #1160 53B40
- On intrinsic and induced theories of a Finsler subspace. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 119-121. (M. Yoshida) **49** #3743 53B40
- Curvature invariants associated with fundamental forms of a Finsler hypersurface. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1971), 41-47. (S. Kawaguchi) **49** #1394 53B40
- On the induced theory of Finsler hypersurfaces from the standpoint of non-linear connections. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **53** (1972), 541-548 (1973). (S. Kawaguchi) **50** #14559 53B40
- Hypernormal curves on a Riemannian hypersurface. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday. Vol. II. *Tensor (N.S.)* **25** (1973), 238-240. (Virgil Obădeanu) **49** #1395 53B40

- (with Dubey, Shri Krishna Deo) Induced and intrinsic derivatives on the subspace special Kawaguchi space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. s. Mat. Natur.* (8) **54** (1973), 724-729 (1974). (H. S. P. Grässer) **50** #14560 53B40
- (with Yadav, Prakash Chandra) On hyper Darboux lines of a Finsler hypersurface on the standpoint of the non-linear connections. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 730-738 (1974). (J. K. Beem) **51** #11077 53B40
- (with Singh, Udai Bir) Geodesic torsion of a curve of a Finsler hypersurface. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 10-213 (1974). (H. Rund) **50** #14561 53B40
- (with Dubey, Shri Krishna Deo) Union curves and union curvature of a curve in special Kawaguchi spaces of order two. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 393-399 (1974). (M. Yoshida) **51** #1638 53B25
- (with Prasad, Baij Nath) On a Kähler space with parallel Bochner curvature tensor. *Indian J. Math.* **15** (1973), 25-31. (Editors) **58** #30868 53B35
- (with Yadav, Prakash Chandra) On subspaces of subspaces of a Finsler space. *Rend. Accad. Naz. XL* (4) **24/25** (1973/74), 63-70 (1975). (R. B. Misra) **54** #3614 53B40
- (with Yadav, Prakash Chandra) On hypernormal curves in the special Kawaguchi geometry. *Rend. Accad. Naz. XL* (4) **24/25** (1973/74), 71-76 (1975). (R. B. Misra) **54** #3615 53B40
- On Finsler spaces admitting parallel vectorfields. *Tensor (N.S.)* **27** (1973), 170-172. (E. Bompiani) **49** #3744 53B40
- (with Singh, V. P.) On union curves and pseudogeodesics in a Finsler subspace from the standpoint of non-linear connections. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 4, 530-536. (R. B. Misra) **52** #15299 53B40
- (with Dubey, Shri Krishna Deo) Hyperasymptotic and hypergeodesic curvatures of a curve in special Kawaguchi spaces. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 6, 586-591 (1975). (Stere Ianus) **55** #4006 53B20
- On hyper asymptotic curves in generalised spaces. *Math. Student* **42** (1974), 201-204 (1975). (Zbl 357 #53016) **58** #30887 53B40
- (with Dubey, Shri Krishna Deo) On pseudogeodesics and relative parallelism in a special Kawaguchi space. *Pure Appl. Math. Sci.* **1** (1974/75), no. 2, 6-13. (Yoshihiro Ichijyō) **56** #16534 53B40
- (with Dubey, Shri Krishna Deo) On subspaces of subspaces in special Kawaguchi spaces. *Univ. Nac. Tucumán Rev. Ser. A* **24** (1974), no. 1-2, 167-172 (1975). (Bang-yen Chen) **52** #4162 53B25
- (with Yadav, Prakash Chandra) Subspaces of subspaces of a Finsler space. *Univ. Nac. Tucumán Rev. Ser. A* **24** (1974), no. 1-2, 213-221 (1975). (H. Rund) **52** #4167 53B40
- (with Dubey, Shri Krishna Deo) Special curves of a subspace of a special Kawaguchi space. (Italian summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 2, 319-326. (A. Kawaguchi) **54** #3616 53B40
- (with Yadav, Prakash Chandra) On decomposition of curvature tensor in recurrent Finsler spaces. *Univ. Nac. Tucumán Rev. Ser. A* **25** (1975), no. 1-2, 49-55 (1976). (Hassan Akbar-Zadeh) **54** #8508 53B40
- (with Singh, Udai Bir) Geodesic torsion of a curve in a Finsler space. *Tensor (N.S.)* **30** (1976), no. 1, 44-46. (R. B. Misra) **55** #4018 53B40
- (with Singh, Awadhesh Kumar) On Kaehlerian conharmonic recurrent and Kaehlerian conharmonic symmetric spaces. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **62** (1977), no. 2, 173-179. (K. Yano) **58** #24100 53B35
- (with Chaubey, G.-C.) On hypersurfaces of recurrent Finsler spaces. *Indian J. Pure Appl. Math.* **8** (1977), no. 4, 497-504. (M. S. Al-Borney) **58** #2630 53B40
- (with Singh, Raghuraj) Partial differential equations for the generalized polynomial $M_n(x, y)$. *Progr. Math. (Allahabad)* **11** (1977), no. 1-2, 15-24. (B. R. Bhonsle) **57** #739 3A35
- (with Dubey, Shri Krishna Deo) Theory of Lie derivatives and motions in special Kawaguchi spaces and its subspaces. *Indian J. Pure Appl. Math.* **9** (1978), no. 7, 709-717. (S. Watanabe) **58** #2631 53B40
- (with Singh, Udai Bir) G -union and G -special curves of a Finsler subspace. *J. Math. Phys. Sci.* **12** (1978), no. 1, 85-97. (H. D. Pande) **58** #18239 53B40
- (with Singh, Awadhesh Kumar) Curvature collineations in a recurrent Riemannian space. *J. Math. Phys. Sci.* **12** (1978), no. 4, 307-313. (P. Stavre) **58** #12780 53B20
- (with Singh, Awadhesh Kumar) Theory of Lie-derivatives and motions in Hermitian spaces. *J. Math. Phys. Sci.* **12** (1978), no. 4, 315-324. (T. Suguri) **58** #12799 53B35
- gh, Uday Narayan (with Singh, Shaligram) Some generalised fixed point theorems. *Ann. Soc. Sci. Bruxelles Sér. I.* **89** (1975), no. 3, 369-374. (Harold Bell) **51** #14015 54H25
- gh, Umesh (with Gupta, Vijaya Prakash) Bias and mean square error of an estimation procedure after a preliminary test of significance for three-way layout in ANOVA model-II. *Sankhyā Ser. B* **38** (1976), no. 2, 164-178. (T. A. Bancroft) **57** #7896 62J10
- gh, V. B. (with Dwivedi, A. P.) Quadruple sequence equations involving orthogonal polynomials. *Proc. Nat. Acad. Sci. India Sect. A* **46** (1976), no. 2, 131-136. **58** #29798 42A52
- (with Dwivedi, A. P.) Quadruple series equations involving series of Jacobi polynomials. *Indian J. Pure Appl. Math.* **8** (1977), no. 9, 1068-1077. (B. R. Bhonsle) **58** #6397 33A65 (45F10)
- (with Dwivedi, A. P.) On simultaneous dual integral equations of convolution type. *J. of M.A.C.T.* **10** (1977), 77-84. (R. U. Verma) **57** #17149 45F10
- gh, V. K. On the absolute summability $|C_r+1|_k$ of the conjugate series of the r -th derived series of Fourier series. *Comment. Math. Prace Mat.* **19** (1976), no. 1, 147-153. (G. Sunouchi) **54** #10966 42A24
- gh, V. N. Certain integrals involving generalised hypergeometric functions of two variables. *Acta Ci. Indica* **3**, no. 2, 189-191 (1977). (V. M. Bhishe) **57** #10023 33A35
- On some double integrals involving Meijer's G -function. *Indian J. Pure Appl. Math.* **8** (1977), no. 2, 189-195. (R. G. Buschman) **56** #8931 33A35
- Singh, V. P. See Singh, Vijendra Pal
- Singh, V. P. (with Singh, Udai Pratap) On union curves and pseudogeodesics in a Finsler subspace from the standpoint of non-linear connections. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 4, 530-536. (R. B. Misra) **52** #15299 53B40
- On union curve and union curvature of a Finsler hypersurface from the stand point of non-linear connections. *Progr. Math.* **8** (1974), no. 1, 23-30. (H. Rund) **51** #4096 53B40
- Singh, Vashishtha N. Reproducing kernels and operators with a cyclic vector. I. *Pacific J. Math.* **52** (1974), 567-584. (J. Rovnyak) **50** #8133 47A65 (46E20)
- Singh, Vijay A. (with Inomata, Akira) Path integrals with a periodic constraint: entangled strings. *J. Math. Phys.* **19** (1978), no. 11, 2318-2323. (Authors' summary) **58** #25640 81.60
- Singh, Vijendra On a relation between harmonic summability and Riemann summability. *Riv. Mat. Univ. Parma* (3) **1** (1972), 239-246. (K. Chandrasekhara Rao) **50** #13961 40D25
- Singh, Vijendra Pal Finite waiting space bulk service system. *J. Engrg. Math.* **5** (1971), 241-248. (J. G. C. Templeton) **50** #14994 (E 50 #14995) 60K25
- (with Hsieh, Hsueh Y.) Statistical properties of the noise output current. *J. Engrg. Math.* **5** (1971), 249-255. (L. L. Campbell) **51** #5152 94A05
- Addendum: "Finite waiting space bulk service system" (*J. Engrg. Math.* **5** (1971), 241-248). *J. Engrg. Math.* **6** (1972), 85-88. (J. G. C. Templeton) **50** #14995 60K25
- Queue-dependent servers. *J. Engrg. Math.* **7** (1973), 123-126. (C. Mohan) **51** #9261 60K25
- (with Singh, Shanker; Sze, Daniel) Pulse-mode asynchronous sequential circuits. *Proceedings of the Eighth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1975)*, pp. 148-150. Western Periodicals Co., North Hollywood, Calif., 1975. (C. Tartia) **51** #5197 94A20
- (with Prasad, J.) A heterogeneous system with finite waiting space. *J. Engrg. Math.* **10** (1976), no. 2, 125-134. (Nassar Hadidi) **55** #11440 60K25
- Singh, Vikramaditya (with Goel, Ram Murti) Coefficient estimates for a class of starlike functions. *Indian J. Pure Appl. Math.* **3** (1972), no. 6, 1118-1130. (F. Holland) **50** #10231 (EA 51) 30A34
- (with Goel, Ram Murti) On radii of univalence of certain analytic functions. *Indian J. Pure Appl. Math.* **4** (1973), no. 4, 402-421. (S. D. Bernardi) **51** #875 30A32
- (with Singh, Ram) On a class of bounded starlike functions. *Indian J. Pure Appl. Math.* **5** (1974), no. 8, 733-754. (Carl P. McCarty) **55** #647 30A32
- (with Gupta, R. S.) Radius of convexity of α -spiral like functions. *Indian J. Pure Appl. Math.* **6** (1975), no. 3, 322-336. (R. J. Libera) **56** #12248 30A32
- (with Singh, Ram) On a class of functions schlicht in the unit disc. *Indian J. Pure Appl. Math.* **7** (1976), no. 1, 116-120. (S. K. Bajpai) **57** #610 30A32
- (with Ruscheweyh, Stephan) On certain extremal problems for functions with positive real part. *Proc. Amer. Math. Soc.* **61** (1976), no. 2, 329-334 (1977). (M. S. Robertson) **54** #13060 30A32
- (with Chichra, Pran Nath) Univalent functions $f(z)$ for which $zf'(z)$ is α -spiral-like. *Indian J. Pure Appl. Math.* **8** (1977), no. 2, 253-259. (R. J. Libera) **57** #6397 30A32
- (with Paul, Surinder) Constrained extremal problems for functions with positive real part. *Indian J. Pure Appl. Math.* **8** (1977), no. 4, 454-462. (Authors' summary) **58** #28511 30A76
- Singh, Vikramaditya On the summation of derived Fourier series by Borel's integral method. *Indian J. Math.* **12** (1970), 195-203. (S. M. Mazhar) **46** #4091 42A24
- (with Sinha, S. R.) On the absolute Riesz summability of a series associated with the derived Fourier series. *Indian J. Math.* **13** (1971), 131-137. (S. M. Mazhar) **48** #4621 42A28
- On the summation of a series associated with Fourier series by absolute Borel's integral method. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 2, 149-157. (S. Baron) **51** #10984 42A28
- On the absolute Euler summability of derived Fourier series. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **26** (1978), no. 3, 213-222. (S. M. Mazhar) **58** #12164 42A28
- Singh, Vimal Comments on: "A direct synthesis of Q in the Lyapunov equation $Q = -[A'R + R^*A]$ " (*IEEE Trans. Automatic Control* **AC-17**(1972), no. 5, 726-728), by E. T. Wall and D. E. Stewart. With a reply by Wall. *IEEE Trans. Automatic Control* **AC-19** (1974), 625. (Editors) **57** #5312 93D05 (93D10)
- On a recent stability conjecture. *Proc. IEEE* **63** (1975), no. 12, 1725-1726. (O. I. Nwokah) **57** #10129 34D20
- A note on Kalman's conjecture for a class of third-order systems. *Proc. IEEE* **64** (1976), no. 8, 1246-1247. (Author's summary) **56** #2564 93D05
- Further remarks on: "On third-order systems and Aizerman's conjecture" (*IEEE Trans. Automatic Control* **AC-17** (1972), 220-222) by A. R. Bergen and R. A. Baker. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 2, 285. (Editors) **55** #14356 93D99
- Singh, Virendra Exact results in the analytic S -matrix theory of strong interactions for high energies. *Fields and Quanta* **1** (1970/71), no. 2, 151-170. (Porter W. Johnson) **55** #4994 81.30
- (with Vengurlekar, Arvind S.) Asymptotic bounds on the absorptive parts of the elastic scattering amplitudes. *Phys. Rev. D* (3) **5** (1972), 2310-2315. (Authors' summary) **52** #7355 81.30
- Bounds on elastic absorptive parts. *Ann. Physics* **92** (1975), no. 2, 377-394. (Marcel Coz) **52** #9879 81.34
- Analytical theory of the control equations for protein synthesis in the Goodwin model. *Bull. Math. Biology* **39** (1977), no. 5, 565-575. (Brian D. Sleeman) **57** #5169 92A05
- (with Raina, A. K.) Exact solution of a Meiman problem with an application to the pionic contribution to the muon magnetic moment. *Nuclear Phys. B* **139** (1978), no. 3, 341-364. (K. T. Mahanthappa) **58** #14544 81.30
- (with Biswas, S. N.; Datta, K.) Anharmonic oscillator and the analytic theory of continued fractions. *Phys. Rev. D* (3) **18** (1978), no. 6, 1901-1908. (P. J. Roberts) **58** #25515 81.34 (34A20)

- Singh, Y. P. On integrals involving the product of two hypergeometric series and some operational results in two variables. *Proc. Nat. Acad. Sci. India Sect. A* **36** (1966), 687-712. (T. Erber) **46** #7570 33A30
- On generating functions. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 199-203. (K. C. Sharma) **47** #2104 33A30
- The asymptotic behavior of solutions of a nonlinear n th-order differential equation. *Math. J. Okayama Univ.* **15** (1971/72), 71-73. (T. G. Hallam) **46** #470 34E05 (34D05)
- On the oscillation of solutions of a n th-order differential equation. *Yokohama Math. J.* **22** (1974), 1-9. (C. A. Swanson) **50** #7672 34C10
- Singhal, B. M. On product of generalized hypergeometric functions. *Indian J. Pure Appl. Math.* **5** (1974), no. 12, 1141-1146. (Author's summary) **57** #12930 33A30
- (with Agrawal, B. M.) An integral representation for the product of two generalised hypergeometric polynomials. *J. Jiwaji Univ.* **2** (1974), no. 1, 68-72. (S. P. Goyal) **54** #7883 33A30
- (with Agrawal, B. M.) On multiple integrals involving hypergeometric functions of two variables. *Jñānabha Sect. A* **4** (1974), 41-46. (Y. L. Luke) **52** #6055 33A30
- On the reducibility of Lauricella's function F_D . *Jñānabha Sect. A* **4** (1974), 163-164. (V. L. Deshpande) **52** #3626 33A30
- (with Agrawal, B. M.) A transformation from G functions to ' H ' functions. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), 137-142. (S. D. Bajpai) **50** #13645 33A35
- Integral representation for the product of two polynomials. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **17** (1974), no. 3, 165-169. (C. M. Joshi) **54** #13164 33A30
- On Meijer's G -function of two variables. I. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **18** (1975), no. 4, 347-352. (V. M. Bhise) **54** #7901 33A35
- A transformation from G -functions to H -functions of two variables. *Indian J. Pure Appl. Math.* **7** (1976), no. 6, 682-691. (A. M. Mathai) **58** #28724 33A35
- Some identities and hypergeometric functional expansions. *Jñānabha Sect. A* **6** (1976), 49-52. (R. N. Jain) **58** #28715 33A30
- (with Agrawal, B. M.) A new duplication formula for $I(2r; z)$. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 1, 35-39. (Authors' summary) **56** #685 33A15
- On Meixner's formula. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 4, 325-329. (From the author's summary) **57** #6918 39A05
- Singhal, J. P. (with Schleusner, John W.) On determinant representations for certain classical polynomials. *J. Natur. Sci. and Math.* **10** (1970), 287-291. (S. K. Chatterjea) **47** #5324 33A65
- (with Srivastava, Hari M.) A class of polynomials defined by generalized Rodrigues' formula. *Ann. Mat. Pura Appl.* (4) **90** (1971), 75-85. (A. G. Law) **46** #7596 33A65
- (with Joshi, C. M.) Some polynomials associated with the generalized Hermite polynomials. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* (6) **26** (1971), 25-33. (K. N. Srivastava) **45** #7136 33A65
- (with Srivastava, Hari M.) Some formulas involving the products of several Jacobi or Laguerre polynomials. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **58** (1972), 1238-1247. (A. G. Law) **47** #7085 33A65
- (with Srivastava, Hari M.) Certain generating functions for Jacobi, Laguerre and Rice polynomials. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 355-363. (B. M. Agrawal) **46** #7595 33A65
- Certain extensions of the Mehler formula. *Canad. Math. Bull.* **15** (1972), 115-117. (A. G. Law) **47** #3721 33A65
- (with Srivastava, Hari M.) Some extensions of the Mehler formula. II. *Duke Math. J.* **39** (1972), 173-177. (R. A. Askey) **45** #613 33A65
- (with Srivastava, Hari M.) On a class of generalized hypergeometric distributions. *Jñānabha Sect. A* **2** (1972), 1-9. (S. D. Bajpai) **50** #15069 62E15
- (with Srivastava, Hari M.) A unified presentation of certain classical polynomials. *Math. Comp.* **26** (1972), 969-975. (A. E. Danese) **47** #2114 33A65
- (with Soni, N. K.) Some integrals involving Appell's hypergeometric functions. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 385-388 (1974). (V. L. Deshpande) **53** #8520 33A30
- (with Srivastava, Hari M.) A class of bilateral generating functions for certain classical polynomials. *Pacific J. Math.* **42** (1972), 755-762. (S. Saran) **47** #5325 33A65 (33A45)
- (with Joshi, C. M.) Operational formulas associated with a class of polynomials unifying the generalized Hermite and Laguerre polynomials. *Riv. Mat. Univ. Parma* (3) **1** (1972), 279-286. (S. K. Chatterjea) **51** #5999 33A65
- (with Srivastava, Hari M.) Some generalizations of Mehler's formula. *Rocky Mountain J. Math.* **2** (1972), no. 2, 283-287. (S. K. Chatterjea) **45** #3809 33A65
- (with Joshi, C. M.) Some polynomials associated with the generalized Hermite polynomials. *J. Approximation Theory* **7** (1973), 113-121. (K. N. Srivastava) **49** #5428 33A65
- (with Srivastava, Hari M.) New generating functions for Jacobi and related polynomials. *J. Math. Anal. Appl.* **41** (1973), 748-752. (R. A. Askey) **48** #4374 33A65
- (with Bhati, S. S.) An extension of the Mehler formula. *Jñānabha Sect. A* **3** (1973), 27-33. (R. N. Jain) **50** #656 33A45
- (with Soni, N. K.) Multiple series relations involving Hermite polynomials. *Publ. Inst. Math. (Beograd) (N.S.)* **15**(29) (1973), 127-132. (M. E. Muldoon) **49** #10941 33A65
- (with Soni, N. K.) An integral involving Legendre polynomial and generalized function of two variables. *Univ. Nac. Tucumán Rev. Ser. A* **25** (1975), no. 1-2, 73-77 (1976). (B. R. Bhonsle) **55** #3360 33A45
- (with Bhati, S. S.) Certain expansions associated with hypergeometric functions of n variables. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **11** (31) (1976), no. 2, 239-245. (Harold Exton) **55** #731 33A30
- (with Soni, N. K.) Some polynomials associated with $G_n^{(a)}(x, r, p, k)$. *Ranchi Univ. Math. J.* **7** (1976), 1-10. (H. L. Manocha) **58** #28709 33A10
- (with Bhati, S. S.) Integrals involving generalized H -function of two variables. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 1, 73-80. (Authors' summary) **56** #3370 33A30
- Singhal, Kishore (with Vlach, Jifi) Interpolation using the fast Fourier transform. *Proc. IEEE* **60** (1972), 1558. (Marc Duc-Jacquet) **52** #2134 65D05
- (with Vlach, Jifi) Accuracy and speed of real and complex interpolation. (German summary) *Computing (Arch. Elektron. Rechnen)* **11** (1973), no. 2, 147-158. (C. V. Clenshaw) **51** #14519 65D05
- (with Nakhla, Michael; Vlach, Jifi) An optimal pivoting order for the solution sparse systems of equations. *IEEE Trans. Circuits and Systems* **CAS-21** (1974), 222-225. (Jan Zitko) **52** #12307 65F05
- (with Vlach, Jifi) Computation of time domain response by numerical inversion the Laplace transform. *J. Franklin Inst.* **299** (1975), 109-126. (R. S. Dahiya) **51** #11965D20
- (with Vlach, Jifi; Nakhla, Michael) Absolutely stable, high order method for time domain solution of networks. (German summary) *AEÜ—Arch. Elektron. Übertragungstech.* **30** (1976), no. 4, 157-166. (Authors' summary) **57** #5482 94A01 (93D10)
- (with Vlach, Jifi) Symbolic analysis of analog and digital circuits. *IEEE Trans. Circuits and Systems* **CAS-24** (1977), no. 11, 598-609. (Authors' summary) **56** #15212 94A20
- Singhal, M. K. On the behavior of a sequence of Fourier coefficients. *Rend. Circ. Mat. Palermo* (2) **20** (1971), 269-276 (1972). (F. Liverani) **48** #11880 42A24
- Singh Antal, Tara Sums of double series. *Ganita* **23** (1972), no. 2, 25-32. (Harold Exton) **47** #7075 33A30
- Singh Chandel, R. C. A short note on generalized Laguerre polynomials and the polynomials related to them. *Indian J. Math*

- 192. (D. K. Ray-Chaudhuri) **56** #8393 05B05
(with Bose, R. C.; Shrikhande, S. S.) Edge regular multigraphs and partial metric designs with an application to the embedding of quasi-residual designs. *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973)*, no. 1, pp. 49-81. *Atti dei Convegni Lincei*, No. 17, *Accad. Naz. Lincei, Rome*, 1976. **58** #21709 05B30 (05B25, 05C99)
(with Rothschild, B. L.) Characterizing k -flats in geometric designs. *J. Combinatorial Theory Ser. A* **20** (1976), no. 3, 398-403. (Aiden A. Bruen) **55** #2621 335
(with Shrikhande, S. S.) On the λ -design conjecture. *Utilitas Math.* **9** (1976), 1-318. (L. D. Baumert) **57** #9577 05B30
(with Ray-Chaudhuri, Dijen K.) A characterization of the line-hyperplane design of projective space and some extremal theorems for matroid designs. *Number theory and algebra*, pp. 289-301. *Academic Press, New York*, 1977. (Noboru Hamada) **57** #12265 B25
(with Földes, Stéphane) Regular representation of abelian groups by 3-uniform hypergraphs. *Ars Combinatoria* **3** (1977), 15-20. (Pavol Hell) **58** #21782 05C25
(with Erdős, Paul; Rothschild, B. L.) Characterizing cliques in hypergraphs. *Ars Combinatoria* **4** (1977), 81-118. (M. Aigner) **58** #10607 05C99
(with Mullin, Ronald C.; Vanstone, S. A.) Embedding the affine complement of three intersecting lines in a finite projective plane. *J. Austral. Math. Soc. Ser. A* **24** (1977), 4, 458-464. (L. D. Baumert) **57** #2953 05B30 (05B25, 50D30)
(with Földes, Stéphane) Regular representation of finite groups by hypergraphs. *Canad. J. Math.* **30** (1978), no. 5, 946-960. (C. R. J. Clapham) **58** #10576 05C25 0C99
of, Wilhelm Über nichtlineare Spektral- und Störungstheorie. (English summary) *Manuscripta Math.* **14** (1974), 123-162. (J. Daneš) **50** #10942 47H99 (58D99)
On the Lusternik-Schnirelmann category of Lie groups. *Math. Z.* **145** (1975), no. 2, 1-116. (Pierre J. Malraison, Jr.) **52** #11897 55C30
On the Lusternik-Schnirelmann category of Lie groups. II. *Math. Z.* **151** (1976), no. 143-148. (Pierre J. Malraison, Jr.) **54** #13902 55C30 (57F20)
Varma, H. O. (with Shih, Weishu) Sur les KO -classes caractéristiques des fibrés éls. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A1212-A1214. (A. Dold) **45** #1155 F05
See also *Comptes Rendus: K-Colloque*, **48** #6204
S, L. An extension of L_2 designs. *Austral. J. Statist.* **19** (1977), no. 2, 126-131. (Damaraju Raghavarao) **56** #13474 62K10
ary, W. E. (with Hughes, Charles E.) Combinatorial systems with axiom. *Notre Dame J. Formal Logic* **14** (1973), 354-360. (L. Bokut') **48** #10791 02F47
Many-one degrees associated with partial propositional calculi. *Notre Dame J. Formal Logic* **15** (1974), 335-343. (S. K. Thomason) **50** #1862 02F30 (02B05, 02F05, 02F25)
(with Hughes, Charles E.) Combinatorial systems defined over one- and two-letter alphabets. *Arch. Math. Logik Grundlagenforsch.* **17** (1975), no. 1-2, 25-33. (Forbes D. Lewis) **53** #105 02F05 (02G05, 02F30)
(with Hughes, Charles E.) Triadic partial implicational propositional calculi. *Z. Math. Logik Grundlagen Math.* **21** (1975), 21-28. (Forbes D. Lewis) **52** #13348 02F30
(with Hughes, Charles E.) The one-one equivalence of some general combinatorial decision problems. *Notre Dame J. Formal Logic* **18** (1977), no. 2, 305-309. (Cristian Alude) **57** #9513 02F50 (02G05)
ton, Robert E. (with Oswatitsch, Klaus) The method of parabolic substitution for subsonic flow. *Transactions of the Twenty-First Conference of Army Mathematicians White Sands Missile Range, White Sands, N.M., 1975*, pp. 445-456. *ARO Rep.*, 76-1. *U. Army Res. Office, Research Triangle Park, N.C.*, 1976. (Authors' summary) **53** #32401 76G5
ton, Robert R. (with Tyndall, William F.) ★Games and programs. *Mathematics for modeling*. W. H. Freeman and Co., San Francisco, Calif., 1974. xxiii + 304 pp. (Editors) **51** #2636 90Cxx (90Dxx)
(with Tyndall, William F.) ★Introducción a la teoría de juegos y a la programación lineal. (Spanish) [Introduction to the theory of games and to linear programming] translated from the English by Marta Sanz Solé. Labor Universitaria. Manuales. University Research. Manuales] *Editorial Labor, Barcelona*, 1977. 274 pp. *ISBN* 84-335-1714-7 (Editors) **57** #15420 90C05 (90-01)
ey, Donald H. Pairs of metrics on parallel hypersurfaces and ovaloids. *Differential Geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973)*, Part 1, pp. 237-243. *Amer. Math. Soc., Providence, R.I.*, 1975. (M. Okumura) **52** #11802 53C45
Smoothness theorems for the principal curvatures and principal vectors of a hypersurface. *Rocky Mountain J. Math.* **5** (1975), 135-144. (C.-C. Hsiung) **51** #4120 53C40
master, David On the concept of directed distance. *Enseignement Math.* **17** (1971), 7-91. (A. Cronheim) **48** #8646 20F99 (50A20)
Some corrections to Carlson's "Determination of Heronian triangles". *Fibonacci Quart.* **11** (1973), no. 2, 157-158. (K. Szymiczek) **47** #4922 10B05 (10A40, 50A05)
Notes on binomial coefficients. IV. Proof of a conjecture of Gould on the GCD's of two triples of binomial coefficients. *Fibonacci Quart.* **11** (1973), no. 3, 282-284. (H. W. Gould) **49** #4792 05A10 (10A05)
Notes on binomial coefficients. I. A generalization of Lucas' congruence. *J. London Math. Soc.* (2) **8** (1974), 545-548. (F. T. Howard) **53** #151 05A10 (10A20)
Notes on binomial coefficients. II. The least n such that p^r divides an r -nomial coefficient of rank n . *J. London Math. Soc.* (2) **8** (1974), 549-554. (F. T. Howard) **53** #152 05A10 (10A25)
Notes on binomial coefficients. III. Any integer divides almost all binomial coefficients. *J. London Math. Soc.* (2) **8** (1974), 555-560. (F. T. Howard) **53** #153 05A10 (10A25)
On polynomial functions (mod m). *J. Number Theory* **6** (1974), 345-352. (W. Ledermann) **51** #3127 12C05
Enumerating unlabelled Hamiltonian circuits. *Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen (Tagung, Math. Forschungsinst.*
- Oberwolfach, Oberwolfach*, 1974), pp. 117-130. *International Series of Numerical Mathematics, Vol. 29, Birkhäuser, Basel*, 1975. (R. C. Read) **54** #10077 05C35
Repeated binomial coefficients and Fibonacci numbers. *Fibonacci Quart.* **13** (1975), no. 4, 295-298. (H. W. Gould) **54** #224 10A35 (05A10)
Hamiltonian circuits on the n -dimensional octahedron. *J. Combinatorial Theory Ser. B* **19** (1975), no. 1, 1-4. (Author's summary) **52** #13493 05C35
Covering deleted chessboards with dominoes. *Math. Mag.* **48** (1975), 59-66. (J. B. Wilker) **50** #14503 52A45 (05B40)
(with Hill, Anthony) Labelled and unlabelled Hamiltonian circuits in a class of 3-polytopes. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 293-305. *Congressus Numerantium, No. XV, Utilitas Math., Winnipeg, Man.*, 1976. (D. Barnette) **53** #1410 52A25
(with Hill, Anthony) Some classes of Hamiltonian 3-polytopes. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 551-558. *Congressus Numerantium, No. XV, Utilitas Math., Winnipeg, Man.*, 1976. (D. Barnette) **53** #1412 52A25
An elementary evaluation of the Catalan numbers. *Amer. Math. Monthly* **85** (1978), no. 5, 366-368. (Graham Lord) **58** #10475 05A15
Singpurwalla, Nozer D. (with Mann, Nancy R.; Schafer, Ray E.) ★Methods for statistical analysis of reliability and life data. *Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, New York-London-Sydney*, 1974. ix + 564 pp. (H. L. Harter) **51** #2228 62N05
(with Haines, Andrew L.) Some contributions to the stochastic characterization of wear. *Reliability and biometry: statistical analysis of lifelength (Proc. Conf., Florida State Univ., Tallahassee, Fla., 1973)*, pp. 47-80. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1974. (A. C. Cohen) **50** #6086 62N05
Estimation of the join point in a heteroscedastic regression model arising in accelerated life tests. *Comm. Statist.* **3** (1974), 853-863. (S. Blumenthal) **51** #4613 62N05
★Annotated bibliography on some physical models in accelerated life testing and models for fatigue failure. *ARL TR 75-0158. Applied Mathematics Research Laboratory, Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio; distributed by National Technical Information Services Clearinghouse, Springfield, Va.*, 1975. iv + 40 pp. (Editors) **51** #7214 62N05 (90B25)
Time series analysis and forecasting of failure-rate processes. *Reliability and fault tree analysis (Conf., Univ. California, Berkeley, Calif., 1974)*, pp. 483-507. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1975. (S. M. Pandit) **56** #9880 62N05
(with Brown, Robert A.) Some inequalities for certain functions of order statistics from IFR distributions. *J. Amer. Statist. Assoc.* **70** (1975), 245-247. (P. K. Sen) **51** #9350 62G30
(with Castellino, Victor C.; Goldschen, Donald Y.) Inference from accelerated life tests using Eyring type re-parametrizations. *Naval Res. Logist. Quart.* **22** (1975), no. 2, 289-296. (H. L. Harter) **53** #9557 62N05
(with Buchanan, William B.) Some stochastic characterizations of multivariate survival. *The theory and applications of reliability, with emphasis on Bayesian and nonparametric methods (Conf., Univ. South Florida, Tampa, Fla., 1975)*, Vol. I, pp. 329-348. *Academic Press, New York*, 1977. (Authors' summary) **58** #24809 62N05
(with Mastran, David V.) A Bayesian estimation of the reliability of coherent structures. *Oper. Res.* **26** (1978), no. 4, 663-672. (C. Mohan) **58** #24813 62N05 (90B25)
See also *Reliability and fault tree analysis*, **54** #11709
Sinha, A. SU(3) magnetic monopoles. *Phys. Rev. D* (3) **14** (1976), no. 8, 2016-2022. (R. Delbourgo) **54** #4387 81.22
Sinha, A. K. (with Mahalanabis, Amarendra K.) On the sensitivity of a fixed-point smoothing algorithm. *IEEE Trans. Aerospace and Electron. Systems* **AES-9** (1973), 912-920. (Andrew P. Sage) **48** #13411 93E10
(with Prasad, R. M.) On recursive identification of linear and non-linear systems: case of coloured noise. *Internat. J. Systems Sci.* **7** (1976), no. 12, 1435-1442. (Tohru Katayama) **54** #12320 93E10
(with Prasad, R. M.; Mahalanabis, Amarendra K.) Two-stage bootstrap algorithms for parameter estimation. *Internat. J. Systems Sci.* **8** (1977), no. 12, 1365-1374. (Hironao Kawashima) **57** #5344 93E10
Sinha, A. S. C. Stability result of a sixth order non-linear system. (French, German and Russian summaries) *Automatica-J. IFAC* **7** (1971), 641-643. (Mark A. Aizerman) **53** #959 34D20
On stability of sixth-order nonlinear system. *Information and Control* **19** (1971), 368-374. (P. Brock) **47** #2156 34D20 (93C15)
(with Hof, Richard G.) Stability of a nonautonomous differential equation of fourth order. *SIAM J. Control* **9** (1971), 8-14. (A. M. Krall) **46** #2170 34D05
Stability of solutions of differential equations with retarded arguments. *IEEE Trans. Automatic Control* **AC-17** (1972), 241-242. (B. Stephan) **52** #962 34K20
(with Hari, Y.) On the boundedness of solutions of some non-autonomous differential equations of the fourth-order. *Internat. J. Control* (1) **15** (1972), 717-724. (A. M. Krall) **47** #5374 34C15
Lyapunov functionals for a class of delay-differential systems. *Internat. J. Control* (1) **15** (1972), 1027-1031. (Author's summary) **47** #1517 93D05
(with Williams, W. J.) On the boundedness of the solutions of some systems with retarded arguments. *Internat. J. Control* (1) **16** (1972), 719-722. (R. D. Driver) **47** #7180 34K15
(with Williams, W. J.) Asymptotic stability of solutions to nonlinear equations. *Proc. IEEE* **60** (1972), 467-468. (James S. Muldowney) **50** #10455 34D05
On stability of solutions of some third and fourth order delay-differential equations. *Information and Control* **23** (1973), 165-172. (D. Ramakrishna Rao) **48** #6617 34K20
Stability of a delay-differential system. *Internat. J. Control* (1) **17** (1973), 511-514. (V. Staikos) **48** #2530 34K20
Some results on the stability of non-linear delay-differential systems. *Internat. J. Control* (1) **18** (1973), 689-694. (D. Bainov) **48** #9051 34K20
 L^p -stability of solutions to a class of delay-differential control system. *Internat. J.*

- Systems Sci.* **4** (1973), 527-531. (N. P. Bhatia) **49** #787 34K20
Some extensions of Liapunov's method to a non-linear delay-differential system. *Internat. J. Systems Sci.* **4** (1973), 623-628. (A. Halanay) **48** #6618 34K20
Global asymptotic stability of certain nonlinear feedback systems. *Proc. IEEE* **61** (1973), 1506-1507. (Peter J. Moylan) **55** #7525a (E 55 #7525b) 93D10
On the Lagrange stability and boundedness of difference equations. *Internat. J. Control* **19** (1974), 1111-1115. (V. M. Popov) **50** #4052 93D05 (39A10)
Further stability results of a delay-differential systems for digital networks. *Internat. J. Systems Sci.* **5** (1974), 317-321. (K. S. Miller) **49** #7006 94A05
Stability and boundedness of systems. *Internat. J. Systems Sci.* **5** (1974), 851-855. (Guy Jumarie) **50** #6598 93D05
On stability of a class of discrete systems. *J. Franklin Inst.* **297** (1974), 287-292. (Dahsoong Yü) **50** #807 39A12 (93D05)
Some mathematical analysis of Sandberg's model for synchronizing digital transmission networks with variable retardations. *Proceedings of the Eighteenth Midwest Symposium on Circuits and Systems* (Concordia Univ., Montreal, Que., 1975), pp. 456-460. *Western Periodicals, North Hollywood, Calif.*, 1975. (Robert J. Mulholland) **55** #12339 94A20 (94A05, 35K05)
On Volterra-Lotka systems. *Internat. J. Systems Sci.* **6** (1975), 49-55. (F. Hoppensteadt) **50** #13827 34K20 (92A15)
Some results on functional perturbations to delay-differential systems. *Internat. J. Systems Sci.* **6** (1975), no. 10, 977-982. (C. H. Anderson) **53** #8620 34K20
Analysis of a mathematical model for transport of ^{131}I -albumin. *J. Theoret. Biol.* **50** (1975), no. 2, 259-267. (J. P. Kernevez) **54** #5593 34K20 (92A05)
On the boundedness of solutions of an n th-order time-lag system. *Proc. IEEE* **63** (1975), no. 1, 199-200. (D. Ramakrishna Rao) **52** #14553 (EA 53) 34K20
An extension of some results for PCM systems involving delay-differential systems to hereditary equations. *Proceedings of the 1976 Conference on Information Sciences and Systems* (Tenth Annual Meeting, Johns Hopkins Univ., Baltimore, Md., 1976), pp. 406-410. *Dept. Electr. Engrg., Johns Hopkins Univ., Baltimore, Md.*, 1976. (Joseph D. Cole) **58** #26310 93C10
Asymptotic stability and boundedness of non-linear difference equations. *Internat. J. Systems Sci.* **7** (1976), no. 8, 929-934. (Shinzo Kitamura) **54** #2292 93D05
Integro-differential equations arising in population dynamics and control systems. *Internat. J. Control* **27** (1978), no. 4, 571-577. (Franz Kappel) **58** #12253 45J05 (34K20, 92A15)
Null controllability of AMCD-spacecraft attitude control system. *Internat. J. Systems Sci.* **9** (1978), no. 2, 205-217. (P. C. Parks) **58** #9625 93D05 (93B05)
See also **Champagne, Lawrence**, **55** #7525b
- Sinha, B. B.** (with Singh, Surendra Pratap) On the recurrent tensor fields of Finsler spaces. (Turkish summary) *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **33** (1968), 117-124 (1971). (S. Watanabe) **46** #4422 (EA 46) 53B40
(with Singh, Sankatha P.) On recurrent spaces of second order in Finsler spaces. *J. Sci. Res. Banaras Hindu Univ.* **20** (1969/70), no. 2, 37-42. (Authors' summary) **55** #6322 53B40
(with Singh, Surendra Pratap) Generalised Finsler spaces of recurrent curvature. *Progr. Math. (Allahabad)* **3** (1969), no. 1-2, 85-92. (J. K. Beem) **46** #819 (EA 46) 53B40
Union curve in Finsler space. *Rend. Circ. Mat. Palermo* (2) **18** (1969), 288-292. (R. B. Misra) **45** #1097 53B40
(with Singh, Surendra Pratap) On decomposition of recurrent curvature tensor fields in Finsler spaces. *Bull. Calcutta Math. Soc.* **62** (1970), 91-96. (K. Takano) **45** #5934 53B40
(with Singh, Surendra Pratap) On decomposition of recurrent curvature tensor fields. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 105-110. (S. Watanabe) **46** #9893 53B40
(with Singh, Surendra Pratap) K^* -curves of a subspace of a Finsler space. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 157-161. (T. Ohkubo) **46** #8110 53B40
On Tachibana concircular curvature tensor. *Progr. Math. (Allahabad)* **4** (1970), no. 1, 43-48. (H. A. Eliopoulos) **46** #812 53B35
On H -projective curvature tensor in an almost product and almost decomposable manifold. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 53-56 (1972). (T. Suguri) **48** #12356 53B20
On the C -umbilical hypersurface of a Kahler manifold. *Matrix Tensor Quart.* **22** (1971/72), 22-26. (K. Yano) **46** #8105 53B35
On projectively flat Finsler space and pseudo deviation tensor. *Progr. Math. (Allahabad)* **5** (1971), no. 1-2, 88-92. (H. Rund) **47** #7639 53B40
(with Singh, Surendra Pratap) On recurrent Finsler spaces. *Rev. Roumaine Math. Pures Appl.* **16** (1971), 977-986. (S. Kawaguchi) **45** #1098 53B40
On certain parameters in almost complex spaces. *Rev. Roumaine Math. Pures Appl.* **16** (1971), 1241-1246. (T. J. Willmore) **46** #825 53C15
(with Singh, Surendra Pratap) On pseudo-projective tensor fields. *Tensor (N.S.)* **22** (1971), 317-320. (S. Watanabe) **45** #2639 53B40
(with Singh, Surendra Pratap) Recurrent Finsler space of second order. *Yokohama Math. J.* **19** (1971), no. 2, 79-85. (M. Yoshida) **53** #14346 53B40
On H -projective connexions. *Indian J. Pure Appl. Math.* **3** (1972), no. 2, 263-267. (K. Yano) **45** #7659 53C05
Projective invariants in a special Kawaguchi space. *Indian J. Pure Appl. Math.* **3** (1972), no. 6, 969-972. (S. Watanabe) **50** #1150 53B20
(with Singh, Surendra Pratap) A generalization of Gauss and Codazzi equations for the first curvature of Cartan. C. N. Srinivasiengar dedication volume. *Progr. Math. (Allahabad)* **6** (1972), no. 1, 1-6. (S. Golab) **48** #12376 53B40
Decomposition of recurrent curvature tensor fields of second order. C. N. Srinivasiengar dedication volume. *Progr. Math. (Allahabad)* **6** (1972), no. 1, 7-14. (M. Kucharszewski) **49** #3745 53B40
(with Das, G.) General F -connection and H -projectively related connections in almost product space. *Riv. Mat. Univ. Parma* (3) **1** (1972), 221-230. (K. Yano) **51** #1652 53C05
On H -conharmonic curvature tensor. *Tensor (N.S.)* **23** (1972), 271-274. (T. Ohkubo) **48** #9592 53B35
(with Singh, Surendra Pratap) Recurrent Finsler spaces of second order. II. *J. Pure Appl. Math.* **4** (1973), no. 1, 45-50. (Editors) **58** #12810 53B40
On H -curvature tensors in Kahler manifold. *Kyungpook Math. J.* **13** (1973), 185-189. (R. Miron) **49** #6074 53B35
Analytic vector fields in almost Sasakian manifold. (Romanian summary) *An. Timişoara Ser. Şti. Mat.* **12** (1974), no. 2, 161-166 (1977). (N. Prakash) **57** #7453B20
(with Tripathi, R. S.) On decomposition of curvature tensor fields in recurrent Finsler spaces of second order. *Indian J. Pure Appl. Math.* **5** (1974), no. 5, 426-430. (Hassan Akbar-Zadeh) **52** #9110 53B40
(with Singh, I. J. P.) On some H -star(*) curvature tensors in Kahler manifold. *Kyungpook Math. J.* **14** (1974), 7-14. (T. Ohkubo) **51** #1690 53C55
(with Singh, I. J. P.) On almost contact metric hypersurface of a Kahler manifold. *Proc. Indian Acad. Sci. Sect. A* **80** (1974), 282-288. (Koichi Ogiue) **51** #1393 53B35
(with Chaubey, D. N.) On birecurrent almost product and almost decomposable manifold. *Acta Ci. Indica* **1**, no. 4, 361-366 (1975). (C. S. Houh) **53** #1474 53B35
(with Chaubey, D. N.) On affine connexions in almost complex manifold. *Indian J. Pure Appl. Math.* **6** (1975), no. 3, 247-252. (J. J. Etayo) **58** #7431 53B15
(with Singh, I. J. P.) On H -curvature tensors in almost product and almost decomposable manifold. II. *Indian J. Pure Appl. Math.* **6** (1975), no. 4, 416-422. (Suguri) **56** #16532 53B35
(with Singh, I. J. P.) Generalised (f, g, u, v, λ) -structure. *Proc. Indian Acad. Sci. Sect. A* **81** (1975), 1-8. (S. Takizawa) **51** #6647 53C15
(with Singh, I. J. P.) Some properties of Sasakian manifold. *Progr. Math. (Allahabad)* **9** (1975), no. 2, 43-49. (David Blair) **58** #12837 53C25
(with Singh, I. J. P.) On an affine connection in almost contact manifold. *Indian J. Pure Appl. Math.* **7** (1976), no. 1, 1-12. (David Blair) **58** #12825 53C15
(with Singh, I. J. P.) On H -curvature tensors in almost product and almost decomposable manifold. *Indian J. Pure Appl. Math.* **7** (1976), no. 1, 28-31. (T. Suguri) **56** #16531 53B35
(with Singh, I. J. P.) On (f, g, u, v) -structure. *Indian J. Pure Appl. Math.* **7** (1976), no. 5, 490-496. (J. R. Vanstone) **58** #24114 53C15
(with Chaubey, D. N.) On affine connexion in an almost contact manifold. *Indian J. Pure Appl. Math.* **7** (1976), no. 5, 511-515. (J. J. Etayo) **58** #24083 53C15
 F -connexions and H -projective changes in almost product manifold. *Progr. Math. (Allahabad)* **10** (1976), no. 1, 33-42. (K. Yano) **54** #3621 53C15
Projective invariants in a special Kawaguchi space. *Rev. Mat. Hisp.-Amer.* (1976), no. 1, 34-41. (N. Prakash) **54** #1120 53B40
(with Narain, Dhruwa) Hypersurfaces on nearly Sasakian manifolds. *Ann. Fac. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys.* **3** (1977), no. 2, 267-279 (1978). (K. Yano) **58** #2639 53C15
(with Chaubey, D. N.) On almost Sasakian manifold. *Indian J. Pure Appl. Math.* **7** (1977), no. 2, 201-210. (H. S. Park) **58** #18225 53B20
(with Shueb, Mohd.) Almost contact metric submanifold with special quater symmetric metric connexion. *Pure Appl. Math. Sci.* **5** (1977), no. 1-2, 1-6. (Y. Tachikawa) **57** #17564 53C25
(with Sharma, R.) On a special quadratic structure on differentiable manifold. *Indian J. Pure Appl. Math.* **9** (1978), no. 8, 811-817. (K. Yano) **58** #18260a 53C15
(with Sharma, R.) On a structure f satisfying $f^2 + \alpha f - I = 0$. *Indian J. Pure Appl. Math.* **9** (1978), no. 8, 818-823. (K. Yano) **58** #18260b 53C15
(with Prasad, Gunraj) Relativistic magnetofluids and symmetry mappings. *Indian J. Pure Appl. Math.* **9** (1978), no. 9, 893-899. (Authors' summary) **58** #14983 53B35
- Sinha, Balmiki Kumar** (with Jha, Kamal Kant) Some properties of permanence of ϵ -products of locally convex spaces. *Progr. Math. (Allahabad)* **5** (1971), no. 1-2, 1-10. (Gil de Lamadrid) **49** #1148 46M05
- Sinha, Baleshwar P.** (with MacPhie, Robert H.) On the computation of the spherical radial functions of the second kind. *J. Mathematical Phys.* **16** (1975), no. 2, 2378-2381. (C. J. Bouwkamp) **54** #6459 65D20 (33A55)
(with MacPhie, Robert H.) Electromagnetic scattering by prolate spheroidal plane waves with arbitrary polarization and angle of incidence. *Radio Sci.* **12** (1977), 171-184. (Y. Hayashi) **56** #17522 78B5
- Sinha, Bikas Kumar** Invariant problems of linear inference and related designs. *Calcutta Statist. Assoc. Bull.* **19** (1970), 103-122. (J. Kiefer) **45** #7886 (E 51 #4575)
Addendum: "Invariant problems of linear inference and related designs" (Calcutta Statist. Assoc. Bull. **19** (1970), 103-122). *Calcutta Statist. Assoc. Bull.* **21** (1972), 5-10. (J. Kiefer) **51** #4575 62K05
Comparison of some experiments from sufficiency consideration. *Ann. Inst. Statist. Math.* **25** (1973), 501-520. (Reinhard Michel) **50** #15024 62B15
On sampling schemes to realize pre-assigned sets of inclusion probabilities of two orders. *Calcutta Statist. Assoc. Bull.* **22** (1973), 89-110. (P. W. Mielke) **51** #11752 62D05
On sampling schemes to realize "invariant" preassigned sets of inclusion probabilities of first two orders. *Calcutta Statist. Assoc. Bull.* **23** (1974), no. 89-92, 93-100. (K. Vijayan) **53** #11831 62D05
(with Sinha, Bimal Kumar) Some problems of unbiased sequential binomial estimation. *Ann. Inst. Statist. Math.* **27** (1975), no. 2, 245-258. (Jan C. Geert) **52** #15906 62L12
Regular cyclically invariant problems of linear inference and related designs. *Sankhyā Ser. B* **37** (1975), no. 1, 79-90. (Author's summary) **58** #31616 (62A05)
On some optimum properties of serially balanced sequences. *Sankhyā Ser. A* (1975), no. 2, 173-192. (Author's summary) **58** #31641 62K10
(with Adhikary, Basudeb) On group divisible rotatable designs. *Calcutta Statist. Assoc. Bull.* **25** (1976), no. 97-100, 79-93 (1977). (M. N. Das) **58** #18937 62K10
On balanced sampling schemes. *Calcutta Statist. Assoc. Bull.* **25** (1976), no. 9, 129-138 (1977). (Kenneth R. W. Brewer) **57** #4394 62D05
(with Sinha, Bimal Kumar) On a characterization of the dispersion matrix based on the properties of regression. *Comm. Statist.—Theory Methods* **A5** (1976), no. 1, 1-10.

- 5-1224. (Emil Spjøtvoll) **56** #9813 62H05
(with Ghosh, J. K.; Sinha, Bimal Kumar) Multivariate power series distributions and Neyman's properties for multinomials. *J. Multivariate Anal.* **7** (1977), no. 3, 1-408. (Authors' summary) **58** #24717 62H05
- Bimal Kumar** On the equivalence of Bayesian and non-Bayesian procedures. *Calcutta Statist. Assoc. Bull.* **20** (1971), 1-22. (J. W. Pratt) **47** #2738 62F15 (62J99)
(with Mukhopadhyay, Nitis) Some results on sequential prediction. *Calcutta Statist. Assoc. Bull.* **23** (1974), no. 89-92, 97-106 (1975). (M. B. Woodroffe) **53** #14819 62L12
(with Sinha, Bikas Kumar) Some problems of unbiased sequential binomial estimation. *Ann. Inst. Statist. Math.* **27** (1975), no. 2, 245-258. (Jan C. Geertsema) #15906 62L12
(with Basu, Sujit Kumar) Locally best invariant and locally minimax test of dependence. *Canad. J. Statist.* **3** (1975), no. 1, 111-118. (N. Giri) **56** #16920 H15 (62A05)
(with Giri, Narayan Chandra) On the distribution of a random matrix. *Comm. Statist.* **4** (1975), no. 11, 1057-1063. (M. S. Srivastava) **52** #15847 62H10
Approximately minimax tests for testing hypotheses about a random parameter with unknown distribution. *Ann. Inst. Statist. Math.* **28** (1976), no. 2, 249-258. (Glen Leeden) **56** #4001 62C99 (62F05)
(with Wieand, Harry S.) Admissibility and minimaxity of MVUE when the parameter space is restricted to integers. *Calcutta Statist. Assoc. Bull.* **25** (1976), no. 7-100, 165-168 (1977). (Pi-Erh Lin) **57** #14210 62C15
(with Sinha, Bikas Kumar) On a characterization of the dispersion matrix based on the properties of regression. *Comm. Statist.—Theory Methods* **A5** (1976), no. 13, 215-224. (Emil Spjøtvoll) **56** #9813 62H05
(with Ghosh, Malay; Mukhopadhyay, Nitis) Multivariate sequential point estimation. *J. Multivariate Anal.* **6** (1976), no. 2, 281-294. (Rasul A. Khan) **53** #14816 62L12
On improved estimators of the generalized variance. *J. Multivariate Anal.* **6** (1976), no. 4, 617-625. (Arthur Cohen) **55** #13647 62F10
On unbiasedness of Mann-Wald-Gumbel χ^2 -test. *Sankhyā Ser. A* **38** (1976), no. 2, 24-130. (C. R. Heathcote) **57** #4420 62G10
(with Mukhopadhyay, Nitis) Sequential estimation of a bivariate normal mean vector. *Sankhyā Ser. B* **38** (1976), no. 3, 219-230. **58** #31655 62L12
(with Giri, Narayan Chandra) On the optimality and non-optimality of some multivariate normal test procedures. *Sankhyā Ser. B* **38** (1976), no. 3, 244-248. (Authors' summary) **58** #31587 62H15 (62A05)
(with Ghosh, J. K.; Sinha, Bikas Kumar) Multivariate power series distributions and Neyman's properties for multinomials. *J. Multivariate Anal.* **7** (1977), no. 3, 197-408. (Authors' summary) **58** #24717 62H05
(with Wieand, Harry S.) Multivariate nonparametric tests for independence. *J. Multivariate Anal.* **7** (1977), no. 4, 572-583. (M. Hušková) **57** #10911 62G10
A. D. K. (with Nandy, S. C.) A critique on studies in electro-fluidmechanics. Special issue presented to Professor Bibhutibhusan Sen on the occasion of his seventieth birthday, Part II. *Indian J. Mech. Math. Special Issue* (1968/69), part II, 117-130 (1971). (L. Dragoş) **49** #10240 76.01 (78.01)
(with Singal, M. K.) XXXIX Annual Conference of Indian Mathematical Society, Jadavpur, December 28-30, 1973. *Math. Student* **42** (1974), 225-229 (1975). (Editors) **52** #10299 00A10
See also **Collection: Bhatnagar, Prabhu L.**, **52** #10304
- A. D. P.** (with Majumdar, S. K.) A note on Padé approximations of order (m, n) to the hypergeometric function $F(\alpha, \beta, \gamma; x)$. *Indian J. Pure Appl. Math.* **8** (1977), no. 5, 627-635. (Harold Exton) **57** #6532 33A30
- A. I.** Property T for finite sets of linear transformations. *Gaṇita* **21** (1970), no. 1, 103-108. (A. R. Amir-Moéz) **46** #7266 15A27
(with Srivastava, J. B.) Ideals in commutative domains. *Math. Mag.* **44** (1971), 124-127. (T. S. Shores) **45** #6798 13G05
(with Dixit, V. N.) Commutators in certain nilpotent linear groups. *Portugal. Math.* **30** (1971), 153-167. (J. D. Dixon) **46** #1923 20H20
(with Srivastava, J. B.) Relative projectivity and a property of Jacobson radical. *Publ. Math. Debrecen* **18** (1971), 37-41 (1972). (C. Vraciu) **48** #2176 16A26
(with Dixit, V. N.) Horospherical representation of linear groups. *Yokohama Math. J.* **19** (1971), no. 2, 109-117. (Bhama Srinivasan) **54** #5361 20G05
Super-ideals in group-rings. *Tamkang J. Math.* **4** (1973), 1-7. (D. B. Coleman) **49** #2824 16A26
A note on extensions of abelian groups. *Mathematica (Cluj)* **16**(39) (1974), no. 1, 173-175. (A. I. Moskalenko) **54** #5371 20K35
Certain representations of infinite group algebras. *Pacific J. Math.* **54** (1974), 261-267. (Donald S. Passman) **50** #9947 16A26
Characteristic ideals in group algebras. *Pacific J. Math.* **55** (1974), 285-287. (Donald S. Passman) **51** #592 16A26
0-divisors in groups rings. *Proc. Amer. Math. Soc.* **43** (1974), 476-477. (S. K. Sehgal) **49** #10731 16A26
Passman-Zaleskii radical of group algebras. *Proc. Edinburgh Math. Soc.* (2) **19** (1974/75), 71-72. (Donald S. Passman) **49** #7296 16A26
Semi-simplicity of group-rings with trivial units. *Tamkang J. Math.* **5** (1974), no. 1, 107-108. (M. Djabali) **50** #9946 16A26
Characteristic ideals in group algebras. II. *Comment. Math. Univ. St. Paul.* **24** (1975/76), no. 1, 9-12. (D. B. Coleman) **54** #10320 16A26
Intersection of the powers of the augmentation ideal. *Tamkang J. Math.* **7** (1976), no. 1, 87-89. (Donald S. Passman) **54** #2720 16A26
Simplicity of the augmentation ideal in group rings. *Comment. Math. Univ. St. Paul.* **26** (1977/78), no. 1, 1-2. (Martha K. Smith) **57** #367 16A26
- A. K. B.** See **Sinha, Kalyan**
- A. K. C.** See **Conference: Optimization Techniques**, **48** #5759
- A. K. P.** (with Sivaram, C.) f -gravity and spinors in general relativity. *Lett. Nuovo Cimento* (2) **13** (1975), no. 10, 357-363. **56** #4688 83.53
(with Sivaram, C.) On the field equations of the tensor-scalar theory of finite-range strong gravity. *Progr. Theoret. Phys.* **55** (1976), no. 4, 1288-1297. (Authors' summary) **57** #2445 83.53
- Sinha, K. S.** (with Sahai, Bhagwan) Asymptotic expansions of the solutions for small and large Rossby numbers. *Indian J. Pure Appl. Math.* **9** (1978), no. 1, 34-46. (From the authors' summary) **57** #8422 76.41
- Sinha, Kalyan** (with Jauch, Joseph-Maria; Misra, Baidyanath) Time-delay in scattering processes. *Helv. Phys. Acta* **45** (1972/73), 398-426. (Authors' summary) **54** #6770 81.47
(with Jauch, Joseph-Maria) Scattering systems with finite total cross-section. *Helv. Phys. Acta* **45** (1972/73), 580-586. (K. Veselić) **52** #2472 81.47
On the decay of an unstable particle. *Helv. Phys. Acta* **45** (1972/73), 619-628. (From the author's introduction) **54** #6779 81.47
Decay in presence of a uniform electric field. *Lett. Math. Phys.* **1** (1975/76), no. 3, 251-257. (James S. Howland) **54** #14640 81.47
(with Rejto, Peter) Absolute continuity for a 1-dimensional model of the Stark-Hamiltonian. *Helv. Phys. Acta* **49** (1976), no. 3, 389-413. (Fritz Schwarz) **54** #4431 81.47 (81.34)
(with Amrein, Werner O.; Jauch, Joseph-Maria) ★Scattering theory in quantum mechanics. Physical principles and mathematical methods. Lecture Notes and Supplements in Physics, No. 16. *W. A. Benjamin, Inc., Reading, Mass.-London-Amsterdam*, 1977. xxiii + 691 pp. ISBN 0-8053-0202-6 (Anne-Marie Berthier) **58** #14631 81.47 (35P25, 47A40)
On the absolutely and singularly continuous subspaces in scattering theory. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **26** (1977), no. 3, 263-277. (W. O. Amrein) **57** #18617 81.47 (47B25)
(with Misra, Baidyanath) A remark on the rate of regeneration in decay processes. *Helv. Phys. Acta* **50** (1977), no. 1, 99-104. (Nadine Bessis) **57** #2316 81.47
- Sinha, Kishore** Configuration of mutually perspective triangles. (Czech and loose Russian summaries) *Časopis Pěst. Mat.* **101** (1976), no. 3, 228-231. (Author's summary) **58** #10498 05B05 (50D35)
24 self-inscribed decagons in Desargues configuration 10_3 . (Czech and loose Russian summaries) *Časopis Pěst. Mat.* **101** (1976), no. 3, 232-233. (From the text) **58** #7369 50D10 (05B25)
On the construction of m -associate PBIB designs. I. *J. Stat. Plann. Inference* **1** (1977), no. 2, 133-142. (J. A. John) **58** #18943 62K10 (05B05)
A triangle free configuration. (Czech summary) *Časopis Pěst. Mat.* **103** (1978), no. 2, 147-148, 202. (Heiko Harborth) **58** #308 05B30
- Sinha, Kripa Nath** On Śrīpati's (c. 1039) laws of signs; also his concept of imaginary numbers (*Siddhānta-Sekhara*, xiv 3-5, also iii 28). *Math. Education* **10** (1976), no. 1, B10-B13. (Editors) **58** #15824 01A25
- Sinha, Naresh K.** (with Griscik, Michael P.) A stochastic approximation method. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-1** (1971), 338-344. (K. S. Fu) **46** #6548 62L20
(with Pille, W.) A new method for reduction of dynamic systems. *Internat. J. Control* (1) **14** (1971), 111-118. (Hansgeorg Jeggle) **46** #8694 93A15
(with Pille, W.) On-line parameter estimation using matrix pseudoinverse. *Proc. Inst. Elec. Engrs.* **118** (1971), 1041-1046. (M. Aoki) **48** #3548 93B30
(with Rózsa, Pál) Efficient algorithm for irreducible realization of a rational matrix. *Internat. J. Control* **20** (1974), 739-751. (B. Levinger) **50** #11754 65F30 (93C05)
(with Prasad, Tribhuan) Martingales and their application to optimal state estimation. *Internat. J. Systems Sci.* **5** (1974), 1039-1054. (R. S. Bucy) **50** #6608 93E10 (60G45)
(with Rózsa, Pál) Decoupling in the design of multivariable systems. *Proceedings of the Eighteenth Midwest Symposium on Circuits and Systems* (Concordia Univ., Montreal, Que., 1975), pp. 236-241. *Western Periodicals, North Hollywood, Calif.*, 1975. (Y. T. Tsay) **56** #17969 93B25
(with Rózsa, Pál) Minimal realization of a transfer function matrix in canonical forms. *Internat. J. Control* **21** (1975), 273-284. (Kailash C. Kapur) **51** #5082 93B20
(with Hickin, J.) Near-optimal control using reduced-order models. *Electron. Lett.* **12** (1976), no. 10, 259-260. (T. Kaczorek) **53** #15488 93C99
(with Hickin, J.) Reduction of linear systems by canonical forms. *Electron. Lett.* **12** (1976), no. 21, 551-553. (Alan Bradshaw) **55** #2232 93B99
(with Sen, A.) On-line estimation of the parameters of a multivariable system using matrix pseudo-inverse. *Internat. J. Systems Sci.* **7** (1976), no. 4, 461-471. (B. Wittenmark) **54** #12278 93B30
(with Kusztá, B.) Optimum input signals for parameter identification. *Internat. J. Systems Sci.* **7** (1976), no. 8, 935-941. (B. Wittenmark) **56** #2525 93B30
(with Gupta, Madan M.; Nikiforuk, P. N.) Recent advances in adaptive control. *J. Cybernet.* **6** (1976), no. 1-2, 79-100. (Vladimir Katkovnik) **57** #5290 93C40
(with Rózsa, Pál) Decoupling and pole placement in linear multivariable systems: a direct algebraic approach. (Russian summary) *Problems of Control and Information Theory/Problemy Upravleniya i Teorii Informacii* **5** (1976), no. 4, 329-358. (S. P. Bhattacharyya) **56** #2520 93B25
On-line identification of linear multivariable systems: survey and new results. *Applications and research in information systems and sciences* (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 2, pp. 301-305. *Hemisphere, Washington, D.C.*, 1977. (Author's summary) **58** #15409 93B30 (93E10)
(with Hickin, J.) Canonical forms and aggregation for low-order models. *Applications and research in information systems and sciences* (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 2, pp. 437-441. *Hemisphere, Washington, D.C.*, 1977. (Authors' summary) **58** #15345 93A15
(with Kusztá, B.) Optimal m -sequence input signal for system identification. *Internat. J. Systems Sci.* **8** (1977), no. 10, 1097-1103. (S. P. Bingulac) **58** #4502 93B30
(with Raibman, N. S.) Identification of multivariable systems. A critical review. *Internat. J. Systems Sci.* **8** (1977), no. 12, 1415-1427. (Zbigniew Nahorski) **57** #5254 93B30 (93E10)
(with Tang, M. Y.) On-line system identification in real time using a minicomputer. *Math. Comput. Simulation* **19** (1977), no. 2, 113-120. (From the summary) **58** #4569 93E10 (93E25)
(with Hickin, J.) Canonical forms for aggregated models. *Internat. J. Control* **27**

- (1978), no. 3, 473-485. (J. M. E. Valenca) **58** #9458 93A15
(with Kusztá, B.) Design of optimal input signals for the identification of distributed parameter systems. *Internat. J. Systems Sci.* **9** (1978), no. 1, 1-7. (Claudia Simionescu) **57** #5284 93C20 (93B30)
(with Tom, Alvan F. W.) Adaptive state estimation for systems with coloured observation noise. *Internat. J. Systems Sci.* **9** (1978), no. 1, 31-43. (Tohru Katayama) **57** #5349 93E10
(with Yau, J. Y.) Decoupling the control of the orbit and attitude of a communications satellite. *Internat. J. Systems Sci.* **9** (1978), no. 3, 335-342. (P. M. Mereau) **58** #9559 93C10
See also *Sensitivity, adaptivity and optimality*, **49** #8697
- Sinha, P. Ch.** The methods of T. Kato and M. G. Slobodjanskii. I. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 3(142), 70-73. (A. Ramm) **50** #14304 47A55 (65J05)
The methods of T. Kato and M. G. Slobodjanskii. II. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 11(162), 75-77. (A. Ramm) **58** #17925 47A55 (65J05)
- Sinha, P. K.** Dynamic compensation for state feedback decoupling of multivariable systems. *Internat. J. Control* **24** (1976), no. 5, 673-684. (Jerzy Klamka) **55** #10096 93B25
State feedback decoupling of nonlinear systems. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 3, 487-489. (Takashi Yahagi) **56** #17970 93B25
Controllability, observability and decoupling of multivariable systems. *Internat. J. Control* **26** (1977), no. 4, 603-620. (Masao Ikeda) **58** #20671 93B25 (93B05)
(with Hazlerigg, A. D. G.) Noninteracting control by output feedback and dynamic compensation. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 1, 76-79. (Authors' summary) **58** #15426 93B99
- Sinha, Prabhakant** (with Armstrong, Ronald D.) Improved penalty calculations for a mixed integer branch-and-bound algorithm. *Math. Programming* **6** (1974), 212-223. (Authors' summary) **49** #2090 90C10
- Sinha, R. S.** (with Mishra, R. S.) Some identities satisfied by Cartan's curvature tensors. *Proc. Nat. Acad. Sci. India Sect. A* **36** (1966), 534-538. (H. Rund) **46** #4420 53B40
(with Srivastava, S. C.) Asymptotic lines in a hypersurface of a Finsler space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 44-52. (Makoto Matsumoto) **46** #8111 53B40
Infinitesimal projective transformation in Finsler spaces. *Progr. Math. (Allahabad)* **5** (1971), no. 1-2, 30-34. (R. Roşca) **47** #9470 53B40
Infinitesimal conformal transformation in Finsler spaces. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 283-287. (M. Yoshida) **49** #3746 53B40
(with Srivastava, S. C.) Geodesic congruences in a Finsler space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 156-161. (J. K. Beem) **48** #7152 53B40
Some formulae in the theory of Lie derivatives in Finsler spaces. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. II. *Tensor (N.S.)* **25** (1972), 332-336. (J. K. Beem) **49** #1396 53B40
(with Srivastava, S. C.) Projective transformation in recurrent and Ricci-recurrent Finsler spaces. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 3-4, 181-186. (S. Kawaguchi) **53** #3937 53B40
- Sinha, Rajendra** Arithmetic means of Fourier coefficients. *Proc. Amer. Math. Soc.* **55** (1976), no. 1, 83-86. (F. Liverani) **53** #1133 (E **54** #8126) 42A16
Addendum to: "Arithmetic means of Fourier coefficients" (Proc. Amer. Math. Soc. **55** (1976), no. 1, 83-86). *Proc. Amer. Math. Soc.* **60** (1976), 243-244 (1977). (F. Liverani) **54** #8126 42A16
On an infinite linear combination of partial sums of Fourier series. *Studia Math.* **56** (1976), no. 2, 93-100. (S. Izumi) **54** #13437 42A20
- Sinha, Rajiv** On $|N, p_n|$ summability factors of infinite series. *Comm. Fac. Sci. Univ. Ankara Sér. A* **21** (1972), 111-117. (G. U. Brauer) **49** #3371 40F05
Convexity theorem for (N, p, q) summability. *Kyungpook Math. J.* **13** (1973), 37-40. (F. P. Cass) **48** #758 40G05
On strong (N, P, α) summability of infinite series. III. *Mat. Vesnik* **10** (25) (1973), 313-318. (G. U. Brauer) **55** #13122 40F05
Convexity theorem for $[N, p, q]$ summability. *Kyungpook Math. J.* **15** (1975), no. 2, 265-269. (T. Pati) **53** #1089 40G05
- Sinha, S.** (with Caines, Peter E.) On the use of shift register sequences as instrumental variables for the recursive identification of multivariable linear systems. *Internat. J. Systems Sci.* **8** (1977), no. 9, 1041-1055. (Agostino Villa) **56** #15060 93E10
- Sinha, S. B.** (with Rauf, Sk. A.) On the propagation speeds of coupled dilatational and shear waves in an elasto-plastic medium. *J. Mathematical and Physical Sci.* **10** (1976), no. 3, 211-218. (T. Bryant Moodie) **54** #9255 73.35
- Sinha, S. C.** (with Carmi, S.) On the Liapunov-Movchan and the energy theories of stability. (German summary) *Z. Angew. Math. Phys.* **27** (1976), no. 5, 607-612. (W. F. Ames) **54** #6673 76.35
- Sinha, S. K.** Distributions of order statistics and estimation of mean life when an outlier may be present. (French summary) *Canad. J. Statist.* **1** (1973), no. 1, 119-121. (Benjamin Epstein) **53** #4368 62G30 (62F10)
Life testing and reliability estimation for non-homogeneous data—a Bayesian approach. *Comm. Statist.* **2** (1973), 235-243. (A. P. Basu) **48** #12767 62N05
Estimation of the parameters of a two-parameter exponential distribution when an outlier may be present. *Utilitas Math.* **3** (1973), 75-82. (A. K. Gayen) **48** #3174 (E **48** #5239) 62F10
Corrigenda: "Estimation of the parameters of a two-parameter exponential distribution when an outlier may be present" (*Utilitas Math.* **3** (1973), 75-82). *Utilitas Math.* **4** (1973), 333. (Editors) **48** #5239 62F10
(with Guttman, Irwin) Bayesian inference about the reliability function for the exponential distributions. *Comm. Statist.—Theory Methods* **A5** (1976), no. 5, 471-479. (G. S. Lingappaiah) **55** #4487 62F15 (62N05)
- Sinha, S. M.** (with Jain, O. P.) On indefinite programming problems. *Z. Operations Res. Ser. A-B* **18** (1974), A41-A45. (Ih-Ching Hsu) **54** #4672 90C30
(with Jain, O. P.) Symmetry and self-duality in nonlinear programming in complex space. *Cahiers Centre Études Recherche Opér.* **18** (1976), no. 3, 355-366. (Bruce D. Craven) **55** #12112 90C30
- Sinha, S. P.** (with Agarwal, J. P.) On the solution of $f(x)=0$. *Indian J. Mech. Math.* (1975), no. 1-2, 16-18. (Luciano Biasini) **57** #11027 65H05
- Sinha, S. R.** (with Singh, Vikramaditya) On the absolute Riesz summability of a associated with the derived Fourier series. *Indian J. Math.* **13** (1971), 131-137. (Mazhar) **48** #4621 42A28
- Sinha, T. N.** An extension of a theorem of Lehmer. *Proc. Nat. Acad. Sci. India Sect. A* (1970), 97-100. (D. H. Lehmer) **45** #6748 10A10
A note on a theorem of Lehmer. *J. London Math. Soc.* (2) **4** (1971/72), 54-55. (H. Halberstam) **45** #6783 05B99
A note on D. H. Lehmer's solution of the Tarry-Escott problem. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 331-333 (1972). (Williamson) **48** #10975 10A45
Equal sums of like powers. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 355-358 (1972). (K. S. Williams) **48** #8383
A linear equation and its relation to the problem of equal sums of like powers. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 376-378 (1972). (S. L. G. Choi) **49** #216 10B05
The equation $x^2 + bxy + cy^2 = 1$. *Math. Student* **41** (1973), no. 3-4, 359-360. (Ezra Brown) **51** #10217 10B05
The Diophantine equation $\sum_{i=1}^n d_i(x+iz)^2 = \sum_{i=1}^n d_i(y+jz)^2$. *Math. Student* **41** (1973), no. 3/4, 388-390 (1974). (R. Steiner) **53** #13111 10B20
Note on the Diophantine equation $x^2 + y^2 + 1 = xyz$. *Math. Student* **42** (1974), 73-75 (1975). (Ezra Brown) **53** #273 10B05
Note on perfect numbers. *Math. Student* **42** (1974), 336 (1975). (H. L. A. J.) **52** #13625 10A40
The Diophantine equation $p^2x^4 + 3px^2y^2 + y^4 = z^2$, p an odd prime. *J. Res. Nat. Standards Sect. B* **79B** (1975), no. 1-2, 41-44. (W. H. Mills) **52** #8032 10B10
The Diophantine equation $(x-c)^2 - 2(x^2-y)^2 = w^2$ and its consequences. *Math. Student* **43** (1975), 58-60 (1976). (S. P. Mohanty) **56** #8486 10B05
Some quartic equations with only trivial integer solutions. *Math. Student* **43** (1975), 61-64 (1976). (E. L. Cohen) **56** #8488 10B10
A class of quartic Diophantine equations with only trivial solutions. *Amer. J. Math.* **100** (1978), no. 3, 585-590. (R. Steiner) **58** #10721 10B10
- Sinha, V. P.** (with Dhawan, G. K.) The use of H -function of Fox in the electrostatic potential between two spherical conductors. *J. Mathematical and Physical Sci.* **5** (1971), 26-30. (T. Erber) **46** #2990 78.33
Some roles of generalised Laplace transform. *Jñānabha Sect. A* **1** (1971), 75-82. (C. Fox) **46** #622 44A15
- Sinha Roy, P. K.** (with Sheng, C. L.) An approach for the synthesis of multithreshold elements. *IEEE Trans. Computers* **C-21** (1972), 913-920. (From the author's text) **56** #11624 94A20
- Šiniberov, L. P.** (with Černenko, M. I.) Statistical linearization of quadratic nonlinear systems. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1974**, no. 5, 490-495, 580. (Authors' summary) **49** #10427 94A05
- Šinica, M. A.** (with Kuliš, E. N.; Tarasov, B. P.) Optimization of the accuracy of the functional elements of automated control systems. (Russian) *Nadežn. Kibernet. Sistem* No. 1 (1973), 104-107, 136. **50** #4049 93C99
- Sinicin, I. N.** On a generalization of the statistical linearization method. (Russian summary) *Problems of Control and Information Theory / Problemy Upravlenija i Informacii* **1** (1972), no. 2, 117-121. (Author's summary) **56** #11468 93E99
Methods of statistical linearization (survey). *Automat. i Telemekh.* **1974**, no. 5, 765-776. (Russian); translated as *Automat. Remote Control* **35** (1974), no. 5, 765-776. (Katayama) **52** #7631 93C10 (93E99)
See also *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)
- Sinicik, L. A.** The estimation of the smallest time constant and the highest eigenfrequency of an electric circuit. (Russian. English summaries) *Teoret. Élektrotehn.* No. 10 (1973), 132-137. (P. Brunovsky) **45** #3127 94A20
(with Dučák, B. Ľ.) On Lyapunov stability theorems for difference equations. *Automatika* **1973**, no. 6, 19-23 (Ukrainian); translated as *Soviet Automat. Control* (1973), no. 6, 12-15. (C. E. Billigheimer) **54** #8061 39A10 (34D20)
(with Šmigel'skii, Ja. A.) Electrical circuits that contain nonlinear transfer elements. (Russian. English summary) *Teoret. Élektrotehn. Vyp.* **19** (1975), 96-102. (Authors' summary) **57** #15769 94A20
(with Dučák, B. Ľ.; Močul'skii, Ju. S.) Application of implicit numerical integration formulas to the computation of ill-conditioned nonlinear circuits. (Russian. English summary) *Teoret. Élektrotehn.* No. 21 (1976), 108-116, 142. (Not reviewed)
(with Maksimović, N. G.) The relationship between the currents and the voltages in a linear LC-circuit with constant parameters. (Russian. English summary) *Élektrotehn. Vyp.* **21** (1976), 21-23, 139. (Authors' summary) **56** #2680 94A20
- Sinicyn, A. S.** (with Dmitriev, A. N.; Krug, G. K.; Kuzin, L. T.; Kurakin, K. I.; Kuhtenko, O. I.; Matveev, P. S.; Mihaïlov, F. A.; Petrov, B. N.; Solodovnikov, V. V.; Topčeev, Ju. I.; Ulanov, G. M.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 2: Анализ и синтез линейных непрерывных и дискретных систем автоматического регулирования. (Russian) [Theory of automatic guidance systems. Book 2: Analysis and synthesis of continuous and discrete automatic guidance systems.] Edited by V. V. Solodovnikov. *Izdat. "Mašinostroenie"*, Moscow, 1967. 679 pp. (RZKibernet **1968** #3 G89) **50** #6559 93-02
(with Dmitriev, A. N.; Krug, G. K.; Kuzin, L. T.; Kurakin, K. I.; Kuhtenko, O. I.; Matveev, P. S.; Mihaïlov, F. A.; Petrov, B. N.; Solodovnikov, V. V.; Topčeev, Ju. I.; Ulanov, G. M.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. 2: Analyse und Synthese linearer Systeme. Gesamtedition der Originalausgaben von W. V. Solodovnikov. Aus dem Russischen übersetzt von Klaus Franke, Luise Heckendorff, Volker Langguth, Werner Otto Mertens und Uwe Riedel. Deutsche Bearbeitung unter Manfred Peschel. *VEB Verlag Technik, Berlin*, 1971. 620 pp. (RZKibernet **1968** #10 G7K) **50** #6560 93-02
See also *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)
- Sinicyn, I. G.** (with Kudrja, V. P.; Mahviladze, T. M.; Šelepina, L. A.) Coherence and questions of radiation control in multilevel systems. (Russian) *Trudy Fiz.*

- bedev. 87 (1976), 38-54. (From the text) 58 #32668 82.45
- a, P. V. (with Lucenko, A. V.) The stabilization of a linear system with compactly supported controls. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 799-803, 954. (G. tšavili) 49 #9715 49E15
- a, V. A. (with Veretennikov, V. G.) Discontinuous variational problem of the minimization of control processes. *Prikl. Mat. Meh.* 36 (1972), 357-360 (Russian); translated as *J. Appl. Math. Mech.* 36 (1972), 333-336. (M. Q. Jacobs) 49 #1266 A10
- A10
- Vito F. Leśniewski's analysis of Russell's antinomy. *Notre Dame J. Formal Logic* 17 (1976), no. 1, 19-34. (N. C. A. da Costa) 55 #5400 02C99 (02-03)
- a, I. N. See Sinicin, I. N.
- dy, L. A. See Sinic'kii, L. A.
- yn, I. N. See Sinicin, I. N.
- yn, V. A. See Sinicyn, V. A.
- e, V. Elementary magnetic resonance, and the rotation group. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 23 (1974), 20-228. (A. S. Wightman) 50 #6338 81.22
- A group-theoretic approach to the dynamics of multispin systems. I. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 24 (1975), no. 1, 35-48. (See Zbl 324 #22011) 81.22
- A group-theoretic approach to the dynamics of multispin systems. II. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 25 (1976), no. 2, 146-155. (See Zbl 372 #22013) 81.22
- A group-theoretic approach to the dynamics of multispin systems. III. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 26 (1977), no. 2, 161-172. (Not reviewed) 58F05 (81.58)
- A group-theoretic approach to the dynamics of multispin systems. IV. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 26 (1977), no. 3, 281-289. (Not reviewed) 81.22
- uk, Ju. V. Error estimation for the optimal solution in linear programming problems. (Russian) *Ėkonom. i Mat. Metody* 9 (1973), 131-137. (I. Marušciac) 47 #10057 90C05
- av'ska, L. M. A certain statistical problem for a semi-Markov process. (Ukrainian. English and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh.* No. 15 (1973), 85-89, 145. (M. Skalsky) 50 #6079 62M05
- avskaja, L. M. Nonlinear transformation of a semi-Markov process. (Russian) *Mathematical models of complex systems (Russian)*, pp. 174-180. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1973. (See RŽMat 1974 #5 V67; MR 57 #17740) 60K15
- avskii, A. L. See Calculation of three-dimensional constructions, 48 #7754
- av'skii, M. I. See Questions in applied mathematics, 48 #5448 and Studies in the theory of functions of a complex variable and its applications, 48 #5481
- av'skii, V. F. A certain limit theorem for random fields of shot effect type. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 3, 151-152. (M. Loève) 50 #5907 60F05
- The absolute convergence of the Fourier series of a homogeneous random field. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist. Vyp.* 9 (1973), 153-158, 177. (Miloslav Duchon) 53 #14630 60G17
- A certain sufficient condition for the continuity of sample distribution functions of a random field. (Ukrainian. English and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh.* No. 15 (1973), 64-67, 144. (M. Skalsky) 50 #5921 60G17
- Local properties of sample functions of homogeneous random fields. (Russian) *Theory of random processes, No. 2 (Russian)*, pp. 86-93, 140. *Izdat. "Naukova Dumka"*, Kiev, 1974. (M. Loève) 51 #14243 60G17
- A necessary condition for the continuity of the sample functions of a random field. (Ukrainian. English and Russian summaries) *Visnik Kiïv. Univ. Ser. Mat. Meh.* No. 16 (1974), 139-145, 177-178. (Author's summary) 56 #6828 60G17
- (with Rudomanov, V. I.; Jadrenko, M. I.) The simulation of realizations of stationary random processes. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No.* 24 (1974), 33-40, 158. (H. Salehi) 51 #1928 60G10 (65C05)
- The differentiability of sample functions of homogeneous random fields. (Russian) *Theory of random processes, No. 3 (Russian)*, pp. 109-112, 159. *Izdat. "Naukova Dumka"*, Kiev, 1975. (M. Loève) 51 #11645 60G17
- Conditions for the continuity of sample functions of homogeneous Gaussian random fields. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* 1975, no. 6, 500-502, 570. (M. I. Jadrenko) 52 #15639 60G15
- av'skii, V. V. The spectral theory of representations in topological spaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp.* 24 (1975), 150-156, iv. (M. Hasumi) 53 #6243 43A65 (22D12)
- Condition for the regularity of the Banach algebra that is connected with a Sturm-Liouville equation. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 11, 988-991, 1055. (Author's summary) 58 #30266 46J05 (34B25)
- The spectrum of the representation of a nilpotent group in a locally convex space. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No.* 29 (1978), 123-127, v. (S. Ju. Priščeponok) 58 #28271 22E25
- ukov, N. S. Infinitesimal almost geodesic transformations of affinely connected and Riemannian spaces. II. (Russian) *Ukrain. Geometr. Sb. No.* 11 (1971), 87-95. (A. Goetz) 46 #6202 53B05
- karenko, G. A. Interpolation on triangles in the finite element method. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* 1976, no. 11, 70-75, 127. 58 #31926 65N30
- karik, T. K. The stability of the libration points in the generalized restricted three-body problem. *Astronom. Ž.* 48 (1971), 627-637 (Russian); translated as *Soviet Astronom. AJ* 15 (1971), 494-500 (1972). (E. Leimanis) 52 #7248 70.34
- (with Kondurav, V. T.) Libration points in the restricted generalized three-body problem. (Russian. English summary) *Bjull. Inst. Teoret. Astronom.* 13, no. 2(145), 102-110 (1972). (B. Garfinkel) 46 #10263 70.34
- A numerical study of periodic motions that are nearly librations. (Russian. German summary) *Bjull. Inst. Teoret. Astronom.* 13, no. 9(152), 583-587 (1974). (errata insert) 56 #10265 70.65
- kevič, O. A. (with Artemov, V. I.) On the construction of plane stationary solutions of equations for nonequilibrium magnetized plasma. *Prikl. Mat. Meh.* 40 (1976), no. 5, 813-822 (Russian); translated as *J. Appl. Math. Mech.* 40 (1976), no. 5, 764-774 (1977). (E. G. Broadbent) 57 #8475 78.41
- Sinkevič, V. K. Characteristic properties of homomorphisms and correspondences of graphs, and their applications. (Russian) *Informational questions of semiotics, linguistics and automatic translation, No. 4 (Russian)*, pp. 77-93 (errata insert). *Akad. Nauk SSSR Vsesojuz. Inst. Nauch. i Tehn. Informacii, Moscow*, 1974. (E. Ja. Gabovič) 51 #12622 05C99 (04A05)
- An elementary proof of a theorem of E. S. Wolk. (Russian) *Theory of semigroups and its applications, No. 3 (Russian)*, pp. 107-108, 154. *Izdat. Saratov. Univ., Saratov*, 1974. (E. Gedeonová) 57 #12307 06A10
- Sinkevič, O. A. See Sinkevič, O. A.
- Sinkhorn, Richard Continuous dependence on A in the D_1AD_2 theorems. *Proc. Amer. Math. Soc.* 32 (1972), 395-398. (E. C. Johnsen) 45 #6844 15A48
- Doubly stochastic matrices whose squares leave the permanent invariant. *Linear and Multilinear Algebra* 1 (1973), no. 2, 103-118. (N. J. Pullman) 48 #318 15A51
- Diagonal equivalence to matrices with prescribed row and column sums. II. *Proc. Amer. Math. Soc.* 45 (1974), 195-198. (Donald W. Robinson) 50 #9902 15A21
- Doubly stochastic matrices whose squares decrease the permanent. *Linear and Multilinear Algebra* 4 (1976), no. 2, 123-128. (Peter M. Gibson) 54 #10302 15A51
- (with Knopp, Paul J.) Permanents of special classes of doubly stochastic matrices. *Linear and Multilinear Algebra* 4 (1976), no. 2, 129-136. (Peter M. Gibson) 54 #10301 15A51
- Matrices which commute with doubly stochastic matrices. *Linear and Multilinear Algebra* 4 (1976/77), no. 3, 201-203. (Peter M. Gibson) 55 #5669 15A57
- Doubly stochastic matrices which have certain diagonals with constant sums. *Linear Algebra and Appl.* 16 (1977), no. 1, 79-82. (James R. Wall) 57 #3172 15A51
- Doubly stochastic matrices with dominant p -minors. *Linear and Multilinear Algebra* 5 (1977/78), no. 2, 107-117. (Thomas H. Foregger) 56 #3038 15A51
- Sinkinson, Kathleen The cohomology of certain spectra associated with the Brown-Peterson spectrum. *Duke Math. J.* 43 (1976), no. 3, 605-622. (R. E. Stong) 53 #14471 55B20
- Sin'ko, G. I. The spectral functions of a first order integrodifferential operator. (Russian) *Functional analysis, No. 3 (Russian)*, pp. 186-190. *Ul'janovsk. Gos. Univ., Ulyanovsk*, 1974. (F. Smithies) 57 #3792 45J05 (47G05)
- Generalized resolvents and spectral functions of a second order integrodifferential operator. (Russian) *Functional analysis, No. 3 (Russian)*, pp. 191-202. *Ul'janovsk. Gos. Univ., Ulyanovsk*, 1974. (F. Smithies) 57 #3793 45J05 (47G05)
- Sin'kov, M. V. Number-theoretic methods in the four-dimensional system of quaternions. (Russian) *Ėlektronika i Modelirovanie Vyp.* 9 (1975), 133-135, 148. (Author's summary) 58 #483 10A30
- The system of remainder classes in the four-dimensional system of quaternions. (Russian) *Ėlektronika i Modelirovanie Vyp.* 9 (1975), 136-139, 148. (Author's summary) 58 #5478 10A10
- Number-theoretic methods in the four-dimensional system of biquaternions. (Russian) *Ėlektronika i Modelirovanie Vyp.* 10 (1975), 79-81, 147. (Author's summary) 57 #16177 10A10
- (with Gubareni, N. M.; Telešev, V. E.) A system of remainder classes in the four-dimensional domain of biquaternions. (Russian) *Ėlektronika i Modelirovanie Vyp.* 10 (1975), 82-84, 147. (From the text) 58 #16480 10A10 (68A15)
- Development of number theory methods for extending the range of computing media functioning in a system of residue classes. (Russian) *Problems in electronics and computer science (Russian)*, pp. 108-137, 297. *Izdat. "Naukova Dumka"*, Kiev, 1976. (S. I. Gendler) 56 #15546 10A30
- Šinkūnas, J. The space of support linears of a Finsler structure. (Russian. Lithuanian and French summaries) *Litovsk. Mat. Sb.* 12 (1972), no. 1, 221-227, 243. (W. Wrona) 49 #1397 53B40
- (with Bliznikas, V. I.; Vaškas, P. I.; Lupeikis, Z.) A survey of the scientific works of K. J. Grincevičius. (Russian. English summary) Collection of articles dedicated to the memory of Kleopas Grincevičius. *Trudy Geometr. Sem.* 5 (1974), 7-53, 375. (errata insert) (Leo Boček) 52 #13182 01A70 (53A25)
- The m -plane distribution in an n -dimensional Riemannian space. (Russian. English summary) Collection of articles dedicated to the memory of Kleopas Grincevičius. *Trudy Geometr. Sem.* 5 (1974), 123-133, 375. (errata insert) (W. Wrona) 52 #15530 58A30
- Šinkūnas, J. Connections on a space of support supervectors of order p . (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp.* 8 (1975), 132-144. (A. Goetz) 54 #11209 53B15
- Šinkūnas, Ju. See Šinkūnas, J.
- Šinkūnas, Ju. I. See Šinkūnas, J.
- Šinkūnas, Ju. I. See Šinkūnas, J.
- Sin Men Dē Logical-term equivalent transformations of program schemata. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 5, 52-60. (Author's summary) 57 #18200 68A05
- (with Itkin, V. E.) Combinatorial equivalence of Janov schemes. (Russian) *Programirovanie* 1978, no. 1, 12-21, 95. (A. V. Anisimov) 58 #3620 68A05
- Sinn, Ulrich (with Rus, Teodor) An algebraic approach to data organization. *Nordisk Tidskr. Informationsbehandling (BIT)* 14 (1974), 460-481. (Bernard H. Rosman) 50 #12419 94-04
- Sinnott, W. (with Coates, John) An analogue of Stickelberger's theorem for the higher K -groups. *Invent. Math.* 24 (1974), 149-161. (P. Abellanas) 51 #5557 12A70
- (with Coates, John) On p -adic L -functions over real quadratic fields. *Invent. Math.* 25 (1974), 253-279. (T. Kubota) 50 #7093 12A70 (12B30)
- (with Coates, John) Integrality properties of the values of partial zeta functions. *Proc. London Math. Soc.* (3) 34 (1977), no. 2, 365-384. (Lawrence Washington) 55 #12697 12A70 (12A95)
- On the Stickelberger ideal and the circular units of a cyclotomic field. *Ann. of Math.* (2) 108 (1978), no. 1, 107-134. (Yasumasa Akagawa) 58 #5585 12A35 (12A45, 12A50)
- Sinowjew, A. A. See Zinov'ev, A. A.
- Sinowjew, Alexander Alexandrowitsch See Zinov'ev, A. A.

- Sinswat, V. (with Fallside, F.) Calculating poles and zeros of matrix transfer functions. *Electron. Lett.* **12** (1976), no. 2, 38-39. (Editors) **56** #8110 93B25 (65F30)
- (with Fallside, F.) Obtainability of closed-loop systems using constant state feedback or output feedback. *Electron. Lett.* **12** (1976), no. 12, 303-304. (N. Harris McClamroch) **53** #12669 93B25
- (with Patel, R. V.; Fallside, F.) A method for computing invariant zeros and transmission zeros of invertible systems. *Internat. J. Control* **23** (1976), no. 2, 183-196. (M. Z. Nashed) **54** #4748 93B20
- (with Fallside, F.) On minimal-order inverses of linear continuous time-invariant systems. *Internat. J. Control* **24** (1976), no. 6, 853-868. (Edward W. Kamen) **54** #14820 93B20
- (with Patel, R. V.; Fallside, F.) Disturbance zeros in multivariable systems. *Internat. J. Control* **26** (1977), no. 1, 85-96. (Bradley W. Dickinson) **56** #17983 93B35
- (with Fallside, F.) Determination of invariant zeros and transmission zeros of classes of invertible systems. *Internat. J. Control* **26** (1977), no. 1, 97-114. (Peter A. Cook) **57** #5248 93B25
- (with Fallside, F.) Eigenvalue/eigenvector assignment by state-feedback. *Internat. J. Control* **26** (1977), no. 3, 389-403. (A. S. C. Sinha) **57** #2668 93B25
- (with Patel, R. V.; Fallside, F.) A method for computing the zeros of transfer functions in linear systems. *Internat. J. Systems Sci.* **8** (1977), no. 3, 241-249. (V. N. Igolkin) **56** #17967 93B25
- Sint, Lenie (with de Champeaux, Dennis) An optimality theorem for a bi-directional heuristic search algorithm. *Comput. J.* **20** (1977), no. 2, 148-150. (Authors' summary) **56** #4279 68A50
- (with de Champeaux, Dennis) An improved bidirectional heuristic search algorithm. *J. Assoc. Comput. Mach.* **24** (1977), no. 2, 172-191. (Eberhard Lüdde) **56** #4228 68A10
- Sint, Peter Paul See *Compstat*, **49** #9990
- Sintemirova, G. B. Use of positional strategies in the problem of assigning an optimal penalty. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1976**, no. 1, 80-84, 94. (Nigel Howard) **56** #11050 90D45
- A game-theoretic analysis of a dynamical two-level hierarchic control system. (Russian. Kazakh summary) *Vestnik Akad. Nauk Kazah. SSR* **1976**, no. 3, 55-58. (J. M. Skowronski) **54** #14829 93C15 (90D45)
- Sintonen, L. Generating microprogram control sequences using linear sequential circuits. (French and German summaries) *Digital Process.* **3** (1977), no. 1, 17-34. (I. E. Strazdins) **57** #9348 94A25
- Sinval, S. D. See *Rai, R. N.*, **58** #26760 and *Shukla, Kripa Shankar*, **58** #26765
- Sinzack, Ronald L. Eigenvectors and maximal vectors in Boolean vector spaces. *Proc. Amer. Math. Soc.* **47** (1975), 323-328. (E. Deutsch) **50** #9920 15A60
- Sion, Maurice Group-valued outer measures. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 589-593. Gauthier-Villars, Paris, 1971. (Z. Lipecki) **55** #614 28A45
- ★ A theory of semigroup valued measures. *Lecture Notes in Mathematics*, Vol. 355. Springer-Verlag, Berlin-New York, 1973. iv+140 pp. (Z. Lipecki) **56** #8797 28A45 (46G10)
- (with Millington, Hugh) Inverse systems of group-valued measures. *Pacific J. Math.* **44** (1973), 637-650. (C. L. Scheffer) **48** #8746 28A45
- Dérivation de mesures à valeurs vectorielles. *Séminaire Choquet, 14e année* (1974/75), *Initiation à l'analyse, Exp. No. 13*, 4 pp. Secrétariat Mathématique, Paris, 1975. (Zbl 321 #28009) **57** #12815 28A45 (46G10)
- Sioson, F. M. (with Monk, J. Donald) On the general theory of m -groups. *Fund. Math.* **72** (1971), no. 3, 233-244. (V. Topenčarov) **45** #3292 08A25 (20N15)
- Counting elements in semigroups. *J. Combinatorial Theory Ser. A* **12** (1972), 339-345. (Donald W. Miller) **46** #5509 20M20
- Siotani, Minoru Simultaneous confidence intervals relating to matrices of multivariate regressions. (Japanese. English summary) *Proc. Inst. Statist. Math.* **19** (1971/72), no. 1, 1-13. (Author's summary) **56** #7043 62J15 (62F10)
- (with Chou, Charissa) Asymptotic expansion of the non-null distribution of the ratio of two conditionally independent Hotelling's T^2 -statistics. *Ann. Inst. Statist. Math.* **26** (1974), 277-288. (M. D. Perlman) **57** #2029 62H10
- Asymptotic expansions for the general distributions of test statistics in multivariate analysis—the methods in the recent development. I. (Japanese. English summary) *J. Japan Statist. Soc.* **5** (1974/75), no. 2, 87-103. (Author's summary) **58** #3199 62H10 (62E20)
- (with Geng, Shu) Asymptotic joint distribution of the largest roots of several multivariate F matrices. I. Quasi-independent case. *J. Multivariate Anal.* **4** (1974), 150-165. (D. G. Kabe) **50** #8832 62H10
- (with Wang, Ruey Hwa) Asymptotic expansions for error rates and comparison of the W -procedure and the Z -procedure in discriminant analysis. *Multivariate analysis, IV (Proc. Fourth Internat. Sympos., Dayton, Ohio, 1975)*, pp. 523-545. North-Holland, Amsterdam, 1977. (Anant M. Kshirsagar) **57** #17957 62H30
- Siouris, G. M. On the method of adjoints. (German summary) *Regelungstechn. Prozess-Datenverarbeitung* **21** (1973), no. 3, 91-96. (Marshall Slemrod) **54** #9764 93C05
- Šipačev, V. S. Elliptic equations with a small parameter that are degenerate on the boundary of the region. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **25** (1970), no. 6, 58-66. (L. E. Bobisud) **45** #8975 35B25
- Šipanov, P. K. Intransitive monomial representation of finite groups. (Russian) *Kalinin. Gos. Ped. Inst. Učen. Zap.* **69** (1969), 135-140. (E. M. Levič) **45** #5242 20C15
- Šipenite, D. A. See Šipienytė, D.
- Siperstein, B. I. (with Krivošein, B. L.; Radčenko, V. P.; Bobrovskii, S. A.; Dubinskii, A. V.) Certain mathematical models of unsteady gas flow in trunk pipelines. *Énerget. i Transport* **6** (1974), 112-120 (Russian); translated as *Fluid Mech.—Soviet Res.* **5** (1976), no. 2, 32-42. (Authors' summary) **56** #10423 76F5
- A method for the hydraulic analysis of complex gas line systems. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 3, 76-83. (Djordje Djukić) **54** #6920 90B10 (76.49)
- (with Bunimovič, A. I.) Group properties and invariant solutions of a certain system of equations that describes the unsteady nonisothermal motion of a gas in pipe. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 119-124. (J. P. Guiraud) **54** #14545 76J35
- (with Bunimovič, A. I.; Radčenko, V. P.) Some self-similar solutions of the equations of the flow of gas in pipelines. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1978**, no. 3, 119-125. (Authors' summary) **58** #25321 76J35
- Šipienytė, D. (with Kaminskas, Vytautas) A study of two statistical tests for the detection of the nonstationary state of dynamical systems. (Russian. Lithuanian and English summaries) *Trudy Akad. Nauk Litov. SSR Ser. B* **1974**, no. 3 (82), 141-149. (Authors' summary) **55** #5288 93E10
- (with Kaminskas, Vytautas) Detection of a parameter change of an autoregressive process. (Russian. Lithuanian and English summaries) *Trudy Akad. Nauk Litov. SSR* **1975**, no. 4 (89), 143-148. (Ju. I. Petunin) **53** #6940 62M10
- (with Kaminskas, Vytautas) A nonparametric method for the detection of unsteadiness of a linear dynamical system. (Russian. Lithuanian and English summaries) *Trudy Akad. Nauk Litov. SSR Ser. B* **1976**, no. 2(93), 153-163. (Authors' summary) **58** #15626 93E25
- Sipilä, Aarne H. (with Mäkelä, Matti; Nevanlinna, Olavi) On some generalized Hermite-Birkhoff interpolation problems. *Ann. Acad. Sci. Fenn. Ser. A I No. 563* (1974), 13 pp. (J. R. Rice) **51** #1202a 41A05
- (with Mäkelä, Matti; Nevanlinna, Olavi) Hermite interpolation by generalized rational functions. *Ann. Acad. Sci. Fenn. Ser. A I No. 564* (1974), 10 pp. (J. R. Rice) **51** #1202b 41A05
- (with Nevanlinna, Olavi) A nonexistence theorem for explicit A -stable methods. *Math. Comp.* **28** (1974), 1053-1056. (Rolf Jeltsch) **50** #1515 65L05
- (with Mäkelä, Matti; Nevanlinna, Olavi) Exponentially fitted multistep methods for generalized Hermite-Birkhoff interpolation. *Nordisk Tidskr. Informationsbehandling (BIT)* **14** (1974), 437-451. (J. Hurt) **53** #14915 65L05 (34A50)
- (with Mäkelä, Matti; Nevanlinna, Olavi) On the concepts of convergence, consistency, and stability in connection with some numerical methods. *Numer. Math.* **1974**, 261-274. (J. D. Lambert) **51** #4680 65L05
- (with Nevanlinna, Olavi) Explicit A -stable one-step methods for ordinary differential equations. *Proceedings of the Fourth Manitoba Conference on Numerical Mathematics (Winnipeg, Man., 1974)*, pp. 343-350. *Congr. Numer., No. XII, Univ. of Winnipeg, Winnipeg, Man., 1975.* (Rolf Jeltsch) **51** #9492 65L05
- Šipilina, L. B. (with Kuznecov, O. P.; Makarevskii, A. Ja.; Markovskii, A. V.; Okudžava, V. Š.) YARUS—a language for describing the operation of complex automatic control systems. *Automat. i Telemekh.* **1972**, no. 6, 80-89 (Russian); translated as *Automat. Remote Control* **33** (1972), no. 6, part 1, 956-963. (Authors' summary) **56** #10169 68A30
- (with Markovskii, A. V.) Realization of partially symmetric functions by networks of functional elements. *Problems of Control and Information Theory / Problemy Upravljenija i Teorii Informacii* **2** (1973), no. 3-4, 273-281; translated as *Problems of Control and Information Theory (English translation of the Communications in Russian)* **1973**, no. 3-4, 13-19. (Korolian Gleizan) **55** #7605 94A20
- (with Makarevskii, A. Ja.) Complexity of realization of symmetric and partially symmetric functions in iterative arrays. *Automat. i Telemekh.* **1974**, no. 2, 113-119. (Russian); translated as *Automat. Remote Control* **1974**, no. 2, part 2, 272-279. **56** #8205 94A20 (68A20)
- (with Kuznecov, O. P.) The works of A. Ja. Makarevskii. (Russian) *Vychisl. Sist. Vyp. 64* (1975), 173-178, 183. (Editors) **57** #12124 01A70
- Šipilov, A. I. (with Alekperov, V. P.; Andrievskii, V. R.; Bahanov, L. E.; Bykov, V. Zubkov, M. Ja.; Ivanenko, V. G.; Modjaev, A. D.; Potemkin, V. G.; Teplov, V. G.; Topčeev, Ju. I.; Fedorov, S. M.; Hlyupalo, E. I.; Černikov, S. A.; Čudov, M. Šumilov, B. F.; Ščerbakov, V. A.) ★Нелинейные корректирующие устройства в системах автоматического управления. (Russian) [Nonlinear correcting devices in automatic control systems] Edited by Ju. I. Topčeev. *Nonlinear Automatic Control Systems*, Vol. 2. *Izdat. "Mašinostroenie", Moscow*, 1971. 466 pp. (Bojan Popović) **50** #4005 93-06
- Sipin, A. S. Solution of the Dirichlet problem for the equation $-\Delta u + a(x)u = f(x)$ by the Monte Carlo method. (Russian. English summary) *Vestnik Leningrad. Univ.* **1976**, no. 1, 60-63, 161. (F. M. Pascal) **58** #19021 65C05 (65M05)
- Šipka, Ľ. G. A certain realization of the Newton-Kantorovič method. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1972**, no. 7, 19-21, 131. (L. Kosel) **50** #15402 65R05
- (with Martynenko, Mih. D.) The approximate solution of a certain type of nonlinear integrodifferential equations. (Russian) *Dokl. Akad. Nauk BSSR* **19** (1976), 109-112, 187. (Ulrich Kosel) **51** #1311 45L05
- Šipoš, Jan A decomposition of a functional as a difference of two positive functionals. *Mat. Časopis Sloven. Akad. Vied* **23** (1973), 364-373. (J. C. Oxtoby) **49** #10828 A30
- Šipov, G. I. Equations of a tetrad field in a space with absolute parallelism. (Russian) *Vysš. Učebn. Zaved. Fizika* **1976**, no. 6, 132-133. (R. F. Biljalov) **57** #4978 83C05
- General relativistic nonlinear spinor equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 3, 121-125. (Author's summary) **57** #15258 83J5
- Theory of gravitation in a space with absolute parallelism. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 6, 142-147. (Author's summary) **57** #2444 83J5
- Šipp, F. See *Schipp, Ferenc*
- Sippel, Wilhelm Approximation by functions with restricted ranges. *Approximation Theory and Methods (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 481-484. *Academic Press, New York*, 1973. (A. Bacopoulos) **50** #2775 41A50
- Existenzaussagen bei gewissen Approximations- und Einschliessungsproblemen halbgeordneten linearen normierten Räumen. *J. Approximation Theory* **9** (1973), 51-59. (J. H. Curtiss) **50** #10656 41A65
- Sippu, Seppo (with Soisalon-Soininen, Elias) On defining error recovery in context parsing. *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, Finland, 1977)*, pp. 492-503. *Lecture Notes in Comput. Sci.*, Vol. 52, Springer, Berlin, 1977. (J. van Leeuwen) **58** #13877 68A05
- Sips, Robert Solutions singulières des équations de l'hydrodynamique correspondant sources pulsatoires immergées. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **57** (1971), 839-848. (Author's summary) **46** #1194 76J35

- Ondes liquides de gravité au-dessus d'un cylindre circulaire immergé. *Acad. Roy. g. Bull. Cl. Sci.* (5) **58** (1972), 625-646. (F. Ursell) **47** #9949 7635
- Michael (with Katseff, Howard P.) Several results in program size complexity. *Annual Symposium on Foundations of Computer Science (Providence, R.I., 1977)*, pp. 89. *IEEE Comput. Soc., Long Beach, Calif.*, 1977. (A. V. Anisimov) **58** #25113 420
- ly, Ibrahim H. (with Bassali, W. A.) The analysis of thin clamped elastic plates under concentrated forces. *Bull. Calcutta Math. Soc.* **68** (1976), no. 1, 13-22. (J. W. Jags) **57** #8280 7330
- Problem of a circular annular elastic plate for which normal stress and tangential placement are given on the boundary. (Arabic summary) *Proc. Math. Phys. Soc. Egypt No. 44* (1977), 1-9. (R. Muki) **55** #11772 7335
- (with Cornous, K. A.) Problems for linear nonstationary Navier-Stokes equations in the half-plane with a semifree boundary. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp.* **32** (1977), 54-59, 158. (Authors' summary) **56** #17408 7635
- Solution of the linearized Navier-Stokes equations for the axisymmetrical slow motion in the half-space. (German summary) *Z. Angew. Math. Phys.* **28** (1977), no. 4, 1-748. (Author's summary) **58** #32372 7644
- Stretched plates weakened by inner curvilinear holes. (German summary) *Z. Angew. Math. Phys.* **28** (1977), no. 6, 1153-1159. (Author's summary) **56** #13886 1330
- See also **Nonlinear boundary value problems of mathematical physics**, **50** #1797
- ngy, N. M. See El-Siragy, N. M.
- , T. N. The canonical representations of stochastic processes of multiplicities one and two. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 155-160. (H. i. Tucker) **49** #6343 60G25
- The multiplicity of a sum of orthogonal random processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 4, 880-884. (G. M. Molčan) **4** #14076 60G25
- On subordinate processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **22** (1977), no. 1, 131-136. (H. Salehi) **56** #3927 60G05
- Canonical representations of second order random processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **22** (1977), no. 2, 429-435. (A. Weron) **56** #9664 60G25
- The projection of processes with orthogonal increments, and subordinate processes. (Russian. English summary) Problems of the theory of probability distributions, IV. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **72** (1977), 132-139, 218, 222. (A. Weron) **57** #17803 60G25 60G10
- , Tunekiti On branching Markov processes with derivative. *Proceedings of the Second Japan-USSR Symposium on Probability Theory (Kyoto, 1972)*, pp. 412-432. *Lecture Notes in Math.*, Vol. 330, Springer, Berlin 1973. (Author's introduction) **56** #1479 60J35
- On the growing up problem for semilinear heat equations. Functional analysis and numerical analysis for nonlinear problems (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1974). *Sūrikaiseikenkyūsho Kōkyūroku No.* 258 (1975), 106-112. (D. T. Tsaimo) **58** #23065 35K05
- (with Kobayashi, Kusuo; Tanaka, Hiroshi) On the growing up problem for semilinear heat equations. *J. Math. Soc. Japan* **29** (1977), no. 3, 407-424. (J. Smoller) **56** #9076 35K55
- idinov, S. H. (with Orazov, G.) The estimate of the remainder term in a local limit theorem for a random number of random terms. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1967**, no. 10, 3-6. (V. Kolčín (RŽMat 1968 #9 V25)) **46** #6423 60F05
- (with Azlarov, T. A.; Bazarov, V.) Investigation of a certain group servicing system. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 10, 3-5. (A. Obretenov) **52** #6917 60K25
- (with Fazylov, H.) Optimal plans for statistical control with sampling by variables. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **14** (1970), no. 4, 32-38. (B. I. Penkov) **45** #6135 62N10
- (with Fazylov, H.) Optimal plans of statistical control by a quantitative test with an unknown variance. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 1, 24-28. (A. Obretenov) **45** #4557 62N99 (93E20)
- (with Azlarov, T. A.; Bazarov, V.) An investigation of a certain bulk service system. (Russian) *Studia Sci. Math. Hungar.* **6** (1971), 123-125. (D. J. Daley) **49** #6413 60K25
- (with Azlarov, R. A.) Limit theorems for certain characteristics of the system $M/G/1/n$. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1972**, no. 4, 3-4. (H.-J. Roßberg) **47** #5988 60K25
- (with Matvievskaia, G. P.) The mathematical legacy of the scientists of Central Asia from the ninth to the fifteenth centuries. (Bulgarian) *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* **15**(48) (1972), 209-216. (Editors) **57** #2822 01A30
- (with Azlarov, T. A.) Limit theorems for certain characteristics of the system $M/G/1/n$. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 6, 24-30, 79. (H.-J. Roßberg) **49** #6414 60K25
- (with Fozilov, H.) Optimal plans for statistical acceptance control for a two-sided test with respect to a quantitative characteristic. (Russian) *Studies in mathematical statistics, and related questions. Tashten. Gos. Univ. Nauch. Trudy No.* 402 (1972), 101-110. (N. L. Johnson) **48** #12769 62N10
- (with Gafurov, M. U.) A remark on a certain limit theorem. (Russian) *Random processes and statistical inference*, No. 3 (Russian), pp. 170-172. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1973. (J. G. Wendel) **51** #6935 60F05
- (with Radžabov, A.) Optimal designs of statistical sequential control by means of a quantitative criterion. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **17** (1973), no. 4, 41-45, 98. (Authors' summary) **54** #11683 62L10
- (with Smahanov, K.) Optimal control plans with known initial distribution. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 152-162, 212-213. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (K. Sarkadi) **52** #15925 62N10
- (with Formanov, Š. K.) Certain inequalities for a sum of independent identically distributed random vectors. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **18** (1974), no. 1, 28-33, 73. (S. A. Book) **49** #6321 60F05
- (with Azlarov, T. A.; Zuparov, T. M.) ★Аддитивные задачи с растущим числом слагаемых. (Russian) [Additive problems with an increasing number of terms] *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1975. 162 pp. (errata insert) (J. Galambos) **58** #16554 10G05 (10J10, 10J15, 10K99)
- (with Gafurov, M. U.; Saliev, Š. T.) The limit behavior of the distribution of sums of a random number of random variables. (Russian) *Random processes and statistical inference*, No. 5 (Russian), pp. 141-157, 204. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1975. (Dominik Szynal) **53** #11712 60F05
- (with Salahitdinov, M. S.; Vinokurov, V. G.) On the occasion of the sixtieth birthday of Tašmuhamed Alievich Sarymsakov. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 5, 61-62. (Editors) **53** #2599 01A70
- (with Landsman, Z. M.) Asymptotic behavior of the Fisher information contained in additive statistics. *Proceedings of the Third Japan-USSR Symposium on Probability Theory (Tashkent, 1975)*, pp. 351-374. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (L. B. Klebanov) **56** #1522 62F10 (62B10)
- (with Matvievskaia, G. P.) On research in the history of mathematics in Central Asia. (Russian) *Istor.-Mat. Issled. Vyp.* **21** (1976), 51-60, 353. (Authors' summary) **58** #16007 01A65
- (with Radžabov, A.) On the economically most advantageous sequential control plan by a quantitative attribute. (Russian) *Limit theorems for random processes (Russian)*, pp. 106-113, 166. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1977. (K. Sarkadi) **57** #1793 62L10 (62N10)
- (with Formanov, Š. K.; Ėl'-Fahham, M. M.) Estimates for the remainder term in a local limit theorem for densities of sums of independent random variables. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 3, 532-534. (F. N. Galstjan) **54** #14054 60F05
- (with Landsman, Z. M.) An estimate of the remainder term in the asymptotic behavior of Fisher information contained in statistics of summator type. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 4, 780-782. (L. B. Klebanov) **56** #1523 62F10 (62B10)
- (with Mirzahmedov, M. A.; Hosni, A. K.) Estimation of a probability density from dependent samples. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 2, 3-6. (Wolfgang Wertz) **55** #13652 62G05
- (with Landsman, Z. M.) An estimate of the remainder term in an asymptotic expression for Fisher information contained in statistics of additive type. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 2, 32-40, 94-95. (L. B. Klebanov) **56** #16894 62F10 (62B10)
- (with Safarbaev, I.) A random walk scheme in k -dimensional space. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 4, 23-28, 84. (D. A. Darling) **57** #10831 60J15
- The limit distribution of the roots of Euler polynomials. (Russian) *Dokl. Akad. Nauk SSSR* **239** (1978), no. 1, 56-59. (B. A. Bondarenko) **57** #16508 26A78 (33A65)
- (with Safarbaev, I.) The random walk of a particle between reflecting barriers. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 2, 78. (D. A. Darling) **58** #7862 60J15
- (with Gafurov, M. U.) Some refinements of Erdős-Katz theorems on the strong law of large numbers. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 3, 37-42, 86-87. (R. J. Tomkins) **58** #18690 60F15
- See also **Studies in mathematical statistics, and related questions**, **48** #7317;
- Random processes and statistical inference**, **51** #11600; **Random processes and statistical inference**, **52** #12018; **Stochastic processes and related problems**, **52** #12019; **Limit theorems and mathematical statistics**, **55** #4316; **Limit theorems for random processes**, **56** #1383; **Mathematics and astronomy in the works of scientists of the medieval East**, **56** #8270 and **History of the exact sciences in the medieval Near and Middle East**, **57** #5579
- Sirazetdinov, T. K. Certain singularities of the stability of processes with distributed parameters. (Russian) *Trudy Kazan. Aviacion. Inst. No.* 109 (1969), 40-51. (Št. I. Gheorghijă) **46** #498 35B35
- (with Degtjarev, G. L.) Optimal control of one-dimensional processes with retarded arguments. *Automat. i Telemekh.* **1970**, no. 1, 36-44 (Russian. English summary); translated as *Automat. Remote Control* **1970**, no. 1, 28-36. (Authors' summary) **46** #758 49B25
- Synthesis of the control of systems with distributed parameters under an incomplete measurement of its state. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* **1971**, no. 3, 37-43. (S. P. Bingulac) **45** #9767 93C99
- Analytic design of regulators in random processes with distributed parameters. (Russian) *Trudy Kazan. Aviacion. Inst. No.* 130 (1971), 9-19. (A. Ja. Dorogovcev) **47** #1530 93E20
- (with Klestov, E. A.) A method of distributed moments in time-optimal problems. (Russian) *Trudy Kazan. Aviacion. Inst. No.* 130 (1971), 33-41. (N. N. Petrov) **46** #9840 49B35
- (with Kuršev, V. N.) Optimal control of one-dimensional stochastic processes with distributed parameters. *Automat. i Telemekh.* **1972**, no. 1, 41-45 (Russian); translated as *Automat. Remote Control* **33** (1972), no. 1, part 1, 33-37. (Vaclav E. Beneš) **51** #9940 93E20
- (with Klestov, E. A.) Problem of optimal response-time in distributed systems with random properties. *Automat. i Telemekh.* **1972**, no. 3, 35-42 (Russian. English summary); translated as *Automat. Remote Control* **33** (1972), no. 3, part 1, 377-383. (N. U. Ahmed) **53** #12723 93E20
- The method of Lyapunov functions in control problems for distributed-parameter systems (a survey). *Automat. i Telemekh.* **1972**, no. 7, 5-21 (Russian. English summary); translated as *Automat. Remote Control* **1972**, no. 7, part 1, 1063-1077. (P. K. C. Wang) **54** #4762 93C20
- A certain critical case in systems with distributed parameters. (Russian) *Trudy Kazan. Aviacion. Inst. No.* 149 (1972), 22-27, 47. (Russell D. Rupp) **49** #800 35B35
- (with Bogomolov, A. I.) A solution of the fundamental problem of control by the method of steepest descent. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* **1974**, no. 1, 5-12, 167. (L. Mikołajczyk) **50** #8204 49A40
- Optimization of controllable processes. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* **1974**, no. 4, 96-102, 150. (L. von Wolfersdorf) **56** #13050 49B30

- (with Bogomolov, A. I.) On the solution of the fundamental problems of the control of dynamical objects. (Russian) *Problems in analytical mechanics, stability and control theories* (Second Četaev Conf., Kazan, 1973) (Russian), pp. 62-66, 337. Izdat. "Nauka", Moscow, 1975. (Ė. G. Al'breht) 57 #5274 93C15
- (with Semenov, P. K.) The stability of processes with distributed parameters with lag. (Russian) *Problems in analytical mechanics, stability and control theories* (Second Četaev Conf., Kazan, 1973) (Russian), pp. 280-284, 342. Izdat. "Nauka", Moscow, 1975. (Claudia Simionescu) 56 #13092 49E20 (35B35)
- The sensitivity of systems with distributed parameters. (Russian) *Sensitivity of control systems* (Proc. All-Union School-Seminar Theory of Sensitivity of Control Systems and its Application, Vladivostok, 1975), Vol. I (Russian), pp. 47-58, 324. Akad. Nauk SSSR Dal'necostočn. Naučn. Centr, Vladivostok, 1976. (Vadim Komkov) 58 #9520 93B35
- (with Zaripov, N. G.) On the solution of a fundamental problem of control of a discontinuous dynamical system. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* 1976, no. 4, 46-52, 139. (I. Muntean) 56 #4968 93C15 (49B10)
- ★Оптимизация систем с распределенными параметрами. (Russian) [Optimization of systems with distributed parameters] Izdat. "Nauka", Moscow, 1977. 479 pp. (Vadim Komkov) 58 #33322 93C20
- (with Degtjarev, G. L.) Optimal control of processes with distributed parameters given incomplete information. *Avtomat. i Telemekh.* 1977, no. 5, 5-10. (Russian. English summary); translated as *Automat. Remote Control* 38 (1977), no. 5, part 1, 615-620. (Claudia Simionescu) 57 #5266 93C05
- (with Degtjarev, G. L.) On the problem of optimal control synthesis in distributed systems with incomplete measurement. (Russian) *Izv. Vysš. Učebn. Zaved. Aviacion. Tehn.* 1977, no. 2, 45-49, 150. (Authors' summary) 58 #15453 93C20
- (with Elizarov, V. I.) Optimum control of the flow of non-Newtonian fluid between rotating cylinders. *Prikl. Mat. Meh.* 41 (1977), no. 1, 113-123 (Russian); translated as *J. Appl. Math. Mech.* 41 (1977), no. 1, 103-114. (R. K. Rathy) 58 #8777 7649
- Sirkiladze, D. D.** (with Ivahnenko, O. G.; Karpuhina, A. M.) Optimization of nonlinear transformation of continuous features into discrete (binary) code by sifting according to analytic formulas. *Avtomatika* 1976, no. 5, 3-13 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 9 (1976), no. 5, 1-10. (Hidemitsu Ogawa) 56 #10195 68A45
- Sircar, Annapurna** (with Everitt, William N.) On the integration of certain second-order linear differential equations. *Quart. J. Math. Oxford Ser. (2)* 23 (1972), 391-400. (H. Hochstadt) 47 #3731 34A30
- Sircar, Ranesh** Dynamic response of circular plates on elastic foundation subjected to sonic booms. *Indian J. Pure Appl. Math.* 6 (1975), no. 5, 530-538. (Z. Kączkowski) 56 #13936 7335
- Sirčenko, Z. F.** (with Eidel'man, S. D.) The application of the averaging principle to the solution of certain parabolic boundary value problems. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 621-631, 716. (L. E. Bobisud) 48 #4465 35B25 (35K20)
- (with Eidel'man, S. D.) The applicability of the averaging principle to the solutions of the Cauchy problem for parabolic equations in classes of unbounded functions. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations* (Russian), pp. 189-197. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1975. (From the authors' introduction) 53 #13849 35K60 (35B30)
- Sirenko, I. G.** (with Peleh, B. L.; Pidstrigač, Ja. S.) Some general problems in the theory of thermoelasticity of transversely isotropic shells. *Izv. Akad. Nauk SSSR Meh. Tverd. Tela* 1971, 81-88 (Russian); translated as *Mechanics of Solids* 6 (1971), no. 6, 65-71 (1973). (Yi-Yuan Yu) 50 #3715 7335
- Sirenko, Ju. K.** (with Masalov, S. O.; Šestopalov, V. P.) The applicability of the truncation method to some infinite systems of equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 6, 539-543, 575. (D. K. Cohoon) 58 #32430 7865
- Siret, J. M.** (with Michalesco, G.) Détermination du domaine de stabilité par rapport aux conditions initiales de systèmes échantillonnés non linéaires. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle* 7 (1973), Sér. J-1, 116-121. (Guy Jumarie) 48 #8055 93D99
- (with Melin, C.; Michalesco, G.) Partial decoupling of multivariable non-linear sampled-data control systems and the asymptotic stability analysis. *Internat. J. Control* 19 (1974), 977-988. (S. Prusty) 53 #5112 93D15
- (with Bertrand, P.; Michalesco, G.) Sur la synthèse de modèles réduits par agrégation. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* 10 (1976), no. J-2, 105-112. (Authors' summary) 58 #33198 93A15
- (with Michalesco, G.; Bertrand, P.) Representation of linear dynamical systems of aggregated models. *Internat. J. Control* 26 (1977), no. 1, 121-128. (Edward W. Kamen) 56 #14865 93A15
- (with Michalesco, G.; Bertrand, P.) Optimal approximation of high-order systems subject to polynomial inputs. *Internat. J. Control* 26 (1977), no. 6, 963-971. (Authors' summary) 57 #15629 93C05
- Sirgorsky, Vitaly P.** See **Sigorskii, V. P.**
- Siri, R.** (with Aragone, Carlos; Gambini, R.) Dynamical inconsistency and conformal covariance of the massless tensor field. (Italian and Russian summaries) *Nuovo Cimento B* (11) 12 (1972), 219-230. (Alan Barnes) 50 #15809 8335
- (with Aragone, Carlos; Restuccia, Alvaro) Gravidynamics of linear spin two neutral fields. *General Relativity and Gravitation* 5 (1974), no. 6, 643-655. (Alan Barnes) 54 #9557 8353
- Siriex, M.** See **Applied mechanics**, 50 #11914
- Sirik, A. F.** On the algorithm of M. Held and R. M. Karp for the solution of the travelling salesman problem. (Russian) *Computing methods and programming for the electronic computers "URAL-2"*, "URAL-4", No. 2 (Russian), pp. 32-35. (loose errata) Izdat. Saratov. Univ., Saratov, 1968. (E. Ja. Gabovič) 52 #16576 90B10 (90C47)
- Sirik, V. K.** (with Nikitin, Ju. P.; Jakimčuk, G. S.) Approximate analysis of periodically inhomogeneous long lines. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1973, no. 11, 1176-1183. 54 #7016 93A15
- Širkjan, R. A.** The spectrum of nonselfadjoint ordinary differential operators of higher order. (Russian) *Differencial'nye Uravnenija* 8 (1972), 1214-1224. (S. R. Bernfeld) 46 #5724 34B25
- Širkov, B. M.** A system of models and methods for optimal long range planning of contract construction and its production base. (Russian) *Ėkonom. i Mat. Metody* (1977), no. 1, 92-108. (B. L. Ovsievich) 56 #14609 90A15
- Širinkov, M.** Removable singularities of convex functions. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 16 (1973), no. 11, 9-12. (Roman Ger) 49 #10837 26A51
- The regularization of the supremum of a family of plurisubharmonic functions. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 17 (1974), no. 9, 14-17. (L. Ronkin) 56 #12312 32F05
- The existence of the least plurisuperharmonic majorant and some of its applications. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 18 (1975), no. 7, 7-10. (L. Ronkin) 54 #7857 32F05 (32D10)
- (with Safoev, M. D.) The convergence of Newton series in three complex variables. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 19 (1976), no. 1, 8-12. (Reimers) 54 #13363 40A05
- Erratum: "The regularization of the supremum of a family of plurisubharmonic functions" (Dokl. Akad. Nauk Tadžik. SSR 17 (1974), no. 9, 14-17). (Russian) *Dokl. Akad. Nauk Tadžik. SSR* 20 (1977), no. 6, 62. (Editors) 56 #15985 32F05
- The growth of a class of plurisubharmonic functions. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 20 (1977), no. 12, 12-15. (Guy Laville) 58 #17214 32F05
- Širinkulov, T.** (with Badalov, F. B.) Solution of nonlinear Volterra integro-differential equations and systems by means of power series. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1971, no. 9, 14-16. (C. Corduneanu) 47 #9202 45J05
- See also **Abstracts: Conference of the Faculties on Advances in Research**, 48 #3610
- Širinov, K. F.** (with Guseinov, A. I.; Babaev, D. A.; Mahmudov, Ju. A.) The paths of development of cybernetics in the Azerbaijani Academy of Sciences. (Russian) *Problems of computational mathematics* (Russian), pp. 56-69. Izdat. "Ėlm", Baku, 1976. (Editors) 47 #4697 94-03
- (with Bahyševa, F. A.) The approximate solution of a certain three-dimensional filtration problem in an inhomogeneous stratum of variable thickness. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tekhn. Nauk* 1975, no. 2, 103-107. (Jakub Siemek) 52 #12526 7635
- See also **Numerical mathematics**, 51 #13 and **Questions of mathematical cybernetics and applied mathematics**, 54 #4887
- Sirisen, H. R.** (with Choi, S. S.) Optimal pole placement in linear multivariable systems using dynamic output feedback. *Internat. J. Control* 21 (1975), 661-671. (Authors' summary) 57 #18954 93C05 (93B25)
- (with Choi, S. S.) Pole placement in output feedback control systems for minimum sensitivity to plant parameter variations. *Internat. J. Control* 22 (1975), no. 1, 129-137. (S. G. Tzafestas) 56 #4979 93C99
- (with Tan, K. S.) Solution of nonlinear two-point boundary-value problems using spline functions. *J. Optimization Theory Appl.* 16 (1975), 245-254. (G. D. Byrne) 51 #11977 65L10
- (with Chou, F. S.) An efficient algorithm for solving optimal control problems with linear terminal constraints. *IEEE Trans. Automatic Control* AC-21 (1976), no. 3, 275-277. (Claude Carasso) 53 #14278 49D30
- Reduced-order filters for limited state estimation from measurements containing coloured noise. *Internat. J. Systems Sci.* 7 (1976), no. 6, 613-624. (Andrew P. Sage) 54 #2307 93E10
- (with Choi, S. S.) An algorithm for constructing minimal-order observers for linear functions of the state. *Internat. J. Systems Sci.* 8 (1977), no. 3, 251-261. (Kunihiko Ichikawa) 57 #18101 65K05 (93B05)
- Širjaev, A. F.** (with Šul'man, T. A.) Application of mathematical programming methods to the computation of elastic systems with one-sided connections. (Russian) *Moskov. Inž. Železnodorož. Transporta Trudy* No. 385 (1971), 45-54. (Authors' summary) 52 #16246 7365
- Širjaev, A. N.** ★Статистический последовательный анализ: Оптимальные правила остановки. (Russian) [Statistical sequential analysis: Optimal stopping rules] *Izdat. "Nauka", Moscow*, 1969. 231 pp. (W. Hoeffding) 45 #2865 62L15
- Sur les équations stochastiques aux dérivées partielles. *Actes du Congrès International des Mathématiciens* (Nice, 1970), Tome 2, pp. 537-544. Gauthier-Villars, Paris, 1971. (R. S. Bucy) 54 #11481 60G35
- (with Legostaeva, I. L.) Minimax weights in a trend detection problem of a random process. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 16 (1971), 339-347. (B. I. Penkov) 45 #1307 62F10
- (with Lipcer, R. Š.) Statistics of conditionally Gaussian random sequences. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: Probability theory, pp. 389-400. Univ. California Press, Berkeley, Calif., 1972. (K. S. Miller) 53 #4211 60G35
- (with Lipcer, R. Š.) The absolute continuity with respect to Wiener measure measures that correspond to processes of diffusion type. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 36 (1972), 847-889. (L. A. Shepp) 47 #1119 60G30 (60H05)
- (with Rozovskii, B. L.) On infinite systems of stochastic differential equations that arise in the theory of optimal nonlinear filtering. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 17 (1972), 228-237. (K. S. Miller (Zbl 277 #60046)) 53 #14603 60G35 (60H10)
- ★Statistical sequential analysis. Optimal stopping rules. Translated from Russian by Lisa Rosenblatt and Judah Rosenblatt. Translations of Mathematical Monographs, Vol. 38. American Mathematical Society, Providence, R.I., 1973. iv + pp. (Editors) 50 #3482 62Lxx
- Statistics of diffusion type processes. *Proceedings of the Second Japan-US Symposium on Probability Theory* (Kyoto, 1972), pp. 397-411. *Lecture Notes in Mathematics*, Vol. 330, Springer, Berlin, 1973. (Ī. M. Stojanov) 56 #16768 60G35 (93E10, 62M05)
- (with Lipcer, R. Š.) ★Статистика случайных процессов. (Russian) [Statistics of random processes] Нелинейная фильтрация и смежные вопросы. [Nonlinear filtering and related problems] *Probability Theory and Mathematical Statistics*, Vol. 15. *Izdat. "Nauka", Moscow*, 1974. 696 pp. (Ī. M. Stojanov) 55 #4365 60G35 (60G30, 93E10, 62M05)
- Optimal filtering of random processes. (Russian) *Probabilistic and statistical methods* (Internat. Summer School Probability Theory and Math. Statist., Varna, 1973), pp. 1-10. (Editors) 50 #3482 62Lxx

- ulgarian), pp. 126-199. *B"lgar. Akad. Nauk. Inst. Mat. i Meh. s Izliš. Cent"r, Sofia*, 74. (Editors) **58** #31376 60G35 (93E10)
- Statistics of diffusion processes. *Progress in statistics (European Meeting of statisticians, Budapest, 1972), Vol. II, pp. 737-751. Colloq. Math. Soc. János Bolyai, Vol. North-Holland, Amsterdam, 1974. (Václav E. Beneš) 54 #8837 60G35 (62M05, E10)*
- Reduction of data with preservation of information, and innovation processes. (Russian) *Proceedings of the School and Seminar on the Theory of Random Processes (Druskininkai, 1974), Part II (Russian), pp. 235-267. Inst. Fiz. i Mat. Akad. Nauk Litovsk. SSR, Vilnius, 1975. (Ī. M. Stojanov) 55 #4366 60G35 (93E10)*
- (with Kabanov, Ju. M.; Lipcer, R. Š.) Martingale methods in the theory of point processes. (Russian) *Proceedings of the School and Seminar on the Theory of Random Processes (Druskininkai, 1974), Part II (Russian), pp. 269-354. Inst. Fiz. i Mat. Akad. Nauk Litovsk. SSR, Vilnius, 1975. (Ī. M. Stojanov) 55 #4371 60G45 (60G55, 3E10)*
- ★Статистический последовательный анализ. Оптимальные правила остановки. (Russian) [Statistical sequential analysis. Optimal stopping rules] Second edition, revised. *Izdat. "Nauka", Moscow, 1976. 272 pp. (W. Hoeffding) 56 #4078 62L10 (52M05)*
- (with Kabanov, Ju. M.; Lipcer, R. Š.) Criteria of absolute continuity of measures corresponding to multivariate point processes. *Proceedings of the Third Japan-USSR Symposium on Probability Theory (Tashkent, 1975), pp. 232-252. Lecture Notes in Math., Vol. 550, Springer, Berlin, 1976. (Editors) 58 #24515 60G30*
- (with Lipcer, R. Š.) ★Statistics of random processes. I. General theory. Translated by A. B. Aries. *Applications of Mathematics, Vol. 5. Springer-Verlag, New York-Heidelberg, 1977. x + 394 pp. ISBN 0-387-90226-0 (Ī. M. Stojanov) 57 #14125 50G35 (60G45, 60H10, 93Exx)*
- (with Kabanov, Ju. M.; Lipcer, R. Š.) "Predictable" criteria for the absolute continuity and singularity of probability measures (the case of continuous time). (Russian) *Dokl. Akad. Nauk SSSR 237* (1977), no. 5, 1016-1019. (Jean Memin) **58** #24513 60G30 (60G45)
- (with Kabanov, Ju. M.; Lipcer, R. Š.) On the question of the absolute continuity and singularity of probability measures. (Russian) *Mat. Sb. (N.S.) 104(146)* (1977), no. 2(10), 227-247, 335. (Jean Memin) **58** #24514 60G30 (60G45)
- ★Optimal stopping rules. Translated from the Russian by A. B. Aries. *Applications of Mathematics, Vol. 8. Springer-Verlag, New York-Heidelberg, 1978. x + 217 pp. ISBN 0-387-90256-2 (Editors) 57 #7906 62L15 (60G40)*
- (with Lipcer, R. Š.) ★Statistics of random processes. II. Applications. Translated from the Russian by A. B. Aries. *Applications of Mathematics, Vol. 6. Springer-Verlag, New York-Heidelberg, 1978. x + 339 pp. ISBN 0-387-90236-8 (Ī. M. Stojanov) 58 #7827 60G35 (62L10, 93E20)*
- See also *Studies in mathematical statistics*, **48** #1352; *Lamperti, John*, **49** #11580; *Proceedings: School-Seminar on the Theory of Random Processes*, **52** #9307; *Barra, Jean-René*, **53** #6806; *Proceedings: School-Seminar on the Theory of Random Processes*, **54** #3780 and *Robbins, Herbert; et al.*, **57** #14294
- nev, V. I. On the stability in the large of a third order system with "its own" nonlinearities in a certain special case. (Russian) *Differentsial'nye Uravneniya* **9** (1973), 2102-2104, 2120. (K. R. Schneider) **48** #9012 34D25
- On the stability of second order nonlinear autonomous systems. (Russian) *Problems of analytical mechanics, stability and control theories (Proc. Second Četaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 376-386, 418. Kazan. Aviacion. Inst., Kazan, 1976. (Author's summary) 58 #15515 93D05*
- nev, V. M. A certain class of inverse semigroups. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1970**, no. 2, 10-13, 74. (B. Šain (RŽMat **1971** #2 A141)) **52** #14116 20M10
- A certain extension in the class of inverse semigroups. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1971**, no. 1, 15-23, 65. (B. Šain (RŽMat **1971** #7 A185)) **51** #10505 20M10
- Semilattices of width 2. *Semigroup Forum* **13** (1976/77), no. 2, 149-177. (From the author's introduction) **55** #12588 06A20
- Some properties of the category of inverse semigroups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 5 (180), 125-136. (Editors) **58** #16832 18C99 (20M05)
- ten, Monroe G. See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, **52** #9427
- kov, D. V. (with Bogoljubov, N. N.) ★Введение в теорию квантованных полей. (Russian) [Introduction to quantum field theory] Second, revised edition. *Izdat. "Nauka", Moscow, 1973. 416 pp. (errata insert) (Editors) 50 #9234 81.47*
- Ultraviolet asymptotics of propagators and higher Green functions. With a discussion in English and Russian. International Conference: Mathematical Problems of Quantum Field Theory and Quantum Statistics (Moscow, 1972), Part II. *Trudy Mat. Inst. Steklov.* **136** (1975), 333-350, 441. (Tetz Yoshimura) **57** #15034 81.35
- See also *School: JINR-CERN, High Energy Physics*, **48** #3377
- in, A. (with Friedberg, R.; Lee, T. D.) Class of scalar-field soliton solutions in three space dimensions. *Phys. Rev. D* (3) **13** (1976), no. 10, 2739-2761. (Robert L. Warnock) **58** #32554 81.47
- manov, Cvetan A history-of-physics calendar for the year 1977. (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **20(53)** (1977), no. 2, 172-174. (Editors) **58** #16042 01A70
- min, G. I. About regions of convergence of expansions of differential equations of the three-dimensional restricted three-body problem in the vicinity of collinear libration points. (Russian summary) *Celestial Mech.* **9** (1974), 183-190. (Djordje Djukic) **49** #4355 70.34
- On the algorithm for constructing periodic solutions of a system of ordinary differential equations not reduced to the characteristic form of Liapounov's system. *Celestial Mech.* **10** (1974), 151-164. (T. G. Proctor) **56** #6022 34C25
- Power series expansions of the Jacobi function of the three-dimensional circular restricted three-body problem in the neighborhood of collinear libration points. (Russian. English summary) *Moskov. Gos. Univ. Trudy Gos. Astronom. Inst. Šternberg.* **45** (1974), 154-178. (errata insert) (Q. K. Giori) **56** #17290 70.34
- An investigation of the stability of periodic motions in the neighborhood of collinear libration points. (Russian. English summary) *Celestial Mech.* **11** (1975), 483-515. (Q. K. Giori) **52** #4760 70.34
- Širočenko, V. P. Numerical solution of a problem on the flow of a viscous incompressible fluid in a doubly connected domain. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **8** (1977), no. 1 *Mat. Modelirovanie*, 119-134. (N. N. Janenko) **57** #2170 76.65
- Širodža, I. B. (with Salyga, V. I.) Identification of dynamic objects by using R-functions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1972**, no. 3, 51-55. (P. Neumann) **46** #10453 93B30
- Široid, Ī. P. (with Ljance, V. Ė.) The spectrality of the perturbed operator of multiplication by the independent variable. (Russian) *Mat. Zametki* **13** (1973), 289-296. (H. Baumgärtel) **48** #941 47B40
- The nonselfadjoint second order differential operator on the whole axis. (Russian) *Mathematical methods, and physical and mechanical fields*, No. 1 (Russian), pp. 201-203, 221. "Naukova Dumka", Kiev, 1975. (M. M. Skriganov) **54** #8357 47E05 (34B25)
- Symmetrizers for operators that are smoothly perturbed in the sense of T. Kato. (Russian) *Theoretical and applied questions of algebra and differential equations (Russian), pp. 112-114, 124. Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev, 1976. (Author's summary) 58 #30400 47A55*
- Nonselfadjoint perturbation of the continuous spectrum with conditions of smoothness and almost-smoothness. (Russian) *Theoretical and applied questions of algebra and differential equations (Russian), pp. 115-116, 124. Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev, 1976. (Author's summary) 58 #30401 47A55*
- The problem of nonselfadjoint perturbation of the continuous spectrum for the Dirac operator. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 2, 122-126, 190. (H. Baumgärtel) **54** #3506 47E05 (34B25)
- Širois-Dumais, R. (with Willard, Stephen) Quotient-universal sequential spaces. *Pacific J. Math.* **66** (1976), no. 1, 281-284. (J. E. Keeling) **58** #12926 54D55
- Širokov, A. P. Fiber bundles of involutions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 12(127), 116-123. (C. Simionescu) **47** #9473 53C05
- (with Aminova, A. V.; Biļjalov, R. F.; Kaigorodov, V. R.) Alekseĭ Zinov'evič Petrov. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 9 (1973), 127-135. (Editors) **58** #27098 01A70
- Structures on differentiable manifolds. (Russian) *Algebra. Topology. Geometry, Vol. 11 (Russian), pp. 153-207, 263. Akad. Nauk. SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1974. (I. Kolář) 55 #4027 53C10 (58H05)*
- (with Višnevskii, V. V.; Kopp, V. G.; Laptev, B. L.; Šulikovskii, V. I.) Aleksandr Petrovič Norden (on the occasion of his seventieth birthday). (Russian) *Proceedings of the Seminar of the Department of Geometry, No. VII (Russian), pp. 7-19. Izdat. Kazan. Univ., Kazan, 1974. (Editors) 53 #64 01A70*
- On the question of spin representations of the rotations of Euclidean spaces over algebras. (Russian) *Proceedings of the Seminar of the Department of Geometry, No. VII (Russian), pp. 165-175. Izdat. Kazan. Univ., Kazan, 1974. (H. Freudenthal) 52 #14173 22E70 (53A50)*
- Normalizations in a projective space with a given fibering. (Russian) Collection of articles dedicated to Aleksandr Petrovič Norden on the occasion of his seventieth birthday. *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 5(144), 216-221. (Gheorghe Murarescu) **50** #11049 53A20
- A remark on structures in tangent bundles. (Russian. English summary) Collection of articles dedicated to the memory of Kleopas Grincevičius. *Trudy Geomet. Sem.* **5** (1974), 311-318, 376. (V. Oproiu) **52** #9271 58A20 (53C10)
- A remark on special types of Riemannian spaces over algebras. (Russian) *Differential geometry, No. 2 (Russian), pp. 94-98, 119. Izdat. Saratov. Univ., Saratov, 1975. (B. Rozenfel'd) 57 #1358 53C25*
- (with Podol'skii, V. G.) On a four-dimensional Riemannian space. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 10-11 (1975), 108-112. (RŽMat **1977** #10 A488) **58** #30856 53B20
- (with Podol'skii, V. G.) Some types of Riemannian foliations. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 10-11 (1975), 232-236. (From the text) **58** #30912 53C20
- (with Talantova, N. V.) A remark on a certain metric in the tangent bundle. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 6(157), 143-146. (J. Vilms) **52** #11767 53B15
- Norden's normalization method, and real models of projective spaces over algebras. (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp.* **8** (1975), 145-152. (V. V. Gol'dberg) **55** #1238 53A55
- (with Talantova, N. V.) Three-step groups of linear fractional substitutions of a dual variable as affine collineations. (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp.* **9** (1976), 105-113. (From the text) **58** #30828 53A35
- On the question of relative line geometry. (Russian) *Differential geometry, No. 3 (Russian), pp. 69-81, 108. Izdat. Saratov. Univ., Saratov, 1977. (Author's summary) 58 #30787 53A15 (53A35)*
- See also *Proceedings: Seminar of the Department of Geometry, Kazan University*, **51** #1618 and *Algebra, Topology, Geometry*, **52** #13063
- Širokov, B. M. Boundary value problems for degenerate elliptic equations. (Russian) *Petrozavodsk. Gos. Univ. Učen. Zap.* **18** (1970), no. 2 *Voprosy Mat. Meh.*, 151-159 (1971). (See RŽMat **1972** #7 B298) 35J70
- The distribution of the values of a polyadic norm. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 553-554. (B. Volkmann) **48** #2101 10K20
- A certain class of Dirichlet series. (Russian) *Studies in number theory*, 3. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **50** (1975), 187-194, 196. (I. Kátai) **55** #5556 10H25
- Širokov, F. V. (with Signaevskii, V. A.) Minimal coverings of a finite set. I. (Russian) *Diskret. Analiz* No. 21 (1972), 72-94, 97. (J. B. Roberts) **48** #8278a 05B40
- (with Signaevskii, V. A.) Minimal coverings of a finite set. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 1066-1069. (J. B. Roberts) **47** #3216 05B40
- (with Signaevskii, V. A.) Minimal coverings of a finite set. II. Connected coverings. (Russian) *Diskret. Analiz* No. 22 (1973), 57-78, 81. (J. B. Roberts) **48** #8278b 05B40
- (with Poliščuk, V. K.) A matrix analogue of polynomial coefficients. (Russian) *Kombinatornyi Anal.* No. 3 (1974), 15-27. (Not reviewed) 05A15 (05C30)
- (with Fedoseev, V. I.) Detection and estimation of the position of the source of a

- signal that modulates a Poisson random field. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **18** (1975), no. 2, 246-252. (Authors' summary) **57** #2734 94A05
- (with Fedoseev, V. I.) Space-time nonlinear filtering for Poisson random fields. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 1, 29-40. (L. I. Gal'čuk) **53** #14641 (EA 54) 60G35 (60J75)
- See also Grothendieck, A.; et al., **55** #5621
- Širokov, Ju. M. Conditions for the consistency, completeness and relativistic invariance of the system of equal-time commutators. (Russian. English summary) *Teoret. Mat. Fiz.* **9** (1971), no. 3, 333-342. (Author's summary) **57** #11406 81.17 (81.47)
- Relativistic invariance in quantum theory. I. (Russian. English summary) *Fiz. Elementar. Častici i Atom. Jadra* **3** (1972), no. 3, 606-649. (Author's summary) **58** #14525a 81.22
- Relativistic invariance in quantum theory. II. (Russian. English summary) *Fiz. Elementar. Častici i Atom. Jadra* **4** (1973), no. 1, 42-78. (Author's summary) **58** #14525b 81.22
- Covariant formalism for equal-time commutators. (Russian. English summary) *Teoret. Mat. Fiz.* **15** (1973), no. 1, 20-42. (Author's summary) **57** #15083 81.47
- Algebraic and covariant structure of the equal time commutators. New developments in relativistic quantum field theory, Vol. I (Tenth Winter School Theoret. Phys., Karpacz, 1973). *Acta Univ. Wratislaviensis*. No. 207 (1974), 159-185. (John McEwan) **55** #7205 81.47
- Canonical expansions of commutators and of field products on the cone and at small distances in the universal algebra formalism. (Russian. English summary) *Teoret. Mat. Fiz.* **25** (1975), no. 1, 3-9. (Author's summary) **58** #14692 81.47
- (with Indukaev, K. V.) Covariantization of the Boulware-Deser representation for the equal-time commutator of the energy-momentum tensor. (Russian. English summary) *Teoret. Mat. Fiz.* **25** (1975), no. 2, 178-184. (Authors' summary) **58** #14719 81.53
- Axiomatics of general type Hamiltonian theories that include classical and quantum theories as special cases. (Russian. English summary) *Teoret. Mat. Fiz.* **25** (1975), no. 3, 307-312. (Author's summary) **57** #18545 81.22 (22D35)
- Covariant expansions for field commutators at an equal-time point. (Russian) International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part I. Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 228-235, 262-263. (K. Kumar) **56** #7579 81.35
- A combined algebra for quantum and classical mechanics. (Russian. English summary) *Teoret. Mat. Fiz.* **28** (1976), no. 3, 308-319. (Author's summary) **58** #25540 81.35 (58F05, 70.35)
- Various quantizations and various classical limits of quantum theory. (Russian. English summary) *Teoret. Mat. Fiz.* **29** (1976), no. 3, 309-322. (A. J. Coleman) **57** #8657 81.46
- The admissible theories of canonical mechanics. (Russian. English summary) *Teoret. Mat. Fiz.* **30** (1977), no. 1, 6-11. (Author's summary) **55** #13973 81.02
- (with Šondin, Ju. G.) Expansion of generalized functions with support in the light cone over a continuous set of irreducible representations of the Lorentz group and Wilson expansions. (Russian. English summary) *Teoret. Mat. Fiz.* **31** (1977), no. 2, 147-155. (Ju. M. Zinov'ev) **58** #30185 46F10 (22E45, 32M10, 81.46)
- Širokov, L. E. Application of the theory of conditional Markov processes to the solution of a certain class of filtering problems. *Avtomat. i Telemekh.* **1968**, no. 12, 31-37 (Russian. English summary); translated as *Automat. Remote Control* **1968**, no. 12, 1920-1926. (Tohru Katayama) **53** #10435 93E10
- Estimation of the state of a nonlinear dynamical system with a continuous-discrete observation channel. (Russian) *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 1, 180-187. (V. N. Igolkin) **55** #12251 93E10
- Unbiased coordinate transformation. *Prikl. Mat. Meh.* **40** (1976), no. 4, 736-739 (Russian); translated as *J. Appl. Math. Mech.* **40** (1976), no. 4, 681-684 (1977). (O. Bottema) **57** #13720 53A15
- Širokov, M. F. Certain global properties of gravitational energy-momentum pseudotensors in general relativity, and their physical applications. (Russian) *Gravitacion: problemy, prospekty (dedicated to the memory of A. Z. Petrov)* (Russian), pp. 321-332, 359. *Izdat. "Naukova Dumka"*, Kiev, 1972. (N. Rosen) **49** #4534 83.53
- (with Bondarev, B. V.) The stability of finite motions along a geodesic in the Schwarzschild metric. (Russian) *Izv. Vysš. Učebn. Zaved. Fiz.* **1974**, no. 12, 52-55. (From the text) **58** #25741 83.34
- See also Gravitation: problems, prospects, **48** #7881
- Širokov, M. I. Causality in quantum electrodynamics. *Jadernaja Fiz.* **23** (1976), no. 5, 1131-1141 (Russian); translated as *Soviet J. Nuclear Phys.* **23** (1976), no. 5, 599-605. (Alberto Galindo) **55** #5057 81.47
- Širokov, N. A. (with Lebedev, N. A.) The uniform approximation of functions on closed sets that have a finite number of angular points with nonzero exterior angles. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **6** (1971), no. 4, 311-341. (J. Siciak) **45** #5375 30A82
- A certain property of analytic capacity. (Russian. English summary) *Vestnik Leningrad. Univ.* **1971**, no. 19, 75-82. (S. V. Temko) **46** #2034 30A44
- (with Vinogradov, S. A.) The factorization of analytic functions with derivative in H^p . (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **22** (1971), 8-27. (L. I. Hedberg) **45** #8848 30A78
- The uniform approximation of functions on closed sets without angular points. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **22** (1971), 209-211. (D. A. Brannan) **45** #7078 30A82
- Uniform approximation of functions on closed sets that have a finite number of angular points with nonzero exterior angles. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 798-800. (D. A. Brannan) **46** #9362 30A82
- Certain properties of analytic capacity. (Russian. English summary) *Vestnik Leningrad. Univ.* **1972**, no. 1, 77-86. (D. A. Brannan) **46** #345 30A44 (31A15)
- Hayman's regularity theorem. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **24** (1972), 182-200. (T. Kubo) **46** #3774 30A36
- (with Vinogradov, S. A.) Zeros of analytic functions with a derivative in H^1 . (Russian) Investigations on linear operators and the theory of functions, III. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **30** (1972), 154-157. (L. Ronkin) **48** #11449 30A08 (30A78)
- A generalization of a theorem of Littlewood and Paley. (Russian) Investigations on linear operators and the theory of functions, III. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **30** (1972), 179-180. (Boris Pavlov) **48** #6427 30A78
- Analytic capacity of sets that are close to a smooth curve. (Russian. English summary) *Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Vyp.* **4** (1973), 73-75. (L. Zalcman) **48** #11486 30A44
- Weighted approximations on closed sets with corners. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 295-297. (P. M. Tamrazov) **51** #3462 30A82
- The uniform approximation of functions on closed sets with nonzero exterior angle. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR. Ser. Mat.* **9** (1974), no. 1, 62-80, 83. (J. Siciak) **50** #2504 30A82
- Some properties of primary ideals of absolutely convergent Taylor series and Fourier integrals. (Russian) Investigations on linear operators and the theory of functions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1974), 149-161. (G. M. Fel'dman) **49** #5853 46J15 (30A98)
- Some generalizations of the Littlewood-Paley theorem. (Russian) Investigations on linear operators and the theory of functions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1974), 162-175. (P. L. Duren) **50** #10268 30A78
- (with Hruščev, S. V.) A remark on a theorem of V. P. Gurarii. (Russian) Investigations on linear operators and the theory of functions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1974), 196-197. (M. Rabinathan) **49** #7464 30A98 (46J15)
- On a generalization of a theorem of Ahlfors. (Russian) Extremal problems of the geometric theory of functions of a complex variable, II. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **44** (1974), 179-185, 188. (A. Rubinstein) **52** #8397 30A30
- The constructive characterization of analytic continuous functions in domains that are close-to-convex. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 4, 790-793. (A. Aksej'ev) **52** #5981 30A82
- Approximation of continuous analytic functions in domains with bounded boundary rotation. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 4, 809-812. (Gregor) **54** #559 30A82
- Some imbedding theorems for spaces of harmonic functions. (Russian. English summary) Investigations on linear operators and theory of functions, VI. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **56** (1976), 191-194, 200. (Author's summary) **58** #1205 31C05
- Uniform approximation of analytic functions by polynomials in domains with bounded rotation of the boundary and without zero exterior angles. (Russian. English summary) Investigations on linear operators and the theory of functions, VII. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **65** (1976), 199-202. (Author's summary) **58** #22578 30A82
- Approximate entropy of continua. (Russian) *Dokl. Akad. Nauk SSSR* **235** (1977), no. 3, 546-549. (H. Renelt) **58** #1166 30A82
- See also Investigations in linear operators and function theory, **49** #5761; Extremal problems of the geometric theory of functions of a complex variable, **50** #581
- Investigations on linear operators and the theory of functions, **52** #14241 (EA 53)
- Širokov, V. A. (with Klimik, A. U.) ★ On the tensor product of representations of the groups $SO_0(n, 1)$ and $U(n, 1)$. Report ITP-76-5E. *Akad. Nauk Ukrain. SSR Inst. Teor. Fiz.*, Kiev, 1976. 52 pp. (Wayne J. Holman, III) **58** #6088 22E70
- (with Klimik, A. U.) Irreducible and indecomposable representations of the algebras $U(n, 1)$ and $IU(n)$. (Russian) *Mathematics collection (Russian)*, pp. 218-224. *Izdat. "Naukova Dumka"*, Kiev, 1976. (Editors) **58** #11233 22E45 (17B10)
- (with Klimik, A. U.) Tensor product of representations of the groups $U(n, 1)$ and $Spin(n, 1)$. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **19** (1976), no. 12, 1073-1076, 1141. (D. Miličević) **56** #5795 22E45
- Širokov, V. I. (i)-convergence, and its applications to sequences of functions. (Russian) *Mat. Zametki* **14** (1973), 809-819. (Karel Wichterle) **54** #6057 54A20
- Širokov, V. S. Richard Süsser's Liber calculationum. (Russian) *Istor.-Mat. Issled. Vyp.* **1976**, 129-142, 354. (Editors) **58** #15864 01A35
- Širokova, E. A. Certain questions on the univalence of functions of class S . (Russian) *Mat. Zametki* **18** (1975), no. 3, 403-410. (E. Żłotkiewicz) **53** #11041 30A36
- The univalence of certain integrals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 9(184), 107-114. (Z. Lewandowski) **58** #6206 30A32
- Širokova, I. V. The rate of convergence in the weak law of large numbers. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist. Vyp.* **8** (1973), 158-168, 179. (S. Book) **54** #8807 60F05
- (with Petrov, V. V.) The exponential rate of convergence in the law of large numbers. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. Vyp.* **2** (1973), 155-157, 165. (M. Skalsky) **48** #9814 60F05
- The rate of convergence in the law of large numbers under moment restriction. (Russian. Lithuanian and English summaries) *Lietosk. Mat. Sb.* **14** (1974), no. 195-206, 233-234. (R. J. Tompkins) **52** #6840 60F05
- Širokova, S. A. Certain principles of the classification of combinatorial designs. (Russian) *Kombinatornyi Anal.* No. 1 (1971), 35-41. (József Pelikán) **45** #1783 05B05
- See also Hall, Marshall, Jr., **45** #1779
- Širokovskaja, O. S. (with Gadziev, A. D.) The numerical solution of the two-dimensional transport equation in curvilinear coordinates. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **1976**, no. 6, 1605-1609, 1631. (Editors) **58** #25717 82.65
- Širokovskii, V. P. (with Djakin, V. V.) An estimation of the rate of convergence of method of Green's function in the calculation of electron spectra. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 532-537. (R. Zezula) **46** #6625 65N25
- (with Djakin, V. V.) Zeros of the eigenfunctions of a quasiperiodic problem. (Russian) *Differencial'nye Uravnenija* **10** (1974), 624-628, 764. (M. Švec) **50** #7652 34B25
- Široký, Jaromír A contribution to the history of astronomy in Olomouc. (Czech and Russian summaries) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **37** (1974), 335-340. (V. E. Thoren) **49** #8795 01A50 (01A55, 01A60)
- Siromoney, Gift (with Siromoney, Ranj) Equal matrix languages and Kleene closure

- Proc. Indian Acad. Sci. Sect. A* **74** (1971), 172-188. (K. S. Fu) **45** #8485 68A30
(with Siromoney, Rani; Krithivasan, Kamala) Abstract families of matrices and picture languages. *Comput. Graphics and Image Processing* **1** (1972), no. 3, 284-307. (K. Fu) **52** #2301 68A45
(with Siromoney, Rani; Krithivasan, Kamala) Picture languages with array rewriting rules. *Information and Control* **22** (1973), 447-470. (R. E. Stearns) **49** #4327 68A30
(with Siromoney, Rani; Krithivasan, Kamala) n -dimensional array languages and description of crystal symmetry. I. *Proc. Indian Acad. Sci. Sect. A* **78** (1973), 72-88. (M. Novotný) **49** #8437 68A30 (68A45)
(with Siromoney, Rani; Krithivasan, Kamala) n -dimensional array languages and description of crystal symmetry. II. *Proc. Indian Acad. Sci. Sect. A* **78** (1973), 130-139. (M. Novotný) **50** #9068 68A30
(with Siromoney, Rani) Parallel OL-languages. *Internat. J. Comput. Math.* **5** (1975), no. 2, 109-1239 (E. Stockii) **56** #1831 68A30
(with Siromoney, Rani) Extended controlled table L-arrays. *Information and Control* **35** (1977), no. 2, 119-138. (E. Ikaunieks) **58** #25133 68A25 (92A05, 94A30)
Siromoney, Rani Finite-turn checking automata. *J. Comput. System Sci.* **5** (1971), 549-559. (A. Mučnik (RŽMat 1972 #594)) **51** #2812 94A30
(with Siromoney, Gift) Equal matrix languages and Kleene closure. *Proc. Indian Acad. Sci. Sect. A* **74** (1971), 172-188. (K. S. Fu) **45** #8485 68A30
(with Siromoney, Gift; Krithivasan, Kamala) Abstract families of matrices and picture languages. *Comput. Graphics and Image Processing* **1** (1972), no. 3, 284-307. (K. S. Fu) **52** #2301 68A45
Unambiguous equal matrix languages. *Information and Control* **20** (1972), 1-8. (S. Ginsburg) **50** #9067 68A30
(with Siromoney, Gift; Krithivasan, Kamala) Picture languages with array rewriting rules. *Information and Control* **22** (1973), 447-470. (R. E. Stearns) **49** #4327 68A30
(with Krithivasan, Kamala; Siromoney, Gift) n -dimensional array languages and description of crystal symmetry. I. *Proc. Indian Acad. Sci. Sect. A* **78** (1973), 72-88. (M. Novotný) **49** #8437 68A30 (68A45)
(with Krithivasan, Kamala; Siromoney, Gift) n -dimensional array languages and description of crystal symmetry. II. *Proc. Indian Acad. Sci. Sect. A* **78** (1973), 130-139. (M. Novotný) **50** #9068 68A30
(with Krithivasan, Kamala) Parallel context-free languages. *Information and Control* **24** (1974), 155-162. (Leon Levy) **49** #4328 68A30
(with Krithivasan, Kamala) Array automata and operations on array languages. *Internat. J. Comput. Math.* **4**, 3-30 (1974). (W. W. Armstrong) **50** #6208 68A25
(with Krithivasan, Kamala) Characterizations of regular and context-free matrices. *Internat. J. Comput. Math.* **4**, 229-245 (1974). (K. S. Fu) **51** #7377 68A30
(with Siromoney, Gift) Parallel OL-languages. *Internat. J. Comput. Math.* **5** (1975), no. 2, 109-1239 (E. Stockii) **56** #1831 68A30
(with Subramanian, K. G.; Rangarajan, K.) Control on kolam arrays. *Information and Control* **32** (1976), no. 3, 272-275. (Itsoo Takanami) **55** #11732 68A30
(with Siromoney, Gift) Extended controlled table L-arrays. *Information and Control* **35** (1977), no. 2, 119-138. (E. Ikaunieks) **58** #25133 68A25 (92A05, 94A30)
(with Subramanian, K. G.; Rangarajan, K.) Parallel/sequential rectangular arrays with tables. *Internat. J. Comput. Math.* **6** (1977/78), no. 2, 143-157. (Tadao Takaoka) **57** #11198 68A30
- Siromoney, A. M.** (with Brāzma, N.; Bunga, A. U.; Strazdiņš, I. Ē.) The teaching of mathematics at the Riga Polytechnic Institute during the last hundred years. (Russian. Latvian summary) *Latvian mathematical yearbook*, 16 (Russian), pp. 3-13, 271. Izdat. "Zinatne", Riga, 1975. (Editors) **51** #10007 01A60 (01A55)
- Sir, Jean-Marie** Théorème de Yoneda dans les bicatégories. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 24, A1661-A1663. (D. Pumplün) **53** #8177 18A20
Les fins cartésiennes. *Esquisses mathématiques*, No. 26, Exp. No. 2, iv+85 pp. *U.E.R. Math., Univ. Amiens, Amiens*, 1976. (J. Sonner) **56** #439 18A30 (18D05)
Les fins cartésiennes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 1, Aii, A25-A28. (Author's summary) **55** #8139 18D20
- rota, A. I.** The curvature of the infinitesimal connection of fiber bundles with a reductive basis. (Russian) *Trudy Moskov. Inst. Radiotekh. Elektron. i Avtomat. Vyp.* **67** Mat. (1973), 12-14, 150. (Author's summary) **58** #18281 53C30 (53C05)
- rota, B. N.** (with Kleiner, G. B.) A class of production functions. (Russian) *Ėkonom. i Mat. Melody* **12** (1976), no. 1, 48-55. (See RŽMat 1973 #6 V736) **90A15**
- rotkin, A. M.** (with Slesarev, I. S.) ★ Вариационно-разностные схемы в теории переноса нейтронов. (Russian) [Variational difference schemes in the neutron transport theory] Серия "Физика Ядерных Реакторов", No. 10. ["Nuclear Reactor Physics"] Series, No. 10] *Atomizdat, Moscow*, 1978. 102 pp. (Frederick A. Howes) **58** #9031 82.65
(with Slesarev, I. S.) Computation of neutron distributions in composite heterogeneous nuclear reactor cells by the imbedded element method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 1, 243-249, 272. (From the authors' summary) **57** #15168 82.65
- rotkina, A. A.** The discrete Jensen inequality for a function with an inflection. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap.* **460** (1972), 102-105. (V. Volenec) **48** #4246 26A87
- rovich, Franco** Isomorfismo fra grafi: un algoritmo efficiente per trovare tutti gli isomorfismi. (English summary) *Calcolo* **8** (1971), 301-337 (1972). (R. C. Read) **49** #4871 05C99
Some ideas on semantic memory in automatic learning of heuristics. *Calcolo* **11** (1974), 127-153. (W. W. Armstrong) **51** #2374 68A45
(with Levi, Giorgio) Proving program properties, symbolic evaluation and logic procedural semantics. *Mathematical foundations of computer science (Fourth Sympos., Mariánské Lázně, 1975)*, pp. 294-301. *Lecture Notes in Comput. Sci.*, Vol. 32, Springer, Berlin, 1975. (Immo O. Kerner) **52** #12381 68A05 (68A15, 68A40)
(with Levi, Giorgio) Generalized AND/OR graphs. *Artificial Intelligence* **7** (1976), no. 3, 243-259. (Masaharu Mizumoto) **56** #10203 68A45
- irridge, Mary J.** William of Sherwood on propositions and their parts. *Notre Dame J. Formal Logic* **15** (1974), 462-464. (J. J. E. Gracia) **50** #6776 02-03 (02A05)
Buridan: "every proposition is false" is false. *Notre Dame J. Formal Logic* **19** (1978), no. 3, 397-404. (Paul Vincent Spade) **58** #15865 01A35 (02-03)
- Širšov, A. I.** (with Kargapolov, M. I.; Bokut', L. A.; Kuz'min, E. N.; Slin'ko, A. M.; Šestakov, I. P.) Konstantin Aleksandrovich Ževlakov. (Russian) *Mat. Zametki* **12** (1972), 233-237. (Editors) **47** #3138 01A70 (17D05)
(with Marčuk, G. I.; Kulikov, L. Ja.; Kargapolov, M. I.; Taĭmanov, A. D.; Plotkin, B. I.; Kemhadze, Š. S.; Andrunakievič, V. A.; Eršov, Ju. L.; Janovskii, R. G.) From speeches at the opening of the Tenth All-Union Algebra Colloquium dedicated to the memory of Academician A. I. Mal'cev. (Russian) *Selected questions of algebra and logic (collection dedicated to the memory of A. I. Mal'cev)* (Russian), pp. 300-314. Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1973. (Editors) **58** #21310 01A70
(with Ževlakov, K. A.; Slin'ko, A. M.; Šestakov, I. P.) ★ Альтернативные алгебры. Часть I. (Russian) [Alternative algebras. Part I] Серия "Библиотека Кафедры Алгебры и Математической Логике Новосибирского Университета", Вып. 17. ["Library of the Department of Algebra and Mathematical Logic of Novosibirsk State University"] Series, No. 17] *Novosibirsk. Gos. Univ., Novosibirsk*, 1976. 77 pp. (Harry F. Smith) **57** #16365 17-02 (16A68, 17D05)
(with Ževlakov, K. A.; Slin'ko, A. M.; Šestakov, I. P.) ★ Йордановы алгебры. (Russian) [Jordan algebras] *Novosibirsk. Gos. Univ., Novosibirsk*, 1976. 99 pp. (Editors) **58** #28105 17Cxx
(with Eršov, Ju. L.; Merzljakov, Ju. I.) Mihail Ivanovič Kargapolov. (Russian) *Mat. Zametki* **19** (1976), no. 6, 825-832. (Editors) **53** #12839 01A70 (20-03)
(with Eršov, Ju. L.; Merzljakov, Ju. I.) In memoriam Mihail Ivanovič Kargapolov. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 1 (193), 145-149. (Editors) **55** #5352 01A70
(with Aleksandrov, P. S.; Arnaudov, V. I.; Rjabuhin, Ju. M.; Skornjakov, L. A.) Vladimir Aleksandrovich Andrunakievič (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 4(196), 271-275. (Editors) **56** #15316 01A70
See also Birthday: Širšov, A. I., **46** #14; Selected questions of algebra and logic, **48** #16; Herstein, Israel Nathan, **50** #4639; Mal'cev, A. I., **54** #12464; Mal'cev, A. I., **54** #12465; Rings, **55** #8117 and Rings, **55** #10492
Širšov, A. T. See Biography: Mal'cev, A. I. (Not reviewed)
Širšova, E. E. Pseudo-lattice-ordered groups. (Russian) *Groups and modules; game theory* (Russian), pp. 10-18. *Moskov. Oblast. Ped. Inst., Moscow*, 1973. (R. Madell) **52** #13561 06A55
- Sirtori, Sergio** Calcolo della matrice tangente delle rigidità di elementi finiti per l'analisi strutturale con grandi spostamenti. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **108** (1974), 149-179. **50** #3731 73.65
- Sirugue, M.** (with Manuceau, J.; Testard, D.; Verbeure, A.) The smallest C^* -algebra for canonical commutations relations. *Comm. Math. Phys.* **32** (1973), 231-243. (R. H. Herman) **49** #4473 81.46 (82.46)
(with Rocca, F.) Phase operator and condensed systems. *Comm. Math. Phys.* **34** (1973), 111-121. (Authors' summary) **52** #2495 82.46
(with Verbeure, A.) On the lower bound of Mazur for autocorrelation functions. *Ergodicity. Physica* **65** (1973), 181-186. (Author's summary) **53** #7337 82.62
(with Beaume, R.; Manuceau, J.; Pellet, A.) Translation invariant states in quantum mechanics. *Comm. Math. Phys.* **38** (1974), 29-45. (M. E. Mayer) **51** #4888 81.46
(with Provost, J. P.; Rocca, F.; Vallée, G.) Phase properties of some photon states with nonzero energy density. *J. Mathematical Phys.* **15** (1974), 2079-2085. (Guy Loupias) **52** #9907 81.47
(with Sirugue-Collin, M.) On the probabilistic structure of quasi-free states of a Clifford algebra. *Comm. Math. Phys.* **48** (1976), no. 2, 131-135. (Guy Loupias) **55** #5032 81.46
(with Combe, Philippe; Rodriguez, R.; Sirugue-Collin, M.) Classical functions associated with some groups of automorphisms of the Weyl group. *Group theoretical methods in physics (Proc. Fifth Internat. Colloq., Univ. Montréal, Montreal, Que., 1976)*, pp. 349-359. *Academic Press, New York*, 1977. (M. K. F. Wong) **58** #1036 22E70 (81.22)
- Sirugue-Collin, M.** (with Sirugue, M.) On the probabilistic structure of quasi-free states of a Clifford algebra. *Comm. Math. Phys.* **48** (1976), no. 2, 131-135. (Guy Loupias) **55** #5032 81.46
(with Combe, Philippe; Rodriguez, R.; Sirugue, M.) Classical functions associated with some groups of automorphisms of the Weyl group. *Group theoretical methods in physics (Proc. Fifth Internat. Colloq., Univ. Montréal, Montreal, Que., 1976)*, pp. 349-359. *Academic Press, New York*, 1977. (M. K. F. Wong) **58** #1036 22E70 (81.22)
- Sirvanci, Mete B.** (with Wolff, Stephen S.) Nonparametric detection with autoregressive data. *IEEE Trans. Information Theory* **IT-22** (1976), no. 6, 725-731. (Rashid Ahmad) **55** #1608 62G10 (62M10)
(with Yang, Grace L.) Estimation of a time-truncated exponential parameter used in life testing. *J. Amer. Statist. Assoc.* **72** (1977), no. 358, 444-447. (A. C. Cohen) **56** #4095 62N05
- Širvanjan, V. L.** Imbedding of the group $B(\infty, n)$ in the group $B(2, n)$. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 1, 190-208, 223. (B. Hartley) **54** #2821 20F50
Independent systems of defining relations of a free periodic group with an odd exponent. (Russian) *Mat. Sb. (N.S.)* **100(142)** (1976), no. 1, 132-136, 166. (M. Greindlinger) **58** #16892 20F05
- Širvinskii, Ė.** (with Golenko, D.; Kesler, I.) An investigation of the comparative efficiency of methods of predicting time series. (Russian) *Algorithms, and organizing the solution of economic problems*, No. 1 (Russian), pp. 68-84, 117. Izdat. "Statistika", Moscow, 1973. (I. M. Stojanov) **49** #4184 (EA 50) 62M20 (90A20)
- Širyaev, A. N.** See Širjaev, A. N.
- Sisakjan, A. N.** (with Kulešov, S. P.; Matveev, V. A.; Smodyrev, M. A.) Approximate methods in quantum field theory, and the concept of rectilinear paths at high energies. (Russian. English summary) *Bulgar. J. Phys.* **1** (1974), no. 3, 223-232. (Authors' summary) **54** #9455a (E 54 #9455b) 81.47
(with Kulešov, S. P.; Matveev, V. A.; Smodyrev, M. A.; Tavhelidze, A. N.)

- Straight-line path approximation in quantum field theory. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* 5 (1974), 3-62. (Authors' summary) 57 #2298 81.46
- (with Kulešov, S. P.; Matveev, V. A.; Smondyrev, M. A.; Tavhelidze, A. N.) Method of straight-line paths and the eikonal problem. (Russian. English summary) *Teoret. Mat. Fiz.* 18 (1974), 147-160. (Authors' summary) 57 #8640 81.41
- (with Kulešov, S. P.; Matveev, V. A.; Smondyrev, M. A.) Errata to "Approximate methods in quantum field theory, and the concept of rectilinear paths at high energies" (Russian) (Bulgar. J. Phys. 1 (1974), no. 3, 223-232). *Bulgar. J. Phys.* 2 (1975), no. 1, 86. (Authors' summary) 54 #9455b 81.47
- (with Kvinihidze, A. N.; Slepčenko, L. A.; Tavhelidze, A. N.) Inclusive processes with large-scale transverse impulses in the treatment of composite particles. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* 8 (1977), no. 3, 478-543. (Authors' summary) 58 #8937 81.47
- (with Darbaizde, Ja. Z.; Mahaldiani, N. V.; Slepčenko, L. A.) A study of the selfsimilar behavior of semi-inclusive distributions by the renormalisation group method. (Russian. English summary) *Teoret. Mat. Fiz.* 34 (1978), no. 3, 303-310. (Authors' summary) 58 #19924 81.22
- Sisam, Charles H.** (with Snyder, Virgil; Black, Amos H.; Coble, Arthur B.; Dye, Leaman A.; Emch, Arnold; Lefschetz, Solomon; Sharpe, F. R.) ★Selected topics in algebraic geometry. Second edition. *Chelsea Publishing Co., New York*, 1970. v+484 pp. (From the publisher's description) 45 #21 01A75 (14-00)
- Sisarcic, Wood C.** (with Shah, Swarupchand M.) On entire functions of exponential type. *J. Res. Nat. Bur. Standards Sect. B* 75B (1971), 141-147. (A. Bailleite) 46 #9350 30A66
- (with Fricke, Gerd H.; Shah, Swarupchand M.) A characterization of entire functions of exponential type and M -bounded index. *Indiana Univ. Math. J.* 23 (1973/74), 405-412. (Fred Gross) 48 #11502 30A64
- Linear functionals on the space of entire functions. *Proc. West Virginia Acad. Sci.* 45 (1973), 328-331. (R. H. Cox) 50 #10781 46E10
- On a class of entire functions of two variables. *Proc. West Virginia Acad. Sci.* 46 (1974), 107-115. (S. K. Bose) 54 #580 32A15
- Metric spaces of entire functions. *Indian J. Pure Appl. Math.* 6 (1975), no. 6, 628-636. (S. K. Bajpai) 56 #8872 30A98
- A Hahn-Banach theorem for linear spaces with an invariant metric. *Indian J. Pure Appl. Math.* 6 (1975), no. 8, 841-848. (Alan Shuchat) 57 #7099 46A15 (46E10)
- (with Fields, Jerry W.) A Banach algebra of entire functions. *Indian J. Pure Appl. Math.* 6 (1975), no. 11, 1378-1387. (R. G. Douglas) 57 #1133 46J99 (30A66)
- The space of entire functions of two variables as a metric space. *Internat. J. Math. Math. Sci.* 1 (1978), no. 1, 97-111. (V. Ganapathy Iyer) 57 #17233 46E10 (32A15)
- Šišatskii, S. P.** (with Amonov, B. K.) An a priori estimate of the solution of the Cauchy problem with data on a time-like surface for a second order parabolic equation, and related uniqueness theorems. (Russian) *Dokl. Akad. Nauk SSSR* 206 (1972), 11-12. (J. Vencko) 50 #2696 35K15
- A priori estimates in the problem of extending a wave field from a cylindrical time-like surface. (Russian) *Dokl. Akad. Nauk SSSR* 213 (1973), 49-50. (V. Rosa) 48 #11744 35B45 (35L05)
- The uniqueness of the solution of the Cauchy problem with data on a segment of the time axis for a degenerate parabolic equation. (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 8, 1453-1459, 1532. (Author's summary) 57 #16985 35K15
- (with Fajazov, K. S.) The Carleman operator for an evolution equation of elliptic type. (Russian) *Akad. Nauk SSSR Sibirsk. Otdel. Vychisl. Centr Preprint. No.* 81 (1977), 13 pp. (G. B. Gustafson) 58 #22897 34G05
- Šišigin, M. I.** (with Nanobašvili, N. D.) A certain method of decreasing the redundancy in the transmission of a set of unordered binary vectors. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 76 (1974), 317-320. (J. Černý) 52 #2723 94A10
- Coding the elements of a symmetric group. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 78 (1975), no. 1, 69-71. (Heinrich Seidel) 53 #2516 94A10
- Šišina, V. T.** (with Miroļubov, A. A.) A certain method of solving an integral equation. (Russian) *Differentsial'nye Uravnenija* 8 (1972), 545-548. (Peter Russev) 46 #2375 45G99
- A certain integral equation. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 12 (163), 64-69 (1976). (N. K. Karapetjanc) 55 #3709 45E10
- Analytic solutions of a class of integral equations. (Russian) *Differentsial'nye Uravnenija* 14 (1978), no. 6, 1119-1123, 1151. (V. V. Salav) 58 #29933 45H05 (45A05)
- Šiškanova, S. F.** (with Roitman, A. B.) The solution of polyharmonic equations. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1975, no. 5, 433-437, 476. (Authors' summary) 57 #12881 31B30
- Siskens, Th. J.** (with Bongaarts, P. J. M.) Observables, constants of the motion and ergodicity in quantum-statistical mechanics of finite systems. *Physica* 71 (1974), 529-559. (H. Wakita) 54 #14673 82.47
- (with van Weert, Ch. G.) Transition amplitudes and probabilities for the Weinberg-Salam model. *Phys. A* 89 (1977), no. 1, 163-174. 56 #14385 81.60
- Šiškin, A. A.** The behavior of the solution of a boundary value problem for a system of ordinary differential equations with a small parameter multiplying the derivative. (Russian) *Differentsial'nye Uravnenija* 8 (1972), 290-299. (J. W. Macki) 46 #3934 34E15 (34D05)
- Asymptotic behavior of solutions of boundary value problems for systems of linear ordinary differential equations with a small parameter multiplying the derivative. (Russian) *Differentsial'nye Uravnenija* 8 (1972), 615-632. (M. Ráb) 46 #3935 34E15 (34D05)
- Asymptotic behavior of the solutions of one-point and two-point problems with singular perturbations for systems of linear ordinary differential equations. (Russian) *Differentsial'nye Uravnenija* 9 (1973), 1156-1160, 1168. (M. I. Imanaliev) 48 #4437 34D15
- Asymptotic behavior of the solution of certain problems with singular perturbations for systems of linear ordinary differential equations. (Russian) *Differentsial'nye Uravnenija* 10 (1974), 1430-1442, 1539. (J. W. Macki) 51 #6064 34D15
- Asymptotic behavior of the solution of the Cauchy problem for a nonlinear system of ordinary differential equations with a small parameter multiplying the derivative. (Russian) *Differentsial'nye Uravnenija* 10 (1974), 1828-1838, 1917. (M. Ráb) 51 #10134 34D15
- Asymptotic behavior of the solutions of certain problems for a certain class of quasilinear systems of ordinary differential equations with a small parameter multiplying the derivative. (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 6, 1013-1017, 1148-1149. (errata insert) (C. Olech) 54 #5569 34E15
- The asymptotic behavior of the solutions of some problems of singularly perturbed systems of ordinary differential equations. (Russian. Bulgarian and English summaries) Conference on Differential Equations and Applications (Ruse, 1975). *Godišnik VUčebn. Zaved. Priložna Mat.* 11 (1975), no. 1, 257-262 (1977). (R. F. Matlak) 58 #19924 34E15
- Šiškin, A. D.** (with Prokof'ev, V. N.) Sequential classification of normal populations with unknown variances. *Radiotekh. i Elektron.* 19 (1974), no. 12, 2635-2638. (Russian translated as *Radio Engng. Electron. Phys.* 19 (1974), no. 12, 141-143. (From the author's introduction) 56 #16952 62L10 (94A05)
- Šiškin, G. A.** Certain formulae of the α -operational calculus, and their application to linear integro-differential equations. (Russian) *Trudy Irkutsk. Gos. Univ.* 74 (1970), Ser. M, no. 6, 349-354. (RŽMat 1972 #11 B54) 58 #23386 44A40 (45B05)
- An application of integral series to the solution of linear Volterra integrodifferential equations with variable coefficients. (Russian) *Differentsial and integral equations, No. 1* (Russian), pp. 119-130. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (C. Corduneanu) 52 #8842 45J05
- Solution of linear integro-differential equations with deviating argument. (Russian) *Differentsial and integral equations, No. 1* (Russian), pp. 131-145. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (C. Corduneanu) 52 #8843 45J05
- Approximate solution of linear integro-differential equations with variable coefficients with retarded argument. (Russian) *Differentsial and integral equations, No. 1* (Russian), pp. 146-157, 311. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Author's summary) 57 #8100 65R05
- Šiškin, G. I.** A certain problem with a free boundary for a system of parabolic equations. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* 3 (1972), no. 2, 105-121. (A. Borzymowski) 51 #13460 35K50
- (with Emel'janov, K. V.; Il'in, A. M.; Kaljakin, Léonid A.; Titov, V. A.) Solution of differential equations with small parameters multiplying the highest derivative. (Russian) *Proceedings of the Fifth All-Union Seminar on Numerical Methods in Mechanics of a Viscous Fluid (Kaciveli, 1974), Part I* (Russian), 37-47. *Vychisl. Centr Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1975. (Editors) 58 #29073 35L10 (65N99)
- A certain problem of Stefan type with a discontinuous movable boundary. (Russian) *Dokl. Akad. Nauk SSSR* 224 (1975), no. 6, 1276-1278. (V.-V. Olariu) 54 #8038 35K20
- (with Titov, V. A.) A difference scheme for a differential equation with two small parameters at the derivatives. (Russian) *Čisl. Metody Meh. Splošn. Sredy* 7 (1976), no. 145-155. (From the authors' text) 56 #13665 65L10
- (with Titov, V. A.) A numerical solution of a parabolic equation with small parameters multiplying the derivatives with respect to the space variables. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR Vyp. 21 Raznost. Metody Rešenija Kraev. Zadač s Malym Parametrom i Razryv. Kraev. Uslovijami* (1976), 38-60. (errata insert) (K. Moszyński) 58 #3526 65N10
- A numerical solution of an elliptic equation with discontinuous boundary conditions. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR Vyp. 21 Raznost. Metody Rešenija Kraev. Zadač s Malym Parametrom i Razryv. Kraev. Uslovijami* (1976), 52-58, 61. (T. Maess) 57 #11094 65N10
- The first boundary value problem for a second order equation with small parameters multiplying the derivatives. (Russian) *Differentsial'nye Uravnenija* 13 (1977), no. 2, 376-378, 384. (K. Moszyński) 58 #11723 34E05 (34B05)
- Šiškin, G. V.** The two types of Dirac fields in general relativity theory. (Russian) *Vopr. Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1974, no. 6, 86-90, 143. (L. Méder) 50 #12138 83.60 (81.60)
- Šiškin, Ju. B.** (with Alekseeva, N. T.) ★Специальные функции и их некоторые приложения. (Russian) [Special functions and some of their applications] *Moskovskij Inst., Moscow*, 1969. 67 pp. (Editors) 52 #6060 33A40
- Šiškin, V. N.** (with Kobylin, A. M.; Stojan, Ju. G.) A solution of the problem of single-line die stamping that takes the whole operation into account. (Russian) *Ékonom. i Mat. Metody* 9 (1973), 1117-1123. 48 #7960 90C05
- Šiškin, V. P.** (with Kopeikin, Ju. D.) Direct solution of boundary value problems of elasticity theory for solids of revolution on the basis of Somigliana's integral formula. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1977, no. 3, 36-41, 141. (Kodnár) 57 #2051 73.35
- Šiškin, V. S.** Finding the exact values of inverse transforms in complex operational calculus. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1975, no. 9, 792-794, 860. (V. M. Amerbaev) 53 #9610 65E05
- Siskind, Victor** Second moments of inverse Wishart-matrix elements. *Biometrika* 59 (1972), 690-691. 48 #9977 62H10
- Šiško, N. P.** The stability of the solution of the Cauchy problem for a parabolic equation. (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 12, 2236-2241, 2302. (J. Vencko) 54 #10820 35B35 (35K30)
- The uniqueness of the solution of two inverse problems. (Russian) *Sibirsk. Mat. Zh.* 16 (1975), 399-404, 422. (M. A. Atahodžev) 51 #10921 35R30
- Šiškov, A. E.** Calculation of the index of the critical point in the degenerate case. (Russian) *Mat. Fiz. Vyp.* 22 (1977), 108-112, 126. (E. R. Cekanovskii) 57 #10531 47F05 (58E05)
- Existence of solutions that are regular up to the boundary of the domain of Dirichlet problem for strongly elliptic Monge-Ampère equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1978, no. 1, 30-33, 94. (J. Chraština) 57 #10228 35J65
- (with Skripnik, I. V.) The solvability of the Dirichlet problem for the

- longe-Ampère equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR* 1978, no. 3, 216-219, 285. (E. M. Saak) 58 #6687 35J65 (53A05)
- On the question of the coercivity of pairs of linear elliptic operators in the case of general boundary conditions. (Russian) *Mat. Fiz. Vyp.* 23 (1978), 102-105, 116. (Author's summary) 58 #17489 35J30
- V. D. B. (with Vavilov, E. M.) Analysis and synthesis of automata given by a system of excitation and output functions. (Russian) *Kibernetika (Kiev)* 1967, no. 4, 1-8. (Phan Vinh Dieu (Zbl 174, 32)) 48 #5743 94A30
- Minimization of finite automata. (Russian. Czech summary) *Kybernetika (Prague)* 8 (1972), 297-316. (Pavel Strnad) 48 #8143 94A30
- W. I. (with Ivanov, D.; Petrov, V.; ĭovkova, S.) Optimal planning in an industrial system. (Bulgarian. Russian and English summaries) *Aviomet. i Izčisl. Tehn.* 6 (1972), no. 3, 5-9, 1, 2, 3. (Authors' summary) 47 #8092 90B30
- W. L. K. (with Šihov, S. B.) Analysis of the equation of neutron transport under conditions of an infinite energy axis. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 705-716, 813. (Hans Kaper) 50 #1674 82.45
- ova, M. A. A discussion of a certain system of differential equations with a small parameter multiplying the highest derivatives. (Russian) *Dokl. Akad. Nauk SSSR* 209 (1973), 576-579. (J. W. Macki) 48 #2509 34D15
- ova, Marija Z. A generalization of the method of potential functions, and an application of it. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Izv. Mat. Inst.* 14 (1973), 271-276. (A. Obretenov) 51 #4755 68A45
- Forecasting the reliability of instruments by means of pattern recognition, when the evolution of the instrument is taken into account. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Izv. Mat. Inst.* 15 (1974), 229-235. (Author's summary) 51 #4971 90B25 (68A45)
- er, Miroslav Über ein Iterationsverfahren für zyklische Matrizen. (Czech summary) *Apl. Mat.* 17 (1972), 225-233. (R. S. Varga) 45 #1375 65F10
- Über die Konvergenz eines gewissen Iterationsverfahrens für zyklische Matrizen. (Czech summary) *Apl. Mat.* 18 (1973), 89-98. (R. F. Albrecht) 48 #7563 65F10
- Bemerkungen zur Optimierung eines gewissen Iterationsverfahrens. (Czech summary) *Apl. Mat.* 18 (1973), 315-324. (J. J. Moré) 51 #14586 65K05
- Über ein zweiparametrisches Iterationsverfahren. (Czech summary) *Apl. Mat.* 18 (1973), 325-332. (J. Vandergraft) 49 #1756 65F30
- Über die Konvergenz eines zweiparametrischen Iterationsverfahrens. (Czech summary) *Apl. Mat.* 18 (1973), 452-461. (J. W. Schmidt) 48 #7564 65F10
- Über die Optimierung eines zweiparametrischen Iterationsverfahrens. (Czech summary) *Apl. Mat.* 20 (1975), no. 2, 126-142. (A. Lee) 52 #7096 65F10
- Bemerkungen zur Optimierung eines zweiparametrischen Iterationsverfahrens. (Czech and loose Russian summaries) *Apl. Mat.* 21 (1976), no. 3, 213-220. (Petr Liebl) 53 #6998 65F10
- ilian, Jean See Smirnov, V. I., 53 #3268
- lonov, V. V. The effectiveness of systems in the presence of a certain type of failures. (Russian) *Aviomet. i Vyčisl. Tehn.* 1972, no. 2, 31-35. (Author's summary) 46 #1399 93B99
- imakov, V. S. A differential guidance game with an information lag. I. (Russian) *Upravljajemye Sistemy No. 7* (1970), 15-23. (See RŽMat 1971 #8 B414) 90D25
- Evasion game problem with information lag. *Prikl. Mat. Meh.* 35 (1971), 575-583 (Russian); translated as *J. Appl. Math. Mech.* 35 (1971), 527-534 (1972). (J. H. Case) 50 #3974 90D25
- A differential guidance game with an information lag. II. (Russian) *Upravljajemye Sistemy No. 8* (1971), 3-12. (See RŽMat 1972 #3 B417) 90D25
- A minimax pursuit problem with lag in information. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 3, 43-46 (Russian); translated as *Engng. Cybernetics* 11 (1973), no. 3, 395-398. (F. Szidarovszky) 52 #7637 93C15 (90D25)
- smarev, I. A. (with Il'in, V. A.) Fourier series in fundamental systems of functions of the polyharmonic operator. (Russian) *Dokl. Akad. Nauk SSSR* 189 (1969), 707-709. (Editors) 54 #3283 42A60
- (with Maslov, V. P.) The symbols of one-parameter semigroups e^{tA} as $t \rightarrow 0$. (Russian) *Uspehi Mat. Nauk* 29 (1974), no. 4(178), 177. (Editors) 57 #10502 47G05 (35S05)
- The asymptotic behavior as $t \rightarrow 0$ and the T -product for hypoelliptic systems. (Russian) *Dokl. Akad. Nauk SSSR* 226 (1976), no. 5, 1018-1020. (L. Cattabriga) 56 #12559 35H05 (35B40, 35S10)
- See also Kato, Tosio, 50 #5506
- smarev, Ju. E. (with Abakumov, A. I.; Paljutin, E. A.; Taiclin, M. A.) Categorical quasivarieties. (Russian) *Algebra i Logika* 11 (1972), 3-38, 121. (N. Both (Zbl 249 #02024)) 50 #12857 08A15 (02G20)
- The categorical theories of a single function. (Russian) *Mat. Zametki* 11 (1972), 89-98. (M. Benda) 45 #46 02H99
- solák, František The oscillation of the solutions of a second order linear differential equation with retarded argument. (Slovak. English and Russian summaries) *Acta Fac. Rerum Natur. Univ. Comenian. Math.* 30 (1975), 127-132. (J. F. Heyda) 52 #14543 34K15
- sonok, N. A. (with Dikarev, V. E.) Optimization of systems reliability characteristics by the method of the discrete maximum principle. I. (Russian) *Mathematical methods for the study and optimization of systems (Proc. Sem. Theory of Optimal Decisions, Kiev-Lvov, 1970)* (Russian), pp. 167-176. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (Authors' summary) 52 #2559 90B25
- (with Dikarev, V. E.) On the problem of Markov processes with discrete intervention of chance. (Russian) *Theoretical cybernetics (Proc. Sem. Complex Systems and Simulation, Kiev, 1971)* (Russian), pp. 134-142. *Inst. Kibernet. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (Editors) 58 #7900 60K15
- (with Dikarev, V. E.) Reliability analysis of systems with a two-contour repair structure. (Russian) *Točn. i Nadežn. Kibernet. Sistem No. 1* (1973), 85-90, 135. 50 #3903 90B25
- (with Dikarev, V. E.) The interval distribution of a certain class of Markov processes. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist. Vyp.* 10 (1974), 69-71, 175. (M. Iosifescu) 53 #14729 60K99
- See also Accuracy and reliability of cybernetic systems, 47 #9873 and Cybernetics and computer technology, 48 #1517
- Šišov, V. I. (with Gočelašvili, K. S.) Multiple scattering of light in a turbulent medium. (French and German summaries) *Optica Acta* 18 (1971), 767-777. (Z. Derzko) 47 #6203 78.62
- Šišov, V. S. (with Ho Ba Thuan) Remarks on Tarri's method of counting Euler cycles. (Russian. English summary insert) *Kibernetika (Kiev)* 1968, no. 4, 76-80. (RŽMat 1969 #1 V250) 45 #6667 05C99
- Šišova, T. Ja. (with Terent'ev, A. G.) Certain methods of investigating equations with deviating argument. (Russian) *Differencial'nye Uravnenija* 9 (1973), 1275-1280, 1357. (Leo F. Boron) 47 #7176 34K05
- Sisson, P. N. M. (with Verbeure, A.; Wolfe, John C.) High temperature freedom of an infinite Dicke maser model. *Ann. Soc. Sci. Bruxelles Sér. I* 89 (1975), no. 4, 552-558. (Etang Chen) 52 #4906 82.47
- (with Lewis, J. T.) A C^* -algebra of the two-dimensional Ising model. *Comm. Math. Phys.* 44 (1975), no. 3, 279-292. (Authors' summary) 56 #7693 82.46
- An extension of Kaufmann's transfer-matrix method in the Ising model. *Phys. A* 80 (1975), no. 6, 595-606. (Etang Chen) 52 #16443 82.47
- (with Rocca, F.; Verbeure, A.) A class of states on the boson-fermion algebra. *J. Mathematical Phys.* 17 (1976), no. 5, 665-667. (B. Misra) 54 #1969 81.46
- Sisteró, R. F. A nonstatic plane symmetric solution of Einstein's field equations for zero-rest mass scalar fields. *General Relativity and Gravitation* 7 (1976), no. 6, 487-489. (Author's summary) 58 #32741 83.35
- Sisto, Irene (with Selvaggi, Renata) Sulla regolarità di certi potenziali ellittici. (English summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) 43 (1976), 372-380 (1977). (S. A. Tersenov) 58 #29187 35J55 (31B25)
- Sit, Cho Wei Quotients of complete multipartite graphs. *Pacific J. Math.* 63 (1976), no. 2, 531-538. (Seth R. Alpert) 54 #126 05C10
- Sit, Kwan-Yuk Claire On bounded elements of linear algebraic groups. *Trans. Amer. Math. Soc.* 209 (1975), 185-198. (Linda P. Rothschild) 52 #655 22E20 (20G25)
- Compactness of certain homogeneous spaces of locally compact groups. *Proc. Amer. Math. Soc.* 55 (1976), no. 1, 170-174. (Siegfried Grosser) 54 #12962 22D05
- Sit, Kwan-Yuk Law On centralizers of generalized uniform subgroups of locally compact groups. *Trans. Amer. Math. Soc.* 201 (1975), 133-146. (Paul Milnes) 50 #7400 22D05
- Sit, William Yu Typical differential dimension of the intersection of linear differential algebraic groups. *J. Algebra* 32 (1974), no. 3, 476-487. (Peter Blum) 52 #360 12H05 (14L99)
- Differential algebraic subgroups of $SL(2)$ and strong normality in simple extensions. *Amer. J. Math.* 97 (1975), no. 3, 627-698. (Jerald Kovacic) 53 #376 12H05 (12F10, 20G15)
- (with Siu, Man Keung) On the subsemigroups of N . *Math. Mag.* 48 (1975), no. 4, 225-227. (Hugo S. Sun) 51 #12665 10A05 (20M10)
- Well-ordering of certain numerical polynomials. *Trans. Amer. Math. Soc.* 212 (1975), 37-45. (K. Okugawa) 53 #10776 12H05
- Sitaram, Alladi On the isomorphism of discrete subgroups of $SL(2, R)$. *Michigan Math. J.* 23 (1976), no. 1, 31-32. (Dong Hoon Lee) 57 #3307 22E40 (10D05)
- Sitaram, K. A finite group with cyclic Sylow subgroups. *J. Indian Math. Soc. (N.S.)* 37 (1973), 335-337 (1974). (M. E. Harris) 50 #10068 20D20
- Cayley loop in a Moufang plane. *J. Indian Math. Soc. (N.S.)* 37 (1973), 355-357 (1974). (P. J. Lorimer) 51 #1605 50D35
- On some classes of non-associative rings. *Nederl. Akad. Wetensch. Proc. Ser. A* 76=Indag. Math. 35 (1973), 368-370. (D. Rodabaugh) 51 #12953 17A30
- On some special non-associative rings. *Nederl. Akad. Wetensch. Proc. Ser. A* 79=Indag. Math. 38 (1976), no. 3, 240-243. (From the introduction) 58 #22221 17E05
- Sitaramachandra Rao, R. (with Suryanarayana, D.) On the average order of the function $E(x) = \sum_{n \leq x} \phi(n) - 3x^2/\pi^2$. *Ark. Mat.* 10, 99-106 (1972). (T. M. Apostol) 46 #8988 10H25
- (with Suryanarayana, D.) The number of square-full divisors of an integer. *Proc. Amer. Math. Soc.* 34 (1972), 79-80. (T. M. Apostol) 45 #198 (EA 45) 10H15
- (with Suryanarayana, D.) The distribution of square-full integers. *Ark. Mat.* 11, 195-201 (1973). (E. Grosswald) 49 #8948 10H15 (10H05, 10H25)
- (with Suryanarayana, D.) Uniform O -estimate for k -free integers. *J. Reine Angew. Math.* 261 (1973), 146-152. (G. Greaves) 47 #8459 10H15
- (with Suryanarayana, D.) On an asymptotic formula of Ramanujan. *Math. Scand.* 32 (1973), 258-264 (1974). (A. L. Whiteman) 49 #2611 10H25
- (with Suryanarayana, D.) Distribution of semi- k -free integers. *Proc. Amer. Math. Soc.* 37 (1973), 340-346. (T. M. Apostol) 47 #161 10H25
- (with Suryanarayana, D.) On $\sum_{n \leq x} (\sigma^*(n))$ and $\sum_{n \leq x} (\phi^*(n))$. *Proc. Amer. Math. Soc.* 41 (1973), 61-66. (W. J. Ellison) 47 #8463 10H25 (10A20)
- (with Suryanarayana, D.) Distribution of unitarily k -free integers. *J. Austral. Math. Soc.* 20 (1975), no. 2, 129-141. (J. W. Porter) 52 #306 10H15
- (with Suryanarayana, D.) The number of bi-unitary divisors of an integer. II. *J. Indian Math. Soc. (N.S.)* 39 (1975), 261-280 (1976). (E. M. Horadam) 54 #2605 10H25
- (with Suryanarayana, D.) On the true maximum order of a class of arithmetical functions. *Math. J. Okayama Univ.* 17 (1975), no. 2, 95-101. (J. Knopfmacher) 52 #310 10H25
- (with Suryanarayana, D.) The number of unitarily k -free divisors of an integer. *J. Austral. Math. Soc. Ser. A* 21 (1976), no. 1, 19-35. (T. M. Apostol) 52 #10622 10H15
- (with Suryanarayana, D.) On the maximum and minimum exponents in factoring integers. *Arch. Math. (Basel)* 28 (1977), no. 3, 261-269. (H. L. Abbott) 55 #10368 10A25
- Sitaraman, Y. (with Nambooripad, K. S. Subramonian) A note on weakly inverse semigroups. *J. Indian Math. Soc. (N.S.)* 40 (1976), no. 1-4, 145-151 (1977). (E.-A. Behrens) 56 #5754 20M10
- (with Swaminathan, V.) Tauberian theorems for the family $F(a, q)$ of summability methods. *Acta Math. Acad. Sci. Hungar.* 30 (1977), no. 1-2, 45-47. (F. W. Hartmann) 56 #16197 40E05

- Sitaramayya, Malladi** On automorphic factors of a compact Riemann surface. *Ann. Mat. Pura Appl.* (4) **96** (1972), 149-154. (J. Spilker) **48** #6476 32N05 (30A58)
Curvature tensors in Kaehler manifolds. *Trans. Amer. Math. Soc.* **183** (1973), 341-353. (Koichi Ogiue) **48** #1083 53B35
- Sitarski, Ryszard** On some variation formulas for quasi-starlike functions. (Polish and Russian summaries) *Zeszyty Nauk. Politech. Łódź. No. 208 Mat. Vyp.* **6** (1975), 107-116. (Carl P. McCarty) **52** #729 30A32
On some application of a parametric method. (Polish and Russian summaries) *Zeszyty Nauk. Politech. Łódź. Mat. No. 9* (1977), 63-69. **58** #22530 30A40
- Sitchin, Amnon** (with Vance, John M.) Numerical solution of dynamical systems by direct application of Hamilton's principle. *Internat. J. Numer. Methods Engrg.* **4** (1972), 207-216. (R. Plunkett) **45** #4717 70.65
- Sitek, Mirosława** Application of the selection procedure R to unequal observation numbers. (Polish summary) *Zastos. Mat.* **12** (1971/72), 355-371. (Csaba Fabian) **47** #4375 62F07
- Sitenko, A. G.** (with Harčenko, V. F.) Bound states and scattering in a system of three particles. *Uspehi Fiz. Nauk* **103** (1971), 469-527 (Russian); translated as *Soviet Physics Uspekhi* **14** (1971), 125-153. (A. G. Gibson) **56** #14282 81.45
- Sitenko, Ju. O.** (with Miranskii, V. A.; Fomin, P. I.) Vacuum polarization and the degeneracy of states in massless Abelian gauge theory. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 8, 747-751, 769. (Ju. M. Širokov) **55** #1987 81.47
- Sitgreaves, Rosedith** See *Discriminant analysis and applications*, **57** #17959
- Šitikov, Ju. L.** (with Tugov, I. I.) A method for computing the Appell functions $F_1(\alpha; \beta, \beta'; \gamma; x, y)$. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **16** (1976), no. 6, 1587-1590, 1630. (Authors' summary) **57** #18029 65D20
- Šitkova, K. V.** (with Kurdjumov, I. V.; Smirnov, Ju. F.; El' Samarai, S. X.) Translationally invariant shell model. *Nuclear Phys. A145* (1970), 593-612. (A. Corciovei) **47** #1389 81.22
- Sitjuk, V. N.** (with Anisimov, V. V.) Asymptotic behavior of an inhomogeneous Poisson process with the leading function dependent on a small parameter that is controlled by a Markov chain. (Russian) *Kibernetika (Kiev)* **1977**, no. 4, 149-150. (S. A. Book) **58** #18753 60J75
- Sitko, N. Ja.** (with Kuz'min, È. A.) Determination of Fourier coefficients by means of the Laplace transform. (Russian) *Izv. Vysš. Učebn. Zaved. Élektromekhanika* **1971**, no. 10, 1149-1151. (S. Aljančić) **45** #5646 42A16
- Sitlanadze, Elizbar S.** See *Citlanadze, È. S.*
- Sitnikov, Ju. K.** See *Collection: Papers by graduate students, Kazan Univ.*, **57** #5537 and *Collection: Papers by graduate students, Kazan Univ.*, **58** #26642
- Sitnikov, L. S.** See *Many-Valued elements and structures*, **53** #5140
- Sitnikov, O. P.** Representation of signals by expansions in nonanalytic bases, and analyzers of generalized spectra. (Russian) *Theory of automatic control (Proc. Sem., Kiev, 1969)*, No. 3 (Russian), pp. 27-42. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (M. Cîrnu) **46** #10454 93B30 (94A05)
Matrix representation of the operators of dynamical systems and new methods of identification. (Russian) *Theory of automatic control (Proc. Sem., Kiev, 1969)*, No. 3 (Russian), pp. 43-55. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (M. Cîrnu) **46** #10455 93B30
(with Labunec, V. G.) Harmonic analysis of Boolean functions and k -ary logic functions on finite fields. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 1, 141-148, 222-223 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 1, 112-119. (J. C. Muzio) **54** #4841 94A20 (20C15)
Harmonic analysis on groups in an abstract systems theory. (Russian) *Harmonic analysis on groups in an abstract systems theory (Russian)*, pp. 5-23, 152. *Izdanie Ural. Politehn. Inst., Sverdlovsk, 1976.* (Authors' summary) **58** #20646 93A05
(with Labunec, V. G.) Generalized and fast Fourier transforms on an arbitrary finite abelian group. (Russian) *Harmonic analysis on groups in an abstract systems theory (Russian)*, pp. 24-43, 152. *Izdanie Ural. Politehn. Inst., Sverdlovsk, 1976.* (Authors' summary) **58** #12214 43A75 (42A76)
(with Labunec, V. G.) Generalized harmonic analysis of Vilenkin-Pontrjagin-invariant linear dynamical systems and stochastic processes. (Russian) *Harmonic analysis on groups in an abstract systems theory (Russian)*, pp. 44-66, 152. *Izdanie Ural. Politehn. Inst., Sverdlovsk, 1976.* (Authors' summary) **58** #20744 93E20
See also *Cybernetics and computer technology*, **47** #8140 and *Harmonic analysis on groups in an abstract systems theory*, **57** #11996
- Sitnikov, V. M.** (with Starostin, A. I.) Finite groups with decomposable centralizers of involutions. (Russian) *Ural. Gos. Univ. Mat. Zap.* **7** (1969/70), no. 3, 200-207. (N. Ito) **45** #370 12D99
Finite groups with 2-closed or 2'-closed centralizers of involutions. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **35** (1971), 1208-1224. (P. Fong) **45** #3555 20D15
Finite groups with 2-closed or 2'-closed centralizers of the involutions. (Russian) *Mat. Zametki* **10** (1971), 437-446. (D. L. Barnett) **47** #1941 20D20
(with Ustjužaninov, A. D.) A certain class of finite groups. (Russian) *Ural. Gos. Univ. Mat. Zap.* **8** (1972), no. 3, 104-115, 142 (1973). (Sergei A. Syskin) **48** #8631 20D99
The Mathieu group M_{12} . (Russian) *Mat. Zametki* **15** (1974), 651-660. (Sergei A. Syskin) **50** #4735 20D05
Finite groups with a Salow 2-subgroup that contains a selfcentralizing elementary abelian subgroup of order 8. (Russian) *Mat. Zametki* **16** (1974), 899-906. (Sergei A. Syskin) **51** #8248 20D20
Finite groups with a selfcentralizing subgroup of order 8. (Russian) *Algebraic studies*, pp. 40-52, 120. *Izdanie Ural. Politehn. Inst., Sverdlovsk, 1976.* (Sergei A. Syskin) **56** #3121 20D15
- Sitnikova, E. G.** Two theorems concerning a class of elliptic equations with multiple complex characteristics. (Russian) *Moskov. Inž.-Stroitel. Inst. Sb. Trudov* No. 130 (1975), 59-65. (From the author's introduction) **56** #16138 35J30
- Šitov, Ju. A.** (with Šapeev, V. P.) On a method for constructing curvilinear meshes. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **7** (1976), no. 2, 140-144. (From the authors' text) **56** #13686 65N05
- Sitševa, Z. Z.** (with Zahidov, M. T.) Qualitative analysis and numerical computation of differential equation with a regular singular point. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) Vyp.* **46** (1977), 62-65, 192. (Authors' summary) **58** #8285 65N05 (34D05)
- Sitte, Joaquin** Weyl's theory and the electronic structure of finite crystals. *Phys. Rev. B* **14** (1976), no. 2, 409-423. (Author's summary) **57** #2354 82.34
- de Sitter, J. M.** See *De Sitter, J. M.*
- de Sitter, L. U.** A system theoretical paradigm of social interaction: towards a new approach to qualitative system dynamics. *Ann. Syst. Res.* **3** (1973), 109-140 (1974). (Author's summary) **56** #17924 92A20
- Sitter, R. E.** (with Tefteller, Steve C.) Oscillation of a fourth-order nonhomogeneous differential equation. *J. Math. Anal. Appl.* **59** (1977), no. 1, 93-104. (R. E. Ferber) **56** #753 34C10
- nguen Si Tuen** See *Nguyen Si Tuen*
- Siu, Man Keung** Unitary Whitehead group of cyclic groups. *Bull. Amer. Math. Soc.* (1973), 92-95. (J. A. Schafer) **47** #8656 18F25 (57D65)
Unitary Whitehead group of cyclic groups. *J. Algebra* **28** (1974), 461-476. (Man Keung Siu) **55** #5719 18F25 (57D65)
(with Connell, E. H.) Localization in algebraic K -theory. *J. Algebra* **30** (1974), 37-41. (E. Graham Evans, Jr.) **49** #10682 13D15
(with Lam, Tsit Yuen) K_0 and K_1 -an introduction to algebraic K -theory. *Am. Math. Monthly* **82** (1975), 329-364. (Bruno Harris) **53** #3063 18F25
(with Sit, William Yu) On the subsemigroups of N . *Math. Mag.* **48** (1975), no. 225-227. (Hugo S. Sun) **51** #12665 10A05 (20M10)
When is -1 a power of 2? *Math. Mag.* **48** (1975), no. 5, 284-286. (Philip Leonard) **52** #13602 10A10
An interesting exponential equation. *Math. Gaz.* **60** (1976), no. 413, 213-215. (Editors) **58** #17631 39A30 (10B25)
(with Yu, Clement T.; Salton, Gerard) Effective automatic indexing using text addition and deletion. *J. Assoc. Comput. Mach.* **25** (1978), no. 2, 210-225. (K. H. Booth) **57** #8227 68A50
- Siu, T. K.** (with Leondes, Cornelius T.) Parameter optimization for linear quadratic differential games. *Trans. ASME Ser. G. J. Dynamic Systems, Measurement and Control* **99** (1977), no. 1, 58-62. (Authors' summary) **58** #20521 90D25
- Siu, Yum Tong** An Osgood type extension theorem for coherent analytic sheaves. *Several complex variables, II (Proc. Internat. Conf., Univ. Maryland, College Park, Md., 1974)*, pp. 189-241. *Lecture Notes in Math.*, Vol. 185, Springer, Berlin, 1971. (Gerd Fischer) **46** #391 32C25
Generalizations of Grauert's direct image theorem. *Symposium on Several Complex Variables (Park City, Utah, 1970)*, pp. 151-174. *Lecture Notes in Math.*, Vol. 185, Springer, Berlin, 1971. (Author's introduction) **47** #5295 32C35 (32F15)
Dimensions of sheaf cohomology groups under holomorphic deformation. *Math. Ann.* **192** (1971), 203-215. (W. Thimm) **45** #8878 32C25
A pseudoconvex-pseudoconcave generalization of Grauert's direct image theorem. *Ann. Scuola Norm. Sup. Pisa* (3) **26** (1972), 649-664. (Andrew Markoe) **51** #5963 32C35
(with Range, R. Michael) Uniform estimates for the $\bar{\partial}$ -equation on intersection of strictly pseudoconvex domains. *Bull. Amer. Math. Soc.* **78** (1972), 721-723. (M. Heins) **46** #9554 35N15 (32F15)
A Thullen type extension theorem for positive holomorphic vector bundles. *Am. J. Math.* **94** (1972), 775-776. (S. Hironaka) **45** #7109 32L05
Analyticity of sets associated to Lelong numbers and the extension of meromorphic maps. *Bull. Amer. Math. Soc.* **79** (1973), 1200-1205. (Reese Harvey) **48** #8843 32D20 (32C25)
(with Range, R. Michael) Uniform estimates for the $\bar{\partial}$ -equation on domains with piecewise smooth strictly pseudoconvex boundaries. *Math. Ann.* **206** (1973), 325-335. (S. G. Gindikin) **49** #3214 32F15 (35N15)
★Techniques of extension of analytic objects. *Lecture Notes in Pure and Applied Mathematics*, Vol. 8. Marcel Dekker, Inc., New York, 1974. iv + 256 pp. (G. Trautman) **50** #13600 32D15 (32C35)
The mixed case of the direct image theorem and its applications. *Complex analysis (Centro Internaz. Mat. Estivo, I Ciclo, Bressanone, 1973)* pp. 281-463. *Edizioni Cremonese, Rome, 1974.* (Jean-Pierre Ramis) **54** #3016 32C35
A Thullen type extension theorem for positive holomorphic vector bundles. *Fonctions analytiques de plusieurs variables et analyse complexe (Colloq. Internat. Centre Nat. Rech. Sci., Paris, 1972)*, pp. 231-234. "Agora Mathematica", No. 1, Gauthier-Villars, Paris, 1974. (R. Michael Range) **57** #3446 32D15
Analyticity of sets associated to Lelong numbers and the extension of closed positive currents. *Invent. Math.* **27** (1974), 53-156. (Reese Harvey) **50** #5003 (EA 32C25 32D15)
All plane domains are Banach-Stein. *Manuscripta Math.* **14** (1974), 101-105. (Hirschowitz) **50** #13603 32E10 (32K05)
The $\bar{\partial}$ problem with uniform bounds on derivatives. *Math. Ann.* **207** (1974), 163-176. (S. G. Gindikin) **48** #8852 32F15 (35N15)
(with Range, R. Michael) C^k approximation by holomorphic functions and $\bar{\partial}$ -closed forms on C^k submanifolds of a complex manifold. *Math. Ann.* **210** (1974), 105-122. (O. Wells, Jr.) **50** #2561 32E30
Characterization of privileged polydomains. *Trans. Amer. Math. Soc.* **193** (1974), 329-357. (H. Tornehave) **50** #7577 32C35 (46E15)
Extension of meromorphic maps into Kähler manifolds. *Ann. of Math.* (2) **101** (1975), no. 3, 421-462. (Pierre Lelong) **57** #3447 32D15 (32C30)
Every Stein subvariety admits a Stein neighborhood. *Invent. Math.* **38** (1976), no. 1, 89-100. (Alessandro Silva) **55** #8407 32E10
Holomorphic fiber bundles whose fibers are bounded Stein domains with zero Betti number. *Math. Ann.* **219** (1976), no. 2, 171-192. (Alessandro Silva) **52** #11123 32L05
(with Yau, Shing Tung) On the structure of complete simply-connected Kähler manifolds with nonpositive curvature. *Proc. Nat. Acad. Sci. U.S.A.* **73** (1976), no. 1008. (Robert E. Greene) **53** #8476 32C10
The uniformization problem for complex manifolds. *Proceedings of the Oji Sem.*

- Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., 1976). *Publ. Res. Inst. Math. Sci.* **12** (1976/77), supplement, 461-463. (H. Wu) #3456 32G13 (32G10)
- The Levi problem. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, pt 2, Williams Coll., Williamstown, Mass., 1975)*, pp. 45-48. *Amer. Math. Soc., Providence, R.I.*, 1977. (Tosiaki Kori) **57** #12917 32L05 (32E10)
- (with Yau, Shing Tung) Complete Kähler manifolds with nonpositive curvature of order less than quadratic decay. *Ann. of Math.* (2) **105** (1977), no. 2, 225-264. (H. Wu) #10719 32C10 (32F99)
- (with Norguet, François) Holomorphic convexity of spaces of analytic cycles. (French summary) *Bull. Soc. Math. France* **105** (1977), no. 2, 191-223. (From the text) #28677 32F99
- Pseudoconvexity and the problem of Levi. *Bull. Amer. Math. Soc.* **84** (1978), no. 4, 511-512. (M. Hervé) **57** #16648 32-02 (32F15)
- Levi, S. N. A priori estimates of the solutions of quasilinear differential equations of elliptic type. (Russian) *Dokl. Akad. Nauk SSSR* **211** (1973), 1306-1309. (M. A. Babodzhev) **49** #7593 35J15
- Harnack's inequality for generalized solutions of second order parabolic equations with discontinuous coefficients. (Russian. Georgian and English summaries) *Matematichesk. Inst. Sem. Moshen. Anotacie. No. 8* (1973), 77-84. (A. Borzymowski) **50** #5186 35K10
- József (with Dancs, István; Hunyadi, László) Control based on stock signals in a Leont'ev type economy. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* **6** (1973), 185-207. (Authors' summary) #514114 90A15
- Krishna Prasad, P. (with Subramanian, N. R.) Incompressible potential flow past non-so-slender bodies of revolution at an angle of attack. *J. Fluid Mech.* **70** (1975), no. 4, 651-661. (J. P. Guiraud) **52** #2394 76A1
- Raphael On the controllability of the heat equation. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 12, Paper 6D, 4 pp. *Inst. Mech. Engrs., London*, 1967. (L. von Wolfersdorf) **52** #1488 49E15 (35K05)
- (with Kwakernaak, Huibert) ★Linear optimal control systems. *Wiley-Interscience [John Wiley & Sons], New York-London-Sydney*, 1972. xxv + 575 pp. (Takashi Yahagi) **53** #10394 93C05
- (with Kwakernaak, Huibert) The maximally achievable accuracy of linear optimal regulators and linear optimal filters. *IEEE Trans. Automatic Control* **AC-17** (1972), 79-86. (F. M. Kirillova) **50** #4034 (E 50 #4035) 93C05 (93E10)
- (with Herman, D.) An extension of a theorem by Rosenbrock. *IEEE Trans. Automatic Control* **AC-19** (1974), 88. (Hsi-han Yeh) **51** #2700 93C05
- (with Kurtaran, Bension) Linear-quadratic-Gaussian control with one-step-delay sharing pattern. *IEEE Trans. Automatic Control* **AC-19** (1974), 571-574. (William D. Ray) **55** #2319 93E20
- See also Godbole, S. S., **50** #4035 and *Proceedings: International Congress of the International Federation of Automatic Control (IFAC)*, **51** #12360a
- anov, F. S. An attempt to construct a purely arithmetical additive theory of the natural numbers. (Russian) *Moskov. Oblast. Ped. Inst. Učen. Zap.* **240**, 97-126 (1969). (1 foldout) (D. H. Lehmer) **45** #3301 10A99
- The additive structure of composite odd natural numbers. (Russian) *Moskov. Oblast. Ped. Inst. Učen. Zap.* **282**, 278-307 (1970). (D. H. Lehmer) **45** #3302 10A99 (68A10)
- aram, C. (with Sinha, K. P.) *f*-gravity and spinors in general relativity. *Lett. Nuovo Cimento* (2) **13** (1975), no. 10, 357-363. **56** #4688 83.53
- (with Sinha, K. P.) On the field equations of the tensor-scalar theory of finite-range strong gravity. *Progr. Theoret. Phys.* **55** (1976), no. 4, 1288-1297. (Authors' summary) **57** #2445 83.53
- aramakrishnan, K. (with Huzurbazar, M. S.) Jacobson's theorem on commutativity of rings. *Aligarh Bull. Math.* **1** (1971), 9-12. (J. A. Johnson) **47** #283 16A70
- aramakrishnan, R. On three extensions of Pillai's arithmetic function $\beta(n)$. Volume dedicated to the memory of V. Ramaswami Aiyer. *Math. Student* **39** (1971), 187-190 (1972). (D. Reark) **49** #2508 10A20
- (with Venkataraman, C. S.) An extension of Ramanujan's sum. *Math. Student* **40A** (1972), 211-216. (T. M. Apostol) **48** #8428 10K20 (10H25)
- A number-theoretic identity. *Publ. Math. Debrecen* **21** (1974), 67-69. (E. L. Cohen) **50** #7002 10A20
- On a class of multiplicative arithmetic functions. *J. Reine Angew. Math.* **280** (1976), 157-162. (E. M. Horadam) **52** #10569 10A20
- a Rama Prasad, V. (with Suryanarayana, D.) The number of *k*-free divisors of an integer. *Acta Arith.* **17** (1970/71), 345-354. (L. Carlitz) **48** #6039 10H25
- (with Suryanarayana, D.) The number of pairs of generalized integers with $L.C.M. < x$. *J. Austral. Math. Soc.* **13** (1972), 411-416. (E. M. Horadam) **46** #8990 10H40
- (with Suryanarayana, D.) Sum functions of *k*-ary and semi-*k*-ary divisors. *J. Austral. Math. Soc.* **15** (1973), 148-162. (T. M. Apostol) **48** #6040 10H25 (10H35)
- (with Suryanarayana, D.) The number of *k*-free and *k*-ary divisors of *m* which are prime to *n*. *J. Reine Angew. Math.* **264** (1973), 56-75. (T. M. Apostol) **48** #6041 (E 49 #2612) 10H25
- (with Suryanarayana, D.) Correction to: "The number of *k*-free and *k*-ary divisors of *m* which are prime to *n*" (J. Reine Angew. Math. **264** (1973), 56-74). *J. Reine Angew. Math.* **265** (1974), 182. (T. M. Apostol) **49** #2612 10H25
- (with Suryanarayana, D.) The number of *k*-ary divisors of a generalized integer. *Portugal. Math.* **33** (1974), 85-92. (E. M. Horadam) **48** #8419 10H40
- (with Suryanarayana, D.) The number of *k*-ary, (*k* + 1)-free divisors of an integer. *J. Reine Angew. Math.* **276** (1975), 15-35. (T. M. Apostol) **51** #12749 10H25
- (with Suryanarayana, D.) The number of *k*-free divisors of an integer. II. *J. Reine Angew. Math.* **276** (1975), 200-205. (L. Carlitz) **51** #10258 10H25
- (with Suryanarayana, D.) The number of semi-*k*-free divisors of an integer. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **20** (1977), 5-19. (Bruce C. Berndt) **57** #5927 10H15
- vašinškil, G. I. (with Barenblatt, G. I.) Self-similar solutions of the second kind in the problem of propagation of intense shock waves. *Prikl. Mat. Meh.* **34** (1970), 685-692 (Russian); translated as *J. Appl. Math. Mech.* **34** (1970), 655-662 (1971). (R. P. Kanwal (Zbl. **222** #76064)) **48** #5483 76.35
- On a distorted flame front as a hydrodynamic discontinuity. *Acta Astronaut.* **3** (1976), no. 11-12, 889-918. (Author's summary) **56** #10388 76.35
- Nonlinear analysis of hydrodynamic instability in laminar flames. I. Derivation of basic equations. *Acta Astronaut.* **4** (1977), no. 11-12, 1177-1206. (Salvatore Rionero) **58** #19741 76.35
- (with Michelson, D. M.) Nonlinear analysis of hydrodynamic instability in laminar flames. II. Numerical experiments. *Acta Astronaut.* **4** (1977), no. 11-12, 1207-1221. (Author's summary) **58** #32374 76.45
- Sivašinškil, S. V. A difference method of projection type for the solution of a mixed problem for symmetric hyperbolic systems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 113-125, 268. (M. Zlámal) **49** #6650 65N30
- See also Boundary value problems of mathematical physics and related aspects of function theory, **46** #9499
- Sivazlian, B. D. A multi-commodity inventory system with set-up costs. *Opsearch* **7** (1970), 213-240. (E. V. Bulinskaja) **45** #8252 90B05
- On a discounted replacement problem with arbitrary repair time distribution. *Management Sci.* **19** (1972/73), 1301-1309. (M. Stoica) **57** #11705 90B25
- (with Goswick, T. E.) The mixed ordering policy in periodic review stochastic multi-commodity inventory systems. *Naval Res. Logist. Quart.* **21** (1974), 389-410. (E. S. Boylan) **50** #6455 90B05
- A continuous-review (*s, S*) inventory system with arbitrary interarrival distribution between unit demand. *Operations Res.* **22** (1974), no. 1, 65-71. (Carl M. Harris) **53** #4945 90B05 (60K10)
- An optimum multiple-launch program for artificial satellites. *Opsearch* **11** (1974), no. 2-3, 131-137. (Author's summary) **55** #14188 90B99
- (with Lawler, Eugene L.) Minimization of time-varying costs in single-machine scheduling. *Oper. Res.* **26** (1978), no. 4, 563-569. (John C. Gittins) **58** #15117 90B35
- Sivcev, V. I. (with Slepcev, A. A.; Kičkinas, I.; Rudzikas, Z. B.) Submatrix elements of operators that consist of unit tensors in the *ij*-coupling, and their properties. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **15** (1975), no. 1, 5-20, 153. (Authors' summary) **57** #2249 81.22
- (with Kryčkin, I. S.; Slepcev, A. A.; Rudzikas, Z. B.) A further study of the relativistic Hamiltonian of many-electron atoms. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **15** (1975), no. 4, 539-558, 673. (M. Martinis) **56** #2015 81.34
- Sivenjuk, V. V. See *Nonlinear oscillations and stability of motion*, **57** #12950
- Sivers, Dennis (with Yellin, Joel) Review of recent work on narrow resonance models. *Rev. Modern Phys.* **43** (1971), 125-188. (Authors' summary) **57** #14998 81.30
- Sivov, A. N. (with Voitovič, N. N.; Kacelenbaum, B. Z.) ★Обобщенный метод собственных колебаний в теории дифракции. (Russian) [The generalized method of eigenoscillations in diffraction theory] With a supplement "Spectral properties of diffraction problems" by M. S. Agranovič. *Izdat. "Nauka", Moscow*, 1977. 416 pp. (N. D. Kazaninoff) **58** #3962 78.00 (35P20)
- Sivov, V. V. The continuous gradient method in the problem of the analytical design of regulators. (Russian) *Differencial'nye Uravneniya* **13** (1977), no. 10, 1894-1896, 1911. (V. Komkov) **57** #1239 49D10
- On the smoothing of controls in a linear time-optimality problem. (Russian) *Differencial'nye Uravneniya (Ryazan) No. 11* (1978), 144-147. (Author's summary) **58** #26322 93C15
- Siwak, Paweł P. Certain state codings for three state automata. (Polish. English summary) *Studia Automat.* **1** (1970), no. 2, 17-28. (S. Waliński) **47** #3129 94A30
- Single shift-register realization for an automaton. (Polish. English summary) *Studia Automat.* **1** (1971), no. 3, 9-17. (loose errata) (W. Kwasowicz) **45** #9856 94A30
- The realization of an automaton on two shift registers. (Polish. English summary) *Studia Automat.* **1**, no. 4, 5-15 (1973). (W. Kwasowicz) **48** #3651 94A30
- Coding the states of synchronous automata. (Polish. English summary) *Studia Automat.* **3**, 39-55 (1975). (Aleksander Albicki) **55** #12364 94A30
- Some extensions and memory of automata. *Found. Control Engrg.* **1** (1976), no. 4, 235-242. (M. Růžička) **56** #8238 94A30
- Coding the states of synchronous automata and certain structures of the technical realization. (Polish. English summary) *Studia Automat.* **4** (1976), 35-76. (Author's summary) **58** #4714 94A25 (94A20)
- Decomposition of automata onto components with gated clock signals. *Found. Control Engrg.* **2** (1977), no. 4, 205-210. (From the summary) **58** #15727 94A25
- Siwek, Edward (with Zajtz, Andrzej) Sur les comitants algébriques des densités. (Polish summary) *Uniwers. Śląski w Katowicach—Prace Mat.* **1** (1969), 91-98. (M. Kucharzewski (Zbl. **234** #53019)) **48** #4939 53A55
- ★Analiza matematyczna. Część I. (Polish) [Mathematical analysis. Part I] Uniwersytet Śląski w Katowicach, Wydawnictwo Dydaktyczne, 35. *Wydawnictwo Uniwersytetu Śląskiego, Katowice*, 1971. 296 pp. (Editors) **50** #7437 26-01
- Classification des densités vectorielles factorisées. *Ann. Polon. Math.* **32** (1976), no. 3, 273-285. (V. Oproiu) **54** #1109 53A55 (22E99)
- Siwek, Halina Projection of four-dimensional Euclidean space by the method of two hypertraces. (Polish. French summary) *Zeszyty Nauk. Akad. Gór.-Hutniczej—Mat.-Fiz.-Chem. No. 13* (1973), 95-126. (V. Havel) **52** #4105 50D15
- Siwiec, Frank On the theorem of Morita and Hanai, and Stone. *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 449-454. *Lecture Notes in Math., Vol. 378, Springer, Berlin*, 1974. (P. W. Harley, III) **51** #13973 54C10 (54E35)
- On defining a space by a weak base. *Pacific J. Math.* **52** (1974), 233-245. (D. J. Lutzer) **50** #3198 54E35 (54D50)
- Generalizations of the first axiom of countability. *Rocky Mountain J. Math.* **5** (1975), 1-60. (Joe A. Guthrie) **50** #11158 54D50
- (with Boone, James R.) Sequentially quotient mappings. (Loose Russian summary)

- Czechoslovak Math. J. **26**(101) (1976), no. 2, 174-182. (S. P. Franklin) **53** #6505 54D55 (54C10)
- (with Michael, Ernest A.; Olson, Roy C.) A -spaces and countably bi-quotient maps. *Dissertationes Math. (Rozprawy Mat.)* **133** (1976), 43 p. (K. Nagami) **54** #6067 54C10 (54D50)
- A note on identifications of metric spaces. *Proc. Amer. Math. Soc.* **57** (1976), no. 2, 340-344. (V. Kannan) **54** #1174 54E20 (54C10)
- Countable spaces having exactly one nonisolated point. I. *Proc. Amer. Math. Soc.* **57** (1976), no. 2, 345-350. (V. Kannan) **54** #1185 54F65 (54D50)
- Open continuous functions from the reals to the reals. (Italian summary) *Rend. Mat.* (6) **9** (1976), no. 3, 477-480. (Edwin Duda) **55** #1285 54C10
- Siwiński, Jerzy** Synthesis of a class of finite automata using the method of numerical description. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 67, Paper 35A, 8 pp. *Inst. Mech. Engrs., London*, 1967. (Author's summary) **51** #9993 94A30
- See also *Proceedings: International Congress of the International Federation of Automatic Control (IFAC)*, **51** #12360c
- Six, Gabriel** (with Crombez, Gilbert) On topological n -groups. *Abh. Math. Sem. Univ. Hamburg* **41** (1974), 115-124. (John F. Berglund) **52** #14143 22A99
- Six, H.-W.** (with Maurer, Hermann A.; Ottmann, Thomas) Manipulation of number sets using balanced trees. *Graphen, Algorithmen, Datenstrukturen (Zweite Fachtagung über Graphentheoretische Konzepte der Informatik, Göttingen, 1976)*, pp. 9-37. *Appl. Comput. Sci., Vol. 4, Hanser, Munich*, 1976. (Fabrizio Luccio) **57** #14663 68A50
- (with Maurer, Hermann A.; Ottmann, Thomas) Implementing dictionaries using binary trees of very small height. *Information Processing Lett.* **5** (1976/77), no. 1, 11-14. (K. H. V. Booth) **53** #2002 68A05 (68A10)
- (with Ottmann, Thomas; Wood, Derick) New results in balanced search trees. *Datenstrukturen, Graphen, Algorithmen (3. Fachtagung Graphentheoretische Konzepte der Informatik, Linz, 1977)*, pp. 107-124. *Appl. Comp. Sci., Vol. 8, Carl Hanser, Munich*, 1978. (Amitava Bagchi) **58** #13899 68A10
- (with Ottmann, Thomas; Wood, Derick) Right brother trees. *Comm. ACM* **21** (1978), no. 9, 769-776. (Stephen Soule) **58** #13898 68A10
- Sixtl, Friedrich** Probabilistic unfolding. *Psychometrika* **38** (1973), 235-248. (Author's summary) **48** #3532 92A25
- Sixto, Rios** See *Proceedings: Annual Conference of Spanish Mathematicians*, **48** #10735
- Siy, Pepe** (with Chen, Chiou Shiun) Minimization of fuzzy functions. *IEEE Trans. Computers* **C-21** (1972), 100-105. (Charles G. Morgan) **47** #6384 (E **51** #12428) 94A15
- See also *Kandel, Abraham*, **51** #12428
- Siyyam** On the (P) summability of a sequence of Fourier coefficients. *Mat. Vesnik* **11**(26) (1974), 148-152. (Prem Chandra) **50** #7926 42A16
- Simon, A. A.** See *Simon, A.*
- Sizer, Walter S.** Triangularizing solvable groups of unipotent matrices over a skew field. *Canad. Math. Bull.* **20** (1977), no. 1, 121-123. (Marvin Marcus) **56** #3144 20H20
- Triangularizing semigroups of matrices over a skew field. *Linear Algebra and Appl.* **16** (1977), no. 2, 177-187. (Peter M. Gibson) **57** #9724 15A33 (15A21, 20M30)
- Sizikov, V. S.** (with Verlan', A. F.) ★Методы решения интегральных уравнений с программами для ЭВМ. (Russian) [Methods for the solution of integral equations using computer programs] *Izdat. "Naukova Dumka", Kiev*, 1978. 291 pp. (J. Švejda) **58** #25047 65R05 (65-04)
- Siz'ko, V. G.** (with Ševljakov, Ju. A.) The solution of the first fundamental problem for an annulus. (Russian) *Teoret. i Prikladna Meh. Vyp. 1* (1970), 39-48, 110. (Authors' summary) **56** #5902 30A88
- šub-Sizonenko, Ju. A.** See *Šub-Sizonenko, Ju. A.*
- Sizova, A. F.** (with Ermakov, S. M.; Nekrutkin, V. V.; Proškin, A. Ja.) The solution of nonlinear kinetic equations by the Monte Carlo method. (Russian) *Dokl. Akad. Nauk SSSR* **230** (1976), no. 2, 261-263. (From the introduction) **58** #4119 82A45 (65C05)
- The dispersion of the collision estimate for the solutions of nonlinear problems by the Monte Carlo method. (Russian. English summary) *Vestnik Leningrad. Univ.* **1976**, no. 1 *Mat. Meh. Astronom. vyp.* **1**, 152-155, 164. (V. V. Ivanov) **55** #1700 65C05
- See also *Operations research and statistical simulation*, **48** #10430
- Sizova, O. A.** (with Mjačin, V. F.) Practice application of the regularized method of Taylor-Steffensen series. (Russian. English summary) *Bjull. Inst. Teoret. Astronom.* **14**, no. 4 (157), 215-228 (1976). (Gh. Silas) **58** #3831 70G5
- Sizuk, P. I.** (with Černikov, V. V.) Certain properties of univalent functions. (Russian) *Mat. Zametki* **17** (1975), no. 4, 563-569. (K. W. Lucas) **53** #8408 30A32
- On a certain result of Libera and Livingston. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), 98-102, 196. (R. J. Libera) **51** #5911 30A32
- Regular functions $f(z)$ for which $zf'(z)$ is θ -spiral-shaped of order α . (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 6, 1286-1290, 1371. (L. A. Aksen'ev) **52** #14264 30A32
- (with Černikov, V. V.) Some properties of starlike univalent functions. (Russian) *Some problems in modern function theory (Proc. Conf. Modern Problems of Geometric Theory of Functions, Inst. Math., Acad. Sci. USSR, Novosibirsk, 1976)* (Russian), pp. 173-176. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Mat., Novosibirsk*, 1976. (Editors) **58** #22503 30A32
- The radius of almost convexity of order α in a class of schlicht functions. (Russian) *Mat. Zametki* **20** (1976), no. 1, 105-112. (Z. Lewandowski) **54** #13061 30A32
- (with Černikov, V. V.) Some properties of star-like univalent functions. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 1, 193-200, 239. (A. W. Goodman) **57** #603 30A32
- Sjabro, V. D.** See *Cybernetics and computer technology*, **48** #1735 and *Man-machine control systems*, **49** #8696
- Sjaglo, I. S.** Divisors of infinitesimal parameters of a local Lorentz transformation in a gravitational field. (Russian) *Gravitacija i Teor. Otnositel'nosti No. 7* (1970), 55-59. (RŽFiz **1971** #3 B146) **58** #32815 83J53
- Dynamic characterizations of a reference frame in the tetrad formulation of relativity theory. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1971**, no. 5, 89-94. (R. I. Pimenov) **45** #4800 83J53
- (with Ivanickaja, O. S.) Three-dimensional Lorentz-covariant equations of the Einstein theory of gravitation, and their chronometrically and kinemetrically covariant representations. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1974**, 68-142. (B. Mielnik) **52** #7465 83J53
- Dual turnings in bivector parametrization of the Lorentz transformation. (Russian. English summary) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 4, 69-136-137. (Author's summary) **58** #25816 83J53 (50C05)
- Sjarev, Ants Hancovič** See *Mathematics and theoretical mechanics*, **53** #2569 and *Birthday: Sjarev, Ants Hancovič*, **53** #2606
- Sjarova, A. B.** Transition from the analytic to the constructive-kinematic determination surfaces. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **7** (1971), no. 2, 51-56 (1973). (V. Topenčarov) **48** #12322 53A70 (70J53)
- A parametrization of the contact condition for surfaces, and its application. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 2, 149-154 (1973). (W. Wrona) **54** #5987 53A05
- (with Mičková, D. N.; Raičeva, O. B.) Representation of a four-dimensional cone. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 2, 165-172 (1973). (B. Orbán) **53** #14302 50D15
- (with Mičková, D. N.; Raičeva, O. B.) The mapping of a hypercone and sections in four-dimensional space. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 3, 193-201 (1973). (V. Volenec) **53** #6406a 50B20
- (with Raičeva, O. B.; Mičková, D. N.) Three-dimensional spaces tangent to certain hyperplanes in E^4 . (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **9** (1973), no. 1, 187-196 (1974). (V. Volenec) **53** #6406b 50B20
- (with Mičková, D. N.; Raičeva, O. B.) The mapping of a spherical hypercone and its sections from certain spaces into E^4 . (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **9** (1973), no. 1, 197-207 (1974). (V. Volenec) **53** #6406c 50B20
- (with Mičková, D. N.; Raičeva, O. B.) A mapping of the sections of a spherical hypercone from a three-dimensional space in E^4 . (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **9** (1973), no. 2, 189-200 (1974). (V. Volenec) **53** #6406d 50B20
- On a line congruence of degree two and class four. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 4, 217-220 (1977). (From the introduction and summary) **58** #12757 53A20
- An involution of the third power in the space P_3 originated by the straight congruence of the second power, fourth class. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 4, 163-168 (1977). (K. Burian) **58** #27979 14E10
- Sjavavko, M. S.** Analytic solutions of certain equations in a functional space. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 31* (1969), 96-100, 107. (Author's summary) **46** #557 35R15
- A functional derivative of the operator of a dynamical system. (Russian) *Mathematical models of complex systems (Russian)*, pp. 181-189. *Akad. Nauk Ukr. SSR Inst. Kibernet., Kiev*, 1973. (See RŽMat **1974** #6 V81; MR **57** #17740) **58** (58F15)
- An investigation of the operators of dynamical systems of functions with values in Banach space. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 31* (1973), 79-83, 97. (S. Fučik) **52** #1299 46G05
- (with Ćisipčuk, N. D.) A certain class of equations in functional derivatives. (Russian) *Mathematical physics*, No. 15 (Russian), pp. 55-59, 179. *Izdat. "Naukova Dumka", Kiev*, 1974. (Ju. L. Daleckij) **49** #5607 35R15 (35C10, 46F10)
- (with Mel'ničak, P. P.) A certain class of equations with functional derivatives. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 836-841, 864. (B. Szafirski) **51** #13680 46G05 (35R15)
- (with Ćisipčuk, M. D.) On the question of linear equations, with constant coefficients, in a function space. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 87 Mat. i Meh.* (1974), 22-25, 152. (B. Szafirski) **53** #11248 35G05 (46G05)
- (with Ćisipčuk, M. D.) Approximate solution of a certain class of first order differential equations that contain ordinary and functional derivatives. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 87 Mat. i Meh.* (1974), 29-34. (E. Gerlach) **53** #11250 35R15 (46G05)
- (with Batjuk, Ju. R.) Solution by continued fractions of certain classes of differential equations with functional derivatives. (Russian) *Mathematical methods, physical and mechanical fields*, No. 1 (Russian), pp. 192-194, 221. "Naukova Dumka", Kiev, 1975. (N. G. Kazakova) **53** #11369 46G05 (34G05)
- (with Ćisipčuk, M. D.) Solution of a homogeneous first-order linear equation with functional derivatives by the method of series expansion in a neighborhood of a particular point. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 87 Mat. i Meh.* (1974), 132-136, 206. (Authors' summary) **58** #23189 35R15 (58C99)
- (with Batjuk, Ju. R.) Some criteria for the convergence of continued fractions. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst.* **1977**, no. 119 *Mat. i Meh.* 144-146, 198. (Authors' summary) **58** #22323 40A15
- (with Mel'ničak, P. P.) Systems of linear differential equations with functional derivatives. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst.* **1977**, no. 119 *Mat. i Meh.*, 146-149, 198. (Authors' summary) **58** #22913 34K05
- Sjerve, Denis K.** (with Held, René P.) Sur certains complexes de Thom et le J -homomorphisme. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A1293-A1295. (M. Atiyah) **47** #5871 55E50
- (with Held, René P.) On the Spanier conjecture. *Comment. Math. Helv.* **47** (1972), 75-91. (W. Metzler) **46** #4527 55D10
- (with Held, René P.) À propos du type d'homotopie stable des espaces projectifs. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1665-A1668. (M. F. Atiyah) **48** #5069 55E50
- (with Held, René P.) On the stable homotopy type of Thom complexes. *Canad. Math. Bull.* **25** (1973), 1285-1294. (R. M. F. Moss) **49** #3911 55D15 (55F50)
- Homology spheres which are covered by spheres. *J. London Math. Soc.* (2) **6** (1973), 333-336. (A. Ljulevicius) **46** #9993 57A65

- (with Held, René P.) On the homotopy properties of Thom complexes. *Math. Z.* **35** (1973/74), 315-323. (J. A. Schafer) **49** #6237 55F10
- Group actions and generalized periodicity. *Math. Z.* **149** (1976), no. 1, 1-11. Raymond Barre) **54** #1223 55F45 (57E15)
- The Thom space periodicity of classifying spaces. *Proc. Amer. Math. Soc.* **65** (1977), no. 1, 165-170. (Robert D. Rigdon) **58** #31073 55F35
- rg, Anders On the Korteweg-de Vries equation: existence and uniqueness. *J. Math. Anal. Appl.* **29** (1970), 569-579. (Editors) **53** #13885 35Q99
- rg, Boris Über die Fortsetzbarkeit gleichmässig stetiger Abbildungen in uniformen Räumen. (English summary) *Soc. Sci. Fenn. Comment. Phys.-Math.* **40** (1970), 11-46. (C. H. Cook) **47** #2535 54A20 (54C20)
- in, Gunnar Hardy-fields. *Ark. Mat.* **8**, 217-237 (1971). (V. Ganapathy Iyer) **45** #3647 26A24
- On filtered modules and their associated graded modules. *Math. Scand.* **33**, (1973), 229-249 (1974). (Victor Camillo) **51** #606 16A50
- A set of generators for $\text{Ext}_k(k, k)$. *Math. Scand.* **38** (1976), no. 2, 199-210. (J. L. Williams) **54** #10239 13D99
- in, Tord Bessel potentials and extension of continuous functions on compact sets. *Ark. Mat.* **13** (1975), no. 2, 263-271. (Richard Bagby) **53** #843 31C15
- ren, Peter Estimates of mass distributions from their potentials and energies. *Ark. Mat.* **10**, 59-77 (1972). (David R. Adams) **46** #9369 31A25
- On the regularity of the distribution of the Fekete points of a compact surface in \mathbb{R}^n . *Ark. Mat.* **11**, 147-151 (1973). (Ch. Pommerenke) **49** #5381 31B15
- On the adjoint of an elliptic linear differential operator and its potential theory. *Ark. Mat.* **11**, 153-165 (1973). (N. Boboc) **49** #10899 31D05
- La convolution dans L^1 faible de \mathbb{R}^n . *Séminaire Choquet, 13e année* (1973/74), *Initiation à l'analyse, Exp. No. 14*, 10 pp. *Secrétariat Mathématique, Paris*, 1975. (Editors) **57** #17115 42A96
- Noyaux singuliers positifs et ensembles exceptionnels. *Séminaire Choquet, 14e année* (1974/75), *Initiation à l'analyse, Exp. No. 8*, 23 pp. *Secrétariat Mathématique, Paris*, 1975. (Author's introduction) **57** #17128 43A35
- Harmonic spaces associated with adjoints of linear elliptic operators. (French summary) Collection of articles dedicated to Marcel Brelot on the occasion of his 70th birthday. *Ann. Inst. Fourier (Grenoble)* **25** (1975), no. 3-4, xviii, 509-518. (R. M. Hervé) **53** #5909 31B35 (35J15, 31D05)
- Approximation dans les espaces de Banach et mesures spectrales. D'après P. L. Butzer, R. J. Nessel et W. Trebels (J. Approximation Theory **8** (1973), 335-356). *Séminaire de Théorie du Potentiel (Paris, 1972-1974)*, pp. 266-275. *Lecture Notes in Math., Vol. 518, Springer, Berlin*, 1976. (Walter Schempp) **56** #12739 41A65 (42A18)
- Une propriété des fonctions harmoniques positives, d'après Dahlberg. *Séminaire de Théorie du Potentiel de Paris, No. 2* (Univ. Paris, Paris, 1975-1976), pp. 275-282. *Lecture Notes in Math., Vol. 563, Springer, Berlin*, 1976. (Author's summary) **58** #28556 31B05
- Solution fondamentale d'un opérateur différentiel en dimension infinie. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 6, A305-A307. (S. Łojasiewicz) **56** #3682 47F05 (46F10, 35E05)
- Un contre-exemple pour le noyau reproduisant de la mesure gaussienne dans le plan complexe. *Séminaire Paul Krée, 2e année* (1975/76), *Équations aux dérivées partielles en dimension infinie, Exp. No. 10*, 2 pp. *Secrétariat Math., Paris*, 1977. (From the text) **58** #17808 46E15
- Weak L_1 characterizations of Poisson integrals, Green potentials and H^p spaces. *Trans. Amer. Math. Soc.* **233** (1977), 179-196. (M. Brelot) **57** #3412 31B10
- lin, Per Convergence almost everywhere of certain singular integrals and multiple Fourier series. *Ark. Mat.* **9**, 65-90 (1971). (W. C. Connett) **49** #998 42A92
- (with Carleson, Lennart) Oscillatory integrals and a multiplier problem for the disc. Collection of articles honoring the completion by Antoni Zygmund of 50 years of scientific activity, III. *Studia Math.* **44** (1972), 287-299. (errata insert) (B. Muckenhoupt) **50** #14052 42A92 (42A18)
- Fourier multipliers and estimates of the Fourier transform of measures carried by smooth curves in \mathbb{R}^2 . *Studia Math.* **51** (1974), 169-182. (W. C. Connett) **52** #6299 42A18
- On the convergence almost everywhere of double Fourier series. *Ark. Mat.* **14** (1976), no. 1, 1-8. (G. V. Welland) **54** #8144 42A92
- L^p estimates for strongly singular convolution operators in \mathbb{R}^n . *Ark. Mat.* **14** (1976), no. 1, 59-64. (Alberto Torchinsky) **54** #844 42A40
- The Haar and Franklin systems are not equivalent bases in L^1 . (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 11, 1099-1100. (S. Swaminathan) **57** #7018 42A56
- An inequality for convex curves in the plane. *Math. Scand.* **40** (1977), no. 2, 293-300. (J. Lukes) **57** #3356 28A75 (52A40)
- (with Ciesielski, Zbigniew; Simon, P.) Equivalence of Haar and Franklin bases in L_p spaces. *Studia Math.* **60** (1977), no. 2, 195-210. (F. Schipp) **55** #6103 42A56
- strand, David Conductors with respect to hereditary orders. *Michigan Math. J.* **20** (1973), 181-185. (R. B. Tarsy) **48** #2171 16A18
- strand, Johannes Sur une classe d'opérateurs pseudo-différentiels de type principal. *C. R. Acad. Sci. Paris Sér. A-B* **271** (1970), A781-A783. (H. Goldschmidt) **45** #989 47G05 (35S99)
- Une classe d'opérateurs pseudodifférentiels à caractéristiques multiples. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A817-A819. (M. K. V. Murthy) **49** #4055 58G15 (35S05, 47G05)
- (with Duistermaat, J. J.) Sur une classe d'opérateurs de type sous-elliptique. *Séminaire Goulaouic-Schwartz 1972-1973: Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 7*, 13 pp. *Centre de Math., École Polytech., Paris*, 1973. (Ju. V. Egorov) **53** #14555 58G15 (35S05)
- Operators of principal type with interior boundary conditions. *Acta Math.* **130** (1973), 1-51. (M. K. V. Murthy) **55** #9174 (EA 55/56) 58G15 (35S99)
- Une classe d'opérateurs pseudodifférentiels à caractéristiques doubles. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A743-A745. (M. K. V. Murthy) **49** #4056 58G15 (35S05, 47G05)
- (with Duistermaat, J. J.) A global construction for pseudo-differential operators with non-involutive characteristics. *Invent. Math.* **20** (1973), 209-225. (R. D. Moyer) **49** #9681 47G05 (35S05, 58G15)
- (with Melin, Anders) Fourier intégraux à phases complexes. *Séminaire Goulaouic-Schwartz 1973-1974: Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 13*, 10 pp. *Centre de Math., École Polytech., Paris*, 1974. (Ju. V. Egorov) **53** #14227 47G05 (58G15)
- Parametrics for pseudodifferential operators with multiple characteristics. *Ark. Mat.* **12**, 85-130 (1974). (F. Cardoso) **50** #5236 35S99 (47G05, 58G15)
- (with Melin, Anders) Fourier integral operators with complex-valued phase functions. *Fourier integral operators and partial differential equations (Colloq. Internat., Univ. Nice, Nice, 1974)*, pp. 120-223. *Lecture Notes in Math., Vol. 459, Springer, Berlin*, 1975. (Weishu Shih) **55** #4290 58G15 (58G15, 35S05)
- Applications of Fourier distributions with complex phasefunctions. *Fourier integral operators and partial differential equations (Colloq. Internat., Univ. Nice, Nice, 1974)*, pp. 255-282. *Lecture Notes in Math., Vol. 459, Springer, Berlin*, 1975. (Weishu Shih) **55** #6494 58G15 (35S05)
- (with Baouendi, M. S.) Régularité analytique pour des opérateurs elliptiques singuliers en un point. *Séminaire Goulaouic-Lions-Schwartz (1974-1975), Équations aux dérivées partielles linéaires et non linéaires, Exp. No. 7*, 11 pp. *Centre Math., École Polytech., Paris*, 1975. (M. Schechter) **58** #29171 35J40
- (with Boutet de Monvel, Louis) Sur la singularité des noyaux de Bergman et de Szegő. *Journées: Équations aux dérivées partielles de Rennes* (1975), pp. 123-164. *Astérisque, No. 34-35, Soc. Math. France, Paris*, 1976. (Editors) **58** #28684 32H10 (35H05, 35N99)
- (with Baouendi, M. S.) Non hypoellipticité d'opérateurs elliptiques singuliers. *Séminaire Goulaouic-Schwartz (1975/1976), Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 24*, 8 pp. *Centre Math., École Polytech., Palaiseau*, 1976. (A. I. Atanasev) **57** #6803 35H05 (35J30)
- Propagation of singularities for operators with multiple involutive characteristics. (French summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 1, v, 141-155. (R. D. Moyer) **54** #13285 35D10 (58G15)
- (with Baouendi, M. S.) Régularité analytique pour des opérateurs elliptiques singuliers en un point. *Ark. Mat.* **14** (1976), no. 1, 9-33. (Louis Boutet de Monvel) **57** #6831 35J70
- (with Melin, Anders) Fourier integral operators with complex phase functions and parametrix for an interior boundary value problem. *Comm. Partial Differential Equations* **1** (1976), no. 4, 313-400. (Ju. V. Egorov) **56** #13294 58G15 (35S05, 47G05)
- (with Melin, Anders) Opérateurs intégraux de Fourier et le problème de la dérivée oblique. *Séminaire Goulaouic-Schwartz 1976/1977: Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 6*, 9 pp. *Centre Math., École Polytech., Palaiseau*, 1977. (Ju. V. Egorov) **58** #7749 58G15 (35J25)
- (with Baouendi, M. S.) Analytic regularity for the Dirichlet problem in domains with conic singularities. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **4** (1977), no. 3, 515-530. (Maurizio Chicco) **58** #23050 35J70 (35D10)
- (with Melin, Anders) A calculus for Fourier integral operators in domains with boundary and applications to the oblique derivative problem. *Comm. Partial Differential Equations* **2** (1977), no. 9, 857-935. (Ju. V. Egorov) **56** #16708 58G15 (35S05)
- (with Melrose, Richard B.) Singularities of boundary value problems. I. *Comm. Pure Appl. Math.* **31** (1978), no. 5, 593-617. (Makhlof Derridj) **58** #11859 35G15 (58G15)
- (with Menikoff, A.) On the eigenvalues of a class of hypoelliptic operators. *Math. Ann.* **235** (1978), no. 1, 55-85. (Akira Asada) **58** #1735 35P20 (58G15)
- Sjuc, A. See Szűcs, A.
- Šjuc, K. See Schütz, Karin
- Sjullivan, D. See Sullivan, Dennis
- Skaar, S. B. (with Kraige, L. G.) A variation of parameters approach to the arbitrarily torqued, asymmetric rigid body problem. *J. Astronaut. Sci.* **25** (1977), no. 3, 207-226. (J. Ignaczak) **57** #8269 7065
- Škabara, A. S. (with Romanovskii, V. Ju.) Representations of diagrams with one relation. (Russian) *Mathematics collection (Russian)*, pp. 282-285. *Izdat. "Naukova Dumka", Kiev*, 1976. (Sheila Brenner) **58** #11025 16A64 (06A10)
- Skaček, B. Ja. Distribution of the eigenvalues of one dimensional singular differential operators. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 15* (1972), 153-161. (Editors) **58** #6472 34B25 (47E05)
- Distribution of eigenvalues of multidimensional differential operators. (Russian) *Funkcional. Anal. i Priložen.* **9** (1975), no. 1, 83-84. (Boris Pavlov) **52** #3754 (EA 53) 35P20
- (with Volovik, L. N.) A modified algorithm for the solution of the traveling salesman problem. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **16** (1976), no. 5, 1318-1327, 1374. (Józef Grabowski) **58** #9245 90C10 (90C50)
- Skačkov, A. D. Suboptimal solutions for players in high-dimensional matrix games. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 3, 14-21 (Russian); translated as *Engr. Cybernetics* **9** (1971), no. 3, 414-419 (1972). (T. L. Saaty) **46** #6850 90D99
- Skačkov, B. N. The construction of a Ljapunov function for self-regulation systems. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 8, 1454-1461, 1526. (M. I. Imanahiev) **56** #16077 34D20 (93D05)
- Skačkov, N. B. (with Solovcov, I. L.) A relativistic three-dimensional description of two-fermion interaction. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* **9** (1978), no. 1, 5-47. (Z. Janković) **57** #11512 8153
- Skaff, M. S. Vector valued Orlicz spaces generalized N -functions. I. *Pacific J. Math.* **28** (1969), 193-206. (Author's summary) **54** #3395a 46E40 (46E30)
- Vector valued Orlicz spaces. II. *Pacific J. Math.* **28** (1969), 413-430. (Author's summary) **54** #3395b 46E40 (46E30)
- Skagerstam, Bo-Sture K. On the mathematical definition of entropy. *Z. Naturforsch.* **29a** (1974), 1239-1243. (P. N. Rathie) **53** #5168 94A15
- On the notions of entropy and information. *J. Statist. Phys.* **12** (1975), no. 6, 449-462. (Daniel M. Dubois) **52** #16460 8260 (93A15)

- Some remarks concerning the question of localization of elementary particles. *Internat. J. Theoret. Phys.* **15** (1976), no. 3, 213-230. (Gerald A. Goldin) **55** #7194 81.46
- Generalized quantum sine-Gordon equation and its relation to the Thirring model in quantum field theory. *Phys. Rev. D* (3) **13** (1976), no. 10, 2827-2831. (Jorge André Swieca) **58** #4048 81.35
- Stochastic mechanics and dissipative forces. *J. Mathematical Phys.* **18** (1977), no. 2, 308-311. (Ludwig Arnold) **55** #5124 82.60
- Skakauskas, V. I.** The 13-moment system of approximate equations of the aerodynamics of rarefied gases. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 665-668. (J. P. Guiraud) **45** #2982a 76.45
- Conditions for the selection of an unknown solution of the Burnett equations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 883-885. (J. P. Guiraud) **45** #2982b 76.45
- Use of integral representations of the distribution function for obtaining systems of approximate equations of the aerodynamics of rarefied gases. (Russian. English summary) *Vestnik Leningrad. Univ.* **1971**, no. 7, 107-121. (Št. I. Gheorghijă) **45** #1482 76.65 (76.41)
- Certain exact solutions of the Boltzmann equation. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **12** (1972), no. 1, 217-220, 241. (L. A. Mysak) **47** #8056 82.45
- Existence and uniqueness of the solution of an initial-boundary value problem for the kinetic Boltzmann equation in the spatially inhomogeneous case. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **14** (1974), no. 2, 97-107, 253. (From the text) **58** #6992 45K05 (82.45)
- On the question of the existence and uniqueness of the solution of the kinetic equations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **14** (1974), no. 2, 109-113, 253. (Author's summary) **57** #11537 82.45
- Skakova, M. S.** The generalized Riemann-Hilbert problem in a certain singular case. (Russian) *Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. No. 5* (1973), 199-203. (Not reviewed) **30A88**
- Skala, Heinz J.** Nichtstandard-Bestätigungsfunktionen. (English summary) *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes* (Tech. Univ., Prague, 1971; dedicated to the memory of Antonín Špaček), pp. 797-806. *Academia, Prague*, 1973. (L. D. Kugler) **51** #2904 02H20
- Nonstandard utilities and the foundation of game theory. *Internat. J. Game Theory* **3** (1974), 67-81. (A. C. Williams) **51** #5035 90D05
- On the problem of imprecision. *Theory and Decision* **7** (1976), no. 3, 159-170. (D. Driankov) **55** #7741 02C05 (04A05, 93A99)
- Not necessarily additive realizations of comparative probability relations—a basis of decision theory. *Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the Eighth European Meeting of Statisticians* (Tech. Univ. Prague, Prague, 1974), Vol. A, pp. 545-554. *Reidel, Dordrecht*, 1977. (M. I. Gusev) **58** #25867 90A05
- On many-valued logics, fuzzy sets, fuzzy logics and their applications. *Fuzzy Sets and Systems* **1** (1978), no. 2, 129-149. (Anca Pascu) **58** #5040 02C05 (04A99)
- Skala, Helen** Trellis theory. *Algebra Universalis* **1** (1971/72), 218-233. (E. Gedeonová) **46** #1667 06A20 (08A05)
- ★Trellis theory. *Memoirs of the American Mathematical Society*, No. 121. *American Mathematical Society, Providence, R.I.*, 1972. iii + 42 pp. (R. P. Dilworth) **48** #3821 06A20
- A variation of the friendship theorem. *SIAM J. Appl. Math.* **23** (1972), 214-220. (Judith G. Longyear) **51** #10169 05C99
- Grouplike Menger algebras. *Fund. Math.* **79** (1973), no. 3, 199-207. (Gilbert Crombez) **47** #8752 20N15 (08A25)
- Eine neue Methode, die Paradoxien der naiven Mengenlehre zu vermeiden. *Anz. Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **1974**, no. 3, 15-16. (James D. Halpern) **53** #7783 02K15
- An alternative way of avoiding the set-theoretical paradoxes. *Z. Math. Logik Grundlagen Math.* **20** (1974), 233-237. (N. C. A. da Costa) **51** #152 02K15
- Skalak, Francis M.** (with Wang, Chang Yi) On the nonunique solutions of laminar flow through a porous tube or channel. *SIAM J. Appl. Math.* **34** (1978), no. 3, 535-544. (Authors' summary) **58** #19743 76.35
- Skalak, Richard** Extensions of extremum principles for slow viscous flows. *J. Fluid Mech.* **42** (1970), 527-548. (J. Förste (Zbl 218, 538)) **46** #4855 76.49
- Skaleckaja, E. I.** A decomposition of a quasiregular representation of the group $SU(p, q)$ into a direct integral of the representations of the principal series. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **25** (1970), no. 4, 35-38. (J. Gil de Lamadrid) **47** #6947 22E45
- (with Šapiro, A. P.) Optimization of conditions for the exploitation of populations when there is random replenishment. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 2, 312-314. (Colin W. Clark) **56** #8086 92A15 (90C40)
- (with Skaleckii, V. V.) An algorithm for the solution of a sequence of systems of linear equations. (Russian. English summary insert) *Kibernetika (Kiev)* **1978**, no. 1, 114-116. (N. N. Abdelmalek) **58** #3348 65F05
- Skaleckii, A. G.** Sets without the F -property. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 16 Sb. Statei po Nelineinym Operator. Uraun. v Priložen.* (1975), 56-58. (D. Adnadjević) **57** #13904 54H25
- Skaleckii, V. V.** (with Voronov, A. A.; Čistjakov, Ju. V.) Determination of the input distribution in a one-channel queue system. *Problems of Control and Information Theory/Problemy Upravljenija i Teorii Informacii* **3** (1974), no. 3, 197-207; translated as *Problems of Control and Information Theory* (English translation of the Communications in Russian) **3** (1974), no. 3, 1-11. (William Henderson) **53** #11806 60K25
- (with Skaleckaja, E. I.) An algorithm for the solution of a sequence of systems of linear equations. (Russian. English summary insert) *Kibernetika (Kiev)* **1978**, no. 1, 114-116. (N. N. Abdelmalek) **58** #3348 65F05
- Skalikov, A. A.** A certain system of functions. (Russian) *Mat. Zametki* **18** (1975), no. 6, 855-860. (A. Oleviskii) **54** #5732 42A64
- The completeness of the eigen- and associated functions of an ordinary differential operator with nonregular splitting boundary conditions. (Russian) *Funkcional. Anal. i*
- Priložen.* **10** (1976), no. 4, 69-80. (H. I. Freedman) **55** #763 34B25 (47E05)
- (with Orazov, M. B.) The property of being an n -multiple basis of eigenfunctions of certain regular boundary value problems. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 627-639, 717. (Leo F. Boron) **53** #13720 34B25
- Škalikova, N. A.** The complexity of the realization of certain cellular nets. (Russian) *collection of papers on mathematical cybernetics, No. 1* (Russian), pp. 102-115. *Vychisl. Centr. Akad. Nauk SSSR, Moscow*, 1976. (Editors) **58** #33579 94A20
- Skal'ko, L. A.** (with Skurlov, V. M.) The electromagnetic field of a linear radiator that is located inside a parabolic cylinder with apertures. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 152-169. (A. Nikodémusz) **46** #2995 78.35
- Diffraction of a cylindrical wave by a double parabolic cylinder with apertures. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 2, 336-343, 382. (S. Kalish) **56** #14148 78.35
- Skalli, Bernard** (with Bismut, Jean-Michel) Le problème général d'arrêt optimal. (English summary) *C. R. Acad. Sci. Paris, Sér. A-B* **283** (1976), no. 6, 4v, A385-A386. (Author's summary) **54** #14083 60G40
- (with Bismut, Jean-Michel) Temps d'arrêt optimal, théorie générale des processus processus de Markov. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **39** (1977), no. 301-313. (Authors' summary) **58** #31377 60G40 (60J40)
- Skalmierski, Bogdan** (with Tylikowski, Andrzej) Remarks on the subject of the stability systems. (Polish. Russian and English summaries) *Nonlinear vibration problems, No. 1*, pp. 163-174. *PWN-Polish Sci. Publ., Warsaw*, 1972. (V. Komkov) **56** #11423 93E15 (60H10)
- See also *Annuaire: Naissance de Nicolas Copernicus*, **50** #22
- Skalsky, I. P.** (with Lebedev, N. N.) Dual integral equations related to the Kontorovich-Lebedev transform. *Prikl. Mat. Meh.* **38** (1974), no. 6, 1090-1097. (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), no. 6, 1033-1040 (1975). (K. Srivastava) **52** #1214 45F10
- Skalsky, Michael** A note on nonnegative polynomials. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 302-319* (1970), 99-100. (T. S. Chihara) **45** #5292 26A75
- Enumeration of paths in a random walk. *Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of the birth. Math. Balkanica* **3** (1973), 465-471. (V. K. Rohatgi) **50** #11462 60J15 (05A15)
- On a system of orthogonal polynomials of Meizner type. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 498-541* (1975), 115-117. (A. E. Danese) **52** #833A65
- Skandalis, Kostas** Finite lattices of degrees of definability. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 3, 217-219. (Thomas J. Jech) **56** #125 02K05 (02F30)
- Skarabis, Horst** ★Mathematische Grundlagen und praktische Aspekte der Diskriminierung und Klassifikation. *Berichte aus dem Institut für Statistik und Versicherungsmathematik und aus dem Institut für Angewandte Statistik der Freien Universität Berlin, Heft 12. Physica-Verlag, Würzburg*, 1970. v + 76 pp. (H. E. Reinhardt) **49** #6501 62H30
- See also *Owen, Guillermo*, **50** #3957
- Skarbek, W.** (with Zembrzusi, K.) Some properties of continuous machines. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 583-590. (P. C. Gilmore) **47** #2862 68A25
- (with Zembrzusi, K.) Some remarks on relation between 1-machines and k -machines. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 87-90. (Petre Preoteasa) **48** #10715 94A30
- wybraniec-Skardowska, Urszula** See *Wybraniec-Skardowska, Urszula*
- Skarin, V. D.** Estimates in the penalty method for convex programming problems. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr. Akad. Nauk SSSR No. 3 Metody v Nekotorykh Zadačah Optimal. Planirovanija* (1971), 19-31. (See RŽMat **1971** #2 V554) 90C25
- The method of penalty functions for nonlinear programming problems. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 1292-1295. (M. Vlach) **48** #1712 90C30
- The method of penalty functions for nonlinear programming problems. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr. Akad. Nauk SSSR No. 4 Metody Vyp. Programirovanija i Priložen.* (1973), 8-26. (See RŽMat **1974** #2 V642) 90C30
- A modification of the penalty function method in convex programming. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr. Akad. Nauk SSSR No. 5 Nelinej. Optimizacija i Priložen. v Planirovanii* (1973), 51-62, 133. (RŽMat **1974** #2 V642) 57 #11757 90C25
- The method of penalty functions for nonlinear programming problems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 1186-1199, 1363. (J. S. Kowalik) **48** #4886 49D30 (90C30)
- Estimates of deviations for regularized minimax problems. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr. Akad. Nauk SSSR Vyp. 18 Metody Feier. Tipa v Vyp. Programirovanii* (1975), 82-95, 100. (E. G. Gol'shtein) **57** #15456 90C25
- A modification of the penalty function method in convex programming. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Drogobych, 1974), Convex programming (Russian)*, pp. 94-102. *Central. Ekonom.-M. Inst. Akad. Nauk SSSR, Moscow*, 1976. (R. Petrović) **56** #7995 90C25
- On the regularization of minimax problems that arise in convex programming. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 6, 1408-1420, 1626. (Author's summary) **56** #14709 90C25
- Škarka, V.** On the extension of F. Henin's theorem in dynamics of correlations in inhomogeneous gases. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **60** (1974), 1248-1260. (Kubo) **51** #12253 82.62
- Skarynkin, V. S.** (with Strongin, R. G.) Construction and calculation of complete entrance on an electronic computer. (Russian. English summary insert) *Kibernetika (Kiev)* **1978**, no. 4, 99-100. (Authors' summary) **45** #8071 68A50
- Skarzyński, E.** See *Przełęcki, Marian*, **53** #2617
- Skateckii, V. G.** A certain reducible system. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. Fiz.-Mat. Nauki* **1969**, no. 3, 3-5. (Š. Schwabik) **46** #3884 34A30
- A certain theorem of B. P. Demidovič. (Russian) *Differencial'nye Uravnenija*

- 975), no. 5, 835-840, 947. (D. Izjumova) **51** #13378 34D05
Asymptotic stability of the solutions of a certain linear system. (Russian)
Differentsial'nye Uravnenija **13** (1977), no. 5, 956-957, 968. (A. Corduneanu) **58** #1433 34D20
Boundedness and asymptotic stability of the solutions of a second order differential linear system. (Russian. English summary) *Dokl. Akad. Nauk BSSR* **22** (1978), no. 8, 684-686, 763. (M. Bertolino) **58** #22842 34D05
Ebol, L. V. (with Nguyen Quang Duc) Further results on majority-logic decoding of product codes. *IEEE Trans. Information Theory* **IT-18** (1972), 308-310. (G. Solomon) **48** #10651 94A10
Christian, F. Orthogonal measures on the state space of a C^* -algebra. *Algebras in analysis (Proc. Instructional Conf. and NATO Advanced Study Inst., Birmingham, 1973)*, pp. 272-303. Academic Press, London, 1975. (Horst Behncke) **54** #8302 46L05
Finite subalgebras of a von Neumann algebra. *J. Functional Analysis* **25** (1977), no. 3, 211-235. (Jun Tomiyama) **56** #1088 46L10
See also **Algebras in analysis**, **52** #14888
Ivar, (with Selmer, Ernst S.) Some applications of Finn Holme's method for determining $\sum 1/k^2$. (Norwegian. English summary) *Nordisk Mat. Tidskr.* **19** (1971), 120-124, 155. (Authors' summary) **48** #749 40A25
(with Killingbergtrø, Hans Georg) Some formulas that come from a problem in probability theory. (Norwegian. English summary) *Nordisk Mat. Tidskr.* **23** (1975), no. 3-4, 117-131, 146. (P. Holgate) **55** #11332 (EA 55/56) 60C05 (05A19)
el, Robert D. Analysis of fixed-stepsize methods. *SIAM J. Numer. Anal.* **13** (1976), no. 5, 664-685. (H. J. Stetter) **55** #1737 65L05
(with Kong, Antony K.) Blended linear multistep methods. *ACM Trans. Math. Software* **3** (1977), no. 4, 326-345. (R. Leonard Brown) **57** #1904 65L05
(with Jackson, L. W.) Consistency of Nordseick methods. *SIAM J. Numer. Anal.* **14** (1977), no. 5, 910-924. (D. F. Mayers) **56** #13650 65L05
ékely, Béla (with Szepesi, György) Optimal paths of economic growth in a controlled economic system. (Hungarian. English and Russian summaries)
Szigma—Mat.-Közgazdasági Folyóirat **4** (1971), 137-151. (Authors' summary) **45** #1567 90A15
elboe, Stig Computation of rational interval functions. *Nordisk Tidskr. Informationsbehandling (BIT)* **14** (1974), 87-95. (H. Ratschek) **48** #12779 65D15
The control of order and steplength for backward differentiation methods. *Nordisk Tidskr. Informationsbehandling (BIT)* **17** (1977), no. 1, 91-107. (W. H. Enright) **56** #10022 65L05
elencev, T. (with Peičev, G.) Mathematical model for determining the zone of radiovisibility from a transmission point. *C. R. Acad. Bulgare Sci.* **26** (1972), 1387-1390. (K. S. Miller) **48** #10624 94A05
empton, A. W. (with Brown, Joyce) John and Edward Troughton, mathematical instrument makers. *Notes and Records Roy. Soc. London* **27** (1973), no. 2, 233-262. (V. E. Thoren) **55** #10196 01A50 (01A55)
endžić, Marija A certain solution of the nonlinear differential equation for Mikusiński's operator $(W^{(k)}(z))^m = (-1)^{km} W^{p+m}(z)$. (Serbo-Croatian. English summary) *Mat. Vesnik* **10(25)** (1973), 231-236. (Vojislav Marić) **49** #3255 34A05 (44A40)
(with Marić, Vojislav) Unbounded solutions of the generalized Thomas-Fermi equation. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of their birth (Proc. Internat. Conf. on Integral, Differential and Functional Equations (Bled, 1973) in connection with the first centenary of the birth of Josip Plemelj). *Math. Balkanica* **3** (1973), 312-320. (L. E. Bobisud) **50** #7709 34E05
On a solution of the nonlinear differential equation of Mikusiński operators $W'(z) = -s^a(z)W^{p+1}(z)$. *Publ. Inst. Math. (Beograd) (N.S.)* **16(30)** (1973), 135-145. (R. G. Buschman) **50** #10709 44A40
Integral representation of functions of significance for the operational calculus. (Serbo-Croatian. English summary) *Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak.* **3** (1973), 11-21. (B. S. Popov) **49** #7711 44A45
(with Stanković, Bogoljub) On power series in the operators s^a . *Studia Math.* **57** (1976), no. 3, 229-239. (Harris S. Shultz) **55** #997 44A40
See also **Biography: Skendžić, Marija**, **52** #13252
erry, H. B. Mercerian conditions for the method (F, d_n) . *Canad. J. Math.* **23** (1971), 1078-1085. (W. Beekmann) **45** #770 40C15
An inclusion theorem for generalized Lototsky summability methods. *J. Analyse Math.* **25** (1972), 203-216. (J. P. King) **46** #7757 40D25
(with Wilansky, Albert) Inclusion relations between row-finite matrices and triangles. *J. Analyse Math.* **26** (1973), 183-186. (A. Meir) **48** #9164 40D25
On matrix maps of entire sequences. *Pacific J. Math.* **51** (1974), 563-570. (J. P. King) **51** #1194 40C05 (40C15)
erštēna, A. (with Klovks, J.) A certain method of solving the Sturm-Liouville problem for a second order ordinary differential equation. I. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 9 (Russian), pp. 105-116. Izdat. "Zinatne", Riga, 1971. (K. Najzar) **47** #6098 65L10
(with Klovks, J.) A certain method of solving the Sturm-Liouville problem for a second order ordinary differential equation. II. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 12 (Russian), pp. 99-109. Izdat. "Zinatne", Riga, 1973. (K. Najzar) **49** #6625 65L10 (34B05)
Numerical solution of Volterra integral equations of the second kind. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 15 (Russian), pp. 155-168, 234-235. Izdat. "Zinatne", Riga, 1974. (J. Kofroň) **50** #3625 65R05
(with Vasiļev, I. I.; Klovks, J.) ★Дополнительные главы численного анализа. Часть I. Применение полиномов Чебышева в численном анализе. (Russian) [Supplementary chapters in numerical analysis. Part I. Application of Chebyshev polynomials in numerical analysis] *Latvian Gos. Univ., Riga*, 1975. 94 pp. (A. Čotju) **57** #10983 65-01
(with Vasiļev, I. I.; Klovks, J.) ★Дополнительные главы численного анализа. Часть II. Численное решение дифференциальных и интегральных уравнений. (Russian) [Supplementary chapters in numerical analysis. Part II. Numerical solution of differential and integral equations] *Latvian Gos. Univ., Riga*, 1975. 111 pp. (A. Čotju)
- 57** #10984 65-01
A certain method for the solution of a linear differential equation with a singularity. (Russian. Latvian summary) *Latvian mathematical yearbook*, 16 (Russian), pp. 262-267, 276. Izdat. "Zinatne", Riga, 1975. (Authors' summary) **57** #16772 34A30 (65L05)
An application of Chebyshev polynomials to the solution of linear boundary value problems of ordinary differential equations. (Russian) *Latvian Mat. Ežegodnik Vyp.* **20** (1976), 117-125, 213. (E. L. Albasiny) **56** #7219 65L10
The solution of a boundary value problem for a second order differential equation with a nonsummable singularity by the ballistic method. (Russian) *Latvian Mat. Ežegodnik Vyp.* **20** (1976), 126-132, 213. (E. L. Albasiny) **56** #7220 65L10
Approximate calculation of a matrix-valued exponential. (Russian) *Latvian Mat. Ežegodnik Vyp.* **21** (1977), 201-205, 238. **56** #17041 65F30
Skėrus, Stasys (with Jačiauskas, Ignatas) A three person coalition differential game. (Russian. Lithuanian and English summaries) *Lietusk. Mat. Sb.* **11** (1971), 887-898. (R. Petrović) **45** #4848 90D25
(with Jačiauskas, Ignatas) A certain n -person coalition differential game. (Russian. Lithuanian and English summaries) *Lietusk. Mat. Sb.* **13** (1973), no. 2, 163-175, 265. (R. Petrović) **48** #3514 90D25
(with Jačiauskas, Ignatas) Existence of equilibrium situations for linear differential games. (Russian. English summary) *Mat. Metody v Social. Nauk.—Trudy Sem. Processy Optimal. Upravlenija. II Sekcija Vyp.* **2** (1973), 89-94. (Authors' summary) **57** #5142 90D25
(with Jačiauskas, Ignatas) A certain coalition linear differential game. (Russian. Lithuanian and English summaries) *Mat. Metody v Social. Nauk.—Trudy Sem. Processy Optimal. Upravlenija II Sekcija Vyp.* **4** (1974), 57-67. (Authors' summary) **56** #17875 90D25
Skiba, A. N. Strongly saturated formations of finite groups. (Russian. English summary) *Dokl. Akad. Nauk BSSR* **22** (1978), no. 4, 300-302, 379. (S. M. Vovsi) **58** #22297 20D99
Skiba, Ju. N. (with Marčuk, G. I.; Kordzadze, A. A.) Calculation of the basic hydrological fields in the Black Sea. *Izv. Akad. Nauk SSSR Ser. Fiz. Atmosf. i Okeana* **11** (1975), no. 4, 379-393 (Russian); translated as *Izv. Acad. Sci. USSR Atmosf. Ocean Phys.* **11** (1975), no. 4, 229-237. (Editors) **56** #4420 76J65
(with Marčuk, G. I.) Numerical calculation of the conjugate problem for a model of the thermal interaction of the atmosphere with the oceans and continents. *Izv. Akad. Nauk SSSR Ser. Fiz. Atmosf. i Okeana* **12** (1976), no. 5, 459-469 (Russian); translated as *Izv. Acad. Sci. USSR Atmosf. Ocean Phys.* **12** (1976), no. 5, 279-284. (Authors' summary) **56** #10748 86J65
Skiba, N. I. (with Zaharjuta, V. P.) Estimates of the n -widths of certain classes of functions that are analytic on Riemann surfaces. (Russian) *Mat. Zametki* **19** (1976), no. 6, 899-911. (S. V. Hruščev) **54** #7801 30A98
(with Semiguk, O. S.) General bases in certain spaces of analytic functions on Riemann surfaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp.* **26** (1976), 90-95, iii. (I. F. Kušnirčuk) **55** #1051 46E10 (30A98)
Skiba, Yu. N. See **Skiba, Ju. N.**
Skibenko, I. T. (with Popov, V. A.; Mokljak, N. G.) The number of types of systems of k -valued logical functions. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 6, 18-27. (József Pelikán) **51** #55 02C05 (05A15)
(with Popov, V. A.) Enumeration of abstract automata. *Automat. i Telemekh.* **1975**, no. 1, 143-148 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 1, 129-133. (Authors' summary) **56** #8237 94A30
(with Popov, V. A.; Lysenko, Ė. V.; Syčev, A. V.) Synthesis of universal linear transformations. (Russian) *Automat. Sistemy Upravlenija i Pribory Automat. Vyp.* **41** (1977), 50-53, 2. (Authors' summary) **58** #15720 94A20 (93B99)
(with Popov, V. A.) Self-complementary types of the algebra of multivalued functions for self-dual transformations. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 30-32. (A. Salomaa) **58** #5038 02C05 (94A20)
(with Popov, V. A.; Fedorovich, O. E.) Structure functional optimization of control computer systems. *Automat. i Telemekh.* **1978**, no. 5, 173-181 (Russian. English summary); translated as *Automat. Remote Control* **39** (1978), no. 5, part 2, 764-771. (Authors' summary) **58** #19461 68A99 (94A99)
Skibiński, Przemysław On a class of hyperbolic quasiconformal mappings. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **21** (1967), 11-25 (1972). (E. Reich) **49** #573 30A60
Skibinsky, Morris Sharp upper bounds for probability on an interval when the first three moments are known. *Ann. Statist.* **4** (1976), no. 1, 187-213. (J. R. Blum) **52** #12042 60E05
The maximum probability on an interval when the mean and variance are known. *Sankhyā Ser. A* **39** (1977), no. 2, 144-159. (B. K. Ghosh) **58** #18666 60E05 (62E10)
Skibko, N. E. See **Nicolaus Copernicus. On the 500th anniversary of his birth**, **50** #12560
Skidmore, Alexandra (with Leighton, Walter) On the differential equation $y'' + p(x)y = f(x)$. *J. Math. Anal. Appl.* **43** (1973), 46-55. (H. A. DeKleine) **47** #3762 34C10
(with Bowers, John J.) Oscillatory behavior of solutions of $y'' + p(x)y = f(x)$. *J. Math. Anal. Appl.* **49** (1975), 317-323. (H. A. DeKleine) **50** #10438 34C10
Skieplko, Jan On the existence of a magnetogasdynamical shock wave structure with negligible shear viscosity. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **25** (1973), 923-944. (M. Sichel) **52** #2386 76J35
On the existence and uniqueness of magnetohydrodynamical shock wave structures, disregarding thermal conductivity. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **26** (1974), 263-269. (P. Germain) **51** #9654 76J35
Škil', M. I. (with Feščenko, S. F.; Sotničenko, M. A.) The asymptotic representation of the solutions for a system of linear partial differential equations with time lag. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 177-189. (C. V. Coffman) **45** #7320 35R10
(with Grigorenko, V. K.) The formal solutions of a system of linear differential equations with an irregular singular point. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1972**, 29-34, 93. (J. Moravčík) **46** #7611 34A20
(with Grigorenko, V. K.) The general formal solution for a system of differential equations with an irregular singular point. (Ukrainian. English and Russian summaries)

- Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1972, 442-446, 478. (M. Ráb) 46 #9431 34C05 (34A20)
- (with Grigorenko, V. K.) Asymptotic solution of a system of linear partial differential equations in the case of multiple elementary divisors. (Russian) *Ukrain. Mat. Ž.* 24 (1972), 204-217. (Vojislav Marić) 45 #5537 35B40 (35C99)
- (with Grigorenko, V. K.) The formal solutions of a system of linear differential equations with an irregular singular point. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 14* (1972), 26-38, 147. (J. Muszyński) 58 #17267 34A20
- (with Terlec'kii, V. V.) The boundary value problem for a system of ordinary differential equations with a complex parameter. (Russian) *Differentsial'nye Uravneniya* 9 (1973), 660-668, 783. (A. Elbert) 48 #8933 34B05
- (with Pidchenko, Ju. P.) The asymptotic solution of a system of linear differential equations with slowly changing coefficients of neutral type. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1973, 222-226, 286. (M. M. Konstantinov) 47 #5406 34K25 (34A05)
- (with Pidchenko, Ju. P.) On the question of the asymptotic solution of a system of linear differential equations with slowly changing coefficients of neutral type. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1973, 825-829, 862. (D. Bobrowski) 48 #6619 34K25
- (with Grigorenko, V. K.) The asymptotic representation of the solutions of a system of linear differential equations with slowly varying coefficients. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 502-513, 574. (Vojislav Marić) 49 #7541 34E05
- (with Božko, V. O.) The periodic solutions of a system of linear differential equations with a small parameter multiplying the derivatives. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1974, 54-58, 94. (Leo F. Boron) 48 #8976 34C25
- Construction of formal particular solutions of a system of linear differential equations with retarded argument. (Russian) *Ukrain. Mat. Ž.* 26, (1974), 51-60, 141. (K. Smitalová) 49 #5514 34K05
- (with Božko, V. O.) Periodic solutions of systems of linear differential equations of fractional rank. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 16* (1974), 44-56, 174. (Authors' summary) 56 #8992 34C25 (34E05)
- (with Pidchenko, Ju. P.) The approximate solution of a system of linear differential equations of neutral type with slowly varying coefficients. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev) No. 22* (1974), 155-168, 174. (Pavol Marušák) 50 #7733 34K05
- (with Voronoï, O. M.) The asymptotic representation of the solutions of systems of linear integrodifferential equations with a small parameter. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1975, no. 7, 593-596, 668. (S. D. Miluševa) 52 #6351 45J05
- (with Terlec'kii, V. V.) The asymptotic solution of a boundary value problem for a system of ordinary differential equations. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 17* (1975), 38-49, 177. (V. A. Plotnikov) 55 #12994 34B25 (34E05)
- (with Šamanov, Z.) Asymptotic solutions of systems of second order linear differential equations. (Russian) *Approximate methods of mathematical analysis* (Russian), pp. 189-199. Kiev. Gos. Ped. Inst., Kiev, 1976. (A. Elbert) 57 #16870 34E05
- (with Leifura, V. M.) The asymptotic solution of an optimal control problem for systems with slowly varying coefficients. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1976, no. 7, 604-608, 671. (Author's summary) 58 #2539 49B05
- Periodic solutions of systems of linear differential equations with slowly varying coefficients. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 2(165), 79-91. (M. Švec) 57 #13027 34C25
- (with Božko, V. O.) The periodic solutions of a system of first order linear differential equations with a small parameter multiplying the derivatives in the case of multiple and simple elementary divisors. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 1, 123-130, 144. (A. Halanay) 53 #6022 34C25 (34D15)
- (with Voronoï, O. M.) The asymptotic representation of the solutions of a system of linear integrodifferential equations of rational rank. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 2, 222-231, 286. (D. Bainov) 54 #8198 45J05
- (with Fešchenko, S. F.) Asymptotic methods in the theory of linear differential equations with slowly varying coefficients. (Russian) *Problems of the asymptotic theory of nonlinear oscillations* (Russian), pp. 213-219, 279. Naukova Dumka, Kiev, 1977. (Authors' summary) 58 #28923 34E05
- (with Leifura, V. M.) On the question of the asymptotic solution of the problem of the optimal control of systems with slowly varying coefficients in the case of multiple roots. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev) Vyp. 31* (1977), 81-92, 157-158. (Authors' summary) 56 #13075 49D99 (34H05)
- (with Voronoï, O. M.) The construction of an asymptotic solution of a system of linear integro-differential equations of rational rank. (Russian) *Differentsial'nye Uravneniya* 14 (1978), no. 3, 527-539, 575. (M. I. Imanaliev) 57 #13424 45J05
- See also *History of mathematical education in the USSR*, 52 #13176 and *Approximation methods of mathematical analysis*, 56 #15247
- Skilling, J.** The complete set of uniform polyhedra. *Philos. Trans. Roy. Soc. London Ser. A* 278 (1975), 111-135. (1 plate) (H. S. M. Coxeter) 51 #1586 50B30 (20H15)
- Uniform compounds of uniform polyhedra. *Math. Proc. Cambridge Philos. Soc.* 79 (1976), no. 3, 447-457. (J. J. Burckhardt) 53 #1413 52A25
- Skilling, John H.** (with Wolfe, Douglas A.) Testing for ordered alternatives by combining independent distribution-free block statistics. *Comm. Statist.—Theory Methods A6* (1977), no. 15, 1453-1463. (T. P. Hettmansperger) 58 #8013 62G10
- Škil'njak, S. S.** (with Nikitčenko, N. S.) Certain classes of grammars oriented toward analysis by scanning. (Russian) *Theory of languages and processors* (Russian), pp. 65-77. Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev, 1974. (See RŽMat 1975 #4 V857; MR 55 #1859) 68A30
- Syntactic analysis of languages using interrupted contexts. (Russian) *Programirovanie* 1976, no. 3, 22-30, 87. (A. V. Anisimov) 54 #9185 68A30
- Skimel', V. N.** The rigidity property of certain gyroscopic systems. (Russian) *Trudy Kazan. Aviacion. Inst. No. 119* (1970), 70-82. (B. Dolapčiev) 46 #1184 70.34
- On the problem of approximate integrations. (Russian) *Trudy Kazan. Aviacion. Inst. No. 144* (1972), 3-7, 100. (F. M. Pascal) 48 #3328 70.34
- The property of rigidity of motions, and the admissibility of approximate solution (Russian) *Problems in analytical mechanics, stability and control theories* (Second Četa Conf., Kazan, 1973) (Russian), pp. 284-289, 342. Izdat. "Nauka", Moscow, 1975. (Author's summary) 57 #2024 70.34
- Skinner, L. A.** "Shooting technique" for singular perturbations. *SIAM J. Appl. Math.* (1973), 28-31. (R. C. Ackenberg) 49 #4407 76.34
- Škira, V. V.** Universal functions for certain classes of recursive functions and sets (Russian) Mathematical logic, theory of algorithms and theory of sets (dedicated to S. Novikov on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* (1973), 243-250, 276. (Igor Lavrov) 48 #3718 02F20
- Skirmantas, Rimantas** (with Sapagovas, Mifodijus) The error of the calculation of derivatives in the finite difference method. (Russian. Lithuanian and English summaries) *Differentsial'nye Uravneniya i Primeneniye.—Trudy Sem. Processy Optimal. Upravleniya Sekcija Vyp. 17* (1977), 75-97, 101. (G. W. Hedstrom) 57 #8051 65M15
- Skitović, A. V.** Conditions for the occurrence of the problem of center and focus. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 6, 1061-1069, 1156-1157. (Author's summary) 58 #17311 34C05
- Skitović, V. P.** ★Элементы теории массового обслуживания. (Russian) [Elements queueing theory] Izdat. Leningrad. Univ., Leningrad, 1976. 95 pp. (E. Kočetkov) 57 #7810 60K25
- Skjelbred, Tor** (with Chang, Theodore) Group actions on Poincaré duality spaces. *Bull. Amer. Math. Soc.* 78 (1972), 1024-1026. (David Smallen) 46 #6346 55C35
- (with Chang, Theodore) Topological Schur lemma and related results. *Bull. Amer. Math. Soc.* 79 (1973), 1036-1038. (J. A. Schaefer) 48 #12582 57E15 (55F20)
- (with Chang, Theodore) The topological Schur lemma and related results. *Ann. Math. (2)* 100 (1974), 307-321. (G. E. Bredon) 51 #11552 57E15
- (with Allday, Christopher) The Borel formula and the topological splitting principle for torus actions on a Poincaré duality space. *Ann. of Math. (2)* 100 (1974), 322-331. (G. E. Bredon) 51 #11553 57E15
- Integral global weights for torus actions on projective spaces. *Math. Scand.* (1974), 249-253. (J. A. Schaefer) 51 #14125 57E25
- (with Chang, Theodore) Lie group actions on a Cayley projective plane and a new on homogeneous spaces of prime Euler characteristic. *Amer. J. Math.* 98 (1976), no. 655-678. (G. E. Bredon) 55 #1371 57E25
- (with Sund, Terje) Sur la classification des algèbres de Lie nilpotentes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 5, A241-A242. (Authors' summary) 58 #16802 17B30
- (with Ellingsrud, Geir) Profondeur d'anneaux d'invariants en caractéristique p. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 7, A321-A324. (Authors' summary) 57 #12483 13C15 (13F20)
- Skjolingstad, L.** (with Cheung, Y. K.) Three-dimensional field problems by higher order finite elements. *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* 16 (1971), 359-373. (W. Ames) 45 #6202 65N05
- Skliansky, Jack** (with Nahin, Paul J.) A parallel mechanism for recognizing silhouettes. *Information processing 71* (Proc. IFIP Congress, Ljubljana, 1971), Vol. 1: Foundations of systems, pp. 224-228. North-Holland, Amsterdam, 1972. (Wolfgang Böhm) 53 #9751 68A45
- (with Chazin, Robert L.; Hansen, Bruce J.) Minimum-perimeter polygons of digitized silhouettes. *IEEE Trans. Computers C-21* (1972), 260-268. (Authors' summary) 55 #9624 68A45
- (with Nahin, Paul J.) A parallel mechanism for describing silhouettes. *IEEE Trans. Computers C-21* (1972), 1233-1239. (R. L. Kashyap) 49 #11882 68A45
- Measuring concavity on a rectangular mosaic. *IEEE Trans. Computers C-21* (1972), 1355-1364. (Arnold K. Griffith) 48 #12930 68A45
- (with Wassel, Gustav N.) Training a one-dimensional classifier to minimize probability of error. *IEEE Trans. Systems, Man, and Cybernet. SMC-2* (1972), 533-539. (F. W. Stallmann) 48 #7696 68A45
- (with Ramanujam, H. R.) A stopping rule for trainable one-dimensional threshold learning. *IEEE Trans. Systems, Man, and Cybernet. SMC-2* (1972), 553-557. (F. Stallmann) 48 #7693 68A45
- (with Ramanujam, H. R.) A stopping rule for threshold learning. *Internat. Systems Sci.* 4 (1973), 129-148. (K. D. Günther) 48 #3317 68A45
- On filling cellular concavities. *Comput. Graphics and Image Processing* 4 (1975), 3, 236-247. (Stephen H. Y. Hung) 53 #12121 68A45 (94A05)
- (with Cordella, Luigi P.; Levialdi, Stefano) Parallel detection of concavities in cellular blobs. *IEEE Trans. Computers C-25* (1976), no. 2, 187-196. (A. K. Dewdney) 53 #4659 68A45
- (with Kibler, Dennis F.) A theory of nonuniformly digitized binary pictures. *IEEE Trans. Systems Man Cybernet. SMC-6* (1976), no. 9, 637-647. (Allen Klinger) 55 #1341 68A45
- (with Wassel, Gustav N.) An adaptive nonparametric linear classifier. Special is on adaptive systems. *Proc. IEEE* 64 (1976), no. 8, 1162-1171. (R. L. Kashyap) 54 #7078 93E10 (68A45)
- See also *Pattern recognition: introduction and foundations*, 56 #13835
- Sklar, Abe** (with Erber, T.; Schweizer, Berthold) Mixing transformations on metric spaces. *Comm. Math. Phys.* 29 (1973), 311-317. (E. S. Boylan) 48 #2343 28A65
- Random variables, joint distribution functions, and copulas. *Kybernetika (Prague)* (1973), 449-460. (B. Schweizer) 49 #9903 60E05
- (with Schweizer, Berthold) Probabilistic metric spaces determined by measure preserving transformations. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 26 (1973), 235-239. (H. Sherwood) 48 #12623 60B99 (54E35)
- (with Schweizer, Berthold) Operations on distribution functions not derivable from operations on random variables. *Studia Math.* 52 (1974), 43-52. (J. D. Mason) 50 #11377 60E05
- (with Johnson, P.) Recurrence and dispersion under iteration of Čebyšev polynomials. *J. Math. Anal. Appl.* 54 (1976), no. 3, 752-771. (R. L. Adler) 54 #2911 28A65 (41A10)

- (with Schweizer, Berthold) The axiomatic characterization of functions. *Z. Math. Physik Grundlagen Math.* **23** (1977), no. 5, 373-382. (From the introduction) **58** #10441 02J99
- (with Moynihan, R.; Schweizer, Berthold) Inequalities among operations on probability distribution functions. *General inequalities (Proc. First Internat. Conf., Math. es. Inst., Oberwolfach, 1976), I*, pp. 133-149. Birkhäuser, Basel, 1978. (M. Skalsky) **8** #7784 60E05
- Lawrence Absolute space and the metaphysics of theories. *Noûs* **6** (1972), no. 4, 89-109. (V. Ja. Kreinovič) **57** #2446 83J53
- What might be right about the causal theory of time. Hans Reichenbach, logical empiricist. Part V. *Synthese* **35** (1977), no. 2, 155-171. (L. K. Patel) **57** #15174 83J00
- us, N. G. (with Rvačov, V. L.; Kurpa, L. V.; Učišvil, L. A.) ★Метод R-функций в задачах об изгибе и колебаниях пластин сложной формы. (Russian) [The method of R -functions in problems of the bending and oscillations of plates of irregular shape] *Naukova Dumka*, Kiev, 1973. 121 pp. (Editors) **54** #4256 73J35
- adnev, S. A. (with Petunin, Ju. I.) Certain questions on the theory of Fréchet spaces. (Russian) *Voronež. Gos. Univ. Trudy Sem. Funkcional. Anal. Vyp.* **10**, 84-91 (1968). (J. Peetre) **54** #13520 46A15
- The completion of lattice-normed spaces. (Russian) *Voronež. Gos. Univ. Trudy Sem. Funkcional. Anal. Vyp.* **10**, 122-129 (1968). (Ju. A. Abramovič) **53** #14078 46A40
- Metrization of K -spaces. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 108-111. (See RŽMat **1972** #1 B658) 46A40
- Representation of lattice complete KS -lineals. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU No. 3* (1971), 126-131. (Rosalind Reichard) **46** #7848 46A40
- Lattice complete KS -lineals with additive norm. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* **6** (1972), 81-85. (V. Geiler (RŽMat **1973** #3 B596)) **56** #12829 46A40
- See also Collection: Papers by postgraduates in mathematics and mechanics, **47** #4748
- ans'kii, A. L. On the question of applying the method of variation in a pair-wise collision in the generalized three-body problem with variable masses. (Russian) *Approximate and qualitative methods of the theory of differential and integral equations (Russian)*, pp. 282-294. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1971. (E. Leimanis) **51** #9606 70J34
- A generalization of the Lagrange-Jacobi relation. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1971**, 601-605, 668. (B. D. Jovanović) **45** #8079 70J34
- Investigation of conditions under which the energy integral exists in the generalized n -body problem with variable masses. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1972**, 746-749, 767. (Ljubomir Lilov) **47** #2879 70J34
- (with Putjata, T. V.; Fradlin, B. N.) The development of mechanics in the studies of Jurii Dmitrievič Sokolov. (Russian) *Prikladna. Meh.* **8** (1972), no. 4, 136-139. (Editors) **50** #6763 01A70
- Paired collision in the general three body problem with variable masses. (Russian) *Methods of approximate solution of differential and integral equations (Russian)*, pp. 287-304. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1973. (Editors) **58** #3821 70J34
- ar, B. Š. The controllability in classes of very simple functions. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1972**, no. 1, 91-93, 97. (P. Brunovský) **48** #672 34H05
- The minimal number of inputs of a controllable system. (Russian) *Differencial'nye Uravnenija* **9** (1973), 2284, 2304. (I. Muntean) **48** #9523 49E15
- On the problem of the relative controllability of systems with deviating argument of neutral type. (Russian) *Differencial'nye Uravnenija* **10** (1974), 1443-1450, 1540. (M. M. Konstantinov) **57** #5236 93B05
- A certain criterion for the controllability of dynamical systems. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1974**, no. 3, 75-77, 95. (N. N. Petrov) **51** #9874 93B05
- Construction of admissible controls in systems with lags. (Russian) *Differencial and integral equations*, No. 3 (Russian), pp. 276-285, 306. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Author's summary) **58** #33361 93C99
- Controllability in a class of polynomials for systems with retarded argument. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1975**, no. 2, 106-109, 142. (A. Halanay) **56** #2505 93B05
- jar, S. N. Eigenfunction basis for the operator connected with a problem of Sobolev. (Russian) *Dinamika Splošn. Sredy Vyp.* **17** *Bystroprotekajuščie Processy* (1974), 81-88, 117-118. (V. Komkov) **56** #16164 35P05
- Spectral properties of a pencil of differential operators that is connected with a mixed problem. (Russian) *Dinamika Splošn. Sredy Vyp.* **27** *Dinamika Neodnorodn. Židkosti* (1976), 93-100, 161. (Piere Bassanini) **57** #913 35P05
- The completeness of the system of eigenfunctions of an operator that is connected with a mixed problem. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 6, 1381-1392, 1437. (V. V. Kovrižkin) **58** #1731 35P10
- The basis of eigenfunctions of a pencil of differential operators. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 1, 161-171, 238. (J. B. Butler, Jr.) **57** #6888 35P10
- arenko, E. G. On Hilbert's fifth problem. (Russian) *Hilbert's problems (Russian)*, pp. 101-115. *Izdat. "Nauka", Moscow*, 1969. (Editors) **58** #16938 22-01
- On the theory of generalized manifolds. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **35** (1971), 831-843. (Y. Kodama) **45** #1170 55C05 (57B10)
- (with Aleksandrov, P. S.; Efimov, N. V.) In memoriam Lev Abramovič Tumarkin. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 3(183), 151-153. (1 plate) (Editors) **52** #7785 01A70
- Pure and finitely presentable modules, duality homomorphisms and the property of coherence of a ring. (Russian) *Mat. Sb. (N.S.)* **105(147)** (1978), no. 2, 192-206, 287. (E. Enochs) **57** #9757 16A62
- Relative homological algebra in the category of modules. (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 3(201), 85-120. (L. Bican) **58** #16777 16A62
- See also Die Hilbertschen Probleme, **49** #10488
- arenko, V. A. Certain properties of the P^2 -primitive. (Russian) *Mat. Zametki* **12** (1972), 693-700. (J. Mařík) **47** #8785 26A39
- Denjoy integrable sums of everywhere convergent trigonometric series. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 533-536. (J. Musielak) **49** #5679 42A20 (26A39)
- Škljarevič, A. N. (with Hripkov, N. N.) The general case of computation of the mean reaction of a linear stationary system with a possible disturbance to a given input. (Russian) *Avtomat. i Vyčisl. Tehn.* **1969**, no. 4, 36-42. (RŽKibernet **1970** #1 G111) **45** #9741 93C05
- A method of determining a scheme of operation of combinational automaton during the appearance of a complex of defects. (Russian) *Avtomat. i Vyčisl. Tehn.* **1969**, no. 5, 30-36. (Author's summary) **45** #9857 94A30
- A structural method of determination of the logical scheme of a differentiating automaton. (Russian) *Avtomat. i Vyčisl. Tehn.* **1969**, no. 6, 13-17. (G. Blohina (RŽMat **1970** #7 V353)) **45** #9858 94A30
- Mean response of a dynamical system with possible disturbances to a given input. (Russian) *Avtomat. i Vyčisl. Tehn.* **1970**, no. 2, 54-61. (Author's summary) **45** #1631 93B99
- A function for testing the working order of the logical element of a combinational automaton. (Russian) *Avtomat. i Vyčisl. Tehn.* **1970**, no. 3, 55-61. (Editors) **45** #8429 94A20
- Tests for the complete logical check-up of a repetition-free combination automaton. (Russian) *Avtomat. i Vyčisl. Tehn.* **1972**, no. 1, 24-31. (Author's summary) **46** #3242 94A30
- Diagnostic possibilities of a testing sequence. (Russian) *Avtomat. i Vyčisl. Tehn.* **1972**, no. 3, 42-46. (M. Tetruašvili) **47** #1560 94A30
- ★Введение в статистическую динамику систем с возможными нарушениями. (Russian) [Introduction to the statistical dynamics of systems with possible failures] *Izdat. "Zinatne", Riga*, 1973. 258 pp. (Ivar Petersen) **50** #6588 93C05 (90B25)
- ★Введение в статистическую динамику систем с возможными нарушениями. (Russian) [Introduction to the statistical dynamics of systems with possible defects] *Izdat. "Zinatne", Riga*, 1973. 258 pp. (Editors) **54** #14815 93-01
- (with Denisenko, O. S.) Diagnostic capabilities of a test for an inertia automaton. (Russian) *Theory of finite automata and its applications*, No. 1 (Russian), pp. 47-63, 65. *Izdat. "Zinatne", Riga*, 1973. (M. Tetruašvili) **51** #15244 94A30
- Tests for a complete logical check of a combination automaton with branching of the input signal. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1973**, no. 3, 21-28. (F. Gécség) **48** #3652 94A30
- Control tests for an automaton with branching of two signals. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1973**, no. 6, 29-36. (I. Meznik) **50** #4171 94A30
- (with Denisenko, O. S.; Jadina, V. F.) Testing of combinational schemes with ramifications. (Russian) *Theory of finite automata and its applications*, No. 3 (Russian), pp. 5-18, 78. *Izdat. "Zinatne", Riga*, 1974. (Authors' summary) **54** #12398 94A20
- (with Denisenko, O. S.) A test that checks the regularity of operation of a memory element at individual failures. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1974**, no. 6, 11-19. (Authors' summary) **56** #15238 94A30
- ★Линейные системы с возможными нарушениями. (Russian) [Linear systems with possible break-downs] *Izdat. "Nauka", Moscow*, 1975. 351 pp. (Bojan Popović) **57** #15630 93C05
- ★Логические методы проверки комбинационных автоматов. (Russian) [Logical methods for testing combinatorial automata] *Izdat. "Zinatne", Riga*, 1975. 198 pp. (Bolesław Mikołajczak) **58** #4698 94A20
- See also Questions of the reliability of discrete automata, **47** #6136
- Škljarov, L. I. (with Rvačov, V. L.) A predicate description of domains of a complex form. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 3, 59-62. (Authors' summary) **45** #8482 68A30
- (with Dorohov, V. O.) A certain approximate solution of boundary value problems. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1974**, 103-106, 187. (Authors' summary) **58** #31813 65J05
- (with Rvačov, V. L.) A difference-analytic method for finding the indeterminate components of structural formulas for solutions of boundary value problems. (Russian) *Methods for the quantitative and qualitative study of differential and integral equations (Russian)*, pp. 139-146. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1975. **56** #10071 65N99
- (with Rvačov, V. L.; Tonica, V. S.) The closing functions of three-valued logic. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 6, 499-502, 574. (M. Stojaković) **54** #2418 02C05 (02J05)
- Škljarov, V. A. An algebraic method for the synthesis of logic diagrams. (Russian) *Avtomat. i Vyčisl. Tehnika (Minsk)* **No. 7** (1977), 139-148, 7-8. (Author's summary) **58** #26585 94A20
- Škljarskii, D. O. (with Čencov, N. N.; Jaglom, I. M.) ★Геометрические оценки и задачи из комбинаторной геометрии. (Russian) [Geometrical estimates and problems from combinatorial geometry] With a preface by I. M. Jaglom. Библиотека Математического Кружка, Вып. 13. [Library of the Mathematical Circle, No. 13] *Izdat. "Nauka", Moscow*, 1974. 383 pp. (Editors) **52** #15205 50-01
- Šklover, M. D. The simulation of a certain class of random fields. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 425-427. (József Pergel) **47** #7890 65C10
- Sklovskaja, I. L. (with Babskii, V. G.) On convection onset in a self-gravitating fluid sphere with internal heating. *Prikl. Mat. Meh.* **35** (1971), 1000-1014 (Russian); translated as *J. Appl. Math. Mech.* **35** (1971), 951-965, (1972). (E. G. Broadbent) **48** #12985 76J35
- Šklovskii, A. I. Certain questions of graphic regularity. (Russian. English summary) *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **20** (1971), 272-281, 290. (P. Gács) **55** #8486 (E **48** #5808) 68A30
- Skobel'cyn, Ju. A. (with Kosmačev, P. P.; Afanas'eva, S. S.) Lateral discharge of a fluid from a flow through a nozzle. (Russian) *Methods of the theory of analytic functions (Russian)*, pp. 3-8. *Severo-Oset. Gos. Univ., Ordzhonikidze*, 1974. (Not reviewed) 76J30
- Skobel'cyn, D. V. Paradoxes of the quantum theory of the Vavilov-Cerenkov and Doppler effects. *Uspehi Fiz. Nauk* **122** (1977), no. 2, 295-324 (Russian); translated as *Soviet Physics Uspekhi* **20** (1977), no. 6, 528-545. (Brian DeFacio) **57** #11458a 81J35

- See also Group-theoretical methods in physics, 48 #13038; Ginzburg, V. L., 57 #11458b and Group theoretical methods in physics, 57 #18522
- Skobelev, V. G.** (with Bogomolov, A. M.) An algorithm for the solution of prediction and homing problems with an automaton. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 6, 1-6. (Authors' summary) 57 #19110 94A20 (68A20)
- Skobel'syn, D. V.** See Skobel'cyn, D. V.
- Skolija, N. S.** (with Krylov, V. I.) ★Handbook of numerical inversion of Laplace transforms. Translated from the Russian by D. Louvish. *Israel Program for Scientific Translations, Jerusalem*, 1969. v+293 pp. (Editors) 52 #12302 65D30 (44A10, 65A05)
- (with Gončar, T. V.; Janovič, L. A.) Cubature formulae for integrals over a domain of functions of a complex variable. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1971, no. 2, 36-42. (J. B. Butler, Jr.) 45 #1387 65D30
- (with Metel'skiĭ, A. S.; Abrašin, V. N.) Vladimir Ivanovič Krylov (on the occasion of his seventieth birthday). (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1972, no. 6, 127-128. 48 #3680 01A70
- (with Krylov, V. I.) ★Методы приближенного преобразования Фурье и обращения преобразования Лапласа. (Russian) [Approximation methods for the Fourier transform and inversion of the Laplace transform] *Izdat. "Nauka", Moscow*, 1974. 223 pp. (See Zbl 304 #42024) 44A10 (42A68)
- (with Krylov, V. I.) ★A handbook of methods of approximate Fourier transformation and inversion of the Laplace transformation. Translated from the Russian by George Yankovsky. *Mir Publishers, Moscow*, 1977. 271 pp. (Y. L. Luke) 58 #2043 44A10 (65D20)
- Skoda, Henri** Solution à croissance du second problème de Cousin dans \mathbb{C}^n . (English summary) *Ann. Inst. Fourier (Grenoble)* 21 (1971), no. 1, 11-23. (J. Kajiwara) 45 #588 58G05 (35N15)
- Système fini ou infini de générateurs dans un espace de fonctions holomorphes avec poids. *C. R. Acad. Sci. Paris Sér. A-B* 273 (1971), A389-A392. (G. Trautmann (Zbl 232 #32008)) 47 #8906 32E25 (32F15)
- Croissance des fonctions entières s'annulant sur une hypersurface donnée de \mathbb{C}^n . *Séminaire Pierre Lelong (Analyse) (année 1970-1971)*, pp. 82-105. *Lecture Notes in Math., Vol. 275, Springer, Berlin*, 1972. (Author's introduction) 57 #16654 32A15
- Application des techniques L^2 à la théorie des idéaux d'une algèbre de fonctions holomorphes avec poids. *Ann. Sci. École Norm. Sup. (4)* 5 (1972), 545-579. (M. Hervé) 48 #11571 32F05 (46J15)
- Sous-ensembles analytiques d'ordre fini ou infini dans \mathbb{C}^n . *Bull. Soc. Math. France* 100 (1972), 353-408. (A. Hirschowitz) 50 #5004 (EA 51) 32C25
- Croissance des fonctions entières s'annulant sur un sous-ensemble analytique de \mathbb{C}^n . *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A1347-A1350. (R. O. Kujala) 46 #388 32A15 (32C25)
- Formulation hilbertienne du nullstellensatz dans les algèbres de fonctions holomorphes. *L'analyse harmonique dans le domaine complexe (Actes Table Ronde Internat., Centre Nat. Recherche Sci., Montpellier, 1972)*, pp. 95-103. *Lecture Notes in Math., Vol. 336, Springer, Berlin*, 1973. (Lawrence Gruman) 52 #11114 32E25
- Sous-ensembles analytiques d'ordre fini ou infini dans \mathbb{C}^n . *Fonctions analytiques de plusieurs variables et analyse complexe (Colloq. Internat. CNRS, No. 208, Paris, 1972)*, pp. 235. "Agora Mathematica", No. 1, Gauthier-Villars, Paris, 1974. (From the author's text) 57 #698 32C25
- Nouvelle méthode pour l'étude des potentiels associés aux ensembles analytiques. *Séminaire Pierre Lelong (Analyse), Année 1972-1973*, pp. 117-141. *Lecture Notes in Math., Vol. 410, Springer, Berlin*, 1974. (F. Gherardelli) 54 #7840 32C25
- (with Briançon, Joël) Sur la clôture intégrale d'un idéal de germes de fonctions holomorphes en un point de \mathbb{C}^n . *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 949-951. (J. Stutz) 49 #5394 32B10 (58C25)
- Valeurs au bord pour les solutions de l'opérateur d'' dans les ouverts strictement pseudoconvexes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A633-A636. (R. Michael Range) 51 #8466 32F15 (35N10)
- Zéros des fonctions de la classe de Nevanlinna dans les ouverts strictement pseudoconvexes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 24, A1677-A1680. (R. Michael Range) 52 #6020 32C25 (32F15)
- Boundary values for the solutions of the $\bar{\partial}$ -equation and application to the Nevanlinna class. *Spaces of analytic functions (Sem. Functional Anal. and Function Theory, Kristiansand, 1975)*, pp. 166-179. *Lecture Notes in Math., Vol. 512, Springer, Berlin*, 1976. (G. Laville (Zbl 338 #35067)) 58 #28673 32F15 (35N15)
- Valeurs au bord pour les solutions de l'opérateur d'' , et caractérisation des zéros des fonctions de la classe de Nevanlinna. *Bull. Soc. Math. France* 104 (1976), no. 3, 225-299. (R. Michael Range) 56 #8913 32F15
- Estimations L^2 pour l'opérateur $\bar{\partial}$ et applications arithmétiques. *Journées sur les Fonctions Analytiques (Toulouse, 1976)*, pp. 314-323. *Lecture Notes in Math., Vol. 578, Springer, Berlin*, 1977. (Michel Waldschmidt) 57 #716 32F05 (10F35)
- Fibrés holomorphes à base et à fibre de Stein. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 19, A1199-A1202. (Author's summary) 55 #10724 32E10 (32L05)
- Fibrés holomorphes à base et à fibre de Stein. *Invent. Math.* 43 (1977), no. 2, 97-107. (Author's review (Zbl 365 #32018)) 58 #22657 32E10
- Skodrov, V. G.** (with Batrakov, Ju. V.) Errors in numerical methods for the estimation of integrals that determine the coefficients of the gravitation field of a planet. (Russian. English summary) *Bjull. Inst. Teoret. Astronom.* 14, no. 3 (156), 145-153 (1975). (Authors' summary) 57 #15281 85.65 (65D30)
- The determination of the external potential of a planet from the known absolute values of the anomaly vector of the force of gravity. (Russian) *C. R. Acad. Bulgare Sci.* 29 (1976), no. 10, 1417-1419. (George V. Demidov) 56 #2189 86.31
- Skodrov, VI.** An integral whose subintegral function is the product of associated Legendre functions. (Russian) *C. R. Acad. Bulgare Sci.* 24 (1971), 1293-1295. (J. Lawrynowicz) 45 #1503 81.33 (33A45)
- Skof, Fulvia** ★Criteri sufficienti di completa additività per le funzioni aritmetiche. *Tamburini Editore, Milan*, 1969. i+19 pp. (J. Kubilius) 51 #3040 10A20 (10L10)
- Alcuni critere per la forma $c \log n$ delle funzioni aritmetiche additive. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 106 (1972), 847-862. (Henri Joris) 48 #8415 10H25
- Intorno a un problema di P. Erdős. (English summary) *Rend. Sem. Mat. Univ. Politec. Torino* 32 (1973/74), 499-506 (1975). (L. Carlitz) 51 #10208 10A20
- Qualche osservazione sulle successioni di interi aventi densità 1 oppure 0. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* 35 (1976/77), 391-395 (1978). (From the text) 58 #27884 10L10
- Teoremi di punto fisso per applicazioni negli spazi metrici. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 111 (1977), no. 3-4, 323-329. (B. Margolis) 58 #2780 54H25
- Proprietà di densità delle successioni e forma $c \log n$ delle funzioni aritmetiche additive. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 111 (1977), no. 5-6, 503-511. (Author's summary) 58 #22008 10L10
- Densità, misura, equidistribuzione delle successioni di interi e proprietà delle funzioni aritmetiche additive. (English summary) *Rend. Mat. (6)* 10 (1977), no. 607-616. (J. Kubilius) 58 #10692 10A20
- Skokov, V. A.** A certain numerical experiment for solving nonlinear programming problems. (Russian) *Mathematical methods for the solution of economic problems, No. (Suppl. to Ekonom. i Mat. Metody) (Russian)*, pp. 51-69. *Izdat. "Nauka", Moscow*, 1977. (From the introduction) 58 #9283 90C30 (65K05)
- Skolenok, G. A.** Curves of order three and their classification in the early works of Isaac Newton (1664-1668). (Russian) *History and methodology of the natural sciences, No. XIV: Mathematics, mechanics (Russian)*, pp. 206-224. *Izdat. Moskov. Univ., Moscow*, 1973. (Author's review (Zbl 291 #01017)) 58 #21146 01A45 (14-03)
- Skölleremo, Anders** (with Skölleremo, Gunilla) A Fourier analysis of some difference schemes for the Laplace equation in a system of rotational symmetry. *J. Comput. Phys.* 28 (1978), no. 1, 103-114. (Authors' summary) 58 #19211 65N20
- Skölleremo, Gunilla** A Fourier method for the numerical solution of Poisson's equation. *Math. Comput.* 29 (1975), 697-711. (Pierre Hillion) 51 #7317 65N10
- (with Skölleremo, Anders) A Fourier analysis of some difference schemes for the Laplace equation in a system of rotational symmetry. *J. Comput. Phys.* 28 (1978), no. 1, 103-114. (Authors' summary) 58 #19211 65N20
- Skolnick, M. H.** (with Cannings, C.) Genetic drift in exogamous marriage systems. *Theoret. Population Biol.* 7 (1975), 39-54. (From the authors' introduction) 54 #9715 92A10
- (with Cannings, C.; Thompson, E. A.) Probability functions on complex pedigree. *Advances in Appl. Probability* 10 (1978), no. 1, 26-61. (Jon Stene) 58 #9399 92A10
- Škol'nikov, P. L.** (with Stražev, V. I.) The Lagrangian formulation of dually symmetric classical electrodynamics. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 3, 80-84, 141. (J. Lawrynowicz) 54 #6695 78.35
- (with Stražev, V. I.) The isomorphism of transformations of the Gürsey group and the $O(3,1)$ group. (Russian. English summary) *Comm. Partial Differential Equations* (1978), no. 10, 608-611, 668. (Authors' summary) 58 #25496 81.22 (22E70)
- Škol'nyi, E. I.** (with Šneps-Šnepe, M. A.) On the accuracy of statistical simulation queueing systems described by semi-Markov birth-and-death processes. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 5, 60-65 (Russian); translated as *Engng. Cybernetics* 11 (1973), no. 5, 762-766. (Jozef L. Teugels) 50 #11528 60K25
- Algorithms for the computation of moments of statistics of commutation system that are described by semi-Markov birth and death processes. (Russian) *Methods teletraffic theory in information distribution systems (Russian)*, pp. 108-119. *Izdat. "Nauka", Moscow*, 1975. (From the introduction) 58 #18790 60K25
- Estimates of the loss probabilities for a queueing system with repeated calls. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1977, no. 2, 95-99, 221 (Russian); translated as *Engng. Cybernet.* 15 (1977), no. 2, 74-78 (1978). (U. Narayan Bhat) 57 #17884 60K25
- Skomaha, L. N.** A singular integral equation with infinite index for the case of an analytic kernel. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 16 (1976), no. 161-177, 236. (S. G. Samko) 54 #8188 45E05
- Skomorohin, A. Ja.** (with Bojdecki, Tomasz; Loś, Jerzy; Zabczyk, Jerzy) Some properties of ordered finite-dimensional spaces. *Mathematical models in economics (Proc. Symp. and Conf. von Neumann Models, Warsaw, 1972)*, pp. 315-327. *North-Holland, Amsterdam*, 1974. (H. J. Biesterfeldt, Jr.) 51 #13627 (E 51 #13628) 46A40
- See also Klee, Victor, 51 #13628 and Pełczyński, A., 57 #1087
- Skoog, R. A.** (with Brockett, Roger W.) A new perturbation theory for the synthesis of nonlinear networks. *Mathematical aspects of electrical network analysis (Proc. SIAM-AMS Sympos. Appl. Math., New York, 1969)*, pp. 17-33. *SIAM-AMS Proc., III, Amer. Math. Soc., Providence, R.I.*, 1971. (R. Saeks) 48 #13486 94A20
- Skoog, Ronald A.** (with Willems, Jan C.) Orthogonality, positive operators, and the frequency-power formulas. *Quart. Appl. Math.* 29 (1971/72), 341-361. (H. Burkhardt) 54 #8141 42A84 (94A15)
- (with Lau, Clifford G. Y.) Instability of slowly varying systems. *IEEE Trans. Automatic Control* AC-17 (1972), 86-92. (J. Warga) 49 #748 34D05
- Some results concerning time-varying networks having a time-invariant terminal behavior. *IEEE Trans. Circuit Theory* CT-19 (1972), 48-52. (Author's summary) 56 #11625 94A20
- On dynamical systems realizing stationary weighting patterns and time-varying feedback systems. *SIAM J. Control* 10 (1972), 48-55. (Š. Schwabik) 46 #6878 93C15
- Positivity conditions and instability criteria for feedback systems. *SIAM J. Control* 12 (1974), 83-98. (N. Harris McClamroch) 52 #5135 93D10
- Skopec, R. Z.** A mapping of six-dimensional affine space onto an affine 3-plane. (Russian. English summary) *Geometrija i topologija, No. 1 (Russian)*, pp. 126-131. *Leningrad. Gos. Ped. Inst. im. Gercena, Leningrad*, 1974. (K. Burian) 54 #328 14N05
- Construction of a plane model of five-dimensional projective space P^5 by means of the Segre variety V_3^2 . (Russian) *Geometrija i topologija, No. 1 (Russian)*, pp. 132-137. *Leningrad. Gos. Ped. Inst. im. Gercena, Leningrad*, 1974. (K. Burian) 54 #329 14N05
- Skopec, Zalman** (with Eneva, Gergana) Construction of a plane model of four-dimensional projective space by the isotropic projection of a norm surface of order three. (Russian. German summary) *Annuaire Univ. Sofia Fac. Math.* 62 (1967/68), 243-260 (1968). (Authors' summary) 45 #1030 50D20
- (with Asekritov, U. M.) A new representation of Burmester's curve. (Russian. Czech summary) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 61 Geometrija* (1967), 126-137. (E. J.

- rimrose) 51 #6567 50D15
(with Kazakova, G. G.) A cyclographic representation of a non-Euclidean four-space on the plane, and Lie circular transformations. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 61 Geometrija* (1967), 138-151. (M. C. Chaki) 51 #8939 50C25
(with Sumilov, A. N.) A constructive method for obtaining a Laguerre transformation on the Lobačevskii plane. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 61 Geometrija* (1967), 152-159. (J. B. Pavliček) 54 #8430 50C05
A two-dimensional circular model of Euclidean four-space on the Euclidean plane. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 83 Geometrija* (1971), 120-132. (V. Medek) 52 #11724 50D15
(with Kuznecova, V. A.; Nosik, R. G.) On the question of the double lines of an affine transformation. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 83 Geometrija* (1971), 133-143. (J. C. Fisher) 52 #11723 50D05
(with Peklič, V. A.) Symplectic geometry, and Lie circular transformations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 1(128), 91-98. (E. J. F. Primeau) 48 #7113 50D45
(with Muran, K. V.) A mapping of three-dimensional projective space onto the plane by means of a second order line congruence of class one. (Russian) *Geometry and topology*, No. 1 (Russian), pp. 104-108. *Leningrad. Gos. Ped. Inst. im. Gercena, Leningrad*, 1974. (B. Orbán) 54 #7464 14E05 (14N05)
(with Kuznecova, V. A.) A mapping of the straight lines of the space P_4 onto the plane into twice punctured conics with a fixed point. (Russian) *Geometry and topology*, No. 1 (Russian), pp. 119-125. *Leningrad. Gos. Ped. Inst. im. Gercena, Leningrad*, 1974. (W. Burau) 54 #327 14N05
See also Žarov, V. A.; et al., 54 #12458
Peklič, V. V. (with Ljaško, I. I.; Sergienko, I. V.; Misteckii, G. E.) ★Вопросы автоматизации решения задач фильтрации на ЭВМ. (Russian) [Questions on the automation of the solution of filtration problems on an electronic computer] *Izdat. "Naukova Dumka", Kiev*, 1977. 287 pp. (V. Komkov) 57 #1828 65Dxx
(with Sergienko, I. V.) Problems on the study of data processing systems and the improvement of their efficiency. (Russian. English summary) *Kibernetika (Kiev)* 1977, no. 6, 61-72, 150. (Authors' summary) 58 #25189 68A99
See also Mathematical physics, 48 #5768
Piec, J. (with Jędrzejewski, Jacek Marek) On a mathematical model of a heat exchange process in conductors. (Polish summary) *Zastos. Mat.* 14 (1974), 403-413. (R. S. Levitin) 50 #15612 80.34
Pin, A. I. Certain finite groups. (Russian) Modules and homology in group theory and Galois theory. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 31 (1973), 115-139. (Sergei A. Šyskin) 48 #8639 20F15
The Jacobi identity for groups. (Russian) Modules and representations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 46 (1974), 53-58, 140-141. (J. Wiegold) 51 #726 20F35
The collecting formula. (Russian) Modules and representations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 46 (1974), 59-63, 141. (J. Wiegold) 51 #727 20F35
Relations in groups of exponent 8. (Russian) Modules in representation theory and algebraic geometry. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 57 (1976), 129-169, 178. (L. Bokut') 57 #3267 20F40 (20F05)
(with Lobyč, V. P.) Relations in groups of exponent 8. II. (Russian) Rings and modules. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 64 (1976), 92-94, 161. (L. Bokut') 57 #3268 20F40 (20F05)
Transmetabelian groups. (Russian) Rings and linear groups. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 75 (1978), 159-163, 198. (See RŽMat 1978 #12 A328) 20K99
See also Serre, Jean-Pierre, 50 #4527; Modules in representation theory and algebraic geometry, 54 #10339; Rings and modules, 55 #2866; Modules and homology in group theory and Galois theory, 56 #8717 and Modules and representations, 56 #11977
Pin, V. I. (with Artjuhina, N. I.) Establishment of couplings in one-way switching systems with a restricted number of simultaneous couplings. (Russian) *Problems on the distribution of information* (Russian), pp. 133-143, 196. *Izdat. "Nauka", Moscow*, 1973. (Authors' summary) 51 #15201 94A20
Pin, V. S. (with Kryžanovskii, I. A.; Pletn'ova, T. G.; Eidel'man, S. D.) A closed solution of an integral equation that arises in the technology of magnetic sound recording. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 1593-1595, 1631. (Stefan Balint) 51 #6318 45E10 (30A88)
Pordov, Dimit'r The continuity of certain functionals and the closedness of certain cones. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* 64 (1969/70), 209-212 (1971). (loose errata) (J. Benkö) 46 #7833 46A05
Linear operators with sufficiently many preassigned eigenvectors. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* 10 (1969), 239-271. (loose errata) (S. Kurepa) 45 #7502 47A65 (46A15)
On Turing computable operators. (Russian summary) *Annuaire Univ. Sofia Fac. Math. Méc.* 67 (1972/73), 103-112 (1976). (John P. Helm) 55 #12497 02F99
A remark on integration theory. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* 67 (1972/73), 165-167 (1976). (O. Costinescu) 55 #3204 28A25
Indecomposable elements in the sense of Ja. Tagamickii. (Russian) *Math. Balkanica* 2 (1972), 212-214. (E. Halfar) 48 #2993 54D05
Some examples of universal functions that are recursively definable by means of small systems of inequalities. (Russian) *Studies in the theory of algorithms and mathematical logic*, Vol. I (Russian), pp. 134-177. *Vyčisl. Centr Akad. Nauk SSSR, Moscow*, 1973. (Max I. Kanovič) 49 #2312 02F20 (02E10)
(with Petkov, P.) Andrei Andreevič Markov, on the occasion of his 70th birthday. (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* 16(49) (1973), 312-315. (Editors) 53 #58 01A70
Recursively complete operations on words. (Russian) *C. R. Acad. Bulgare Sci.* 27 (1974), 449-452. (Igor Lavrov) 49 #8833 02F20 (02E15)
A certain generalization of the theory of recursive functions. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), 1079-1082. (G. Asser) 54 #7230 02F27
Set-valued functions of several variables. (Russian) *C. R. Acad. Bulgare Sci.* 28 (1975), no. 7, 885-888. (D. Kurepa) 52 #5423 04A05
Some topological examples of iterative combinatorial spaces. (Russian) *C. R. Acad. Bulgare Sci.* 28 (1975), no. 12, 1575-1578. (Igor Lavrov) 55 #7754 02F27
Some methods for building up the theory of recursive functions. (Bulgarian) *Mathematics and mathematical education (Proc. Third Spring Conf. Bulg. Math. Soc., Burgas, 1974)* (Bulgarian), pp. 41-53, *B"lgar. Akad. Nauk, Sofia*, 1976. (See Zbl 369 #02022) 02F20
Recursion theory on iterative combinatorial spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 1, 23-31. (John P. Helm) 54 #4950 02F43 (02F27)
Certain combinatorial spaces that are connected with the complexity of data processing. (Russian) *C. R. Acad. Bulgare Sci.* 29 (1976), no. 1, 7-10. (A. S. Kuzičev) 53 #12905 02F10 (02C20, 68A20, 94A35)
The partial order on the set C in combinatorial spaces. (Russian) *C. R. Acad. Bulgare Sci.* 29 (1976), no. 2, 151-154. (A. S. Kuzičev) 53 #12892 02C20
Some models of combinatorial logic. (Russian) *Mat. Zametki* 19 (1976), no. 1, 149-154. (A. S. Kuzičev) 53 #12893 02C20
The concept of search computability from the point of view of the theory of combinatorial spaces. (Russian) *Serdica* 2 (1976), no. 4, 343-349. (A. S. Kuzičev) 57 #2894 02F27
Simplification of some definitions in the theory of combinatorial spaces. *C. R. Acad. Bulgare Sci.* 30 (1977), no. 7, 947-950. (A. S. Kuzičev) 58 #5084 02C20
Skordev, Genčo S. (with Hadžiivanov, Nikola G.) The homotopy properties of a certain space. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* 64 (1969/70), 17-22 (1971). (R. Engelking) 46 #4460 54C15
On the theorem of Hurewicz. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* 65 (1970/71), 1-6 (1972). (errata insert) (S. Mardešić) 48 #3025 54F45
Cohomology of bicomact A -AR and A -ANR spaces. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* 66 (1971/72), 1-5 (1974). (D. Baladze) 53 #14472 55C15
The resolvents that correspond to a closed mapping. (Russian) *Mat. Sb. (N.S.)* 86(128) (1971), 234-247. (Y. Kodama) 45 #1157 55B30
Rouché's theorem. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* 67 (1972/73), 1-6 (1976). (I. Ivanšić) 55 #4199 57D25 (57C05)
Fixed points of acyclic mappings. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* 67 (1972/73), 7-18 (1976). (Ju. G. Borisovič) 54 #11313 55C20
Equivariant multivalued mappings of a sphere. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* 67 (1972/73), 113-137 (1976). (Christian Fenske) 54 #11314 55C20
The degree of an equivariant acyclic mapping of a sphere. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* 67 (1972/73), 139-164 (1976). (L. Gorniewicz) 55 #4151 55C25
Fixed points of continuous mappings of bicomact A -ANR spaces. (Russian. English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 173-180. (L. Gorniewicz) 47 #9602 54H25
On AANR spaces. (Russian. English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 1123-1130. (C. R. Borges) 49 #1469 54C55
Fixed points of multivalued mappings. (Russian) *C. R. Acad. Bulgare Sci.* 26 (1973), 595-597. (L. Gorniewicz) 47 #9373 47H10
Finite-sheeted coverings and the resolvent of a closed mapping. (Russian) *C. R. Acad. Bulgare Sci.* 26 (1973), 733-734. (I. Pop) 48 #7278 55H05
Perturbations of vector fields. (Russian) *C. R. Acad. Bulgare Sci.* 26 (1973), 999-1000. (J. W. Jaworowski) 49 #3968 57D25 (54C60)
Fixed points of multivalued mappings of bicomact AANR' spaces. (Russian. English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 415-420. (L. Janos) 49 #6223 55C20 (54H25)
Antipodal mappings. (Russian) *C. R. Acad. Bulgare Sci.* 27 (1974), 159-160. (K. Sieklucki) 50 #3186 54C60
Incidence and coincidence of acyclic mappings. (Russian) *C. R. Acad. Bulgare Sci.* 27 (1974), 301-302. (H. Inassaridze) 50 #1248 57A65
Fixed-point theorem for multivalued acyclic mappings. *C. R. Acad. Bulgare Sci.* 27 (1974), 1319-1321. (L. Gorniewicz) 50 #14724 54H25
On the invariance of domain. *C. R. Acad. Bulgare Sci.* 27 (1974), 1471-1472. (J. W. Jaworowski) 50 #14733 55C20
Generalizations of Bourgin-Yang's theorem. *C. R. Acad. Bulgare Sci.* 27 (1974), 1619-1620. (D. G. Bourgin) 51 #6784 55C20 (54F45)
Mappings of a finite dimensional sphere in euclidean spaces. *C. R. Acad. Bulgare Sci.* 28 (1975), 7-8. (L. Gorniewicz) 51 #4222 55C10
Fixed points of mappings of compact connected groups. (Russian) *C. R. Acad. Bulgare Sci.* 28 (1975), no. 4, 437-439. (From the text) 58 #24249 55C20
Coincidence of mappings of compact groups. (Russian) *C. R. Acad. Bulgare Sci.* 28 (1975), no. 11, 1451-1454. (K. Sieklucki) 55 #4150 55C20 (54H25)
(with Smirnov, Ju. M.) The factorization and approximation theorems for Aleksandrov-Čech cohomology in the class of bicomacta. (Russian) *Dokl. Akad. Nauk SSSR* 220 (1975), 1031-1034. (I. Pop) 52 #1665 55B05
Coincidence and co-coincidence of acyclic mappings. (Russian) *Serdica* 1 (1975), no. 1, 29-41. (L. Gorniewicz) 53 #1567 54H25 (55C20)
On a theorem of Bourgin-Yang. *Serdica* 1 (1975), no. 2, 183-198. (Benjamin Halpern) 53 #6542 55C35
On a theorem of H. Hopf. *Serdica* 1 (1975), no. 3, 317-325. (A. V. Zarelua) 54 #1206 55C35
(with Kintisev, Janko) The Lefschetz fixed point theorem for homogeneous spaces of locally compact groups. (Russian) *C. R. Acad. Bulgare Sci.* 29 (1976), no. 11, 1571-1573. (L. Gorniewicz) 55 #4105 54H25 (55C20)
On the invariance of domain. *Serdica* 2 (1976), no. 1, 7-11. (Gilles Fournier) 54 #8617 55C25
On the fixed point theorem of Schauder. *Serdica* 2 (1976), no. 2, 122-125. (E. Fadell) 54 #13901 55C20 (47H10)
(with Bogatyř, Semen A.) A fixed point theorem for NE-mappings. (Russian) *Serdica* 3 (1977), no. 2, 126-129. (Christian Fenske) 57 #13924 55C20

- Skorik, A. I. Linear topological classification of the sequence spaces $l(p_k)$. (Russian) *Collection of articles on applications of functional analysis (Russian)*, pp. 173-194. Voronezh. Tehnolog. Inst., Voronezh, 1975. (P. Wojtaszczyk) 57 #17193 46A45 (46B15)
- (with Zaidenberg, M. G.) Groups of isometries that contain reflections. (Russian) *Funktsional. Anal. i Prilozhen.* 10 (1976), no. 4, 87-88. (Alexander A. Pankov) 55 #6240 47D10 (58D05)
- Isometries of ideal coordinate spaces. (Russian) *Uspehi Mat. Nauk* 31 (1976), no. 2(188), 229-230. (S. Rolewicz) 53 #14093 46B99
- Skorik, V. N. See *Mathematical simulation and the theory of electrical circuits*, 48 #3287
- Skorina, V. V. See *Computer science in mechanical engineering*, 50 #6713
- Skórnik, Krystyna Form of a locally integrable function whose mth local derivative vanishes almost everywhere. (Polish. English summary) *Wyż. Szkół. Ped. w Katowicach — Zeszyty Nauk. Sekc. Mat. No. 5* (1966), 127-152 (1967). (B. Crstici) 50 #14212 46F99 (26A24)
- An estimation of Fourier coefficients of periodic distributions. (Loose Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 16 (1968), 581-585. (Zbl 159, 420) 58 #23576 46F10
- Hereditarily periodic distributions. *Studia Math.* 43 (1972), 245-272. (S. Łojasiewicz) 47 #9275 46F10 (44A40)
- Skornikov, A. V. On the description of the spaces $L_p^m(\Omega)$. *Mat. Zametki* 17 (1975), no. 5, 691-701. (J. Albrecht) 52 #14983 46E35
- Skornjakov, L. A. ★Элементы теории структур. (Russian) [Elements of lattice theory] *Izdat. "Nauka", Moscow*, 1970. 149 pp. (S. P. Bandyopadhyay) 45 #5036 06A20
- Complements in a lattice of congruences. (Russian) *Mat. Sb. (N.S.)* 88(130) (1971), 148-181. (R. S. Pierce) 46 #117 08A05
- Hall varieties of semigroups. (Russian) *Mat. Zametki* 11 (1972), 463-470. (L. Bokut') 45 #8757 20M10
- Radicals and purity. (Russian) *Modules, I (Russian)*, pp. 3-11. *Inst. Mat. Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1973. (J. S. Joel) 56 #15705 16A62 (16A21, 18E40)
- Generalizations of modules. (Russian) *Modules, III (Russian)*, pp. 22-27. *Inst. Mat. Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1973. (J. S. Joel) 56 #5396 08A25
- (with Mihalev, A. V.) Books, and various questions. (Russian) *Modules, III (Russian)*, pp. 28-30. *Inst. Mat. Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1973. (J. S. Joel) 56 #5617 16-02
- Radicals of Ω -rings. (Russian) *Selected questions of algebra and logic (A collection dedicated to the memory of A. I. Mal'cev) (Russian)*, pp. 283-299. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk*, 1973. (G. M. Bergman) 48 #5965 08A25 (16A21)
- The recognizability of finite sets. (Russian) *Mat. Issled.* 8 (1973), no. 1(27), 227-229, 244. (I. Peák) 47 #6924 20M35 (94A30)
- More on quasi-Frobenius rings. (Russian) *Mat. Sb. (N.S.)* 92(134) (1973), 518-529, 647. (Chr. U. Jensen) 48 #11194 16A36
- (with Andrunakievich, V. A.; Baranovich, T. M.; Belousov, V. D.; Berman, S. D.; Gluskin, L. M.; Golovin, O. N.; Zavalo, S. T.; Kaluzhnik, L. A.; Plotkin, B. I.; Sadovskii, L. E.; Suprunenko, D. A.; Ševrin, L. N.; Šmel'kin, A. L.) In memoriam Aleksandr Gennadiyevich Kuroš (January 19, 1908-May 18, 1971). (Russian) Collection of articles commemorating Aleksandr Gennadiyevich Kuroš. *Trudy Moskov. Mat. Obšč.* 29 (1973), 3-4. (Editors) 51 #7787 01A70
- Almost direct products. (Russian) Collection of articles commemorating Aleksandr Gennadiyevich Kuroš. *Trudy Moskov. Mat. Obšč.* 29 (1973), 215-222. (G. Pollák) 52 #230 08A10
- Algebraic automata. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 2, 31-34. (E. W. Chapin, Jr.) 55 #14451 94A30
- (with Golovin, O. N.; Kostrikin, A. I.; Šmel'kin, A. L.) Research Seminar on General Algebra. Sessions of the Fall semester of the 1974/75 academic year. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 4, 114-117. (Editors) 52 #225 08-XX
- (with Golovin, O. N.; Kostrikin, A. I.; Šmel'kin, A. L.) Research Seminar on General Algebra. Sessions of the Spring semester of the 1974-75 academic year. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 6, 117-121. (Editors) 53 #2795 08-XX
- (with Mihalev, A. V.) Modules. (Russian. Errata insert; loose summary) With contributions by V. T. Markov and L. A. Koifman. *Algebra. Topology. Geometry, Vol. 14 (Russian)*, pp. 57-190. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1976. (P. M. Cohn) 56 #395 16-02
- Complements in the congruence lattice of a polygon over a commutative monoid. *Lattice theory (Proc. Colloq., Szeged, 1974)*, pp. 395-412. *Colloq. Math. Soc. János Bolyai, Vol. 14, North-Holland, Amsterdam*, 1976. (R. S. Pierce) 55 #10353 08A05
- Radikale in Bikategorien. *Universale Algebren und Theorie der Radikale*, pp. 57-63. *Studien zur Algebra und ihre Anwendungen, Band 1, Akademie-Verlag, Berlin*, 1976. (H.-J. Hoehnke) 58 #11065 18D05
- Decomposability of modules into a direct sum of ideals. (Russian) *Mat. Zametki* 20 (1976), no. 2, 187-193. (C. Niță) 54 #7543 16A46
- ★Elements of lattice theory. Translated from the Russian by V. Kumar. *Hindustan Publishing Corp., Delhi; Adam Hilger, Ltd., Bristol*, 1977. vii + 147 pp. ISBN 0-85274-331-9 (Editors) 58 #21871 06-01
- (with Egorova, D. P.) The lattice of congruences of a unary algebra. (Russian) *Ordered sets and lattices, No. 4 (Russian)*, pp. 28-40, 133. *Izdat. Saratov. Univ., Saratov*, 1977. (G. Szász) 58 #457 08A25
- A condition of Andrunakievich and Rjabuhin. (Russian) Topological structures and algebraic systems. *Mat. Issled. Vyp.* 44 (1977), 174-176, 182. (V. A. Artamonov) 58 #16814 17E05 (16A56)
- Commutative rings with subinjective ideals. (Russian) *Mat. Sb. (N.S.)* 102(144) (1977), no. 2, 280-288, 327. (Tomas Kepka) 57 #12481 13C10
- On the structure of locally bicompat biregular rings. (Russian) *Mat. Sb. (N.S.)* 104(146) (1977), no. 4, 652-656, 664. (V. I. Arnautov) 57 #16362 16A80
- (with Aleksandrov, P. S.; Arnautov, V. I.; Rjabuhin, Ju. M.; Širšov, A. I.) Vladimir Aleksandrovich Andrunakievich (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* 32 (1977), no. 4(196), 271-275. (Editors) 56 #15316 01A70
- See also *Sverdlovsk Symposium*, 45 #6958; *Progress in mathematics*, 49 #47
- Lambek, Joachim, 50 #4640; *Transactions of the Moscow Mathematical Society*, 52 #10313; *Modules*, 56 #2713a; *Modules*, 56 #2713b; *Modules*, 56 #2713c; *Modules*, 56 #2713d and Faith, Carl, 58 #10983
- Skornjakova, B. L. A piecewise linear minimax algorithm for the construction of a decision rule for pattern recognition. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. No. 166 Teor. Kolebanii, Prikl. Mat. i Kibernet.* (1973), 90-110. (I. Kramosil) 51 #2375 68(90C25)
- Skornjakova, V. S. Almost geodesic direction fields in A_{n+1} . (Russian) *Izv. Vysš. Učeb. Zaved. Matematika* 1973, no. 8(135), 68-78. (C. Simionescu) 49 #3719 53B05
- Skorobogat'ko, A. A. The solution of the fundamental biharmonic problem of elasticity theory for a semi-annulus and an annulus with a cross-cut. (Russian. German summary) *Vychisl. Prikl. Mat. (Kiev) No. 6* (1968), 64-72. (V. S. Vol'pert (RZMeh 1969 #1 V 45 #8106 73.35 (65N99)
- (with Položii, G. M.; Čalenko, P. I.) Computational formulae for the solution of boundary value problems of the Helmholtz and Poisson equations by the method of summary representations. I. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev)* 8 (1969), 22-39. (Authors' summary) 45 #4667 65N99
- (with Položii, G. M.; Čalenko, P. I.) Computational formulae for the solution of boundary value problems of the Helmholtz and Poisson equations by the method of summary representations. II. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev)* 10 (1970), 17-32. (Authors' summary) 45 #6207 65N99
- (with Makarov, V. L.) A method of summary representations for the solution of certain boundary value problems of potential theory in unbounded domains. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 10* (1970), 90-102. (Authors' summary) 45 #4669 65N99
- (with Mamunja, L. A.) Solution of the problem of torsion of a splined shaft. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 14* (1971), 3-17. (Authors' summary) 46 #2960 73.35
- (with Bončev, E. K.) Numerical analytic solutions of certain boundary value problems for the stress function of slotted rods under torsion. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), no. 3, 123-139. (Raičo Lazarov) 53 #4704 73.65
- (with Bončev, E. K.) Numerical analytic solutions of boundary value problems of the Poisson equation with partially constant coefficients. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), no. 3, 139-150. (Authors' summary) 57 #1920 65N05
- (with Bončev, E. K.) An application of the method of summary representation to the study of the stress state under torsion of certain forms of rods with slits. (Bulgarian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), 4, 121-132 (1973). (Raičo Lazarov) 53 #4705 73.65
- (with Mamunja, L. A.) A certain iteration method for the solution of a weakly nonlinear equation of elliptic type. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 22* (1974), 68-73, 171. (M. Zlámal) 50 #15377 65N10
- (with Mamunja, L. A.; Ryzhenko, I. A.) Some nonlinear problems of gas filtration. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp. 26* (1975), 127-135, (Editors) 56 #4423 76.65
- (with Ljaško, I. I.; Makarov, V. L.) ★Методы вычислений. (Russian) [Numerical methods] Численный анализ. Методы решения задач математической физики. [Numerical analysis. Methods for the solution of problems of mathematical physics. *Izdat. Ob'ed. "Višča Škola", Kiev*, 1977. 406 pp. (E. G. D'jakonov) 58 #2483 65-01 (65P05, 69.00)
- Skorobogat'ko, V. Ja. See Skorobogat'ko, V. Ja.
- Skorobogat'ko, A. A. See Skorobogat'ko, A. A.
- Skorobogat'ko, V. G. An integral equation with a symmetric kernel in Stieltjes integrals. (Russian) *Collection of scientific works of the Department of Higher Mathematics, Novosibirsk*, pp. 95-98, 124. *Tul'sk. Politehn. Inst., Tula*, 1975. (Editors) 58 #2993 45H05
- Skorobogat'ko, V. Ja. A certain system of fourth order equations of cosmogony. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1971, 787-790, 858. (R. I. Pimenov) 45 #9646 83.53
- (with Bobik, O. I.) The uniqueness of the solution of the first boundary value problem for elliptic equations. (Ukrainian. German and Russian summaries) *Visti Kiiv. Univ.* 1971, no. 13, 33-39, 146. (B. A. Bondarenko) 46 #9520 35J25
- (with Bobik, O. I.; Bodnarčuk, P. I.; Ptašnik, B. I.) ★Элементы якісної теорії диференціальних рівнянь з частинними похідними. (Ukrainian) [Elements of qualitative theory of partial differential equations] "Naukova Dumka", Kiev, 1972. 112 pp. (V. Olariu (Zbl 261 #35003)) 56 #12516 35-01 (35Bxx)
- A test for the convergence of a branching continued fraction. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1972, 27-29, 93. (P. Boas, Jr.) 46 #2020 30A22
- (with Bodnarčuk, P. I.) ★Гіллясті ланцюгові дроби та їх застосування. (Ukrainian) [Branching continued fractions and their applications] "Naukova Dumka", Kiev, 1974. 271 pp. (B. A. Bondarenko) 50 #6109 65D15
- (with Fešin, G. M.; Pelyh, V. A.) n-point planimetry of Euclidean type. (Russian. Mathematical methods, and physical and mechanical fields, No. 1 (Russian), pp. 5-10, 12. "Naukova Dumka", Kiev, 1975. (F. Neuman) 54 #1099 53A15 (34B10)
- (with Slon'ovskii, R. V.; Bodnarčuk, P. I.; Pustomel'nikov, I. P.) Recurrence equations and branching continued fractions. (Ukrainian. Russian summary) *Visti L'viv. Politehn. Inst. No. 106* (1975), 142-145, 207. (Authors' summary) 58 #2321 39A10 (10A30)
- (with Bodnarčuk, P. I.) Progress and problems in the theory of ordinary and branching continued fractions. (Russian) *Continued fractions and their applications (Russian)*, pp. 5-8, 103. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Authors' summary) 58 #29548 40A15 (10A30)
- (with Fešin, G. M.) A mathematical model of relativity theory on the basis of n-point pseudo-Euclidean planimetry. (Russian) *Theoretical and applied questions of algebra and differential equations (Russian)*, pp. 71-81, 120. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Ja. A. Smorodinskii) 58 #32816 83.53
- Scientific Conference on Continued and Branching Continued Fractions and the

- Applications (Lvov, 1975). (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 2, 282-283. (Editors) **53** #8710 40A15
(with Kalenjuk, P. I.) ★Якісні методи теорії диференціальних рівнянь. (Ukrainian) [Qualitative methods of the theory of differential equations] *Vidavn. "Naukova Dumka", Kiev, 1977. 123 pp. (D. Bobrowski) 58 #6485 34Cxx*
See also *Proceedings: International Conference on Nonlinear Oscillations*, **47** #8969; *Theoretical and applied questions of algebra and differential equations*, **58** #15777 and *Continued fractions and their applications*, **58** #21908
- orobogatov, G. A. Kinetic equations of Markov type for a system of a finite number of particles. I. Two-particle collision in the spatially homogeneous case. (Russian. English summary) *Vestnik Leningrad. Univ. No. 4 Fiz. Him. Vyp. 1* (1975), 72-83, 154. (Nina B. Maslova) **57** #15163a 82.62
Kinetic equations of Markov type for a system of a finite number of particles. II. Allowance for triple collisions and spatial inhomogeneity. (Russian. English summary) *Vestnik Leningrad. Univ. No. 10 Fiz. Him. Vyp. 2* (1975), 72-82, 156. (Nina B. Maslova) **57** #15163b 82.62
- orobogatov, P. V. The construction of wave functions in A. Bohr's model. I. (Russian. English summary) *Ukrain. Fiz. Ž.* **21** (1976), no. 12, 2025-2030, 2108. (Author's summary) **57** #14984 81.22
- orobogatov, V. A. Models of computing equipment and certain principles of their classification. (Russian) *Computing systems. No. 3: Programming of computing equipment (Proc. First All-Union Conf., Novosibirsk, 1967)* (Russian), pp. 35-68. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1968. (V. Tkač (RŽMat 1969 #6 V419)) 46 #1473 94A20*
(with Makarov, L. I.) Certain algorithms for mapping logical networks into computing E_n -media. (Russian) *Computing systems. No. 3: Programming of computing equipment (Proc. First All-Union Conf. Comput. Systems, Novosibirsk, 1967)* (Russian), pp. 95-114. *2 foldouts Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1968. 45 #9850 68A25*
Recognition of the isomorphism of unoriented graphs. (Russian) *Vychisl. Sistemy No. 33* (1969), 34-36. (From the author's introduction) **46** #1478 94A20
(with Koifman, A. A.; Moskov, B. A.; Pankov, A. V.; Popkov, V. K.) Choice of a basis for an element of a one-dimensional computing medium. (Russian) *Vychisl. Sistemy No. 54* (1973), 112-118, 155. (Authors' summary) **49** #4311 68A25
Analysis of the connectedness of neographs. (Russian) *Vychisl. Sistemy Vyp. 64* (1975), 11-25, 179. (P. Vondráček) **56** #10878 90B10
Relative partitioning and layers of graphs. (Russian) *Vychisl. Sistemy No. 69 Voprosy Obrabotki Informacii pri Proektirovanii Sistem* (1977), 3-10, 153. (Author's summary) **58** #27662 05C99
See also *Present state of research in the field of computing media*, **48** #5424
- orochod, A. W. See Skorohod, A. V.
- orodinskii, V. A. See Questions in applied mathematics, **48** #5448
- orodinskii, V. A. A certain class of diffusion equations with discontinuous coefficients. (Ukrainian. Russian summary) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 3* (1961), no. 1, 76-83. (See RŽMat 1962 #9 V28) **65P05**
Surface integrals and the Green formula in Hilbert space. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 2* (1970), 172-175. (W. A. Woyczyński) **46** #1997 28A40 (46G99)
- A note on unbiased estimates of the parameters of Gaussian distributions in Hilbert space. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 3* (1970), 195-199. (H. G. Tucker) **45** #2790 60G15 (62F10)
- Admissible shifts of measures in Hilbert space. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 15* (1970), 577-598. (A. Badrikian) **45** #499 28A40
(with Gihman, I. I.) ★Теория случайных процессов. Том I. (Russian) [Theory of random processes. Vol. I] *Izdat. "Nauka", Moscow, 1971. 664 pp. (M. Loève) 49 #6287 60-02 (60Gxx)*
(with Gihman, I. I.) ★Stochastische Differentialgleichungen. Deutsche Übersetzung von dem Russischen durch Jurgis Slazas. In deutscher Sprache herausgegeben von Helga Bunke. Mathematische Lehrbücher und Monographien, II. Abteilung: Mathematische Monographien, Band XXV. *Akademie-Verlag, Berlin, 1971. vi + 338 pp. (Editors) 49 #11626 60H10 (34F05)*
- Certain questions on the theory of measure and integral in Hilbert space. (Russian) *Proceedings of the Eighth Mathematical Summer School (Kaciveli, 1970)* (Russian), pp. 102-127. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971. (R. A. Minlos) 52 #12025 60B05 (28A40, 60G30)*
(with Džafarov, K. M.; Nasirova, T. I.) The limit of a certain process with semi-independent increments. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. No. 5* (1971), 51-56. (G. K. Eagleson) **45** #1232 60G50
(with Gihman, I. I.) ★Stochastic differential equations. Translated from the Russian by Kenneth Wickwire. *Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 72. Springer-Verlag, New York-Heidelberg, 1972. viii + 354 pp. (Editors) 49 #11625 60H10 (34F05)*
(with Gihman, I. I.) On the density of probability measures in function spaces. (Hungarian) Translated from the Russian by Pál Medgyessy. *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **20** (1972), no. 3-4, 419-490. (Editors) **56** #9665 60G30
(with Remez, E. Ja.; Gavriljuk, V. T.) On the 150th anniversary of the birth of P. L. Čebyšev. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 137-140. (Editors) **50** #4206 01A55
(with Gihman, I. I.) ★Теория случайных процессов. Том II. (Russian) [Theory of random processes. Vol. II] *Izdat. "Nauka", Moscow, 1973. 639 pp. (M. Loève) 49 #6288 60-02 (60Jxx)*
(with Portenko, M. I.) The existence of ϵ -optimal Markov strategies for controllable diffusion processes. (Russian) *Questions of statistics and of the control of random processes* (Russian), pp. 204-227. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973. (From the authors' introduction) 55 #1507 60J60 (93E20)*
(with Jadrénko, M. I.) Absolute continuity of measures that correspond to homogeneous Gaussian fields. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 18* (1973), 30-43. (J. L. Doob) **47** #1120 60G30 (60G15)
(with Ibrahimilov, I. Š.) Determination of the mean for a Wiener process that is observed on an infinite interval. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 18* (1973), 804-808. (E. M. Klimko) **48** #10009 62M05 (60J65)

- A theorem on the continuity of a random function on a compact set in Hilbert space. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 18* (1973), 809-811. (R. M. Dudley) **48** #5171 60G17
(with Nasirova, T. I.) The distribution of certain functionals of a process with semi-independent increments. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 400-405, 431. (M. Loève) **49** #4100 60J30
(with Gihman, I. I.) ★The theory of stochastic processes. I. Translated from the Russian by S. Kotz. *Die Grundlehren der mathematischen Wissenschaften, Band 210. Springer-Verlag, New York-Heidelberg, 1974. viii + 570 pp. (Editors) 49 #11603 60Gxx (60-02)*
★Integration in Hilbert space. Translated from the Russian by Kenneth Wickwire. *Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 79. Springer-Verlag, New York-Heidelberg, 1974. xii + 177 pp. (Editors) 57 #6360 28A40 (60B05, 60G15)*
A remark on consistent estimates of a Gaussian distribution. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 19* (1974), 195-198. (R. M. Dudley) **48** #12704 62F10
(with Gihman, I. I.) ★The theory of stochastic processes. II. Translated from the Russian by Samuel Kotz. *Die Grundlehren der Mathematischen Wissenschaften, Band 218. Springer-Verlag, New York-Heidelberg, 1975. vii + 441 pp. (Editors) 51 #11656 60Jxx (60-02)*
★Елементи теорії ймовірностей та випадкових процесів. (Ukrainian) [Foundations of probability theory and random processes] *Vidavn. Ob'ednannya "Visša Škola", Kiev, 1975. 295 pp. (M. Skalsky) 55 #13509 60-01*
(with Gihman, I. I.) ★Теория случайных процессов. Том III. (Russian) [Theory of random processes. Vol. III] *Теория Вероятностей и Математическая Статистика. [Monographs in Probability Theory and Mathematical Statistics] Izdat. "Nauka", Moscow, 1975. 496 pp. (Editors) 58 #31323a 60-02 (60Hxx, 60J60)*
(with Kabanov, Ju. M.) Extended stochastic integrals. (Russian) *Proceedings of the School and Seminar on the Theory of Random Processes (Druskininkai, 1974), Part I (Russian)*, pp. 123-167. *Inst. Fiz. i Mat. Akad. Nauk Litovsk. SSR, Vilnius, 1975. (Stanley Sawyer) 54 #1375 60H05*
K-martingales and stochastic equations. (Russian) *Proceedings of the School and Seminar on the Theory of Random Processes (Druskininkai, 1974), Part II (Russian)*, pp. 195-234. *Inst. Fiz. i Mat. Akad. Nauk Litovsk. SSR, Vilnius, 1975. (M. P. Eršov) 55 #6567 60H10 (60G45)*
(with Nasirova, T. I.) Functionals of processes with semi-independent increments. (Russian) *Theory of random processes, No. 3 (Russian)*, pp. 80-84, 159. *Izdat. "Naukova Dumka", Kiev, 1975. (D. A. Darling) 55 #4416 60K15*
Regular families of distributions, discrimination of hypotheses, and consistent estimates. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 12* (1975), 138-149, 175. (O. Gulyás) **55** #1574 62F05
A remark on square integrable martingales. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 20* (1975), 199-202. (Joseph Horowitz) **51** #1947 60G45 (60J60)
On a generalization of the stochastic integral. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 20* (1975), no. 2, 223-238. (M. P. Eršov) **52** #12079 60H05
(with Mitropol'skii, Ju. O.; Gusak, D. V.; Turbin, A. F.) Asymptotic methods in probabilistic problems. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 4, 471-476, 573. (D. A. Darling) **52** #1901 60J30 (60K15)
Random operators in a Hilbert space. *Proceedings of the Third Japan-USSR Symposium on Probability Theory (Tashkent, 1975), pp. 562-591. Lecture Notes in Math., Vol. 550, Springer, Berlin, 1976. (A. T. Bharucha-Reid) 55 #13574 60H99 (60G45, 47D05)*
(with Džafarov, K. M.) Some processes constructed from independent random variables. (Russian) *Studies in the theory of random processes (Russian)*, pp. 49-59. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1976. (D. A. Darling) 56 #13372 60J30*
Operator martingales and stochastic semigroups. (Russian) *Theory of random processes, No. 4 (Russian)*, pp. 86-94, 118. *Izdat. "Naukova Dumka", Kiev, 1976. (A. T. Bharucha-Reid) 55 #1452 60G45 (60H05)*
On the existence of a solution for the general martingale problem. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 14* (1976), 137-147, 158. (A. Friedman) **54** #1385 60H10 (60G45)
(with Šatašvili, A. D.) On the absolute continuity of a Gaussian measure under a nonlinear transformation. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 15* (1976), 139-151, 157. (G. N. Sytaja) **55** #4363 60G30
(with Prokopenko, L. M.) On flows of events in semi-ordered spaces. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 21* (1976), no. 3, 537-547. (Authors' summary) **58** #24541 60G99
On a representation of random variables. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 21* (1976), no. 3, 645-648. (M. P. Eršov) **55** #1391 60A10 (60H10)
(with Gihman, I. I.) ★Управляемые случайные процессы. (Russian) [Controlled random processes] *Izdat. "Naukova Dumka", Kiev, 1977. 251 pp. (V. Komkov) 56 #13357 60G99 (93Exx)*
(with Gihman, I. I.) ★Введение в теорию случайных процессов. (Russian) [Introduction to the theory of random processes] Second edition, revised. *Izdat. "Nauka", Moscow, 1977. 567 pp. (Editors) 58 #7758 60-01*
The averaging of stochastic equations of mathematical physics. (Russian) *Problems of the asymptotic theory of nonlinear oscillations (Russian)*, pp. 196-208, 279. *Naukova Dumka, Kiev, 1977. (I. M. Stojanov) 58 #31402 60H10*
(with Nasirova, T. I.) A class of jump processes with a retaining barrier. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 16* (1977), 75-88, 156. (M. Iosifescu) **57** #7815 60K99
Linear and almost linear functionals on a measurable Hilbert space. (Russian. English summary) *Teor. Veroyatnost. i Primenen. 23* (1978), no. 2, 397-402. (W. A. Woyczyński) **58** #13246 60B05 (28A40)
(with Gihman, I. I.) ★The theory of stochastic processes. III. Translated from the Russian by Samuel Kotz. With an appendix containing corrections to Volumes I and II. *Grundlehren der Mathematischen Wissenschaften, 232. Springer-Verlag, Berlin-New*

- York, 1979. iii + 387 pp. ISBN 3-540-90375-5 (Walter A. Rosenkrantz) 58 #31323b 60-02 (60G45, 60H05, 60H10, 60J60)
- See also *Mathematics and progress in science and technology*, 48 #8170; *Questions of statistics and of the control of random processes*, 50 #15020; *Studies in the theory of random processes*, 55 #4321 and *Theory of random processes. Questions of statistics and control*, 55 #9187
- Skorohod, T. A.** On the convergence of products of independent random variables. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* 15 (1976), 135-139, 157. (Zdzisław Rychlik) 54 #8815 60F15
- The convergence of infinite products of random matrices. (Russian) *Theory of random processes*, No. 5 (Russian), pp. 86-92, 114. Izdat. "Naukova Dumka", Kiev, 1977. (V. M. Kruglov) 57 #1620 60F15 (60B15)
- Skorohod'ko, E. F.** See *Linguistic questions of the design and the information analysis of automated information systems*, 56 #4286
- Skorohodov, A. N.** (with Filippov, V. M.) A quadratic functional for the heat equation. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 6, 1113-1123, 1158. (V. S. Rabinovič) 58 #6696 35K05
- (with Filippov, V. M.) The principle of a minimum of a quadratic functional for a boundary value problem of heat conduction. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 8, 1434-1445, 1540. (L. von Wolfersdorf) 57 #6839 35K05 (49A15)
- Skoromnik, M. G.** See *Proceedings: Republican Conference of Belorussian Mathematicians*, 48 #3669
- Skoroselov, V. A.** Interpolation of plane curves. (Russian) *Vychisl. Sistemy Vyp.* 68 *Metody Splain-Funkcii* (1976), 33-44, 117. (Author's summary) 58 #8152 65D10
- Skorubskii, V. I.** (with Maïorov, S. A.; Pavlenko, V. V.) Algorithmic methods of the classification of Boolean functions. (Russian) *Questions of the theory of electronic digital mathematical machines* (Proc. Sem., Kiev, 1968), No. 3 (Russian), pp. 63-80. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (G. Blohina (RŽMat 1970 #3 V358)) 45 #9814 94A20
- (with Maïorov, S. A.; Kravcov, L. Ja.) Universal logic modules and their application. (Russian. English summary) *US i M—Upravljajushchie Sistemy i Mashiny* 1977, no. 1(27), 98-104, 149, 150. (Authors' summary) 58 #15718 94A20
- Skorupski, Andrzej** The possibility of realizing the excitation function of elementary automata with edge-sensitive inputs. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* 22 (1977), no. 3, 259-266. 58 #26615 94A30
- Skoryi, V. V.** See *Cybernetics and computer technology*, 48 #1736
- Skoug, David** (with Johnson, Gerald W.) A Banach algebra of Feynman integrable functionals with application to an integral equation formally equivalent to Schroedinger's equation. *J. Functional Analysis* 12 (1973), 129-152. (A. C. Zaenen) 50 #570 28A40
- (with Johnson, Gerald W.) Feynman integrals of non-factorable finite-dimensional functionals. *Pacific J. Math.* 45 (1973), 257-267. (M. Schilder) 47 #8805 28A40
- (with Johnson, Gerald W.) Cameron and Storvick's function space integral for certain Banach spaces of functionals. *J. London Math. Soc.* (2) 9 (1974/75), 103-117. (Tack-Wang Lee) 51 #845 28A40
- Partial differential systems of generalized Wiener and Feynman integrals. *Portugal. Math.* 33 (1974), 27-33. (M. Schilder) 49 #5608 35R15 (28A40)
- (with Johnson, Gerald W.) A function space integral for a Banach space of functionals on Wiener space. *Proc. Amer. Math. Soc.* 43 (1974), 141-148. (M. Schilder) 49 #5288 28A40 (46G10)
- (with Johnson, Gerald W.) Cameron and Storvick's function space integral for a Banach space of functionals generated by finite-dimensional functionals. *Ann. Mat. Pura Appl.* (4) 104 (1975), 67-83. (Robert Cameron) 52 #14220 28A40
- (with Johnson, Gerald W.) The Cameron-Storvick function space integral: the L_1 theory. *J. Math. Anal. Appl.* 50 (1975), 647-667. (M. Schilder) 51 #10568 28A40
- (with Johnson, Gerald W.) The Cameron-Storvick function space integral: an $L(L_p, L_p)$ theory. *Nagoya Math. J.* 60 (1976), 93-137. (Robert Cameron) 53 #11011 81.28 (28A40)
- (with Park, C.) Wiener integrals over the sets bounded by sectionally continuous barriers. *Pacific J. Math.* 66 (1976), no. 2, 523-534. (Ju. L. Daleckii) 56 #12214 28A40 (60J65)
- Converses to measurability theorems for Yeh-Wiener space. *Proc. Amer. Math. Soc.* 57 (1976), no. 2, 304-310. (Tack-Wang Lee) 54 #10549 28A40
- The change of scale and translation pathology in Yeh-Wiener space. *Riv. Mat. Univ. Parma* (4) 3 (1977), 79-87 (1978). (V. S. Mandrekár) 57 #16530 28A40
- Skovgaard, Ove** Table errata: "Ten-figure table of the complete elliptic integrals K , K' , E , E' and a table of $1/\vartheta_2^2(0|\tau)$, $1/\vartheta_2^2(0|\tau)$ " (Proc. London Math. Soc. (2) 33 (1931), 160-164 by L. M. Milne-Thomson). *Math. Comp.* 28 (1974), 1181. (Editors) 49 #8268 65A05 (33A25)
- Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964). *Math. Comp.* 28 (1974), 1182. (Editors) 54 #4038 65A05 (33-XX)
- (with Petersen, Mogens Helmer) Table erratum: *Tafeln für die Differenzenrechnung sowie für die Hyperbel-Besselschen, elliptischen und anderen Funktionen* (Springer, Berlin, 1933) by K. Hayashi. *Math. Comp.* 29 (1975), 670. (Editors) 50 #15256 65A05 (33-XX)
- (with Petersen, Mogens Helmer) Table erratum: *Tafeln der Besselschen Theta-, Kugel- und anderer Funktionen* (Springer, Berlin, 1930) by K. Hayashi. *Math. Comp.* 29 (1975), 670-672. (Editors) 50 #15257 65A05 (33-XX)
- Table erratum: *Higher transcendental functions. Vol. I, II* (McGraw-Hill, New York, 1953) by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. *Math. Comp.* 29 (1975), 670. (Editors) 54 #3045 33-XX (65A05)
- Table erratum: *An elementary treatise on elliptic functions* (second edition, Dover Publications, New York, 1961) by Arthur Cayley. *Math. Comp.* 29 (1975), 670. (J. S. Joel) 55 #8423 33A25
- Table erratum: *Formulas and theorems for the special functions of mathematical physics* (third edition of English translation, Springer, New York, 1966) by W. Magnus, E. Oberhettinger and R. P. Soni. *Math. Comp.* 29 (1975), 672. (Editors) 54 #3047 33-XX (65A05)
- Errata: *The elliptic functions as they should be: an account, with applications, of the functions in a new canonical form* (Galloway and Porter, Cambridge, 1958) by Albert Eagle. *Math. Comp.* 31 (1977), no. 138, 614-615. (Editors) 55 #6767 65A05
- Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964) edited by M. Abramowitz and Irene A. Stegun. *Math. Comp.* 31 (1977), no. 139, 806. (Editors) 55 #9480 65A05
- Table errata: *A treatise on Bessel functions and their applications to physics*, 2nd edition (Dover, New York, 1966) by A. Gray and G. B. Mathews. *Math. Comp.* (1977), no. 140, 1046-1049. (Editors) 56 #703 33A45 (65A05)
- Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964) edited by M. Abramowitz and Irene A. Stegun. *Math. Comp.* 31 (1977), no. 140, 1046. (Editors) 56 #1657 65A05
- Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D.C., 1964), edited by M. Abramowitz and Irene A. Stegun. *Math. Comp.* 32 (1978), no. 141, 317. (Editors) 57 #14319 65A05
- Table errata: *A treatise on Bessel functions and their applications to physics* (second edition, Dover, New York, 1966) by A. Gray, G. B. Mathews and T. M. MacRobert. *Math. Comp.* 32 (1978), no. 141, 318-319. (Editors) 57 #16739 33A40 (65A05)
- Skowron, Andrzej** Semantic translation of programming languages. (Loose Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 18 (1970), 597-600. (S. Marcus) 48 #7678 68A30
- K-substitution. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 19 (1971), 645-647. (W. S. Hatcher) 46 #2925 68A30
- Semantic translation of a certain class of programming languages. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 19 (1971), 773-774. (Horst Reichel) 46 #4772 68A05
- Machines with input and output. *Mathematical foundations of computer science* (Proc. Sympos. and Summer School, Štrbské Pleso, 1973), pp. 317-319. *Math. Slovák Acad. Sci., Bratislava*, 1973. (Egon Börger) 54 #4940 02F10 (68A25)
- Stored program machines. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 459-465. (Author's summary) 58 #10357 68A30
- Basic operations on semantic translations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 467-470. (W. D. Maurer) 48 #3132 68A25
- Existence of semantic translations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 637-641. (W. D. Maurer) 48 #10358 68A05
- Translators in stored program machines. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 741-745. (W. D. Maurer) 50 #9400 68A05
- On a certain class of stored program machines. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 859-865. (W. D. Maurer) 50 #9401 68A05
- Programming languages. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 1005-1010. (Horst Reichel) 48 #12923 68A05
- (with Bartol, W.; Raś, Z.) Theory of computing systems. *Mathematical foundations of computer science*, pp. 101-165. *Państw. Wydawn. Nauk., Warsaw*, 1977. (Karel Ruzička) 57 #8109 68-02
- wachecka-Skowron, Anna** See **Wachecka-Skowron, Anna**
- Skowronek, Marcin** (with Olech, Czesław; Węgrzyn, Stefan) Optimization of sequential operations under constraints on the individual operations. (Polish. English and Russian summaries) *Podstawy Sterowania* 1 (1971), 147-151. (A. Buraczewski) 46 #10359 90C99 (49D20)
- (with Olech, Czesław; Węgrzyn, S.) Optimization of a sequence of operations under limitations imposed on particular operations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* 20 (1972), 65-68. (Gerard G. L. Meyer) 49 #6612 65K05
- Skowrońska, Maria** Optimization of the solutions of an electrical filter on the basis of graph theory and of machine systems synthesis. (Polish. English, German and Russian summaries) *Rozprawy Elektrotech.* 17 (1971), 311-364. (P. Vondráček) 46 #8400 94A05
- Skowronski, Andrzej** On the category of Abelian Hopf algebras over a non-perfect field. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 9, 675-682. (R. G. Larson) 56 #15733 18H15
- Abelian Hopf algebras with waists. *J. Algebra* 52 (1978), no. 2, 315-321. (G. B. Segal) 57 #12579 16A24
- Skowronski, E. C.** (with Shannon, G. F.) Conditions for non-oscillatory response of multiple non-linear systems. *Internat. J. Control* (1) 15 (1972), 953-960. (Authors' summary) 47 #1510 93C10
- Geometric criterion for the design of a non-oscillatory dynamical system. *Internat. J. Control* (1) 16 (1972), 379-388. (Author's summary) 47 #4691 93D99
- Skowronski, J. M.** Geometrical aspects of kinetic synthesis for lumped physical systems. *Proceedings of the Fourth Conference on Nonlinear Oscillations* (Prague, 1967), 257-268. *Academia, Prague*, 1968. (N. D. Sengupta) 52 #16208 70.34
- Conjectures on Liapunov qualitative game. *Internat. J. Control* (1) 16 (1972), 501-507. (Author's summary) 47 #3029 90D25
- (with Leitmann, G.) Avoidance control. *J. Optimization Theory Appl.* 23 (1977), no. 4, 581-591. (O. Hájek) 58 #9338 90D25
- See also *Proceedings: International Conference on Nonlinear Oscillations*, 47 #1510
- Skrabutėnas, R. Ju.** Asymptotic expansions of sums of multiplicative functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 14 (1974), no. 2, 115-126. (G. Halász) 52 #5601 10H25
- Asymptotic expansions of local limit distribution laws of arithmetic functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 16 (1976), no. 179-187, 236. (J. Galambos) 54 #12688 10H25 (10K20)
- Local limit distribution laws for a class of arithmetic functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 18 (1978), no. 1, 187-202, 244. (Karl-Indlekofer) 58 #5570 10K20
- The distribution of values of multiplicative arithmetic functions. (Russian.

- Lithuanian and English summaries) *Litoosk. Mat. Sb.* **18** (1978), no. 2, 129-139, 218. (Karl-Heinz Indlekofer) **58** #22001 10K20
- A local theorem, including large deviations, for multiplicative functions. (Russian. Lithuanian and English summaries) *Litoosk. Mat. Sb.* **18** (1978), no. 3, 137-148, 216. (J. Galambos) **58** #16578 10K20
- apek, W. A. (with Lalli, B. S.) Some further stability and boundedness results of some differential equations of the fourth order. *Ann. Mat. Pura Appl.* (4) **90** (1971), 167-179. (J. O. C. Ezeilo) **46** #9442 34C10 (34D99)
- (with Lalli, B. S.) On the boundedness and the stability of some differential equations of the fourth order. *SIAM J. Math. Anal.* **2** (1971), 221-225. (J. O. C. Ezeilo) **45** #672 34D99
- (with Lalli, B. S.) Further stability and boundedness results for the solutions of some differential equations of the fourth order. *Ann. Mat. Pura Appl.* (4) **95** (1973), 293-301. (R. Grimmer) **54** #13234 34D20
- iganov, M. M. (with Buslaev, V. S.) Characteristic property of Weyl quantization. (Russian. English summary) *Teoret. Mat. Fiz.* **2** (1970), no. 3, 292-296. (Authors' summary) **57** #18607 81.47 (47B99)
- (with Matveev, V. B.) Wave operators for a Schrödinger equation with rapidly oscillating potential. (Russian) *Dokl. Akad. Nauk SSSR* **202** (1972), 755-757. (J. R. Schulenberg) **45** #9183 47A40 (35J10)
- The spectrum of a Schrödinger operator with rapidly oscillating potential. (Russian) Boundary value problems of mathematical physics, 8. *Trudy Mat. Inst. Steklov.* **125** (1973), 187-195, 235. (H. Triebel) **49** #9444 35P05
- The eigenvalues of the Schrödinger operator that are located on the continuous spectrum. (Russian) Boundary value problems of mathematical physics and related questions in the theory of functions, 7. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **38** (1973), 149-152. (J. R. Schulenberg) **49** #887 35P05 (81.47)
- (with Buslaev, V. S.) Coordinate asymptotic behavior of the solution of the scattering problem for the Schrödinger equation. (Russian. English summary) *Teoret. Mat. Fiz.* **19** (1974), 217-232. (Authors' summary) **57** #8610 81.35
- The coordinate asymptotic behavior of the Green's function of a scattering problem for the Schrödinger equation. (Russian) Mathematical problems in the theory of wave propagation, 6. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **42** (1974), 236-238, 271. (J. Wiesner) **49** #5557 35J10 (35P20)
- Uniform coordinate and spectral asymptotics of the solutions of the scattering problem for the Schrödinger equation. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 10. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **69** (1977), 171-199, 277. (From the introduction and summary) **58** #29420 35P20 (35J10)
- See also **Boundary value problems of mathematical physics**, **51** #6096
- skripnik, A. A. The optimization of algorithms for the multiplication of matrices. (Russian) Software of electronic digital computers (Proc. Sem. Optimization of Computations, Kiev, 1971) (Russian), pp. 287-294. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (Editors) **55** #1803 68A10
- skripnicenko, V. I. The Hansen method of partial anomalies. I. Theory. (Russian. English summary) *Bjull. Inst. Teoret. Astronom.* **12**, no. 1(134), 16-54 (1970). (J. S. Shipman) **45** #9649 85.65 (70.35)
- (with Krasinskiĭ, G. A.; Merman, G. A.; Petrovskaja, M. S.; Evdokimova, L. S.) Celestial mechanics. (Russian) *Astronomy*, Vol. 11 (Russian), pp. 5-154 (errata insert). *Akad. Nauk SSSR Vsesojuz. Inst. Nauch. i Tehn. Informacii, Moscow*, 1975. (E. Leimanis) **57** #11226 70.00 (70.65)
- skripnik, I. V. On the question of \mathfrak{A} -closed forms on a noncompact space. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Fiz. Him. i Meh.-Mat.* **1968**, 193-195. (J. Vanžura) **50** #8584 58A10
- Bifurcation points of variational problems. (Russian) *Mathematical physics*, No. 9 (Russian), pp. 117-123. *Naukova Dumka, Kiev*, 1971. (Ulrich Kosel) **45** #5834 47H15
- The branch points of elliptic variational problems. (Russian) *Mathematical physics*, No. 10 (Russian), pp. 156-160. *Naukova Dumka, Kiev*, 1971. (Ulrich Kosel) **46** #4304 47H15 (35J60)
- On the problem of bifurcation points. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1971**, 126-128, 188. (B. V. Loginov) **45** #7549 47H15 (35J60)
- The solvability of the nonlinear Neumann problem. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1971**, 989-992, 1053. (H. Marcinkowska) **46** #3985 35J60
- Regularity of the solutions of quasilinear elliptic equations on the plane. (Russian) *Mathematical Physics*, No. 11 (Russian), pp. 137-145. *Naukova Dumka, Kiev*, 1972. (J. Nečas) **47** #2179 35D10 (35J30)
- The behavior near the boundary of the solutions of quasilinear elliptic equations on the plane. (Russian) *Mathematical Physics*, No. 11 (Russian), pp. 146-148. *Naukova Dumka, Kiev*, 1972. (J. Nečas) **47** #2180 35D10 (35J30)
- The application of Morse's methods to nonlinear elliptic equations. (Russian) *Dokl. Akad. Nauk SSSR* **202** (1972), 769-771. (I. Vaisman) **45** #1206 58E05 (35J60)
- The regularity of generalized solutions of quasilinear elliptic equations of arbitrary order. (Russian) *Dokl. Akad. Nauk SSSR* **203** (1972), 36-38. (D. P. Squier) **46** #2206 35D10 (35J60)
- Calculation of the index of a critical point. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1972**, 527-529, 574. (S. Burýšek) **46** #7995 47H15 (35J60)
- The differentiability of integral functionals. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1972**, 1086-1089, 1150. (S. Fučík) **48** #2749 46E35 (58C20)
- An application of topological methods to equations with monotone operators. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 69-79. (J. Daneš) **45** #5840 47H10 (58E05)
- ★ Нелинейные эллиптические уравнения высшего порядка. (Russian) [Nonlinear higher order elliptic equations] *Izdat. "Naukova Dumka", Kiev*, 1973. 219 pp. (Milan Kučera) **55** #8549 35J65 (47H15, 58G10)
- The bifurcation of the equilibrium of flexible plates. (Russian) *Mathematical physics*, No. 13 (Russian), pp. 159-161, 194. *"Naukova Dumka", Kiev*, 1973. (Author's summary) **48** #7733 73.35
- The continuity of generalized solutions of higher order elliptic equations. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1973**, 43-45, 93. (Ja. A. Roitberg) **47** #7198 35D10
- The regularity of the generalized solutions of quasi-linear elliptic equations in the plane. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1973**, 217-219, 285. (Ja. A. Roitberg) **47** #7199 35D10
- Nonlinear elliptic equations of higher order. (Russian. Georgian and English summaries) *Gamoqeneb. Math. Inst. Sem. Moḡsen. Anotacie. No. 7* (1973), 51-52. (J. Nečas) **50** #7805 35J60
- A condition for the regularity of generalized solutions of higher order quasilinear elliptic equations. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **37** (1973), 1376-1427. (Ja. A. Roitberg) **49** #816 35D10 (35J30)
- The solvability and justification of Galerkin's method in a number of nonlinear problems in mechanics. (Russian) *Mathematical physics*, No. 15 (Russian), pp. 152-159, 182. *Izdat. "Naukova Dumka", Kiev*, 1974. (S.-F. Sburian) **51** #4795 73.35
- (with Petrivskii, B. P.) The regularity of generalized solutions of quasilinear elliptic systems of arbitrary order. (Russian) *Mathematics collection* (Russian), pp. 34-37. *Izdat. "Naukova Dumka", Kiev*, 1976. (Editors) **58** #17473 35D10 (35J60)
- Quasilinear higher order elliptic equations with continuous generalized solutions. (Russian) *Mathematics collection* (Russian), pp. 90-93. *Izdat. "Naukova Dumka", Kiev*, 1976. (Editors) **58** #17502 35J60
- Conditions that may be imposed on the coefficients of higher order quasilinear elliptic equations. (Russian) *Mathematics collection* (Russian), pp. 93-94. *Izdat. "Naukova Dumka", Kiev*, 1976. (Editors) **58** #17503 35J60
- (with Ščerbina, V. P.) The bifurcation of the solutions of boundary value problems for nondivergence equations. (Russian) *Mat. Fiz. Vyp.* **20** (1976), 99-103, 114. (From the introduction) **58** #1611 35J60 (58G10)
- (with Daniljuk, G. I.) Regularity of the solutions of nonlinear parabolic systems. (Russian) *Mat. Fiz. Vyp.* **22** (1977), 87-91, 125. (From the introduction) **57** #16937 35D10 (35K55)
- (with Vol'pert, A. I.; Daniljuk, I. I.; Markovskii, A. I.) Jaroslav Borisovič Lopatinskii (on the occasion of his seventieth birthday). (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 1 (193), 213-216. (Editors) **55** #7706 01A70
- The inequality of coercivity for pairs of linear elliptic operators. (Russian) *Dokl. Akad. Nauk SSSR* **239** (1978), no. 2, 275-278. (V.-V. Olariu) **58** #17490 35J30
- The topological characterization of general nonlinear elliptic operators. (Russian) *Dokl. Akad. Nauk SSSR* **239** (1978), no. 3, 538-541. (V. S. Rabinovič) **58** #6678 35J60 (58G10)
- The index of the critical points of nondivergence elliptic operators. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 2, 116-119, 192. (A. Haimovici) **57** #10229 35J65 (58E05)
- (with Šiškov, A. E.) The solvability of the Dirichlet problem for the Monge-Ampère equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 3, 216-219, 285. (E. M. Saak) **58** #6687 35J65 (53A05)
- The membership of solutions of variational problems in Morrey spaces. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 5, 405-408. (Editors) **58** #23885 49A50 (46E35)
- Skripnik, M. O. The general solution of an equation of the form $\sum_{k=0}^n A_k \delta^k U / \delta x^k \delta y^k = 0$. *Ukrain. Mat. Ž.* **27** (1975), no. 4, 548-553, 575. (Hans Kaper) **52** #3728 35J45
- A condition for the solvability of the Dirichlet problem for second order elliptic systems in a ball. (Russian) *Mathematics collection* (Russian), pp. 167-170. *Izdat. "Naukova Dumka", Kiev*, 1976. (Editors) **58** #17500 35J55
- Index of the Dirichlet problem for a second order elliptic operator. (Russian) *Mathematics collection* (Russian), pp. 260-262. *Izdat. "Naukova Dumka", Kiev*, 1976. (Editors) **58** #17487 35J25 (58G10)
- Skripnik, V. I. A certain variant of the matrix method in statistical mechanics. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 4, 797-799. (J. Fritz) **56** #4602 82.47
- The construction of the transfer matrix for one-dimensional continuous multicomponent Gibbsian systems with a two-body regular interaction potential. (Russian. English summary) *Teoret. Mat. Fiz.* **29** (1976), no. 3, 323-335. (K. Kumar) **56** #10674 82.47
- The structure of translation operators in phase spaces of free Euclidean fields. I. (Russian. English summary) *Teoret. Mat. Fiz.* **35** (1978), no. 1, 24-28. (J. Niederle) **58** #14693 81.47 (46E35, 47D05)
- Skripnik, V. P. The stability of certain systems with transformed argument. (Russian) *Differencial'nye Uravnenija* **8** (1972), 1705-1708, 1719. (K. Smítalová) **47** #5404 34K20
- Certain questions that are connected with equations with a transformed argument. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 505-512, 573. (G. B. Gustafson) **46** #7670 (EA 47) 34K10
- Multidimensional integral equations with transformed argument of neutral type and their application to certain partial differential equations. (Russian) *Mathematical physics*, No. 14 (Russian), pp. 164-171, 176. *"Naukova Dumka", Kiev*, 1973. (N. K. Karapetjanc) **50** #2834 45F05
- The method of initial functions for equations of superneutral type. (Russian) *Differencial'nye Uravnenija* **9** (1973), 874-879, 977. (C. Corduneanu) **47** #9013 34K05
- The stability of certain systems with perturbed argument. (Russian) *Differencial'nye Uravnenija* **9** (1973), 1049-1057, 1164. (G. S. Ladde) **49** #5526 34K20
- On the stability of nonlinear systems with a transformed argument. *Prikl. Mat. Meh.* **37** (1973), 159-162 (Russian); translated as *J. Appl. Math. Mech.* **37** (1973), 145-149. (H. I. Freedman) **49** #9375 34K20
- Stability of systems of neutral type with a countable number of transformations of the argument. (Russian) *Differencial'nye Uravnenija* **10** (1974), 1662-1672, 1733. (G. S. Ladde) **50** #13828 34K20
- Certain questions that are connected with equations of superneutral type with small deviation. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 196-204, 284. (D. Bainov) **49** #7564 34K25

- Stability of systems with a countable number of transformations of the argument. (Russian) *Differencial'nye Uravneniya* 11 (1975), no. 5, 841-849, 948. (C. Corduneanu) 52 #963 34K20
- The boundedness of the solutions of nonlinear systems with transformed argument. (Russian) *Dinamika Sistem Vyp.* 7 (1975), 47-51, 165. (Author's summary) 58 #15516 93D05 (34K15)
- The stability of linear systems with perturbed argument. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 5(156), 67-72. (Š. Schwabik) 52 #11260 34K20
- On the stability of nonlinear systems of the neutral type. *Prikl. Mat. Meh.* 39 (1975), no. 1, 45-52 (Russian); translated as *J. Appl. Math. Mech.* 39 (1975), no. 1, 38-45. (D. Ramakrishna Rao) 53 #11196 34K20
- Stability criteria for systems with transformed argument that are based on the symmetrization of matrices. (Russian) *Differencial'nye Uravneniya* 12 (1976), no. 9, 1587-1595, 1724. (J. K. Hale) 55 #13049 34K20
- The stability of systems with transformed argument in the case in which the deviations of the argument change sign. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 1, 97-102, 143. (Pavol Marušák) 53 #8621 34K20
- Stability of functional-differential equations. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 31 (1976), no. 6, 39-43. (H. I. Freedman) 56 #6060 34K20
- Behavior of the solutions of equations with transformed argument. (Russian) *Differencial'nye Uravneniya* 13 (1977), no. 8, 1532-1533, 1544. (Juri Bogdanov) 58 #1473 34K05
- Stability of a nonlinear system with a countable number of transformations of the argument. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR. Ser. A* 1977, no. 2, 116-120, 192. (Author's summary) 58 #6626 34K20
- Behavior of the solutions of equations with a transformed argument. (Russian) *Ukrain. Mat. Ž.* 29 (1977), no. 5, 690-694, 711. (Š. Schwabik) 57 #6756 34K25
- Asymptotic behavior of the solutions of systems with transformed argument. (Russian) *Uspehi Mat. Nauk* 32 (1977), no. 1 (193), 205-206. (Š. Schwabik) 56 #805 34K20
- The behavior of the solutions in the case where the transformation of the argument depends on the solution. (Russian) *Differencial'nye Uravneniya* 14 (1978), no. 5, 853-858, 957. (M. M. Konstantinov) 58 #11806 34K15
- Skrjabin, B. N.** A qualitative study of the equations that describe the dynamics of a continuous flow chemical reactor (exothermal reaction of arbitrary order). (Russian) Qualitative methods of the theory of differential equations and their applications. *Gor'kov. Gos. Univ. Učen. Zap. Vyp.* 187 (1973), 188-206. (Editors) 58 #28878 34C35
- Skrjabin, D. D.** Generalization of theorems on exponential families. (Russian) *Certain questions in differential equations* (Russian), pp. 137-145. *Yakutsk. Gos. Univ., Yakutsk*, 1971. (S. A. Book) 49 #11680 62B05
- Efficient sequential estimation. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. Vyp.* 2 (1973), 50-56, 161. (N. L. Johnson) 48 #12757 62L12
- Efficient sequential estimation for exponential families of rank 1. (Russian) Statistical theory of estimation, I. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 43 (1974), 94-106, 170. (B. Ja. Levit (RŽMat 1975 #3 V182)) 54 #4000 62L12
- Skrjabina, L. P.** Uniqueness of the solution of certain boundary value problems for the heat equation with discontinuous boundary conditions. (Russian) *Volž. Mat. Sb. No. 15* (1973), 137-143. (T. Styš) 49 #9415 35K05
- Skrjago, A. M.** The homotopy type of certain compact semigroups. (Russian) *Mat. Zametki* 8 (1970), 711-719. (Klaus Keimel) 45 #8764 22A15 (55D10)
- The homotopy properties of certain continuous semigroups. (Russian) Questions of modern mathematics and methods of teaching it at institutions of higher learning. *Leningrad. Gos. Ped. Inst. Učen. Zap.* 404 (1971), 481-497. 55 #10600 22A15
- On a problem of A. D. Wallace on the structure of semigroups on spheres. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 9(124), 99-108. (A. B. Paalman-de Miranda) 48 #4187 22A15
- The structure of the homotopy algebra of a continuous arcwise connected groupoid with an idempotent. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* 541 (1972), 195-208. (J. Stasheff) 48 #6289 20L15
- Skrobiš, K.** (with Westwański, B.) Dipolar and quadrupolar susceptibility for Heisenberg-biquadratic and Blume-Emery-Griffiths interactions. II. *Phys. A* 92 (1978), no. 3-4, 527-544. (Katsuhiko Fujii) 58 #4123b 8247
- Skrockaja, E. G.** See *Stability and phase transitions*, 51 #2547
- Skrockii, G. V.** (with Volkov, A. M.; Izmet'sev, A. A.) The propagation of electromagnetic waves in a Riemannian space. *Ž. Eksper. Teoret. Fiz.* 59 (1970), 1254-1261 (Russian. English summary); translated as *Soviet Phys. JETP* 32 (1971), 686-689. (Authors' summary) 51 #14757 7853
- Skrolis, I. L.** (with Kaljaev, A. V.) Solution of matrix games on digital integrating machines. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1971, no. 1, 119-125 (Russian); translated as *Engng. Cybernetics* 9 (1971), no. 1, 103-110. (T. A. Porsching) 47 #3035 90D99 (65F30)
- Use of extrapolation digital integrating machines for the solution of matrix games. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 3, 26-30. (Author's summary) 48 #13303 90D99
- Skrönn, H. J.** See *Jahrestagung: Gesellschaft für Informatik*, 48 #1502
- Skrotskii, G. V.** See **Skrockii, G. V.**
- Skručava, D. Ž.** A pair consisting of a surface and a fixed plane. (Russian) *Irkutsk. Politehn. Inst. Trudy No. 52* (1969), 196-203. (N. Mihăileanu) 46 #6173 53A05
- Skrydlova, E. V.** A class of degenerate congruences of figures in projective space. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 3 (1973), 126-132. (M. A. Akivis) 57 #13732 53A20
- Degenerate congruences $(CL)_{1,2}$ in three-dimensional projective space. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 5 (1974), 141-158. (R. M. Geidel'man) 57 #1306 53A25
- Degenerate congruences $(CL)_{2,1}$ in three-dimensional projective space. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 5 (1974), 159-170. (R. M. Geidel'man) 57 #1307 53A25
- Congruences $(CP)_{2,1}$. (Russian) *Trudy Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 4 (1974), 161-174. (Josef Vala) 54 #8487 53A25
- Degenerate congruences of pairs of conics. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur No. 6* (1975), 169-181. (Author's introduction) 58 #30817 53A20
- A certain class of degenerate congruences of quadratic pairs. (Russian) *Ukrain. Geometr. Sb. Vyp.* 18 (1975), 126-135, v. (R. M. Geidel'man) 53 #1440 53A20
- Degenerate congruences of the second kind that are generated by a pair of conics. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 5 (1976), 99-104, 153. (M. Decuyper) 58 #12758 53A20
- Degenerate congruences that are generated by a second order curve and a point. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp.* 6 (1977), 71-76, 155. (Author's summary) 58 #18199 53A25
- Skrypnik, G. I.** (with Beljaev, A. V.) Contribution to the theory of optimal linear filtering. *Radio Engng. Electron. Phys.* 17 (1972), 247-255. (Ludwig Arnold) 52 #5155 93B15
- Skrypnik, I. V.** See **Skripnik, I. V.**
- Skrypnik, M. A.** See **Skripnik, M. O.**
- Skrzypczak, Jerzy** Remarks on approximate methods for the solution of operator equations in e -chain Banach spaces. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 465 Mat.-Fiz. Zeszyt* 28 (1977), 151-161. (Author's summary) 58 #23832 47H15 (65J05)
- Skrzypkowski, T.** State functions of computing machines. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 1155-1159. (K. Vairav) 50 #15439 68A25
- Skubačevskii, A. L.** The oscillatory solutions of a second order linear homogeneous differential equation with retarded argument. (Russian) *Differencial'nye Uravneniya* 13 (1977), 462-469, 587-588. (K. Smítalová) 52 #960 34K15
- A certain property of the solutions of a second order linear differential equation of unstable type with retarded argument. (Russian) *Differencial'nye Uravneniya* 11 (1975), no. 4, 760-761, 768. (From the summary) 58 #29017 34K15
- Skubenko, B. F.** (with Narzullaev, H. N.) On the question of the inhomogeneous Minkowski problem. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) No. 181* (1973), 129-142. (Peter Brückmann) 46 #1712 10E05 (52A45)
- (with Narzullaev, H. N.) Certain questions of the generalization of the center of mass theorem of Minkowski. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) No. 181* (1973), 142-152. (Peter Brückmann) 46 #1713 (EA 46) 10E05 (52A45)
- On Minkowski's conjecture for $n=5$. (Russian) *Dokl. Akad. Nauk SSSR* 233 (1972), 1304-1305. (G. C. Shepard) 46 #5255 10E05 (52A45)
- A proof of Minkowski's conjecture on the product of n linear inhomogeneous forms in n variables for $n < 5$. (Russian) Investigations in number theory, 2. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 33 (1973), 6-36. (A. C. Woods) 51 #310E25
- A new variant of the proof of the inhomogeneous Minkowski conjecture for $n=5$. (Russian) Number theory, mathematical analysis and their applications. *Trudy M. Inst. Steklov.* 142 (1976), 240-253, 271. (Editors) 58 #27803 10E20
- On a theorem of Čebotarev. (Russian) *Dokl. Akad. Nauk SSSR* 233 (1977), no. 301-303. (H. J. Godwin) 58 #10759 10E15
- Skubuliani, M. S.** The differentiation of functionals of two variables. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 76 (1974), 297-300. (Janos) 51 #6418 46G05
- Some questions concerning the differentiation of functionals of several variables in Banach spaces. (Russian) *Fifth Works of Young Scientists at Tbilisi State University on the Order of the Red Star (Russian)*, pp. 13-20. *Tbilis. Univ., Tbilisi*, 1976. (Editors) 58 #31165 58C20 (46G05)
- Skudlarek, Hans-Ludwig** Die unzerlegbaren Charaktere einiger diskreter Gruppen. *Math. Ann.* 223 (1976), no. 3, 213-231. (Dong Hoon Lee) 57 #3308 22E40 (20G05)
- Skudrzyk, Eugen** ★ The foundations of acoustics. Basic mathematics and basic acoustics. *Springer-Verlag, New York-Vienna*, 1971. xxviii + 790 pp. (Ll. G. Chambers) 58 #1976.00
- Skubida, L. G.** (with Šubenko-Šubin, L. O.; Litvin, O. M.; Pereverzev, D. A.) On the question of obtaining continuous solutions of nonstationary heat conduction problems. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. Fiz.-Mat. Nauk* 1974, 652-654, 672. (Authors' summary) 50 #1649 8035
- Skula, Ladislav** Kurzung unter den Typen der teilweise geordneten Mengen. Lectures on the theory of ordered sets and general algebra (Abstracts, Summer Session, Harnett, 1970). *Acta Fac. Rerum. Natur. Univ. Comenian. Math. Mimoriadne Číslo* (1971), 81-100. (E. Harzheim) 52 #207 06A10
- Die Fortsetzung stetiger Homomorphismen von δ -Halbgruppen. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topology Symposium, 1971)*, pp. 401-404. *Academia, Prague*, 1972. (Anne L. Hudson) 51 #5832A15
- Eine Bemerkung zu dem ersten Fall der Fermatschen Vermutung. *J. Reine Angew. Math.* 253 (1972), 1-14. (H. J. Godwin) 45 #6777 10J10
- Fortsetzung stetiger Homomorphismen von δ -Halbgruppen. *J. Reine Angew. Math.* 261 (1973), 71-87. (O. Steinfeld) 49 #7379 20M10
- Quasi-reflections and limits. *Czechoslovak Math. J.* 24(99) (1974), 522-527. (M. Bunge) 50 #10004 18A30
- Fortsetzung stetiger Homomorphismen von δ -Halbgruppen. (Russian summary) *Scripta Fac. Sci. Natur. UJEP Brunensis-Math.* 4 (1974), no. 1, 53. (Editors) 52 #1020M10
- Maximale δ - und δ_1 -Kategorien. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, III. *J. Reine Angew. Math.* 274/275 (1975), 287-298. (Steinfeld) 52 #14009, 18H40 (20M15)
- Über pseudoreguläre Primzahlen. *J. Reine Angew. Math.* 277 (1975), 37-39. (Narkiewicz) 52 #10667 12A35 (12A50)
- Extension of a partial x -operator to an x -operator. (Czech. English and Russian summaries) *Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v. Brně B-56* (1975), 125-130. (B. Pondělíček) 52 #8309 20M99

- On c -semigroups. *Acta Arith.* **31** (1976), no. 3, 247-257. (W. Narkiewicz) **56** #3164 20M10 (13F05, 12A50)
- On extensions of partial x -operators. *Czechoslovak Math. J.* **26(101)** (1976), no. 3, 477-505. (B. M. Schein (Šaĭn)) **54** #2857 20M99
- Eine Bemerkung zum Kardinalprodukt. *Czechoslovak Math. J.* **27(102)** (1977), no. 4, 515-522. (E. Harzheim) **56** #15507 06A10
- Non-possibility to prove infinity of regular primes from some theorems. *J. Reine Angew. Math.* **291** (1977), 162-181. (Karl-Heinz Indlekofer) **56** #5413 10A40 (10H35)
- See also Faisant, Alain, **57** #6247 and Faddeev, D. K., **57** #16258
- Y'skii, O. I. (with Podgaec, R. M.; Njašin, Ju. I.) A minimum principle for transformed power of viscous dissipation. (Russian) *Perm. Politehn. Inst. Sb. Naučn. Trudov* **167** (1975), 23-26. (From the authors' text) **56** #17466 76A9
- manich, A. (with Domenico, B. A.) On the application of the generalized Newton-Raphson method in radiative transfer problems. *J. Quant. Spectrosc. Radiat. Transfer* **11** (1971), no. 6, 547-557. (Ian P. Grant) **54** #4561 85A5
- pas, Antanas. A condition for the solvability of the Cauchy problem for a certain elliptic system. (Russian. Lithuanian and English summaries) *Differencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija. I Sekcija* No. 4 (1973), 47-58, 91. (A. Borzymowski) **51** #1109 35J45
- pien, Zdzisław (with Wojda, A. Paweł) Sufficient conditions for λ -edge Hamiltonian graphs. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 391-396. (H. V. Kronk) **46** #1645 05C35
- Sufficient conditions for Hamiltonian graphs. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 901-905. (C. Berge) **46** #5179 05C99
- A short proof of the theorem on the structure of maximal graphs without 1-factors. (Polish and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały* No. 9 *Grafy i hipergrafy* (1973), 9-14. (G. Chartrand) **50** #12810 05C35
- (with Marczyk, A.) Characterizing line graphs of general graphs. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 235-241. (L. W. Beineke) **49** #7188 05C99
- (with Wojda, A. Paweł) On highly Hamiltonian graphs. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 463-471. (H. V. Kronk) **50** #1974 05C35
- Hamiltonian circuits and path coverings of vertices in graphs. *Colloq. Math.* **30** (1974), 295-316. (From the author's introduction) **57** #9601 05C35
- Path partitions of vertices and Hamiltonity of graphs. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 481-491. *Academia, Prague*, 1975. (A. C. Shershin) **54** #5045 05C35
- Partitions and counting isomorphism types of certain maximal graphs without 1-factors. *Demonstratio Math.* **8** (1975), no. 4, 447-463. (W. Mader) **54** #146 05C30
- Hamiltonian shortage, path partitions of vertices, and matchings in a graph. *Colloq. Math.* **36** (1976), no. 2, 305-318. (From the introduction) **58** #27631 05C35 (05C99)
- (with Zygmunt, W.) Generating path factors of a tree. *Zeszyty Nauk. Univ. Jagielloń.* **475** *Prace Mat. Zeszyt* 19 (1977), 169-173. (C. Tartia) **57** #9602 05C35
- On extending path systems and (g, r) -edge Hamiltonian graphs. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 4, 343-348. (L. V. Quintas) **57** #12295 05C35
- (with Sysło, Maciej M.) Applied graph theory. III. Euler and Hamiltonian graphs. The traveling salesman problem. (Polish) *Mat. Stos.* (3) **10** (1977), 5-54. (G. O. H. Katona) **58** #367c 05C35 (65F99)
- Stirling numbers and colouring of q -trees. (Polish and Russian summaries) *Prace Nauk. Inst. Mat. Politechn. Wrocław. No. 17 Ser. Stud. i Materiały* No. 13 (1977), 63-67. (Renu Laskar) **58** #5337 05C15
- See also Demidović, B. P., **50** #2622
- uratsov'skii, M. V. The development of the fundamental identity of the theory of prime numbers. (Ukrainian) *Narisi İstor. Prirodosnav. i Tehn. Vyp.* 21 (1975), 36-41, 110. (Editors) **58** #21186 01A50 (01A55, 10-03)
- urba, V. V. (with Juhimenko, B. I.) Convergence of a certain modification of the "branch and bound" method for the solution of a linear integer programming problem with Boolean variables. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1969)*, No. 3 (Russian), pp. 81-84. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (S. Zlobec) **46** #3077 90C10
- Priority intervals in ordering problems. (Russian. English summary insert) *Kibernetika (Kiev)* (1970), no. 2, 77-79. (V. Tanaev (RZMat 1971 #1 V478)) **54** #12197 90B35
- (with Burdjuk, V. Ja.) Scheduling theory. Problems and methods of solution. I. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 1, 89-102. (Editors) **45** #1569 90B35
- (with Tanaev, V. S.) ★Введение в теорию расписаний. (Russian) [Introduction to scheduling theory] Edited by D. B. Judin. *Экономико-Математическая Библиотека*. [Library of Mathematical Economics] *Izdat. "Nauka", Moscow*, 1975. 256 pp. (Z. Khalil) **58** #32904 90B35
- (with Beleckii, S. A.) Numerical methods in the solution of the assembly line balancing problem. A survey. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 1, 96-108. (I. V. Romanovskii) **57** #5051 90B30
- See also Automated systems of management control, **56** #7767
- uridin, S. A. See Mathematics and progress in science and technology, **48** #8170
- urihin, V. I. (with Žiteckii, L. S.; Procenko, M. M.) ★Итеративно-табличные автоматы. (Russian) [Iterative-tabular automata] *Izdat. "Naukova Dumka", Kiev*, 1977. 165 pp. (L. Bal) **58** #25051 65S05 (93Bxx)
- See also Automated control systems, **53** #4904; Systems analysis in industrial production, **56** #7850 and Automated control systems and data processing, **56** #8113
- urlov, V. M. (with Skal'ko, L. A.) The electromagnetic field of a linear radiator that is located inside a parabolic cylinder with apertures. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 152-169. (A. Nikodémusz) **46** #2995 78S35
- urnick, David See Credibility: theory and applications, **52** #2116
- urskii, B. I. (with Aronov, M. G.) Optimum estimation of shift of random function realization. *Avtomat. i Telemekh.* **1974**, no. 11, 33-39. (Russian. English summary); translated as *Avtomat. Remote Control* **35** (1974), no. 11, part 1, 1734-1739 (1975). (Authors' summary) **56** #11356 93E10
- Škutin, L. I. Exact formulation of the equations of nonlinear deformation of thin shells. I. (Russian) *Prikl. Problemy Proč. i Plast. No. 7* (1977), 3-9, 150. (S. Drobot) **58** #25266 73J35
- (with Pavlov, V. M.) Formulas for the calculation of armored cylindrical shells that are most stable under external pressure. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1977**, no. 5, 159-167. (M. Mišicu) **57** #4780 73A9
- Skvorcov, A. E. A sharpening of the multidimensional local limit theorem (the lattice case). (Russian) *Cybernetics (Proc. Sem., Donetsk, 1969)*, No. 1 (Russian), pp. 87-92. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (V. Petrov (RZMat 1970 #8 V24)) **45** #9371 60F05
- The rate of convergence in limit theorems for additive functionals of Markov processes. (Russian) *Theory of random processes*, No. 3 (Russian), pp. 112-117, 159. *Izdat. "Naukova Dumka", Kiev*, 1975. (Masuyuki Hitsuda) **56** #6800 60F05 (60J55)
- On the estimation of the remainder term in a central limit theorem for homogeneous Markov chains. (Russian) *Behavior of systems in random media (Russian)*, pp. 36-38. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1976. (J. H. Kučkarov) **58** #18679 60F05 (60J05)
- An estimate of the rate of convergence in the limit theorem for Markov chains. (Russian) *Theory of random processes*, No. 4 (Russian), pp. 80-86, 118. *Izdat. "Naukova Dumka", Kiev*, 1976. (Š. K. Formanov) **54** #14104 60J05 (60J05)
- Two limit theorems for sums of random variables that are connected in a homogeneous Markov chain. (Russian) *Theory of random processes*, No. 5 (Russian), pp. 82-85, 114. *Izdat. "Naukova Dumka", Kiev*, 1977. (Serban Grigorescu) **57** #1613 60F05 (60J10)
- Skvorcov, D. P. The occurrence of an implication in the finitely valid intuitionistically unprovable formulae of propositional logic. (Russian) *Mat. Zametki* **20** (1976), no. 3, 383-390. (V. P. Orevkov) **55** #2511 02C15
- Skvorcov, Ė. F. (with Sulimov, Ju. V.) An approach to the problem of decoding Bose-Chaudhuri-Hocquenghem codes. (Russian) *Problemy Pereдачи Informacii* **12** (1976), no. 4, 36-45. (Authors' summary) **58** #15685 94A10
- Skvorcov, Ė. K. On the proof of N. K. Kulikov's generalized formula for the expansion of a function of one argument. (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 69-79. (J. Moravčík) **46** #7604 34A05 (41A30)
- Skvorcov, Ė. V. (with Kotljars, L. M.) The filtration of a viscoplastic fluid toward the drain in a curvilinear layer. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 1049-1052. (Št. I. Gheorghită) **47** #9939 76J30
- (with Kotljars, L. M.) Jet flows with two sections of a curvilinear rigid boundary. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* 12 (1975), 111-122. (L. Dragoş) **58** #3907 76J30
- Skvorcov, G. E. On general hydrodynamics. (Russian. English summary) *Vestnik Leningrad. Univ.* **1976**, no. 1 *Mat. Meh. Astronom. vyp.* 1, 112-116, 162. (V. P. Milantiev) **55** #4890 76J00
- Skvorcov, P. G. The Monte Carlo method for nonlinear integral equations. (Russian) *Operations research and statistical simulation*, No. 2 (Russian), pp. 121-148, 152. *Izdat. Leningrad. Univ., Leningrad*, 1974. (G. Vainikko) **52** #9559 65C05 (65R05)
- (with Ermakov, S. M.) Unbiased estimators of the sum of the Neumann series by the Monte Carlo method. (Russian) *Statistical theory of estimation*, I. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **43** (1974), 155-168, 171. (V. Dupač) **52** #9553 65C05
- Skvorcov, V. A. (with Vinogradova, I. A.) Generalized integrals and Fourier series. (Russian) *Mathematical analysis*, 1970 (Russian), pp. 65-107. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1971. (K. Karták) **51** #8715 42-02
- Uniqueness theorems on Haar series for summation methods. (Russian) *Mat. Zametki* **9** (1971), 449-458. (A. Peyerimhoff) **45** #7385 42A24 (40C99, 42A60)
- The Marcinkiewicz-Zygmund integral and its connection with the SCP-integral of Burkil. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **27** (1972), no. 5, 78-82. (Jaroslav Smital) **49** #5251 26A39
- Certain generalizations of the uniqueness theorem for series with respect to a Walsh system. (Russian) *Mat. Zametki* **13** (1973), 367-372. (F. Schipp) **47** #7313 42A62
- Sets of uniqueness for multidimensional Haar series. (Russian) *Mat. Zametki* **14** (1973), 789-798. (R. L. Cooke) **48** #11908 42A92
- The coefficients of convergent multiple Haar and Walsh series. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 6, 77-79. (R. L. Cooke) **48** #11894 42A56
- The uniqueness of Haar series with convergent subsequences of partial sums. (Russian) *Mat. Zametki* **16** (1974), no. 1, 27-32. (F. Schipp) **52** #14826 42A56
- An example of a Walsh series with a subsequence of partial sums that converges to zero everywhere. (Russian) *Mat. Sb. (N.S.)* **97(139)** (1975), no. 4(8), 517-539, 633. (F. Móricz) **52** #3871 42A62
- An example of a zero-series in the Walsh system. (Russian) *Mat. Zametki* **19** (1976), no. 2, 179-186. (W. R. Wade) **53** #13996 42A56
- Uniqueness theorems for Walsh series that are summable by the (C, 1) method. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 5, 73-80. (See RZMat 1977 #4 B74) **42A24**
- The rate of convergence to zero of coefficients of zero-series in the Haar and Walsh systems. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 3, 703-716, 719. (F. Schipp) **58** #6897 42A56
- Uniqueness condition for the representation of functions by Walsh series. (Russian) *Mat. Zametki* **21** (1977), no. 2, 187-197. (F. Schipp) **58** #6898 42A56
- The h -measure of M -sets for the Walsh system. (Russian) *Mat. Zametki* **21** (1977), no. 3, 335-340. (F. Schipp) **58** #6899 42A56
- See also Mathematical analysis, **52** #8
- Skvorcov, V. V. See Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region, **46** #1532
- Skvorcova, M. G. Multipliers of Fourier series of Orlicz classes. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1969**, no. 1(80), 78-88. (See RZMat 1969 #8 B113) **42A18**

- Multiplicators and summability factors. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **253** (1970), 205-211. (E. Stipančić) **45** #777 40H05
- Properties of the multipliers of trigonometric Fourier series. (Russian) *Ural. Gos. Univ. Mat. Zap.* **8** (1972), no. 2, 91-107, 176. (S. Aljančić) **48** #2638 42A18
- Skvoretz, John** Information diffusion in formally structured populations: an information processing approach. *J. Cybernet.* **8** (1978), no. 1, 51-82. (A. Rapoport) **57** #15579 92A20
- Skwarczyński, Maciej** A class of domains determined by an invariant property of the Bergman function. (Polish and Russian summaries) Proceedings of the Fifth Conference on Analytic Functions (Univ. Mariae Curie-Skłodowska, Lublin, 1970). *Ann. Univ. Mariae Curie-Skłodowska Sect. A.* **22-24** (1968/70), 171-173 (1972). (K. T. Hahn) **51** #3538 32H05
- The Bergman function and semiconformal mappings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 667-673. (Klas Diederich) **50** #7592 32H10
- (with Iwiński, T.) The convergence of Bergman functions for a decreasing sequence of domains. *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 117-120. *Reidel, Dordrecht*, 1975. (I. P. Ramadanov) **56** #8828 30A31
- Some applications of the theorem on rational approximation in the mean. Proceedings of the Sixth Conference on Analytic Functions (Kraków, 1974). *Ann. Polon. Math.* **33** (1976/77), no. 1-2, 101-106. (L. I. Hedberg) **55** #3267 30A82
- A new notion of boundary in the theory of several complex variables. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 5, 327-330. (S. I. Pinčuk) **53** #11095 32D99 (32H10)
- (with Lawrynowicz, Julian) Conformal and biholomorphic invariants in the analysis on manifolds. *Proceedings of the First Finnish-Polish Summer School in Complex Analysis (Podlesice, 1977), Part I*, pp. 35-113. *Univ. Łódź, Łódź*, 1978. (Adib A. Fadlalla) **58** #24321 58C10 (32H99, 58E99)
- Skwirzynski, Joseph K.** See Conference: Optimization Techniques, **48** #5759; Network theory, **49** #12198; New directions in signal processing in communication and control, **57** #2728 and Communication systems and random process theory, **57** #15723
- Skyrms, Brian** Definitions of semantical reference and self-reference. *Notre Dame J. Formal Logic* **17** (1976), no. 1, 147-148. (Merrie Bergmann) **55** #2479 02A05
- See also Paradox of the liar, **48** #3694
- Skyum, Sven** (with Nielsen, Mogens; Rozenberg, Grzegorz; Salomaa, Arto) Nonterminals, homomorphisms and codings in different variations of OL-systems. II. Nondeterministic systems. *Acta Inform.* **3** (1973/74), 357-364. (S. Ginsburg) **50** #11867b 68A30
- Nonterminals and codings in defining variations of OL-systems. *L systems (Third Open House, Comput. Sci. Dept., Aarhus Univ., Aarhus, 1974)*, pp. 244-249, 327-388. *Lecture Notes in Comput. Sci., Vol. 15, Springer, Berlin*, 1974. (Jürgen Dassow) **53** #12113 68A30
- (with Nielsen, Mogens; Rozenberg, Grzegorz; Salomaa, Arto) Nonterminals, homomorphisms and codings in different variations of OL-systems. I. Deterministic systems. *Acta Inform.* **4** (1974/75), 87-106. (S. Ginsburg) **50** #11867a 68A30
- On extensions of ALGOL-like languages. *Information and Control* **26** (1974), 82-97. (S. Ginsburg) **50** #9069 68A30
- Parallel context-free languages. *Information and Control* **26** (1974), 280-285. (Rani Siromoney) **51** #2367 68A30
- On decomposing languages defined by parallel devices. *Seventh Annual ACM Symposium on Theory of Computing (Albuquerque, N. M., 1975)*, pp. 121-125. *Assoc. Comput. Mach., New York*, 1975. (Juhani Karhumäki) **55** #13890 68A30
- (with Engelfriet, Joost) Copying theorems. *Information Processing Lett.* **4** (1975/76), no. 6, 157-161. (E. Stockfi) **53** #4636 68A30
- Confusion in the Garden of Eden. *Proc. Amer. Math. Soc.* **50** (1975), 332-336. (E. Ikauniekis) **52** #7206 68A25
- (with Ehrenfeucht, Andrzej; Rozenberg, Grzegorz) A relationship between ETOL and EDTOL languages. *Theoret. Comput. Sci.* **1** (1975/76), no. 4, 325-330. (Martti Penttonen) **54** #1729 68A30
- Decomposition theorems for various kinds of languages parallel in nature. *SIAM J. Comput.* **5** (1976), no. 2, 284-296. (Branislav Rován) **58** #13983 68A30
- (with Jones, Neil D.) Complexity of some problems concerning L systems (preliminary report). *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 301-308. *Lecture Notes in Comput. Sci., Vol. 52, Springer, Berlin*, 1977. (Kurt Mehlhorn) **58** #8524 68A30 (68A20)
- (with Jones, Neil D.) Recognition of deterministic ETOL languages in logarithmic space. *Information and Control* **35** (1977), no. 3, 177-181. (Jan van Leeuwen) **57** #4619 68A20 (68A30)
- Słačálek, P.** (with Ferst, P.) On autogenerating systems. (Russian and Czech summaries) *Acta Univ. Carolinae—Math. et Phys.* **18** (1977), no. 2, 35-42. (Authors' summary) **57** #16448 20M35
- Slack, J. R.** See *Compstat*, **49** #9990
- Slack, R. S.** Further notes on branching processes with mean 1. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **25** (1972/73), 31-38. (E. Seneta) **48** #9871 60J80
- Slad', L. M.** Space-like solutions of the Gel'fand-Jaglom type equations. (Russian. English summary) *Teoret. Mat. Fiz.* **5** (1970), no. 1, 25-38. (Author's summary) **57** #15035 81.35
- Śladek, Andrzej** Grothendieck groups of quadratic forms over formally real fields. (Polish summary) *Univ. Śląski w Katowicach Prace Naukowe No. 59 Prace Mat. Vyp.* **5** (1975), 41-47. (Craig Cordes) **52** #10594 10C05
- Sladkov, A. B.** (with Bočkov, P. E.; Popov, Ju. A.) Design of multifunctional modules by using invariants of Boolean functions. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* **1973**, no. 3, 15-20. (J. Kuntzmann) **49** #2199 94A20
- Ślądowska, Janina** Sur les conditions de Grunsky-Nehari pour les fonctions univalentes bornées dans le cercle unité. (English and Russian summaries) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 307-311. (J. G. Krzyż) **50** #4928 30A36
- Coefficient inequalities for Shah's functions. *Demonstratio Math.* **5** (1973), 171-192. (Victor I. Lavin) **49** #5334 30A32
- (with Bereśniewicz-Rajca, Olga) A certain area theorem. (Polish. Russian. English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 24* (1974), 127-130. (Z. Lewandowski) **51** #10608 30A36
- Coefficient inequalities for Bieberbach-Eilenberg functions. (Polish. Russian. English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. Zeszyt* **25** (1974), 1-10. (T. Giec) **55** #12903 30A34
- Les polynômes de Faber dans la théorie des fonctions univalentes bornées. *Demonstratio Math.* **8** (1975), 99-112. (F. R. Keogh) **51** #5918 30A36
- Les polynômes de Faber dans les familles compactes de fonctions univalentes bornées. *Comment. Math. Prace Mat.* **20** (1977), no. 1, 205-214. (Zbl 371 #358) **58** #22528 30A36
- Théorème des aires dans la théorie des fonctions univalentes bornées. I. *Demonstratio Math.* **10** (1977), no. 2, 287-316. (RŽMat 1978 #7 B211) **58** #2843 30A36
- Théorème des aires dans la théorie des fonctions univalentes bornées. II. *Demonstratio Math.* **10** (1977), no. 3-4, 547-569. (RŽMat 1978 #9 B115) **58** #2843 30A36
- Sladký, Karel** Markovian approach for large scale stochastic system optimization. *Proceedings of the First "Formator" Symposium on Mathematical Methods for the Analysis of Large-Scale Systems (Liblice, 1970)*, pp. SL1-SL 21+iv. *Inst. Info. Theory and Automat., Czechoslovak Akad. Sci., Prague*, 1970. (Richard Gran) **45** #93E20
- Necessary and sufficient optimality conditions for average reward of controlled Markov chains. *Kybernetika (Prague)* **9** (1973), 124-137. (H. Taylor) **50** #1590C40
- On the set of optimal controls for Markov chains with rewards. *Kybernetika (Prague)* **10** (1974), 350-367. (H. Taylor) **51** #15008 90C40
- On dynamic programming recursions for multiplicative Markov decision chains. Stochastic systems: modeling, identification and optimization, II (Proc. Sympos., Kentucky, Lexington, Ky., 1975). *Math. Programming Stud. No. 6* (1976), 216-228. (Stanley R. Pliska) **56** #11004 90C40 (90A05)
- On the optimality conditions for semi-Markov decision processes. *Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the Eighth European Meeting of Statisticians (Tech. Prague, Prague, 1974), Vol. A*, pp. 555-562. *Reidel, Dordrecht*, 1977. (M. I. C. 58 #26028 90C40
- (with Hordijk, Arie) Sensitive optimality criteria in countable state dynamic programming. *Math. Oper. Res.* **2** (1977), no. 1, 1-14. (L. C. Thomas) **56** #1490C40
- See also Symposium: Formator, Mathematical Methods for the Analysis of Large-Scale Systems, **58** #33215
- Šlafer, I. M.** (with Gameckaja, S. P.; Matuševskii, V. V.) A certain problem of harvesting and processing of the sugar beet. (Russian) *Prikl. Mat. i Programirovanie* **8** (1972), 18-23. (K. Zimmermann) **47** #10042 90B30
- Šlafman, Š. M.** The existence of solutions in the nonlinear theory of nonshallow shells. *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* **1973**, 4, 49-53, 137. (From the author's introduction) **54** #11916 73.35
- (with Vorovič, I. I.; Lebedev, L. P.) On some direct methods and the existence of solution in the nonlinear theory of elastic nonshallow shells of revolution. *Prikl. Meh.* **38** (1974), 339-348. (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 310-319. (John M. Ball) **51** #9620 73.35
- (with Vorovič, I. I.) On the solvability of nonlinear equations for a symmetrically loaded nonshallow spherical dome. *Prikl. Mat. Meh.* **38** (1974), 944-946. (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 894-897 (1975). (W. Kec) **51** #973.47
- Slaghek, Luigi** Curvature delle orientazioni bidimensionali in un punto di uno spazio a quattro dimensioni. (French and English summaries) *Atti. Accad. Ligure Sci. Lett.* **1976**, 49-54. (Aristide Sanini) **54** #13759 53B20
- Slaght, Ralph L.** A concise method for translating propositional formulae containing standard truth-functional connectives into a Sheffer stroke equivalent; plus an extension of the method. *Notre Dame J. Formal Logic* **15** (1974), 161-164. (T. G. Beach) **49** #2285 02D99
- Modal tree constructions. *Notre Dame J. Formal Logic* **18** (1977), no. 4, 517-528. (Brian F. Chellas) **58** #21483 02C10
- Slagle, James R.** (with Chang, Chin Liang; Lee, Richard Char Tung) A new algorithm for generating prime implicants. *IEEE Trans. Computers* **C-19** (1970), no. 4, 304-309. **56** #15213 94A20
- Interpolation theorems for resolution in lower predicate calculus. *J. Assoc. Comput. Mach.* **17** (1970), 535-542. (G. E. Minc) **50** #6804 02D99 (02B10, 68A40)
- ★Artificial intelligence: the heuristic programming approach. *McGraw-Hill, New York-Düsseldorf-London*, 1971. viii + 196 pp. (Editors) **53** #9754 68.01
- (with Chang, Chin Liang) An admissible and optimal algorithm for searching for shortest paths in AND/OR graphs. *Artificial Intelligence* **2** (1971), 117-128. (S. Amarel) **48** #168A45
- (with Koniver, Deena A.) Finding resolution proofs and using duplicate goals in AND/OR trees. *Information Sci.* **3** (1971), 315-342. (G. E. Minc) **46** #2928 68A40
- (with Chang, Chin Liang) Completeness of linear refutation for theories of equality. *J. Assoc. Comput. Mach.* **18** (1971), 126-136. (G. E. Minc) **46** #468A40
- Automatic theorem proving with built-in theories including equality, partial ordering and sets. *J. Assoc. Comput. Mach.* **19** (1972), 120-135. (O. A. Letićić) **52** #16172 68A40
- An approach for finding C-linear complete inference systems. *J. Assoc. Comput. Mach.* **19** (1972), 496-516. (G. E. Minc) **47** #3145 02D99 (68A40)
- ★Искусственный интеллект: подход на основе эвристического программирования. (Russian) [Artificial intelligence: the heuristic programming approach] With a supplement "Theorem-proving by resolution as a basis for question-answering systems" by C. Green (Machine Intelligence 4, pp. 183-205, American Elsevier, New York, 1969). Translated from the English by A. E. Voiskovskiy and B. A. Pozin. Edited by G. E. Pozdnjak. *Izdat. "Mir", Moscow*, 1973. 300 pp.

(Editors) **53** #9755 68A45

Automated theorem-proving for theories with simplifiers, commutativity, and associativity. *J. Assoc. Comput. Mach.* **21** (1974), 622-642. (Charles G. Morgan) **55** #1871 68A45

(with Norton, L. M.) Automated theorem-proving for the theories of partial and total ordering. *Comput. J.* **18** (1975), 49-54. (I. Kramosil) **51** #7387 68A40

gle, Johnnie G. Combinatorial theory of local complexes. *Illinois J. Math.* **19** (1975), 179-197. (Jerrold W. Grossman) **53** #4075 57C05

hor, L'udomir On the solution of the problem: $u''' = f(x, u, u', u''), u(a_1) = u(a_2) = u(a_3) = 0$ by using quasilinearization. (Slovak and Russian summaries) *Acta Fac. Rerum Natur. Univ. Comenian. Math.* **30** (1975), 15-34. (Richard Brown) **54** #13190 34B15

ović, Semiha The (R, λ, δ) -summability of expansions in the eigenfunctions of a boundary value problem for the oscillating membrane. (Serbo-Croatian. English summary) *Akad. Nauka i Umjet. Bosne i Hercegov. Rad. Knj. 58 Odjeli. Tehn. Nauka Knj. 4* (1977), 209-224. (M. Tomić) **56** #12653 35P10

ma-Cazacu, Tatiana See *Recherches sur la philosophie des sciences*, **52** #7764

pak, Ju. D. The quasiperiodic solutions of second order systems. (Russian) *The method of integral manifolds in nonlinear differential equations (Russian)*, pp. 319-330. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1973. (N. Chafee) **51** #10769 34C25

The periodic solutions of second order nonlinear equations that are not solved with respect to the highest derivative. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 850-854, 864. (I. Muntean) **50** #13736 34C25

Periodic solutions of a second order linear system that is not solved for the derivatives. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations (Russian)*, pp. 183-188. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1975. (Editors) **53** #13744 34C25 (34C30)

Periodic solutions of a linear system of differential equations with a degenerate matrix multiplying the derivatives. (Russian) *Ukrain. Mat. Ž.* **27** (1975), 137-140, 144. (I. Muntean) **51** #1024 34C25

On the reducibility of a linear system of differential equations with a degenerate matrix at the derivatives. (Russian) *Mat. Fiz. Vyp.* **21** (1977), 60-64, 119. (L. Pintér) **58** #17327 34C20

pikene, M. (with Vainikko, G.) On a certain theorem of S. G. Krein on perturbation of operators that generate analytic semigroups. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised* No. 281 (1971), 186-189. (A. B. Buche) **47** #2431 47D05

stnikov, A. D. Moderate zones of normal convergence. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 5, 1028-1030. (Zdzisław Rychlik) **57** #10779 60F05

On the distribution of random determinants. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **22** (1977), no. 4, 888-896. (V. L. Girko) **57** #7740 60F05 (62H10)

Probabilities of moderate deviations. (Russian) *Dokl. Akad. Nauk SSSR* **238** (1978), no. 4, 814-815. (S. A. Book) **57** #10783 60F10

Limit theorems for probabilities of moderate deviations. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **23** (1978), no. 2, 340-357. (S. A. Book) **58** #7799 60F10

ter, David J. See Charness, Neil. **58** #32024

te, B. H. The foundations of logic. *Mind* **81** (1972), no. 321, 42-56. (J. Corcoran and W. Ebersberger) **57** #2867 02A05 (02C10)

Logic. *Philos. Quart.* **23** (1973), 224-229. (Editors) **58** #16107 02A05

ter, G. L. A transformation approach to the terminal control problem. *AIAA J.* **14** (1976), no. 9, 1206-1209. (Author's summary) **56** #17991 93C05

ter, Gillian L. The differential-difference equation $w'(s) = g(s)[w(s-1) - w(s)]$. *Proc. Roy. Soc. Edinburgh Sect. A* **78** (1977/78), no. 1-2, 41-55. (C. H. Anderson) **58** #11820 34K25

ter, J. B. Determination of L -functions of elliptic curves parametrized by modular functions. *Proc. London Math. Soc.* (3) **28** (1974), 439-456. (K. Wohlfahrt) **50** #2174 14G05 (10D05, 14G10, 14K15)

Congruences on the L -function of an elliptic curve parametrized by modular functions. *J. London Math. Soc.* (2) **11** (1975), no. 3, 285-293. (Michael Razar) **52** #13849 14G25 (14G10)

(with Allatt, P.) Congruences on some special modular forms. *J. London Math. Soc.* (2) **17** (1978), no. 3, 380-392. (Neal Koblitz) **58** #10741 10D05 (10C20, 10J20)

ter, L. J. See Semon, Mark D.; et al., **53** #5960; Exton, Harold, **54** #10699 and Exton, Harold, **57** #14318

ter, Michael Prime alternative rings. III. *J. Algebra* **21** (1972), 394-409. (M. L. Tomber) **47** #1902 17D05

(with Hentzel, Irvin Roy) On the Andrunakievich lemma for alternative rings. *J. Algebra* **27** (1973), 243-256. (D. Rodabaugh) **48** #11237 17D05

(with Watters, J. F.) On Amitsur's condition D in radical theory. *J. Algebra* **39** (1976), no. 1, 175-198. (W. G. Leavitt) **53** #510 16A21

ter, Morton (with Driver, R. D.; Sasser, D. W.) The equation $x'(t) = ax(t) + bx(t - \tau)$, with "small" delay. *Amer. Math. Monthly* **80** (1973), 990-995. (B. Stephan) **48** #4449 34K05

(with Newman, Donald J.) Binary digit distribution over naturally defined sequences. *Trans. Amer. Math. Soc.* **213** (1975), 71-78. (S. L. G. Choi) **52** #5607 10K10

ter, Noel Bryan (with Kotiah, T. C. T.) The steady state of multi-server mixed queue. *Advances in Appl. Probability* **5** (1973), 614-631. (P. R. Milch) **50** #8753 60K25

(with Kotiah, T. C. T.) On two-server Poisson queues with two types of customers. *Operations Res.* **21** (1973), 597-603. (D. J. Daley) **52** #4463 (E 53 #11810) 60K30

See also Kendall, David G., **49** #8800 and Kotiah, T. C. T., **53** #11810

ter, Peter J. (with Hedetniemi, Stephen T.) Line graphs of triangleless graphs and iterated clique graphs. *Graph theory and applications (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1972; dedicated to the memory of J. W. T. Youngs)*, pp. 139-147. *Lecture Notes in Math.*, Vol. 303, Springer, Berlin, 1972. (J. W. Moon) **49** #151 05C99

(with Goodman, Seymour E.; Hedetniemi, Stephen T.) Some results on the optional and non-optional Hamiltonian completion problem. *Proceedings of the Fifth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1974)*, pp. 423-448. *Congressus Numerantium*, No. X, Utilitas

Math., Winnipeg, Man., 1974. (L. V. Quintas) **51** #262 05C35

Irreducible point independence numbers and independence graphs. *Proceedings of the Fifth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1974)*, pp. 647-660. *Congressus Numerantium*, No. X, Utilitas Math., Winnipeg, Man., 1974. (M. Aigner) **51** #284 05C99

A classification of 4-connected graphs. *J. Combinatorial Theory Ser. B* **17** (1974), 281-298. (W. T. Tutte) **51** #10143 05C10

Leaves of trees. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory, and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1975)*, pp. 549-559. *Congressus Numerantium*, No. XIV, Utilitas Math., Winnipeg, Man., 1975. (Takashi Hamada) **54** #10054 05C05

(with Goodman, Seymour E.; Hedetniemi, Stephen T.) Advances on the Hamiltonian completion problem. *J. Assoc. Comput. Mach.* **22** (1975), 352-360. (Jean-Claude Bermond) **52** #184 05C35

Maximin facility location. *J. Res. Nat. Bur. Standards Sect. B* **79B** (1975), no. 3-4, 107-115. (Author's summary) **56** #2295 90B10

General soldering. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 559-567. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, Man., 1976. (Rudolf Halin) **53** #181 05C10

Central vertices in a graph. *Proceedings of the Seventh Southeastern Conference on Combinatorics, Graph Theory, and Computing (Louisiana State Univ., Baton Rouge, La., 1976)*, pp. 487-497. *Congressus Numerantium*, No. XVII, Utilitas Math., Winnipeg, Man., 1976. (Richard D. Ringeisen) **56** #2877 05C99 (90B10)

R -domination in graphs. *J. Assoc. Comput. Mach.* **23** (1976), no. 3, 446-450. (G. Berman) **56** #7904 90B10 (90C35)

A note on pseudointersection graphs. *J. Res. Nat. Bur. Standards Sect. B* **80B** (1976), no. 4, 441-445. (J. A. Kappel) **57** #2966 05C05

(with Goodman, Seymour E.; Hedetniemi, Stephen T.) On the optional Hamiltonian completion problem. *Networks* **6** (1976), no. 1, 35-51. (Authors' summary) **57** #2998 05C35

(with Bange, David W.; Barkauskas, Anthony E.) Using associated trees to count the spanning trees of labelled maximal outerplanar graphs. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1977)*, pp. 605-614. *Congressus Numerantium*, No. XIX, Utilitas Math., Winnipeg, Man., 1977. (J. W. Moon) **58** #5353 05C30 (05C05)

Subtrees of a tree that form a König system. *Ars Combinatoria* **4** (1977), 271-283. (J. W. Moon) **58** #5309 05C05

(with Maurer, Stephen B.) On k -critical, n -connected graphs. *Discrete Math.* **20** (1977/78), no. 3, 255-262. (R. C. Entringer (Zbl 375 #05031)) **58** #16422 05C99

Fibonacci numbers in the count of spanning trees. *Fibonacci Quart.* **15** (1977), no. 1, 11-14. (R. C. Read) **55** #10280 05A15 (05C05)

Enclaveless sets and MK-systems. *J. Res. Nat. Bur. Standards* **82** (1977), no. 3, 197-202. (Stephane Foldes) **58** #27632 05C35

(with Véléz, William Yslas) Permutations of the positive integers with restrictions on the sequence of differences. *Pacific J. Math.* **71** (1977), no. 1, 193-196. (N. G. de Bruijn) **56** #137 05A05

(with Entringer, Roger C.) A note on k -critically n -connected graphs. *Proc. Amer. Math. Soc.* **66** (1977), no. 2, 372-375. (D. R. Lick) **57** #16140 05C99

Slatkin, Montgomery Gene flow and selection in a cline. *Genetics* **75** (1973), no. 4, 733-756. (K. P. Hadelor) **52** #16719 92A10 (92A15)

See also Problems: Population genetics, **56** #17911

Slaughter, F. G., Jr. (with Atkins, J. M.) On the metrizable of preimages of metric spaces under closed continuous functions. *Proceedings of the University of Oklahoma Topology Conference Dedicated to Robert Lee Moore* (1972), pp. 13-22. *Univ. of Oklahoma, Norman, Okla., 1972.* (R. Hodel) **54** #13864 54E35 (54E20)

The closed image of a metrizable space is M_1 . *Proc. Amer. Math. Soc.* **37** (1973), 309-314. (G. H. M. Thomas) **46** #9930 54D15

(with Rosenstein, G. M., Jr.) Topological operators, subspaces, and hereditary normality. *Amer. Math. Monthly* **83** (1976), no. 4, 271-272. (Harold Reiter) **52** #15337 54B05 (54D15)

Šlaustas, R. Ju. A study of the flow of a nonstationary bounded stream of incompressible fluid around a thin profile. (Russian) *Asymptotic methods in systems theory*, No. 7 (Russian), pp. 108-123. *Irkutsk. Gos. Univ., Irkutsk*, 1974. (Editors) **57** #11333 76.44

Slavenas, P. V. The students of N. Copernicus in Lithuania. (Russian. English summary) *Voprosy Istor. Estestvozn. i Tehn.* **1972**, no. 1(42), 23-25, 94, 103 (1973). (Editors) **58** #26853 01A40 (01A45, 01A50, 01A55)

Slavić, Dušan V. Tables for functions $\Gamma(x)$ and $1/\Gamma(x)$. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 357-380 (1971), 69-74. (From the introduction) **45** #6143 (E 56 #1658) 65A05

Tables of trigonometric functions (angle in grades). *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 357-380 (1971), 75-80. (From the introduction) **45** #6144 (E 56 #1659) (E 50 #15258) 65A05

Some applications of a transformation of series. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 357-380 (1971), 87-92. (U. C. Guha) **45** #7029 30A10

Supplementing the asymptotic expansion of the gamma function and other related functions. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 381-409 (1972), 73-80. (K. Karpov (RŽMat 1973 #6 B36)) **51** #10704 33A15

On the left factorial function of the complex argument. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 472-477. (R. N. Jain) **50** #10337 33A15

Complements to asymptotic development of sine cosine integrals, and auxiliary functions. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 461-497 (1974), 185-191. (E. Riekstins) **53** #898 33A15

Reciprocal transformations of potential and Čebyšev's developments. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 461-497 (1974), 33-39. (Y. L. Luke) **50** #13627 33-04

(with Kraus, Laslo L.) Computer programs for computation of the hyperbolic tangent function. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 461-497

- (1974), 41-46. (H. E. Fettes) **50** #15280 65D20
(with Dujmović, Jozo J.) Numerical computation of weighted power means. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 461-497* (1974), 167-171. (N. N. Abdelmalek) **51** #9466 65G05
On inequalities for $\Gamma(x+1)/\Gamma(x+1/2)$. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 498-541* (1975), 17-20. (S. D. Bajpai) **52** #6047 33A15
On coefficients for numerical differentiation and integration. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 498-541* (1975), 21-26. (F. Pecka) **52** #4590 65D30
On coefficients of the Gregory formula. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 498-541* (1975), 27-32. (R. E. Barnhill) **53** #4498 65D30
On coefficients of the Gauss-Encke formula. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 498-541* (1975), 33-38. (Ian Gladwell) **52** #4591 65D30
Correction: "Tables for functions $\Gamma(x)$ and $1/\Gamma(x)$ " (Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 357-380 (1971), 69-74). *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 544-576* (1976), 175. (Editors) **56** #1658 65A05
Correction: "Tables for trigonometric functions (angle in grades)" (Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 357-380 (1971), 75-80). *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 544-576* (1976), 175. (Editors) **56** #1659 65A05
Transformation of the continued fraction into a rational function. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 577-598* (1977), 49-52. (David F. Dawson) **56** #17000 65D15
See also Wrench, John W., Jr., **50** #15258
- Slavik, J.** (with Bičák, J.) Non-linear electrodynamics in the Newman-Penrose formalism. *Acta Phys. Polon. B* **6** (1975), no. 4, 489-508. (Authors' summary) **57** #18703 83.35 (81.53)
- Slavik, Josef** (with Gautschi, Walter) On the computation of modified Bessel function ratios. *Math. Comp.* **32** (1978), no. 143, 865-875. (James M. Horner) **57** #10025 33A40
- Slavik, Václav** (with Ježek, Jaroslav) Some examples of primitive lattices. *Acta Univ. Carolinae—Math. et Phys.* **14** (1973), no. 2, 3-8 (1974). (H. F. J. Lowig) **51** #12638 06A20
On skew lattices. I. *Comment. Math. Univ. Carolinae* **14** (1973), 73-85. (G. Bruns) **47** #8370 06A20
On skew lattices. II. *Comment. Math. Univ. Carolinae* **14** (1973), 493-506. (G. Bruns) **49** #8909 06A20
Some primitive classes of lattices closed under the formation of projective images. *Comment. Math. Univ. Carolinae* **15** (1974), 65-68. (H. F. J. Lowig) **49** #4881 06A20
A note on subquasivarieties of some varieties of lattices. *Comment. Math. Univ. Carolinae* **16** (1975), 173-181. (Evelyn Nelson) **51** #3011 06A20
On h -primitive lattices. *Comment. Math. Univ. Carolinae* **16** (1975), no. 3, 505-514. (Werner Poguntke) **52** #5499 06A20
- Slavjanov, S. Ju.** The construction of the asymptotics of the eigenfunctions of Fredholm integral equations with a symmetrical rapidly oscillating kernel. (Russian) *Problems of mathematical physics*, No. 6 (Russian), pp. 125-137. *Izdat. Leningrad. Univ., Leningrad*, 1973. (Š. Schwabik) **49** #11165 45C05 (65R05)
(with Ponomarev, L. I.; Komarov, I. V.) ★Сфероидальные и кулоновские сфероидальные функции. (Russian) [Spheroidal and Coulomb spheroidal functions] *Izdat. "Nauka", Moscow*, 1975. 320 pp. (RŽMat **1976** #9 B26) **58** #28730 33A55
(with Komarov, I. V.; Ponomarev, L. I.) ★Сфероидальные и кулоновские сфероидальные функции. (Russian) [Spheroidal and Coulomb spheroidal functions] Edited and with a preface by V. S. Buldyrev. *Izdat. "Nauka", Moscow*, 1976. 319 pp. (Not reviewed) **33A55**
See also Spectral theory and wave processes, **49** #4732
- Slavjanov, S. Yu.** (with Cohen, I.) Smooth perturbations of the Schrödinger equation related to the charmonium models. *J. Comput. Phys.* **29** (1978), no. 2, 289-294. (A. Terry Amos) **58** #25645 81.65 (65L15)
- Slavkov, Svetoslav** ★Аспекти на математическото познание (философски анализ). (Bulgarian) [Aspects of mathematical knowledge (philosophical analysis)] *Izdat. Naukai Izkustvo, Sofia*, 1971. 288 pp. (Editors) **58** #9974 00A25
- Slavnov, A. A.** Invariant regularization of non-linear chiral theories. *Nuclear Phys. B* **31** (1971), 301-315. (K. Kawarabayashi) **46** #8563 81.22
Renormalization of gauge-invariant theories. (Russian. English summary) *Fiz. Elementar. Častici i Atom. Jadra* **5** (1974), 755-790. (From the introduction) **58** #4079 81.47
Renormalization of supersymmetric gauge theories. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 214-217. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (From the introduction) **58** #32604 81.47
Continual integral in perturbation theory. (Russian. English summary) *Teoret. Mat. Fiz.* **22** (1975), no. 2, 177-185. (Author's summary) **58** #8925 81.46
Renormalization of theories with a nontrivial group of internal symmetry. (Russian) International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part I. Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 210-217, 261-262. (Tetz Yoshimura) **56** #7634 81.47
Supersymmetric gauge field theories. (Russian) *Nonlocal, nonlinear and nonrenormalizable field theories (Proc. Fourth Internat. Sympos. Nonlocal Field Theories, Alushta, 1976)* (Russian), pp. 165-182. *Ob'ed. Inst. Jadern. Issled., Dubna*, 1976. (From the author's text) **56** #14333 81.47
(with Krivoshekov, V. K.; Faizullae, B. A.) A superdiagrammatic technique for gauge theories. (Russian. English summary) *Teoret. Mat. Fiz.* **26** (1976), no. 2, 147-161. (Authors' summary) **56** #7626 81.47
Spontaneous breaking of supersymmetry in nonabelian gauge theories. (Russian. English summary) *Teoret. Mat. Fiz.* **27** (1976), no. 2, 141-148. (Author's summary) **56** #14233 81.22
Spontaneous breaking of supersymmetry and its possible application to unified gauge models. *Nuclear Phys. B* **124** (1977), no. 2-3, 301-308. (Johan G. Belinfante) **56** #10501 81.22
The Pauli-Villars regularization for nonabelian gauge theories. (Russian. English summary) *Teoret. Mat. Fiz.* **33** (1977), no. 2, 210-217. (Author's summary) **56** #1481.55
- Slavnov, A. G.** Spectrum of the fluctuations of a random process that is due to diffusion in a medium in the presence of an electric field. (Russian. English summary) *Izv. V. Učebn. Zaved. Radiofizika* **16** (1973), no. 6, 909-912. (Author's summary) **57** #23982.60
- Slavnov, D. A.** A certain variant of the S-matrix theory. (Russian. English summary) *Teoret. Mat. Fiz.* **1** (1969), no. 2, 200-212. (Author's summary) **56** #17604 81.47
Asymptotic states in quantum field theory. (Russian. English summary) *Teoret. Mat. Fiz.* **1** (1969), no. 3, 329-336. (Author's summary) **57** #4912 81.47
The asymptotic behavior of Feynman diagrams. (Russian. English summary) *Teoret. Mat. Fiz.* **17** (1973), 169-177. (Author's summary) **57** #8584 81.28
A generalized Pauli-Villars regularization. (Russian. English summary) *Teoret. Mat. Fiz.* **17** (1973), 342-358. (Author's summary) **57** #8658 81.46
Generalized Pauli-Villars regularization in the presence of zero-mass particles. (Russian. English summary) *Teoret. Mat. Fiz.* **19** (1974), 3-13. (Author's summary) **57** #8659 81.46
Unitarity and causality in the generalized Pauli-Villars regularization. (Russian. English summary) *Teoret. Mat. Fiz.* **19** (1974), 291-299. (Author's summary) **57** #8659 81.47
The Poincaré transformation in seven-dimensional space. (Russian) *Vestnik Moskov. Univ. III Fiz. Astronom.* **15** (1974), no. 5, 525-529. (James D. Faber) **54** #1929 81.22
(with Samohin, A. P.) Quantization of a free boson field of arbitrary spin ($m \neq 0$). (Russian) *Vestnik Moskov. Univ. III Fiz. Astronom.* **15** (1974), no. 5, 553-562. (Tetz Yoshimura) **55** #7203 81.47
Limit transition with respect to the imaginary additional mass in Feynman amplitudes. (Russian. English summary) *Teoret. Mat. Fiz.* **22** (1975), no. 3, 307-314. (Author's summary) **58** #14545 81.30
A direct proof of the correctness of the generalized Pauli-Villars regularization. (Russian. English summary) *Teoret. Mat. Fiz.* **25** (1975), no. 1, 43-48. (Author's summary) **58** #14626 81.46
An electromagnetic field without indefinite metric. (Russian. English summary) *Teoret. Mat. Fiz.* **29** (1976), no. 3, 291-299. (Author's summary) **57** #11477 81.47
The principle of causality in scattering theory. (Russian. English summary) *Teoret. Mat. Fiz.* **30** (1977), no. 2, 147-158. (A. A. Arsen'ev) **56** #2048 81.46
(with Il'in, V. A.) Algebras of observables in the S-matrix approach. (Russian. English summary) *Teoret. Mat. Fiz.* **36** (1978), no. 1, 32-41. (Authors' summary) **58** #19982 81.46
- Slavova, S. K.** A certain linear operator equation. (Russian) *Mat. Issled.* **10** (1975), 3(37), 134-148, 242-243. (A. V. Džiskariani) **53** #11407 47A65
On the properties of a transformer in the Banach ideals of the algebra L_p . (Bulgarian. Russian and English summaries) *Plovdiv. Univ. Nauch. Trud.* **13** (1975), 1, 347-357 (1977). (Author's summary) **58** #12505 47B99 (46H99)
(with Markus, A. S.) The spectrum of certain linear transformers. (Russian) Spectral properties of operators. *Mat. Issled. Vyp.* **45** (1977), 101-114, 181. (Chandrasekhar) **57** #10450 47A10 (47A60, 47B99)
- Slavskii, V. V.** A certain integral geometry relation in surface theory. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 645-658. (K. Radziszewski) **45** #9271 53C65
Integral-geometric relations with orthogonal projection for multidimensional surfaces. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 48-51. (Z. Nádeník) **49** #33365 53C65
Integral geometry relations with orthogonal projection for hypersurfaces. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), 103-123, 196. (Z. Nádeník) **51** #11387 53C65
Integral-geometric relations with orthogonal projection for surfaces. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), 355-367, 421. (Z. Nádeník) **51** #13959 53C65
- Slavutskii, E. I.** Euler's works on elliptic integrals. (Russian) *History and methodology of natural sciences*, No. XIV: Mathematics (Russian), pp. 181-189. *Izdat. Moskov. Univ.*, Moscow, 1973. (I. Grattan-Guinness (Zbl **287** #01011)) **58** #21187 01A50 (33-03)
Some questions on the structure of the Arithmetical Diophantus of Alexandria. (Russian) *Studies in the history of mathematics*, No. 18 (Russian), pp. 301-309. *Izdat. "Nauka", Moscow*, 1973. (B. Rozenfel'd) **57** #24 01A20
The history of cyclic systems of equations. (Russian) *Studies in the history of mathematics*, No. 19 (Russian), pp. 50-68, 300. *Izdat. "Nauka", Moscow*, 1974. (Rozenfel'd) **58** #4818 01A30
The algebra of Diophantos and its sources. (Russian) *Istor.-Mat. Issled. Vyp.* **1** (1975), 63-103, 379. (Manfred Stern) **58** #4791 01A20 (10-03)
(with Bašmakova, I. G.) *Genesis triangulorum* de François Viète et ses recherches dans l'analyse indéterminée. *Arch. Hist. Exact Sci.* **16** (1976/77), no. 4, 289-300. (Editors) **58** #26830 01A40
(with Bašmakova, I. G.) F. Viète's calculus of triangles, and the study of Diophantine equations. (Russian) *Istor.-Mat. Issled. Vyp.* **21** (1976), 78-101. (Editors) **58** #15866 01A40
Euclid's Data. (Russian) *Istor.-Mat. Issled. Vyp.* **22** (1977), 229-236, 303. (E. Bruins) **58** #21007 01A20
See also Studies in the history of mathematics, **50** #1806 and Studies in the history of mathematics, **55** #2457
- Slavutskii, E. I.** (with Zaslavskii, S. Ja.) Problem of mapping spreading and prognostication of disease course. *Math. Biosci.* **19** (1974), 185-190. (S. Levin) **48** #10547 92A15
- Slavutskii, I. Š.** Local properties of Bernoulli numbers and a generalization of the Kummer-Vandiver theorem. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, 3(118), 61-69. (W. Narkiewicz) **46** #151 12A35
Generalized Bernoulli numbers that belong to unequal characters, and an extension of Vandiver's theorem. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* **496** (1972), 1, 61-68. (J. B. Roberts) **46** #7194 12A50
Square-free numbers and the quadratic field. (Russian) *Colloq. Math.* **32** (1975), 2, 291-300. (T. Metsänkylä) **52** #3113 12A50 (10H15, 12A25)
On representations of numbers by sums of squares and quadratic fields. *Math. (Brno)* **13** (1977), no. 1, 29-40. (R. A. Rankin) **57** #5932 10J10 (10C15)

- Küli, Ju. I.** (with Golovan', E. T.; Zaslavskii, S. Ja.) Distribution function of random Boolean vectors and its approximate representation. *Avtomatika* 1976, no. 6, 15 (Ukrainian. English and Russian summaries); translated as *Soviet Automat. Control* 1976, no. 6, 1-12. (Manabu Ichino) 57 #5449 94A20 (68A45)
- Ky, I. Sh.** See Slavutskii, I. S.
- Ky, Ye. I.** See Slavutskii, E. I.
- Nowinski, Jan J.** Geometry of Van Vleck ensembles. *Rep. Mathematical Phys.* 3 (1972), no. 3, 157-172. (H. S. P. Grässer) 46 #10341 81.60
- Classical pure states: information and symmetry in statistical mechanics. *Internat. Theoret. Phys.* 8 (1973), 451-462. (Author's summary) 51 #2568 82.60
- Wigner functions and the transition from quantum statistics to classical statistics. *Polish Statistical theories for solids, fluids and gases (Proc. Working Conf., Jabłonna, 1972) (Polish)*, pp. 193-216. *Ossolineum-Wydawn. Polskiej Akad. Nauk, Wrocław*, 1974. (Editors) 56 #14334 81.47
- Analytical mechanics of finite homogeneous strains. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Sios.)* 26 (1974), 569-587. (F. V. Pohle) #7063 73.58
- Abelian groups and the Weyl approach to kinematics. Nonlocal function-algebras. *Mathematical Physics* 5 (1974), 295-319; errata, *ibid.* 6 (1974), 169. (H. S. P. Grässer) #12579 81.22
- The mechanics of an affinely-rigid body. *Internat. J. Theoret. Phys.* 12 (1975), 1-296. (J. Denmead Smith) 56 #13875 70.53 (58F05)
- Now-Christow, Swetoslaw** Leibniz und die zweite Krise in der Mathematik. *Akten des Internationalen Leibniz-Kongresses (Hannover, 1972), Band II: Wissenschaftstheorie und Wissenschaftsgeschichte*, pp. 77-81. *Studia Leibnitiana Suppl., Vol. XIII, Steiner, Wiesbaden*, 1975. (H. C. Kennedy) 58 #21235 01A55 (26-03)
- Now, Joseph** Representations of canonical anticommutation relations and complementability of canonical transformations. *Comm. Math. Phys.* 22 (1971), 104-114. (Ji-Soo Smith) 45 #3016 81.46
- On factor representations and the C^* -algebra of canonical commutation relations. *Comm. Math. Phys.* 24 (1972), 151-170. (R. H. Herman) 45 #3017 81.46
- Analyticity and uniqueness for spin $\frac{1}{2}$ classical ferromagnetic lattice systems at low temperatures. *Comm. Math. Phys.* 34 (1973), 271-296. (B. Souillard) 53 #2225a 32
- A family of equilibrium states relevant to low temperature behavior of spin 1/2 classical ferromagnets. Breaking of translation symmetry. *Comm. Math. Phys.* 35 (1974), 7-305. (C. J. Henrich) 49 #4496 82.28
- Ferromagnetic spin systems at low temperatures. *Comm. Math. Phys.* 46 (1976), no. 75-97. (J. Fritz) 54 #12075 82.30 (60K35)
- (with Holstzyński, Włodzimierz) Peierls condition and number of ground states. *Comm. Math. Phys.* 61 (1978), no. 2, 177-190. (Joshua Zak) 58 #14770 82.20
- J. F. A. See Numerical methods in fluid dynamics**, 49 #10260
- Nowicki, Władysław** See Collection: Ślebodziński, Władysław, 48 #4920
- M. B. (with Law, Alan G.)** Normalizing orthogonal polynomials by using their recurrence coefficients. *Proc. Amer. Math. Soc.* 48 (1975), 505-507. (R. A. Askey) #961 33A65
- (with Christian, W. G.; Law, Alan G.; Martens, W. F.; Mullikin, A. L.) Solution of initial-value problems for some infinite chains of harmonic oscillators. *J. Mathematical Phys.* 17 (1976), no. 1, 146-158. (Chanchal K. Majumdar) 55 #4818 34
- W. T. (with Kurtz, J. C.)** Uniform summability of power series. *Proc. Cambridge Philos. Soc.* 71 (1972), 335-341. (H. P. Dikshii) 45 #4005 40C15
- Some inequalities related to the Hausdorff-Young theorem. *Proc. Amer. Math. Soc.* (1973), 535-540. (J. Siddiqui) 49 #9519 42A18
- Some results about spaces of analytic functions introduced by Hardy and Littlewood. *J. London Math. Soc.* (2) 9 (1974/75), 328-336. (J. H. Hedlund) #13537 30A78 (46E15)
- Coefficient estimates for exponential series. *Proc. Amer. Math. Soc.* 45 (1974), 7-364. (O. P. Juneja) 50 #2463 30A16
- Now, Brian D.** On diffraction at short wavelengths by a prolate spheroid. *J. Inst. Math. Appl.* 5 (1969), no. 4, 432-442. (Author's summary) 56 #14094 76.41
- Integral representations associated with high-frequency non-symmetric scattering by prolate spheroids. *Quart. J. Mech. Appl. Math.* 22 (1969), 405-426. (Editors) 55 #9728 78.44 (44A15)
- The two parameter Sturm-Liouville problem for ordinary differential equations. *Proc. Roy. Soc. Edinburgh Sect. A* 69 (1970/71), 139-148. (F. Max Stein) 45 #634 42B25
- Multi-parameter eigenvalue problems in ordinary differential equations. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* 17(21) (1971), no. 3-4, sect. I, 51-60. (From the introduction) 46 #441 34B25
- Multi-parameter eigenvalue problems and k -linear operators. *Conference on the theory of Ordinary and Partial Differential Equations (Univ. Dundee, Dundee, 1972)*, pp. 27-353. *Lecture Notes in Math., Vol. 280, Springer, Berlin*, 1972. (Walter Eberhard) #7944 34B25
- The two-parameter Sturm-Liouville problem for ordinary differential equations. II. *Proc. Amer. Math. Soc.* 34 (1972), 165-170. (F. Max Stein) 45 #635 34B25
- Completeness and expansion theorems for a two-parameter eigenvalue problem in ordinary differential equations using variational principles. *J. London Math. Soc.* (2) 6 (1973), 705-712. (F. Neuman) 48 #6538 34B25
- The three-dimensional inverse scattering problem for the Helmholtz equation. *Proc. Cambridge Philos. Soc.* 73 (1973), 477-488. (E. Pinney) 47 #6200 78.35
- Singular linear differential operators with many parameters. *Proc. Roy. Soc. Edinburgh Sect. A* 71, part 3, 199-232 (1973). (F. Max Stein) 48 #8942 34B20
- (with Källström, A.) A multi-parameter Sturm-Liouville problem. *Ordinary and partial differential equations (Proc. Conf., Univ. Dundee, Dundee, 1974)*, pp. 394-401. *Lecture Notes in Math., Vol. 415, Springer, Berlin*, 1974. (Patrick J. Browne) 55 #3405 34B25
- Some aspects of multi-parameter spectral theory. *Spectral theory and asymptotics of differential equations (Proc. Conf., Scheveningen, 1973)*, pp. 81-94. *North-Holland Math. Studies, Vol. 13, North-Holland, Amsterdam*, 1974. (R. R. D. Kemp) 55 #3406 42B25
- (with Hargrave, B. A.) The numerical solution of two-parameter eigenvalue problems in ordinary differential equations with an application to the problem of diffraction by a plane angular sector. *J. Inst. Math. Appl.* 14 (1974), 9-22. (G. D. Byrne) 49 #11816 65L15
- (with Hargrave, B. A.) Uniform asymptotic expansions for ellipsoidal wave functions. I. High frequency solutions of the ellipsoidal wave equations. *J. Inst. Math. Appl.* 14 (1974), 31-40. (R. K. Gupta) 54 #7909 33A60
- (with Green, M. W.) On FitzHugh's nerve axon equations. *J. Math. Biol.* 1 (1974/75), no. 2, 153-163. (J. D. Cowan) 52 #14699 35Q99 (92-XX)
- (with Källström, A.) An abstract relation for multiparameter eigenvalue problems. *Proc. Roy. Soc. Edinburgh Sect. A* 74 (1974/75), 135-143 (1976). (F. H. Szafraniec) 56 #9304 47A70 (34B25)
- (with Källström, A.) A left definite multiparameter eigenvalue problem in ordinary differential equations. *Proc. Roy. Soc. Edinburgh Sect. A* 74 (1974/75), 145-155 (1976). (F. H. Szafraniec) 56 #8957 34B25 (34A30)
- Left-definite multiparameter eigenvalue problems. *Spectral theory and differential equations (Proc. Sympos., Dundee, 1974; dedicated to Konrad Jörgens)*, pp. 307-321. *Lecture Notes in Math., Vol. 448, Springer, Berlin*, 1975. (F. Max Stein) 53 #8542 34B10
- FitzHugh's nerve axon equations. *J. Math. Biol.* 2 (1975), no. 4, 341-349. (Luigi M. Ricciardi) 52 #14700 35Q99 (92A05)
- (with Hargrave, B. A.) Asymptotic evaluation of certain integral formulae for ellipsoidal wave functions. *Proc. Roy. Soc. Edinburgh Sect. A* 72, no. 3, 257-269 (1975). (Authors' summary) 52 #8753 41A60 (33A60)
- (with Roach, Gary F.) Generalized multiparameter spectral theory. *Function theoretic methods for partial differential equations (Proc. Internat. Sympos., Darmstadt, 1976)*, pp. 394-411. *Lecture Notes in Math., Vol. 561, Springer, Berlin*, 1976. (Patrick J. Browne) 57 #3887 47A50 (47A10)
- Towards the validity of the geometrical theory of diffraction. *Function theoretic methods for partial differential equations (Proc. Internat. Sympos., Darmstadt, 1976)*, pp. 443-458. *Lecture Notes in Math., Vol. 561, Springer, Berlin*, 1976. (R. F. Millar) 57 #6810 35J05 (35B40, 78.35)
- Global estimates for non-linear wave equations and linear wave equations with non-linear boundary constraints. *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976)*, pp. 438-451. *Lecture Notes in Math., Vol. 564, Springer, Berlin*, 1976. (Editors) 58 #29291 35L05
- (with Källström, A.) Solvability of a linear operator system. *J. Math. Anal. Appl.* 55 (1976), no. 3, 785-793. (B. V. Loginov) 54 #5881 47A70 (47A50)
- (with Roach, Gary F.) On the spectral theory of operator bundles. *Applicable Anal.* 7 (1977/78), no. 1, 1-14. (Patrick J. Browne) 57 #3897 47B15 (47A10)
- (with Källström, A.) Multiparameter spectral theory. *Ark. Mat.* 15 (1977), no. 1, 93-99. (Patrick J. Browne) 55 #11082 47A70
- (with Hargrave, B. A.) Lamé polynomials of large order. *SIAM J. Math. Anal.* 8 (1977), no. 5, 800-842. (F. M. Arscott) 57 #742 33A55 (34E05)
- See also Ordinary and partial differential equations, 50 #10391; Conference: Theory of Ordinary and Partial Differential Equations, 50 #10392 and Ordinary and partial differential equations, 57 #16754
- Šleifer, F. G.** Nilsemigroups with a thin layer of subsemigroups. (Russian) *Modern algebra, No. 2 (Russian)*, pp. 182-195. *Leningrad. Gos. Ped. Inst., Leningrad*, 1974. (M. Kilp) 53 #5783 20M10
- Semigroups with thin layers of subsemigroups. (Russian) *Modern algebra, No. 3 (Russian)*, pp. 117-133. *Leningrad. Gos. Ped. Inst., Leningrad*, 1975. (Editors) 58 #22359 20M10
- Šleifer, R. G.** The solutions of a functional equation. (Russian) A collection of articles on the qualitative theory of differential equations. *Rjazan. Gos. Ped. Inst. Učen. Zap.* 102 (1971), 132-139. (Editors) 58 #1798 39A20
- Slèigl, Dž.** See Slagle, James R.
- Sleijpen, Gérard L. G.** Sur les translations continues des mesures bornées sur un semi-groupe localement compact. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 419-421. (J. W. Baker) 49 #5716 43A10
- Norm- and weak-continuity of translations of measures; a counterexample. *Semigroup Forum* 15 (1977/78), no. 4, 343-350. (Anne C. Baker) 57 #10355 43A05 (22A20)
- Locally compact semigroups and continuous translations of measures. *Proc. London Math. Soc.* (3) 37 (1978), no. 1, 75-97. (Anne C. Baker) 58 #17682a 43A05 (22A20)
- Emaciated sets and measures with continuous translations. *Proc. London Math. Soc.* (3) 37 (1978), no. 1, 98-119. (Anne C. Baker) 58 #17682b 43A05 (22A20)
- Šleinkova, M. A.** Matrix elements of the irreducible representations of the group $SU(2, 1)$ and a generalized hypergeometric function. (Russian) Harmonic analysis on groups. *Moskov. Gos. Zaočn. Ped. Inst. Sb. Naučn. Trudov Vyp.* 39 (1974), 219-236. (Editors) 58 #16976 22E45 (33A75)
- Šlem, B. M.** (with Korneičuk, V. I.) Analysis of algorithms for accelerated multiplication in electronic digital computers. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 3, 63-65. (M. Tetrušvili) 52 #12392 68A10 (94A20)
- Slemrod, Marshall** Asymptotic behavior of periodic dynamical systems on Banach spaces. *Ann. Mat. Pura Appl.* (4) 86 (1970), 325-330. (N. P. Bhatia) 45 #5524 (E 46 #7659) 34G05
- (with Infante, E. F.) An invariance principle for dynamical systems on Banach space: application to the general problem of thermoelastic stability. *Instability of continuous systems (IUTAM Sympos., Herrenalb, 1969)*, pp. 215-221. *Springer, Berlin*, 1971. (Editors) 58 #32292 73.58
- Erratum: "Asymptotic behavior of periodic dynamical systems on Banach spaces". *Ann. Mat. Pura Appl.* (4) 88 (1971), 397. (Editors) 46 #7659 34G05
- The flip-flop circuit as a neutral equation. *Delay and functional differential equations and their applications (Proc. Conf., Park City, Utah, 1972)*, pp. 387-392. *Academic Press, New York*, 1972. (C. H. Anderson) 53 #977 34K20
- The linear stabilization problem in Hilbert space. *J. Functional Analysis* 11 (1972), 334-345. (J. K. Hale) 50 #7724 34H05 (93D15)
- (with Infante, E. F.) Asymptotic stability criteria for linear systems of difference-differential equations of neutral type and their discrete analogues. *J. Math.*

- Anal. Appl.* **38** (1972), 399-415. (F. Hoppensteadt) **46** #5800 34K25 (34K20)
(with Hale, Jack K.; Lasalle, Joseph P.) Theory of a general class of dissipative processes. *J. Math. Anal. Appl.* **39** (1972), 177-191. (G. Sansone) **47** #2581 (E **48** #1203) 54H25 (34C35)
(with Dafermos, Constantine M.) Asymptotic behavior of nonlinear contraction semigroups. *J. Functional Analysis* **13** (1973), 97-106. (V. K. Balakrishnan) **49** #11336 47H15
(with Hale, Jack K.; Lasalle, Joseph P.) Erratum: "Theory of a general class of dissipative processes" (*J. Math. Anal. Appl.* **39** (1972), 177-191). *J. Math. Anal. Appl.* **41** (1973), 270. (G. Sansone) **48** #1203 54H25
Existence of optimal controls for control systems governed by nonlinear partial differential equations. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* **1** (1974), 229-246 (1975). (P. K. C. Wang) **52** #1460 49A25
An application of maximal dissipative sets in control theory. *J. Math. Anal. Appl.* **46** (1974), 369-387. (Hsi-han Yeh) **49** #7872 49A20 (93C20)
A note on complete controllability and stabilizability for linear control systems in Hilbert space. *SIAM J. Control* **12** (1974), 500-508. (H. O. Fattorini) **50** #5593 49E15 (93D15)
A hereditary partial differential equation with applications in the theory of simple fluids. *Arch. Rational Mech. Anal.* **62** (1976), no. 4, 303-321. (Y. Kato) **54** #4320 76.47 (73.46)
Existence, uniqueness, stability for a simple fluid with fading memory. *Bull. Amer. Math. Soc.* **82** (1976), no. 4, 581-583. (N. D. Kopačevskii) **53** #15075 76.34
Asymptotic behavior of C_0 semi-groups as determined by the spectrum of the generator. *Indiana Univ. Math. J.* **25** (1976), no. 8, 783-792. (John W. Spellmann) **56** #9321 47D05
Stabilization of boundary control systems. *J. Differential Equations* **22** (1976), no. 2, 402-415. (H. O. Fattorini) **55** #1205 49E20
An energy stability method for simple fluids. *Arch. Rational Mech. Anal.* **68** (1978), no. 1, 1-18. (P. M. Gupta) **58** #19873 80.45 (73.45)
Stabilization of bilinear control systems with applications to nonconservative problems in elasticity. *SIAM J. Control Optimization* **16** (1978), no. 1, 131-141. (Michel Cotsafitis) **57** #9222 93D05
See also **Proceedings: International Conference on Nonlinear Oscillations**, **47** #10124
Šlenzak, Gražina Elliptic problems in a refined scale of spaces. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 4, 48-58. (H. Triebel) **50** #7803 35J40 (46E35)
The Cauchy problem for a certain second order nonlinear differential equation. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1976**, no. 5, 10-14. (V.-V. Olariu) **58** #6657 35G25 (34G05)
Šlepakov, L. M. See **Projective-iterative methods for the solution of differential and integral equations**, **50** #11707
Šlepakov, L. N. A certain class of equations that describe autogenerators with a delay line. (Russian) *Analytic and qualitative methods of the theory of differential equations* (Russian), pp. 265-271. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1972. (From the author's introduction) **56** #9000 34C99 (94A20)
(with Poljakov, R. V.) Spline approximation in certain nonlinear problems. (Russian. English summary) *Nonlinear boundary value problems of mathematical physics* (Russian), pp. 299-313. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (H. Zegeling) **50** #11719 65D05
See also **Nonlinear oscillations and stability of motion**, **57** #12950
Slepčenko, L. A. (with Kvinihidze, A. N.; Sisakjan, A. N.; Tavhelidze, A. N.) Inclusive processes with large-scale transverse impulses in the treatment of composite particles. (Russian. English summary) *Fiz. Ėlementar. Častic. i Atom. Jadra* **8** (1977), no. 3, 478-543. (Authors' summary) **58** #8937 81.47
(with Darbaizde, Ja. Z.; Mahaldiani, N. V.; Sisakjan, A. N.) A study of the selfsimilar behavior of semi-inclusive distributions by the renormalisation group method. (Russian. English summary) *Teoret. Mat. Fiz.* **34** (1978), no. 3, 303-310. (Authors' summary) **58** #19924 81.22
Slepčov, A. A. (with Sivcev, V. I.; Kičkinas, I.; Rudzikas, Z. B.) Submatrix elements of operators that consist of unit tensors in the j -coupling, and their properties. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **15** (1975), no. 1, 5-20, 153. (Authors' summary) **57** #2249 81.22
(with Kryčkin, I. S.; Sivcev, V. I.; Rudzikas, Z. B.) A further study of the relativistic Hamiltonian of many-electron atoms. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **15** (1975), no. 4, 539-558, 673. (M. Martinis) **56** #2015 81.34
Slepčov, A. G. Estimates of eigenvalues in the study of the stability of a boundary layer. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **5** (1974), no. 5, 101-107. (RŽMat **1975** #9 B965) **58** #32315 76.34 (34B25)
Convergence of the local collocation method for ordinary differential equations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 6, 1447-1456, 1624. (Author's summary) **57** #11072 65L10
Convergence of the local collocation method. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **8** (1977), no. 7, 141-154. (I. P. Gavriljuk) **58** #31866 65L10
Slepčuk, K. M. See **Slepčuk, K. M.**
Slepián, David On neighbor distances and symmetry in group codes. *IEEE Trans. Information Theory* **IT-17** (1971), 630-632. (Toby Berger) **45** #8392 94A10
On maxentropic discrete stationary processes. *Bell System Tech. J.* **51** (1972), 629-653. (K. Jacobs) **46** #10054 60G10
On delta modulation. *Bell System Tech. J.* **51** (1972), 2101-2137. (J. P. M. Schalkwijk) **51** #7704 94A05
On the symmetrized Kronecker power of a matrix and extensions of Mehler's formula for Hermite polynomials. *SIAM J. Math. Anal.* **3** (1972), 606-616. (Brij Mohan) **47** #3722 33A65
(with Wolf, Jack Keil) A coding theorem for multiple access channels with correlated sources. *Bell System Tech. J.* **52** (1973), 1037-1076. (G. M. Tenengol'c) **48** #1801 94A10
(with Wolf, Jack Keil) Noiseless coding of correlated information sources. *IEEE Trans. Information Theory* **IT-19** (1973), 471-480. (A. D. Wyner) **54** #9852 94A10
Information theory in the fifties. *IEEE Trans. Information Theory* **IT-19** (1973), 2, 145-148. (Editors) **57** #11933 94A15
(with Shepp, Lawrence A.) First-passage time for a particular stationary process. *J. Appl. Probability* **13** (1976), no. 1, 27-38. (A. M. Hall) **53** #1712 60G15
On bandwidth. *Proc. IEEE* **64** (1976), no. 3, 292-300. (Author's summary) **57** #2738 94A05
(with Gilbert, Edgar N.) Doubly orthogonal concentrated polynomials. *SIAM Math. Anal.* **8** (1977), no. 2, 290-319. (A. G. Law) **55** #737 33A65
(with Landau, Henry J.) A note on the eigenvalues of Hermitian matrices. *SIAM Math. Anal.* **9** (1978), no. 2, 291-297. (R. C. Thompson) **57** #6052 15A18
See also **Algebraic coding theory: history and development**, **51** #9958; **Key papers in the development of coding theory**, **52** #5176 and **Key papers in the development of information theory**, **52** #5177
Slepián, Paul (with Loughlin, Timothy A.) Minimal paramount matrices. *Linear Algebra and Appl.* **15** (1976), no. 3, 197-204. (Author's summary) **57** #356 15A57 (94A10)
Slepián, G. Ja. On the calculation of the electromagnetic eigenoscillations of solenoids. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 3, 776-780. (Author's summary) **56** #14180 78.65
Slepián, L. I. Strains in the neighborhood of a singular point. *Izv. Akad. Nauk SSSR Ser. Fiz.-Mat. Nauk* **1972**, 70-79 (Russian); translated as *Mechanics of Solids* **7** (1972), 60-68 (1973). (John M. Ball) **48** #12964 73.35
Slepián, V. A. Probabilistic characterizations of the distribution of irredundant tests. (Russian) *Diskret. Analiz* No. 12 (1968), 50-74. (RŽMat **1969** #6 V296) **45** #762D05
Distribution parameters of irredundant tests and information weights of column binary tables. (Russian) *Diskret. Analiz* No. 14 (1969), 28-43. (A. Utkin (RŽMat **1970** #1 V556)) **45** #9871 94A35
The asymptotic behavior of the average number of irredundant tests. (Russian. English summary insert) *Kibernetika (Kiev)* **1970**, no. 4, 57-65. (From the introduction) **47** #3122 94A20
(with Noskov, V. N.) The number of irredundant tests for a certain class of problems. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 1, 60-65. (H. Maier (RŽMat **1972** #7 V435)) **51** #15219 94A20 (05A15)
Minimal test length for a certain class of tables. (Russian) A collection of papers dedicated to the memory of Vitalii Konstantinovič Korobkov. *Diskret. Analiz* No. 1 (1973), 59-71, 74. (R. Shirladze) **51** #2805 94A20
Slepov, A. A. Optimization of network models by the method of extremal selection. (Russian) *Mathematical methods of solution of economic problems (Suppl. to Ėkonom. Mat. Metody, No. 5)* (Russian), pp. 62-71. *Izdat. "Nauka", Moscow*, 1974. (P. Vondráček) **53** #7408 90B10
Slepov, N. N. See **Optimization, Operations research, Bionics**, **48** #1846
Slepova, L. M. Formations of E^B -groups. (Russian) *Dokl. Akad. Nauk. BSSR* **21** (1977), no. 7, 587-589, 665. (Author's summary) **58** #5928 20D99
Radical formations. (Russian) *Mat. Zametki* **21** (1977), no. 6, 861-864. (Vovsi) **58** #5932 20E10
Slepyan, L. I. See **Slepián, L. I.**
Slesarenko, A. P. (with Rvačov, V. L.) The solution of mixed boundary value problems on nonhomogeneous media for multiply connected domains of complex form by the method. (Russian) *Differencial'nye Uravnenija* **8** (1972), 696-705. (B. A. Bondarenko) **46** #4753 65N30
(with Kravčenko, V. F.; Rvačov, V. L.; Jarmoljuk, V. K.) The solution of external problems of electrostatics by the method of R -functions. (Russian) *Radiotekhnika i Elektronika* **20** (1972), 150-154. (A. A. Mullin) **47** #4544 (EA **47**) 78.65 (65N30)
(with Rvačov, V. L.) The solution of certain nonlinear boundary value problems of domains of complex form by the lattice method. (Russian) *Differencial'nye Uravnenija* **8** (1973), 771-773, 788. (G. W. Hedstrom) **47** #9058 35J60 (65N99)
(with Rvačov, V. L.) A certain sufficiently complete system of R -functions. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 5, 117-120. (Bondarenko) **49** #4278 65N99
Solution of a three-dimensional boundary value problem of heat conduction for a body bounded by a cylindrical surface of complex shape. (Ukrainian. English summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* **1974**, 643-644. (Author's summary) **50** #1648 80.35
The solution of mixed three-dimensional problems of heat conduction for domains of complex shape. (Russian) *Mixed boundary value problems and questions of mathematical simulation* (Russian), pp. 153-161. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1975. (V. P. Milantiev) **54** #4366 80.35
Application of the operational-structural method and the small parameter method to the solution of a nonlinear nonstationary problem of heat conduction. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* **1975**, no. 11, 989-992, 1051. (B. I. Kvasov) **53** #9888 80.35
(with Rvačov, V. L.) ★ Алгебра логики и интегральные преобразования в краевых задачах. (Russian) [Algebra of logic and integral transforms in boundary value problems] *Izdat. "Naukova Dumka", Kiev*, 1976. 287 pp. (From the preface) **57** #8035 (02J05)
(with Rvačov, V. L.) A regional-structural method. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 4, 720-728, 774. (F. M. Pascal) **54** #1667 65N30 (65N99)
The solution of problems of heat conduction for a regionally nonlinear medium. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 1, 470-472, 477. (L. Jentsch) **56** #14188 80.35
The solution of some three-dimensional boundary value problems of mathematical physics. (Russian) *Mat. Fiz. Vyp.* **20** (1976), 103-109, 114. (Author's introduction) **58** #1632 35J99 (35C99)
The solution of linear and nonlinear heat conduction problems for nonhomogeneous domains. (Russian) *Analytic, numerical and analog methods in heat conduction problems* (Russian), pp. 28-38, 236. *Izdat. "Naukova Dumka", Kiev*, 1977. (V. Djurkovič) **58** #17535 35K99 (35C10)
Solution of the heat conduction problem for an inhomogeneous region with

- imperfect thermal contact. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 6, 496-499, 573. (Author's summary) **57** #11384 80.35
(with Rvačov, V. L.; Rakova, A. F.) Stationary problems of heat conduction for composite prismatic bodies. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 11, 984-988, 1055. (Authors' summary) **57** #8501 80.35
See also **Mathematical physics**, **48** #5769 and **Mathematical physics**, **48** #5770
- arev, I. S. (with Sirotkin, A. M.) ★ Вариационно-разностные схемы в теории переноса нейтронов. (Russian) [Variational difference schemes in the neutron transport theory] Серия "Физика Ядерных Реакторов", No. 10. ["Nuclear Reactor Physics"] Series, No. 10] *Atomizdat, Moscow*, 1978. 102 pp. (Frederick A. Howes) **58** #9031 82.65
(with Sirotkin, A. M.) Computation of neutron distributions in composite heterogeneous nuclear reactor cells by the imbedded element method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 1, 243-249, 272. (From the authors' summary) **57** #15168 82.65
- inskii, I. V. See Kiro, S. M., **58** #27117
- oraitienė, R. See also Šliesoraitienė, R.
- arenko, A. P. See Slesarenko, A. P.
- telberg, L. (with Aarts, J. M.) Monotone functions in stability theory. *Delft Progress Rep.* **2** (1976/77), no. 1, 21-22. (R. F. Datko) **56** #6034 34D99
- inger, M. I. The relations between instruction and self-instruction in pattern recognition. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 2, 81-88. (Author's summary) **45** #8072 68A45
The connection between training and self-training in pattern recognition. (Russian) *Cybernetics and computer technology*, No. 3: *Pattern recognition (Russian)*, pp. 14-26. *Naukova Dumka, Kiev*, 1969. **45** #9547 68A45
Synthesis of a linear decision rule for a certain class of pattern recognition problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 5, 157-160 (Russian); translated as *Engng. Cybernetics* **10** (1972), no. 5, 892-895. (Patrick Bergmans) **48** #7692 68A45
A class of recognition devices used for testing complex hypotheses. *Automatika* **1972**, no. 2, 38-42 (Ukrainian); translated as *Soviet Automat. Control* **5** (1972), no. 2, 28-31. (Author's summary) **56** #10208 68A45
(with Koval', V. K.) Two-dimensional programming in image-analysis problems. *Automat. i Telemekh.* **1976**, no. 8, 149-168 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 8, part 2, 1269-1285. (Authors' summary) **56** #13824 68A45 (68A30)
A syntactic analysis of two-dimensional visual signals under conditions of interference. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 4, 113-133. (Author's summary) **57** #14647 68A45
(with Esin, N. A.) Synthesis of the probabilistic automaton grammar that describes a given set of sequences. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 4, 116-120. (Authors' summary) **58** #33607 94A35 (68A30)
- ion, Dymitr Necessary and sufficient conditions for the optimality of a strategy for a certain differential game. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **20 Algebra, Zastos. Mat.** (1978), 105-115. (Author's summary) **58** #20528 90D25
- ikin, N. A. The various forms of Reynold's differential equations for spatial flows of gaseous lubricant. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1971**, no. 3, 89-97. (Simona Popp) **47** #1374 76.35
The kinetic equations of L. Boltzmann and their importance in modern science. (Russian. English summary) *Voprosy Ist. Estestvozn. i Tehn.* **1977**, no. 3-4(56-57), 62-66, 162. (Editors) **58** #4911 01A60
The fundamental solution of the Fokker-Planck equation for the Brownian motion of rotating particles. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1978**, no. 1, 95-98. (Author's summary) **58** #20076 82.35
See also **History and methodology of the natural sciences**, **50** #1807
- hter, Charles Sumner See Ingraham, Mark H., **58** #27111
- oraitienė, R. An analogue of a theorem of Mahler and Sprindžuk for polynomials of degree two in p -adic variables. (Russian. Lithuanian and English summaries) *Lietosk. Mat. Sb.* **13** (1973), no. 2, 177-188, 267. (S. E. Schuur) **48** #6016 10F25 (10B45, 10M10)
- gna-Slik, S. D. See Sprygina-Slik, S. D.
- nac, O. The generalization of the functional equation of d'Alembert and D. V. Ionescu under the assumption that some dependencies are given among its arguments. (Romanian. Russian and French summaries) Collection of articles dedicated to Vasile Mioc on his seventieth birthday. *Bul. Ști. Tehn. Inst. Politehn. Timișoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **17(31)** (1972), no. 1, 53-59. (I. Stamate) **49** #5624 39A30
- nan, Mohamed Hachmi Sur les opérateurs semi-invariants. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 21, A1353-A1356. (Author's summary) **56** #3185 22E25 (22E45)
- novič, B. M. (with Astapenko, V. M.) A diffraction problem on a rigid corrugated surface. *Akust. Ž.* **17** (1971), 24-29 (Russian); translated as *Soviet Physics Acoust.* **17** (1971), 19-22. (Homer F. Walker) **47** #2899 76.35
- in, Ja. A. Iterated modalities in contemporary logic. (Russian) *Nonclassical logic (Russian)*, pp. 286-296. *Izdat. "Nauka", Moscow*, 1970. (I. Ruzsa) **47** #6447 02C10
- ker, Steven P. (with Challifour, John L.) Euclidean field theory. I. The moment problem. *Comm. Math. Phys.* **43** (1975), 41-58. (Walter Wyss) **53** #7278 81.46
(with Challifour, John L.) On Schwinger functionals—positive extensions, moment problems, and representations. *J. Mathematical Phys.* **18** (1977), no. 10, 1913-1917. (Walter Wyss) **57** #4898 81.46
On commuting self-adjoint extensions of unbounded operators. *Indiana Univ. Math. J.* **27** (1978), no. 4, 629-636. (J. A. Erdos) **58** #12482 47B25
- 'ko, A. M. Algebraic operations on systems of objects. *Problemy Kibernet.* No. 20 (1968), 217-223 (Russian); translated as *Systems Theory Res.* **20** (1971), 189-195. (G. Čupona) **45** #143 08A05 (20N99)
- The radicals of Jordan rings. (Russian) *Algebra i Logika* **11** (1972), 206-215, 239. (L. Š. Ioffe) **48** #361 17C10
- The Jacobson radical and absolute divisors of zero of special Jordan algebras. (Russian) *Algebra i Logika* **11** (1972), 711-723, 737. (Kevin McCrimmon) **47** #5065 17A15
(with Širšov, A. I.; Kargapov, M. I.; Bokuť, L. A.; Kuz'min, E. N.; Šestakov, I. P.) Konstantin Aleksandrovič Ževlakov. (Russian) *Mat. Zametki* **12** (1972), 233-237. (Editors) **47** #3138 01A70 (17D05)
A remark on radicals and derivations of rings. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 1395-1397, 1422. (Rainer Miltz) **48** #4065 17A99
Jordan rings. (Russian) *Rings, I (Russian)*, pp. 10-12. *Inst. Mat. Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1973. (J. S. Joel) **55** #8133 17C50
(with Šestakov, I. P.) Right representations of algebras. (Russian) *Algebra i Logika* **13** (1974), no. 5, 544-588, 605-606. (Authors' summary) **58** #16810 17D05
Radicals of Jordan rings that are connected with alternative rings. (Russian) *Mat. Zametki* **16** (1974), 135-140. (M. Slater) **51** #5683 17A15
(with Ževlakov, K. A.; Šestakov, I. P.; Širšov, A. I.) ★ Альтернативные алгебры. Часть I. (Russian) [Alternative algebras. Part I] Серия "Библиотека Кафедры Алгебры и Математической Логике Новосибирского Университета", Вып. 17. ["Library of the Department of Algebra and Mathematical Logic of Novosibirsk State University"] Series, No. 17] *Novosibirsk. Gos. Univ., Novosibirsk*, 1976. 77 pp. (Harry F. Smith) **57** #16365 17-02 (16A68, 17D05)
(with Ževlakov, K. A.; Šestakov, I. P.; Širšov, A. I.) ★ Йордановы алгебры. (Russian) [Jordan algebras] *Novosibirsk. Gos. Univ., Novosibirsk*, 1976. 99 pp. (Editors) **58** #28105 17Cxx
Jordan algebras, without nilpotent elements, that satisfy finiteness conditions. (Russian) Rings and modules. *Mat. Issled. Vyp.* **38** (1976), 170-176, 209. (I. L. Kantor) **57** #3203 17A15
The lower nilradical in Jordan algebras with a maximality condition. (Russian) *Algebra i Logika* **16** (1977), no. 1, 98-100, 124. (Author's summary) **58** #22212 17C10
- Slin'ko, M. G. (with Fedotov, A. V.) Application of the maximum principle for the optimization of chemical processes. (Russian) *Diskret. Analiz* No. 13 (1968), 48-65. **45** #4868 49A99
(with Fedotov, A. V.; Kuznecov, Ju. I.) Determination of the optimal boundary control for a process with variable activity of the catalyst. (Russian) *Diskret. Analiz* No. 13 (1968), 66-73. **45** #4869 49A99
(with Bykov, V. I.; Jablonskii, G. S.; Kuznecov, Ju. I.; Matros, Ju. Š.; Fedotov, A. V.) Optimization of catalytic processes with variable activity. (Russian) *Problemy Kibernet.* No. 27 (1973), 153-178, 294. (J. S. Joel) **57** #14957 80.49
(with Bykov, V. I.; Jablonskii, G. S.; Akramov, T. A.) The rate of decrease of the free energy of a complex chemical reaction. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 3, 621-624. (From the text) **58** #32438 80.35
- Slinn, W. G. N. (with Gibbs, Alan G.) The stochastic growth of a rain droplet. *J. Atmospheric Sci.* **28** (1971), 973-982. (W. J. Pierson, Jr.) **45** #3047 86.60
(with Shen, S. F.) Brownian diffusion in a nonuniform gas. *J. Statist. Phys.* **3** (1971), 291-305. (S. Harris) **46** #8604 82.45
- Slipenčuk, K. M. Transformation of a certain class of infinite products. (Russian) *Studies in contemporary problems of summability and approximation of functions, and their applications (Russian)*, pp. 100-103. *Dnepropetrovsk. Univ., Dnepropetrovsk*, 1972. (E. Stipančić) **54** #8071 40A20
Absolute α -power summability of infinite products. (Russian) *Studies in contemporary problems of summability and approximation of functions, and their applications (Russian)*, pp. 104-105. *Dnepropetrovsk. Univ., Dnepropetrovsk*, 1972. (E. Stipančić) **54** #8072 40A20
(with Udalaja, N. I.) Absolute summability of series by matrix methods. I, II. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 6(145), 65-73; *ibid.* **1974**, no. 7(146), 72-82. (Hubert Tietz) **50** #7888 40F05 (40C05)
Strong p th power summability of Fourier series by matrix methods. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications*, No. 6 (Russian), pp. 136-139. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1975. (Editors) **58** #29776 42A28
(with Novikova, N. S.; Udalaja, N. I.) Strong summability of series by matrix methods. I. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 11(162), 78-88. (See RŽMat **1976** #8 B32) 40C05
(with Novikova, N. S.; Udalaja, N. I.) Strong summability of series by matrix methods. II. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 12(163), 53-63 (1976). (See Zbl **357** #40001) 40C05
Strong summability of double series by matrix methods, and theorems of Tauberian type for these methods. (Russian) *Mat. Zametki* **17** (1975), 391-400. (D. P. Gupta) **53** #1088 40G05
A theorem of Tauberian type for the case of the summation of double series. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications (Russian)*, pp. 99-102, 161. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1976. (Author's summary) **58** #29563 40E05 (40B05)
Absolute summability of double series by matrix methods, and theorems of Tauberian type for these methods. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 1, 102-107, 143. (V. G. Čelidze) **53** #6147 40F05
Absolute and strong p th power summability ($p > 1$) of double series by matrix methods, and theorems of Tauberian type for these methods. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 7(182), 76-86. (Editors) **58** #23237 40B05
Theorems of Tauberian type for matrix transformations and their application to Borel's method. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 11(186), 100-105. (M. S. Rangachari) **58** #29564 40E05
Invertibility conditions in the theory of the summability of double series. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 6, 830-835, 855. (S. Baron) **57** #17069 40B05 (40E05)
See also **Studies in contemporary problems of summability and approximation of functions and their applications**, **58** #26658 and **Studies in contemporary problems of summability and approximation of functions and their applications**, **58** #26659

- Slipenko, A. K. Representations of operatives. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* 1970, 226-230, 285. (I. M. H. Etherington) 45 #2071 20N15
- Representations of operatives. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* 1971, 708-710, 765. (V. Havel) 45 #6734 08A25 (20N99)
- Symmetric p -operatives. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 4(119), 102-108. (G. Čupona) 46 #7431 20N15 (08A25)
- An abstract characterization of matrix operatives. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 112-114, 143. (S. P. Bandyopadhyay) 51 #12661 08A25
- Matrix operatives. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* 1975, 207-208, 284. (I. M. H. Etherington) 51 #3347 20N15
- Regular operatives and ideal equivalences. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 3, 218-221, 285. (Author's summary) 58 #10673 08A25
- Slipičević, Kerim F. (with Marković, Mihailo I.) First flight escape probability in basic geometries for symmetrical source distribution. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 412-460 (1973), 135-142. (R. Zezula) 49 #4497 82.33
- Slisenko, A. O. Certain questions of the approximation of the maximal regulators of continuity. (Russian) *Trudy Mat. Inst. Steklov.* 113 (1970), 73-78. (errata insert) (E. Mendelson) 46 #1969 26A15 (02E99)
- Identification of the symmetry predicate by means of multihead Turing machines with input. (Russian) Problems in the constructive trend in mathematics, 6. *Trudy Mat. Inst. Steklov.* 129 (1973), 30-202, 267. (errata insert) (Max I. Kanović) 55 #5410 02F15 (68A25)
- A finite approach to the problem of the optimization of algorithms for theorem-proving. (Russian. English summary) Theoretical applications of the methods of mathematical logic, I. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 49 (1975), 123-130, 178. (Pavel Strnad) 51 #12489 02E10 (68A40)
- A simplified proof of the real-time recognizability of palindromes on Turing machines. (Russian. English summary) Theoretical applications of the methods of mathematical logic, II. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 68 (1977), 123-139, 146-147. (From the summary) 58 #19361 68A20 (02F15)
- See also *Studies in constructive mathematics and mathematical logic*, 46 #8817; *Studies in constructive mathematics and mathematical logic*, 46 #8818; *American Mathematical Society Translations*, Ser. 2, 48 #4; *Problems in the constructive trend in mathematics*, 49 #4761; *Investigations in constructive mathematics and mathematical logic*, 49 #10522; *Goodstein, R. Louis*, 50 #4261; *Studies in constructive mathematics and mathematical logic*, 54 #9966 and *Problems in the constructive trend in mathematics*, 55 #5379
- Slisenko, O. A. See *Investigations in constructive mathematics and mathematical logic*, 48 #50 (EA 49) (E 48 #5808) and *Investigations in constructive mathematics and mathematical logic*, 56 #8313
- Slisko, Josip (with Ljolie, Krunoslav) Green's functions of subsystems in a nonrelativistic quantum system. (Serbo-Croatian summary) *Akad. Nauka i Umjet. Bosne i Hercegov. Rad. Knj. 52 Odjelj. Prirod. Mat. Nauka Knj.* 14 (1974), 83-95. (Nadine Bessis) 52 #12622 81.47
- Slivina, N. A. The behavior as $t \rightarrow \infty$ of the solution of the Dirichlet problem in a half-space for the equation $\Delta u - u_x = 0$. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 290 (1976), 95-101. (RŽMat 1977 #1 B353) 58 #17496 35J40
- Slivinskaja, G. A. (with Dinic, E. A.) The structure of the class of graphs with a given cyclomatic matrix. (Russian) *Uspehi Mat. Nauk* 29 (1974), no. 3 (177), 195-196. (W. Dörfler) 52 #13448 05C05
- Slivinskas, Al'gimantas A cooperative game of dynamic economic models. (Russian. Lithuanian and English summaries) *Mat. Metody v Social. Nauk.—Trudy Sem. Processy Optimal. Upravlenija II Sekcija No. 9* (1977), 49-82, 121. (E. G. Gol'shtein) 58 #26113 90D40 (90A15)
- Characteristics of trajectories in a game of dynamic economic models. (Russian. Lithuanian and English summaries) *Mat. Metody v Social. Nauk.—Trudy Sem. Processy Optimal. Upravlenija II Sekcija No. 9* (1977), 83-104, 121. (A. A. Piontkovskii) 58 #32873 90A15
- Slivinskas, Vytautas (with Paulauskas, Celestinas) Repair of a technical system as a problem of optimal stopping of a Markov chain. (Russian. English and Lithuanian summaries) *Statist. Problemy Upravlenija—Trudy Sem. No. 4* (1973), 9-21. (K. Wickwire) 49 #8626 90B25
- Adaptive repair of a technical system. (Russian. English and Lithuanian summaries) *Statist. Problemy Upravlenija—Trudy Sem. No. 4* (1973), 22-45. (K. Wickwire) 49 #8627 90B25
- (with Gabrijolavičius, Alfredas; Jusas, Mečišlovas) A recursive algorithm for the minimal realization of linear systems. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija Vyp.* 20 (1977), 21-35, 89. (Authors' summary) 58 #15396 93B20
- Linear recurrent extrapolation. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 26* (1977), 9-34, 71. (Author's summary) 58 #15430 93B99 (65N30)
- Slivinski, Thomas A. An extension of threshold logic. *IEEE Trans. Computers* C-19 (1970), no. 4, 319-341. 56 #15214 94A20
- Slivinskii, A. P. (with Zaslavskii, G. M.; Kudenko, Ju. A.) Thermodynamics and dynamics of spin systems in the phase transition to the superradiance state. (Russian. English summary) *Teoret. Mat. Fiz.* 33 (1977), no. 1, 95-109. (Authors' summary) 56 #14424 82.34
- Slivinskii, V. E. On the theory of analytic functions of a hypercomplex Galois variable. (Russian) *Taškent. Inst. Inž. Železnodorož. Transporta Trudy No. 56* (1968), 91-92. (Not reviewed) 30A97
- Slivinsky, Charles (with Zahr, Khalil M.) State variable feedback in computer-controlled multivariable systems. *IEEE Trans. Automatic Control* AC-19 (1974), 404-407. (K. B. Datta) 54 #4768 93C45
- (with Min, Byung Ju; Hoft, Richard G.) Absolute stability analysis of PWM systems. *IEEE Trans. Automatic Control* AC-22 (1977), no. 3, 447-452. (James A. Heinen) 57 #2693 93D10
- Slivnjak, I. M. Properties of the process of active data accumulation with a large number of measurements. *Avtomat. i Telemekh.* 1974, no. 6, 32-37. (Russian); *transl. Automat. Remote Control* 35 (1974), no. 6, part 1, 899-904. (Michael Titterton) 52 #12933 93E10
- Recurrent estimation in the presence of a controlling parameter. (Russian) *Problemy Pereдачи Informacii* 10 (1974), no. 1, 80-90. (V. N. Igolkina) 50 #8873 (E 62L20 (93E10))
- Testing of simple hypotheses in systems with a control parameter. (Russian) *Funkcii Funkcional. Anal. i Priložen. Vyp.* 26 (1976), 95-116, iii. (Vladimir Katk) 56 #1550 62F05 (62H30)
- Śliwa, Jan On distribution of values of $\sigma(n)$ in residue classes. *Colloq. Math.* 27 (1973), 283-291, 332. (J. Knopfmacher) 48 #6044 10H35
- Sums of distinct units. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Astronom. Phys.* 22 (1974), 11-13. (S. D. Cohen) 49 #10658 12A25
- On the length of factorizations in algebraic number fields. (Russian summary) *Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 23 (1975), no. 4, 387-389. (L. C. 51 #10289 12A45 (12A50))
- (with Narkiewicz, Władysław) On a kind of uniform distribution of values of multiplicative functions in residue classes. *Acta Arith.* 31 (1976), no. 3, 291-294. (Leitmann) 58 #559 10H35
- Factorizations of distinct lengths in algebraic number fields. *Acta Arith.* 31 (1976), no. 4, 399-417. (S. Ikehara) 55 #2840 12A45 (10H25)
- A note on factorizations in algebraic number fields. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 5, 313-314. (H. J. G. 54 #274 12A45 (10H25))
- (with Rosiński, Jan) The number of factorizations in an algebraic number field. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 10, 821-826. (Larry J. Goldstein) 57 #16250 12A20 (10H25)
- Primes which remain irreducible in a normal field. *Colloq. Math.* 37 (1977), 159-165. (W.-D. Geyer) 57 #5961 12A75
- (with Narkiewicz, Władysław) Normal orders for certain functions associated with factorizations in number fields. *Colloq. Math.* 38 (1977/78), no. 2, 323-328. (R. Odoni) 58 #5586 12A45 (10H25)
- Śliwiński, Eugeniusz The Green's function and the solution of boundary problems for certain partial differential equations. (Polish. English summary) *Zeszyty Nauk. Gór.-Hutniczej—Mat.-Fiz.-Chem. No. 3* (1970), 1-44. (Author's summary) 45 #35J15
- The Dirichlet and Neumann problem for Laplace equation in an angular region. *Comment. Math. Prace Mat.* 17 (1973/74), 489-498. (R. B. Kelman) 50 #751
- Śliż, Franciszek (with Kuklewski, Julian) Pseudo-Euclidean rotations of frames in Euclidean space. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* 16 Geom. Różniczkowa (1973), 7-10. (R. I. Pimenov) 54 #1114 53B30
- Sliz'kii, V. I. A certain generalized Carleman problem with inverse shift for a simply connected domain. (Russian) *Sibirsk. Mat. Ž.* 16 (1975), 186-188, 198. (N. K. Karapetjanc) 51 #3468 (E 52 #11070) 30A88 (45E05)
- Letter to the editors: Correction to the paper "A certain generalized Carleman problem with inverse shift for a simply connected domain" (*Sibirsk. Mat. Ž.* 16 (1975), no. 1, 186-188). (Russian) *Sibirsk. Mat. Ž.* 16 (1975), no. 6, 1364. (N. K. Karapetjanc) 52 #11070 30A88
- A certain generalized Carleman problem for a simply connected domain. (Russian. English summary) *Ukrain. Mat. Ž.* 27 (1975), no. 4, 553-555, 576. (N. K. Karapetjanc) 53 #828
- On the Noether theory of the generalized Carleman problem for two function fields. (Russian) *Sibirsk. Mat. Ž.* 17 (1976), no. 6, 1422-1440. (G. S. Litvinčuk and N. L. Vasilevskii) 56 #3312 30A88
- The Noether theory of the generalized Carleman boundary value problem for function fields. (Russian) *Ukrain. Mat. Ž.* 29 (1977), 694-697, 711. (G. S. Litvinčuk) 57 #656 30A88
- Šljahin, G. G. Kant's philosophy of mathematics, and the present. (Russian. English summary) *Voprosy Filoz.* 1976, no. 1, 129-138, 188. (Author's summary) 58 #2102A05 (00A25)
- Šljahov, A. R. See *Cybernetics—in the service of Communism*, 48 #10432
- Šljapak, R. A. (with Ljašenko, I. M.) An application of a difference scheme of increasing accuracy to the determination of eigenvalues of the Laplace operator for domains consisting of rectangles. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev)* 1 (1971), 123-135. (C. Ilioi) 46 #6622 65N20
- See also *Systems analysis and algorithmization of production processes*, 49 #10432
- Šljapočnik, L. Ja. The solution of an oblique derivative problem by a difference method of the method of M. B. Maljutov. (Russian) *Čisl. Metody Meh. Splošn. Sredy* 5 (1971), 139-145. (From the author's introduction) 56 #17120 65N05
- Application of the method of nets to plane problems with an oblique derivative. (Russian) *Questions on the theory of the method of nets (Russian)*, pp. 116-187. *Nekot. Primenen. Metoda Setok v Gazovoi Dinamike, Vyp. 7, Izdat. Moskov. Univ., Moscow*, 1975. (Editors) 58 #31927 65N30
- Coercive difference approximations of the problem with an oblique derivative. (Russian) *Dokl. Akad. Nauk SSSR* 221 (1975), no. 5, 1053-1055. (G. W. Hedberg) 52 #12356 65N15
- Sljusarcuk, P. V. Use of pseudomoments for the estimation of the rate of convergence of the two-dimensional central limit theorem. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* 12 (1975), 149-155, 175. (M. U. Gafurov) 53 #60F05
- (with Ignat, Ju. I.) Convergence to stable laws. (Russian. English summary) *Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 10, 912-913, 960. (L. A. Anorina) 57 #60F05
- Sljusarcuk, V. E. (with Car'kov, E. F.) The stability of the solutions of linear functional-differential equations. (Russian) *Differential-difference equations (Russian)*, pp. 140-151. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (J. K. 53 #13787 34K20)
- (with Sverdan, M. L.) The stability of systems of difference equations. (Russian) *Analytic and qualitative methods of the theory of differential equations (Russian)*

- 24-232. *Izdanje Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1972.* (I. M. Sheffer) 1 #8663 39A10
(with Car'kov, E. F.; Jasinskiĭ, V. K.) The stability of the solutions of linear differential-functional equations under random perturbations of the parameters. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 409-415, 432. (A. Ja. Dorogovcev) **48** #9847 0H99
- Bounded and almost periodic solutions of difference equations in a Banach space. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations* (Russian), pp. 147-156. *Izdanje Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1975.* (Bolis lasit) **54** #775 39A40
- Sufficient conditions for the absolute asymptotic stability of linear equations in a Banach space. (Russian) *Mat. Zametki* **17** (1975), no. 6, 919-923. (M. Bertolino) **2** #14522 34G05
- The absolute stability of the solutions of linear differential equations in a Banach space with lags. (Russian) *Mat. Zametki* **18** (1975), no. 2, 261-265. (Tadeusz Dłotko) **2** #14523 34G05 (34K20)
- (with Car'kov, E. F.) Difference equations in a Banach space. (Russian) *Latvian mathematical yearbook*, 17 (Russian), pp. 214-229, 279. *Izdat. "Zinatne", Riga, 1976.* (D. Wexler) **57** #16909 34K05 (34G05)
- On the question of the stability of the solutions of infinite systems of differential equations. (Russian) *Differentsial' nye Uravneniya* **12** (1976), no. 11, 2019-2026, 2109. (Angelo Favini) **56** #791 34G05
- Absolute asymptotic stability of linear differential equations with infinitely many lags in a Banach space. (Russian) *Differentsial' nye Uravneniya* **12** (1976), no. 5, 840-847, 856. (Š. Schwabik) **54** #10795 34G05 (34K20)
- (with Jasinskiĭ, V. K.) Stability of the solutions of linear stochastic systems with aftereffect. (Russian) *A study of systems with random perturbations* (Russian), pp. 3-15. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev, 1977.* (G. S. Ladde) **58** #18727 0H10
- Bounded solutions of linear functional equations. (Russian) *Qualitative methods in the theory of differential equations with deviating argument* (Russian), pp. 124-129. *Izdanje Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1977.* (I. M. Sheffer) **58** #29533 39A20
- Estimates of the spectra of holomorphic functions with values in a Banach algebra. (Russian) *Topological spaces and their mappings*, No. 3 (Russian), pp. 102-112, 158. *Latv. Gos. Univ., Riga, 1977.* (Author's introduction) **58** #30259 46H25
- The spectra of certain operators in the space of bounded vector-valued functions. (Russian) *Topological spaces and their mappings*, No. 3 (Russian), pp. 113-122, 158. *Latv. Gos. Univ., Riga, 1977.* (Author's summary) **58** #30361 47A10 (47B37)
- A generalization of Wiener's theorem on absolutely convergent Fourier series and its application to the study of infinite-dimensional discrete systems. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 2, 23-26, 140. (R. V. Dudučava) **56** #16432 47B35
- (with Jasko, F. F.) Necessary and sufficient conditions for the exponential stability of the solutions of operator difference equations. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 5, 109-112, 143. (Authors' summary) **58** #6793 39A12 (47A50)
- Estimates of spectra and the invertibility of functional operators. (Russian) *Mat. Sb. (N.S.)* **105(147)** (1978), no. 2, 269-285, 288. (Chandler Davis) **58** #23691 47A60 (39A40, 46H05)
- On the question of instability in the first approximation. (Russian) *Mat. Zametki* **23** (1978), no. 5, 721-723. (Stefan Balint) **58** #11762 34G05
- See also **Functional and differential-difference equations**, **50** #10484
- Šarčuk, V. Ju. Stability of the solutions of differential equations with random parameters in a Banach space. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1972**, 530-532, 574. (J. Carkovs) **46** #9481 34G05 (34F05)
- Stability of the solutions of differential operator equations. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1974**, 226-228, 286. (H. Langer) **50** #8125 47A50 (34G05, 60H10)
- Necessary and sufficient conditions for the exponential stability of the solutions of operator differential equations with variable operator coefficients. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1974**, 313-317, 380. (Š. Schwabik) **50** #2638 34G05
- Bounded and almost periodic solutions of implicit difference equations in a Banach space. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1975**, no. 6, 502-508, 570. (Ulrich Kosel) **52** #11683 47H15 (39A10)
- Sarenko, V. M. (with Fradlin, B. N.) Dynamics of an absolutely rigid body with one fixed point. (Russian) *Prikl. Meh.* **11** (1975), no. 8, 3-15, 140. (Q. K. Ghori) **56** #7384 70.00
- (with Fradlin, B. N.) Some research by native scientists on the dynamics of a rigid body. (Russian. English summary) *Voprosy Istor. Estestvozn. i Tehn.* **1976**, no. 1(54), 46-48, 97, 107. (Editors) **58** #15946 01A55
- Sarova, K. M. (with Saran, L. A.) Estimation of the curvature of level curves for functions that are convex with respect to the direction of the imaginary axis. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1972**, 141-144, 189. (R. Kühnau) **46** #3767 30A32
- The domain of the values of C-functions with fixed real coefficients. (Ukrainian. English and Russian summaries) *Dopovidі Akad. Nauk Ukrain. RSR Ser. A* **1974**, 222-225, 286. (K. W. Lucas) **51** #8429 30A86
- Certain estimates of C-functions and starlike functions with fixed Taylor coefficients. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh.* **10** (1974), 105-108, 176. (Author's summary) **56** #5857 30A32
- Sarska, Vanda See Słosarska, W.
- Skovka, M. (with Balabanova, R. St.) Special equidistant nets and three-webs in a two-dimensional Riemannian space. I. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Načn. Trud.* **13** (1975), no. 1, 141-157 (1977). (M. A. Akivis) **58** #12786a 53B25
- Sloan, Alan D. A relativistic polaron without cutoffs in two space dimensions. *Bull. Amer. Math. Soc.* **78** (1972), 407-410. (Walter Wyss) **45** #6328 81.47
- A nonperturbative approach to nondegeneracy of ground states in quantum field theory: polaron models. *J. Functional Analysis* **16** (1974), 161-191. (A. S. Wightman) **49** #11997 81.47
- The polaron without cutoffs in two space dimensions. *J. Mathematical Phys.* **15** (1974), 190-201. (K. Kumar) **48** #13083 81.47
- Analytic domination with quadratic form type estimates and nondegeneracy of ground states in quantum field theory. *Trans. Amer. Math. Soc.* **194** (1974), 325-336. (P. R. Chernoff) **49** #10300 81.47
- Analytic domination by fractional powers with linear estimates. *Proc. Amer. Math. Soc.* **51** (1975), 94-96. (Bernard B. Morrel) **51** #3938 47A65 (47B25)
- An application of the nonstandard Trotter product formula. *J. Mathematical Phys.* **18** (1977), no. 12, 2495-2496. (J. Ławrynowicz) **57** #11501 81.47
- (with Herbst, Ira W.) Perturbation of translation invariant positivity preserving semigroups on $L^2(\mathbb{R}^N)$. *Trans. Amer. Math. Soc.* **236** (1978), 325-360. (T. Kato) **57** #10496 47D05 (35P99, 81.47)
- Sloan, D. M. (with Wilks, G.) Invariant imbedding, Riccati transformations and eigenvalue problems. *J. Inst. Math. Appl.* **18** (1976), no. 1, 99-116. (W. C. Rheinboldt) **55** #6873a 65L15
- (with Wilks, G.) Riccati transformations for eigenvalues of systems of linear ordinary differential equations with separated boundary conditions. *J. Inst. Math. Appl.* **18** (1976), no. 1, 117-127. (W. C. Rheinboldt) **55** #6873b 65L15
- (with Wilks, G.) The Riccati transformation method and the computation of eigenvalues of complex linear differential systems. *J. Comput. Appl. Math.* **3** (1977), no. 3, 195-199. (H. Hochstadt) **57** #4528 65L15
- Eigenfunctions of systems of linear ordinary differential equations with separated boundary conditions using Riccati transformations. *J. Computational Phys.* **24** (1977), no. 3, 320-330. (Silvio Nocilla) **56** #16045 34B99 (65L15)
- (with Bramley, J. S.) A comparison of boundary methods for the numerical solution of hyperbolic systems of equations. *J. Engrg. Math.* **11** (1977), no. 3, 227-239. (I. Norman Katz) **56** #13687 65N10
- Sloan, Ian H. Equations for four-particle scattering. *Phys. Rev. C* **3** (6) (1972), 1945-1955. (Author's summary) **52** #12631 81.47
- Convergence of degenerate-kernel methods. *J. Austral. Math. Soc. Ser. B* **19** (1975/76), no. 4, 422-431. (H. E. Fettis) **56** #10079 65R05 (45L10, 45B05)
- (with Burn, B. J.; Datyner, N.) A new approach to the numerical solution of integral equations. *J. Comput. Phys.* **18** (1975), 92-105. (Y. Ikebe) **53** #1992 65R05
- Error analysis for a class of degenerate-kernel methods. *Numer. Math.* **25** (1975/76), no. 3, 231-238. (J. Kofroň) **56** #1759 65R05
- Improvement by iteration for compact operator equations. *Math. Comp.* **30** (1976), no. 136, 758-764. (Author's summary) **57** #14435 65J05
- Iterated Galerkin method for eigenvalue problems. *SIAM J. Numer. Anal.* **13** (1976), no. 5, 753-760. (L. Janos) **55** #1727 65J05
- On the numerical evaluation of singular integrals. *BIT* **18** (1978), no. 1, 91-102. (Hans Stegbuchner) **58** #19054 65D30
- (with Smith, W. E.) Product-integration with the Clenshaw-Curtis and related points. Convergence properties. *Numer. Math.* **30** (1978), no. 4, 415-428. (C. W. Clenshaw) **58** #13646 65D30
- Sloane, A. The axially symmetric stationary vacuum field equations in Einstein's theory of general relativity. *Austral. J. Phys.* **31** (1978), no. 5, 427-438. (J. W. Auer) **58** #25817 83.53
- Sloane, Neil J. A. On finding the paths through a network. *Bell. System Tech. J.* **51** (1972), 371-390. (P. Vondráček) **47** #3123 94A20
- (with MacWilliams, F. Jessie; Goethals, J. M.) The MacWilliams identities for nonlinear codes. *Bell. System Tech. J.* **51** (1972), 803-819. (H. Jürgensen) **46** #8761 94A10
- (with MacWilliams, F. Jessie; Thompson, J. G.) Good self dual codes exist. *Discrete Math.* **3** (1972), 153-162. (E. L. Cohen) **46** #6919 94A10
- A survey of constructive coding theory, and a table of binary codes of highest known rate. *Discrete Math.* **3** (1972), 265-294. (J. K. Wolf) **46** #10494 94A10
- (with Berlekamp, Elwyn R.; MacWilliams, F. Jessie) Gleason's theorem on self-dual codes. *IEEE Trans. Information Theory* **IT-18** (1972), 409-414. (G. M. Tenengol'c) **48** #13446 94A10
- (with Reddy, Sudhakar M.; Chen, Chin Long) New binary codes. *IEEE Trans. Information Theory* **IT-18** (1972), 503-510. (S. Guisgu) **51** #12415 94A10
- (with MacWilliams, F. Jessie; Mallows, Colin L.) Generalizations of Gleason's theorem on weight enumerators of self-dual codes. *IEEE Trans. Information Theory* **IT-18** (1972), 794-805. (H. F. Mattson, Jr.) **53** #2515 94A10
- (with Kurshan, R. P.) Coset analysis of Reed Muller codes via translates of finite vector spaces. *Information and Control* **20** (1972), 410-414. (R. C. Mullin) **51** #7713 94A10
- Sphere packings constructed from BCH and Justesen codes. *Mathematika* **19** (1972), 183-190. (J. M. Wills) **47** #3321 10E30 (94A10)
- ★A handbook of integer sequences. *Academic Press* [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1973. xiii + 206 pp. (Editors) **50** #9760 10A40 (05Axx, 65A05)
- (with Aho, A. V.) Some doubly exponential sequences. *Fibonacci Quart.* **11** (1973), no. 4, 429-437. (J. B. Roberts) **49** #209 10A40
- Is there a $(72,36,d)=16$ self-dual code? *IEEE Trans. Information Theory* **IT-19** (1973), no. 2, 251. (F. J. MacWilliams) **54** #9843 94A10
- (with Mallows, Colin L.) An upper bound for self-dual codes. *Information and Control* **22** (1973), 188-200. (G. Solomon) **54** #2326 94A10
- (with MacWilliams, F. Jessie; Thompson, J. G.) On the existence of a projective plane of order 10. *J. Combinatorial Theory Ser. A* **14** (1973), 66-78. (C. Ballester Pereyra) **47** #1644 05B25
- (with Mallows, Colin L.) On the invariants of a linear group of order 336. *Proc. Cambridge Philos. Soc.* **74** (1973), 435-440. (M. Nagata) **48** #3954 13F20 (20G20)
- Weight enumerators of codes. *Combinatorics, Part 1: Theory of designs, finite geometry and coding theory* (Proc. Advanced Study Inst., Breukelen, 1974), pp. 111-138. *Math. Centre Tracts*, No. 55, Math. Centrum, Amsterdam, 1974. (Ian Blake) **50** #16098 94A10
- (with Gilbert, E. N.; MacWilliams, F. Jessie) Codes which detect deception. *Bell*

- System Tech. J.* **53** (1974), 405-424. (Authors' summary) **55** #5306 94A10
(with Pless, Vera) Binary self-dual codes of length 24. *Bull. Amer. Math. Soc.* **80** (1974), 1173-1178. (Authors' summary) **58** #33506 94A10
(with Mallows, Colin L.) Weight enumerators of self-orthogonal codes. *Discrete Math.* **9** (1974), 391-400. (Ian Blake) **50** #16092 94A10
(with Burt, Stefan A.; Grünbaum, Branko) The orchard problem. *Geometriae Dedicata* **2** (1974), 397-424. (R. C. Mullin) **49** #2428 05B30
- ★A short course on error correcting codes. International Centre for Mechanical Sciences, Courses and Lectures, No. 188. *Springer-Verlag, Vienna-New York*, 1975. 78 pp. (E. R. Berlekamp) **53** #2517 94A10
- An introduction to association schemes and coding theory. *Theory and application of special functions (Proc. Advanced Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1975)*, pp. 225-260. *Math. Res. Center, Univ. Wisconsin, Publ. No. 35, Academic Press, New York*, 1975. (J.-M. Goethals) **53** #5155 94A10 (05B99)
(with Mallows, Colin L.; Odlyzko, Andrew M.) Upper bounds for modular forms, lattices, and codes. *J. Algebra* **36** (1975), no. 1, 68-76. (Bart Rice) **51** #12711 10D05 (94A10)
(with Pless, Vera) On the classification and enumeration of self-dual codes. *J. Combinatorial Theory Ser. A* **18** (1975), 313-335. (Dominique Perrin) **51** #12412 94A10
(with Mallows, Colin L.) Two-graphs, switching classes and Euler graphs are equal in number. *SIAM J. Appl. Math.* **28** (1975), 876-880. (R. W. Robinson) **55** #164 05C30
(with Best, M. R.; Brouwer, A. E.; MacWilliams, F. Jessie; Odlyzko, Andrew M.) Some new bounds on the size of codes (summary). *Proceedings of the Seventh Southeastern Conference on Combinatorics, Graph Theory, and Computing (Louisiana State Univ., Baton Rouge, La., 1976)*, pp. 499-500. *Congressus Numerantium, No. XVII, Utilitas Math., Winnipeg, Man., 1976*. (J. J. Stiffler) **55** #5304 94A10
(with MacWilliams, F. Jessie) Pseudo-random sequences and arrays. *Proc. IEEE* **64** (1976), no. 12, 1715-1729. (E. R. Berlekamp) **55** #12295 94A10
(with Mallows, Colin L.; Pless, Vera) Self-dual codes over GF(3). *SIAM J. Appl. Math.* **31** (1976), no. 4, 649-666. (R. J. McEliece) **55** #14404 94A10
(with MacWilliams, F. Jessie) ★The theory of error-correcting codes. I. North-Holland Mathematical Library, Vol. 16. *North-Holland Publishing Co., Amsterdam-New York-Oxford*, 1977. pp. i-xv and 1-369. ISBN 0-444-85009-0 (Ian Blake) **57** #5408a 94A10
(with MacWilliams, F. Jessie) ★The theory of error-correcting codes. II. North-Holland Mathematical Library, Vol. 16. *North-Holland Publishing Co., Amsterdam-New York-Oxford*, 1977. pp. i-ix and 370-762. ISBN 0-444-85010-4 (Ian Blake) **57** #5408b 94A10
- Binary codes, lattices, and sphere-packings. *Combinatorial surveys (Proc. Sixth British Combinatorial Conf., Royal Holloway Coll., Egham, 1977)*, pp. 117-164. *Academic Press, London*, 1977. (J. M. Goethals) **58** #9781 94A10 (05B40, 10E30)
- Error-correcting codes and invariant theory: new applications of a nineteenth-century technique. *Amer. Math. Monthly* **84** (1977), no. 2, 82-107. (Ian Blake) **54** #12361 94A10
(with Best, M. R.; Brouwer, A. E.; MacWilliams, F. Jessie; Odlyzko, Andrew M.) Bounds for binary codes of length less than 25. *IEEE Trans. Information Theory* **IT-24** (1978), no. 1, 81-93. (From the authors' introduction) **57** #19066 94A10
Codes over GF(4) and complex lattices. *J. Algebra* **52** (1978), no. 1, 168-181. (H. F. Mattson, Jr.) **58** #9782 94A10 (05B40, 06A20, 10E30)
See also *Cybernetics collection*, **48** #5714; *Algebraic coding theory: history and development*, **51** #9958; *Key papers in the development of coding theory*, **52** #5176 and *Combinatorics*, **52** #7912
- Sloate, Harry M. (with Bickart, Theodore A.) A-stable composite multistep methods. *J. Assoc. Comput. Mach.* **20** (1973), 7-26. (J. Hurt) **49** #6623 65L05
Matrix representations for sorting and the fast Fourier transform. *IEEE Trans. Circuits and Systems* **CAS-21** (1974), 109-116. (Robert Gray) **52** #16840 94A05 (42A16)
- Slobko, Thomas A. (with Paige, Lowell J.; Swift, J. Dean) ★Elements of linear algebra. Second edition. *Xerox College Publishing, Lexington, Mass.-Toronto, Ont., 1974*. ix+287 pp. (Editors) **50** #9891 15-01
- Sloboda, Fridrich Note about the parallel projection method for solution of system of linear algebraic equations. *Proceedings of the Third Conference on Basic Problems of Numerical Mathematics (Prague, 1973). Acta Univ. Carolinae-Math. et Phys.* **15** (1974), no. 1-2, 157-158. (B. Levinger) **55** #1715 65F05
Parallel method of conjugate directions for minimization. (Czech summary) *Apl. Mat.* **20** (1975), no. 6, 436-446. (M. R. Hestenes) **52** #16622 90C20 (65K05)
Nonlinear iterative methods and parallel computation. (Czech and loose Russian summaries) *Apl. Mat.* **21** (1976), no. 4, 252-262. (Jo Ann Howell) **54** #14354 65H10
A conjugate directions method and its application. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977), Part 2*, pp. 147-157. *Lecture Notes in Control and Information Sci., Vol. 7, Springer, Berlin*, 1978. (Siegfried Schaible) **58** #3451 65K05
A parallel projection method for linear algebraic systems. (Czech and loose Russian summaries) *Apl. Mat.* **23** (1978), no. 3, 185-198. (Charles F. Van Loan) **58** #9607 93C99 (65F20)
- Slobodčikova, R. I. (with Egorova, N. V.; Patkin, B. P.) A modified algorithm for the solution for an assignment problem. (Russian) *Ėkonom. i Mat. Metody* **13** (1977), no. 4, 782-784. (E. G. Gol'shtein) **57** #2551 90C10
- Slobodenjuk, N. P. On the asymptotic behavior of the distribution of the number of entries of a random walk into a fixed state. (Russian) *Questions of statistics and of the control of random processes (Russian)*, pp. 228-241. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Author's introduction) **55** #1487 60J15
Asymptotic analysis of the distribution of the number of visits of a random walk into a fixed state. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 9* (1973), 159-166, 177-178. (Ju. V. Borovskikh) **54** #3855 60J15
The asymptotic expansion of the distribution of the number of returns of a random walk to the initial state. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 58-65, 141. (F. L. Spitzer) **47** #9725 60J15
- Slobodinskaja, T. V. (with Petrosjan, L. A.) Simultaneous pursuit games. (Russian. Lithuanian and English summaries) *Mat. Metody v Social. Nauk.-Trudy Sem. P. Optimal. Upravlenija II Sekcija Vyp. 5* (1975), 23-36. (Authors' summary) **56** #90D25
- Slobodjan, Ju. S. Four-dimensional Riemannian spaces that admit families of two-dimensional totally geodesic surfaces. (Russian) *Ukrain. Geomtr. Sb. M.* (1968), 150-159. (A. Švec) **46** #8137 53C40
(with Kalynjak, L. I.) The structure of four-dimensional Riemannian spaces that admit a three-parameter family of two-dimensional totally geodesic surfaces. (Russian) *Ukrain. Geomtr. Sb. No. 7* (1969), 62-64, 184 (1970). (M. C. Chaki) **48** #53B25
A certain characteristic property of totally geodesic surfaces in a five-dimensional Riemannian space. (Russian) *Ukrain. Geomtr. Sb. No. 7* (1969), 118-129, 186 (C. Simionescu) **48** #1080 53B25
Certain properties of the totally geodesic hypersurfaces of a Finsler space. (Russian) *Ukrain. Geomtr. Sb. No. 10* (1971), 65-71. (L. Tamássy) **45** #4339 53C60
The Gauss-Codazzi conditions for totally geodesic surfaces in a Finsler space. (Russian) *Ukrain. Geomtr. Sb. No. 12* (1972), 124-131, 170. (L. Tamássy) **48** #53B40
- Slobodjanskii, A. H. A study of the process of optimizing the simplest class of multiparameter objects by means of the random search method. (Russian) *Avt. Vychisl. Tehn. (Riga)* **1975**, no. 1, 55-59. (Author's summary) **58** #9728 93E25
- Slobodjanskii, M. G. Certain estimates for stresses in the plane problem of elasticity. (Russian) *Trudy Moskov. Orden. Lenin. Ėnerget. Inst. No. 120* (1972), 29-40. (Sokolowski) **47** #6177 73.35
Bounds for loads when mass forces are absent. (Russian) *Trudy Moskov. Orden. Lenin. Ėnerget. Inst. Vyp. 246* (1975), 45-51. **56** #13937 73.35
- Slobodkin, Lawrence B. (with Wu, Lilian Shiao Yen) An elementary reconstruction of population dynamics: a conversation between a mathematician and a biologist. *Directions in the analysis of ecological systems (Proc. Conf., Utah State Univ., Utah, 1975), Part 2*, pp. 159-166. *Simulation Councils Proc. Ser., Vol. 5, No. Comput. Simulation, La Jolla, Calif., 1977*. (Howard B. Stauffer) **57** #2644 90C99
- Slobodkina, F. A. On the stability of subsonic gas dynamic flows. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1978**, no. 1, 90-97. (From the summary) **58** #76.35
- Slobodnik, S. G. The continuity and the differentiability of functions of several variables. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap. No. 277* (1971), 144-149. (Henryk Kozłowski) **46** #5550 26A54
Asymptotically differentiable functions of several variables. (Russian) *Mat. Zametki* **17** (1975), no. 6, 857-871. (M. Kuczma) **53** #10999 26A54
Expanding system of linearly closed sets. (Russian) *Mat. Zametki* **19** (1976), 67-84. (Henryk Fast) **53** #13494 26A54
(with Kaplan, L. I.) Monotone transformations, and differentiability properties of functions. (Russian) *Mat. Zametki* **22** (1977), no. 6, 859-871. (J. S. Lipiński) **57** #26A24
- Slobodskoi, A. M. (with Fridman, È. I.) The theory of the additive group of the integers with an arbitrary number of predicates that define maximal subgroups. (Russian) *Algebra, No. 11 (Russian)*, pp. 130-137. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Kogalovskii) **53** #10575 02G05 (02H15, 20K10)
(with Fridman, È. I.) Theories of abelian groups with predicates that define subgroups. (Russian) *Algebra i Logika* **14** (1975), no. 5, 572-575, 607. (O. V. Belegradskii) **55** #12512 02H15 (02G05, 20A10)
(with Fridman, È. I.) Undecidable universal theories of lattices of subgroups of abelian groups. (Russian) *Algebra i Logika* **15** (1976), no. 2, 227-234, 246. (Igor M. Kuznetsov) **57** #9515 02G05 (20A10)
- Slobozanin, L. A. The stability of a cylindrical equilibrium state of a rotating plasma. (Russian) *Mat. Fiz. i Funkcional. Anal. Vyp. 2* (1971), 169-174, 239. (Author's summary) **56** #14076 76.35
A problem on the branching of a cylindrical equilibrium state of a rotating plasma. (Russian) *Mat. Fiz. i Funkcional. Anal. Vyp. 2* (1971), 175-181, 239. (V. K. Pavlov) **57** #14875 76.35
(with Tjupcov, A. D.) A characteristic parameter for the stability of an axisymmetric equilibrium surface of a capillary fluid. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1974**, no. 4, 74-84. **56** #17488 76.65
(with Babskii, V. G.; Kopačevskii, N. D.; Myskii, A. D.; Tjupcov, A. D.) Approximate methods in the hydrodynamics of weightlessness. (Russian) *Questions of mathematical physics and functional analysis (Proc. Res. Sem. Inst. Low Temp. Phys., Kharkov) (Russian)*, pp. 83-92, 173. "Naukova Dumka", Kiev, 1976. (Author's summary) **58** #14247 76.35
See also *Loginov, B. V.*, **57** #14876
- Słociński, Marek Unitary dilation of two-parameter semi-groups of contractions. (Polish. English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 1011-1014. (A. B. Buche) **52** #1409 47D05 (47A20)
Normal extensions of commutative subnormal operators. *Studia Math.* **54** (1975/76), no. 3, 259-266. (M. B. Abrahamse) **53** #8948 47B20
Isometric dilation of doubly commuting contractions and related models. (Polish. English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), 1233-1242. (I. Suciu) **58** #7142 47A45
- Slocum, Richard Conditions which insure that a Peano continuum is a 2-cell, a 2-sphere, an annulus. *Proceedings of the Auburn Topology Conference (Auburn Univ., Auburn, Ala., 1969; dedicated to F. Burton Jones on the occasion of his 60th birthday)*, pp. 9-14. *Auburn Univ., Auburn, Ala.*, 1969. (C. E. Burgess) **53** #1538 54F25 (57A05)
Using brick partitionings to establish conditions which insure that a Peano continuum is a 2-cell, a 2-sphere or an annulus. *Pacific J. Math.* **42** (1972), 701-710. (M.-E. Hamström) **47** #9569 54F25
The Kline 2-sphere characterization—by definition. *Proc. Amer. Math. Soc.* **47** (1975), 491-498. (M.-E. Hamström) **50** #11239 57A05
- Słodkowski, Zbigniew On ideals consisting of joint topological divisors of zero. *Math.* **48** (1973), 83-88. (D. W. Bailey) **50** #1003 46J20
(with Żelazko, Wiesław) On joint spectra of commuting families of operators. *Math.* **48** (1973), 1-10. (D. W. Bailey) **50** #1004 46J20

- Studia Math.* **50** (1974), 127-148. (J. W. Bunce) **49** #11280 47A10 (46J05)
(with Wojtyński, Wojciech; Zemánek, Jaroslav) A note on quasilinear elements of a Banach algebra. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 2, 131-134. (G. Marinescu) **55** #11043 46H05
An infinite family of joint spectra. *Studia Math.* **61** (1977), no. 3, 239-255. (Chandler Davis) **57** #1157 47A10 (46M20)
- Wojtyński, Peter** Einige Bemerkungen zur Entfaltung symmetrischer Funktionen. *Math. Z.* **58** (1978), no. 2, 157-170. (P. Orlík) **57** #14021 58C25
- Wojtyński, A. M.** Two-stage detection of signals in normal noise of unknown intensity. *Radioelektron. i Elektron.* **17** (1972), 2064-2070 (Russian); translated as *Radio Engng. Electron. Phys.* **17** (1972), 1643-1649. (Author's summary) **56** #11500 94A05
Sequential analysis of signals resulting in a Student-Stein statistic. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 2, 131-135 (Russian); translated as *Engng. Cybernetics* **12** (1974), 92-96. (K. S. Miller) **52** #9531 62L10
Application of analysis of variance to sequential detection of deterministic signals. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 4, 164-169, 223 (Russian); translated as *Engng. Cybernetics* **12** (1974), no. 4, 118-122. (James C. Bezdek) **52** #4493 62F05 (93E10)
- Wojtyńska, Anna** See Witelonis *Perspectivae liber primus*, **58** #10021
- Wojtyńska, J.** On the equivariant Chern homomorphism. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 10, 909-913. (W. D. Neumann) **57** #1474 55B25
- Wojtyńska, Jolanta** André-Quillen cohomology for commutative coalgebras. *Colloq. Math.* **22** (1975), no. 2, 167-184. (E. J. Taft) **53** #13362 18H15
- Wojtyński, Józef** On the greatest congruence relation contained in an equivalence relation and its applications to the algebraic theory of machines. *Colloq. Math.* **29** (1974), 31-43, 59. (David C. Rine) **50** #9446 94A30 (08A05)
- Wojtyński, Leon** (with Walukiewicz, Stanisław; Faner, Marian) An improved algorithm for pseudo-Boolean programming. *Fifth Conference on Optimization Techniques (Rome, 1973), Part I*, pp. 493-504. *Lecture Notes in Comput. Sci.*, Vol. 3, Springer, Berlin, 1973. From the authors' text **56** #11018 90C99
The quadratic assignment problem as a linear zero-one programming problem. Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **20** (1975), 89-105. (P. Vondráček) **51** #12305 90B05
See also Garfinkel, Robert S.; et al., **58** #20417
- Wojtyński, Alan** Generalized quantifiers and well orderings. *Arch. Math. Logik. Grundlagenforsch.* **15** (1972), 57-73. (Hans Läuchli) **48** #3698 02B20 (02H05)
Decision problems for generalized quantifiers—a survey. *Set theory and hierarchy theory (Proc. Second Conf., Bierutowice, 1975)*, pp. 249-258. *Lecture Notes in Math.*, Vol. 537, Springer, Berlin, 1976. (Editors) **58** #16248 02G05 (02B20)
See also Proceedings: Bertrand Russell Memorial Logic Conference, **49** #4747
- Wojtyński, R. V.** See Slon'ov's'kii, R. V.
- Wojtyński, Kenneth** A complete infinitary logic. *J. Symbolic Logic* **41** (1976), no. 4, 730-746. (Henry Africk) **55** #7739 02B25 (02D99, 02B20)
- Wojtyński, R. V.** (with Bodnarčuk, P. I.; Pustomel'nikov, I. P.) Representation of the solutions of boundary value problems by continued fractions and by branching continued fractions. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 59* (1971), 34-43, 148. (G. P. Los') **48** #12837 65L05
(with Bodnarčuk, P. I.; Pustomel'nikov, I. P.; Jarovii, S. S.) On certain applications of branching continued fractions in the investigation of Markov processes. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1972**, 391-394, 475. (B. Choczewski) **46** #6469 60J10
(with Bodnarčuk, P. I.; Pustomel'nikov, I. P.) The solution of boundary value problems for higher order differential equations by means of branching continued fractions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 1(128), 15-23. (R. S. Levitin) **52** #9619 65L10
(with Bodnarčuk, P. I.; Marko, V. F.) Estimation of solutions of problems by continued fractions. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 75* (1973), 3-7, 91. (Jozef Mikloško) **48** #12808 65G05
A certain problem of the theory of Markov processes with gains. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 75* (1973), 40-44, 94. (B. Choczewski) **49** #8115 60J20
(with Bodnarčuk, P. I.; Pustomel'nikov, I. P.) The solution of boundary value problems for differential equations of odd orders by means of branching continued fractions. (Russian) *Differentsial'nye Uravnenija* **10** (1974), 1205-1212, 1339. (R. S. Levitin) **51** #4676 65L05
(with Bodnarčuk, P. I.; Skorobogat'ko, V. Ja.; Pustomel'nikov, I. P.) Recurrence equations and branching continued fractions. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 106* (1975), 142-145, 207. (Authors' summary) **58** #23215 39A10 (10A30)
Stability of difference schemes. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst. No. 106* (1975), 145-148, 208. (Author's summary) **58** #24981 65L99
(with Bodnarčuk, P. I.; Ivanel, V. K.; Dzjubka, V. E.; Pustomel'nikov, I. P.) Computational stability of ordinary continued and branching continued fractions. (Russian) *Continued fractions and their applications (Russian)*, pp. 12-14, 103. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Authors' summary) **58** #29547 40A15 (10A30)
(with Marko, V. F.) Numerical realization of a method for the solution of a system of linear Diophantine equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 10, 943-945. (Authors' summary) **58** #16476 10-04 (10B05, 65F05)
(with Maksimiv, E. M.) A method of computing continued fractions. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst.* **1977**, no. 119 *Mat. i Meh.*, 139-141, 197. (Authors' summary) **58** #23234 40A15 (65G05)
(with Nikitjuk, Z. M.) Application of continued fractions in the solution of first order differential equations. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst.* **1977**, no. 119 *Mat. i Meh.*, 141-144, 198. (Authors' summary) **58** #22720 34A10
- Wojtyński, T. H.** Not quite, but almost. *Transactions of the Nineteenth Conference of Army Mathematicians (U.S. Army Training Device Agency, Naval Training Equipment Center, Orlando, Fla., 1973)*, pp. 143-151. *U.S. Army Research Office (Durham), Report No.* 73-3, *U.S. Army Research Office (Durham), Durham, N.C.*, 1973. (H. Günzler) **49** #7706 43A60
- Ślósarska, W.** (with Żekanowski, Zbigniew) On certain generalization of the concept of a harmonic and Killing tensor in a V_n . *Demonstratio Math.* **2** (1970), no. 3, 201-221. (T. K. Pan) **45** #1080 53C20
(with Żekanowski, Zbigniew) On some properties of a Riemannian space V_n with constant scalar curvature. Collection of articles commemorating Władysław Ślebodziński. *Colloq. Math.* **26** (1972), 145-148. (A. Rapcsák) **50** #14549 53B20
A certain necessary and sufficient condition for a Riemannian space V_n to be symmetric in the sense of Cartan. (Russian) Collection of articles dedicated to Stanisław Gołab on his 70th birthday, II. *Demonstratio Math.* **6** (1973), 847-850 (1974). (A. Urban) **50** #3152 53C35
- Ślósman, S. B.** Submanifolds of codimension one and a simple homotopy type. (Russian) *Mat. Zametki* **12** (1972), 167-175. (D. Burghleia) **50** #1250 57C10 (57D80)
Smooth structures on Poincaré complexes. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **37** (1973), 917-930. (P. S. Landweber) **48** #5102 57D65 (57B10)
Limit theorems of probability theory for compact Lie groups. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 2, 306-308. (K. R. Parthasarathy) **52** #1816 60B15
Absence of continuous symmetry breakdown in two-dimensional models of statistical physics. (Russian. English summary) *Teoret. Mat. Fiz.* **33** (1977), no. 1, 86-94. (Author's summary) **56** #14418 82J31
- Sloss, James M.** (with Kranzler, Stan K.) Localization of the eigenvalues of linear integral equations with applications to linear ordinary differential equations. *J. Math. Anal. Appl.* **37** (1972), 659-676. (H. E. Fettes) **46** #2370 45C05
(with Carleton, Oleg) Reflection geometry for a first order elliptic system in two independent variables. *Indiana Univ. Math. J.* **23** (1973/74), 699-717. (R. C. MacCamy) **51** #6136 35J55
(with Bruch, John C., Jr.) A free boundary value problem. *J. Math. Anal. Appl.* **47** (1974), 424-440. (R. P. Srivastava) **50** #13550 30A88
Global reflection for a class of simple closed curves. *Pacific J. Math.* **52** (1974), 247-260. (E. Pinney) **52** #712 30A14
The plane Dirichlet problem for certain multiply connected regions. *J. Analyse Math.* **28** (1975), 86-100. (See Zbl **325** #31004) 30A88
A new integral equation for certain plane Dirichlet problems. *SIAM J. Math. Anal.* **6** (1975), no. 6, 998-1006. (David R. Adams) **55** #10706 31A25
(with Bruch, John C., Jr.) Harmonic approximation with Dirichlet data on doubly connected regions. *SIAM J. Numer. Anal.* **14** (1977), no. 6, 994-1005. (R. B. Kelman) **57** #18164 65E05 (65N99)
- van der Slot, J.** A note on perfect irreducible mappings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 377-382. (G. L. Cain, Jr.) **46** #6272 54C10
A survey of realcompactness. *Theory of sets and topology (in honour of Felix Hausdorff, 1868-1942)*, pp. 473-494. *VEB Deutsch. Verlag Wissenschaft.*, Berlin, 1972. (W. W. Comfort) **49** #6162 54D60
Compact sets in non-metrizable product spaces. *General Topology and Appl.* **2** (1972), 61-65. (O. T. Alas) **46** #843 54B10
- Sloth, Flemming** Chr. Huygens' rectification of the cycloid. *Centaurus* **13** (1968/69), no. 3-4, 278-284. (See Zbl **192** #321) 01A45
- Slotterbeck, Oberta** (with Ligh, Steve; McQuarrie, Bruce) On near fields. *J. London Math. Soc.* (2) **5** (1972), 87-90. (R. Gorton) **45** #5174 16A76
- Sloušek, A. V.** (with Vil'čevskii, N. O.; Pervozvanskii, A. A.) Use of plan-production functions (PPF) in planning under uncertainty. I. Static optimal planning problem. *Automat. i Telemekh.* **1976**, no. 6, 73-77 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 6, part 2, 875-879. (I. M. Stancu-Minasian) **55** #9923 90B30 (90A05)
(with Vil'čevskii, N. O.; Pervozvanskii, A. A.) Use of plan-production functions in planning under uncertainty. II. Optimal scheduling. *Automat. i Telemekh.* **1976**, no. 8, 139-148 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 8, part 2, 1259-1268. (I. M. Stancu-Minasian) **55** #9924 90B30
- Slover, Rebecca** (with Fletcher, Peter; McCoy, Robert A.) A note on boundedly countably paracompact spaces. *Mathematika* **18** (1971), 168-171. (J. E. Vaughan) **45** #9302 54D20 (54F45)
A note on the radical of row-finite matrices. *Glasgow Math. J.* **13** (1972), 80-81. (R. L. Tangeman) **46** #1834 16A42
The radicals of a semigroup. *Trans. Amer. Math. Soc.* **204** (1975), 179-195. (Heinrich Seidel) **51** #5817 20M10
Semigroups of row-monoidal matrices. *J. Algebra* **50** (1978), no. 1, 69-76. (John M. Howie) **57** #6263 20M20
- Slovohotov, L. I.** Determination of reaction cross sections from counter-telescope data. *Trudy Fiz. Inst. Lebedev.* **45** (1969), 25-67 (Russian); translated in *Programming and Computer Techn. in Experiment. Phys.*, pp. 22-62. *Consultants Bureau, New York*, 1970. (Y. M. Chen) **45** #2886 68A10
- Ślowikowski, Wojciech** Epimorphisms of the adjoints to generalized (L, F) -spaces. Introduction. (Loose Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **16** (1968), 107-112. **53** #11391 47A05 (46A05)
Epimorphisms of the adjoints to generalized (L, F) -spaces. Sufficient conditions. (Loose Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **16** (1968), 113-116. **53** #11392 47A05 (46A05)
Range of operators and regularity of solutions. *Studia Math.* **40** (1971), 183-198. (I. Namioka) **47** #9308 47A05 (46A07)
A Hilbert space of L_2 type over a real Hilbert space. *Papers from the "Open House for Functional Analysis" (Aarhus Univ., Aarhus, 1972), Paper No. 12*, 5 pp. *Various Publications Ser.*, No. 23, *Mat. Inst., Aarhus Univ., Aarhus*, 1972. (Editors) **56** #9264 46G99 (46F99)
On a certain theorem of Hörmander. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 467-470. (P. Saphar) **47** #7423 46F10 (47G05)
Pre-supports of linear probability measures and linear Lusin measurable functionals. *Dissertationes Math. (Rozprawy Mat.)* **93** (1972), 39 pp. (Albert Tortrat) **54** #502 28A40

- On Hörmander's theorem about surjections of \mathcal{D}' . *Math. Scand.* **30** (1972), 267-280. (Vo-Khac Khoan) **48** #12046 46F10 (46A05)
- Lebesgue integration in Hilbert space. *Proceedings of the Seminar on Random Series, Convex Sets and Geometry of Banach Spaces (Mat. Inst., Aarhus Univ., Aarhus, 1974; dedicated to the memory of E. Asplund)*, pp. 199-222. *Various Publ. Ser.*, No. 24, *Mat. Inst., Aarhus Univ., Aarhus*, 1975. (Erik G. F. Thomas) **53** #3248 28A40 (81.60)
- Les espaces de fonctions classiques sur un espace de Hilbert séparable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 11, A381-A384. (J. Horváth) **52** #14999a 46G05 (46F05)
- Les espaces de fonctions classiques sur un espace de Hilbert séparable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 12, A439-A441. (J. Horváth) **52** #14999b 46G05 (46F05)
- Słowiński, Roman** (with Węglarz, Jan; Błażewicz, Jacek; Cellary, Wojciech) Original and revised simplex method for finding time-optimal control of a complex of operations. *Found. Control Engrg.* **1** (1975), no. 1, 59-71. (Dobre Ion) **53** #10263 90B35 (90C50)
- (with Węglarz, Jan; Błażewicz, Jacek; Cellary, Wojciech) A comparison of two specialized versions of the revised simplex method for finding the time-optimal control of a complex of operations. *Found. Control Engrg.* **1** (1976), no. 2, 103-122. (Kailash C. Kapur) **53** #10324 90C50 (90B05)
- (with Węglarz, Jan) Computational aspects of a certain class of time-optimal resource allocation problems in a complex of operations. *Found. Control Engrg.* **1** (1976), no. 2, 123-133. (Kailash C. Kapur) **53** #10325 90C50 (90B05)
- (with Błażewicz, Jacek; Cellary, Wojciech; Węglarz, Jan) Deterministic problems of scheduling tasks on parallel processors. I. Sets of independent tasks. (Polish. English and Russian summaries) *Podstawy Sterowania* **6** (1976), no. 2, 155-177. (Authors' summary) **57** #18794a 90B35
- (with Błażewicz, Jacek; Cellary, Wojciech; Węglarz, Jan) Deterministic problems of scheduling tasks on parallel processors. II. Sets of dependent tasks. (Polish. English and Russian summaries) *Podstawy Sterowania* **6** (1976), no. 3, 297-319. (Authors' summary) **57** #18794b 90B35
- (with Węglarz, Jan) An algorithm for finding time-optimal task allocation in a complex of operations. (Russian summary) *Systems Sci.* **2** (1976), no. 1-2, 165-174. (W. Greblicki) **54** #6936 90B35
- Optimal and heuristic procedures for project scheduling with multiple constrained resources—a survey. *Found. Control Engrg.* **2** (1977), no. 1, 33-49. (Richard N. Burns) **56** #10912 90B35
- A node ordering heuristic for network scheduling under multiple resource constraints. *Found. Control Engrg.* **3** (1978), no. 1, 19-27. (Rainer Burkard) **58** #9202 90B35
- (with Węglarz, Jan) Solving the general project scheduling problem with multiple constrained resources by mathematical programming. *Found. Control Engrg.* **3** (1978), no. 1, 29-39. (Der-San Chen) **58** #20391 90B35
- Sluckajka, T. L.** An algorithm for the calculation of the information weights of tests. (Russian) *Diskret. Analiz* No. 12 (1968), 75-90. (RZMat 1969 #2 V306) **45** #8550 05B20 (94A15)
- The effectiveness of ballot algorithms for a certain class of binary tables. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 2, 80-86. (E. Seiden) **51** #4756 68A45 (68A10)
- The choice of an optimal algorithm in a class of pattern recognition algorithms. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 5, 1285-1295, 1335. (Author's summary) **58** #8572 68A45
- Slud, Eric V.** Distribution inequalities for the binomial law. *Ann. Probability* **5** (1977), no. 3, 404-412. (S. M. Samuels) **55** #11333 60C05 (62E15)
- Relative extinction times for independent branching processes. *J. Appl. Probability* **14** (1977), no. 2, 382-386. (A. V. Nagaev) **55** #13593 60J80
- Entropy and maximal spacings for random partitions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **41** (1977/78), no. 4, 341-352. (R. L. Adler) **58** #7803 60F15
- A note on exchangeable sequences of events. *Rocky Mountain J. Math.* **8** (1978), no. 3, 439-442. (David J. Aldous) **57** #17790 60F15
- Sluga, Hans D.** Frege as a rationalist. *Studien zu Frege, Band I*, pp. 27-47. *Problemata*, No. 42, *Frommann-Holzboog, Stuttgart*, 1976. (Editors) **58** #27264 02A05 (01A55, 02-03)
- Slugin, S. N.** Certain partially ordered sets, spaces over semiordeed lineals and approximation methods. (Russian) *Kazan. Gos. Univ. Učen. Zap.* **129** (1969), no. 3, 135-138. (B. Jankó) **46** #2392 46A40 (65J05)
- (with Sekieru, I. V.) A projection method in a KH -space with unity. (Russian) *Bul. Akad. Stintse RSS Moldoven.* **1972**, no. 1, 89-91. (B. Jankó) **46** #2476 47B55 (65J05)
- (with Kalašnikov, A. L.) Pointwise semi-ordered Sobolev spaces and the positiveness of the optimal solution. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 281-283. (Rosalind Reichard) **47** #3942 46A40 (49A25)
- (with Kalašnikov, A. L.) Positivity of optimal control with minimal norm in a domain that is prescribed by a linear operator equation in a partially ordered space. (Russian) *Theory of oscillations, applied mathematics and cybernetics*, No. 1 (Russian), pp. 177-186. *Gor'kov. Gos. Univ., Gorky*, 1973. (Authors' summary) **58** #23870 49A25 (46A99)
- (with Kalašnikov, A. L.) The growth of support functionals, and the positivity of the optimal solution. (Russian) *Bul. Akad. Stintse RSS Moldoven.* **1973**, no. 1, 13-17, 90. (Alexander M. Rubinov) **48** #6968 46N05
- (with Šaškov, V. M.) Sufficient conditions for the existence of a minimum of a functional generated by a countable system of unbounded operators. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 37-39. (L. Janos) **48** #7074 49B30 (46N05)
- (with Šaškov, V. M.) Solvability of an extremal problem in a case of infinite systems of weak* closed operations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 8(135), 79-83. (B. T. Poljak) **48** #9491 49A25
- (with Kalašnikov, A. L.) K -minimality of an optimal element and of a minimizing sequence. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 12(139), 73-77. (Rosalind Reichard) **51** #11076 46E05
- (with Šaškov, V. M.) Minimizability of a functional on the topological product spaces. (Russian) Collection of articles dedicated to Aleksandr Petrovič Nožikov on the occasion of his seventieth birthday. *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 5(144), 188-193. (Nicolae Luca) **52** #6527 49A25
- (with Gavrikov, A. I.) A method of two-sided approximations for a search optimum with constraints of equality type. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 8 (171), 100-103. (A. B. Németh (Zbl 349 #49033)) **57** #49C99 (46G99)
- (with Gavrikov, A. I.) A monotone method of barriers for a controlled dynamical system. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 1(176), 1-10. (Editors) **58** #23871 49A25
- (with Šaškov, V. M.; Mironov, A. V.) A topological sufficiency test for the existence of the optimal control of a dynamical system. (Russian) *Izv. Vysš. Učebn. Matematika* **1977**, no. 10(185), 134-137. (Authors' introduction) **58** #49B30
- Sluhaev, V. V.** Geometrical theory of the stationary motion of a liquid. *Dokl. Akad. Nauk SSSR* **196** (1971), 549-552. (Russian); translated as *Soviet Physics Dokl.* **16** (1971), 12-14. (H. W. Guggenheimer) **46** #4852 76.35
- (with Ščerbakov, R. N.) Frame fields and fiberbundles. (Russian) Geometry collection, No. 9. *Trudy Tomsk. Gos. Univ.* **212** (1972), 5-9. (A. Švec) **50** #53C15
- Differential systems on a fibered manifold. (Russian) Geometry collection, *Trudy Tomsk. Gos. Univ.* **212** (1972), 10-20. (A. Švec) **50** #1279 58A30
- (with Ščerbakov, R. N.) Remarks concerning V. S. Malahovskii's article "Differential geometry of rigged varieties of figures" (*Trudy Kaliningrad. Gos. Univ.* **1971**, no. 2, 5-19). (Russian) Geometry collection, No. 9. *Trudy Tomsk. Gos. Univ.* **212** (1972), 224-235. (K. Radziszewski) **52** #6614 53C30
- The geometry of a two-parameter manifold of plane elements in three-dimensional Euclidean space. (Russian) Geometry collection, No. 10. *Trudy Tomsk. Gos. Univ.* **212** (1972), 159-172 (1973). (Josef Vala) **50** #5645 53A05
- (with Finkel'shtein, V. M.) Submanifolds of a variable direction field. (Russian) Geometry collection, No. 10. *Trudy Tomsk. Gos. Univ.* **230** (1972), 173-185 (1973). (Stanilov) **51** #1650 53B40
- (with Ščerbakov, R. N.) Differential topology aspects of the Cartan method. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 44-47. (J. Vanžura) **48** #55F10 (53C05)
- The possibility of a nonstationary barotropic motion of an ideal fluid with field of pencils of velocity directions. (Russian) Geometry collection, No. 12. *Trudy Tomsk. Gos. Univ.* **244** (1975), 61-64. (Gr. Stanilov) **53** #6447 53A25 (76.53)
- Geometric conditions for the compatibility of the stationary barotropic motion of an ideal fluid and an ideal gas. (Russian) Geometry collection, No. 12. *Trudy Tomsk. Gos. Univ.* **244** (1975), 65-81. (L. Dragos) **53** #9873 76.53
- See also *Geometry collection*, **52** #4143
- Sluijter, F. W.** (with Verheggen, Th. M. M.; Broer, L. J. F.) Nonmonochromatic solutions of the spatially inhomogeneous wave equation based on the WKB approximation. *Math. Anal. Appl.* **62** (1978), no. 3, 512-524. (Wolf von Wahl) **58** #1538 (35L05)
- van der Sluis, A.** The remainder term in quadrature formulae. *Numer. Math.* **19** (1973), 49-55. (F. Stenger) **46** #4687 65D30
- Stability of the solutions of linear least squares problems. *Numer. Math.* **19** (1974/75), 241-254. (S. F. McCormick) **51** #9459 65F20
- Perturbations of eigenvalues of non-normal matrices. Collection of articles honoring Alston S. Householder. *Comm. ACM* **18** (1975), 30-36. (Jan Zitko) **51** #9457b 65F15
- Corrigendum: "Perturbations of eigenvalues of non-normal matrices" (*Comm. ACM* **18** (1975), 30-36). *Comm. ACM* **18** (1975), 180. (Jan Zitko) **51** #9457b 65F15
- (with Mattheij, R. M. M.) Error estimates for Miller's algorithm. *Numer. Math.* **19** (1976), no. 1, 61-78. (Walter Gautschi) **55** #11652 65Q05 (65F10)
- Estimating the solutions of slowly varying recursions. *SIAM J. Math. Anal.* **1976**, no. 5, 662-695. (Colette Lebaud) **54** #9119 65Q05
- Slukhaev, V. V.** See *Sluhaev, V. V.*
- Stupecki, Jerzy** (with Borkowski, Ludwik) ★Элементы математической логики и теории множеств. (Russian) [Elements of mathematical logic and set theory] Translated from Polish by O. F. Serebrjannikov. Edited by I. N. Kovalenko. *Izdat. "Priluchye", Moscow*, 1965. 368 pp. (Not reviewed) 02-01 (04-01)
- (with Bryll, Grzegorz; Wybraniec-Skardowska, Urszula) A certain theory equivalent to Tarski's theory of deductive systems. (Polish. English summary) *Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **10** *Logika Mat.* (1970), 61-67. (Authors' summary) **53** #12926 02G99
- A generalization of modal logic. (Polish and Russian summaries) *Studia Logica* **1971**, 7-17. (R. A. Bull) **45** #8505 02C10
- (with Bryll, Grzegorz; Wybraniec-Skardowska, Urszula) Theory of rejected propositions. I. (Polish and Russian summaries) *Studia Logica* **29** (1971), 75-83. (Corcoran) **46** #5116 02D99 (02C99, 02E99)
- Proof of axiomatizability of full many-valued systems of calculus of propositions. *Studia Logica* **29** (1971), 155-168. (A. Nakamura (Zbl 247 #02021)) **51** #120C05 (02G15)
- (with Bryll, Grzegorz) The proof of \mathcal{L} -decidability of Lewis' system $S5$. *Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **1** (1972), no. 1, 32-34. (Authors' summary) **50** #12658 02C10 (02G05)
- \mathcal{L} -decidability and decidability. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **1** (1972), no. 3, 38-43. (Douglas Walton) **51** #116 02G05
- (with Bryll, Grzegorz; Wybraniec-Skardowska, Urszula) The theory of rejected propositions. II. (Polish and Russian summaries) *Studia Logica* **30** (1972), 153-157. (A. Salomaa) **47** #8245 02C05
- The Warsaw school of logic. (Polish) *Wiadom. Mat.* (2) **15**, 65-72 (1972). (Authors' introduction) **58** #4912 01A60 (01A65, 02-03)

- Jan Łukasiewicz. (Polish) *Wiadom. Mat.* (2) **15**, 73-78 (1972). (Editors) **58** #4952 01A70 (02-03)
- Proof of the completeness of a fragmentary system of the propositional calculus. (Polish. English summary) *Zeszyty Nauk. Uniw. Jagiello. Prace z Logiki* No. 7 (1972), 23-29. (H. B. Curry) **47** #6429 02B05
- (with Piróg-Rzepecka, Krystyna) An extension of the algebra of sets. (Polish and Russian summaries) *Studia Logica* **31** (1973), 7-37. (M. Boffa) **47** #8301 02K15 (02B05)
- (with Bryll, Grzegorz) Proof of \mathcal{L} -decidability of Lewis system S_5 . (Polish and Russian summaries) *Studia Logica* **32** (1973), 99-107. (I. Ruzsa) **50** #1845 02C10 (02G10)
- (with Bryll, Grzegorz) A certain proof of the completeness of Lewis's system S_5 . (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **13** *Logika Mat.* (1973), 57-74. (Jerzy Kotas) **54** #7206 02C10
- (with Bryll, Grzegorz) Syntactic proof of the \mathcal{L} -decidability of classical logic and Łukasiewicz's three-valued logic. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **13** *Logika Mat.* (1973), 131-152. (Authors' summary) **54** #4954 02G05 (02B05, 02C05)
- Some remarks on the many-valued logics of Jan Łukasiewicz. (Russian) *Philosophy and logic* (Russian), pp. 177-187. *Nauka, Moscow*, 1974. (Editors) **58** #27311 02C05 (02A05)
- (with Bryll, Grzegorz) Contributions to the general theory of deductive systems. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **15** *Logika Mat.* (1975), 53-62. (Authors' summary) **54** #4962 02G10
- (with Halkowska, Katarzyna; Piróg-Rzepecka, Krystyna) ★ *Logika matematyczna*. (Polish) [Mathematical logic] Państwowe Wydawnictwo Naukowe, Warsaw, 1976. 289 pp. (S. J. Surma) **57** #15933 02-01
- arczyk, Bronisław ★ *Geometria rzutowa i wykreślna w zakresie krzywych i powierzchni stopnia drugiego*. (Polish) [Projective and descriptive geometry within the limits of second degree curves and surfaces] Państwowe Wydawnictwo Naukowe, Warsaw, 1976. 296 pp. (V. Medek) **55** #3936 50-01
- sky, Steven Abstentions and majority equilibrium. *J. Econom. Theory* **11** (1975), no. 2, 292-304. (Maurice Salles) **54** #4602 90A15
- A voting model for the allocation of public goods: existence of an equilibrium. *J. Econom. Theory* **14** (1977), no. 2, 299-325. (Wolfram F. Richter) **58** #25895 90A15 (92A20)
- (with Kats, Amoz) On partially continuous correspondences. *J. Econom. Theory* **15** (1977), no. 2, 376-380. (From the text) **58** #32844 90A05 (92A20)
- z, Donald (with Shedler, Gerald S.) Derivation of miss ratios for merged access streams. *IBM J. Res. Develop.* **20** (1976), no. 5, 505-517. (Zbl **336** #68028) **57** #8234 68A99
- (with Coffman, Edward G., Jr.; Leung, Joseph Y.-T.) On the optimality of first-fit and level algorithms for parallel machine assignment and sequencing. *Proceedings of the 1977 International Conference on Parallel Processing* (Wayne State Univ., Detroit, Mich., 1977), pp. 95-99. *Inst. Elect. Electron. Engrs., New York*, 1977. (Authors' summary) **58** #32031 68A10 (90B35)
- zki, G. (with Pnueli, Amir) Simple programs and their decision problems. *Automata, languages and programming*. (Fourth Colloq., Univ. Turku, Turku, 1977), pp. 380-390. *Lecture Notes in Comput. Sci., Vol. '52*, Springer, Berlin, 1977. (Steven S. Muchnick) **57** #8161 68A25
- evskii, È. F. (with Airapetov, V. E.) A generalization of Abel's second theorem. (Russian) *Taškent. Gos. Univ. Naučn. Trudy* No. 418 *Voprosy Mat.* (1972), 15-20, 375-376. (S. Baron) **50** #2543 32A05
- Boundary correspondence under quasiconformal mappings. (Russian) *Taškent. Gos. Univ. Naučn. Trudy* No. 460 *Voprosy Mat.* (1974), 124-127, 178. (I. A. Volynec) **52** #14286 30A60
- (with Gol'dštejn, M. Š.) Some questions on the theory of closed Riemann surfaces. (Russian) *Dokl. Akad. Nauk SSSR* **220** (1975), 772-774. (J. Čizmar) **53** #8069 14H15
- k, V. A. (with Mitjuk, I. P.) A certain form of symmetrization. (Russian) *Metric questions of the theory of functions and mappings*, No. 3 (Proc. Second Colloq. Theory of Quasiconformal Mappings and its Generalizations, dedicated to M. A. Lavrent'ev's seventieth birthday, Donetsk, 1970) (Russian), pp. 80-93. *Izdat. "Naukova Dumka", Kiev*, 1971. (R. Kühnau) **49** #9177 30A30
- (with Mitjuk, I. P.) An application of the S_0^q -symmetrization to the study of the extremal properties of functions that are regular in an annulus. (Russian) *Kuban. Gos. Univ. Naučn. Trudy* No. 148 *Mat. Anal.* (1971), 41-54. (Z. Lewandowski) **49** #554 30A32
- Certain properties of functions that are weakly p -valent in an annulus. (Russian) *Kuban. Gos. Univ. Naučn. Trudy* No. 148 *Mat. Anal.* (1971), 75-80. (Z. Lewandowski) **49** #555 30A32
- Certain estimates for functions that are regular and univalent in an annulus. (Russian) *Kuban. Gos. Univ. Naučn. Trudy* No. 148 *Mat. Anal.* (1971), 81-84. (Z. Lewandowski) **48** #11483 30A40
- The Gronwall problem in the class of bounded functions that are weakly univalent in the mean with respect to a circle. (Russian) *Metric questions of the theory of functions and mappings*, No. IV (Russian), pp. 165-171. *Izdat. "Naukova Dumka", Kiev*, 1973. (K. Szilárd) **49** #10870 30A32
- Certain covering theorems for weakly univalent, meromorphic functions in an annulus. (Russian) *Metric questions of the theory of functions and mappings*, No. V (Russian), pp. 171-178. *Izdat. "Naukova Dumka", Kiev*, 1974. (J. G. Krzyż) **53** #5844 30A32
- (with Metel'skii, N. N.) Conditions for the solvability of the integer linear programming problem. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 5, 16-19, 137. (G. Serksnys) **57** #18818 90C10
- On the faces of master Gomory polyhedra. (Russian. English summary) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1978**, no. 2, 5-11, 138. (Author's summary) **58** #9242 90C10 (90C30)
- k, V. V. Finite groups that are saturated by supersolvable subgroups. (Russian) *Dokl. Akad. Nauk (BSSR)* **15** (1971), 968-969. (L. Dornhoff) **45** #371 20D99
- (with Monahov, V. S.) Finite groups with normalizer conditions for the subgroups. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1971**, no. 6, 13-17. (D. L. Barnett) **47** #1942 20D25
- The finite groups that are saturated with supersolvable subgroups. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1972**, no. 4, 5-10, 138. (L. Dornhoff) **46** #7371 20D10
- The influence of the formation properties of the maximal subgroups on the structure of a finite solvable group. (Russian) *Dokl. Akad. Nauk BSSR* **17** (1973), 109-112, 189. (N. Ito) **49** #5162 20D10
- The intersection of maximal subgroups in finite groups. (Russian) *Mat. Zametki* **14** (1973), 429-439. (Sergei A. Syskin) **48** #4119 20D25
- (with Aniščenko, A. G.) Finite groups with several p -decomposable subgroups. (Russian) *Dokl. Akad. Nauk BSSR* **18** (1974), 108-109, 186. (J. Wiegold) **49** #404 20D10
- (with Aniščenko, A. G.) Finite groups with noninvariant p -decomposable zpd-subgroups. (Russian) *Finite groups (Proc. Gomel Sem., 1973/1974)* (Russian), pp. 14-23, 227. *Izdat. "Nauka i Tehnika", Minsk*, 1975. (J. L. Brenner) **53** #600 20D10
- (with Aniščenko, A. G.) Finite groups with supersolvable zpd-subgroups. (Russian) *Finite groups (Proc. Gomel Sem., Gomel, 1975-1977)* (Russian), pp. 7-17, 172. *Izdat. "Nauka i Tehnika", Minsk*, 1978. (Ja. G. Berkovič) **58** #22275 20D10
- van Slyke, R. M. See Van Slyke, R. M.
- van Slyke, Richard M. (with Ball, Michael) Backtracking algorithms for network reliability analysis. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 49-64. *Ann. of Discrete Math., Vol. 1, North-Holland, Amsterdam*, 1977. (Der-San Chen) **57** #2578 90C35 (90B15)
- Slysz, Roman (with Hać, Aleksander) A certain nonlinear boundary value problem in the plane for a system of two partial differential equations of elliptic type. (Polish. Russian and English summaries) *Biul. Wojsk. Akad. Tech.* **20** (1971), no. 12(232), 45-56. (T. Styś) **48** #2557 35J25
- (with Hać, Aleksander) A compound problem of Hilbert-Riemann type for an infinite system of analytic functions. *Demonstratio Math.* **11** (1978), no. 1, 105-118. (D. Mitrović) **58** #11437 30A88
- Šmadici, K. The existence of solutions in graphs. (Russian. English summary) *Vestnik Leningrad. Univ.* **1976**, no. 7 *Mat. Meh. Astronom. vyp.* 2, 88-92, 164. (J. R. Isbell) **54** #12242 90D99
- Smadici, C. (with Smadici, L.) On the isomorphism of digraphs. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **18** (1972), 297-298. (Editors) **48** #1966 05C20
- (with Smadici, L.) On a problem of Frank Harary. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **18** (1972), 299-304. (R. Cori) **51** #3001 05C99
- Smadici, L. (with Smadici, C.) On the isomorphism of digraphs. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **18** (1972), 297-298. (Editors) **48** #1966 05C20
- (with Smadici, C.) On a problem of Frank Harary. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **18** (1972), 299-304. (R. Cori) **51** #3001 05C99
- Smadja, René ★ *Bases d'idéaux et algorithme permettant de déterminer le groupe des classes d'une extension finie de \mathbb{Q}* . *Département de Mathématiques, Université d'Aix-Marseille II, U. E. R. de Marseille-Luminy, Luminy*, 1972. 50 pp. (Not reviewed) **12A65**
- Sur le groupe des classes des corps de nombres. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1639-A1641. (G. Whaples) **49** #10661 12A40 (12A50)
- Utilisation des ordinateurs dans les calculs sur les idéaux des corps de nombres algébriques. *Journées Arithmétiques de Caen (Univ. Caen, Caen, 1976)*, pp. 277-282. *Astérisque* No. 41-42, Soc. Math. France, Paris, 1977. (J.-C. Herz) **56** #2960 12A50
- Smaga, Edward An attempt to formulate a theorem on the nonexistence of a measure of a symmetry that is single-valued at zero. (Polish. Russian and English summaries) *Przegląd Statyst.* **21** (1974), 627-630. (I. I. Kotlarski) **52** #12160 62E10
- Some equivalent definitions of a symmetric distribution. (Polish. Russian and English summaries) *Przegląd Statyst.* **22** (1975), no. 1, 131-134. (Dominik Szytal) **52** #15767 62E10
- A continuous empirical distribution function. (Polish. Russian and English summaries) *Przegląd Statyst.* **24** (1977), no. 1, 103-112. (M. Hušková) **56** #4044 62G10
- A smooth empirical distribution function. (Polish. Russian and English summaries) *Przegląd Statyst.* **25** (1978), no. 1, 121-131. (M. Hušková) **58** #18890 62G99 (62G30)
- Šmagin, Ju. A. The representation of meromorphic and piecewise holomorphic functions with a countable set of singularities. (Russian) *Collection of papers by graduate students. Exact sciences: mathematics, mechanics* (Russian), pp. 3-10. *Izdat. Kazan. Univ., Kazan*, 1976. (Editors) **58** #28505 30A70
- Smagin, S. A. Fractional powers of a hypoelliptic operator in R^n . (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 1033-1035. (L. Cattabriga) **48** #4844 47G05 (35S05)
- The meromorphicity of P^z , where P is a matrix. (Russian) *Funcional. Anal. i Priložen.* **9** (1975), no. 1, 85-86. (J.-M. Kantor) **52** #8492 32C40 (46F10)
- Complex powers of hypoelliptic systems in R^n . (Russian) *Mat. Sb. (N.S.)* **99(141)** (1976), no. 3, 331-341, 479. (S. Łojasiewicz) **54** #5610 35H05 (32C25)
- Smagin, V. A. The mean frequency of failures of an apparatus in the case of unreliable exchange elements. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 3, 118-120 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 3, 85-88. (Santosh Kumar) **55** #7353 90B25
- Smagin, V. I. (with Paraev, Ju. I.) Synthesis of linear regulators of simplified structure under conditions of total information. (Russian) *Mat. Sb. (Tomsk) Vyp.* **1** (1975), 143-154. (Authors' summary) **56** #17989 (EA 57) 93C05
- (with Paraev, Ju. I.) Synthesis of linear stationary filters of simplified structure. (Russian) *Mat. Sb. (Tomsk) Vyp.* **1** (1975), 155-159. (From the authors' text) **56** #18055 (EA 57) 93E10
- (with Paraev, Ju. I.) Questions on the optimal control of linear objects with random coefficients. (Russian) *Problems of analytical mechanics, stability and control theories*

- (Proc. Second Četaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 266-272, 412. Kazan. Aviacion. Inst., Kazan, 1976. (Authors' summary) **58** #9719 93E20
- Smagin, V. N.** A mathematical model of the renewal of a machine yard. (Russian) *Mathematical methods of solution of economic problems (Suppl. to Ekonom. i Mat. Metody, Collection No. 1)* (Russian), pp. 127-134. Izdat. "Nauka", Moscow, 1969. **45** #6401 90B25
- Smagin, V. V.** (with Sobolevskii, P. O.) Theorems on the comparison of semigroups. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 1 Sb. Statei po Teorii Operatornykh Uravnenii* (1970), 145-148. **54** #13631 47D05
- Certain methods for the approximate solution of densely solvable equations. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 19* (1975), 133-141. (Janusz Mika) **57** #7995 65J05 (47A50)
- Smagina, E. M.** Design of multidimensional control systems with a specified spectrum and incomplete information on the state of the plant. *Avtomat. i Telemekh.* **1976**, no. 5, 95-99 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 5, part 1, 724-728. (Takashi Yahagi) **55** #10088 93B10
- Smagina, T. I.** Estimations of the periodic solutions of strongly damped systems. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 19* (1975), 141-145. (H. I. Freedman) **57** #3521 34C25
- Regularity classes for second order vectorial equations. (Russian) *Differentsial'nye Uravneniya* **12** (1976), no. 7, 1320-1322, 1344. (G. B. Gustafson) **55** #8478 34C25
- Smagulov, Š.** (with Kuznecov, B. G.) Difference schemes with a small parameter that approximate the Navier-Stokes equations. (Russian) *Proceedings of the Fifth All-Union Seminar on Numerical Methods in the Mechanics of a Viscous Fluid (Kaciveli, 1974), Part I* (Russian), pp. 109-122. *Vychisl. Centr. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1975. (From the text) **58** #31937 65N99
- A nonlinear equation with a small parameter that approximates the Navier-Stokes equation. (Russian) *Proceedings of the Fifth All-Union Seminar on Numerical Methods in the Mechanics of a Viscous Fluid (Kaciveli, 1974), Part I* (Russian), pp. 123-134. *Vychisl. Centr. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1975. (B. Rusanov) *RŽMat* **1976** #7 B384) **58** #29437 35Q10 (65P05)
- (with Kuznecov, B. G.) Approximation of the Navier-Stokes equations. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **6** (1975), no. 2, 70-79. (*RŽMat* **1976** #3 B1033) **58** #29435 35Q10
- (with Kažihov, A. V.) The correctness of boundary value problems in a certain diffusion model of an inhomogeneous fluid. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **7**, no. 4 *Mat. Modelirovanie* (1976), 75-92. (Authors' introduction) **56** #17460 76.46
- (with Kažihov, A. V.) The correctness of boundary value problems in a certain diffusion model of an inhomogeneous fluid. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 2, 330-332. (R. Finn) **56** #4391 76.35
- (with Utegenov, K.) Asymptotic behavior of the solution of the problem of the flow of an inhomogeneous fluid. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1977**, no. 5, 49-55, 92-93. (Authors' summary) **58** #17458 35B40 (76.35)
- Smahanov, K.** On the question of choosing the optimal acceptance plan with respect to a quantitative characteristic under a known initial distribution. (Russian) *Studies in mathematical statistics, and related questions. Taskent. Gos. Univ. Naučn. Trudy No. 402* (1972), 111-115. **50** #1455 62N10
- (with Siradžinov, S. H.) Optimal control plans with known initial distribution. (Russian) *Random processes and statistical inference, No. 4* (Russian), pp. 152-162, 212-213. Izdat. "Fan" Uzbek. SSR, Tashkent, 1974. (K. Sarkadi) **52** #15925 62N10
- Smailov, E. S.** On the first boundary value problem for a certain equation with a hypoelliptic operator. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1972**, no. 3, 55-59. (L. Cattabriga) **47** #624 35H05
- Imbedding theorems for function spaces with an orthogonal basis. (Russian) *Imbedding theorems and their applications (Proc. All-Union Sympos., Alma-Ata, 1973)* (Russian), pp. 145-148, 193. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1976. (Author's summary) **57** #13359 42A52
- Šmaia, I. H.** Imbeddings of classical systems in intuitionistic and minimal ones. (Russian) *Studies in systems of logic (dedicated to the memory of S. A. Janouskaja)* (Russian), pp. 51-67. Izdat. "Nauka", Moscow, 1970. (E. Mendelson) **49** #22 02C15
- Embedding of an extended predicate calculus K_0 with a scheme of reducibility axioms in arithmetic. (Russian) *Investigations in mathematical linguistics, mathematical logic and information languages* (Russian), pp. 217-226, "Nauka", Moscow, 1972. (See *RŽMat* **1972** #7 A68) 02B10 (02D99)
- Extended calculus of recursive functions. I. (Russian) *Studies in formalized languages and nonclassical logics* (Russian), pp. 50-81. Izdat. "Nauka", Moscow, 1974. (G. Asser) **57** #16028 02F43
- See also Feys, R., **50** #9527
- Smajdor, Andrzej** (with Ger, Joanna) Regular iteration in the case of multiplier zero. *Aequationes Math.* **7** (1971), 127-131. (J. Täuber) **46** #2288 39A15
- On monotonic solutions of some functional equations. *Dissertationes Math. Rozprawy Mat.* **82** (1971), 58 pp. (M. Kuczma (Zbl **224** #39004)) **58** #29530 39A15
- Elements of the theory of functional equations. (Polish) *Functional equations in the theory of stochastic processes* (Polish), pp. 77-92. *Silesian Univ. Katowice, No. 47. Wydawn. Univ. Śląsk., Katowice*, 1972. (Henryk Adamczyk) **53** #1081 39A20
- On some special iteration groups. *Fund. Math.* **83** (1973), no. 1, 67-74. (J. W. Neuberger) **49** #11081 39A15 (26A48)
- Note on a functional equation. *Ann. Polon. Math.* **30** (1974), 57-61. (R. A. Rosenbaum) **50** #812 39A15
- Note on the existence of convex iteration groups. *Fund. Math.* **87** (1975), no. 3, 213-218. (J. Aczél) **51** #8664 39A15 (26A51)
- (with Ger, Roman) p -convex iteration groups. *Fund. Math.* **91** (1976), no. 1, 29-38. (B. Crstici) **53** #6136 39A20 (26A18)
- Smajdor, Wilhelmina** (with Kuczma, Marek) Analytic solutions of some functional equations. *J. London Math. Soc.* (2) **4** (1971/72), 418-424. (Fred Gross) **45** #3992 39A15
- Solutions of the Schröder equation. *Ann. Polon. Math.* **27** (1972/73), 61-65. (errata insert) (Pl. Kannappan) **48** #4559 39A15
- On continuous solutions of the Schröder equation. *Ann. Polon. Math.* **32** (1976), no. 2, 111-118. (K. Lajkó) **54** #3207 39A40
- Smak, Jozef** See *Proceedings: Symposium on Copernicus and Astronomy*, **58** #26844
- Pendse, C. G., **58** #26758 and Ghosh, Samir Kumar, **58** #26844
- Šmakal, S.** Eine Bemerkung zu einem Satz über räumliche Fünfecke. *Elem. Math.* (1972), 62-63. (Editors) **48** #12235c 50B10
- Šmakal, Stanislav** Vertices of space curves. *Czechoslovak Math. J.* **23**(98) (1973), 7 (M. Kurita) **47** #4153 53A05
- Curves of constant breadth. *Czechoslovak Math. J.* **23**(98) (1973), 86-94 (M. Kurita) **47** #4154 53A05
- Regular polygons. *Czechoslovak Math. J.* **28**(103) (1978), no. 3, 373-393 (Bottema) **58** #30713 50B30 (52A25)
- Šmakov, A. P.** The symmetry method and its application in the plane problem in elasticity theory. (Russian) *Elasticity and inelasticity, No. 3* (Russian), pp. 5-16. Izdat. M. Univ., Moscow, 1973. (I. S. Aržanyh (RŽMeh **1973** #9 V37)) **51** #14697 73.30
- Šmalakov, Ju. G.** (with Freidman, P. A.) Nilrings of prime characteristic with modular lattice of subrings. (Russian) *Sverdlovsk. Gos. Ped. Inst. Naučn. Trudy No. 219 Alg. Mat. Anal.* (1974), 91-117. (W. G. Leavitt) **51** #12914 16A22
- (with Freidman, P. A.) Rings of prime characteristic with a modular lattice of subrings. (Russian) *Latviš. Mat. Ežegodnik Vyp.* **18** (1976), 198-218, 223. (J. Mal'cev) **57** #373 16A48 (16A46)
- Smale, S.** Topology and mechanics. I. *Invent. Math.* **10** (1970), 305-331. (H. C. Morfitt) **46** #8263 58F05
- Topology and mechanics. II. The planar n -body problem. *Invent. Math.* **11** (1971), 45-64. (H. Omori) **47** #9671 58E10 (58F99, 70.58)
- (with Shub, Michael) Beyond hyperbolicity. *Ann. of Math.* (2) **96** (1972), 587-600. (K. R. Meyer) **47** #563 34C40 (58F15)
- On the mathematical foundations of electrical circuit theory. *J. Differential Geometry* **7** (1972), 193-210. (Clark Robinson) **48** #1265 58F05 (94A20)
- Topology and mechanics. (Russian) Translated from the English (*Invent. Math.* (1970), no. 4, 305-331; *ibid.* **11** (1970), no. 1, 45-64) by S. B. Katok. *Uspehi Mat. Nauk* (1972), no. 2(164), 77-133. (Editors) **52** #6785 58F05 (58E05)
- Global analysis and economics. I. Pareto optimum and a generalization of it. (Russian) Translated from the English (*Dynamical systems* (Proc. Sympos. Univ. Bahia, Salvador, 1971), pp. 531-544, Academic Press, New York, 1973) by Brūšlinskaja. *Uspehi Mat. Nauk* **27** (1972), no. 3(165), 177-187. (Editors) **52** #6785 58F99 (90A15)
- Stability and isotopy in discrete dynamical systems. *Dynamical systems Sympos., Univ. Bahia, Salvador, 1971*, pp. 527-530. Academic Press, New York, 1973. (Robert Wells) **49** #3984 (EA 50) 57D50 (58F10)
- Global analysis and economics. I. Pareto optimum and a generalization of it. (Russian) *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 531-544. Academic Press, New York, 1973. (Carl Simon) **49** #6283 58F99 (90A15)
- (with Hirsch, Morris W.) ★ Differential equations, dynamical systems, and algebra. Pure and Applied Mathematics, Vol. 60. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1974. xi + 358 pp. (C. Simon) **58** #6484 34Cxx (15-XX, 58Fxx, 70.34)
- A mathematical model of two cells via Turing's equation. *Some mathematical questions in biology, V (Proc. Seventh Sympos., Mathematical Biology, Mexico City, 1973)*, pp. 15-26. *Lectures on Math. in the Life Sciences*, Vol. 6, Amer. Math. Soc., Providence, R.I., 1974. (Nishan Krikorian) **58** #4427 92A05 (58F10)
- Global analysis and economics. IIA. Extension of a theorem of Debreu. *J. Econom. Theory* (1974), no. 1, 1-14. (Carl P. Simon) **54** #14756 90A15 (58F99)
- Global analysis and economics. III. Pareto optima and price equilibria. *J. Econom. Theory* (1974), no. 2, 107-117. (Carl P. Simon) **54** #14757 90A15 (58F99)
- Global analysis and economics. IV. Finiteness and stability of equilibria in general consumption sets and production. *J. Math. Econom.* **1** (1974), no. 2, 115-130. (Carl P. Simon) **54** #14758 90A15 (58F99)
- Global analysis and economics. V. Pareto theory with constraints. *J. Math. Econom.* **1** (1974), no. 3, 213-221. (Carl P. Simon) **54** #14759 90A15 (58F99)
- Sufficient conditions for an optimum. *Dynamical systems—Warwick 1973 Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973*, presented to E. C. Zeeman on his fiftieth birthday, pp. 287-292. *Lecture Notes in Math.* **468**, Springer, Berlin, 1975. (M. Adachi (Zbl **314** #58007)) **58** #31204 (90A15)
- Optimizing several functions. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973)*, pp. 69-75. Univ. Tokyo Press, Tokyo, 1975. (Yieh Hei Wan) **53** #1090A99 (58E15)
- Global analysis and economics. Pareto optimum and a generalization of it. (Russian) *Mathematical methods of the social sciences. Synthese* **31** (1975), no. 2, 341-350. (Editors) **57** #10732 58E15 (90A15)
- (with Williams, Robert F.) The qualitative analysis of a difference equation. *J. Math. Biol.* **3** (1976), no. 1, 1-4. (George K. Francis) **54** #92A15 92A15
- On the differential equations of species in competition. *J. Math. Biol.* **3** (1976), no. 1, 5-7. (M. W. Green) **53** #10366 92A15 (58F05)
- Global analysis and economics. VI. Geometric analysis of Pareto optima and equilibria under classical hypotheses. *J. Math. Econom.* **3** (1976), no. 1, 1-14. (C. P. Simon) **54** #14760 90A15 (58F99)
- A convergent process of price adjustment and global Newton methods. *J. Econom. Theory* (1976), no. 2, 107-120. (Yieh Hei Wan) **53** #15310 90A15
- Exchange processes with price adjustment. *J. Math. Econom.* **3** (1976), no. 1, 211-226. (Yves Balasko) **56** #10844 90A15
- Convergent process of price adjustment and global Newton methods. *Frontiers in quantitative economics, Vol. IIIA (Invited papers, Econometric Soc., Third World Congress, Toronto; Ont., 1975)*, pp. 191-205. *Contributions to Economic Analysis*, Vol. 105, North-Holland Publishing Co., Amsterdam, 1977. (Wolfgang Mayer) **56** #17490A15 90A15
- Dynamical systems and turbulence. *Turbulence Seminar (Univ. Calif., Berkeley, Calif., 1976/1977)*, pp. 48-70. *Lecture Notes in Math.*, Vol. 615, Springer, Berlin, 1977. (L. A. Bunimovič) **57** #17723 58F15 (35Q10)

- Marston Morse (1892-1977). *Math. Intelligencer* **1** (1978/79), no. 1, 33-34.
(Editors) **58** #10224 (EA 58) 01A70
See also Statistical mechanics: new concepts, new problems, new applications.
49 #8558 (EA 50) and Marsden, Jerrold Eldon; et al., **58** #13209
- Ygauxen, V. I. (with Kandidov, V. P.; Landa, P. S.; Leontović, M. A.; Fursov, V. S.; Harlamov, A. A.; Jakovlev, I. A.) Sergei Pavlovich Strelkov (obituary). *Uspehi Fiz. Nauk* **114** (1974), no. 1-2, 169-171 (Russian); translated as *Soviet Physics Uspekhi* **17** (1975), no. 5, 812-814. (Editors) **51** #7790 01A70
- Il, Charles Correction to: "The group of quadratic extensions". *J. Pure Appl. Algebra* **2** (1972), 395. (J. S. Hsia) **47** #279 16A56
The group of quadratic extensions. *J. Pure Appl. Algebra* **2** (1972), no. 2, 83-105. (J. S. Hsia) **46** #5297 (E 47 #279) 13A20 (16A16)
On certain quotients of Grothendieck groups. *Canad. Math. Bull.* **16** (1973), 397-400. (E. Graham Evans, Jr.) **49** #5007 13K05
Integer polynomials with prescribed integer values. *Math. Mag.* **46** (1973), 92-94. (K. S. Williams) **47** #4990 13B25 (12F10)
Normal bases for quadratic extensions. *Pacific J. Math.* **50** (1974), 601-611. (Joel Cunningham) **52** #366 13B05
(with Orzech, Morris) ★The Brauer group of commutative rings. *Lecture Notes in Pure and Applied Mathematics*, Vol. 11. Marcel Dekker, Inc., New York, 1975. ix + 183 pp. (Manuel Ojanguren) **56** #15627 13A20
(with Geramita, Anthony V.) ★Introduction to homological methods in commutative rings. *Queen's Papers in Pure and Applied Mathematics*, No. 43. *Queen's University, Kingston, Ont.*, 1976. ii + 352 pp. (J. Ohm) **54** #5206 13-02
Sums of three squares and level of quadratic fields. *Conference on Quadratic Forms* —1976 (Proc. Conf., Queen's Univ., Kingston, Ont., 1976), pp. 625-631. *Queen's Papers in Pure and Appl. Math.*, No. 46. *Queen's Univ., Kingston, Ont.*, 1977. (Bart Rice) **58** #10736 10C05
Waring's problem mod n . *Amer. Math. Monthly* **84** (1977), no. 1, 12-25. (J. B. Roberts) **54** #12693 10J05
Solution of Waring's problem mod n . *Amer. Math. Monthly* **84** (1977), no. 5, 356-359. (W. A. Webb) **55** #12671 10J05 (12C15)
Waring's problem. *Math. Mag.* **50** (1977), no. 1, 12-16. (O. H. Körner) **55** #5561 10J05
Powers mod n . *Math. Mag.* **50** (1977), no. 2, 84-86. (Robert Meyer) **55** #10363 10A10
Sums of powers in large finite fields. *Proc. Amer. Math. Soc.* **65** (1977), no. 1, 35-36. (F. Dress) **58** #5605 12C15
- Il, Donald B. A matrix sequence associated with a continued fraction expansion of a number. *Fibonacci Quart.* **15** (1977), no. 2, 123-130. (K. E. Hirst) **55** #10370 10A30
Il, J. C. (with Booker, J. R.; Davis, E. H.) Elasto-plastic consolidation of soil. *Internat. J. Solids and Structures* **12** (1976), no. 6, 431-448. (Radu Bădescu) **54** #11943 73.65
Il, Lance W. Ideals in finitely-generated PI-algebras. *Ring theory* (Proc. Conf., Park City, Utah, 1971), pp. 347-351. *Academic Press*, New York, 1972. (M. Chacron) **49** #10732 16A38
(with Gordon, Robert) Piecewise domains. *J. Algebra* **23** (1972), 553-564. (E. A. Rutter) **46** #9087 16A08 (16A48)
Prime ideals in Noetherian PI-rings. *Bull. Amer. Math. Soc.* **79** (1973), 421-422. (H. Tominaga) **47** #1862 16A38 (16A46)
(with Herstein, Israel Nathan) The intersection of the powers of the radical in Noetherian P.I. rings. *Israel J. Math.* **16** (1973), 176-180. (A. V. Jategaonkar) **49** #7304 16A38
(with Schacher, Murray M.) Noncrossed products in characteristic p . *J. Algebra* **24** (1973), 100-103. (A. Rosenberg) **46** #7300 16A40
(with Goldie, Alfred W.) A note on rings of endomorphisms. *J. Algebra* **24** (1973), 392-395. (Z. Papp) **46** #7295 16A34
(with Goldie, Alfred W.) A study in Krull dimension. *J. Algebra* **25** (1973), 152-157. (Robert Gordon) **48** #4027 16A46
(with Robson, J. Chris) Hereditary prime P.I. rings are classical hereditary orders. *J. London Math. Soc.* (2) **8** (1974), 499-503. (Chr. U. Jensen) **50** #2236 16A38
(with Jøndrup, Søren) Power series over coherent rings. *Math. Scand.* **35** (1974), 21-24. (J. T. Arnold) **50** #13018 13J05
(with Bergman, George M.) P.I. degrees and prime ideals. *J. Algebra* **33** (1975), 435-462. (Robert L. Snider) **50** #13129 16A38
(with Herstein, Israel Nathan) An extension of a theorem of Schur. *Collection of articles dedicated to Olga Taussky-Todd. Linear and Multilinear Algebra* **3** (1975/76), no. 1/2, 41-43. (J. C. Robson) **52** #10770 15A33
(with Robson, J. Chris) Idempotent ideals in P.I. rings. *J. London Math. Soc.* (2) **14** (1976), no. 1, 120-122. (Chr. U. Jensen) **54** #10327 16A38
(with Schelter, William) Some pathological rings of quotients. *J. London Math. Soc.* (2) **14** (1976), no. 2, 200-202. (G. Michler) **55** #2981 16A21
(with Amitsur, S. A.) Prime PI-rings. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 249-251. (Louis Rowen) **55** #8095 16A38
- Il, Robert D. A new approach to Zeeman's catastrophe machine. (French summary) *J. Mécanique* **14** (1975), no. 5, 887-897. (J. S. Joel) **58** #13140 58C25
Symmetry and higher order cuspid catastrophes. (French summary) *J. Méc. Appl.* **1** (1977), no. 3, 227-246. (M. J. Sewell) **56** #16672 58C25
- Il-Small, T. B. See Sheil-Small, T. B.
- allen, David L. Weak equivalence of fibrations. *Bol. Soc. Mat. Mexicana* (2) **18** (1973), 38-41. (G. V. Krishnarao) **48** #7272 55F15 (55D10)
(with Lieberman, Gerald) Localization and self-equivalences. *Duke Math. J.* **41** (1974), 183-186. (C. R. Curjel) **49** #1514 55D10
The group of self-equivalences of certain complexes. *Pacific J. Math.* **54** (1974), 269-276. (J. W. Rutter) **53** #9203 55D10
- alley, Larry L. Integral versus local conservation laws in metric theories of gravity. *Phys. Lett. A* **57** (1976), no. 4, 300-302. (Sotirios Persides) **54** #2113 83J3
(with Hehl, Friedrich W.; Kerlick, G. David; Lord, Eric A.) Hypermomentum and the microscopic violation of the Riemannian constraint in general relativity. *Phys. Lett. B* **70** (1977), no. 1, 70-72. (Authors' summary) **57** #11599 83J9
- Smallwood, Catherine V. Approximate upper and lower limits. *J. Math. Anal. Appl.* **37** (1972), 223-227. (J. C. Oxtoby) **45** #2103 26A12 (28A20)
Monotonic restrictions. *J. Math. Anal. Appl.* **41** (1973), 384-390. (P. H. Diananda) **49** #493 26A48
Partitions of sets of matrices. *Discrete Math.* **13** (1975), no. 3, 261-275. (R. Balakrishnan) **53** #12993 05B20
- Smallwood, Dennis E. See Goldfield, Stephen M.; et al., **49** #8262
- Smallwood, J. (with d'Inverno, R. A.) A note on a family of type $\{3, 1\}$ vacuum solutions with twist. *General Relativity and Gravitation* **9** (1978), no. 3, 215-225. (Kenneth Dunn) **58** #14930 83J3
- Smalo, Sverre O. Global dimension of special endomorphism rings over Artin algebras. *Illinois J. Math.* **22** (1978), no. 3, 414-427. (K. R. Fuller) **58** #16770 16A60 (16A46)
The structure of special endomorphism rings over Artin algebras. *Illinois J. Math.* **22** (1978), no. 3, 428-442. (K. R. Fuller) **58** #16771 16A48 (16A46)
- Smamutov, K. N. Two paradoxes of the dynamics of linear elasticity theory. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1975**, no. 3, 9-10. (J. Ignaczak) **51** #12082 73J35
- Šmancar, V. Classification of the elements of a certain class of simple Jordan algebra. (Russian) *Jaraoslav. Gos. Ped. Inst. Učen. Zap. No. 61 Geometrija* (1967), 209-217. (I. P. Šestakov) **51** #3249 17C20
- Smaranda, D. On the Riemann space with intransitive group of motions. *Tensor (N.S.)* **28** (1974), 273-274. (M. C. Chaki) **50** #11105 53C50
(with Andonie, O. C.) Sur une classe de variétés riemanniennes de type Einstein. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math. Phys.* **1** (1975), no. 1, 118-125. (Edwin Ithig) **53** #4874 83J3
(with Chimah, D.) Une méthode élémentaire pour déterminer les formules d'immersion de certains espace temps relativistes. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math. Phys.* **1** (1975), no. 1, 126-144. (Mineo Ikeda) **53** #4890 83J3 (53B30)
Sur une connexion semi-symétrique qui conserve le tenseur projectif de courbure ou le tenseur conforme de courbure. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math. Phys.* **1** (1975), no. 2, 242-248. (S. Takizawa) **54** #3609 53B20
(with Andonie, O. C.) On semi-symmetric connection. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys.* **2** (1976), no. 2, 265-270. (L. A. Santaló) **55** #11167 53B20
(with Ianuş, Stere) Some remarkable structures on the product of an almost contact metric manifold with the real line. *Papers from the National Colloquium on Geometry and Topology* (Univ. Timişoara, Timişoara, 1977), pp. 107-110. *Soc. Şti. Mat., Univ. Timişoara, Timişoara*, 1977. (David Blair) **58** #30904 53C15
(with Andonie, O. C.) Certaines connexions semi-symétriques. *Tensor (N.S.)* **31** (1977), no. 1, 8-12. (P. Stavre) **57** #13740 53B15
- Smaranda, Dumitru On the imbedding problem of the Peres space-times. *Bull. Math. Soc. Sci. Math. R. S. Roumaine (N.S.)* **17(65)** (1973), no. 1, 41-55 (1974). (R. I. Pimenov) **50** #14609 53C50
- Šmarda, Bohumil Algebraically and topologically compact ordered groups. (Russian summary) *Spisy Přírod. Fak. Univ. Brno* **1970**, no. 518, 471-479 (1971). (F. D. Pedersen) **45** #138 06A55
Connectivity in tl -groups. *Arch. Math. (Brno)* **12** (1976), no. 1, 1-7. (R. Madell) **56** #5387 06A55 (22A05)
The lattice of topologies of topological l -groups. *Czechoslovak Math. J.* **26(101)** (1976), no. 1, 128-136. (S. J. Bernau) **53** #5414 06A55 (54F05, 54A10)
Polars and X -ideals in semigroups. *Math. Slovaca* **26** (1976), no. 1, 31-37. (R. E. Peinado) **55** #538 20M10
Polars on closure spaces. *Arch. Math. (Brno)* **13** (1977), no. 2, 117-124. (F. Šik) **57** #187 06A15
- Šmargunova, E. I. See Logic, **55** #7717
- Smarr, Larry (with York, James W., Jr.) Kinematical conditions in the construction of spacetime. *Phys. Rev. D* (3) **17** (1978), no. 10, 2529-2551. (Khawaja Tahir Shah) **58** #20240 83J3 (58D05)
- Smart, D. R. Fixed point theorems for many-valued mappings. *Math. Colloq. Univ. Cape Town* **8** (1973), 167-170. (Bal Kishan Dass) **54** #11122 47H10
★Fixed point theorems. *Cambridge Tracts in Mathematics*, No. 66. *Cambridge University Press, London-New York*, 1974. viii + 93 pp. (L. Janos) **57** #7570 54H25 (47H15)
- Smart, John Roderick On meromorphic functions commuting with elements of a function group. *Proc. Amer. Math. Soc.* **33** (1972), 343-348. (J. Lehner) **45** #2165 30A58
On the values of the Epstein zeta function. *Glasgow Math. J.* **14** (1973), 1-12. (H. L. Montgomery) **47** #4933 10D05 (10H10)
See also Schoeneberg, Bruno, **54** #236
- Smart, Susan M. (with Gipps, P. G.) An examination of the power of Scheffé's solution to the Fisher-Behrens problem. *Austral. J. Statist.* **14** (1972), 161-166. (S. John) **50** #6029 62F05
- Smazewski, R. A method for solving the Volterra integral equation of the first kind. (Polish summary) *Zastos. Mat.* **15** (1976), no. 1, 117-123. (John M. Bownds) **54** #9122 65R05
Characterization of optimal polynomial and rational starting approximations. (Polish summary) *Zastos. Mat.* **15** (1976/77), no. 4, 511-515. (G. D. Taylor) **56** #12706 41A10
- Šmat, V. A. See Cybernetics and computer technology, **48** #1735
- Šmata, T. S. (with Ibragimov, I. I.; Nagnibida, M. I.) A certain basis for the space of analytic functions in an annulus. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 284-287. (Z. Canturija) **48** #9367 46E10 (30A98)
Operators that commute with integration type operators in the space of functions analytic in an annulus. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain RSR Ser. A* **1973**, 709-712, 765. (G. M. Fel'dman) **49** #3517 46E10
(with Nagnibida, M. I.) Certain operators and bases in the space of functions analytic in an annulus. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1973**, 996-1001, 1054. (G. M. Fel'dman) **49** #3518 46E10

- (with Nagnibida, M. I.) Certain isomorphisms of the space of functions analytic in an annulus. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1976, no. 1, 18-21, 93. (S. V. Hruščev) 53 #6296 46E10 (30A98)
- Šmatkov, A. A. The preservation of analytic planes under arbitrary mappings of the space C_r^n . (Russian) *Moskov. Inst. Elektron. Mašinstroenija—Trudy MIEM Vyp. 30 Mat. Anal. i Priložen.* (1974), 93-125. (V. Mičić) 54 #10644 32A10
- Šmatkov, B. A. (with Alešin, A. V.) Asymptotic behavior of the optimal trajectories of the generalized von Neumann-Gale model. (Russian) *Ekonom. i Mat. Metody* 11 (1975), no. 5, 886-891. (RŽMat 1976 #2 V816) 57 #8992 90A15
- Šmatkov, V. A. Simultaneous approximation and interpolation under preservation of the norm. (Russian) *Proceedings of the Central Regional Association of Mathematics Departments, No. 2: Functional analysis and the theory of functions* (Russian), pp. 182-194. Kalinin. Gos. Ped. Inst., Kalinin, 1971. (A. B. Németh) 51 #13560 41A65
- Simultaneous approximation and interpolation problems. (Russian) *Proceedings of the Fourth Winter School on Mathematical Programming and Related Questions* (Drogobych, 1971), No. 2 (Russian), pp. 216-222. *Moskov. Inž.-Stroitel. Inst., Moscow*, 1971. (C. de Boer) 56 #9160 41A65 (46B99)
- Simultaneous approximation and interpolation in Banach spaces. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 53 (1971), 65-70. (G. Albinus) 45 #5644 41A65
- One-sided approximation with interpolation in the space of continuous functions. (Russian) *A collection of articles on the constructive theory of functions and the extremal problems of functional analysis* (Russian), pp. 158-173. Kalinin. Gos. Univ., Kalinin, 1972. (A. B. Németh) 51 #13537 41A30
- Simultaneous interpolations and one-sided approximation in the mean of continuous functions. (Russian) *Mat. Zametki* 12 (1972), 701-712. (Hans-Jürgen Albrand) 47 #7276 41A05
- The uniqueness of the best interpolation polynomial when there are supplementary constraints. (Russian) *Application of functional analysis in approximation theory*, No. 1 (Russian), pp. 164-171. Kalinin. Gos. Univ., Kalinin, 1973. (V. A. Popov) 49 #5657 41A50
- One-sided approximation with interpolation in a space of continuous functions of several variables. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 8 (1973), no. 5, 410-417, 426. (C. de Boer) 49 #9506 41A63
- (with Garkavi, A. L.) The Lamé point and its generalizations in a normed space. (Russian) *Mat. Sb. (N.S.)* 95(137) (1974), 272-293, 328. (W. W. Breckner) 50 #14414 49A25
- The uniqueness of generalized Lamé points in normed spaces. (Russian) *Rev. Anal. Numér. Théor. Approx.* 4 (1975), no. 1, 73-77. (From the text) 58 #30074 46B05
- Šmatok, V. I. (with Bojarčuk, O. K.) The stability of uniform difference schemes for an ordinary differential equation of arbitrary order with discontinuous coefficients. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 13* (1971), 3-12. (E. L. Albasing) 47 #1295 65L10
- Co-stability of homogeneous difference schemes for a differential equation of order $2p$ with discontinuous coefficients. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 20* (1973), 133-140, 167. (M. Stojanović) 48 #10134 65L10
- Smeach, Stephen C. (with Rust, Albert) A stochastic approach to predator-prey models. *Bull. Math. Biol.* 40 (1978), no. 4, 483-498. (Brian D. Sleeman) 58 #15317 92A15
- Smeenk, Derk Jan ★ Rational motions of special spatial four-bars. With a Dutch summary. Doctoral dissertation, Technical University, Delft. *Technische Hogeschool, Delft*, 1973. 77 pp. (loose addendum) (From the author's introduction) 55 #7014 70.00
- Smeers, Yves (with Gochet, Willy F.) On the use of linear programs to solve prototype geometric programs. *Cahiers Centre Études Recherche Opér.* 16 (1974), 23-36. (Elmor L. Peterson) 56 #2350 90C05
- Utilisation des plus courts chemins dans certains problèmes de transfèrement à coût concave. Colloque sur la Programmation Mathématique (Brussels, 1974). *Cahiers Centre Études Recherche Opér.* 16 (1974), 487-494. (From the author's introduction) 55 #12063 90C05
- A monotonic Passy-like algorithm for the modular design problem. *Math. Programming* 7 (1974), 46-59. (Torrence D. Parsons) 50 #6500 90C30
- A convergence proof of a special version of the generalized reduced gradient method (GRGS). (French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Verte* 8 (1974), no. V-3, 105-114. (Vincentiu Dumitru) 56 #10009 65K05
- (with Gochet, Willy F.) Constraint sets of geometric programs characterized by auxiliary problems. *SIAM J. Appl. Math.* 29 (1975), no. 4, 708-718. (Elmor L. Peterson) 54 #4668 90C30
- (with Gochet, Willy F.; Kortanek, K. O.) On a classification scheme for geometric programming and complementarity theorems. *Applicable Anal.* 6 (1976/77), no. 1, 47-59. (A. C. Williams) 55 #7398 90C25
- Generalized reduced gradient method as an extension of feasible direction methods. *J. Optimization Theory Appl.* 22 (1977), no. 2, 209-226. (K. G. Murty) 56 #10984 90C30
- (with Daeninck, Gery) Using shortest paths in some transshipment problems with concave costs. *Math. Programming* 12 (1977), no. 1, 18-25. (M. M. Syslo) 56 #17763 90B10 (90C35)
- An algorithm for some special nondifferentiable optimization problems. *Operations Res.* 25 (1977), no. 5, 808-817. (Jacques A. Ferland) 56 #4850 90C30
- Smell, S. See Smale, S.
- Smekalova, N. P. Surfaces V_2 in E_4 with zero scalar curvature. (Russian) *Questions of differential and non-Euclidean geometry* (Russian), pp. 89-98. *Moskov. Gos. Ped. Inst., Moscow*, 1972 (1973). (Gr. Stanilov) 58 #12743 53A05
- Šmelev, A. A. The method of A. O. Gelfond in the theory of transcendental numbers. (Russian) *Mat. Zametki* 10 (1971), 415-426. (B. Volkmann) 45 #6766 10F35
- On the question of the algebraic independence of algebraic powers of algebraic numbers. (Russian) *Mat. Zametki* 11 (1972), 635-644. (B. Volkmann) 45 #8611 10F35
- Simultaneous approximations of the values of an exponential function at nonalgebraic points. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 27 (1972), no. 4, 25-33. (B. Volkmann) 47 #1756 10F35
- The arithmetic properties of the roots of certain transcendental equations. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 27 (1972), no. 6, 5-14. (Mahler) 48 #6018 10F35
- The arithmetic properties of the values of the exponential function at nonalgebraic points. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 10(137), 90-99. (Kotov) 49 #2577 10F35
- A criterion for the algebraic dependence of transcendental numbers. (Russian) *Mat. Zametki* 16 (1974), 553-562. (Grigorii V. Čudnovskii) 51 #12729 10F35
- On the question of the algebraic independence of exponents. (Russian) *Zametki* 17 (1975), 407-418. (S. V. Kotov) 53 #10727 10F35
- Simultaneous approximations of exponentials by polynomials of a given transcendental number. (Russian) *Ukrain. Mat. Ž.* 27 (1975), no. 4, 555-563, 576. (Volkmann) 52 #295 10F30
- The algebraic independence of the values of the exponential and an elliptic function. (Russian) *Mat. Zametki* 20 (1976), no. 2, 195-202. (Author's summary) 58 #278 10F35
- Simultaneous approximations of exponentials by transcendental numbers of certain classes. (Russian) *Mat. Zametki* 20 (1976), no. 3, 305-314. (Author's summary) 58 #21962 10F35 (10F10)
- Šmelev, A. B. (with Kravcov, Ju. A.; Fuks, I. M.) Successive application of Kirchhoff's method to the problem of the scattering of a sound wave by a surface with random irregularities. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* (1971), 854-864. (A. Nikodémusz) 46 #7717 35L05 (76.35)
- Equations for Gaussian approximation in the problem of filtering a jump multivariate Markov process with continuous states. (Russian) *Numerical methods in signal processing* (Russian), pp. 116-119. *Trudy Radiotekhn. Inst. Akad. Nauk SSSR* 23, *Radiotekhn. Inst. Akad. Nauk SSSR, Moscow*, 1975. (Author's summary) 58 #96 93E10
- Optimum filtering of a nondiffusive Markov process with continuous states. *Radiotekhn. i Elektron.* 20 (1975), no. 9, 1856-1863 (Russian); translated as *Radio Engng. Electron. Phys.* 20 (1975), no. 9, 57-62. (N. H. Bingham) 56 #9673 60G35
- Šmelev, E. A. (with Erzanov, R. Ž.; Ševkopljias, B. V.) A certain class of extremal problems. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1974, no. 5, 79-84. (B. T. Poljak) 50 #15340 65K05
- Šmelev, L. A. See Optimization, Operations research, Bionics, 48 #1846
- Šmelev, V. V. Penalty functions in linear integer programming. *Avtomat. i Telemekh.* no. 9, 203-206 (Russian. English summary); translated as *Automat. Remote Control* (1975), no. 9, part 2, 1566-1570 (1976). (Massimiliano Ottaviani) 53 #10292 90C10
- (with Bol'shakov, V. A.; Uzdémir, A. P.) Problems of planning discrete (custom-made) production and numerical methods of solving them. III. Problem minimizing mean-square relative overload of capacity. *Avtomat. i Telemekh.* 1976, no. 1, 146-156 (Russian. English summary); translated as *Automat. Remote Control* 37 (1976), no. 1, part 2, 86-95. (E. G. Gol'shtein) 54 #12192c 90B30 (90C50)
- Šmeleva, I. V. The motion of a heavy rigid body with one fixed point in the Lagrange problem. (Russian) *Differentsial'nye Uravnenija (Rjazan') Vyp. 9* (1977), 163-171. (G. P. Ostapenko) 57 #8254 70.34
- Smeljanskii, O. M. (with Gluško, V. P.) Smoothness of solutions of a degenerate differential equation with a bounded operator in a Banach space. (Russian) *Vopr. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 42-58. (See RŽMat 1972 #2 B735) 35B01
- (with Gluško, V. P.) A coercive estimate of the solutions of a certain degenerate differential equation in a Hilbert space. (Russian) *Voronež. Gos. Univ. Trudy Mat. Vyp. 9 Sb. Rabot Uravn. Častn. Proizvodn. i Vychisl. Mat.* (1973), 155-161. (RŽMat 1973 #7 B347) 57 #10147 34G05
- (with Gluško, V. P.) Coercive solvability of a boundary value problem for a complete degenerate second order differential equation in a Hilbert space. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Drogobych, 1974), Theory of operators in linear spaces* (Russian), pp. 168-184. *Cen. Ékonom. Mat. Inst. Akad. Nauk SSSR, Moscow*, 1976. (Authors' summary) 58 #21962 34G05
- Šmel'kin, A. L. (with Andrunakievich, V. A.; Baranović, T. M.; Belousov, V. D.; Beresnev, S. D.; Gluskin, L. M.; Golovin, O. N.; Zavalo, S. T.; Kalužnin, L. A.; Plotkin, S. D.; Sadovskii, L. E.; Skornjakov, L. A.; Suprunenko, D. A.; Ševrin, L. N.) In memory of Aleksandr Gennadijevič Kuroš (January 19, 1908-May 18, 1971). (Russian) *Collection of articles commemorating Aleksandr Gennadijevič Kuroš. Trudy Moskov. Mat. Inst.* 29 (1973), 3-4. (Editors) 51 #7787 01A70
- Wreath products of Lie algebras, and their application in group theory. (Russian) *Collection of articles commemorating Aleksandr Gennadijevič Kuroš. Trudy Moskov. Mat. Obšč.* 29 (1973), 247-260. (H. de Vries) 52 #517 17B05 (20E25)
- (with Golovin, O. N.; Kostrikin, A. I.; Skornjakov, L. A.) Research Seminar in General Algebra. Sessions of the Fall semester of the 1974/75 academic year. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 4, 114-117. (Editors) 52 #21962 08-XX
- (with Golovin, O. N.; Kostrikin, A. I.; Skornjakov, L. A.) Research Seminar in General Algebra. Sessions of the Spring semester of the 1974-75 academic year. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 6, 117-121. (Editors) 53 #2795 08-XX
- (with Aleksandrov, P. S.; Kalužnin, L. A.; Kostrikin, A. I.) Oleg Nikolaevič Golovin (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* (1976), no. 4 (190), 283-287. (1 plate) (Editors) 54 #30 01A70
- See also Transactions of the Moscow Mathematical Society, 52 #10313
- Smelov, V. V. ★ Лекции по теории переноса нейтронов. (Russian) [Lectures on the theory of neutron transport] *Atomizdat, Moscow*, 1972. 173 pp. (From the publisher's description) 54 #4456 82.35
- A modification of the principle for the construction of a basis system of elementary numerical algorithms. (Russian) *Dokl. Akad. Nauk SSSR* 229 (1976), no. 6, 1324-1326. (Editors) 58 #24926 65J05
- Smeltzer, Michael D. Subadditive stochastic processes. *Bull. Amer. Math. Soc.* 83 (1977), no. 5, 1054-1056. (Yves Derriennic) 56 #16785 60G99
- Smereka, Ľ. P. (with Senik, P. M.) The construction of approximate periodic solutions of the equation $\dot{x} = Ax + B \sin x$. (Russian) *Trudy Vsesoyuzn. Nauch. Issled. Inst. Matem. Mekh.* 1977, no. 1, 1-10. (From the publisher's description) 58 #24926 65J05

- a system of nonlinear autonomous differential equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 12, 1081-1084. (E. S. Čičkin) **55** #9554 65L99 (34E05)
- (with Senik, P. M.; Sokil, B. I.) An asymptotic method and periodic Atab-functions in the theory of essentially nonlinear oscillations. (Russian) *Analytic and qualitative methods for the study of differential and differential-difference equations* (Russian), pp. 143-156. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (D. P. Gupta) **58** #22786 34C15
- rk, Jiří** The approximation of functions in the sense of Tchebychev. I. *Arch. Math. (Brno)* **11** (1975), no. 1, 31-51. (Ralph L. James) **54** #818 41A50
- The approximation of functions in the sense of Tchebychev. II. *Arch. Math. (Brno)* **12** (1976), no. 3 117-141. (Ralph L. James) **55** #8652 41A50
- rinjuk, I. V.** A certain nonlinear method of processing experimental data by the use of Gaussian statistics. (Russian) *Avtometrija* **1974**, no. 2, 3-10, 113. (errata insert) (K. Sarkadi) **51** #2125 62G05
- Smet, Antoine** See De Smet, Antoine
- et, E.** (with Borwein, David) Tauberian theorems for Borel-type methods of summability. *Canad. Math. Bull.* **17** (1974), 167-173. (D. Gaier) **50** #13964 (E **54** #13367) 40E05 (40G10)
- (with Borwein, David) Addendum to: "Tauberian theorems for Borel-type methods of summability" (Canad. Math. Bull. **17** (1974), 167-173). *Canad. Math. Bull.* **19** (1976), no. 2, 245-246. (D. Gaier) **54** #13367 40E05
- (with Borwein, David) Tauberian theorems for strong and absolute Borel-type methods of summability. *Canad. Math. Bull.* **20** (1977), no. 2, 161-172. (Amnon Jakimovski) **57** #6943 40F05 (40E05)
- Smet, Hugo J. P.** On convex closures in a field, compatible with the algebraic structure. *Bull. Soc. Math. Belg.* **26** (1974), no. 3, 261-273. (Benno Fuchssteiner) **57** #4010 52A99
- Determination of the extremal points of the convex semigroup S_0 in the field F . *Bull. Soc. Math. Belg.* **26** (1974), no. 4, 363-370. (Benno Fuchssteiner) **57** #4011 52A99
- On a notion of convexity introduced by B. Fuchssteiner. *Simon Stevin* **49** (1975/76), no. 4, 185-198. (Murat R. Sertel) **53** #11492 52A05
- etanić, Ja. S.** The reconstruction of words. (Russian) *Dokl. Akad. Nauk SSSR* **201** (1971), 798-800. (I. M. H. Etherington) **47** #44 05A05 (82.05)
- The reconstruction of words. (Russian) Mathematical logic, theory of algorithms and theory of sets (dedicated to P. S. Novikov on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **133** (1973), 183-202, 275. (I. M. H. Etherington) **48** #5873 05A05
- etterer, L.** See Schmetterer, L.
- eur, A. J. E. M.** Algebra in a rare sixteenth century Antwerp publication. (Dutch. English summary) *Sci. Hist.* **12** (1970), no. 2, 53-62. (Author's summary) **58** #21096 01A40
- Georg Cantor and the theory of sets. (Dutch) *Sci. Hist.* **15** (1973), 23-26. (Editors) **58** #21236 01A55
- (with Folkerts, Menso) A treatise on the squaring of the circle by Franco of Liège, of about 1050. I. *Arch. Internat. Histoire Sci.* **26** (1976), no. 98, 59-105. (A.-A. P. Youschkevitch (Juškevič)) **58** #26809a 01A35
- (with Folkerts, Menso) A treatise on the squaring of the circle by Franco of Liège, of about 1050. II. *Arch. Internat. Histoire Sci.* **26** (1976), no. 99, 225-253. (A.-A. P. Youschkevitch (Juškevič)) **58** #26809b 01A35
- See also Georgius de Hungaria, **45** #12
- eyers, P.** (with Denis, J.; Denoyelle, J.) Asymptotic expansions for acoustical modes of the homogeneous compressible model. *Astrophys. and Space Sci.* **37** (1975), no. 1, 221-233. (J. W. Miles) **54** #6887 86.41 (76.41)
- iałkówna, Henryka** (with Siewierski, Lucjan) On the coefficients of meromorphic quasi-convex functions. (Polish and Russian summaries) Proceedings of the Fifth Conference on Analytic Functions (Univ. Mariae Curie-Skłodowska, Lublin, 1970). *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **22-24** (1968/70), 167-170 (1972). (V. Linis) **51** #10607 30A34
- On some properties of Schroeder's univalent functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 9, 947-949. (Jochen Becker) **52** #14265 30A32
- ickih, S. V.** On the theory of focusing operators. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Ypp. 11 Sb. Statei Funkcional. Anal. i Priložen.* (1973), 102-111. (B. Sadovskii (RŽMat **1974** #8 B862)) **58** #2446 47B55 (47A10)
- On a theorem of Bahtin. (Russian) *Qualitative and approximate methods for the investigation of operator equations*, No. 1 (Russian), pp. 164-169. *Jaroslav. Gos. Univ., Yaroslavl*, 1976. (From the introduction) **58** #30477 47B55
- (with Pokornyi, Ju. V.) The converse of the oscillation property of focusing operators. (Russian) *Mat. Zametki* **20** (1976), no. 5, 753-760. (A. B. Buche) **57** #10493 47B55
- id, B.** (with Stam, Aart Johannes) Convergence in distribution of quotients of order statistics. *Stochastic Processes Appl.* **3** (1975), no. 3, 287-292. (Sidney I. Resnick) **53** #6686 60F05 (62G30)
- id, I.** See Schmied, J.
- id, V.** See Schmid, W.
- idov, F. I.** Differential properties of a measurable function of one real variable. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **34** (1970), 945-959. (D. W. Solomon) **45** #7010 28A15 (26A24)
- Structure of a measurable function of two real variables. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 847-861, 911. (A. Precupanu) **49** #482 26A54
- The D -property of a measurable function. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 272-274, 287. (Constance Elson) **49** #5285 28A15
- The superposition of two absolutely continuous functions. (Russian) *Dokl. Akad. Nauk BSSR* **20** (1976), no. 5, 392-393, 475. (D. Preiss) **54** #2896 26A27
- See also Proceedings: Republican Conference of Belorussian Mathematicians, **48** #3669
- idov, I. Ju.** (with Bovbel', E. I.; Izoh, V. V.) The difference between an analytic response of a coordinated filter and Woodward's indeterminacy function. (Russian)
- Vestnik Beloruss. Gos. Univ. Ser. I* **1974**, no. 1, 81-85, 90. (Authors' summary) **51** #2749 94A05
- Šmidt, A. A.** (with Veršik, A. M.) Symmetric groups of higher degree. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 269-272. (K. Jacobs) **47** #4300 60B15
- (with Timofeev, A. V.; Udovičenko, S. P.; Haričev, V. V.) Complete and continuous systems of invariants in a problem of pattern recognition. (Russian. English summary) *Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Ypp.* **4** (1972), 143-144, 149. (A. Morimoto) **50** #10151 22D40 (68A45)
- (with Veršik, A. M.) Limit measures that arise in the asymptotic theory of symmetric groups. I. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **22** (1977), no. 1, 72-88. (K. Jacobs) **56** #6782 60B15 (60C05, 20B25)
- (with Veršik, A. M.) Limit measures that arise in the asymptotic theory of symmetric groups. II. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **23** (1978), no. 1, 42-54. (K. Jacobs) **58** #3049 60J05 (10K20, 60B15)
- Šmidt, A. G.** (with Weitzman, Martin L.) The maximum principle for discrete economic processes on an infinite time interval. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 5, 83-89. (S. Krčevinač) **46** #3051 90A15
- Allowance for phase constraints in optimization problems on a finite and an infinite interval of time. (Russian) *Mathematical economics and functional analysis* (Russian), pp. 233-247. *Izdat. "Nauka", Moscow*, 1974. (Editors) **56** #11016 90C99 (90A99)
- Šmidt, O. Ju.** See Černikov, S. M., **45** #5232; Safronov, V. S., **45** #6562; Čumilina, S. A., **50** #4211 and Movčan, V. O., **58** #10132
- Šmidt, R. A.** (with Gorbov, A. N.) The Klein resolvent for an equation of degree five over a field of characteristic that divides 5! (Russian) Modules and representations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **46** (1974), 36-40, 140. (J. Browkin) **52** #3127 12E10
- Smidt, Robert K.** (with McDonald, Lyman L.; Lowe, Victor W.; Meister, Keren A.) A preliminary test for discriminant analysis based on small samples. (French summary) *Biometrics* **32** (1976), no. 2, 417-422. (C. W. Chen) **55** #1629 62H30
- Šmigel'skiĭ, Ja. A.** (with Sinic'kiĭ, L. A.) Electrical circuits that contain nonlinear transformers. (Russian. English summary) *Teoret. Elektrotehn. Ypp.* **19** (1975), 96-102. (Authors' summary) **57** #15769 94A20
- Šmigirev, Ė. F.** Certain questions of the theory of formations. (Russian) *Finite groups (Proc. Gomel Sem., 1973/1974)* (Russian), pp. 213-225, 232. *Izdat. "Nauka i Tehnika", Minsk*, 1975. (B. Hartley) **55** #3070 20D10
- Formation properties of subgroups of finite groups. (Russian) *Dokl. Akad. Nauk BSSR* **19** (1975), no. 9, 775-777, 857. (B. Hartley) **54** #2791 20D10
- F -normalizers in groups with a solvable F -coradical. (Russian) *Dokl. Akad. Nauk BSSR* **20** (1976), no. 1, 8-11, 91. (S. S. Levičenko) **53** #13389 20D10
- Smikun, L. B.** The problem of the equivalence of automata with respect to the direct product of groups. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 6, 145-146. (A. Ádám) **53** #12918 02G05 (94A30)
- (with Letičevs'kiĭ, O. A.) A certain class of groups with a decidable problem of automata equivalence. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 1, 36-38. (L. Bokut') **53** #10964 20M35 (68A25)
- A connection between context-free groups and groups with a solvable problem of automata equivalence. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 5, 33-37. (André Lentini) **57** #6242 20M05 (68A30)
- Properties of the class of α -groups. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 12-19. (Jan Chvalina) **58** #10655 06A55
- Smilansky, U.** (with Levit, S.) A new approach to Gaussian path integrals and the evaluation of the semiclassical propagator. *Ann. Physics* **103** (1977), no. 1, 198-207. (Khawaja Tahir Shah) **55** #11824 81.10
- (with Levit, S.) The Hamiltonian path integrals and the uniform semiclassical approximations for the propagator. *Ann. Physics* **108** (1977), no. 1, 165-197. (L. S. Schulman) **58** #14613 81.46
- (with Levit, S.) A theorem on infinite products of eigenvalues of Sturm-Liouville type operators. *Proc. Amer. Math. Soc.* **65** (1977), no. 2, 299-302. (Walter Eberhard) **56** #16040 34B25 (34E99)
- Smiley, A. K., III.** (with Fleisig, S.; Loveland, Donald W.; Yarmush, D. L.) An implementation of the model elimination proof procedure. *J. Assoc. Comput. Mach.* **21** (1974), 124-139. (I. Kramosil) **49** #8442 68A40
- Smiley, M. F.** (with Robinson, Norman F.) A generalization of the property L of Motzkin and Taussky. *Linear Algebra and Appl.* **4** (1971), 323-328. (M. Pearl) **45** #3436 15A27
- Duality in complex homogeneous programming. *J. Math. Anal. Appl.* **40** (1972), 153-158. (R. W. Cottle) **52** #5044 90C30
- Smiley, T. J.** (with Shoemith, D. J.) Deducibility and many-valuedness. *J. Symbolic Logic* **36** (1971), 610-622. (H. B. Curry) **46** #29 02C99
- See also Ramsey, Frank Plumpton, **57** #15930 and Scott, Dana S., **58** #10307
- Smiley, W. G., III** (with Lloyd, Justin T.) On the group of permutations with countable support. *Pacific J. Math.* **58** (1975), no. 2, 529-530. (Mark P. Hale, Jr.) **52** #14067 20F15
- (with Decell, Henry P., Jr.) Optimal linear combinations using Householder transformations. Special issue on remote sensing. *Comm. Statist.-Theory Methods* **A5** (1976), no. 12, 1153-1162. (C. W. Chen) **55** #6701 62H30
- Smilgājs, A.** (with Metra, I. A.) The definiteness and regularity of events that are represented by probabilistic automata. (Russian) *Avtomat. i Vyčisl. Tehn.* **1968**, no. 4, 1-7. (Authors' summary) **45** #6544 94A35
- Smiljanskii, V. R.** Reduction of certain systems of linear ordinary differential equations to a simpler form. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 813-818. (J. D. Kečkić) **45** #616 34A05
- The propagation of an electromagnetic wave across a magnetic field in a parabolic plasma layer. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1971**, no. 3, 28-34. (H. G. Bzhatlov) **45** #8137 78.34
- Smillie, John** Flat manifolds with non-zero Euler characteristics. *Comment. Math. Helv.* **52** (1977), no. 3, 453-455. (C. B. Thomas) **57** #1506 57D20
- Smirnickii, Ju. A.** (with Sobolev'skiĭ, P. O.) Imbedding theorems for fractional norms that are generated by an elliptic operator. (Russian) *Mat. Zametki* **15** (1974), 91-100. (H. Triebel) **49** #3534 46E35 (47D05)

- Smirnov, A. D.** Construction of field equations by a method of nonlinear group representations. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **26** (1971), no. 3, 346-348. (RZhFiz **1971** #12 B192) **50** #9208 81.22
- The nonlinear group representation method in the nonlinear spinor theory. *Izv. Vysš. Učebn. Zaved. Fizika* **1972**, no. 12, 49-55 (Russian); translated as *Soviet Physics J.* **15** (1972), 1730-1735 (1974). (Jules Beckers) **53** #9921 81.22
- Smirnov, A. L.** A study of the stability of linear systems with several random parametric actions. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* **227** (1975), 31-39. (J. A. König) **54** #1779 73.34
- Smirnov, A. N.** (with Červinskaja, L. A.) A certain problem of a graph. (Russian) *Primenen. Mat. Ekonom.* **No. 7** (1972), 77-80. (E. Ja. Gabovič) **46** #4921 90B10
- Smirnov, A. S.** Average resultant error when transmitting telemetered signals by means of nonredundant binary code. *Avtomat. i Telemekh.* **1971**, no. 5, 161-167 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 5, part 2, 827-833. (Toby Berger) **47** #10129 94A05
- Smirnov, D. M.** Cantor algebras with one generator. I. (Russian) *Algebra i Logika* **10** (1971), 61-75. (S. P. Bandyopadhyay) **45** #5067 08A25
- Cantor algebras with one generator. II. (Russian) *Algebra i Logika* **10** (1971), 658-667. (S. P. Bandyopadhyay) **46** #3627 20F05
- (with Mal'cev, A. I.; Doohovskoy, A. P.; Taiclin, M. A.) ★Algebraic systems. Posthumous edition, edited by D. Smirnov and M. Taiclin. Translated from the Russian by B. D. Seckler and A. P. Doohovskoy. *Akademie-Verlag, Berlin*, 1973. xii+317 pp. (Editors) **52** #13380 02J10 (02H15, 08A05)
- Bases and automorphisms of free Cantor algebras of finite rank. (Russian) *Algebra i Logika* **13** (1973), 35-62, 121. (W. Taylor) **53** #13073 08A10
- Regularly definable varieties of algebras. (Russian) *Algebra i Logika* **15** (1976), no. 3, 331-342, 366. (Jaroslav Ježek) **55** #12602 08A15
- See also **Biography**: Mal'cev, A. L., (Not reviewed); **Selected questions of algebra and logic**, **48** #16 and Mal'cev, A. L., **50** #1878
- Smirnov, E. I.** Bases in inductive limits of linear metric spaces. (Russian) *Vestnik Jaroslavl. Univ. Vyp.* **12** (1975), 125-130. (C. Bessaga) **56** #12822 46A35
- The theory of sheaves and a problem of A. Grothendieck. (Russian) *Qualitative and approximate methods for the investigation of operator equations*, No. 1 (Russian), pp. 160-163. *Jaroslavl. Gos. Univ., Jaroslavl*, 1976. (From the introduction) **58** #30017 46A30 (46M99)
- The continuity of a semiadditive functional. (Russian) *Mat. Zametki* **19** (1976), no. 4, 541-548. (S. Kutateladze) **53** #6284 46A99
- (with Zabreiko, P. P.) On the closed graph theorem. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 2, 304-313, 478. (W. Słowiowski) **58** #12270 46A30
- Smirnov, E. Ja.** Stabilization of the null solution of a system of linear differential equations. *Avtomat. i Telemekh.* **1968**, no. 3, 5-12 (Russian. English summary); translated as *Automat. Remote Control* **1968**, no. 3, 359-366. (A. S. C. Sinha) **52** #16765 93C15 (93D99)
- Stabilization of nonstationary linear controlled systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1970**, no. 5, 182-190 (Russian); translated as *Engng. Cybernetics* **8** (1970), no. 5, 996-1005. (W. Hahn) **46** #3171 93D99
- Control of the rotational motion of a solid body. (Russian) *Differencial'nye Uravnenija* **8** (1972), 2264-2266. (K. Magnus) **47** #4503 70.34
- Stabilization of dynamic systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 3, 174-176 (Russian); translated as *Engng. Cybernetics* **11** (1973), no. 3, 509-512. (J. E. Rubio) **52** #7657 93D15
- Problems of stabilization of nonstationary systems with incomplete feedback. *Avtomat. i Telemekh.* **1974**, no. 11, 23-32 (Russian. English summary); translated as *Automat. Remote Control* **35** (1974), no. 11, part 1, 1725-1733 (1975). (Author's summary) **56** #8133 93D15
- Control of the rotational motion of a rigid body under conditions of indeterminacy. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 5, 928-929, 951. (È. G. Al'breht) **54** #9224 70.49
- (with Voitenko, S. S.) On the problem of the analytic construction of optimal regulators for systems with periodic coefficients. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 6, 1131-1132, 1151. (J. Jarník) **51** #13823 49B10
- Smirnov, E. M.** A self-similar solution for fan-like jets with an arbitrary degree of torsion. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1977**, no. 5, 71-75, 182. (Author's summary) **57** #4814 76.35
- Smirnov, E. N.** See **Theory of languages and methods of construction of programming systems**, **48** #7682
- Smirnov, E. Ya.** See **Smirnov, E. Ja.**
- Smirnov, G. A.** The forms of logical inference. (Russian) *Studies in systems of logic (dedicated to the memory of S. A. Janovskaja)* (Russian), pp. 204-214. *Izdat. "Nauka", Moscow*, 1970. (A. Salomaa) **47** #8239 02B05
- The convergence of orthogonal expansions. (Russian) *Application of functional analysis in approximation theory*, No. 1 (Russian), 127-131. *Kalinin. Gos. Univ., Kalinin*, 1973. (A. Oleviskiĭ) **49** #987 42A60
- (with Baskakov, Viktor A.; Nikol'skiĭ, V. N.) Pavel Petrovič Korovkin (on the occasion of his sixtieth birthday). (Russian) *Application of functional analysis in approximation theory*, No. 1 (Russian), pp. 172-176. *Kalinin. Gos. Univ., Kalinin*, 1973. (Editors) **48** #8179 01A70
- A transformation of triangular methods for the summability of series. (Russian) *Application of functional analysis in approximation theory*, No. 5 (Russian), pp. 87-97. *Kalinin. Gos. Univ., Kalinin*, 1975. (Editors) **58** #29756 42A08
- See also **Zinov'ev, A. A.**, **51** #7809 and **Zinov'ev, A. A.**, **51** #7810
- Smirnov, G. M.** (with Oleinikov, V. A.) Time-optimal control of nonlinear systems. *Avtomat. i Telemekh.* **1970**, no. 12, 167-170 (Russian. English summary); translated as *Automat. Remote Control* **1970**, no. 12, 2053-2056. (L. D. Berkovitz) **46** #3159 93C50
- An analysis of the oscillation properties of an optimal control. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR* **1975**, no. 3, 111-118. (J. Jarník) **55** #8509 34H05 (49A10)
- Smirnov, G. P.** (with Ivanov, V. T.; Lubyšev, F. V.) The direct and inverse boundary value problems for the heat equation. (Russian) *Differencial'nye Uravnenija* **8** (1972), 2023-2028, 2112. (E. Sánchez Palencia) **47** #5446 35K05 (35R30)
- Smirnov, G. S.** The general form of a linear functional and a criterion for the polynomial of best approximation in spaces with a mixed integral metric. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 134-138, 144. (G. Albinus) **47** #3971 46E30 (41A65)
- A criterion for the polynomial of best approximation in spaces $L_{p,1}$ and $L_{p,2}$. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 415-419, 432. (C. de Boor) **48** #6789 41A65
- Certain properties of the best approximation of abstract functions by polynomials. (Russian) *Theory of the approximation of functions, and its applications* (Russian), pp. 129-134. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. *RZhMat* **1975** #7 B620; *MR* **50** #13975 41A65 (41A10)
- The approximation of abstract functions by elements of convex sets. (Russian) *Theory of the approximation of functions, and its applications* (Russian), pp. 135-139. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (See *RZhMat* **1975** #7 B620; *MR* **50** #13975) 41A65
- A certain characterization of the element of best approximation of an abstract function with values in a Banach space. (Ukrainian. English and Russian summaries) *Visnik Kiĭv. Univ. Ser. Mat. Meh.* **No. 17** (1975), 134-138, 181. (A. B. Némethi) **54** #13426 41A65
- On the dimension of polyhedra of best approximation in a space of abstract functions. (Russian) *Questions in the theory of approximation of functions and its applications* (Russian), pp. 150-159. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Editors) **58** #29728 41A65
- Some best approximation theorems in the spaces CL_p . (Ukrainian. English and Russian summaries) *Visnik Kiĭv. Univ. Ser. Mat. Meh.* **No. 18** (1976), 69-75. (Author's summary) **58** #23288 41A50
- Smirnov, I. N.** (with Pervozvanskiĭ, A. A.) An estimate of the steady state of a control system with slowly varying constraints. (Russian. English summary insert) *Kibernet. (Kiev)* **1974**, no. 4, 45-51. (T. Tobias) **54** #4790 93E10 (60J10)
- ★Синтез систем управления на логических элементах. (Russian) [Synthesis control systems on logical elements] *Izdat. Leningrad. Univ., Leningrad*, 1975. 70 pp. (Korolian Gilezan) **56** #2692 94A20
- Smirnov, I. P.** (with Morozov, S. F.) Nonlinear mathematical problems on the transfer of excitatory and inhibitory pulses in neural tissues. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **17** (1977), no. 1, 149-161, 285. (Authors' summary) **58** #20569 92A05 (82.45)
- Smirnov, Ju. B.** The method of nets for a second order ordinary differential equation with a degeneracy. (Russian) *Numerical methods in problems of technology and economics* (Russian), pp. 68-73. *Izdat. Kazan. Univ., Kazan*, 1971. (From the author's introduction) **55** #1742 65L10
- An investigation of the convergence of difference schemes for a one-dimensional degenerate parabolic equation. (Russian) *Issled. Prikl. Mat. Vyp.* **1** (1973), 28-37. (*RZhMat* **1974** #8 B849) **57** #11081a 65M10
- An investigation of the convergence of difference schemes for a multidimensional degenerate parabolic equation. *Issled. Prikl. Mat. Vyp.* **1** (1973), 32-37. (*RZhMat* **1974** #8 B850) **57** #11081b 65M10
- An investigation of the convergence of difference schemes for quasilinear elliptic equations with degeneracy. (Russian) *Issled. Prikl. Mat. Vyp.* **2** (1974), 81-84. (*RZhMat* **1975** #1 B1285) **57** #11095 65N10
- The mesh method for a certain nonlinear equation with a degeneracy. (Russian) *Issled. Prikl. Mat. Vyp.* **2** (1974), 76-80. (*RZhMat* **1975** #1 B1314) **57** #11096 65M99
- A study of difference schemes for a certain class of nonlinear degenerate equations. (Russian) *Issled. Prikl. Mat. Vyp.* **3** (1975), 108-112. (J. Mikliček) **57** #8063 65N10
- The numerical realization of a certain class of nonlinear elliptic difference equations. (Russian) *Issled. Prikl. Mat. Vyp.* **3** (1975), 113-116. (J. Mikliček) **57** #8064 65N10
- (with Lapin, A. V.) The study of difference schemes for quasilinear degenerate elliptic equations. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 5, 892-901, 903. (V. Thomée) **54** #11804 65N10
- Estimates of the rate of convergence of difference schemes for a class of degenerate equations. (Russian) *Issled. Prikl. Mat. Vyp.* **4** (1977), 51-57. (Stefan Mirică) **58** #13743 65L10
- Smirnov, Ju. F.** (with Kurdjumov, I. V.; Šitkova, K. V.; El' Samarai, S. X.) Translationally invariant shell model. *Nuclear Phys.* **A145** (1970), 593-612. (A. Corciovei) **47** #1389 81.22
- (with Ašerova, R. M.; Tolstoi, V. N.) Projection operators for simple Lie groups. (Russian. English summary) *Teoret. Mat. Fiz.* **8** (1971), no. 2, 255-271. (Authors' summary) **57** #14967 81.22 (22E70)
- (with Sviridov, D. T.; Tolstoi, V. N.) The construction of the wave functions for quantum systems with the symmetry of G_2 . (Russian) *Dokl. Akad. Nauk SSSR* **1972**, 1317-1320. (A. J. Coleman) **47** #6217 81.22
- (with Tolstoi, V. N.) A new projected basis in the theory of five-dimensional quasi-spin. *Rep. Mathematical Phys.* **4** (1973), 97-111. (G. R. Allcock) **49** #1931 81.22
- (with Ašerova, R. M.; Tolstoi, V. N.) Projection operators for simple Lie groups. General scheme for the construction of lowering operators. The case of the group $SU(n)$. (Russian. English summary) *Teoret. Mat. Fiz.* **15** (1973), no. 1, 107-111. (Authors' summary) **57** #14968 81.22 (22E70)
- (with Ašerova, R. M.; Knyr, V. A.; Tolstoi, V. N.) Some group theoretical aspects of the method of generalized hyperspherical functions. *Jadernaja Fiz.* **21** (1975), 1126-1134 (Russian); translated as *Soviet J. Nuclear Phys.* **21** (1975), no. 5, 580-588. (Daniel A. Akyeampong) **53** #2164 81.22
- (with Neudačín, V. G.; Pavličenkova, A. V.; Levin, V. G.) On the study of double Fourier transforms of the electron wavefunctions for atoms and molecules at the $(\gamma, 2e)$ and $(e, 3e)$ processes at high energies. *Phys. Lett. A* **64** (1977), no. 1, 3-6. (Authors' summary) **58** #25553 81.44
- Smirnov, Ju. M.** (with Britov, G. S.; Ignat'ev, M. B.; Mironovskii, L. A.) ★Управляемые вычислительными процессами. Том I. (Russian) [Control of computing processes. Volume I] *Izdat. Leningrad. Univ., Leningrad*, 1973. 296 pp. (D. Obradović) **48** #3284 68-02
- (with Lokucievskii, O. V.; Mal'cev, A. A.) International Topology Colloquium

- Keszthely. (Russian) Held in Keszthely, June 19-23, 1972. *Uspehi Mat. Nauk* **28** (1973), no. 3(171), 217-226. (Editors) **52** #9140 54-06
- Extensors for compact and metrizable spaces and applications to infinite-dimensional spaces. *Topics in topology (Proc. Colloq., Keszthely, 1972)*, pp. 669-573. *Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam, 1974.* (V. Mancuso) **51** #1721 54C55
- (with Skordev, Genčo S.) The factorization and approximation theorems for Aleksandrov-Čech cohomology in the class of bicomplexa. (Russian) *Dokl. Akad. Nauk SSSR* **220** (1975), 1031-1034. (I. Pop) **52** #1665 55B05
- (with Bogatyĭ, Semen A.) Approximation by polyhedra and factorization theorems for ANR-bicomplexa. (Russian) *Fund. Math.* **87** (1975), no. 3, 195-205. (S. Mardešić) **52** #4222 54C55 (54B25, 54F35)
- Sets of H -fixed points are absolute extensors. (Russian) *Mat. Sb. (N.S.)* **98**(140) (1975), no. 1(9), 93-101, 158. (J. W. Jaworowski) **52** #15412 54H15 (54C55, 54F45)
- (with Kurovskii, A. B.) The dimension Ind, defined by means of retracts. (Russian) *Czechoslovak Math. J.* **26**(101) (1976), no. 1, 30-36. (N. Hadziivanov) **58** #2754 54F45
- (with Bogatyĭ, Semen A.) The position of compacta in Hilbert space. (Russian) *Czechoslovak Math. J.* **26**(101) (1976), no. 1, 37-42. (Stojan Nedev) **52** #11831 54C56 (55D99, 57A20)
- Equivariant imbeddings of G -spaces. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 5 (191), 137-147. (J. W. Jaworowski) **55** #13396 54H15
- Some topological aspects of the theory of topological transformation groups. *General topology and its relations to modern analysis and algebra, IV (Proc. Fourth Prague Topological Sympos., Prague, 1976)*, Part A, pp. 196-204. *Lecture Notes in Math., Vol. 509, Springer, Berlin, 1977.* (S. N. Hudson) **57** #10690 54H15
- (with Agaronjan, V. V.) The shape theory for uniform spaces and the shape uniform invariants. *Comment. Math. Univ. Carolin.* **19** (1978), no. 2, 351-357. (Ross Geoghegan) **58** #2701 54C56 (54E15)
- See also Borsuk, Karol, **50** #3177; Problems: Topology, **50** #8399 and Terpe, Frank, et al., **57** #17595
- nov, Ju. N. (with Konjaev, S. I.) Stability of a solution of Whittaker's equation. *Dokl. Akad. Nauk SSSR* **200** (1971), 1048-1050 (Russian); translated as *Soviet Physics Dokl.* **16** (1971/72), 846-848. **55** #900 35Q99
- nov, Ju. P. See al-Birūnī, Abū'l-Rayhān Muḥammad ibn Aḥmad, **58** #15834b
- nov, K. K. (with Baglai, R. D.) On the processing of two-dimensional signals on an electronic computer. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), 241-248, 278. (Authors' introduction) **51** #5144 94A05 (68A20)
- (with Agranovskii, M. Ia; Baglai, R. D.) Identification of a class of nonlinear operators. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 2, 284-293, 523. (Editors) **58** #9508 93B30
- nov, L. N. (with Koržik, V. I.) Error probability in a channel with fading and with noise that resembles the signal. (Russian) *Problemy Peredači Informacii* **13** (1977), no. 1, 19-25. (Authors' summary) **58** #15650 94A05
- nov, L. P. (with Brujackii, E. V.) ★Математические методы в задачах управления. (Russian) [Mathematical methods in problems of the control of science] *Izdat. "Naukova Dumka", Kiev, 1973.* 184 pp. (Editors) **54** #4570 90-02
- nov, M. M. ★Модельное уравнение смешанного типа четвертого порядка. (Russian) [A standard fourth order equation of mixed type] *Izdat. Leningrad. Univ., Leningrad, 1972.* 125 pp. (See Zbl **251** #35066) 35G15
- (with Bobyleva, L. A.) A certain boundary value problem for a fourth order equation of mixed-composite type. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 5 (120), 15-21. (S. A. Tersenov) **47** #7234 35M05
- The second boundary value problem for a certain fourth order equation of mixed type in the disc. (Russian) *Differencial'nye Uravnenija* **9** (1973), 2052-2057, 2117. (T. Kal'menov) **48** #9129 35M05
- The first boundary value problem for a certain fourth order equation of mixed type in the disc. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. Vyp. 2* (1973), 57-61, 161. (Author's summary) **48** #6715 35M05
- ★Дифференциальные уравнения в частных производных второго порядка. (Russian) [Second order partial differential equations] Second edition, revised and augmented. *Izdat. Beloruss. Gosudarst. Univ., Minsk, 1974.* 232 pp. (Editors) **52** #11275 35-01
- ★Задачи по уравнениям математической физики. (Russian) [Problems on the equations of mathematical physics] Sixth edition, supplemented. *Izdat. "Nauka", Moscow, 1975.* 127 pp. (Editors) **54** #3133 35-01
- A boundary value problem with shift for a fourth order equation of mixed-composite type. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 9, 1678-1686, 1718. (Megumi Saigo) **53** #3513 35M05
- A certain boundary value problem with shift for fourth order equations of mixed-composite type. (Russian. English summary) *Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp. 3* (1975), 32-38, 150. (Author's summary) **57** #13233 35M05
- ★Problemas de ecuaciones de la física matemática. (Spanish) [Problems on the equations of mathematical physics] Translated from the Russian by Bernardo Mayorga. *Editorial Mir, Moscow, 1976.* 162 pp. (Editors) **54** #3132 35-01
- Functionally invariant solutions and the nonuniqueness of the solution of the Darboux problem for degenerate hyperbolic equations. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 5, 937-939, 960. (M. Meredov) **56** #878 35L99 (35M05)
- ★Вырождающиеся гиперболические уравнения. (Russian) [Degenerate hyperbolic equations] *Izdat. "Vyššejšaja Škola", Minsk, 1977.* 158 pp. (A. M. Nahušev) **57** #13220 35L99 (35M05)
- A boundary value problem for an equation of mixed type of the second kind with displacement. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 5, 931-943, 967. (Author's summary) **57** #17020 35M05
- nov, M. S. (with Efremova, I. S.) Transformation of a system of differential equations of heat and mass transfer in a domain with a variable boundary into a system of equations for a domain with a fixed boundary. *Inž.-Fiz. Ž.* **31** (1976), no. 5, 873-875 (Russian); translated as *J. Engng. Phys.* **31** (1976), no. 5, 1326-1328 (1977). (N. D. Sengupta) **57** #2215 80.35

- Smirnov, N. A. See Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #8022
- Smirnov, N. V. (with Pavlov, B. S.) Resonance scattering by a one-dimensional crystal and a thin film. (Russian. English summary) *Vestnik Leningrad. Univ.* **1977**, no. 13 Mat. Meh. Astronom. vyp. 3, 71-80, 171. (R. C. Gilbert) **57** #6603 34B25
- Smirnov, O. See Jaglom, I. M.; et al., **56** #8252
- Smirnov, O. K. (with Krasnov, S. N.) Calculation of the nonstationary heat conditions of a duct wall by means of the regularization method. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 239 (1975), 86-99. (Editors) **58** #32463 80.65
- Smirnov, S. G. Smooth knots in manifolds of homotopy type $K(\pi, 1)$. (Russian) *Uspehi Mat. Nauk* **26** (1971), no. 5(161), 225-226. (O. Krötenheerdt) **53** #9233 57C45
- Smooth knots in a manifold with a contractible of spherical universal covering. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 6(174), 217-218. (O. Krötenheerdt) **53** #9234 57C45
- Smooth knots in a manifold of the homotopy type $K(\pi, 1)$. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **39** (1975), no. 3, 610-634, 704. (O. Krötenheerdt) **53** #4083 57C45
- Smirnov, S. V. Multidimensional nomograms. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **31** (1963), no. mat., 87-102. (loose errata) (L. Bal) **47** #2850 65S05
- (with Simonov, M. I.) A certain method of Euler for the calculation of the roots of equations. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **44** (1969), no. mat., 115-118. (C. Illoio) **47** #1277 65H05
- (with Denisjuk, I. M.; Ljusternik, L. A.; Hovanskii, G. S.) In memoriam I. A. Vil'ner. (Russian) *Nomography collection, No. 8 (Russian)*, pp. 3-9. *Vyčisl. Centr Akad. Nauk SSSR, Moscow, 1971.* (Editors) **50** #9503 01A70
- (with Mazaeva, G. A.; Prokop'ev, G. S.; Durakov, B. P.) In memoriam P. V. Nikolaev. (Russian) *Nomography collection, No. 8 (Russian)*, pp. 10-13. *Vyčisl. Centr Akad. Nauk SSSR, Moscow, 1971.* (Editors) **50** #9504 01A70
- (with Potapov, M. K.) Uniform approximations by nomographable functions. (Russian) *Nomography collection, No. 8 (Russian)*, pp. 173-181. *Vyčisl. Centr Akad. Nauk SSSR, Moscow, 1971.* (A. Lupaş) **52** #4681 65S05
- From recollections about A. I. Mal'cev. (Russian) *Selected questions of algebra and logic (collection dedicated to the memory of A. I. Mal'cev)* (Russian), pp. 322-331. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1973.* (Editors) **58** #21316 01A70
- (with Nepomnjaščaja, T. Ja.) Three-dimensional 4-webs and three-dimensional Pascal configurations. (Russian) *Algebra, logic and numerical mathematics (Second Interuniversity Seminar on Nomography, Ivanovo, 1975)* (Russian), pp. 135-148. *Ivanov. Gos. Univ., Ivanovo, 1976.* (V. V. Gol'dberg) **57** #13718 53A15
- See also Logic, algebra and numerical analysis, **53** #2567 (EA 54); Logic, algebra and numerical analysis, **55** #10; Logic, algebra and numerical analysis, **55** #11 and Algebra, logic and numerical analysis, **56** #16986
- Smirnov, V. I. ★Курс высшей математики. Том 5. (Russian) [A course in higher mathematics. Vol. 5] *Fizmatgiz, Moscow, 1959.* 655 pp. (errata insert) (Editors) **50** #5407 46-02 (28-02, 47-02)
- ★Lehrgang der höheren Mathematik. Teil V. Zweite, berichtigte Auflage. Übersetzung aus dem Russischen von Renate Helle und Brigitte Mai. Hochschulbücher für Mathematik, Band 6. *VEB Deutscher Verlag der Wissenschaften, Berlin, 1967.* xiii + 570 pp. (Editors) **50** #5408 46-02 (28-02, 47-02)
- ★Linear algebra and group theory. Revised, adapted and edited by Richard A. Silverman. Republication of the original (1961) edition. *Dover Publications, Inc., New York, 1970.* x + 464 pp. (Editors) **49** #10708 15-01 (20-01)
- (with Andreev, N. I.; Dostupov, B. G.; Kazakov, I. E.; Kozlov, Ju. M.; Kočetkov, V. T.; Poceluev, A. V.; Sajutin, Ju. V.; Sotskii, N. M.; Tihonov, V. I.; Černeckii, V. I.) ★Статистические методы в проектировании нелинейных систем автоматического управления. (Russian) [Statistical methods in the design of nonlinear automatic control systems] Edited by B. G. Dostupov. *Nonlinear Automatic Control Systems, Vol. 6. Izdat. "Mašinostroenie", Moscow, 1970.* 407 pp. (errata insert) (V. N. Igolkin) **50** #9403 93E20
- ★Lehrgang der höheren Mathematik. Teil II. Zehnte Auflage. Übersetzung aus dem Russischen nach der zwölften Auflage von Klaus Krienes. Hochschulbücher für Mathematik, Band 2. *VEB Deutscher Verlag der Wissenschaften, Berlin, 1971.* xii + 583 pp. (Editors) **50** #4842 26-02
- ★Cours de mathématiques supérieures. Tome III. Deuxième partie. Traduit du russe par Jean Sislian. *Éditions Mir, Moscow, 1972.* 694 pp. (Editors) **53** #3268 30-02 (33-02)
- (with Vallander, S. V.; Ibragimov, I. A.; Ladyženskaja, O. A.; Lozinskii, S. M.; Petrašen', G. I.; Petrov, V. V.; Romanovskii, I. V.; Faddeev, D. K.) Jurii Vladimirovič Linnik (1915-1972). (Bulgarian) Translated from the Russian (Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp. 3 (1972), 146-147). *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **15**(48) (1972), 244. (Editors) **53** #63 01A70
- (with Bazilevič, I. E.; Lebedev, N. A.; Milin, I. M.; Petrašen', G. I.; Tartakovskii, V. A.) Jurii Evgen'evič Alenicyan (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 5(167), 265-270 (1 plate). (Editors) **52** #5288 01A70
- (with Vallander, S. V.; Ibragimov, I. A.; Ladyženskaja, O. A.; Lozinskii, S. M.; Petrašen', G. I.; Petrov, V. V.; Romanovskii, I. V.; Faddeev, D. K.) Jurii Vladimirovič Linnik. (Russian) *Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp. 3* (1972), 146-147. **48** #3684 01A70
- (with Babič, V. M.; Birman, M. Š.; Solomjak, M. Z.; Ural'ceva, N. N.) Ol'ga Aleksandrovna Ladyženskaja (on her fiftieth birthday). (Russian) *Vestnik Leningrad. Univ.* **1972**, no. 7, 159-160. (Editors) **45** #6560 01A70 (35-03, 65L10, 76.35)
- ★Lehrgang der höheren Mathematik. Teil IV. Sechste Auflage. Übersetzung aus dem Russischen nach der dritten Auflage von Christa Berg und Lothar Berg. Hochschulbücher für Mathematik, Band 5. *VEB Deutscher Verlag der Wissenschaften, Berlin, 1973.* xii + 708 pp. (Editors) **50** #5147 35-02 (45-02, 49-02)
- (with Kondrat'ev, K. Ja.; Sretenskii, L. N.; Tihonov, A. N.) Jurii Aleksandrovič Surinov (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 6(174), 231-232. (Editors) **52** #7806 01A70
- ★Курс высшей математики. Том IV. Часть 1. (Russian) [A course in higher mathematics. Vol. IV. Part 1] Sixth edition, revised and augmented. *Izdat. "Nauka",*

- Moscow, 1974. 336 pp. (Editors) 50 #14095 45-02 (49-02)
- ★Cours de mathématiques supérieures. Tome III. Première partie. Deuxième édition. Traduit du russe. *Éditions Mir, Moscow*, 1976. 328 pp. (Editors) 53 #2972 15-02 (20-02)
- ★Lehrgang der höheren Mathematik, Teil V. Übersetzt aus dem Russischen von Renate Helle und Brigitte Mai. Siebente Auflage. Hochschulbücher für Mathematik, Band 6. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1976. xiii + 570 pp. (Editors) 55 #5807 26-01 (28-01, 46-01)
- ★Lehrgang der höheren Mathematik. Teil III, 1. Achte Auflage. Übersetzt aus dem Russischen. Hochschulbücher für Mathematik, Band 3. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1976. 319 pp. (Editors) 55 #12381 00A05 (15-01)
- ★Lehrgang der höheren Mathematik. Teil III, 2. Fünfte Auflage. Übersetzt aus dem Russischen. Hochschulbücher für Mathematik, Band 4. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1976. xi + 599 pp. (Editors) 55 #12382 00A05 (30-01)
- See also **Problems of mathematical analysis**, 48 #10745; **Problems of mathematical analysis**, 48 #10746; **Linear operators and operator equations**, 49 #4718; **Problems in mathematical analysis**, 49 #4724; **Obituary: Smirnov, V. I.**, 51 #36; **Collection: Smirnov, V. I.**, 51 #2819; **Ladyženskaja, O. A.**, 52 #5314; **Petrašen, G. I.**, 52 #5315; **History of mathematical education in the USSR**, 52 #13176; **Ožigova, E. P.**, 53 #7694; **Problems of mathematical analysis**, 54 #22; **Markuš, I. I.**, 58 #10130; **Juškevič, A. P.**, 58 #10183 and **Euler, Leonhard**, 58 #15920
- Smirnov, V. I.** (with Lušnikov, A. A.) Stationary coalescence and particle size distribution of atmospheric aerosols. *Izv. Akad. Nauk SSSR Ser. Fiz. Atmosf. i Okeana* 11 (1975), no. 2, 139-152 (Russian); translated as *Izv. Acad. Sci. USSR Atmosf. Ocean Phys.* 11 (1975), no. 2, 83-89. (Editors) 56 #4378 7630
- (with Veržbinskaja, Ju. S.; Dem'janovič, Ju. K.; Kurdova, E. V.) A method for the numerical solution of the Navier-Stokes equations. (Russian) *Metody Vychisl.* 10 (1976), 130-136, 188. (Authors' summary) 57 #11351 7665
- (with Tikheyeva, A. M.) The connection between the Bayesian risk and the Kolmogorov distance and a modification of it in recognition problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1977, no. 6, 189-192 (Russian); translated as *Engrg. Cybernetics* 15 (1977), no. 6, 147-150 (1978). (Authors' summary) 58 #25169 68A45 (94A05)
- Smirnov, V. M.** (with Barkova, L. S.) A transformation of a graph of relations in order to construct precedence functions. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 247 (1975), 96-101. (Bolesław Mikolajczak) 58 #3708 68A30 (05C99)
- Smirnov, V. N.** (with Vlasov, A. G.) An axially symmetric problem of elasticity theory on the equilibrium of a right circular cylinder. (Russian) *Problems of theoretical physics, II, Theory of the atom, Functional methods in quantum field theory and statistical physics, Mathematical physics*, pp. 167-175, 183. *Izdat. Leningrad. Univ., Leningrad*, 1975. (Authors' summary) 58 #14170 7341
- Smirnov, V. V.** See Wilkes, M. V., 50 #9053
- Smirnov, Vladimir A.** A syllogistics without the law of the excluded middle and its inclusion into the predicate calculus. (Russian) *Studies in systems of logic (dedicated to the memory of S. A. Janovskaja)* (Russian), pp. 68-77. *Izdat. "Nauka", Moscow*, 1970. (M. Rogava) 48 #1877 02B10 (02C99)
- The so-called paradoxes of material implication, and systems of logic with a concept of strict implication. (Russian) *Studies in systems of logic (dedicated to the memory of S. A. Janovskaja)* (Russian), pp. 122-136. *Izdat. "Nauka", Moscow*, 1970. (M. Rogava) 48 #5814 02B05 (02C99)
- Élimination des termes ϵ dans la logique intuitionniste. Logique et méthodologie des sciences en U.R.S.S. *Rev. Internat. Philos.* 25 (1971), no. 4, 512-519. (Editors) 58 #27371 02D99 (02C15)
- An absolute first order predicate calculus. *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* 2 (1973), no. 1, 38-45. (Carlo Cellucci) 52 #13339 02D99
- (with Tavanec, P. V.) The interrelations of symbolic logic and philosophy. (Russian) *Philosophy and logic* (Russian), pp. 5-34. *Nauka, Moscow*, 1974. (Editors) 58 #27273 02A05
- On the question of the definability of predicates introduced via bilateral reduction sentences. (Russian) *Philosophy and logic* (Russian), pp. 165-167. *Nauka, Moscow*, 1974. (Editors) 58 #27436 02G99 (02A05, 02C10)
- Twisted tensor products, and Hirsch's theory. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), 294-296. (I. Pop) 52 #6713 55F20
- Twisted tensor products, and strong homotopy. (Russian) *Dokl. Akad. Nauk SSSR* 222 (1975), no. 2, 288-290. (I. Pop) 52 #6714 55F20
- Homology of twisted tensor products. (Russian) *Dokl. Akad. Nauk SSSR* 222 (1975), no. 5, 1041-1044. (I. Pop) 52 #1671 55B45 (55F20)
- The functor D for twisted tensor products. (Russian) *Mat. Zametki* 20 (1976), no. 4, 465-472. (I. Pop) 55 #4172 (EA 55/56) 55H05
- (with Jarlykov, M. S.; Jakovlev, A. I.) Optimum processing of pulsed signals in the presence of discrete interference. *Radioelektron. i Elektron.* 21 (1976), no. 2, 243-249 (Russian); translated as *Radio Engrg. Electron. Phys.* 21 (1976), no. 2, 21-26. (Authors' summary) 56 #11485 94A05
- Asymptotic expansions of generalized functions that are singular on the light cone. (Russian. English summary) *Teoret. Mat. Fiz.* 29 (1976), no. 3, 336-346. (M. M. Skriganov) 56 #10570 8146
- (with Sadovskii, V. N.) Definability and identifiability: certain problems and hypotheses. *Basic problems in methodology and linguistics (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Part III, Univ. Western Ontario, London, Ont., 1975)*, pp. 63-80. *Univ. Western Ontario Ser. Philos. Sci., Vol. 11, Reidel, Dordrecht*, 1977. (Editors) 58 #21568 02G99
- The functor D and strong homotopy. (Russian) *Mat. Zametki* 21 (1977), no. 4, 557-564. (I. Pop) 58 #7624 55D99 (57F05)
- The connection between the behavior of electromagnetic form factors in the Bjorken limit and the singularities of their Fourier transforms on the light cone. (Russian. English summary) *Teoret. Mat. Fiz.* 33 (1977), no. 3, 319-326. (Author's summary) 57 #8705 8147
- Singularities of Feynman diagrams in a coordinate space. (Russian. English summary) *Teoret. Mat. Fiz.* 36 (1978), no. 2, 183-192. (Author's summary) 58 #25569 8146
- See also **Philosophy and logic**, 58 #21368
- Smirnov, Ye. Ya.** See Smirnov, E. Ja.
- Smirnov, Yu. F.** See Smirnov, Ju. F.
- Smirnov, Yu. M.** See Smirnov, Ju. M.
- Smirnov, Yu. N.** See Smirnov, Ju. N.
- Smirnova, E. D.** Consistency and eliminability in proof theory. (Russian) *Philosophy and logic* (Russian), pp. 84-101. *Nauka, Moscow*, 1974. (Editors) 58 #27265 02D99
- Smirnova, E. L.** The stability of parabolic difference schemes with variable coefficients. (Russian. English summary) *Vestnik Leningrad. Univ.* 1975, no. 19 *Mat. Meh. Astron. vyp.* 4, 43-49, 167. (E. Schechter) 53 #7054 65M10
- The invertibility and stability of difference operators with variable coefficients. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, no. 7 *Mat. Meh. Astron. vyp.* 2, 97-102, 165. (Raičo Lazarov) 56 #17110 65M10
- Smirnova, E. V.** (with Konovalov, A. N.) A mixed Cauchy problem with boundary conditions of the third kind for a system of equations that are not of Cauchy-Kovalevskaja type. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* 1 (1970), no. 70-76. (A. D. Solomon) 51 #3730 35Q99
- Smirnova, G. B.** (with Bagaev, G. N.) A regular threshold function for a discontinuity chain in a random tree. (Russian) *Control systems*, No. 9 (Russian), pp. 89-91. *Inst. Inst. Kataliza Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1971. (Marcel Rădulescu) 49 #4822 05C05
- Smirnov, G. N.** The first boundary value problem for equations of parabolic type that degenerate on the boundary of the domain. (Russian) *Algebra and number theory* *Moskov. Gos. Ped. Inst. Učen. Zap.* No. 375 (1971), 136-142. 58 #17517 35K20
- Smirnova, G. V.** The approximation of chain semigroups. (Russian) *Modern algebra, N. 3* (Russian), pp. 169-176. *Leningrad. Gos. Ped. Inst., Leningrad*, 1974. (V. Havel) 53 #5784 20M10
- Approximation of chained semigroups. (Russian) *Modern algebra, N. 3* (Russian), pp. 112-116. *Leningrad. Gos. Ped. Inst., Leningrad*, 1975. (P. Javor) 56 #5757 20M10
- Smirnova, I. M.** (with Gusev, L. A.) Languages, grammars, and abstract automata models. I. *Avtomat. i Telemekh.* 1968, no. 4, 72-94 (Russian. English summary); translated as *Automat. Remote Control* 1968, no. 4, 587-605. (Wilfried Brauer) 52 #16091 68A30
- (with Gusev, L. A.) Languages, grammars, and abstract automata models. II. *Avtomat. i Telemekh.* 1968, no. 5, 73-94 (Russian. English summary); translated as *Automat. Remote Control* 1968, no. 5, 757-774. (Wilfried Brauer) 52 #16092 68A25, 68A30, 94A30
- (with Aizerman, M. A.; Gusev, L. A.; Rozonoër, L. I.; Tal', A. A.) ★Logic automata a algorithm. (Czech) [Logic, automata and algorithms] Translated from Russian by Jaroslav Volčik, Miroslav Mleziva and Antonín Mykiska. *Academia [Nakladatelství Československé Akademie Věd], Prague*, 1971. 408 pp. (Editors) 48 #1818 94A30 (02F10)
- Smirnova, L. I.** Differential invariants of a surface in an Appell space of elliptic type. (Russian) *Collection of articles on differential geometry, No. 2* (Russian), pp. 54-60. *Kalinin. Gos. Univ., Kalinin*, 1975. (V. Gol'dberg (RŽMat 1976 #3 A711)) 58 #3035A35
- An Appell space of elliptic type as the union of isotropic and Galilean spaces. (Russian) *Collection of articles on differential geometry, No. 2* (Russian), pp. 60-63. *Kalinin. Gos. Univ., Kalinin*, 1975. (V. Gol'dberg (RŽMat 1976 #3 A712)) 58 #3035A35 (53A20)
- Smirnova, N. A.** S. I. Vavilov in the Presidium of the USSR Academy of Sciences. Sketches for a portrait of S. I. Vavilov. *II. Uspehi Fiz. Nauk* 114 (1974), no. 3-4, 550-551 (Russian); translated as *Soviet Physics Uspekhi* 17 (1975), no. 6, 960-962. (Editors) 58 #21332m 01A70
- Smirnova, N. I.** Finite groups with metacyclic abelian nonprimary subgroups. (Russian) *Sverdlovsk. Gos. Ped. Inst. Naučn. Trudy Sb.* 219 *Algebra i Mat. Anal.* (1974), 63-72. (Schoenwaelder) 52 #3316 20D10
- Smirnova, N. L.** (with Kuražkovskaja, V. S.; Belov, N. V.) Belov's symmetry subalgebra for homologous series of structural block bases. (Russian) *Dokl. Akad. Nauk SSSR* (1977), no. 5, 1094-1096. 58 #28212 20H15
- Smirnova, N. S.** See **Mathematical problems in the theory of wave propagation**, 46 #10000
- Smirnova, O. S.** Some examples of nonstandard extensions. (Russian) *Logic, algebra and numerical analysis*, Vol. 2, no. 1. *Ivanov. Gos. Ped. Inst. Učen. Zap.* 123 (1973), 91-92. (RŽMat 1974 #2 A78) 58 #27462 02H20
- Completeness and decidability of the axiomatic theory SG for spherical geometry. (Russian) *Logic, algebra and numerical analysis*, Vol. 3, no. 1. *Ivanov. Gos. Univ. Učen. Zap.* 130 (1974), 25-37. (L. W. Szczerba) 57 #89 02G10 (50A20)
- Smirnova, T. N.** (with Šahbazjan, K. V.; Lebedinskii, M. M.) Specialization of the A -language for linear algebra problems. *Trudy Mat. Inst. Steklov.* 96 (1968), 4-10. (Russian); translated in *Proc. Steklov Inst. Math.*, No. 96 (1968): *Automat. Program. Numer. Methods and Functional Anal.*, pp. 57-70. *Amer. Math. Soc., Providence*, 1970. (A. A. Grau) 45 #2951 68A30
- (with Kublanovskaja, V. N.; Savinov, G. V.) On the solution of problems with sparse matrices. (Russian) *Numerical methods and automatic programming. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 35 (1973), 75-94. (S. Zidarovszky) 49 #1749 65F05
- (with Kublanovskaja, V. N.; Hazanov, V. B.) On the solution of the eigenvalue problem of sparse matrices. (Russian) *Numerical methods and automatic programming. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 58 (1976), 92-110. (G. F. Miller) 58 #19075 65F15
- See also **Automatic programming and numerical methods of analysis**, 46 #10000; **Numerical methods and automatic programming**, 48 #7522; **Theory of languages and methods of construction of programming systems**, 48 #7682; **Numerical methods of functional analysis**, 49 #6540; **Numerical methods and automatic programming**, 50 #11706 and **Numerical methods and questions on organization of computations**, 56 #9898
- Smirnova, T. S.** Geodesic and Čebyšev nets in a two-dimensional Riemannian space. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap.* 83 *Geometrija* (1971), 144-149. (Michał Lorens) 53 #9064 53B25

- Certain diagonal properties of apolar nets. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. No. 83 Geometrija* (1971), 149-153. (W. Wrona) **52** #15290 53B20
(with Feofanov, G. N.) Distribution of service waiting times in systems with a LIFO queue discipline. *Automat. i Telemekh.* **1972**, no. 3, 151-154 (Russian. English summary); translated as *Automat. Remote Control* **33** (1972), no. 3, part 2, 482-485. (Nasser Hadidi) **54** #3883 60K25
- imova, V. B.** Stability of a certain control system with distributed parameters and discontinuous nonlinearities. (Russian. English summary) *Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp. 3* (1972), 57-65, 150. (Russell D. Rupp) **51** #8596 35B35
- The asymptotic behavior of the solutions of a certain problem with a discontinuous nonlinearity. (Russian) All-Union Symposium on Selected Questions of Partial Differential Equations (Priëlbrus, 1972). *Differencial'nye Uravneniya* **9** (1973), 149-157, 197. (J. Kopáček) **48** #11796 35L50
- imova, V. N.** (with Tai, M. L.) On the investigation of a steady process in a multidimensional extremal system in the presence of interference. (Russian) *Izv. Vysš. Učebn. Zaved. Radiofizika* **11** (1968), 1723-1729. (G. N. Mil'shtein) **49** #10425 93E99
(with Tai, M. L.) Multidimensional discrete extremal systems in the presence of noise. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics (Tbilisi, 1968)*, Vol. 1: *Optimal and adaptive systems* (Russian), pp. 252-259, 310. Izdat. "Nauka", Moscow, 1972. (L. I. Gal'čuk) **49** #2111 90C40
- The application of the z-transform to the study of the stability of difference schemes. (Russian. English summary) Theory of oscillations, applied mathematics and cybernetics. *Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), no. 11, 1671-1681. (Editors) **56** #18029 93D99
(with Tai, M. L.) Some algorithms for successive accumulation in extremal systems. (Russian. English summary) Theory of oscillations, applied mathematics and cybernetics. *Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), no. 11, 1738-1748. (Authors' summary) **56** #18081 93E25
(with Neimark, Ju. I.) Stability of linear numerical processes. (Russian) *Dinamika Sistem Vyp. 3* (1974), 99-116. (RŽMat **1975** #7 B1020) **58** #19178 65L99
(with Grigorenko, Valeri P.; Tai, M. L.) A certain method for the solution of nonlinear boundary value problems that describe the distribution of inessential carriers in the base of a transistor structure. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 4, 923-930, 1088. (N. N. Janenko) **52** #12341 65L10 (94A20)
- irnov, W. I.** See **Smirnov, V. I.**
- it, C. H.** (with Hoogstraten, H. W.) A mathematical theory of shock-wave formation in arterial blood flow. (German summary) *Acta Mech.* **30** (1978), no. 1-2, 145-155. (J. C. Burns) **58** #15280 92A05
- it, J.** External line wave functions in Coulomb gauge electrodynamics and equivalence with the Landau gauge. *Nederl. Akad. Wetensch. Proc. Ser. B* **74** (1971), 318-331. (S. N. Biswas) **45** #9614 81A5 (81A6)
- Smit, Joseph Hubertus Alphonsus** ★ Many server queueing systems. (Dutch summary) Doctoral dissertation, Technical University of Delft. *Technische Hogeschool Delft, Delft*, 1971. 122 pp. (L. Takács) **48** #9890 60K25
- The optimal number of servers in a many server queueing system. *Techniques of optimization (Fourth IFIP Colloq. Optimization Techniques, Los Angeles, Calif., 1971)*, pp. 469-472. Academic Press, New York, 1972. (Jacqueline Loris-Teghem) **53** #6795 60K25
- Some general results for many server queues. *Advances in Appl. Probability* **5** (1973), 153-169. (Jacqueline Loris-Teghem) **51** #2006 60K25
- On the many server queue with exponential service times. *Advances in Appl. Probability* **5** (1973), 170-182. (Jacqueline Loris-Teghem) **51** #2007 60K25
- A simple analytic proof of the Pollaczek-Wendel identity for ordered partial sums. *Ann. Probability* **1** (1973), 348-351. (Authors' summary) **50** #3356 60J15
- ital, Jaroslav** Remarks on ratio sets of sets of natural numbers. *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* **25** (1971), 93-99. (S. L. G. Choi) **51** #10279 10L10
- On a problem concerning uniform limits of Darboux functions. *Colloq. Math.* **23** (1971), 115-116, 175. (A. M. Bruckner) **46** #306 26A15
- On approximation of Baire functions by Darboux functions. *Czechoslovak Math. J.* **21(96)** (1971), 418-423. (J. G. Ceder) **45** #470 26A21
- A note on the class M_2 . *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* **27** (1972), 97-99. (J. G. Ceder) **47** #8778 26A21
- On boundedness and discontinuity of additive functions. *Fund. Math.* **76** (1972), no. 3, 245-253. (S. Kurepa) **47** #9109 39A20
- Some characterizations of the Darboux continuity of real functions. *Mat. Časopis Sloven. Akad. Vied* **22** (1972), 59-70. (A. M. Bruckner) **46** #1974 26A15
- Characteristic types of convergence for certain classes of Darboux-Baire one functions. *Mat. Časopis Sloven. Akad. Vied* **23** (1973), 115-118. (A. M. Bruckner) **48** #6331 26A21
- On convex functions bounded below. *Aequationes Math.* **14** (1976), no. 3, 345-350. (Roman Ger) **55** #3189 26A51 (39A20)
(with Kuczma, Marek) On measures connected with the Cauchy equation. *Aequationes Math.* **14** (1976), no. 3, 421-428. (L. Losonczy) **53** #13502 28A10 (39A20)
- A necessary and sufficient condition for continuity of additive functions. (Loose Russian summary) *Czechoslovak Math. J.* **26(101)** (1976), no. 2, 171-173. (Roman Ger) **53** #6138 39A20
(with Kostyrko, Pavel) The fiftieth birthday of Professor Tibor Šalát. (Slovak) *Pokroky Mat. Fyz. Astronom.* **21** (1976), no. 4, 226-227. (Editors) **58** #10185 01A70
- On the sum of continuous and Darboux functions. *Proc. Amer. Math. Soc.* **60** (1976), 183-184. (A. M. Bruckner) **54** #5403 26A15
- italová, Kristína** On zeros of solutions of the second-order linear differential equation with retardation. *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* **26** (1972), 53-55. (V. Staikos) **46** #9494 34K15
- Periodic solution of a second-order non-linear differential equation. *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* **27** (1972), 19-25. (D. Hinton) **47** #8985 34C25
- On bilateral solutions of linear differential equations with lags. (Slovak and Russian summaries) *Acta Fac. Rerum Natur. Univ. Comenian. Math.* **31** (1975), 121-126. (N. Onuchic) **52** #6140 34K05
- Existence of solutions of functional-differential equations. *Časopis Pěst. Mat.* **100** (1975), no. 3, 261-264. (R. B. Grafton) **52** #14528 34K05
- Smit-Ghinelli, Dina** Varietà Hermitiane e strutture finite. II. (English summary) *Rend. Mat. (6)* **6** (1973), 13-29. (A. Barlotti) **50** #1929 05B25 (05C99)
- On the application of Hermitian geometries for the construction of association schemes and designs. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Roma, 1973)*, Tomo I, pp. 213-228. *Atti dei Convegni Lincei, No. 17, Accad. Naz. Lincei, Rome*, 1976. (S. K. Tharthare) **56** #11821 05B05
(with Ciampi Procesi, Rita) Calcolo simbolico per morfismi di spazi tensoriali. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **61** (1976), no. 1-2, 6-14 (1977). (J. Gil de Lamadrid) **57** #16337 15A72 (14L99)
- Smith, A.** The differentiability of Riemann's functions. *Proc. Amer. Math. Soc.* **34** (1972), 463-468. (K. M. Garg) **46** #7451 26A27
- Smith, A. C.** (with Lim, T. H.) A Cauchy integral-equation method for the numerical solution of the steady water-wave problem. *J. Engrg. Math.* **12** (1978), no. 4, 325-340. (D. H. Hyers) **58** #25387 76.65 (65R05)
- Smith, A. M.** (with Roux, J. A.) Radiative transport analysis for plane geometry with isotropic scattering and arbitrary temperature. *AIAA J.* **12** (1974), no. 9, 1273-1277. (Authors' summary) **52** #12559 80A45
(with Roux, J. A.; Todd, D. C.) Radiative transfer with anisotropic scattering and arbitrary temperature for plane geometry. *AIAA J.* **13** (1975), no. 9, 1203-1211. (M. Drăganu) **52** #12560 80A45
- Smith, A. M. O.** (with Cebeci, Tuncer) ★ Analysis of turbulent boundary layers. Applied Mathematics and Mechanics, No. 15. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1974. xvii+404 pp. (W. O. Crimale, Jr.) **54** #4279 76.00
- Smith, A. R.** See *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompili*, **48** #9783
- Smith, Adrian** (with Lindley, Dennis V.) Bayes estimates for the linear model. With discussions by J. A. Nelder, V. D. Barnett, C. A. B. Smith, T. Leonard, M. R. Novick, D. R. Cox, R. L. Plackett, P. Sprent, J. B. Copas, D. V. Hinkley, E. F. Harding, A. P. Dawid, C. Chatfield, S. E. Fienberg, B. M. Hill, R. Thompson, B. de Finetti, and O. Kempthorne. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 1-41. (A. P. Dawid) **54** #3939 62F15 (62J05)
- Bayes estimates in one-way and two-way models. *Biometrika* **60** (1973), 319-329. (N. Giri) **49** #11707 62F15 (62J05)
- A general Bayesian linear model. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 67-75. (I. Guttman) **48** #12706 62F15 (62J05)
- (with Goldstein, Matthew) Ridge-type estimators for regression analysis. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 284-291. (T. Robertson) **54** #6383 62J05
- A Bayesian approach to inference about a change-point in a sequence of random variables. *Biometrika* **62** (1975), no. 2, 407-416. (Bruce M. Hill) **52** #2012 (E **54** #3943) 62F15
(with Kingman, J. F. C.; Taylor, Samuel James; Hawkes, Alan G.; Walker, A. M.; Cox, D. R.; Hill, Bruce M.; Burville, P. J.; Leonard, Tom) Random discrete distribution. With a discussion by S. J. Taylor, A. G. Hawkes, A. M. Walker, D. R. Cox, A. F. M. Smith, B. M. Hill, P. J. Burville, T. Leonard and a reply by the author. *J. Roy. Statist. Soc. Ser. B* **37** (1975), 1-22. (Mir Ali) **51** #4505 62E99
(with Booth, N. B.) Batch acceptance schemes based on an autoregressive prior. *Biometrika* **63** (1976), no. 1, 133-136. (Authors' summary) **53** #9486 62F15 (62N10)
- Corrections and amendments: "A Bayesian approach to inference about a change-point in a sequence of random variables" (Biometrika **62** (1975), 407-416). *Biometrika* **63** (1976), no. 1, 218. (Bruce M. Hill) **54** #3943 62F15
- A Bayesian analysis of some time-varying models. *Recent developments in statistics (Proc. European Meeting Statisticians, Grenoble, 1976)*, pp. 257-267. North-Holland, Amsterdam, 1977. (S. K. Katti) **58** #18871 62F15
- See also **Brown, R. Leonard**; et al., **51** #14478; **Efron, Bradley**; et al., **52** #2009; **Barndorff-Nielsen, Ole**, **55** #1546; **de Finetti, Bruno**, **55** #13514a and **de Finetti, Bruno**, **55** #13514b
- Smith, Alan Jay** Analysis of the optimal, look-ahead demand paging algorithms. *SIAM J. Comput.* **5** (1976), no. 4, 743-757. (Authors' summary) **58** #25101 68A10
- Smith, Alvy Ray, III** Cellular automata complexity trade-offs. *Information and Control* **18** (1971), 466-482. (D. Richardson) **46** #6973 94A30
- Simple computation-universal cellular spaces. *J. Assoc. Comput. Mach.* **18** (1971), 339-353. (Robert M. Baer) **45** #3142 94A30
- Real-time language recognition by one-dimensional cellular automata. *J. Comput. System Sci.* **6** (1972), 233-253. (Ronald V. Book) **46** #8493 68A45 (94A30)
- Introduction to and survey of polyautomata theory. *Automata, languages, development*, pp. 405-422. North-Holland, Amsterdam, 1976. (Hidenosuke Nishio) **58** #15742 94A30 (68A30, 92A05)
- Smith, Anthony** On piecewise linear embeddings. *Proc. Cambridge Philos. Soc.* **71** (1972), 235-241. (R. C. Kirby) **45** #4432 57C35
- Uniform compounds and the group \mathcal{U}_n . *Proc. Cambridge Philos. Soc.* **75** (1974), 115-117. (H. T. Croft) **48** #12243 50B30
- A topology on the space of PL homeomorphisms of a PL manifold. *Proc. Cambridge Philos. Soc.* **76** (1974), 497-502. (E. C. Turner) **52** #1740 57E05
- Two compounds of antiprisms in R^4 . *Math. Proc. Cambridge Philos. Soc.* **79** (1976), no. 3, 459-461. (P. McMullen) **53** #3853 50B30
- Smith, B.** (with Brown, K.; Minkoff, M.; Hillstrom, K.; Nazareth, Larry; Pool, J.) Progress in the development of a modularized package of algorithms for optimization problems. *Optimization in action (Proc. Conf., Univ. Bristol, Bristol, 1975)*, pp. 185-211. Academic Press, London, 1976. (Vincențiu Dumitru) **55** #7369 90Cxx (90-04, 65K05)
- Smith, B. J.** (with Bryant, J. L.; Lacher, R. C.) Free spheres with mapping cylinder neighborhoods. *Geometric topology (Proc. Conf., Park City, Utah, 1974)*, pp. 58-65. *Lecture Notes in Math.*, Vol. 438, Springer, Berlin, 1975. (John Hempel) **52** #11927 57A40

- (with Lewis, T. G.; Smith, M. Z.) Fibonacci sequences and memory management. *Fibonacci Quart.* 14 (1976), no. 1, 37-41. (Herbert J. Bernstein) 53 #9716 68A20 (10A35, 68A50)
- Smith, B. T.** (with Boyle, J. M.; Dongarra, J. J.; Garbow, B. S.; Ikebe, Yasuhiko; Klema, V. C.; Moler, Cleve B.) ★Matrix eigensystem routines—EISPACK guide. Second edition. Lecture Notes in Computer Science, Vol. 6. Springer-Verlag, Berlin-New York, 1976. ix + 551 pp. ISBN 3-540-07546-1 (Editors) 58 #13662a 65F15 (65-04)
- (with Wos, L. T.) An unnatural attack on the structure problem for the free Jordan ring on 3 letters: an application of quad arithmetic. *Computers in nonassociative rings and algebras (Special session, 82nd Annual Meeting Amer. Math. Soc., San Antonio, Tex., 1976)*, pp. 41-138. Academic Press, New York, 1977. (Armin Thedy) 56 #15711 17-04
- Smith, Barry** The ontogenesis of mathematical objects. Collection of articles dedicated to the memory of Roman Ingarden. *JBS-P—J. British Soc. Phenomenology* 6 (1975), no. 2, 91-101. (Paul Ernest) 56 #5204 02A05 (00A25)
- Smith, Brent P.** Helson sets not containing the identity are uniform Fatou-Zygmund sets. *Indiana Univ. Math. J.* 27 (1978), no. 2, 331-347. (Colin C. Graham) 56 #16260 43A25 (43A46)
- Smith, Brian J.** Products of decompositions of E^n . *Trans. Amer. Math. Soc.* 184 (1973), 31-41 (1974). (K. W. Kwun) 48 #7288 57A15
- Smith, Brian L.** Rapidly rotating polytropes as a net of singular perturbation problems. *Astrophys. and Space Sci.* 35 (1975), no. 2, 223-240. (D. ter Haar) 52 #4935 85.35
- On the structure of uniformly rotating polytropes. *Indian J. Pure Appl. Math.* 6 (1975), no. 8, 918-930. (Attay Kovetz) 57 #2455 85.65
- Smith, Brian T.** Filtration techniques in the study of Lie algebras. *Bull. Amer. Math. Soc.* 79 (1973), 393-399. (Robert E. Beck) 48 #358 17B65
- See also **Software for numerical mathematics**, 50 #6095
- Smith, Bruce D.** An alternate characterization of continuity. *Proc. Amer. Math. Soc.* 39 (1973), 318-320. (S. A. Naimpally) 47 #4202 54C05 (26A15)
- A standard Jordan polynomial. *Comm. Algebra* 5 (1977), no. 2, 207-218. (Michel L. Racine) 55 #3020 17C05
- Smith, C. L.** (with Bosarge, W. E., Jr.) Some numerical results for iterative continuation in nonlinear boundary-value problems. *IBM J. Res. Develop.* 15 (1971), 323-327. (K. Frankowski) 47 #1303 65N10
- (with Bosarge, W. E., Jr.) Numerical properties of a multivariate Ritz-Treffitz method. Mathematics of numerical computation. *IBM J. Res. Develop.* 16 (1972), 393-400. (Hansgeorg Jeggel) 49 #1798 65N30
- (with Bosarge, W. E., Jr.; Johnson, Olin) A direct method approximation to the linear parabolic regulator problem over multivariate spline bases. *SIAM J. Numer. Anal.* 10 (1973), 35-49. (D. H. Chyung) 47 #5694 49D05 (65K05)
- Smith, C. R.** (with Hare, William R.) On convex subsets of a polytope. *Proc. Amer. Math. Soc.* 35 (1972), 238-239. (A. Florian) 46 #789 52A25
- Smith, C. S.** Multiplicative pseudo-random number generators with prime modulus. *J. Assoc. Comput. Mach.* 18 (1971), 586-593. (T. E. Hull) 45 #4588 65C10
- A note on boundary-crossing probabilities for the Brownian motion. *J. Appl. Probability* 9 (1972), 857-861. (Author's summary) 54 #6300 60J65 (65R05)
- Smith, C. V., Jr.** (with Smith, Donald R.) When is Hamilton's principle an extremum principle? *AIAA J.* 12 (1974), no. 11, 1573-1576. (Manfred Andrie) 52 #12459 (E 52 #12460) (E 52 #12461) 70.49
- (with Smith, Donald R.) Reply by authors to S. F. Felszeghy (*AIAA J.* 13 (1975), no. 11, 1540) and C. D. Bailey (*AIAA J.* 13 (1975), no. 11, 1539-1540). *AIAA J.* 13 (1975), no. 11, 1540-1541. (Manfred Andrie) 52 #12462 70.49
- See also **Bailey, Cecil D.**, 52 #12460 and **Felszeghy, Stephen F.**, 52 #12461
- Smith, Carl H.** (with van Leeuwen, Jan) Microprogrammed random access stored program machines. *ACM SIGACT News* 6 (1974), no. 3, 23-32. (K. H. V. Booth) 58 #13878 68A05
- (with van Leeuwen, Jan) An improved bound for detecting looping configurations in deterministic DPA's. *Information Processing Lett.* 3 (1974), 22-24. (Forbes D. Lewis) 50 #6218 68A30
- Smith, Carol M.** An almost fixed point theorem for reffluent multifunctions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Astronom. Phys.* 23 (1975), no. 3, 277-280. (L. E. Ward, Jr.) 51 #11471 54H25 (54F20)
- (with Gray, William J.) Common fixed points of commuting mappings. *Proc. Amer. Math. Soc.* 53 (1975), no. 1, 223-226. (L. E. Ward, Jr.) 51 #14012 54H25
- Smith, Cedric A. B.** Electric currents in regular matroids. *Combinatorics (Proc. Conf. Combinatorial Math., Math. Inst., Oxford, 1972)*, pp. 262-284. *Inst. Math. Appl., Southend-on-Sea*, 1972. (W.-K. Chen) 49 #7030 94A20 (05B35)
- Measures of homozygosity and inbreeding in populations. *Ann. Human Genetics* 37 (1973/74), 377-391; erratum, *ibid.* 38 (1974/75), 382. (R. G. Stanton) 52 #2640 92A10
- (with Vetta, Atam) Comments on Fisher's theory of assortative mating. *Ann. Human Genetics* 38 (1974/75), 243-248. (P. W. A. Dayananda) 52 #16720 92A10
- A non-parametric test for linkage with a quantitative character. *Ann. Human Genetics* 38 (1974/75), no. 4, 451-460. (R. G. Stanton) 52 #16713 (E 53 #2419) 92A10
- Patroids. *J. Combinatorial Theory Ser. B* 16 (1974), 64-76. (Ann Miller) 48 #8277 05B35
- Looking-glass numbers. *J. Recreational Math.* 7 (1974), no. 4, 299-305. (H. J. Kanold) 57 #214 10-01
- Iteration near a fixed point. *Perspectives in probability and statistics (papers in honour of M. S. Bartlett on the occasion of his 65th birthday)*, pp. 157-173. *Applied Probability Trust, Univ. Sheffield, Sheffield*, 1975. (I. N. Baker) 53 #8398 30A20 (92A15)
- Note on: "Quantitative linkage: a statistical procedure for its detection and estimation" (Ann. Human Genetics 38 (1974/75), no. 4, 439-449) by Annlia P. Hill, and on "A non-parametric test for linkage with a quantitative character" (*ibid.* 38 (1974/75), no. 4, 451-460) by the author. *Ann. Human Genetics* 39 (1975/76), no. 3, 381. (R. G. Stanton) 53 #2419 92A10
- Prime factors and recurring duodecimals. *Math. Gaz.* 59 (1975), no. 408, 106-109. (Editors) 57 #5884 10A25
- The use of matrices in calculating Mendelian probabilities. *Ann. Human Genetics* (1976/77), no. 1, 37-54. (George F. Estabrook) 54 #6989 92A10
- A note on genetic distance. *Ann. Human Genetics* 40 (1976/77), no. 4, 463-479. (Levin) 57 #5181 92A10
- The analogy between decision and inference. Foundations of probability and statistics. I. *Synthese* 36 (1977), no. 1, 71-85. (D. V. Lindley) 58 #31487 62A10
- On Tutte's dichromate polynomial. Advances in graph theory (Cambridge Combinatorial Conf., Trinity Coll., Cambridge, 1977). *Ann. Discrete Math.* 3 (1977), 247-257. (W. T. Tutte) 58 #341 05C15
- See also **Atkinson, A. C.; et al.**, 50 #15192; **Discussion: Papers by Professor Tversky and by Professor Suppes**, 52 #6803 and **Lindley, Dennis V.; et al.**, 54 #31487
- Smith, Charles E.** (with Tuckwell, Henry C.) Some stochastic growth processes. *Mathematical problems in biology (Conf., Univ. Victoria, Victoria, B.C., 1973)*, 211-225. *Lecture Notes in Biomath., Vol. 2, Springer, Berlin*, 1974. (L. M. Ricciardi) 51 #5066 92A15
- See also **Ricciardi, Luigi M.**, 58 #26143
- Smith, Charles H.** (with Goldberg, Seymour) Strongly continuous semigroups of semi-Fredholm operators. *J. Math. Anal. Appl.* 64 (1978), no. 2, 407-420. (K. Gustafson) 57 #17380 47D05 (47B30)
- Smith, Charles Ray** Operator techniques in three dimensions. *Amer. J. Phys.* 44 (1976), 10, 989-993. (Author's summary) 56 #14335 81.47
- Smith, Christopher H. Llewellyn** See **Weak and electromagnetic interactions at high energy**, 58 #25452a
- Smith, Claudia** (with Hoggatt, Verner E., Jr.) Primitive periods of generalized Fibonacci sequences. *Fibonacci Quart.* 14 (1976), no. 4, 343-347. (L. Carlitz) 54 #12623 10A35
- Smith, Crosbie** "Mechanical philosophy" and the emergence of physics in Britain: 1800-1850. *Ann. of Sci.* 33 (1976), no. 1, 3-29. (Richard Vahrenkamp) 56 #5101A55
- Natural philosophy and thermodynamics: William Thomson and "The dynamical theory of heat". *British J. Hist. Sci.* 9 (1976) no. 33, part 3, 293-319. (Richard Vahrenkamp) 56 #56 01A55
- Smith, Cyril** (with Appa, Gautam) On L_1 and Chebyshev estimation. *Math. Programming* 5 (1973), 73-87. (L. W. Johnson) 48 #7957 90C05 (65F20)
- Smith, Cyril Stanley** A seventeenth-century octonary arithmetic. *Isis* 66 (1975), no. 2, 390-394. (R. H. Atkin) 58 #10067 01A45
- See also **Loeb, Arthur L.**, 56 #9447
- Smith, D. B.** Universal homogeneous algebras. *Algebra Universalis* 1 (1971/72), 254-261. (M. Gould) 45 #3298 08A25
- Smith, D. G.** Lower bound on the size of a 3-stage wide-sense nonblocking network. *Electron. Lett.* 13 (1977), no. 7, 215-216. (N. A. Karpova) 57 #19144 94A20
- Smith, D. H.** Primitive and imprimitive graphs. *Quart. J. Math. Oxford Ser. (2)* 22 (1971), 551-557. (Ju. Pottosin (RŽMat 1972 #5 V281)) 48 #5926 05C99
- On tetraivalent graphs. *J. London Math. Soc. (2)* 6 (1973), 659-662. (F. Harary) 52 #202a 05C99
- Distance-transitive graphs. *Combinatorics (Proc. British Combinatorial Conf., Univ. Coll. Wales, Aberystwyth, 1973)*, pp. 145-153. *London Math. Soc. Lecture Note Ser.*, 13, Cambridge Univ. Press, London, 1974. (Norman Biggs) 50 #4405 05C99
- Hamiltonian circuits on the \mathbb{R} -cube. *Canad. Math. Bull.* 17 (1974/75), no. 759-761. (F. Harary) 52 #10499 05C35
- On bipartite tetraivalent graphs. *Discrete Math.* 10 (1974), 167-172. (Norman Biggs) 50 #4406 05C99
- Bounding the diameter of a distance-transitive graph. *J. Combinatorial Theory Ser. B* 16 (1974), 139-144. (R. L. Hemminger) 49 #4872 05C99
- Distance-transitive graphs of valency four. *J. London Math. Soc. (2)* 8 (1974), 377-384. (F. Harary) 52 #202b 05C99
- (with Hammond, Peter) Perfect codes in the graphs O_k . *J. Combinatorial Theory Ser. B* 19 (1975), no. 3, 239-255. (Norman Biggs) 54 #2539 05C99 (94A10)
- (with Hammond, Peter) An analogue of Lloyd's theorem for completely regular codes. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, 1975)*, 261-267. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, 1976. (Norman Biggs) 52 #13504 05C99 (94A10)
- An improved version of Lloyd's theorem. *Discrete Math.* 15 (1976), no. 2, 175-181. (Norman Biggs) 53 #13046 05C99 (94A10)
- Smith, David A.** Bivariate function algebras on posets. *J. Reine Angew. Math.* 251 (1975), 100-109. (Author's review (Zbl 224 #06002)) 58 #27670 06A10 (06A75)
- (with Rota, Gian-Carlo) Fluctuation theory and Baxter algebras. *Symposia Mathematica*, Vol. IX (Convegno di Calcolo delle Probabilità, INDAM, Rome, 1971), 179-201. Academic Press, London, 1972. (J. B. Miller) 49 #7838 47B99
- Generalized arithmetic function algebras. *The theory of arithmetic functions (P. Conf., Western Michigan Univ., Kalamazoo, Mich., 1971)*, pp. 205-245. *Lecture Notes in Math.*, Vol. 251, Springer, Berlin, 1972. (D. Reaick) 49 #2509 10A20
- Numerical differentiation for calculus students. *Amer. Math. Monthly* 82 (1975), 284-287. (C. Brumfiel) 51 #11936 65D25
- (with Rota, Gian-Carlo) Enumeration under group action. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* 4 (1977), no. 4, 637-646. (Louis Comtet) 58 #16326 05A15
- Further comments on: "On the evaluation of $\sum_{n=0}^{\infty} n^k x^n$ with applications to transforms" (IEEE Trans. Automatic Control AC-17 (1972), no. 6, 835-836) by H. Abed. *IEEE Trans. Automatic Control AC-22* (1977), no. 6, 993. (Editors) 57 #793 65B10
- (with Guipre, Pamela S.) Modifications to the Forsythe-Moler algorithm for solving linear algebraic systems. *Comput. J.* 21 (1978), no. 2, 174-177. (Authors' summary) 58 #13653 65F05 (15-04)
- A descriptive model for perception of optical illusions. *J. Mathematical Psychology* 17 (1978), no. 1, 64-85. (A. H. Copeland, Jr.) 58 #4470 92A25
- Smith, David J.** Euclidean subdomains of algebraic function fields. *J. London Math. Soc. (2)* 6 (1972), 103-108. (W.-D. Geyer) 47 #189 12A90
- Integral closure of some coordinate rings. *J. Austral. Math. Soc.* 20 (1975), part 1, 115-123. (Henry C. Pinkham) 51 #12866 14H20
- Smith, David P.** An Euler contribution to stable theory from Süssmilch's *Göttliche*

Ordnung. Theoret. Population Biology **12** (1977), no. 2, 246-251. (From the summary) **58** #4456 92A15 (01A50)

See also **Mathematical demography**, **58** #33163

th, Donald R. (with Lee, Jun Ji) Families of shift-register sequences with impulsive correlation properties. *IEEE Trans. Information Theory* **IT-20** (1974), 255-261. (G. M. Tenengol'c) **51** #2765 94A10

th, David W. A simplified approach to the maximum likelihood estimation of the covariance matrix. *Amer. Statist.* **32** (1978), no. 1, 28-29. (Mir Ali) **57** #17927 62F10

th, Dolores S. See **Proceedings: Session of the International Statistical Institute**, **49** #8145

th, Donald R. ★Variational methods in optimization. *Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1974. xv+378 pp. (L. Cesari) **49** #11341 49-01

(with Smith, C. V., Jr.) When is Hamilton's principle an extremum principle? *AIAA J.* **12** (1974), no. 11, 1573-1576. (Manfred Andrie) **52** #12459 (E 52 #12460) (E 52 #12461) 70.49

(with Smith, C. V., Jr.) Reply by authors to S. F. Felszeghy (*AIAA J.* **13** (1975), no. 11, 1540) and C. D. Bailey (*AIAA J.* **13** (1975), no. 11, 1539-1540). *AIAA J.* **13** (1975), no. 11, 1540-1541. (Manfred Andrie) **52** #12462 70.49

A nonlinear boundary value problem on an unbounded interval. *SIAM J. Math. Anal.* **6** (1975), 601-615. (Piero Bassanini) **51** #10780 34E15 (35Q99, 76.35)

The multivariable method in singular perturbation analysis. *SIAM Rev.* **17** (1975), 221-273. (R. E. O'Malley, Jr.) **50** #13776 34E15

(with Weinstein, Mills B.) Comparison techniques for overdamped systems. *SIAM Rev.* **17** (1975), 520-540. (F. Hoppensteadt) **51** #6072 34E15

(with Weinstein, Mills B.) Sturm transformations and linear hyperbolic differential equations in two variables. *J. Math. Anal. Appl.* **56** (1976), no. 3, 548-566. (P. Günther) **55** #6024 35L10

(with Weinstein, Mills B.) Comparison techniques for certain overdamped

hyperbolic partial differential equations. Summer Research Conference on Singular Perturbations: Theory and Applications (Northern Arizona Univ., Flagstaff, Ariz., 1975). *Rocky Mountain J. Math.* **6** (1976), no. 4, 731-742. (From the introduction) **57** #16926 35B25 (35L10)

Optimal repair of a series system. *Oper. Res.* **26** (1978), no. 4, 653-662. (C. Mohan) **58** #25924 90B25 (60K25)

A new proof of the optimality of the shortest remaining processing time discipline. *Operations Res.* **26** (1978), no. 1, 197-199. (R. Subramanian) **57** #10851 60K25 (90B99)

See also **Bailey, Cecil D.**, **52** #12460 and **Felszeghy, Stephen F.**, **52** #12461

th, Dorothy P. Meet-irreducible elements in implicative lattices. *Proc. Amer. Math. Soc.* **34** (1972), 57-62. (G. S. Monk) **45** #129 06A35

th, Douglas B., Jr. (with Luh, Jiang) On semigroups of endomorphisms of generalized Boolean rings. *J. Austral. Math. Soc.* **18** (1974), 411-418. (D. R. LaTorre) **51** #3341 20M20

(with Chaffer, Robert A.; Eggen, Maurice; Saint Andre, Richard) Strong finite embeddability for classes of quasigroups. *Algebra Universalis* **5** (1975), no. 2, 257-262. (Charles C. Lindner) **52** #10939 20N05

th, Douglas D. Non-recursiveness of the set of finite sets of equations whose theories are one-based. *Notre Dame J. Formal Logic* **13** (1972), 135-138. (J. M. Plotkin) **45** #8525 02F25

th, E. R. (with Penrose, O.) Thermodynamic limit for classical systems with Coulomb interactions in a constant external field. *Comm. Math. Phys.* **26** (1972), 53-77. (S. Ueno) **46** #3002 80.31

(with Penrose, O.) An upper bound on the free energy for classical systems with Coulomb interactions in a varying external field. *Comm. Math. Phys.* **40** (1975), 197-213. (T. Neubrunn) **51** #4910 82.28

(with Perram, J. W.) Thermodynamic limit for a system with dipole-dipole interactions. *J. Austral. Math. Soc. Ser. B* **19** (1975), no. 1, 116-128. (F. C. Auluck) **55** #11891 82.62

(with Hoskins, C. S.; Glasser, M. Lawrence) Half-space electrostatic lattice sums. *J. Phys. A* **10** (1977), no. 6, 879-884. (Mineo Ikeda) **56** #14182 78.65

th, Ed R. (with Henry, J. W.) Noniterative integral-equation approach to scattering problems. *Phys. Rev. A* (3) **7** (1973), 1585-1590. (Authors' summary) **50** #15691 81.45

A numerical approach to the solution of coupled equations involved in electron-ion and electron-atom scattering problems. *J. Comput. Phys.* **18** (1975), 201-223. (Yu. S. Sayasov) **51** #12224 81.65

th, Eric P. The Garabedian function of an arbitrary compact set. *Pacific J. Math.* **51** (1974), 289-300. (J. Garnett) **50** #10238 30A40

th, F. A. Projectivity of prime quotients and simple lattices. *J. Algebra* **31** (1974), 257-261. (K. A. Baker) **50** #6944 06A20

(with Shapiro, Harvey L.) A note on extending locally finite collections. *Canad. Math. Bull.* **19** (1976), no. 1, 117-119. (L. I. Sennott) **54** #8564 54D15

(with Shapiro, Harvey L.) Even covers and collectionwise normal spaces. *Canad. J. Math.* **30** (1978), no. 3, 466-473. (James C. Smith) **57** #7524 54D15

(with Shapiro, Harvey L.) Neighborhoods of the diagonal and strong normality properties. *Proc. Amer. Math. Soc.* **71** (1978), no. 2, 329-333. (Richard A. Alò) **57** #17589 54D15

th, F. T. Three dimensional stagnation point flow into a corner. *Proc. Roy. Soc. London Ser. A* **344** (1975), no. 1639, 489-507. (J. P. Guiraud) **52** #2387 76.35

Steady motion through a branching tube. *Proc. Roy. Soc. London Ser. A* **355** (1977), no. 1681, 167-187. (Author's summary) **56** #10355 76.34

(with Duck, P. W.) Separation of jets or thermal boundary layers from a wall. *Quart. J. Mech. Appl. Math.* **30** (1977), no. 2, 143-156. (Authors' summary) **56** #10395 76.41

Flow through symmetrically constricted tubes. *J. Inst. Math. Appl.* **21** (1978), no. 2, 145-156. (W. F. Ames) **58** #3941 76.35

th, Francis J. (with Boggs, R. A. C.) A note on the integration of ordinary differential equations using Chebyshev series. *Comput. J.* **14** (1971), 270-271. (G. D. Byrne) **46** #2880 65L99

Smith, Fredrick L. Finite groups whose Sylow 2-subgroups are the direct product of a dihedral and a semi-dihedral group. *Illinois J. Math.* **17** (1973), 352-386. (W. Feit) **47** #8682a 20D20

Groups whose Sylow subgroups are the direct product of two semi-dihedral groups.

Illinois J. Math. **17** (1973), 387-396. (W. Feit) **47** #8682b 20D20

A general characterization of the Janko simple group J_2 . *Arch. Math. (Basel)* **25** (1974), 17-22. (Mark P. Hale, Jr.) **50** #10053 20D05

A characterization of the 2 Conway simple group. *J. Algebra* **31** (1974), 91-116. (W. J. Wong) **50** #2325 20D05

Finite simple groups all of whose 2-local subgroups are solvable. *J. Algebra* **34** (1975), 481-520. (David R. Mason) **51** #13022 20D05

On the centralizers on involution in finite fusion-simple groups. *J. Algebra* **38** (1976), no. 2, 268-273. (Koichiro Harada) **53** #599 20D05

On groups with an involution z such that the generalized Fitting subgroup E of $C(z)$ is extra-special and $C(z)/E \cong (\text{Out}(E))'$. *Comm. Algebra* **5** (1977), no. 3, 267-277. (David C. Hunt) **55** #10563 20D25

On a result of M. Aschbacher. *Comm. Algebra* **5** (1977), no. 3, 279-288. (Koichiro Harada) **55** #3064 20D05

On finite groups with large extra-special 2-subgroups. *J. Algebra* **44** (1977), no. 2, 477-487. (Gernot Stroth) **55** #480 20D05

Smith, Furman H. (with Kimeldorf, George S.) Discrete sequential search for one of many objects. *Ann. Statist.* **3** (1975), no. 4, 906-915. (Olavi Hellman) **51** #14938 90B40 (62L99)

Smith, G. D. ★Numerical solution of partial differential equations. Second reprinting of 1965 edition. Oxford Mathematical Handbooks. *Oxford University Press, London-New York-Toronto, Ont.*, 1975. viii+179 pp. (Editors) **52** #12288 65-02

(with Papamichael, N.) The determination of consistent orderings for the SOR iterative method. *J. Inst. Math. Appl.* **15** (1975), 239-248. (Authors' summary) **51** #7272 65F30

Smith, G. E. J. (with Sen, A. R.; Tourigny, J.) On the line transect sampling method. (French summary) *Biometrics* **30** (1974), 329-340. (M. Atiqullah) **50** #1460 62P99

(with Sen, A. R.; Sellers, S.) The use of a ratio estimate in successive sampling. (French summary) *Biometrics* **31** (1975), no. 3, 673-683. (Kenneth R. W. Brewer) **52** #12149 (E 57 #7837) 62D05

(with Sen, A. R.; Sellers, S.) Corrections to: "The use of a ratio estimate in successive sampling" (*Biometrics* **31** (1975), no. 3, 673-683). *Biometrics* **33** (1977), no. 4, 767. (Editors) **57** #7837 62D05 (62F10)

Smith, G. F. On a fundamental error in two papers of C.-C. Wang "On representations for isotropic functions. I, II" (*Arch. Rational Mech. Anal.* **33** (1969), 249-267; *ibid.* **33** (1969), 268-287). *Arch. Rational Mech. Anal.* **36** (1970), 161-165. (R. C. King) **49** #5057 15A72 (73.53)

On isotropic functions of symmetric tensors, skew-symmetric tensors and vectors. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **9** (1971), 899-916. (S. Golaş) **46** #3540 15A72

On the inner product of property tensors and physical tensors. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. I. *Tensor (N.S.)* **24** (1972), 374-382. (A. J. M. Spencer) **49** #4393 73.53

(with Huang, Chi Lung) A canonical form for symmetric functions of three vectors. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **11** (1973), no. 4, 405-408. (J. P. Boehler) **57** #8235 69.00 (15A72)

On symmetric-tensor-valued isotropic functions of two symmetric tensors. *Quart. Appl. Math.* **31** (1973), 373-376. (H. A. Eliopoulos) **56** #3754 53A45

Projection operators for symmetric regions. *Arch. Rational Mech. Anal.* **54** (1974), 161-174. (Mark Benard) **49** #9066 20C15 (47F05)

(with Kiral, Erhan) On the constitutive relations for anisotropic materials—triclinic, monoclinic, rhombic, tetragonal and hexagonal crystal systems. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **12** (1974), 471-490. (J. P. Boehler) **57** #2070 73.53

On some invariant-theoretic problems of continuum mechanics. *Trends in applications of pure mathematics to mechanics (Conf., Univ. Lecce, Lecce, 1975)*, pp. 365-383. *Monographs and Studies in Math.*, Vol. 2, Pitman, London, 1976. (A. J. M. Spencer) **58** #3837 73.15

See also **Wang, Chao Chen**, **49** #5058 and **Wang, Chao Chen**, **49** #5059

vincent-Smith, G. F. See **Vincent-Smith, G. F.**

Smith, George B. Matrix element expansion of a spin wavefunction. *J. Mathematical Phys.* **19** (1978), no. 3, 581-585. (Author's summary) **57** #11416 81.22

Smith, George W., Jr. (with Walford, Robert B.) The identification of a minimal feedback vertex set of a directed graph. *IEEE Trans. Circuits and Systems* **CAS-22** (1975), 9-15. (W.-K. Chen) **53** #15581 94A20 (68A10)

Smith, Gerald F. (with Rivlin, Ronald S.) On identities for 3×3 matrices. (Italian summary) Collection of articles dedicated to Mauro Picone on the occasion of his ninetieth birthday, II. *Rend. Mat.* (6) **8** (1975), no. 2, 345-353. (Claudio Procesi) **52** #8157 15A24

Smith, Graham Further necessary conditions for the existence of a solution to the multi-index problem. Mathematical programming and its applications. *Operations Res.* **21** (1973), 380-386. (M. Vlach) **51** #9792 90C05

A procedure for determining necessary and sufficient conditions for the existence of a solution to the multi-index problem. (Czech summary) *Apl. Mat.* **19** (1974), 177-183. (V. Ionescu) **50** #1713 90C05

On the Morávek and Vlach conditions for the existence of a solution to the multi-index problem. *Apl. Mat.* **20** (1975), no. 6, 432-435. (M. Vlach) **56** #4817 90C05

On maintenance of the opportunity list for class-teacher timetable problems. *Comm. ACM* **18** (1975), 203-208. (I. Gh. Ciobanu) **51** #12314 90B35

Smith, Granville J., II (with Klink, William H.) Symmetries imposed on two-particle systems. III. Energy dependence of partial-wave amplitudes. *Phys. Rev. D* (3) **2** (1970), 2912-2926. (Anthony Joseph) **47** #9969 81.22

Smith, H. Fairfield See **Proceedings: Session of the International Statistical Institute**, **49** #8145

Smith, H. V. Close-overconvergence of a Dirichlet series. *Simon Stevin* **49** (1975/76), no.

- 4, 199-207. (M. E. Noble) **53** #13531 30A16
Error estimates for a class of quadrature formulae. *Nordisk Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 4, 394-399. (Author's summary) **58** #8174 65D30
Bi-univalent polynomials. *Simon Stevin* **50** (1976/77), no. 2, 115-122. (W. C. Royster) **54** #13065 30A34
Error estimates for Gauss-Legendre quadrature of integrands possessing Dirichlet series expansions. *Nordisk Tidskr. Informationsbehandling (BIT)* **17** (1977), no. 1, 108-112. (J. Kofroň) **56** #1680 65D30
A method for the integration of oscillatory functions. *Nordisk Tidskr. Informationsbehandling (BIT)* **17** (1977), no. 3, 338-343. (J. G. Herriot) **57** #4488 65D30
- Smith, H. W.** (with Davison, Edward J.) Pole assignment in linear time-invariant multivariable systems with constant disturbances. (French, German and Russian summaries) *Automatica—J. IFAC* **7** (1971), 489-498. (Authors' summary) **50** #4055 93D15
- Smith, Hal Leslie** Bounded oscillation in a class of functional differential equations. *J. Math. Anal. Appl.* **56** (1976), no. 1, 223-232. (A. F. Izé) **54** #5590 34K15
(with Gatica, Juan A.) Fixed point techniques in a cone with applications. *J. Math. Anal. Appl.* **61** (1977), no. 1, 58-71. (Authors' summary) **58** #23797 47H10
On periodic solutions of a delay integral equation modelling epidemics. *J. Math. Biol.* **4** (1977), no. 1, 69-80. (J. M. Cushing) **58** #20622 92A15 (45M99)
Periodic solutions for a class of epidemic equations. *J. Math. Anal. Appl.* **64** (1978), no. 2, 467-479. (H. W. Hethcote) **58** #9422 92A15
- Smith, Harry F.** Prime generalized alternative rings *I* with nontrivial idempotent. *Proc. Amer. Math. Soc.* **39** (1973), 242-246. (D. Rodabaugh) **47** #1903 17D05
The Wedderburn principal theorem for a generalization of alternative algebras. *Trans. Amer. Math. Soc.* **198** (1974), 139-154. (D. Rodabaugh) **50** #4674 17A30
(with Kleinfeld, Erwin) Locally $(-1, 1)$ rings. *Comm. Algebra* **3** (1975), 219-237. (I. P. Šestakov) **51** #8187 17A30
The Wedderburn principal theorem for generalized alternative algebras. I. *Trans. Amer. Math. Soc.* **212** (1975), 139-148. (D. Rodabaugh) **51** #12971 17D05
A Wedderburn decomposition for certain generalized right alternative algebras. *Proc. Amer. Math. Soc.* **58** (1976), 1-7. (D. Rodabaugh) **54** #7561 17A30
- Smith, Harvey A.** (with Busby, Robert C.; Schochetman, Irwin E.) Integral operators and the compactness of induced representations. *Trans. Amer. Math. Soc.* **164** (1972), 461-477. (A. B. Wilcox) **45** #4167 46J99 (47G05)
Commutative twisted group algebras. *Trans. Amer. Math. Soc.* **197** (1974), 315-326. (R. C. Busby) **51** #792 22D15 (46J20)
Characteristic principal bundles. *Trans. Amer. Math. Soc.* **211** (1975), 365-375. (J. M. G. Fell) **51** #13128 22D25 (55F10)
(with Kupperman, Robert H.) The role of population defense in mutual deterrence. *SIAM Rev.* **19** (1977), no. 2, 297-318. (G. S. Davies) **55** #7367 90B99 (92A15, 92A25)
Central twisted group algebras. *Trans. Amer. Math. Soc.* **238** (1978), 309-320. (Maurice J. Dupré) **58** #7093 46H99 (22D20, 46L99)
See also *Algebras in analysis*, **52** #14888
- Smith, Haywood, Jr.** See *Proceedings: Conference on the Numerical Solution of Ordinary Differential Equations*, 49 #4257
- maynard Smith, J.** See *Maynard Smith, J.*
- Smith, J. Denmead** Harmonic analysis of scalar and vector fields in \mathbb{R}^n . *Proc. Cambridge Philos. Soc.* **72** (1972), 403-416. (Henri Joris) **46** #7789 42A60 (30A02, 42A92)
Probability and the elementary symmetric functions. *Proc. Cambridge Philos. Soc.* **74** (1973), 133-139. (L. Carlitz) **47** #4302 60C05 (05A10)
Factorizability of resonance poles in multiparticle amplitudes. *J. Mathematical Phys.* **15** (1974), 1859-1865. (A. C. Manoharan) **50** #12040 81J30
Quantum mechanics of the rigid rotator. (Italian and Russian summaries) *Nuovo Cimento B* (11) **22** (1974), 337-345. (A. O. Barut) **52** #12580 81J22
Determination of polynomials and entire functions. *Amer. Math. Monthly* **82** (1975), no. 8, 822-825. (Y. Komatu) **52** #5966 30A66 (30A08)
The general Cayley-Hamilton theorem via the easiest real case. *Math. Mag.* **48** (1975), no. 4, 232-233. (M. Shafqat Ali) **52** #10769 15A24
- byatt-Smith, J. G. B.** See *Byatt-Smith, J. G. B.*
- Smith, J. R.** See *Computers in number theory*, 47 #3285
- Smith, J. R.** (with Cheatham, Thomas J.) Regular and semisimple modules. *Pacific J. Math.* **65** (1976), no. 2, 315-323. (C. Niță) **54** #10338 16A64
- Smith, J. Wolfgang** Submersions with p -connected fibers. *Math. Z.* **121** (1971), 288-294. (R. J. Milgram) **46** #6374 57D35 (55F05)
- Smith, Jack H.** Symmetry and multiple eigenvalues of graphs. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **12**(32) (1977), no. 1, 3-8. (M. Doob) **58** #21787 05C25
- Smith, Jack W.** (with Duda, Edwin) Reflexive open mappings. *Pacific J. Math.* **38** (1971), 597-611. (P. Ungar) **46** #6267 54C10
- Smith, James C., Jr.** Other characterizations and weak sum theorems for metric-dependent dimension functions. *Proc. Japan Acad.* **46** (1970), 364-369. (D. Adnadjević) **51** #1780 54F45
(with Nichols, John C.) Examples concerning sum properties for metric-dependent dimension functions. *Pacific J. Math.* **38** (1971), 151-159. (Richard A. Alò) **48** #1191 54F45
Properties of expandable spaces. *General topology and its relations to modern analysis and algebra, III* (Proc. Third Prague Topological Sympos., 1971), pp. 405-410. *Academia, Prague*, 1972. (George M. Reed) **50** #14660 54D20
(with Nichols, John C.) Embedding characterizations for expandable spaces. *Duke Math. J.* **39** (1972), 489-496. (Richard A. Alò) **46** #6277 54C25
A remark on embeddings and discretely expandable spaces. *Topics in topology* (Proc. Colloq., Keszthely, 1972), pp. 575-583. *Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam*, 1974. (Richard A. Alò) **51** #6724 54D20
- Some recent results on expandable spaces. *TOPO 72—general topology and its applications* (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot), pp. 455-467. *Lecture Notes in Math., Vol. 378, Springer, Berlin*, 1974. (J. E. Vaughan) **50** #11148 54D30 (54A25)
- Embedding characterizations for collectionwise normality and expandability. *Studies in topology* (Proc. Conf., Univ. North Carolina, Charlotte, N.C., 1974; dedicated to M. E. Noble) (Proc. Conf., Univ. North Carolina, Charlotte, N.C., 1974; dedicated to M. E. Noble) *Math. Sect. Polish Acad. Sci.*, pp. 553-558. *Academic Press, New York*, 1975. (Richard A. Alò) **51** #6725 54D15
Properties of weak $\bar{\theta}$ -refinable spaces. *Proc. Amer. Math. Soc.* **53** (1975), no. 511-517. (H. R. Bennett) **52** #1628 54D20
Characterizations of generalized paracompact spaces. *Colloq. Math.* **35** (1976), 1, 29-39, 177. (R. Hodel) **53** #14412 54D20
On Θ -expandable spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **11**(31) (1976), no. 2, 335-346. (D. J. Luizer) **55** #11215 54E25 (54D20)
A remark on irreducible spaces. *Proc. Amer. Math. Soc.* **57** (1976), no. 1, 133-134. (H. R. Bennett) **53** #9147 54D20
A note on precompactness. *Topology Proceedings, Vol. I* (Conf., Auburn Univ., Auburn, Ala., 1976), pp. 253-260. *Math. Dept., Auburn Univ., Auburn, Ala.*, 1977. (H. R. Bennett) **56** #13160 54D20
New characterizations for collectionwise normal spaces. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **12**(32) (1977), no. 2, 327-338. (R. Telgarsky) **58** #2717 54D20
- Smith, James E.** The design of totally self-checking check circuits for a class of unordered codes. *J. Design Automat. Fault-Tolerant Comput.* **1** (1976/77), no. 4, 321-342. (Krzysztof Sapiecha) **58** #4699 94A20
- Smith, James F.** The p -classes of an H^* -algebra. *Pacific J. Math.* **42** (1972), 777-793. (Saworotnow) **48** #879 46K15
The p -classes of a Hilbert module. *Proc. Amer. Math. Soc.* **36** (1972), 428-434. (M. Sinclair) **46** #9753 46K15
The structure of Hilbert modules. *J. London Math. Soc.* (2) **8** (1974), 741-749. (Saworotnow) **50** #10826 46K99 (46H25)
(with Quinn, Michael J.) Hamiltonian circuits: a hierarchy of examples. *Math. Mag.* **50** (1977), no. 1, 35-36. (Editors) **58** #27633 05C35
- Smith, James R.** The eigenvalues and eigenvectors of the rotation tensor. *Matrix Tensor Quart.* **22** (1971/72), 35-37. (A. S. Householder) **46** #5354 15A18
On a simple derivation of Stokes' law. *Matrix Tensor Quart.* **23** (1972/73), 64-67. (S. Goląb) **47** #4530 76J35
On direct proofs of Green's identities for the general linear second order operator. *Matrix Tensor Quart.* **23** (1972/73), 138-141. **47** #3614 26A66
A note on the linearized strain tensor. *Matrix Tensor Quart.* **25** (1974/75), 67-70. (S. Goląb) **51** #7448 73J35
A note on the Lyapunov functions. *Matrix Tensor Quart.* **25** (1974/75), 101-102. (T. A. Burton) **50** #13765 34D20
A note on the characteristics for second order partial differential equations. *Matrix Tensor Quart.* **25** (1974/75), 109-111. (E. Kreyszig) **51** #3655 35A30
A note on the Fredholm theory for the degenerate kernel. *Matrix Tensor Quart.* **25** (1974/75), no. 4, 143-145. (C. van Trigt) **52** #3899 45B05
A note on the Fokker-Planck-Kolmogorov equation. I. *Matrix Tensor Quart.* **25** (1974/75), no. 4, 150-151. (Ian Lerche) **54** #4486a 82G60
A note on the Fokker-Planck-Kolmogorov equation. II. *Matrix Tensor Quart.* **25** (1974/75), no. 2, 61-62. (Ian Lerche) **54** #4486b 82G60
Representation and analysis of E_3 -vector fields. *Utilitas Math.* **8** (1975), 55-85. (Power) **53** #3330 31B25 (58A10)
- Smith, James T.** Haar integrals on topological rings. *Amer. Math. Monthly* **79** (1972), 267-270. (Colin C. Graham) **46** #2011 28A70
Orthogonal geometries. I. *Geometriae Dedicata* **1** (1973), no. 2, 221-235. (I. Pieper) **47** #4114 50A10 (50A05)
Orthogonal geometries. II. *Geometriae Dedicata* **1** (1973), no. 3, 334-339. (I. Pieper) **51** #8940 50C25
Metric geometries of arbitrary dimension. *Geometriae Dedicata* **2** (1973), 349-359. (W. Szmielew) **49** #7897 50A25
Foundations of metric geometry of arbitrary dimension. *Grundlagen der Geometrie und algebraische Methoden* (Internat. Kolloq., Pädagog. Hochsch. "Karl Liebknecht", Potsdam, 1973), pp. 49-54. *Potsdam Forschungen, Reihe B, Heft 3, Pädagog. Hochschule "Karl Liebknecht", Potsdam*, 1974. (F. Bachmann) **54** #13712 50C25
Generalized metric geometries of arbitrary dimension. *Geometriae Dedicata* **1** (1973), 485-497. (W. R. Heise) **49** #9725 50A10
Group theoretic characterization of elliptic geometries of arbitrary dimension. *Math. Nachr.* **67** (1975), 265-272. (E. J. F. Primrose) **51** #11266 50C15
- Smith, John Howard** (with Fein, Burton; Gordon, Basil) On the representation of -1 as a sum of two squares in an algebraic number field. *J. Number Theory* **3** (1971), 310-315. (S. Chowla) **47** #8481 12A40 (10B35, 10C05)
(with Fried, Michael D.) Primitive groups, Moore graphs, and rational curves. *Michigan Math. J.* **19** (1972), 341-346. (H. W. Brinkmann) **47** #309 20B05 (05C25)
Aggregation of preferences with variable electorate. *Econometrica* **41** (1973), 1027-1041. (Author's summary) **55** #14090 90A05 (92A20)
A geometric treatment of nonnegative generalized inverses. *Linear and Multilinear Algebra* **2** (1974), 179-184. (A. Jaeger) **52** #8146 15A09 (47A99)
(with Hoffman, Alan J.) On the spectral radii of topologically equivalent graphs. *Recent advances in graph theory* (Proc. Second Czechoslovak Sympos., Prague, 1974), pp. 273-281. *Academia, Prague*, 1975. (A. J. Schwenk) **53** #7834 05C10
Representability by certain norm forms over algebraic number fields. *Acta Arithmetica* **27** (1975/76), no. 3, 223-227. (K. Szymiczek) **53** #5473 10B35 (10B15)
Rearrangements of conditionally convergent real series with preassigned cycle type. *Proc. Amer. Math. Soc.* **47** (1975), 167-170. (F. P. Cass) **50** #5258 40A05
Commutators of nilpotent matrices. *Linear and Multilinear Algebra* **4** (1976), no. 17-19. (D. J. Hartfiel) **53** #8095 15A24
General trinomials having symmetric Galois group. *Proc. Amer. Math. Soc.* **57** (1977), no. 2, 208-212. (James K. Deveney) **55** #10433 12E05
- Smith, John L.** Markov decisions on a partitioned state space. *IEEE Trans. Systems Man Cybernet. SMC-I* (1971), 55-60. (Author's summary) **53** #15383 90C40
Approximate stationary probability vectors of a finite Markov chain. *SIAM J. Appl. Math.* **29** (1971), 612-618. (A. K. Gayen) **45** #7825 60J10
- Smith, John M.** A theorem on matrix commutators. *J. Res. Nat. Bur. Standards Sec. 75B* (1971), 17-21. (B. Levinger) **46** #9078 15A57

- On the existence of certain matrices. *Portugal. Math.* **30** (1971), 93-95. (M. Pearl) 6 #7262 15A21
- The factorization of a matrix as the commutator of two matrices. *J. Res. Nat. Bur. Standards Sect. B* **78B** (1974), 109-112. (D. Ž. Đoković) **50** #4623 15A24
- h, Jon M.** ★Scientific analysis on the pocket calculator. Wiley-Interscience [John Wiley & Sons], New York-London-Sydney, 1975. xii+380 pp. (Editors) **50** #8904 65-XX
- ★Mathematical modeling and digital simulation for engineers and scientists. Wiley-Interscience [John Wiley & Sons], New York-London-Sydney, 1977. xii+332 pp. From the preface **58** #32150 68A55 (65-01, 93-01)
- h, Jonathan D. H.** ★Mal'cev varieties. Lecture Notes in Mathematics, Vol. 554. Springer-Verlag, Berlin-New York, 1976. viii+158 pp. (V. A. Artamonov) **55** #5499 EA 55/56) 08A15
- Centraliser rings of multiplication groups on quasigroups. *Math. Proc. Cambridge Philos. Soc.* **79** (1976), no. 3, 427-431. (D. A. Robinson) **53** #3178 20N05
- Finite distributive quasigroups. *Math. Proc. Cambridge Philos. Soc.* **80** (1976), no. 1, 37-41. (V. D. Belousov) **54** #7682 20N05
- On the nilpotence class of commutative Moufang loops. *Math. Proc. Cambridge Philos. Soc.* **84** (1978), no. 3, 387-404. (Orin Chein) **58** #16932 20N05
- A second grammar of associators. *Math. Proc. Cambridge Philos. Soc.* **84** (1978), no. 4, 405-415. (Jean-Pierre Soubliin) **58** #18933 20N05
- h, Julius** On the approximate solution of the first boundary value problem for $\nabla_u^4 = f$. *SIAM J. Numer. Anal.* **10** (1973), 967-982. (Jacob Steinberg) **49** #8405 65N99
- h, Justin R.** Homology surgery theory and perfect groups. *Topology* **16** (1977), no. 4, 461-463. (A. A. Ranicki) **56** #16654 57D65 (18F25)
- Complements of codimension-two submanifolds. The fundamental group. *Illinois J. Math.* **22** (1978), no. 2, 232-239. (H. Wada) **58** #18467 57A35 (57C45)
- Acyclic localizations. *J. Pure Appl. Algebra* **12** (1978), no. 2, 117-127. (Wolfgang Grözl) **58** #11075 18G25
- h, K. C.** (with Corinthios, Michael J. G.; Geadah, Youssef A.) Generalized spectral analysis algorithms and processors. *Applications and research in information systems and sciences* (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 1, pp. 257-261. Hemisphere, Washington, D.C., 1977. (Mark Karpovsky) **58** #9737 94-04 (68A10)
- h, K. J. C.** (with Bose, R. C.) Ternary rings of a class of linearly representable semi-translation planes. *Atti del Convegno di Geometria Combinatoria e sue Applicazioni Univ. Perugia, Perugia*, 1970, pp. 69-101. *Ist. Mat., Univ. Perugia*, 1971. (J. L. Zemmer) **50** #3106 50D35
- h, K. R.** (with Agnew, N. H.; Agnew, R. A.; Rasmussen, J.) An application of chance constrained programming to portfolio selection in a casualty insurance firm. *Management Sci.* **15** (1968/69), B512-B520. **45** #9690 90C50
- h, Keith P.** (with Kroll, Jeffrey R.) An eigenvalue problem for the Stieltjes mean sigma-integral related to Gronwall's inequality. *Proc. Amer. Math. Soc.* **33** (1972), 384-388. (S. J. Taylor) **45** #833 45C05
- h, Kennan T.** ★Primer of modern analysis. (Directions for knowing all dark things, Rhind papyrus, 1800 B. C.). *Bogden & Quigley, Inc., Publishers, Tarrytown-on-Hudson, N. Y.*, 1971. xv+412 pp. (Not reviewed) 26-01 (00A05)
- (with Guenther, Ronald B.; Kerber, C. W.; Killian, E. K.; Wagner, Sheldon L.) Reconstruction of objects from radiographs and the location of brain tumors. *Proc. Nat. Acad. Sci. U.S.A.* **71** (1974), 4884-4886. (Authors' summary) **50** #6547 92A05 (68A45)
- (with Solmon, Donald C.) Lower dimensional integrability of L^2 functions. *J. Math. Anal. Appl.* **51** (1975), no. 3, 539-549. (Richard Bagby) **51** #13668 46E30
- (with Wagner, Sheldon L.; Guenther, Ronald B.) Reconstruction from X-rays. *Optimal estimation in approximation theory* (Proc. Internat. Sympos., Freudenstadt, 1976), pp. 215-227. Plenum, New York, 1977. (F. W. Stallman) **56** #17901 92A05 (68A45)
- (with Solmon, Donald C.; Wagner, Sheldon L.) Practical and mathematical aspects of the problem of reconstructing objects from radiographs. *Bull. Amer. Math. Soc.* **83** (1977), no. 6, 1227-1270. (L. A. Shepp) **58** #9394a 92A05
- (with Solmon, Donald C.; Wagner, Sheldon L.) Addendum to: "Practical and mathematical aspects of the problem of reconstructing objects from radiographs" (Bull. Amer. Math. Soc. **83** (1977), no. 6, 1227-1270). *Bull. Amer. Math. Soc.* **84** (1978), no. 4, 591. (L. A. Shepp) **58** #9394b 92A05
- (with Solmon, Donald C.; Wagner, Sheldon L.; Hamaker, C.) Mathematical aspects of divergent beam radiography. *Proc. Nat. Acad. Sci. U.S.A.* **75** (1978), no. 5, 2055-2058. (James C. Bezdek) **58** #20581 92A05 (68A45)
- See also Kelley, John L.; et al., **52** #14890
- h, Kirby C.** Extending Jordan ideals and Jordan homomorphisms of symmetric elements in a ring with involution. *Canad. J. Math.* **24** (1972), 50-59. (W. S. Martindale, III) **45** #1972 16A28
- The centralizer of a matrix with real quaternion elements. *Linear Algebra and Appl.* **8** (1974), 331-335. (W. G. Leavitt) **49** #5039 15A33
- The centralizer of a semi-linear transformation. *Linear Algebra and Appl.* **14** (1976), no. 1, 21-27. (Author's summary) **58** #22162 16A42
- Algebraically closed noncommutative polynomial rings. *Comm. Algebra* **5** (1977), no. 4, 331-346. (J. F. Watters) **55** #5696 16A56 (16A72, 16A74)
- (with Maxson, Carlton J.) Endomorphisms of linear automata. *J. Comput. System Sci.* **17** (1978), no. 1, 98-107. (W. Wechler) **58** #9919 94A30
- (with Curry, Guy L.; Feldman, Richard M.) A stochastic model of a temperature-dependent population. *Theoret. Population Biology* **13** (1978), no. 2, 197-213. (Wolfgang J. Bühler) **58** #4444 92A15 (92A05)
- See also Ring theory, **48** #2125
- h, L. D.** (with Huffstutler, R. G.; Liu, Ya Yin) Criterion for the polynomial solutions of certain first order differential equations. *Portugal. Math.* **31** (1972), 139-145. (From the authors' introduction) **46** #422 34A05
- h, L. W.** (with Yau, Stephen Sik-Sang) Generation of regular expressions for automata by the integral of regular expressions. *Comput. J.* **15** (1972), 222-228. (S. Ginsburg) **52** #16919 94A30 (68A25, 68A30)
- h, Larry** Lectures on the complex bordism of finite complexes. Applications. *Proceedings of the Advanced Study Institute on Algebraic Topology* (1970), Vol. III, pp. 513-566. Various Publ. Ser., No. 13, Mat. Inst., Aarhus Univ., Aarhus, 1970. (A. Liulevicius) **49** #4001 57D95 (55E10)
- On the Eilenberg-Moore spectral sequence. *Algebraic topology* (Proc. Sympos. Pure Math., Vol. XXII, Univ. Wisconsin, Madison, Wis., 1970) pp. 231-246. Amer. Math. Soc., Providence, R.I., 1971. (A. K. Bousfield) **48** #3052 55H20
- (with Conner, Pierre) On the complex bordism of finite complexes. II. *J. Differential Geometry* **6** (1971/72), 135-174. (R. E. Stong) **45** #7721 57C20
- (with Conner, Pierre) On the complex bordism of complexes with few cells. *J. Math. Kyoto Univ.* **11** (1971), 315-356. (T. tom Dieck) **45** #7722 57C20 (55E45)
- On ideals in Ω^* . *Pacific J. Math.* **37** (1971), 527-537. (H. Suzuki) **48** #12578 57D90
- A note on annihilator ideals of complex bordism classes. *Pacific J. Math.* **38** (1971), 551-558. (T. tom Dieck) **46** #8233 57C20 (57D99)
- (with Johnson, David Copeland) On the relation of complex cobordism to connective K-theory. *Proc. Cambridge Philos. Soc.* **70** (1971), 19-22. (H. Suzuki) **45** #2696 55B15 (57D90)
- On realizing complex bordism modules. III. *Amer. J. Math.* **94** (1972), 875-890. (R. E. Stong) **46** #10014 57D90
- Operations in mod p connective K theory and the J homomorphism. *Duke Math. J.* **39** (1972), 623-631. (P. J. Kahn) **47** #9621 55G25
- (with Zahler, Raphael S.) Detecting stable homotopy classes by primary BP cohomology operations. *Math. Z.* **129** (1972), 137-156. (J. F. Adams) **47** #2596 55E10
- Manifolds with few cells and the stable homotopy of spheres. *Proc. Amer. Math. Soc.* **31** (1972), 279-284. (F. Raymond) **45** #6016 55E45 (57C10)
- "On characteristic numbers of almost complex manifolds with framed boundaries": A correction. *Topology* **11** (1972), 323. (R. E. Stong) **45** #4437 57D20 (53C15)
- The Todd character and cohomology operations. *Advances in Math.* **11** (1973), 72-92. (P. S. Landweber) **47** #9622 55G25
- A note on the Stong-Hattori theorem. *Illinois J. Math.* **17** (1973), 285-289. (A. Liulevicius) **48** #1213 55B15
- The Todd character and the integrality theorem for the Chern character. *Illinois J. Math.* **17** (1973), 301-310. (R. E. Stong) **48** #7273 55F45 (57D20)
- Secondary cohomology theories. *Indiana Univ. Math. J.* **23** (1973/74), 899-923. (J. F. Adams) **49** #3898 55B20 (55G25)
- (with Stong, Robert E.) Cohomology of a bounding manifold. *Proc. Amer. Math. Soc.* **39** (1973), 637-639. (M. Mahowald) **48** #5108 57D90
- The e invariant and finite coverings. *Indiana Univ. Math. J.* **24** (1974/75), 659-675. (A. Liulevicius) **50** #14812 57D85 (55E45)
- (with Löffler, Peter) Line bundles over framed manifolds. *Math. Z.* **138** (1974), 35-52. (R. E. Stong) **49** #11548 57D90
- (with Atiyah, M. F.) Compact Lie groups and the stable homotopy of spheres. *Topology* **13** (1974), 135-142. (K. H. Mayer) **49** #8013 55E45
- Framings of sphere bundles over spheres, the plumbing pairing, and the framed bordism classes of rank two simple Lie groups. *Topology* **13** (1974), 401-415. (J. F. Adams) **52** #6761 57D90 (55E45)
- New infinite families in the stable homotopy of spheres. *Bull. Amer. Math. Soc.* **81** (1975), 148-150. (M. Mimura) **50** #8519 55E45
- On $\text{Im}(\Omega_*^f(BZ/p) \rightarrow \Omega_*^f(BZ/p))$. *J. Pure Appl. Algebra* **6** (1975), no. 3, 223-234. (T. tom Dieck) **52** #11955 57D85
- (with Pittie, Harsh V.) Generalized flag manifolds as framed boundaries. *Math. Z.* **142** (1975), 191-193. (R. E. Stong) **51** #6854 57D90
- Formes bilinéaires, homomorphismes J généralisés et groupes d'homotopie des sphères. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 11, Aii, A825-A827. (Guido Mislin) **54** #11329 55E45
- On realizing complex bordism modules. IV. Applications to the stable homotopy groups of spheres. *Amer. J. Math.* **99** (1977), no. 2, 418-436. (R. E. Stong) **55** #6426 55E45
- (with Ewing, John; Moolgavkar, Suresh; Stong, Robert E.) Stable parallelizability of lens spaces. *J. Pure Appl. Algebra* **10** (1977/78), no. 2, 177-191. (C. S. Hoo) **57** #17641 55F10 (57D90)
- (with Ewing, John) Cobordism of hyperframed manifolds and the stable J-homomorphism. *Manuscripta Math.* **22** (1977), no. 2, 171-197. (P. S. Landweber) **56** #16646 57D20 (55E50)
- (with Cooke, George E.) Mod p decompositions of co H -spaces and applications. *Math. Z.* **157** (1977), no. 2, 155-177. (M. Mimura) **57** #17634 55D99
- ★Linear algebra. Undergraduate Texts in Mathematics. Springer-Verlag, New York-Berlin, 1978. vii+280 pp. ISBN 0-387-90235-X (R. Merris) **57** #9712 15-01
- Nonsingular bilinear forms, generalized J homomorphisms, and the homotopy of spheres. I. *Indiana Univ. Math. J.* **27** (1978), no. 5, 697-737. (J. F. Adams) **58** #18438 55E50
- Complex 2 plane bundles over $\text{CP}(n)$. *Manuscripta Math.* **24** (1978), no. 2, 221-228. (Peter Giblin) **57** #13943 55F25 (32L05)
- The parallelizability of the Stiefel manifolds $V_k(R^n)$: $k \geq 3$. *Proc. Amer. Math. Soc.* **69** (1978), no. 1, 201-202. (Kee Yuen Lam) **57** #7618 57D25
- Smith, Linda L.** (with Morino, Luigi) Stability analysis of nonlinear differential autonomous systems with applications to flutter. *AIAA J.* **14** (1976), no. 3, 333-341. (Wei Lai) **55** #14357 93D99
- Smith, Lyle B.** Using interactive graphical computer systems on approximation problems. *Iterationsverfahren, Numerische Mathematik, Approximationstheorie* (Tagung Numer. Method. Approximationstheorie, Oberwolfach, 1969), pp. 177-191. *Internat. Schriftenreihe Numer. Math.*, Vol. 15, Birkhäuser, Basel, 1970. (Author's summary) **51** #2380 68A55
- Smith, M. H.** (with Deely, J. J.) A secretary problem with finite memory. *J. Amer. Statist. Assoc.* **70** (1975), 357-361. (D. Siegmund) **53** #11913 62L15
- A secretary problem with uncertain employment. *J. Appl. Probability* **12** (1975), no. 3, 620-624. (S. M. Samuels) **51** #14460 62L05
- Smith, M. J.** Packing translates of a compact set in Euclidean space. *Bull. London Math. Soc.* **7** (1975), 129-131. (J. B. Wilker) **51** #11290 52A45
- Smith, M. L.** (with Panwalkar, S. S.; Dudek, R. A.) Flowshop sequencing problem with ordered processing time matrices. *Management Sci.* **21** (1974/75), no. 5, 544-549. (F.

- Weinberg) 53 #10261 90B35
(with Dahlen, F. A.) The influence of rotation on the free oscillations of the Earth. *Philos. Trans. Roy. Soc. London Ser. A* 279 (1975), no. 1292, 583-624. (Jiri Nedoma) 52 #7474 8635
(with Panwalkar, S. S.; Dudek, R. A.) Flowshop sequencing problem with ordered processing time matrices: a general case. *Naval Res. Logist. Quart.* 23 (1976), no. 3, 481-486. (Tadashi Kurisu) 56 #4802 90B35
See also Symposium: Theory of Scheduling and its Applications, 48 #3481
- Smith, M. R. (with Hamer, K.) Stability of general Hill's equation with three independent parameters. *Trans. ASME Ser. E. J. Appl. Mech.* 39 (1972), 276-278. (Authors' summary) 45 #669 34D99
(with Cohn-Sfetcu, S.; Buckmaster, H. A.) Decomposition of multicomponent exponential decays by spectral analytic techniques. *Technometrics* 18 (1976), no. 4, 467-482. (Benjamin Kedem-Kimelfeld) 55 #14397 94A05
- Smith, M. W. A. (with Roberts, A. P.) Use of an analogue computer in the application of Kalman filter methods of system identification in the presence of noise. *Math. Comput. Simulation* 19 (1977), no. 1, 11-22. (Tamer Başar) 57 #5345 93E10
(with Roberts, A. P.) A study in continuous time of the identification of initial conditions and/or parameters of deterministic system by means of a Kalman-type filter. *Math. Comput. Simulation* 19 (1977), no. 3, 217-226. (Arlid Thowsen) 57 #15698 93E10
(with Roberts, A. P.) An exact equivalence between the discrete- and continuous-time formulations of the Kalman filter. *Math. Comput. Simulation* 20 (1978), no. 2, 102-109. (Tohru Katayama) 57 #19017 93E10
- Smith, M. Z. (with Lewis, T. G.; Smith, B. J.) Fibonacci sequences and memory management. *Fibonacci Quart.* 14 (1976), no. 1, 37-41. (Herbert J. Bernstein) 53 #9716 68A20 (10A35, 68A50)
- Smith, Margaret S. A note on rank 3 extensions of rank 3 permutation groups. *Bull. London Math. Soc.* 7 (1975), 30-32. (M. D. Hestenes) 51 #5719 20B05
On rank 3 permutation groups. *J. Algebra* 33 (1975), 22-42. (E. L. Spitznagel, Jr.) 52 #5775 20B15 (05C99)
Phase memory in W.K.B. and phase integral solutions of ionospheric propagation problems. *Proc. Roy. Soc. London Ser. A* 346 (1975), no. 1644, 59-79. (N. D. Sengupta) 52 #7319 7834
A characterization of a family of rank 3 permutation groups. *Quart. J. Math. Oxford Ser. (2)* 26 (1975), 99-105. (K. Strambach) 51 #3277 20B10
On the isomorphism of two simple groups of order 44,352,000. *J. Algebra* 41 (1976), no. 1, 172-174. (David C. Hunt) 54 #5332 20D05
A combinatorial configuration associated with the Higman-Sims simple group. *J. Algebra* 41 (1976), no. 1, 175-195. (Spyros S. Magliveras) 56 #5696 20B25 (05B30)
- Smith, Mark A. A smooth, non-reflexive second conjugate space. *Bull. Austral. Math. Soc.* 15 (1976), no. 1, 129-131. (Ivan Singer) 54 #11039 46B10
Rotundity and smoothness in conjugate spaces. *Proc. Amer. Math. Soc.* 61 (1976), no. 2, 232-234 (1977). (J. Diestel) 55 #8763 46B10
(with Sullivan, Francis E.) Extremely smooth Banach spaces. *Banach spaces of analytic functions (Proc. Pelczynski Conf., Kent State Univ., Kent, Ohio, 1976)*, pp. 125-137. *Lecture Notes in Math.*, Vol. 604, Springer, Berlin, 1977. (M. I. Kadec) 56 #16328 46B05
Banach spaces that are uniformly rotund in weakly compact sets of directions. *Canad. J. Math.* 29 (1977), no. 5, 963-970. (S. Swaminathan) 56 #9232 46B05
Products of Banach spaces that are uniformly rotund in every direction. *Pacific J. Math.* 70 (1977), no. 1, 215-219. (C. Martin Edwards) 57 #3830 46B05
Some examples concerning rotundity in Banach spaces. *Math. Ann.* 233 (1978), no. 2, 155-161. (M. M. Day) 58 #2168 46B05
- Smith, Mark W. (with Walsh, John E.) Optimum sequential search with discrete locations and random acceptance errors. *Naval Res. Logist. Quart.* 18 (1971), 159-167. (S. Holm) 46 #8362 62L15
- Smith, Martha K. Regular representations of discrete groups. *J. Functional Analysis* 11 (1972), 401-406. (Wai-Mee Ching) 49 #9641 46L10
Centralizers in rings of quotients of group rings. *J. Algebra* 25 (1973), 158-164. (K. W. Roggenkamp) 47 #3544 20E35 (16A08)
Regular representations of unimodular groups. *Math. Ann.* 203 (1973), 183-185. (T. R. Chow) 47 #8763 22D25 (46L10)
(with Montgomery, Susan) Algebras with a separable subalgebra whose centralizer satisfies a polynomial identity. *Comm. Algebra* 3 (1975), 151-168. (H. Tominaga) 51 #10386 16A38
Rings with an integral element whose centralizer satisfies a polynomial identity. *Duke Math. J.* 42 (1975), 137-149. (J. L. Fisher) 53 #3007 16A38
Spectra of operator equations. *Michigan Math. J.* 23 (1976), no. 2, 151-153. (From the author's introduction) 57 #10437 46L10
(with Bonvallet, K.; Hartley, B.; Passman, Donald S.) Group rings with simple augmentation ideals. *Proc. Amer. Math. Soc.* 56 (1976), 79-82. (H. K. Farahat) 53 #2996 16A26
Universal enveloping algebras with subexponential but not polynomially bounded growth. *Proc. Amer. Math. Soc.* 60 (1976), 22-24 (1977). (Claudio Procesi) 54 #7555 16A68 (17B35)
Growth of algebras. *Ring theory, II (Proc. Second Conf., Univ. Oklahoma, Norman, Okla., 1975)*, pp. 247-259. *Lecture Notes in Pure and Appl. Math.*, Vol. 26, Dekker, New York, 1977. (Helmut Strade) 55 #10517 16A46
Central and invariant conditions in group algebras. *Houston J. Math.* 3 (1977), no. 1, 125-130. (Robert L. Snider) 55 #399 16A26
Derivations of group algebras of finitely-generated, torsion-free, nilpotent groups. *Houston J. Math.* 4 (1978), no. 2, 277-288. (Claudio Procesi) 58 #5767 16A26
See also Selected papers: Algebra, 57 #2802
- Smith, Mary Lynn (with Ling, William H.; McLaughlin, Harry W.) A computational procedure for the approximation of random functions. *Numer. Math.* 27 (1976/77), no. 3, 301-305. (James Lewis) 56 #16224 41A50
(with Ling, William H.; McLaughlin, Harry W.) Approximation of random functions. *J. Approximation Theory* 20 (1977), no. 1, 10-22. (Eli Passow) 56 #935 41A50
- Smith, Michel Generating large indecomposable continua. *Pacific J. Math.* 62 (1976) 2, 587-593. (G. R. Gordh, Jr.) 54 #8588 54F20
A theorem on continuous decompositions of the plane into nonseparating continua. *Proc. Amer. Math. Soc.* 55 (1976), no. 1, 221-222. (W. S. Mahavier) 54 #3654B15 (54F15)
The irreducibility of continua which are the inverse limit of a collection of Hausdorff arcs. *Fund. Math.* 94 (1977), no. 1, 65-73. (F. Burton Jones) 55 #1354F55
- weston-Smith, Miranda See Weston-Smith, Miranda
- Smith, N. See Control in space, 48 #8040
- Smith, N. J. (with Sage, Andrew P.) A sequential method for system identification of hierarchical structure. (French, German and Russian summaries) *Automatica—J. I. E. E. C.* 9 (1973), 677-688. (Authors' summary) 58 #4504 93B30
(with Sage, Andrew P.) Hierarchical structuring for system identification. *Information Sci.* 7 (1974), 49-72. (T. Kaczorek) 48 #13352 93B30
- Smith, Otto J. M. Linear programming using sparse elemental factors. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* 1974, no. 1, 103-111. (Robert Todd Gregory) 53 #12573 90C05
- Smith, P. D. P. Representation of the gravitational and electromagnetic fields by a tetrad of mixed symmetry. (Italian and Russian summaries) *Nuovo Cimento B* (11) 24 (1975), 255-271. (Author's summary) 52 #4932 8353
Gravitational and electric fields of a massive charged source described by comoving tetrads. (Italian and Russian summaries) *Nuovo Cimento B* (11) 29 (1975), no. 1, 71-80. (Author's summary) 52 #9968 8353
A method of obtaining the rate of perihelion precession in a system of two charged masses. *General Relativity and Gravitation* 9 (1978), no. 6, 469-487. (From the summary) 58 #14965 8353
- Smith, P. E. A simple subgroup of $M^?$ and $E_6(3)$. *Bull. London Math. Soc.* 8 (1976), no. 1, 161-165. (David C. Hunt) 53 #13382 20D05
- Smith, P. N. (with Collinson, C. D.) A comment on the symmetries of Kerr black holes. *Comm. Math. Phys.* 56 (1977), no. 3, 277-279. (Marcos Rosenbaum) 57 #8853 8353
- Smith, Patricia L. (with Gentle, James E.; Kodell, Ralph L.) On the distribution of studentized bivariate range. *Technometrics* 17 (1975), no. 4, 501-505. (T. D. Dwivedi) 53 #1805 (E 55 #9365) 62E15
Letter to the editor: "On the distribution of the studentized bivariate range." *Technometrics* 17 (1975), no. 4, 501-505 by J. E. Gentle, R. L. Kodell and Smith, Patricia L. *Technometrics* 18 (1976), no. 3, 365. (T. D. Dwivedi) 55 #9365 62E15
- Smith, Patrick F. On the intersection theorem. *Proc. London Math. Soc.* (3) 21 (1970), 385-398. (G. Betsch) 45 #3452 16A46 (13A15, 20E15)
Quotient rings of group rings. *J. London Math. Soc.* (2) 3 (1971), 645-660. (J. Rutter) 47 #3435 16A08
Localization and the AR property. *Proc. London Math. Soc.* (3) 22 (1971), 39-46. (G. Betsch) 45 #3453 16A46
Localization in group rings. *Proc. London Math. Soc.* (3) 22 (1971), 69-90. (G. Betsch) 45 #3454 16A08 (20C05)
On two-sided artinian quotient rings. *Glasgow Math. J.* 13 (1972), 159-163. (Djabali) 47 #5035 16A08 (16A46)
On the dimension of group rings. *Proc. London Math. Soc.* (3) 25 (1972), 288-290. (Bhama Srinivasan) 47 #3501 20C05
Corrigendum: On the dimension of group rings (Proc. London Math. Soc. (3) 25 (1972), 288-302). *Proc. London Math. Soc.* (3) 27 (1973), 766-768. (Editors) 48 #16A26
Group rings of hypercyclic groups. *Math. Z.* 144 (1975), no. 3, 283-288. (Wiegold) 53 #8213 20C05
A note on projective modules. *Proc. Roy. Soc. Edinburgh Sect. A* 75 (1975/76), no. 1, 23-31. (B. J. Müller) 56 #5653 16A50
A note on idempotent ideals in group rings. *Arch. Math. (Basel)* 27 (1976), no. 1, 22-27. (S. K. Sehgal) 54 #351 16A26
On non-commutative regular local rings. *Glasgow Math. J.* 17 (1976), no. 2, 98-100. (Marie-Paule Malliavin) 54 #10309 16A10 (17B30)
(with Roseblade, J. Edward) A note on hypercentral group rings. *J. London Math. Soc.* (2) 13 (1976), no. 1, 183-190. (Donald S. Passman) 53 #2997 16A26
(with Chatters, A. W.) A note on hereditary rings. *J. Algebra* 44 (1977), no. 1, 181-190. (M. Djabali) 55 #8096 16A46
Decomposing modules into projectives and injectives. *Pacific J. Math.* 76 (1978), no. 1, 247-266. (K. R. Goodearl) 58 #785 16A50 (16A62)
Finitely embedded modules over group rings. *Proc. Edinburgh Math. Soc.* (2) 21 (1978/79), no. 1, 55-64. (Johann Wiesenbauer) 58 #11189 20M25 (13C10, 20M25)
Some rings which are characterised by their finitely generated modules. *Quart. Math. Oxford Ser. (2)* 29 (1978), no. 113, 101-109. (A. Rosenberg) 57 #12616A64 (16A14)
- Smith, Patrick L. Fitting multistage models to input/output data. *Control and dynamical systems: advances in theory and applications*, Vol. 11, pp. 1-23. Academic Press, New York, 1974. (F. M. Kirillova) 53 #15458 93B30 (93E10)
Backward-forward smoothing interpretation of the a posteriori process noise estimate. *IEEE Trans. Automatic Control* AC-20 (1975), 138-139. (Tohru Katayama) 54 #14854 93E10
- Smith, Paul (with Arkin, Joseph) Treble-magic systems in a Latin 3-cube of order 6. *Fibonacci Quart.* 14 (1976), no. 2, 167-170. (Bhagwandas) 53 #12985 05B15
A doubly divisible nearly Kirkman system. *Discrete Math.* 18 (1977), no. 1, 9-11. (A. Rosa) 57 #5783 05B05
- Smith, Paul E. Stability in disequilibrium macro models. *Metroeconomica* 28 (1976), no. 1-3, 53-61. (Truman Bewley) 58 #32874 90A15
- Smith, Paul H. Optimal production policies for items with decreasing demand. *European J. Oper. Res.* 1 (1977), no. 6, 365-367. (Laurence L. George) 56 #10865 90B05
- Smith, Paul J. (with Bell, C. B.) Some aspects of the concept of symmetry in nonparametric statistics. *Symmetric functions in statistics (Proc. Sympos., Univ. Windsor, Windsor, Ont., 1971)*, pp. 143-181. *Univ. Windsor, Windsor, Ont.*, 1972. (Z. Štípanek) 51 #4531 62G10 (62H15)

- (with Bell, C. B.) Completeness theorems for characterizing distribution-free statistics. *Ann. Inst. Statist. Math.* **24** (1972), 435-453. (J. H. Stapleton) **49** #8194 62G10
- Limiting distributions of tests of exchangeability based on the empirical distribution. *Metron* **33** (1975), no. 1-2, 128-136 (1977). (Author's summary) **58** #3184 62G10 (62E20)
- (with Mikulski, Piotr W.) A variance bound for unbiased estimation in inverse sampling. *Biometrika* **63** (1976), no. 1, 216-217. (Authors' summary) **53** #1820 62F10
- (with Mikulski, Piotr W.) Comparison of fixed precision estimation schemes in Bernoulli trials. (Polish summary) *Zastos. Mat.* **15** (1976/77), no. 4, 437-444. (Madanlal T. Wasan) **56** #16954 62L12
- A nonparametric test for bivariate circular symmetry based on the empirical CDF. *Comm. Statist.-Theory Methods* **A6** (1977), no. 3, 209-220. (T. P. Hettmansperger) **55** #11495 62G10
- th, Peter** Some asymptotic extremum principles for magnetohydrodynamic pipe flow. *Appl. Sci. Res.* **24** (1971), 452-466. (Peter Smith) **47** #1376 76.41
- Some extremum principles for pipe flow in magnetohydrodynamics. (French summary) *Z. Angew. Math. Phys.* **23** (1972), 753-764. (G. Power) **47** #2909 76.41
- (with Jordan, D. W.) On the asymptotic expansion of a class of real integrals. *Math. Nachr.* **57** (1973), 201-207. (L. Berg) **48** #4594 41A60
- Some extremum principles for mixed boundary value problems in magnetohydrodynamic pipe flow. (German and Russian summaries) *Z. Angew. Math. Mech.* **53** (1973), 791-796. (L. Dragos) **51** #4846 76.35
- A note on dual extremum principles in magnetohydrodynamic pipe flow. *J. Inst. Math. Appl.* **18** (1976), no. 1, 129-133. (L. G. Chambers) **53** #15089 76.49
- (with Jordan, Dominic William) ★Nonlinear ordinary differential equations. Oxford Applied Mathematics and Computing Science Series. Clarendon Press, Oxford, 1977. v+360 pp. ISBN 0-19-859620-0 (V. Lakshmikantham) **57** #16750 34-01
- th, Philip W.** Characterization of the function class $W^{m,p}$. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 485-490. Academic Press, New York, 1973. (J. W. Jerome) **49** #968 41A65 (46E35)
- (with Allen, G. D.; Chui, Charles K.; Madych, Wolodymyr R.; Narcowich, Francis J.) Padé approximation and orthogonal polynomials. *Bull. Austral. Math. Soc.* **10** (1974), 263-270. (Walter Schempp) **49** #9490 41A20
- (with Allen, G. D.; Chui, Charles K.; Madych, Wolodymyr R.; Narcowich, Francis J.) Padé approximation and Gaussian quadrature. *Bull. Austral. Math. Soc.* **11** (1974), 63-69. (Gerhard Merz) **51** #6248 41A55
- $W^{r,\infty}(R)$ -splines. *J. Approximation Theory* **10** (1974), 337-357. (C. Micchelli) **50** #5285 41A15
- (with Chui, Charles K.; Shisha, Oved) Padé approximants as limits of best rational approximants. *J. Approximation Theory* **12** (1974), 201-204. (Gerhard Merz) **50** #10625 41A20
- (with Chui, Charles K.) Characterization of a function by certain infinite series it generates. *Pacific J. Math.* **53** (1974), 363-371. (J. H. Curtiss) **50** #10258 30A66 (42A68)
- (with Chui, Charles K.) On $H^{m,\infty}$ -splines. *SIAM J. Numer. Anal.* **11** (1974), 554-558. (G. D. Byrne) **51** #11923 65D05
- (with Rozema, Edward R.) Nonlinear approximation in uniformly smooth Banach spaces. *Trans. Amer. Math. Soc.* **188** (1974), 199-211. (D. E. Wulbert) **48** #9212 41A65
- $H^{r,\infty}(R)$ - and $W^{r,\infty}(R)$ -splines. *Trans. Amer. Math. Soc.* **192** (1974), 275-284. (Walter Schempp) **51** #3780 41A65
- (with Chui, Charles K.) A note on Landau's problem for bounded intervals. *Amer. Math. Monthly* **82** (1975), no. 9, 927-929. (A. Sharma) **56** #15859 26A84 (41A15)
- (with Chui, Charles K.; Ward, Joseph D.) Limits of $H^{k,p}$ -splines. *Bull. Amer. Math. Soc.* **81** (1975), 563-565. (Editors) **55** #6062 41A15
- (with Chui, Charles K.) Some nonlinear spline approximation problems related to N -widths. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, IV. *J. Approximation Theory* **13** (1975), 421-430. (J. W. Jerome) **51** #6252 41A65
- (with Allen, G. D.; Chui, Charles K.; Madych, Wolodymyr R.; Narcowich, Francis J.) Padé approximation of Stieltjes series. *J. Approximation Theory* **14** (1975), no. 4, 302-316. (Gerhard Merz) **52** #3809 (EA 53) 41A20
- (with Ward, Joseph D.) Restricted centers in subalgebras of $C(X)$. *J. Approximation Theory* **15** (1975), no. 1, 54-59. (A. B. Németh) **52** #6282 41A65
- (with Chui, Charles K.; Shisha, Oved) Best local approximation. *J. Approximation Theory* **15** (1975), no. 4, 371-381. (James Lewis) **55** #6080 41A50
- (with Chui, Charles K.; Ward, Joseph D.) Approximation with restricted spectra. *Math. Z.* **144** (1975), no. 3, 289-297. (P. R. Halmos) **52** #1365 (E 53) #8938 47A55
- (with Ward, Joseph D.) Restricted centers in $C(\Omega)$. *Proc. Amer. Math. Soc.* **48** (1975), 165-172. (W. J. Kotzé) **52** #1127 41A65
- (with Chui, Charles K.) Unique best nonlinear approximation in Hilbert spaces. *Proc. Amer. Math. Soc.* **49** (1975), 66-70. (Mogens Esrom Larsen) **50** #14020 41A65
- (with Chui, Charles K.; Ward, Joseph D.) On the range of certain locally determined spline projections. *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math., Univ. Bonn, Bonn, 1976)*, pp. 122-135. Springer, Berlin, 1976. (From the summary) **58** #29611 41A15
- On the smoothness of local best L_p spline approximations. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 563-566. Academic Press, New York, 1976. (L. L. Schumaker) **55** #8633 41A15
- (with Chui, Charles K.; Ward, Joseph D.) On uniqueness of piecewise polynomial approximation. *Transactions of the Twenty-First Conference of Army Mathematicians (White Sands Missile Range, White Sands, N.M., 1975)*, pp. 141-147. ARO Rep., 76-1. U.S. Army Res. Office, Research Triangle Park, N.C., 1976. (Authors' summary) **58** #29612 41A15
- (with Rozema, Edward R.) Global approximation with bounded coefficients. *J. Approximation Theory* **16** (1976), no. 2, 162-174. (G. D. Taylor) **53** #8748 41A50
- (with Chui, Charles K.; Ward, Joseph D.) Quasi-uniqueness in L^∞ extremal problems. *J. Approximation Theory* **18** (1976), no. 3, 213-219. (J. W. Jerome) **56** #941 41A65
- (with Chui, Charles K.; Ward, Joseph D.) Preferred NBV-splines. *J. Math. Anal. Appl.* **55** (1976), no. 1, 18-31. (Derek W. Arthur) **53** #11265 41A15
- (with Chui, Charles K.; Ward, Joseph D.) Correction to: "Approximation with restricted spectra" (*Math. Z.* **144** (1975), 289-297). *Math. Z.* **146** (1976), no. 3, 291-292. (P. R. Halmos) **53** #8938 47A55 (41A65)
- (with Chui, Charles K.; Rozema, Edward R.; Ward, Joseph D.) Simultaneous spline approximation and interpolation preserving norms. *Proc. Amer. Math. Soc.* **54** (1976), 98-100. (Joseph M. Lambert) **52** #8755 41A65
- (with Chui, Charles K.; Ward, Joseph D.) A note on Riesz operators. *Proc. Amer. Math. Soc.* **60** (1976), 92-94. (Lawrence Fialkow) **54** #5882 47B05
- (with Chui, Charles K.; Rozema, Edward R.; Ward, Joseph D.) Metric curvature, folding, and unique best approximation. *SIAM J. Math. Anal.* **7** (1976), no. 3, 436-449. (Dietrich Braess) **53** #3567 41A65
- (with Chui, Charles K.; Ward, Joseph D.) Favard's solution is the limit of $W^{k,p}$ -splines. *Trans. Amer. Math. Soc.* **220** (1976), 299-305. (J. W. Jerome) **54** #10938 41A15
- (with Chui, Charles K.; Su, L. Y.) A minimization problem related to Padé synthesis of recursive digital filters. *Padé and rational approximation (Proc. Internat. Sympos., Univ. South Florida, Tampa, Fla., 1976)*, pp. 247-256. Academic Press, New York, 1977. (N. S. Kambo) **57** #13305 41A20 (94A20)
- (with Barrow, David L.; Chui, Charles K.; Ward, Joseph D.) Unicity of best L_2 approximation by second-order splines with variable knots. *Bull. Amer. Math. Soc.* **83** (1977), no. 5, 1049-1050. (Sherwood D. Silliman) **56** #6199 41A15
- (with Chui, Charles K.; Smith, R. R.; Ward, Joseph D.) L -ideals and numerical range preservation. *Illinois J. Math.* **21** (1977), no. 2, 365-373. (J. P. Williams) **55** #3822 47A10 (46B05)
- (with Chui, Charles K.; Ward, Joseph D.) On the smoothness of best L_2 approximants from nonlinear spline manifolds. *Math. Comp.* **31** (1977), no. 137, 17-23. (Dietrich Braess) **54** #10939 41A15
- (with Borosh, Itshak; Chui, Charles K.) Best uniform approximation from a collection of subspaces. *Math. Z.* **156** (1977), no. 1, 13-18. (Allan Pinkus) **57** #10326 41A50
- (with Chui, Charles K.; Legg, David A.; Ward, Joseph D.) On a question of Olsen concerning compact perturbations of operators. *Michigan Math. J.* **24** (1977), no. 1, 119-127. (Mehdi Radjabalipour) **56** #9295 47A30
- (with Chui, Charles K.; Ward, Joseph D.) Best L_2 local approximation. *J. Approximation Theory* **22** (1978), no. 3, 254-261. (G. Meinardus) **58** #23283 41A50 (41A20, 41A60)
- (with Chui, Charles K.; Rahman, Qazi Ibadur; Sahney, Badri N.) On simultaneous Chebyshev approximation. *J. Approximation Theory* **22** (1978), no. 4, 350-351. (G. D. Taylor) **57** #13319 41A50
- (with Barrow, David L.; Chui, Charles K.; Ward, Joseph D.) Unicity of best mean approximation by second order splines with variable knots. *Math. Comp.* **32** (1978), no. 144, 1131-1143. (Dietrich Braess) **58** #1853 41A15
- An improvement theorem for Descartes systems. *Proc. Amer. Math. Soc.* **70** (1978), no. 1, 26-30. (Allan Pinkus) **57** #6985 41A50
- Smith, R.** (with Arrowsmith, D. K.) A note on Smale's formulation of electrical network theory. *Math. Proc. Cambridge Philos. Soc.* **79** (1976), no. 3, 537-544. (Clark Robinson) **53** #2523 94A20 (58F05)
- Smith, R. A.** See **Smith, Russell A.**
- Smith, R. A.** See **Smith, Robert Arnold**
- Smith, R. C. T.** An example of an orthogonal transformation of Hilbert sequence space. *J. Austral. Math. Soc.* **13** (1972), 357-361. (S. I. Drobnie) **46** #4052 40C99 (44A15)
- An integral equation involving both sine and cosine transforms. *J. Math. Anal. Appl.* **48** (1974), 504-514. (I. Fenyő) **50** #10726 45G99
- Smith, R. E.** (with Kurtz, Lawrence A.; Parks, C. L.; Boney, L. R.) A comparison of the method of lines to finite difference techniques in solving time-dependent partial differential equations. *Comput. & Fluids* **6** (1978), no. 2, 49-70. (C. Taylor) **58** #8390 65P05 (65M20, 76.35)
- Smith, R. G.** (with Giles, D. E. A.) A note on the minimum error variance rule and the restricted regression model. *Internat. Econom. Rev.* **18** (1977), no. 1, 247-251. (Authors' introduction) **58** #31690 62P20
- Smith, R. J. G.** Easily decodable efficient self-orthogonal block codes. *Electron. Lett.* **13** (1977), no. 7, 173-174. (N. J. A. Sloane) **56** #2646 94A10
- Smith, R. L.** An elementary proof of the duality theorem of linear programming. *J. Optimization Theory Appl.* **12** (1973), 129-135. (Neal Glassman) **48** #7964 90C05
- Smith, R. L.** (with MacCamy, Richard C.) Limits of solutions of Volterra integral equations. *Bull. Amer. Math. Soc.* **81** (1975), 739-742. (S. I. Grossman) **53** #6264 45N05
- (with MacCamy, Richard C.) Limits of solutions of nonlinear Volterra equations. *Applicable Anal.* **7** (1977/78), no. 1, 19-27. (Š. Schwabik) **57** #10398 45M05
- Smith, R. R.** (with Chui, Charles K.; Smith, Philip W.; Ward, Joseph D.) L -ideals and numerical range preservation. *Illinois J. Math.* **21** (1977), no. 2, 365-373. (J. P. Williams) **55** #3822 47A10 (46B05)
- Borel structures on compact convex sets. *J. London Math. Soc.* (2) **16** (1977), no. 1, 99-111. (G. K. Pedersen) **58** #2158 46A99
- On non-unital Jordan-Banach algebras. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 3, 375-380. (K. Kutzler) **57** #7187 46J99 (17C10, 46A40)
- The R -Borel structure on a Choquet simplex. *Pacific J. Math.* **73** (1977), no. 1, 221-226. (Peter D. Taylor) **57** #13449 46A99
- (with Ward, Joseph D.) M -ideal structure in Banach algebras. *J. Functional Analysis* **27** (1978), no. 3, 337-349. (F. F. Bonsall) **57** #7175 46H10
- Spectral theory for universal caps. *J. London Math. Soc.* (2) **17** (1978), no. 1, 119-128. (G. K. Pedersen) **58** #2159 46A99
- Smith, R. T.** Harmonic mappings of spheres. *Bull. Amer. Math. Soc.* **78** (1972), 593-596. (J. Eells) **45** #7642 53C20 (57D35)

- The spherical representations of groups transitive on S^n . *Indiana Univ. Math. J.* **24** (1974/75), 307-325. (N. R. Wallach) **51** #811 22E45 (53C40)
- Harmonic mappings of spheres. *Amer. J. Math.* **97** (1975), 364-385. (R. L. Bishop) **52** #11949 57D35 (53C45)
- The second variation formula for harmonic mappings. *Proc. Amer. Math. Soc.* **47** (1975), 229-236. (N. Desolneux-Moulis) **51** #11580 58E15
- Examples of elliptic complexes. *Bull. Amer. Math. Soc.* **82** (1976), no. 2, 297-299. (Akira Asada) **53** #1654 58G05 (35N10)
- See also **Differential geometry**, **51** #6864
- Smith, Raymond** (with Kaloni, Purna N.) Penny-shaped crack in a linear viscoelastic medium under torsion. *AIAA J.* **12** (1974), 1745-1747. (L. W. Morland) **50** #6273 73A45
- Smith, Richard H., Jr.** (with Vande Linde, V. David) A saddle-point optimality criterion for nonconvex programming in normed spaces. *SIAM J. Appl. Math.* **23** (1972), 203-213. (M. Dragomirescu) **47** #6325 90C30
- Smith, Richard L.** (with Turnbull, Bruce W.; Kaspi, Haya) Adaptive sequential procedures for selecting the best of several normal populations. *J. Statist. Comput. and Simulation* **7** (1978), no. 2, 133-150. (Joseph A. Yahav) **58** #3239 62L10 (62F07)
- Smith, Robert Allan** (with Chakravarti, Indra-Mohan) Sur certaines substitutions dans un corps de Galois entraînant l'existence de plans sériels équilibrés définis par Williams. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 23, A1159-A1162. (Authors' summary) **58** #13533 62K10 (05B15)
- Smith, Robert Arnold** (with Chalk, J. H. H.) On Bombieri's estimate for exponential sums. *Acta Arith.* **18** (1971), 191-212. (M. Eichler) **46** #8985 10G05
- (with Callahan, Thomas) L -functions of a quadratic form. *Trans. Amer. Math. Soc.* **217** (1976), 297-309. (H. M. Stark) **53** #7967 10H10
- Smith, Robert M.** (with Engelhardt, Max; Bain, Lee J.) ★A further study of life-testing models and simple estimates for the logistic distribution. ARL TR 74-0008. *Aerospace Research Laboratories, Office of Aerospace Research, United States Air Force, Wright-Patterson Air Force Base, Ohio*, 1974. iv+117 pp. (A. P. Basu) **49** #10112 62N05
- (with Bain, Lee J.) Correlation type goodness-of-fit statistics with censored sampling. *Comm. Statist.-Theory Methods* **A5** (1976), no. 2, 119-132. (Bruce W. Turnbull) **55** #6682 62G10
- Smith, Robert P.** (with Bhattacharya, P. K.) Sequential probability ratio test for the mean value function of a Gaussian process. *Ann. Math. Statist.* **43** (1972), 1861-1873. (Harry I. Cohn) **52** #15895 62L10
- Smith, Robert S.** (with Frink, Orrin) On the distributivity of the lattice of filters of a groupoid. *Pacific J. Math.* **42** (1972), 313-322. (D. R. LaTorre) **47** #8743 20M99
- Smith, Ronald** Asymptotic solutions for high-frequency trapped wave propagation. *Philos. Trans. Roy. Soc. London Ser. A* **268** (1970), 289-324. (W. F. Ames) **48** #3369 78.35
- Evolution of inertial frequency oscillations. *J. Fluid Mech.* **60** (1973), 383-389. (L. M. Hocking) **48** #7770 76.35
- (with Bona, Jerry L.) Existence of solutions to the Korteweg-de Vries initial value problem. *Nonlinear wave motion (Proc. AMS-SIAM Summer Sem., Clarkson Coll. Tech., Potsdam, N.Y., 1972)*, pp. 179-180. *Lectures in Appl. Math.*, Vol. 15, *Amer. Math. Soc., Providence, R.I.*, 1974. (G. L. Lamb, Jr.) **50** #5223 35Q99
- A least squares version of short wave asymptotics. *SIAM J. Appl. Math.* **27** (1974), 503-516. (E. V. Laitone) **51** #4848 76.41
- (with Peregrine, D. H.) Stationary gravity waves on non-uniform free streams: jet-like streams. *Math. Proc. Cambridge Philos. Soc.* **77** (1975), no. 2, 415-438. (Authors' summary) **52** #12529 76.41
- The reflection of short gravity waves on a non-uniform current. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), no. 3, 517-525. (R. Manohar) **52** #12530 76.41
- (with Bona, Jerry L.) The initial-value problem for the Korteweg-de Vries equation. *Philos. Trans. Roy. Soc. London Ser. A* **278** (1975), no. 1287, 555-601. (Theodore E. Dushane) **52** #6219 35Q99
- Giant waves. *J. Fluid Mech.* **77** (1976), no. 3, 417-431. (Daniel Euvrard) **55** #9696 76.35
- (with Bona, Jerry L.) A model for the two-way propagation of water waves in a channel. *Math. Proc. Cambridge Philos. Soc.* **79** (1976), no. 1, 167-182. (W. F. Ames) **52** #16254 76.35
- Propagation in slowly-varying wave-guides. *SIAM J. Appl. Math.* **33** (1977), no. 1, 39-50. (C. Rogers) **55** #11805 76.41 (86.41)
- Smith, Ronald L.** Moore-Penrose inverses of block circulant and block k -circulant matrices. *Linear Algebra and Appl.* **16** (1977), no. 3, 237-245. (Thomas L. Bouillion) **57** #9713 15A09 (15A54)
- Smith, Roy L.** (with England, James W.) The zeta function of automorphisms of solenoid groups. *J. Math. Anal. Appl.* **39** (1972), 112-121. (Clark Robinson) **46** #6400 58F20
- Smith, Russell A.** A stability condition for n th order difference equations. *Glasgow Math. J.* **12** (1971), 24-30. (A. Halanay) **45** #3983 39A10
- Absolute stability of certain differential equations. *J. London Math. Soc.* (2) **7** (1973), 203-210. (F. Brauer) **48** #6587 34D20 (93D05)
- On the elliptic ball stability criterion for ordinary differential equations. *Proc. Cambridge Philos. Soc.* **74** (1973), 497-505. (Author's summary) **56** #11303 93D05
- Elliptic ball stability criterion for discrete-time systems. *Internat. J. Control* **19** (1974), 925-932. (A. Kósa) **50** #10964 49B35
- Absolute stability of feedback control equation with constant time lags. *J. London Math. Soc.* (2) **9** (1974/75), 346-354. (M. M. Konstantinov) **51** #10821 34K20
- Singularities of solutions of certain plane autonomous systems. *Proc. Roy. Soc. Edinburgh Sect. A* **72**, no. 4, 307-315 (1975). (W. T. Reid) **52** #3672 34C35
- Multiple circle criterion for diagonally dominant transfer matrices. *Internat. J. Control* **24** (1976), no. 2, 261-273. (Peter A. Cook) **58** #33396 93D15 (93D05)
- Inclusion conditions for Hurwitzian and Schur sets in C^{n+1} . *Math. Proc. Cambridge Philos. Soc.* **80** (1976), no. 1, 113-120. (Á. Elbert) **56** #15892 30A08 (34K20)
- Forced oscillations of the feedback control equation. *Proc. Roy. Soc. Edinburgh Sect. A* **76** (1976/77), no. 1, 31-42. (V. V. Obuhovskii) **56** #760 34C25
- Resonance sets of the feedback control equation. *Ann. Mat. Pura Appl.* (4) **114** (1977), 195-205. (S. Ahmad) **57** #2680 93C15
- Some elliptic balls which avoid a Nyquist set in C^{n+1} . *Proc. Roy. Soc. Edinburgh Sect. A* **79** (1977/78), no. 3-4, 327-334. (H. O. Tejumola) **58** #11676 34C25
- Non-uniqueness in the inverse gravity problem for infinite polygonal cylinders. *Inst. Math. Appl.* **21** (1978), no. 1, 61-65. (W. Buchheim) **58** #9100 86.31
- Smith, S.** See **Kudrjavcev, L. D.**, **49** #9618; **Daleckiĭ, Ju. L.**; et al., **50** #5126 (EA 52)
- Boundary value problems for differential equations, **50** #10496 and *Difference methods of solving problems of mathematical physics*, **51** #9655
- Smith, S. E.** (with Yau, Stephen Sik-Sang) Linear sequential pattern classification. *IEEE Trans. Information Theory* **IT-18** (1972), 673-678. (W. Greblicki) **53** #7161 68A05 (94A05, 62H30)
- Smith, S. H.** The development of the boundary layer at a rear stagnation point. *J. Eng. Math.* **11** (1977), no. 2, 139-144. (Author's summary) **56** #1918 76.34
- Smith, S. L.** (with Brebbia, C. A.) Improved stability techniques for the solution of Navier-Stokes equations. *Appl. Math. Modelling* **1** (1977), no. 5, 226-234. (Jacques Couot) **58** #8798 76.65 (65P05)
- Smith, Spencer B.** (with Uskup, Ergin) A branch-and-bound algorithm for two-stage production-sequencing problems. *Operations Res.* **23** (1975), no. 1, 118-136. (Rainald Burkard) **53** #12562 90B35
- Smith, Stephen A.** A generalization of Huffman coding for messages with relative frequencies given by upper and lower bounds. *IEEE Trans. Information Theory* **IT-18** (1974), 124-125. (Nguyen Quang Duc) **54** #12372 94A15 (94A10)
- A derivation of entropy and the maximum entropy criterion in the context of decision problems. *IEEE Trans. Systems Man Cybernet.* **SMC-4** (1974), 157-163. (L. Campbell) **53** #11825 62C99 (94A15)
- Smith, Stephen D.** (with Tyrer, A. P.) On finite groups with a certain Sylow normalizer II. *J. Algebra* **26** (1973), 343-365; *ibid.* **26** (1973), 366-367. (I. M. Isaacs) **48** #2241 20C20
- On finite groups with a certain Sylow normalizer. III. *J. Algebra* **29** (1974), 489-503. (I. M. Isaacs) **49** #10775 20D20
- Sylow automizers of odd order or an application of coherence. *Proceedings of Conference on Finite Groups (Univ. Utah, Park City, Utah, 1975)*, pp. 445-449. *Academic Press, New York*, 1976. (Henry S. Leonard, Jr.) **54** #5339 20D20
- (with Isaacs, I. Martin) A note on groups of p -length 1. *J. Algebra* **38** (1976), no. 531-535. (Leo J. Alex) **52** #14025 20C15
- On p -singular control of p -regular character values. *J. Algebra* **39** (1976), no. 255-276. (Leo J. Alex) **53** #5720 20C15
- Some methods in the theory of blocks of characters. *J. Algebra* **39** (1976), no. 360-374. (Leo J. Alex) **53** #5719 20C15
- Sylow automizers of odd order. *J. Algebra* **46** (1977), no. 2, 523-543. (Leo J. Alex) **55** #12804 20G20
- Nonassociative commutative algebras for triple covers of 3-transposition groups. *Michigan Math. J.* **24** (1977), no. 3, 273-287. (From the summary) **58** #11102 20D05 (10C30, 20C25)
- Smith, Stephen W.** (with Priest, Dean B.) Column generators for coefficients of Fibonacci and Fibonacci-related polynomials. *Fibonacci Quart.* **14** (1976), no. 1, 30-34. (M. Chema) **52** #10578 10A35
- (with Priest, Dean B.) Row and rising diagonal sums for a type of Pascal triangle. *Fibonacci Quart.* **15** (1977), no. 4, 359-361. (M. E. Cohen) **57** #135 05A15
- Smith, T. F.** (with Waterman, Michael S.; Beyer, W. A.) Some biological sequence metrics. *Advances in Math.* **20** (1976), no. 3, 367-387. (Gerhard D. Wassermann) **53** #12639 92A05
- (with Waterman, Michael S.; Singh, Madan G.; Beyer, W. A.) Additive evolutionary trees. *J. Theoret. Biol.* **64** (1977), no. 2, 199-213. (George F. Estabrook) **58** #20585 92A05 (05C05)
- (with Waterman, Michael S.) On the similarity of dendrograms. *J. Theoret. Biol.* **58** (1978), no. 4, 789-800. (From the summary) **58** #15293 92A05
- Smith, T. H. C.** (with Jeroslow, Robert) Experimental results on Hillier's linear search algorithm. *Math. Programming* **9** (1975), no. 3, 371-376. (Charles E. Blair) **52** #16607 90C10
- (with Thompson, Gerald L.) A LIFO implicit enumeration search algorithm for symmetric traveling salesman problem using Held and Karp's 1-tree relaxation. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 479-493. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (R. L. Graves) **56** #14733 90C30
- (with Srinivasan, V.; Thompson, Gerald L.) Computational performance of the subtour elimination algorithms for solving asymmetric traveling salesman problem. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 495-506. *Ann. Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (See Zbl **363** #90081; MR **57** #2376) 90C10
- Smith, T. M. F.** (with John, J. A.) Two factor experiments in non-orthogonal designs (French summary) *Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971)*, Vol. 2. *Bull. Inst. Internat. Statist.* **44** (1971), no. 224-228. (D. V. Chopra) **52** #12251 62K15
- (with John, J. A.) Two-factor experiments in non-orthogonal designs. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 401-409. (H. L. Harter) **49** #6519 62K15
- (with Scott, Alastair) Survey design, symmetry and posterior distributions. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 57-60. (David Bellhouse) **48** #12673 62D05
- (with Cotter, Sarah C.; John, J. A.) Multi-factor experiments in non-orthogonal designs. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 361-367. (C. G. Bhattacharya) **51** #7171 62K15
- (with John, J. A.) Sum of squares in non-full rank general linear hypotheses. *Roy. Statist. Soc. Ser. B* **36** (1974), 107-108. (G. Manijia) **50** #15176 62J05
- (with Scott, Alastair) Minimax designs for sample surveys. *Biometrika* **62** (1975), no. 2, 353-357. (K. Vijayan) **53** #11829 62D05
- (with Scott, Alastair) Comments on "The efficient use of supplementary information in standard sampling procedures" (J. Roy. Statist. Soc. Ser. B **33** (1971) 391-400) by E. K. Foreman and K. R. W. Brewer. *J. Roy. Statist. Soc. Ser. B* **37** (1975), 146-148. (David Bellhouse) **51** #2068 62D05
- The foundations of survey sampling: a review. With a discussion by A. Stuart, K. L. Kalton, S. F. Buck, C. A. O'Muircheartaigh, D. Holt, M. R. Sampford, W. G. Cochran, W. A. Ericson, and Leslie Kish and a reply by the author. *J. Roy. Statist. Soc. Ser. B* **39** (1976), no. 2, 183-204. (Claes-M. Cassel) **56** #4005 62D05

- (with Scott, Alastair; Jones, R. G.) The application of time series methods to the analysis of repeated surveys. *Internat. Statist. Rev.* **45** (1977), no. 1, 13-28. (Kenneth R. Brewer) **55** #11457 62D05 (62M10)
- See also Kish, Leslie; et al., **51** #2064; Cassel, Claes-Magnus; et al., **56** #4002
- Analysis of survey data**, **58** #13416
- Terence R.** The "internal referencing" structural instability in an environment characterized by random variation: the example of the N.Y.C. banks in the crisis of 1971. *Statistical mechanics and statistical methods in theory and application (Proc. Sympos., Univ. Rochester, Rochester, N.Y., 1976)*, pp. 685-721. Plenum, New York, 1977. From the introduction **58** #15022 90A05 (90A15)
- Terry L.** (with Parks, R. Zane) The inadequacy of Hughes and Cresswell's semantics for the CI systems. *Notre Dame J. Formal Logic* **15** (1974), 331-332. (M. J. Cresswell) **50** #1844 02C10
- Tony E.** On the existence of most-preferred alternatives. *Internat. Econom. Rev.* **15** (1974), 184-194. (Georg Bol) **57** #18759 90A05 (06A10)
- Scalable choice models. *J. Mathematical Psychology* **14** (1976), no. 3, 239-243. (B. Mirkkin) **57** #5205 92A25**
- Truett L.** (with Tsokos, Chris P.) On approximating the expected behavior of stochastic epidemiological models applicable to small populations. *Appl. Math. Comput.* **1976**, no. 2, 95-111. (W. A. O'N. Waugh) **54** #6998 92A15
- Ud-Smith, V. J.** See Rayward-Smith, V. J.
- V. Merriline** Strongly superficial elements. *Pacific J. Math.* **58** (1975), no. 2, 3-650. (M. Nagata) **52** #13783 13A15
- Vedene H., Jr.** See Reduced density operators with applications to physical and chemical systems, **52** #7399
- Vernon L.** An optimistic theory of exhaustible resources. *J. Econom. Theory* **9** (1974), no. 4, 384-396. (Edwin Burmeister) **57** #9016 90A15
- Optimal costly firm entry in general equilibrium. *J. Econom. Theory* **9** (1974), no. 4, 7-417. (From the introduction) **58** #15069 90A15**
- W.** (with Jones, W. E.) Entropy, information flow and variance in regulatory control systems. *Internat. J. Control* **24** (1976), no. 2, 239-246. (Tamer Basar) **54** #2334 94A15 (93E20)
- W. B.** (with Zeis, C. D.) On classification for incomplete multinormal data. *Comm. Statist.* **2** (1973), 85-93. (T. N. Bhargava) **48** #3190 62H30
- (with Zeis, C. D.; Syler, G. W.) Three parameter lognormal estimation from censored data. *J. Indian Statist. Assoc.* **11** (1973), 15-31. (A. K. Md. Ehsanes Saleh) #7116 62F10
- (with Zeis, C. D.) Discrimination between normal populations with equal means. *Statist. Appl. Res. Un. Japán. Sci. Engrs.* **21** (1974), no. 2, 1-7. (Peter A. Berghström) **51** #7164 62H30
- W. C.** (with Sposito, Vincent) On a sufficient condition and a necessary condition for L_1 estimation. *J. Roy. Statist. Soc. Ser. C Appl. Statist.* **25** (1976), no. 2, 154-157. #6390 62J05
- W. D.** See Conference: Optimization Techniques, **48** #5758
- W. E.** (with Sloan, Ian H.) Product-integration with the Clenshaw-Curtis and related points. Convergence properties. *Numer. Math.* **30** (1978), no. 4, 415-428. (C. W. Clenshaw) **58** #13646 65D30
- W. R.** See Cybernetics collection, **52** #16086
- Walter L.** (with Basu, Sujit Kumar) General moment functions and a density version of the central limit theorem. *Proc. Cambridge Philos. Soc.* **75** (1974), 365-381. (Bergström) **49** #6322 60F05
- Warren D.** (with Mohler, Ronald R.) Necessary and sufficient conditions in the center determination of compartmental system order. *J. Theoret. Biol.* **57** (1976), no. 1, 21. (Robert J. Mulholland) **56** #4899 92A05 (93B05)
- Wendell** (with Sposito, Vincent; McCormick, Gary) ★Minimizing the sum of solute deviations. *Angewandte Statistik und Ökonometrie, Heft 12. Vandenhoeck & Ruprecht, Göttingen*, 1978. 60 pp. ISBN 3-525-11243-2 (R. Pfaffenberger) **58** #24857 D10 (41A50)
- William Bridges** See Révész, György, **50** #6222
- William Robert** (with Henderson, Douglas; Barker, J. A.) Perturbation theory in classical statistical mechanics. *Utilitas Math.* **1** (1972), 211-234. (S. Harris) **47** #2952 42
- (with Melnyk, Theodor William; Knop, Osvald) Extremal arrangements of points and unit charges on a sphere: equilibrium configurations revisited. (French summary) *Canad. J. Chem.* **55** (1977), no. 10, 1745-1761. (Authors' summary) **56** #2848 05B30 (2A40)
- (with Silvert, William) Optimal exploitation of a multi-species community. *Math. Sci.* **33** (1977), no. 1-2, 121-134. (Authors' summary) **58** #33158 92A15
- (with Henderson, Douglas) Exact analytical formulas for the distribution functions of charged hard spheres in the mean spherical approximation. *J. Statist. Phys.* **19** (1978), no. 2, 191-200. (From the summary) **58** #20141 (E 58 #20142) 82.65
- See also Blum, Lesser, **58** #20142
- Winthrop W., Jr.** (with Erdman, Stephen) A note on the inversion of complex matrices. *IEEE Trans. Automatic Control AC-19* (1974), 64. (Ralph E. Carlson) #7262a (E 51 #7262bc) 65F05
- (with Rugh, Wilson J.) On the structure of a class of nonlinear systems. System identification and time-series analysis. *IEEE Trans. Automatic Control AC-19* (1974), 701-706. (Steven I. Marcus) **56** #4946 93B15
- See also El-Hawary, M. E., **51** #7262b and Kamat, P. S., **51** #7262c
- Woolcott** The infinitely-many-server queue with semi-Markovian arrivals and customer-dependent exponential service times. *Operations Res.* **20** (1972), 907-912. (I. I. Iululescu) **49** #9974 60K20
- Shot noise generated by a semi-Markov process. *J. Appl. Probability* **10** (1973), 655-690. (S. K. Srinivasan) **50** #11513 60K15**
- (with Grassle, J. Frederick) Sampling properties of a family of diversity measures. *French summary* *Biometrics* **33** (1977), no. 2, 283-292. (I. J. Good) **58** #8112 P10
- ies, F.** Two remarks on a note by Mordell: "The minimum value of a definite integral" (*Math. Gaz.* **52** (1968), 135-136). *Math. Gaz.* **54** (1970), no. 389, 260-261. (Editors) **58** #11289 26A87
- What is modern mathematics? (Spanish) Translated from the English (*Math. Gaz.* **47** (1963), 278-298). *Bol. Mat.* **9** (1975), no. 1, 1-37. (Editors) **53** #5214 00A05
- Weierstrass's theory of the real numbers. *Bull. Inst. Math. Appl.* **11** (1975), no. 1-2, 24-27. (Willard Parker) **56** #2748 01A55
- See also Collected papers: Hardy, Godfrey Harold, **58** #16072 and Collected papers: Hardy, Godfrey Harold, **58** #16073
- Smithson, Raymond E.** Fixed point theorems for pseudo-monotone multifunctions. *Colloq. Math.* **24** (1971/72), 157-162. (M. Edelstein) **46** #8207 54H25 (54C60)
- Topologies on sets of relations. *J. Natur. Sci. and Math.* **11** (1971), 43-50. (J. M. Day) **46** #9925 54C60 (54C35)**
- Multifunctions and bitopological spaces. *J. Natur. Sci. and Math.* **11** (1971), 191-198. (V. J. Mancuso) **46** #4467 54C60 (54E55)**
- Uniform convergence for multifunctions. *Pacific J. Math.* **39** (1971), 253-259. (J. M. Day) **46** #8164 54C35 (54C60)**
- Multifunctions. *Nieuw. Arch. Wisk.* (3) **20** (1972), 31-53. (V. J. Mancuso) **46** #4468 54C60**
- (with Ward, Lewis E., Jr.) The fixed point property for arcwise connected spaces: a correction. *Pacific J. Math.* **43** (1972), 511-514. (W. H. Campbell) **47** #9603 54H25
- Fixed points in partially ordered sets. *Pacific J. Math.* **45** (1973), 363-367. (L. E. Ward, Jr.) **47** #4871 06A10 (54H25)**
- M-isometries. *Portugal. Math.* **32** (1973), 109-113. (O. T. Alas) **47** #9562 54E40**
- (with Muenzenberger, T. B.) Fixed point structures. *Trans. Amer. Math. Soc.* **184** (1973), 153-173 (1974). (L. E. Ward, Jr.) **48** #7242 54H25 (54F05, 54F20)
- (with Muenzenberger, T. B.) On the equivalence of certain coincidence theorems and fixed point theorems. *Fund. Math.* **84** (1974), no. 2, 93-100. (L. E. Ward, Jr.) **49** #1500 54H25
- (with Muenzenberger, T. B.) Compactness and connectedness as composable properties. *J. Austral. Math. Soc.* **18** (1974), no. 2, 161-169. (From the authors' introduction) **57** #13850 54D30
- (with Seelbach, E. R.) Prespaces and partially continuous functions. *J. Natur. Sci. and Math.* **14** (1974), no. 2, 111-126. (M. G. Murdeshwar) **55** #13376 54C60 (54A05)
- (with Muenzenberger, T. B.) Reffluent multifunctions on semitrees. *Proc. Amer. Math. Soc.* **44** (1974), 189-195. (S. T. Lin) **49** #6213 54H25
- (with Muenzenberger, T. B.) Characterizations of compactness of the interval topology in semilattices. *Proc. Amer. Math. Soc.* **46** (1974), 133-136. (L. E. Ward, Jr.) **49** #10615 06A20
- Subcontinuity for multifunctions. *Pacific J. Math.* **61** (1975), no. 1, 283-288. (G. L. Cain, Jr.) **53** #14404 54C60**
- (with Muenzenberger, T. B.) The structure of nested spaces. *Trans. Amer. Math. Soc.* **201** (1975), 57-87. (Á. Császár) **50** #8468 54F05
- (with Muenzenberger, T. B.) Mobs and semitrees. *J. Austral. Math. Soc. Ser. A* **21** (1976), no. 1, 56-63. (L. E. Ward, Jr.) **53** #4015 54F05 (54H25)
- First countable hyperspaces. *Proc. Amer. Math. Soc.* **56** (1976), 325-328. (Jozef Krasinkiewicz) **53** #6483 54B20**
- (with Muenzenberger, T. B.) Fixed point theorems for acyclic and dendritic spaces. *Pacific J. Math.* **72** (1977), no. 2, 501-512. (L. Janos) **56** #13196 54H25
- Connected and connectivity multifunctions. *Proc. Amer. Math. Soc.* **64** (1977), no. 1, 146-148. (Melvin R. Hagan) **56** #3786 54C10**
- Smits, T. H. M.** On matrix-subrings of some algebras with involution. *Rings, modules and radicals (Proc. Colloq., Keszthely, 1971)*, pp. 469-474. *Colloq. Math. Soc. János Bolyai, Vol. 6, North-Holland, Amsterdam*, 1973. (R. Piziaki) **50** #387 16A28
- On special hereditary orders in quaternion algebras. *Delft Progress Rep.* **1** (1974/75), no. 2, 37-40. (Zbl 295 #16001) **58** #22145 16A18**
- On an algebra of Littlewood. *Delft Progress Rep.* **1** (1974/75), no. 2, 41-43. (V. Dlab) **56** #5655 16A60**
- Quadratic skew polynomial rings. *Delft Progress Rep.* **2** (1976/77), no. 2, 111-118. (P. M. Cohn) **56** #5620 16A06**
- Skew Laurent series over semi-simple rings. *Delft Progress Rep.* **2** (1976/77), no. 2, 131-136. (P. M. Cohn) **56** #5644 16A40 (13J05)**
- Representations of quadratic extensions of commutative rings. *Delft Progr. Rep.* **3** (1977/78), no. 3, 179-186. (Author's summary) **58** #27940 13B99**
- Quadratic skew polynomial rings. II. *Delft Progress Rep. Ser. F* **3** (1977/78), no. 1, 3-7. (P. M. Cohn) **57** #16340 16A04**
- Smoczyński, Piotr** An existence theorem for an exact solution of a certain two-dimensional problem of gas dynamics. *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **23** (1975), no. 11, 969-974. (Nima Geffen) **57** #11319 7635
- The global solution of a certain boundary problem in the theory of plasticity.** (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **25** (1977), no. 3, 195-199. (Barry Bernstein) **57** #14756 7335
- Smogorzevs'kii, O. S.** ★Lobatschewskische Geometrie. Übersetzt aus dem Russischen von D. Schmidt. Mathematische Schülerbücherei, No. 96. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1978. 75 pp. (E. J. F. Primrose) **58** #2578 50-01 (50A10)
- Šmois, V. M.** (with Dusev, I. I.) Integration in finite form of systems of differential equations of linkage theory. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Tehn. Nauk* **1975**, no. 4, 69-71, 118. (E. L. Albasiny) **55** #3384 34A45
- Smoke, William** Dimension and multiplicity for graded algebras. *J. Algebra* **21** (1972), 149-173. (D. Kirby) **46** #9024 13D05
- Smokler, Howard** Semantical questions in Carnap's inductive logic. *British J. Philos. Sci.* **28** (1977), no. 2, 129-135. (Editors) **58** #10322 02C10
- Three grades of probabilistic involvement. *Philos. Studies* **32** (1977), no. 2, 129-142. (David W. Miller) **57** #5662 02A05 (02C10)**
- Smoktii, O. I.** Exact solution of the problem of diffuse reflection and transmission of light by a planetary atmosphere with a three-term scattering phase function. *Izv. Akad. Nauk SSSR Ser. Fiz. Atmosf. i Okeana* **12** (1976), no. 11, 1168-1182 (Russian); translated as *Izv. Acad. Sci. USSR Atmospher. Ocean. Phys.* **12** (1976/77), no. 11, 719-727. (Archibald Brown) **58** #4193 85.45 (86.45)

- Smoktunowicz, Alicja** (with Majchrowska, Jana) Numerical analysis of the Ortega-Householder algorithm in the complex domain. (Polish) *Mat. Stos.* (111) 8 (1976), 55-66. (Editors) 57 #18057 65F30
- Smolcaren, J. J.** Problèmes de stabilité numérique posés par les systèmes hyperboliques avec conditions aux limites. *Computing methods in applied sciences and engineering (Proc. Internat. Sympos., Versailles, 1973), Part 2, pp. 135-159. Lecture Notes in Comput. Sci., Vol. 11, Springer, Berlin, 1974.* (E. Schechter) 55 #13816 65N10
- Smoleński, Włodzimierz** Pre-supports and kernels of probability measures in Fréchet spaces. *Demonstratio Math.* 10 (1977), no. 3-4, 751-762. (A. Badrikian) 58 #17029 28A40
- Smoliar, Stephen W.** On the free matrix representation of transversal geometries. *J. Combinatorial Theory Ser. A* 18 (1975), 60-70. (J. E. Graver) 50 #9636 05B35
See also *Jahrestagung: Gesellschaft für Informatik*, 48 #1502
- Smolič, L. I.** (with El'sin, M. I.) A certain solvability condition for a boundary value problem. (Russian) *Mat. Zametki* 13 (1973), 247-250. (Leo F. Boron) 47 #3740 34B15 (34A15)
- Smolin, Ju. N.** (with Vinokurov, V. R.) The asymptotic behavior of Volterra equations with almost periodic kernels and retardations. (Russian) *Dokl. Akad. Nauk SSSR* 201 (1971), 771-773. (C. Avramescu) 45 #836 45D05 (45M05)
Volterra equations with a small parameter. (Russian) *Vsesojuz. Zaočn. Politehn. Inst. Sb. Trudov No. 73 Ser. Mat. Meh.* (1972), 79-82. (See RŽMat 1972 #11 B452) 45D05
- Smolin, V. P.** On the question of definability in the lower predicate calculus on a finite model without equality. (Russian. English summary insert) *Kibernetika (Kiev)* 1972, no. 4, 147-148. (H. B. Curry) 46 #7015 02G99 (02J10)
- Smoljak, S. A.** Splines and their application. (Russian) *Ėkonom. i Mat. Metody* 7 (1971), 419-431. (V. A. Popov) 45 #6115 62F10 (41A15)
(with Titarenko, B. P.) The robust estimation of the parameter of a distribution function. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Drogobych, 1973)* (Russian), pp. 198-208. *Central. Ėkonom.-Mat. Inst. Akad. Nauk SSSR, Moscow, 1975.* (I. Volodin) RŽMat 1976 #1 V248) 56 #16895 62F10 (62G35, 60K25)
(with Filimonov, V. V.) Problems on optimizing the production of a machine yard. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Drogobych, 1973)* (Russian), pp. 209-228. *Central. Ėkonom.-Mat. Inst. Akad. Nauk SSSR, Moscow, 1975.* (Editors) 56 #14635 90B30
(with Titarenko, B. P.) A generalization of Huber's model for arbitrary contamination. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Drogobych, 1974), Convex programming* (Russian), pp. 103-109. *Central. Ėkonom.-Mat. Inst. Akad. Nauk SSSR, Moscow, 1976.* (Jana Jurečková) 57 #7864 62G35
- Smol'jakov, A. F.** Generalization of the problem of M. Dresher. (Russian) *Operations research (Models, Systems, Solutions), No. 1* (Russian), pp. 71-89. *Vychisl. Centr Akad. Nauk SSSR, Moscow, 1970.* (R. Petrović) 47 #4661 90D40
- Smol'jakov, Ė. R.** Generalized differential games. (Russian) *Operations research (Models, Systems, Solutions), No. 1* (Russian), pp. 90-102. *Vychisl. Centr Akad. Nauk SSSR, Moscow, 1970.* (A. B. Kuržanskiĭ) 48 #8006 90D25
The maximum principle for problems with phase constraints. (Russian) *Operations research (Models, Systems, Solutions), No. 2* (Russian), pp. 136-155. *Vychisl. Centr Akad. Nauk SSSR, Moscow, 1971.* (Constantin Vîrsan) 47 #4099 49A99
Generalized differential and infinite antagonistic games with dependent player strategies. (Russian) *Dokl. Akad. Nauk SSSR* 208 (1973), 56-59. (L. A. Petrosjan) 47 #6337 90D25
Solution of games with dependent player strategies. (Russian) *Dokl. Akad. Nauk SSSR* 208 (1973), 280-283. (L. A. Petrosjan) 47 #8132 90D25
The concept of the solution of an N -person cooperative game with transferability. (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 1290-1292. (M. Mañas) 48 #1722 90D12
Conditions for stationarity in differential and infinite games. (Russian) *Operations research (models, systems, solutions), No. 4* (Russian), pp. 163-187, 239. *Vychisl. Centr, Akad. Nauk SSSR, Moscow, 1974.* (Editors) 58 #33046 90D25
Necessary conditions for optimality of the solution of program differential games. I. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1976, no. 3, 23-31 (Russian); translated as *Engng. Cybernetics* 14 (1976), no. 3, 18-25 (1977). (From the introduction) 58 #33047a 90D25
Necessary conditions for optimality of the solution of program differential games. II. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1976, no. 6, 31-41 (Russian); translated as *Engng. Cybernetics* 14 (1976), no. 6, 20-29 (1977). (From the introduction) 58 #33047b 90D25
- Smoljakov, V. I.** Asymptotic behavior of the resolvent of a certain triangular system of equations, and uniform approximation on the half axis of the solution of a system of Volterra equations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1971, no. 1(104), 73-82. (L. Guggenbuhl) 45 #838 45F05
Certain numerical methods of the approximate solution of system of Volterra integral equations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1971, no. 6(109), 95-101. (J. Kofroň) 45 #4693 65R05
- Smol'janinov, N. D.** (with Vasil'ev, V. V.) An effective estimation algorithm for non-Gaussian error models. (Russian) *Numerical analysis and mathematical physics, No. 2* (Russian), pp. 124-134. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow, 1975.* (See RŽMat 1976 #10 V118; MR 56 #1654) 62F10 (93E10)
- Smol'janinov, V. M.** Construction and analysis of statistical characteristics of a scattering Poisson channel. *Radiotehn. i Elektron.* 17 (1972), 2084-2091 (Russian); translated as *Radio Engng. Electron. Phys.* 17 (1972), 1659-1666. (F. J. Beutler) 52 #2707 94A05
- Smoljanov, O. G.** (with Averbuh, V. I.; Fomin, S. V.) Generalized functions and differential equations in linear spaces. I. Differentiable measures. (Russian) *Trudy Moskov. Mat. Obšč.* 24 (1971), 133-174. (Ju. L. Daleckiĭ) 51 #6413 46G05 (46F10, 28A40)
(with Averbuh, V. I.; Fomin, S. V.) Generalized functions and differential equations in linear spaces. II. Differential operators and their Fourier transforms. (Russian) *Trudy Moskov. Mat. Obšč.* 27 (1972), 247-262. (Ju. L. Daleckiĭ) 51 #6414 46G05 (46F10, 28A40)
- Several results on fully complete spaces and hereditarily complete spaces. (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 2(164), 181-182. (R. Cristescu) 54 #8213 46A05
(with Averbuh, V. I.) Differentiation and pseudotopologies. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 27 (1972), no. 1, 3-7. (G. Marinescu) 45 #9130 46G05 (46A15, 54A99)
(with Averbuh, V. I.) Pseudo-topologies and differentiation. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 27 (1972), no. 2, 3-9. (G. Marinescu) 45 #9131 46G05 (46A15, 54A99)
Sequentially closed subsets of products of locally convex spaces. (Russian) *Funkcional. Anal. i Priložen.* 7 (1973), no. 1, 88-89. (W. Słowikowski) 47 #3946A05
(with Ugianov, A. V.) Every Hilbert subspace of a Wiener space has measure zero. (Russian) *Mat. Zametki* 14 (1973), 369-374. (A. Badrikian) 49 #7421 28A40 (46B99)
Linear differential operators in spaces of measures and functions on Hilbert spaces. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 5(173), 251-252. (G. Marinescu) 53 #46G05 (58C20)
Certain complete spaces of smooth mappings of pseudotopological linear spaces. (Russian) *Uspehi Mat. Nauk* 29 (1974), no. 4(178), 181-182. (G. Marinescu) 54 #58C20 (58D15, 46G05)
Linear representations of evolution differential equations. (Russian) *Dokl. Akad. Nauk SSSR* 221 (1975), no. 6, 1288-1291. (Editors) 58 #17596 35Q10 (34A60, 46G99)
The class of spaces in which the theorem on the bounded differentiability of the inverse function is valid. (Russian) *Mat. Zametki* 17 (1975), no. 5, 703-709. (Theodor S. Bolis) 53 #6616 58C15 (46G05, 58C20)
Almost closed subsets of countable products of locally convex spaces. (Russian) *Trudy Moskov. Mat. Obšč.* 32 (1975), 61-76. (W. Słowikowski) 54 #13517 46A05
The size of the classes of hypercomplete spaces and spaces that satisfy the Kreĭn-Smul'jan condition. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 1(181), 259-266. (W. Słowikowski) 53 #14070 46A30 (46A05)
(with Fomin, S. V.) Measures on topological linear spaces. (Russian) *Uspehi Mat. Nauk* 31 (1976), no. 4, (190), 3-56. (R. M. Dudley) 54 #8776 60B05 (28A40, 46G10)
(with Aleksandrov, P. S.; Gel'fand, I. M.; Kolmogorov, A. N.; Maĭkov, E. I.; Maslov, V. P.; Oleĭnik, O. A.; Sinaĭ, Ja. G.; Tihomirov, V. M.) In memory of S. Vasil'evich Fomin. (Russian) *Uspehi Mat. Nauk* 31 (1976), no. 4(190), 199-212. (I. P. Fomin) 54 #29 01A70
Higher derivatives of mappings of locally convex spaces. (Russian) *Mat. Zametki* 22 (1977), no. 5, 729-744. (Theodor S. Bolis) 58 #13129 58C20 (46G05)
See also Frölicher, Alfred; et al., 50 #5463; *Transactions of the Moscow Mathematical Society*, 50 #9475 and *Transactions of the Moscow Mathematical Society*, 50 #9478
- Smoljanskĭ, S. A.** (with Prozorkevič, A. V.) A covariant formalism in the theory of quantum relativistic kinetic equations. (Russian. English summary) *Teoret. Mat. Fiz.* (1977), no. 1, 118-124. (M. Drăganu) 56 #2130 82A5
- Smoljar, L. I.** Mathematical models of scheduled planning of serial production. (Russian) *Ėkonom. i Mat. Metody* 2 (1966), 699-710. (V. Tanaev) RŽMat 1967 #4 V248) 46 #8652 90B35
Solution of a distributive problem by the method of the base graph. (Russian) *Ėkonom. i Mat. Metody* 6 (1970), 733-742. (M. Mañas) 45 #3066 90C05
The method of leading elements for a linear programming problem. (Russian) *Mathematical methods in economic research (Russian), pp. 50-60. Izdat. "Nauka", Moscow, 1974.* (I. Maruŝciac) 53 #7457 90C05
- Smolka, Josef** The correspondence of Diviš with L. Euler and the St. Petersburg Academy of Sciences. (Czech. Russian summary) *Acta Hist. Rerum Natur. Nec Non Techn.* (1963), 139-162. (Author's summary) 57 #15880 01A50
The role of the works of R. J. Bosovich in Bohemian lands. (Czech. English summary) *Acta Hist. Rerum Natur. Nec Non Techn.* 11 (1967), 117-133. (Author's summary) 57 #15881 01A50
- Smolkin, R. A.** Optimization of system for transport of exchangeable products. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 4, 27-34, 219 (Russian); translated as *Engng. Cybernetics* 12 (1974), no. 4, 19-25. (Author's summary) 55 #9904 90B10
- Smoller, Joel A.** A survey of hyperbolic systems of conservation laws in two dependent variables. *Hyperbolic equations and waves (Rencontres, Battelle Res. Inst., Seattle, WA, 1968), pp. 51-60. Springer, Berlin, 1970.* (Editors) 58 #29342 35L65
(with Conley, Charles C.) Viscosity matrices for two-dimensional non-linear hyperbolic systems. II. *Amer. J. Math.* 94 (1972), 631-650. (E. D. Conway) 47 #35L40
(with Conley, Charles C.) Shock waves as limits of progressive wave solutions of higher order equations. II. *Comm. Pure Appl. Math.* 25 (1972), 133-146. (D. L. Russell) 46 #5843 35L60
(with Conley, Charles C.) Topological methods in the theory of shock waves. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. Calif., Berkeley, Calif., 1971), pp. 293-302. Amer. Math. Soc., Providence, R.I., 1973.* (M. Fabrizio) 49 #5586 35L65 (76.35)
(with Taylor, Michael E.) Wave front sets and the viscosity method. *Bull. Amer. Math. Soc.* 79 (1973), 431-436. (M. H. Protter) 50 #780 35L45
(with Nishida, Takaaki) Solutions in the large for some nonlinear hyperbolic conservation laws. *Comm. Pure Appl. Math.* 26 (1973), 183-200. (E. D. Conway) 48 #9126 35L60
(with Conway, Edward D.) Shocks violating Lax's condition are unstable. *Amer. Math. Soc.* 39 (1973), 353-356. (Ronald DiPerna) 55 #3550 35L65
(with Nishida, Takaaki) Solutions in the large for some nonlinear hyperbolic systems of conservation laws. *Nonlinear wave motion (Proc. AMS-SIAM Summer Clarkson Coll. Tech., Potsdam, N.Y., 1972), pp. 209-210. Lectures in Appl. Math., 15, Amer. Math. Soc., Providence, R.I., 1974.* (M. Fabrizio) 50 #778 35L45
(with Sarason, Leonard) Geometrical optics and the corner problem. *Arch. Rational Mech. Anal.* 56 (1974/75), 34-69. (D. L. Colton) 49 #11059 (EA 50) 35L40
(with Conley, Charles C.) On the structure of magnetohydrodynamic shock waves.

- Comm. Pure Appl. Math.* **27** (1974), 367-375. (P. Germain) **51** #4827 76.35 (35Q99, 58F58)
- (with Conley, Charles C.) The M.H.D. version of a theorem of H. Weyl. *Proc. Amer. Math. Soc.* **42** (1974), 248-250. (W. F. Ames) **48** #5486 76.35
- (with Conley, Charles C.) The existence of heteroclinic orbits, and applications. *Dynamical systems, theory and applications (Rencontres, Battelle Res. Inst., Seattle, Wash., 1974)*, pp. 511-524. *Lecture Notes in Phys.*, Vol. 38, Springer, Berlin, 1975. Shigehiro Ushiki) **56** #12667 35Q99 (58F10)
- (with Conley, Charles C.) On the structure of magnetohydrodynamic shock waves. *J. Math. Pures Appl.* (9) **54** (1975), no. 4, 429-443. (C. Rogers) **56** #12627 35L99 (76.35)
- (with Nishida, Takaaki) Solutions in the large for certain nonlinear hyperbolic systems arising in shock-wave theory. *Applications of methods of functional analysis to problems in mechanics (Joint Sympos., IUTAM/IMU, Marseille, 1975)*, pp. 415-425. *Lecture Notes in Math.*, 503. Springer, Berlin, 1976. (T. Ruggeri (Zbl 347 #35054)) **58** #29341 35L65
- (with Conley, Charles C.) Remarks on traveling wave solutions of non-linear diffusion equations. *Structural stability, the theory of catastrophes, and applications in the sciences (Proc. Conf. Battelle Seattle Res. Center, Seattle, Wash., 1975)*, pp. 77-89. *Lecture Notes in Math.*, Vol. 525, Springer, Berlin, 1976. (See Zbl 341 #35048; MR 58 #24311) **58F10** (58C25)
- (with Conway, Edward D.) Diffusion and the classical ecological interactions: asymptotics. *Nonlinear diffusion (NSF-CBMS Regional Conf. Nonlinear Diffusion Equations, Univ. Houston, Houston, Tex., 1976)*, pp. 53-69. *Res. Notes Math.*, No. 14, Pitman, London, 1977. (S. Levin) **57** #6846 35K40 (92A05)
- (with Bardos, Claude) Instabilité des solutions stationnaires pour des systèmes de réaction-diffusion. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 4, A249-A252. (Authors' summary) **56** #16145 35K10 (35B35)
- (with Conway, Edward D.) A comparison technique for systems of reaction-diffusion equations. *Comm. Partial Differential Equations* **2** (1977), no. 7, 79-697. (Richard J. Field) **56** #3436 35B05 (92A05)
- (with Chueh, K. N.; Conley, Charles C.) Positively invariant regions for systems of nonlinear diffusion equations. *Indiana Univ. Math. J.* **26** (1977), no. 2, 373-392. (Mario Primicerio) **55** #3541 35K40
- (with Nishida, Takaaki) Mixed problems for nonlinear conservation laws. *J. Differential Equations* **23** (1977), no. 2, 244-269. (Ronald DiPerna) **55** #882 35L65
- (with Conway, Edward D.) Diffusion and the predator-prey interaction. *SIAM J. Appl. Math.* **33** (1977), no. 4, 673-686. (Authors' summary) **58** #11934 35K99 (92A15)
- (with Rauch, Jeffrey B.) Qualitative theory of the FitzHugh-Nagumo equations. *Advances in Math.* **27** (1978), no. 1, 12-44. (H. F. Weinberger) **58** #6759 35Q99 (92A05)
- (with Conway, Edward D.; Hoff, David) Large time behavior of solutions of systems of nonlinear reaction-diffusion equations. *SIAM J. Appl. Math.* **35** (1978), no. 1, -16. (Charles C. Conley) **58** #6637 35B40 (35K55, 92A05)
- Štiková, I. A. An upper bound for the number of real zeros of a finite-dimensional family of quasipolynomials on a finite interval. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I. Mat. Meh.* **1977**, no. 2, 50-55. (Author's summary) **58** #22440 26A78 (93D05)
- Šolov, E. L. Two asymptotic formulae for special functions that are connected with representations of the groups $SO(n)$ and $M(n-1)$. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 2(117), 72-77. (R. G. Langebartel) **45** #5435 33A75
- Šolowitz, Lawrence H. (with Levitan, Michael L.) Limit theorems for reversible Markov processes. *Ann. Probability* **1** (1973), no. 6, 1014-1025. (U. Krengel) **50** #5935 60J05
- Skalska-Adamowicz, Z. One more aspect of forcing and omitting types. *J. Symbolic Logic* **41** (1976), no. 1, 73-80. (J. M. Plotkin) **57** #16050 02H13 (02B25)
- On finite lattices of degrees of constructibility of reals. *J. Symbolic Logic* **41** (1976), no. 2, 313-322. (Editors) **58** #5204 02K05
- Constructible semi-lattices of degrees of constructibility. *Set theory and hierarchy theory, V (Proc. Third Conf., Bierutowice, 1976)*, pp. 1-43. *Lecture Notes in Math.*, Vol. 519, Springer, Berlin, 1977. (From the summary and text) **58** #21601 02K05
- On finite lattices of degrees of constructibility. *J. Symbolic Logic* **42** (1977), no. 3, 349-371. (Keith Devlin) **58** #5203 02K05
- On finite lattices of the degrees of constructibility of reals. *Prace Nauk. Inst. Mat. Politech. Wrocław. No. 14 Ser. Konfer. No. 1* (1977), 31-49. (From the introduction) **58** #10445 02K05 (02F30)
- Skłowski, Adam (with Kijowski, Jerzy) Darboux's theorem and the linearization of ordinary differential equations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astron. Phys.* **25** (1977), no. 7, 671-673. (Tudor S. Rațiu) **57** #4240 58F05
- Škviř, V. M. (with Čerepanov, G. P.; Tagi-zade, A. G.) Optimal design of certain engineering materials. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* **29** (1976), no. 3, 51-62, 79. (From the authors' summary) **56** #17362 73A49
- On the estimation of the parameter of the local method in the combined method of search for an extremum. (Russian) *Theory of optimal solutions (Russian)*, pp. 72-84. *Akad. Nauk Ukrain. SSR Inst., Kibernet., Kiev, 1977*. (Editors) **58** #8258 65K05 (65C99)
- Stuk, Antoni (with Bartosiewicz, Stanisława) The problem of the optimization of productivity with respect to the employment and investment structure. (Polish. Russian and English summaries) *Przegląd Statyst.* **23** (1976), no. 1, 119-123. (Authors' summary) **54** #12163 90A15
- (with Bukietyński, Władysław; Cieślak, Maria) Professor Zdzisław Hellwig. (Polish. Russian and English summaries) *Przegląd Statyst.* **23** (1976), no. 4, 379-387. (Editors) **55** #45 01A70
- Remarks on discrimination in compact metric spaces. (Polish. Russian and English summaries) *Przegląd Statyst.* **23** (1976), no. 4, 483-490. (Author's summary) **56** #16578 54E45
- Smol'jakov, E. R. See Smol'janinov, E. R.
- Smol'janinov, V. M. See Smol'janinov, V. M.
- Smondyrev, M. A. (with Kulešov, S. P.; Matveev, V. A.; Sisakjan, A. N.) Approximate methods in quantum field theory, and the concept of rectilinear paths at high energies. (Russian. English summary) *Bulgar. J. Phys.* **1** (1974), no. 3, 223-232. (Authors' summary) **54** #9455a (E 54 #9455b) 81.47
- (with Kulešov, S. P.; Matveev, V. A.; Sisakjan, A. N.; Tavhelidze, A. N.) Straight-line path approximation in quantum field theory. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* **5** (1974), 3-62. (Authors' summary) **57** #2298 81.46
- (with Kulešov, S. P.; Matveev, V. A.; Sisakjan, A. N.; Tavhelidze, A. N.) Method of straight-line paths and the eikonal problem. (Russian. English summary) *Teoret. Mat. Fiz.* **18** (1974), 147-160. (Authors' summary) **57** #8640 81.41
- (with Kulešov, S. P.; Matveev, V. A.; Sisakjan, A. N.) Errata to "Approximate methods in quantum field theory, and the concept of rectilinear paths at high energies" (Russian) (Bulgar. J. Phys. **1** (1974), no. 3, 223-232). *Bulgar. J. Phys.* **2** (1975), no. 1, 86. (Authors' summary) **54** #9455b 81.47
- (with Goloskokov, S. V.; Kulešov, S. P.; Matveev, V. A.) Scattering at large angles on the analytical quasipotentials. (Russian. English summary) *Teoret. Mat. Fiz.* **24** (1975), no. 1, 24-33. (Authors' summary) **58** #14575 81.35
- (with Kulešov, S. P.) Quantum fluctuations and the structure of particles in a field theory model. (Russian. English summary) *Teoret. Mat. Fiz.* **34** (1978), no. 3, 291-302. (Authors' summary) **58** #20013 81.47
- Smorgonskii, B. D. A transformation of matrices. (Russian) *Vestnik Jaroslav Univ. Vyp. 9* (1975), 103-110. (Editors) **56** #15675 15A21
- On the question of optimizing the scaling measure of a matrix. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 2(194), 229-230. (Petr Liebl) **57** #12549 15A12 (65F35)
- Smorodinskii, Ja. A. (with Huszár, Miklós) Representations of the Lorentz group and the generalization of helicity states. (Russian. English summary) *Teoret. Mat. Fiz.* **4** (1970), no. 3, 328-340. (Authors' summary) **57** #2250 81.22
- (with Liberman, M. A.; Kuznecov, G. I.) Two-dimensional expansions of relativistic amplitudes. (Russian. English summary) *Problemy Fiz. Elementar. Častic i Atom. Jadra* **2** (1971), 105-128. (Authors' summary) **57** #15008 81.33
- (with Nyíri, J.) Eigenfunctions in the problem of three bodies. *Jadernaja Fiz.* **12** (1970), 202-216 (Russian); translated as *Soviet J. Nuclear Phys.* **12** (1971), 109-115. (A. Ramm) **56** #7575 81.35
- (with Šepelev, G. I.) Boost matrix elements in $O(3, 1)$ and continuation to $O(4)$. *Jadernaja Fiz.* **13** (1971), 441-453 (Russian); translated as *Soviet J. Nuclear Phys.* **13** (1971), 248-253. (N. Mukunda) **49** #8542 81.22
- (with Huszár, Miklós) Unitary representations of the Lorentz group. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* **3** (1972), no. 1, 223-237. (Authors' summary) **58** #6074 22E43 (22E70)
- (with Šelepín, L. A.) Clebsch-Gordan coefficients, viewed from different sides. *Uspehi Fiz. Nauk* **106** (1972), 3-45 (Russian); translated as *Soviet Physics Uspekhi* **15** (1972), 1-24. (Authors' summary) **51** #14780 81.22
- (with Ėfros, V. D.) Orthogonal transformations of multidimensional angular harmonics. *Jadernaja Fiz.* **17** (1973), 210-224 (Russian); translated as *Soviet J. Nuclear Phys.* **17** (1973), 107-113. (Authors' summary) **50** #15662 81.33
- (with Danilov, Ju. A.) Johannes Kepler: from the mystery to the harmony. *Uspehi Fiz. Nauk* **109** (1973), 175-209 (Russian); translated as *Soviet Physics Uspekhi* **16** (1973), 136-155. **58** #26869 01A45
- (with Šepelev, G. I.) Matrix elements of the boost for the reduction $O(3, 1) \supset O(2, 1) \supset O(2)$. *Jadernaja Fiz.* **18** (1973), 934-943 (Russian); translated as *Soviet J. Nuclear Phys.* **18** (1974), 483-486. (J.-P. Antoine) **53** #7256 81.22
- (with Verdiev, Ĭ. A.; Kerimov, G. A.) The Clebsch-Gordan coefficients of the group $O(2, 1)$. *Jadernaja Fiz.* **20** (1974), 827-838 (Russian); translated as *Soviet J. Nuclear Phys.* **20** (1975), 441-446. (J. E. Lowther) **53** #7257 81.22
- (with Kuznecov, G. I.) On the theory of $3nj$ coefficients. *Jadernaja Fiz.* **21** (1975), no. 5, 1135-1143 (Russian); translated as *Soviet J. Nuclear Phys.* **21** (1975), no. 5, 585-588. (Daniel A. Akyeampong) **53** #2159 81.05 (81.22)
- (with Verdiev, Ĭ. A.; Kerimov, G. A.) Clebsch-Gordan coefficients of the Lorentz group. *Jadernaja Fiz.* **21** (1975), no. 6, 1351-1361 (Russian); translated as *Soviet J. Nuclear Phys.* **21** (1975), no. 6, 697-701. (Editors) **56** #4469 81.22
- Trees and the many-body problem. (Russian) *Izv. Vysš. Učebn. Zaved. Radiofizika* **19** (1976), no. 5-6, 932-941. (Editors) **58** #14526 81.22 (22E70)
- Lobačevskii and physics. (Russian) *Kvant* **1976**, no. 2, 22-27. (Not reviewed) 01A70
- Development of fundamental concepts in 20th century physics. (Russian. English summary) *Voprosy Filos.* **1977**, no. 5, 66-78, 187. (Author's summary) **58** #21265 01A60
- See also Einstein collection, **51** #4924; Tolman, Richard C., **51** #9728; Pauli, Wolfgang, **54** #2404; Pauli, Wolfgang, **55** #5375; Feynman, Richard P.; et al., **55** #9633a and Feynman, Richard P.; et al., **55** #9633b
- Smorodinsky, Meir ★Ergodic theory, entropy. *Lecture Notes in Mathematics*, Vol. 214. Springer-Verlag, Berlin-New York, 1971. v+64 pp. (Nathaniel Friedman) **54** #10568 28A65
- A partition on a Bernoulli shift which is not weakly Bernoulli. *Math. Systems Theory* **5** (1971), 201-203. (E. S. Boylan) **45** #7023 28A65 (60G99)
- Probabilistic properties of number expansions. *Papers from the "Open House for Probabilists" (Mat. Inst., Aarhus Univ., Aarhus, 1971)*, pp. 191-196. *Various Publ. Ser.*, No. 21, Mat. Inst., Aarhus Univ., Aarhus, 1972. (M. S. Waterman) **52** #3098 10K10 (28A65)
- On Ornstein's isomorphism theorem for Bernoulli shifts. *Advances in Math.* **9**, 1-9 (1972). (M. A. Akcoglu) **45** #8804 28A65
- (with Adler, Roy L.; Shields, Paul C.) Irreducible Markov shifts. *Ann. Math. Statist.* **43** (1972), 1027-1029. (I. Cuculescu) **46** #6468 60J10
- β -automorphisms are Bernoulli shifts. *Acta Math. Acad. Sci. Hungar.* **24** (1973), 273-278. (M. S. Waterman) **49** #10859 28A65 (10K10)
- Construction of K -flows. *Advances in Math.* **15** (1975), 207-215. (R. L. Adler) **50** #7485 28A65
- (with Kalai, Ehud) Other solutions to Nash's bargaining problem. *Econometrica* **43** (1975), 513-518. (Authors' summary) **55** #14250 90D35

- (with Kalai, Ehud) On a game theoretic notion of complexity for compact convex sets. *Proc. Amer. Math. Soc.* **49** (1975), 416-420. (Louis J. Billera) **51** #4948 90A15 (52-XX)
- (with Ornstein, Donald S.) Ergodic flows of positive entropy can be time changed to become K -flows. *Israel J. Math.* **26** (1977), no. 1, 75-83. (Kenneth R. Berg) **56** #5837 28A65
- (with Keane, M. S.) A class of finitary codes. *Israel J. Math.* **26** (1977), no. 3-4, 352-371. (Paul C. Shields) **56** #8808 28A65
- Smoryński, C. A.** Applications of Kripke models. *Metamathematical investigation of intuitionistic arithmetic and analysis*, pp. 324-391. *Lecture Notes in Mathematics*, Vol. 344, Springer, Berlin, 1973. (V. P. Orevkov) **56** #2795 02C15 (02H10)
- Elementary intuitionistic theories. *J. Symbolic Logic* **38** (1973), 102-134. (J. R. Moschovakis) **48** #5842 02G05 (02C15)
- (with de Jongh, D. H. J.) Kripke models and the intuitionistic theory of species. *Ann. Math. Logic* **9** (1976), no. 1-2, 157-186. (Dirk van Dalen) **53** #5266 02C15
- A note on the number of zeros of polynomials and exponential polynomials. *J. Symbolic Logic* **42** (1977), no. 1, 99-106. (Forbes D. Lewis) **58** #5124 02F25
- On axiomatizing fragments. *J. Symbolic Logic* **42** (1977), no. 4, 530-544. (Bernd I. Dahn) **57** #15998 02E05
- Avoiding self-referential statements. *Proc. Amer. Math. Soc.* **70** (1978), no. 2, 181-184. (Franco Montagna) **57** #16015 02F25
- See also **Handbook: Mathematical logic**, **56** #15351 and **Handbook: Mathematical logic**, **58** #10343
- Smotrov, V. M.** (with Černyšev, V. M.) The inverse problem of oscillations of rods and strings of variable mass. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1974**, no. 5, 117-124. (Authors' summary) **56** #10293 7335
- Smouse, Peter E.** (with Kojima, Ken-ichi) Maximum likelihood analysis of population differences in allelic frequencies. *Genetics* **72** (1972), no. 4, 709-719. (Jon Stene) **56** #9882 62P10 (92A10)
- Smrcz, Ervin** (with Faragó, István) Solution of partial differential equations by the finite element method. (Hungarian. Russian and English summaries) *Informac.-Elektron.* **13** (1978), no. 1, 34-39. (C. Tartia) **58** #3550 65N30
- Smrz, P. K.** Fibre bundles and Yang-Mills fields. *J. Austral. Math. Soc.* **15** (1973), 482-487. (F. A. E. Pirani) **48** #13167 8353
- Gauge invariant interactions of classical fields. *J. Austral. Math. Soc.* **19** (1975), 376-383. (S. Deser) **51** #7530 8158
- Translation as gauge transformations. *J. Austral. Math. Soc. Ser. B* **20** (1977), no. 1, 38-45. (Jouko Mickelsson) **57** #15268 8355
- De Sitter gauge transformations of Dirac equation. *Progr. Theoret. Phys.* **57** (1977), no. 5, 1771-1780. (M. Carmeli) **56** #2177 8353 (8122)
- (with O'Connor, M. P.) Dirac particles in the Minkowski space with torsion. *Austral. J. Phys.* **31** (1978), no. 2, 195-200. (M. A. H. MacCallum) **58** #14722 8153 (53C05)
- Šmukin, A. A.** (with Lazučnikov, N. M.) Solution of a two-dimensional inverse problem for a differential equation of parabolic type. (Russian) *Differential equations and their applications* (Russian), pp. 96-100, 214-215. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1976. (Authors' summary) **58** #29491 35R30 (35K99)
- Šmukler, A. I.** (with Pul'er, Ju. M.; Šul'man, T. A.) Signal transmission with time quantization. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy No. 385* (1971), 54-64. (O. A. Glonti) **48** #5718 94A05
- Convolution and bounded continuation of generalized functions. (Russian) *Sibirsk. Mat. Ž.* **12** (1971), 880-899. (N. Popa) **45** #890 46F10
- The integrability of the Fourier transforms of functions with compact support. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy No. 433 Mat. Metody i Primenen. v Zadačah Transporta* (1973), 85-95, 154. (J. L. B. Cooper) **50** #5339 42A28
- (with Šul'man, T. A.) Certain properties of Kotelnikov series. (Russian) *Izv. Vyss. Učebn. Zaved. Matematika* **1974**, no. 3(142), 93-103. (S. Baron) **50** #14036 42A20
- (with Šul'man, T. A.) Quantization of a stochastic signal. (Russian) Applied mathematics and transportation problems. *Moskov. Inst. Inž. Železnodorož. Transporta Trudy Vyp.* **473** (1974), 99-109. (Editors) **58** #9754 94A05
- Šmukler, Julija** Unidimensional and bidimensional Gur games. *Avtomat. i Telemekh.* **1970**, no. 10, 107-116 (Russian. English summary); translated as *Automat. Remote Control* **1970**, no. 10, 1634-1642. (From the author's introduction) **54** #6968 90D20
- The balloting problem with a random error. (Russian) *Dokl. Akad. Nauk SSSR* **196** (1971), 789-792. (E. Orlovsky) **46** #4631 60K99 (92A20)
- Šmulev, S. A.** (with Amangel'diev, B. R.; Šigaev, M. N.) Vector optimization problems. (Russian) *Optimization and simulation of complex systems* (Russian), pp. 41-47, 165. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (Tomas Gal) **56** #17841 90C99
- (with Amangel'diev, B. R.; Šigaev, M. N.) The structure and properties of vector optimization problems. I. (Russian) *Optimization and simulation of complex systems* (Russian), pp. 48-57, 166. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (Tomas Gal) **57** #11758a 90C30
- (with Amangel'diev, B. R.; Šigaev, M. N.) The structure and properties of vector optimization problems. II. *Optimization and simulation of complex systems* (Russian), pp. 58-62, 166. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (Tomas Gal) **57** #11758b 90C30
- Šmulevič, S. D.** The distribution of the eigenvalues of the operator of a selfadjoint elliptic boundary value problem in an unbounded domain. (Russian) *Dokl. Akad. Nauk SSSR* **189** (1969), 959-962. (Zbl 211, 415) **58** #29421 35P20
- Šmul'jan, B. L.** An iteration method for the identification of a nonlinear dynamic object in the condition of its normal exploitation. (Russian) *Cybernetics and computer technology*, No. 1: *Complex control systems* (Russian), pp. 187-195. *Naukova Dumka, Kiev*, 1969. **45** #9742 93B30
- (with Dubov, Ju. A.) Improvement of the solution of discrete multicriterion problem. *Avtomat. i Telemekh.* **1973**, no. 12, 109-117 (Russian); translated as *Automat. Remote Control* **34** (1973), no. 12, part 2, 1953-1959 (1974). (From the authors' introduction) **56** #13618 65K05
- (with Dubov, Ju. A.; Ikoeva, N. V.; Imel'baev, Š. S.; Kabakov, A. B.; Koval'čuk, S. G.; Kopeikin, A. B.; Popkov, Ju. S.; Rjazancev, A. N.) Mathematical simulation of the development of urban systems. *Avtomat. i Telemekh.* **1975**, no. 11, 93-127 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 11, part 1831-1862 (1976). (Kenneth F. Wieand) **55** #7306 90A15 (92A15, 93C10)
- (with Bedel'baev, A. A.; Dubov, Ju. A.) ★ Adaptive decision procedures in multicriterion problems. *Avtomat. i Telemekh.* **1976**, no. 1, 106-116 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 1, part 2, 76-85 (1977). (V. D. Dimitrov) **54** #14782 90C30
- (with Dubov, Ju. A.; Ikoeva, N. V.; Imel'baev, Š. S.; Koval'čuk, S. G.; Kopeikin, A. B.; Popkov, Ju. S.; Rjazancev, A. N.) Optimal planning and control problems in the development of conurbations (survey and research problems). *Avtomat. i Telemekh.* **1977**, no. 6, 78-116 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 6, part 2, 879-912. (Andrew P. Sage) **55** #14069 90-02 (93-02)
- (with Imel'baev, Š. S.) Stochastic communication systems analyzed by thermodynamic methods. *Avtomat. i Telemekh.* **1977**, no. 5, 77-87 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 5, part 1, 677-686. (Authors' summary) **56** #11483 94A05
- Šmul'jan, G. L.** An application of Volterra series to the study of a class of nonlinear dynamical systems. (Russian) *Kibernet. i Vyčisl. Tehn. Vyp.* **37** (1977), 14-21, 118. (G. Al'breht) **58** #9570 93C22
- Šmul'jan, Ju. L.** An extended spectral function and an extended resolvent of a Hermitian operator. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1970**, 230-234, 285. (Ju. M. Berezanskij) **45** #9177 47A10 (47A70)
- The direct and inverse problems of the theory of resolvent matrices. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1971**, 514-517, 573. (H. Langer) **47** #5553 47A60
- Representation of Hermitian operators with an ideal reference subspace. (Russian) *Mat. Sb. (N.S.)* **85**(127) (1971), 553-562. (Chandler Davis) **46** #703 47A65 (47B01)
- The operator R -functions. (Russian) *Sibirsk. Mat. Ž.* **12** (1971), 442-451. (Devinatz) **45** #949 47B99
- (with Safronova, V. Ja.) Holomorphic operator-valued functions whose values are collinear to semi-unitary operators. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 1347-1349. (J. L. B. Cooper) **48** #6987 47A65
- Operator colligations. (Russian) *Mat. Issled.* **8** (1973), no. 2(28), 147-160, 161. (Chandler Davis) **50** #10867 47A45 (47A70, 47B25)
- The inverse problem of the theory of operator colligations. (Russian) *Mat. Issled.* **8** (1973), no. 3(29), 122-135, 182. (Chandler Davis) **50** #10868 47A45 (47A70, 47B01)
- The resolvent matrix of an operator colligation. (Russian) *Mat. Issled.* **8** (1973), no. 4(30), 157-174, 198. (H. Langer) **50** #8147 47A25
- (with Volodin, A. A.) Certain questions of the geometry of rigged Hilbert spaces. (Russian) *Mat. Zametki* **13** (1973), 395-402. (Chandler Davis) **47** #5567 46C05 (46M35, 47A70)
- Letter to the editors: "The spectra of certain operator classes in Hilbert spaces." *Mat. Zametki* **13** (1973), 783-784. (J. Bognár) **48** #944 47B50
- Operator extension theory, and spaces with indefinite metric. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **38** (1974), 896-908. (H. Langer) **51** #3952 47B50 (47A01, 47B25)
- Closed Hermitian operators and their selfadjoint extensions. (Russian) *Mat. Zametki* **13** (1973), 155-169, 325. (T. Ja. Azizov) **49** #5911 47B25
- Theory of linear relations, and spaces with indefinite metric. (Russian) *Funkcion. Anal. i Priložen.* **10** (1976), no. 1, 67-72. (T. Ja. Azizov) **53** #8960 47B50
- (with Pekarev, E. L.) Parallel addition and parallel subtraction of operators. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 2, 366-387, 470. (F. Vasilescu) **53** #14178 47A50
- Certain stability properties for analytic operator-valued functions. (Russian) *Mat. Zametki* **20** (1976), no. 4, 511-520. (Alexander A. Pankov) **55** #1114 47A55 (32A01, 47B50)
- (with Cekanovs'kij, E. R.) Questions in the theory of the extension of unbounded operators in rigged Hilbert spaces. (Russian) *Mathematical analysis*, Vol. 14 (Russian. English summary), pp. 59-100, i. (loose errata). *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informac.* Moscow, 1977. (Chandler Davis) **58** #7162 47A70
- Certain properties of dissipative operators and dissipative holomorphic operator-valued functions. (Russian) *Teor. Funkcij Funkcional. Anal. i Priložen.* **1977**, 113-123, iv. (Andrei Rácz) **56** #6443 47A65 (47B44)
- (with Cekanovs'kij, E. R.) The theory of biextensions of operators in rigged Hilbert spaces. Unbounded operator colligations and characteristic functions. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 5(197), 69-124, 239. (M. S. Livšic) **57** #3893 47A70
- General linear-fractional transformations of operator spheres. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 2, 418-425, 480. (P. P. Zabreiko) **58** #12463 47A60
- See also **American Mathematical Society Translations, Ser. 2**, **48** #6969
- Smullyan, Raymond M.** A generalization of intuitionistic and modal logics. *Truth, syntax and modality* (Proc. Conf. Alternative Semantics, Temple Univ., Philadelphia, Pa., 1974), pp. 274-293. *Studies in Logic and the Foundations of Math.*, Vol. 68, North-Holland, Amsterdam, 1973. (R. Parikh) **53** #7733 02C10 (02C15)
- Smurova, N. A.** (with Bondarev, A. S.; Košev, A. I.; Merkulov, A. I.; Rynkevich, N. A.) The numerical realization of an iteration process for quasilinear elliptic equations. (Russian) *Izv. Vyss. Učebn. Zaved. Matematika* **1977**, no. 9(184), 6-10. (J. Miklič) **58** #8382 65P05
- Šmutcer, E.** See **Schmutzer, E.**
- Šmyglevskij, I. P.** (with Branec, V. N.) ★ Применение кватернионов в задачах ориентации твердого тела. (Russian) [The use of quaternions in problems of rigid-body attitude] *Механика Космического Полета*. [Mechanics of Space Flight Series] *Izdat. "Nauka", Moscow*, 1973. 320 pp. (B. D. Jovanović) **51** #4779 7053
- See also **Control in space**, **48** #8040 and **Control in space**, **48** #13320
- Šmyglevskij, Ju. D.** (with Terent'ev, E. D.) A complete system of equations in divergence form for the dynamics of an ideal gas. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 6, 1535-1544, 1626. (S. K. Aslanov) **56** #10389 7635
- The method of moments for the computation of selective radiative transfer. (Russian) *Radiation gas dynamics*, No. 2 (Russian), pp. 42-60, 127. *Vyčisl. Centr Akad. Nauk SSSR, Moscow*, 1976. (M. Drăgănu) **55** #14044 8265
- A variational principle in magneto-hydrodynamics in the case of infinite

- ductivity. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 1, 262-266, 280. (I. Djordje Djukic) **53** #12210 7649
- (with Terent'ev, E. D.) A complete system of equations in divergence form for the electromagnetic dynamics of a perfect gas. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 3, 725-737, 821. (S. K. Aslanov) **56** #10390 7635
- A variant of the moment method for the computation of selective radiation transfer. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 3, 785-790, 807. (Author's summary) **14491** 8265
- See also **Radiation gas dynamics**, **54** #4493
- V. I. (with Rubinstein, G. Š.) Methods of minimization of a quasiconvex function a convex polyhedron. (Russian) *Optimizacija No. 1*(18) (1971), 82-117. (J. Abraham) **4948** 90C25
- Effective algorithms for a certain class of nonlinear programming problems. (Russian) *Optimizacija No. 1*(18) (1971), 118-133. (J. Abraham) **46** #4947 90C30
- The algorithms of the method of successive improvement for quadratic programming. (Russian) *Optimizacija No. 5*(22) (1972), 133-157, 160. (A. Göpfert) **6001** 49D40 (90C20)
- (with Bulavskii, V. A.; Zvjagina, R. A.; Kaplan, A. A.) Studies in numerical methods of mathematical programming. (Russian) *Optimizacija Vyp. 13*(30) (1974), 159-168. (A. B. Pevnyi) **53** #15363 90C25
- Algorithms for the method of successive adaptation for a quadratic programming problem on the basis of a conjugate direction scheme. (Russian) *Optimizacija Vyp. 31*(1974), 71-82, 184. (Bruce D. Craven) **54** #12206 90C20
- A procedure of Newtonian type for the determination of expansion rates in the von Neumann model. (Russian) *Optimizacija Vyp. 18*(35) (1976), 36-47, 160. (Title) **4246** 90A15
- Algorithms of the method of feasible directions with quadratic normalization. (Russian) *Optimizacija Vyp. 18*(35) (1976), 82-89, 161. (A. B. Pevnyi) **56** #14710 C25
- See also **Laurent, Pierre-Jean**, (Not reviewed)
- va, N. V. An algorithm for a parametric linear-fractional programming problem. (Russian) *Optimizacija Vyp. 14*(31) (1974), 83-102, 184. (Tomas Gal) **53** #12574 C05
- Allowing for the simplest constraints in parametric programming. (Russian) *Optimizacija Vyp. 15*(32) (1974), 73-78, 185. (B. Bereanu) **53** #12575 90C05
- A decomposition algorithm in linear programming. (Russian) *Optimizacija No. 36*(1977), 100-115, 155. (I. Maruscian) **58** #31837 65K05 (90C05)
- la, A. M. (with Bljumin, S. L.) The sequence of Walsh functions and their generalizations. (Russian) *Problemy Peredači Informacii* **10** (1974), no. 3, 116-117. (Authors' summary) **57** #7036 42A56
- (with Bljumin, S. L.) The generation of the Walsh functions and their generalizations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 2(177), 6-9. (Editors) **58** #33479 94A05 (33-XX)
- S. (with Amir-Moëz, Ali R.) Square roots of a positive matrix and polar compositions. *Indust. Math.* **24** (1974), 55-60. (Marvin Marcus) **51** #535 15A06
- élls, Emmanuel P. Mesures normales et fonctions harmoniques. *Bull. Sci. Math.* (2) (1971), 197-207. (P. A. Loeb) **45** #3749 31D05
- Fonctions hypermédianes en théorie axiomatique du potentiel. *Bull. Sci. Math.* (2) (1972), 49-58. (P. A. Loeb) **47** #490 31D05
- Axiomatique d'un problème de Dirichlet dans les espaces biharmoniques. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1897-A1900. (P. A. Loeb) **46** #5660 31D05
- Sur les limites fines des fonctions harmoniques et les suites maximales. *Bull. Sci. Math.* (2) **97** (1973), 161-175 (1974). (I. Netuka) **49** #619 31D05
- Axiomatique des fonctions biharmoniques. I. (English summary) *Ann. Inst. Fourier (Grenoble)* **25** (1975), no. 1, x, 35-97. (N. Boboc) **52** #3573 31D05
- Axiomatique des fonctions biharmoniques. II. (English summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 3, ix, 1-47. (N. Boboc) **57** #16645 31D05
- jaeva, L. G. The method of finite difference equations in the solution of sampled-data control problems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 4(143), 78-83. (V. V. Ivanov) **50** #12380 93C55
- Some properties of discrete Laplace transforms. (Russian) *Trudy Rjazan. Radiotehn. Inst. No. 69 Differencial'nye Uravnenija* (1975), 87-91, 170. (Author's summary) **23368** 44A10
- (with Bojarkian, G. N.) Systems of linear differential equations with sampled-data components. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1977**, no. 1, 63-66. (Erwin Kozakiewicz) **56** #9039 34K20 (93D99)
- Some applications of generalized functions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1977**, no. 3, 59-63, 90-91. (L. Berg) **57** #10330 41A10
- A study of a certain class of linear sampled data systems by the method of transformations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 1(176), 2-88. (H.-J. Glaeske (Zbl 355 #44004)) **58** #20684 93C05
- See also **Litvinov, A. P.**, **48** #13384
- rian (with Howard, Alan) Kähler surfaces of nonnegative curvature. *J. Differential Geometry* **5** (1971), 491-502. (C. I. Ispas) **45** #2635 53C55
- Submanifolds of constant mean curvature. *Math. Ann.* **205** (1973), 265-280. (M. do Carmo) **48** #12421 53C40
- Mean curvature. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 163-166. Internat. Atomic Energy Agency, Vienna, 1974. (Robert Reilly) **55** #4053 53C40
- (with Nagano, Tadashi) Minimal varieties in tori. *Differential geometry (Proc. Sympos., Pure Math., Vol. XXVII, Part 1, Stanford Univ., Stanford, Calif., 1973)*, pp. 39-190. *Amer. Math. Soc., Providence, R.I.*, 1975. (David Blair) **54** #6038 53C40
- (with Nagano, Tadashi) Sur les surfaces minimales hyperelliptiques dans un tore. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 22, Aii, 1527-A1529. (R. Osserman) **52** #1497 49F10 (53A10)
- (with Nagano, Tadashi) Minimal varieties and harmonic maps in tori. *Comment. Math. Helv.* **50** (1975), 249-265. (David Blair) **52** #11797 53C40
- Weakly ample Kähler manifolds and Euler number. *Math. Ann.* **224** (1976), no. 3, 69-279. (Shoshichi Kobayashi) **55** #3334 32J25
- (with Nagano, Tadashi) Minimal surfaces in tori by Weyl groups. *Proc. Amer. Math. Soc.* **61** (1976), no. 1, 102-104 (1977). (H. Blaine Lawson) **55** #4049 53C40
- (with Nagano, Tadashi) Periodic minimal surfaces. *Comment. Math. Helv.* **53** (1978), no. 1, 29-55. (Robert Reilly) **58** #7501 53C40
- Smyth, C. J. Closed sets of algebraic numbers in complete fields. *Mathematika* **17** (1970), 199-205. (O. Fomenko (RŽMat 1971 #10 A76)) **48** #3912 12A15
- (with Ennola, Veikko) Conjugate algebraic numbers on a circle. *Ann. Acad. Sci. Fenn. Ser. A I No. 582* (1974), 31 pp. (H. L. Montgomery) **58** #16587 12A15
- Inequalities relating different definitions of discrepancy. Collection of articles dedicated to the memory of Hanna Neumann, V. J. *Austral. Math. Soc.* **17** (1974), 81-87. (J. P. R. Christensen) **49** #6037 52A40
- (with Ennola, Veikko) Conjugate algebraic numbers on circles. *Acta Arith.* **29** (1976), no. 2, 147-157. (Marthe Grandet) **53** #337 12A15 (10F40)
- Some inequalities for certain power sums. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 3-4, 271-273. (Marthe Grandet) **54** #12669 10F30 (12A15)
- Smyth, E. T. W. A schema for solving linear equations. *Math. Gaz.* **59** (1975), no. 409, 192-194. (From the text) **58** #31771 65F05
- Smyth, M. E. B. (with Oaten, Allan; Pearce, C. E. M.) Batesian mimicry and signal detection theory. *Bull. Math. Biology* **37** (1975), no. 4, 367-387. (James C. Bezdek) **52** #2647 92A15
- Smyth, M. R. F. (with Kaashoek, M. A.) On operators T such that $f(T)$ is Riesz or meromorphic. *Proc. Roy. Irish Acad. Sect. A* **72**, 81-87 (1972). (E. Berkson) **47** #5641 47B05
- A note on the action of an operator on its centraliser. *Spectral Theory Symposium (Trinity College, Dublin, 1974)*. *Proc. Roy. Irish Acad. Sect. A* **74** (1974), 297-298. (Author's summary) **57** #13523 46L15 (47B05)
- Riesz theory in Banach algebras. *Math. Z.* **145** (1975), no. 2, 145-155. (F. F. Bonsall) **52** #15013 46H05 (47B05)
- (with West, T. T.) The spectral radius formula in quotient algebras. *Math. Z.* **145** (1975), no. 2, 157-161. (A. M. Sinclair) **52** #6429 46H05 (47A10)
- Riesz algebras. *Proc. Roy. Irish Acad. Sect. A* **76** (1976), no. 31, 327-333. (F. F. Bonsall) **55** #6189 46H05 (47B05)
- (with West, T. T.) Invariant subspaces of compact elements in C^* -algebras. *Math. Z.* **153** (1977), no. 2, 193-197. (J. W. Bunce) **55** #8814 46L05 (47A15)
- Smyth, Michael B. Unique-entry graphs, flowcharts, and state diagrams. *Information and Control* **25** (1974), 20-29. (E. Engeler) **49** #6672 68A05 (05C20)
- Involutions as a basis for propositional calculi. *Notre Dame J. Formal Logic* **15** (1974), 569-588. (H. B. Curry) **51** #10021 02B05
- (with Lehmann, Daniel J.) Data types (extended abstract). *18th Annual Symposium on Foundations of Computer Science (Providence, R.I., 1977)*, pp. 7-12. *IEEE Comput. Sci., Long Beach, Calif., 1977*. (From the introduction) **58** #8450 68A05
- (with Plotkin, G. D.) The category-theoretic solution of recursive domain equations (extended abstract). *18th Annual Symposium on Foundations of Computer Science (Providence, R.I., 1977)*, pp. 13-29. *IEEE Comput. Sci., Long Beach, Calif., 1977*. (From the introduction) **58** #8459 68A05 (18B20)
- Effectively given domains. *Theoret. Comput. Sci.* **5** (1977/78), no. 3, 257-274. (Claude Benzenen) **58** #10366 02F27
- Power domains. *J. Comput. System Sci.* **16** (1978), no. 1, 23-36. (Henner Kröger) **57** #8128 68A05
- Smyth, W. F. (with Arany, Ilona; Szóda, Lajos) An improved method for reducing the bandwidth of sparse symmetric matrices. *Information processing 71 (Proc. IFIP Congr., Ljubljana, 1971)*, Vol. 2: Applications, pp. 1246-1250. North-Holland, Amsterdam, 1972. (Authors' summary) **57** #4589 68A10 (05C35)
- (with Benzi, W. M. L.) An algorithm for finding the diameter of a graph. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974)*, pp. 500-503. North-Holland, Amsterdam, 1974. (Herbert J. Bernstein) **55** #6939 68A10 (05C35)
- The construction of rational iterating functions. *Math. Comp.* **32** (1978), no. 143, 811-827. (Horst Tietz) **58** #6196 30A20 (65E05)
- Smythe, N. (with Crowell, Richard H.) The subgroup theorem for amalgamated free products, HNN-constructions and colimits. *Proceedings of the Second International Conference on the Theory of Groups (Australian Nat. Univ., Canberra, 1973)*, pp. 241-280. *Lecture Notes in Math.*, Vol. 372, Springer, Berlin, 1974. (J. S. Birman) **50** #13286 20E99
- (with Cossey, John) HNN groups and groups with center. *Knots, groups, and 3-manifolds (Papers dedicated to the memory of R. H. Fox)*, pp. 87-99. *Ann. of Math. Studies*, No. 84, Princeton Univ. Press, Princeton, N. J., 1975. (Andrew Brunner) **54** #5352 20E30
- Smythe, R. T. Approximation of local time at regular boundary points of a Markov chain. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **20** (1971/72), 134-142. (Author's summary) **58** #31420 60J50
- (with Meyer, Paul-André; Walsh, John B.) Birth and death of Markov processes. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. III: Probability theory, pp. 295-305. Univ. California Press, Berkeley, Calif., 1972. (Jacques Azéma) **53** #9392 60J40
- Strong laws of large numbers for r -dimensional arrays of random variables. *Ann. Probability* **1** (1973), no. 1, 164-170. (From the summary) **49** #11602 60F15
- (with Walsh, John B.) The existence of dual processes. *Invent. Math.* **19** (1973), 113-148. (D. L. Burkholder) **48** #7395 60J45
- Remarks on the hypotheses of duality. *Séminaire de Probabilités, VIII (Univ. Strasbourg, année universitaire 1972-1973)*, pp. 329-343. *Lecture Notes in Math.*, Vol. 381, Springer, Berlin, 1974. (Jacques Azéma) **54** #8890 60J40
- Sums of independent random variables on partially ordered sets. *Ann. Probability* **2** (1974), 906-917. (Jozef L. Teugels) **50** #11429 60G50
- Convergence of sommes de variables aléatoires indicées par des ensembles partiellement ordonnés. *Colloque Consacré au Calcul des Probabilités (Univ. Clermont, Clermont-Ferrand, 1973)*. *Ann. Sci. Univ. Clermont* **51** (1974), no. 9, 43-46. (Editors) **52** #9370 60G50
- Ergodic properties of marked point processes in R' . (French summary) *Ann. Inst. H. Poincaré. Sect. B (N.S.)* **11** (1975), no. 2, 109-125. (Olav Kallenberg) **51** #11633 60F15 (60G55)

- Multiparameter subadditive processes. *Ann. Probability* **4** (1976), no. 5, 772-782. (Yves Derriennic) **54** #11471 60F15 (28A65, 60G99)
- Remarks on renewal theory for percolation processes. *J. Appl. Probability* **13** (1976), no. 2, 290-300. (N. H. Bingham) **53** #11789 60K05
- (with Shorack, Galen R.) Inequalities for $\max_k S_k/b_k$ where $k \in N^+$. *Proc. Amer. Math. Soc.* **54** (1976), 331-336. (David J. Scott) **53** #4220 60G45 (60G50, 60B10)
- (with Wierman, John C.) First-passage percolation on the square lattice. I. *Advances in Appl. Probability* **9** (1977), no. 1, 38-54. (H. Kesten) **56** #9742 60K35
- (with Wierman, John C.) First-passage percolation on the square lattice. III. *Advances in Appl. Probability* **10** (1978), no. 1, 155-171. (H. Kesten) **57** #17891 60K35
- Smythies, Yorick** See **Lectures: Wittgenstein on the foundations of mathematics**, **55** #7728
- Snaidman, L. M.** See **Statistical analysis of economic time series and prediction**, **50** #1446
- Snaith, Victor P.** *J*-equivalence of group representations. *Proc. Cambridge Philos. Soc.* **70** (1971), 9-14. (J. S. Frame) **46** #1897 20C15
- Functional Massey products and homological algebra. *Proc. Cambridge Philos. Soc.* **70** (1971), 219-233. (J. P. May) **45** #1156 55G30
- On cyclic maps. *Proc. Cambridge Philos. Soc.* **71** (1972), 449-456. (P. S. Landweber) **51** #14051 54G25
- On the Kunnet formula spectral sequence in equivariant *K*-theory. *Proc. Cambridge Philos. Soc.* **72** (1972), 167-177. (L. Hodgkin) **46** #8226 55J25
- (with Davis, Donald M.) Massey products and *H* (*p, q*)-systems. *Math. Z.* **132** (1973), 1-10. (R. M. F. Moss) **48** #7279 55H15 (55G30)
- (with Ucci, Jack) Three remarks on symmetric products and symmetric maps. *Pacific J. Math.* **45** (1973), 369-377. (Ronald Brown) **51** #4230 55A15
- On $KO^*(X \times Y)$ and symmetric maps for S^3 . *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 31-35. (J. C. Becker) **48** #5059 55C25 (55B15)
- A stable decomposition of Ω^*S^*X . *J. London Math. Soc. (2)* **7** (1974), 577-583. (J. P. May) **49** #3918 55D35
- Dyer-Lashof operations in *K*-theory. *Topics in K-theory. Two independent contributions*, pp. 103-294. *Lecture Notes in Math.*, Vol. 496, Springer, Berlin, 1975. (J. F. Adams) **52** #15463 55G25 (55D35)
- On $K_*(\Omega^2 X; \mathbb{Z}/2)$. *Quart. J. Math. Oxford Ser. (2)* **26** (1975), no. 104, 421-436. (H. Suzuki) **52** #15462 55G25
- Infinite loop maps and the complex *J*-homomorphism. *Bull. Amer. Math. Soc.* **82** (1976), no. 3, 508-510. (Frederick H. Croom) **53** #14487 55E50 (55D35)
- A note on symmetric maps for spheres. *Math. Scand.* **38** (1976), no. 1, 78-80. (Ronald Brown) **54** #8618 55C25 (55B15)
- Some nilpotent *H*-spaces. *Osaka J. Math.* **13** (1976), no. 1, 145-156. (J. Stasheff) **54** #1214 55D45
- Towards algebraic cobordism. *Bull. Amer. Math. Soc.* **83** (1977), no. 3, 384-385. (J. F. Adams) **55** #4143 55B20
- The total Chern and Stiefel-Whitney classes are not infinite loop maps. *Illinois J. Math.* **21** (1977), no. 2, 300-304. (Stewart B. Priddy) **55** #6422 55D35 (57D20)
- (with Madsen, Ib; Tornehave, Jørgen) Infinite loop maps in geometric topology. *Math. Proc. Cambridge Philos. Soc.* **81** (1977), no. 3, 399-430. (J. P. May) **58** #13007 55D35 (55F45)
- The 2-primary *J*-homomorphism. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 3, 381-387. (Stanley Kochman) **57** #13939 55E50
- The complex *J*-homomorphism. I. *Proc. London Math. Soc. (3)* **34** (1977), no. 2, 269-302. (J. P. May) **56** #1311 55F50 (55E50)
- On the homology of the general linear groups over $\mathbb{Z}/4$. *Canad. J. Math.* **30** (1978), no. 4, 851-855. (Karlheinz Knapp) **58** #13032 55F50 (18F25, 55F40)
- On the stable cohomotopy of RP^∞ . *Proc. Amer. Math. Soc.* **69** (1978), no. 1, 174-176. (J. F. Adams) **57** #7573 55B20
- Snajder, Zagorka** Gemeinsame Eigenschaften der zentralen normalen, parallelen und überparallelen Projektionen im dreidimensionalen hyperbolischen Raum. *Mat. Vesnik* **9(24)** (1972), 27-37. (J. Böhm) **48** #2886 50C05
- Die Interpretation der Zentralkollineation in der hyperbolischen Ebene. *Mat. Vesnik* **11(26)** (1974), 297-300. (E. Morgantini) **51** #4026 50C05
- Snapper, Ernest** (with Troyer, Robert J.) \star Metric affine geometry. *Academic Press, New York-London*, 1971. xx+435 pp. (R. Artzy) **45** #9238 50D05
- (with Rudvalis, Arunas) Numerical polynomials for arbitrary characters. *J. Combinatorial Theory Ser. A* **10** (1971), 145-159. (Authors' summary) **46** #239 20C15 (05A15)
- Counting *p*-subgroups. *Proc. Amer. Math. Soc.* **39** (1973), 81-82. (Peter M. Neumann) **47** #3521 20D20
- Omitting models. *J. Symbolic Logic* **42** (1977), no. 1, 29-32. (From the introduction) **58** #21573 02H05
- Snapper, John W.** Contextual definition: what Frege might have meant but probably didn't. *Noûs* **8** (1974), no. 3, 259-272. (Not reviewed) 02-03
- Snay, Richard A.** Decompositions of E^3 into points and countably many flexible dendrites. *Pacific J. Math.* **48** (1973), 503-509. (James W. Cannon) **52** #15474 57A15 (54F50)
- Reducing the profile of sparse symmetric matrices. *Bull. Géodésique* **50** (1976), no. 4, 341-352. (M. Lotkin) **56** #9946 65F30
- Sneath, Peter H. A.** (with Sokal, Robert R.) \star Numerical taxonomy. The principles and practice of numerical classification. A Series of Books in Biology. W. H. Freeman and Co., San Francisco, Calif., 1973. xv+573 pp. (George F. Estabrook) **56** #14818 92A05
- Discussion of preceding papers. *Proceedings of the Eighth International Conference on Numerical Taxonomy* (Oeiras, 1974), pp. 167-175. W. H. Freeman, San Francisco, Calif., 1975. (Not reviewed) 92A99
- See also **Proceedings: International Conference on Numerical Taxonomy**, **56** #8071
- Sneddon, G. E.** (with McIntosh, C. B. G.) Generation of solutions of the Brans-Dicke equations. *Austral. J. Phys.* **27** (1974), 411-416. (Authors' summary) **53** #12455 83J35
- Change of Petrov type under generation of solutions of Einstein's equations. *J. Mathematical Phys.* **16** (1975), 740-742. (J. K. Beem) **50** #15847 83J53
- Hamiltonian cosmology: a further investigation. *J. Phys. A* **9** (1976), no. 2, 229-238. (M. A. H. MacCallum) **57** #2402 83A99
- Sneddon, Ian Naismith** (with Tweed, John) The stress intensity factors for a Griffith crack in an elastic body in which there is an asymmetrical distribution of body forces. *Roy. Soc. Edinburgh Sect. A* **69** (1970/71), 85-114. (T. W. Ting) **45** #2968 73J25
- \star The use of integral transforms. McGraw-Hill Book Co., New York-Düsseldorf-Johannesburg, 1972. xii+539 pp. (See Zbl **237** #44001) 44-01
- (with Das, S. C.) The stress field near a system of four symmetrically situated cracks of equal length. *Continuum mechanics and related problems of analysis on the occasion of the eightieth birthday of Academician N. I. Muskhelishvili* (Russian), 181-192. Izdat. "Nauka", Moscow, 1972. (M. Sokolowski) **51** #14709 73J45
- Integral transform methods. *Mechanics of fracture*, Vol. 1, pp. 315-367. Noordhoff, Leiden, 1973. (Vadim Komkov) **58** #8677 73J44
- \star Metoda transformacji całkowych w mieszanym zagadnieniu brzegowych klasycznej teorii sprężystości. (Polish) [The method of integral transforms in boundary value problems of the classical theory of elasticity] Text of lectures delivered in the cycle "Achievements of Polish Science", No. 17. Translated from the English by Hanna Olesiakowa. Ossolineum—Zakład Narodowy imienia Ossolińskich-Wydawnictwo Polskiej Akademii Nauk, Wrocław, 1974. 106 pp. (Not reviewed) 44A05 (73J35)
- Nikolai Ivanovich Muskhelishvili. Collection of articles dedicated to Nikolai Ivanovich Muskhelishvili. *Applicable Anal.* **4** (1974/75), 97-99. (Editors) **52** #5301A70
- Transform solutions of Dirichlet problems in quarter-spaces. *Glasgow Math. J.* (1974), 155-158. (E. J. Scott) **51** #3679 35J05
- A relation between the solutions of the half-space Dirichlet problems for Helmholtz's equation in R^n and Laplace's equation in R^{n+1} . *J. Engrg. Math.* **8** (1977-180. (E. J. Scott) **51** #1086 35C15 (35J05)
- The use in mathematical physics of Erdélyi-Kober operators and of some of their generalizations. *Fractional calculus and its applications* (Proc. Internat. Conf., Univ. of Hawaii, West Haven, Conn., 1974), pp. 37-79. *Lecture Notes in Math.*, Vol. 457, Springer, Berlin, 1975. (W. A. Al-Salam) **58** #6948 44A15
- (with Nasim, C.) A general procedure for deriving solutions of dual integral equations. *J. Engrg. Math.* **12** (1978), no. 2, 115-128. (R. U. Verma) **57** #17145F10
- See also **Bogolubov, N. N.**; et al., **53** #11156; **Encyclopaedic dictionary of mathematics for engineers and applied scientists**, **56** #2720; **Application of integral transforms in the theory of elasticity**, **58** #19613 and **Štokalo, I. Z.**, **58** #29868
- Snedecor, George W.** (with Cochran, William G.) \star Statistical methods. Seventh printing of the sixth edition. The Iowa State University Press, Ames, Iowa, 1967. xiv+592 pp. (Editors) **52** #1943 62-01
- See also **Bancroft, T. A.**, **49** #7074; **Kempthorne, Oscar**, **52** #7804; **Statistical papers in honor of George W. Snedecor**, **54** #6337; **Cochran, William G.**, **55** #7100; **Cox, Gertrude M.**; et al., **57** #5628 and **Biography: Snedecor, George W.**, **57** #10000
- Snee, Ronald D.** See **Cornell, John A.**; et al., **52** #12240
- Sneed, Joseph D.** Quantum mechanics and classical probability theory. *Symposium on Problems of Quantum Theory. Synthese* **21** (1970), no. 1, 34-64. (S. Gudder) **55** #8160
- Describing revolutionary scientific change: a formal approach. *Historical philosophical dimensions of logic, methodology and philosophy of science* (Proc. Internat. Congr. Logic, Methodology and Philos. of Sci., Part IV, Univ. Western Ontario, London, Ont., 1975), pp. 245-268. Univ. Western Ontario Sci. Philos. Sci., Vol. 12, Reidel, Dordrecht, 1977. (Editors) **58** #20971 00A25 (02A05)
- (with Balzer, Wolfgang) Generalized net structures of empirical theories. I. *Studia Logica* **36** (1977), no. 3, 195-211. (Mario Bunge) **57** #9458 02A05 (02G99)
- (with Balzer, Wolfgang) Generalized net structures of empirical theories. II. *Studia Logica* **37** (1978), no. 2, 167-194. (Mario Bunge) **58** #200 02G99
- See also **Przełęcki, Marian**, **53** #2617
- Šneerson, L. M.** Identities in finitely presented semigroups. (Russian) *Logic, algebra and mathematical analysis*, Vol. 2, no. 1. *Ivanovo Gos. Ped. Inst. Učen. Zap.* **123** (1973), 163-171. (L. Bokut') **57** #491 20M05
- The free subsemigroups of finitely presented semigroups. (Russian) *Sibirsk. Mat. Zh.* **15** (1974), 450-454, 463. (G. Pollák) **48** #11362 20M05
- Šneerson, M. S.** (with Lopatina, T. M.) Conjugate functions with respect to constants and spinors. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 848-851. (D. P. Rašković) **46** #20H05
- (with Kudrjašova, N. F.) A certain oblique derivative problem for harmonic functions of three independent variables. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 1906-1908, 1916. (Ju. A. Šaškin) **47** #2083 31B20
- Functionally invariant solutions of Weyl equations, spinors and electromagnetic fields. (Russian) *Gravitacija i Teor. Otnositel'nosti* No. 9 (1973), 97-104. (RŽFizmat) **6** B143) **58** #32817 83J53
- (with Lopatina, T. M.) Conjugate functions and analytic functions of two complex variables. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 275-279, 287. (Victor I. Levin) **49** #5383 31B99
- See also **Questions of mathematical physics and theory of oscillations**, **58** #25100
- Snegur, A. A.** (with Martson, L. S.) A sufficient test of asymptotic stability of a class of continuously discrete automatic systems. (Russian) *Adaptive systems of automatic control* (Proc. Sem., Kiev, 1968), No. 1 (Russian), pp. 63-69. Akad. Nauk Ukrain. SSR, Kiev, 1969. (RŽKibernet) **1970** #1 G53) **46** #1425 93D99
- (with Lutov, S. D.) Certain questions of the technical realization of adaptive control systems of continuous technological processes. (Russian) *Adapt. Sistemy Avtomat. Upravlenija Vyp.* **2** (1974), 137-141, 154. (Authors' summary) **55** #7513 93C40
- Šneiberg, I. Ja.** The nonconnectedness of the group of invertible operators in a pair of Hilbert spaces. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. Mekh.* **1** (1970), 1-10. (L. Ladyženskaja) **54** #13982 58D05 (47D10)
- The solvability of linear equations in interpolational families of Banach spaces. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 57-59. (S. Ganguly (Zbl **322** #46058) **58** #30443 47B30 (46M35, 47A50)
- Admissible values of the indices of Noetherian operators in a pair of Banach spaces. (Russian) *Funkcional. Anal. i Priložen.* **7** (1973), no. 2, 95-96. (S. G. Samko (Zbl **470066**) **58** #30444 47B30 (46M35, 47A50)

- The nullspaces of the powers of a Φ_+ -operator that depends holomorphically on a parameter. (Russian) *Mat. Issled.* **8** (1973), no. 1(27), 230-234, 244. (S. Rolewicz) **7** #4037 47A55 (47B30)
- Spectral properties of linear operators in interpolation families of Banach spaces. (Russian) *Mat. Issled.* **9** (1974), no. 2(32), 214-229, 254-255. (E. Gerlach) **58** #30362 7A10 (46M35, 47B30)
- (with Petunin, Ju. I.) Families of uniqueness, and weakly sequentially continuous functionals in Banach spaces. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **12** (1975), 110-115, 173. (W. A. Woyczyński) **53** #8373 28A40 (60B05, 6B05)
- (with Buldigin, V. V.; Petunin, Ju. I.; Pličko, A. M.) The structure of the σ -algebra of Borel sets, and the convergence of certain random series in Banach spaces. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 4, 435-442, 572. (R. M. Dudley) **51** #14182 60B10
- The invertibility of multipliers and the spectrum of an operator in spaces with various norms. (Russian) *Funktsional. Anal. i Prilozhen.* **12** (1978), no. 1, 92. (F.-H. Silesescu) **58** #2429 47B37 (43A22)
- ler, A. A. The reduction of an improper double Lebesgue integral to an iterated integral. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 3(142), 104-110. (Piotr Antosik) **51** #828 26A42
- ler, A. E. Exponential stability of countable systems of differential equations with lag that contain a small parameter multiplying the derivative. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9** (1975), no. 4, 110-120, 136 (1976). (K. Smítalová) **57** #6752 34K20
- ler, K. R. See **Schneider, K. R.**
- ler, Maria Adelaide Saggio di una teoria per un'equazione integro-differenziale che interessa la dinamica delle galassie. (English summary) *Rend. Mat.* (6) **6** (1973), 11-857. (I. Fenýő) **50** #10728 45J05
- (with Fichera, G.) Distribution de la charge électrique dans le voisinage des sommets et des arêtes d'un cube. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 1303-1306. (R. B. Kelman) **50** #3770 (EA 54) 78.31
- (with Fichera, G.) Un problema di autovalori proposto da Alexander M. Ostrowski. Collection of articles dedicated to Mauro Picone on the occasion of his ninetieth birthday. *Rend. Mat.* (6) **8** (1975), 201-224. (L. Collatz) **51** #8763 45C05 (65D99)
- (with Fichera, G.) Abstract and numerical aspects of the problem concerning the computation of eigenfrequencies of continuous systems. *Trends in applications of pure mathematics to mechanics* (Conf., Univ. Lecce, Lecce, 1975), pp. 63-90. *Monographs and Studies in Math.*, Vol. 2, Pitman, London, 1976. (Authors' introduction) **58** #3853 3.35 (35P99, 49C99)
- ler, V. E. A certain bicomact topological space. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 7(110), 108-112. (R. Telgársky) **45** #1117 54D30
- ler Ludovici, Maria Adelaide See **Sneider, Maria Adelaide**
- erman, Ja. N. Addition theorems and modification of the "Hausdorff topology". (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1977**, no. 2, 65-68. (A. I. Baškirov) **56** #6588 54A25 (54D10)
- rais, A. B. (with Nigirner, D. I.) Functions that characterize the scattering of resonance radiation in an infinite medium. (Russian. English summary) *Leningrad. Gos. Univ. Učen. Zap. No. 363. Ser. Mat. Nauk Vyp. 48. Trudy Astronom. Obser.* **29** (1973), 6-32. (Authors' summary) **53** #15243 82.65
- lers, H. A. M. Numerology in German romanticism and "Naturphilosophie". *Janus* **10** (1973), 25-40. (Editors) **58** #27045 01A55
- g, E. J. (with Cox, D. R.) On test statistics calculated from residuals. *Biometrika* **58** (1971), 589-594. (Authors' summary) **47** #1174 62E15
- g, Fred M. See **Progress in theoretical biology**, **52** #12836
- l, J. Laurie (with Kemeny, John G.; Schleifer, Arthur, Jr.; Thompson, Gerald L.) ★Mathematik für die Wirtschaftspraxis. Übersetzung aus dem englischen von Hans-Jürgen Zimmermann. *Walter de Gruyter, Berlin-New York*, 1966. xv + 492 pp. (Editors) **50** #12501 00A05
- (with Kemeny, John G.; Thompson, Gerald L.) ★Úvod do finitní matematiky. (Czech) [Introduction to finite mathematics] Translated from the English by Jaroslav Růžička, Karel Prokop, Štefan Chochol and Jan Chlumský. *SNTL—Nakladatelství Technické Literatry, Prague; Nakladatel'stvo Alfa, Bratislava*, 1971. 470 pp. (Editors) **50** #12499 00A05
- (with Kemeny, John G.; Schleifer, Arthur, Jr.; Thompson, Gerald L.) ★Finite mathematics with business applications. Second edition. *Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1972. xiii + 529 pp. (Editors) **50** #12500 00A05
- (with Kemeny, John G.; Schleifer, Arthur, Jr.; Thompson, Gerald L.) ★Mathematik für die Wirtschaftspraxis. Übersetzung aus dem englischen von Hans-Jürgen Zimmermann. Zweite verbesserte Auflage. *Walter de Gruyter, Berlin-New York*, 1972. xv + 492 pp. (Editors) **50** #12502 00A05
- (with Kemeny, John G.) ★Mathematical models in the social sciences. Reprint of the 1962 edition. *The MIT Press, Cambridge, Mass.-London*, 1972. vii + 145 pp. (Editors) **50** #15959 92-01 (90-01)
- (with Kemeny, John G.; Thompson, Gerald L.) ★Introduction to finite mathematics. Third edition. *Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1974. xi + 484 pp. (Editors) **50** #12498 00A05
- (with Kemeny, John G.; Thompson, Gerald L.) ★Einführung in die endliche Mathematik. Übersetzt aus dem Englischen von Ferdinand Lipowsky und Luitgard Sieber. Wirtschaftswissenschaft der Gegenwart, No. III. Mathematische Hilfsmittel. Erster Band. *Fachverlag für Wirtschaftstheorie und Ökonometrie, Ludwigshafen am Rhein*, 1974. vii + 386 pp. (Editors) **55** #7644 00A05 (90-01)
- (with Griffeth, David) Optimal stopping in the stock market. *Ann. Probability* **2** (1974), no. 1, 1-13. (Ulrich Rieder) **50** #15205 62L15
- ★Introduction to probability theory with computing. *Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1975. vii + 294 pp. (Editors) **50** #14851 60-01
- (with Kemeny, John G.; Knapp, Anthony W.) ★Denumerable Markov chains. Second edition. With a chapter on Markov random fields, by David Griffeth. Graduate Texts in Mathematics, No. 40. *Springer-Verlag, New York-Heidelberg-Berlin*, 1976. xii + 484 pp. (Editors) **53** #11748 60Jxx (60Gxx)
- (with Kemeny, John G.) ★Finite Markov chains. Reprinting of the 1960 original. Undergraduate Texts in Mathematics. *Springer-Verlag, New York-Heidelberg*, 1976. ix + 210 pp. (Editors) **53** #14670 60J10 (60J20)
- (with Föllmer, Hans) An "inner" variational principle for Markov fields on a graph. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **39** (1977), no. 3, 187-195. (F. L. Spitzer) **56** #3978 60K35
- Snell, L. J. On the proofs of two theorems in probabilistic potential theory. *Martingales (Report Meeting, Oberwolfach, 1970)*, pp. 49-59. *Lecture Notes in Math.*, Vol. 190, Springer, Berlin, 1971. (Mamoru Kanda) **51** #7017 60J45
- Snell, R. I. (with Jones, William B.) Sequences of convergence regions for continued fractions $K(a_n/1)$. *Trans. Amer. Math. Soc.* **170** (1972), 483-497. (A. Magnus) **47** #3656 30A22
- Snell, Roy C. The range of invariant means on locally compact groups and semigroups. *Proc. Amer. Math. Soc.* **37** (1973), 441-447. (C. Chou) **47** #2035 28A70 (43A07)
- (with Goodaire, Edgar G.) The derivation algebra of $M_n^*(\mathbb{C})$. *Canad. Math. Bull.* **17** (1974), no. 3, 375-378; correction, *ibid.* **17** (1974), no. 4, 623. (Helmut Strade) **51** #8193 17E05
- The range of invariant means on locally compact abelian groups. *Canad. Math. Bull.* **17** (1974), no. 4, 567-573. (A. T.-M. Lau) **53** #1166 43A07
- Snell, W. See **Joyce, W. B.**; et al., **53** #12830
- Snelling, M. (with Bouckaert, M.; Pirotte, A.) Efficient parsing algorithms for general context-free parsers. *Information Sci.* **8** (1975), 1-26. (Derick Wood) **50** #15443 (EA 52) 68A30
- See also **Jahrestagung: Gesellschaft für Informatik**, **48** #1502
- Snellman, Håkan Dynamical formulations of the concept of partial conservation of the axial-vector current. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **16** (1972), 279-291. (J. Ławrynowicz) **48** #7815 81.22
- (with Flato, Moshé; Simon, Jacques; Sternheimer, Daniel) Simple facts about analytic vectors and integrability. *Ann. Sci. École Norm. Sup.* (4) **5** (1972), 423-434. (E. A. Thieleker) **51** #13135 22E45
- Charges as generators of unitary symmetry groups. *J. Mathematical Phys.* **14** (1973), 1218-1221. (S. Gudder) **49** #1988 81.47
- (with Nagel, Bengt) Analytic vectors for the Poincaré group in quantum field theory. *J. Mathematical Phys.* **15** (1974), 245-246. (L. O'Raifeartaigh) **49** #6809 81.22
- (with Flato, Moshé) Regge lattice and Lie-algebra representations. *J. Mathematical Phys.* **15** (1974), 857-860. (W. Miller, Jr.) **49** #10272 81.22
- Poincaré analytic vectors in axiomatic quantum field theory. *J. Mathematical Phys.* **15** (1974), 1054-1059. (H. Araki) **54** #9391 81.22
- Quantization in terms of local Heisenberg systems. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **24** (1976), no. 4, 393-416. (E. A. Thieleker) **54** #14621 81.46
- Representations of the Weyl Lie algebra as models of elementary particles. *J. Math. Phys.* **19** (1978), no. 11, 2278-2282. (Jouko Mickelsson) **58** #25462 81.17 (22E70)
- Šneperman, L. B. Continuous semigroups of transformations. (Russian) *Dokl. Akad. Nauk BSSR* **14** (1970), 493-495. (Št. Schwarz) **47** #2571 54H15 (22A15)
- Semigroups of endomorphisms of infinite topological groups and inverse semigroups. (Russian) *Dokl. Akad. Nauk BSSR* **16** (1972), 681-683, 767. (Št. Schwarz) **49** #455 22A15
- Maximal inverse subsemigroups of the semigroup of linear transformations. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 11(150), 93-100. (B. Pondělíček) **51** #770 20M20
- Weakly uniform monothetic semigroups. *Semigroup Forum* **9** (1974/75), no. 3, 275-277. (M. Friedberg) **52** #648 22A15
- Periodic inverse linear semigroups. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 4, 22-28, 140. (I. S. Ponizovskii) **58** #954 20M10
- The semigroup of continuous functions. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 6, 93-94, 143. (Author's summary) **57** #17241 (EA 58) 46E25 (54D30)
- (with Gluskin, L. M.; Schein, Boris M.; Jaroker, I. S.) Addendum to: "A survey of semigroups of continuous selfmaps" (*Semigroup Forum* **11** (1975/76), no. 3, 189-282) by K. D. Magill. *Semigroup Forum* **14** (1977), no. 2, 95-125. (K. N. Sigmón) **56** #3168 20M20 (22A15)
- Inverse semigroups of partially unitary operators. (Russian. English summary) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 1, 11-16, 139. (A. B. Buche) **58** #2458 47D05
- See also **Sverdlovsk Symposium**, **45** #6958 and **Mathematics**, **57** #15810
- Šneps-Sneppe, M. A. (with Škol'nyi, E. I.) On the accuracy of statistical simulation of queueing systems described by semi-Markov birth-and-death processes. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 5, 60-65 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 5, 762-766. (Jozef L. Teugels) **50** #11528 60K25
- A theorem on optimal limited access circuits under minimal load. (Russian) *Problemy Peredachi Informacii* **11** (1975), no. 3, 73-80. (Author's summary) **58** #9755 94A05
- Šnerenko, P. I. See **Mathematical simulation and the theory of electrical circuits**, **48** #3287
- Snevčeliev, Hristo P. Stability of the solutions of a certain strongly nonlinear system of differential equations. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 4, 41-50 (1973). (From the author's summary) **57** #3538 34D25
- Stability of the solutions of certain strongly nonlinear systems of differential equations under a constraint condition. (Bulgarian. Russian and French summaries) *Mathematics and mathematical education (Proc. Second Spring Conf. Bulgarian Math. Soc., Vidin, 1973)* (Bulgarian), pp. 193-199. *Izdat. B'lgar. Akad. Nauk., Sofia*, 1974. (D. Bobrowski) **50** #2626 34D05
- On the stability problem for strongly nonlinear systems of differential equations. (Bulgarian. Russian and English summaries) Conference on Differential Equations and Applications (Ruse, 1975). *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 1, 221-230 (1977). (V. M. Popov) **58** #11705 34D05
- Stability of strongly nonlinear systems of differential equations via an investigation of the exceptional directions. (Bulgarian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 1, 215-224 (1978). (Author's summary) **58** #28916 34D20
- Sneyd, Henry C. See **Kaufmann, A.**; et al., **58** #15141
- Sneyers, R. Sur l'estimation du nombre équivalent de répétitions. *Rev. Statist. Appl.* **19**

- (1971), no. 2, 35-47. (J. L. Lumley) **51** #2208 62M05
- Śniadecki, Jan See Dianni, Jawidja, **58** #10079
- Śniatycki, A. (with Włodarski, L.) Klein's measure of angles based upon the Ptolemy theorem. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 473-479. (L. Bitay) **47** #947 50C10
- Śniatycki, Jędrzej (with Tulczyjew, Włodzimierz M.) Canonical dynamics of relativistic charged particles. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **15** (1971), 177-187. (P. G. Bergmann) **45** #6366 83J53
- Lagrangian systems, canonical systems and Legendre transformation. *Proceedings of the Thirteenth Biennial Seminar of the Canadian Mathematical Congress (Dalhousie Univ., Halifax, N.S., 1971)*, Vol. 2, pp. 125-143. *Canad. Math. Congr., Montreal, Que.*, 1972. (D. Lovelock) **51** #7423 70J53 (58F05)
- (with Tulczyjew, Włodzimierz M.) Canonical formulation of Newtonian dynamics. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **16** (1972), 23-27. (H. S. P. Grässer) **45** #8206 83J34 (70J34)
- (with Tulczyjew, Włodzimierz M.) Generating forms of Lagrangian submanifolds. *Indiana Univ. Math. J.* **22** (1972/73), 267-275. (A. J. Tromba) **46** #4427 53C10
- Bohr-Sommerfeld quantum systems. *Group theoretical methods in physics (Proc. Third Internat. Colloq., Centre Phys. Theor., Marseille, 1974)*, Vol. 1, pp. 42-51. *Centre Nat. Recherche Sci., Centre Phys. Theor., Marseille, 1974*. (Virgil Obădeanu) **57** #14044 58F05 (22E45, 81J58)
- Dirac brackets in geometric dynamics. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **20** (1974), 365-372. (H. S. P. Grässer) **50** #11319 58F05
- Prequantization of charge. *J. Mathematical Phys.* **15** (1974), 619-620. (M. Carmeli) **49** #1996 81J58
- Wave functions relative to a real polarization. *Internat. J. Theoret. Phys.* **14** (1975), no. 4, 277-288. (Hans Tilgner) **53** #12396 81J58
- (with Lawruk, Bohdan; Tulczyjew, Włodzimierz M.) Special symplectic spaces. *J. Differential Equations* **17** (1975), 477-497. (Alan Weinstein) **51** #9125 58F05 (35G15, 58G15)
- Bohr-Sommerfeld conditions in geometric quantization. *Rep. Mathematical Phys.* **7** (1975), no. 2, 303-311. (David J. Simms) **52** #12643 81J58
- On wave functions in geometric quantization. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 194-198. *Lecture Notes in Phys.*, Vol. 50, Springer, Berlin, 1976. (J. S. Joel) **58** #13175 58F05 (81J58)
- On cohomology groups appearing in geometric quantization. *Differential geometrical methods in mathematical physics (Proc. Sympos., Univ. Bonn, Bonn, 1975)*, pp. 46-66. *Lecture Notes in Math.*, Vol. 570, Springer, Berlin, 1977. (Joseph Klein) **56** #9591 58F05 (22E45)
- (with Toporowski, Stanley) On representation spaces in geometric quantization. *Internat. J. Theoret. Phys.* **16** (1977), no. 8, 615-633. (Virgil Obădeanu) **58** #25638 81J58 (58F05)
- On geometric quantization of classical systems. *Mathematical foundations of quantum theory (Proc. Conf., Loyola Univ., New Orleans, La., 1977)*, pp. 287-297. *Academic Press, New York*, 1978. (C. W. Kilmister) **58** #7712 58F05 (81J58)
- See also Axiomatic approach to quantum field theory and many body problem, **49** #11975; Blattner, Robert J., **56** #9582 and Voros, A., **57** #7678
- Snider, Arthur David An improved estimate of the accuracy of trigonometric interpolation. *SIAM J. Numer. Anal.* **9** (1972), 505-508. (Author's summary) **47** #1238 65D05
- (with Fleming, Gary Charles) Approximation by aliasing with application to "Certain" stiff differential equations. *Math. Comp.* **28** (1974), 465-473. (C. W. Gear) **49** #8377 65L99
- Error analysis for a stiff system procedure. *Math. Comp.* **30** (1976), no. 134, 216-219. (W. H. Enright) **53** #1966 65L05
- Numerical applications of reflection to partial differential equations. *Math. Comp.* **30** (1976), no. 134, 220-240. (C. Kalik) **56** #1750 65N99 (30A28, 65E05)
- Snider, R. F. Transport properties of dilute gases with internal structure. *Transport phenomena (Sitges Internat. School Statist. Mech., Sitges, 1974)*, pp. 469-517. *Lecture Notes in Phys.*, Vol. 31, Springer, Berlin, 1974. (Carlo Cercignani) **53** #7325 82J45
- Differential cross section from an operator viewpoint. *J. Chem. Phys.* **63** (1975), no. 8, 3256-3262. (From the author's summary) **56** #4539 81J47
- (with Turner, R. E.) Superoperator methods for calculating cross sections. I. Correlation functions and the Born approximation. (French summary) *Canad. J. Phys.* **54** (1976), no. 13, 1313-1327. (Jean-Paul Marchand) **53** #10016a 81J47
- (with Turner, R. E.) Superoperator methods of calculating cross sections. II. Distorted wave Born approximation. (French summary) *Canad. J. Phys.* **54** (1976), no. 13, 1328-1342. (Jean-Paul Marchand) **53** #10016b 81J47
- (with Rainwater, James C.) Quantum corrections to the momentum distribution of moderately dense Boltzmann gases. I. Smooth potentials. *J. Chem. Phys.* **65** (1976), no. 11, 4658-4967. (Authors' summary) **57** #15130a 82J45
- (with Rainwater, James C.) Quantum corrections to the momentum distribution of moderately dense Boltzmann gases. II. Hard sphere potentials. *J. Chem. Phys.* **65** (1976), no. 11, 4968-4978. (Authors' summary) **57** #15130b 82J45
- Snider, Robert L. Lattices of radicals. *Pacific J. Math.* **40** (1972), 207-220. (E. P. Armendariz) **46** #7290 16A21
- (with Formanek, Edward) Primitive group rings. *Proc. Amer. Math. Soc.* **36** (1972), 357-360. (K. W. Roggenkamp) **46** #7293 16A26 (20C05)
- Group algebras whose simple modules are finite dimensional over their commuting rings. *Comm. Algebra* **2** (1974), 15-25. (E. Formanek) **50** #383 16A26
- (with Fisher, Joe W.) On the von Neumann regularity of rings with regular prime factor rings. *Pacific J. Math.* **54** (1974), 135-144. (H. Tominaga) **50** #13126 16A30
- (with Fisher, Joe W.) Prime von Neumann regular rings and primitive group algebras. *Proc. Amer. Math. Soc.* **44** (1974), 244-250. (J. K. Luedeman) **49** #7297 16A30
- Rings whose modules are projective over endomorphism rings. *Proc. Amer. Math. Soc.* **46** (1974), 164-168. (W. V. Vasconcelos) **50** #401 16A50
- (with Farkas, Daniel R.) Group algebras whose simple modules are injective. *Trans. Amer. Math. Soc.* **194** (1974), 241-248. (Donald S. Passman) **50** #9943 16A26
- Rings whose ideals have projective covers. *Arch. Math. (Basel)* **27** (1976), no. 4, 378-382. (James Hein) **54** #10236 13C10
- On the singular ideal of a group algebra. *Comm. Algebra* **4** (1976), no. 1087-1089. (D. B. Coleman) **54** #2721 16A26
- (with Farkas, Daniel R.) K_0 and Noetherian group rings. *J. Algebra* **42** (1976), 1, 192-198. (Edward Formanek) **54** #10318 16A26
- (with Fisher, Joe W.) Rings generated by their units. *J. Algebra* **42** (1976), no. 363-368. (Gertrude Ehrlich) **54** #7531 16A30
- Primitive ideals in group rings of polycyclic groups. *Proc. Amer. Math. Soc.* **47** (1976), no. 1, 8-10. (Donald S. Passman) **54** #2722 16A26
- Injective hulls of simple modules over group rings. *Ring theory (Proc. Conf., Univ. of Athens, Ohio, 1976)*, pp. 223-226. *Lecture Notes in Pure and Appl. Math.*, Vol. 10, Dekker, New York, 1977. (Martha K. Smith) **56** #5637 16A26
- The zero divisor conjecture. *Ring Theory, II (Proc. Second Conf., Univ. Oklahoma, Norman, Okla., 1975)*, pp. 261-295. *Lecture Notes in Pure and Appl. Math.*, Vol. 10, Dekker, New York, 1977. (Eugene Spiegel) **55** #10508 16A26
- (with Farkas, Daniel R.) Noetherian fixed rings. *Pacific J. Math.* **69** (1977), no. 347-353. (S. Elliger) **56** #3064 16A74
- (with Armendariz, Efraim P.; Fisher, Joe W.) On injective and surjective endomorphisms of finitely generated modules. *Comm. Algebra* **6** (1978), no. 7, 659-671. (W. V. Vasconcelos) **57** #9754 16A52
- Snigirev, O. V. (with Az'jan, Ju. M.) The stability of stationary processes of a certain class of self oscillating systems. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **19** (1971), no. 4, 437-440. (R. Tomović) **45** #8337 93D99
- Snijders, Tom A test for randomness in behaviour. *Statist. Neerlandica* **29** (1975), 39-44. (Charles E. Land) **55** #11526 62M05 (62P10)
- Complete class theorems for the simplest empirical Bayes decision problems. *Statist.* **5** (1977), no. 1, 164-171. (Glen Meeden) **55** #11452 62C07 (62C25)
- Snipes, Ray F. T-sequential topological spaces. *Fund. Math.* **77** (1972), no. 2, 95-98. (D. Kent) **47** #7696 54D55
- C-sequential and S-bornological topological vector spaces. *Math. Ann.* **202** (1973), 273-283. (P. P. Narayanaswami) **48** #9328 46A09
- Completions of topological vector spaces. *Kyungpook Math. J.* **14** (1974), 113-120. (A. Revuz) **51** #6351 46A30
- Convergence and continuity: the adequacy of filterbases, the inadequacy of sequences, and spaces in which sequences suffice. *Nieuw Arch. Wisk.* (3) **23** (1975), no. 1, 8-31. (V. Kannan) **53** #6480 54A20 (54D55)
- Functions that preserve Cauchy sequences. *Nieuw Arch. Wisk.* (3) **25** (1977), no. 409-422. (C. M. Pareek) **58** #7542 54C30
- Šnipp, A. I. (with Kolpačikov, V. L.) Thermodynamics and properties of relaxation functions of materials with memory. *Internat. J. Engrg. Sci.* **16** (1978), no. 8, 503-513. (D. Graffi) **58** #14188 73J46
- Snir, Marc (with Bracha-Barak, Amnon) A direct approach to the parallel evaluation of rational expressions with a small number of processors. *IEEE Trans. Computers* **28** (1977), no. 10, 933-937. (Jaroslav Morávek) **57** #4608 68A10
- Šnirel'man, A. I. The degree of a quasiruled mapping, and the nonlinear Hilbert problem. (Russian) *Mat. Sb. (N.S.)* **89(131)** (1972), 366-389, 533. (J. Daneš) **48** #4865 47H15 (30A88)
- Degree of a quasiruled mapping, and the nonlinear Hilbert problem. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 5(167), 257-258. (Editors) **52** #11671 47H15 (58B15)
- Ergodic properties of eigenfunctions. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 6(180), 181-182. (D. Newton) **53** #6648 58G99 (35P20)
- The asymptotic multiplicity of the spectrum of the Laplace operator. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 4 (184), 265-266. (Ju. V. Kostarčuk) **54** #1313 58G99 (35P20)
- See also Weinberger, H. F.; et al., **58** #1756
- Šnirman, M. G. On the question of the ergodicity of a certain Markov chain. (Russian) *Problemy Kibernet.* No. 20 (1968), 115-122. (M. Maljutov) *RŽMat* **1969** #9 V 45 #7826 60J10
- Snively, James W., Jr. (with Rosenfeld, Azriel) Bounds on the complexity of grammars. *Frontiers of pattern recognition (Proc. Internat. Conf., Univ. Hawaii, Honolulu, Hawaii, 1971)*, pp. 479-489. *Academic Press, New York*, 1972. (Pavel Strnad) **52** #1611 68A30 (68A20)
- Snobar, M. G. (with Kadec', M. I.) Certain functionals on the Minkowski compactum. (Russian) *Mat. Zameki* **10** (1971), 453-457. (K. Karták) **45** #861 46B05
- p-absolutely summing constants. (Russian) *Teor. Funkcii Funkcional. Anal. i Prilozhen.* No. 16 (1972), 38-41, 216. (A. Pietsch) **49** #1072 46B05 (47B10)
- Snodgrass, Herschel (with Kershaw, David S.; Zemach, Charles) Methods for the Bethe-Salpeter equation. I. Special functions and expansions in spherical harmonics. *Phys. Rev. D* (3) **2** (1970), 2806-2819. (K. J. Le Couteur) **48** #1612 81J35
- Šnol', E. E. Remarks on the theory of quasistationary states. (Russian. English summary) *Teoret. Mat. Fiz.* **8** (1971), no. 1, 140-149. (Author's summary) **57** #11478 81J45
- Groups corresponding to the simplest problems of classical mechanics. (Russian. English summary) *Teoret. Mat. Fiz.* **11** (1972), no. 3, 344-353. (Author's summary) **57** #14985 81J22 (58F05)
- Notes on the mathematical theory of small oscillations of an inviscid gas. *Izv. Akad. Nauk SSSR Mekh.* **37** (1973), 559-564. (Russian); translated as *J. Appl. Math. Mech.* **37** (1973), 538-543 (1974). (D. E. Edmunds) **48** #12997 76J35
- On the instability of plane-parallel flows of perfect fluid. *Prikl. Mat. Mekh.* (1974), 502-506. (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 464-468 (1974). (Wei Lai) **52** #9795 76J35
- (with Hazin, L. G.) Nonexistence of an algebraic criterion of asymptotic stability under resonance 1:3. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Matem. Preprint No. 45* (1977), 31 pp. (From the publisher's description) **58** #32181 70J35
- (with Hazin, L. G.) The simplest cases of algebraic unsolvability in problems of asymptotic stability. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1978), no. 6, 1309-1311. (A. Morimoto) **58** #17348 34D05 (58F10)
- de Snoo, Hendrik Simon Victor ★On generalizations of Fourier and Laplace transforms. Doctoral dissertation, Technical University of Delft. With a Dutch summary. *Technische Hogeschool Delft, Delft*, 1971. iv + 78 pp. (Not reviewed) **44A10** (42A76)

- with Dijkstra, Aalt) Integral transforms and certain eigenvalue problems. *positio Math.* 26 (1973), 233–247. (H. Hochstadt) 49 #9667 47A70 (34B25)
- (with Dijkstra, Aalt) Integral transforms and a class of singular S-Hermitian value problems. *Manuscripta Math.* 10 (1973), 129–139. (H. Hochstadt) 49 #5933 E05 (34B25)
- Integral representations of Watson transforms. *Nieuw Arch. Wisk.* (3) 21 (1973), 58. (G. O. Okikiolu) 48 #11930 44A05
- A note on Watson transforms. *Proc. Cambridge Philos. Soc.* 73 (1973), 83–85. (J. N. Dey) 47 #2280 44A15
- On invariant linear manifolds of Watson transforms. *Quart. J. Math. Oxford Ser.* 24 (1973), 217–221. (P. G. Rooney) 48 #2682 44A15
- (with Braaksma, B. L. J.) Generalized translation operators associated with a ular differential operator. *Ordinary and partial differential equations (Proc. Conf., Dundee, Dundee, 1974), pp. 62–77. Lecture Notes in Math., Vol. 415, Springer, in, 1974. (I. Fenyő) 54 #10898 35Q05*
- On the spectrum of Watson transforms. *J. London Math. Soc.* (2) 8 (1974), 297–305. (G. Rooney) 50 #1044 47B37 (44A15)
- (with Dijkstra, Aalt) Self-adjoint extensions of symmetric subspaces. *Pacific J. h.* 54 (1974), 71–100. (C. R. Putnam) 50 #14331 47B25
- (with Dijkstra, Aalt) Distributional Watson transforms. *SIAM J. Math. Anal.* 5 (4), 888–892. (D. Myers) 50 #10698 44A05 (46F10)
- (with Dijkstra, Aalt) Eigenfunction expansions for nondensely defined differential ators. *J. Differential Equations* 17 (1975), 198–219. (C. R. Putnam) 50 #5519 25 (47A70)
- (with Dijkstra, Aalt) A note on adjoint operators. *Proc. Roy. Soc. Edinburgh Sect.* 2, no. 3, 215–217 (1975). (S. Goldberg) 52 #11622 47A05
- (with Coddington, Earl A.) Positive selfadjoint extensions of positive symmetric spaces. *Math. Z.* 159 (1978), no. 3, 203–214. (T. Ando) 58 #17936 47B25
- (with Watts, R. O.) Perturbation theories in non-equilibrium statistical hysics. I. Methods based on the time-displacement operator. *Molecular Phys.* 33 (7), no. 2, 431–441. (G. V. Ramanathan) 58 #20080a 82A1
- (with Watts, R. O.) Perturbation theories in non-equilibrium statistical mechanics. Methods based on memory function formalism. *Molecular Phys.* 33 (1977), no. 2, 452. (G. V. Ramanathan) 58 #20080b 82A1
- (with Goethals, Jean-Marie) Nearly perfect binary codes. *Discrete Math.* 3 (2), 65–88. (I. M. Chakravarti) 46 #8756 94A10
- (with Cruse, T. A.; Wilson, R. B.) Numerical solutions in axisymmetric iticity. *Comput. Struct.* 7 (1977), no. 3, 445–451. (Samuel Levy) 56 #4371 73.65
- Donald R. A two independent variable Gronwall-type inequality. *Inequalities, III e. Third Sympos., Univ. California, Los Angeles, Calif., 1969; dedicated to the memory eodore S. Motzkin, pp. 333–340. Academic Press, New York, 1972. (J. Conlan) #3301 35B45*
- Gronwall's inequality for systems of partial differential equations in two pendent variables. *Proc. Amer. Math. Soc.* 33 (1972), 46–54. (M. Pinl) 45 #7240 45
- Some applications of functional equations in ecology and biology. With discussion. *System analysis and prediction (Proc. SIAM-SIMS Conf., Alta, Utah, 1974), pp. 31–313. Soc. Indust. Appl. Math., Philadelphia, Pa., 1974. (From the introduction) #20543 92A05*
- A sufficiency technique in calculus of variations using Carathéodory's equivalent olems approach. *J. Math. Anal. Appl.* 51 (1975), 129–140. (H. S. P. Grässer) #4079 49C05
- Transversality and natural boundary conditions by equivalent problems in calculus variations. *Calculus of variations and control theory (Proc. Sympos., Math. Res. ter, Univ. Wisconsin, Madison, Wis., 1975; dedicated to Laurence Chisholm Young on ccession of his 70th birthday), pp. 391–404. Math. Res. Center, Univ. Wisconsin, Publ. 36, Academic Press, New York, 1976. (Rolf Klötzler) 55 #13322 49C05*
- Rayleigh's principle by equivalent problems. *General inequalities (Proc. First rnat. Conf., Math. Res. Inst., Oberwolfach, 1976), I, pp. 223–230. Birkhäuser, Basel, 8. (From the summary) 58 #17462 35B99 (49H05)*
- Morris (with Shapiro, Jack M.) The Fredholm spectrum of the sum and product of operators. *Trans. Amer. Math. Soc.* 191 (1974), 387–393. (Editors) 56 #12931 10
- (with Schechter, Martin) The Fredholm spectrum on tensor products. *Proc. Roy. h Acad. Sect. A* 75 (1975), no. 13, 121–127. (Robin Harte) 51 #13728 47A10
- A joint Browder essential spectrum. *Proc. Roy. Irish Acad. Sect. A* 75 (1975), no. 14, 129–131. (Robin Harte) 52 #6471 47A60
- R. E. (with Greenlee, W. M.) Two-timing on the half line for damped oscillation ations. *J. Math. Anal. Appl.* 51 (1975), no. 2, 394–428. (W. Wasow) 52 #3680 20
- Two-timing for forced oscillation equations. *J. Math. Anal. Appl.* 54 (1976), no. 1, 5. (F. Brauer) 53 #8590 34E05
- Andrew K. Sequence spaces and interpolation problems for analytic functions. *dia Math.* 39 (1971), 137–153. (J. H. Hedlund) 46 #6045 46J15 (30A80, 46A45)
- (with Wilansky, Albert) Non-replaceable matrices. *Math. Z.* 129 (1972), 21–23. (D. Prullage) 47 #2222 40C05
- (with Wilansky, Albert) Inclusion theorems and semiconservative FK spaces. *ky Mountain J. Math.* 2 (1972), no. 4, 595–603. (G. E. Peterson) 46 #9594 405 (40D25)
- Multipliers and the Nevanlinna-Pick theorem. *Indiana Univ. Math. J.* 25 (1976), no. 1159–1170. (P. L. Duren) 56 #3306 30A82 (46E15, 30A98)
- D. A. (with Entringer, Roger C.; Jackson, Douglas E.) Distance in graphs. *zechoslovak Math. J.* 26(101) (1976), no. 2, 283–296. (From the Introduction) #27583 05C10
- D. Paul (with Leblanc, Hugues) Duals of Smullyan trees. *Notre Dame J. Formal ic* 13 (1972), 387–393. (Robert G. Jeroslow) 46 #8816 (E 50 #1853) 02D99
- (with Leblanc, Hugues) Erratum: "Duals of Smullyan trees" (Notre Dame J. mal Logic 13 (1972), 387–393). *Notre Dame J. Formal Logic* 15 (1974), 648. (Editors) 50 #1853 02D99
- Donald L. (with Rhodes, Ian B.) Bounds on the accuracy in causal filtering for
- nonlinear observations with some implications on asymptotic separation in stochastic control. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 4: Education, feedback, regulators, linear and non-linear systems, Identification, differential games, discrete and stochastic systems, Paper No. 41.1, 5 pp. Internat. Fed. Automat. Control, Düsseldorf, 1971 [1972]. (D. D. Sworder) 51 #7683 93E10*
- (with Collins, L. D.) Realization of filter-squarer receivers. *IEEE Trans. Information Theory* IT-17 (1971), 97–101. (K. S. Miller) 46 #1430 93E10
- (with Rhodes, Ian B.) Filtering and control performance bounds with implications on asymptotic separation. (French, German and Russian summaries) *Automatica—J. IFAC* 8 (1972), 747–753. (D. D. Sworder) 48 #10602 93E10
- Filtering and detection for doubly stochastic Poisson processes. *IEEE Trans. Information Theory* IT-18 (1972), 91–102. (Tohru Katayama) 53 #12716 93E10 (94A05)
- Smoothing for doubly stochastic Poisson processes. *IEEE Trans. Information Theory* IT-18 (1972), 558–562. (K. S. Miller) 51 #15120 93E10
- Information processing for observed jump processes. *Information and Control* 22 (1973), 69–78. (K. Dietz) 48 #5302 62M99 (93E10)
- ★ Random point processes. *Wiley-Interscience [John Wiley & Sons], New York-London-Sydney, 1975. x + 485 pp. (1 plate) (Mats Rudemo) 58 #18715 60G55 (60G35, 62M99, 93E10, 94A05)*
- (with Fishman, Philip M.) How to track a swarm of fireflies by observing their flashes. *IEEE Trans. Information Theory* IT-21 (1975), no. 6, 692–695. (M. Iosifescu) 54 #4794 93E10
- (with Fishman, Philip M.) The statistical analysis of space-time point processes. *IEEE Trans. Information Theory* IT-22 (1976), no. 3, 257–274. (E. Parzen) 54 #6257 (E 55 #7559) 60G35 (62M20)
- (with Vaca, Marco V.) Estimation and decision for observations derived from martingales. I. Representations. *IEEE Trans. Information Theory* IT-22 (1976), no. 6, 691–707. (A. N. Širjaev) 55 #2311 93E10
- (with Markham, Joanne; Cox, Jerome R., Jr.) A numerical implementation of the maximum-likelihood method of parameter estimation for tracer-kinetic data. *Math. Biosci.* 28 (1976), no. 3/4, 275–300. (Pierre Loridan) 54 #4101 65K05
- (with Rhodes, Ian B.; Hoversten, E. V.) A separation theorem for stochastic control problems with point-process observations. *Automatica—J. IFAC* 13 (1977), no. 1, 85–87. (Claude Foulard) 55 #5297 93E20
- (with Rhodes, Ian B.) Estimation and control performance for space-time point-process observations. *IEEE Trans. Automatic Control* AC-22 (1977), no. 3, 338–346. (M. D. Srinath) 58 #26450 93E10 (94A05)
- (with Fishman, Philip M.) Correction to: "The statistical analysis of space-time point processes" *IEEE Trans. Information Theory* IT-22 (1976), 257–274. *IEEE Trans. Information Theory* IT-23 (1977), no. 1, 146–147. (Editors) 55 #7559 94A05
- Applications of stochastic calculus for point process models arising in optical communication. *Communication systems and random process theory (Proc. 2nd NATO Advanced Study Inst., Darlington, 1977), pp. 789–804. NATO Advanced Study Inst. Ser., Ser. E: Appl. Sci., No. 25, Sijthoff & Noordhoff, Alphen aan den Rijn, 1978. (From the text) 58 #20775 94A05 (78.60)*
- Snyder, Herbert H. Holomorphic functions on a finite-dimensional algebra associated with Laplace's equation in three real variables. *Univ. N*

- Lefschetz, Solomon; Sharpe, F. R.; Sisam, Charles H.) ★Selected topics in algebraic geometry. Second edition. *Chelsea Publishing Co., New York*, 1970. v+484 pp. (From the publisher's description) **45** #21 01A75 (14-00)
- Snyders, Jakov** Error formulae for optimal linear filtering, prediction and interpolation of stationary time series. *Ann. Math. Statist.* **43** (1972), 1935-1943. (E. J. Hannan) **50** #5925 60G35
- Error expressions for optimal linear filtering of stationary processes. *IEEE Trans. Information Theory* **IT-18** (1972), 574-582. (Author's summary) **56** #11404 93E10
- On the error matrix in optimal linear filtering of stationary processes. *IEEE Trans. Information Theory* **IT-19** (1973), 593-599. (Author's summary) **55** #12282 94A05
- On optimal linear estimation of signals with general spectral distribution. *IEEE Trans. Information Theory* **IT-20** (1974), 654-658. (See Zbl **322** #62095) 93E10
- (with Wonham, W. Murray) Regulation of linear stochastic systems. *SIAM J. Control* **13** (1975), 853-864. (A. B. Schwarzkopf) **54** #14856 93E15
- Error expressions for optimal stationary state estimation. *SIAM J. Control* **13** (1975), no. 5, 1093-1102. (M. D. Srinath) **58** #26456 93E10
- Stationary probability distributions for linear time-invariant systems. *SIAM J. Control Optimization* **15** (1977), no. 3, 428-437. (Peter A. Cook) **55** #12259 93E15
- Snygg, John** Wave functions rotated in phase space. *Amer. J. Phys.* **45** (1977), no. 1, 58-60. (J. V. Greenman) **54** #14654 81.60
- So, Alfred** (with Thomas, Jean-Claude; Watkiss, Christopher) Sur la multiplicativité de l'homomorphisme de Chern-Weil local. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 6, A369-A371. (Ph. Tondeur) **52** #9246 57D20 (57D30)
- So, Hing C.** (with Mitra, Debasis) Existence conditions for L_1 Lyapunov functions for a class of nonautonomous systems. *IEEE Trans. Circuit Theory* **CT-19** (1972), 594-598. (P. C. Parks) **51** #2709 93D05
- (with Mitra, Debasis) P matrices and solutions to a class of linear inequalities. *SIAM J. Appl. Math.* **25** (1973), 5-15. (V. Pták) **49** #333 15A39
- (with Garey, Michael R.; Johnson, David Stifler) An application of graph coloring to printed circuit testing. *IEEE Trans. Circuits and Systems* **CAS-23** (1976), no. 10, 591-599. (Narsingh Deo) **57** #9320 94A20 (05C15)
- So, Kwang Ho** A property of cofunctors $S_p(X, A)$. *Kyungpook Math. J.* **13** (1973), 235-240. (A. Dold) **49** #3933 55F25
- pow So, Li** See Pow So, Li
- Soardi, Paolo Maurizio** Su un problema di punto unito di S. Reich. (English summary) *Boll. Un. Mat. Ital.* (4) **4** (1971), 841-845. (M. Edelstein) **46** #741 47H10
- (with Roux, Delfina) Sui punti uniti di mappe continue di uno spazio topologico in sé. (English summary) *Riv. Mat. Univ. Parma* (2) **12** (1971), 21-28. (I. A. Rus) **51** #6778 54H25
- (with Roux, Delfina) Alcune generalizzazioni del teorema di Browder-Göhde-Kirk. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 682-688. (S. Swaminathan) **48** #4856 47H10 (46B05)
- Un'osservazione su un teorema di punto unito per multifunzioni non espansive. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **106** (1972), 911-915. (I. A. Rus) **49** #5958 47H10
- Struttura quasi-normale e teoremi di punto unito. (English summary) *Rend. Ist. Mat. Univ. Trieste* **4** (1972), 105-113. (B. Rodriguez-Salinas) **48** #9474 47H10
- (with De-Michele, Leonede) Symbolic calculus in $A_p(G)$. I. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 1-2, 24-30 (1975). (Pierre Eymard) **52** #14850 43A15
- (with De-Michele, Leonede) Symbolic calculus in $A_p(G)$. II. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 1-2, 31-35 (1975). (Pierre Eymard) **52** #14851 43A15
- Punti uniti di semicontrazioni. (English summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **108** (1974), 51-57. (S. Swaminathan) **50** #8178 47H10
- (with De-Michele, Leonede) A noncommutative extension of Helson's translation lemma. *Boll. Un. Mat. Ital.* (4) **9** (1974), 800-806. (C. F. Dunkl) **51** #3800 43A30
- (with De-Michele, Leonede) Functions which operate in the Fourier algebra of a discrete group. *Proc. Amer. Math. Soc.* **45** (1974), 389-392. (C. F. Dunkl) **49** #11144 43A15
- (with De-Michele, Leonede) A remark on sets of uniqueness of l^p . (Italian summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 1, 64-65. (C. McGehee) **51** #8723 42A48
- (with De-Michele, Leonede) Sets of uniqueness in LCA groups. (Italian summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 2, 359-365. (Y. Katznelson) **51** #11016 43A25 (42A48)
- (with De-Michele, Leonede) Uniform convergence of lacunary Fourier series. *Colloq. Math.* **36** (1976), no. 2, 285-287. (S. Izumi) **56** #9175 42A44
- (with De-Michele, Leonede) Existence of Sidon sets in discrete FC-groups. *Proc. Amer. Math. Soc.* **55** (1976), no. 2, 457-460. (J. H. Williamson) **53** #1175 43A46 (42A44, 22D99)
- (with Inglis, Ian R.) Radial functions on certain discrete groups. (Italian summary) *Boll. Un. Mat. Ital. A* (5) **15** (1978), no. 1, 77-86. (Pierre Eymard) **58** #29848 43A35
- (with Dooley, A. H.) Local p -Sidon sets for Lie groups. *Proc. Amer. Math. Soc.* **72** (1978), no. 1, 125-126. (John F. Price) **58** #12210 43A40
- Soare, Robert I.** (with Gandy, Robin O.) A problem in the theory of constructive order types. *J. Symbolic Logic* **35** (1970), 119-121. (A. S. Ferebee) **45** #1755 02F40
- The Friedberg-Muchnik theorem re-examined. *Canad. J. Math.* **24** (1972), 1070-1078. (J. R. Shoenfield) **49** #8836 02F25 (02F30)
- (with Jockusch, Carl G., Jr.) Degrees of members of Π_1^0 classes. *Pacific J. Math.* **40** (1972), 605-616. (M. Machtey) **46** #8827 02F40
- (with Jockusch, Carl G., Jr.) Π_1^0 classes and degrees of theories. *Trans. Amer. Math. Soc.* **173** (1972), 33-56. (S. Feferman) **47** #4775 02F30 (02F35, 02G05)
- (with Jockusch, Carl G., Jr.) Encodability of Kleene's O . *J. Symbolic Logic* **38** (1973), 437-440. (J. C. Owings, Jr.) **51** #97 02F30
- (with Jockusch, Carl G., Jr.) Post's problem and his hypersimple set. *J. Symbolic Logic* **38** (1973), 446-452. (Manuel Lerman) **49** #2313 02F25
- Automorphisms of the lattice of recursively enumerable sets. I. Maximal sets. *Ann. of Math.* (2) **100** (1974), 80-120. (Manuel Lerman) **50** #12685 02F25
- Automorphisms of the lattice of recursively enumerable sets. *Bull. Amer. Math. Soc.* **80** (1974), 53-58. (Manuel Lerman) **51** #10058 02F25
- Isomorphisms on countable vector spaces with recursive operations. *J. A. Math. Soc.* **18** (1974), no. 2, 230-235. (From the introduction) **58** #186 02F25
- (with Morley, Michael D.) Boolean algebras, splitting theorems, and D_2^0 sets. *Math.* **90** (1975), no. 1, 45-52. (A. H. Lachlan) **53** #2658 02F25
- The infinite injury priority method. *J. Symbolic Logic* **41** (1976), no. 2, 513-525. (Barry Cooper) **55** #2534 02F25
- (with Bennison, Victor L.) Recursion theoretic characterizations of computable theoretic properties. *18th Annual Symposium on Foundations of Computer Science (Providence, R.I., 1977)*, pp. 100-106. *IEEE Comput. Soc., Long Beach, Calif.*, (John T. Gill) **58** #27391 02F20 (68A20)
- Computational complexity, speedable and levelable sets. *J. Symbolic Logic* (1977), no. 4, 545-563. (L. Hay) **58** #5125 02F25 (02F20, 68A20)
- (with Bennison, Victor L.) Some lowness properties and computational complexity sequences. *Theoret. Comput. Sci.* **6** (1978), no. 3, 233-254. (Cristian Calude) **58** #02F25 (68A20)
- Soares, I. Damiao** Cartan frames and rotating universes. *J. Phys. A* **9** (1976), 555-559. (C. B. Collins) **53** #12493 83.53
- (with Novello, Mario) Neutrino cosmology. *Phys. Lett. A* **56** (1976), no. 6, 431-434. (Brian O. J. Tupper) **54** #4542 83.53
- (with Novello, Mario; Salim, J. M.) On Jacobi fields. *General Relativity and Gravitation* **8** (1977), no. 2, 95-102. (Mauro Francaviglia) **57** #8944 83.58 (58D05)
- (with Novello, Mario) Eigenvalue treatment of cosmological models. *Phys. Lett. B* **64** (1977), no. 2, 153-154. (Authors' summary) **56** #14511 83.53
- Soares, Rui João Baptista** A recurrence formula for the calculation of the coefficients of the polynomials $He_n(x)$. (Portuguese) *Gaz. Mat. (Lisboa)* **32** (1971), no. 121-124, 125-126. (1 foldout) (R. P. Boas, Jr.) **48** #6505 33A65
- Relations between the coefficients of the polynomials $T_n(x)$ and $P_n(x)$ and the coefficient of the polynomials $He_n(x)$. Application to machine computation. (Portuguese) *Gaz. Mat. (Lisboa)* **34-35** (1973/74), no. 129-132, 17-20. (R. P. Boas, Jr.) **52** #765A05
- Spherical harmonics. (Portuguese) *Gaz. Mat. (Lisbon)* **36-37** (1975/76), no. 13-14, 25-33. (Not reviewed) 33A45
- Šob, M.** (with Bičák, J.; Stuchlík, Z.) Scalar fields around a charged rotating black hole. *Czechoslovak J. Phys.* **28B** (1978), no. 2, 121-124. (Hsin-Yang Yeh) **57** #1883.53
- Sobański, Maciej** On the existence of maximal solutions of some functional equations. *Zeszyty Nauk. Univ. Jagielloń.* **403** *Prace Mat. No. 17* (1975), 175-179. (W. Smolka) **53** #6135 39A15 (45G99)
- Sobaszek, A.** Discrete random walk and differential transport equation in one dimension. *Acta Phys. Polon. A* **49** (1976), no. 4, 431-436. (Ian Lerche) **56** #2161 82.60
- Sobcov, N. V.** Maximum likelihood estimation in a multi-scale measuring system. *Radiotekhn. i Elektron.* **17** (1972), 2076-2083 (Russian); translated as *Radio Electron. Phys.* **17** (1972), 1653-1659. (S. Csibi) **50** #4099 94A05
- Sobčuk, V. S.** (with Lizunova, L. Ju.) The existence of nonrigid hypersurfaces of Riemannian space that does not admit a Killing vector field. (Ukrainian. German. Russian summaries) *Visnik Kiiv. Univ.* **1971**, no. 13, 113-118, 149. (Authors' summary) **46** #4398 53A35
- The almost geodesic mapping of Riemannian spaces. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 1071-1073. (M. Kucharszewski) **51** #6630 53B20
- An almost geodesic mapping of Riemannian spaces onto symmetric Riemannian spaces. (Russian) *Mat. Zametki* **17** (1975), no. 5, 757-763. (J. Szenthe) **53** #1153C35
- Sobczyk, Andrew** Obliquity, obtusity, and families of flats. *Proceedings of the Conference on Convexity and Combinatorial Geometry (Univ. Oklahoma, Norman, Okla., 1974)*, 44-56. *Dept. Math., Univ. Oklahoma, Norman, Okla.*, 1971. (E. J. F. Primrose) **51** #12571 05B25 (50D40)
- (with Gettys, James O., Jr.) Extended chromatic polynomials. *Canad. J. Math.* (1972), 492-501. (J. Sedláček) **45** #5027 05C15
- More progress to madness via "Eight Blocks". *Math. Mag.* **47** (1974), 113-114. (Jean Doyen) **52** #156 05B40
- See also **Problems: Geometry of metric and linear spaces**, **53** #6419
- Sobczyk, Kazimierz** Stochastic stability of motion. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* **8** (1970), 375-406. (J. Wargha) **45** #7844 60H10
- Elastic waves in a discrete stochastic medium. (Polish) *Prace IPPT/IFTF* **1974**, no. 5, 76 pp. **58** #25297 73.60
- (with Bienkowska-Lipińska, Krystyna; Browkin, Jerzy; Dymowski, Stanisław; Grochowski, Bogusław; Gutowski, Roman; Jeśmanowicz, Leon; Kotlarski, Ignacy; Krasnodębski, Ryszard; Kudrewicz, Jacek; Leitner, Roman; Muszyński, Jerzy; Osowski, Jerzy; Pawłowicz, Ireneusz; Piskorek, Adam; Traczyk, Tadeusz; Trzaskowski, Waligórski, Stanisław; Wojdat, Marian; Zuber, Roman; Żakowski, Wojciech) ★*Mathematik Handbuch für Technik und Naturwissenschaft*. Herausgegeben von Jerzy Dreszer. Redaktion der deutschsprachigen Ausgabe Günther Eisenreich und Wolfgang Naumann. Aus dem Polnischen übersetzt von Dworak, L. Kulik, L. Kutyla und W. Pilarczyk. *Verlag Harri Deutsch, Zurich-Frankfurt am Main*, 1975. xii+1346 pp. (Editors) **52** #7771 00A20
- Elastic wave propagation in a discrete random medium. (German summary) *Mech.* **25** (1976/77), no. 1-2, 13-28. (S. N. Murthy) **55** #7066 73.60
- Sobecka, Zofia** See **Dictionary: Polish-Russian**, **54** #12430
- Sobeh, M. M.** A special three-point problem for a system of ordinary second order differential equations. (Russian. Azerbaijani summary) *Azerbaij. Gos. Univ. Zap. Ser. Fiz.-Mat. Nauk* **1975**, no. 4, 17-24. (RŽMat **1976** #7 B229) **58** #134B10
- The existence and uniqueness of the solution of a certain boundary value problem. (Russian. Azerbaijani summary) *Azerbaij. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1976**, no. 1, 58-64. (I. Kiguradze) **58** #1354 34B15
- A boundary value problem for differential equations with retarded arguments. (Russian. Azerbaijani summary) *Azerbaij. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1976**, no. 3, 33-38. (K. Smitalová) **58** #6604 34K10
- Sobel, Jordan Howard** *Principia Mathematica* description theory: the classical a

- alternative notation. *Notre Dame J. Formal Logic* **15** (1974), 63-72. (K. Inoue) #4748 02A05
- Alternative notations for *Principia Mathematica* description theory: possible simplifications. *Notre Dame J. Formal Logic* **17** (1976), no. 3, 476-478. (K. Inoue) #82 02B15
- Matthew J. Production smoothing with stochastic demand. I. Finite horizon case. *Management Sci.* **16** (1969/70), 195-207. (D. Hochstädter) **46** #4924a 90B30
- Employment smoothing (capital accumulation) with production for stochastic demand. *Management Sci.* **16** (1969/70), 340-349. (K. J. Arrow) **47** #6294 90B30
- Smoothing start-up and shut-down costs: concave case. *Management Sci.* **17** (1970/71), 78-91. (F. Giannessi) **48** #7946 90B30
- Production smoothing with stochastic demand. II. Infinite horizon case. *Management Sci.* **17** (1970/71), 724-735. (D. Hochstädter) **46** #4924b 90B30
- Noncooperative stochastic games. *Ann. Math. Statist.* **42** (1971), 1930-1935. (V. J. McKelvey) **46** #8672 90D15 (90D10)
- Chebyshev optimal waste discharges. *Operations Res.* **19** (1971), 308-322. (I. M. Iosadze) **45** #6402 90B99
- Queueing processes at competing service facilities. *Management Sci.* **19** (1972/73), 1000. (H. Taylor) **48** #12664 60K25 (90B99)
- Continuous stochastic games. *J. Appl. Probability* **10** (1973), 597-604. (T. Parthasarathy) **51** #2723 93E05 (90D10)
- Optimal operation of queues. *Mathematical methods in queueing theory* (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1973), pp. 231-261. *Lecture Notes in Mathematics*, Vol. 98, Springer, Berlin, 1974. (Micha Yadin) **53** #9427 (90B35)
- (with Kirman, Alan P.) Dynamic oligopoly with inventories. *Econometrica* **42** (1974), 279-287. (Authors' summary) **55** #14132 90A15 (90D45)
- Ordinal dynamic programming. *Management Sci.* **21** (1974/75), no. 9, 967-975. (Authors' summary) **55** #14225 90C40
- (with Sanghvi, Arun P.) Bayesian games as stochastic processes. *Internat. J. Game Theory* **5** (1976), no. 1, 1-22. (Jaap Wessels) **53** #10334 90D15
- Milton A. Selecting the r th largest using binary errorless comparisons. *Combinatorial theory and its applications, II* (Proc. Colloq., Balatonfüred, 1975), pp. 585-599. North-Holland, Amsterdam, 1976. (S. G. Mohanty) **47** #49 (90B35)
- (with Kumar, Satindar; Blumenthal, Saul) Symmetric binomial group-testing with unequal outcomes. *Statistical decision theory and related topics* (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1970), pp. 119-160. Academic Press, New York, 1971. (Benjamin Stein) **48** #7442 62F07 (62N10)
- (with Desu, Mahamunulu M.) Nonparametric procedures for selecting fixed-size subsets. *Statistical decision theory and related topics* (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1970), pp. 255-273. Academic Press, New York, 1971. (E. S. Keeping) **52** #5258 62G30 (62F07)
- (with Weiss, George H.) Play-the-winner rule and inverse sampling in selecting the better of two binomial populations. *J. Amer. Statist. Assoc.* **66** (1971), 545-551. (A. F. F. F.) **46** #8358 62L05
- (with Kumar, Satindar) Finding a single defective in binomial group-testing. *J. Amer. Statist. Assoc.* **66** (1971), 824-828. (Authors' summary) **47** #1218 62L05
- (with Blumenthal, Saul; Christie, Theodore) Best sequential tests for an identification problem with partially overlapping distributions. *Sankhyā Ser. A* **33** (1971), 185-192. (J. Sethuraman) **48** #12752 62L10
- (with Weiss, George H.) A comparison of play-the-winner and vector-at-a-time sampling for selecting the better of two binomial populations with restricted parameter spaces. *Trabajos Estadist.* **22** (1971), no. 1-2, 195-206. **47** #6038 62L05
- (with Hoel, David G.) Comparisons of sequential procedures for selecting the best optimal population. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. IV: *Biology and Health*, pp. 53-69. Univ. California Press, Berkeley, Calif., 1972. (Yung L. Tong) **51** #1449 62F07 (62L10)
- (with Das Gupta, Somesh; Eaton, M. L.; Olkin, Ingram; Perlman, M.; Savage, L.) Inequalities on the probability content of convex regions for elliptically contoured distributions. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: *Probability Theory*, pp. 241-265. Univ. California Press, Berkeley, Calif., 1972. (Z. Šidák) **54** #1478 (62H05)
- (with Katz, Leo) Coverage of generalized chess boards by randomly placed rooks. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. III: *Probability theory*, pp. 555-564. Univ. California Press, Berkeley, Calif., 1972. (R. G. Stanton) **53** #173 60C05 (60B40)
- (with Weiss, George H.) Recent results on using the play the winner sampling rule for binomial selection problems. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. I: *Theory of statistics*, pp. 717-736. Univ. California Press, Berkeley, Calif., 1972. (N. C. Geertsema) **53** #9543 62L10 (62F07)
- (with Yen, S. P.) An asymptotic comparison of subset selection procedures. *Ann. Inst. Statist. Math.* **24** (1972), 465-468. (D. Y. Huang) **49** #6461 62F07
- (with Uppuluri, V. R. R.) On Bonferroni-type inequalities of the same degree for the probability of unions and intersections. *Ann. Math. Statist.* **43** (1972), 1549-1558. (Benjamin Epstein) **50** #1380 62E15 (62H05)
- (with Weiss, George H.) Play-the-winner rule and inverse sampling for selecting the best of $k > 3$ binomial populations. *Ann. Math. Statist.* **43** (1972), 1808-1826. (Yung L. Tong) **51** #4510 62F07 (62L10)
- (with Nebenzahl, Elliott) Play-the-winner sampling for a fixed sample size binomial selection problem. *Biometrika* **59** (1972), 1-8. (J. E. Bilikam) **48** #5232 62F07
- (with Hoel, David G.; Weiss, George H.) A two-stage procedure for choosing the better of two binomial populations. *Biometrika* **59** (1972), 317-322. (W. Uhlmann) **51** #4142 62F07
- (with Lee, Jung Keun) Dorfman and R_1 -type procedures for a generalized group-testing problem. *Math. Biosci.* **15** (1972), 317-340. (S. Levin) **46** #10432 (62L05)
- Procédures optimales pour le classement des t meilleurs articles parmi n au moyen de comparaisons binaires. (Loose English summary) Traduit de l'anglais par Alain Lahoute, Gérard Louit et Jean-Pierre Roubelat. *Rev. Française Automat. Informat. Recherche Opérationnelle* **6** (1972), No. R-3, 23-68. (J. W. Moon) **50** #4318 05A05
- (with Uppuluri, V. R. R.) Sparse and crowded cells and Dirichlet distributions. *Proceedings of the 39th Session of the International Statistical Institute* (Vienna, 1973), Vol. 2. *Bull. Inst. Internat. Statist.* **45** (1973), no. 2, 440-449. (Ramesh C. Gupta) **51** #9302 62E15
- (with Berry, Donald A.) An improved procedure for selecting the better of two Bernoulli populations. *J. Amer. Statist. Assoc.* **68** (1973), 979-984. (J. Kiefer) **51** #4509 62F07 (62L10)
- (with Uppuluri, V. R. R.) Sparse and crowded cells and Dirichlet distributions. *Ann. Statist.* **2** (1974), 977-987. (H. E. Reinhardt) **50** #15068 62E15
- (with Kumar, Satindar) An asymptotically optimal Bayes solution for group-testing. *A survey of statistical design and linear models* (Proc. Internat. Sympos., Colorado State Univ., Ft. Collins, Colo., 1973), pp. 367-381. North-Holland, Amsterdam, 1975. (V. Susarla) **52** #2011 62F15
- (with Elashoff, Robert M.) Group testing with a new goal, estimation. *Biometrika* **62** (1975), 181-193. (Arthur Cohen) **52** #1987 62F05
- (with Frankowski, K.; Uppuluri, V. R. R.) Dirichlet type 1 distribution: properties and applications. (French summary) *Proceedings of the 40th Session of the International Statistical Institute* (Warsaw, 1975), Vol. 3. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 3, 267-271 (1976). (G. C. Jain) **57** #4398 62E15 (62C05, 62F05)
- (with Hoel, David G.; Weiss, George H.) Comparison of sampling methods for choosing the best binomial population with delayed observations. *J. Statist. Comp. and Simulation* **3** (1975), no. 4, 299-313. (Jan C. Geertsema) **54** #14202 62F07
- (with Starr, Norman) Selecting the coin with the greatest bias. *Sankhyā Ser. A* **37** (1975), no. 2, 197-210. (Joseph A. Yahav) **55** #9374 62F07
- (with Desu, Mahamunulu M.) Correction: "A fixed subset-size approach to the selection problem" (*Biometrika* **55** (1968), 401-410). *Biometrika* **63** (1976), no. 3, 685. (Editors) **54** #11628 62F07
- (with Tong, Y. L.) Estimation of a normal percentile by grouping. *J. Amer. Statist. Assoc.* **71** (1976), no. 353, 189-192. (Authors' summary) **53** #1824 62F10
- (with Uppuluri, V. R. R.; Frankowski, K.) ★Selected tables in mathematical statistics. Vol. IV. Dirichlet distribution-type 1. Edited by the Institute of Mathematical Statistics. Coeditors: D. B. Owen and R. E. Odeh. *American Mathematical Society, Providence, R. I.*, 1977. x+309 pp. (Editors) **54** #11721 62Q05
- (with Gibbons, Jean Dickinson; Olkin, Ingram) ★Selecting and ordering populations: a new statistical methodology. A Wiley Publication in Applied Statistics. *John Wiley & Sons, New York-London-Sydney*, 1977. xxi+569 pp. ISBN 0-471-02670-0. (Z. Šidák) **58** #7980 62F07 (62Q05)
- The Dirichlet-type 1 integral and its applications to multinomial-related problems. *Statistical decision theory and related topics. II* (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976), pp. 357-374. Academic Press, New York, 1977. (M. L. Tiku) **55** #6641 62E15 (33A70)
- (with Moon, J. W.) Enumerating a class of nested group testing procedures. *J. Combinatorial Theory Ser. B* **23** (1977), no. 2-3, 184-188. (Frank K. Hwang) **56** #15449 05A15
- See also Problems: Combinatorial theory, **46** #8855; Mantel, Nathan, **52** #12254; Discriminant analysis and applications, **57** #17959 and Perspectives in biometrics, **58** #31689
- Sobhy, M. I. Modifications of the Routh algorithm. *Electron. Lett.* **11** (1975), no. 19, 450-452. (Ian Gladwell) **53** #1913 65D15
- Sobich, Lucja On the recurrence relation for the moments of inflated binomial and inflated Poisson distribution. *Comment. Math. Prace Mat.* **17** (1973/74), 459-468. (I. I. Kotlarski) **51** #2083 62E15
- (with Szyal, Dominik) Some properties of inflated binomial distribution. *Canad. Math. Bull.* **17** (1974), no. 4, 611-613. (Peter Flusser) **54** #3911 62E15
- Sobieszek, Wiesław On the structure of the solution of the allocation problem. (Polish summary) *Zastos. Mat.* **13** (1972/73), 49-83. (K. Hinderer) **48** #5648 90C25
- Certain numerical aspects of the solutions of the functional equation of dynamic programming. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 21* (1973), 169-178. (K. Zima) **48** #10112 65K05
- On the point-to-set mappings and functions maximum related to them. *Demonstratio Math.* **7** (1974), 483-494. (F. S. Van Vleck) **51** #11422 54C60
- On the functional equations of the dynamic programming with a singular point. *Comment. Math. Prace Mat.* **19** (1976/77), no. 2, 373-380. (T. Parthasawathy) **58** #7311 49C99
- (with Kietlyka, Stanisław) A generalization of the theorem on directional derivative for the maximum functional and its application. *Demonstratio Math.* **9** (1976), no. 1, 47-59. (G. M. Ewing) **53** #2374 90C30 (54C60, 39A15)
- (with Kietlyka, Stanisław) Certain topological properties of point-set mappings and of the maximum function. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 441 Mat.-Fiz. Zeszyt 26* (1976), 139-146. (Authors' summary) **56** #3785 54C10
- (with Kietlyka, Stanisław) Sufficient conditions for the semicontinuity from below of a certain point-set mapping. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 441 Mat.-Fiz. Zeszyt 26* (1976), 147-153. (Author's summary) **56** #3784 54C10
- Sobirov, A. Š. (with Inojatova, K. G.) On the elementary proof of the asymptotic law of the distribution of prime numbers. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 2, 79-81. (R. A. Rankin) **47** #3331 10H15
- (with Inojatova, K. G.) On the question of providing an elementary proof of the asymptotic law of the distribution of primes. I, II. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 5, 13-19, 67; *ibid.* **17** (1973), no. 2, 10-16, 69. (A. I. Vinogradov) **47** #8458 10H15
- (with Lavrik, A. F.) The remainder term in the elementary proof of the prime number theorem. (Russian) *Dokl. Akad. Nauk SSSR* **211** (1973), 534-536. (J. S. Joel) **48** #2092 10H15

- On the question of providing an elementary proof of the asymptotic law of the distribution of primes. III. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadzhik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk* 1973, no. 2(48), 8-13, 120. (A. I. Vinogradov) 50 #9817 10H15
- On the prime number theorem in its elementary method of proof. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 18 (1974), no. 1, 64. (J. S. Joel) 49 #234 10H15
- Sobirov, I.** A theorem on the existence of the second eigenvector of an integral operator in a function space. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadzhik. SSR* 17 (1974), no. 12, 3-5. (L. Janos) 51 #8895 47G05
- Sobirov, M. A.** See **Sabirov, M. A.**
- Sobkin, B. L.** Synthesis of an optimal set of scales for analog-digital transformation. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Drogobych, 1974), Convex programming (Russian)*, pp. 110-120. Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow, 1976. (From the introduction) 58 #33535 94A15
- Sobko, G. M.** The first diffusion problem on differentiable manifolds. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 17 (1972), 549-557. (R. G. Laha) 46 #6475 60J15
- Diffusion approximation of non-Markov random walks on differentiable manifolds. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 18 (1973), 44-55. (R. G. Laha) 47 #5933 60F05 (60B15, 60J15)
- Sobociński, Bolesław** Concerning some extensions of S4. *Notre Dame J. Formal Logic* 12 (1971), 363-370. (Hugh Lacey) 45 #8506 02C10
- A new class of modal systems. *Notre Dame J. Formal Logic* 12 (1971), 371-377. (Hugh Lacey) 45 #8507 02C10
- A proper subsystem of S4.O4. *Notre Dame J. Formal Logic* 12 (1971), 381-384. (From the introduction) 46 #26 02C10
- Additional note on lattice-theoretical form of Hauber's law. *Notre Dame J. Formal Logic* 13 (1972), 101-102. (Andreas Blass) 45 #8589 06A30 (02J05)
- Certain sets of postulates for distributive lattices with the constant elements. *Notre Dame J. Formal Logic* 13 (1972), 119-123. (M. Stojaković) 46 #53 02J05
- An abbreviation of Croiset's axiom-system for distributive lattices with 1. *Notre Dame J. Formal Logic* 13 (1972), 139-141. (M. Stojaković) 46 #54 02J05
- A new formalization of Newman algebra. *Notre Dame J. Formal Logic* 13 (1972), 255-264. (W. Taylor) 45 #6712a 06A40
- An equational axiomatization of associative Newman algebras. *Notre Dame J. Formal Logic* 13 (1972), 265-269. (W. Taylor) 45 #6712b (E 54 #7347) 06A40 (08A25)
- A semi-lattice theoretical characterization of associative Newman algebras. *Notre Dame J. Formal Logic* 13 (1972), 283-285. (W. Taylor) 45 #6712c 06A40 (08A25)
- An equational axiomatization and a semi-lattice theoretical characterization of mixed associative Newman algebras. *Notre Dame J. Formal Logic* 13 (1972), 407-423. (Editors) 47 #8381 06A40
- Solution to the problem concerning the Boolean bases for cylindric algebras. *Notre Dame J. Formal Logic* 13 (1972), 529-545. (D. Monk) 48 #104 02J15
- Remark about the Boolean parts in the postulate-systems of closure, derivative and projective algebras. *Notre Dame J. Formal Logic* 14 (1973), 111-117. (D. Monk) 48 #10803 02J15
- A note on Newman's algebraic systems. *Notre Dame J. Formal Logic* 14 (1973), 129-133. (From the author's introduction) 55 #97 02J99
- A new axiomatization of modal system K1.2. *Notre Dame J. Formal Logic* 14 (1973), 413-414. (R. I. Goldblatt) 48 #69 02C10
- Modal system S3 and the proper axioms of S4.O2 and S4.O4. *Notre Dame J. Formal Logic* 14 (1973), 415-418. (R. I. Goldblatt) 48 #70 (E 50 #1846) 02C10
- Note about the Boolean parts in the extended Boolean algebras. *Notre Dame J. Formal Logic* 14 (1973), 419-422. (A. Preller) 48 #1918 02J05
- Concerning the quantifier algebras in the sense of Pinter. *Notre Dame J. Formal Logic* 14 (1973), 547-553. (D. Monk) 49 #7138 02J15
- Errata: "Note on G. J. Massey's closure-algebraic operation" (Notre Dame J. Formal Logic 11 (1970), 343-346). *Notre Dame J. Formal Logic* 14 (1973), 584. (Editors) 48 #8204 02C10
- Errata: "An equational axiomatization of associative Newman algebras" (Notre Dame J. Formal Logic 13 (1972), 265-269). *Notre Dame J. Formal Logic* 14 (1973), 584. (Editors) 54 #7347 06A40
- Concerning the proper axioms of S4.O2. *Notre Dame J. Formal Logic* 15 (1974), 169-172. (George F. Schumm) 48 #10769 02C10
- A theorem concerning a restricted rule of substitution in the field of propositional calculi. I, II. *Notre Dame J. Formal Logic* 15 (1974), 465-476; *ibid.* 15 (1974), 589-597. (Charles Lambros) 50 #6781 02B05 (02D99)
- Erratum: "Modal system S3 and the proper axioms of S4.O2 and S4.O4" (Notre Dame J. Formal Logic 14 (1973), 415-418). *Notre Dame J. Formal Logic* 15 (1974), 648. (Editors) 50 #1846 02C10
- A new postulate-system for modular lattices. *Notre Dame J. Formal Logic* 16 (1975), 81-85. (M. Kolibiar) 51 #5436 06A30 (02G15)
- A short postulate-system for ortholattices. *Notre Dame J. Formal Logic* 16 (1975), 141-144. (Barbara Jeffcott) 50 #9723 06A25
- Concerning the postulate-systems of subtractive abelian groups. *Notre Dame J. Formal Logic* 16 (1975), 429-444. (R. C. Lyndon) 51 #10071 02G15 (20A10)
- Pledger lemma and the modal system S3*. *Notre Dame J. Formal Logic* 17 (1976), no. 2, 253-256. (Jerzy Kotas) 53 #10553 02C10
- A short equational axiomatization of modular ortholattices. *Notre Dame J. Formal Logic* 17 (1976), no. 2, 311-316. (Ralph Freese) 53 #12920 02G15 (06A30)
- A short equational axiomatization of orthomodular lattices. *Notre Dame J. Formal Logic* 17 (1976), no. 2, 317-320. (Ralph Freese) 53 #12921 02G15 (06A30)
- The modular latticoids. *Notre Dame J. Formal Logic* 17 (1976), no. 4, 617-621. (Barbara Jeffcott) 55 #10342 06A30
- The axioms for latticoids and their associative extensions. *Notre Dame J. Formal Logic* 17 (1976), no. 4, 625-631. (Evelyn Nelson) 56 #2897 06A75
- Awkward axiom-systems. *Notre Dame J. Formal Logic* 19 (1978), no. 2, 315-320.
- (O. V. Belegadek) 58 #132 02B05 (02G99)
- Note about Łukasiewicz's theorem concerning the system of axioms of the implicational propositional calculus. *Notre Dame J. Formal Logic* 19 (1978), 457-460. (Mieczysław Omyła) 58 #10285 02B05
- A new axiomatization of the mixed associative Newman algebras. *Notre Dame J. Formal Logic* 19 (1978), no. 3, 467-474. (Evelyn Nelson) 58 #10649 06A40 (02B05)
- Sobol', I. M.** ★Многомерные квадратурные формулы и функции Хаара. (Russian) [Multidimensional quadrature formulae and Haar functions] *Izdat. "Nauka", Moscow* 1969. 288 pp. (A. Cojiiu) 54 #10952 41A55
- ★Die Monte-Carlo-Methode. Übersetzung aus dem Russischen von A. Ma. Kleine Ergänzungsserie zu den Hochschulbüchern für Mathematik, XXII. VEB Deutscher Verlag der Wissenschaften, Berlin, 1971. 74 pp. (Editors) 50 #1463 60J15 (with German, V. A.) The utilization of surfaces of constant density in the simulation of multidimensional random variables. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 789-791. (V. Dupač) 45 #1341 65C10
- ★Метод Монте-Карло. Russian [The Monte Carlo method] Second edition revised. Popular Lectures in Mathematics, No. 46. *Izdat. "Nauka", Moscow*, 1972. (Editors) 50 #6103 65C05
- A deterministic interpretation of goodness-of-fit tests, and a test of pseudorandom numbers. (Russian) *Operations research and statistical modeling*, No. 1 (Russian) 162-169. *Izdat. Leningrad. Univ., Leningrad*, 1972. (V. Pagurova (RŽMAT 1973 V275)) 51 #9422 65C05
- ★Численные методы Монте-Карло. (Russian) [Numerical Monte Carlo methods] *Izdat. "Nauka", Moscow*, 1973. 311 pp. (Editors) 53 #9578 65C05
- Computation of improper integrals by means of equidistributed sequences. (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 278-281. (D. D. Stancu) 51 #11165C05
- A probabilistic estimate of the integration error for Π_2 -grids. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 1035-1037, 1093. (V. V. Ivanov) 51 #4635 65D30 (with Statnikov, R. B.; Ovčinnikova, N. F.) Locating the eigenvalues of a matrix. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 1581-1583, 1638. (J. Segeth) 50 #8942 65F15
- ★The Monte Carlo method. Translated and adapted from the second Russian edition by Robert Messer, John Stone, and Peter Fortini. Popular Lectures in Mathematics. The University of Chicago Press, Chicago, Ill.-London, 1974. viii + 100 pp. (Editors) 51 #9423 65C05
- ★Die Monte-Carlo-Methode. Übersetzt aus dem Russischen von A. Ma. Zweite Auflage. Kleine Ergänzungsserie zu den Hochschulbüchern für Mathematik, XXII. VEB Deutscher Verlag der Wissenschaften, Berlin, 1974. 72 + ii pp. (Editors) 57 #7937 65C05 (65-01)
- Pseudorandom numbers for the construction of discrete Markov chains by a Monte Carlo method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 36-44, 266. (V. Dupač) 49 #4203 65C05
- ★The Monte Carlo method. Translated from the second Russian edition by Kisin. Little Mathematics Library, No. 46. Mir Publishers, Moscow, 1975. 74 pp. (Editors) 53 #6975 65C05
- ★Método de Montecarlo. (Spanish) [The Monte Carlo method] Translated from the Russian by Carlos Vega. Lecciones Populares de Matemáticas, No. 46. [Popular Lectures in Mathematics, No. 46] Editorial Mir, Moscow, 1976. 79 pp. (Editors) 55 #6773 65C05
- (with Statnikov, I. N.) Calculation of multidimensional integrals by means of pseudorandom sequences. (Russian) *Mathematical simulation and the theory of electrical circuits*, No. 1. (Russian) pp. 3-8, 107. *Izdat. "Naukova Dumka", Kiev*, 1976. (Authors' summary) 58 #8141 65C05 (65D30)
- Uniformly distributed sequences with an additional property of uniformity. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 5, 1332-1337, 1375. (Authors' summary) 58 #3298 65C05 (65D30)
- (with Statnikov, R. B.) ★Постановка некоторых задач оптимального проектирования при помощи ЭВМ. (Russian) [Formulation of some optimal control problems by means of an electronic computer] With an English summary. Preprint 24 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow*, 1977. 20 pp. (Authors' summary) 58 #15497 93C99
- (with Artobolevskii, I. I.; Sergeev, V. I.; Statnikov, R. B.) The use of electronic computers in the formulation of the optimal machine design problem. (Russian) *Akad. Nauk SSSR* 233 (1977), no. 4, 567-570. (Authors' introduction) 58 #93A99
- Best uniformly distributed sequences. (Russian) *Uspehi Mat. Nauk* 32 (1977), (194), 231-232. (B. Volkmann) 57 #258 10K05
- See also **Problems of random search**, 50 #15864
- Sobolev, A. I.** A certain dynamic model. (Russian) *Ekonom. i Mat. Metody* 7 (1971), 265-270. (M. Mañas) 48 #10473 90B30
- The dimension of a linear space of matrices that have a saddle point. (Russian. English summary) *Advances in game theory (Proc. Second All-Union Conf., Vilnius, 1971)* (Russian), pp. 66-68. *Izdat. "Mintis", Vilnius*, 1973. (A. B. Németh) 50 #1290D05 (15A03)
- The functional equations that give the payoffs of the players in an n -person game. (Russian. English summary) *Advances in game theory (Proc. Second All-Union Vilnius, 1971)* (Russian), pp. 151-153. *Izdat. "Mintis", Vilnius*, 1973. (Author's summary) 50 #6525 90D12
- Nonlinear analogues of Shapley's axiomatization. (Russian. English summary) *Current trends in game theory (Russian)*, pp. 119-126. *Izdat. "Mokslas", Vilnius*, 1976. (O. N. Bondareva) 56 #8051 90D35
- See also **Aumann, Robert J.**; et al., 58 #15223
- Sobolev, A. V.** A certain class of positive linear operators in topological linear spaces. (Russian) *Dokl. Akad. Nauk SSSR* 212 (1973), 305-307. (Rosaling Reichard) 53 #1334 47B55 (46A40)
- (with Krasnosel'skii, M. A.) Fixed points of discontinuous operators. (Russian) *Sibirsk. Mat. Ž.* 14 (1973), 674-677, 696. (J. Dancs) 48 #4852 47H10 (47B55)
- (with Ahmerov, R. R.; Kamenskii, M. I.; Kozjakin, V. S.) Periodic solutions of autonomous functional-differential equations of neutral type with small

- Differential'nye Uravneniya 10 (1974) 1923-1931, 2081. (G. B. Gustafson) #3644 34K15
- (with Krasnosel'skii, M. A.) Cones of finite rank. (Russian) *Dokl. Akad. Nauk SSSR* 225 (1975), no. 6, 1256-1259. (A. V. Buhvalov) 52 #14911 46A40 (47B55)
- On the theory of completely positive matrices. (Russian) *Sibirsk. Mat. Zh.* 16 (1975), 4, 830-836, 886. (George P. Barker) 52 #447 15A48
- A method for metrizing the set of subspaces of a Banach space. (Russian) *Uspehi Akad. Nauk SSSR* 1976, no. 1, 170-176. (Author's introduction) 52 #30027 46A40 (46B99)
- Quasi-convex cones of finite rank. (Russian) *Uspehi Mat. Nauk* 32 (1977), no. 97, 197-198. (P. P. Zabreiko) 58 #7024 46A40
- (with Bravyy, M. Ja.) An attempt at solving a linear programming problem with random technological coefficients. (Russian) *Mathematical methods in economic research* (Russian), pp. 17-25. *Izdat. "Nauka", Moscow*, 1974. (V. V. Ivanov) 53 #10301 90C25 (49D35)
- (with O. S. Multichannel control of interconnected inertia-free channels. (Russian) *Theory and methods of construction of multivariable control systems* (Russian), pp. 330-339. "Nauka", Moscow, 1973. (G. N. Mil'shtein) 52 #5125 93C30
- (with S. L. Pseudodifferential operators in infinitely many variables that are generated by measures of polynomial growth. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 29 (1974), no. 2, 52-61. (Ju. L. Daleckii) 50 #8073 46G99 (35R15)
- A certain class of pseudodifferential operators with an infinite number of variables whose symbols depend on a quadratic form. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 29 (1974), no. 3, 22-31. (Ju. L. Daleckii) 50 #8074 G99 (35R15)
- (with S. K. Finite-dimensional superintuitionistic logics. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 41 (1977), no. 5, 963-986, 1199. (V. Ja. Kreinovich) 58 #10333 C15
- The finite approximability of superintuitionistic logics. (Russian) *Mat. Sb. (N.S.)* 214 (1977), no. 2, 289-301, 327. (L. L. Maksimova) 56 #11763 02C15
- On the intuitionistic propositional calculus with quantifiers. (Russian) *Mat. Zametki* 22 (1977), no. 1, 69-76. (L. L. Maksimova) 56 #15371 02C15
- (with S. L. (with Gel'fand, I. M.; Kostjuchenko, A. G.; Levitan, B. M.; Lopatinskiy, Ju. A.; Šilov, G. E.) Zaid Ismailovich Halilov (on his sixtieth birthday). (Russian) *Uspehi Akad. Nauk SSSR* 26 (1971), no. 3(159), 221-224. (1 plate) (Editors) 45 #18 01A70
- (with Kudrjavcev, L. D.; Lizorkin, P. I.; Nikol'skii, S. M.) Vladimir Isosifovich Andrašov (obituary). (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 2(164), 149-155 (1 plate). (Editors) 52 #5309 01A70
- ★Введение в теорию кубатурных формул. (Russian) [Introduction to the theory of cubature formulae] *Izdat. "Nauka", Moscow*, 1974. 808 pp. (V. V. Ivanov) #18037 65D30
- (with Bicadze, A. V.; Bogoljubov, N. N.; Vekua, I. N.; Maksudov, F. G.; Sitopol'skii, Ju. O.) Zaid Ismailovich Halilov (an obituary). (Russian) *Uspehi Mat. Nauk* 29 (1974), no. 5(179), 211-214. (1 plate) (Editors) 52 #7791 01A70
- Convergence of cubature formulae on infinitely differentiable functions. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 4, 793-796. (A. Cojbu) 53 #11981 65D30
- (with Aleksandrov, P. S.; Kolmogorov, A. N.) Ol'ga Arsen'evna Oleinik. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 4, 118-124. (Editors) 52 #2797 01A70
- (with Ilišinskiy, A. Ju.; Oleinik, O. A.) Ivan Georgievich Petrovskii. (Russian) *Problems in mechanics and mathematical physics* (Russian), pp. 1-6. *Izdat. "Nauka", Moscow*, 1976. (Editors) 57 #12120 01A70
- Convergence of cubature formulas on elements of $\tilde{L}^{(m)}$. (Russian) *Dokl. Akad. Nauk SSSR* 228 (1976), no. 1, 45-47. (D. D. Stancu) 53 #14874 65D30 (41A55)
- Coefficients of best quadrature formulas. (Russian) *Dokl. Akad. Nauk SSSR* 235 (1977), no. 1, 34-37. (Gheorghe Coman) 57 #981 41A55
- Roots of Euler polynomials. (Russian) *Dokl. Akad. Nauk SSSR* 235 (1977), no. 2, 7-280. (Author's review (RŽMat 1977 #12 B32)) 58 #19040 65D20 (65H05)
- (with Vainberg, B. R.; Kondrat'ev, V. A.; Landis, E. M.; Oleinik, O. A.) Samarii Aleksandrovich Gal'pern: an obituary. (Russian) *Uspehi Mat. Nauk* 33 (1978), no. 1(199), 5-197. (Editors) 58 #16046 01A70
- See also Partial differential equations, 46 #9500; American Mathematical Society translations, Ser. 2, 53 #978; Problems in mechanics and mathematical physics, 56 #2715 and Interview with S. L. Sobolev and N. N. Janenko, 58 #15788
- ev, T. K. See Takeuti, Gaisi, 58 #27366b
- ev, V. A. Integral manifolds of singularly perturbed systems in one critical case. (Russian) *Differential equations* (Russian), pp. 63-71, 168. *Kuibyshev. Gos. Univ., Kuibyshev*, 1976. (Author's summary) 58 #6522 34C30
- (with Strygin, V. V.) The method of integral manifolds in the problem of stabilization of bodies with the aid of passive shock absorbers. (Russian) *Differential equations* (Russian), pp. 127-164, 168. *Kuibyshev. Gos. Univ., Kuibyshev*, 1976. (Authors' summary) 58 #8609 70.34 (34D15)
- ev, V. I. ★Лекции по дополнительным главам математического анализа. [Lectures in supplementary chapters of mathematical analysis] (Russian) *Izdat. "Nauka", Moscow*, 1968, 288 pp. (Not reviewed) 26-01
- Ideals in semiordeered rings. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 1 Sb. Statei po Teorii Operatornykh Uravnenii* (1970), 149-158. (G. P. Otikov) (RŽMat 1971 #6 B595) 55 #1031 46A40 (46H10)
- (with Ljusternik, L. A.) ★Elements of functional analysis. Translated from the Russian. Revised corrected edition. International Monographs on Advanced Mathematics & Physics. *Hindustan Publishing Corp., Delhi*, 1971. x+322 pp. (Editors) 59 #7721 46-02
- (with Birman, M. Š.; Vilenkin, N. Ja.; Gorin, E. A.; Zabreiko, P. P.; Iohvidov, I. A.; Kadeč, M. I.; Kostjuchenko, A. G.; Krasnosel'skii, M. A.; Krein, S. G.; Mitjagin, B. S.; Petunin, Ju. I.; Rutickii, Ju. B.; Semenov, E. M.; Stecenko, V. Ja.; Faddeev, L. S.; Citlanadze, E. S.) ★Функциональный анализ. (Russian) [Functional analysis] edited by S. G. Krein. Second edition, revised and augmented. Mathematical Reference Library. *Izdat. "Nauka", Moscow*, 1972. 544 pp. (Editors) 50 #5406 46-02 (47-02)
- (with Vilenkin, N. Ja.; Gorin, E. A.; Kostjuchenko, A. G.; Krasnosel'skii, S. G.; Krein, S. G.; Maslov, V. P.; Mitjagin, B. S.; Petunin, Ju. I.; Rutickii, Ju. B.; Stecenko, V. Ja.; Faddeev, L. S.; Citlanadze, E. S.) ★Functional analysis. Translated from the Russian by Richard E. Flaherty. English edition edited by George F. Votruba with the collaboration of Leo F. Boron. *Wolters-Noordhoff Publishing, Groningen*, 1972. xv+380 pp. (Editors) 52 #11516 46-02 (47-02)
- (with Ščerbin, V. M.) The continuity of mappings of K -spaces with unit. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 6* (1972), 86-88. (V. Geiler (RŽMat 1973 #3 B598)) 56 #13015 47H99
- (with Ščerbin, V. M.) The extrema of mappings of K -spaces with identity. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 11 Sb. Statei Funkcional. Anal. i Priložen.* (1973), 84-91. (V. Geiler (RŽMat 1974 #8 B768)) 57 #13476 46G05
- (with Ljusternik, L. A.) ★Elemente der Funktionalanalysis. Fünfte Auflage. Übersetzung der zweiten russischen Auflage von Klaus Fiedler und herausgegeben von Konrad Gröger. Mathematische Lehrbücher und Monographien, I. Abteilung: Mathematische Lehrbücher, Band VIII. *Akademie-Verlag, Berlin*, 1976. viii+375 pp. (Editors) 53 #14063 46-01 (47-01)
- See also Efimov, N. V.; et al., 52 #7798; Collection: Function spaces and operator equations, 52 #15044 and Gajewski, Herbert; et al., 58 #30524b
- Sobolev, V. Ja. (with Ljusternik, L. A.) ★Elements of functional analysis. Authorised third translation from second extensively enlarged and rewritten Russian edition. International Monographs on Advanced Mathematics & Physics. *Hindustan Publishing Corp., Delhi; Halsted Press [John Wiley & Sons, Inc.], New York*, 1974. 360 pp. (Editors) 50 #2852 46-02 (47-02)
- Sobolev, V. N. The estimation of the dynamical state of control systems and automatization objects from their regression models. (Russian) *Cybernetics and diagnostics*, No. 5 (Russian), pp. 157-166. *Izdat. "Zinatne", Riga*, 1972. (Editors) 50 #4077 93E10
- The estimation of the accuracy of regression models of complex dynamical systems. (Russian) *Cybernetic methods in diagnostics* (Russian), pp. 35-41, 129. *Izdat. "Zinatne", Riga*, 1973. (V. N. Igolkin) 49 #2150 93B30
- Statistical identification of complex dynamical systems. (Russian) *Cybernetic methods in diagnostics* (Russian), pp. 117-124, 132. *Izdat. "Zinatne", Riga*, 1973. (V. N. Igolkin) 49 #2149 93B30
- Sobolev, V. P. Analysis of systems for delivery of supplies with limited utilization time. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 2, 78-89 (Russian); translated as *Engrg.*

- Istrăţescu) 54 #5896 47B37
- Equivalent matrices in linear programming problems. (Russian) *Mathematical methods of solution of economic problems (Suppl. to Ekonom. i Mat. Metody)*, No. 5 (Russian), pp. 15-24. Izdat. "Nauka", Moscow, 1974. (S. Zlobec) 52 #16602 90C05
- Sobolevskii, P. E.** See **Sobolevskii, P. O.**
- Sobolevskii, P. I.** (with Yanovič, L. A.) Certain approximate formulas for multiple Wiener integrals. (Russian) *Dokl. Akad. Nauk BSSR* 15 (1971), 578-581. (T. Neubrunn) 45 #500 28A40 (65D30)
- (with Yanovič, L. A.) Certain formulas with real parameters for the approximate calculation of integrals with respect to a Gaussian measure. (Russian) *Dokl. Akad. Nauk BSSR* 16 (1972), 197-200. (Alan H. Shuchat) 45 #5308 28A40 (65D30)
- (with Yanovič, L. A.) The formulae of V. S. Vladimirov for the approximate computation of integrals with respect to Gaussian measure. (Russian) *Dokl. Akad. Nauk BSSR* 18 (1974), 965-968, 1050. (G. N. Sytaja) 53 #4226 60H05 (60G15, 28A40)
- The estimation of the remainder of an approximation formula for integrals with respect to Gaussian measure. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Nauk* 1974, no. 6, 50-57, 141. (G. N. Sytaja) 53 #4227 60H05
- A certain formula for the approximate computation of integrals with respect to Gaussian measure. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Nauk* 1975, no. 1, 44-47, 140. (G. N. Sytaja) 53 #4228 60H05
- Interpolation of functionals, and some approximate formulae for integrals with respect to Gaussian measure. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Nauk* 1975, no. 2, 5-12, 138. (M. I. Jadrénko) 53 #9358 60G15 (28A40)
- Approximate formulas for the calculation of continual integrals with respect to a Gaussian measure. (Russian) *Dokl. Akad. Nauk BSSR* 20 (1976), no. 4, 293-296, 379. (G. N. Sytaja) 55 #4358 60G15 (28A40)
- Some formulae for the approximate computation of multiple integrals with respect to Gaussian measure. (Russian) *Dokl. Akad. Nauk BSSR* 20 (1976), no. 7, 585-588, 667. (Dimitr Vandev) 54 #5426 28A40 (60G15)
- The approximate calculation of path integrals with respect to certain measures that are defined by means of the characteristic functional. (Russian) *Dokl. Akad. Nauk BSSR* 20 (1976), no. 10, 873-876, 955. (V. Ficker) 54 #13026 28A40 (60G15)
- (with Egorov, A. D.) Linear partial differential equations in function spaces. (Russian) *Differentsial'nye Uravnenija* 13 (1977), no. 9, 1716-1719, 1735-1736. (Authors' summary) 58 #12035 35R15
- A method for the approximate calculation of continual integrals. (Russian) *Dokl. Akad. Nauk BSSR* 21 (1977), no. 8, 677-680, 763. (From the introduction) 58 #8175 65D30
- A method for the approximate calculation of path integrals. (Russian) *Dokl. Akad. Nauk BSSR* 21 (1977), no. 10, 869-871, 955. (R. S. Anderssen) 57 #11006 65D30
- Composite approximate formulas for Poisson continual integrals. (Russian. English summary) *Dokl. Akad. Nauk BSSR* 22 (1978), no. 6, 492-495, 571. (A. B. Pevnyi) 58 #13647 65D30 (28A40, 60H05)
- Sobolevskii, P. O.** Differential equations of parabolic type in a Banach space. (Russian) *A collection of articles on function spaces and operator equations (Proc. Sem. Functional Anal., Math. Fac., Voronezh State Univ., Voronezh, 1970)* (Russian), pp. 95-122. *Voronezh. Gos. Univ., Voronezh*, 1970. (H. Kogan) 55 #13032 34G05 (47D05)
- (with Tiunčik, M. F.) The difference method of approximate solution for elliptic equations. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 4* (1970), 117-127. (G. W. Hedstrom) 55 #6883 65N15 (35B45)
- (with Dymant, D. A.) Coercive solvability of the Cauchy problem for differential equations in a Banach space with an unbounded operator that has a variable domain of definition. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 4* (1970), 131-136. (G. S. Ladde) 53 #8597 34G05
- (with Dymant, D. A.) The coercive solvability of the Cauchy problem for parabolic differential equations in a Banach space. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU 1 Sb. Statei po Teorii Operatornykh Uravnenii* (1970), 60-72. (T. Enikeeva) 54 #13242 34G05
- (with Smagin, V. V.) Theorems on the comparison of semigroups. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 1 Sb. Statei po Teorii Operatornykh Uravnenii* (1970), 145-148. 54 #13631 47D05
- (with Ick, B. G.) The stability of the Bubnov-Galerkin method for first order differential equations with unbounded operators in a Hilbert space. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 2 Cylk Statei po Prikl. Analizu* (1970), 39-42. (D. Lik (RŽMat 1971 #9 B712)) 58 #6580 34G05 (65J05)
- (with Primakova, S. I.) The error of the network method for elliptic equations. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 2 Cylk Statei po Prikl. Analizu* (1970), 46-50. (RŽMat 1971 #7 B945) 58 #19196 65N15
- (with Tiunčik, M. F.) The angle between parabolic operators. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 5* (1971), 103-113. (Todor G. Genčev) 53 #11229 35K10
- (with Janovskii, L. P.) An iteration method for solving quasilinear second order elliptic equations. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 5* (1971), 114-121. (Todor G. Genčev) 53 #11217 35J25
- (with Tiunčik, M. F.) Remark on the paper "The difference method of approximate solution of boundary value problems for quasilinear elliptic and parabolic equations" (Voronezh. Gos. Univ. Trudy Mat. Fak. No. 2 (1970), 82-106). (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. No. 5* (1971), 121-122. (Not reviewed) 65N10
- (with Anosov, V. P.) The first boundary value problem for elliptic equations in a Banach space. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 13-21. (See RŽMat 1972 #2 B739) 35J25
- (with Čebotareva, L. M.) Fractional powers of poorly positive operators. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 112-118. (See RŽMat 1972 #2 B728) 47A60
- (with Janovskii, L. P.) Solvability of a boundary value problem for a quasilinear parabolic equation with continuous initial data. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 119-134. (See RŽMat 1972 #2 B368) 35K55
- (with Dymant, D. A.) Coercive solvability of abstract parabolic equations in Bochner spaces. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU*
- No. 3 (1971), 27-34. (P. Szeptycki) 47 #879 47D05 (35R20)
- (with Janovskii, L. P.) A certain iteration method for the approximate solution of quasilinear elliptic equations. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 3* (1971), 142-146. (J. Nečas) 47 #9050 35J25
- (with Sil'čenko, Ju. T.) Solvability in the large of the first boundary value problem for a certain class of quasilinear one-dimensional parabolic equations. (Russian) *Differentsial'nye Uravnenija* 8 (1972), 1904-1905, 1915. (T. Styš) 47 #3846 35J25
- (with Sil'čenko, Ju. T.) The nonlocal existence theorem for the approximate solution of a quasilinear parabolic equation. (Russian. Lithuanian and German summaries) *Lithuanian Math. Sb.* 12 (1972), no. 1, 213-215, 241. (J. Chabrowski) 47 #7229 35K55
- (with Anosov, V. P.) The coercive solvability of parabolic equations. (Russian) *Mat. Zametki* 11 (1972), 409-419. (R. Carroll) 46 #558 47D05
- The coercive solvability of equations with fractional powers of parabolic operators. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 6* (1972), 89-93. (RŽMat 1973 B913) 58 #1460 34G05
- (with Evzerov, I. D.) Fractional powers of ordinary differential operators of order α in Hölder spaces with weight. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 7*, 56-60. (M. M. Skniganov) 55 #1139 47E05
- (with Pogorelenko, V. A.) Periodic solutions of quasilinear hyperbolic equations. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. 1972*, no. 7, 85-89. (O. Večerkina) 55 #3462 34G05 (35B10)
- Fractional powers of elliptic operators in the ideals S_p . (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 5 Sb. Statei Teor. Operator. i Differentsial. Uravnenii* (1972), 114-117. 56 #12989 47F05
- (with Evzerov, I. D.) Fractional powers of ordinary differential operators. (Russian) *Differentsial'nye Uravnenija* 9 (1973), 228-240, 393. (P. Talpalaru) 47 #5657 47F05
- The convergence of the method of Euler step-functions. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 9 Sb. Rabot Uravn. Častn. Proizvodn. i Vyčisl. Mat.* (1973), 108-111. (RŽMat 1974 #7 B998) 57 #10065 34A45
- An interpolation theorem for fractional spaces that are generated by unbounded positive operators with incomparable domains of definition. (Russian) *Voronezh. Gos. Univ. Trudy Mat. Fak. Vyp. 9 Sb. Rabot Uravn. Častn. Proizvodn. i Vyčisl. Mat.* (1973), 142-155. (RŽMat 1974 #7 B685) 57 #10443 46M35 (46E99)
- (with Orlov, V. P.) The resolvent of a degenerate operator in a Banach space. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 9 Sb. Prikl. Anal.* (1973), 47-64. (T. Enikeeva (RŽMat 1974 #9 B930)) 57 #6702 47A50
- (with Hoang Van Lai) Application of the properties of the mixed derivatives of Green's functions in the theory of generalized Hermitian splines. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 9 Sb. Rabot Prikl. Anal.* (1973), 80-86. (V. Nikol'skii (RŽMat 1974 #8 B586)) 57 #6965 41A15
- (with Zagorodnikov, Ju. I.) Certain difference methods for the approximate solution of nonstationary Navier-Stokes equations. (Russian) *Collection of articles on numerical mathematics and theoretical cybernetics*, No. 13 (Russian), pp. 1-14. *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 9 Sb. Rabot Prikl. Anal.* (1973), 142-155. (Authors' introduction) 58 #29444 35Q10 (65N10)
- Interpolation theorems for fractional powers of operators acting in Banach spaces. (Russian) *Collection of articles on numerical mathematics and theoretical cybernetics*, No. 13 (Russian), pp. 51-64. *Voronezh. Gos. Univ., Voronezh*, 1974 (1975). (From the introduction) 58 #30338 46M35 (47A60)
- (with Šteinvil', Ė. A.) The correct solvability of an extended boundary value problem for a parabolic equation. (Russian) *Differentsial'nye Uravnenija* 10 (1974), 1692-1698, 1734. (J. Kačur) 51 #3695 35K20
- (with Primakova, S. I.) The coercive solvability of fourth order difference equations. (Russian) *Differentsial'nye Uravnenija* 10 (1974), 1699-1713, 1734-1735. (J. Kačur) 52 #1076 39A10
- (with Gerštein, L. M.) Coercive solvability of general boundary value problems for second order elliptic differential equations in a Banach space. (Russian) *Differentsial'nye Uravnenija* 10 (1974), 2059-2061, 2086. (P. Talpalaru) 50 #10476 34G05
- (with Smirnickii, Ju. A.) Imbedding theorems for fractional norms that are generated by an elliptic operator. (Russian) *Mat. Zametki* 15 (1974), 91-100. (Triebel) 49 #3534 46E35 (47D05)
- (with Gurova, I. N.) Fractional powers of a second order difference operator. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 12 Sb. Statei Prikl. Anal.* (1974), 10-27. (RŽMat 1975 #10 B712) 57 #10490 47B45 (39A10)
- (with Polička, A. Ė.) Coercive solvability of parabolic difference equations. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 12 Sb. Statei po Prikl. Anal.* (1974), 75-81. (RŽMat 1975 #10 B845) 57 #10490 34G05 (47D05)
- Some properties of the solutions of differential equations in fractional spaces. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 14 Sb. Statei Teor. Operator. Uravnenii* (1974), 68-74. (See RŽMat 1975 #7 B825) 34G05
- (with Titenskii, M. E.) Stability of the Bubnov-Galerkin method for a one-dimensional parabolic equation. (Russian) *Numerical analysis and mathematical physics*, No. 2 (Russian), pp. 113-123. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1974. (See RŽMat 1976 #12 B1105; MR 56 #1654) 65N30
- (with Orlov, V. P.) The resolvent of a degenerate operator in a Banach space. (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 5, 858-868, 948. (P. Szeptycki) 52 #940 34G05 (47E05)
- (with Gerštein, L. M.) Coercive solvability of general boundary value problems for second order elliptic differential equations in a Banach space. II. (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 7, 1335-1337, 1351. (P. Talpalaru) 51 #34G05
- (with Orlov, V. P.) The resolvent of a degenerate operator in a Banach space. (Russian) *Dokl. Akad. Nauk SSSR* 221 (1975), no. 5, 1035-1037. (Leo F. E. E. E.) 52 #941 34G05 (47A50)
- Fractional powers of coercively positive sums of operators. (Russian) *Dokl. Akad. Nauk SSSR* 225 (1975), no. 6, 1271-1274. (Author's summary) 58 #2387 47B25, 47F05
- The correct solvability in C of elliptic and parabolic difference boundary value problems. (Russian) *Voronezh. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU*

- Operator. *Urauneni* (1975), 94-95. (G. I. Sulhanišvili) **58** #19212 65N20
(with Alibekov, H. A.) The stability and convergence of a scheme with weights in a Banach space. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* (1975), 3-9. (Hans Kaper) **57** #16880 34G05 (47D05)
(with Polička, A. E.) Estimation of the solutions of a difference boundary value problem in the norm of the "trace" space of solutions of a differential problem. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 19* (1975), 3-122. (See RŽMat **1976** #6 B718) 65N05
(with Krasnosel'skii, M. A.; Zabreiko, P. P.; Pustyl'nik, E. I.) ★ Integral operators spaces of summable functions. Translated from the Russian by T. Ando. Monographs and Textbooks on Mechanics of Solids and Fluids, Mechanics: Analysis. Northhoff International Publishing, Leiden, 1976. xv+520 pp. (Editors) **52** #6505 3G05 (47H99)
Fractional powers of sums of operators. (Russian) *Imbedding theorems and their applications* (Proc. All-Union Sympos., Alma-Ata, 1973) (Russian), pp. 148-151, 193-194. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (P. Szeptycki) **58** #2388 47A60 (B99)
The Bubnov-Galerkin method for parabolic equations. (Russian) *Fractional-difference methods for the solution of problems of mathematical physics* (Proc. 2nd All-Union Sem., Novosibirsk, 1975) (Russian), pp. 79-85. *Vychisl. Centr Sibirsk. Akad. Nauk SSSR, Novosibirsk*, 1976. (P. P. Zabreiko) **58** #8246 65J05 (G05)
(with Evzerov, I. D.) The resolvent and fractional powers of ordinary differential operators in spaces of smooth functions. (Russian) *Differentsial'nye Uravneniya* **12** (1976), no. 2, 227-233, 378. (Jan Bochenek) **53** #8968 47E05 (34B25)
(with Polička, A. E.) Rothe's method of approximate solution of the Cauchy problem for differential equations in a Banach space with a variable unbounded operator. (Russian) *Differentsial'nye Uravneniya* **12** (1976), no. 9, 1693-1704, 1727. (Authors' summary) **57** #13058 34G05 (35K25)
(with Zagorodnikov, Ju. I.) Application of the method of fractional powers of operators to the study of a two-dimensional difference system of Navier-Stokes equations. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 2, 281-284. (J. P. Merle) **53** #14949 65P05 (35Q10)
(with Polička, A. E.) Correct solvability of a difference boundary value problem in Bochner space. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 4, 511-523, 574. (Bolis Basit) **57** #795 34G05 (47A50)
(with Polička, A. E.) New L_p estimates for parabolic difference problems. (Russian) *Vychisl. Mat. i Mat. Fiz.* **16** (1976), no. 5, 1155-1163, 1371. (Authors' summary) **57** #18129 65M99
The theory of semigroups and the stability of difference schemes. (Russian) *Operator theory in function spaces* (Proc. School, Novosibirsk, 1975) (Russian), pp. 44-337, 344. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk*, 1977. (Pavel Doktor) **57** #31877 65M99 (34G05)
(with Hoang Van Lai) The theory of Hermite splines, and algorithms of optimum approximation. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **8** (1977), no. 1 *Mat. Modelirovanie*, 143. (RŽMat **1977** #10 B156) **58** #3304 65D05
(with Orlov, V. P.) Stability of Rothe's method for degenerate parabolic equations. (Russian, Lithuanian and English summaries) *Differentsial'nye Uravneniya i Prilozheniya*.—*Trudy Sem. Processy Optimal. Upravleniya I Sekcija Vyp.* **17** (1977), 43-73, 1. (G. W. Hedstrom) **57** #8048 65M10
(with Alibekov, H. A.) The stability of difference schemes for parabolic equations. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 4, 737-740. (Janusz Mika) **57** #13023 34G05 (65M10)
(with Čebotareva, L. M.) Approximate solution of the Cauchy problem for an abstract hyperbolic equation by the method of lines. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 5(180), 103-116. (Russell C. Thompson) **58** #24986 65M20
(with Zagorodnikov, Ju. I.) Some difference methods for the approximate solution of nonstationary Navier-Stokes equations. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 1, 96-238. (E. G. Djakonov) **55** #13807 65M10 (35Q10)
Fractional powers of coercive-positive sums of operators. (Russian) *Sibirsk. Mat. Ž.* (1977), no. 3, 637-657, 719. (Jan Bochenek) **56** #12942 47A60 (47D05, 47F05)
(with Zagorodnikov, Ju. I.) Application of the method of fractional powers of operators to the study of the Crank-Nicolson scheme for Navier-Stokes equations. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 2, 303-317, 478. (I. Aganovic) **58** #19195 N10 (35Q10)
(with Zagorodnikov, Ju. I.) Application of the method of fractional powers of operators to the study of a two-dimensional difference system of Navier-Stokes equations. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **18** (1978), no. 2, 385-393, 525. (Authors' summary) **58** #8364 65N30 (65J05)
See also Collection: Numerical mathematics and theoretical cybernetics, **57** #11988
Law, W. L. See Sobolev, V. I.
Lewy, Anna Sur un système d'inégalités différentielles partielles du second ordre à argument fonctionnel. *Ann. Polon. Math.* **25** (1971), 103-108. (I. Łojczyński-Królikiewicz) **57** #3915 35B45
Sur l'existence de la solution d'une équation différentielle à argument accéléré. *Ann. Polon. Math.* **26** (1972), 157-163. (M. Q. Jacobs) **46** #2190 34K05
Sur quelques inégalités différentielles relatives à des lignes polygonales. *Ann. Polon. Math.* **27** (1972/73), 55-60. (J. W. Bebernes) **49** #10953 34A40
Sur l'existence de la fonction de Green pour un problème aux limites relatif à une équation différentielle à argument fonctionnel. *Ann. Polon. Math.* **28** (1973), 175-180. (S. Smítalová) **49** #9371 34K10
Lewy, Michał A method for the recognition of typewritten characters. (Polish, Russian and English summaries) *Arch. Automat. i Telemekh.* **21** (1976), no. 2, 253-262. (Authors' summary) **56** #17246 68A45
Lewy, S. L. See Theory of cubature formulas and applications of functional analysis to some problems in mathematical physics, **58** #20951
Lewy, Ju. P. The possibility of combining the advantages of residue classes and logarithms in machine arithmetic. (Ukrainian, English and Russian summaries) *Preprints Akad. Nauk Ukrain. RSR Ser. A* **1974**, 715-721, 766. (R. N. Goss) **50** #3639 68A10
Relative productivities of superfast arithmetic-logical processors and multiprocessor systems. *Automatika* **1974**, no. 5, 61-67 (Ukrainian, Russian and English summaries); translated as *Soviet Automat. Control* **7** (1974), no. 5, 50-55. (John T. Gill) **51** #12028 68A20 (94A25)
(with Dolins'ka, N. A.) Transformation of the matrices of multiplicative modular operations to additive form. (Russian, English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 10, 881-884, 958. (Authors' summary) **58** #480 10A30 (12C25)
Sobotka, Martha See Mally, Ernst, **54** #7187
Sobotka, Zdeněk Non-linear rheological equations following from tensorial expansions. *Acta Tech. ČSAV* **18** (1973), 192-196. (P. Villaggio) **48** #10276 73A5
Tensorial expansions in non-linear viscoelasticity. *Acta Tech. ČSAV* **20** (1975), 1-21. (V. P. Madan) **50** #15550 73J3
New invariants in constitutive equations of non-linear mechanics. *Acta Tech. ČSAV* **21** (1976), no. 3, 242-269. (François Sidoroff) **54** #11935 73J3
Non-linear constitutive functional equations for isotropic viscoelastic bodies. *Acta Tech. ČSAV* **21** (1976), no. 6, 634-654. (V. P. Madan) **56** #7443 73J3
Bending of viscoelastic orthotropic rectangular plates. *Acta Tech. ČSAV* **22** (1977), no. 6, 655-680. (Authors' summary) **57** #14757 73J35
Sobouti, Y. Pure perturbation spectra of convectively neutral fluids. *Astronom. and Astrophys.* **55** (1977), no. 3, 339-346. (P. C. Jain) **55** #13954 76J65
Sobral, M., Jr. Optimal nonlinear feedback controls for a class of linear systems. *J. Franklin Inst.* **298** (1974), 463-466. (Takashi Yahagi) **51** #5096 93C10
(with Koo, Robert L.) Pole sensitivity in coupling networks. *J. Franklin Inst.* **300** (1975), no. 3, 203-207. (Authors' summary) **56** #11586 94A20
The inverse lure problem of optimal control. *J. Franklin Inst.* **300** (1975), no. 3, 209-212. (N. U. Ahmed) **57** #18955 93C05 (49A20)
See also System sensitivity analysis, **52** #12863
de Sobrino, Luis The Giansdorff-Prigogine thermo-dynamic stability criterion in the light of Lyapunov's theory. *J. Theoret. Biol.* **54** (1975), no. 2, 323-333. (Aubrey B. Poore) **57** #18996 93D05 (34D35)
Some thermodynamic and stability properties of a fluid with gradient dependent free energy. (French summary) *Canad. J. Phys.* **54** (1976), no. 2, 105-117. (R. K. Gupta) **55** #7145 80J35
Sobtsov, N. V. See Sobceov, N. V.
Socaciu, Vi. (with Iordache, Mihai) A demonstration of the second theorem of similitude. (Loose French and German summaries) *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* **21** (1976), no. 3, 409-417. (Hannah Chen) **56** #13509 65C99
(with Iordache, Mihai) A generalization of the method of small parameter on the transient analysis of linear or nonlinear networks. *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* **22** (1977), no. 1, 33-42. (H. Hochstadt) **56** #721 34A25
Sočalov, Ju. A. A certain class of matrices that are induced by a matrix spectrum of semisimple structure. (Russian) *Probabilistic methods and cybernetics*, No. 9 (Russian), pp. 94-98. *Izdat. Kazan. Univ., Kazan*, 1971. (C. Reischer) **48** #3654 94A35
(with Stolov, E. L.) The construction of the set of characteristic sequences of symmetric stochastic matrices. (Russian) *Probabilistic methods and cybernetics*, No. X-XI (Russian), pp. 129-141. *Izdat. Kazan. Univ., Kazan*, 1974. (Gh. Oprișan) **58** #5733 15A51
Probabilistic automata that possess more general properties than definiteness and quasidefiniteness. (Russian) *Probabilistic methods and cybernetics*, Vol. 12-13, pp. 11-23. *Kazan. Univ., Kazan*, 1976. (I. Pokrovskaja) (RŽMat **1978** #10 V7333) **58** #33609 94A35 (68A25)
Soceneanu, A. Establishment of a condition for a given grammar to be deterministic. (Romanian, English summary) *Bul. Ști. Tehn. Inst. Politehn. "Traian Vuia" Timișoara* **22**(36) (1977), no. 1, 222-224. (Authors' summary) **58** #13984 68A30
Socha, Lesław Frequency-domain criteria for stability of a class of nonlinear systems with random parameters. *IEEE Trans. Automatic Control* **AC-20** (1975), 284-287. (A. N. V. Rao) **55** #12260 93E15
(with Klamka, Jerzy) Some remarks about stochastic controllability. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 5, 880-881. (Authors' summary) **56** #15107 93E99
Analysis of the stability of complex stochastic dynamical systems. (Polish, Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 465 Mat.-Fiz. Zeszyt* **28** (1977), 163-175. (Authors' summary) **56** #2601 93E15
Sochor, Antonín (with Mlček, Josef) Contributions to the theory of semisets. II. The theory of semisets and end-extensions in a syntactic setting. *Z. Math. Logik Grundlagen Math.* **18** (1972), 407-417. (L. Bukovský) **54** #2460 02K15 (02K10)
On semisets defined by non-normal formulas. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 867-874. (M. Boffa) **54** #95 02K10
Real classes in the ultrapower of hereditarily finite sets. *Comment. Math. Univ. Carolinae* **16** (1975), no. 4, 637-640. (J. M. Plotkin) **52** #10419 02K10 (02H20)
(with Vopěnka, Petr) Contributions to the theory of semisets. V. *Z. Math. Logik Grundlagen Math.* **21** (1975), no. 4, 289-302. (L. Bukovský) **54** #2463 02K15 (02K10)
Contribution to the theory of semisets. VI. Non-existence of the class of all absolute natural numbers. *Z. Math. Logik Grundlagen Math.* **21** (1975), no. 5, 439-442. (L. Bukovský) **54** #2464 02K15 (02K10)
The alternative set theory. *Set theory and hierarchy theory* (Proc. Second Conf., Bierutowice, 1975), pp. 259-271. *Lecture Notes in Math.*, Vol. 537, Springer, Berlin, 1976. (James D. Halpern) **57** #2913 02K10
Differential calculus in the alternative set theory. *Set theory and hierarchy theory, V* (Proc. Third Conf., Bierutowice, 1976), pp. 273-284. *Lecture Notes in Math.*, Vol. 619, Springer, Berlin, 1977. (S. Comer) **57** #12221 02K10
New results in the theory of semisets. *Prace Nauk. Inst. Mat. Politech. Wrocław. No. 14 Ser. Konfer.* No. 1 (1977), 105-107. (From the text) **58** #5213 02K10
(with Marek, Wiktor) On a weak Kelley-Morse theory of classes. *Comment. Math. Univ. Carolinae* **19** (1978), no. 2, 371-381. (Paul Bankston) **58** #10442 02Kxx
de Socio, Luciano M. (with Pozzi, Amilcare) Time-dependent solutions of the Navier-Stokes equations. (Italian summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 1,

- 132-143. (D. R. Smith) **53** #8683 35Q10
(with Carlomusto, Luigi) Sul calcolo numerico delle funzioni di Abramowitz. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* **34** (1975/76), 201-209. (H. Brunner) **55** #9492 65D20 (33A70)
(with Gaffuri, Giovanni) Analytic solutions to problems of radiative transport in an absorbing medium. (Italian summary) *Z. Angew. Math. Phys.* **27** (1976), no. 5, 591-598. (Edward W. Larsen) **54** #14701 82A5
(with Puliti, Paolo) Radiation transfer in an absorbing layer bounded by a specular reflector. *Mat. Vesnik* **1(4)(29)** (1977), no. 4, 363-370. (Hans Kaper) **58** #8994 82A5
(with Carlomusto, Luigi) Poiseuille flow of a rarefied gas mixture. (Italian summary) *Z. Angew. Math. Phys.* **29** (1978), no. 2, 206-216. (Carlo Cercignani) **58** #8785 76G5
- de Socio, Marialuia** See **De Socio, Marialuia**
- de Socio, Marialuia** Sul teorema di unicità per le equazioni di Maxwell nei mezzi anisotropi. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **108** (1974), 705-710 (1975). (V. Daniele) **51** #12139 78J35
Su alcune proprietà dei messi di Toupin e Rivlin. (English summary) *Atti Accad. Sci. Ist. Bologna Cl. Sci. Fis. Rend. (13)* **3** (1975/76), no. 2, 207-213. (St. I. Gheorghita) **56** #1957 78J35
- Sočnega, V. A.** (with Fridlender, V. R.) Uniqueness spaces of Cauchy and Goursat problems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 7(146), 83-90. (S. N. Kružkov) **50** #7762 35A05 (46E35)
(with Zobin, N. M.; Fridlender, V. R.) An algebraically closed field. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 2(177), 37-48. (A. H. Wallace) **58** #16647 14A25 (12A90)
- Socolescu, Dan** Existenz- und Eindeutigkeitsbeweise für das Problem der Zusammenwirkung von Strahlen. *Indiana Univ. Math. J.* **26** (1977), no. 4, 707-730. (E. Zeidler) **57** #2083 76J30
- chirila-Socolescu, Rodica** See **Chirila-Socolescu, Rodica**
- Socolovsky, M.** (with Zandron, Oscar S.) Another way of quantizing massive bosons. *Math. Notae* **25** (1976), 65-70. (H. Araki) **57** #11502 81A7
- Sod, Gary A.** A numerical solution of Boltzmann's equation. *Comm. Pure Appl. Math.* **30** (1977), no. 4, 391-419. (Janusz Mika) **58** #4144 82J65
Eigenvalues and eigenfunctions of the Hilbert operator. *J. Computational Phys.* **23** (1977), no. 2, 179-186. (Author's summary) **58** #8412 65R05
A survey of several finite difference methods for systems of nonlinear hyperbolic conservation laws. *J. Computational Phys.* **27** (1978), no. 1, 1-31. (Author's summary) **58** #13770 65N20
- Soda, Giovanni** (with Aguzzi, Gianni; Cesarini, Francesca; Pinzani, Renzo; Sprugnoli, Renzo) Towards an automatic generation of interpreters. *Dritte Jahrestagung der Gesellschaft für Informatik (Hamburg, 1973)*, pp. 94-103. *Lecture Notes in Comp. Sci., Vol. 1*, Springer, Berlin, 1973. (I. Kaufmann) **50** #3632 68A05
(with Aguzzi, Gianni; Cesarini, Francesca; Pinzani, Renzo; Sprugnoli, Renzo) Tree structures handling by APS. *Programming Symposium (Proc. Colloq. Programmation, Paris, 1974)*, pp. 120-129. *Lecture Notes in Comput. Sci., Vol. 19*, Springer, Berlin, 1974. (Karel Čulík) **56** #4229 68A15
- Soda, Toshio** The motion and mobility of ions in superfluid ^3He . *Progr. Theoret. Phys.* **58** (1977), no. 4, 1096-1101. (T. Izuyama) **58** #14792 82J35
- Šoda, Zenon** See **Szoda, Zenon**
- Sodaro, D.** (with Kortanek, K. O.; Soden, J. V.) Profit analyses and sequential bid pricing models. *Management Sci.* **20** (1973/74), 396-417. (Michael H. Rothkopf) **49** #6911 90B99
- Sodat, Said Azizula** See **Sadat, Said Azizula**
- Soden, J. V.** (with Kortanek, K. O.; Sodaro, D.) Profit analyses and sequential bid pricing models. *Management Sci.* **20** (1973/74), 396-417. (Michael H. Rothkopf) **49** #6911 90B99
- Söderholm, Lars** On relativistic motions isometric with respect to a particle. *Phys. Scripta* **4** (1971), no. 1-2, 7-10. (C. W. Kilmister) **52** #9969 83J53
- Söderström, T.** Convergence properties of the generalised least squares identification method. *Automatica—J. IFAC* **10** (1974), 617-626. **56** #15062 93E10
On the generalised least squares method. Counter-examples to general convergence. *Automatica—J. IFAC* **10** (1974), 681-683. **56** #15061 93E10
Convergence of identification methods based on the instrumental variable approach. *Automatica—J. IFAC* **10** (1974), 685-688. (See *RZMat* **1975** #7 B1128) **93B30**
(with Åström, Karl J.) Uniqueness of the maximum likelihood estimates of the parameters of an ARMA model. System identification and time-series analysis. *IEEE Trans. Automatic Control* **AC-19** (1974), 769-773. (H. J. Kushner) **55** #14358 93E10 (62H10)
(with Stewart, G. W., III) On the numerical properties of an iterative method for computing the Moore-Penrose generalized inverse. *SIAM J. Numer. Anal.* **11** (1974), 61-74. (V. Pereyra) **49** #6589 65F20
On the uniqueness of maximum likelihood identification. *Automat.—J. IFAC* **11** (1975), 193-197. (R. L. Kashyap) **51** #12368 93B30
(with Ljung, Lennart; Gustavsson, Ivar) Counterexamples to general convergence of a commonly used recursive identification method. *IEEE Trans. Automatic Control* **AC-20** (1975), no. 5, 643-652. (V. N. Igolkin) **53** #5126 93E10
(with Gustavsson, Ivar; Ljung, Lennart) Identifiability conditions for linear systems operating in closed loop. *Internat. J. Control* **21** (1975), 243-255. (Authors' summary) **56** #14908 93B30
Ergodicity results for sample covariances. (Russian summary) *Problems of Control and Information Theory / Problemy Upravleniya i Teorii Informacii* **4** (1975), no. 2, 131-138. (Lennart Ljung) **54** #12322 93E10
(with Ljung, Lennart; Gustavsson, Ivar) Identifiability conditions for linear multivariable systems operating under feedback. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 6, 837-840. (Agostino Villa) **55** #2228 93B30
(with Gustavsson, Ivar; Ljung, Lennart) Identification of processes in closed loop — identifiability and accuracy aspects. *Automatica—J. IFAC* **13** (1977), no. 1, 59-75. (Arie Feuer) **57** #19011 93E10
(with Stoica, Petre) A method for the identification of linear systems using the
- generalized least squares principle. *IEEE Trans. Automatic Control* **AC-22** (1977), 631-634. (Authors' summary) **56** #15065 93E10
On model structure testing in system identification. *Internat. J. Control* **26** (1977), no. 1, 1-18. (Arunabha Bagchi) **58** #15588a 93E10
See also **Akaike, Hirotugu**, **58** #15588b
- Sodhi, J. S.** (with Raghavarao, D.; Singh, Ravindra) A new assumption in spring balance weighing designs leading to a sampling application. *Calcutta Statist. Assoc. Bull.* (1971), 83-88. (D. A. Sprott) **46** #10147 62K99 (62D05)
- Sodin, L. G.** An application of the method of statistical estimation to the solution of a problem of the recovery of brightness in radioastronomy. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **14** (1971), 739-747. (R. V. Ambarcumjan) **46** #1118 65R05
- Sodman-Mihailov, D. B.** (with Šauman, A. M.) Determination of the periods of self-generating sequences. (Russian) *Vysš. Tehn. i Voprosy Kibernet. Vyp.* **14** (1976), 60-72, 207. (Bolesław Mikołajczak) **58** #4715 94A25
- Soeda, Takashi** (with Ohmatsu, Shigeru; Tomita, Y.) Optimal filtering for discrete-time nonlinear systems. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 1, 116-121. (Jean-Michel Bismut) **53** #15519 93E10
(with Omatsu, Shigeru; Tomita, Y.) An alternative expression of the mutual information for Gaussian processes. *IEEE Trans. Information Theory* **IT-22** (1976), 5, 593-595. (Authors' summary) **56** #5058 94A15
(with Tomita, Y.; Ohmatsu, Shigeru) An application of the information theory to estimation problems. *Information and Control* **32** (1976), no. 2, 101-111. (S. Arimoto) **54** #9807 93E10
(with Tomita, Y.; Omatsu, Shigeru) An application of the information theory to fixed-point smoothing problems. *Internat. J. Control* **23** (1976), no. 4, 525-534. (L. Davisson) **54** #7076 93E10
(with Omatsu, Shigeru; Tomita, Yutaka) Linear fixed-point smoothing by using functional analysis. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 1, 9-18. (Authors' summary) **56** #2589 93E10
(with Omatsu, Shigeru; Tomita, Y.) Fixed-point smoothing in Hilbert spaces. *Information and Control* **34** (1977), no. 4, 324-338. (S. G. Tzafestas) **56** #11493E10
(with Yoshimura, Toshio; Tabuchi, Toshiaki) A suboptimal identification of covariances in discrete-time linear systems. *Internat. J. Control* **27** (1978), no. 3, 393-406. (Ivar Gustavsson) **58** #15589 93E10
(with Tabuchi, Toshiaki; Yoshimura, Toshio) On the estimation of noise covariances in linear discrete-time systems. *Internat. J. Systems Sci.* **9** (1978), no. 5, 531-542. (Authors' summary) **58** #4571 93E10
- Soeder, Heinrich** (with Reinhardt, Fritz) ★dtv-Atlas zur Mathematik. Tafeln und Tabellen. Zweite Auflage. Band I: Grundlagen, Algebra und Geometrie. *Deutscher Taschenrechner Verlag, Munich*, 1976. 266 pp. (From the authors' preface) **55** #5332 00A05
- Soenen, R.** (with Vidal, Pierre) Modélisation et commande automatique adaptative d'un processus. *Revue de l'Association Française pour l'Automatique* **19** (1976), 1-10. (English and Russian summaries) *Systems Sci.* **3** (1977), no. 1, 57-76. **58** #20484 90C50
- Soeteman, A.** See *Études de logique juridique*, **48** #5826 (EA 52)
- Soeten, Edward L. N.** One-dimensional segment spaces. (French summary) *Acad. Belg. Bull. Cl. Sci.* (5) **58** (1972), 1338-1344. (C. S. Houh) **49** #1456 53C70
Segment-spaces. *Bull. Soc. Math. Belg.* **24** (1972), 152-172. (C. S. Houh) **47** #53C70
Two-dimensional segment spaces. (French summary) *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **59** (1973), 195-205. (B. B. Phadke) **48** #7187 53C70
On locally Desarguesian planes. (French summary) *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **59** (1973), 725-734. (B. B. Phadke) **49** #3664 50D05 (53C70)
- Soffer, J.** (with Sénéor, Roland) On the construction of physical states in the dual-resonance model. (Italian and Russian summaries) *Nuovo Cimento A* (1) **40** (1972), 641-654. (G. R. Alcock) **49** #6794 81J15
- Sofman, L. B.** Distributions in metric spaces, and the entropy characteristics of Riemannian manifolds. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 1(169), 249-260. (Leo Boček) **53** #9078 53C20
Diameters of an infinite-dimensional octahedron. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 5, 54-56. (V. Zizler) **49** #546C05 (52A05)
A problem of Shannon. (Russian) *Dokl. Akad. Nauk SSSR* **215** (1974), 1313-1315. (Ju. M. Ryžov) **49** #11615 60G35 (94A05)
Linear approximations of a certain class of random processes. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 5(179), 241-242. (A. Weron) **53** #1713 60G15
Almost compactness, almost separability and entropy characteristics of metric spaces with a measure. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 4(184), 259-266. (M. Dudley) **54** #6250 60G15
- Sofonea, Liviu** Some analytic aspects of the conditions of quantization. (Romanian. English summary) *Stud. Cerc. Mat.* **22** (1970), 1065-1099. (N. D. Sengupta) **47** #81J35
Some generalizations of the "invariant mechanics". (French summary) *Roumaine Phys.* **16** (1971), 865-874. (H. S. P. Grässer) **46** #6674 70J34 (70A99)
The theory of adiabatic invariants of motion in quantum mechanics. (Romanian. English summary) *Stud. Cerc. Fiz.* **23** (1971), 61-85. (N. D. Sengupta) **46** #4881 81J35
Aspects of the quantizations of multiply periodic motions. (Romanian. English summary) *Stud. Cerc. Mat.* **23** (1971), 287-318. (N. D. Sengupta) **47** #9980 (70J35)
(with Ionescu-Pallas, Nicholas) Compatibility of the relativistic representation of the electromagnetic field. (Romanian. English summary) *Stud. Cerc. Fiz.* **24** (1972), 1043-1059. (Authors' summary) **48** #7794 80J33 (83J26)
Analytical considerations on the dimensions of space. (Romanian. English summary) *Stud. Cerc. Mat.* **24** (1972), 623-651. (N. D. Sengupta) **50** #6407
Possibilités et implications d'une mécanique fondée sur le concept d'invariant adiabatique. (English summary) *Noesis, II (Travaux Colloq., Comité Roumain d'Histoire Philosophie, Bucharest, 1973)*, pp. 71-81. *Editura Acad. R. S. R., Bucharest*, 1974. (Author's summary) **58** #25541 81J35
(with Ionescu-Pallas, Nicholas) The genesis of the mathematical entities. A

- historico-modelling example. (French summary) *Noesis (Colloq. Philos. Hist. Sci., Bucharest, 1973)*, III, pp. 275-289. *Editura Acad. R.S.R., Bucharest, 1975*. (R. C. Gupta) **5** #15817 01A25
- (with Ionescu-Pallas, Nicholas) Géométrisation des théories physiques. Le formalisme complex-vectorel. (English summary) *Papers from the National Colloquium on Geometry and Topology (Univ. Timișoara, Timișoara, 1977)*, pp. 135-148. *Soc. Ști. Mat., Univ. Timișoara, Timișoara, 1977*. (H. Treder) **58** #32777 83.53
- See also **Papers: National Colloquium on Geometry and Topology**, **58** #24023
- niou, S. A. (with Heskia, Said) The unitary group $U(m)$ as the symmetry group of curved phase space. *J. Mathematical Phys.* **12** (1971), 2280-2286. (S. N. Biswas) **5** #3004 81.22
- nov, E. T. Certain sufficient conditions for the stability of motion. (Russian) *Certain questions in differential equations (Russian)*, pp. 63-72. *Jakutsk. Gos. Univ., Yakutsk, 1971*. (H. I. Freedman) **49** #9357 34D20
- On the investigation of the stability of motion in the case of three zero roots. (Russian) *Differential and integral equations*, No. 1 (Russian), pp. 11-17. *Irkutsk. Gos. Univ., Irkutsk, 1972*. (Wolfdietrich Müller) **52** #929 34D20
- See also **Questions in differential equations**, **48** #10742
- Hideo Boundary value problems with oblique derivative. *Publ. Res. Inst. Math. Sci.* **0** (1974/75), no. 3, 619-668. (M. S. Agranovič) **51** #13440 35J25 (35J70)
- Degenerate elliptic systems of pseudodifferential equations. *Proc. Japan Acad.* **52** (1976), no. 8, 417-419. (H. Kumano-go) **55** #6495 58G15 (35J55)
- Degenerate elliptic systems of pseudo-differential equations and non-coercive boundary value problems. *Osaka J. Math.* **14** (1977), no. 3, 537-555. (Ju. V. Egorov) **7** #6824 35J55 (58G15)
- On the mixed problem with d'Alembertian in a quarter space. *Proc. Japan Acad. Ser. A Math. Sci.* **53** (1977), no. 4, 108-111. (Klaus Deimling) **57** #890 35L05
- mi, Ikuro Nonlocal field theory of the quark model. *Nonlocal, nonlinear and nonrenormalizable field theories (Proc. Fourth Internat. Sympos. Nonlocal Field Theories, Iushta, 1976)* (Russian), pp. 352-362. *Ob'ed. Inst. Jader. Issled., Dubna, 1976*. (From the text) **58** #4061 81.46
- Relativistic quantum theory of composite systems. (Italian and Russian summaries) *Nuovo Cimento A* (11) **46** (1978), no. 1, 78-110. (Charles L. Hammer) **58** #8905 1.35
- wa, Mitsuyoshi On strongly regular rings. *Proc. Japan Acad.* **47** (1971), 180. (E. A. Sutter) **45** #3474 16A30
- oglio-Hérault, L. See **Dal Soglio-Hérault, L.**
- monjan, E. S. Approach to test construction. *Avtomat. i Telemekh.* **1968**, no. 10, 37-146. (Russian. English summary); translated as *Automat. Remote Control* **1968**, no. 10, 1673-1682. (W.-K. Chen) **52** #10268 94A20
- On the problem of constructing minimal tests. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics (Tbilisi, 1968)*, Vol. 6: *Technological means of automation (Russian)*, pp. 72-81. *Izdat. "Nauka", Moscow, 1971*. (Editors) **57** #19145 94A20
- See also **Miller, Raymond E.**, **53** #2539
- W. (with Gonzalez, Mario J., Jr.) Periodic job scheduling in a distributed processor system. *IEEE Trans. Aerospace and Electron. Systems* **AES-12** (1976), no. 5, 530-536. (Jacek Błażewicz) **58** #25932 90B35
- cki-Bratkowski, Jerzy A qualitative investigation of systems of ordinary differential equations that do not contain linear terms. (Russian. Polish and English summaries) *Nonlinear vibration problems*, No. 11, pp. 41-69. *Państw. Wydawn. Nauk., Warsaw, 1971*. (V. Komkov) **56** #12437 34C99
- J. S. (with Singh, Harpreet) On sensitivity invariance of multi-input multi-output networks. *Proc. IEEE* **64** (1976), no. 4, 560. (Authors' summary) **56** #15215 94A20
- a, A. S. A class of transformation operators. *Mat. Fiz. i Funkcional. Anal. Vyp. 1* (1969), 117-125, 260. (Editors) **57** #10058 34A25
- The inverse scattering problem for an equation with a singularity. (Russian) *Mat. Fiz. i Funkcional. Anal. Vyp. 2* (1971), 182-235, 239. (Author's summary) **56** #16044 34B25 (47E05)
- An integral representation of Hankel functions. (Russian. English summary) *Mat. Fiz. i Funkcional. Anal. Vyp. 3* (1972), 68-70, 108. (Author's summary) **56** #8928 33A10
- The inverse scattering problem for an equation with singularities of a special form. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 17* (1973), 56-64, 243. (J. Wiesner) **49** #7507 34B25 (81.34)
- Transformation operators for an equation with a singularity of a certain form. (Russian) *Vestnik Har'kov. Gos. Univ. No. 113 Mat. i Meh. Vyp. 39* (1974), 36-42, 122. (J. Wiesner) **52** #877 34B25
- A certain generalization of Levinson's theorem. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 22* (1975), 136-145, 163. (Alexander Alenicyan) **52** #11185 34B25
- a, Ira Some variations on the Mardon model. *Mathematical economics and game theory*, pp. 322-339. *Lecture Notes in Econ. and Math. Systems, Vol. 141, Springer, Berlin, 1977*. (Alberto Chilosi) **57** #2493 90A15
- u, Mun-Gu (with Choi, Bong Dae) On quasi-complete spaces. *Kyungpook Math. J.* **12** (1972), 225-228. (R. Hodel) **47** #9564 54E99
- nius, Martin F. (with Dondi, P. H.) Supersymmetry transformations with isospin. *Nuclear Phys. B* **81** (1974), 317-329. (U. Cattaneo) **54** #4378 81.22
- (with Haag, Rudolf; Łopuszański, Jan T.) All possible generators of supersymmetries of the S-matrix. *Nuclear Phys. B* **88** (1975), 257-274. (Authors' summary) **53** #15132 81.22
- (with Grimm, R. C.; Wess, J.) Extended supersymmetry and gauge theories. *Nuclear Phys. B* **133** (1978), no. 2, 275-284. (J. Rosen) **57** #18634 81.53
- Bianchi identities for supersymmetric gauge theories. *Nuclear Phys. B* **136** (1978), no. 3, 461-474. (Author's summary) **58** #20158 83.22 (22E70)
- Supersymmetry and central charges. *Nuclear Phys. B* **138** (1978), no. 1, 109-121. (Author's summary) **58** #14627 81.46
- H. Schwache Lösungen von Evolutionsgleichungen mit Anwendungen auf partielle Differentialgleichungen. *Methoden und Verfahren der mathematischen Physik, Band 11*, pp. 117-142. *Bibliographisches Institut, Mannheim, 1973*. (Howard A. Levine)
- 50** #13787 34G05 (35R20, 47D05)
- Verallgemeinerung eines Satzes von O. Ladyzenskaja über Schrödingergleichungen. *Methoden und Verfahren der mathematischen Physik, Band 11*, pp. 143-162.
- Bibliographisches Institut, Mannheim, 1973*. (Howard A. Levine) **50** #13788 34G05 (35R20, 47D05)
- Über Evolutionsgleichungen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), T169-T170. (H.-W. Rohde) **52** #6136 34G05 (47A50)
- Über eine Verallgemeinerung der Trotterschen Banachraumfolgen. *Methoden und Verfahren der mathematischen Physik, Band 15*, pp. 91-113. *Bibliographisches Inst., Mannheim, 1976*. (D. J. H. Garling) **58** #2154 46A45
- Starke Lösungen eines Typs parabolischer Evolutionsgleichungen im Hilbertraum. *Methoden und Verfahren der mathematischen Physik, Band 16*, pp. 105-129.
- Bibliographisches Inst., Mannheim, 1976*. (M. Biroli) **54** #8057 35R20 (47D05)
- Sohranskaja, V. S. See **Numerical methods and automatic programming**, **48** #7522 and **Theory of languages and methods of construction of programming systems**, **48** #7682
- Sehus, Trond Vincent (with Johannessen, Dag Magne) On unit fractions. (Norwegian. English summary) *Nordisk Mat. Tidskr.* **22** (1974), 103-107, 135. (E. Frank) **55** #252 10A30
- Soibelman, O. I. Perturbations of the shift operator. (Russian) *Mat. Issled.* **8** (1973), no. 3(29), 76-91, 181. (N. K. Nikol'skii) **52** #3999 47A55
- Šoible, M. See **Schäuble, M.**
- Soifer, A. Ju. A theorem on direct decompositions of abelian groups. (Russian) *Mat. Zametki* **14** (1973), 879-884. (L. Fuchs) **50** #505 20K10
- Irreducible systems of generators of abelian groups. (Russian) *Dokl. Akad. Nauk SSSR* **216** (1974), 274-277. (L. Bican) **50** #510 20K99
- Tests for the existence of irreducible systems of generators in abelian groups. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 120-151, 237. (L. G. Kovács) **49** #5210 20K99
- Soifer, G. A. Maximal subgroups and the Frattini subgroup of a Lie group. (Russian) *Funkcional. Anal. i Priložen.* **10** (1976), no. 2, 88-89. (H. de Vries) **53** #10980 22E15
- (with Margulis, G. A.) A criterion for the existence of maximal subgroups of infinite index in a finitely generated linear group. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 6, 1261-1264. (J. L. Brenner) **57** #6292 22E40 (20G30)
- Representation of solvable Lie groups and of automorphisms of their lattices by matrices. (Russian) *Funkcional. Anal. i Priložen.* **11** (1977), no. 2, 91-92. (V. L. Popov) **56** #5784 22E25 (22E40)
- Soifer, V. A. (with Klovskii, D. D.) Capacity of multipath channels. (Russian) *Problemy Peredači Informacii* **8** (1972), no. 1, 16-25. (O. Gulyás) **50** #6629 94A05
- An algorithm for the processing of fields that uses linear estimates of the channel. (Russian) *Problemy Peredači Informacii* **11** (1975), no. 3, 98-100. (Author's summary) **58** #4604 94A05
- Some algorithms for space-time signal processing that use estimates of the channel parameters. (Russian) *Information transmission on radio channels containing statistically inhomogeneous media (Russian)*, pp. 190-209, 239. *Izdat. "Nauka", Moscow, 1976*. (Author's summary) **58** #4570 93E10 (94A05)
- Soigin, A. M. The Cauchy problem for a hyperbolic system with random initial conditions. (Russian) *Control methods and models*, No. 6 (Russian), pp. 31-37, 134. *Redakcionno-Izdat. Otdel Rižsk. Politehn. Inst., Riga, 1973*. (Kazimierz Sobczyk) **50** #8700 60H15 (35L45)
- The Cauchy problem for a stochastic first order hyperbolic system. (Russian) *Differencial'nye Uravnenija* **10** (1974), 561-562, 576. (V. Đuriković) **50** #779 35L45 (60H15)
- An estimate of the variance of a random solution of an initial boundary value problem for a first order hyperbolic system. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp. 62 Differencial'nye Uravnenija* (1975), 134-137, 184. (Author's summary) **57** #13212 35L40 (35R99)
- A partial differential equation for random functions. (Russian) *Trudy Rjazan. Radiotehn. Inst. No. 69 Differencial'nye Uravnenija* (1975), 92-98, 170. (Author's summary) **58** #24553 60H15 (35R99)
- A Banach space of second order random functions. (Russian) *Trudy Rjazan. Radiotehn. Inst. No. 69 Differencial'nye Uravnenija* (1975), 98-103, 171. (Author's summary) **58** #24555 60H99
- Šoihet, B. A. The existence of the value of a differential game with prescribed continuability. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 2, 119-124. (R. Petrović) **46** #1366 90D25
- On asymptotically exact equations of thin plates of complex structure. *Prikl. Mat. Meh.* **37** (1973), 914-924. (Russian); translated as *J. Appl. Math. Mech.* **37** (1973), 867-877 (1974). (J. W. Craggs) **50** #1604 73.35
- On existence theorems in linear shell theory. *Prikl. Mat. Meh.* **38** (1974), 567-571. (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 527-531 (1975). (B. R. Seth) **50** #11931 73.35
- Estimates for approximations to the saddle point of the Lagrange functional and their applications to certain problems of mathematical physics. (Russian) *Problems in mathematical analysis, No. 6: Spectral theory, boundary value problems (Russian)*, pp. 190-198, 204-205. *Izdat. Leningrad. Univ., Leningrad, 1977*. (Author's summary) **58** #18060 49D99 (65K05)
- (with Trapeznikov, L. P.) Solution of a creep theory problem for aging bodies with a growing cut. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 1, 43-46. (J. L. Nowinski) **58** #19597 73.35
- Šoihet, B. P. A simplex algorithm for accelerated optimization. (Russian) *Ėkonom. i Mat. Metody* **9** (1973), 769-772. **48** #10113 65K05
- See also **Operations research and statistical simulation**, **50** #3881
- Șoîl, Adrian Generalized linear automata. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **21** (1975), 107-110. (Rani Siromoney) **53** #12799 94A30 (68A25)
- Generation polynomial ranges by iterative one-dimensional arrays. *An. Științ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **23** (1977), no. 2, 409-413. (Author's summary) **58** #15743 94A30 (12-04)
- Remarks on uniform tag sequences. *An. Științ. Univ. "Al. I. Cuza" Iași Secț. I a*

- Mat. (N.S.) 23 (1977), no. 2, 415-418. (Author's summary) 58 #16216 02F05 (10L15)
- Šoinbekov, K. D.** Transformation of a certain system of two partial differential equations into a canonical system. (Russian) *Differential equations and their application* (Russian), pp. 63-68, 212. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1970. (Editors) 51 #6102 35A30
- soisalon-Soininen, Eljas** See Soisalon-Soininen, Eljas
- Šoizurov, C. B.** The approximate integration of functions in the space $W^{(m)}$. (Russian) *Application of functional methods to the boundary value problems of mathematical physics* (Proc. Third Soviet-Czechoslovak Conf., Novosibirsk, 1971) (Russian), pp. 256-265. Inst. Mat. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk, 1972. (Gheorghe Coman) 53 #1927 65D30
- Certain questions on the theory of cubature formulas in nonisotropic S. L. Sobolev spaces. (Russian) *Dokl. Akad. Nauk SSSR* 209 (1973), 1036-1038. (Hans-Jürgen Albrand) 48 #4719 46E35 (41A55)
- The approximate integration of functions in S. L. Sobolev spaces with weight. (Russian) *Dokl. Akad. Nauk SSSR* 218 (1974), 775-778; erratum, *ibid.* 221 (1975), 10. (B. Bojanov) 51 #3773 41A55 (65D30)
- Soisalon-Soininen, Eljas** (with Sippu, Seppo) On defining error recovery in context-free parsing. *Automata, languages and programming* (Fourth Colloq., Univ. Turku, Turku, 1977), pp. 492-503. *Lecture Notes in Comput. Sci.*, Vol. 52, Springer, Berlin, 1977. (From the introduction) 58 #13877 68A05
- Soittola, Matti** On DOL synthesis problem. *Automata, languages, development*, pp. 313-321. North-Holland, Amsterdam, 1976. (K. P. Lee) 57 #4672 68A30
- On stochastic and Q -stochastic languages. *Ann. Acad. Sci. Fenn. Ser. A I Math. Dissertationes* No. 7 (1976), 43 pp. (P. Turakainen) 52 #13034 94A35 (68A30)
- Positive rational sequences. *Theoret. Comput. Sci.* 2 (1976), no. 3, 317-322. (From the author's introduction) 55 #11733 68A30
- (with Salomaa, Arto) ★Automata-theoretic aspects of formal power series. *Texts and Monographs in Computer Science*. Springer-Verlag, New York-Heidelberg, 1978. x+171 pp. ISBN 0-387-90282-1 (P. W. Baker) 58 #3698 68A25
- Soize, Christian** Sur la dynamique stochastique des structures élastiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 25, A1765-A1768. (J. L. Lumley) 53 #2117 73G60
- Transformation quadratique d'un processus gaussien et application à la dynamique stochastique. (English summary) *J. Mécanique* 15 (1976), no. 5, 857-875. (T. K. Caughey) 55 #4882 73G60
- Sojka, J.** See Conference: *Mathematical Methods in Economics*, 49 #6886
- Sojka, Józef** (with Marszał, Edward) Limiting distributions and their applications. *Wyz. Sokol. Ped. Krakow. Rocznik Nauk.-Dydakt.* No. 51 *Prace Mat.* No. 7 (1974) 59-76. (Wolfgang Sendlir) 52 #4492 62E20 (62N05)
- Sokačev, E. S.** Projection operators and supplementary conditions for superfields with arbitrary spin. *Nuclear Phys. B* 99 (1975), no. 1, 96-108. (John McEwan) 54 #1999 81A47
- (with Ogievčekii, V. I.) Primitive representations of the $SL(3, R)$ algebra. (Russian. English summary) *Teoret. Mat. Fiz.* 23 (1975), no. 2, 214-220. (Authors' summary) 58 #11235 22E45 (81.22)
- (with Ogievčekii, V. I.) Equations of motion for superfields. (Russian) *Nonlocal, nonlinear and nonrenormalizable field theories* (Proc. Fourth Internat. Sympos. on Nonlocal Field Theories, Alushta, 1976) (Russian), pp. 183-203. *Ob'ed. Inst. Jadern. Issled., Dubna*, 1976. (E. S. Fradkin) 56 #4500 81J35
- Sokal, Robert R.** (with Sneath, Peter H. A.) ★Numerical taxonomy. The principles and practice of numerical classification. A Series of Books in Biology. W. H. Freeman and Co., San Francisco, Calif., 1973. xv+573 pp. (George F. Estabrook) 56 #14818 92A05
- Clustering and classification: background and current directions. *Classification and clustering* (Proc. Ado. Sem., Univ. Wisconsin, Madison, Wis., 1976), pp. 1-15. *Math. Res. Center Publ.*, No. 37, Academic Press, New York, 1977. (F. W. Stallmann) 56 #10209 68A45
- See also *Multivariate statistical methods: among-groups covariation*, 51 #14407
- Šokamolov, I.** (with Pyhteev, G. N.) Certain interpositional quadrature formulas, for Cauchy type integrals and their principal values, of a special form. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 14 (1971), no. 2, 11-14. (T. G. Gegelia) 45 #4638 65D30
- An analogue of the Newton-Cotes formulae for certain Cauchy type integrals and their principal values. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geol.-Him. Nauk* 1972, no. 3(45), 6-13, 104. (Author's summary) 51 #2259 65D30
- (with Pyhteev, G. N.) The computation of the coefficients and error estimation of interpolation quadrature formulas for Cauchy type integrals and singular integrals of special form. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1972, no. 4, 25-34, 139. (Walter Gautschi) 46 #8392 65D30
- An approximate method for solving a certain singular integro-differential equation. (Russian) *Differentsial'nye Uravnenija* 10 (1974), 1117-1123, 1151. (J. Milota) 50 #15403 (EA 51) 65R05
- (with Pyhteev, G. N.) The exact and approximate solution of plane problems of the theory of heat conduction with boundary conditions of the first and second kind. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geol.-Him. Nauk* 1974, no. 2(52), 10-16, 106. (R. S. Levitin) 51 #13455 35K05
- Šokarovski, Risto** A generalized direct product of graphs. *Publ. Inst. Math. (Beograd)* (N.S.) 22(36) (1977), 267-269. (W. Dörfler) 58 #5416 05C99
- Sokatchev, E.** See Sokačev, E. S.
- Šoke-Brjua, I.** See Choquet-Bruhat, Y.
- Sokil, B. I.** (with Senik, P. M.) The construction of an optimal autonomous program-oscillatory system with a strong nonlinearity. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1976, no. 7, 601-604, 671. (A. Halanay) 54 #9767 93C10 (34C15)
- (with Senik, P. M.; Smereka, I. P.) An asymptotic method and periodic Ateb-functions in the theory of essentially nonlinear oscillations. (Russian) *Analytic and qualitative methods for the study of differential and differential-difference equations* (Russian), pp. 143-156. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (D. Gupta) 58 #22786 34C15
- (with Senik, P. M.) The use of u -methods for a certain class of oscillatory systems. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 1, 12-94. (A. Halanay) 57 #16816 34C15 (34E05)
- Šokin, Ju. I.** (with Janenko, N. N.) The group classification of difference schemes for system of one-dimensional equations of gas dynamics. (Russian) *Certain problems mathematics and mechanics (on the occasion of the seventieth birthday of M. A. Lavrent'ev)* (Russian), pp. 277-283. Izdat. "Nauka", Leningrad, 1970. (M. Drăgan) 45 #6268 76G5
- (with Janenko, N. N.; Anučina, N. N.; Petrenko, V. E.) Methods for the calculation of problems of gas dynamics with large deformations. (Russian) *Metody Meh. Splošnoi Sredy* 1 (1970), no. 1, 40-62. (Simona Popp) 48 #13008 76G5
- (with Tuševa, L. A.) Dissipative difference schemes for hyperbolic systems equations. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* 2 (1971), no. 1, 91-98. (Kopáček) 48 #7619 65M10
- (with Janenko, N. N.) A group classification of implicit difference schemes for the system of equations of gas dynamics. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* (1971), no. 2, 85-92. (I. O. Bohachevsky) 48 #3364 76G5
- (with Šemjakín, E. I.; Kuznecov, B. G.; Kononov, A. N.) Nikolai Nikolaevich Janenko. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR* 1971, no. 13, 123. (Editor) 45 #6563 01A70
- (with Janenko, N. N.) Schémas numériques invariants de groupe pour les équations de la dynamique de gaz. *Proceedings of the Third International Conference on Numerical Methods in Fluid Mechanics* (Univ. Paris VI and XI, Paris, 1972), Vol. 1, pp. 174-181. *Lecture Notes in Phys.*, Vol. 18, Springer, Berlin, 1973. (See Zbl 262 #76036; MR #1945) 76G5
- The method of the first differential approximation in the theory of difference schemes for hyperbolic systems of equations. (Russian) *Difference methods for the solution of problems of mathematical physics, Part II. Trudy Mat. Inst. Steklov.* 122 (1973), 66-84, 99. (J. Kopáček) 50 #8998 65M05 (76G5)
- (with Janenko, N. N.) The group classification of difference schemes for the system of equations of gas dynamics. (Russian) *Difference methods for the solution of problems of mathematical physics, Part II. Trudy Mat. Inst. Steklov.* 122 (1973), 85-99. (J. Kopáček) 50 #8999 65M05 (76G5)
- (with Janenko, N. N.) On the theory of the difference schemes of gas dynamics. (Russian) *Proceedings of the Symposium on Continuum Mechanics and Related Problems of Analysis* (Tbilisi, 1971), Vol. 2 (Russian), pp. 292-306. Izdat. "Mecnierebd", Tbilisi, 1974. (Editors) 56 #14121 76G5
- A necessary and sufficient condition of invariance of difference schemes in terms of the first differential approximation. (Russian) *Čisl. Metody Meh. Sploš. Sredy* 5 (1975), no. 5, 120-122. (RŽMat 1975 #8 B900) 58 #31959 65Q05
- (with Paasonen, V. I.; Janenko, N. N.) On the theory of difference schemes for gas dynamics equations. *Proceedings of the Fourth International Conference on Numerical Methods in Fluid Dynamics* (Univ. Colorado, Boulder, Colo., 1974), pp. 293-303. *Lecture Notes in Phys.*, Vol. 35, Springer, Berlin, 1975. (See Zbl 352 #76045; MR 55 #4933) 65M05
- (with Tuševa, L. A.; Janenko, N. N.) The construction of difference schemes of high order of approximation on the basis of differential implications. (Russian) *Solving problems of numerical and applied mathematics* (Russian), pp. 184-191, 310. *Nauk. Sibirsk. Otdel., Novosibirsk*, 1975. (Authors' summary) 58 #31953 65P05
- (with Talyšev, A. A.) Equivalence of difference schemes. (Russian) *Čisl. Metody Meh. Sploš. Sredy* 6 (1975), no. 2, 120-125. (RŽMat 1976 #3 B1038) 58 #31889 65N10
- (with Fedotova, Z. I.) Invariant difference schemes with polynomial viscosity matrix. (Russian) *Dokl. Akad. Nauk SSSR* 222 (1975), no. 1, 51-53. (N. Cristes) 52 #12349 65N05 (76J35)
- On the analysis of the dissipation and dispersion of finite difference schemes. (Russian) *Čisl. Metody Meh. Sploš. Sredy* 7, no. 7 *Mat. Modelirovanie* (1976), 131-140. (From the author's introduction) 56 #13676 65M10
- (with Kalmykov, S. A.; Juldašev, Z. H.) On the solution of ordinary differential equations by interval methods. (Russian) *Dokl. Akad. Nauk SSSR* 230 (1976), no. 1267-1270. (E. S. Čičkin) 54 #11787 65L05
- (with Kalmykov, S. A.; Juldašev, Z. H.) The second order interval-analytic method for ordinary differential equations. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR. Ser. Fiz.-Mat. Nauk* 1976, no. 3, 28-30, 89. (H. Shintani) 54 #6508 65L05
- (with Fedotova, Z. I.; Marčuk, An. G.) The relation between the conservatism of difference schemes and the properties of their first differential approximations. (Russian) *Dokl. Akad. Nauk SSSR* 242 (1978), no. 2, 290-293. (Murli M. Gupta) 58 #19184 65M05
- See also *Difference methods of solving problems of mathematical physics*, 51 #9605
- Sokirjanakaja, E. N.** Computation of the norms of certain linear operators using interval programming. (Russian) *Optimizacija* No. 4(21) (1971), 115-141. (K. Zimmermann) 49 #8358 65K05 (15A60)
- Certain algorithms for bilinear programming. (Russian. English summary) *Inform. Kibernetika* (Kiev) 1974, no. 4, 106-112. (J. Abraham) 52 #16623 90C20
- Maximization of a bilinear function under constraints of a special form. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions* (Drogoibych, 1973), (Russian), pp. 229-243. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1975. (Editors) 56 #13640 65K05 (90C05)
- Comments on M. Altman's article "Bilinear programming" (Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. 16 (1968), 741-746). (Russian) *Optimizacija Vyp.* 16 (1975), 91-98, 180-181. (I. Marusciac) 56 #14703 90C20
- Sokol, Barnett J.** Thomas Harriot—Sir Walter Raleigh's tutor—on population. *Ann. Sci.* 31 (1974), 205-212. (R. H. Atkin) 58 #10068 01A45
- Sokol, Ju.** The 27th problem of Birkhoff. (Russian) *Ordered sets and lattices, Novosibirsk*, pp. 113-123, 135. Izdat. Saratov. Univ., Saratov, 1977. (G. Szász) 58 #40306A10
- Sokolenko, O. I.** Kernels in the sense of Knopp in the summability of a series by a regular positive matrix. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 565-572, 576. (H.-H. Köster)

0 #5265 (EA 51) 40C05

Tauberian theorems for a certain class of regular matrices. (Russian) *Ukrain. Mat. Zh.* 26 (1974), 832-836, 864. (E. Reimers) 51 #3748 40E05

The summability of bounded sequences by regular matrices. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 23* (1975), 109-119, 171. (Hubert Tietz) 2 #11406 40D20

The summability of bounded sequences by positive K -matrices. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 23* (1975), 119-124, 171. (Hubert Tietz) 2 #11407 40D20

On the question of summability of bounded sequences by regular semicontinuous matrices. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 25* (1976), 112-120, 121. (M. S. Rangachari) 55 #8609 40C15

On the question of Tauberian theorems. (Russian) *Ukrain. Mat. Zh.* 29 (1977), no. 3, 411-415, 430. (E. Reimers) 56 #12697 40E05

Ilin, V. N. (with Gorbunov, A. D.; Zverkina, Tamara S.) Two economical methods for the numerical integration of ordinary differential equations, using a displaced grid. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 99-112, 267. (J. Mikliček) 49 #8364 5L05

Ilik, G. A. (with Stanjukovič, K. P.) Algebraic theory of the space of the curvature tensor. (Russian) *Gravitation: problems, prospects (dedicated to the memory of A. Z. Petrov)* (Russian), pp. 242-254, 358. *Izdat. "Naukova Dumka", Kiev, 1972.* (R. I. Timonov) 50 #15848 83.53

A new form of gravitational interaction with respect to conformally flat space. *General Relativity and Gravitation* 5 (1974), no. 5, 599-602. (B. H. Voorhees) 53 #4891 83.53

Geometrical description of field algebra. *General Relativity and Gravitation* 6 (1975), no. 5, 449-461. (E. Kyriakopoulos) 56 #2094 81.53

Ilin, S. G. A class of integer matrices. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, no. 19 *Mat. Meh. Astronom. vyp.* 4, 70-75, 148. (E. Seneta) 58 #292 5B20

Ilin, N. A. (with Bondareva, O. N.) Construction of the solution for a class of games with nonempty core by a decomposition method. (Russian. English summary) *Vestnik Leningrad. Univ.* 1971, no. 7, 40-46. (R. Petrović) 45 #1608 90D12

The kernel-solution of a cooperative game. (Russian) *Operations research and statistical modeling*, No. 1 (Russian), pp. 170-173. *Izdat. Leningrad. Univ., Leningrad, 1972.* (Constantin Vîrsan) 52 #7567 90D12

The structure of a solution that distinguishes a coalition of two players. (Russian. English summary) *Vestnik Leningrad. Univ.* No. 13 *Mat. Meh. Astronom. Vyp.* 3 (1974), 49-151, 158. (Marcel Rădulescu) 52 #12821 90D12

Iskri, Krzysztof A characterization of the category of Boolean algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 25 (1977), no. 6, 29-532. (M. C. Chaki) 57 #3031 06A40 (18B99)

Isnikoff, I. S. (with Lohin, V. V.) ★Тензорный анализ. (Russian) [Tensor analysis] Теория и применения в геометрии и в механике сплошных сред. [Theory and applications in geometry and continuum mechanics] Translated from the English by V. Kontovt. Edited by V. V. Lohin. Физико-Математическая Библиотека Инженера. Library of Physics and Mathematics for the Engineer] *Izdat. "Nauka", Moscow, 1971.* 74 pp. (Editors) 54 #3597 53-02, (70.00, 73.00, 76.00, 83.00)

Ilov, A. A. (with Žirnov, N. I.) Some new approaches to the study of the properties of the generalized WKB-approximation. II. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1974, no. 7, 65-71. (J. S. Joel) 57 #6688b 34E20

(with Žukovskii, V. Č.; Nikitina, N. S.) Quantum transitions of electrons in a high intensity magnetic field (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 15 (1974), no. 5, 548-552. (Yu. S. Sayasov) 54 #4402 81.35

(with Žirnov, N. I.) Some new approaches to the study of the properties of the generalized WKB-approximation. IV. (Russian) *Izv. Vysš. Učebn. Zaved. Fiz.* 1975, no. 6, 62-67. (Not reviewed) 81.34

(with Bazarov, I. P.; Bogolubov, N. N.; Kadamcev, B. B.; Ol'hovskii, I. I.; Fursov, V. S.; Hohlov, R. V.) Anatolii Aleksandrovich Vlasov (obituary). *Uspehi Fiz. Nauk* 119 (1976), no. 2, 385-386 (Russian); translated as *Soviet Physics Uspekhi* 19 (1976), no. 6, 545-546. (Editors) 54 #12444 01A70

See also Gravitation: problems, prospects, 48 #7881 and Current problems in theoretical physics, 57 #8836

Ilov, A. V. The coincidence of the spectrum of a family of difference operators with the kernel of this spectrum for a certain class of operators. (Russian) *Dokl. Akad. Nauk SSSR* 208 (1973), 284-286. (I. M. Sheffer) 47 #7499 47B45 (39A10)

An invariant test for the stability of a mixed boundary value difference problem. (Russian) *Uspehi Mat. Nauk* 29 (1974), no. 6(180), 177-178. (I. M. Sheffer) 53 #13902 39A10

A theorem on the coincidence of the spectrum of a family of difference operators with the kernel of that spectrum. (Russian) *Trudy Moskov. Mat. Obšč.* 35 (1976), 215-234. (I. M. Sheffer) 58 #12498 47B45 (39A10)

Ilov, B. A. (with Sokolov, V. B.) Boundary value problems for the equations of the gas dynamics of shock waves. (Russian) *Studies in differential equations and their applications. Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 201 (1974), 150-159. (Editors) 57 #18463 76.35 (35Q99)

Ilovskii-Sokolov, B. Ju. See Mandrovskii-Sokolov, B. Ju.

Ilov, B. M. Recurrent, finitely convergent algorithms for the solution of inequalities in certain automatic control problems. (Russian) *Computer technology and questions of cybernetics*, No. 7 (Russian), pp. 126-133. *Izdat. Moskov. Univ., Moscow, 1970.* (W. M. Wonham) 48 #10564 93B30

A piecewise linear deciding function in the case of a large number of separating classes. (Russian) *Metody Vyčisl. No. 7* (1971), 121-124. (V. Miheev (RŽMat 1972 #6 V571)) 51 #7391 68A45

An estimate of the computational error of the gradient method of solution of linear equations. (Russian. English summary) *Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp.* 3 (1972), 66-69, 151. (I. M. Sheffer) 48 #10079 65F10

Ilov, B. N. (with Černous'ko, F. L.) Differential games with information lag. *Prikl. Mat. Meh.* 34 (1970), 812-819 (Russian); translated as *J. Appl. Math. Mech.* 34 (1970), 779-785 (1971). (C. P. Tsokos) 46 #6847 90D25

A certain differential pursuit game with information lag in the presence of integral constraints. (Russian) *Differencial'nye Uravnenija* 8 (1972), 1797-1804, 1911. (G. Zatiašvil) 52 #5070 90D25

A differential guidance game with integral constraints on the controls of the adversaries. (Russian) *Differencial'nye Uravnenija* 10 (1974), 436-446, 571. (A. B. Kuržanskiĭ) 49 #4589 90D25

(with Albul, A. V.) A minimax problem for the optimization of a thermal process. (Russian) *Bul. Akad. Štintce RSS Moldoven.* 1977, no. 2, 7-14, 94. (Authors' summary) 56 #14190 80.49

Sokolov, D. D. Certain properties of an indefinite metric. (Russian) *Mat. Sb. (N.S.)* 86(128) (1971), 3-8. (Editors) 56 #9466 53C50

Topology of models of the universe. *Dokl. Akad. Nauk SSSR* 195 (1970), no. 6, 1307-1309 (Russian); translated as *Soviet Physics Dokl.* 15 (1971), no. 12, 1112-1113. (David E. Lerner) 53 #10157 83.57

Two-dimensional convex surfaces with definite metric in three-dimensional pseudoeuclidean space. (Russian. English summary) *Trudy Geometr. Sem.* 6 (1974), 277-293. (J. Vîrsik) 52 #9128 53C45 (53B30)

Certain properties of pseudo-Riemannian manifolds, and their applications to mathematical problems in cosmology. (Russian) *Ukrain. Geometr. Sb. No. 15* (1974), 104-112, iii. (N. Rosen) 51 #12280 83.53

The structure of the limit cone of a convex surface in pseudo-Euclidean space. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 1(181), 261-262. (W. J. Firey) 57 #7484 53C50

(with Poznjak, È. G.) Isometric immersions of Riemannian spaces in Euclidean spaces. (Russian) *Algebra. Topology. Geometry, Vol. 15* (Russian), pp. 173-210 (errata and summary inserts). *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1977.* (M. L. Gromov) 58 #2656 53C40 (58C15)

The regularity of convex surfaces with definite metric in three-dimensional pseudo-Euclidean space. (Russian) *Problems in geometry, Vol. 8* (Russian), pp. 257-277, 280. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1977.* (V. T. Fomenko) 58 #18299 53C45

The notions of global homogeneity and global isotropy of pasted universes. (Russian) *Gravitacija i Teor. Otosiel'nosti* No. 12 (1977), 142-147. (A. Staruszkiewicz) 58 #32818 83.53 (53C30)

Sokolov, E. I. The functional equation of general associativity. (Russian) *Studies in the theory of quasigroups and loops* (Russian), pp. 160-163, 200. *Izdat. "Štiinca", Kishinev, 1973.* (K. Lajkó) 52 #3410 20N05

The Gluskin-Hosszú theorem for Dörnte n -groups. (Russian) *Nets and quasigroups. Mat. Issled. Vyp.* 39 (1976), 187-189, 235. (G. Čupona) 56 #523 20N15

(with Sokolova, L. A.) Quasigroups with the generalized inverse property. (Russian) *Nets and quasigroups. Mat. Issled. Vyp.* 39 (1976), 190-197, 235. (G. Čupona) 56 #524 20N15

Solution of the functional equation of generalized transitivity. (Russian) *Quasigroups and combinatorics. Mat. Issled. Vyp.* 43 (1976), 160-161, 210. (Author's summary) 58 #29543 39A40

Sokolov, I. A. The boundary value problem of Riemann type for bi-analytic functions in the case of an arbitrary contour. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1969, no. 6, 29-38. (S. Gogonea) 45 #8861 30A88

A first boundary value problem of Riemann type for polyanalytic functions in the case of an arbitrary contour. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* 1970, no. 2, 20-23, 74. (S. A. Tersenov) 48 #11528 30A88

(with Aleščenko, L. N.) A boundary value problem of Riemann type with supplementary conditions for polyanalytic functions. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1974, no. 1, 37-41, 137. (S. A. Tersenov) 49 #3157 30A88

Sokolov, Ju. D. The behavior at infinity of the solutions of the differential equations of a plane symmetric motion of three mass points that attract (or repel) each other with forces directly or inversely proportional to certain powers of their mutual distances. (Russian) *Methods of approximate solution of differential and integral equations* (Russian), pp. 5-37. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973.* (Editors) 58 #3822 70.34

See also Approximate and qualitative methods of the theory of differential and integral equations, 50 #4184; Putjata, T. V.; et al., 50 #6763; Fil'čakova, V. P., 52 #2793; Grave, D. O., 53 #5237; Mitropol'skii, Ju. O.; et al., 54 #7178 and Mitropol'skii, Ju. O.; et al., 57 #12129

Portnov-Sokolov, Ju. P. See Portnov-Sokolov, Ju. P.

Sokolov, L. A. (with Neiland, V. Ja.) On the asymptotic theory of the generation of a separation around a panel when a hypersonic stream flows around a cooled body in a regime of weak hypersonic interaction. (Russian) *Učen. Zap. CAGI* 6 (1975), no. 3, 25-34. (M. Drăganu) 57 #14886 76.41

Sokolov, L. V. See Control in space, 48 #8040

Sokolov, M. See Fried, Ervin; et al., 52 #10318

Sokolov, M. P. An application of functions of multidimensional matrices to the solution of systems of higher order linear partial differential equations. (Russian) *Ukrain. Mat. Zh.* 23 (1971), 494-507. (G. C. Barozzi) 46 #3973 35G05

★Введение в теорию многомерных матриц. (Russian) [Introduction to the theory of multidimensional matrices] *Izdat. "Naukova Dumka", Kiev, 1972.* 175 pp. (George P. Barker) 50 #4602 15-02

(with Stolova, E. S.) ★Алгебраические кривые третьего и четвертого порядков. (Russian) [Third and fourth order algebraic curves] Библиографический указатель. [A bibliography] *Izdat. "Naukova Dumka", Kiev, 1973.* 199 pp. (Editors) 53 #414 14-01 (00A15, 14-03, 14H45)

The stability of the zero solution of systems of partial differential equations. (Russian) *Ukrain. Mat. Zh.* 25 (1973), 66-72, 142. (V. Komkov) 47 #2174 35B35

A study of a collection of special Markov chains that is represented by a multidimensional matrix. (Russian. English summary insert) *Kibernetika* (Kiev) 1975, no. 3, 125-129. (Jürgen Groh) 55 #1541 60K99

Application of multidimensional matrices to the study of a set of discrete Markov chains. (Russian) *Ukrain. Mat. Zh.* 27 (1975), 33-41, 141. (Z. Šidák) 51 #4403 60J10

- Sokolov, N. D.** (with Gol'danskii, V. I.; Zel'dovič, Ja. B.; Kožušner, M. A.; Kondrat'ev, V. N.; Lifšic, I. M.; Novožilov, B. V.; Semenov, N. N.; Tal'roze, V. L.; Hariton, Ju. B.) Aleksandr Solomonovich Kompaneets (obituary). *Uspehi Fiz. Nauk* **114** (1974), no. 3-4, 687-688 (Russian); translated as *Soviet Physics Uspekhi* **17** (1975), no. 6, 965-966. (Editors) **51** #12464 01A70
- Sokolov, N. P.** See Sokolov, M. P.
- Sokolov, O. B.** (with Enikeev, I. I.) A class of arithmetic codes with correction of several errors. *Problemy Peredači Informacii* **3** (1967), no. 3, 73-75 (Russian); translated as *Problems of Information Transmission* **3** (1967), no. 3, 61-63 (1969). (H. F. Mattson, Jr.) **46** #6934 94A10 (60G99)
- (with Enikeev, I. I.) A certain class of codes and its decoding. (Russian) *Kazan. Gos. Univ. Učen. Zap.* **129** (1969), no. 4, 67-73. (G. M. Tenengol'c) **46** #1457 94A10
- (with Kugurakov, V. S.) Sets of the lengths of cycles of one-to-one affine mappings of the space $V^n(GF(p))$ onto itself. (Russian) *Kazan. Gos. Univ. Učen. Zap.* **129** (1969), no. 4, 74-79. (C. Reischer) **45** #8661 15A03
- (with Loginov, A. I.) A new class of cyclic codes that admit majority decoding. (Russian) *Information reception and processing in structurally complex systems*, No. 4 (Russian), pp. 108-109. *Izdat. Kazan. Univ.*, Kazan, 1974. (Editors) **57** #19076 94A10
- Sokolov, P. B.** (with Merkulova, N. M.) The scientific legacy of A. M. Ljapunov. (Russian) *History and methodology of natural sciences*, No. IX: *Mechanics, mathematics* (Russian), pp. 90-109. *Izdat. Moskov. Univ.*, Moscow, 1970. (J. Burlak) **46** #8800 01A70 (34D20, 93D05)
- Sokolov, P. V.** A system of differential equations for the level curves of the integral surfaces of the general first order differential equation with one unknown function. (Russian) *Differential equations. Trudy Rjazan. Radiotekhn. Inst. No. 20* (1969), 130-137. (See RŽMat **1970** #11 B335; MR **52** #13071) **34C20**
- Limit theorems on the existence of integral surfaces that are tangent to singular integral elements. (Russian) *Differencial'nye Uravnenija* **7** (1971), 1672-1683. (V. Lakshmikantham) **45** #5525 35A05
- The singular linear elements of an ordinary differential equation, and the contact of the integral curves of such elements. (Russian) *Trudy Rjazan. Radiotekhn. Inst. No. 28 (Differencial'nye Uravnenija)* (1971), 90-101. (A. A. Reinfelds) **52** #864 34A99
- Questions of the existence of a singular solution of an ordinary differential equation. (Russian) *Trudy Rjazan. Radiotekhn. Inst. No. 28 (Differencial'nye Uravnenija)* (1971), 83-89. (A. A. Reinfelds) **52** #863 34A99
- The qualitative study of certain first order partial differential equations. (Russian) *Trudy Rjazan. Radiotekhn. Inst. Vyp. 28 Differencial'nye Uravnenija* (1971), 205-214. (R. S. Levitin) **53** #3472 35A30
- The structural stability and instability of the geometric picture of integral surfaces near a singular characteristic element of the cone T . (Russian) *Trudy Rjazan. Radiotekhn. Inst. Vyp. 42 Differencial'nye Uravnenija* (1972), 123-130. (Editors) **57** #6775 35B35
- One characterization of rings of polynomials over a field. (Russian) *Rings and modules. Mat. Issled. Vyp. 38* (1976), 177-184, 209. (D.-M. Popescu) **56** #2979 12H05
- Sokolov, S. N.** An example of a simultaneous many-particle relativistic wave equation. (Russian. English summary) *Teoret. Mat. Fiz.* **18** (1974), 56-65. (Author's summary) **57** #8630 81J35
- A two-dimensional model of the relativistic quantum mechanics of a system of N particles with potential interaction. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 4, 809-812. (K. Veselić) **53** #12372 81J47
- Separability and invariance properties in nonrelativistic and relativistic quantum mechanics. (Russian. English summary) *Teoret. Mat. Fiz.* **23** (1975), no. 3, 355-365. (Author's summary) **58** #14694 81J47
- Physical equivalence of the point and instant forms of the relativistic dynamics. (Russian. English summary) *Teoret. Mat. Fiz.* **24** (1975), no. 2, 236-241. (Author's summary) **57** #8706 81J47
- Nonlocal relativistic Hamiltonian quantum field theory. (Russian) *Nonlocal, nonlinear and nonrenormalizable field theories (Proc. Fourth Internat. Sympos. on Nonlocal Field Theories, Alushta, 1976)* (Russian), pp. 77-83. Ob'ed. Inst. Jadern. Issled., Dubna, 1976. (James D. Fabrey) **56** #10606 81J47
- Hamiltonian relativistic quantum description of systems of directly interacting particles. (Russian) *Dokl. Akad. Nauk SSSR* **233** (1977), no. 4, 575-578. (H. S. Green) **56** #2049 81J46
- Is relativistic invariance preserved as $\hbar \rightarrow 0$? (Russian. English summary) *Teoret. Mat. Fiz.* **32** (1977), no. 3, 354-359. (V. N. Suško) **57** #2322 81J47
- Sokolov, S. P.** (with Drobyshev, Ju. P.; Sokolova, E. M.) The synthesis of nonisomorphic multigraphs. (Russian) *Aviometrija* **1977**, no. 6, 52-58, 101. (From the summary) **58** #27640 05C99
- Sokolov, S. S.** (with Krysko, V. A.) On the computation of flexible shallow shells, with allowance for shears, by the finite difference method. (Russian) *Differencial'nye Uravnenija i Vyčisl. Mat. Vyp. 6* (1976), no. 1, 130-137, 178. (Authors' summary) **58** #14232 73G5
- Sokolov, V. A.** Remarks on the class of partial functions of countably-valued logic. (Russian) *Diskret. Analiz* No. 19 (1971), 56-62. (G. Wechsung) **46** #5104 02C05
- The maximal subalgebras of the algebra of all partially recursive functions. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 1, 70-73. (G. Wechsung) **46** #5122 02F20
- Synthetic methods for designing models for the computation of certain cubic Cremona transformations in R^3 . (Russian) *Questions of geometric simulation. Leningrad. Inž.-Stroitel. Inst. Sb. Trudov No. 71* (1972), 92-102. (M. Št. Botez) **51** #4704 65S05
- Certain properties of the algebra of all partially recursive functions. (Russian) *Mat. Issled.* **7** (1972), no. 1(23), 133-149. (G. Asser) **47** #37 02J99 (18A15)
- A problem in the class of computable functions with the superposition operation. (Russian) *Vestnik Jaroslav. Univ. Vyp. 9* (1975), 111-114. (From the author's text) **57** #79 02E15
- (with Rublev, V. S.; Bondarenko, V. A.) Ordering the creation of files when the position in the memory of input information is given. (Russian) *Heuristic optimization algorithms (Russian)*, pp. 76-113. *Jaroslav. Gos. Univ.*, Yaroslavl, 1976. (Witold Lipski) **58** #32019 68A05 (68A20)
- See also *Heuristic optimization algorithms*, **58** #20399
- Sokolov, V. B.** (with Burkov, V. N.; Rubinštein, M. I.) Some problems in optimal allocation of large-volume memories. *Automat. i Telemekh.* **1969**, no. 9, 83-91 (Russian. English summary); translated as *Automat. Remote Control* **1969**, no. 9, 1442-1448. **56** #14614 90B05 (68A50)
- (with Aven, O. I.) Some working memory control strategies. *Izv. Akad. Nauk SSSR. Tehn. Kibernet.* **1971**, no. 2, 89-94 (Russian); translated as *Engrg. Cybernetics* **9** (1971), no. 2, 286-290. (L. A. Aroian) **45** #8435 94A30
- (with Sokolov, B. A.) Boundary value problems for the equations of the dynamics of shock waves. (Russian) *Studies in differential equations and their applications. Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp. 201* (1974), 150-160. (Editors) **57** #18463 76J35 (35Q99)
- (with Makarov, I. M.; Mihaïlov, A. M.) Solution of a class of multistep non-zero-sum two-person games. *Automat. i Telemekh.* **1977**, no. 10, 51-57 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 10, part 1, 1469-1474 (1978). (Louis J. Billera) **58** #32998 90D05 (90D20)
- (with Makarov, I. M.; Mihaïlov, A. M.) Application of concept of potential stability domain in solution of multistep noncooperative games. *Automat. i Telemekh.* **1977**, no. 11, 53-57 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 11, part 1, 1622-1626 (1978). (G. Owen) **58** #20502 90D10 (90D20)
- See also *Busacker, Robert G.; et al.*, **49** #10585
- Sokolov, V. G.** (with Remeslennikov, V. N.) Certain properties of the Magnus imbedding. (Russian) *Algebra i Logika* **9** (1970), 566-578. (F. Haimo) **45** #2001 20F05
- An algorithm for the solution of the word problem for a certain class of solvable groups. (Russian) *Sibirsk. Mat. Ž.* **12** (1971), 1405-1410. (Juri A. Bahturin) **46** #120F10
- Long-periodic solutions of the asteroid three-body problem. (Russian. English summary) *Bull. Inst. Teoret. Astronom.* **14**, no. 4 (1977), 243-247 (1976). (Q. K. Ghosh) **56** #17291 70J34
- Sokolov, V. I.** See *Foundations of automatic control*, **53** #5066
- Sokolov, V. V.** (with Vainštein, A. I.) Chronological products and equal-time commutators in perturbation theory. *Jadernaja Fiz.* **16** (1972), 209-216 (Russian); translated as *Soviet Nuclear Phys.* **16** (1973), 112-116. (Authors' summary) **51** #14810 81J47
- Symmetric quasigroups. (Russian) *Quasigroups and combinatorics. Mat. Issled. Vyp. 43* (1976), 157-159, 209. (Miklós Csikós) **58** #977 20N05
- Theory of magnetic poles and the Dirac-Schwinger quantization condition with strings. *Jadernaja Fiz.* **23** (1976), no. 3, 628-635 (Russian); translated as *Soviet Nuclear Phys.* **23** (1976), no. 3, 330-334. (Author's summary) **54** #4403 81J35
- Examples of commutative rings of differential operators. (Russian) *Funkcion. Anal. i Priložen.* **12** (1978), no. 1, 82-83. (Alexander A. Pankov) **58** #17963 47J55 (58F05)
- Sokolov, Valerii** See *Gol'dfarb, L. S.; et al.*, **50** #6563
- Sokolova, E. G.** The construction of the solution of the nonstationary system of Prandtl equations by the finite difference method. (Russian) *Uspehi Mat. Nauk* **29** (1974), 3(177), 227-228. (Zbl **308** #76029) **57** #11122 65P05
- Application of the method of finite differences to the solution of the problem of continuation of a boundary layer. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 3, 219-222, 235. (P. C. Fife) **54** #13354 35Q99
- The smoothness of the solutions of a system of boundary layer equations. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 3(183), 173-174. (N. D. Kopachevskii) **56** #6163 35Q99 (76J35)
- Solution of the problem of the continuation of a nonstationary boundary layer by the finite difference method. (Russian) *Problems in mechanics and mathematical physics (Russian)*, pp. 246-264, 298. *Izdat. "Nauka", Moscow*, 1976. (J. F. Heyda) **57** #19265N05 (76J65)
- Sokolova, E. I.** Ibn al-Haitham's solution of the "Problem of Alhazen". (Russian) *Tul. Ped. Inst. Učen. Zap. Mat. Kaf. No. 3* (1970), 57-63. (E. S. Kennedy) **50** #6753 01A30 (01A35)
- See also *History of the exact sciences in the medieval Near and Middle East*, **57** #5579
- Sokolova, E. M.** (with Drobyshev, Ju. P.; Sokolov, S. P.) The synthesis of nonisomorphic multigraphs. (Russian) *Aviometrija* **1977**, no. 6, 52-58, 101. (From the summary) **58** #27640 05C99
- Sokolova, I. P.** The maximum of the modulus of a function that satisfies Zygmund condition. (Russian) *Studies in the theory of functions of several real variables (Russian)*, pp. 66-71. *Jaroslav. Gos. Univ.*, Yaroslavl, 1976. (Editors) **58** #28343 26A15
- Sokolova, L. A.** (with Sokolov, E. I.) Quasigroups with the generalized inverse property. (Russian) *Nets and quasigroups. Mat. Issled. Vyp. 39* (1976), 190-197, 235. (G. Čupović) **56** #524 20N15
- Sokolova, L. E.** The stabilization of the stationary motion of a mechanical system with partial dissipation. (Russian) *Problems of analytical mechanics, stability and control theories (Proc. Second Četaev Conf., Kazan, 1973)*, Vol. 2 (Russian), pp. 297-303. *Kazan. Aviacion. Inst.*, Kazan, 1976. (Author's summary) **58** #3823 70J34
- Sokolova, N. D.** (with Eraševskaja, S. P.; Ivanov, E. A.; Pal'cev, A. A.) ★ Таблицы сферических волновых функций и их первых производных. Том I. (Russian) [Tables of spheroidal wave functions and their first derivatives. Vol. I] *Izdat. "Nauka i Tekhnika", Minsk*, 1973. 443 pp. (Editors) **53** #6968 65A05
- (with Eraševskaja, S. P.; Ivanov, E. A.; Pal'cev, A. A.) ★ Таблицы сферических волновых функций и их первых производных. Том II. (Russian) [Tables of spheroidal wave functions and their first derivatives. Vol. II] Edited by V. Krylov. *Izdat. "Nauka i Tekhnika", Minsk*, 1976. 418 pp. (Editors) **53** #6969 65A05
- Sokolova, N. O.** (with Karatygin, V. A.; Rozov, V. A.) A case of asymptotic summability in a two-dimensional case. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 554-562, 809. (Authors' summary) **58** #19018 65B10
- Sokolova, O. A.** (with Bonami, A. A.) Hardy-Littlewood inequalities for periodic conjugate harmonic functions of several variables. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 12 (163), 6-15 (1976). (P. Agranović) **55** #3663 42A40 (31B05)

- va, S. O. (with Īvahnenko, O. G.; Visoc'kiĭ, V. M.; Fedorov, V. D.; Maksimov, V.) Simulation of the dynamics of the environment-plankton ecological system of the Barents Sea and analysis of its stability. *Avtomatika* **1975**, no. 3, 9-18 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* **8** (1975), no. 3, 6-13. (J. Skowroński) **56** #8097 92A99
- va, S. P. (with Ašimov, A.) Stability of an automatic system of direct digital control that realizes stabilization and the removal of a technological object from emergency conditions. (Russian) *Kibernet. i Vychisl. Tehn. Vyp.* **38** (1977), 92-98, 115. (P. Ivanovsky) **58** #15526 93D15
- va, T. A. On the question of the point correspondences between three projective planes. (Russian. English summary) Collection of articles dedicated to the memory of Ivan Fedorovič Laptev. *Trudy Geometr. Sem.* **4** (1973), 269-283. (B. Rozenfel'd) #14525 53A20
- vaskaja, I. N. (with Tokarenko, A. I.) Locally finitely stable groups of automorphisms. (Russian. Latvian and English summaries) *Latvian mathematical journal*, **13** (Russian), pp. 82-88. Izdat. "Zinatne", Riga, 1973. (L. G. Kovács) #5182 20E25
- vaskaja, Z. K. (with Rozenfel'd, B. A.; Rožanskaja, M. M.) ★Абь-р-Райхан Бируни (973-1048). (Russian) [Abū'l-Rayḥān al-Bīrūnī (973-1048)] Izdat. "Nauka", Moscow, 1973. 271 pp. (Ja. O. Matvičičin (Zbl 293 #01006)) **56** #5135 01A30 A70
- See also Nicolaus Copernicus. On the 500th anniversary of his birth, **50** #12560
- vaskii, A. I. (with Peletminskii, S. V.) On the question of the construction of nonequilibrium entropy. I. (Russian. English summary) *Teoret. Mat. Fiz.* **20** (1974), 1-99. (Authors' summary) **58** #32672a 82.46
- (with Peletminskii, S. V.) Nonequilibrium entropy, and the definition of products of generalized functions. II. (Russian. English summary) *Teoret. Mat. Fiz.* **20** (1974), 1-398. (Authors' summary) **58** #32672b 82.46
- (with Kovalevskii, M. Ju.; Peletminskii, S. V.) Nonequilibrium entropy, and a symmetry principle for the kinetic coefficients. (Russian. English summary) *Teoret. Mat. Fiz.* **33** (1977), no. 3, 377-389. (Nicolae Angelescu) **58** #14450 80.60 (82.60)
- (with Ceitlin, M. Ju.) On the theory of Brownian motion in the reduced description method. (Russian. English summary) *Teoret. Mat. Fiz.* **33** (1977), no. 3, 409-418. (Authors' summary) **58** #20133 82.60
- (with Peletminskii, S. V.; Šolokov, V. S.) Hydrodynamics of a superfluid Bose-fluid with allowance for dissipative processes in a model with weak interaction. (Russian. English summary) *Teoret. Mat. Fiz.* **34** (1978), no. 1, 81-98. (Authors' summary) **58** #14858 82.60
- vaskii, A. V. The "large sieve". (Russian) *Acta Arith.* **25** (1973/74), 301-306. (J. Lamboos) **50** #256 10H30
- vaskii, Ju. L. See Theoretical cybernetics, **50** #15417
- vaskii, L. H. (with Bunič, P. G.; Perlamutrov, V. L.) The optimal relation of own and borrowed industrial working capital. (Russian) *Ekonom. i Mat. Metody* **6** (1970), 1-532. (V. Spiridonov) **45** #1564 90A99
- vaskii, M. N. Operations over languages, and spectra. (Russian) *Diskret. Analiz No.* (1971), 66-87. (G. Wechsung) **45** #4922 68A30
- Diagnostic experiments with automata. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 6, 44-49. (J. Kuntzmann) **46** #3243 94A30
- The complexity of the generation of transformations, and experiments with automata. (Russian) *Diskret. Analiz No. 29 Metody Diskret. Anal. v Teorii Kodov i Shem* (1976), 68-86, 103. (Author's summary) **58** #4741 94A30 (68A20)
- Estimates of the length of a diagnostic word of a finite automaton. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 2, 16-21. (From the introduction) #15744 94A30
- vaskii, V. B. An equation of parabolic type with a functional Laplacian in a Hilbert space. (Russian) *Applications of functional analysis to approximate calculations (Russian)*, pp. 97-111. Kazan. Univ., Kazan, 1974. (Editors) **58** #30227 46G05 (35K99, R15)
- The second and the third boundary value problem in the Hilbert ball for equations of elliptic type that are solved for the functional Laplacian. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 3 (154), 111-114. (F. T. Brawn (Zbl 315 #35035)) #17040 35R15 (46G05)
- A boundary value problem without initial conditions for a certain equation with functional Laplacian in Hilbert space. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 11(162), 102-105. (Ju. V. Kostarčuk (Zbl 318 #35068)) **58** #6775 35R15 (6G05)
- The second boundary value problem without initial conditions for the heat equation in the Hilbert ball. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 5(168), 9-123. (T. V. Lossievskaja (Zbl 339 #35041)) **58** #6776 35R15 (46G05)
- vaskii, V. V. See Continuum mechanics and related problems of analysis, **50** #6714
- vaskii, V. Z. Random oscillations of distributed systems. (Russian) *Vestnik Har'kov. gos. Univ. No. 93 Mat. Vyp.* **38** (1973), 60-66, 2. (Kazimierz Sobczyk) **49** #4394 60.60
- The approximate solution of stochastic differential equations. (Russian) *Vestnik Har'kov. Gos. Univ. No. 93 Mat. Vyp.* **38** (1973), 67-74, 3. (C. E. Langenhop) **48** #9017 34F05
- Application of the Bubnov-Galerkin method to the solution of stochastic equations. (Russian) *Combinatorial geometry and optimal assignments (Russian)*, pp. 29-33. *Akad. nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1974. (See RŽMat **1975** #3 V130; MR **57** 10986) 60H99
- Filtering for stochastic fields. *Avtomat. i Telemekh.* **1975**, no. 11, 28-32 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 11, part 1, 1770-1774 (1976). (S. G. Tzafestas) **55** #12252 93E10
- Optimal estimates of random fields. (Russian) *Vestnik Har'kov. Gos. Univ. No. 119 Mat. i Meh. Vyp.* **40** (1975), 88-102, iii. (RŽMat **1976** #1 V418) **58** #33437 93E10
- Quasioptimal filtering of random functions. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 1, 158-161 (Russian); translated as *Engrg. Cybernetics* **15** (1977), no. 1, 135-138. (A. P. Roberts) **57** #5367 93E20
- owski, Jan Methods of approximation of the solutions of partial differential equations of parabolic type. (Polish. Russian and English summaries) *Arch. Automat. i*
- Telemekh.* **19** (1974), 401-426. (T. Styś) **50** #9002 65M99
- On parametric optimal control for a class of linear and quasilinear equations of parabolic type. (Polish and Russian summaries) *Control Cybernet.* **4** (1975), no. 1, 19-38. (Y. I. Kannai) **53** #11458 49B25
- On parametric optimal control for weak solutions of abstract linear parabolic equations. (Polish and Russian summaries) *Control Cybernet.* **4** (1975), no. 3-4, 59-84. (J. E. Rubio) **53** #14267 49B30
- External approximation of a parametric optimization problem for parabolic equations. (Polish and Russian summaries) *Control Cybernet.* **5** (1976), no. 4, 45-60. (P. K. C. Wang) **56** #13076 49D99
- Sokolowski, K. On (m, n)-products of Boolean algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 12, 1227-1228. (Timothy Cramer) **53** #225 06A40
- Sokolowski, L. M. The Gauss-Codazzi equations and field equations for a special case of null hypersurfaces in the theory of gravitation. *Acta Phys. Polon. B* **6** (1975), no. 4, 529-536. (Brian O. J. Tupper) **53** #12494 83.53
- On the connection between Einstein surface equations, Raychaudhuri equation and the intrinsic geometry of null hypersurfaces. *Acta Phys. Polon. B* **6** (1975), no. 5, 657-660. (George Debney) **53** #15281 83.53
- Sokolowski, Marek A certain model of a body that carries couple-stresses. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* **9** (1971), 391-401. (J. Murzewski) **46** #6688 73.35
- See also Trends in elasticity and thermoelasticity, **57** #11248
- Sokolowski, Stefan Total correctness for procedures. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 475-483. *Lecture Notes in Comput. Sci., Vol. 53, Springer, Berlin, 1977.* (Immo O. Kerner) **57** #4581 68A05
- Axioms for total correctness. *Acta Informat.* **9** (1977/78), no. 1, 61-71. (John Cherniavsky) **57** #14587 68A05
- A method for proving programming languages non context-free. *Information Processing Lett.* **7** (1978), no. 3, 151-153. (Andrzej Blikle) **57** #14636 68A30 (68A05)
- Sokolowski, Daniel A note on the Fermat problem. *Amer. Math. Monthly* **83** (1976), no. 4, 276. (H. S. M. Coxeter) **53** #6428 52A40
- Sokol'skii, A. A. (with Minkevič, A. V.) On a variational formalism in the relativistic dynamics of a conservative continuous medium. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1971**, no. 2, 70-78. (J. Lawrynowicz) **45** #1556 83.53
- (with Minkevič, A. V.) A general-relativistic variational formalism for a test particle with moments. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1975**, No. 4, 72-80, 141-142. (W. M. Tulczyjew) **52** #7402 81.49 (83.53)
- Sokol'skii, A. G. On the stability of an autonomous Hamiltonian system with two degrees of freedom in the case of equal frequencies. *Prikl. Mat. Meh.* **38** (1974), 791-799 (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 741-749 (1975). (Alan Jupp) **52** #12458 70.34
- On stability of an autonomous Hamiltonian system with two degrees of freedom under first-order resonance. *Prikl. Mat. Meh.* **41** (1977), no. 1, 24-33 (Russian); translated as *J. Appl. Math. Mech.* **41** (1977), no. 1, 20-28. (R. Barrar) **57** #10734 58F05 (70.58)
- On the stability of small quasiperiodic motions in the Hamiltonian systems. (Russian summary) *Celestial Mech.* **17** (1978), no. 4, 373-394. (Richard C. Churchill) **58** #25225 70.58 (58F05)
- Sokol'skii, D. V. See al-Fārābī, Abū Naṣr Muḥammad ibn Muḥammad ibn Tarkhān, **55** #7711
- Sokolsky, A. G. See Sokol'skii, A. G.
- Sokov, V. M. Optimization of the number of peripheral arrangements of automated business control systems in the simplest flow of industrial information and in representative service. (Russian) *Mathematical methods of solution of economic problems (Suppl. to Ekonom. i Mat. Metody)*, No. 5 (Russian), pp. 161-165. Izdat. "Nauka", Moscow, 1974. (Editors) **51** #14945 90B99
- Sokova, A. See Rozanov, Ju. A., **53** #9315 and D'jačenko, V. F., **57** #7929
- Sokovišin, Ju. A. (with Berezovskii, A. A.) The method of singular perturbations in the problem of free convection with a constant flow of heat on a vertical surface. (Russian) *Izv. Akad. Nauk SSSR Meh. Židk. Gaza* **1977**, no. 2, 129-136. (From the authors' summary) **56** #17405 76.35
- Sokovnin, V. M. Pseudoinverse operators and the identification of linear nonstationary objects. (Russian) *Control methods and models*, No. 6 (Russian), pp. 63-67, 136. *Redakcionno-Izdat. Otdel Rižsk. Politehn. Inst.*, Riga, 1973. (L. von Wolfersdorf) **51** #4662 65J05 (47A50, 93B30)
- (with Kristinkov, D. S.) Projection methods in the problem of identification. (Russian) *Control methods and models*, No. 6 (Russian), pp. 68-72, 136. *Redakcionno-Izdat. Otdel Rižsk. Politehn. Inst.*, Riga, 1973. (L. von Wolfersdorf) **51** #4663 65J05 (47A50, 93B30)
- Regularization of a recurrent identification algorithm. (Russian) *Control methods and models*, No. 6 (Russian), pp. 126-129, 139. *Redakcionno-Izdat. Otdel Rižsk. Politehn. Inst.*, Riga, 1973. (L. von Wolfersdorf) **51** #4664 65J05 (93B30)
- A method for the identification of linear nonstationary systems by means of pseudoinverse operators. (Russian) *Methods and models of control*, No. 5 (Russian), pp. 84-92, 143. *Redakcionno-Izdat. Otdel Rižsk. Politehn. Inst.*, Riga, 1973. (F. Sizarovskij) **51** #15063 93B30
- A regularized algorithm for successive identification. (Russian) *Methods and models of control*, No. 7 (Russian), pp. 80-82, 122. *Redakcionno-Izdat. Otdel Rižsk. Politehn. Inst.*, Riga, 1974. (F. Sizarovskij) **51** #14587 65K05 (47A55)
- A projection-successive identification algorithm. (Russian) *Methods and models of control*, No. 7 (Russian), pp. 90-93, 123. *Redakcionno-Izdat. Otdel Rižsk. Politehn. Inst.*, Riga, 1974. (F. Sizarovskij) **51** #15064 93B30
- See also Methods and models of control, **50** #12536
- Šokuev, V. N. A formula for the number of subgroups of a given order in a finite p-group. (Russian) *Mat. Zametki* **12** (1972), 561-568. (J. Wiegold) **48** #415 20D15
- The number of subgroups of a finite p-group. (Russian) *Ural. Gos. Univ. Mat. Zap.* **8** (1972), no. 3, 133-138, 143 (1973). (D. I. Zaicev) **48** #2247 20D15
- Finite p-groups. (Russian) *Algebra and number theory*, No. 1 (Russian), pp. 42-66.

- Kabardino-Balkarsk. Gos. Univ., Nalchik**, 1973. (Ja. G. Berkovič) 57 #6189 20D15
The enumeration of subgroups in finite p -groups. (Russian) *Mat. Zametki* 13 (1973), 107-112. (Sergei A. Syskin) 47 #5102 20D15
Certain relations between group-theoretic invariants of finite p -groups. (Russian) *Mat. Zametki* 17 (1975), no. 4, 571-578. (U. Schoenwaelder) 53 #3107 20D15
(with Zurtov, A. H.) Coverings of finite sets. (Russian) *Algebra and number theory*, No. 2 (Russian), pp. 78-81. *Kabardino-Balkarsk. Gos. Univ., Nalchik*, 1977. (V. A. Artamonov) 57 #12699 20D99
(with Caturjan, T. A.) Certain relations between group-theoretic invariants of finite p -groups. II. (Russian) *Algebra and number theory*, No. 2 (Russian), pp. 139-146. *Kabardino-Balkarsk. Gos. Univ., Nalchik*, 1977. (U. Schoenwaelder) 58 #5909 20D15
The number of subgroups of given order in a p -group of order p^4 ($p > 2$). (Russian) *Algebra and number theory*, No. 2 (Russian), pp. 164-168. *Kabardino-Balkarsk. Gos. Univ., Nalchik*, 1977. (D. I. Žaicev) 58 #10796 10H25 (20D10)
- Sokur, L. P.** (with Fuščić, V. I.) Equations of motion invariant under the group $P(i, n)$. II. (Russian. English summary) *Teoret. Mat. Fiz.* 6 (1971), no. 3, 348-363. (Authors' summary) 57 #15098 81.53
- Šokurov, A. V.** The homotopic and homological realization of exact sequences of groups. (Russian) *Mat. Sb. (N.S.)* 96(138) (1975), 83-92, 167. (I. Pop) 51 #11492 55E05 (55B40)
Cohomology of the ring of operations in unitary cobordism theory and homotopy invariants of continuous maps. (Russian) *Uspehi Mat. Nauk* 33 (1978), no. 3(201), 195-196. (P. S. Landweber) 58 #18499 57D90 (55B20, 55E45, 55G25)
- Šokurov, V. V.** The Noether-Enriques theorem on canonical curves. (Russian) *Mat. Sb. (N.S.)* 86(128) (1971), 367-408. (D. Klucký) 49 #2751 14H45 (14J25)
Periods of cusp forms, and Kuga varieties. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 3(183), 183-184. (Editors) 58 #27798a 10D20 (14G25)
Modular symbols of arbitrary weight. (Russian) *Funkcional. Anal. i Priložen.* 10 (1976), no. 1, 95-96. (K.-B. Gundlach) 55 #269 10D05
Holomorphic differential forms of highest degree on Kuga's modular varieties. (Russian) *Mat. Sb. (N.S.)* 101(143) (1976), no. 1, 131-157, 160. (Editors) 58 #27798b 10D20 (14G25)
- Solahjan, S. A.** An axiomatic approach to the proof of the correctness of programs. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 63 (1976), no. 4, 199-204. (From the text) 58 #3641 68A05
The formal description of the semantics of programming languages. (Russian) *Programirovanie* 1976, no. 3, 3-12, 87. (V. I. Konstantinov) 54 #11865 68A30
Proving properties of programs by using VDL. (Russian) *Programirovanie* 1976, no. 4, 33-42, 110. (V. I. Konstantinov) 55 #11681 68A05
A proof of properties of programs that contain procedures and conditional operators. (Russian) *Programirovanie* 1977, no. 2, 28-36, 95. (V. N. Agafonov) 58 #13879 68A05
- Solak, Wiesław W.** An iterative method for solving operator equations. *Ann. Polon. Math.* 25 (1971/72), 221-225. (Jagdish Chandra) 46 #2857 65J05 (47B55)
The numerical method of solving ordinary differential equations with the Cauchy initial condition. *Ann. Polon. Math.* 27 (1973), 143-147. (H. Brunner) 47 #1291 65L05
(with Struś, M.) The secant method in Banach spaces. (German summary) *Computing* 16 (1976), no. 3, 201-209. (R. A. Tapia) 53 #4533 65J05
- Solakov, E. D.** (with Stoikov, St. M.) The nomographic solution of a certain system of equations. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 4, 89-100 (1971). (Bl. Sendov) 47 #4475 65S05
Nomographic solution of a certain form of system of two equations in ten variables. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 4, 101-107 (1971). (Author's summary) 46 #6638 65S05
Nomographic representation of a certain form of equation in eight variables. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 4, 109-115 (1971). (Bl. Sendov) 47 #4476 65S05
Nomographic solution of a certain form of equation in nine variables. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 4, 117-125 (1971). (Bl. Sendov) 47 #4477 65S05
- Solana, J.** (with Alvarez-Estrada, R. F.) Interaction, diffraction, and scattering of a two-particle system by a thin crystal. *Ann. Physics* 93 (1975), no. 1-2, 1-40. (Marcel Coz) 54 #2055 82.47
- Soland, Richard M.** (with Falk, James E.) An algorithm for separable nonconvex programming problems. *Management Sci.* 15 (1968/69), 550-569. (A. Majthay) 52 #10045 90C30
An algorithm for separable nonconvex programming problems. II. Nonconvex constraints. *Management Sci.* 17 (1970/71), 759-773. (C.-A. Burdet) 47 #1468 90C25
(with Kuenne, Robert E.) Exact and approximate solutions to the multisource Weber problem. *Math. Programming* 3 (1972), 193-209. (Authors' summary) 47 #1437 90B10
An algorithm for separable piecewise convex programming problems. *Naval Res. Logist. Quart.* 20 (1973), 325-340. (J. Stoer) 47 #10070 90C30
Optimal facility location with concave costs. *Operations Res.* 22 (1974), no. 2, 373-382. (J. Falk) 53 #7496 90C35 (90B05)
(with Ross, G. Terry) A branch and bound algorithm for the generalized assignment problem. *Math. Programming* 8 (1975), 91-103. (M. Rössler) 51 #4998 90C10
(with Charnetski, Johnnie R.) Statistical measures for linear functions on polytopes. *Operations Res.* 24 (1976), no. 1, 201-204. (E. S. Boylan) 54 #4679 90C50
(with Charnetski, Johnnie R.) Multiple-attribute decision making with partial information: the comparative hypervolume criterion. *Naval Res. Logist. Quart.* 25 (1978), no. 2, 279-288. (Authors' summary) 58 #25854 90A05
See also **Mathematical programming and its applications**, 49 #10355
- Solari, M. E.** (with Dunnage, J. E. A.) A note on Spitzer's lemma and its application to the maximum of partial sums of dependent random variables. *J. Appl. Probability* 13 (1976), no. 2, 361-364. (J. G. Wendel) 53 #4224 60G99
- Solari, Mary E.** See **Anderson, T. W.**, 53 #14764
- Solazzi, Robert E.** Isomorphism theory of congruence groups. *Bull. Amer. Math. Soc.* (1971), 164-168. (G. Maxwell) 45 #3585 20H05
The automorphisms of certain subgroups of $\text{PGL}_n(V)$. *Illinois J. Math.* 16 (1972), 330-348. (A. O. Morris) 45 #397 20G15
The automorphisms of the symplectic congruence groups. *J. Algebra* 21 (1973), 91-102. (J. G. Horne) 47 #3561 20G15
On the isomorphisms between certain congruence groups. *Proc. Amer. Math. Soc.* 35 (1972), 405-410. (G. E. Wall) 46 #7407 20H15
On the isomorphisms between certain congruence groups. II. *Canad. J. Math.* (1973), 1006-1014. (G. E. Wall) 48 #4142 20G15
The automorphisms of the unitary groups and their congruence subgroups. *Illinois J. Math.* 17 (1973), 153-165. (G. E. Wall) 55 #3100 20G15
Four-dimensional symplectic groups. *J. Algebra* 49 (1977), no. 1, 225-237. (Author's summary) 58 #21941 10C30 (20G15)
See also **Automorphisms of the classical groups**, 55 #267
- Solberg, James J.** A graph theoretic formula for the steady state distribution of finite Markov processes. *Management Sci.* 21 (1974/75), no. 9, 1040-1048. (Author's summary) 55 #14164 90B15
(with Phillips, Donald T.; Ravindran, Arunachalam) ★Operations research: principles and practice. *John Wiley & Sons, Inc., New York-London-Sydney*, 1974. xvii + 585 pp. ISBN 0-471-68707-3 (F. Weinberg) 58 #9164 90Bxx (90-01)
- Soldati, R.** (with Bassetto, A.; Toller, M.; Zerbini, S.) The second virial coefficient for the scattering operator in classical mechanics. *Lett. Math. Phys.* 1 (1975/77), no. 4, 401-405. (Etang Chen) 56 #2135 82.47
- Soldatov, A. P.** The uniqueness of the solution of a certain problem of A. V. Bica. (Russian) *Differentsial'nye Uravnenija* 8 (1972), 143-146. (Vojislav Marić) 45 #539 31A25
A certain problem of the theory of functions. (Russian) *Differentsial'nye Uravnenija* 9 (1973), 325-332, 396. (S. A. Teresnov) 47 #5267 30A88
Solution of a certain boundary value problem with shift in the theory of functions. (Russian) *Differentsial'nye Uravnenija* 10 (1974), 143-152, 182. (N. K. Karapetjan) 48 #11529 30A88
A certain class of singular integral equations with a shift of non-Carleman type. (Russian) *Differentsial'nye Uravnenija* 11 (1975), 137-150, 205. (N. K. Karapetjan) 50 #14382 47G05 (45E05)
On the theory of singular integro-functional operators. (Russian) *Differentsial'nye Uravnenija* 13 (1977), no. 1, 140-154, 191. (S. G. Samko) 57 #13415 45E10 (47G05)
On the Noether theory of operators. One-dimensional singular integral operator of general form. (Russian) *Differentsial'nye Uravnenija* 14 (1978), no. 4, 706-718, 766. (G. Samko) 58 #12483 47B30 (47G05)
On the Noether theory of singular operators of general form. (Russian) *Dokl. Akad. Nauk SSSR* 238 (1978), no. 5, 1067-1070. (N. L. Vasilevskii) 58 #2466 47G05 (45Exx)
On the theory of singular operators with a shift. (Russian) *Differentsial'nye Uravnenija* 15 (1979), no. 1, 116-131, 189. (N. K. Karapetjan) 58 #30502 47G05 (47B35)
- Soldatov, G. P.** The nonlinear wave motions on the surface of a fluid. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* 1972, no. 2, 62-66. (H. C. Kranzer) 49 #676 76.35
On the hydrodynamic theory of two-directional traffic flow. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 4(155), 68-73. (I. O. Bohachevsky) 52 #1658 90B20 (76.35)
- Soldatov, M. A.** (with Vorob'eva, I. G.) The completeness of subsystems of general Faber polynomials. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 1(155), 89-92. (W. H. J. Fuchs) 55 #10654 30A18
- Soldatova, V. V.** Solution of the word problem for a certain class of groups. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* 44 (1969), no. mat., 17-25. (J. Wiegold) 46 #910 20F10
The centralizer of an arbitrary element. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* 61 (1969), no. mat., 209-224. (J. Wiegold) 46 #9169 20F10
- sanaz Solé, Marta** See **Sanz Solé, Marta**
- miracle-Solé, S.** See **Miracle-Solé, S.**
- Solecki, Andrzej** Finite atlases on manifolds. *Comment. Math. Prace Mat.* 17 (1973/74), 469-473. (S. Y. Hussein) 51 #4302 58A05
On group operations in groups of exponent k . *Colloq. Math.* 30 (1974), 225-228. (P. Street) 51 #659 20A05
(with Mozrzyms, Jan) R^4 point groups. *Rep. Mathematical Phys.* 7 (1975), no. 3, 363-394. (J. S. Frame) 53 #13434 20H15 (50A15)
On fibering of $\text{SO}(7, R)$. *Colloq. Math.* 35 (1976), no. 2, 235-245. (S. Murakami) 53 #11612 55F10 (22E15)
 R^4 Bravais lattices. *Rep. Mathematical Phys.* 9 (1976), no. 1, 115-134. (We. Nowacki) 54 #12073 82.20
See also **Spivak, Michael**, 56 #3202
- Soleiman, M. A.** A certain class of complexes in elliptic space. (Russian) *Ukrain. Geom. Sb. No.* 10 (1971), 71-80. (Gr. Stanilov) 45 #9256 53A35
A certain class of complexes of projective revolution in elliptic space. (Russian) *Ukrain. Geom. Sb. No.* 12 (1972), 152-165, 170. (M. Kucharzewski) 49 #134 53A35
Some properties of a certain class of centroinflectional complexes in elliptic space. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No.* (1972), 113-121, 160. (Author's summary) 57 #4020 53A25
A certain class of congruences in elliptic space. (Russian) *Ukrain. Geom. Sb.* 13 (1973), 155-172, 5. (A. Švec) 49 #6053 53A35
An integral-free representation of the complexes in elliptic space that split into one-parameter families of congruences with focal surfaces of zero Gaussian curvature. (Russian) *Ukrain. Geom. Sb. Vyp.* 14 (1973), 98-109, 116. (Author's summary) 54 #11193 53A20
- Soleimany, A. K.** Generalized conformal transformations. *J. Phys. A* 7 (1974), 223-230. (Author's summary) 53 #10150 83.53
- Soler, A. I.** (with Hutchins, G. J.) Extended validity of single segment stepwise integration

- emes for solution of two-point boundary value problems. *Comput. Methods Appl. Mech. Engrg.* **1** (1972), 307-316. (Robert D. Russell) **55** #1741 65L10
- Soler, F.** See **Martines-Soler, F.**
- François** Sur les variétés récurrentes conformément planes. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A601-A603. (Y. Mut6) **48** #9588 53B20
- 8-derivations d'algèbres.** *Publ. Math. Debrecen* **20** (1973), 207-214 (1974). (A. Ęrniakiewicz) **48** #8572 16A72 (17A99)
- (with Collinson, C. D.) Second order conformally recurrent and birecurrent planar waves. *Tensor (N.S.)* **27** (1973), 37-40. (Yung Chow Wong) **49** #4516 53
- (with Collinson, C. D.) Sur la classification du champ électromagnétique. *Tensor (S.)* **27** (1973), 49-52. (J. D. Zund) **48** #13168 83.53
- (with Collinson, C. D.) On the recurrency of a class of pseudo-Riemannian spaces. *Tensor (N.S.)* **30** (1976), no. 1, 87-88. (R. Roşca) **57** #13754 53B30
- r^2 -variétés à connexion affine. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 5. (Ion D. Teodorescu) **57** #17548 53C05
- (with Fugère, J.) Conditions de Licherowicz pour la radiation gravitationnelle. *Tensor (N.S.)* **31** (1977), no. 2, 123-128. (Jean Chevalier) **57** #4979 83.53
- Jean-Louis** m -dual d'un espace vectoriel mesurable et structures statistiques de type ponentiel. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A49-A52. (S. J. Taylor) #6986 28A40 (62E10)
- La loi de probabilité de Wishart associée à un élément aléatoire gaussien décentré à res dans un espace de Fréchet séparable. Application aux fonctions aléatoires éssiennes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 12, Aiii, 71-A474. (Albert Tortrat) **52** #4362 60B05
- Infinite dimensional exponential type statistical spaces (generalized exponential ilies). *Recent developments in statistics (Proc. European Meeting Statisticians, enoble, 1976)*, pp. 269-284. North-Holland, Amsterdam, 1977. (Author's summary) #31674 62M99 (28A40, 62E10)
- M.** Topologies generated in a vector space by families of functions that are ogenous with respect to a subgroup of R . (Spanish. English summary) *Rev. Acad. Zaragoza* (2) **30** (1975), no. 1-2, 25-29. (M. Balanzat) **54** #13521 46A15
- I Soler, Magi** See **Cadevall Soler, Magi**
- Mario** (with Rañada, Antonio F.) On the gravitational self-interaction of the ssical scalar field. *Lett. Nuovo Cimento* (2) **8** (1973), 421-424. **56** #14515 83.53
- Dorda, M.** A type of functions that generate a topology in a vector space. (Spanish. English summary) *Publicaciones del Seminario Matematico Garcia de Galdeano*, No. 21, 17-20. Consejo Superior de Investigaciones Científicas, Facultad de Ciencias de aragoza, Zaragoza, 1975. (From the author's summary) **56** #9217 46A15
- A type of functions that generate a topology in a vector space. (Spanish. English mmary) *Rev. Acad. Ci. Zaragoza* (2) **30** (1975), no. 3-4, 141-144 (1976). (R. D. Williams) **55** #6165 46A15
- Jean-Noël** (with Micaelli, Jean-Claude) Stabilité de l'interface entre deux fluides coulant à courantour ou à contre-courant entre deux plans verticaux. (English mmary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 12, A809-A812. (Authors' mmary) **56** #17430 76.35
- V. N.** Absolutely regular trajectories in Hilbert space. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **22** (1971), 139-160. (A. L. Shields) #9721 46E99 (42A16, 47B99, 60B40)
- The average over a unit of time of the amount of information contained in one tionary Gaussian process with respect to another. (Russian) Problems in the theory probability distributions. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **29** (1972), 18-26. (D. A. Darling) **48** #7357 60G15
- The absolute regularity condition for fields. (Russian) Problems in the theory of probability distributions. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **29** (1972), 27-29. (D. A. Darling) **48** #5163 60G10
- The continuous analogue of a theorem of G. Szegő. (Russian) Investigations on ear operators and the theory of functions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1974), 104-109. (A. Devinatz) **50** #5528 47B35
- Spectral measure of order three for a stationary process. (Russian) *Dokl. Akad. Nauk SSSR* **224** (1975), no. 3, 546-548. (I. G. Žurbenko) **52** #12060 60G10
- Information in a scheme with additive noise. (Russian. English summary) Problems the theory of probability distributions, III. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **55** (1976), 117-127, 200. (M. I. Jadrénko) **54** #1362 60G15 (A15)
- Conditionally regular processes. (Russian. English summary) Problems of the ory of probability distributions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **72** (1977), 140-149, 218, 222. (A. I. Ponomarenko) **58** #7821 G20
- See also *Investigations in linear operators and function theory*, **49** #5761 and *blems in the theory of probability distributions*, **52** #4355
- n, Ole A.** (with Saethre, Audun) Optimal control of a class of distributed parameter stems. *Automatic and remote control III (Proc. Third Congr. Internat. Federation automatic Control (IFAC), London, 1966)*, Vol. 1, p. 13, Paper 6G, 9 pp. *Inst. Mech. Engrs., London*, 1967. (Authors' summary) **51** #9895 93C20
- Design of optimal discrete control systems with prescribed eigenvalues. *Internat. J. Control* (1) **19** (1974), 417-427. (Author's summary) **54** #7053 93C55
- See also *Proceedings: International Congress of the International Federation of automatic Control (IFAC)*, **51** #12360a
- Alexandru** ★Teoria modulelor (categoriile de module). (Romanian. French mmary) [Theory of modules (categories of modules)] Editura Academiei Republicii ialiste România, Bucharest, 1972. 419 pp. (C. Niță) **49** #9032 16A64 (18E05)
- Groupe dans une catégorie. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), 55-A158. (A. Babakhanian) **47** #5076 18B99
- ★Theory of modules (an introduction to the theory of module categories). ntranslated from the Romanian by Mioara Buiculescu. Editura Academiei, Bucharest; nly-Interscience [John Wiley & Sons, Ltd.], London-New York-Sydney, 1977. vii + 420 . ISBN 0-471-99462-6 (Editors) **56** #5659 16A64 (18E10)
- ★Coomologia grupurilor. (Romanian) [Cohomology of groups] With an English mmary. Editura Academiei Republicii Socialiste România, Bucharest, 1977. xiii + 290 pp. (G. Pic) **58** #11080 18H10 (12Gxx, 20J99)
- On the continuation of group extensions. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 2, 279-284. (A. I. Moskalenko) **58** #22320 20F25
- Solfani, G.** (with Minguzzi, A.; Leo, R. A.) On the kinematical singularities. II. (Italian summary) *Nuovo Cimento A* (11) **9** (1972), 37-42. (M. Glück) **46** #8570 81.32
- (with Toller, M.) A semigroup contained in SL_{2R} and complex angular momentum. (Italian and Russian summaries) *Nuovo Cimento A* (11) **15** (1973), 430-448. (P. Pascual) **53** #15149 81.22
- (with Leo, M.; Leo, R. A.) Periodic solutions for a class of nonlinear lattices. *Phys. Lett. A* **60** (1977), no. 4, 283-286. (Authors' summary) **56** #2117 82.34
- Soljanik, A. I.** See **Soljanik, A. I.**
- Solich, R.** Problem of determining the order of production of complex products. (Polish. Russian and English summaries) *Przegląd Statyst.* **20** (1973), 211-229. (O. Pokorná) **50** #12212 90B30
- A scheduling problem for cyclically recurring production. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **13** (1973), 326-342, 531. (A. Aganbegjan) **49** #10352 90B35
- Solvie, I. U.** See *Computer science and questions in applied mathematics*, **56** #17266
- Solvie, Ju.** Cubature formulas for singular integrals. (Russian. Tajiki summary) *Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk* **1976**, no. 4 (62), 77-81. (J. Kofron) **57** #14347 65D30
- (with Velev, G. D.; Semenov, I. P.) Interpolational quadrature and cubature formulas with multiple nodes for certain singular integrals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 2 (177), 10-20. (A. Coțiu) **58** #12139 41A55
- Quadrature and cubature formulas for singular integrals with kernels of Cauchy type. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 3 (178), 108-112. (I. P. Mysovskih) **56** #17016 65D30
- Interpolational quadrature formulas with multiple nodes for singular integrals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 9 (184), 122-126. (A. Coțiu) **58** #8176 65D30
- Solvie, Š. T.** (with Gafurov, M. U.) Certain estimates of the rate of convergence in limit theorems for sums of a random number of independent random variables. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 40-51, 210. Izdat. "Fan" Uzbek. SSR, Tashkent, 1974. (Dominik Szynal) **52** #1836 60F05
- Solignac, J.-L.** See *Applied mechanics*, **50** #11914
- Solih, R.** See **Solich, R.**
- Soliman, J. I.** (with Kwoh, H.) Absolute stability of a class of nonlinear sampled-data systems. *Proc. Inst. Elec. Engrs.* **116** (1969), 145-148. (E. Ar) **46** #5004 93D05
- (with Kwoh, H.) On the absolute stability of automatic control systems. *Proc. Inst. Elec. Engrs.* **117** (1970), 2306-2310. (Jochen Werner) **46** #8717 93D10
- Soliman, M. A.** (with Ray, W. Harmon) On the optimal control of systems having pure time delays and singular arcs. I. Some necessary conditions for optimality. *Internat. J. Control* (1) **16** (1972), 963-976. (Authors' summary) **47** #2467 49B99
- (with Tapiero, Charles S.) Multi-commodities transportation schedules over time. *Networks* **2** (1972), 311-327. (W.-K. Chen) **47** #4611 90B05
- A new necessary condition for optimality of systems with time delay. *J. Optimization Theory Appl.* **11** (1973), 249-254. (Y. Cherruault) **49** #12129 93C22
- Distribution of an arbitrary complex in elliptic space \mathfrak{z}_3 into one parametric family of normal congruences. (Arabic summary) *Bull. Fac. Sci. Assiut Univ.* **5** (1976), no. 2, 219-227 (1977). (M. Kucharzewski) **58** #18200 53A25
- On particular classes of complexes which are distributed into one parametric family of special kinds of normal congruences in elliptic space \mathfrak{z}_3 . (Arabic summary) *Bull. Fac. Sci. Assiut Univ.* **6** (1977), no. 1, 209-220. (P. Drăgăli) **58** #30827 53A35
- On some classes of congruences of lines in hyperbolic space H_3 . (Arabic summary) *Proc. Math. Phys. Soc. Egypt* No. 43 (1977), 23-27. (H. W. Guggenheimer) **55** #3994 53A35
- Solin, N. N.** Application of asymptotic methods of oscillation theory to the analysis of stochastic nonlinear lumped oscillatory systems. I. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **18** (1975), no. 3, 371-382. (From the author's summary) **57** #820 34F05 (34C10)
- Application of asymptotic methods of oscillation theory to the analysis of stochastic nonlinear lumped oscillatory systems. II. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **18** (1975), no. 12, 1831-1844. (Author's summary) **57** #821 34F05 (34C10)
- Solis Santos, Carlos** The Copernican revolution, and who made it. (Spanish) *Teorema* **4** (1974), no. 1, 29-46. (J. Vernet) **55** #10192 01A40
- Solitar, Donald** (with Karrass, Abraham) Subgroups of HNN groups and groups with one defining relation. *Canad. J. Math.* **23** (1971), 627-643. (Stephen Meskin) **46** #260 20E30
- (with Karrass, Abraham) The free product of two groups with a malnormal amalgamated subgroup. *Canad. J. Math.* **23** (1971), 933-959. (F. Levin) **47** #3541 20E30
- (with Karrass, Abraham) On a theorem of Cohen and Lyndon about free bases for normal subgroups. *Canad. J. Math.* **24** (1972), 1086-1091. (K. Appel) **47** #8690 20E30
- (with Hoare, A. Howard M.; Karrass, Abraham) Subgroups of infinite index in Fuchsian groups. *Math. Z.* **125** (1972), 59-69. (A. M. Macbeath) **45** #2029 20H10 (10D05)
- (with Fischer, Jerrold; Karrass, Abraham) On one-relator groups having elements of finite order. *Proc. Amer. Math. Soc.* **33** (1972), 297-301. (C. F. Miller, III) **47** #342 20F05
- (with Hoare, A. Howard M.; Karrass, Abraham) Subgroups of NEC groups. Collection of articles dedicated to Wilhelm Magnus. *Comm. Pure Appl. Math.* **26** (1973), 731-744. (F. A. Sherk) **49** #437 20H10
- (with Karrass, Abraham; Pietrowski, Alfred) Finite and infinite cyclic extensions of free groups. Collection of articles dedicated to the memory of Hanna Neumann, IV. *J. Austral. Math. Soc.* **16** (1973), 458-466. (Stephen Meskin) **50** #2343 20F05
- (with Karrass, Abraham) On finitely generated subgroups which are of finite index in generalized free products. *Proc. Amer. Math. Soc.* **37** (1973), 22-28. (K. Appel) **47** #8692 20F05 (20E30)
- (with Magnus, Wilhelm; Karrass, Abraham) ★Комбинаторная теория групп.

- (Russian) [Combinatorial group theory] Представление групп в терминах образующих и соотношений [Presentation of groups in terms of generators and relations] Edited by M. D. Grindlinger [Martin Greendlinger]. Translated from the English by D. I. Moldvanskii. A. A. Fridman and Ju. I. Hmelevskii. *Izdat. "Nauka", Moscow*, 1974. 455 pp. (Editors) 51 #10480 20Fxx (20Exx)
- (with Karrass, Abraham; Pietrowski, Alfred) An improved subgroup theorem for HNN groups with some applications. *Canad. J. Math.* 26 (1974), 214-224. (From the authors' introduction) 55 #5749 20E30 (20E05, 20F15)
- (with Magnus, Wilhelm; Karrass, Abraham) ★Combinatorial group theory. Presentations of groups in terms of generators and relations. Second revised edition. *Dover Publications, Inc., New York*, 1976. xii + 444 pp. (Editors) 54 #10423 20F05
- (with Karrass, Abraham) Subgroups with centre in HNN groups. *J. Austral. Math. Soc. Ser. A* 24 (1977), no. 3, 350-361. (D. E. Cohen) 58 #5934 20F05 (20F25)
- (with Burns, Robert G.; Chau, T. C.) On the intersection of free factors of a free group. *Proc. Amer. Math. Soc.* 64 (1977), no. 1, 43-44. (Peter M. Neumann) 56 #5717 20E05
- (with Karrass, Abraham) One relator groups having a finitely presented normal subgroup. *Proc. Amer. Math. Soc.* 69 (1978), no. 2, 219-222. (Ian M. Chiswell) 57 #6203 20F05
- Soljanik, A. I.** (with Černous'ko, F. L.) Approximate synthesis method for optimal control of a system subjected to random perturbations. *Prikl. Mat. Meh.* 36 (1972), 829-839 (Russian); translated as *J. Appl. Math. Mech.* 36 (1972), 780-791 (1973). (Peter Stavroulakis) 48 #10615 93E20
- The optimal selection of moments of observation and correction in a dynamical system. (Russian. English summary insert) *Kibernetika (Kiev)* 1972, no. 6, 104-108. (K. Magnus) 47 #8147 93B05
- The optimal combination of pulse control processes and discrete observation processes in a dynamical system under random perturbations. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 5, 88-93. (Bojan Popović) 48 #13425 93E20
- Soljanik, V. F.** (with Geim, Ju. A.; Didkovskii, V. N.) Integral approximation of the functions $y = \ln(1+x)$ with given accuracy by means of polynomials of lower degree. (Russian) *Trudy Altaisk. Politehn. Inst. Vyp.* 3 (1967), 109-114. (A. Lupas) 54 #14319 65D20
- Soljanik-Krassa, K. V.** See Calculation of three-dimensional constructions, 48 #7754
- Soljar, V. G.** An inequality for the norms of a function and of its derivatives. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 2 (165), 64-68. (Jöran Bergh) 56 #558 26A84
- Sollogub, A. V.** (with Platova, A. A.) A way of representing, organizing the retrieval of, and processing information in an information-reference system. (Russian. English summary) *US i M—Upravljajušče Sistemy i Mašiny* 1975, no. 1(15), 10-14, i. (Authors' summary) 57 #4714 68A50
- Solmon, Donald C.** (with Smith, Kennan T.) Lower dimensional integrability of L^2 functions. *J. Math. Anal. Appl.* 51 (1975), no. 3, 539-549. (Richard Bagby) 51 #13668 46E30
- The X-ray transform. *J. Math. Anal. Appl.* 56 (1976), no. 1, 61-83. (G. M. Habibullah) 58 #2051 44A15
- (with Smith, Kennan T.; Wagner, Sheldon L.) Practical and mathematical aspects of the problem of reconstructing objects from radiographs. *Bull. Amer. Math. Soc.* 83 (1977), no. 6, 1227-1270. (L. A. Shepp) 58 #9394a 92A05
- (with Smith, Kennan T.; Wagner, Sheldon L.) Addendum to: "Practical and mathematical aspects of the problem of reconstructing objects from radiographs" (Bull. Amer. Math. Soc. 83 (1977), no. 6, 1227-1270). *Bull. Amer. Math. Soc.* 84 (1978), no. 4, 691. (L. A. Shepp) 58 #9394b 92A05
- (with Hamaker, C.) The angles between the null spaces of X-rays. *J. Math. Anal. Appl.* 62 (1978), no. 1, 1-23. (Gabor T. Herman) 57 #3798 45L05 (65D99)
- (with Smith, Kennan T.; Wagner, Sheldon L.; Hamaker, C.) Mathematical aspects of divergent beam radiography. *Proc. Nat. Acad. Sci. U.S.A.* 75 (1978), no. 5, 2055-2058. (James C. Bezdek) 58 #20581 92A05 (68A45)
- von Solms, S. H.** The characterization of certain classes of languages in the context sensitive area by automata. *Erste Fachtagung der Gesellschaft für Informatik über Automatentheorie und Formale Sprachen (Bonn, 1973)*, pp. 182-190. *Lecture Notes in Computer Science*, Vol. 2, Springer, Berlin, 1973. (John T. Gill) 55 #11734 68A30
- On TOL languages over terminals. *Information Processing Lett.* 3 (1974/75), 69-70. (S. A. Greibach) 51 #7384 68A30
- The characterization by automata of certain classes of languages in the context sensitive area. *Information and Control* 27 (1975), 262-271. (S. A. Greibach) 50 #15463 68A30
- On the characterization of certain classes of developmental languages by automata. *Internat. J. Comput. Math.* 5 (1975), no. 2, 125-132. (J. Tucker) 52 #16132 68A25 (68A30)
- Some notes on ETOL-languages. *Internat. J. Comput. Math.* 5 (1975/76), no. 4, 285-296. (Matti Linna) 55 #6984 68A30
- (with Rozenberg, Grzegorz) Some aspects of random context grammars. *GI—6. Jahrestagung (Stuttgart, 1976)*, pp. 63-75. *Informatik-Fachberichte, Band 5*, Springer, Berlin, 1976. (Itsuo Takanami) 56 #17228 68A30
- Solncev, S. V.** (with Filonik, S. A.) Realization of arithmetic functions on homogeneous structures. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 4, 114-126, 222 (Russian); translated as *Engrg. Cybernetics* 12 (1974), no. 4, 86-96. (I. Kaufmann) 54 #7121 94A20 (68A10)
- Two remarks on the stopping problem in cellular growth models. (Russian) *Problemy Peredači Informacii* 12 (1976), no. 1, 63-69. (E. Ikaunieks) 54 #14892 94A30 (92A05)
- Solncev, V. A.** See Collection: Oscillations and waves in nonlinear media, 49 #4705
- Solncev, V. N.** (with Repina, L. K.) Solution of two applied problems by the method of random search. (Russian) *Operations research and statistical modeling*, No. 1 (Russian), pp. 136-145. *Izdat. Leningrad. Univ., Leningrad*, 1972. (V. Fabian) 53 #7472 90C15 (90C30)
- Solnceva, T. V.** (with Silaeva, E. A.) Some complements to the method of potentials and to the approximate methods of linear programming. (Russian) *Trudy Nauch. Ob"ed.*
- Prepodav. Fiz.-Mat. Fak. Ped. Inst. Dal'n. Vostok.* 9 (1968), 60-71. (J. Abram) 47 #4631 90C05
- Solnečnyĭ, È. M.** Conditions for achieving maximum in a feedback-controlled dynamical system. *Avtomat. i Telemekh.* 1973, no. 12, 18-26 (Russian); translated as *Automatic Remote Control* 34 (1973), no. 12, part 1, 1874-1882 (1974). (Author's summary) 58 #4538 93C99 (90C40)
- Invariant dynamic systems with degenerate subsystems and conditions for their crudeness. *Avtomat. i Telemekh.* 1975, no. 8, 14-21 (Russian. English summary); translated as *Automatic Remote Control* 36 (1975), no. 8, part 1, 1222-1228 (1976). (Kaczorek) 52 #16775 93C99
- Solvability conditions for the control system synthesis problem under special requirements on the transient responses. *Avtomat. i Telemekh.* 1975, no. 12, 35 (Russian. English summary); translated as *Automatic Remote Control* 36 (1975), no. 12, part 1, 1958-1972 (1976). (Author's summary) 56 #11289 93C99
- The theorems of Fatou and Lebesgue for sequences and systems of finite subseries on lattices. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 10(173), 74-76. (Przemysław Kranz) 56 #577 28A60 (06A10)
- Solnik, Bruno H.** An equilibrium model of the international capital market. *J. Econ. Theory* 8 (1974), no. 4, 500-524. (Wolfgang Mayer) 58 #4247 90A15
- Solntseff, N.** (with Yezerski, A.) A survey of extensible programming languages. *Automatic Programming* 7 (1974), no. 5, 267-307. (Authors' summary) 56 #1782 68A05
- Solntsev, S. V.** See Solncev, S. V.
- Solodov, A. A.** On external fields of collapsed bodies. (Russian. English summary) *Teor. Mat. Fiz.* 24 (1975), no. 1, 136-140. (Author's summary) 58 #9046 83.35 (81C35)
- Solodov, A. V.** (with Petrov, F. S.) ★Линейные автоматические системы с переменными параметрами. (Russian) [Linear automatic systems with variable parameters] *Izv. Vysš. Učebn. Zaved. Matematika* 1971, 620 pp. (V. N. Igolkin) 48 #1751 93C05
- Solodov, V. M.** A search algorithm for a simple cycle of bounded length with maximum weight. (Russian) *The programmed method of control*, No. 2, Some software questions in programmed control (Russian), pp. 57-62, 101. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1973. (E. Ja. Gabovici) 48 #13242 90B99 (94A20)
- Solodovnik, M. D.** (with Vorovič, I. I.) The problem of the bending of a circular plate that lies in an elastic half-space. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* 1974, no. 4, 26-30, 136. 54 #11923 73.45
- Solodovnikov, A. S.** The global structure of semireducible analytic Riemannian spaces. (Russian) *Trudy Sem. Vektor. Tenzor. Anal.* 15 (1970), 79-118. (I. Vaisman) 45 #53C20
- A certain class of complete analytic pseudo-Riemannian spaces of index 1. (Russian) *Trudy Sem. Vektor. Tenzor. Anal.* 16 (1972), 3-13. (W. Waliszewski) 48 #2955 53C50
- (with Kantor, I. L.) ★Гиперкомплексные числа. (Russian) [Hypercomplex numbers] *Izdat. "Nauka", Moscow*, 1973. 144 pp. (M. Slater) 50 #371 16-01
- Pseudo-Riemannian analytic spaces with poles. (Russian) *Dokl. Akad. Nauk SSSR* 212 (1973), 53-56. (A. Švec) 51 #4089 53B30
- (with Jaglom, I. M.; Trahtenbrot, B. A.; Ventcel', È. S.) ★Nouvelles orientations des mathématiques. Traduit du russe par O. Smirnov. Initiation aux Mathématiques. *Editions Mir, Moscow*, 1975. 408 pp. (Editors) 56 #8252 00A05
- (with Kamyšanskii, N. R.) Poles of pseudo-Riemannian spaces. (Russian) *Dokl. Akad. Nauk SSSR* 222 (1975), no. 1, 47-50. (M. Kucharszewski) 52 #4204 53C50
- (with Kamyšanskii, N. R.) Poles of pseudo-Riemannian spaces. (Russian) *Dokl. Akad. Nauk SSSR Ser. Mat.* 39 (1975), no. 5, 1093-1129, 1219-1220. (A. Švec) 53 #6472 53C50
- ★Системы линейных неравенств. (Russian) [Systems of linear inequalities] Second edition, revised and supplemented. Популярные Лекции по Математике, 48 [Popular Lectures in Mathematics, No. 48] *Izdat. "Nauka", Moscow*, 1977. 111 pp. (Publisher's description) 58 #25970 90C05 (90C25)
- (with Kantor, I. L.) ★Hyperkomplexe Zahlen. Übersetzt aus dem Russischen von W. Hintzsche. Mathematische Schülerbücherei, No. 95. *BSB B. G. Teubner Verlagsgesellschaft, Leipzig*, 1978. 156 pp. (A. O. Morris) 58 #5773 16A40 (30A05)
- (with Kamyšanskii, N. R.) Pseudo-Riemannian spaces with poles (multidimensional case). (Russian) *Trudy Sem. Vektor. Tenzor. Anal.* 18 (1978), 300-320. (V. G. Kuznetsov) 58 #18302 53C50
- Solodovnikov, I. E.** The generalized Gellerstedt problem for a certain particular case of the equation $K(y)u_{xx} + u_y = 0$. (Russian) *Trudy Sem. Kraev. Zadacham No. 10* (1974), 130-139. (T. Kalmenov) 50 #5209 35M05
- A problem of Tricomi type for the equation $\operatorname{sgn} |y| u_{xx} + u_y = 0$. (Russian) *Trudy Sem. Kraev. Zadacham Vyp.* 11 (1974), 165-170. (S. A. Tersenov) 58 #29399 35M05
- A generalization of the glueing conditions for a boundary value problem of Tricomi type. (Russian) *Differentsial'nye Uravneniya (Rjazan')* No. 10 (1977), 162-164. (V. Komkov) 58 #11986 35M05
- Solodovnikov, V. N.** Solution of problems on the stability and equilibrium of shells of revolution by the finite-difference method. (Russian) *Dinamika Splošn. Sredy Vysš. Učebn. Zaved. Tela* (1976), 102-112, 164. (From the author's text) 56 #17373.65
- Solodovnikov, V. V.** (with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. A.; Šaripov, D. S.; Šatalov, A. S.; Teodorčik, K. F.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 1: Математическое описание, анализ устойчивости и качества систем автоматического регулирования. (Russian) [Theory of automatic control. Book 1: Mathematical description, analysis of stability and quality of automatic control systems] Edited by V. V. Solodovnikov. *Izdat. "Mašinstroenie", Moscow*, 1968. 768 pp. (Editors) 50 #6557 93-02
- (with Dmitriev, A. N.; Krug, G. K.; Kuzin, L. T.; Kurakin, K. I.; Kuhtenk, I.; Matveev, P. S.; Mihailov, F. A.; Petrov, B. N.; Sinicyn, A. S.; Topčeev, Ju. I.; Ulanov, G. M.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 2: Анализ и синтез линейных непрерывных и дискретных систем автоматического регулирования. (Russian) [Theory of automatic guidance. Book 2: Analysis and synthesis of continuous and discrete automatic guidance systems] Edited by V. V. Solodovnikov. *Izdat. "Mašinstroenie", Moscow*, 1967. 679 pp. (RŽKibernet 1968)

589) 50 #6559 93-02

(with Batkov, A. M.; Borodin, Ju. I.; Gol'dfarb, L. S.; Ioannesian, A. B.; Krinečii, I. I.; Letov, A. M.; Petrov, V. V.; Popov, E. P.; Semenov, V. V.; Topčeev, Ju. I.; Ulanov, G. M.; Šatalov, A. S.) ★Техническая кибернетика. Теория автоматического регулирования. Книга 3: Теория нестационарных, нелинейных и само-настраивающихся систем автоматического регулирования. Часть 1. (Russian) Engineering cybernetics. Theory of automatic control. Vol. 3: Theory of nonstationary, nonlinear and selfadjusting systems of automatic control. Part 1] Edited by V. V. Solodovnikov. Izdat. "Mašinstroenie", Moscow, 1969. 607 pp. (Editors) 45 #9726 93-02

(with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šaripov, D. S.; Šatalov, A. S.; Teodorčik, K. F.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. S.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. Band 1: Stetige lineare Systeme. Gesamtedaktion der Originalausgabe von W. W. Solodownikov. Aus dem Russischen übersetzt von Klaus Bienen, Klaus Franke, Manfred Krauß, Helmut Otto, Edmund Suschke und Bernd Weber. Deutsche Bearbeitung unter Manfred Peschel. VEB Verlag Technik, Berlin, 1971. 744 pp. (3 foldouts) (W. Oppelt (Zbl 229 #93002)) 0 #6558 93-02

(with Dmitriev, A. N.; Krug, G. K.; Kuzin, L. T.; Kurakin, K. I.; Kuhtenko, O.; Matveev, P. S.; Mihaïlov, F. A.; Petrov, B. N.; Sinicyn, A. S.; Topčeev, Ju. I.; Ulanov, G. M.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. Band 2: Analyse und Synthese linearer Systeme. Gesamtedaktion der Originalausgabe von W. W. Solodownikov. Aus dem Russischen übersetzt von Klaus Franke, Ludmilla Heckendorff, Volker Langguth, Werner Otto Mertins und Uwe Riedel. Deutsche Bearbeitung unter Manfred Peschel. VEB Verlag Technik, Berlin, 1971. 620 pp. (1 foldout) (RŽKibernet 1968 #10 GTK) 50 #6560 93-02

(with Lenskii, V. L.) Wellposedness, regularization and the minimal complexity principle in the statistical dynamics of automatic control systems. (Russian) Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics Tbilisi, 1968, Vol. 2: Theory of automatic control (Russian), pp. 160-170, 477. Izdat. Nauka", Moscow, 1972. (Authors' summary) 53 #15489 93C99 (65-XX)

(with Birjukov, V. F.) Optimization of multivariate stochastic systems, and the problem of the stability of the solutions. (Russian. English summary) Stability of stochastic dynamical systems (Proc. Internat. Sympos., Univ. Warwick, Coventry, 1972), pp. 325-332. Lecture Notes in Math., Vol. 294, Springer, Berlin, 1972. (V. N. Igolkin) 43 #12727 93E20

(with Matveev, P. S.) ★Расчет оптимальных систем автоматического управления при наличии помех. (Russian) [Calculation of optimal automatic control systems in the presence of noise] "Mašinstroenie", Moscow, 1973. 240 pp. (S. P. Bingulac) 50 #4030 93Cxx

(with Birjukov, V. F.) The complexity principle and the method of regularization in stochastic problems of the synthesis of optimal systems of automatic control. (Russian) Dokl. Akad. Nauk SSSR 208 (1973), 573-575. (Bojan Popović) 47 #10121 93E20

(with Artemenko, A. I.) An application of the principle of complexity to the regularization of ill-posed extremal problems. (Russian) Dokl. Akad. Nauk SSSR 208 (1973), 791-793. (V. Komkov) 47 #9305 46N05

(with Birjukov, V. F.) Synthesis of statistically optimal automatic control systems. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1973, no. 5, 171-177 (Russian); translated as Engrg. Cybernetics 11 (1973), no. 5, 862-868. (H. J. Kushner) 50 #16058 93E20

(with Filimonov, A. B.; Filimonov, N. B.) Reducing linear integrodifferential equations to Fredholm integral equations of the second kind in optimal synthesis problems. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1976, no. 1, 167-173 (Russian); translated as Engrg. Cybernetics 14 (1976), no. 1, 126-133 (1977). (Authors' summary) 58 #6993 45K05 (45B05, 93E15)

(with Birjukov, V. F.; Tumakin, V. I.) ★Принцип сложности в теории управления. (Russian) [The complexity principle in control theory] О проектировании технически оптимальных систем и проблеме корректности. [Designing technically optimal systems and the problem of correctness] Izdat. "Nauka", Moscow, 1977. 341 pp. (Vadim Komkov) 58 #15498 93C99

(with Reutov, V. F.) Methods for the approximate solution of some classes of linear integral equations that occur in control theory. (Russian) Differentsial'nye Uravnenija 13 (1977), no. 8, 1487-1492, 1541. (Š. Schwabik) 57 #8101 65R05 (93C22)

See also Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics, 47 #4666 (EA 47) and Control in space, 48 #13320

downnikov, A. S. See Solodovnikov, A. S.

downnikov, W. V. See Solodovnikov, V. V.

duhin, Ju. N. A concept of function-analogue and a criterion for functional incompleteness of systems of many-valued logic. (Russian) Studies in systems of logic (dedicated to the memory of S. A. Janovskaja) (Russian), pp. 271-281. Izdat. "Nauka", Moscow, 1970. (G. Bär) 47 #6438 02C05

duhin, V. A. (with Kryžanovskii, G. A.) On a linear programming problem. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1972, no. 4, 30-32 (Russian); translated as Engrg. Cybernetics 10 (1972), no. 4, 587-590. (M. Yamasaki) 48 #10493 90C05

gub, V. G. The solution of a certain integral equation of convolution type with finite limits of integration. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 11 (1971), 837-854. (F. Smithies) 45 #832 45E10

Short wave asymptotic behavior of the solution of the problem of diffraction on a circular disc. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 12 (1972), 388-412. (A. Nikodémusz) 47 #7231 35L05 (76.35, 78.35)

Diffraction of a plane wave by a grating of parallel strips in the case of short wavelengths. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 12 (1972), 974-989, 1085-1086. (J. E. Rosenthal) 48 #3372 78.45

(with Šestopalov, V. P.; Litvinenko, L. M.; Masalov, S. C.) ★Дифракция волн на решетках. (Russian) [Diffraction of waves by gratings] Izdat. Har'kov. Univ., Kharkov, 1973. 287 pp. (J. E. Rosenthal) 49 #4439 78.35

(with Bražnikova, L. N.) Method for the investigation of diffraction by a circular disk. Akust. Ž. 19 (1973), 280-283 (Russian); translated as Soviet Physics Acoust. 19 (1973), 183-184. 53 #12190 76.35

(with Borzenkov, A. V.) A certain method for the numerical study of the problem of

diffraction by a band. (Russian) Vestnik Har'kov. Gos. Univ. No. 113 Mat. i Meh. Vyp. 39 (1974) 73-84, 123. (Authors' introduction) 58 #8826 78.65 (65R05)

A certain method of investigating the problem of diffraction by a finite number of bands that are situated in one plane. (Ukrainian. English and Russian summaries) Dopovid Akad. Nauk Ukrain. RSR Ser. A 1975, no. 6, 549-552, 573. (Alexander Alenicyyn) 52 #4827 78.65

(with Veliev, Ė. I.; Šestopalov, V. P.) Diffraction of a plane H-polarized electromagnetic wave by a grid of circular cylinders with longitudinal slits. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1976, no. 3, 243-248, 288. (Yu. S. Sayasov) 54 #4352 78.45

Sologub, V. S. Periods and the basic trends in the development of the theory of equations of elliptic type in the 18th and 19th centuries. (Ukrainian) Narisi Īstor. Prirodovnaz. i Tehn. No. 13 (1971), 51-56, 125. (N. Flašer (RŽMat 1971 #11 A17)) 58 #27046 01A55

Boundary value problems of the theory of heat conduction in the works of Poincaré. (Ukrainian) Narisi Īstor. Prirodovnaz. i Tehn. Vyp. 14 (1971), 27-32, 102. (Editors) 57 #12079 01A55

Development of the theory of the differential equation $\Delta u + p(x, y)u = 0$ in the second half of the nineteenth century. (Ukrainian) Narisi Īstor. Prirodovnaz. i Tehn. Vyp. 17 (1972), 23-32. (Editors) 57 #12080 01A55

(with Mitropol'skii, Ju. O.; Štokalo, Ī. Z.; Bogoljubov, O. M.; Lučka, A. Ju.)

Obituary: Jurii Dmitriovič Sokolov. (Ukrainian) Narisi Īstor. Prirodovnaz. i Tehn. Vyp. 17 (1972), 86-88. (Editors) 57 #12129 01A70

(with Štokalo, Ī. Z.; Bogoljubov, O. M.) Obituary: Īosip Benediktovič Pogrebys'kii. (Ukrainian) Narisi Īstor. Prirodovnaz. i Tehn. Vyp. 17 (1972), 89-90. (Editors)

57 #12134 01A70

Development of the theory of the differential equations $\Delta u - k^2 u = 0$ and $\Delta u = ke^u$

($k > 0$) in the second half of the nineteenth century. (Ukrainian) Narisi Īstor. Prirodovnaz. i Tehn. Vyp. 19 (1974), 16-26, 134. (Editors) 58 #21237 01A55

★Развитие теории эллиптических уравнений в XVIII и XIX столетиях.

(Russian) [The development of the theory of elliptic equations in the eighteenth and nineteenth centuries] Izdat. "Naukova Dumka", Kiev, 1975. 280 pp. (I. Grattan-Guinness) 58 #27047 01A55 (35-03)

From the history of the boundary value problems of the theory of heat conduction

in the first half of the nineteenth century. (Ukrainian. Russian summary) Narisi Īstor. Prirodovnaz. i Tehn. Vyp. 22 (1976), 8-20, 108. (Editors) 58 #10116 01A55

(with Demčičin, A. Ī.) V. A. Steklov's studies in the theory of boundary value

problems for ordinary differential equations. (Ukrainian. Russian summary) Narisi Īstor. Prirodovnaz. i Tehn. No. 23 (1977), 21-31, 117. (Editors) 58 #21253 01A60

(with Bogoljubov, O. M.; Matveeva, L. V.; Tepljakova, A. S.) Īosip Zaharovič

Štokalo (on the occasion of his eightieth birthday). (Ukrainian) Narisi Īstor. Prirodovnaz. i Tehn. No. 23 (1977), 109-111. (Editors) 58 #21291 01A70

See also History of mathematical education in the USSR, 52 #13176

Šolohov, E. I. (with Izrailevič, Ja. A.) A simplex method for minimizing a function of

several variables. (Russian) Vopr. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU

Vyp. 19 (1975), 76-83. (J. Abrahm) 57 #5109 90C30

Šolohovič, F. A. Linear dynamical systems with control. (Russian) Differentsial'nye

Uravnenija 8 (1972), 300-308. (H. O. Fattorini) 46 #481 34H05 (93B05)

(with Pribavkina, N. L.) Dimension of the trajectories in a linear dynamical system.

Izv. Vysš. Učebn. Zaved. Matematika 1972, no. 2(117), 95-103. (Leo F. Boron)

45 #7231 34G05

(with Nefedov, S. A.) Concerning conditions for ϵ -controllability in Banach spaces.

(Russian) Ural. Gos. Univ. Mat. Zap. 9, no. 2, 82-88, 144 (1975). (W. W. Breckner)

54 #3558 49E15

(with Nefedov, S. A.) A criterion for ϵ -controllability of a linear system. (Russian)

Differentsial'nye Uravnenija 12 (1976), no. 4, 653-657, 772-773. (L. Mikołajczyk)

56 #3727 49E15

Šolohovič, V. F. The approximate solution of unstable extremal problems. (Russian) Izv.

Vysš. Učebn. Zaved. Matematika 1971, no. 5(108), 101-108. (B. T. Poljak) 47 #2469

49D30 (46N05, 65J05)

A certain method of numerical solution of unstable extremal problems. (Russian)

Izv. Vysš. Učebn. Zaved. Matematika 1972, no. 6(121), 92-100. (B. T. Poljak) 47 #2470

49D30 (46N05, 65J05)

Nonstable extremal problems, and the geometric properties of the unit sphere in a

Banach space. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1972, no. 7(122),

113-118. (W. W. Breckner) 47 #3952 46B05 (41A65, 49B99)

The numerical solution of unstable extremal problems. (Russian) Izv. Vysš. Učebn.

Zaved. Matematika 1972, no. 8(123), 105-113. (B. T. Poljak) 47 #9306 46N05

(49D30, 65J05)

The regularization of unstable extremal problems in locally convex spaces. (Russian)

Izv. Vysš. Učebn. Zaved. Matematika 1976, no. 10(173), 120-123. (H. Benker (Zbl 355

#49009)) 58 #7085 46G99 (49D99)

Solomaha, G. I. (with Zapletin, P. P.; Maksimov, V. K.) A statistical analysis of ways to

increase the reliability of an automatic assembly line. (Russian) Proceedings of a

Seminar of the Departments of Theoretical Mechanics and Higher Mathematics, No. 1

(Russian), pp. 125-145. Džambul. Tehn. Inst. Legkoj i Piščevoj Promyšl., Alma-Ata, 1971.

(Z. Khalil) 50 #15888 90B25

Soloman, H. See Matthews, G. V. T., 54 #11536 and Kendall, David G., 54 #11537

Solombrino, Luigi (with Ascoli, Renato; Garola, Claudio; Teppati, Giancarlo) Vector

spaces over fields with a conjugation and linear-antilinear commutants. (Italian

summary) Rend. Mat. (6) 10 (1977), no. 1, 129-148. (Marvin Marcus) 57 #6055

15A27

Solomencev, E. D. See Lohwater, A. J., 53 #3311 and Antosik, Piotr; et al., 54 #924

Solomešč, Ī. A. An extension of quadratic forms and its application to certain elliptic

differential operators. (Russian) Baškir. Gos. Univ. Učen. Zap. No. 31 (1968), Ser. Mat.

no. 3, 338-341. (R. Výborný) 46 #5833 35J99 (15A63)

(with Gol'dštejn, Ju. B.; Solomešč, M. A.) Extremals of a nonlocal functional.

(Russian) Petrozavodsk. Gos. Univ. Učen. Zap. 18 (1970), no. 2 Voprosy Mat. Meh.,

105-110 (1971). (See RŽMat 1972 #6 B493) 49B99

Solomešč, M. A. (with Gol'dštejn, Ju. B.) Variational problems for nonlocal functionals.

- (Russian) *Petrozavodsk. Gos. Univ. Učen. Zap.* **18** (1970), no. 2 *Voprosy Mat. Meh.*, 101-104 (1971). (See RŽMat **1972** #6 B495) 49G99
(with Gol'dšteĭn, Ju. B.; Solomešĭ, I. A.) Extremals of a nonlocal functional. (Russian) *Petrozavodsk. Gos. Univ. Učen. Zap.* **18** (1970), no. 2 *Voprosy Mat. Meh.*, 105-110 (1971). (See RŽMat **1972** #6 B493) 49B99
- Solomin, Jorge E.** Le résidu logarithmique dans les intersections non complètes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 17, A1061-A1064. (P. Lelong) **56** #663 32C30 (32B15)
- Solomin, V. M.** Information in scientific creativity (the example of the mathematical discoveries of Ramanujan). (Russian. English summary) *Naučn.-Tehn. Informacija (VINITI) Ser. 2. Informacionnye Processy i Sistemy* **1974**, no. 10, 9-12, 39. (A. A. Mullin) **58** #4913 01A60 (10A10, 94A05)
- Solomjak, M. Z.** Double operator integrals in the ring \hat{R} . (Russian) *Problems of mathematical physics*, No. 3: *Spectral theory* (Russian), pp. 88-102. *Izdat. Leningrad. Univ., Leningrad*, 1968. (Edward Azoff) **50** #2976 47B15 (46G10)
(with Sten'kin, V. V.) A certain class of multiple operator Stieltjes integrals. (Russian) *Problems of Math. Anal.*, No. 2: *Linear Operators and Operator Equations* (Russian), pp. 122-134. *Izdat. Leningrad. Univ., Leningrad*, 1969. (Editors) **55** #11080 47A60
(with Kruglov, A. A.) Interpolation of operators in the spaces V_p . (Russian. English summary) *Vestnik Leningrad. Univ.* **1971**, no. 13, 54-60. (S. D. Riemenschneider) **45** #2464 46E35 (28A25)
(with Birman, M. Š.) Spectral asymptotic behavior of nonsmooth elliptic operators. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 267-270. (Ja. A. Roitberg) **46** #4278 47F05 (35P20)
(with Vuliš, I. L.) Spectral asymptotic behavior of degenerate elliptic operators. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 262-265. (H. Triebel) **47** #2205 35P20
(with Macaev, V. I.) Existence conditions for the Stieltjes integral. (Russian) *Mat. Sb. (N.S.)* **88(130)** (1972), 522-535. (Editors) **58** #22437 26A42 (46E35)
(with Birman, M. Š.) Spectral asymptotics of nonsmooth elliptic operators. I, II. (Russian) *Trudy Moskov. Mat. Obšč.* **27** (1972), 3-52; *ibid.* **28** (1973), 3-34. (Ja. A. Roitberg) **51** #1152 35P20 (47F05)
(with Babič, V. M.; Birman, M. Š.; Smirnov, V. I.; Ural'ceva, N. N.) O'l'ga Aleksandrovna Ladyženskaja (on her fiftieth birthday). (Russian) *Vestnik Leningrad. Univ.* **1972**, no. 7, 159-160. (Editors) **45** #6560 01A70 (35-03, 65L10, 76.35)
(with Birman, M. Š.) Remarks on the spectral shift function. (Russian) Boundary value problems of mathematical physics and related questions in the theory of functions, 6. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **27** (1972), 33-46. (J. R. Schulenberger) **47** #4031 47A40 (47A55)
(with Birman, M. Š.) Double Stieltjes operator integrals. III. (Russian) *Problems of mathematical physics*, No. 6 (Russian), pp. 27-53. *Izdat. Leningrad. Univ., Leningrad*, 1973. (J. R. Schulenberger) **50** #992 46G10 (47B15)
(with Birman, M. Š.) Equivalent renormings of W_p^r classes in the case of partitioning of the domain. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 3(130), 19-27. (A. Kufner) **49** #9614 46E35
(with Vuliš, I. L.) Spectral asymptotic analysis of the degenerate Steklov problem. (Russian. English summary) *Vestnik Leningrad. Univ.* No. 19 *Mat. Meh. Astronom. Vyp.* **4** (1973), 148-150, 156. (V. Rosa) **48** #9132 35P20
(with Birman, M. Š.) Quantitative analysis in Sobolev's imbedding theorems and applications to spectral theory. (Russian) *Tenth Mathematical School (Summer School, Kaciveli/Nalchik, 1972)* (Russian), pp. 5-189. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (P. Szeptycki) **58** #2224 46E35 (35P99)
(with Vuliš, I. L.) Spectral asymptotic analysis for degenerate second order elliptic operators. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **38** (1974), 1362-1392. (H. Triebel) **50** #10546 35J70 (35P20)
(with Birman, M. Š.; Koplienko, L. S.) Estimates of the spectrum of a difference of fractional powers of selfadjoint operators. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 3(154), 3-10. (Edward Azoff) **52** #6458 47A10 (47B05)
(with Birman, M. Š.) A certain "model" nonelliptic spectral problem. (Russian. English summary) Collection of articles dedicated to the memory of Academician V. I. Smirnov. *Vestnik Leningrad. Univ.* **1975**, no. 1 *Mat. Meh. Astronom. vyp.* **1**, 39-45, 189. (H. Triebel) **50** #1049 35P20
(with Birman, M. Š.) Asymptotic properties of the spectrum of differential equations. (Russian) *Mathematical analysis*, Vol. 14 (Russian), pp. 5-58, i. (loose errata) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1977. (H. Triebel) **57** #6892 35P20 (35-02)
(with Birman, M. Š.) Estimates for the singular numbers of integral operators. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 1(193), 17-84, 271. (M. F. Timan) **55** #11104 47G05 (47B10)
(with Birman, M. Š.) Asymptotic behavior of the spectrum of pseudodifferential operators with anisotropically homogeneous symbols. (Russian. English summary) *Vestnik Leningrad. Univ.* **1977**, no. 13 *Mat. Meh. Astronom. vyp.* **3**, 13-21, 169. (A. I. Atanasov) **57** #3680 35S05
- See also **Linear operators and operator equations**, **49** #4718; **Spectral theory**, **49** #10505; **Transactions of the Moscow Mathematical Society**, **50** #9478;
Transactions of the Moscow Mathematical Society, **50** #9479 and **Boundary value problems of mathematical physics and related questions in the theory of functions**, **52** #8620
- Solomjak, T. B.** An application of the theory of degenerate equations to inverse problems for subsonic flows of a compressible fluid. (Russian) *Proceedings of a Conference on Boundary Value Problems (Kazan, 1969)* (Russian), pp. 238-243. *Izdat. Kazan. Univ., Kazan*, 1970. (Simona Popp) **51** #4845 76.35
Methods of solution of certain filtration problems. (Russian) *Differencial'nye Uravnenija* **10** (1974), 721-729, 767. (Hans Kaper) **50** #13925 35Q99 (76.46)
Differential properties of the solutions of vortex problems for a compressible fluid. (Russian) *Problems of mathematical analysis*, No. 5: *Linear and nonlinear differential equations, Differential operators* (Russian), pp. 166-179. *Izdat. Leningrad. Univ., Leningrad*, 1975. (E. Ungureanu-David) **54** #1851 76.35
Properties of subsonic vortex flows at points of zero and critical velocities. (Russian)
- Problems in mathematical analysis*, No. 6: *Spectral theory, boundary value problems* (Russian), pp. 158-172, 204. *Izdat. Leningrad. Univ., Leningrad*, 1977. (Author's summary) **58** #19745 76.35
- Solomka, O. P.** A theorem on the boundary properties of a certain class of functions are analytic in a plane with a slit. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 818-823. Tanaka) **45** #557 30-XX
- Solomon, A. I.** (with Lurić, D.) Chiral symmetry and the Goldstone theorem. *Lett. Nuovo Cimento* **3** (1970), 354-356. (Y. Kato) **45** #6296 81.22
Three novel applications of Lie algebras. *Group theoretical methods in physics (Proc. Third Internat. Colloq., Centre Phys. Theor., Marseille, 1974)*, Vol. 1, pp. 318-327. *Centre Nat. Recherche Sci., Centre Phys. Theor., Marseille*, 1974. (J. S. Joel) **58** #2006 82.17
(with Critchley, R. H.) A variational approach to superfluidity. *J. Statist. Phys.* (1976), no. 4, 381-393. (Nicolae Angelescu) **54** #4477 82.49
(with Montgomery, W.) Generalized XY model. *J. Phys. A* **11** (1978), no. 1633-1644. (From the introduction) **58** #20066 82.22
- Solomon, Alan D.** On variational approaches to steady state heat conduction. *J. Eng. Math.* **5** (1971), no. 1, 33-37. (Author's summary) **53** #2150 80.49
Some variational aspects of an automatic control problem. *J. Optimization Theory Appl.* **10** (1972), 337-343. (Author's summary) **56** #11244 93C15
On parameter dependence of the solution to an extremal problem. *J. Optimization Theory Appl.* **17** (1975), no. 1-2, 163-168. (M. J. Davies) **52** #4069 49A50
The applicability and extendability of Megerlin's method for solving parabolic boundary problems. *Moving boundary problems (Proc. Sympos. and Workshop, Gatlinburg, Tenn., 1977)*, pp. 187-202. *Academic Press, New York*, 1978. (F. M. Pass) **58** #3559 65N99
See also **Rubinstein, L. I.**, **50** #3837 and **Moving boundary problems**, **57** #676
- Solomon, Arthur** (with Humke, Paul D.) Transfinite separation axioms in topological spaces. *Kyungpook Math. J.* **17** (1977), no. 1, 71-77. (Mary Powderly) **58** #2418 54D15
- Solomon, C. E.** (with Hall, G. G.) Orbital equations for the transcorrelated wavefunction. *Chem. Phys. Lett.* **4** (1969/70), 352-354. (E. Zeidler) **48** #10372 81.47
- Solomon, Daniel L.** A-minimax estimation of a multivariate location parameter. *J. Amer. Statist. Assoc.* **67** (1972), 641-646. (Pi-Erh Lin) **52** #6940 62C99 (62F15)
A-minimax estimation of a scale parameter. *J. Amer. Statist. Assoc.* **67** (1972), 647-649. (Pi-Erh Lin) **52** #6941 62C99 (62F15)
(with Davidson, Roger R.) A Bayesian approach to paired comparison experimentation. *Biometrika* **60** (1973), 477-487. (D. V. Lindley) **49** #6474 62J15
(with Pollock, K. H.; Robson, D. S.) Tests for mortality and recruitment in a K-sample tag-recapture experiment. *Biometrics* **30** (1974), 77-87. (P. K. Sen) **51** #962D05
(with Davidson, Roger R.) Moment-type estimation in the exponential family. *Comm. Statist.* **3** (1974), 1101-1108. (Lai K. Chan) **54** #11631 62F10
A note on the non-equivalence of the Neyman-Pearson and generalized likelihood ratio tests for testing a simple null versus a simple alternative hypothesis. *Amer. Statist.* **29** (1975), 101-102. (Madanlal T. Wasan) **51** #9311 62F05
(with Baskerville, J. C.) Bayes two-decision procedures for two-sample problems and rank-order data. (French summary) *Canad. J. Statist.* **3** (1975), no. 2, 187-201. (K. Katti) **54** #8940 62C25 (62G10)
- See also **Mathematical models in biological discovery**, **56** #11076
- Solomon, Fred** Random walks in a random environment. *Ann. Probability* **3** (1975), 1-15. (V. K. Rohatgi) **50** #14943 60J15
- Solomon, G.** A note on alphabet codes and fields of computation. *Information and Control* **25** (1974), 395-398. (Ian Blake) **53** #7603 94A10
See also **Algebraic coding theory: history and development**, **51** #9958 and **Key papers in the development of coding theory**, **52** #5176
- Solomon, Herbert** (with Wang, Peter C. C.) Nonhomogeneous Poisson fields of random lines with applications to traffic flow. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. III: *Probability theory*, pp. 383-400. *Univ. California Press, Berkeley, Calif.*, 1971. (Mark Brown) **54** #3884 60K30
(with Rizvi, M. Haseeb) Selection of largest multiple correlation coefficients: asymptotic case. *J. Amer. Statist. Assoc.* **68** (1973), 184-188; corrigendum, *ibid.* (1974), 288. (S. Panchapakesan) **52** #1992 62F07
(with Brown, Mark) Optimal issuing policies under stochastic field lives. *J. Amer. Probability* **10** (1973), 761-768. (John C. Gittins) **51** #2629 90B35
(with Brown, Mark) Some results for secondary processes generated by a Poisson process. *Stochastic Processes Appl.* **2** (1974), no. 4, 337-348. (Jan Grandell) **52** #19360K99
A highway traffic model. *Perspectives in probability and statistics*, pp. 303-317. *Applied Probability Trust, Univ. Sheffield, Sheffield*, 1975. (Author's summary) **55** #960K99 (90B20)
(with Zacks, Shelemyahu) Lower confidence limits for the impact probability with a circle in the normal case. *Naval Res. Logist. Quart.* **22** (1975), 19-30. (S. J. Janssen) **52** #6989 62F25
(with Brown, Mark) A second-order approximation for the variance of a renewal reward process. *Stochastic Processes Appl.* **3** (1975), no. 3, 301-314. (Richard F. Serfo) **53** #6777 60K05
(with Alam, Khurshed; Rizvi, M. Haseeb) Selection of largest multiple correlation coefficients: exact sample size case. *Ann. Statist.* **4** (1976), no. 3, 614-620. (Yung-Tong) **54** #1448 62F07
(with Brown, Mark; Stephens, M. A.) Estimation of parameters of zero-one processes by interval sampling. *Operations Res.* **25** (1977), no. 3, 493-505. (Jacqueline Janssen) **56** #1637 62M99
- ★Geometric probability. Ten lectures given at the University of Nevada, Vegas, Nev., June 9-13, 1975. Conference Board of the Mathematical Sciences—Regional Conference Series in Applied Mathematics, No. 28. *Society for Industrial and Applied Mathematics, Philadelphia, Pa.*, 1978. (L. A. Santaló) **58** #77760D05 (53C65)

- omon, J. L. (with Guseman, L. F., Jr.) Subsequential limit points of successive approximations. *Proc. Amer. Math. Soc.* **34** (1972), 573-577. (J. W. Neuberger) **45** #7692 54H20 (34C35)
- A note on the extension of contractive mappings. *Proc. Amer. Math. Soc.* **40** (1973), 319-322. (W. A. Kirk) **48** #1145 54C20 (54H25)
- (with Peters, B. Charles, Jr.) A note on optimum linear feature extraction for Gaussian populations with equal covariances and equal a priori probabilities. Special issue on remote sensing. *Comm. Statist.-Theory Methods* **A5** (1976), no. 12, 1137-1141. (Authors' summary) **55** #1633 62H30
- A note on attractors for compact sets. *Proc. Amer. Math. Soc.* **65** (1977), no. 2, 293-296. (Author's summary) **58** #30584 47H99 (54H25)
- (with Janos, Ludvik) Even continuity and the Banach contraction principle. *Proc. Amer. Math. Soc.* **69** (1978), no. 1, 166-168. (Kok Keong Tan) **58** #18398 54H25
- (with Janos, Ludvik) A fixed point theorem and attractors. *Proc. Amer. Math. Soc.* **71** (1978), no. 2, 257-262. (S. Swaminathan) **58** #2772 54H25
- omon, Louis On the affine group over a finite field. *Representation theory of finite groups and related topics (Proc. Sympos. Pure Math., Vol. XXI, Univ. Wisconsin, Madison, Wis., 1970)*, 145-147. *Amer. Math. Soc., Providence, R.I.*, 1971. (J. E. Humphreys) **47** #6834 20C20 (20G40)
- The affine group. I. Bruhat decomposition. *J. Algebra* **20** (1972), 512-539. (Donald S. Passman) **46** #5475 20H15
- (with Kilmoyer, Robert) On the theorem of Feit-Higman. *J. Combinatorial Theory Ser. A* **15** (1973), 310-322. (H. K. Farahat) **50** #9625 05B25 (20C99)
- Rational characters and permutation characters. *Symposia Mathematica, Vol. XIII (Convegno di Gruppi e loro Rappresentazioni, INDAM, Rome, 1972)*, pp. 453-466. *Academic Press, London*, 1974. (G. de B. Robinson) **50** #10041 20C15
- A Mackey formula in the group ring of a Coxeter group. *J. Algebra* **41** (1976), no. 2, 255-264. (Gerald O. Losey) **56** #3104 20C05
- Zeta functions and integral representation theory. *Advances in Math.* **26** (1977), no. 3, 306-326. (I. Reiner) **57** #286 12B35 (20C10)
- Partition identities and invariants of finite groups. *J. Combinatorial Theory Ser. A* **23** (1977), no. 2, 148-175. (R. Stanley) **56** #8677 20C05 (05A17)
- (with Orlik, Peter) Singularities. II. Automorphisms of forms. *Math. Ann.* **231** (1977/78), no. 3, 229-240. (Peter Gibling) **57** #16292b 14B05 (14B15, 32C40)
- (with Orlik, Peter) Singularities. I. Hypersurfaces with an isolated singularity. *Advances in Math.* **27** (1978), no. 3, 256-272. (Peter Gibling) **57** #16292a 14B05 (14B15, 32C40)
- See also Tits, Jacques, **56** #3105
- omon, R. C. A type of βN with κ_0 relative types. *Fund. Math.* **79** (1973), no. 3, 209-212. (N. H. Williams) **47** #8290 02J05
- A space of the form $N \cup (p)$ with no scattered compactification. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 9, 755-756. (M. Rajagopalan) **56** #6605 54D35
- A scattered space that is not zero-dimensional. *Bull. London Math. Soc.* **8** (1976), no. 3, 239-240. (Peter J. Nyikos) **56** #13183 54G20 (54E45)
- Families of sets and functions. *Czechoslovak Math. J.* **27(102)** (1977), no. 4, 556-559. (N. H. Williams) **56** #15429 04A20 (02K05)
- A Hausdorff compactification that is not regular Wallman. *General Topology and Appl.* **7** (1977), no. 1, 59-63. (Olav Njåstad) **55** #6366 54D35
- Scattered spaces and their compactifications. *General Topology and Appl.* **8** (1978), no. 3, 299-301. (Michael L. Wage) **57** #13857 54D35
- omon, Ronald M. Finite groups with Sylow 2-subgroups of type \mathfrak{A}_{12} . *J. Algebra* **24** (1973), 346-378. (Mark P. Hale, Jr.) **47** #324 20D20
- Finite groups with Sylow 2-subgroups of type $\Omega(7, q)$, $q \equiv \pm 3 \pmod{8}$. *J. Algebra* **28** (1974), 174-181. (Mark P. Hale, Jr.) **50** #10069 20D20
- Finite groups with Sylow 2-subgroups of type 3. *J. Algebra* **28** (1974), 182-198. (Mark P. Hale, Jr.) **49** #9077 20D20
- On defect groups and p -constraint. *J. Algebra* **31** (1974), 557-561. (I. M. Isaacs) **54** #10388 20C20
- (with Collins, Michael J.) The identification of finite groups of PSL(5, q)-type and PSU(5, q)-type. *Bull. London Math. Soc.* **7** (1975), 113-123. (M. E. Harris) **51** #8232 20G05
- Finite groups with intrinsic 2-components of type \hat{A}_n . *J. Algebra* **33** (1975), 498-522. (M. E. Harris) **51** #8251 20D99
- Finite groups of alternating type. *Proceedings of the Conference on Finite Groups (Univ. Utah, Park City, Utah, 1975)*, pp. 13-25. *Academic Press, New York*, 1976. (Koichiro Harada) **53** #5745 20D99
- (with Harris, Morton E.) Finite groups of PSL(2, q)-type. A report on current joint work with Ronald Solomon. *Proceedings of the Conference on Finite Groups (Univ. Utah, Park City, Utah, 1975)*, pp. 63-78. *Academic Press, New York*, 1976. (N. Ito) **54** #7608 20D05
- Maximal 2-components in finite groups. *Comm. Algebra* **4** (1976), no. 6, 561-594. (N. Ito) **54** #10404 20D25
- Divisibility properties of certain recurring sequences. *Fibonacci Quart.* **14** (1976), no. 2, 153-158. (Jau Shyong Shiue) **53** #5458 10A35
- (with O'Nan, Michael E.) Simple groups transitive on internal flags. *J. Algebra* **39** (1976), no. 2, 375-409. (David R. Mason) **53** #10895 20B10 (20D05)
- Standard components of alternating type. I. *J. Algebra* **41** (1976), no. 2, 496-514. (J. L. Alperin) **54** #10394 20D05
- (with Harris, Morton E.) Finite groups having an involution centralizer with a 2-component of dihedral type. I. *Illinois J. Math.* **21** (1977), no. 3, 575-620. (U. Schoenwaelder) **58** #873a 20D05
- Standard components of alternating type. II. *J. Algebra* **47** (1977), no. 1, 162-179. (J. L. Alperin) **56** #3115 20D05
- 2-signalizers in finite groups of alternating type. *Comm. Algebra* **6** (1978), no. 6, 529-549. (M. E. Harris) **57** #6183 20D05
- omon, Sender Sur certaines équations intégrales non-linéaires dans un espace topologique mesuré. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **17** (1971), 95-102. (H. Amann) **46** #7818 45G99
- Opérateur de Carathéodory sur un espace topologique mesuré. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 305-312 (1972). (P. M. Anselone) **48** #9315 45G99 (47G05)
- Remark on a note by Nurimov. (Romanian. French summary) *Stud. Cerc. Mat.* **25** (1973), 997-999. (Editors) **56** #6309 45E10
- Dépendance du domaine d'intégration de la solution d'une équation intégrale sur un espace topologique mesuré. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **20** (1974), 59-64. (J. A. Nohel) **51** #3820 45D05
- A theorem of existence and uniqueness for an integral equation in topological spaces. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **58** (1975), no. 6, 864-867. (I. Fenyő) **55** #8725 45N05
- On some integral equations in topological spaces. *Proceedings of the Institute of Mathematics Iași* (1974), pp. 169-172. *Editura Acad. R. S. R., Bucharest*, 1976. (Robert L. Wheeler) **56** #9200 45D05 (45N05)
- Solomon, Stephan-Ylan Algebraic linguistics and model theory. (Romanian. English summary) *Stud. Cerc. Mat.* **21** (1969), 1107-1134. (D. Vaida) **49** #11870 68A30
- Solomonoff, R. J. Complexity-based induction systems: comparisons and convergence theorems. *IEEE Trans. Inform. Theory* **24** (1978), no. 4, 422-432. (A. Paz) **58** #20912 94A30 (02F15, 68A20, 94A15)
- Solomonov, L. A. (with Mareev, I. V.; Strekalov, L. N.) A certain algorithm for the control of information gathering. (Russian) *Voprosy Kibernet. (Tashkent) Vyp.* **45** (1971), 113-119. **55** #2360 94A15
- (with Žgutow, G. O.) An application of Gomory's method for the computation of an optimal plan for unloading produce. (Russian) *Differencial'nye Uravneniya i Vyčisl. Mat. Vyp.* **6** (1976), part 1, 64-76, 174. (Authors' summary) **58** #9302 90C50 (90C30)
- Solomonov, S. L. See Problems of statistical optimization, **47** #6378 and Cybernetic methods in diagnostics, **48** #8018
- Solomov, L. A. The realization of complexity functions and of tests of complexity by disjunctive and conjunctive normal forms. (Russian) *Diskret. Analiz No. 14* (1969), 50-67. (G. Blohina (RŽMat 1970 #1 V335)) **45** #9820 94A20
- Information complexity of problems associated with minimal realization of Boolean functions by networks. *Dokl. Akad. Nauk SSSR* **200** (1971), 556-559 (Russian); translated as *Soviet Physics Dokl. Soviet Physics Dokl.* **16** (1971/72), 714-717. (G. Berman) **53** #12785 14A20
- The informational complexity of problems that are connected with the minimal realization of Boolean functions by schemes. Russian. Collection of articles dedicated to the memory of Eduard Ivanovič Nečiporuk. *Problemy Kibernet. No. 26* (1973), 207-256, 328. (R. Shirladze) **49** #10456 94A20
- A certain sequence of complexly realizable functions. (Russian) *Mat. Zametki* **17** (1975), no. 6, 957-966. (G. Wechsung) **52** #13340 02E15 (68A20)
- Solon, B. Ja. e -powers of hyperimminence retractable sets. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 1, 172-179, 239. (A. N. Dégtev) **57** #16018 02F25
- Solon, Peter The Six wings of Immanuel Bonfils and Michael Chrysokokkes. *Centaurus* **15** (1970/71), no. 1, 1-20. (H. W. Guggenheimer) **58** #26821 01A35
- Solonnikov, V. A. The Green's matrices for parabolic boundary value problems. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **14** (1969), 256-287. (J. Vencko) **45** #5587 35K20
- Overdetermined elliptic boundary value problems. (Russian) *Dokl. Akad. Nauk SSSR* **199** (1971), 279-281. (M. Zerner) **45** #713 35N10
- The Green's matrices for elliptic boundary value problems. II. (Russian) Boundary value problems of mathematical physics, *7. Trudy Mat. Inst. Steklov.* **116** (1971), 181-216, 237. (A. Borzyskowski) **51** #1108 35J40
- Operators that admit a regularization. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **21** (1971), 159-163. (S. Rolewicz) **45** #924 47A99
- Certain inequalities for functions from the classes $\tilde{W}_p(R^n)$. (Russian) Boundary value problems of mathematical physics and related questions in the theory of functions. *6. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **27** (1972), 194-210. (H. Triebel) **47** #2351 46E35
- The differential properties of weak solutions of quasilinear elliptic equations. (Russian) Investigations on linear operators and the theory of functions, III. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **30** (1972), 174-175. (G. Wildenhain) **48** #9102 35J55
- (with Ščadilov, V. E.) A certain boundary value problem for the stationary system of Navier-Stokes equations. (Russian) Boundary value problems of mathematical physics, *8. Trudy Mat. Inst. Steklov.* **125** (1973), 196-210, 235. (P. C. Fife) **51** #1164 35Q10
- (with Ladyženskaja, O. A.) The linearization principle and invariant manifolds for problems of magnetohydrodynamics. (Russian) Boundary value problems of mathematical physics and related questions in the theory of functions, *7. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **38** (1973), 46-93. (J. W. Thomas) **51** #13482 35Q99 (47H15)
- Estimates of the solutions of the nonstationary Navier-Stokes system. (Russian) Boundary value problems of mathematical physics and related questions in the theory of functions, *7. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **38** (1973), 153-231. (P. C. Fife) **54** #3188 35Q10
- The differential properties of weak solutions of quasilinear elliptic equations. (Russian) Investigations on linear operators and the theory of functions, IV. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1974), 110-119. (V. Barbu) **49** #5537 35D10
- A certain class of Noetherian overdetermined elliptic boundary value problems. (Russian. English summary) Investigations on linear operators and the theory of functions, *7. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **47** (1974), 138-154, 187, 193. (B. Bojarski) **54** #10884 35N05 (35J40)
- (with Sahaev, Š.) Estimations of the solutions of a certain boundary value problem of magnetohydrodynamics. (Russian) Boundary value problems of mathematical physics, *9. Trudy Mat. Inst. Steklov.* **127** (1975), 76-92, 155. (V. Ju. Ljapidevskii) **56** #16175 35Q99 (76.35)
- A study of overdetermined elliptic boundary value problems in K. K. Golovkin's fractional spaces. (Russian) Boundary value problems of mathematical physics, *9. Trudy Mat. Inst. Steklov.* **127** (1975), 93-114, 155. (H. Triebel) **53** #13828 35J55 (35N10, 46E35)

- (with Ladyženskaja, O. A.) The unique solvability of an initial-boundary value problem for viscous incompressible inhomogeneous fluids. (Russian. English summary) Boundary value problems of mathematical physics and related questions of the theory of functions, 8. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 52 (1975), 52-109, 218-219. (P. C. Fife) 54 #13347 35Q10
- Multiplicative estimates for functions from the classes $W_2^1(R^n)$. (Russian) *Imbedding theorems and their applications* (Proc. All-Union Sympos., Alma-Ata, 1973) (Russian), pp. 151-153, 194. Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1976. (Author's summary) 57 #17269 46E35
- The solvability of the initial-boundary value problem for the equations of motion of a viscous compressible fluid. (Russian. English summary) Investigations on linear operators and theory of functions, VI. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 56 (1976), 128-142, 197. (Author's summary) 58 #1766 35Q99
- (with Ladyženskaja, O. A.) Some problems of vector analysis, and generalized formulations of boundary value problems for the Navier-Stokes equation. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 9. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 59 (1976), 81-116, 256. (V. V. Olariu) 57 #6900 35Q10 (58D15)
- Estimates of the solution of a certain initial-boundary value problem for a linear nonstationary system of Navier-Stokes equations. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 9. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 59 (1976), 178-254, 257. (V. Ju. Ljapidevskii) 57 #922 35Q10 (76.35)
- Solvability of the problem of the motion of a viscous incompressible fluid that is bounded by a free surface. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 41 (1977), no. 6, 1388-1424, 1448. (V. P. Kalašnikov) 58 #14297 76.35 (35Q99)
- (with Ladyženskaja, O. A.) The solvability of boundary value and initial-boundary value problems for the Navier-Stokes equations in domains with noncompact boundaries. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, no. 13. *Mat. Meh. Astronom. vyp.* 3, 39-47, 170. (B. Szafirski) 58 #12017 35Q10
- (with Vasil'ev, V. N.) Bounds for the maximum modulus of the solution of a linear nonstationary system of Navier-Stokes equations. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 10. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 69 (1977), 34-44, 273. (From the introduction) 58 #29441 35Q10
- The solvability of the second initial-boundary value problem for a linear nonstationary system of Navier-Stokes equations. (Russian) Boundary value problems of mathematical physics and related questions in the theory of functions, 10. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 69 (1977), 200-218, 277. (P. C. Fife) 58 #29438 35Q10
- See also Boundary value problems of mathematical physics and related aspects of function theory, 46 #9497; Boundary value problems of mathematical physics and related aspects of function theory, 46 #9498; Boundary value problems of mathematical physics and related aspects of function theory, 46 #9499; Boundary value problems of mathematical physics and related questions in the theory of functions, 47 #595; Boundary value problems of mathematical physics, 48 #681; Boundary value problems of mathematical physics and related aspects of function theory, 49 #4700; Investigations in linear operators and function theory, 49 #5761; Boundary value problems of mathematical physics, 50 #2656; Boundary value problems of mathematical physics, 51 #6096; Boundary value problems of mathematical physics and related questions in the theory of functions, 52 #8620 and Investigations on linear operators and the theory of functions, 52 #14241 (EA 53)
- Solop, S. A.** (with Vorovič, I. I.) On the existence of periodic solutions in the nonlinear theory of oscillations of shallow shells, taking damping into account. *Prikl. Mat. Meh.* 40 (1976), no. 4, 699-705 (Russian); translated as *J. Appl. Math. Mech.* 40 (1976), no. 4, 646-652 (1977). (F. V. Pohle) 57 #14759 73.35
- (with Vorovič, I. I.) The existence of periodic solutions in the nonlinear theory of oscillations of nonshallow shells of revolutions with account taken of damping. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* 1978, no. 1, 16-19. (From the introduction) 58 #19599 73.35
- Solopčenko, G. N.** (with Poluěktov, R. A.) Methods for correcting dynamical errors. (Russian) *Aviometrija* 1971 no. 5, 3-12. (Ĭ. M. Stojanov) 51 #5126 93E10
- Solopenko, V. M.** Analytic and numerical solutions of a mixed problem for generalized Prandtl equations. (Russian) *Z. Prikl. Meh. i Tehn. Fiz.* 1976, no. 5, 81-89, 184 (loose errata.) (V. P. Kalašnikov) 57 #2171 76.65
- (with Prohur, M. Z.) Instability of the Frankel-Du Fort scheme, and the splitting method in the solution of a mixed boundary value problem for a parabolic system of equations. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) Vyp.* 32 (1977), 112-117, 160. (Authors' summary) 58 #8377 65N99
- (with Janko, A. K.; Prohur, M. Z.) A method for the numerical computation of two-dimensional viscous flows by means of the evolution approximation of the stationary Navier-Stokes equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1978, no. 2, 155-158. (A. Ženišek) 58 #8388 65P05 (76.35)
- Solovaja, N. A.** Special cases of intermediate motions in the stellar three-body problem. (Russian. English summary) *Moskov. Gos. Univ. Trudy Gos. Astronom. Inst. Šternberg.* 45 (1974), 137-153. (Q. K. Ghoni) 56 #17292 70.34
- Solovay, Robert M.** (with Palais, Richard S.; Atiyah, M. F.; Borel, Armand; Floyd, E. E.; Seeley, Robert T.; Shih, Weishu; Rešetnikov, V. N.; Dynin, A. S.) ★Семинар по теореме Атьи-Зингера об индексе. (Russian) [Seminar on the Atiyah-Singer index theorem] With contributions by M. F. Atiyah, A. Borel, E. Floyd, R. T. Seeley, W. Shih and R. Solovay. Translated from the English by V. N. Rešetnikov. Edited by A. S. Dynin. Izdat. "Mir", Moscow, 1970. 359 pp. (Editors) 52 #15568 58G10
- Real-valued measurable cardinals. *Axiomatic set theory* (Proc. Sympos. Pure Math., Vol. XIII, Part I, Univ. California, Los Angeles, Calif., 1967), pp. 397-428. *Amer. Math. Soc., Providence, R.I.*, 1971. (Thomas J. Jech) 45 #55 02K35
- (with Tennenbaum, S.) Iterated Cohen extensions and Souslin's problem. *Ann. of Math.* (2) 94 (1971), 201-245. (Thomas J. Jech) 45 #3212 04A15
- (with Monk, J. Donald) On the number of complete Boolean algebras. *Algebra Universalis* 2 (1972), 365-368. (J. L. Zemmer) 47 #6577 06A40
- (with Lévy, Azriel) On the decomposition of sets of reals to Borel sets. *Ann. Math.* Logic 5 (1972/73), 1-19. (Thomas J. Jech) 47 #38 02K05 (02K25, 04A15, 04A20)
- Strongly compact cardinals and the GCH. *Proceedings of the Tarski Symposium* (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971), 365-372. *Amer. Math. Soc., Providence, R.I.*, 1974. (F. R. Drake) 52 #106 02H13, 02K25
- (with Prikyr, Karel) On partitions into stationary sets. *J. Symbolic Logic* 40 (1975), no. 1, 75-80. (Keith Devlin) 55 #5443 02K05 (04A20)
- (with Baker, Theodore P.; Gill, John T., III) Relativizations of the $\mathcal{P} = \mathcal{NP}$ question. *SIAM J. Comput.* 4 (1975), no. 4, 431-442. (Ronald V. Book) 52 #161C 68A20
- Provability interpretations of modal logic. *Israel J. Math.* 25 (1976), no. 287-304. (David Makinson) 56 #15369 02C10 (02D99)
- On sets Cook-reducible to sparse sets. *SIAM J. Comput.* 5 (1976), no. 4, 646-660. (John T. Gill) 56 #7321 68A20 (02F25)
- On random r.e. sets. *Non-classical logics, model theory and computability* (Proc. Third Latin-Amer. Sympos. Math. Logic, Campinas, 1976), pp. 283-307. (loose errata) *Stud. Logic Found. Math.*, Vol. 89, North-Holland, Amsterdam, 1977. (C. G. Jockusch, Jr.) 57 #16016 02F25 (68A20, 94A15)
- (with Jockusch, Carl G., Jr.) Fixed points of jump preserving automorphisms of degrees. *Israel J. Math.* 26 (1977), no. 1, 91-94. (A. H. Lachlan) 55 #5422 02F25
- (with Pincus, David) Definability of measures and ultrafilters. *J. Symbolic Logic* 42 (1977), no. 2, 179-190. (F. R. Drake) 58 #227 02K05
- (with Strassen, Volker) A fast Monte-Carlo test for primality. *SIAM J. Comput.* 6 (1977), no. 1, 84-85. (George Marsaglia) 55 #2732 (E 57 #5885) 10A25 (10-04)
- (with Strassen, Volker) Erratum: "A fast Monte-Carlo test for primality" (*SIAM J. Comput.* 6 (1977), no. 1, 84-85). *SIAM J. Comput.* 7 (1978), no. 1, 118. (Editorial) 57 #5885 10A25 (10-04, 65C05)
- Hyperarithmetically encodable sets. *Trans. Amer. Math. Soc.* 239 (1978), 99-104. (C. G. Jockusch, Jr.) 58 #10375 02F35 (02F27, 02F30, 02K99)
- Solovcov, I. L.** (with Skačkov, N. B.) A relativistic three-dimensional description of two-fermion interaction. (Russian. English summary) *Fiz. Elementar. Častic i At. Yadra* 9 (1978), no. 1, 5-47. (Z. Janković) 57 #11512 81.53
- Solov'ev, A. D.** (with Ušakov, I. A.) Certain estimates for systems of "aging" elements. (Russian) *Avtomat. i Vyčisl. Tehn.* 1967, no. 6, 38-44. (B. I. Penkov) 45 #133 62N05
- (with Gnedenko, B. V.; Beljaev, Ju. K.) ★Mathematical methods of reliability theory. Translated by Scripta Technica, Inc. Translation edited by Richard E. Barlow. Probability and Mathematical Statistics, Vol. 6. Academic Press, New York-London, 1969. xi + 506 pp. (Editors) 49 #9973 60K20
- The problem of optimal servicing. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1970, no. 5, 40-49 (Russian); translated as *Engrg. Cybernetics* 8 (1970), no. 5, 859-868. (E. Rossberg) 46 #2763 60K25
- Asymptotic behavior of the time of first occurrence of a rare event in a regenerative process. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1971, no. 6, 79-89 (Russian); translated as *Engrg. Cybernetics* 9 (1971), no. 6, 1038-1048 (1972). (C. C. Heyde) 48 #987 60K05
- (with Gnedenko, B. V.; Beljaev, Ju. K.) ★Méthodes mathématiques en théorie de la fiabilité. Principales caractéristiques de fiabilité et leur analyse statistique. Traduit du russe par Guy Der-Mégréditchian. Éditions Mir, Moscow, 1972. 535 pp. (Editors) 50 #5972 60K20
- Asymptotic distribution of the moment of first crossing of a high level by a birth and death process. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. 2. Probability theory, pp. 71-86. Univ. California Press, Berkeley, Calif., 1972. (Anthony Pakes) 53 #9405 60J80
- (with Beljaev, Ju. K.; Kolmogorov, A. N.) Boris Vladimirovič Gnedenko (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 2 (197-202 (1 plate). (Editors) 52 #5289 01A70
- (with Gnedenko, B. V.) Conditions for the existence of final probabilities for a Markov process. (Russian. German and English summaries) *Math. Operationsforsch. Statist.* 4 (1973), no. 5, 379-390. (Bruce D. Craven) 52 #15680 60J10
- (with Gnedenko, D. B.) A general model for standby with renewal. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 6, 113-118, 221 (Russian); translated as *Engrg. Cybernetics* 12 (1974), no. 6, 82-86. (R. L. Tweedie) 52 #12121 60K25
- (with Zaicev, V. A.) Standby with incomplete renewal. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 1, 72-81, 220 (Russian); translated as *Engrg. Cybernetics* 13 (1975), no. 1, 58-62. (C. Mohan) 53 #14708 60K10 (62N05)
- (with Gnedenko, D. B.) Estimation of the reliability of complex renewable systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 3, 121-128 (Russian); translated as *Engrg. Cybernetics* 13 (1975), no. 3, 89-96. (C. Mohan) 54 #11706 62N05
- (with Zaicev, V. A.) Redundancy of complex systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 4, 83-92 (Russian); translated as *Engrg. Cybernetics* 13 (1975), no. 4, 66-75. (Authors' summary) 57 #1686 60K10 (90B25)
- (with Sahobov, O.) Two-sided estimates of the reliability of repairable systems. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 1976, no. 28-33, 83-84. (Z. Khaili) 55 #1521 60K10 (62N05)
- (with Gruszczyński, J.) Methods for the optimization of queueing in an industrial park. (Polish) *Mat. Stos.* (3) 7 (1976), 71-80. (Jan Weglarz) 56 #7916 90B25
- (with Sahobov, O.) Two-sided estimates of reliability in a general standby model with one renewal unit. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1977, no. 4, 94-100 (Russian); translated as *Engrg. Cybernet.* 15 (1977), no. 4, 58-63 (1978). (Authors' summary) 58 #18766 60K10 (62N05)
- (with Sahobov, O.) Two-sided estimates for the probability of the failure of a system over a single period of regeneration. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 1977, no. 2, 41-46, 95. (Z. Khaili) 58 #31433 60K10
- Solov'ev, A. E.** A certain approach to the description of control systems. (Russian) *Politehn. Inst. Sb. Naučn. Trudov* 176 (1975), 86-89. (Jerzy Jaroń) 56 #14851 93A05 (02C10)
- Solov'ev, A. F.** On I. P. Natanson's theorem on moment sequences. (Russian) *Jaroslavl Gos. Ped. Inst. Učen. Zap. No. 82 Anal. i Algebra* (1971), 87-91. (See RŽMat 1972

- 0105) 44A50
 v, A. G. (with Aleksandrov, S. N.) A conditionally optimal procedure for sequential estimation of the displacement parameter of a normal distribution in the case of unknown variance. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 2, 149-156 (Russian); translated as *Engrg. Cybernetics* 13 (1975), no. 2, 122-128. (Robert Hultquist) 13 #1880 62L12
- v, A. N. Conditions for the compact support of an operator potential function in terms of scattering data. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1972, no. 3, 74-78. (Boris Pavlov) 10 #8120 47A40 (34G05)
- A criterion for the presence of the Gibbs phenomenon for linear means of Fourier series. (Russian) *Application of functional analysis in approximation theory*, No. 4 (Russian), pp. 116-122. Kalinin. Gos. Univ., Kalinin, 1974. (Editors) 58 #29768 42A24
- The Gibbs phenomenon for certain linear methods of summability of Fourier series. (Russian) *Application of functional analysis in approximation theory*, No. 2 (Russian), pp. 121-129. Kalinin. Gos. Univ., Kalinin, 1974. (V. Murgescu) 51 #8718 42A08 42A24
- The connection of approximate properties of linear means of Fourier series with the Gibbs phenomenon. (Russian) *Application of functional analysis in approximation theory*, No. 4 (Russian), pp. 123-131. Kalinin. Gos. Univ., Kalinin, 1974. (Editors) 58 #29769 42A24
- The inverse problem of scattering theory for a second order equation with an operator coefficient. (Russian) *Proceedings of the Summer School in the Spectral Theory of Operators and the Theory of Group Representation (Baku, 1968)* (Russian), pp. 72-77. Izdat. "Elm", Baku, 1975. (M. M. Skriganov) 53 #3412 34B25 (47E05)
- (with Godunov, A. N.) Gibbs phenomenon and the approximation properties of methods for the summability of Fourier series. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 2, 269-272. (S. Baron) 52 #11450 42A24
- (with Aslanov, M. A.; Kerimov, Ja. R.) A study of the eigenvalues and spectral singularities of a nonselfadjoint operator. (Russian) *Spectral theory of operators* (Russian), pp. 12-21. Izdat. "Elm", Baku, 1977. (E. R. Cekanovskii) 58 #11603 34B25
- A condition for the exponential decay of an operator potential function in terms of the scattering data. (Russian) *Spectral theory of operators* (Russian), pp. 262-270. Izdat. "Elm", Baku, 1977. (A. Ramm) 58 #6473 34B25 (47E05)
- v, A. S. (with Aleksandrov, V. M.) Some mixed problems of elasticity theory. *Izv. Akad. Nauk SSSR Meh. Tverd. Tela* 1969, 120-130 (Russian); translated as *Mechanics of Solids* 4 (1969), no. 5, 106-114. (I. M. Longman) 47 #1356 73.45
- v, B. G. A topological approach to the combinational monitoring of efficiency. (Russian) *Diagnosis and identification* (Russian), pp. 49-54, 173-174. Izdat. "Zinatne", Riga, 1974. (See RŽMat 1975 #3 V596; MR 57 #11908) 94A20
- (with Nigmatullin, R. G.) A topological approach to the combinational search for breakdowns. (Russian) *Diagnosis and identification* (Russian), pp. 55-63, 174. Izdat. "Zinatne", Riga, 1974. (See RŽMat 1975 #3 V595; MR 57 #11908) 94A20
- (with Nigmatullin, R. G.) The localization of inaccuracies in block designs. (Russian) *Probabilistic methods and cybernetics*, No. X-XI (Russian), pp. 59-67. Izdat. Kazan. Univ., Kazan, 1974. (A. D. Koršunov) 58 #4682 94A20 (05B05)
- v, E. A. Nonadiabatic transitions at a pseudocrossing of a group of terms. (Russian. English summary) *Teoret. Mat. Fiz.* 28 (1976), no. 1, 115-122. (From the author's summary) 57 #2351 81.65
- (with Komarov, I. V.) Passage of a term into the continuous spectrum in the presence of a Coulomb field. (Russian. English summary) *Teoret. Mat. Fiz.* 32 (1977), no. 2, 271-274. (K. Veselić) 57 #4903 81.47
- v, G. V. (with Filatov, A. I.) A combined wave matrix and its application for the calculation of annular systems. (Russian) *Ural. Politehn. Inst. Sb. No. 189* (1971), 124-133. (A. Nikodémusz) 45 #6273 78.35 (35L35)
- v, I. G. Dynamic approximation. (Russian) *Voprosy Teor. Sistem Avtomat. Upravlenija Vyp. 3* (1977), 74-79, 117. (R. S. Anderssen) 58 #15499 93C99
- v, Ju. I. Reduction of the three-dimensional axisymmetric problems of the theory of elasticity to the boundary value problems for the analytic functions of a complex variable. *Prikl. Mat. Meh.* 35 (1971), 918-925 (Russian); translated as *J. Appl. Math. Mech.* 35 (1971), 871-878, (1972). (Author's summary) 49 #1860 73.30
- v, Ju. L. (with Šelike, V. F.) Estimation of the state of dynamic systems under the action of disturbances. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 2, 173-184 (Russian); translated as *Engrg. Cybernetics* 12 (1974), 133-144. (V. N. Igolkin) 52 #7674 93E10
- v, Ju. P. (with Mihailevskii, B. N.) A linear autoregression model under small-sample conditions. (Russian) Statistical analysis of economic time series, and prediction. *Učen. Zap. Statist.* 22/23 (1973), 43-67. (From the authors' introduction) 56 #9863 62M10 (62P20)
- A certain theorem of Atiyah-Hirzebruch type for infinite discrete groups. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 4, 26-35. (V. Oproiu) 52 #9298 58G10
- Homotopy invariants of rational homology manifolds. (Russian) *Dokl. Akad. Nauk SSSR* 230 (1976), no. 1, 41-43. (Allen E. Hatcher) 54 #8658a 57D20 (58G10)
- Discrete subgroups, Bruhat-Tits buildings and homotopy invariance of higher signatures. (Russian) *Uspehi Mat. Nauk* 31 (1976), no. 1(187), 261-262. (Allen E. Hatcher) 54 #8658b 57D20 (58G10)
- (with Miščenko, A. S.) Infinite-dimensional representations of fundamental groups, and formulas of Hirzebruch type. (Russian) *Dokl. Akad. Nauk SSSR* 234 (1977), no. 4, 761-764. (J. Stasheff) 58 #13219 58G10 (46M20, 57D90)
- v, L. D. An axiomatic method in quantum electrodynamics. (Russian. English summary) *Teoret. Mat. Fiz.* 18 (1974), 3-13. (Author's summary) 57 #8631 81.35
- (with Pron'ko, G. P.) Infrared asymptotic behavior of the Green function. (Russian. English summary) *Teoret. Mat. Fiz.* 19 (1974), 172-185. (Authors' summary) 57 #8626 81.35
- (with Bažanov, V. V.; Pron'ko, G. P.; Jušin, Ju. Ja.) Scattering by small angles in quantum electrodynamics. (Russian. English summary) *Teoret. Mat. Fiz.* 33 (1977), no. 2, 218-230. (Authors' summary) 56 #14296 81.47
- (with Jušin, Ju. Ja.) Investigation of infrared singularities in quantum electrodynamics by the Feynman diagram method. (Russian. English summary) *Teoret. Mat. Fiz.* 36 (1978), no. 1, 3-23. (Authors' summary) 58 #20025 81.47
- See also Adler, Stephen L.; et al., 50 #15702
- Solov'ev, L. S. (with Gerlah, N. I.; Zueva, N. M.) The linear theory of helical MHD-instability. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 62* (1977), 36 pp. (Authors' summary) 58 #19698 76.35
- (with Zueva, N. M.; Mihaïlova, M. S.) Convective instability of a gaseous sphere. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 65* (1977), 23 pp. (Authors' summary) 58 #14981 85.35
- Solov'ev, M. A. The choice of the class of generalized functions that are compatible with locality. (Russian. English summary) *Teoret. Mat. Fiz.* 7 (1971), no. 2, 183-191. (Author's summary) 58 #30186 46F10 (81.46)
- The Fourier-Laplace transformation of generalized functions. (Russian. English summary) *Teoret. Mat. Fiz.* 15 (1973), no. 1, 3-19. (Author's summary) 57 #13475 46F10 (81.32)
- Localness and lattice theory. (Russian. English summary) *Teoret. Mat. Fiz.* 20 (1974), 299-301. (Author's summary) 57 #8529 81.06
- (with Fainberg, V. Ja.) The present status of axiomatic quantum field theory with nonpolynomial growth. (Russian) *Nonlocal, nonlinear and nonnormalizable field theories (Proc. Fourth Internat. Sympos. Nonlocal Field Theories, Alushta, 1976)* (Russian), pp. 57-76. Ob"ed. Inst. Jadern. Issled., Dubna, 1976. (V. A. Malyšev) 57 #18588 81.46
- (with Fainberg, V. Ja.) Causality, localizability, and holomorphically convex hulls. *Comm. Math. Phys.* 57 (1977), no. 2, 149-159. (S. Aramaki) 58 #8884 81.32
- Solov'ev, N. A. A certain property of tables with irredundant tests of equal lengths. (Russian) *Diskret. Analiz* No. 12 (1968), 91-95. (From the introduction) 45 #6640 05A05 (62K10)
- Tables that contain trivial irredundant tests. (Russian) *Diskret. Analiz* No. 12 (1968), 96-114. (G. Blohina (RŽMat 1969 #6 V295)) 45 #8549 05B20 (94A15)
- Letter to the editors. (Russian) *Diskret. Analiz* No. 12 (1968), 118. (Editors) 49 #4684 94A20
- Unconditional minimal tests for tables with isolated blocks of digits. (Russian) *Diskret. Analiz* No. 20 (1972), 22-65. (G. Bär) 48 #1815 94A20
- The maximal number of irredundant tests. (Russian. English summary insert) *Kibernetika (Kiev)* 1972, no. 1, 28-30. (H. Madatjan (RŽMat 1972 #7 V434)) 51 #15225 94A20
- Solov'ev, P. A. Smallest convex hull of two ovals. (Russian) *Ukrain. Geometr. Sb. No. 16* (1974), 69-78, iii. (A. Sobczyk) 51 #4059 52A40
- Solov'ev, V. D. Q-reducibility, and hyperhypersimple sets. *Probabilistic methods and cybernetics*, No. X-XI (Russian), pp. 121-128. Izdat. Kazan. Univ., Kazan, 1974. (A. N. Dëgtev) 57 #16017 02F25
- Superhypersimple sets. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 2(165), 108-110. (Igor Lavrov) 56 #2807 02F25
- Some generalizations of the notions of reducibility and creativity. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 3(166), 65-72. (A. N. Dëgtev) 54 #9999 02F30 (02F25)
- (with Arslanov, M. M.; Nadyrov, R. F.) A criterion for the completeness of recursively enumerable sets, and some generalizations of a fixed point theorem. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 4 (179), 3-7. (A. H. Lachlan) 56 #5247 02F25
- Solov'ev, V. G. (with Djolos, R. V.) The method of the self-consistent field in nuclear theory. (Russian. English summary) *Problemy Fiz. Elementar. Častic i Atom. Jadra* 1 (1971), 365-390. (Authors' summary) 57 #8780 82.47
- Solov'ev, V. N. (with Serkov, V. I.; Celigorov, N. A.) Determination of the boundaries of the aperiodic stability domain of linearized digital automatic systems in the space of coefficients of the characteristic equation. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromeh.* 1976, no. 6, 676-681, 708. (Authors' summary) 58 #20725 93D99
- Solov'ev, V. P. (with Amosov, N. M.; Palec, B. L.; Agapov, B. T.; Ermakova, I. I.; Ljabah, E. G.; Packina, S. A.) ★Теоретические исследования физиологических систем: математическое моделирование. (Russian) [Theoretical studies of physiological systems: mathematical modeling] Edited by N. M. Amosov. Izdat. "Naukova Dumka", Kiev, 1977. 245 pp. (Editors) 57 #9106 92A05
- Solov'eva, E. N. (with Budak, B. M.) The solution of the elliptic integro-differential equation of thermal balance for a system of cooling fins. (Russian) *Difference methods of solution of boundary value problems for integro-differential equations* (Russian), pp. 299-309. Moskov. Gos. Univ., Moscow, 1970. (J. Ignaczak) 54 #1676 65R05 (80.45)
- (with Uspenskii, A. B.) Difference schemes for computing numerical solutions of problems for parabolic equations with unknown boundaries. (Russian) *Vychisl. Metody i Programirovanie* No. 23 (1974), 85-102. (T. Styš) 58 #24996 65N20
- (with Uspenskii, A. B.) Direct calculation schemes for the numerical solution of boundary value problems with unknown boundaries for one-dimensional equations of parabolic type. (Russian) *Methods for the solution of boundary value and inverse problems of heat conduction* (Russian), pp. 3-23. Izdat. Moskov. Univ., Moscow, 1975. (N. N. Janenko) 55 #4720 65N05
- (with Uspenskii, A. B.) Direct calculation schemes for the numerical solution of the Stefan problem for the two-dimensional heat equation. (Russian) *Methods for the solution of boundary value and inverse problems of heat conduction* (Russian), pp. 24-37. Izdat. Moskov. Univ., Moscow, 1975. (N. N. Janenko) 55 #6881 65N05
- Solov'eva, L. A. An investigation of the first passage times of a certain class of Markov processes. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist.* No. 7 (1972), 146-151, 167. (J. G. Wendel) 47 #9721 60J10
- Solov'eva, N. A. See Automatic programming and numerical methods of analysis, 46 #8464
- Soloviev, A. D. See Solov'ev, A. D.
- Soloviev, M. A. See Solov'ev, M. A.
- Solovine, Maurice See Einstein, Albert, 58 #27142 and Einstein, Albert, 58 #27143
- Solov'yev, A. D. See Solov'ev, A. D.
- Solov'yev, A. G. See Solov'ev, A. G.
- Solov'yev, Yu. L. See Solov'ev, Ju. L.
- Solow, Danny (with Gochet, Willy F.; Loute, Etienne) Comparative computer results of

- three algorithms for solving prototype geometric programming problems. Colloque sur la Programmation Mathématique (Brussels, 1974). *Cahiers Centre Études Recherche Opér.* 16 (1974), 469-486. (J. Falk) 51 #7630 90C30
- Solow, Robert M.** (with Vickrey, William S.) Land use in a long narrow city. *J. Econom. Theory* 3 (1971), no. 4, 430-447. (Authors' summary) 56 #7874 90A15
- Solowiew, A. D.** See Solov'ev, A. D.
- Solpo, I. A.** Derived games from two-person games with ordered outcomes. (Russian) *Mathematical models of behavior*, No. 2 (Russian), pp. 78-84, 95. *Izdat. Saratov. Univ., Saratov*, 1975. (Author's summary) 58 #20501 90D05
- Sols, Ignacio** (with Meseguer Guaita, José) Automata in semimodule categories. *Category theory applied to computation and control (Proc. First Internat. Sympos., San Francisco, Calif., 1974)*, pp. 193-198. *Lecture Notes in Comput. Sci.*, Vol. 25, Springer, Berlin, 1975. (I. Peák) 51 #15140 94-02 (18B20)
- (with Meseguer Guaita, José) On a categorical tensor calculus for automata. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 23 (1975), no. 11, 1161-1166. (E. G. Manes) 53 #3058 18B20 (68A25, 94A30)
- Bon ordre dans l'objet des nombres naturels d'un topos booléen. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 15, A601-A603. (Gavin Wraith) 52 #96 02K10 (18A15)
- Logic, foundations, geometry and automata in the realm of topoi. (Spanish) *Colloquium on Symbolic Logic (Univ. Complutense, Madrid, 1975)* (Spanish), pp. 159-176. *Centro Cálculo, Univ. Complutense, Madrid*, 1976. (Marta C. Bunge) 56 #15419 02K10 (18B05, 18B20, 02F10)
- (with Kühnel, Wolfgang; Meseguer Guaita, José; Pfender, Michael) Primitive recursive algebraic theories and program schemes. *Bull. Austral. Math. Soc.* 17 (1977), no. 2, 207-233. (From the authors' summary) 57 #6138 18C10
- Soltan, E. E.** The expansion of holomorphic functions in multidimensional Birkhoff-Lagrange series. (Russian) *Holomorphic functions of several complex variables (Sem., Krasnoyarsk, 1972)* (Russian), pp. 129-137, 212. *Inst. Fiz. Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1972. (A. I. Heifich) 57 #676 32A05
- Soltan, P. S.** (with Vasiloi, A. D.) Certain characterizations of a convex cone. (Russian) *Mat. Issled.* 6 (1971), no. 4(22), 155-164. (N. Poláková) 45 #1041 52A20
- Covering of convex bodies by large homothetic ones. (Russian) *Mat. Issled.* 6 (1971), no. 4(22), 191-196. (Henryk Fast) 45 #5880 52A45
- (with Priskar, K. F.) The Steiner problem on graphs. I. (Russian) *Prikl. Mat. i Programirovanie* No. 6 (1971), 66-86. (Alexander M. Rubinov) 46 #96 05C35
- Simultaneous solution of several Steiner problems on a graph. (Russian) *Dokl. Akad. Nauk SSSR* 202 (1972), 294-297. (E. Ja. Gabovič) 45 #102 05C99
- The covering of polyhedra by homothetic images. (Russian) *Dokl. Akad. Nauk SSSR* 202 (1972), 541-544. (E. Hertel) 45 #4283 52A45
- Helly's theorem for d -convex sets. (Russian) *Dokl. Akad. Nauk SSSR* 205 (1972), 537-539. (V. Zizler) 46 #8047 52A35
- The covering of convex bodies by homothetic ones. (Russian) *Fund. Math.* 76 (1972), no. 1, 85-93. (E. Jucovič) 46 #6171 52A45
- A certain theorem of Helly type. (Russian) *Mat. Issled.* 7 (1972), no. 1(23), 206-209. (V. Zizler) 46 #2552 52A35
- (with Boltjanskii, V. G.) Illumination from inside of the boundary of a convex body. (Russian) *Mat. Sb. (N.S.)* 87(129) (1972), 83-90. (W. J. Firey) 45 #1039 52A20
- Covering convex bodies by large homothetic ones. (Russian) *Mat. Zametki* 12 (1972), 85-90. (W. J. Firey) 47 #7603 52A45
- (with Zambickii, D. K.; Priskar, K. F.) ★Экстремальные задачи на графах и алгоритмы их решения. (Russian) [Extremal problems on graphs and algorithms for their solution] *Izdat. "Štiinca", Kishinev*, 1973. 90 pp. (H. Sachs) 49 #8901 05C35
- (with German, L. F.; Soltan, V. P.) Certain properties of d -convex sets. (Russian) *Dokl. Akad. Nauk SSSR* 212 (1973), 1276-1279. (N. Poláková) 48 #12296 52A20
- (with German, L. F.) The separation property of d -convex sets. (Russian) *Prikl. Mat. i Programirovanie* No. 12 (1974), 49-61, 136. (R. McGuigan) 52 #15246 52A50
- Analogues of regular simplexes in normed spaces. (Russian) *Dokl. Akad. Nauk SSSR* 222 (1975), no. 6, 1303-1305. (E. Hertel) 52 #4127 52A20 (46B05)
- (with Vasiloi, A. D.) A certain characterization of a convex cone of a topological vector space. (Russian) *Mat. Issled.* 10 (1975), no. 2(36), 247-249, 288. (Ju. A. Abramovič) 53 #6285 46A99
- (with Soltan, V. P.) A criterion for normability in a certain class of metric linear spaces. (Russian) *Mat. Issled.* 10 (1975), no. 2(36), 275-279, 289-290. (S. Kutateladze) 53 #1428 52A50 (46A15)
- ★Экстремальные задачи на выпуклых множествах. (Russian) [Extremal problems on convex sets] *Izdat. "Štiinca", Kishinev*, 1976. 115 pp. (S.-F. Sburan) 58 #18164 52A45 (52A05, 90C25)
- (with Boltjanskii, V. G.) Star-shaped sets. (Russian) *Bul. Akad. Štiințe RSS Moldoven.* 1976, no. 3, 7-11, 92. (Z. Nádeník) 55 #3975 52A30
- (with Boltjanskii, V. G.) Combinatorial geometry and convexity classes. (Russian) *Uspehi Mat. Nauk* 33 (1978), no. 1(199), 3-42, 262. (Z. Nádeník) 58 #7392 52A20
- Soltan, V. P.** (with German, L. F.; Soltan, P. S.) Certain properties of d -convex sets. (Russian) *Dokl. Akad. Nauk SSSR* 212 (1973), 1276-1279. (N. Poláková) 48 #12296 52A20
- The Jordan form of matrices and its connection with lattice theory. (Russian) *Mat. Issled.* 8 (1973), no. 1(27), 152-170, 240. (A. Lee) 47 #5023 15A21 (06A30)
- Finite-dimensional linear operators with identical invariant subspaces. (Russian) *Mat. Issled.* 8 (1973), no. 4(30) 80-100, 197. (N. Tița) 50 #4618 15A21
- (with German, L. F.) Certain properties of d -convex sets. (Russian) *Prikl. Mat. i Programirovanie* No. 10 (1973), 47-61, 150. (W. J. Firey) 48 #12320 52A50
- The diameter of d -convex hulls. (Russian) *Mat. Issled.* 9 (1974), no. 1(31), 96-109. (H. Weber) 52 #9082 52A20
- Finite-dimensional linear operators in a real space with common invariant subspaces. (Russian) *Mat. Issled.* 9 (1974), no. 3(33), 153-189, 216-217. (N. Tița) 51 #8855 47A15
- A characterization of finite-dimensional normal operators. (Russian) *Bul. Akad. Štiințe RSS Moldoven.* 1975, no. 1, 65-67, 93. (C. M. Schneeberger) 54 #13597 47A15 (15A21)
- Jordan elements of a lattice, and subordinate sums. (Russian) *Mat. Issled.* (1975), no. 2(36), 230-237, 287. (L. Beran) 53 #5396 06A30
- (with Soltan, P. S.) A criterion for normability in a certain class of metric linear spaces. (Russian) *Mat. Issled.* 10 (1975), no. 2(36), 275-279, 289-290. (S. Kutateladze) 53 #1428 52A50 (46A15)
- (with Lassak, Marek) A certain classification of metric spaces from the point of view of d -convexity. (Russian) *Mat. Issled.* 10 (1975), no. 3(37), 90-106, 241. (Kutateladze) 53 #1426 52A50
- A certain property of a d -convex ball. (Russian) *Mat. Issled.* 10 (1975), no. 3(37), 149-156, 243. (R. McGuigan) 53 #1409 52A20
- Certain questions of the abstract theory of convexity. (Russian) *Dokl. Akad. Nauk SSSR* 228 (1976), no. 2, 310-313. (N. Poláková) 53 #14318 52A35
- The lattice of hyperinvariant subspaces of a finite-dimensional operator. (Russian) *Nonselfadjoint operators. Mat. Issled. Vyp.* 42 (1976), 192-203, 233-234. (Authors' summary) 58 #30365 47A15 (15A21)
- A class of finite-dimensional normed spaces. (Russian) *Nonselfadjoint operators. Mat. Issled. Vyp.* 42 (1976), 204-215, 234. (Author's summary) 58 #30075 46A15 (15A30, 52A20)
- (with Markin, O. V.) The construction of d -convex shells. (Russian) *Studii algebra, mathematical analysis, and their applications (Russian)*, pp. 22-30, 120. *Izdat. "Štiinca", Kishinev*, 1977. (Authors' summary) 58 #30763 52A50 (54E35)
- A remark on the Helly dimension in R^n . (Russian) *Bul. Akad. Štiințe RSS Moldoven.* 1977, no. 1, 77-78, 95. (W. J. Firey) 57 #1284 52A35
- A theorem on full sets. (Russian) *Dokl. Akad. Nauk SSSR* 234 (1977), no. 320-322. (Z. Nádeník) 58 #2607 52A20
- The unit ball in the β^* -space R^n . (Russian) *Spectral properties of operators. Mat. Issled. Vyp.* 45 (1977), 169-178, 183. (R. McGuigan) 58 #24021 52A50
- (with Boltjanskii, V. G.) Borsuk's problem. (Russian) *Mat. Zametki* 22 (1977), no. 5, 621-631. (Z. Nádeník) 58 #2586 50C25 (52A50)
- Soltanov, K. N.** The solvability of certain degenerate nonlinear equations. (Russian) *Studies in differential equations and their applications. Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 201 (1974), 164-171. (Editors) 58 #1661 35K55
- Periodic solutions of certain nonlinear parabolic equations with implicit degeneracy. (Russian) *Dokl. Akad. Nauk SSSR* 222 (1975), no. 1-2, 291-294. (O. Vejvoda) 51 #13414 35B10
- The existence of a solution for certain nonlinear problems of parabolic type degeneracy. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1975, no. 5, 24-29. (V.-V. Olariu) 54 #8034 35K60
- The solvability of some nonlinear problems with an implicit degeneracy. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* 240 (1975), 155-160. (V.-V. Olariu) 57 #10248 35K60
- The solvability of some nonlinear degenerate parabolic problems. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1977, no. 5, 27-31. (M. Anne Dow) 58 #11931 35K60 (35D05)
- Soltanov, Š. M.** Complexity of a schematic realization of the parallel decoding of a generalized Hamming code. (Russian) *Voprosy Kibernet. (Tashkent) Vyp.* 92 (1975), 92-97, 139. (Author's summary) 57 #5411 94A10
- Soltés, Pavel** Certain properties of the solution of a fourth order differential equation. (Slovak. Russian and English summaries) *Spisy Přírod. Fak. Univ. Brno* 1970, no. 429-443 (1971). (M. Ráb) 45 #654 34C10
- On certain properties of the solutions of a non-linear differential equation of second order. *Arch. Math. (Brno)* 7 (1971), 47-63. (H. O. Tejumola) 46 #2134 34C10
- Boundedness of solutions of non-linear differential equation systems. *Mat. Časopis Sloven. Akad. Vied* 21 (1971), 91-105. (R. Hoppensteadt) 46 #5740 34C10 (35B45)
- A remark on the boundedness of the solutions of the differential equation $A_d(t)'' + A_1(t)x' + A_2(t)f(x) = p(t)$. (Russian) *Differentsial'nye Uravneniya* 8 (1972), 2277-2280. (J. K. Hale) 47 #5382 34D05
- On certain properties of solutions of the differential equation $y'''' + p(x)y''' + q(x)y'' + r(x)y' = f(x)$. (Slovak. English summary) *Mat. Časopis Sloven. Akad. Vied* 22 (1972), 123-130. (F. Neuman) 47 #7130 34C10
- Boundedness and oscillatoriness of solutions of the equation $y'' + a(x)g(y, y') + b(x)f(y)h(y') = 0$. *Ann. Polon. Math.* 28 (1973), 291-296. (H. Howard) 49 #7515 34C10
- A remark of the oscillatory behavior of solutions of differential equations of order n . *Arch. Math. (Brno)* 9 (1973), 115-118. (A. Averna) 50 #2608 34C10
- A remark on the oscillatoriness of solutions of a non-linear third-order equation. *Mat. Časopis Sloven. Akad. Vied* 23 (1973), 326-332. (L. Erbe) 49 #5470 34C10
- Certain properties of solutions of the nonlinear differential equation $y'''' + q(x)y''' + r(x)g(y) = f(x)$. *Acta Fac. Rerum Natur. Univ. Comenian. Math. Publ.* (1974), 13-27. (G. R. Sell) 50 #13726 34C10
- (with Futák, Ján) The zeros of the solutions of a fourth order linear differential equation. (Slovak. Russian, English and German summaries) *Práce Štúd. Vys. Šk. Doprav. v Žilne Sér. Mat.-Fyz. Číslo* 1 (1974), 59-66. (D. Izjumova) 53 #9434 34C10
- On the boundedness of a solution of a system of non-linear differential equations. *Arch. Math. (Brno)* 12 (1976), no. 1, 25-29. (G. A. Bogar) 56 #12413 34C10
- Oscillatoriness of solutions of a nonlinear second order differential equation. (Russian summary) *Math. Slovaca* 26 (1976), no. 4, 337-342. (V. B. Headley) 55 #1343 34C10
- Soltész, Vincent** The oscillation of the solutions of a third order nonlinear differential equation. (Russian. Loose English summary) *Math. Slovaca* 26 (1976), no. 3, 217-222. (D. Bobrowski) 55 #773 34C10
- Soltész, P.** On linear differential and integro-differential equations of infinite order. *Univ. Sci. Budapest. Eötvös Sect. Math.* 17 (1974), 177-182 (1975). (K. Seitz) 53 #13410 34A10
- On differential operators of infinite order. *Period. Math. Hungar.* 6 (1975), no. 2, 217-228. (J. W. Neuberger) 52 #14432 34A20 (47E05)
- Soltysiak, Andrzej** Capacity of finite systems of elements in Banach algebras. *Comm.*

- Math. Prace Mat.* **19** (1976/77), no. 2, 381-387. (M. P. Eršov) **57** #17289 46J05
Some remarks on the joint capacities in Banach algebras. *Comment. Math. Prace Mat.* **20** (1977), no. 1, 197-204. (Mohammed Akkar) **57** #3877 46N05 (32E30)
- Polysik, Henryk** Some realizability conditions of the RC networks containing active and reactive gyrators. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **19** (1971), 465-471. (From the summary) **49** #12189 94A20
Realizability conditions and methods for the realization of the matrix $[Y]$ by means of an $(n+1)$ -terminal network constructed from RC elements and gyrators. (Polish. English, French, German and Russian summaries) *Rozprawy Elektrotech.* **19** (1973), 411-422. (From the summary) **50** #4140 94A20
- Poljan, S. I.** (with Rudenko, O. V.) ★Теоретические основы нелинейной акустики. (Russian) [Theoretical foundations of nonlinear acoustics] *Izdat. "Nauka", Moscow*, 1975, 287 pp. (Vadim Komkov) **58** #32304a 76C00
(with Rudenko, O. V.) ★Theoretical foundations of nonlinear acoustics.
Translated from the Russian by Robert T. Beyer. Studies in Soviet Science. *Consultants Bureau, New York-London*, 1977. vii + 274 pp. ISBN 0-306-10933-6 (Vadim Komkov) **58** #32304b 76C35
- Polman, A.** (with Nath, A. K.) On a method of sequential pattern recognition. *IEEE Trans. Computers* **C-21** (1972), 1433-1440. (K. S. Fu) **48** #10228 68A45
- Polman, M. M.** (with Kloster, S. C.; Das, Anadijiban) On the stationary gravitational fields. *J. Mathematical Phys.* **15** (1974), 1096-1102. (M. Carmeli) **49** #12034 (E **55** #2034) 83J53
(with Teixeira, A. F. da F.; Wolk, Idel) Generalized static electromagnetic fields in relativity. *J. Mathematical Phys.* **15** (1974), 1756-1759. (W. B. Bonnor) **54** #2081 83J35
(with Teixeira, A. F. da F.; Wolk, Idel) Axially symmetric fields in general relativity. *Acta Phys. Austriaca* **43** (1975), no. 1-2, 15-20. (Shin-ichi Kitamura) **53** #12456 83J35
(with Kloster, S. C.; Das, Anadijiban) Erratum: "On the stationary gravitational fields" (J. Mathematical Phys. **15** (1974), 1096-1102). *J. Mathematical Phys.* **17** (1976), no. 3, 441. (M. Carmeli) **55** #2034 83J53
(with Teixeira, A. F. da F.; Wolk, Idel) Exact relativistic solution of disordered radiation with planar symmetry. *J. Phys. A* **10** (1977), no. 10, 1679-1685. (George Debnay) **57** #15262 83J53
- Polmalvico, Marco** (with Sangiovanni-Vincentelli, Alberto L.) State-space appears in problem-solving optimization. *Fifth Conference on Optimization Techniques (Rome, 1973), Part II*, pp. 144-158. *Lecture Notes in Comput. Sci., Vol. 4, Springer, Berlin*, 1973. **56** #13832 68A45
(with Sangiovanni-Vincentelli, Alberto L.) Formulazione teorica del metodo dello spazio degli stati per la risoluzione automatica dei problemi. *Alta Frequenza* **44** (1975), no. 3, 148-164. (Not reviewed) **68A45**
- omasundaram, D.** Non-Archimedean (FK)-spaces. *Indian J. Math.* **14** (1972), 129-140. (I. J. Maddox) **48** #11846 40H05
Inclusion theorems of matrix transformations of some sequence spaces over non-archimedean field. II. *Indian J. Pure Appl. Math.* **5** (1974), no. 4, 327-332. (A. F. Monna) **52** #6241 40D25 (40J05)
On a Hilbert space of entire functions. *Indian J. Pure Appl. Math.* **5** (1974), no. 10, 921-932. (G. Silverman) **55** #8777 46E20
A note on the lattice of topologies on a set. *Math. Education* **8** (1974), A53-A54. (G. L. Cain, Jr.) **50** #14625 54A10
Sequence to series transformations in F -spaces. *Math. Student* **42** (1974), 68-72 (1975). (K. Chandrasekhara Rao) **53** #1092 40J05
Some properties of T -matrices over non-archimedean fields. *Publ. Math. Debrecen* **21** (1974), 171-177. (H. P. Dikshit) **50** #2746 40J05
(with Chinnadurai, P. P.) Summability matrices over non-Archimedean fields. *Indian J. Pure Appl. Math.* **7** (1976), no. 8, 912-923. (M. S. Rangachari) **58** #29556 40C05 (40J05)
- omer, Lawrence** The Fibonacci ratios F_{k+1}/F_k modulo p . *Fibonacci Quart.* **13** (1975), no. 4, 322-324. (T. C. Brown) **52** #8021 10A35
Fibonacci-like groups and periods of Fibonacci-like sequences. *Fibonacci Quart.* **15** (1977), no. 1, 35-41. (H. L. Abbott) **55** #2738 10A35
- omermeier, W. H.** (with Langhout, A.) Optimal specification of incentive remuneration systems. (German summary) *Z. Operations Res. Ser. A-B* **18** (1974), B79-B100. (K. Zimmermann) **49** #12074 90B99
(with Jansen, R.; Louter, A. S.) Estimating quarterly values of annually known variables in quarterly relationships. *J. Amer. Statist. Assoc.* **71** (1976), no. 355, 588-595. (P. C. B. Phillips) **54** #14301 62P20 (90A99)
See also **van Daal, J.**; et al., **55** #12044
- omers, K. B.** (with McLaughlin, Harry W.) Another characterization of Haar subspaces. *J. Approximation Theory* **14** (1975), no. 2, 93-102. (Bl. Sendov) **52** #3846 41A65 (41A50)
- omerville, Paul N.** On allocation of resources in a two-stage selection procedure. *Sankhyā Ser. B* **36** (1974), no. 2, 194-203. (Yung L. Tong) **54** #1450 62F07
Optimum sample size for choosing the population having the smallest variance (large sample size results). *J. Amer. Statist. Assoc.* **70** (1975), no. 352, 852-858. (Thomas J. Santner) **53** #1817 62F07
- omerville, Richard C. J.** (with Gal-Chen, Tzvi) On the use of a coordinate transformation for the solution of the Navier-Stokes equations. *J. Computational Phys.* **17** (1975), 209-228. (P. C. Jain) **51** #2470 76G5
- omes, Grant W.** (with Bhapkar, V. P.) Multiple comparisons of matched proportions. *Comm. Statist.—Theory Methods* **A5** (1976), no. 1, 17-25. (Donald R. Jensen) **54** #1495 62J15
- Somesova, V. K.** (with Dem'janov, V. F.) Directional differentiability of the supremum function. (Russian. English summary) *Vestnik Leningrad. Univ.* **1978**, no. 7 *Mat. Meh. Astronom. vyp.* 2, 15-20, 161. (N. V. Rao) **58** #11263 26A24 (26A54)
- Somia-Taulera, A.** See **Bouroche, Jean-Marie**, **55** #7298
- Somik, V. P.** Address rings and their use for the construction of schemes of information reviewing. (Russian) *Mathematical provisioning of electronic digital computers and effective organization of the computing process (Proc. Sem., Kiev, 1968/1969), No. 4 (Russian)*, pp. 14-23. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (RŽAvtomat Telemekh i
- Vyčisl Tehn **1969** #11 B76) **45** #9544 68A50
A certain method of organization and search of information by means of address rings. (Russian) *Mathematical provisioning of electronic digital computers and effective organization of the computing process (Proc. Sem., Kiev, 1969), No. 2 (Russian)*, pp. 18-27. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (RŽAvtomat. Telemekh. i Vyčisl. Tehn. **1970** #3 B92) **45** #4707 68A50
See also *Software of electronic digital computers*, **50** #11832
- Sominskii, I. S.** ★El metodo de induccion matematica. (Spanish) [The method of mathematical induction] Translated from the sixth Russian edition by Guillermo Gómez Alcaraz. Edited by Manuel Meda Vidal. *Misclánea Matemática*, No. 3. [Mathematical Miscellany, No. 3] *Misclánea Matemática, Mexico*, 1973. iii + 65 pp. (Editors) **50** #12510 00A05
★Die Methode der vollständigen Induktion. Übersetzung aus dem Russischen von Wolfgang Ficker und Ralf-Dieter Schröter. Elfte Auflage. Kleine Ergänzungsreihe zu den Hochschulbüchern für Mathematik, III. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1974, 55 pp. (Editors) **56** #5100 00A05
★Método de inducción matemática. (Spanish) [The method of mathematical induction] Translated from the Russian seventh edition by Carlos Vega. With an afterword and notes by Ju. A. Gastev. *Lecciones Populares de Matemática*, No. 3. [Popular Lectures in Mathematics, No. 3] *Editorial Mir, Moscow*, 1975. 62 pp. (Editors) **53** #7662 00A05
★The method of mathematical induction. Translated from the seventh Russian edition by Martin Greendlinger. With an afterword and notes by Ju. A. Gastev. *Little Mathematics Library*, No. 3. *Mir Publishers, Moscow*, 1975. 62 pp. (Editors) **53** #7663 00A05
(with Faddeev, D. K.) ★Problemas de álgebra superior. (Spanish) [Problems in higher algebra] Translated from the Russian by Emiliano Aparicio Bernardo. Second edition. *Editorial "Mir", Moscow*, 1976. 277 pp. (Editors) **53** #13252 15-01
- Somló, J.** (with Frey, Tamás; Nguyen Van Quy) The use of operators with degenerated kernel for nonlinear system investigation. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 4: Education, feedback, regulators, linear and non-linear systems, Identification, differential games, discrete and stochastic systems, Paper No. 32.5, 11 pp. Internat. Fed. Automat. Control, Düsseldorf*, 1971 [1972]. (E. O. Roxin) **51** #8556 34C25
- Šomlo, Ja.** See *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)
- Sommer, David** (with Glover, Fred) Inequalities for mixed integer programs with structure. *Naval Res. Logist. Quart.* **23** (1976), no. 4, 603-609. (C. R. Bector) **58** #4312 90C10
- Sommer, Dietmar** See **Jordan-Engeln, Gisela**; et al., **50** #11702
- Sommer, F.** See *Fundamentals of mathematics*, **49** #8788
- Sommer, G.** Spectral dependence of the analyticity domain of local vertex functions. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 66-71. *Lecture Notes in Phys.*, **39**. *Springer, Berlin*, 1975. (Editors) **58** #32518 81J2 (32D05)
- Sommer, Manfred** Charakterisierung von Minimallösungen in normierten Vektorräumen durch Eigenschaften von Hyperebenen. *J. Approximation Theory* **14** (1975), no. 2, 103-114. (F. Deutsch) **51** #10975 41A65
Alternanten bei gleichmässiger Approximation mit zweidimensionalen Splinefunktionen. (English summary) *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 339-370. *Lecture Notes in Math.*, Vol. 501, *Springer, Berlin*, 1976. (Author's summary) **58** #1873 41A15
(with Strauss, Hans) Eigenschaften von schwach Tschebyscheffschen Räumen. *J. Approximation Theory* **21** (1977), no. 3, 257-268. (H. Weber) **57** #6986 41A50 (41A65)
(with Nürnberger, Günther) Characterization of continuous selections of the metric projection for spline functions. *J. Approximation Theory* **22** (1978), no. 4, 320-326. (V. A. Popov) **58** #1868 41A15
- Sommerfeld, Arnold** See *Festschrift: Weber, Heinrich*, **50** #12626 and **Benz, Ulrich**, **53** #10530
- Sommerfeld, Gerhard** Über Fragen der Einbettung eines nullteilerfreien Ringes in einen I-Ring. *Studien zur Algebra und ihre Anwendungen (mit Anwendungen in der Mathematik, Physik und Rechentechnik)*, pp. 87-90. *Schr. Zentralinst. Math. Mech. Akad. Wissensch. DDR, Heft. 16. Akademie Verlag, Berlin*, 1972. (J. K. Luedeman) **49** #7313 16A56
- Sommerhalder, R.** On the number of automorphisms of non-cyclic automata. (German summary) *Computing* **15** (1975), no. 3, 247-250. (H. Jürgensen) **52** #16920 94A30
- Sommermeier, Klaus** Koeffizientenänderung in der linearen Optimierung. (English and Russian summaries) *Math. Operationsforsch. Statist.* **2** (1971), no. 4, 271-281. (R. F. Albrecht) **46** #10402 90C05
- Sommers, Fred** Frege or Leibniz? *Studien zu Frege, Band III*, pp. 11-34. *Problemata*, No. 44, *Frommann-Holzboog, Stuttgart*, 1976. (From the introduction) **58** #27188 02-03 (01A45, 01A55)
See also *Methodological and historical essays in the natural and social sciences*, **52** #13078
- Sommers, John P.** (with Schucany, William R.) Improvement of kernel type density estimators. *J. Amer. Statist. Assoc.* **72** (1977), no. 358, 420-423. (G. Manija) **56** #6996 62G05
- Sommers, Paul** (with Hughston, Lane P.; Penrose, R.; Walker, Martin) On a quadratic first integral for the charged particle orbits in the charged Kerr solution. *Comm. Math. Phys.* **27** (1972), 303-308. (Authors' summary) **51** #9739 83J3
(with Hughston, Lane P.) Spacetimes with Killing tensors. *Comm. Math. Phys.* **32** (1973), 147-152. (J. Charles-Renaudie) **49** #12033 83J3
On Killing tensors and constants of motion. *J. Mathematical Phys.* **14** (1973), 787-790. (Kotik K. Lee) **48** #7900 83J53
(with Schmidt, Bernd; Walker, Martin) A characterization of the Bondi-Metzner-Sachs group. *General Relativity and Gravitation* **6** (1975), no. 5, 489-497. (J. E. Marsden) **54** #14739 83J58
(with Walker, Martin) A note on Hauser's type N gravitational field with twist. *J. Phys. A* **9** (1976), no. 3, 357-367. (Garry Ludwig) **57** #11635 83J3
Properties of shear-free congruences of null geodesics. *Proc. Roy. Soc. London Ser.*

- A 349 (1976), no. 1658, 309-318. (F. J. Flaherty) 54 #6877 83.53
Type N vacuum space-times as special functions in C^2 . *General Relativity and Gravitation* 8 (1977), no. 10, 855-863. (Charles A. Nelson) 58 #20162 83.32 (32F99, 53C55)
- Sommese, Andrew John** Borel's fixed point theorem for Kaehler manifolds and an application. *Proc. Amer. Math. Soc.* 41 (1973), 51-54. (Y. Matsushima) 48 #579 32M10 (53C30)
Some algebraic properties of the image of the period mapping. Complex analysis, 1972 (Proc. Conf., Rice Univ., Houston, Tex., 1972), Vol. II: Analysis on singularities. *Rice Univ. Studies* 59 (1973), no. 2, 123-128. (J. S. Joel) 48 #2430 32J25 (14D05)
Holomorphic vector-fields on compact Kaehler manifolds. *Math. Ann.* 210 (1974), 75-82. (J. B. Carrell) 50 #646 32L99 (32M10, 53C55)
Quaternionic manifolds. *Math. Ann.* 212 (1974/75), 191-214. (S. Ramanan) 54 #13778 53C15 (32L05, 32C10)
Reversing the Ahlfors' estimate. *Proc. Amer. Math. Soc.* 45 (1974), 242-244. (A. L. Vitter, III) 50 #7594 32H20
Extension theorems for reductive group action on compact Kaehler manifolds. *Bull. Amer. Math. Soc.* 81 (1975), 729-732. (Michael J. Field) 51 #8484 32M05 (32D15)
Criteria for quasi-projectivity. *Math. Ann.* 217 (1975), no. 3, 247-256. (M. Schneider) 52 #6042 (E 53 #5950) 32J20
Extension theorems for reductive group actions on compact Kaehler manifolds. *Math. Ann.* 218 (1975), no. 2, 107-116. (James B. Carrell) 52 #14370 32D20 (32M05)
A representable functor theorem for compact analytic spaces and applications. *Proc. Amer. Math. Soc.* 52 (1975), 11-17. (C. Bănică) 54 #13147 32J99 (32C15)
On manifolds that cannot be ample divisors. *Math. Ann.* 221 (1976), no. 1, 55-72. (S. Ramanan) 53 #8503 32J20
Addendum to: "Criteria for quasi-projectivity" (*Math. Ann.* 217 (1975), no. 3, 247-256). *Math. Ann.* 221 (1976), no. 1, 95-96. (M. Schneider) 53 #5950 32J20
On holomorphic jet bundles. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part 2, Williams Coll., Williamstown, Mass., 1975)*, pp. 49-52. *Amer. Math. Soc., Providence, R.I.*, 1977. (W. Barth) 58 #1282 32L10 (32J25)
On ample divisors. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part 1, Williams Coll., Williamstown, Mass., 1975)*, pp. 289-292. *Amer. Math. Soc., Providence, R.I.*, 1977. (Editors) 56 #3363 32J20 (14M15, 14F05)
Real algebraic spaces. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* 4 (1977), no. 4, 599-612. (A. Tognoli) 57 #691 32C05 (14F05)
Theorems of Barth-Lefschetz type for complex subspaces of homogeneous complex manifolds. *Proc. Nat. Acad. Sci. U.S.A.* 74 (1977), no. 4, 1332-1333. (W. Barth) 55 #8422 32M10 (32J25, 14M10)
Compact complex manifolds possessing a line bundle with a trivial jet bundle. Special issue dedicated to the seventieth birthday of Erich Kähler. *Abh. Math. Sem. Univ. Hamburg* 47 (1978), 79-91. (H. Kerner) 58 #17231 32J99
Submanifolds of Abelian varieties. *Math. Ann.* 233 (1978), no. 3, 229-256. (Marcus Wright) 57 #6524 32J25 (14C99)
Concavity theorems. *Math. Ann.* 235 (1978), no. 1, 37-53. (Y.-T. Siu) 58 #6352 32F10
- Sommea, D.** (with Livovschi, Leon) A search algorithm for the circuits of a graph. (Romanian. English summary) *Stud. Cerc. Mat.* 28 (1976), no. 2, 189-197. (Authors' summary) 57 #16137 05C35
(with Livovschi, Leon) Finite automata synthesis with conversational terminals. *Modern trends in cybernetics and systems (Proc. Third Internat. Congr., Bucharest, 1975)*, Vol. III, pp. 59-69. *Springer, Berlin*, 1977. (Ljudmil Dakovski) 56 #18173 94A25 (94A30)
- Somogyi, Á.** Maximal inequalities for not necessarily orthogonal random variables and some applications. (Russian summary) *Anal. Math.* 3 (1977), no. 2, 131-139. (From the summary) 58 #31358 60F15
An asymptotically optimal maximal inequality. (Russian summary) *Anal. Math.* 4 (1978), no. 1, 53-59. (H. Teicher) 58 #18708 60G50 (60E05)
- Somolinos, Alfredo S.** On the condition $c^2A-b+r>0$, in the Lurie problem. *Proc. Amer. Math. Soc.* 47 (1975), 432-441. (E. O. Roxin) 50 #10463 34D25 (34H05)
Stability of Lurie-type functional equations. *J. Differential Equations* 26 (1977), no. 2, 191-199. (M. M. Konstantinov) 57 #3565 34K20 (34D20)
Periodic solutions of the sunflower equation: $\ddot{x} + (a/r)\dot{x} + (b/r)\sin x(t-r) = 0$. *Quart. Appl. Math.* 35 (1977/78), no. 4, 465-478. (K. P. Haderl) 57 #5170 92A05 (34C25, 58F10)
- Somorjai, G.** A Müntz-type problem for rational approximation. *Acta Math. Acad. Sci. Hungar.* 27 (1976), no. 1-2, 197-199. (A. Magnus) 55 #3622 41A20
(with Márki, László; Szabados, József) Müntz-Jackson type theorems via interpolation. *Acta Math. Acad. Sci. Hungar.* 29 (1977), no. 1-2, 185-191. (A. K. Varma) 58 #1832 41A05
On the density of quotients of lacunary polynomials. *Acta Math. Acad. Sci. Hungar.* 30 (1977), no. 1-2, 149-154. (Geetha S. Rao) 56 #12713 41A20
- Somorjai, R. L.** (with Power, J. D.) The dimensional and numerical equivalence of the space-filling-curve approach and multi-dimensional integration methods for integral-transform trial functions. *Chem. Phys. Lett.* 12 (1971/72), 502-507. (Authors' summary) 50 #15739 81.49
- Somos, Endre** (with Stahl, János) Decomposition methods in nonlinear programming problems. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* 9 (1976), no. 1-2, 41-52. (Authors' summary) 55 #7418 90C30
- Somov, L. N.** (with Ponomarev, L. I.) The wave functions of continuum for the two-center problem in quantum mechanics. *J. Computational Phys.* 20 (1976), no. 2, 183-195. (Ian P. Grant) 53 #12403 81.65
(with Ponomarev, L. I.; Puzynin, I. V.; Puzynina, T. P.) The scattering problem in quantum mechanics as an eigenvalue problem. *Ann. Physics* 110 (1978), no. 2, 274-286. (Authors' summary) 58 #20020 81.47
- Somov, P. O.** See Ledn'ova, L. D., 58 #26885
- Somova, T. S.** (with Čapinoga, M. M.) Hydromechanics problems that reduce to convolution type integral equations. (Russian) *Proceedings of a Conference on Boundary*
- Value Problems (Kazan, 1969)* (Russian), 244-248. *Izdat. Kazan. Univ., Kazan*, 1970. Ungureanu-Doussat) 51 #2461 76.45
- Soms, A.** (with Roussas, George G.) On the exponential approximation of a family of probability measures and a representation theorem of Hájek-Inagaki. *Ann. Inst. Stat. Math.* 25 (1973), 27-39. (B. L. S. Prakasa Rao) 50 #15213 62M05
- Soms, Andrew P.** (with Harris, Bernard) The reliability of systems of independent components when some components are repeated. *J. Amer. Statist. Assoc.* 68 (1973), 894-898. (R. J. Buehler) 51 #7212 62N05 (62F10)
(with Harris, Bernard) Hypothesis testing and confidence intervals for a multiplicative Poisson model with applications to reliability and bioassay. *Reliability and biometry: statistical analysis of lifelength (Proc. Conf., Florida State Univ., Tallahassee, Fla., 1973)*, pp. 363-378. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1974. (P. J. Huber) 50 #15080 62F05 (62N05)
(with Harris, Bernard) Properties of the generalized incomplete modified beta distributions with applications to reliability theory. *J. Amer. Statist. Assoc.* 69 (1974), 259-263. (Benjamin Epstein) 53 #4428 62N05 (62E15)
(with Harris, Bernard) Tables of the two factor and three factor generalized incomplete modified Bessel distributions. *Selected tables in mathematical statistics, III*, pp. 1-109. *Amer. Math. Soc., Providence, R. I.*, 1975. (From the authors' introduction) 53 #11938 62Q05
(with Dutt, John E.) An integral representation technique for calculating general multivariate probabilities with an application to multivariate χ^2 . *Comm. Statist.-Theory Methods* A5 (1976), no. 4, 377-388. (Minoru Siotani) 54 #3968 62H10
An asymptotic expansion for the tail area of the t -distribution. *J. Amer. Statist. Assoc.* 71 (1976), no. 355, 728-730. (Christian Hipp) 54 #14194 62E20
(with Harris, Bernard) Sequential tests for hypotheses concerning the product of Poisson parameters with applications to problems in reliability and biometry. *Nat. Res. Logist. Quart.* 24 (1977), no. 3, 425-430. (Authors' summary) 58 #13546 62N05 (62N05, 62P10)
- le anh Son** See Le Anh Son
- le hung Son** See Le Hung Son
- nguyen quoc Son** See Nguyen Quoc Son
- Sonavane, K. R.** A representation of one-sided Laplace transformable generalized functions. *Indian J. Pure Appl. Math.* 7 (1976), no. 5, 477-481. (Author's summary) 58 #30187 46F10
(with Bhonsle, B. R.) Conduction of heat in a non-homogeneous finite cylinder with boundary conditions as generalised functions. *J. Shivaji Univ. (Sci.)* (1976), 5-10. (S. L. Kalla) 57 #8494 80.33
(with Bhonsle, B. R.) A relation between distributional one-sided Laplace transformation and distributional Hankel transformation. *J. Shivaji Univ. (Sci.)* (1976), 11-12. (N. C. Jain) 57 #3752 44A10
- Sondermann, A.** (with Tintner, Gerhard) Statistical aspects of economic aggregation. *Mathematical economics and game theory*, pp. 516-535. *Lecture Notes in Econ. and Math. Systems*, Vol. 141, Springer, Berlin, 1977. (A. L. Nagar) 55 #11554 62P20 (90A05)
- Sondermann, Dieter** (with Kirman, Alan P.) Arrow's theorem, many agents, and inviscid dictators. *J. Econom. Theory* 5 (1972), no. 2, 267-277. (Authors' introduction) 56 #7780 90A05 (92A20)
Economies of scale and equilibria in coalition production economies. *J. Econom. Theory* 8 (1974), no. 3, 259-291. (Hildegard Dierker) 57 #15352 90A15
Smoothing demand by aggregation. Papers presented at the Colloquium on Mathematical Economics (Univ. California, Berkeley, Calif., 1974). *J. Math. Econom.* (1975), no. 2, 201-223. (Yieh Hei Wan) 53 #2318 90A15
On a measure theoretical problem in mathematical economics. *Measure theory (Proc. Conf., Oberwolfach, 1975)*, pp. 415-427. *Lecture Notes in Math.*, Vol. 541, Springer, Berlin, 1976. (Yieh Hei Wan) 56 #4765 90A15
- Sondhi, Man Mohan** (with Gopinath, B.) Inversion of the telegraph equation and synthesis of nonuniform lines. *Proc. IEEE* 59 (1971), 383-392. (W.-K. Chen) 49 #49420
(with Gopinath, B.; Mitra, Debasis) Formulas on queues in burst processes. I. *System Tech. J.* 52 (1973), 9-33. (D. J. Daley) 48 #5188 60J15
(with Gopinath, B.; Mitra, Debasis) Formulas on queues in burst processes. *Bell System Tech. J.* 53 (1974), 425-448. (D. J. Daley) 49 #6421 60K30
(with Mitra, Debasis) New results on the performance of a well-known class of adaptive filters. *Proc. IEEE* 64 (1976), no. 11, 1583-1597. (Lee D. Davisson) 55 #793E10
- Sondik, Edward J.** The optimal control of partially observable Markov processes over infinite horizon: discounted costs. *Operations Res.* 26 (1978), no. 2, 282-304. (A. Pervovzanskiĭ) 58 #4351 90C40 (90C50)
- Šondin, Ju. G.** Spectral properties of bilocal operators in the expansion of a product local operators on the light cone. (Russian. English summary) *Teoret. Mat. Fiz.* (1976), no. 3, 309-315. (Author's summary) 56 #7635 81.47
A property of the solutions of the wave equation. (Russian. English summary) *Teoret. Mat. Fiz.* 26 (1976), no. 3, 425-428. (Author's summary) 58 #29292 35J60 (46F10)
(with Širokov, Ju. M.) Expansion of generalized functions with support in the light cone over a continuous set of irreducible representations of the Lorentz group by Wilson expansions. (Russian. English summary) *Teoret. Mat. Fiz.* 31 (1977), no. 147-155. (Ju. M. Zinov'ev) 58 #30185 46F10 (22E45, 32M10, 81.46)
- A Fourier expansion that is connected with the Lorentz group in the space of generalized functions with the support in the light cone. (Russian. English summary) *Teoret. Mat. Fiz.* 34 (1978), no. 1, 23-33. (A. U. Klimyk) 57 #12782 22E43 (43J83, 83.22)
- Sondow, Jonathan D.** The Godbillon-Vey invariant of a product foliation is zero. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 545-547. *Academic Press, New York*, 1973. (R. C. Kirby) 48 #12558 57D30
When is a manifold a leaf of some foliation? *Bull. Amer. Math. Soc.* 81 (1975), 622-624. (Enrique Vidal) 51 #1843 57D30
Fixed points of Anosov maps of certain manifolds. *Proc. Amer. Math. Soc.* (1976), no. 2, 381-384 (1977). (J. W. Robbin) 55 #11311 58F15 (55C20)
- Sone, Satoru** (with Imada, Toshiaki; Utsunomiya, Toshio) An associative memory

- vergent recollection. *Systems-Comput.-Controls* **8** (1977), no. 2, 25-34 (1978). (K. D. Inthier) **58** #25164 68A45
- u, Nicolae The equation of degree two with rounded off numbers as coefficients. (Romanian. English summary) *Stud. Cerc. Mat.* **22** (1970), 803-821. (L. Bal) **47** #9821 65H05 (65G05)
- The composition of unequal rectangular distributions. (Romanian. English summary) *Stud. Cerc. Mat.* **24** (1972), 1137-1146. (Viorel Gh. Vodă) **50** #15076 E99
- Ch'ang Ho A method for the solution of a boundary value problem that arises in the study of the ocean currents of Korea. (Korean. English summary) *Cho-sŏn In-min Kong-hwa-kuk Kwa-hak-wŏn T'ong-po* **1972**, no. 4, 4-9. (Editors) **54** #9346 76.65
- A method for the solution of a boundary value problem that occurs in the study of the ocean currents of Korea. (Korean. English summary) *Su-hak kwa Mul-li* **16** (1972), no. 2, 27-32. (Editors) **54** #9347 76.65
- On a method of calculating river water temperature. (Korean. English summary) *Cho-sŏn In-min Kong-hwa-kuk Kwa-hak-wŏn T'ong-po* **1973**, no. 6, 13-17. (Editors) #9371 80.65
- Some considerations on cubic splines. (Korean. English summary) *Cho-sŏn In-min Kong-hwa-kuk Kwa-hak-wŏ T'ong-po* **23** (1975), no. 3, 124-128. (Editors) **55** #8634 A15
- Some considerations on cubic splines. (Korean. English summary) *Su-hak kwa Mul-li* **19** (1975), no. 3, 29-33. (Author's summary) **56** #1666 65D05
- On the convergence of a semi-iterative optimization method. (Korean. English summary) *Cho-sŏn In-min Kong-hwa-kuk Kwa-hak-wŏn T'ong-bo* **25** (1977), no. 3, 7-140. (Author's summary) **58** #13657 65F10 (65K05)
- Summation representation of the difference equation solution for the elliptic partial differential equation of 2nd order with piecewise constant coefficients. (Korean. English summary) *Su-hak kwa Mul-li* **21** (1977), no. 4, 3-10. (Author's summary) **58** #13771 N20
- M. S. (with Lawson, J. Douglas) Application of generalized multi-step methods to the solution of non-linear algebraic systems. *Proceedings of the Sixth Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1976), pp. 1-237. *Congress. Numer., XVIII. Utilitas Math., Winnipeg, Man., 1977.* (Authors' introduction) **58** #31800 65H10
- Moon Sup Beta alternatives and beta scores two-sample rank test. *J. Korean Math. Soc.* **14** (1977/78), no. 1, 9-32. (W. J. Conover) **57** #10912 62G10
- Use of the Wilcoxon test for the parallelism of two regression lines. *J. Korean Math. Soc.* **14** (1977/78), no. 2, 223-228. (P. K. Sen) **57** #4421 62G10
- S. W. (with Kung, H. T.) An efficient parallel garbage collection system and its correctness proof. *18th Annual Symposium on Foundations of Computer Science Providence, R.I., 1977*, pp. 120-131. *IEEE Comput. Sci., Long Beach, Calif., 1977.* (R. Shyamamundar) **58** #13859 68A05 (68A10)
- Kusum L. (with Oberhettinger, Fritz) On some relations which are equivalent to functional equations involving the Riemann zeta function. *Math. Z.* **127** (1972), 17-34. (J. Ryavec) **46** #7180 10H05
- (with Soni, Raj Pal) Integrability theorems for a class of integral transforms. *J. Math. Anal. Appl.* **43** (1973), 397-418. (L. Artega) **48** #4658 44A05
- (with Soni, Raj Pal) Integrability theorems for a class of integral transforms. II. *J. Math. Anal. Appl.* **44** (1973), 553-580. (L. Artega) **49** #1023 44A15
- (with Soni, Raj Pal) Lipschitz behavior and characteristic functions. *SIAM J. Math. Anal.* **4** (1973), 302-308. (J. N. Pandey) **48** #6829 44A15 (60E05)
- (with Soni, Raj Pal) Asymptotic behavior of a class of integral transforms. *SIAM Math. Anal.* **4** (1973), 466-481. (I. Fenyő) **48** #2675 44A05 (41A60)
- (with Soni, Raj Pal) A Tauberian theorem related to the modified Hankel transform. *Bull. Austral. Math. Soc.* **11** (1974), 167-180. (N. H. Bingham) **50** #14088 4A15 (40E05)
- (with Soni, Raj Pal) A note on probability measures and Hankel transform. *J. London Math. Soc.* (2) **9** (1974/75), 65-67. (J. N. Pandey) **52** #6336 44A15
- (with Soni, Raj Pal) The Parseval relation and monotone functions. *J. Math. Anal. Appl.* **48** (1974), 633-645. (I. Fenyő) **50** #7960 44A05
- (with Ridenhour, Jerry R.) Parseval relation and Tauberian theorems for the Hankel transform. *SIAM J. Math. Anal.* **5** (1974), 809-821. (V. P. Mainra) **50** #14086 44A15
- (with Soni, Kusum L.) Slowly varying functions and asymptotic behavior of a class of integral transforms. I, II, III. *J. Math. Anal. Appl.* **49** (1975), 166-179; *ibid.* **49** (1975), 477-495; *ibid.* **49** (1975), 612-628. (C. Fox) **50** #14089 44A15 (40E05)
- See also Satoh, H. **53** #4467; Wood, Van E. **53** #4472; Semon, Mark D.; et al., **53** #5960; Katzin, Martin, **54** #3046; Skovgaard, Ove, **54** #3047 and Pexton, Robert L., **58** #3292
- Soni, Raminder Singh (with Sharma, Bhu Dev) A new generalized functional equation for inaccuracy and entropy of kind β . *Funkcial. Ekvac.* **17** (1974), 1-11. (Pl. Kannappan) **53** #7619 94A15
- On a functional equation in two and three variables with measures of kind β in information theory. *Defence Sci. J.* **25** (1975), no. 2, 45-54. (Pl. Kannappan) **52** #5210 94A15
- (with Sharma, Bhu Dev) Additive and non-additive measures of information of comparison and information improvement. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **11** (1975), no. 7-8, 489-504. (Pl. Kannappan) **52** #7720 94A15
- (with Autar, Ram) Characterization of information improvement by generating functions. *Indian J. Mech. Math.* **13** (1975), no. 1-2, 69-75. (Authors' summary) **57** #19087 94A15 (39A15)
- (with Autar, Ram) Inaccuracy and a coding theorem. *J. Appl. Probability* **12** (1975), no. 4, 845-851. (Pl. Kannappan) **52** #7712 94A15
- On a functional equation connected with information and information improvement. *Indian J. Pure Appl. Math.* **7** (1976), no. 7, 787-798. (P. N. Rathie) **58** #26545 94A15 (39A30)
- (with Autar, Ram) Generalized inaccuracy and a coding theorem. *Proc. Indian Acad. Sci. Sect. A* **84** (1976), no. 5, 204-209. (Authors' summary) **58** #26528 94A15
- On information improvement. *Indian J. Pure Appl. Math.* **8** (1977), no. 8, 944-954. (Pl. Kannappan) **58** #17632 39A30 (94A15)
- Soni, S. L. A note on Fox's H -function. *Jñānabha Sect. A* **1** (1971), no. 1, 93-97. (R. G. Buschman) **46** #5693 33A35
- An integral involving the product of H -functions. *Math. Student* **40A** (1972), 203-207. (K. C. Gupta) **51** #3573 33A35
- An expansion formula for Fox's H -function in series of Gegenbauer (ultraspherical) polynomials. *Ranchi Univ. Math. J.* **4** (1973), 15-20. (R. G. Buschman) **50** #655 33A35
- Fourier series for H -function of two variables. *Indian J. Pure Appl. Math.* **5** (1974), no. 3, 272-277. (C. L. Parihar) **51** #13312 33A35
- Soni, Leonard E. Characterizations of uniformity-dependent dimension functions. *Fund. Math.* **76** (1972), no. 1, 63-70. (J. Dugundji) **46** #2646 54E15 (54F45)
- Sonin, I. M. (with Presman, É. L.) The problem of best choice in the case of a random number of objects. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 695-706. (V. Fabian) **47** #2729 62F07
- (with Presman, É. L.) Equilibrium points in a generalized game-theoretic best choice problem. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **20** (1975), no. 4, 785-796. (H.-J. Engelbert) **53** #1721 60G40 (62L15)
- Game problems that are connected with optimal selection. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 2, 70-75. (Author's summary) **56** #13349 60G40 (90D99)
- See also Probabilistic control problems in economics, **58** #33180
- Sonis, M. G. A certain class of operators in von Neumann algebras with Segel's measure on the projectors. (Russian) *Mat. Sb. (N.S.)* **84(126)** (1971), 353-368. (A. Brown) **46** #681 46L10
- Sonn, Jack On the embedding problem for nonsolvable Galois groups of algebraic number fields: Reduction theorems. *Bull. Amer. Math. Soc.* **78** (1972), 553-557. (Yasumasa Akagawa) **46** #7195 12A55
- On the embedding problem for nonsolvable Galois groups of algebraic number fields: Reduction theorems. *J. Number Theory* **4** (1972), 411-436. (J. P. Labute) **46** #7196 12A55
- (with Shapiro, Jack M.) Free factor groups of one-relator groups. *Duke Math. J.* **41** (1974), 83-88. (I. D. Macdonald) **50** #487 20F05 (20J05)
- Epimorphisms of Demushkin groups. *Israel J. Math.* **17** (1974), 176-190. (J. J. Malone) **50** #2129 12B15 (20F20)
- Localizability of the embedding problem with symplectic kernel. *J. Number Theory* **6** (1974), 138-157. (J. Browkin) **50** #12992 12F10
- Alternating forms and one-relator groups. *Proc. Amer. Math. Soc.* **46** (1974), 15-20. (I. D. Macdonald) **51** #3312 20F05 (20J05)
- Groups that are the union of finitely many proper subgroups. *Amer. Math. Monthly* **83** (1976), no. 4, 263-265. (Charles S. Holmes) **53** #3130 20F99
- Galois groups of global fields of finite characteristic. *J. Algebra* **43** (1976), no. 2, 606-618. (Jacques Martinet) **54** #10202 12A50 (12A80, 16A40)
- Frobenius Galois groups over quadratic fields. *Israel J. Math.* **31** (1978), no. 1, 91-96. (Pierre Damey) **58** #10820 12A55
- Sonneborn, L. M. (with Bateman, James M.; Phillips, Richard E.) Wreath products and representations of degree one or two. *Trans. Amer. Math. Soc.* **181** (1973), 143-153. (David McDougall) **47** #8698 20F25
- Sonnemann, Eckart (with Krafft, Olaf) Independence numbers of product graphs. *J. Combinatorial Theory Ser. B* **17** (1974), 133-142. (Michel Chénin) **51** #7963 05C99
- Optimally colorable graphs with applications in experimental design. (German summary) *Operations Research Verfahren, Band XX*, pp. 163-177. Hain, Meisenheim am Glan, 1975. (Alan Tucker) **56** #174 05C15 (62K10)
- Sonnenberg, Walter See Jahrestagung: Gesellschaft für Informatik, **48** #1502
- Sonnenschein, Hugo F. On the lower semicontinuity of utility functions derived from demand data. *Preferences, utility and demand (a Minnesota symposium)*, pp. 77-80.

- Harcourt Brace Jovanovich, New York, 1971. (Hildegard Dierker) **56** #7805 90A10
- Demand theory without transitive preferences, with applications to the theory of competitive equilibrium. *Preferences, utility and demand (a Minnesota symposium)*, pp. 215-223. Harcourt Brace Jovanovich, New York, 1971. (Georg Bol) **56** #17746 90A15
- On the continuity of demand functions which satisfy the strong axiom of revealed preference. *Preferences, utility and demand (a Minnesota symposium)*, pp. 271-275. Harcourt Brace Jovanovich, New York, 1971. (Hildegard Dierker) **56** #7806 90A10
- Market excess demand functions. *Econometrica* **40** (1972), 549-563. (Egbert Dierker) **49** #2048 90A15
- Do Walras' identity and continuity characterize the class of community excess demand functions? *J. Econom. Theory* **6** (1973), no. 4, 345-354. (Author's summary) **56** #10845 90A15
- An axiomatic characterization of the price mechanism. *Econometrica* **42** (1974), 425-433. (Author's summary) **55** #14150 90A15
- (with Shafer, Wayne J.) Some theorems on the existence of competitive equilibrium. *J. Econom. Theory* **11** (1975), no. 1, 83-93. (John Roberts) **53** #10210 90A15
- (with Shafer, Wayne J.) Equilibrium in abstract economies without ordered preferences. *J. Math. Econom.* **2** (1975), no. 3, 345-348. (Ryuzo Sato) **53** #2315 90A15
- (with Kihlstrom, Richard E.; Mas-Colell, Andreu) The demand theory of the weak axiom of revealed preference. *Econometrica* **44** (1976), no. 5, 971-978. (M. B. Suryanarayana) **57** #11663 90A05
- (with Shafer, Wayne J.) Equilibrium with externalities, commodity taxation, and lump sum transfers. *Internat. Econom. Rev.* **17** (1976), no. 3, 601-611. (John Roberts) **57** #15350 90A15
- (with Roberts, John) On the existence of Cournot equilibrium without concave profit functions. *J. Econom. Theory* **13** (1976), no. 1, 112-117. (Georg Bol) **55** #5190 (E 57 #9013) 90A15
- Some recent results on the existence of equilibrium in finite purely competitive economies. *Frontiers of quantitative economics (Invited papers, Econometric Soc., Third World Congress, Toronto, Ont., 1977), Vol. IIIA*, pp. 103-109. *Contributions to Economic Analysis*, Vol. 105, North-Holland Publishing Co., Amsterdam, 1977. (Morton I. Kamien) **56** #14610 90A15
- (with Roberts, John) On the foundations of the theory of monopolistic competition. *Econometrica* **45** (1977), no. 1, 101-113. (Authors' summary) **57** #15348 90A15
- (with Roberts, John) Acknowledgment: "On the existence of Cournot equilibrium without concave profit functions" (*J. Econom. Theory* **13** (1976), no. 1, 112-117). *J. Econom. Theory* **16** (1977), no. 2, 521. (Editors) **57** #9013 90A15
- See also *Preferences, utility and demand*, **55** #5187
- Sonnevend, G. On optimization of algorithms for function minimization. *Progress in operations research, Vols. I, II (Proc. Sixth Hungarian Conf., Eger, 1974)*, pp. 865-893. *Colloq. Math. Soc. János Bolyai*, Vol. 12, North-Holland, Amsterdam, 1976. (J. S. Kowalik) **55** #6855 65K05 (90C25)
- Sonnevend, György L. S. Pontrjagin, honorary member of the Hungarian Academy of Sciences. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **22** (1974), no. 2-4, 185-200 (1976). (Editors) **53** #7700 01A70
- On optimization of algorithms for function minimization. (Russian summary) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 3, 591-609, 803. (Wolfgang Wetterling) **57** #4518 65K05
- Output regulation in partially observable linear disturbed systems. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977), Part 1*, pp. 214-227. *Lecture Notes in Control and Information Sci.*, Vol. 6, Springer, Berlin, 1978. (Jerzy Klamka) **58** #26419 93D99
- Sonntag, Otto Albrecht von Haller on academics and the advancement of science: the case of Göttingen. *Ann. of Sci.* **32** (1975), no. 4, 379-391. (M. Kline) **56** #50 01A50 (00A25)
- Sonntag, Yves Un algorithme itératif pour la résolution d'une classe d'inéquations. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 5, A293-A295. (Boro Döring) **54** #9081 65J05 (47H15)
- Interprétation géométrique de la convergence d'une suite de convexes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 18, A1099-A1100. (F. Deutsch) **54** #827 41A65
- Sonobe, Osamu A Gentzen-type formulation of some intermediate propositional logics. *J. Tsuda College No. 7* (1975), 7-13. (B. van Rootselaar) **51** #2877 02C15
- Bi-relational frameworks for minimal and intuitionistic logics. Proceedings of the Third Symposium on Basic Theory of Programs (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1973) and of the Workshop for Proof Theory about Algorithms (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1974). *Sūrikaiseikenkyūsho Kōkyūroku No. 236* (1975), 174-189. (From the text) **58** #5075 02C15 (02B05)
- Tableau methods of proof for LP_n and LQ_n . *J. Tsuda College No. 8* (1976), 19-26. (Daniel Leivant) **57** #2889 02D99 (02C15)
- Beth-type tableau proof systems for some intermediate and modal logics. *J. Tsuda College No. 9* (1977), 49-60. (Dov M. Gabbay) **58** #21419 02B05 (02C10, 02C15, 02D99)
- Sons, L. R. Zeros of power series with large gaps. *Indiana Univ. Math. J.* **22** (1972/73), 199-205. (Walter Hengartner) **46** #3755 30A08
- Asymptotic paths for power series with exponents of the form n^p . *Michigan Math. J.* **19** (1972), 383-384. (M. E. Noble) **47** #2067 30A72 (30A12)
- Zeros of sums of series with Hadamard gaps. *Pacific J. Math.* **43** (1972), 515-524. (A. Edrei) **47** #5258 30A70
- Gap series with rapid growth in the unit disc. *Math. Z.* **131** (1973), 25-48. (T. Kövari) **48** #2356 30A10 (30A70)
- Polynomial growth along Jordan arcs. *Math. Z.* **141** (1975), 1-8. (J. A. Kelings) **51** #8381 30A08
- (with Nicholls, Peter J.) Minimum modulus and zeros of functions in the unit disc. *Proc. London Math. Soc.* (3) **31** (1975), no. 1, 99-113. (Hari Shankar) **53** #780 30A10
- Corrigendum: "Regularity of growth and gaps" (*J. Math. Anal. Appl.* **24** (1968), 296-306). *J. Math. Anal. Appl.* **58** (1977), no. 1, 232. (Editors) **55** #3258 30A70
- Value distribution of canonical products in the unit disc. *Math. Japon.* **22** no. 1, 27-38. (V. P. Petrenko) **57** #635 30A70
- Sontag, Alexia Variation of the Green's function due to quasiconformal distortion region. *Arch. Rational Mech. Anal.* **59** (1975), no. 3, 257-280. (G. D. Ane) **53** #793 30A38
- Sontag, Eduardo D. On some questions of rationality and decidability. *J. Comput. Sci.* **11** (1975), no. 3, 375-381. (Forbes D. Lewis) **54** #4941 02F10 (68A30)
- On linear systems and noncommutative rings. *Math. Systems Theory* **9** (1976), no. 4, 327-344. (E. G. Manes) **56** #11118 93A05
- On finitely accessible and finitely observable rings. *J. Pure Appl. Algebra* **8** no. 1, 97-104. (Samuel H. Cox, Jr.) **54** #5298 16A48
- (with Rouchaleau, Yves) On discrete-time polynomial systems. *Nonlinear* (1976), no. 1, 55-64. (Christopher I. Byrnes) **57** #18922 93B05
- (with Rouchaleau, Yves) Sur les anneaux de Fatou forts. (English summary) *Acad. Sci. Paris Sér. A-B* **284** (1977), no. 5, A331-A333. (Authors' summary) **55** #13C05
- The lattice of minimal realizations of response maps over rings. *Math. Systems Theory* **11** (1977/78), no. 2, 169-175. (Michel Fliess) **57** #11862 93B20
- On split realizations of response maps over rings. *Information and Control* **37** no. 1, 23-33. (E. G. Manes) **58** #9505 93B20 (93A05)
- Sontheimer, Kevin C. The existence of international trade equilibrium with trade taxsubsidy distortions. *Econometrica* **39** (1971), 1015-1035. (Egbert Dierker) **49** #90A15
- An existence theorem for the second best. *J. Econom. Theory* **3** (1971), 1-22. the author's introduction) **56** #7875 90A15
- A technological representation of money. *Metroecon.* **25** (1973), 136-152. Stancu-Minasian and I. Dobre) **57** #11682 90A15
- Sonvico, Violeta (with Kshirsagar, Anant M.) Concurrence of regression equations regressors. *Contributions to survey sampling and applied statistics*, pp. 173-180. Academic Press, New York, 1978. (D. G. Kabe) **58** #18901 62H15 (62J05)
- Sood, Arun K. (with Neuman, Charles P.) Sensitivity functions for multi-input time-invariant systems. *Internat. J. Control* (1) **13** (1971), 1137-1150. (J. Szel) **46** #3144 93B35
- (with Neuman, Charles P.) On the linear two-point boundary-value problem. *Optimization Theory Appl.* **8** (1971), 66-72. (Authors' summary) **45** #7160 34A05
- (with Neuman, Charles P.) Sensitivity functions for multi-input linear time-invariant systems. II. Minimal-order models. *Internat. J. Control* (1) **15** (1972), 451-463. (Authors' summary) **56** #11184 93B35 (93B20)
- Modeling of nonlinear systems. *IEEE Trans. Systems, Man, and Cybernet.* **3** (1973), 417-420. (D. Obradovic) **51** #15059 93B15
- Sookne, David J. (with Olver, Frank W. J.) Note on backward recurrence algorithm. *Math. Comp.* **26** (1972), 941-947. (Walter Gautschi) **48** #10158 65Q05 (33A40)
- Bessel functions I and J of complex argument and integer order. *J. Res. Nat. Standards Sect. B* **77B** (1973), no. 3-4, 111-114. (Roland Bulirsch) **54** #9054 (33A40)
- Certification of an algorithm for Bessel functions of real argument. *J. Res. Nat. Bur. Standards Sect. B* **77B** (1973), no. 3-4, 115-124. (Roland Bulirsch) **54** #9052 65D20 (33A40)
- Bessel functions of real argument and integer order. *J. Res. Nat. Bur. Standards Sect. B* **77B** (1973), no. 3-4, 125-132. (Roland Bulirsch) **54** #9052 65D20 (33A40)
- Certification of an algorithm for Bessel functions of complex argument. *J. Res. Nat. Bur. Standards Sect. B* **77B** (1973), no. 3-4, 133-136. (Roland Bulirsch) **54** #9054 65D20 (33A40)
- Soomer, V. Almost summability fields. (Russian. Estonian and English summaries) *Riikl. Ül. Toimetised No. 342* (1974), 156-162. (M. R. Parameswaran) **52** #40D20
- Convergence factors for almost convergence series. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised No. 342* (1974), 163-170. (M. R. Parameswaran) **52** #3781 40D15
- Almost summability factors of type (A,A). (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih. 355* (1975), 179-186. (Author's summary) **54** #5666 40D15
- Soonets, K. (with Lepik, Ü.; Saks, E.) The dynamics of axially symmetric bodies under high stress. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised No. 342* (1974), 280-292. (N. Cristescu) **54** #4277 73B65
- Soong, T. T. (with Ruymgaart, Peter Arnold) A sample treatment of Langevin stochastic differential equations. *J. Math. Anal. Appl.* **34** (1971), 325-338. (I. G. RŽMat 1972 #3 V104) **46** #952 60H20
- (with Bellman, Richard; Vasudevan, R.) Quasilinearization and stability of nonlinear stochastic systems. *J. Math. Anal. Appl.* **40** (1972), 159-163. (A. summary) **56** #8143 93E15 (93C10)
- (with Bellman, Richard; Vasudevan, R.) On moment behavior of a class of stochastic difference equations. *J. Math. Anal. Appl.* **40** (1972), 286-299. (Darling) **47** #5956 60H99
- ★Random differential equations in science and engineering. *Mathematical Science and Engineering*, Vol. 103. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1973. xiii + 327 pp. (W. J. Padgett) **56** #9691
- (with Dowdee, J. W.) On random least-square analysis. *J. Math. Anal. Appl.* (1974), 447-462. (J. Mockus) **53** #12709 93E10
- (with Mohanty, N. C.) Linear filtering in multiplicative noise. *Information and Control* **34** (1977), no. 2, 141-147. (N. U. Ahmed) **56** #11396 93E10
- On model reduction of large-scale systems. *J. Math. Anal. Appl.* **60** (1977), 477-482. (Alan Bradshaw) **56** #11131 93A15
- (with Chuang, Shui Nan; Chen, Kuang Ho) Stochastic extensions to nonlinear conditions in the theory of the calculus of variations. *J. Optimization Theory Appl.* (1977), no. 1, 53-64. (Authors' summary) **58** #25987 90C15 (49B35)
- Soós, Eugen (with Ariciuc, M.) Particules orientées dans la construction de nouvelles mathématiques des cristaux élastiques. *Bull. Math. Soc. Sci. Math. R. S. Roum. (N.S.)* **16** (64) (1972), no. 3, 255-281 (1973). (F. R. N. Nabarro) **52** #4897 82D05
- (with Teodorescu, P. P.) Un modèle continu, lorentzien, nonlinéaire et nonlocal

électrique hyperélastique. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **17(65)** (1973), no. 4, 417-443 (1975). (From the authors' introduction) **57** #8483 78.49 3.49)

Discrete and continuous models of solids. Generalized continuous models. A critical presentation. I, II, III. (Romanian. English summary) *Stud. Cerc. Mat.* **25** (1973), 485-483; *ibid.* **25** (1973), 567-617; *ibid.* **25** (1973), 687-759. (P. P. Teodorescu) **58** #12469 73.00 (82.00)

(with Ariciuc, Mircea) Cosserat type models of molecular crystals. (Romanian. English summary) *Stud. Cerc. Mat.* **25** (1973), 1115-1166. (P. P. Teodorescu) **58** #12471 73.35 (82.35)

(with Teodorescu, P. P.) Discrete, quasi-continuous models of elastic solids. Beiträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), 33-T43. (H. R. Aggarwal) **49** #11905 73.00

(with Beju, Iulian; Teodorescu, P. P.) ★Tehnici de calcul vectorial cu aplicații. (Romanian) [Techniques of vector calculus with applications] *Seria Matematici Moderne Aplicate*. [Modern Applied Mathematics Series] *Editura Tehnică, Bucharest*, 1976. 287 pp. (Editors) **58** #28015 15-01 (26-01, 53-01, 69.00)

(with Ariciuc, Mircea) Continuous and discrete models of molecular crystals with complex structure. *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* **22** (1977), no. 4, 521-536. (Authors' summary) **56** #17361 73.49

(with Gyéresi, St.) The energy-momentum tensor in the electromagnetic field. I. Preliminary axiomatization. (Romanian) *Stud. Cerc. Mec. Apl.* **37** (1978), no. 1, 3-16. (G. G. Weill) **58** #8825 78.53

Sándor Richtungsbegriff in metrischen Räumen. *Publ. Math. Debrecen* **19** (1972), 199-209 (1973). (S. Golăb) **48** #7218 54E35

Davidson Eugene ★Classical field theory. *Wiley-Interscience [John Wiley & Sons]*, New York-London-Sydney, 1976. xi + 259 pp. (Gérard A. Maugin) **56** #17673 83.35 0.35)

(with Collins, John C.) Large order expansion in perturbation theory. *Ann. Physics* **12** (1978), no. 1, 209-234. (J. Weidmann) **58** #19972 81.41

P. J. R. Austern-Sasakawa scattering theory. *Phys. Rev. C* (3) **10** (1974), 1282-1291. (D. B. Fairlie) **51** #4885 81.45

G. See Schopf, Gerhard

A. E. P. Congruences of central nondegenerate hyperquadrics in n -dimensional affine space. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp.* **7** (1976), 105-110, 153. (Josef Vala) **58** #18182 53A15

Congruences of ellipsoids with a focal congruence of ellipses. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp.* **8** (1977), 77-81, 155-156. (M. C. Chaki) **58** #24077 53A35

A. John R. (with Feldstein, Alan) Numerical methods for nonlinear Volterra integro-differential equations. *SIAM J. Numer. Anal.* **11** (1974), 826-846. (Sean McKee) **51** #12006 65R05

ov, Nikolai Generalized solutions of first order nonlinear equations. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **4** (1967), no. 95-103 (1971). (I. Aganović) **46** #2211 35F30

(with Genov, Angel) Generalized solutions for the second boundary value problem for certain first order nonlinear differential equations. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **4** (1967), no. 1, 105-113 (1971). (I. Aganović) **46** #2212 35F30

The first boundary value problem for a certain second order quasilinear parabolic equation. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **5** (1968/69), no. 1, 115-120 (1971). (I. Aganović) **47** #7223 35K20

The first boundary value problem for certain second order quasilinear parabolic equations with several space variables. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **5** (1968/69), no. 2, 97-105 (1971). (Author's summary) **46** #5832 35K55

The first boundary value problem for certain nonlinear parabolic equations. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **5** (1968/69), no. 3, 19-26 (1970). (I. Aganović) **46** #2233 35K55

The first boundary value problem for nonlinear parabolic equations of arbitrary order. (Russian) *C. R. Acad. Bulgare Sci.* **23** (1970), 899-902. (V. Duriković) **51** #1130 35K35

The Dirichlet problem for a quasilinear second order elliptic equation. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **7** (1971), no. 95-108 (1973). (B. A. Bondarenko) **48** #10155 65N99

On the first boundary value problem for second order nonlinear parabolic equations. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 1, 77-84 (1973). (T. Stýs) **53** #7061 65N05

(with G"rnevska, L. V.) The Dirichlet problem for second order nonlinear elliptic equations. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 1, 85-98 (1973). (T. Stýs) **53** #7062 65N05

A Cauchy problem for a fourth order hyperbolic equation. (Bulgarian. Russian and French summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 2, 9-16 (1978). (Editors) **58** #23103a 35L35

A mixed problem for a fourth order hyperbolic equation. (Bulgarian. Russian and French summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 2, 17-28 (1978). (Editors) **58** #23103b 35L35

A mixed Dirichlet problem for a fourth order hyperbolic differential equation. (Bulgarian. Russian and French summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 2, 29-40 (1978). (Editors) **58** #23103c 35L35

(with Manolov, Spas) A property of the derivatives of the composite functions of a given class. (Bulgarian. Russian and French summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 4, 173-181 (1977). (Authors' summary) **58** #28367 6A72 (34C25)

W, Pet'r The moment-free theory of thin-walled shells on a catenoid. (Bulgarian. Russian and German summaries) *Visš Ped. Inst. Plovdiv Naučn. Trud.* **4** (1966), no. 2, 1-52. (M. Mišicu) **48** #10268 73.35

A certain inequality for integers. (Bulgarian. Russian and French summaries) *Visš Ped. Inst. Plovdiv Naučn. Trud.* **8** (1970), no. 3, 7-15. (T. T. Tonkov) **48** #8401 0F20

On the approximation of irrational numbers. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Naučn. Trud.* **11** (1973), no. 2, 19-28. (Author's summary) **58** #10775 10F35

On the approximation of irrational numbers. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Naučn. Trud.* **12** (1974), no. 1, 123-131. (Grigorii V. Čudnovskii) **53** #7960 10F35

An inequality with integers that are approximate fractions. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Naučn. Trud.* **13** (1975), no. 1, 295-300 (1977). (Author's summary) **58** #21956 10F20

Sopov, S. P. A certain class of homogeneous polyhedra. (Russian) *Ukrain. Geometr. Sb. No. 7* (1969), 130-140, 186 (1970). (E. Hertel) **48** #1019 50B30

A proof of the completeness on the list of elementary homogeneous polyhedra. (Russian) *Ukrain. Geometr. Sb. No. 8* (1970), 139-156. (E. Jocović) **48** #4895 50B30

Šopova, Dimitrička An exposition of the theory of Jacobian elliptic functions in the real domain by elementary means. (Bulgarian. French summary) *Annuaire Univ. Sofia Fac. Math.* **65** (1970/71), 7-24 (1972). (errata insert) (R. P. Boas, Jr.) **48** #2434 33A25

An account of certain applications of Jacobi's elliptic functions by elementary means. (Bulgarian. French summary) *Annuaire Univ. Sofia Fac. Math.* **66** (1971/72), 307-319 (1974). (L. A. Kogan) **53** #2843 10D99 (33A25)

Sopronjuk, F. A. The averaging theorem for functional differential equations with random parameters. (Russian) *Studies in the theory of differential and difference equations (Russian)*, pp. 89-100. *Latv. Gos. Univ., Riga*, 1976. (J. S. Joel) **58** #6615 34K15 (60H10)

Stability of the solutions of linear systems of differential-difference equations under trigonometric perturbations of the parameters. (Russian) *Studies in the theory of differential and difference equations (Russian)*, pp. 101-130. *Latv. Gos. Univ., Riga*, 1976. (J. S. Joel) **57** #16921 34K20

Sopronjuk, F. O. (with Car'kov, E. F.) The stability of linear stochastic differential equations with lag. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1973**, 347-350, 382. (A. Ja. Dorogovcev) **47** #7815 60H10

Soprunov, S. F. The power of a real-closed field. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 4, 70-73. (S. Comer) **51** #5294 02H15 (12D15, 12L05)

Strong nonstandard models of arithmetic. (Russian) *Dokl. Akad. Nauk SSSR* **220** (1975), 293-296. (W. Marek) **53** #12935 02H20 (02H13)

Initial segments of nonstandard arithmetics. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 3, 576-577. (N. V. Beljakin) **53** #7772 02H20

Countable nonstandard models of arithmetic. (Russian) *Studies in set theory and nonclassical logics (Russian)*, pp. 157-173. *Izdat. "Nauka", Moscow*, 1976. (S. R. Kogalovskii) **57** #5744 02H25

Šor, E. I. See Šor, O. I.

Šor, L. A. The flexibility of convex surfaces with boundary. (Russian) *Ukrain. Geometr. Sb. No. 5-6* (1968), 177-196. (Z. Nádenik) **45** #2630 53C45

On the question of the bending of convex surfaces with a slit. (Russian) *Ukrain. Geometr. Sb. No. 7* (1969), 180-181, 187 (1970). (W. J. Firey) **48** #1119 53C45

Applicable convex surfaces with an edge having nonnegative rotation. (Russian) *Ukrain. Geometr. Sb. No. 10* (1971), 87-104. (A. V. Pogorelov) **45** #7654 53C45

Applicable infinite convex surfaces. (Russian) *Ukrain. Geometr. Sb. No. 11* (1971), 98-106. (A. V. Pogorelov) **46** #8143 53C45

(with Zjuz'ko, M. P.) Estimation of the number of connection points in nonblocking commutation schemes. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 4, 37-39. (B. Zelinka) **46** #6964 94A20 (05C35)

Applicable convex surfaces. (Russian) *Ukrain. Geometr. Sb. No. 13* (1973), 179-183, 5. (I. Vaisman) **48** #12430 53C45

(with Vilenkin, N. Ja.; Šilov, G. E.; Uspenskii, V. A.; Ljubič, Ju. I.) ★Quelques applications des mathématiques. Méthode des approximations successives. Gamme simple (structure de l'échelle musicale). Quelques applications de la mécanique aux mathématiques. Méthode cinématique dans les problèmes de géométrie. Traduit du russe par Djilali Embarek. Initiation aux Mathématiques. *Editions Mir, Moscow*, 1975. 279 pp. (Editors) **56** #8251 00A05

(with Garmaš, V. A.) Multiply concatenated schemata for batch switching. (Russian) *Problemy Peredači Informacii* **13** (1977), no. 4, 105-108. (Krzysztof Sapiecha) **58** #4666 94A20

Šor, N. Z. (with Ermol'ev, Ju. M.) A method of random search for a two step problem of stochastic programming and its generalization. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 1, 90-92. (Authors' summary) **45** #8265 90C15

(with Ščepakin, M. B.) An algorithm for solution of a two step problem of stochastic programming. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 3, 56-58. (Authors' summary) **45** #8268 90C15

The rate of convergence of a generalized gradient descent. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 3, 98-99. (Author's summary) **45** #7953 65K05

(with Bileckii, V. I.) A method of space dilation for the acceleration of convergence in problems of ravine type. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1969)*, No. 2 (Russian), pp. 3-18. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (S. P. Bingulac) **45** #7952 65K05 (65B99)

(with Ivanova, L. V.) A certain iterative method of solution of linear programming problems and matrix games. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1968)*, No. 3 (Russian), pp. 22-30. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (C. Berghaller) **46** #4930 90C05

(with Ščepakin, M. B.) Multistage stochastic programming problems in parametric form. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1968)*, No. 3 (Russian), pp. 64-73. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (Authors' introduction) **46** #3078 90C15

Use of the space expansion operation in problems of convex function minimization. (Russian. English summary insert) *Kibernetika (Kiev)* **1970**, no. 1, 6-12. (W. W. Breckner) **45** #4836 90C25

The rate of convergence of the method of the generalized gradient descent with expansion of space. (Russian. English summary insert) *Kibernetika (Kiev)* **1970**, no. 2,

- 80-85. (W. W. Breckner) **45** #6452 90C25
(with Žurbenko, N. G.) A minimization method that uses the space expansion operation in the direction of the difference of two successive gradients. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 3, 51-59. (W. W. Breckner) **46** #4949 90C30 (65K05)
(with Gamburd, P. R.) Certain questions of the convergence of generalized gradient descent. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 6, 82-84. (Alexander M. Rubinov) **46** #3083 90C25
(with Šabašova, L. P.) The solution of minimax problems by the method of the generalized gradient descent with stretching of the space. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 1, 82-88. (W. W. Breckner) **46** #6595 65K05
The class of almost differentiable functions and a certain method of minimizing functions of that class. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 4, 65-70. (J. Abrahm) **46** #8666 90C30 (65K05)
(with Kukša, A. I.) The method of estimating the number of conditionally optimal trajectories of discrete separable dynamic programming. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 6, 37-44. (S. Krčević) **48** #1463 65K05
(with Ščepakin, M. B.) An estimate of the rate of convergence of the random search method. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 4, 55-58. (E. G. Gol'stein) **52** #16647 90C30 (65K05)
A study of the convergence of a gradient type method with stretching of the space in the direction of the difference of two successive gradients. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 4, 48-53. (From the author's text) **56** #3719 49D10
(with Ščepakin, M. B.) Some problems of approximation by functions with restrictions on the first and second derivatives. (Russian) *Theory of optimal decisions (Russian)*, pp. 11-20. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1976. (Ja. I. Al'ber) **58** #23933 49D10 (41A30)
(with Beljaeva, L. V.; Žurbenko, N. G.) A nonlinear transportation problem. (Russian) *Theory of optimal decisions (Russian)*, pp. 83-89. *Akad. Nauk. Ukrain. SSR Inst. Kibernet.*, Kiev, 1976. (O. Pokorná) **58** #15171 90C30
Generalized gradient methods for the minimization of nonsmooth functions, and their application to mathematical programming problems. (Russian) *Ekonom. i Mat. Metody* **12** (1976), no. 2, 337-356. (Andrzej Gościński) **56** #10010 65K05 (90C30)
(with Mihaljevič, V. S.; Žurbenko, N. G.; Momot, A. I.; Sibirko, A. N.; Trubin, V. A.; Jun, G. N.) ★Вычислительные методы выбора оптимальных проектных решений. (Russian) [Numerical methods for the selection of optimal design decisions] *Izdat. "Naukova Dumka"*, Kiev, 1977. 178 pp. (V. Komkov) **57** #2588 90C50
The cut-off method with stretching of the space for the solution of convex programming problems. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 1, 94-95. (Josef Kaška) **56** #14711 90C25 (90C30)
New trends in the development of nonsmooth optimization methods. (Russian. English summary) *Kibernetika (Kiev)* **1977**, no. 6, 87-91, 151. (Author's summary) **58** #23934 49D10 (58E15)
(with Beljaeva, L. V.; Žurbenko, N. G.) A method for solving a class of dynamical distribution problems. (Russian) *Ekonom. i Mat. Metody* **14** (1978), no. 1, 137-146. (A. A. Juškevič) **58** #9212 90C05
(with Asel'derova, I. M.) An investigation of an elementary pursuit problem on a network. (Russian. English summary) *Kibernetika (Kiev)* **1978**, no. 4, 66-71. (Authors' summary) **58** #26066 90D20 (90D25)
Šor, O. I. (with Ivanenko, V. I.; Hohel', O. A.) A synthesis of an optimal adaptive control system of the generator of a Gaussian random process. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 6, 38-42. (V. Kolemaev (RŽMat 1970 #1 V219)) **45** #8374 93E20
(with Ivanenko, V. I.) A certain sufficient criterion for the existence of a regular control of a stationary random object. (Russian) *Adaptive systems of automatic control (Proc. Sem., Kiev, 1969)*, No. 2 (Russian), pp. 48-60. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* ((RŽKibernet 1970 #7 G122)) **46** #1438 93E20
A certain optimization problem. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1968)*, No. 5 (Russian), pp. 125-133. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (F. M. Kirillova) **45** #4879 93E20
The existence of a limit distribution for a sequence of stationary controls that is defined by contraction operators. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 6, 90-93. (A. I. Šchiop) **48** #10616 93E20
(with Andreěv, M. V.) A method for determining the optimal control of probabilistic dynamical objects. (Russian) *Adaptive control systems (Russian)*, pp. 19-25. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1977. (Editors) **58** #15604 93E20
(with Andreěv, M. V.) Equivalence of one-step and multistep optimization for probabilistic dynamical objects. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 10, 937-940. (Mou-Hsiung Chang) **58** #9591 93C55
(with Andreěv, M. V.; Ivanenko, V. I.) A class of strategies in controllable Markov models. (Russian. English summary insert) *Kibernetika (Kiev)* **1978**, no. 2, 96-99. (A. A. Pervozvanskii) **58** #15259 90D35 (90C40)
Sorace, E. Nonelectromagnetic interactions from Galilei invariance. (Italian and Russian summaries) *Nuovo Cimento B* (11) **41** (1977), no. 1, 205-216. (Author's summary) **56** #14492 83.00
(with Giachetti, R.) Canonical theory of relativistic interactions. (Italian and Russian summaries) *Nuovo Cimento A* (11) **43** (1978), no. 2, 281-293. (Authors' summary) **58** #14656 81.47
(with Giachetti, R.) The rigid motion revisited: a canonical treatment for rigidly connected point systems. (Italian and Russian summaries) *Nuovo Cimento B* (11) **45** (1978), no. 1, 130-144. (Manfred Andrie) **57** #14685 70.35
Sorace, Orazio La seconda condizione di linearità nei sistemi ternari intermedi. *Matematiche (Catania)* **25** (1970), 256-266 (1971). (J. D. Swift) **46** #8040 50D35 (20N15)
Sull'addizione dedotta da un sistema ternario. *Matematiche (Catania)* **27** (1972), 133-144. (Rodney Angotti) **52** #3414 20N10
Struttura metrica inerente ad una estensione algebrica. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 3, 280-285. (E. J. F. Primrose) **51** #13842 50A20 (12F05)
Caratterizzazioni spaziali di alcuni doppi sistemi ternari di Skornjakov. *Matematiche (Catania)* **30** (1975), no. 1, 94-108 (1976). (Rodney Angotti) **58** #150D40
Soraggi, Roberto Luiz Bounded subsets in spaces of germs of holomorphic maps (Portuguese. English summary) *An. Acad. Brasil. Ci.* **49** (1977), no. 1, 21-46. (F. M. Aron) **58** #6372 32H99 (46G20, 58C10)
On bounded sets of holomorphic germs. *Proc. Japan Acad. Ser. A Math.* (1977), no. 6, 198-201. (G. Coeuré) **58** #11489 32B99 (46G20)
Sorani, Giuliano (with Cenkl, Bohumil) Cohomology groups associated with the $\partial\bar{\partial}$ -operator. *Pacific J. Math.* **39** (1971), 351-369. (W. J. Sweeney) **51** #3507 (58G05)
(with Cenkl, Bohumil) Sur l'opérateur $\partial\bar{\partial}$. *Journées de géométrie analytique Poitiers, Poitiers, 1972*, pp. 79-88. *Bull. Soc. Math. France Suppl. Mém., No. Math. France, Paris, 1974.* (A. Acemli) **50** #11328 58G05 (32F15, 35N15)
Operatori differenziali sulle varietà. (English summary) *Rend. Sem. Mat. Milano* **44** (1974), 173-209 (1975). (J. Vanžura) **53** #9304 58Gxx
Sorarrain, Oscar M. (with Bosso, José A.; Favret, Ewald E. A.) Application of absorbent Markov chains to sib mating populations with selection. *Biometrics* **25** (1969), no. 1, 17-26. **52** #5078 92A10
Sorba, Paul (with Burdet, G.; Perrin, M.) About the non-relativistic structure of conformal algebra. *Comm. Math. Phys.* **34** (1973), 85-90. (R. Delbourgo) **48** #81.22
Connected subgroups of the Galilei and extended Galilei groups. *Group theory methods in physics (Proc. Third Internat. Colloq., Centre Phys. Théor., Marseille, Vol. 2, pp. 454-464. Centre Nat. Recherche Sci., Centre Phys. Théor., Marseille, 1974)* **56** #12173 22E15 (81.22)
(with Burdet, G.; Perrin, M.) On the automorphisms of real Lie algebras. *Mathematical Phys.* **15** (1974), 1436-1442. (R. Delbourgo) **50** #1654 81.22
(with Burdet, G.; Perrin, M.) On the explicit-time-dependent invariance properties of quantum mechanical systems. *J. Mathematical Phys.* **15** (1974), 2253-2256. (Loupais) **54** #1915 81.22
(with Bacry, H.; Combe, Philippe) Connected subgroups of the Poincaré group. *Rep. Mathematical Phys.* **5** (1974), 145-186. (See Zbl 293 #22034) 81.22
(with Bacry, H.; Combe, Philippe) Connected subgroups of the Poincaré group. *Rep. Mathematical Phys.* **5** (1974), 361-392. (See Zbl 297 #22014) 81.22
(with Combe, Philippe) Electromagnetic fields with symmetry. *Phys. A* **80** (1974), no. 3, 271-286. (Alberto Galindo) **53** #9877 78.22
(with Buccella, F.; Sciarrino, A.) Quarks and the Poincaré group: $SU(6) \times SU(3)$ a classification group for baryons. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 29-36. *Lecture Notes in Phys.*, Vol. 50, Springer, 1976. (Lawrence P. Horwitz) **57** #18544 81.22 (22E70)
The Galilei group and its connected subgroups. *J. Mathematical Phys.* **17** (1976), no. 6, 941-953. (Anthony J. Bracken) **53** #15150 81.22 (22E70)
(with Bacry, H.; Combe, Philippe) Comments and erratum: "Connected subgroups of the Poincaré group. II" (Rep. Mathematical Phys. 5 (1974), 361-392). *Rep. Mathematical Phys.* **10** (1976), no. 3, 407. (See Zbl 345 #22014) 81.22
(with Bitar, Khalil M.) Classification of pseudoparticle solutions in gauge theories. *Phys. Rev. D* (3) **16** (1977), no. 2, 431-437. (Håkan Snellman) **58** #14486 (22E70)
Sorbon, Dag A general method for studying differences in factor means and structure between groups. *British J. Math. Statist. Psychology* **27** (1974), 229-239. (J. Izenman) **53** #9514 62H25
Sordo, Sebastiano Sulla stabilità della doppia schiera di vortici alternati in prossimità di una parete. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat.* (8) **62** (1977), no. 2, 204-211. (Giovanni Carini) **58** #3942 76.35
Sørensen, Jan The periods of the sequences generated by some symmetric shift registers. *Combinatorial Theory Ser. A* **21** (1976), no. 2, 164-187. (Ian Blake) **54** #4817
Pure states of simple C^* -algebras. *J. Functional Analysis* **22** (1976), no. 4, 39-50. (S. Sakai) **54** #5846 46L05
Sørensen, Bo Aagaard (with Thomassen, Carsten) On k -rails in graphs. *J. Combinatorial Theory Ser. B* **17** (1974), 143-159. (W. Mader) **51** #12623 05C99
(with Dirac, Gabriel; Toft, Bjarne) An extremal result for graphs with an application to their colourings. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* **268/269** (1974), 216-221. (Stockmeyer) **50** #156 05C15
Sørensen, Kay (with Karzel, Helmut) Projektive Ebenen mit einem pascalschen Collection of articles dedicated to Lothar Collatz on his sixtieth birthday. *Abh. Sem. Univ. Hamburg* **36** (1971), 123-125. (R. Artzy) **48** #7108 50D35
(with Karzel, Helmut) Die lokalen Sätze von Pappus und Pascal. *Mitt. Gesellsch. Hamburg* **10**, no. 1, 28-55 (1971). (R. Lingenberg) **46** #6149 50D2
(with Karzel, Helmut; Windelberg, Dirk) ★Einführung in die Geometrie. *mathematica/Mathematische Lehrbücher, Taschenbuch 1. Uni-Taschenbücher, N 184. Vandenhoeck & Ruprecht, Göttingen, 1973.* 219 pp. (F. Bachmann) **54** #150-01
(with Heise, Werner) Freie Minkowski-Ebenenweiterungen. (English summary) *J. Geometry* **3** (1973), 1-4. (J. André) **48** #7112 50D45
(with Karzel, Helmut; Kroll, Hans-Joachim) Invariante Gruppenpartitionen der Doppelräume. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* **262/263** (1973), 153-157. (A. Cronheim) **48** #50A15
(with Karzel, Helmut; Kroll, Hans-Joachim) Projektive Doppelräume. *Arch. Math.* (Basel) **25** (1974), 206-209. (A. Cronheim) **49** #9730 50D25 (50D30)
(with Heise, Werner) Scharf n -fach transitive Permutationsgruppen. *Abh. Sem. Univ. Hamburg* **43** (1975), 144-145. (M. J. Kallagher) **51** #13102 20M20
Fanosche nicht-euklidische Ebenen. *Abh. Math. Sem. Univ. Hamburg* **44** (1974), 273-285 (1976). (A. Barliotti) **53** #14295 50C05
(with Kroll, Hans-Joachim) Pseudo-euklidische Ebenen und euklidische Räume. (English summary) *J. Geometry* **8** (1976), no. 1-2, 95-115. (J. Yaqub) **58** #250D10
Elliptische Ebenen. *Mitt. Math. Gesellsch. Hamburg* **10**, no. 4, 277-296 (1976)

- Ellers) **58** #12683 50C05
Zum Begriff des topologischen affinen Raumes. *Beiträge zur geometrischen Analysis*, *Sympos., Duisburg*, 1976), pp. 305-310. *Lehrbücher u. Monographien aus dem hietre der Exakt. Wiss., Math. Reihe, Band 21, Birkhäuser, Basel*, 1977. (W. R. Heise) **58** #12690 50D05
- Inzidenzgruppen der Ordnung 3. *Math. Z.* **154** (1977), no. 3, 239-241. (T. G. trom) **56** #1195 50D35
- Knud Erik A study of the *De proportione motus* by Marcus Marci de Kronland. I. *Centaurus* **20** (1976), no. 1, 50-76. (J. A. Lohne) **57** #15873a 01A45
A study of the *De proportione motus* by Marcus Marci de Kronland. II. *Centaurus* (1977), no. 3-4, 246-277. (J. A. Lohne) **57** #15873b 01A45
- en, St. (with Charnes, Abraham) Constrained n -person games. *Internat. J. Game Theory* **3** (1974), 141-158. (M. Mañas) **51** #5038 90D12
(with Hammer, Peter L.; Peled, Uri N.) Pseudo-Boolean functions and game theory. I. Core elements and Shapley value. *Cahiers Centre Études Recherche Opér.* **19** (1977), no. 1-2, 159-176. (S. Brent Morris) **56** #4866 90D10
Applications of game theory to threshold logic. *Internat. J. Game Theory* **6** (1977), no. 4, 213-220. (Author's summary) **57** #9340 94A20 (90D45)
- on, Harold W. (with Alspach, Daniel L.) Recursive Bayesian estimation using gaussian sums. (French, German, and Russian summaries) *Automatica—J. IFAC* **7** (1971), 465-479. (M. Zakai) **47** #10114 93E10
(with Alspach, Daniel L.) Stochastic optimal control for linear but non-gaussian systems. *Internat. J. Control* (1) **13** (1971), 1169-1181. (H. J. Kushner) **46** #4970 E20
(with Sacks, J. E.) Recursive fading memory smoothing. *Information Sci.* **5** (1973), no. 61. (D. D. Sworder) **47** #10112 93E10
(with Misra, P. N.) Statistical theory of estimation in doubly-stochastic Poisson processes. *Information Sci.* **6** (1973), 343-358. (S. Csibi) **49** #6533 62M99
(with Samant, V. S.) On reducing computational burden in the Kalman filter. (French, German and Russian summaries) *Automatica—J. IFAC* **10** (1974), 61-68. (Authors' summary) **58** #4568 93E10
On the development of practical nonlinear filters. Estimation theory (Special issue *Information Sci.* dedicated to Norbert Wiener and R. E. Kalman). *Information Sci.* **7** (1974), 253-270. (H. J. Kushner) **50** #16043 93E10
(with Samant, V. S.) Stochastic optimal control via stochastic programming. *Modeling and simulation (Proc. Sixth Annual Pittsburgh Conf., Univ. Pittsburgh, Pittsburgh, Pa., 1975)*, Vol. 6, Part 1, pp. 175-180. *Instrument Soc. Amer., Pittsburgh, Pa.*, 1975. (Jean-Michel Bismut) **57** #2723 93E20
(with Misra, P. N.) Parameter estimation in Poisson processes. *IEEE Trans. Information Theory* **IT-21** (1975), 87-90. (M. Zakai) **51** #7700 94A05
An overview of filtering and stochastic control in dynamic systems. *Control and dynamic systems, Advances in theory and applications*, Vol. 12, pp. 1-61. *Academic Press, New York*, 1976. (D. D. Sworder) **53** #2486 93E10 (93E20)
- son, John R. (with Tschirhart, John T.; Whinston, Andrew B.) A game theoretic approach to peak load pricing. *Bell J. Econom.* **7** (1976), no. 2, 497-520. (M. Stoica) **57** #10051 90D45
son, P. G. (with Hamacher, V. C.) A real-time system design methodology. (French summary) *INFOR—Canad. J. Operational Res. and Information Processing* **13** (1975), no. 18. (K. H. V. Booth) **50** #9039 48A05
(with Tremblay, J. P.) ★An introduction to data structures with applications. *McGraw-Hill Computer Science Series. McGraw-Hill Book Co., New York-Auckland-Düsseldorf*, 1976. xvi + 704 pp. (K. H. V. Booth) **55** #9630 68A50 (8A05)
- M. Classical, covariant finite-size model of the radiating electron. *Z. Naturforsch.* **28a** (1974), 1671-1684. (W. B. Bonnor) **53** #7238 78.53
The problem of runaway solutions in the Lorentz-Dirac theory. *Z. Naturforsch.* **31a** (1976), no. 7, 683-689. (Wolfgang Bühring) **54** #9408 81.34
Initial-value problem for the non-local generalization of the Lorentz-Dirac equation. *Z. Naturforsch.* **31a** (1976), no. 12, 1457-1464. (Evangelos Ifantis) **55** #1962 81.34
(with Petzold, J.; Heudorfer, W.) Finite size of the electron and runaway solutions. *Z. Naturforsch.* **32a** (1977), no. 5, 383-389. (C. J. Eliezer) **56** #4489 81.34
P. (with Kirchgässner, Klaus) Stability analysis of branching solutions of the arrier-Stokes equations. *Applied mechanics (Proc. Twelfth Internat. Congr. Appl. Mech., Stanford Univ., Stanford, Calif., 1968)*, pp. 257-268. *Springer, Berlin*, 1969. (A. Elcrat) **51** #12117 76.35
(with Freund, H.) ★Aussagenlogik und Beweisverfahren. *Mathematik für die Lehrausbildung*. B. G. Teubner, Stuttgart, 1974. 136 pp. (Editors) **52** #13297 2-01
- a, S. Ja. Approximation of a generalized binomial distribution. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **22** (1977), no. 4, 867-871. (S. A. Book) **55** #16744 60F05
- no, Luis Ignacio See Collection: Soriano, Luis Ignacio. **49** #7057 and Perry Z., Gustavo. **50** #9507
- no-Lleras, Luis I. (with Albi González, Víctor S.) The work of Indalecio Liévano on the foundations of real numbers. (French and Spanish summaries) *Historia Math.* **3** (1976), no. 2, 161-166. (I. Grattan-Guinness) **58** #26983 01A55
- achi, Michiko On the inventory problem of two substitute products. *J. Operations Res. Soc. Japan* **13** (1970/71) 194-218. (Author's summary) **47** #4610 90B05
An inventory model with dependent intervals of demand. *J. Operations Res. Soc. Japan* **18** (1975), no. 1-2, 64-89. (N. U. Prabhu) **52** #9998 90B05
- B. V. Algorithms for the minimization of the unevenness of demands of perishable resources on network graphs. (Russian) *Systems for the distribution of resources on graphs (Russian)*, pp. 85-117. (errata insert) *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1970. (A. Göpfert) **47** #10037 90B10
- a, A. A. A method for the ordered minimization of risk in the solution of unstable problems. (Russian. Georgian and English summaries) *Sakharth. SSR Meen. Akad. Naumbe* **78** (1975), no. 2, 309-312. (A. Aganbegian) **55** #14189 90B99
- e, Michel Boucle ouverte et boucle fermée adaptée pour les systèmes distribués. Un exemple d'application à la commande en temps réel d'un processus. *New trends in systems analysis (Proc. Internat. Sympos., Versailles, 1976)*, pp. 145-163. *Lecture Notes in Control and Information Sci., Vol. 2, Springer, Berlin*, 1977. (Author's summary) **58** #26344 93C40
- Schéma d'approximation pour des équations du type de Chandrasekhar intervenant en contrôle optimal. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 1, A61-A64. (Author's summary) **55** #2321 93E20
Sur les équations de Chandrasekhar associées au problème de contrôle d'un système parabolique: cas du contrôle et de l'observation distribués. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 13, A863-A866. (Author's summary) **58** #26335 93C20 (49A20)
- Sur les équations de Chandrasekhar associées au problème de contrôle d'un système parabolique: un exemple avec contrôle et observation frontières. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 14, A911-A914. (Author's summary) **56** #9425 49E05
Sur l'équation de Riccati stationnaire associée au problème de contrôle d'un système parabolique. *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 6, A445-A448. (Author's summary) **58** #26336 93C20
- Sorjonen, Pekka Verallgemeinerte Resolventen eines symmetrischen Operators im Pontrjaginraum. *Ber. Univ. Jyväskylä Math. Inst. Ber.* **15** (1972), 58 pp. (J. Bognár) **55** #3866 47B50
(with Langer, Heinz) Verallgemeinerte Resolventen hermitescher und isometrischer Operatoren im Pontrjaginraum. *Ann. Acad. Sci. Fenn. Ser. A I* No. 561 (1974), 45 pp. (J. Bognár) **52** #6488 47B50
Über gewisse Tripel von Pontrjagin-Räumen. *Math. Nachr.* **63** (1974), 213-221. (Björn Textorius) **51** #13756 47B50 (46D05)
Pontrjaginräume mit einem reproduzierenden Kern. *Ann. Acad. Sci. Fenn. Ser. A I Math.* No. 594 (1975), 30 pp. (C. R. Deeter) **53** #8875 46D05 (46E99)
- Sorkin, A. (with Berry, Daniel M.; Chirica, Laurian M.; Johnston, J. B.; Martin, David F.) Time required for reference count management in retention block-structured languages. I. *Internat. J. Comput. Information Sci.* **7** (1978), no. 1, 11-64. (From the summary) **58** #13836 68A05
- Sorkin, E. D. See Sorkinas, E.
- Sorkin, Rafael The electromagnetic field on a simplicial net. *J. Mathematical Phys.* **16** (1975), no. 12, 2432-2440. (Carl Brans) **52** #9970 (E 58 #20241) 83.53
Time-evolution problem in Regge calculus. *Phys. Rev. D* (3) **12** (1975), no. 2, 385-396. (M. Sachs) **52** #12709 83.65
(with Bardeen, James M.; Friedman, John L.; Schutz, Bernard F., Jr.) A new criterion for secular instability of rapidly rotating stars. *Astrophys. J.* **217** (1977), no. 1, part 2, L49-L53. **58** #25833 85.49
On the relation between charge and topology. *J. Phys. A* **10** (1977), no. 5, 717-725. (George S. Whiston) **55** #11911 (E 57 #15269) 83.57
Erratum: "The electromagnetic field on a simplicial net" (J. Mathematical Phys. **16** (1975), no. 12, 2432-2440). *J. Math. Phys.* **19** (1978), no. 8, 1800. (Editors) **58** #20241 83.53
Corrigenda: "On the relation between charge and topology" (J. Phys. A **10** (1977), no. 5, 717-725). *J. Phys. A* **11** (1978), no. 4, 795. (George S. Whiston) **57** #15269 83.57
- Sorkina, A. E. (with Gudzenko, L. I.; Evstigneev, V. V.; Lakoba, I. S.; Marčenko, V. S.; Syc'ko, Ju. I.; Čertoprud, V. E.; Jakovenko, S. I.) The kinetics of simple models of oscillation theory. (Russian) *Trudy Fiz. Inst. Lebedev.* **90** (1976), 208 pp. (Publisher's description) **57** #8453 78.00 (80.34)
- Sorkinas, E. A method of optimal adjustment of the weight coefficients of a model. (Russian. Lithuanian and English summaries) *Trudy Akad. Nauk Litov. SSR Ser. B* **1971**, no. 1(64), 215-224. (Author's summary) **51** #9904 93C99
- Sörn, Ivan Estimation of the parameter p in games with p -intelligent players. (Czech. English summary) *Ekonom.-Mat. Obzor* **11** (1975), 54-60. (M. Vlach) **52** #16672 90D05
A descriptive approach to the estimation of strategies in conflict situations. (Czech. English summary) *Ekonom.-Mat. Obzor* **12** (1976), no. 2, 165-175. (Author's summary) **56** #8056 90D340
- Sörms, T. Theorems of Tauberian type for different forms of summability. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **281** (1971), 103-117. (Hubert Tietz) **46** #9590 40E05
Several generalized Tauberian theorems. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **305** (1972), 167-178. (M. S. Rangachari) **51** #6210 40E05
Tauberian theorems for series in a Banach space. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **342** (1974), 182-188. (A. Alexiewicz) **51** #8798 46B99 (40J05)
- Sorogovec, I. B. The Green's function of the differential equation of the generalized spherical harmonics. (Russian) *Dokl. Akad. Nauk BSSR* **17** (1973), 306-308, 383. (Editors) **48** #4376 33A75
- Soroka, V. A. (with Lazarenko, L. O.) Sum rules and field algebra. *Jadernaja Fiz.* **13** (1971), 845-850 (Russian); translated as *Soviet J. Nuclear Phys.* **13** (1971), 483-485. (Authors' summary) **48** #3405 81.46
(with Volkov, D. V.) Gauge fields for a symmetry group with spinor parameters. (Russian. English summary) *Teoret. Mat. Fiz.* **20** (1974), 291-298. (Authors' summary) **57** #8581 81.22
(with Akulov, V. P.; Volkov, D. V.) Generally covariant gauge field theories on superspace. (Russian. English summaries) *Teoret. Mat. Fiz.* **31** (1977), no. 1, 12-22. (M. A. H. MacCallum) **56** #4544 81.53
- Sorokin, A. S. (with Aleksandrov, I. A.) The Schwarz problem for multiply connected circular domains. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 971-1001, 1197. (I. P. Ramadanov) **50** #4967 30A88
Villat's formula for generalized analytic functions. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 1293-1296. (G. Wildenhain) **48** #8815 30A93
A mixed boundary value problem in the theory of generalized analytic functions. (Russian) *Metric questions of the theory of functions and mappings (Russian)*, pp. 125-131, 168. *Naukova Dumka, Kiev*, 1977. (Editors) **58** #28534 30A88 (30A92)
- Sorokin, A. V. Classification of routes in an integer lattice. (Russian) *Collection of papers by graduate students. Exact sciences: Mathematics (Russian)*, pp. 85-94. *Izdat. Kazan.*

- Univ., Kazan, 1971. (See RZMat 1971 #11 B534; MR 50 #6712) 05C35
(with Aleksandrov, Ju. S.; Kovtsef, M. N.; Selivohin, O. S.) The synthesis of statistically optimal automatic systems. (Russian) *Proceedings of the First All-Union Symposium on Statistical Problems in Engineering Cybernetics (Moscow 1967), Nonlinear and optimal systems (Russian)*, pp. 104-119, 435. Izdat. "Nauka", Moscow, 1971. (V. N. Igolkin) 47 #8183 93E20
- Sorokin, G. A.** The representation of entire functions by series of polynomials. (Russian) *Interunio. Sci. Conf. on the Problem "Application of Functional Analysis in Approximation Theory"* (Proc. Conf., Kalinin) (Russian), 149-155. Kalinin. Gos. Ped. Inst., Kalinin, 1970. (From the author's introduction) 55 #8350 30A62
The convergence of interpolation polynomials of Newton type. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 3(142), 74-77. (P. M. Tamrazov) 51 #3455 30A80
- Sorokin, O. S.** (with Haritonov, V. V.) Generalized Bessel equations with a right hand side. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1972, no. 2, 99-103. (H. A. Lauwerier) 47 #7101 34A25
(with Haritonov, V. V.) ★Некоторые нелинейные задачи теплопроводности. (Russian) [Certain nonlinear problems of heat conduction] Edited, and with a preface by A. G. Saškov. Izdat. "Nauka i Tehnika", Minsk, 1974. 152 pp. (H. A. Lauwerier) 50 #1646 80J35
- Sorokin, S. B.** (with Lužnih, V. M.; Žuk, P. F.) Estimates for the zeros of special functions of a discrete argument. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* 1974, 598-603, 669. (I. M. Sheffer) 50 #7920 42A04 (39A12)
- Sorokin, V. A.** Regular graphs and simple cycles in an integer lattice. (Russian) *Combinatorial and asymptotic analysis (Russian)*, pp. 97-108. Krasnojarsk. Gos. Univ., Krasnojarsk, 1975. (Editors) 58 #27592 05C10 (05B35)
See also *Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region*, 46 #1532 and *Collection: Papers by graduate students, Kazan Univ.*, 50 #6712
- Sorokin, V. K.** ★Вычислительная математика. Вып. 2. (Russian) [Computational mathematics. No. 2] Kalinin. Gosudarstv. Ped. Inst., Kalinin, 1970. 106 pp. (Editors) 45 #4573 65-02
- Sorokin, V. P.** Convergence of almost everywhere linear summability methods for Fourier series. (Russian) *Application of functional analysis in approximation theory (Russian)*, pp. 133-142, 156. Kalinin. Gos. Univ., Kalinin, 1977. (Author's summary) 58 #23322 42A24
- Sorokina, E. M.** (with Sadovnikov, B. I.) Absence of crystalline ordering in quantum systems of one dimension. *Indian J. Pure Appl. Phys.* 8 (1970), 61-63. (Authors' summary) 51 #14841 82.47
On the impossibility of crystalline ordering in one-&two-dimensional classical systems. *Indian J. Pure Appl. Phys.* 8 (1970), 64-65. (Author's summary) 51 #14842 82.47
- Sorokina, M. G.** (with Romanovskii, I. V.) A one-sided search of the tree of variants in the method of Land and Doig. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 13 (1973), 221-227, 271. (E. G. Gol'stein) 47 #6312 90C10
- Sorokina, N. G.** The normal solvability of the Tricomi problem for a Lavrent'ev-Bicadze type equation. (Russian) *Ukrain. Mat. Ž.* 23 (1971), 34-42. (R. Beals) 45 #9008 35M05 (47F05)
A certain method of constructing explicit difference schemes for the equations of dynamic elasticity theory. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* 1972, 532-535, 574. (Author's summary) 46 #6689 73.35 (65N05)
The strong solvability of the generalized Tricomi problem. (Russian) *Ukrain. Mat. Ž.* 24 (1972), 558-561, 575. (R. N. Goss) 47 #2199 35M05
Energy relations for multidimensional equations of mixed type. All-Union Symposium on Selected Questions of Partial Differential Equations (Priëlbrus, 1972). *Differentsial'nye Uravnenija* 9 (1973), 158-161, 197. (A. M. Nahušev) 48 #4528 35M05
Strong solvability of a boundary value problem for an equation of mixed type in multidimensional domains. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 115-123, 143. (T. Kal'menov) 50 #5210 35M05
Two boundary value problems for multidimensional equations of mixed type that are degenerate on a circular cylinder. (Russian) *Ukrain. Mat. Ž.* 27 (1975), no. 5, 614-623, 716. (V. V. Kovrižkin) 52 #8671 35M05
Multidimensional generalizations of C. Morawetz' theorem on the weak solvability of a system of mixed type differential equations. (Russian) *Differentsial'nye Uravnenija* 13 (1977), no. 1, 155-158, 191. (V. L. Makarov) 58 #29400 35M05
Generalized solvability of a certain boundary value problem for the wave equation. (Russian) *Differentsial'nye Uravnenija* 14 (1978), no. 3, 561-564, 576. (G. W. Hedstrom) 57 #13206 35L05
See also *Applications of functional analysis to problems of mathematical physics*, 58 #30341
- Sorokina, S. G.** (with Dubson, M. S.; Tjurin, Ju. N.) The best selection of factors in a prediction problem. (Russian) *Mathematical methods for the solution of economic problems (Suppl. to Ekonom. i Mat. Metody)*, No. 3 (Russian), pp. 152-157. Izdat. "Nauka", Moscow, 1972. (H. Toutenburg) 52 #4533 62J05
- Sorour, El Sayed** Continuous stochastic approximation procedure for evaluating the point at which the regression function stops to be non-positive. *Kibernetika (Prague)* 13 (1977), no. 6, 450-464. (Sami Abdelhamid) 58 #8080 62L20
An extension of Driml-Nedoma continuous stochastic approximation procedure. *Kybernetika (Prague)* 14 (1978), no. 1, 18-27. (Katsuji Uosaki) 57 #17985 62L20
On the convergence of the dynamic stochastic approximation method for stochastic non-linear multidimensional dynamic systems. *Kybernetika (Prague)* 14 (1978), no. 1, 28-37. (Katsuji Uosaki) 57 #17986 62L20 (93E10)
- Sorrentino, N.** (with Milanese, Mario) Decomposition methods for the identifiability analysis of large systems. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Vol. 1*, pp. 181-184. Hemisphere, Washington, D.C., 1977. (Authors' summary) 58 #9463 93A15
(with Genesio, R.) On the model order for uncertain system approximation. (Russian summary) *Systems Sci.* 3 (1977), no. 3, 215-225. (Authors' summary) 58 #9665 93E10
(with Milanese, Mario) Decomposition methods for the identifiability analysis of large systems. *Internat. J. Control* 28 (1978), no. 1, 71-79. (Zbigniew Nałajko) 58 #15348 93A15 (93B15)
- Sorton, G.** Calcul de la probabilité d'allongement d'un train numérique par l'application de la procédure HDLC. (English summary) *Rev. CETHEDC No. 51* (1977), 8 (Ezio M. Biglieri) 58 #9756 94A05
- Sorum, M.** Estimating the expected probability of misclassification for a rule based linear discriminant function: univariate normal case. *Technometrics* 15 (1973), 32 (M. Knott) 52 #2049 62H30
- Sorvali, Tuomas** The boundary mapping induced by an isomorphism of covering spaces. *Ann. Acad. Sci. Fenn. Ser. A I No. 526* (1972), 31 pp. (Y. Kusunoki) 48 #30A60 (30A20)
★Quasiconformally equivalent polygons. Joensuu Korkeakoulun Julkaisuja Sarja B, No. 5. [Publications of the University of Joensuu, Series B, No. 5] *Univ. Joensuu, Joensuu*, 1973. 5 pp. (I. Kra) 56 #5876 30A60
On the dilatation of isomorphisms between covering groups. *Ann. Acad. Sci. Fenn. Ser. A I No. 551* (1973), 15 pp. (C. Earle) 49 #7439 30A58
On isomorphisms between covering groups containing parabolic elements. *Ann. Acad. Sci. Fenn. Ser. A I Math. No. 572* (1974), 6 pp. (Jane Gilman) 51 #887
On Teichmüller spaces of tori. *Ann. Acad. Sci. Fenn. Ser. A I Math.* 1 (1975), 7-11. (K. Strebel) 55 #8349 30A60 (32G15)
- Sós, Vera T.** (with Erdős, Paul) Some remarks on Ramsey's and Turán's theorems. *Combinatorial theory and its applications, II (Proc. Colloq., Balatonfüred, 1968)*, 395-404. North-Holland, Amsterdam, 1970. (Václav Chvátal) 45 #8560 05C99
(with Erdős, Paul; Meir, A.; Turán, Pál) On some applications of graph theory. *Canad. Math. Bull.* 15 (1972), 27-32. (G. O. H. Katona) 50 #4393 05C99 (05C99)
(with Erdős, Paul; Meir, A.; Turán, Pál) On some applications of graph theory. *Discrete Math.* 2 (1972), no. 3, 207-228. (F. Harary) 46 #5053 (E 46 #7094A20 (05C99)
(with Brown, W. G.; Erdős, Paul) Some extremal problems on r -graphs and directions in the theory of graphs (Proc. Third Ann Arbor Conf., Univ. Michigan, Ann Arbor, Mich., 1971), pp. 53-63. Academic Press, New York, 1973. (B. Bollobás) 50 #50C35
(with Erdős, Paul; Meir, A.; Turán, Pál) Corrigendum: "On some applications of graph theory. I". *Discrete Math.* 4 (1973), 90. (Editors) 46 #7093 05C99
(with Erdős, Paul; Brown, W. G.) On the existence of triangulated spheres and 3-graphs, and related problems. *Period. Math. Hungar.* 3 (1973), no. 3-4, 221-228. (Kleitman) 48 #2003 05C99
(with Andrásfai, Béla; Erdős, Paul) On the connection between chromatic number, maximal clique and minimal degree of a graph. *Discrete Math.* 8 (1974), 205-218. (Kleitman) 49 #4831 05C15
(with Erdős, Paul; Simonovits, Miklós) Anti-Ramsey theorems. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. 633-643. Colloq. Math. Soc. János Bolyai, Vol. 10, North-Holland, Amsterdam, 1976* (Rudolf Halin) 52 #164 05C15
(with Fried, Ervin) Weakly associative lattices and projective planes. *Math. Universitatis* 5 (1975), 114-119. (O. Frink) 52 #4107 50D25 (06A20)
Remarks on the connection of graph theory, finite geometry and block designs. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Roma, 1973), Tomo II*, pp. 223-233. *Atti dei Convegni Lincei*, No. 17, Accad. Naz. Lincei, Roma, 1975. (Richard K. Guy) 58 #27555 05B05 (05Cxx)
On the discrepancy of the sequence $\{na\}$. *Topics in number theory (Proc. Conf., Debrecen, 1974)*, pp. 359-367. *Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam, 1976*. (M. Mendès France) 57 #259 10K05
See also *Combinatorial theory and its applications*, 45 #4981; *Problems: Combinatorial theory*, 46 #8855; *Infinite and finite sets*, 50 #12526 and *Problems: Graph theory*, 52 #2932
- Sosa, Ernest** See *Methodological and historical essays in the natural and social sciences*, 52 #13078
- Sošin, M. P.** (with Danilov, V. V.; Kolesov, N. V.) Control of linear numerical systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 5, 127-132. (Russian); *transl. in Engng. Cybernetics* 12 (1974), no. 5, 104-110. (Ju. D. Burtin) 53 #10488 94A05
- Sosinka, Jadwiga** The Pareto optimum for linear programs and separate criteria. (Russian and English summaries) *Przegląd Statyst.* 18 (1971), 353-364. (O. Polak) 46 #6821 90C05
- Sosinovič, V. A.** (with Perel'man, T. L.) Turbulence theory of the basis of multi-distribution functions. *Transport Theory Statist. Phys.* 4 (1975), no. 4, 155-186. (Authors' summary) 56 #4412 76.60
- Sosinskii, A. B.** Homology of a symmetric relation. (Russian) *Mat. Sb. (N.S.)* 107 (1972), 331-339, 351. (Csaba Hatvany) 49 #9838 55B35
(with Aleksandrov, P. S.; Černavskii, A. V.; Štan'ko, M. A.) Ljudmila Vsevolodovna Keldyš (on the occasion of her seventieth birthday). (Russian) *Mat. Nauk* 29 (1974), no. 4(178), 187-192. (1 plate) (Editors) 52 #7782 01A72
Classifying semigroups. (Russian) *Dokl. Akad. Nauk SSSR* 228 (1976), 551-554. (Allen E. Hatcher) 53 #11620 57C25
See also Kirillov, A. A., 52 #14134; Boltjanskii, V. G., 55 #6273 and Aleksandrov, P. S., 58 #24234b
- Šostaišvili, A. N.** Bifurcations of topological type of singular points of vector fields depend on parameters. (Russian) *Funktsional. Anal. i Prilozhen.* 6 (1972), no. 2, 97-107. (Morimoto) 45 #6036 58F99 (34C35)
The lattice of ideals of local rings of finite-to-one mappings of spaces of the dimension is self-dual. (Russian) *Uspehi Mat. Nauk* 29 (1974), no. 3(177), 23-37. (From the text) 58 #6336 32C40 (13H10, 14B05)
The bifurcation of the topological type of the singular points of vector fields depend on parameters. (Russian) *Trudy Sem. Petrovsk. Vyp. 1* (1975), 279-309. (Šil'nikov) 57 #17724 58F99
Functions with isomorphic Jacobian ideals. (Russian) *Funktsional. Anal. i Prilozhen.* 10 (1976), no. 2, 57-62. (P. Orlik) 54 #5492 32B05 (57C10)

- The simplicity of the lattice of ideals of local rings of finite-to-one mappings of spaces of the same dimension. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 2, 433-447, 471. (Gerhard Pfister) **53** #13215 14B05
- Reconstruction of the analytic type of a quasihomogeneous function from the local mapping of a mapping that is given by its gradient. (Russian) *Trudy Moskov. Mat. Obšč.* **34** (1977), 253-259. (Peter Giblin) **56** #15977 32C40
- Dieter Zur approximativen Lösung einer Klasse von nichtlinearen Differentialgleichungen. *Beiträge Anal. Heft* **6** (1974), 109-111. (From the author's introduction) **56** #6526 49D99
- Zur numerischen Lösung einer Klasse nichtlinearer Funktionalgleichungen. 5. Vortragsung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975), Heft 1, pp. 129-134. *Wiss. Schr. Techn. Hochsch., Karl-Marx-Stadt*, 1975. (Wazir Hasan Abdi) **56** #1181 49D99
- Škili, S. P. See *Methods of approximate solution of differential and integral equations*, #12537
- Škili, V. S. (with Misjurkeev, I. V.) The singular solutions of a certain class of nonlinear integro-differential equations. (Russian) *Perm. Gos. Univ. Učen. Zap. No.* **259** (1971), 96-111. (K. Seitz) **46** #7824 45J05
- Škili, Ju. V. See *Automorphisms of the classical groups*, **55** #267
- Skalski, Janusz Determination of the energizing functions of elementary automata. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **17** (1972), 3-19. (J. Janák) **46** #8789 94A30
- Potential elementary automata. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **18** (1973), 341-354. (Author's summary) **50** #9447 94A30
- Hazards and simultaneous output state changes in excitation circuits of asynchronous flip-flops. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **23** (1978), no. 1-2, 183-197. (Author's summary) **58** #20877 94A20
- An algebraic approach towards transient analysis of asynchronous circuits. (French and German summaries) *Digital Process.* **4** (1978), no. 1, 45-66. (A. Thayse) **57** #19146 94A20
- K. A. P. E-compact spaces. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), no. 10-132. (D. Adnadevič) **46** #6297 54D30
- A characterization of the class of Čech complete paracompacta as an ω -paracompactness class. (Russian. English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 839-844. (R. Engelking) **50** #11149 54D30 4J05
- Shape equivalence in compactness classes. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 67-70. (S. Mardešić) **49** #11465 54C56
- E-compact extensions of topological spaces. (Russian) *Funkcional. Anal. i Priložen.* (1974), no. 1, 62-68. (A. B. Németh) **49** #6160 54D35
- A functional characterization of certain classes of topological spaces. (Russian. Latvian summary) *Latvian mathematical yearbook*, **16** (Russian), pp. 164-171, 274. *Izdat. "Zinatne" Riga*, 1975. (J. N. Younglove) **52** #1632 54D30 (54D60)
- Shapes in compactness classes: retracts, extensors, mobility. (Russian. English summary) *Latvišsk. Gos. Univ. Učen. Zap.* **236** *Topologičeskie Prostranstva i Otobraženija* **10**, no. 1, (1975), 108-128, 146 (Author's summary) **57** #1405 54C55 (55D99)
- Q-extensions of topological spaces and rings of functions. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 6, 1291-1294. (Roman Frič) **53** #6506 54D60
- On a class of topological spaces containing all bicompat and all connected spaces. *General topology and its relations to modern analysis and algebra, IV* (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B, pp. 445-451. *Soc. Czechoslovak Mathematicians and Physicists, Prague*, 1977. (T. L. Hicks) **57** #13849 54D20
- Proper shapes of locally bicompat paracompact spaces. (Russian) *Topological spaces and their mappings*, No. 3 (Russian), pp. 123-156, 158. *Latv. Gos. Univ., Riga*, 1977. (From the text) **58** #30970 54D20
- K. R. Ja. (with Baranenko, G. S.; Demidovič, B. P.; Efimenko, V. A.; Kogan, S. M.; Lunc, G. L.; Poršneva, E. F.; Syčeva, E. P.; Frolov, S. V.; Janpol'skiĭ, A. R.) Problems in mathematical analysis. Edited by B. Demidovič [B. P. Demidovič]. Translated from the Russian by G. Yankovsky [G. Yankovskii]. Third printing. *Mir Publishers, Moscow*, 1973. 496 pp. (Editors) **50** #2398 26-01
- (with Baranenko, G. S.; Demidovič, B. P.; Efimenko, V. A.; Frolov, S. V.; Kogan, S. M.; Lunc, G. L.; Poršneva, E. F.; Syčeva, E. P.; Janpol'skiĭ, A. R.) Problemi i Esercizi e problemi di analisi matematica. A cura di B. Demidovič. Traduzione dell'edizione russa di 1959. Nuova Biblioteca di Cultura, Serie Scientifica, No. 138. Edizioni Riuniti, Rome; Edizioni Mir, Moscow, 1975. 486 pp. (Editors) **54** #2370 94A05 (26-01)
- (with Baranenko, G. S.; Demidovič, B. P.; Efimenko, V. A.; Kogan, S. M.; Lunc, G. L.; Poršneva, E. F.; Syčeva, E. P.; Frolov, S. V.; Janpol'skiĭ, A. P.) ★Problems in mathematical analysis. Under the editorship of B. Demidovich. Translated from the Russian by G. Yankovsky. Fourth printing. *Mir Publishers, Moscow*, 1976. 496 pp. (Editors) **55** #5804 26-01
- K. V. F. (with Zaharčenko, V. F.) Hierarchical structure of the optimization algorithms of complex network objects of a certain class. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* **1976**, no. 3, 23-30. (Authors' summary) **57** #18787 90B10 (90A15)
- Jan, Ju. A. (with Krug, G. K.; Fatuev, V. A.) ★Планирование эксперимента в задачах идентификации и экстраполяции. (Russian) [The design of experiment in identification and extrapolation problems] *Izdat. "Nauka", Moscow*, 1977. 208 pp. (Ivar Petersen) **57** #5252 93B30 (62K05)
- Jan, Ju. G. Estimation-correlation methods for detection of weak signals in noise and mathematical-heuristic synthesis. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 5, 44-156 (Russian); translated as *Engrg. Cybernetics* **9** (1971), no. 5, 909-918. (J. Capon) **46** #3189 94A05
- (with Fišman, M. M.) On sequential detection of signals against a noise background. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 2, 132-142 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 2, 280-291. (K. S. Miller) **52** #7672 93E10 (94A05)
- Detection of signals in arbitrary interference using whitening filters. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 1, 188-195, 239 (Russian); translated as *Engrg. Cybernetics* **12** (1974), 154-161. (K. S. Miller) **54** #4795 93E10 (94A05)
- (with Fišman, M. M.) Optimal sequential detection with an informational measure of the cost of observations. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 3, 169-176 (Russian); translated as *Engrg. Cybernetics* **12** (1974), no. 3, 129-136. (Ezio M. Biglieri) **52** #10215 94A05 (62C10)
- (with Fišman, M. M.) Convergence of the logarithm of the likelihood ratio to a Wiener process in the problem of detecting an arbitrary signal in white noise. *Radiotekhn. i Elektron.* **19** (1974), no. 12, 2506-2521 (Russian); translated as *Radio Engrg. Electron. Phys.* **19** (1974), no. 12, 46-59. (Authors' summary) **56** #15128 94A05 (93E10)
- (with Šahurin, A. P.) Analysis of Bayesian algorithms for simultaneous detection and estimation. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 1, 130-137 (Russian); translated as *Engrg. Cybernetics* **15** (1977), no. 1, 107-114. (Authors' summary) **57** #15732 94A05
- Sosulski, W. (with Kisielewicz, Michał; Serafin, B.) Existence theorem for functional-differential equation with compact convex valued solutions. *Demonstratio Math.* **9** (1976), no. 2, 229-237. (Hans-Otto Walther) **53** #11189 34K05
- Sosunov, A. S. A formula for the index of a certain class of singular integral equations with two Carleman shifts. (Russian) *Proceedings of a Conference on Boundary Value Problems* (Kazan, 1969) (Russian), pp. 249-253. *Izdat. Kazan. Univ., Kazan*, 1970. (M. Cotlar) **51** #6315 45E05 (47G05)
- (with Arseni, V. F.) The application of approximate methods to the investigation of a certain class of singular integral equations with fractional linear shift. (Russian. Georgian and English summaries) *Gamoqeneb. Math. Inst. Sem. Mošsen. Anotacie. No.* **4** (1971), 59-62. (D. Przeworska-Rolewicz) **46** #5962 45E99
- (with Arseni, V. F.; Evseev, E. G.) An application of the theory of approximate methods to the study of a singular integral equation with shift that is not subject to the generalized Carleman condition. (Russian. Georgian summary) *Studies of certain equations of mathematical physics*, No. 1 (Russian), pp. 53-62. *Izdat. Tbilis. Univ., Tbilisi*, 1972. (S. G. Samko) **51** #1308 45E05 (65R05)
- Sotirov, Vi. See *Manin, Ju. I.*, **58** #27173
- Sotničenko, M. A. (with Feščenko, S. F.; Škil', M. Ī.) The asymptotic representation of the solutions for a system of linear partial differential equations with time lag. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 177-189. (C. V. Coffman) **45** #7320 35R10
- The integration of a system of linear partial differential equations with retarded argument. (Russian) *Differencial'nye Uravnenija* **8** (1972), 510-522. (N. D. Kazarinoff) **45** #5611 35R10
- The asymptotic solution of a system of integro-differential equations that contain a parameter. (Ukrainian. English and Russian summaries) *Dopovidĭ Akad. Nauk Ukrain. RSR Ser. A* **1973**, 617-620, 669. (J. Muszyński) **48** #9321 45M05
- (with Feščenko, S. F.) The asymptotic representation of the solutions of partial integro-differential equations with retarded argument. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 2(129), 88-90. (V. G. Pisarenko) **49** #5754 45K05 (35R10)
- (with Feščenko, S. F.) The asymptotic solution for a linear system of hyperbolic type with lagging arguments. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 563-568, 576. (L. E. Bobisud) **48** #6731 35R10
- (with Feščenko, S. F.) On the question of the reduction of systems of linear differential equations to L-diagonal form. (Russian) *Approximation methods of mathematical analysis* (Russian), pp. 96-108. *Kiev. Gos. Ped. Inst., Kiev*, 1976. (Editors) **58** #28757 34A25
- (with Feščenko, S. F.) Construction of an asymptotic solution of a system of linear integrodifferential equations with a small parameter. (Russian) *Mathematics collection* (Russian), pp. 56-59. *Izdat. "Naukova Dumka", Kiev*, 1976. (A. Corduneanu) **57** #13425 45J05
- (with Feščenko, S. F.) On the question of the formal solution of a system of linear differential equations with slowly varying coefficients. (Russian) *Mathematics collection* (Russian), pp. 83-86. *Izdat. "Naukova Dumka", Kiev*, 1976. (Vojislav Marić) **56** #12464 34E05
- (with Feščenko, S. F.) An asymptotic solution for a differential equation in a Banach space in the presence of a finite system of multiple eigenvalues. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 5, 655-662, 717. (A. Szép) **55** #8502 34G05 (34E05)
- (with Feščenko, S. F.) On the problem of eigenvalues and "turning points" in the theory of systems of linear differential equations. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 6, 782-792, 862. (Vojislav Marić) **55** #3452 34E20
- Sotnikov, D. D. (with Danilov, L. V.; Maier, I. I.) A priori estimates for the amplitude values of currents and charges in nonlinear circuits. (Russian. English summary) *Teoret. Elektrotehn. Vyp.* **19** (1975), 65-75. (Authors' summary) **57** #15751 94A20
- Sotnikov, V. S. (with Fradlin, B. N.; Grigor'jan, A. T.) Newton's mechanics and contemporary natural science. (Polish. Russian and French summaries) Translated by Anna Grudniewska. *Kwart. Hist. Nauki i Tech.* **22** (1977), no. 4, 771-781. (Editors) **58** #10081 01A50
- (with Grigor'jan, A. T.; Fradlin, B. N.) Newton's role in the formation and development of modern science. (Russian. English summary) *Voprosy Istor. Estestvoznani. i Tehn.* **1977**, no. 1(58), 79-87, 130, 142. (Editors) **58** #26929 01A45 (01A15, 70-01)
- Soto Andrade, Jorge Harmoniques sphériques sur un corps fini. *C. R. Acad. Sci. Paris Sér. A-B* **272** (1971), A1642-A1645. (I. Stewart) **45** #8746 20G05
- Représentation de Weil de $\text{GSp}(4, \mathbb{F}_q)$ associée à un espace quadratique de dimension 4 sur \mathbb{F}_q . *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 227-230. (Louis Solomon) **51** #3320 20G05
- La représentation de Weil de $\text{GSp}(4, \mathbb{F}_q)$ et les représentations de $\text{Sp}(4, \mathbb{F}_q)$. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 321-324. (Louis Solomon) **51** #3321 20G05
- Construction géométrique de certaines séries discrètes. *Geometry and topology* (Proc. III Latin Amer. School of Math., Inst. Mat. Pura Aplicada CNPq, Rio de Janeiro, 1976), pp. 32-55. *Lecture Notes in Math.*, Vol. 597, Springer, Berlin, 1977. (P. C. Kutzko) **58** #16899 20G05 (22E50)
- Sotomayor, Jorge A version of the Morse-Sard theorem for Hilbert spaces. (Spanish. English summary) *Notas Ci. Ser. M:Mat.* **7** (1969), no. 1, 20-26. (A. J. Tromba) **54** #1291 58E05
- Structural stability and bifurcation theory. *Dynamical systems* (Proc. Sympos., Univ. Bahia, Salvador, 1971), pp. 549-560. Academic Press, New York, 1973. (Zbigniew

- Nitecki) 48 #12604 58F99 (58F10)
 Generic bifurcations of dynamical systems. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 561-582. Academic Press, New York, 1973. (Zbigniew Nitecki) 49 #4040 58F99
 Smooth dependence of solutions of differential equations on initial data: a simple proof. *Bol. Soc. Brasil. Mat.* 4 (1973), no. 1, 55-59. (N. P. Bhatia) 50 #13684 34A10 (58F10)
 Generic one-parameter families of vector fields on two-dimensional manifolds. *Inst. Hautes Études Sci. Publ. Math.* No. 43 (1974), 5-46. (John Guckenheimer) 49 #4039 58F10
 See also *Dynamical systems*, 52 #11994
- Sotomayor Tello, J. Structural stability in manifolds with boundary. *Global analysis and its applications*, Vol. III (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972), pp. 167-176. Internat. Atomic Energy Agency, Vienna, 1974. (D. K. Arrowsmith) 56 #1368 58F10
- Soto Vargas, C. W. (with Wright, L. E.; Onley, D. S.) Partial differential matrix equations for generalized hypergeometric functions. *J. Phys. A* 10 (1977), no. 4, L53-L57. (P. J. Roberts) 56 #3371 33A30
- Sotskii, N. M. (with Andreev, N. I.; Dostupov, B. G.; Kazakov, I. E.; Kozlov, Ju. M.; Kočerkov, V. T.; Pocoluev, A. V.; Sajutin, Ju. V.; Smirnov, V. I.; Tihonov, V. I.; Černeckii, V. I.) ★Статистические методы в проектировании нелинейных систем автоматического управления. (Russian) [Statistical methods in the design of nonlinear automatic control systems] Edited by B. G. Dostupov. Nonlinear Automatic Control Systems, Vol. 6. Izdat. "Mašinstroenie", Moscow, 1970. 407 pp. (errata insert) (V. N. Igolkin) 50 #9403 93E20
 (with Belova, N. S.) Estimation of parameters of motion and study of asymptotic properties of estimates in the problem of trajectory measurements. *Avtomat. i Telemekh.* 1977, no. 11, 30-38 (Russian. English summary); translated as *Automat. Remote Control* 38 (1977), no. 11, part 1, 1606-1612 (1978). (Authors' summary) 57 #15705 93E20
- Sotskov, A. I. The differentiability of a certain functional of a programming problem in an infinite dimensional space. (Russian. English summary insert) *Kibernetika (Kiev)* 1969, no. 3, 81-88. (Author's summary) 46 #1343 90C25
 Minimax criteria and certain applications to optimal control problems. (Russian. English summary insert) *Kibernetika (Kiev)* 1969, no. 4, 110-117. (V. Dem'janov (RŽMat 1970 #4 B538)) 46 #762 49B40 (49A30)
 Necessary conditions for a minimax on connected sets. (Russian. English summary insert) *Kibernetika (Kiev)* 1970, no. 4, 96-102. (V. F. Dem'janov) 45 #8304 90C25
 Optimization of models that can be described by discrete inclusions. (Russian) *Èkonom. i Mat. Metody* 10 (1974), no. 6, 1160-1171. (RŽMat 1975 #3 V708) 57 #9217 93C99
 Certain applications of concave functions to the description of utility policy and theory. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Drobovych, 1974)*, *Convex programming (Russian)*, pp. 121-129. Central. Èkonom.-Mat. Inst. Akad. Nauk SSSR, Moscow, 1976. (B. G. Mirkin) 56 #7807 90A10
 Construction of a mixed strategy in a compact family of continuous solutions. (Russian) *Èkonom. i Mat. Metody* 12 (1976), no. 6, 1210-1212. (A. B. Pevnyi) 56 #4858 90C99 (90D99)
- Sotskov, B. S. See *Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics*, 48 #8025; *Obituary: Sotskov, B. S.*, 48 #8187 and *Cybernetics—in the service of Communism*, 48 #10432
- Sotskov, B. S. (with Bol'shev, L. N.; Il'in, V. A.; Krasovskii, N. N.; Prohorov, Ju. V.; Tihonov, A. N.) Petr Ivanovič Kuznetsov (on the fortieth anniversary of his scientific activity). (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 3, 567-570. (Editors) 53 #2588 01A70
- Sotskov, Ju. N. (with Tanaev, V. S.) The enumeration of acyclic digraphs generated by a mixed graph. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1974, no. 2, 16-21, 137. (A. Rosa) 50 #4407 05C99
 (with Tanaev, V. S.) An approach to the enumeration of the directed acyclic graphs that are generated by a mixed graph. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 5, 99-102, 142. (D. Ja. Kesel'man) 55 #12565 05C30
 (with Tanaev, V. S.) Chromatic polynomial of a mixed graph. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 6, 20-23, 140. (D. Cvetković) 57 #2972 05C15
- Sotteau, D. (with Bermond, Jean-Claude) Graph decompositions and G-designs. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 53-72. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, Man., 1976. (D. K. Ray-Chaudhuri) 56 #8401 05B30
 Decomposition of K_n^* into circuits of odd length. *Discrete Math.* 15 (1976), no. 2, 185-191. (Anton Kotzig) 55 #7832 05C20
 (with Bermond, Jean-Claude; Germa, Anne) Hypergraph-designs. *Ars Combinatoria* 3 (1977), 47-66. (Pavol Hell) 57 #12268 05B30 (05C99)
 (with Bermond, Jean-Claude; Heydemann, M. C.) Line graphs of hypergraphs. I. *Discrete Math.* 18 (1977), no. 3, 235-241. (R. L. Hemminger) 57 #2967 05C10 (05C99)
- Soubbaramayer See *Computing methods in applied sciences and engineering*, 49 #4198
- Soubbotine, A. See also *Subbotin, A. I.*
- Soubbotine, A. L. See *Subbotin, A. L.*
- Soubeyran, Bruno Sur certains semi-corps dérivables et une généralisation des systèmes de Hall et de Kirkpatrick. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 851-854. (E. C. Johnsen) 49 #9733 50D35
- Soublin, Jean-Pierre Étude algébrique de la notion de moyenne (Chapitre I). *J. Math. Pures Appl.* (9) 50 (1971), 53-96. (I. Gy. Maurer) 45 #436 20N99 (08A05)
 Étude algébrique de la notion de moyenne (suite). *J. Math. Pures Appl.* (9) 50 (1971), 97-192. (I. Gy. Maurer) 45 #437 20N99 (08A05)
 Étude algébrique de la notion de moyenne (suite et fin). *J. Math. Pures Appl.* (9) 50 (1971), 193-264. (I. Gy. Maurer) 45 #438 20N99 (08A05)
 Problèmes de Burnside. *Comptes Rendus des Journées Mathématiques de la Société Mathématique de France (Univ. Sci. Tech. Languedoc, Montpellier, 1974)*, pp. 151-156. *Cahiers Math. Montpellier*, No. 3, U.E.R. de Math., Univ. Sci. Tech. Languedoc, Montpellier, 1974. (R. R. Struik) 51 #8263 20F05
- Souček, Jiří The spaces W^k , and direct methods of the calculus of variations in nonreflexive spaces. (Russian) *Application of functional methods to the boundary problems of mathematical physics (Proc. Third Soviet-Czechoslovak Conf., Novosibirsk, 1971)* (Russian), pp. 236-244. *Inst. Mat. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk* 1972. (H. Marcinkowska) 51 #6524 49A15
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Vladimír) New infinite dimensional versions of Morse-Sard theorem. (Italian summary) *Boll. Un. Mat. Ital.* (4) 6 (1972), 317-322. (A. J. Tromba) 48 #3074 58C15 (46G05, 58E05)
 Spaces of functions on domain Ω , whose k -th derivatives are measures defined on $\partial\Omega$. (Czech summary) *Časopis Pěst. Mat.* 97 (1972), 10-46, 94. (J. Horváth) 47 #46E35
 (with Souček, Vladimír) Morse-Sard theorem for real-analytic functions. *Comment. Math. Univ. Carolinae* 13 (1972), 45-51. (J. W. Neuberger) 46 #7459 26A90
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Vladimír) Upper bound number of eigenvalues for nonlinear operators. *Comment. Math. Univ. Carolinae* 13 (1972), 191-195. (M. Z. Nashed) 46 #4298 47H15
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Vladimír) Strengthening upper bound for the number of critical levels of nonlinear functionals. *Comment. Math. Univ. Carolinae* 13 (1972), 297-310. (M. Z. Nashed) 46 #4299 47H15
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Vladimír) Upper bound number of critical levels for nonlinear operators in Banach spaces of the type of order nonlinear partial differential operators. *J. Functional Analysis* 11 (1972), 31-46. (Z. C. Motteler) 49 #5974 47H99 (35J15)
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Vladimír) ★Spectral analysis of nonlinear operators. Lecture Notes in Mathematics, Vol. 346. Springer-Verlag, Berlin-New York, 1973. ii+287 pp. (Jean Mawhin) 57 #7280 47H15 (58E05)
 (with Souček, Vladimír) The Morse-Sard theorem for real-analytic functions. *Theory of nonlinear operators (Proc. Summer School, Babylon, 1971)*, pp. 121-125. Academia, Prague, 1973. (J. W. Neuberger) 52 #14204 26A90 (58C05)
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, V.) Upper bound for the number of eigenvalues for nonlinear operators. *Ann. Scuola Norm. Sup. Pisa* (3) 27 (1973), 53-71. (Ana Istrătescu) 51 #9122 58E99 (47H15)
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Vladimír) Note to nonlinear spectral theory: application to the nonlinear integral equations of the Lichtenstein type. *Math. Nachr.* 58 (1973), 257-267. (Ana Istrătescu) 49 #5748 45G99 (47H15)
 (with Fučík, Svatopluk; Kučera, Milan; Souček, Vladimír) Topics in nonlinear spectral theory. *Theory of nonlinear operators (Proc. Summer School, Neuchâtel, 1971)*, pp. 57-73. *Schr. Zentralinst. Math. Mech. Akad. Wiss. DDR, Heft 20, Akademie-Verlag, Berlin*, 1974. (H. Amann) 51 #1494 47Hxx (58E05)
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Vladimír) Krasnoselskii's bifurcation theorem. *Arch. Rational Mech. Anal.* 54 (1974), 328-339. (J. W. T. Young) 52 #1438 47H15
 (with Giacquinta, Mariano) Esistenza per il problema dell'area e controesempi. *Bernstein*. (English summary) *Boll. Un. Mat. Ital.* (4) 9 (1974), 807-817. (William Allard) 51 #11259 49F10
 (with Fučík, Svatopluk; Kučera, Milan; Nečas, Jindřich; Souček, Vladimír) Morse-Sard theorem in infinite dimensional Banach spaces and investigation of the critical levels. *Časopis Pěst. Mat.* 99 (1974), 217-243. (M. Klingmann) 51 #58E05 (47H15)
 (with Souček, Vladimír) On the spectrum of a nonlinear operator. *Czechoslovak Math. J.* 24(99) (1974), 614-663. (Norman Dancer) 53 #4134 58E05 (47H15)
 (with Souček, Vladimír; Stará, Jana) On the nineteenth and the twentieth problems. (Czech) *Pokroky Mat. Fyz. Astronom.* 22 (1977), no. 3, 139-150. (V. K. Ibragimov) 57 #1225 49-02 (58E15, 49F10)
 (with Kučera, Milan; Nečas, Jindřich) The eigenvalue problem for variational inequalities and a new version of the Ljusternik-Schnirelmann theory. *Nonlinear analysis (collection of papers in honor of Erich H. Rothe)*, pp. 125-143. Academic Press, New York, 1978. (A. Vanderbauwhede) 58 #23958 49G05 (58E05)
- Souček, V. (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří) Upper bound number of eigenvalues for nonlinear operators. *Ann. Scuola Norm. Sup. Pisa* (1973), 53-71. (Ana Istrătescu) 51 #9122 58E99 (47H15)
- Souček, Vladimír The nonexistence of a weak solution of Dirichlet's problem for a functional of minimal surface on nonconvex domains. *Comment. Math. Univ. Carolinae* 12 (1971), 723-736. (H. Beckert) 45 #5845 49F10 (35J60, 53A10)
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří) New infinite dimensional versions of Morse-Sard theorem. (Italian summary) *Boll. Un. Mat. Ital.* (4) 6 (1972), 317-322. (A. J. Tromba) 48 #3074 58C15 (46G05, 58E05)
 (with Souček, Jiří) Morse-Sard theorem for real-analytic functions. *Comment. Math. Univ. Carolinae* 13 (1972), 45-51. (J. W. Neuberger) 46 #7459 26A90
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří) Upper bound for the number of eigenvalues for nonlinear operators. *Comment. Math. Univ. Carolinae* 13 (1972), 191-195. (M. Z. Nashed) 46 #4298 47H15
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří) Strengthening upper bound for the number of critical levels of nonlinear functionals. *Comment. Math. Univ. Carolinae* 13 (1972), 297-310. (M. Z. Nashed) 46 #4299 47H15
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří) Upper bound for the number of critical levels for nonlinear operators in Banach spaces of the type of order nonlinear partial differential operators. *J. Functional Analysis* 11 (1972), 31-46. (Z. C. Motteler) 49 #5974 47H99 (35J15)
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří) ★Spectral analysis of nonlinear operators. Lecture Notes in Mathematics, Vol. 346. Springer-Verlag, Berlin-New York, 1973. ii+287 pp. (Jean Mawhin) 57 #7280 47H15 (58E05)
 (with Souček, Jiří) The Morse-Sard theorem for real-analytic functions. *Theory of nonlinear operators (Proc. Summer School, Babylon, 1971)*, pp. 121-125. Academia, Prague, 1973. (J. W. Neuberger) 52 #14204 26A90 (58C05)
 (with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří) Note to nonlinear spectral theory: application to the nonlinear integral equations of the Lichtenstein type. *Math. Nachr.* 58 (1973), 257-267. (Ana Istrătescu) 49 #5748 45G99 (47H15)
 (with Fučík, Svatopluk; Kučera, Milan; Souček, Jiří) Topics in nonlinear

- y. *Theory of nonlinear operators (Proc. Summer School, Neuchâtel, 1972)*, pp. 57-73. Zentralinst. Math. Mech. Akad. Wiss. DDR, Heft 20, Akademie-Verlag, Berlin, (H. Amann) **51** #1494 47Hxx (58E05)
- with Fučík, Svatopluk; Nečas, Jindřich; Souček, Jiří Krasnoselskii's main invariance theorem. *Arch. Rational Mech. Anal.* **54** (1974), 328-339. (J. W. Thomas) **1438** 47H15
- with Fučík, Svatopluk; Kučera, Milan; Nečas, Jindřich; Souček, Jiří Morse-Sard theorem in infinite dimensional Banach spaces and investigation of the set of all critical points. *Časopis Pěst. Mat.* **99** (1974), 217-243. (M. Klingmann) **51** #6875 58E05 (1975)
- with Souček, Jiří On the spectrum of a nonlinear operator. *Czechoslovak Math. J.* **19** (1974), 614-663. (Norman Dancer) **53** #4134 58E05 (47H15)
- with Fučík, Svatopluk; Nečas, Jindřich ★Einführung in die Variationsrechnung. Englischen und russischen Zusammenfassungen. Teubner-Texte zur Mathematik. B. Teubner Verlagsgesellschaft, Leipzig, 1977. 175 pp. (Vadim Komkov) **58** #7269 (1978)
- with Souček, Jiří; Stará, Jana On the nineteenth and the twentieth Hilbert problems. (Czech) *Pokroky Mat. Fyz. Astronom.* **22** (1977), no. 3, 139-150. (V. Komkov) **1225** 49-02 (58E15, 49F10)
- J. (with Li, L. H. Yip) Structure of rings of functions with Riemann Stieltjes integration products. *J. Math. Anal. Appl.* **41** (1973), 468-477. (I. Kovács) **47** #4005 (1974)
- René Principe des travaux virtuels en théorie des plaques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 8, A679-A681. (J. W. Craggs) **7049** 73.35
- théorie des plaques en élasticité linéaire classique. (English summary) *J. Mécanique* **9** (1978), no. 1, 53-76. (Author's summary) **58** #8668 73.35
- A. C. (with Suryanarayanan, K. L.; Rao, S. G.) A unified approach to the identification of time systems. *Internat. J. Control* (1) **14** (1971), 1009-1029. (Authors' summary) **47** #1498 93B30
- with Wong, J. K.) Stochastic optimal pointwise regulation control for linear time-distributed parameter systems. *Internat. J. Control* **22** (1975), no. 5, 509. (S. G. Tzafestas) **53** #12729 93E20
- with Wong, J. K.) Stochastic suboptimal pointwise regulation control for linear time-distributed parameter systems. *Internat. J. Control* **22** (1975), no. 5, 526. (S. G. Tzafestas) **53** #12730 93E20
- with Barkham, P. G. D.; Modi, V. J.) Asymptotic solutions in the many-body problem. I. Planar three-body systems. *Celestial Mech.* **14** (1976), no. 4, 465-492. (V. Szebehely) **57** #18311a 70.34
- with Brauer, Fred; Jarosch, H. S.) Stabilization and de-stabilization of predator-prey systems under harvesting and nutrient enrichment. *Internat. J. Control* **23** (1976), no. 4, 553-573. (Brian D. Sleeman) **54** #9724 (E 55 #12169) 92A15
- with Brauer, Fred; Jarosch, H. S.) Errata: "Stabilization and de-stabilization of predator-prey systems under harvesting and nutrient enrichment" (*Internat. J. Control* 1976), no. 4, 553-573). *Internat. J. Control* **24** (1976), no. 6, 887. (Editors) **12169** 92A15
- with Barkham, P. G. D.; Modi, V. J.) Asymptotic solutions in the many-body problem. II. Periodic orbits in four-body systems. *Celestial Mech.* **15** (1977), no. 1, 5-20. (Szebehely) **57** #18311b 70.34
- with Barkham, P. G. D.) New results on the elliptic function method. *Internat. J. Control* **26** (1977), no. 3, 341-358. (Syvert P. Norsett) **58** #8314 65L99
- with Brauer, Fred) Response of predator-prey systems to nutrient enrichment and partial harvesting. *Internat. J. Control* **27** (1978), no. 1, 65-86. (Colin Clark) **15564** 92A15
- with Brearley, J. R.) Approximate solutions to the Lotka-Volterra competition systems. *Internat. J. Control* **27** (1978), no. 6, 933-941. (Authors' summary) **20597** 92A15 (65L99)
- P. (with Bastin, D.; Girard, E.; Rault, Jean-Claude; Rosenstiehl, Pierre) Le contrôle automatique des masques de circuits intégrés: un nouvel algorithme de planification. (English and German summaries) *Rev. Tech. Thomson-CSF* **6** (1974), 246. (A. T. Amin) **54** #9854 94A20
- Surli See Suhov, Ju. M.
- Bernard (with Duneau, M.) Existence of Green's functions for dilute Bose gases. *Ann. Math. Phys.* **31** (1973), 113-125. (R. Critchley) **49** #4502 82.46
- with Duneau, M.; Iagolnitzer, Daniel) Decrease properties of truncated correlation functions and analyticity properties for classical lattices and continuous systems. *Ann. Math. Phys.* **31** (1973), 191-208. (O. Penrose) **49** #2000 82.30
- with Duneau, M.; Iagolnitzer, Daniel) Strong cluster properties for classical systems with finite range interaction. *Comm. Math. Phys.* **35** (1974), 307-320. (O. Penrose) **49** #2001 82.30
- Links between decay properties of correlations and analyticity of the pressure and partition functions. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 497-503. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (Author's summary) **58** #32714 82.60
- with Duneau, M.; Iagolnitzer, Daniel) Decay of correlations for infinite-range interactions. *J. Mathematical Phys.* **16** (1975), 1662-1666. (M. E. Mayer) **51** #7538 (1976) (82.47)
- with Iagolnitzer, Daniel) Decay of correlations for slowly decreasing potentials. *Rev. A* (3) **16** (1977), no. 4, 1700-1704. (James McDonald) **58** #20067 82.28
- with Iagolnitzer, Daniel) On the analyticity in the potential in classical statistical mechanics. *Comm. Math. Phys.* **60** (1978), no. 2, 131-152. (Authors' summary) **14851** 82.60
- with Kunz, Hervé) Essential singularity in percolation problems and asymptotic behavior of cluster size distribution. *J. Statist. Phys.* **19** (1978), no. 1, 77-106. (Authors' summary) **58** #14852 82.60
- Jiří On minimum cost networks with nonlinear costs. *SIAM J. Appl. Math.* **29** (1975), no. 4, 571-581. (I. T. Frisch) **52** #16900 94A20 (05C10)
- with Cheung, To Yat) A note on minimum cost networks with nonlinear costs. *M. J. Appl. Math.* **34** (1978), no. 2, 225-226. (Authors' summary) **57** #5037 (1979)
- Soukup, Václav On formulation of state equations for linear nonstationary discrete-time system. (Czech summary) *Kybernetika (Prague)* **8** (1972), 419-429. (Jan C. Willems) **48** #10583 93C55
- Linear nonstationary system with discrete-time input. *Kybernetika (Prague)* **9** (1973), 30-41. (Jan C. Willems) **48** #10584 93C55
- Weighting function and state equations of linear discrete-time-varying system. *Kybernetika (Prague)* **9** (1973), 467-474. (D. H. Chyung) **49** #2172 93C55
- On inverse of linear discrete-time-varying system. *Kybernetika (Prague)* **10** (1974), 424-433. (Vladimir Kučera) **53** #7560 93B99
- Soul, H. (with Kay, E.; Trutt, David) Some subnormal operators and hypergeometric kernel functions. *J. Math. Anal. Appl.* **53** (1976), no. 2, 237-242. (L. J. Wallen) **53** #3761 47B20
- Soulard, Alain Changement de phase du premier ordre. Thermodynamique des systèmes singuliers. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 5, B113-B116. (Author's summary) **58** #25428 80.35
- Soulé, Christophe Groupes opérant sur un complexe simplicial avec domaine fondamental. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A607-A609. (Peter M. Neumann) **47** #5854 54H15 (20E30, 20F05)
- Cohomologie de $SL_3(\mathbb{Z})$. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 5, A1-A254. (H. Bass) **53** #709 22E40 (20G10)
- (with Rehmman, Ulf) Finitely presented groups of matrices. *Algebraic K-theory (Proc. Conf., Northwestern Univ., Evanston, Ill., 1976)*, pp. 164-169. *Lecture Notes in Math.*, Vol. 551, Springer, Berlin, 1976. (G. E. Wall) **58** #5955 20G35 (18F25)
- Classes de torsion dans la cohomologie des groupes arithmétiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 17, A1009-A1011. (Author's summary) **55** #6428 55F40 (57D20, 22E40, 55F65)
- Addendum to the article: "On the torsion in $K_*(\mathbb{Z})$ " (*Duke Math. J.* **45** (1978), no. 1, 101-129) by R. Lee and R. H. Szczarba. *Duke Math. J.* **45** (1978), no. 1, 131-132. (R. E. Stafford) **58** #11074b 18F25 (10E45, 55F40)
- The cohomology of $SL_3(\mathbb{Z})$. *Topology* **17** (1978), no. 1, 1-22. (Ken-ichi Tahara) **57** #9908 22E40 (18H10, 20H05)
- See also Brown, Kenneth S., **58** #28143
- Soule, J. L. See Computing methods in applied sciences and engineering, **49** #4198
- Soule, Stephen Entropies of probabilistic grammars. *Information and Control* **25** (1974), 57-74. (Taylor L. Booth) **49** #4329 68A30
- Soulet, Y. (with Fleckinger, R.; Gomes, A.) Orthonormalized and complete basis for the description of electronic states in solids. *Physica* **65** (1973), no. 2, 337-346. (Authors' summary) **52** #16342 81.34
- (with Fleckinger, R.; Gomes, A.) "Ideal" formulation of the one-particle problem when some eigenstates are initially known. Connection with O.P.W. and C.O.P.W. pseudopotential theories. *Physica* **68** (1973), 266-278. (A. Corciovei) **52** #16343 81.34
- (with Fleckinger, R.; Gomes, A.) Statistical mechanics of composite particles. I. General formulation using a projection technique for the fixed ion plasma model. *Phys. A* **85** (1976), no. 3, 485-508. (Authors' summary) **57** #8782 82.47
- (with Fleckinger, R.; Gomes, A.) Statistical mechanics of composite particles. II. Extension of the first Girardeau formulation by means of a projection technique. *Phys. A* **91** (1978), no. 1-2, 33-48. (Authors' summary) **58** #14847 82.60
- Soundalgekar, V. M. Free convection effects on the oscillatory flow of an incompressible viscous fluid past an infinite, vertical plate with variable suction. *Proc. Indian Acad. Sci. Sect. A* **86** (1977), no. 4, 371-382. (A. Pozzi) **57** #14877 76.35
- (with Aranake, R. N.; Pop, Ioan) Effects of couple stresses on MHD oscillatory flow past an infinite plate with constant suction. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 7, 993-1002. (Authors' summary) **57** #2128 76.35
- Recent developments in magnetohydrodynamics. *Acta Cienc. Indica* **4** (1978), no. 2, 185-198. (From the summary) **58** #19746 76.35
- Soundararajan, T. Normal polynomials in simple extension fields. II. *Monatsh. Math.* **72** (1968), 432-444. (N. Guthschmidt (Zbl 184, 70)) **50** #12993 12F20 (12F10)
- On a topology for a Galois system of fields and automorphisms. *J. Pure Appl. Algebra* **1** (1971), no. 2, 155-158. (H. F. Kreimer) **45** #3372 12A55
- Normal polynomials in simple extension fields. III. *Monatsh. Math.* **75** (1971), 338-340. (Author's introduction) **58** #27924 12E05
- (with Kolchin, Ellis) Differential polynomials and strongly normal extensions. *Amer. J. Math.* **94** (1972), 467-472. (J. J. Kovacic) **48** #2123 12H05
- (with Venkataraman, M.; Rajagopalan, M.) Orderable topological spaces. *General Topology and Appl.* **2** (1972), 1-10. (H. Herrlich) **45** #7683 54F05
- (with Bass, Hyman) A property of profinite groups and the converse of classical Galois theory. *J. Indian Math. Soc. (N.S.)* **36** (1972), 1-7. (S. Yuan) **47** #6663 12F10
- (with Rajagopalan, M.; Jakel, D.) On perfect images of ordinals. *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 228-232. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (Paul R. Meyer) **51** #1716 54C10
- (with Mrówka, S.; Rajagopalan, M.) A characterization of compact scattered spaces through chain limits (chain compact spaces). *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 288-297. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (Paul R. Meyer) **51** #11430 54D30 (54D55)
- Cohomology of Galois extensions. *J. Pure Appl. Algebra* **11** (1977/78), no. 1-3, 139-150. (Sunder K. Gupta) **57** #5975 12G05
- Souppouris, D. J. Generalized metric spaces are paracompact. *Math. Proc. Cambridge Philos. Soc.* **77** (1975), 325-326. (V. S. Krishnan) **51** #6751 54E99 (54D20)
- Šourek, Anton See Petkančin, B.; et al., **56** #11724
- Souriau, Jean-Marie (with Duval, Christian; Fliche, Henri-Hugues) Un modèle de particule à spin dans le champ gravitationnel et électromagnétique. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1082-A1084. (K. J. Le Couteur) **45** #4779 81.53 (83.35)
- Indice de Maslov des variétés lagrangiennes orientables. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1025-1026. (J. R. Vanstone) **47** #7772 58G99 (35B40, 81.35)

- Le milieu élastique soumis aux ondes gravitationnelles. Avec discussion. *Ondes et radiations gravitationnelles (Colloq. Internat. CNRS, No. 220, Paris, 1973)*, pp. 243-256. *Centre Nat. Recherche Sci., Paris, 1974*. (R. L. Ingraham) **58** #14966 83.53
- Sur la variété de Képler. *Symposia Mathematica, Vol. XIV (Convegno di Geometria Simplettica e Fisica Matematica, INDAM, Rome, 1973)*, pp. 343-360. *Academic Press, London, 1974*. (David J. Simms) **52** #12466 70.58
- Modèle de particule à spin dans le champ électromagnétique et gravitationnel. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **20** (1974), 315-364. (J. R. Vanstone) **50** #12132 83.53
- Mécanique statistique, groupes de Lie et cosmologie. With questions by S. Sternberg and K. Bleuler and replies by the author. *Géométrie symplectique et physique mathématique (Colloq. Internat. CNRS No. 237, Aix-en-Provence, 1974)*, pp. 59-113. *Éditions Centre Nat. Recherche Sci., Paris, 1975*. (A. Crumeyrolle) **56** #17689 83.22 (58F05)
- Construction explicite de l'indice de Maslov. Applications. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 117-148. *Lecture Notes in Phys., Vol. 50, Springer, Berlin, 1976*. (A. Crumeyrolle) **57** #17715 58F05
- Thermodynamique relativiste des fluides. *Rend. Sem. Mat. Univ. e Politec. Torino* **35** (1976/77), 21-34 (1978). (Gerard A. Maugin) **58** #14442 80.53
- Interprétation géométrique des états quantiques. *Differential geometrical methods in mathematical physics (Proc. Sympos., Univ. Bonn, Bonn, 1975)*, pp. 76-96. *Lecture Notes in Math., Vol. 570, Springer, Berlin, 1977*. (Manfred Andrie) **57** #11243 70.58 (58F05)
- See also *Géométrie symplectique et physique mathématique*, **57** #12420
- Sourlas, D.** (with Jannussis, A. D.; Streclas, A.; Patargias, N.; Vlachos, K.) Wigner operators of angular momentum in phase space. *Lett. Nuovo Cimento* (2) **20** (1977), no. 7, 238-240. (From the text) **58** #14666 81.47
- (with Jannussis, A. D.; Streclas, A.; Vlachos, K.) Some properties of commutators and the equations of motion. *Phys. Scripta* **15** (1977), no. 3, 163-166. (H. Araki) **57** #11470 81.46
- Sourour, Ahmed Ramzy** On groups and semigroups of spectral operators on a Banach space. *Acta Sci. Math. (Szeged)* **36** (1974), 291-294. (V. K. Balakrishnan) **55** #6239 47D05 (47B40)
- (with Berkson, Earl) An example of an unbounded hermitian operator in $AC[0, 2\pi]$. Spectral Theory Symposium (Trinity Coll., Dublin, 1974). *Proc. Roy. Irish Acad. Sect. A* **74** (1974), 185-189. (L. J. Wallen) **50** #10888 47B37
- (with Berkson, Earl) The hermitian operators on some Banach spaces. *Studia Math.* **52** (1974), 33-41. (H. R. Dowson) **50** #8142 47B15
- Semigroups of scalar type operators on Banach spaces. *Trans. Amer. Math. Soc.* **200** (1974), 207-232. (A. B. Buche) **51** #1481 47D05
- On the isometries of $L^p(U, X)$. *Bull. Amer. Math. Soc.* **83** (1977), no. 1, 129-130. (P. Wojtaszczyk) **54** #13558 46E40
- On algebras of Banach space operators and invariant subspaces. *Bull. London Math. Soc.* **9** (1977), no. 3, 305-309. (R. G. Bartle) **57** #1147 46L20 (47A15, 47B40)
- (with Rosenthal, Peter) On operator algebras containing cyclic Boolean algebras. II. *J. London Math. Soc.* (2) **16** (1977), no. 3, 501-506. (R. C. Busby) **58** #17876b 46L20 (47A15)
- (with Rosenthal, Peter) On operator algebras containing cyclic Boolean algebras. *Pacific J. Math.* **70** (1977), no. 1, 243-252. (R. C. Busby) **58** #17876a 46L20 (47A15)
- Sourrouille, Lucien** Une application de l'invariance statistique à un problème de détection. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A253-A256. (Author's summary) **54** #14865 94A05
- Sours, Richard E.** Absolutely continuous component of a class of integral operators. *Proc. Amer. Math. Soc.* **37** (1973), 521-524. (M. J. Fisher) **47** #895 47G05
- Soury, Pierre** (with Léger, Christian) Le convexe topologique des probabilités sur un espace topologique. *J. Math. Pures Appl.* (9) **50** (1971), 363-423. (Authors' introduction) **57** #4274 60B05 (28A32)
- de Sousa, J. (with Welsh, D. J. A.) A characterisation of binary transversal structures. *J. Math. Anal. Appl.* **40** (1972), 55-59. (J. A. Bondy) **47** #6523 05B35
- malato de Sousa, J. A. See Malato de Sousa, J. A.
- fontes de Sousa, Maria de Fátima See Fontes de Sousa, Maria de Fátima
- South, J. C., Jr.** (with Jones, D. J.; Klunker, E. B.) On the numerical solution of elliptic partial differential equations by the method of lines. *J. Computational Phys.* **9** (1972), 496-527. (P. G. Ciarlet) **46** #2899 65N99
- Southcott, Bruce** Two-variable laws for a class of finite simple groups. *Bull. Austral. Math. Soc.* **10** (1974), 85-89. (O. H. Kegel) **49** #2939 20E10
- A basis for the laws of a class of simple groups. Collection of articles dedicated to the memory of Hanna Neumann, VIII. *J. Austral. Math. Soc.* **17** (1974), 500-505. (A. P. Street) **50** #2336 20E10 (20D05)
- Southward, G. Morris** (with Van Ryzin, John) Estimating the mean of a random binomial parameter. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/71), Vol. IV: Biology and health*, pp. 249-263. *Univ. California Press, Berkeley, Calif., 1972*. (Charles E. Land) **54** #1457 62F10
- Southwell, W. H.** Fitting data to nonlinear functions with uncertainties in all measurement variables. *Comput. J.* **19** (1976), no. 1, 69-73. (David R. Hill) **53** #9644 65K05
- Southworth, Thomas W.** (with Salinas, David; Nguyen, Dong H.) Finite element solutions of a nonlinear nuclear reactor dynamics problem. *Computational methods in nonlinear mechanics (Proc. Internat. Conf., Austin, Tex., 1974)*, pp. 541-550. *Texas Inst. Comput. Mech., Austin, Tex., 1974*. (N. N. Janenko) **53** #12036 (EA 54) 65N30
- Souville, Jean** Théorie différentielle du contact maximal en inégale caractéristique. *Bull. Soc. Math. France* **105** (1977), no. 1, 47-63. (Author's summary) **58** #27981 14E15
- de renna e Souza, Celso See de Renna e Souza, Celso
- Souza, J. A.** (with Teixeira, A. F. da F.) Einstein gravitation from scalar nonsingular sources alone. *Internat. J. Theoret. Phys.* **16** (1977), no. 8, 585-590. (A. H. Taub) **57** #11636 83.53
- de Souza Kihl, José Carlos On the complex projective bundle construction. *Geometry and topology (Proc. III Latin Amer. School of Math., Inst. Mat. Pura Aplicada CNPq, Rio de Janeiro, 1976)*, pp. 568-580. *Lecture Notes in Math., Vol. 597, Springer, Berlin, 1977*. (R. E. Stong) **56** #6682 57D85 (55F40)
- Sova, Miroslav** Problèmes de Cauchy paraboliques abstraits de classes supérieures semi-groupes distributions. *Ricerche Mat.* **18** (1969), 215-238. (From the introduction) **54** #3499 47D05
- Équations hyperboliques avec petit paramètre dans les espaces de Banach g . *Colloq. Math.* **21** (1970), 303-320. (From the author's introduction) **54** #10796 34G05
- Régularité de l'évolution linéaire isochrone. *Czechoslovak Math. J.* **20** (1975), 251-302. (Editors) **56** #16094 34G05
- Perturbation numériques des évolutions parabolique et hyperbolique. (Czech summary) *Časopis Pěst. Mat.* **96** (1971), 406-425, 431. (J. E. Lagnese) **46** #47A55 (35L15)
- Abstract semilinear equations with small nonlinearities. *Comment. Math. Univ. Carolinae* **12** (1971), 785-805. (A. Elcrat) **45** #1000 47H15 (35Q99)
- Réflexivité des espaces vectoriels topologiques. (Italian summary) *Rend. Mat. (5)* **26** (1971), 19-36. (K. Floret) **48** #2713 46A25
- Encore sur les équations hyperboliques avec petit paramètre dans les espaces de Banach généraux. *Colloq. Math.* **25** (1972), 135-161. (Author's summary) **54** #34G05
- Abstract semilinear equations with small parameter. *Proceedings of Equations of Mathematical Physics (Third Czechoslovak Conf. Differential Equations and Appl., Brno, 1972)*, pp. 71-76. *Sci. Natur. Univ. Purkynianae Brunensis, Ser. Monograph., Tomus 1, Purkyně, Brno, 1973*. (D. Pascali) **51** #6518 47H15 (35J60)
- On the Timoshenko type equations. *Časopis Pěst. Mat.* **100** (1975), no. 3, 145-159. (E. S. Noussair) **52** #8602 34G05
- Linear differential equations in Banach spaces. *Rozprawy Československé Akademie Mat. Přírod. Věd* **85** (1975), sešit 6, 82 pp. *Čas. 333* #34055 **58** #1461 (35R20, 47D05)
- On inversion of Laplace transform. I. *Časopis Pěst. Mat.* **102** (1977), no. 2, 135-140. (See Zbl 351 #44001) 44A10
- On Hadamard's concepts of correctness. (Czech and loose Russian summary) *Časopis Pěst. Mat.* **102** (1977), no. 3, 234-269, 312. (Denise Huet) **56** #12977 (34G05)
- Soverik, N. I.** On the solution of the boundary value problem for forced oscillations of a string. (Russian) *Trudy Altaisk. Politehn. Inst.* No. 3 (1967), 115-121. (A. S. Soverik) **52** #14579 35C15
- An estimate of the error of a finite difference solution of the boundary value problem of forced vibration of a string. (Russian. English summary) *Vestnik Leningrad. Univ.* **1971**, no. 19, 57-63. (K. Moszynski) **45** #8034 65N15
- Sovetov, B. Ja.** (with Tiškin, A. I.) Dominant distributions in certain problems of scheduling theory. (Russian) *Automation of production*, No. 2 (Russian), pp. 13-17. *Izdat. Leningrad. Univ., Leningrad, 1976*. (G. Šerkšins) **56** #17786 90B35
- See also *Automation of production*, **55** #5180
- Sovin, Ja. A.** Some boundary value problems for elliptic equations with singular part of the boundary. (Russian) *Mat. Fiz. Vyp.* **18** (1975), 149-152, 168. (Author's summary) **58** #1623 35J70
- Šovkopljak, V. N.** (with Ljaško, I. I.) A method for the solution of a boundary value problem for a second order ordinary differential equation. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp.* **29** (1976), 71-80, 153. (Authors' summary) **57** #65L10
- Periodic solutions of a second order differential equation with pulses. (English summary) *Vychisl. Prikl. Mat. (Kiev) Vyp.* **33** (1977), 28-35, 159. (W. S. Soverik) **57** #6643 34C25
- Šovkrinskii, G. Ju.** (with Murkes, M. N.; Rožděstvenskii, V. A.) Two numerical methods for the solution of one-dimensional filtration problems for multicomponent fluids. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **17** (1977), no. 3, 696-705, 804. (Authors' summary) **58** #14452 80.65
- Sowa, A.** (with Murzewski, J.) Tables of the functions of the parabolic cylinder functions with negative integer parameters. (Polish summary) *Zastos. Mat.* **13** (1972/73), 1-10. (Editors) **48** #1424 65A05 (33A60)
- Sowa, John F.** Conceptual graphs for a data base interface. *IBM J. Res. Develop.* **20** (1976), no. 4, 336-357. (Allen Klinger) **55** #13864 68A05 (68A50)
- Soward, A. M.** Nearly symmetric kinematic and hydromagnetic dynamos. *J. Math. Phys.* **12** (1971), 1900-1906. (G. E. Backus) **45** #6376 86.35
- (with Roberts, P. H.) A unified approach to mean field electrodynamics. (English summary) *Astronom. Nachr.* **296** (1975), no. 2, 49-64. (Ian Lerche) **53** #2148
- Sowey, E. R.** A chronological and classified bibliography on random number generation and testing. *Internat. Statist. Rev.* **40** (1972), no. 3, 355-371. (Editors) **54** #65C10
- A second classified bibliography on random number generation and testing. *Internat. Statist. Rev.* **46** (1978), no. 1, 89-102. (Author's summary) **58** #65C10 (00A15)
- Sowter, A. P.** Pricing models. *Bull. Inst. Math. Appl.* **9** (1973), no. 11, 345-353. (reviewed) 90A15
- Šowunmi, C. O. A.** Dependence of the least eigenvalue of Δ^2 on Poisson's ratio. *J. Sci.* **3** (1969), 139-143. (C. A. Swanson) **49** #5597 35P15
- Hyperelasticity and the potentialness of a nonlinear operator. *Ann. Mat. Pura Appl.* (4) **90** (1971), 181-189. (B. R. Seth) **46** #8518 73.47
- On the existence and uniqueness of periodic solution of the equation $\mu_{tt} - \mu_{xx} - K^* u_{xx} - \lambda u_{xt} - f = 0$. (Italian summary) *Boll. Un. Mat. Ital.* (4) **15** (1972), 724-729. (V.-V. Olariu) **51** #13485 35Q99 (35B10)
- Female dominant age-dependent deterministic population dynamics. *J. Math. Anal. Appl.* **3** (1976), no. 1, 9-17. (Anthony Leung) **53** #15407 92-XX
- On the existence of periodic solutions of the equation $\rho_{tt} u - (\sigma(u))_x - \lambda u_x$. (Italian summary) *Rend. Ist. Mat. Univ. Trieste* **8** (1976), no. 1, 58-68. (R. C. MacCamy) **55** #3491 35B10
- G. Adler's deterministic model of vector-borne epidemics—a threshold phenomenon. *Math. Biosci.* **35** (1977), no. 1-2, 47-54. (Author's summary) **58** #33159 92-XX
- Sox, J. L., Jr.** A class of complete orthogonal sequences of broken line functions. *Amer. Math. Soc.* **166** (1972), 293-296. (J. J. Price) **45** #811 42A60

- Michael G.** (with Mode, Charles J.) A stochastic model of natural human fertility algorithms and numerical examples. *Math. Biosci.* **35** (1977), no. 3-4, 187-209. (Authors' summary) **58** #33152 92A15 (60K99)
- A. L.** (with Kortanek, K. O.) On refinements of some duality theorems in linear programming over cones. *Operations Res.* **20** (1972), 137-142. (A. Majthay) **47** #1455 JC05
- (with Kortanek, K. O.; Rom, W. O.) Solution sets of convex programs related to minimal equilibrium problems. Mathematical programming and its applications. *Operations Res.* **21** (1973), 240-246. (B. Berescu) **51** #5011 90C25
- The existence of optimal price vectors in the general balanced-growth model of economics. *Econometrica* **42** (1974), 199-205. (Alberto Chiosi) **54** #2156 90A15
- A note on duality gaps in linear programming over convex sets. *J. Optimization Theory Appl.* **13** (1974), 484-489. (V. Ionescu) **52** #10030 90C05
- A semi-infinite game. *Management Sci.* **21** (1974/75), no. 7, 806-812. (G. Owen) #9688 90D05
- A duality theory for convex programming with set-inclusive constraints. *Operations Res.* **22** (1974), no. 4, 892-898. (Jacques A. Ferland) **54** #2188a (E **54** #2188b) 90C05
- Erratum: "A duality theory for convex programming with set-inclusive constraints" *Operations Res.* **22** (1974), no. 4, 892-898. *Operations Res.* **22** (1974), no. 6, 1280. (Jacques A. Ferland) **54** #2188b 90C05
- (with Toof, D. I.) Some comparative and design aspects of fixed cycle production systems. *Naval Res. Logist. Quart.* **23** (1976), no. 3, 437-454. (Kåre M. Mjelde) #2319 90B30
- a-Bień, Zofia** Program graphs. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 765-772. (C. F. Picard) **46** #6969 94A20 (68A30)
- Some properties of p -events. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 779-784. (W. Kwasowicz) **47** #4486 68A30
- The star measure of regular events. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Math. Astronom. Phys.* **23** (1975), no. 5, 593-598. (Siegmar Gerber) **53** #10515 30 (02F10, 68A25)
- The star measure of regular events and the structure of non-deterministic state spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 5, 599-604. (Siegmar Gerber) **53** #10516 94A30 (94A20, 68A25)
- (with Chyung, Dong H.) On the problem of optimal rendezvous for a nonzero interaction. *J. Optimization Theory Appl.* **23** (1977), no. 3, 401-411. (James A. Heinen) #9561 93C15 (49B10)
- i, Tadeusz** Processus d'équilibre et sous-graphes équilibrés d'un graphe signé complet. (English summary) *Math. Sci. Humaines No. 55* (1976), 25-36, 83. (Author's summary) **58** #27613 05C20 (05C99)
- a, G. S.** (with Freidman, P. A.) Locally cyclic rings. (Russian) *Sverdlovsk. Gos. Inst. Učen. Zap.* **78** (1969), 83-94. (S. P. Bandyopadhyay) **45** #5162 16A48
- č, V. A.** (with Perel'man, T. L.) Finite-dimensional distribution functions in the statistical theory of turbulence. (Russian. English summary) *Teoret. Mat. Fiz.* **17** (1973), 1-141. (Authors' summary) **57** #8438 76F00
- A. I.** (with Šunkov, V. P.) A generalization of the Frobenius theorem to infinite groups. (Russian) *Mat. Sb. (N.S.)* **100(142)** (1976), no. 4, 495-506, 647. (David Douglass) **54** #10420 20E99
- elli, A.** (with Pietrabissa, E.) Un metodo di soluzione per un problema di minimi quadrati con vincoli quadratici. (English summary) *Metron* **33** (1975), no. 1-2, 137-164 (1977). (Authors' summary) **58** #3224 62J05
- Antonin** See Transactions: Prague Conference on Information Theory, Statistical Decision Functions, Random Processes, **48** #10617
- Čestmír** The problem of finding cycles in large-scale logical systems by taking lean powers of the matrices of relationships. (Czech. English summary) *Autom.-Mat. Obzor* **10** (1974), 77-85. (Author's summary) **49** #4685 94A20
- R. O.** Absolute invariance conditions for nonlinear systems of differential equations. *Avtomatika* **1969**, no. 4, 53-59 (Ukrainian); translated as *Soviet Automat. Control—Ukrain. J. Automat.* **1969**, no. 4, 39-44. (E. O. Roxin) **46** #7666 34H05
- Paul Vincent** On a conservative attitude toward some naive semantic principles. *Revue de la Logique* **16** (1975), no. 4, 597-602. (N. B. Cocchiarella) **52** #10367 2A05
- An alternative to Brian Skyrms' approach to the Liar. *Notre Dame J. Formal Logic* **1976**, no. 1, 137-146. (Merrie Bergmann) **55** #2478 02A05
- General semantic closure. *J. Philos. Logic* **6** (1977), no. 2, 209-221. (Editors) **10308** 02C05 (02G99)
- F.** On foci of Hermitian quadrics. *Simon Stevin* **48** (1974/75), no. III-IV, 133-142. (J. F. Primrose) **52** #4102 50C25
- o, Sergio** (with Piccinini, Livio C.) On the Hölder continuity of solutions of second order elliptic equations in two variables. *Ann. Scuola Norm. Sup. Pisa* (3) **26** (1972), 39-402. (C. A. Swanson) **50** #13867 35J15
- On the solvability of some non-linear equations. *Theory of nonlinear operators* Proc. Summer School, Babylon, 1971, pp. 127-133. *Academia, Prague*, 1973. (S. Fučík) #6510 47H05
- (with Piccinini, Livio C.) Una valutazione della regolarità delle soluzioni di sistemi di equazioni variazionali in due variabili. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 417-429 (1974). (S. A. Tersenov) **51** #6135 35J45
- (with De Giorgi, Ennio) Sulla convergenza degli integrali dell'energia per operatori ellittici del secondo ordine. (English summary) *Boll. Un. Mat. Ital.* (4) **8** (1973), 1-411. (M. Schechter) **50** #753 35J15 (47F05)
- Convergence in energy for elliptic operators. *Numerical solution of partial differential equations, III* (Proc. Third Sympos. (SYNSPADE), Univ. Maryland, College Park, Md., 1975), pp. 469-498. *Academic Press, New York*, 1976. (From the introduction) **57** #16971 35J40
- Some convergence problems. *Symposia Mathematica, Vol. XVIII* (Convegno sulle trasformazioni Quasiconforme e Questioni Connesse, INDAM, Rome, 1974), pp. 389-398. *Academic Press, London*, 1976. (A. M. White) **58** #23002 35G20
- (with Colombini, Ferruccio) Sur la convergence de solutions d'équations hyperboliques avec des coefficients qui dépendent du temps. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 14, A735-A737. (Oscar Montaldo) **53** #8656 35K10
- Convergence of parabolic equations. (Italian summary) *Boll. Un. Mat. Ital. B* (5) **14** (1977), no. 2, 547-568. (Author's summary) **57** #880 35K20
- (with Colombini, Ferruccio) Sur la convergence de solutions d'équations paraboliques. (English summary) *J. Math. Pures Appl.* (9) **56** (1977), no. 3, 263-305. (P. C. Fife) **58** #29248 35K20
- (with Colombini, Ferruccio; De Giorgi, Ennio) Existence et unicité des solutions des équations hyperboliques du second ordre à coefficients ne dépendant que du temps. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 22, A1045-A1048. (Authors' summary) **58** #23093 35L10
- Spahn, M.** (with Ehrenfeld, S.) Optimal and suboptimal procedures in group sequential sampling. *Naval Res. Logist. Quart.* **21** (1974), 53-68. (N. Giri) **50** #8868 62L10
- Spaht, Carlos G.** (with Butts, Hubert S.) Generalized quotient rings. *Math. Nachr.* **53** (1972), 181-210. (N. Popescu) **52** #5646 13A99
- Spain, B.** ★Calcolo tensoriale. Traduzione dall'inglese di Alvaro Palamidessi. Poliedro, No. 16. *Cremonese, Rome*, 1971. viii + 142 pp. (Editors) **49** #9762 53A45
- Spain, P. G.** V^* -algebras with weakly compact unit spheres. *J. London Math. Soc.* (2) **4** (1971), 62-64. (A. M. Sinclair) **45** #914 46L99
- On commutative V^* -algebras. II. *Glasgow Math. J.* **13** (1972), 129-134. (T. W. Palmer) **47** #7461 46L20
- On well-bounded operators of type (B). *Proc. Edinburgh Math. Soc.* (2) **18** (1972/73), 35-48. (Henry R. Dowson) **47** #5648 47B40 (46H99, 47A60)
- The W^* -closure of a V^* -algebra. *J. London Math. Soc.* (2) **7** (1974), 385-386. (A. M. Sinclair) **49** #9649 46L20
- The decomposition of the dual of a W^* -algebra. *J. London Math. Soc.* (2) **7** (1974), 568-570. (G. Maitese) **48** #12075 46L10
- Boolean algebras of projections. *Proc. Edinburgh Math. Soc.* (2) **19** (1974/75), 287-289. (N. Tomczak-Jaegermann) **52** #6497 47D99
- (with Dowson, H. R.; Gillespie, T. A.) A commutativity theorem for Hermitian operators. *Math. Ann.* **220** (1976), no. 3, 215-217. (R. Bolstein) **54** #5898 47B40 (47A65)
- A generalization of a theorem of Grothendieck. *Quart. J. Math. Oxford Ser.* (2) **27** (1976), no. 108, 475-479. (Kung-fu Ng) **56** #1007 46A15 (46B05)
- Support projections on Banach spaces. *Glasgow Math. J.* **18** (1977), no. 1, 13-15. (S. K. Berberian) **54** #13592 47A05
- (with Crabb, Michael J.) Commutators and normal operators. *Glasgow Math. J.* **18** (1977), no. 2, 197-198. (C. R. Putnam) **56** #1115 47B15
- Solving an operator equation by iteration. *Linear Algebra and Appl.* **20** (1978), no. 1, 69-70. (Charles W. Groetsch) **57** #10469 47A60 (15A24)
- Spak, F. P.** (with Avotin, E. V.; Kemurdzian, A. L.) Study of the stability of a nonlinear dynamical system from kinematic and energy criteria. (Russian) *Prikl. Meh.* **10** (1974), no. 6, 49-55, 141. (Authors' summary) **54** #9199 70J34
- Špak, G. S.** The range of bounded functions that have prescribed values at two points. (Russian) *Mat. Zametki* **23** (1978), no. 2, 231-235. (V. I. Gavrilov) **58** #1113 30A26
- Špak, V. D.** (with Brodi, S. M.) Application of associated semi-Markov processes in the analysis of systems reliability. I. (Russian. English summary insert) *Kibernetika (Kiev)* **1970**, no. 5, 90-96. (Authors' summary) **52** #15721 60K15 (60K10, 90B25)
- (with Kovalenko, I. M.) Probabilistic characteristics of complex systems with hierarchical control. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 6, 30-34 (Russian); translated as *Engrg. Cybernetics* **10** (1972), no. 6, 964-969. (M. Iosifescu) **52** #10113 93A10 (60K15)
- (with Brodi, S. M.) Application of associated semi-Markov processes in the analysis of systems reliability. II. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 5, 53-63. (B. Choczewski) **52** #15722 60K15 (60K10, 90B25)
- Some analytic models of the reliability of systems with a safeguard. (Russian) *Točn. i Nadežn. Kibernet. Sistem No. 1* (1973), 90-96, 135. **50** #3909 90B25
- (with Stoikova, L. S.) Unloaded redundancy with an unreliable server. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 3, 99-101. (A. M. Zaharin) **55** #9319 60K20
- (with Marčuk, G. A.) Algorithmization of the computation of the characteristics of a multistate system with continuous and periodic testing of the efficiency. (Russian) *Methods of operations research and reliability theory in systems analysis* (Russian), pp. 34-52. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1977. (B. Dimitrov) **58** #24596 60K20
- See also Cybernetics and computer technology, **48** #1517
- Špakauskas, V. V.** (with Kaniauskas, J.; Rudzikas, Z. B.) Tensorial properties of operators in a quasi-spin space as applied to the theory of many-electron atoms. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **17** (1977), no. 5, 563-574, 678. (Authors' summary) **56** #14336 81A7
- Špakova, S. G.** (with Ključnikova, V. G.; Martinenko, V. S.) A study of the oscillations of spherical shells in nonclassical formulation. (Russian) *Prikl. Meh.* **13** (1977), no. 2, 15-20, 140. (From the text) **57** #14706 73J34
- Spal, J.** Glättungsalgorithmen für die digitale Messwerterfassung. (English summary) *Regelungstech. Prozess-Daten-verarbeit.* **18** (1970), no. 9, 390-395. (Author's summary) **54** #14855 93E10
- Ein Beitrag zur deterministischen Kennwertermittlung bei linearen Systemen. (English summary) *Regelungstech. Prozess-Datenverarbeitung.* **18** (1970), no. 8, 354-357. (T. Kaczorek) **52** #10131 93B30
- Spal, Jindřich** (with Csontó, Július) Numerische Lösung algebraischer Gleichungen mittels Anwendung eines Wurzelortverfahrens. (Czech summary) *Apl. Mat.* **17** (1972), 113-123. (L. Collatz) **46** #2842 65H05
- Spalding, D. Brian** (with Caretto, L. S.; Gosman, A. D.; Patankar, S. V.) Two calculation procedures for steady, three-dimensional flows with recirculation. *Proceedings of the Third International Conference on Numerical Methods in Fluid Mechanics* (Univ. Paris VI and XI, Paris, 1972), Vol. II, pp. 60-68. *Lecture Notes in Phys.*, Vol. 19, Springer, Berlin, 1973. (Authors' summary) **56** #17475 76F65
- Numerical computation of steady boundary layers. *Singular perturbations and boundary layer theory* (Proc. Conf., École Centrale, Lyon, 1976), pp. 456-473. *Lecture Notes in Math.*, Vol. 594, Springer, Berlin, 1977. (From the author's text) **56** #13736 65P05

- See also *Symposia Mathematica*, 48 #7318 and *Conference: Applications of Numerical Analysis*, 48 #10031
- Spalding, G. R.** Distributed system identification: a Green's function approach. *Trans. ASME Ser. G. J. Dynamic Systems, Measurement and Control* 98 (1976), no. 2, 146-151. (Shinzo Kitamura) 56 #2526 93B30 (93C20)
- Spalek, J.** (with Chao, K. A.; Oleś, A. M.) Degenerate perturbation theory and its application to the Hubbard model. *Phys. Lett. A* 64 (1977), no. 2, 163-166. (Authors' summary) 57 #4934 82.41 (82.47)
- brink-Spalink, Jan** See **Brink-Spalink, Jan**
- Spallek, Karlheinz** Differential forms on differentiable spaces. *Rend. Mat. (6)* 4 (1971), 231-258. (S. Hitotumatu) 46 #3838 32K15
Abgeschlossene Garben differenzierbarer Funktionen. (English summary) *Manuscripta Math.* 6 (1972), 147-175. (J. Eells) 45 #9347 57D35
Beispiele zur lokalen Theorie der differenzierbaren Räume. *Math. Ann.* 195 (1972), 332-347. (S. Hitotumatu) 45 #597 32C15
Differential forms on differentiable spaces. II. *Rend. Mat. (6)* 5 (1972), 375-389. (S. Hitotumatu) 48 #11582 32K15
The product-problem in differentiable geometry. *Fonctions analytiques de plusieurs variables et analyse complexe (Colloq. Internat. cnrs, No. 208, Paris, 1972)*, pp. 236-241. "Agora Mathematica", No. 1, Gauthier-Villars, Paris, 1974. (N. L. Alling) 57 #3458 32K15
Zur Klassifikation differenzierbarer Gruppen. (English summary) *Manuscripta Math.* 11 (1974), 345-357. (W. Barth) 53 #13631 32C05 (32K15, 32N05)
l-platte Funktionen auf semianalytischen Mengen. *Math. Ann.* 227 (1977), no. 3, 277-286. (Gerd Fischer) 56 #8923 32K10 (58C99)
Geometrische Bedingungen für die Integrabilität von Vektorfeldern auf Teilmengen des \mathbb{R}^n . (English summary) *Manuscripta Math.* 25 (1978), no. 2, 147-160. (Harald Upmeyer) 58 #1275 32K15 (32G05)
- Spallucci, E.** Reissner-Nordström naked singularity as a quantum centre of scattering. *Lett. Nuovo Cimento* (2) 19 (1977), no. 7, 245-248. (From the author's text) 56 #2036 81.35
Quantum mechanical approach to small black holes. *Lett. Nuovo Cimento* (2) 20 (1977), no. 11, 391-394. 56 #14364 81.53
(with Denardo, G.) Switching off the black-hole evaporation. (Italian summary) *Nuovo Cimento B* (11) 44 (1978), no. 2, 381-393. (Andrew King) 57 #18729 83.53
- Spaltenstein, Nicolas** Généralisations de certains théorèmes de Erdős-Rényi sur la théorie additive des nombres. *Math. Scand.* 39 (1976), no. 2, 251-266 (1977). (B. Garrison) 55 #10413 10L05
The fixed point set of a unipotent transformation on the flag manifold. *Nederl. Akad. Wetensch. Proc. Ser. A* 79 = *Indag. Math.* 38 (1976), no. 5, 452-456. (J. S. Joel) 58 #5700 14M15 (20G05)
On the fixed point set of a unipotent element on the variety of Borel subgroups. *Topology* 16 (1977), no. 2, 203-204. (R. Steinberg) 56 #5735 20G15 (14L15)
- Španagel', L. G.** Some results in binary additive problems. (Russian) *Akad. Nauk Kazah. SSR Trudy Inst. Mat. i Meh.* 2 (1971), 113-119, 344-345. (Author's summary) 56 #8494 10B35
- Spandorfer, L. M.** See *Advances in computers*, 50 #3628
- Span'e, Dž.** See **Spanier, Jerome**
- Spanedda, L.** (with Mercatanti, M.) La recherche de l'ensemble optimal des itinéraires des véhicules dans une entreprise de transports automobiles extra-urbains. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Verte* 9 (1975), Sér. V-1, 59-75. (I. Gh. Ciobanu) 51 #12309 90B20
- Spang, H. A., III** The effect of estimation of error on the control of an unknown linear plant. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 16, Paper 8C, 12 pp. *Inst. Mech. Engrs., London*, 1967. (Author's summary) 51 #9927 93E10
- Spangher, Walter** Sulla dimensione di prodotti tensoriali infiniti. (English summary) *Rend. Ist. Mat. Univ. Trieste* 5 (1973), 50-56. (J.-P. Lafon) 49 #5053 15A69
- Spanicciati, Renata** Su un'applicazione dei gruppi di Brandt. (English summary) *Rend. Mat. (6)* 5 (1972), 91-96. (H. A. Thurston) 46 #7409 20L10
Poliedri regolari per equiaffinità. (English summary) *Rend. Mat. (6)* 5 (1972), 113-122. (O. Bottema) 46 #8028 50D05
(n)-prismi ed (n)-piramidi regolari per equiaffinità. (English summary) *Rend. Mat. (6)* 6 (1973), 215-220. (H. S. M. Coxeter) 49 #3665 50D05
- Spanier, Edwin H.** ★Алгебраическая топология. (Russian) [Algebraic topology]
Translated from the English by B. M. Pranov. Edited by A. M. Vinogradov. *Izdat. "Mir", Moscow*, 1971. 680 pp. (Editors) 50 #5772 55-02
(with Ginsburg, Seymour) AFL with the semilinear property. *J. Comput. System Sci.* 5 (1971), 365-396. (M. Novotný) 49 #4316 68A30
Mathematical properties of languages. *Comptes Rendus des Journées Mathématiques de la Société Mathématique de France (Univ. Sci. Tech. Languedoc, Montpellier, 1974)*, pp. 305-315. *Cahiers Math. Montpellier*, No. 3, U.E.R. de Math., Univ. Sci. Tech. Languedoc, Montpellier, 1974. (S. Ginsburg) 52 #9706 68A30
(with Ginsburg, Seymour) On incomparable abstract family of languages (AFL). *J. Comput. System Sci.* 9 (1974), 88-108. (Branislav Rován) 49 #8431 68A30
(with Ginsburg, Seymour) Substitution of grammar forms. *Acta Informat.* 5 (1975), no. 4, 377-386. (Armin Cremers) 53 #12102 68A30
(with Cremers, Armin B.; Ginsburg, Seymour) The structure of context-free grammatical families. *J. Comput. System Sci.* 15 (1977), no. 3, 262-279. (Robert L. Cannon, Jr.) 58 #3715 68A30
(with Ginsburg, Seymour) Pushdown acceptor forms. *Theoret. Comput. Sci.* 5 (1977/78), no. 3, 307-320. (Kenneth B. Salomon) 57 #4632 68A25 (68A30)
- Spanier, Jerome** A new multistage procedure for systematic variance reduction in Monte Carlo. *SIAM J. Numer. Anal.* 8 (1971), 548-554. (R. R. Coveyou) 45 #4589 65C05
(with Gelbard, Ely M.) ★Метод Монте-Карло и задачи переноса нейтронов. (Russian) [The Monte Carlo method and neutron transport problems] Translated from the English by V. P. Kovtunen. Edited by A. D. Frank-Kamenetskii. *Atomizdat, Moscow*, 1972. 271 pp. (Editors) 50 #6104 65C05 (82.65)
(with Oldham, Keith B.) A general solution of the diffusion equation for semiinfinite geometries. *J. Math. Anal. Appl.* 39 (1972), 655-669. (W. F. Ames)
- 46 #6705 76.35
(with Oldham, Keith B.) ★The fractional calculus. Theory and applications to differentiation and integration to arbitrary order. With an annotated bibliography by Bertram Ross. Mathematics in Science and Engineering. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1974. xiii + 234 pp. (A. Erdélyi) 50 #14078 44-02 (26A33, 47A10)
- Spaniol, Otto** Optimale Nachladestrategien unter Berücksichtigung der Programm-Dritte Jahrestagung der Gesellschaft für Informatik (Hamburg, 1973), pp. *Lecture Notes in Comput. Sci.*, Vol. 1, Springer, Berlin, 1973. (I. Kaufmann) 51 68A05 (68A50)
★Arithmetik in Rechenanlagen. Logik und Entwurf. Leitfäden der angewandten Mathematik und Mechanik LAMM, Band 34. Teubner Studienbücher: Informatik. Teubner, Stuttgart, 1976. 208 pp. (Siegmar Gerber) 57 #8108 68-02 (68-02)
- A mathematical approach to program behaviour and look-ahead replacement algorithms. (Loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Bleue* 10 (1976), no. B-1, 27-45. (Author's summary) 58 #68A10
- Spann, Richard N.** (with Hornbuckle, Gary D.) Diagnosis of single-gate failures in combinational circuits. *IEEE Trans. Computers C-18* (1969), no. 3, 216-220. (Author's summary) 52 #16881 94A20
- Špannagel', L. G.** A certain ternary additive problem in the case of restriction prime divisors of the summands. (Russian) Algebra and number theory. *Moscow Ped. Inst. Učen. Zap.* No. 375 (1971), 201-214. (B. Bredihin) (RŽMat 1972 #51) 51 #12699 10B35 (10C15)
- Spano, P.** (with Pala, M. M.) Calcolo numerico della soluzione di un problema di contorno per una equazione del terzo ordine con parte principale di tipo conico. *Rend. Sem. Fac. Sci. Univ. Cagliari* 46 (1976), no. 3-4, 281-293. (Radu) 57 #18424 73.65 (65P05)
- Spanos, P. T. D.** (with Iwan, W. D.) On the existence and uniqueness of solutions generated by equivalent linearization. (French and German summaries) *Int. Non-Linear Mech.* 13 (1978), no. 2, 71-78. (Joseph Ford) 58 #14086 70.60
- ugrin-Šparac, Dimitrije** See **Ugrin-Šparac, Dimitrije**
- Sparck Jones, Karen** (with Kay, Martin) ★Linguistics and information science. *Fédération Internationale de Documentation, Publication*, No. 492. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1973. 288 pp. (See Zbl 288 #68029) 68-01 (68A30)
- Sparenberg, J. A.** On the kernel function of linearized lifting surface and actuator theory. *Symposium on Applied Mathematics (Delft Univ. Tech., Delft, 1978)*, pp. *Delft Univ. Press, Delft*, 1978. (From the introduction) 58 #14298 76.35
- Sparer, Gerson H.** (with Newman, Nathan) Some convergence theorems for linear systems. *IEEE Trans. Information Theory IT-16* (1970), 658-663. (J. Capon) 49 93E10
(with Shapiro, Harold N.) Composite values of exponential and related series. *Comm. Pure Appl. Math.* 25 (1972), 569-615. (J. Knopfmacher) 46 #8958
(with Shapiro, Harold N.) On the units of cubic fields. Collection of papers dedicated to Wilhelm Magnus. *Comm. Pure Appl. Math.* 26 (1973), 819-833. (Godwin) 48 #11037 12A30
(with Pollack, Richard M.; Shapiro, Harold N.) On the graphs of I. Katai. *Pure Appl. Math.* 27 (1974), 669-713. (N. G. de Bruijn) 51 #12672 10A20
(with Shapiro, Harold N.) Power-quadratic Diophantine equations and related problems. *Comm. Pure Appl. Math.* 31 (1978), no. 2, 185-203. (R. Steiner) 58 #5509
- Sparks, Arthur G.** Zero-extreme points and the generalized convex kernel. *Proc. Math. Soc.* 67 (1977), no. 1, 142-146. (W. J. Firey) 57 #1275 52A10
See also *Proceedings: Conference on Convexity and Combinatorial Geometry*, 48 #9547
- Sparks, G. A.** See *Stochastic point processes: statistical analysis, theory, and applications*, 48 #10008
- Sparling, G.** See *Quantum gravity (Oxford Sympos., Chilton, 1974)*, 56 #17537
- Sparr, Gunnar** (with Peetre, Jaak) Interpolation of normed Abelian groups. *Arkiv. Pura Appl. (4)* 92 (1972), 217-262. (J. Friberg) 48 #891 46M35 (41A65, 46E35)
Interpolation of several Banach spaces. *Ann. Mat. Pura Appl. (4)* 92 (1972), 247-316. (Jörgen Löfström) 51 #8848 46M35 (46E35)
Interpolation des espaces L_p^∞ . *C. R. Acad. Sci. Paris Sér. A* 278 (1974), (Vo-Khac Khoan) 50 #2903 46E35
(with Peetre, Jaak) Interpolation and non-commutative integration. *Ann. Math. (4)* 104 (1975), 187-207. (From the authors' introduction) 57 #13528 (46L99)
- Sparrow, F. T.** (with Barchi, R. H.; Vemuganti, Ramakrishna R.) Production, and capacity expansion scheduling with integer variables. *Management Sci.* 21 (1974/75), no. 7, 783-793. (Jeremy F. Shapiro) 53 #12544 90B05 (90C10)
- di Sparti, Antonino** See **Di Sparti, Antonino**
- Spaziani, Antonio** (with Maniá, Alessandro) Segmented structures. *Internat. J. Math. Math. Sci.* 16 (1977), no. 1, 13-33. (Kishin Mariwalla) 57 #2404 83.50
- meyer-Spasche, Rita** See **Meyer-Spasche, Rita**
- Spas'kyy, R. O.** See **Spas'kii, R. O.**
- Spasokukockaja, S. A.** Application of the polynomial operator method to the approximation of solutions of differential equations of special form. (Russian) *Mat. Ž.* 24 (1972), 642-652, 716. (R. S. Levitin) 52 #9617 65L05 (34A45)
Approximate solution of the Cauchy problem by the method of polynomial operators. (Russian) *Ukrain. Mat. Ž.* 24 (1972), 843-846, 863. (W. Altmann) 54 #34010 54 #633 34A45 (65L05)
- Spasowski, Maciej** (with Malinowski, Grzegorz) Dual counterparts of Łukasiewicz sentential calculi. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972/73), no. 2-7. (Editors) 50 #12649 02C05
Some connections between C_n , C_n^{-1} and dC_n . *Polish Acad. Sci. Inst. Sociology Bull. Sect. Logic* 2 (1973), no. 1, 46-50. (Merrie Bergmann) 52 #02B05
Some properties of the operation d . *Rep. Math. Logic* No. 3 (1974), 53-54. (Inoue) 52 #5342 02B05

- (with Malinowski, Grzegorz) Dual counterparts of Łukasiewicz's sentential calculi. *Logica* 33 (1974), 153-162. (A. Tauts) 51 #54 02C05
- The degrees of completeness of dual counterparts of Łukasiewicz sentential calculi. *Philos. Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 4 (1975), no. 4, 163-170. (Annalisa Cja) 55 #12468 02C05 (02G20)
- (with Malinowski, Grzegorz) Dual counterparts of Łukasiewicz's sentential calculi. *Selected papers on Łukasiewicz sentential calculi*, pp. 161-170. *Zakład Narod. im. Nieli*, Wydawn. Polsk. Akad. Nauk, Wrocław, 1977. (Editors) 58 #21442 02C05
- A. F. (with Andronov, I. K.; Syčkov, A. F.) Obituary: Vladimir Modestovič B. (Russian) *Mat. v Škole* 1975, no. 4, 96. (Not reviewed) 01A70
- lis, I. I. (with Krindač, V. P.) A substantiation and some applications for Pierre e's symmetry principle. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 13 (2), no. 4, 458-464. (Pavel Winternitz) 53 #9767 7020
- (with Maksakov, V. V.) Historical-documentary and logical aspects of the inuity of physical theories. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 1976, no. 1, 86-91. (Editors) 57 #5562 01A05
- R. A. The absolute stability of a certain class of nonlinear automatic systems with al parameter multiplying the derivative. (Russian) *Problems in analytical alians, stability and control theories (Second Četaev Conf., Kazan, 1973) (Russian)*, pp. -293, 342. *Izdat. "Nauka", Moscow*, 1975. (G. Bojadžiev) 57 #9204 93C15
- Alexandru ★Teoria transmișiei informației. Vol. 1: Semnale si perturbatii. (Romanian) [The theory of transmission of information. Vol. 1: Signals and urbances] *Editura Tehnică, Bucharest*, 1965. 622 pp. (Editors) 50 #6630 94A05
- ★Theorie der Informationsübertragung. Signale und Störungen. Übersetzung aus Rumänischen. Verantwortlicher Herausgeber: Peter Fey. *Friedr. Vieweg + Sohn, unschweig*, 1973. xxii + 696 pp. (D. Pötschke (Zbl. 254 #94002)) 50 #6631 05
- Aurel On the epsilon-entropy associated to a product of probability fields. (Romanian. English summary) *Stud. Cerc. Mat.* 24 (1972), 1309-1316. (Z. Šidák) #8712 60J10
- On reliability p -functions. (Romanian. English summary) *Stud. Cerc. Mat.* 24 (2), 1441-1452. (Viorel Gh. Vodă) 51 #1996 60K10 (62N05)
- (with Iosifescu, Marius) On denumerable chains of infinite order. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 27 (1973), 195-214. (O. P. Stackelberg) #6997 60J10 (10K10)
- Further results in stochastically monotone Markov chains theory. *Rev. Roumaine h. Pures Appl.* 19 (1974), 493-501. (B. Kronfeld) 51 #4404 60J10
- Note on Kingman semigroup \mathcal{P} . *Rev. Roumaine Math. Pures Appl.* 19 (1974), 7-1048. (J. F. C. Kingman) 50 #11465 60J25 (26A51)
- On a series concerning noncritical Galton-Watson processes. *Rev. Roumaine Math. es Appl.* 21 (1976), no. 6, 767-772. (Torgny Lindvall) 54 #8906 60J80
- (ϕ, f)-expansions of real numbers. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 1459-1469. (J. Galambos) 57 #5937 10K10
- Some f -expansions producing stochastically independent digits. *Sankhyā Ser. A* 39 (7), no. 2, 160-169. (B. Volkman) 58 #16575 10K10
- Helmuth The numerical calculation of high degree Lidstone splines with equidistant ts by blockunderrelaxation. (German summary) *Computing (Arch. Elektron. hnen)* 7 (1971), 65-74. (C. Micchelli) 47 #7892 65D05
- The numerical calculation of quintic splines by blockunderrelaxation. (German amary) *Computing (Arch. Elektron. Rechnen)* 7 (1971), 75-82. (C. Micchelli) #6160 65D15
- Zur Glättung empirischer Häufigkeitsverteilungen. (English summary) *Computing ch. Elektron. Rechnen* 10 (1972), 353-357. (D. C. Handscorn) 48 #5327 65D10
- ★Spline-algorithmen zur Konstruktion glatter Kurven und Flächen. Verfahren der enverarbeitung. *R. Oldenbourg Verlag, Munich-Vienna*, 1973. 134 pp. (Editors) #11721 65D10
- ★Spline algorithms for curves and surfaces. Translated from the German by W. D. skins and H. W. Sager. *Utilitas Mathematica Publishing Inc., Winnipeg, Man.*, 1974. + 198 pp. (Editors) 50 #11722 65D10
- ★Algorithmen für multivariable Ausgleichsmodelle. Verfahren der enverarbeitung. *R. Oldenbourg Verlag, Munich-Vienna*, 1974. 125 pp. (Editors) #6985 65D15 (62Hxx, 62J05)
- (with Merle, G.) Computational experiences with discrete L_p -approximation. (German summary) *Computing (Arch. Elektron. Rechnen)* 12 (1974), no. 4, 315-321. (ciano Biasini) 53 #14864 65D15
- Verallgemeinerte kubische Spline-Interpolation. Vorträge der Wissenschaftlichen rstagung der Gesellschaft für Angewandte Mathematik und Mechanik (Munich, 3). *Z. Angew. Math. Mech.* 54 (1974), T234-T235. (H. Brunner) 50 #6107 005
- Explizite Lösung des dreidimensionalen Minimax-Standortproblems in der y-Block-Distanz. (English summary) *Z. Oper. Res. Ser. A-B* 22 (1978), no. 5, 29-237. (Author's summary) 58 #26041 90C50
- See also *Proceedings: Operations Research*, 55 #11995 and *Proceedings: erations Research*, 56 #4723
- Eberhard (with Bautz, Manfred; Clauder, Ulf) Notwendige Bedingungen für eismatrizen gerichteter Graphen. *Wiss. Z. Techn. Hochsch. Leuna-Merseburg* 19 (77), no. 1, 118-122. (Rudolf Halin) 57 #171 05C35
- ng, D. A. (with Mueller, K. H.) Cyclic equalization—a new rapidly converging alization technique for synchronous data communication. *Bell System Tech. J.* 54 (75), 369-406. (Authors' summary) 50 #12430 94A05
- ng, M. L. See *Numerical methods in fluid dynamics*, 49 #10260
- nan, Jane M. O. An algebraic characterisation of convergence ideals. *J. London th. Soc.* 44 (1969), 26-30. (See Zbl 162, 83) 40A05
- P. R. S. (with Kemp, K. O.) A simplified Reissner theory for plate bending. *Internat. J. Solids and Structures* 13 (1977), no. 11, 1073-1079. (S. M. Murthy) #8669 7335
- nan, Blair (with Williams, Kenneth S.) ★Handbook of estimates in the theory of mbers. Carleton Mathematical Lecture Note, No. 14. *Department of Mathematics, rleton University, Ottawa, Ont.*, 1975. 191 pp. (not consecutively paged) (Editors) #13084 10-02
- Spears, Nina A problem involving simultaneous binary compositions. *Acta Arith.* 22 (1972), 11-20. (E. Grosswald) 46 #1732 10H25
- Spears, W. T. Global dimension in categories of diagrams. *J. Algebra* 22 (1972), 219-222. (Y. C. Wu) 45 #8702 18G20
- Spears, William T. (with Jeffcott, Barbara) Semimodularity in the completion of a poset. *Pacific J. Math.* 58 (1975), no. 2, 467-474. (R. P. Dilworth) 52 #215 06A30
- (with Jeffcott, Barbara) Decompositions of difference sets: a generalization of balanced weighing matrices. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1977)*, pp. 385-414. *Congressus Numerantium*, No. XIX, *Utilitas Math.*, Winnipeg, Man., 1977. (Authors' summary) 58 #27557 05B10
- Specht, E. J. (with Jones, H. T.) Compactness of the Neumann-Poincaré operator. *Trans. Amer. Math. Soc.* 140 (1969), 353-366. (F. Smithies) 53 #5903 31A15 (47G05)
- (with Jones, H. T.) An integral equation arising in potential theory. *Proc. Amer. Math. Soc.* 38 (1973), 349-354. (R. P. Srivastav) 47 #3693 31A25
- Specht, E. K. See *Semantics and communication*, 49 #4731
- Specht, J. (with Duske, Jürgen; Parchmann, Rainer; Sedello, M.) IO-macrolanguages and attributed translations. *Information and Control* 35 (1977), no. 2, 87-105. (Daniel J. Rosenkrantz) 57 #18242 68A30
- Specht, William Isomorphic subgroups of finite p -groups revisited. *Canad. J. Math.* 26 (1974), no. 3, 576-579. (D. L. Barnett) 53 #5735 20D15
- Specht, William H. A factorization theorem for p -constrained groups. *Pacific J. Math.* 53 (1974), 253-258. (J. F. Humphreys) 50 #4742 20D15
- Speck, Frank-Olme Über verallgemeinerte Faltungsoperatoren und ihre Symbole. *Function theoretic methods for partial differential equations (Proc. Internat. Sympos., Darmstadt, 1976)*, pp. 459-471. *Lecture Notes in Math.*, Vol. 561, Springer, Berlin, 1976. (Stefan Balint) 58 #2454 47B99 (47G05)
- Eine Erweiterung des Satzes von Rakovčik und ihre Anwendung in der Simonenko-Theorie. *Math. Ann.* 228 (1977), no. 2, 93-100. (H. O. Cordes) 56 #1140 47G05 (47B37)
- Speck, G. P. Sufficient conditions for elementary Newton-Raphson convergence. *New Zealand Math. Mag.* 14 (1977), no. 1, 34-36. (M. A. Wolfe) 56 #1692 65H05
- Convergence of Gauss-Seidel and related sequences. *New Zealand Math. Mag.* 14 (1977), no. 1, 37-41. (W. Niethammer) 56 #1685 65F10
- Specker, Ernst Algorithmische Kombinatorik mit Kleinsrechnern. *Elem. Math.* 33 (1978), no. 2, 25-35. (J. L. Brenner) 57 #5767 05-04 (68A10)
- See also *Cybernetics collection*, 48 #5714 and *Komplexität von Entscheidungsproblemen—ein Seminar*, 57 #18232
- Speckman, Janace A. See Clatworthy, Willard H., 54 #4029
- Spector, A. A. A variational method of investigation of contact problems involving slippage and adhesion. (Russian) *Dokl. Akad. Nauk SSSR* 236 (1977), no. 1, 39-42. (W. Kec) 57 #18414 7349
- Spector, C. See *Mathematics: Periodical collection of translations of foreign articles*, 49 #4723
- Spector, Marshall Leibniz vs. the Cartesians on motion and force. (German summary) *Studia Leibnitiana* 7 (1975), no. 1, 135-144. (Author's summary) 58 #56 01A45
- See also *Theory change and theory structure*, 52 #7768
- Spector, René Fonctions radiales sur les groupes compacts totalement discontinus. *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A771-A773. (C. F. Dunkl) 46 #612 43A30 (22C05)
- Sur une classe de groupes compacts de torsion. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A523-A525. (Paul Milnes) 47 #3551 20F50
- Aperçu de la théorie des hypergroupes. *Analyse harmonique sur les groupes de Lie (Sém. Nancy-Strasbourg, 1973-75)*, pp. 643-673. *Lecture Notes in Math.*, Vol. 497, Springer, Berlin, 1975. (Yves Meyer) 56 #6284 43A10
- Théorie axiomatique des hypergroupes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 25, Aii, A1743-A1744. (B. Schreiber) 52 #11472a 43A10
- Dualité des hypergroupes commutatifs. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 1, Aii, A27-A30. (B. Schreiber) 52 #11472b 43A10
- Une classe d'hypergroupes dénombrables. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 2-3, Aii, A105-A106. (B. Schreiber) 52 #11472c 43A10
- Mesures invariantes sur les hypergroupes. (English summary) *Trans. Amer. Math. Soc.* 239 (1978), 147-165. (K. A. Ross) 57 #3745 43A05
- Spector, Richard M. (with Frank, William M.; Land, David J.) Singular potentials. *Rev. Modern Phys.* 43 (1971), no. 1, 36-98. (Authors' summary) 56 #7560 81.35
- Spector, Scott J. (with Gurtin, Morton E.) On the sign of the specific heat. *Quart. J. Mech. Appl. Math.* 29 (1976), no. 4, 493-497. (Yoiti Watanabe) 55 #7142 80.35
- Speder, Jean-Paul (with Ancona, Vincenzo) Espaces de Banach-Stein. *Ann. Scuola Norm. Sup. Pisa* (3) 25 (1971), 683-690 (1972). (A. Morimoto) 51 #941 32M05 (32E10, 46G20)
- Equisingularité et conditions de Whitney. *Journées complexes: équations différentielles et fonctions de plusieurs variables (Metz, 1972)*, Exp. No. VI, 6 pp. *Inst. Recherche Math. Avancée, Strasbourg*, 1973. (Jonathan M. Wahl) 58 #660 14B05
- L'équisingularité "à la Zariski" implique les conditions de Whitney. *Singularités à Cargèse (Rencontre Singularités Géom. Anal., Inst. Étude Sci., Cargèse, 1972)*, pp. 41-46. *Astérisque, Nos. 7 et 8, Soc. Math. France, Paris*, 1973. (Editors) 58 #1241 32C40 (14E15)
- Éclatements jacobiens et conditions de Whitney. *Singularités à Cargèse (Rencontre Singularités en Géométrie Analytique, Inst. Études Sci., Cargèse, 1972)*, pp. 47-66. *Astérisque, Nos. 7 et 8, Soc. Math. France, Paris*, 1973. (Joseph Lipman) 55 #10721 32C40
- Analyticité des conditions de Whitney strictes. (English summary) *Ann. Inst. Fourier (Grenoble)* 23 (1973), no. 3, 215-226. (Bernard Teissier) 52 #8493 32C40
- (with Canuto, G.) Un critère d'éclatement pour les conditions de Whitney. *Ann. Scuola Norm. Sup. Pisa* (3) 27 (1973), 405-416 (1974). (H. B. Laufer) 56 #5934 32C40 (14B05)
- Equisingularité et conditions de Whitney. *Amer. J. Math.* 97 (1975), no. 3, 571-588. (Jonathan M. Wahl) 56 #3015 14E15 (32C40)
- (with Briançon, Joël) Familles équisingulières de surfaces à singularité isolée. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), Aii, A1013-A1016. (J. S.

- Joel 55 #712 32C40 (14D15)
(with Briançon, Joël) La trivialité topologique n'implique pas les conditions de Whitney. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 6, Aiii, A365-A367. (J. S. Joel) 54 #13122 32C40 (14D15)
(with Briançon, Joël) Les conditions de Whitney impliquent " μ^* constant". (English summary) *Ann. Inst. Fourier (Grenoble)* 26 (1976), no. 2, xi, 153-163. (Margherita Galbiati) 54 #7843 32C40 (14B05)
(with Briançon, Joël; Henry, Jean-Pierre Georges) Les conditions de Whitney en un point sont analytiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 5, Aii, A279-A282. (J. S. Joel) 54 #13123 32C40 (14D15)
- Spedicato, Emilio** Computational performance of Huang's symmetric update for the conjugate gradient method. *Calcolo* 10 (1973), 179-205. (S. F. McCormick) 50 #11781 65K05
Stability of Huang's update for the conjugate gradient method. *J. Optimization Theory Appl.* 11 (1973), 469-479. (A. Majthay) 48 #10516 90C30
Recent developments in the variable metric method for nonlinear unconstrained optimisation. *Towards global optimisation (Proc. Workshop, Univ. Cagliari, Cagliari, 1974)*, pp. 182-195. North-Holland, Amsterdam, 1975. (J. S. Kowalik) 52 #12330 65K05
On condition numbers of matrices in rank-two minimisation algorithms. *Towards global optimisation (Proc. Workshop, Univ. Cagliari, Cagliari, 1974)*, pp. 196-210. North-Holland, Amsterdam, 1975. (V. Pereyra) 52 #12331 65K05
A bound to the condition number of canonical rank-two corrections and applications to the variable metric method. *Calcolo* 12 (1975), no. 2, 185-199. (A. R. Gourlay) 53 #1957 65K05
Metodi quasi-newtoniani per equazioni algebriche e minimizzazione nonlineare: sviluppi e prospettive. (English summary) *Boll. Un. Mat. Ital. A* (5) 13 (1976), no. 3, 545-567. (V. Pereyra) 54 #11759 65H10
A variable-metric method for function minimization derived from invariance to nonlinear scaling. *J. Optimization Theory Appl.* 20 (1976), no. 3, 315-329. (M. Rössler) 54 #14787 90C30
(with Oren, Shmuel S.) Optimal conditioning of self-scaling variable metric algorithms. *Math. Programming* 10 (1976), no. 1, 70-90. (Marco Gaviano) 53 #4993 90C30 (65K05)
(with Greenstadt, John) On some classes of variationally derived quasi-Newton methods for systems of nonlinear algebraic equations. *Numer. Math.* 29 (1977/78), no. 4, 363-380. (J. Vandergraft) 57 #14419 65H10
A note on the determination of the scaling parameters in a class of quasi-Newton methods for unconstrained minimization. *J. Inst. Math. Appl.* 21 (1978), no. 3, 285-291. (Author's summary) 58 #13719 65K05 (65F35)
See also Conference: Optimization Techniques, 48 #5758
- Speed, F. M.** An application of the generalized inverse to the one-way classification. *Amer. Statist.* 28 (1974), 16-18. (Jagbir Singh) 50 #1428 62J10
(with Hocking, R. R.) Computation of expectations, variances and covariances of ANOVA mean squares. (French summary) *Biometrics* 30 (1974), 157-169. (K. R. Shah) 49 #8231 62J10
(with Hocking, R. R.) A full rank analysis of some linear model problems. *J. Amer. Statist. Assoc.* 70 (1975), no. 351, part 1, 706-712. (Burt S. Holland) 52 #12235 62J10
(with Hocking, R. R.) The use of the $R()$ -notation with unbalanced data. *Amer. Statist.* 30 (1976), no. 1, 30-33. (Authors' introduction) 56 #7040 (E 56 #7041) 62J10
(with Hocking, R. R.; Lynn, M. J.) A class of biased estimators in linear regression. *Technometrics* 18 (1976), no. 4, 425-437. (Jeffrey A. Robinson) 55 #1643 62J05
See also Klimko, Lawrence A.; et al., 56 #7041
- Speed, T. P.** A note on Stone lattices. *Canad. Math. Bull.* 14 (1971), 81-86. (T. S. Blyth) 47 #1699 06A20 (08A25)
A note on Post algebras. *Colloq. Math.* 24 (1971/72), 37-44. (Ph. Dwingier) 46 #7110 06A35 (02J05)
(with Phatarfod, R. M.; Walker, A. M.) A note on random walks. *J. Appl. Probability* 8 (1971), 198-201. (J. Mineka) 46 #6473 60J15
On the order of prime ideals. *Algebra Universalis* 2 (1972), 85-87. (E. T. Schmidt) 46 #5188 06A10
Profinite posets. *Bull. Austral. Math. Soc.* 6 (1972), 177-183. (L. Skula) 45 #4371 54F05 (06A35)
(with Evans, M. W.) A note on commutative Baer rings. *J. Austral. Math. Soc.* 13 (1972), 1-6. (Melvin Hochster) 45 #3387 13A99
A note on commutative Baer rings. *J. Austral. Math. Soc.* 14 (1972), 257-263. (R. A. Melter) 47 #6669 13A99
A note on random walks. II. *J. Appl. Probability* 10 (1973), 218-222. (R. M. Phatarfod) 51 #4413 60J15
Some remarks on a result of Blomqvist. *J. Appl. Probability* 10 (1973), 229-232. (J. F. C. Kingman) 50 #11463b 60J15 (60K30)
A note on commutative Baer rings. III. *J. Austral. Math. Soc.* 15 (1973), 15-21. (R. E. MacRae) 48 #8478 13B99
On rings of sets. II. Zero-sets. Collection of articles dedicated to the memory of Hanna Neumann, II. *J. Austral. Math. Soc.* 16 (1973), 185-199. (Melvin Henriksen) 51 #293 06A20
(with Arjas, Elja) Topics in Markov additive processes. *Math. Scand.* 33 (1973), 171-192. (J. F. C. Kingman) 49 #6369 60J30 (60K15)
(with Arjas, Elja) An extension of Cramér's estimate for the absorption probability of a random walk. *Proc. Cambridge Philos. Soc.* 73 (1973), 355-359. (C. Mohan) 47 #5961 60J15
(with Pitman, J. W.) A note on random times. *Stochastic Processes Appl.* 1 (1973), 369-374. (Adhir K. Basu) 50 #11420 60G40 (62L10)
(with Arjas, Elja) A note on the second factorization identity of A. A. Borovkov. (Russian summary) *Teor. Veroyatnost. i Primenen.* 18 (1973), 601-604. (J. F. C. Kingman) 48 #5186 60J15
(with Arjas, Elja) Symmetric Wiener-Hopf factorisations in Markov additive processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 26 (1973), 105-118. (Hermann Dinges) 48 #9848 60J05 (60J15)
Spaces of ideals of distributive lattices. II. Minimal prime ideals. *J. Austral. Soc.* 18 (1974), 54-72. (K. A. Baker) 50 #6954 06A35
(with Arjas, Elja) Markov chains with replacement. *Stochastic Processes* 1 (1975), 175-184. (Gérard Letac) 51 #6994 60J10
Geometric and probabilistic aspects of some combinatorial identities. *J. Austral. Math. Soc. Ser. A* 22 (1976), no. 4, 462-468. (S. G. Mohanty) 55 #5459 (60C05)
A note on pairwise sufficiency and completions. *Sankhyā Ser. A* 38 (1976), 194-196. (T. Pitcher) 56 #16852 62B05
(with Pakes, Anthony G.) Lagrange distributions and their limit theorems. *J. Appl. Math.* 32 (1977), no. 4, 745-754. (J. G. Wendel) 55 #6535 60F05
See also Neveu, Jacques, 53 #6729
- Speedy, C. B.** (with Brown, R. F.; Goodwin, G. C.) ★Control theory: identification optimal control. *Oliver and Boyd, Edinburgh*, 1970. x+293 pp. (Editors) 50 #93Cxx (93Bxx)
(with Brown, R. F.; Goodwin, G. C.) ★Теория управления: идентификация оптимальное управление. (Russian) [Control theory: identification and optimal control. Translated from the English by Ju. F. Kičatov. Izdat. "Mir", Moscow, 1973. 214 pp.] (Editors) 50 #9386 93Cxx (93Bxx)
- Speer, Eugène R.** Note on the paper "On the structure of analytic renormalization". *Comm. Math. Phys.* 25 (1972), 336. (Editors) 45 #4760 81.30
(with Regge, Tullio; Westwater, Michael J.) The monodromy rings of the ne graphs. *Fortschr. Physik* 20 (1972), no. 6, 365-420. (R. L. Ingraham) 56 #181.32 (81.05)
The convergence of BPH renormalization. *Comm. Math. Phys.* 35 (1974), 15 (From the introduction) 49 #6814 81.32
Analytic renormalization using many space-time dimensions. *Comm. Math. Phys.* 37 (1974), 83-92. (S. Aramaki) 51 #7509 81.32
Renormalization and Ward identities using complex space-time dimensions. *Mathematical Phys.* 15 (1974), 1-6. (P. Achuthan) 48 #10347 81.32
Ultraviolet and infrared singularity structure of generic Feynman amplitudes. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* 23 (1975), no. 1, 1-21. (W. Chen) 52 #7356 81.32 (81.05)
Dimensional and analytic renormalization. *Renormalization theory (Proc. Advanced Study Inst., Erice, 1975)*, pp. 25-93. NATO Advanced Study Inst. Ser. Math. and Phys. Sci., Vol. 23, Reidel, Dordrecht, 1976. (Author's summary) 58 #81.05 (05Cxx)
(with Lowenstein, John H.) Distributional limits of renormalized Feynman integrals with zero-mass denominators. *Comm. Math. Phys.* 47 (1976), no. 1, 43-51. (Author's summary) 54 #1991 81.47 (46F10)
Mass singularities of generic Feynman amplitudes. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* 26 (1977), no. 1, 87-105. (Tuan W. Chen) 56 #2007
Contraction anomalies in dimensional renormalization. *Nuclear Phys. B* 134 (1978), 175-188. (Author's summary) 58 #19956 81.32
- Speevak, Ted** (with Papaioannou, Takis) Rank correlation inequalities with missing data. *Comm. Statist.—Theory Methods* A6 (1977), no. 1, 67-72. (Authors' summary) 56 #1590 62H20 (62D05)
- Speh, Birgit** (with Vogan, David A., Jr.) A reducibility criterion for generalized principal series. *Proc. Nat. Acad. Sci. U.S.A.* 74 (1977), no. 12, 5252. (Jouko Micka) 56 #15839 22E45
- Spéhner, Jean-Claude** Le demi-groupe librement engendré par un groupoïde partie l'image homomorphe associative maximale de G. *C. R. Acad. Sci. Paris Sér. A* (1972), A940-A943. (M. Gould) 45 #431 20M05
Magmas prélibres et demi-groupes prélibres. *C. R. Acad. Sci. Paris Sér. A* (1972), A573-A575. (D. A. Robinson) 46 #1931 20L05
Demi-groupes partiels et demi-groupes résiduellement finis. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A823-A826. (D. A. Robinson) 47 #3580 20M10
Demi-groupes prélibres. (English summary) *Semigroup Forum* 6 (1973), 171-179. (H. A. Thurston) 47 #8722 20M05
L'extension sous-libre d'un sous-monoïde d'un monoïde libre. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 1005-1008. (D. R. LaTorre) 50 #513 20M05
Deux algorithmes relatifs aux sous-monoïdes d'un monoïde libre. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 1335-1338. (D. R. LaTorre) 50 #514 20M05
Quelques constructions et algorithmes relatifs aux sous-monoïdes d'un monoïde libre. *Semigroup Forum* 9 (1974/75), no. 4, 334-353. (G. J. Lallement) 52 #20M05
Sur les codes synchronisants. (English summary) *C. R. Acad. Sci. Paris Sér. A* 281 (1975), no. 19, A779-A782. (D. R. LaTorre) 52 #12975 94A10
Sur les présentations d'un monoïde simplifiable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 12, A613-A615. (Author's summary) 57 #20M05
Sur des théorèmes de A. I. Malcev et de S. I. Adjan. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 15, A767-A770. (André Lentin) 54 #20M05
Présentations et présentations simplifiables d'un monoïde simplifiable. *Semigroup Forum* 14 (1977), no. 4, 295-329. (André Lentin) 57 #6243 20M05
- Speight, Thomas B.** (with Debnath, Lokenath) On generalization of derivatives. *Epsilon J.* 5, 217-220 (1971). 47 #8782 26A33
- Speiser, Andreas** See Fleckenstein, Joachim Otto; et al., 45 #17 and Festschrift: Heinrich, 50 #12626
- Speiser, D.** (with de Ghellinck d'Elsegem Vaeernewyck, G.; Pietenpol, J. L.) Les potentiels centraux en mécanique hamiltonienne résolubles par les fonctions elliptiques. *Ann. Soc. Sci. Bruxelles Sér. I* 87 (1973), 311-339. (Authors' summary) 49 #170.33
(with de Baenst-Vandenbroucke, A.; de Baenst, P.) Induction procedure for the reduction $SU_n \rightarrow SO_n$. *Proc. Roy. Irish Acad. Sect. A* 73, 131-150 (1973). (A. Joseph) 47 #9965 81.22
(with Pietenpol, J. L.) Remarks on the foundations of general relativity. *Helv. Phys. Acta* 48 (1975), no. 2, 153-161. (Marcos Rosenbaum) 52 #7459 83.53

- J. M. (with Alsop, J. M.) Exponential residue codes. *IEEE Trans. Aerospace and Electron. Systems* **AES-11** (1975), no. 6, 1389-1390. (Settimo Termini) **52** #10218 10
- Robert Cohomological dimension and Abelian varieties. *Amer. J. Math.* **95** (3), 1-34. (Arthur Ogus) **48** #3964 14H30 (14B20)
- Cohomological dimension of non-complete hypersurfaces. *Invent. Math.* **21** (1973), 150. (G. Horrocks) **48** #11114 14F05
- (with Hartshorne, Robin) Local cohomological dimension in characteristic p . *Ann. Math.* (2) **105** (1977), no. 1, 45-79. (G. Horrocks) **56** #353 14B15 (14M10)
- Projective varieties of low codimension in characteristic $p > 0$. *Trans. Amer. Math.* **240** (1978), 329-343. (A. B. Altman) **58** #10906 14F05
- See also Boutot, Jean-François, **56** #5548
- Gerald Statistical mechanics of a classical one-component Coulomb gas using effective coordinates. *Ann. Physics* **102** (1976)8 no. 1, 189-225. (Koichiro Matsuno) #12099 82.60
- Spek, W. A. Gauss' logarithms. (Dutch) *Nieuw Tijdschr. Wisk.* **64** (1976/77), no. 4, 199. (Editors) **57** #15898 01A55
- The Easter formulae of C. F. Gauss. (Dutch) *Nieuw Tijdschr. Wisk.* **64** (1976/77), 218-233. (Editors) **57** #15899 01A55
- A. A. The stability of the equilibrium of an elastic-bottomed vessel that contains a liquid. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), 96-101. (J. P. Guiraud) **52** #2388 76.35
- M. D. Hydrodynamic stability of a dense plasma in an undulating magnetic field. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1975**, no. 1, 30-40. (Author's summary) #17440 76.35
- V. Two remarks on radicals and verbals in linear pairs. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 13 (Russian), pp. 89-101. *Izdat. Zinatne*, Riga, 1973. (L. G. Kovács) **49** #5178 20E10
- Remarks on infinite powers of varieties and prevarieties of pairs. (Russian) *Mat. Ežegodnik Vyp.* **20** (1976), 190-203, 215. (RŽMAT 1977 #7 A223) #21900 08A15
- Dennis On the respective terms of the lower central series of a free group and a normal subgroup. *J. Algebra* **31** (1974), 293-304. (J. R. J. Groves) **50** #7349 20E15
- The structure of the abelian groups $F_n/(F_n, F')$. *J. Algebra* **40** (1976), no. 2, 308. (E. Toubassi) **54** #2817 20F15
- n, J. W. (with Hartfiel, D. J.) Diagonal similarity of irreducible matrices to row stochastic matrices. *Pacific J. Math.* **40** (1972), 97-99. (David Carlson) **47** #1823 21
- (with Hartfiel, D. J.) A role for doubly stochastic matrices in graph theory. *Proc. Amer. Math. Soc.* **36** (1972), 389-394. (N. S. Mendelsohn) **47** #4844 05C20
- Product integral techniques for abstract hyperbolic partial differential equations. *Am. J. Math.* **99** (1977), 353-365. (Stefan Balint) **51** #13761 47D05 (20)
- i, Peter Double precision approximations to the elementary functions using double fractions. *Numer. Math.* **18** (1971/72), 127-143. (From the summary) **45** #7938 20
- Algorithms for rational discrete least squares approximation. II. Optimal polefree approximation. *Optimization and optimal control* (Proc. Conf., Oberwolfach, 1974), pp. 261-275. *Lecture Notes in Math.*, Vol. 477, Springer, Berlin, 1975. (Editors) **58** #19030 65D10 (20)
- Algorithms for rational discrete least squares approximation. I. Unconstrained minimization. *Moderne Methoden der numerischen Mathematik (Tagung 200-Jahrfeier, Univ. Clausthal, Clausthal, 1975)*, pp. 139-157. *Internat. Ser. Numer. Math.*, Vol. 13, Birkhäuser, Basel, 1976. (Author's summary) **58** #24856 65D10
- (with Krier, Norbert) Ein Verfahren zur Behandlung von Ausgleichsaufgaben mit unkorrelierten Beobachtungen. (English summary) *Computing* **17** (1976/77), no. 3, 207-218. (G. Feld) **55** #4627 65F10
- Numerical stability and limiting accuracy in nonlinear programming. *VIII. Tagung über Operations Research* (1976), pp. 203-221. *Operations Research Verfahren, XXIII*. Hain, Meisenheim, 1977. (Author's summary) **58** #31838 65K05 (20)
- Numerically stable computation of step-sizes for descent methods. The nonconvex case. (German summary) *Computing* **18** (1977), no. 2, 149-160. (Marco Gaviano) #1718 65K05
- On the numerical stability of step-size procedures for descent methods. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T347-T349. (Marco Gaviano) **56** #1719 65K05
- See also Björck, Åke; et al., **51** #4619
- Alastair On the convergence of the Nyström method for the integral equation of the second kind. *Numer. Math.* **25** (1975/76), no. 1, 57-66. (Christopher T. H. Baker) **52** #16075 65R05
- Error bounds and estimates for eigenvalues of integral equations. *Numer. Math.* **29** (1977/78), no. 2, 133-147. (Author's summary) **58** #31968 65R05
- D. A. Asymptotic solutions of the Fredholm equations for the charged annular region. *A spectrum of mathematics (Essays presented to H. G. Forder)*, pp. 54-65. *Auckland Univ. Press, Auckland*, 1971. (P. M. Gupta) **55** #4950 78.45
- An eigenvalue problem for elastic contact with finite friction. *Proc. Cambridge Philos. Soc.* **73** (1973), 249-268. (M. Mişicu) **47** #1360 73.45
- (with Mkrtchian, J. Z.) The Boussinesq problem for a material with different moduli of elasticity and compression. *Quart. J. Mech. Appl. Math.* **30** (1977), no. 4, 449-466. (Authors' summary) **58** #3871 73.35
- (with Nair, Mohan) An inequality suggested by a physical argument for polynomials with roots of one sign. *Bull. Inst. Math. Appl.* **14** (1978), no. 5-6, 144-145. (Authors' summary) **58** #11281 26A82
- See also Nonlinear elasticity, **48** #3342
- Edward Matrix divisors of mf . *Acta Arith.* **20** (1972), 189-201. (R. C. Thompson) #8573 15A36
- The index of a subgroup of the symplectic modular group. *Michigan Math. J.* **19** (1972), 57-64. (Morris Newman) **45** #3586 20H05 (15A36)
- Hadamard designs. *Proc. Amer. Math. Soc.* **32** (1972), 29-31. (E. C. Johnson) #8554 (EA 58) 05B30
- m -symplectic matrices. *Trans. Amer. Math. Soc.* **170** (1972), 447-457. (D. B. Hunter) **47** #246 15A21
- The difference between consecutive members of a difference set (mod v). *Proc. Amer. Math. Soc.* **46** (1974), 150-154. (L. D. Baumert) **49** #10573 05B10
- Skew-Hadamard matrices of the Goethals-Seidel type. *Canad. J. Math.* **27** (1975), no. 3, 555-560. (S. K. Tharthare) **52** #5446 05B20
- (with Ganley, Michael J.) Relative difference sets and quasiregular collineation groups. *J. Combinatorial Theory Ser. A* **19** (1975), no. 2, 134-153. (L. D. Baumert) **51** #12568 05B25
- Hadamard matrices from relative difference sets. *J. Combinatorial Theory Ser. A* **19** (1975), no. 3, 287-300. (A. L. Whiteman) **52** #142 05B20
- Skew-Hadamard matrices of order $2(q+i)$. *Discrete Math.* **18** (1977), no. 1, 79-85. (A. L. Whiteman) **56** #156 05B20
- An infinite family of Williamson matrices. *J. Austral. Math. Soc. Ser. A* **24** (1977), no. 2, 252-256. (Author's summary) **58** #21697 05B20
- A family of difference sets. *J. Combinatorial Theory Ser. A* **22** (1977), no. 1, 103-106. (S. K. Tharthare) **54** #12540 05B10
- Spence, J. E. See Probabilistic methods in applied mathematics, **52** #15582
- Spence, Lawrence E. On the image of $S^p \times S^q$ under mappings of degree one. *Illinois J. Math.* **17** (1973), 111-114. (Nelson L. Max) **46** #8231 57A65
- (with Friedberg, Stephen H.) Local-belonging sets and multiplier-induced ideals in group algebras. *Illinois J. Math.* **21** (1977), no. 2, 293-299. (Yves Meyer) **55** #6119 43A20
- Spence, M. Anne (with Lange, Kenneth; Westlake, Joan) Extensions to pedigree analysis. III. Variance components by the scoring method. *Ann. Human Genetics* **39** (1975/76), no. 4, 485-491. (See Zbl 331 #92006) **92A10**
- (with Lange, Kenneth; Westlake, Joan) Extensions to pedigree analysis. II. Recurrence risk calculation under the polygenic threshold model. *Human Heredity* **26** (1976), 337-348. (Not reviewed) **92A10**
- Spence, Michael (with Starrett, David A.) Most rapid approach paths in accumulation problems. *Internat. Econom. Rev.* **16** (1975), no. 2, 388-403. (Colin W. Clark) **53** #7390 90A15 (93C05)
- Spence, R. (with Purslow, E. J.) Order of complexity of active networks. *Proc. Inst. Elec. Engrs.* **114** (1967), 195-198. (Authors' summary) **46** #5062 94A20
- Spencer, A. J. M. (with Shaw, Linda) Impulsive loading of ideal fibre-reinforced rigid-plastic beams. I. Free beam under central impact. *Internat. J. Solids and Structures* **13** (1977), no. 9, 823-831. (Authors' summary) **58** #19595a 73.35
- (with Shaw, Linda) Impulsive loading of ideal fibre-reinforced rigid-plastic beams. II. Beam with end supports. *Internat. J. Solids and Structures* **13** (1977), no. 9, 833-844. (Authors' summary) **58** #19595b 73.35
- (with Shaw, Linda) Impulsive loading of ideal fibre-reinforced rigid-plastic beams. III. Cantilever beam. *Internat. J. Solids and Structures* **13** (1977), no. 9, 845-854. (Authors' summary) **58** #19595c 73.35
- (with Rogers, T. G.) Singular stress layers in ideal fibre-reinforced cylinders. (German summary) *Z. Angew. Math. Phys.* **29** (1978), no. 2, 237-244. (M. Sokółowski) **58** #8665 73.35
- Spencer, Armond E. (with Beidleman, James C.) Finite group with a solvable maximal subgroup. (Italian summary) *Riv. Mat. Univ. Parma* (2) **11** (1970), 71-78. (W. E. Deskins) **47** #333 20E15
- Self dual finite groups. *Ist. Veneto Sci. Lett. Arti Atti Cl. Sci. Mat. Natur.* **130** (1971/72), 385-391. (R. Keown) **48** #416 20D15
- (with Beidleman, James C.) The normal index of maximal subgroups in finite groups. *Illinois J. Math.* **16** (1972), 95-101. (H. Bechtell) **45** #3550 20D25
- Finite groups with short nonnormal chains. *J. Austral. Math. Soc.* **18** (1974), 111-118. (J. R. J. Groves) **50** #7336 20D35
- Spencer, Bruce (with Sampson, Allan R.) Sufficiency, minimal sufficiency, and the lack thereof. *Amer. Statist.* **30** (1976), no. 1, 34-35. (Daniel Solomon) **56** #9760 62B05 (62-01)
- Spencer, Christopher B. The Milnor-Hilton theorem and Whitehead products. *J. London Math. Soc.* (2) **4** (1971), 291-303. (J. C. Becker) **45** #5999 55E15
- Relative homotopy operations. *Tōhoku Math. J.* (2) **23** (1971), 453-456. (J. W. Rutter) **46** #6354 55E15
- A 2-category of quasi-topological spaces. *Nanta Math.* **6** (1973), no. 2, 46-57. (G. V. Krishnarao) **49** #9840 55D05 (18D05, 55J10)
- A generalisation of a result of T. Ganea. *J. London Math. Soc.* (2) **7** (1974), 694-698. (J. W. Rutter) **49** #8009 55D40
- Generalised cohomology operations and the flat product. *J. London Math. Soc.* (2) **7** (1974), 741-746. (J. W. Rutter) **49** #8012 55E35 (55G25)
- (with Brown, Ronald) Double groupoids and crossed modules. *Cahiers Topologie Géom. Différentielle* **18** (1976), no. 4, 343-362. (From the authors' introduction) **55** #13427 (E 57 #4171) 55J99 (18D05)
- (with Brown, Ronald) G-groupoids, crossed modules and the fundamental groupoid of a topological group. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), no. 4, 296-302. (D. B. Fuks) **54** #7661 20L10 (22A05)
- An abstract setting for homotopy pushouts and pullbacks. *Cahiers Topologie Géom. Différentielle* **18** (1977), no. 4, 409-429. (Ronald Brown) **58** #5842 18D05 (55D05)
- (with Brown, Ronald) Erratum à l'article: "Double groupoids and crossed modules" (*Cahiers Topologie Géom. Différentielle* **17** (1976), no. 4, 343-362). *Cahiers Topologie Géom. Différentielle* **18** (1977), no. 4, 430. (Authors' text) **57** #4171 55J99 (18D05)
- Spencer, D. (with Robertson, M. M.) Partitions of large multipartites with congruence conditions. I. *Trans. Amer. Math. Soc.* **219** (1976), 299-322. (E. Grosswald) **53** #5515 10J20
- Spencer, Donald C. Overdetermined operators: some remarks on symbols. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 2, pp. 251-256. *Gauthier-Villars, Paris*, 1971. (Akira Asada) **54** #8739 58G05 (58H05)
- Flat differential operators. *Symposium on Several Complex Variables (Park City, Utah, 1970)*, pp. 85-108. *Lecture Notes in Math.*, Vol. 184. Springer, Berlin, 1971. (J. Eells) **45** #7756 58G05
- (with Kumpera, Antonio) ★Lie equations. Vol. I: General theory. *Annals of Mathematics Studies*, No. 73. Princeton University Press, Princeton, N.J.; University of

- Tokyo Press, Tokyo, 1972. xv + 293 pp. (H. Goldschmidt) **52** #1805 58H05
(with Kumpera, Antonio) ★Systems of linear partial differential equations and deformation of pseudogroup structures. Séminaire de Mathématiques Supérieures, No. 41 (Été 1969). *Les Presses de l'Université de Montréal, Montréal, Que.*, 1974. 100 pp. (H. Goldschmidt) **52** #1806 58H05
- Curvatures associated with differential operators. *Géométrie différentielle (Colloq., Univ. Santiago de Compostela, Santiago de Compostela, 1972)*, pp. 64-75. *Lecture Notes in Math.*, Vol. 392, Springer, Berlin, 1974. (A. Nijenhuis) **51** #6892 58G15
- Construction of complexes for Lie equations. *Manifolds—Tokyo 1973 (Proc. Internat. Conf. on Manifolds and Related Topics in Topology)*, pp. 303-311. Univ. Tokyo Press, Tokyo, 1975. (H. Goldschmidt) **54** #11420 58H05 (35G20)
(with Goldschmidt, Hubert) On the non-linear cohomology of Lie equations. I. *Acta Math.* **136** (1976), no. 1-2, 103-170. (Ngô van Quê) **56** #3904a 58H05
(with Goldschmidt, Hubert) On the non-linear cohomology of Lie equations. II. *Acta Math.* **136** (1976), no. 3-4, 171-239. (Ngô van Quê) **56** #3904b 58H05
(with Goldschmidt, Hubert) Submanifolds and over-determined differential operators. *Complex analysis and algebraic geometry*, pp. 319-356. Iwanami Shoten, Tokyo, 1977. (I. Kolář) **56** #16712 58G99 (58H05, 35N10)
- See also Collection: Chern, Shiing Shen and Spencer, Donald C., **47** #6406 and Partial differential equations, **48** #6620
- Spencer, Donald D. ★Game playing with computers. Revised second edition. *Hayden Book Co., Inc., Rochelle Park, N.J.*, 1975. vi + 312 pp. ISBN 0-8104-5103-4 (Editors) **56** #13744 68-01
- Spencer, J. E. (with Geary, R. C.) ★Elements of linear programming with economic applications. Second edition. Griffin's Statistical Monographs & Courses, No. 15. *Hafner Publishing Co., New York*, 1973. 138 pp. (Editors) **50** #3921 90C05 (90Axx)
- Spencer, J. P. (with Pu, Hwang Wên) A proof of J. Mařik's lemma. *Colloq. Math.* **24** (1971/72), 85-88. (Edwin Hewitt) **47** #6980 28A10
- Spencer, James D. Relations between boundary value functions for a nonlinear differential equation and its variational equations. *Canad. Math. Bull.* **18** (1975), no. 2, 269-276. (L. Erbe) **53** #3402 34B15
- Boundary value functions for nonlinear differential equations. *J. Differential Equations* **19** (1975), no. 1, 1-20. (Allan C. Peterson) **51** #13341 34B15
- Spencer, Joel H. (with Graham, Ronald L.) On small graphs with forced monochromatic triangles. *Recent trends in graph theory (Proc. Conf., New York, 1970)*, pp. 137-141. *Lecture Notes in Math.*, Vol. 186, Springer, Berlin, 1971. (P. Erdős) **45** #112 05C15
- Minimal scrambling sets of simple orders. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 349-353. (E. Harzheim) **45** #1805 06A05 (05A05)
- (with Graham, Ronald L.) A constructive solution to a tournament problem. *Canad. Math. Bull.* **14** (1971), 45-48. (J. W. Moon) **45** #1798 05C20
- (with Brown, Thomas A.) Minimization of ± 1 matrices under line shifts. *Colloq. Math.* **23** (1971), 165-171, 177 (errata insert). (M. Pearl) **46** #7059 05B20 (15A21)
- (with Erdős, Paul) On a certain problem of Erdős and Hajnal. (Hungarian. English summary) *Mat. Lapok* **22** (1971), 1-2 (1972). (Authors' summary) **48** #112 05A05
- Optimal ranking of tournaments. *Networks* **1** (1971/72), 135-138. (J. W. Moon) **45** #8580 05C20
- (with Erdős, Paul) Imbalances in k -colorations. *Networks* **1** (1971/72), 379-385. (F. Harary) **45** #8573 05C15
- (with Fishburn, Peter C.) Directed graphs as unions of partial orders. *Pacific J. Math.* **39** (1971), 149-161. (Authors' summary) **46** #5162 05C20
- A remark on coloring integers. *Canad. Math. Bull.* **15** (1972), 43-44. (N. J. A. Sloane) **47** #1772 10L99 (05A99)
- Turán's theorem for k -graphs. *Discrete Math.* **2** (1972), 183-186. (F. Harary) **45** #6668 05C99
- (with Kleitman, Daniel J.) Families of k -independent sets. *Discrete Math.* **6** (1973), 255-262. (G. F. Clements) **48** #1934 05A05
- (with Erdős, Paul; Graham, Ronald L.; Montgomery, P.; Rothschild, B. L.; Straus, Ernst G.) Euclidean Ramsey theorems. I. *J. Combinatorial Theory Ser. A* **14** (1973), 341-363. (Václav Chvátal) **47** #4825 05B30
- (with Erdős, Paul) ★Probabilistic methods in combinatorics. Probability and Mathematical Statistics, Vol. 17. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1974. 106 pp. (P. E. O'Neil) **52** #2895 05-02
- Puncture sets. *J. Combinatorial Theory Ser. A* **17** (1974), 329-336. (H. L. Abbott) **54** #2936 05A05
- Random regular tournaments. *Period. Math. Hungar.* **5** (1974), 105-120. (R. V. Ambarcumjian) **53** #5359 05C20
- A generalized Rota conjecture for partitions. *Studies in Appl. Math.* **53** (1974), 239-241. (R. L. Graham) **50** #6875 05A17
- (with Erdős, Paul; Graham, Ronald L.; Montgomery, P.; Rothschild, B. L.; Straus, Ernst G.) Euclidean Ramsey theorems. II. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. I, pp. 529-557. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (Václav Chvátal) **52** #2935 05C15
- (with Erdős, Paul; Graham, Ronald L.; Montgomery, P.; Rothschild, B. L.; Straus, Ernst G.) Euclidean Ramsey theorems. III. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. I, pp. 559-583. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (Václav Chvátal) **52** #2936 05C15
- Ramsey's theorem—a new lower bound. *J. Combinatorial Theory Ser. A* **18** (1975), 108-115. (R. L. Graham) **51** #2973 05C15
- Restricted Ramsey configurations. *J. Combinatorial Theory Ser. A* **19** (1975), no. 3, 278-286. (Alan Tucker) **52** #2946 05C15
- (with Erdős, Paul; Sauer, Norbert; Schaer, Jonathan) Factorizing the complete graph into factors with large star number. *J. Combinatorial Theory Ser. B* **18** (1975), 180-183. (A. Rosa) **51** #276 05C99
- (with Keeler, Emmett B.) Optimal doubling in backgammon. *Operations Res.* **23** (1975), no. 6, 1063-1071. (G. Owen) **55** #10026 (E 55 #10027) 90D05
- (with Burr, Stefan A.; Erdős, Paul) Ramsey theorems for multiple copies of graphs. *Trans. Amer. Math. Soc.* **209** (1975), 87-99. (Václav Chvátal) **53** #13015 05C15
- (with Erdős, Paul) ★Вероятностные методы в комбинаторике. (Russian) [Probabilistic methods in combinatorics] Translated from the English by B. S. ... With an introduction by Ju. V. Prohorov. With a translation, from the English, "Extremal problems among subsets of a set" [Discrete Math. **8** (1974), 281-294] first author and D. J. Kleitman. *Izdat. "Mir", Moscow*, 1976. 131 pp. (Editors) **54** #2470 05-02
- Maximal asymmetry of graphs. *Acta Math. Acad. Sci. Hungar.* **27** (1976), 47-53. (R. L. Graham) **54** #7322 05C99
- (with Kleitman, Daniel J.; Rothschild, Bruce R.) The number of semigroup order n . *Proc. Amer. Math. Soc.* **55** (1976), no. 1, 227-232. (A. Gewirtz) **54** #2454 05A15 (20M99)
- (with Graham, Ronald L.; Witsenhausen, Hans S.) On extremal density theorems for linear forms. *Number theory and algebra*, pp. 103-109. Academic Press, New York, 1977. (András Sárközy) **58** #569 10L10
- Intersection theorems for systems of sets. *Canad. Math. Bull.* **20** (1977), 249-254. (Norbert Sauer) **56** #15439 05A05
- Asymptotic lower bounds for Ramsey functions. *Discrete Math.* **20** (1977/78), 1, 69-76. (László Lovász) **58** #10600 05C35 (05C15)
- An elementary proof of Kronecker's theorem. *Fibonacci Quart.* **15** (1977), 9-10. (Takeo Miyoshi) **54** #12707 12A35
- Balancing games. *J. Combinatorial Theory Ser. B* **23** (1977), no. 1, 68-77. (Maschler) **58** #26058 90D05
- (with Olson, John E.) Balancing families of sets. *J. Combin. Theory Ser. B* (1978), no. 1, 29-37. (J. E. Graver) **58** #251 05A05
- See also Problems: Infinite sets, **52** #114; Orth, P. J., **55** #10027 and Erdős, Paul, **58** #27144
- Spencer, L. V. Bounds to truncation errors in biorthogonal polynomial approximation with illustrative applications to gamma ray transport distributions. *J. Res. Nat. Standards Sect. B* **75B** (1971), 1-16. (L. Finkelstein) **47** #9845 65M15
- "Plural-series" approximations of functions. *J. Res. Nat. Bur. Standards* **76B** (1972), 91-108. (J.-L. Calais) **48** #3427 82.65
- Spencer, Thomas Perturbation of the $P(\phi)_2$ quantum field Hamiltonian. *J. Mathematical Phys.* **14** (1973), 823-828. (Horst Behncke) **48** #5558 81.47
- (with Glimm, James; Jaffe, Arthur) The Wightman axioms and particle structure of the $\mathcal{P}(\phi)_2$ quantum field model. *Ann. of Math. (2)* **100** (1974), 585-632. (H. Araki) **50** #15694 81.46
- The mass gap for the $P(\phi)_2$ quantum field model with a strong external magnetic field. *Comm. Math. Phys.* **39** (1974), 63-76. (H. Araki) **50** #15732 81.47
- The absence of even bound states for $\lambda(\phi^4)_2$. *Comm. Math. Phys.* **39** (1974), (H. Araki) **50** #15733 81.47
- The decay of the Bethe-Salpeter kernel in $P(\phi)_2$ quantum field models. *Math. Phys.* **44** (1975), no. 2, 143-164. (Jean-Pierre Eckmann) **52** #9911 81.47
- (with Glimm, James; Jaffe, Arthur) Phase transitions for ϕ^4_2 quantum fields. *Comm. Math. Phys.* **45** (1975), no. 3, 203-216. (H. Araki) **52** #12616 81.47
- (with Glimm, James; Jaffe, Arthur) Existence of phase transitions for ϕ^4_2 quantum fields. (French summary) *Les méthodes mathématiques de la théorie quantique des champs (Colloq. Internat. CNRS, No. 248, Marseille, 1975)*, pp. 175-184. *Éditions Nat. Recherche Sci., Paris*, 1976. (Authors' summary) **57** #18595 81.46
- The Bethe-Salpeter kernel in $P(\phi)_2$. (French summary) *Les méthodes mathématiques de la théorie quantique des champs (Colloq. Internat. Centre Nat. Recherche Sci., Marseille, 1975)*, pp. 375-386. *Éditions Centre Nat. Recherche Sci., Paris*, 1976. (Authors' summary) **58** #8942 81.47
- (with Jaffe, Arthur; Glimm, James) An asymptotic perturbation expansion for multiphase Φ^4_2 . *Quantum dynamics: models and mathematics (Proc. Sympos., Center for Interdisciplinary Res., Bielefeld Univ., Bielefeld, 1975)*, pp. 167-175. *Acta Phys. Austriacae Suppl. XVI*, Springer, Vienna, 1976. (From the introduction) **58** #32633 81.65 (81.47)
- (with Glimm, James; Jaffe, Arthur) A convergent expansion about mean field theory. I. The expansion. *Ann. Physics* **101** (1976), no. 2, 610-630. (Alan D. Sloan) **55** #11855a 81.47
- (with Glimm, James; Jaffe, Arthur) A convergent expansion about mean field theory. II. Convergence of the expansion. *Ann. Physics* **101** (1976), no. 2, 631-650. (Alan D. Sloan) **55** #11855b 81.47
- (with Glimm, James; Jaffe, Arthur) Phase transitions in $P(\phi)_2$ quantum field models. *Bull. Amer. Math. Soc.* **82** (1976), no. 5, 713-715. (Editors) **56** #2058 81.47
- (with Zirilli, Francesco) Scattering states and bound states in $\lambda\mathcal{P}(\phi)_2$. *Comm. Math. Phys.* **49** (1976), no. 1, 1-16. (G. Costa) **54** #2000 81.47
- (with Fröhlich, Jürg; Simon, Barry) Infrared bounds, phase transitions and continuous symmetry breaking. *Comm. Math. Phys.* **50** (1976), no. 1, 79-95. (Penrose) **54** #9530 82.47
- (with McBryan, Oliver A.) On the decay of correlations in $SO(n)$ -symmetric ferromagnets. *Comm. Math. Phys.* **53** (1977), no. 3, 299-302. (Gérard G. Bhanu-Sankaran) **55** #14043 82.62
- See also Constructive quantum field theory, **52** #16310
- Spencer Brown, G. ★Laws of form. *The Julian Press, Inc., New York*, 1972. xxiv + 100 pp. (Louis H. Kauffman) **54** #4892 00A25 (02A05, 92A05, 94A20)
- Spencer, E. See Spanier, Edwin H.
- Spengler, Ulrich Relationen zwischen symplektischen Transvektionen. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, III. *J. Reine Math.* **274/275** (1975), 141-149. (J. Dieudonné) **51** #12706 10C30 (15A63)
- (with Wolff, Hilger) Die Länge einer symplektischen Abbildung. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, III. *J. Reine Math.* **274/275** (1975), 150-157. (J. Dieudonné) **51** #12707 10C30 (15A63)
- Spenser, Dž. See Spencer, Joel H.
- Speranskii, D. V. Essentially information-lossless automata. *Avtomat. i Telemekh. 1970*, 181-184. (Russian. English summary; translated as *Automat. Remote Control* (1971), no. 10, part 2, 1695-1698 (1972). (N. Zierler) **50** #16172 94A30
- Control of automata that have a synchronizing sequence. *Izv. Akad. Nauk SSSR Tekhn. Kibernet.* **1971**, no. 1, 89-95. (Russian; translated as *Engrg. Cybernetics* 1971, no. 1, 74-80. (Forbes D. Lewis) **45** #9859 94A30

- Experiments concerning the recognition of the output function of an automaton. (Russian. English summary insert) *Kibernetika (Kiev)* 1971, no. 6, 39-43. (J. Mintzmann) 46 #3244 94A30
- Finite-order automata having essentially no information losses. *Avtomat. i Telemekh.* 1972, no. 6, 90-95 (Russian); translated as *Automat. Remote Control* 1972, no. 6, part 1, 94-968. (R. N. Goss) 53 #7655 94A30
- On automata without loss of information. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1972, no. 2, 109-113 (Russian); translated as *Engrg. Cybernetics* 10 (1972), no. 2, 9-173. (Shimon Even) 48 #10716 94A30
- (with Grunskii, I. S.) The length of a round of a graph. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 6, 34-37. (A. D. Koršunov) 51 #263 05C35 (A20)
- The transformation of an automaton into an information-lossless automaton. *Avtomat. i Telemekh.* 1974, no. 9, 86-93 (Russian. English summary); translated as *Automat. Remote Control* 35 (1974), no. 9, part 1, 1452-1458 (1975). (Jürgen Dassow) #5199 94A30
- (with Grunskii, I. S.) The covering of a graph by a set of paths that emanate from a single vertex. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 1, 29-34. (S. Mel'nikov) 51 #5373 05C20
- (with Bogomolov, A. M.; Grunskii, I. S.) ★Контроль и преобразования секретных автоматов. (Russian) [Control and transformations of discrete automata] *Dokl. Akad. Nauk SSSR* 1975, 174 pp. (Siegmund Gerber) 54 #4858 94A30
- Francia, Francesco ★Relazioni e strutture. *Matematica Moderna*, no. 8. Zanichelli, Bologna, 1970. 224 pp. (Editors) 50 #1882 04-01 (00A05)
- Problemi di cammino nella teoria dei grafi e applicazioni. *Univ. e Politec. Torino* 1970, no. 2, 269-274. (R. C. Read) 46 #7091 05C35 (94A20)
- On some Hamiltonian or Eulerian graphs. (French summary) *Atti del Convegno di Geometria Combinatoria e sue Applicazioni (Univ. Perugia, Perugia, 1970)*, pp. 379-383. (M. Atiyah, Univ. Perugia, Perugia, 1971. (Editors) 49 #2460 05C35
- Sur les sections des hypergraphes et sur leurs automorphismes. *Colloq. Math.* 1973, 269-274. (R. Balakrishnan) 49 #2473 05C99
- Grafi euleriani o hamiltoniani il cui gruppo degli automorfismi s'annulla. *Riv. Mat. Univ. Parma* (3) 3 (1974), 319-334. (W. Dörfler) 55 #10324 05C35
- Numero cromatico, omomorfismi e colorazioni d'un grafo. *Ann. Mat. Pura Appl.* 102 (1975), 359-367. (R. C. Read) 51 #237 05C15
- Colorazioni di specie superiore d'un grafo. (English summary) *Collection in Memory of Enrico Bompiani. Boll. Un. Mat. Ital.* (4) 12 (1975), no. 3, suppl., 53-62. (Maria Ferro) 58 #342 05C15
- René Peter ★Obere und untere Schranken für den tiefsten Eigenwert bzw. das Energieintegral in Problemen, die einen Parameter enthalten. Abhandlung zur Erlangung der Würde eines Doktors der Mathematik der Eidgenössischen Technischen Hochschule Zürich. Diss. No. 4727. *Eidgenössische Technische Hochschule Zürich*, Zürich, 1971. 69 pp. (H. Beckert) 56 #13938 73.35
- Untere und obere Schranken für den tiefsten Eigenwert der elastisch gestützten Membran. (English summary) *Z. Angew. Math. Phys.* 23 (1972), 231-244. (L. E. Payne) #1355 73.35 (35P15)
- A priori-Schranken für das Energieintegral in einem Randwertproblem mit einem Parameter α . (English summary) *Z. Angew. Math. Phys.* 23 (1972), 994-998. (D. O. Banks) 48 #11751 35J05
- (with Bandle, Catherine) Applications of Rellich's perturbation theory to a classical boundary and eigenvalue problem. (German summary) *Z. Angew. Math. Phys.* 24 (1973), 709-720. (L. E. Payne) 49 #3299 35B30 (35P15)
- A-priori Schranken für den tiefsten Eigenwert in gewissen Problemen, die einen Parameter in den Randbedingungen enthalten. *Numerische Behandlung von Eigenwertaufgaben (Tagung, Math. Forschungsinst., Oberwolfach, 1972)*, pp. 117-124. *Internat. Schriftenreihe Numer. Math., Band 24*, Birkhäuser, Basel, 1974. (D. O. Banks) #3359 35P15
- (with Payne, Lawrence E.) Some superadditivity results in the torsion problem for multiply connected cross sections. (German summary) *J. Elasticity* 5 (1975), no. 2, 111-147. (Cornelius O. Horgan) 56 #1887 73.35
- Extension of two theorems of Payne to some nonlinear Dirichlet problems. (German summary) *Z. Angew. Math. Phys.* 26 (1975), no. 6, 721-726. (L. E. Payne) 52 #14643 73J65
- (with Schaefer, Philip W.) A maximum principle for a class of functionals in nonlinear Dirichlet problems. *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976)*, pp. 400-406. *Lecture Notes in Math.*, Vol. 564, Springer, Berlin, 1976. (Editors) 58 #29209 35J65
- (with Schaefer, Philip W.) Maximum principles for some functionals associated with the solution of elliptic boundary value problems. *Arch. Rational Mech. Anal.* 61 (1976), no. 1, 65-76. (L. E. Payne) 53 #8653 35J40
- (with Payne, Lawrence E.) Some a priori and isoperimetric inequalities associated with a class of boundary value problems for doubly connected domains. *SIAM J. Math. Anal.* 7 (1976), no. 4, 451-460. (J. Hersch) 54 #752 35P15
- (with Schaefer, Philip W.) Maximum principles and bounds in some homogeneous elliptic boundary value problems. *SIAM J. Math. Anal.* 8 (1977), no. 5, 71-878. (Catherine Bandle) 58 #11889 35J40
- (with Crooke, Philip S.) Isoperimetric inequalities in a class of nonlinear eigenvalue problems. *SIAM J. Math. Anal.* 9 (1978), no. 4, 671-681. (L. E. Payne) 58 #11897 35J60 (49G05)
- er, S. p-adic hypergeometric functions and their cohomology. *Duke Math. J.* 44 (1977), no. 3, 535-589. (Alan Adolphson) 57 #16307 14G20
- ing, George (with Melchner, Melvin J.) Estimating item and order information. *J. Mathematical Psychology* 13 (1976), no. 2, 192-213. (A. Rapoport) 53 #7545 92A25
- ing, Hans J. The collision singularity in a perturbed N-body problem. *Celestial Mech.* (1972), 396-406. (C. Marchal) 46 #10265 70.34
- The general equilibria of a spinning satellite in a circular orbit. *Celestial Mech.* 6 (1972), 278-293. (P. Likins) 48 #7722 70.35
- ing, J. L. Quasi-linear diffusion and particle transport in inhomogeneous plasmas. *Phys. Fluids* 21 (1978), no. 2, 221-223. (Ian Lerche) 57 #8474 78.35
- er, Emanuel Über die kombinatorischen Grundlagen gewisser simplizialer Sätze. *Atti del Convegno di Geometria Combinatoria e sue Applicazioni (Univ. Perugia, Perugia, 1970)*, pp. 385-401. *Ist. Mat., Univ. Perugia, Perugia*, 1971. (Ky Fan) 49 #4787 05A05 (57C05)
- Combinatorics of valuated complexes. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973), Tomo II*, pp. 61-69. *Atti dei Convegni Lincei*, No. 17, Accad. Naz. Lincei, Rome, 1976. (Ky Fan) 58 #253 05A05 (57C05)
- Wie ist geometrisches Schliessen möglich? Axiomatisierung geometrischen Denkens, aufgezeigt an einem elementargeometrischen Sachverhalt. *Mitt. Math. Gesellsch. Hamburg* 10, no. 4, 297-310 (1976). (L. W. Szczerba) 58 #18068 50A05
- Sperner, Emanuel, Jr. Kombinatorik bewerteter Komplexe. *Abh. Math. Sem. Univ. Hamburg* 39 (1973), 21-43. (Ky Fan) 48 #10825 05A05 (55C99)
- Zur Symmetrisierung von Funktionen auf Sphären. *Math. Z.* 134 (1973), 317-327. (J. Moser) 49 #5310 28A75 (46E35)
- Symmetrisierung für Funktionen mehrerer reeller Variablen. (English summary) *Manuscripta Math.* 11 (1974), 159-170. (F. J. Almgren, Jr.) 48 #6342 26A84
- Ein Regularitätssatz für Systeme nichtlinearer elliptischer Differentialgleichungen. *Math. Z.* 149 (1976), no. 1, 57-68. (R. C. MacCamy) 54 #3141 35D10 (35J45)
- Über eine scharfe Schranke in der Regularitätstheorie elliptischer Systeme. *Math. Z.* 156 (1977), no. 3, 255-263. (R. C. MacCamy) 57 #3629 35J60
- Spesivõh, V. The homogenous space of quadrics in P_n . (Russian) *Students' works in algebra and geometry (Russian)*, pp. 78-84. *Tartu. Gos. Univ., Tartu*, 1972. (C. Teleman) 51 #13931 53C30
- (with Fleischer, A.) The reductiveness of homogeneous spaces of pairs of "quadric-linear structure" in the three-dimensional projective space P_3 . (Russian) *Students' works in algebra and geometry (Russian)*, pp. 85-101. *Tartu. Gos. Univ., Tartu*, 1972. (C. Teleman) 51 #13932 53C30
- Lie subgroups with maximal two-dimensional nonruled orbits in complex $P_3(C)$. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* 305 (1972), 85-95. (Author's summary) 54 #5387 22E05 (53A20, 14N05)
- The complete lift of the tensor algebra from a manifold to its space of 2-jets. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 8(171), 104-106. (I. Kolář) 58 #12816 53C05
- Spevak, L. V. (with Lihtarnikov, L. M.) The solvability of a linear integral equation of V. I. Romanovskii type with partial integrals. (Russian) *Functional analysis, No. 7 (Russian)*, pp. 106-115. *Ul'janovsk. Gos. Ped. Inst., Ul'janovsk*, 1976. (Editors) 58 #30514 47G05 (45F10)
- (with Lihtarnikov, L. M.) A linear partial integral equation of V. I. Romanovskii type with two parameters. (Russian) *Differentsial'nye Uravneniya (Rjazan') Vyp.* 7 (1976), 165-176. (J. F. Heyda) 57 #7061 45A05
- Spevakov, V. N. The absolute summability of orthogonal series by the Riesz methods. (Russian) *Issled. Prikl. Mat. Vyp.* 1 (1973), 109-116. (Editors) 57 #13352 42A28 (42A52)
- Absolute summability of orthogonal series by discontinuous Riesz methods. I. (Russian) *Applications of functional analysis to approximate calculations (Russian)*, pp. 112-124. *Kazan. Univ., Kazan*, 1974. (Editors) 58 #29777 42A28 (42A60)
- (with Kudrjavcev, A. B.) Absolute summability of orthogonal series by the Euler method. (Russian) *Mat. Zametki* 21 (1977), no. 1, 51-56. (D. P. Gupta) 55 #13153 42A60
- Speyer, Jason L. Necessary conditions for optimality for paths lying on a corner. *Management Sci.* 19 (1972/73), 1257-1270. (G. M. Ewing) 49 #3641 49B99
- (with Gustafson, Donald E.) Stochastic optimal control of linear dynamic systems. *AIAA J.* 12 (1974), 1013-1020. (Andrew P. Sage) 49 #8724 93E20
- (with Shaked, Uri) Minimax design for a class of linear quadratic problems with parameter uncertainty. *IEEE Trans. Automatic Control AC-19* (1974), 158-159. (Authors' summary) 54 #12299 93C99
- (with Deyst, John; Jacobson, David H.) Optimization of stochastic linear systems with additive measurement and process noise using exponential performance criteria. *IEEE Trans. Automatic Control AC-19* (1974), 358-366. (V. Kolmanovskii) 54 #7086 93E20
- (with Gustafson, Donald E.) Linear minimum variance filters applied to carrier tracking. *IEEE Trans. Automat. Control AC-21* (1976), no. 1, 65-73. (T. T. Soong) 52 #16798 93E10
- (with Womble, M. Edward; Potter, James E.) Approximations to Riccati equations having slow and fast modes. *IEEE Trans. Automatic Control AC-21* (1976), no. 6, 846-855. (S. G. Tzafestas) 54 #14373 65K05 (49D30)
- See also Control in space, 48 #13319
- Speziale, C. G. (with Eringen, A. Cemal; Kim, B. S.) Crack-tip problem in non-local elasticity. *J. Mech. Phys. Solids* 25 (1977), no. 5, 339-355. (C. L. Purihar) 57 #14777 73.45
- Speziali, Pierre See Einstein, Albert; et al., 52 #10347
- Sphicas, Georgios P. (with Silverman, Fred N.) Deterministic equivalents for stochastic assembly line balancing. *AIIE Trans.* 8 (1976), no. 2, 280-282. (Ivo M. I. Dirickx) 56 #17787 90B35 (90C15, 90C50)
- Spicer, Donald Z. A commutativity theorem for Banach algebras. *Colloq. Math.* 27 (1973), 107-108. (James T. Burnham) 48 #9402 46J05
- Spicer, J. A. Solving time varying and coupled nonlinear systems of differential equations by the self starting predictor algorithm of arbitrary order using exact stability. *Proceedings of the Seventh Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1974)*, pp. 186-188. *Western Periodicals, North Hollywood, Calif.*, 1974. (K. B. Datta) 56 #13651 65L05
- Spicher, K. Der SBj-Algorithmus. Eine Methode zur Beschreibung der Zusammenhänge zwischen Ziel-Lieferbereitschaft und Sicherheitsbestand. (English summary) *Z. Operations Res. Ser. A-B* 19 (1975), B1-B12. (E. V. Bulinskaja) 53 #2329 90B05
- Spicyna, L. A. An application of the monotone motion of a collinearly changeable system to the projective transformation of nomograms. (Russian) *Tul. Gos. Ped. Inst. Učen. Zap. Mat. Kaf.* 1968, 71-78. (L. Bal) 45 #1424 65S05
- Spidi, K. See Speedy, C. B.
- van Spiegel, E. (with Marshall, G.) On the numerical treatment of the Navier-Stokes equations for an incompressible fluid. *J. Engrg. Math.* 7 (1973), 173-188. (M. G. Hall) 51 #4852 76.65

- Spiegel, Edward A.** (with Childress, W. S.) Archimedean instabilities in two-phase flows. *SIAM Rev.* 17 (1975), 136-165. (R. K. Gupta) 51 #9641 7635
(with Latour, Jean; Toomre, Juri; Zahn, Jean-Paul) Stellar convection theory. I. The anelastic modal equations. *Astrophys. J.* 207 (1976), no. 1, part 1, 233-243. (Attay Kovetz) 53 #12507 8535
(with Hsieh, S. H.) The equations of photohydrodynamics. *Astrophys. J.* 207 (1976), no. 1, part 1, 244-252. (Authors' summary) 54 #9308 7635
See also **Problems of stellar convection**, 57 #11646
- Spiegel, Eugene** Automorphisms of unitary groups. *J. Algebra* 19 (1971), 541-546. (G. E. Wall) 45 #3588 20G15
On isomorphisms of abelian group algebras. *Canad. J. Math.* 27 (1975), 155-161. (Donald S. Passman) 50 #9948 16A26
Abelian p -adic group rings. *Comment. Math. Helv.* 50 (1975), 27-32. (Donald S. Passman) 51 #672 20C05
(with Trojan, Allan) On semi-simple group algebras. I. *Pacific J. Math.* 59 (1975), no. 2, 549-555. (I. B. S. Passi) 52 #14023 20C05
Polynomials of generating series type. *Linear and Multilinear Algebra* 4 (1976), no. 2, 115-121. (A. G. Law) 54 #2485 05A15
Calculating commutators in groups. *Math. Mag.* 49 (1976), no. 4, 192-194. (Edward Cline) 54 #417 20F35
Isomorphisms of p -adic group rings. *Monatsh. Math.* 81 (1976), no. 4, 305-309. (Donald S. Passman) 54 #2774 20C05
(with Trojan, Allan) On semi-simple group algebras. II. *Pacific J. Math.* 66 (1976), no. 2, 553-559. (I. B. S. Passi) 56 #5697 20C05
Codes over Z_m . *Information and Control* 35 (1977), no. 1, 48-51. (Ian Blake) 56 #5045 94A10
Codes over Z_m , revisited. *Information and Control* 37 (1978), no. 1, 100-104. (Ian Blake) 57 #19082 94A10
- Spiegel, Hartmut** Gruppenalgebren mit zentralem Radikal. *Arch. Math. (Basel)* 23 (1972), 380-384. (H. K. Farahat) 48 #400 20C05
Blockcorrespondenzen und p' -Normalteiler. *Arch. Math. (Basel)* 25 (1974), 483-487. (G. Michler) 50 #10035 20C05
- Spiegel, M. R.** The Laplace transform of $J_n(t)$. *Math. Gaz.* 56 (1972), no. 398, 329-330. (Editors) 58 #6951 44A20
- Spiegel, Wolfgang** Über die Symmetrisierung stetiger Funktionen im euklidischen Raum. *Arch. Math. (Basel)* 24 (1973), 545-551. (L. Losonczy) 54 #491 26A84
Ein Konvergenzsatz für eine gewisse Klasse kompakter Punktmengen. *J. Reine Angew. Math.* 277 (1975), 218-220. (G. D. Chakerian) 52 #4128 52A20
Ein Zerlegungssatz für spezielle Eikörperabbildungen in den euklidischen Raum. *J. Reine Angew. Math.* 283/284 (1976), 282-286. (G. T. Sallee) 53 #6422 52A20
Zur Minkowski-Additivität bestimmter Eikörperabbildungen. *J. Reine Angew. Math.* 286/287 (1976), 164-168. (H. Hadwiger) 55 #3969 52A20
Ein Beitrag über additive, translationsinvariante, stetige Eikörperfunktionale. *Geometriae Dedicata* 7 (1978), no. 1, 9-19. (E.-A. Weiss, Jr.) 57 #13699 52A20 (52A25)
- Spiegelhalter, D. J.** A test for normality against symmetric alternatives. *Biometrika* 64 (1977), no. 2, 415-418. (M. Csörgö) 58 #8014 62G10
- Spielberg, K.** (with Guignard, Monique) Mixed-integer algorithms for the (0,1) knapsack problem. Mathematics of numerical computation. *IBM J. Res. Develop.* 16 (1972), 424-430. (Editors) 48 #7970 90C10
- Spielberg, Kurt** (with Balinski, M. L.) Methods for integer programming: algebraic, combinatorial, and enumerative. *Progress in operations research, Vol. III: Relationship between operations research and the computer*, pp. 195-292. Wiley, New York, 1969. (From the summary) 57 #18812 90C10
(with Lemke, C. E.; Salkin, Harvey M.) Set covering by single-branch enumeration with linear-programming subproblems. *Operations Res.* 19 (1971), 998-1022. (Ju. Finkel'stein (RZMat 1972 #2 V579)) 54 #6949 90C10
(with Guignard, Monique) Zero-one zero-one programming and enumeration. *Nonlinear programming, 2 (Proc. Special Interest Group on Math. Programming Sympos., Univ. Wisconsin, Madison, Wis., 1974)*, pp. 333-360. Academic Press, New York, 1974. (G. Bär) 54 #2191 90C10
(with Johnson, Ellis L.) Inequalities in branch and bound programming. *Optimization methods for resource allocation (Proc. NATO Conf., Elsinore, 1971)*, pp. 371-399. English Universities Press, London, 1974. (E. M. L. Beale) 51 #12323 90C05
(with Guignard, Monique) Algorithms for exploiting the structure of the simple plant location problem. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 247-271. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (Dobrev) 58 #15214 90C50 (90C05)
(with Guignard, Monique) Reduction methods for state enumeration integer programming. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 273-285. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (F. Giannessi) 56 #10951 90C10
- Spielman, Jeffrey L.** Stochastic process with independent increments, taking values in a Hilbert space. *J. Multivariate Anal.* 6 (1976), no. 3, 426-446. (B. L. S. Prakasa Rao) 54 #6223 60B99 (60G99)
A characterization of the Gaussian distribution in a Hilbert space. *Pacific J. Math.* 68 (1977), no. 2, 497-505. (Author's summary) 58 #24441 60B05
- Spielman, Richard S.** (with Neel, James V.; Li, Francis H. F.) Inbreeding estimation from population data: models, procedures and implications. *Genetics* 85 (1977), no. 2, 355-371. (Klaus Hinkelmann) 55 #10062 92A10
- Spielman, Stephen** A refutation of the Neyman-Pearson theory of testing. *British J. Philos. Sci.* 24 (1973), 201-222. (Günter Menges) 57 #14203 62A99 (62F05)
The logic of tests of significance. *Philos. Sci.* 41 (1974), 211-226. (Author's summary) 56 #13407 62A99
Physical probability and Bayesian statistics. Foundations of probability and statistics. II. *Synthese* 36 (1977), no. 2, 235-269. (From the introduction) 58 #24632 62A15 (02A05)
- Spielvogel, E. R.** (with Spielvogel, L. Q.) Existence of steady free surface gravity flows. *SIAM J. Appl. Math.* 31 (1976), no. 2, 207-232. (F. Ursell) 54 #6674 7635
- Spielvogel, L. Q.** (with Spielvogel, E. R.) Existence of steady free surface gravity flows. *SIAM J. Appl. Math.* 31 (1976), no. 2, 207-232. (F. Ursell) 54 #6674 7635
- Spies, G. O.** Magnetohydrodynamic stability theory with closed magnetic field lines. *Fluids* 17 (1974), 400-408. (R. M. Gundersen) 50 #3755 7635
Nonlinear magnetohydrodynamic stability and plasma containment with field lines. *Phys. Fluids* 17 (1974), 1188-1197. (W. H. Schoendorf) 50 #6397
(with Nelson, D. B.) Sufficient stability criteria for plasma equilibria with pressure. *Phys. Fluids* 17 (1974), 1865-1878. (L. N. Tao) 50 #15578 7635
(with Nelson, D. B.) Properties of magnetically confined plasma equilibria. *Fluids* 17 (1974), 1879-1884. (G. Power) 50 #9157 7635
Stability criteria and the maximum growth rate in magnetohydrodynamics. *Fluids* 17 (1974), 2019-2024. (G. Power) 50 #9161 7649
- Spieß, J.** Uniqueness theorems for nonlinear L_2 -approximation problems. (German summary) *Computing (Arch. Elektron. Rechnen)* 11 (1973), no. 4, 327-335. (Abdelmalek) 52 #2138 65D10 (41A30)
Eindeutigkeitssätze für L_2 -Approximationen durch lokale Betrachtungen. *Vor der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972)*. *Z. Angew. Math. Mech.* 53 (1973), T171-T172. (Hans-Jürgen Albrand) 49 #9511 41A65
Untersuchungen des Zeitgewinns durch neue Algorithmen zur Matrix-Multiplikation. (English summary) *Computing* 17 (1976), no. 1, 23-36. (Author's summary) 56 #13771 68A10
- Spież, Stanisław** A majorant for the family of all movable shapes. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 615-620. (S. Marz) 48 #12465 54C56 (55D99)
On a plane compactum with the maximal shape. *Fund. Math.* 78 (1973), 145-156. (D. R. T aylor) 47 #9533 54C56
Movability and uniform movability. (Russian summary) *Bull. Acad. Polon. Sci. Math. Astronom. Phys.* 22 (1974), 43-45. (S. Mardešić) 49 #11466 54C60
On a characterization of shapes of several compacta. (Russian summary) *Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 4, 257-266. (Kuperberg) 53 #14398 54C56
On generalizations of theorems of Borsuk-Ulam, Dyson and Livesay. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 26 (1978), 325-333. (M. Sebastiani) 58 #24252 55C35
(with Kodama, Yukihiro; Watanabe, Tadashi) On shape of hyperspaces. *Math. 100* (1978), no. 1, 59-67. (S. Mardešić) 58 #7547 54C56 (55D99)
- Spiga, Giampiero** (with Boffi, Vinicio C.; Premuda, Francesco) Convergence in the of solutions to the neutron integral Boltzmann equation in three-dimensional systems. *J. Mathematical Phys.* 14 (1973), 346-352. (M. Drăganu) 47 #8054 8245
(with Boffi, Vinicio C.) Linear integral transformations generated by the three-dimensional neutron transport kernel. *J. Mathematical Phys.* 14 (1973), 1913-1917. (P. Achuthan) 48 #13072 8147
A sufficient condition for the compactness of a linear integral transformation in Lebesgue space. (Italian summary) *Boll. Un. Mat. Ital.* (4) 11 (1975), no. 2, 384-390. (Smithies) 51 #13778 47G05
(with Boffi, Vinicio C.) Practical solution for a three-dimensional problem of the integral neutron transport theory. (Italian summary) *Meccanica—J. Italian Assoc. Theoret. Appl. Mech.* 10 (1975), no. 1, 21-26. (M. Drăganu) 51 #14829 8245
(with Prelati, G. P.) Transport theory of a totally reflected parallelepiped reactor. (Italian summary) *Meccanica—J. Italian Assoc. Theoret. Appl. Mech.* 10 (1975), 128-134. (Edward W. Larsen) 54 #4467 8245
(with Boffi, Vinicio C.) An initial value problem in three-dimensional integral neutron transport theory. *Transport Theory Statist. Phys.* 5 (1976), no. 2-3, 177-200. (Nelson) 58 #20092 8246
Errata: "A sufficient condition for the compactness of a linear integral transformation in a Lebesgue space" (*Boll. Un. Mat. Ital.* (4) 11 (1975), no. 2, 384-390). *Boll. Un. Mat. Ital. A* (5) 14 (1977), no. 2, 419. (Editors) 55 #13300 47G05
- Špigel', E. M.** The projection method for the solution of singular integral equations with rational coefficients. (Russian) *Mat. Issled.* 7 (1972), no. 1(23), 163-185. (I. Wolfersdorf) 45 #5826 47G05 (45E99)
A projection method for the solution of singular integral equations with rational coefficients along multiply connected contour. (Russian) *Mat. Issled.* 7 (1972), no. 1(23), 181-200, 290. (L. von Wolfersdorf) 47 #9362 47F05 (45E05)
(with Krupnik, N. Ja.) Perturbation of singular integral operators. (Russian) *Nonselfadjoint operators. Mat. Issled. Vyp.* 42 (1976), 113-123, 231. (Authors' summary) 58 #23774 47G05
- Špigel'man, E. S.** (with Levakov, A. A.) The boundedness of infinitely continuable solutions of a system of two equations with quadratic right hand sides, and the characteristic Ljapunov exponents of the solutions of this system. (Russian) *Differencial'nye Uravnenija* 8 (1972), 1969-1976, 2111. (F. Szidarovszky) 47 #34D05
The radius of attraction of a certain two-dimensional system. (Russian) *Differencial'nye Uravnenija* 10 (1974), 563-566, 576. (R. F. Datko) 50 #681
The boundedness of the infinitely continuable solutions of a system of two differential equations with quadratic right hand sides. (Russian) *Differencial'nye Uravnenija* 11 (1975), no. 11, 2019-2026, 2109. (I. Kiguradze) 53 #917 (E 56 #134A15)
Letter to the editors: "The boundedness of the infinitely continuable solutions of a system of two differential equations with quadratic right hand sides" (*Differencial'nye Uravnenija* 11 (1975), no. 11, 2019-2026). (Russian) *Differencial'nye Uravnenija* (1977), no. 8, 1537. (Editors) 56 #16027 34A15 (34C10)
- Spigler, R.** Sulle radici dell'equazione $A_n(x) + B_n(x) = 0$. (English summary) *Atti Mat. Fis. Univ. Modena* 24 (1975), no. 2, 399-419 (1976). (E. Riektig) 54 #1033A40
- Spijker, M. N.** On the structure of error estimates for finite-difference methods. *Math.* 18 (1971/72), 73-100. (A. R. Mitchell) 45 #6216 65N15
Reduction of roundoff error by splitting of difference formulas. *SIAM J. Numer. Anal.* 8 (1971), 345-357. (J. D. Lambert) 45 #1394 65L05
Equivalence theorems for nonlinear finite-difference methods. *Numerische Math.*

- chilinearer partieller Differential- und Integrodifferentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1971), pp. 233-264. *Lecture Notes in Math.*, Vol. 267, Springer, Berlin, 1972. (H. J. Stetter) **51** #7307 65M10
- Two-sided error estimates in the numerical solution of initial value problems. *Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen* (Tagung, Math. Forschungsinst., Oberwolfach, 1973), pp. 109-122. *Lecture Notes in Math.*, Vol. 395, Springer, Berlin, 1974. (H. J. Stetter) **55** #4709 65M15
- Optimum error estimates for finite-difference methods. Proceedings of the Third Conference on Basic Problems of Numerical Mathematics (Prague, 1973). *Acta Univ. Carolinae—Math. et Phys.* **15** (1974), no. 1-2, 159-164. (J. Hurt) **52** #7136 65L05
- On the possibility of two-sided error bounds in the numerical solution of initial value problems. *Numer. Math.* **26** (1976), no. 3, 271-300. (E. Schechter) **55** #13808 M15 (65L05)
- See also **Topics in numerical analysis**, **58** #24841
- Paul W.** (with Graef, John R.) On the behavior of the solutions of $+q(t)f(x)=r(t)$. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 544-550 (1974). (T. G. Hallam) **51** #6036 34C10
- (with Graef, John R.) Continuity, boundedness and asymptotic behavior of solutions of $x''+q(t)f(x)=r(t)$. *Ann. Mat. Pura Appl.* (4) **101** (1974), 307-320. (B. S. Dalli) **50** #13719 34C10
- Behavior of the solutions of the differential equation $y''+qy^p=r$. *Applicable Anal.* (1974), no. 3, 253-264. (Yiannis Sficas) **52** #14469 34C10
- (with Graef, John R.) A nonoscillation result for second order ordinary differential equations. (Italian summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) **41** (1974), 92-101 (1975). (H. E. Gollwitzer) **58** #6495 34C10
- (with Graef, John R.) Nonoscillation theorems for forced second order nonlinear differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 6, 694-701 (1976). (D. V. V. Wend) **58** #6496 34C10
- (with Graef, John R.) Sufficient conditions for the equation $(t)x''+h(t, x, x') + q(t)f(x, x') = r(t, x, x')$ to be nonoscillatory. *Funkcial. Ekvac.* **18** (1975), no. 1, 35-40. (J. W. Heidel) **52** #6099 34C10
- (with Graef, John R.) Asymptotic behavior of solutions of a second order nonlinear differential equation. *J. Differential Equations* **17** (1975), 461-476. (K. E. Swick) **51** #13720 34C10
- (with Graef, John R.) Sufficient conditions for nonoscillation of a second order nonlinear differential equation. *Proc. Amer. Math. Soc.* **50** (1975), 289-292. (N. P. Matia) **51** #6037 34C10
- (with Graef, John R.) A nonoscillation result for a nonlinear differential equation. *Differential equations (Third Mexico-U.S. Sympos., Mexico City, 1975)* (Spanish), pp. 9-225. *Math. Notes and Sympos.*, Vol. 2, Fondo de Cultura Económ., Mexico City, 1976. (H. C. Howard) **57** #3509 34C10
- (with Graef, John R.) A nonoscillation result for a forced second-order nonlinear differential equation. *Dynamical systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974), Vol. II, pp. 275-278. Academic Press, New York, 1976.* (Editors) **58** #28841 34C10
- Some stability type results for a nonlinear differential equation. (Italian summary) *Ind. Mat.* (6) **9** (1976), no. 2, 259-271. (N. Chafee) **53** #13731 34C10
- (with Graef, John R.) Stability type properties for second order nonlinear differential equations. *Stability of dynamical systems, theory and applications (Proc. Regional Conf., Mississippi State Univ., Mississippi State, Miss., 1975), pp. 119-126. Lecture Notes in Pure and Appl. Math.*, Vol. 28, Dekker, New York, 1977. (Editors) **58** #28842 34C10
- (with Graef, John R.) A note on a paper of J. S. W. Wong: "Oscillation theorems for second order nonlinear differential equations" (Bull. Inst. Math. Acad. Sinica **3** (1975), 283-309). *Bull. Inst. Math. Acad. Sinica* **5** (1977), no. 2, 375-377. (J. A. Marlin) **51** #11649 34C10
- (with Graef, John R.) Nonoscillation criteria for differential equations of the second order. *Hiroshima Math. J.* **7** (1977), no. 3, 675-681. (J. S. W. Wong) **57** #780 34C10
- (with Graef, John R.) Asymptotic properties of solutions of functional differential equations of arbitrary order. *J. Math. Anal. Appl.* **60** (1977), no. 2, 339-348. (V. Staikos) **51** #12499 34K15
- (with Graef, John R.) Asymptotic properties of solutions of a second order nonlinear differential equation. *Publ. Math. Debrecen* **24** (1977), no. 1-2, 39-51. (J. S. W. Wong) **56** #12439 34D05
- (with Graef, John R.) Comparison and nonoscillation results for perturbed nonlinear differential equations. *Ann. Mat. Pura Appl.* (4) **116** (1978), 135-142. (Krishna M. Das) **58** #22770 34C10
- (with Graef, John R.) Boundedness and convergence to zero of solutions of a forced second-order nonlinear differential equation. *J. Math. Anal. Appl.* **62** (1978), no. 2, 305-309. (S. Leela) **58** #11638 34C10
- A. M.** (with Golubev, V. A.) Magicke Quadrate aus Primzahlen. *Anz. Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **1972**, no. 5, 118-121. (Heiko Harborth) **52** #8026 09A99
- erg, A. Ja.** (with Ljahovickii, E. M.; Kladov, G. K.) A method of obtaining pseudo-random functions with given characteristics. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 1, 58-60. (G. Tenengol'c (RŽMat **1969** #10 V67)) **51** #1039 62M10
- (with Dravec, V. A.) Round-off errors in fast Walsh transformations. (Russian) *Načn. i Nadežn. Kibernet. Sistem.* No. 3 (1975), 93-96, 158. (See RŽMat **1975** #111091) 65G05
- (with Gerasimenko, R. T.) Synthesis of linear automata filters. (Russian) *Elektronika i Modelirovanie Vyp.* **12** (1976), 40-41, 105. (Authors' summary) **56** #18178 94A30 (94A05, 93E10)
- erg, M. I.** (with Borisovič, Ju. G.) Homomorphisms that generalize the concept of the characteristic of a vector field. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 12* **1977**, no. 1, 3-12. (Alan West) **57** #7578 55C20
- man, Seymour** (with Singer, Burton) Trace inequalities for mixtures of Markov chains. *Advances in Appl. Probability* **9** (1977), no. 4, 747-764. (Richard Madsen)
- 57** #1655 60J10 (60J20)
- Špilevskis, E.** (with Rubinstein, Y.) Asymptotic properties of a random search that is to be used for a search for the extremum of a function under conditions of noise. (Russian) Problems of statistical optimization (Proc. Fifth All-Union Sem., Tashkent, 1968). *Voprosy Kibernet. Vyčisl. Mat.* No. 28 (1969), 178-187. (B. Berceanu) **49** #8659 90C15 (65K05)
- Optimal classification of observations of random processes. (Russian. English summary) *Statist. Problemy Upravljenija—Trudy Sem.* No. 1 (1971), 61-75. (Jana Zvárová) **49** #11629 60H10 (62H30)
- Optimal classification of observations in the recognition of random processes. (Russian. Lithuanian and English summaries) *Trudy Akad. Nauk Litov. SSR Ser. B* **1971**, no. 4(67), 151-156. (M. Arató) **46** #6542 (EA **48**) 62H30
- Nonlinear optimal classification of observations in the recognition of random processes. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 3, 129-136 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 3, 466-473. (Rashid Ahmad) **53** #6945 62M99
- Recognition of dynamic systems in noise. *Automat. i Telemekh.* **1974**, no. 12, 60-71 (Russian. English summary); translated as *Automat. Remote Control* **35** (1974), no. 12, part 1, 1927-1936 (1975). (Author's summary) **56** #15063 93E10
- (with Molčanovič, T. F.) Recognition of multidimensional systems against a noisy background. *Automat. i Telemekh.* **1975**, no. 2, 38-45 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 2, part 1, 220-226. (Authors' summary) **56** #15052 93E10
- Bayesian estimates of parameters of Markov processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 6, 112-119. (Editors) **58** #18961 62M05
- Estimation of the parameters and recognition of stochastic processes. *Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the Eighth European Meeting of Statisticians (Tech. Univ. Prague, Prague, 1974), Vol. A, pp. 523-526. Reidel, Dordrecht, 1977.* (S. M. Pandit) **58** #26455 93E10
- Špil'foigel, E. I.** Heights of subordination trees for languages that are defined by categorial grammars. *Naučn.-Tehn. Informacija (2) No. 4* (1973), 28-33; translated as *Automat. Document. and Math. Linguistics* **7** (1973), no. 2, 22-29. (A. Ja. Dikovskii) **50** #1569 68A30
- Špil'ker, G. L.** Partial solution of the variational Lagrange equation. (Russian) *Dokl. Akad. Nauk SSSR* **242** (1978), no. 2, 306-308. (From the text) **58** #25207 70.34 (49B05)
- Spilker, Jürgen** (with Schwarz, Wolfgang) Eine Anwendung des Approximationssatzes von Weierstrass-Stone auf Ramanujan-Summen. *Nieuw Arch. Wisk.* (3) **19** (1971), 198-209. (Henri Joris) **48** #11030 10K20
- Elliptische Fixpunkte symplektischer Matrizen. *Monatsh. Math.* **76** (1972), 339-344. (G. E. Wall) **49** #337 15A60
- (with Schwarz, Wolfgang) Über zahlentheoretische Funktionen, die $f(x+y)=f(x)+f(y)$ erfüllen. *Mitt. Math. Sem. Giessen No. iii* (1974), 80-86. (T. M. Apostol) **51** #8014 10A20
- (with Wolfart, Jürgen) Untergruppen der GL_2 , welche durch homogene lineare Kongruenzen definiert sind. (English summary) *Manuscripta Math.* **14** (1975), 349-378. (J. Lehner) **51** #8283 20H05 (10D05)
- (with Schwarz, Wolfgang) Mean values and Ramanujan expansions of almost even arithmetical functions. *Topics in number theory (Proc. Colloq., Debrecen, 1974), pp. 315-357. Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam, 1976.* (Karl-Heinz Indlekofer) **56** #5480 10K20 (10K35)
- (with Dhombres, Jean G.) Über die Funktionalgleichung $f(f(x) * f(y)) = f(x * y)$. (English summary) *Manuscripta Math.* **18** (1976), no. 4, 371-390. (Wazir Hasan Abdi) **53** #13905 39A15
- de-Spiller, D. A.** See **De-Spiller, D. A.**
- Spillers, William R.** ★ Iterative structural design. With a reprint of "Limits of economy of material in frame-structures" (Philos. Mag. **168** (1904), 589-597) by A. G. M. Michell and an appendix "Geometric optimization" by Lewis Friedland. North-Holland Monographs in Design Theory, No. 1. North-Holland Publishing Co., Amsterdam-Oxford; American Elsevier Publishing Co., Inc., New York, 1975. xxi+187 pp. (Yi-Yuan Yu) **54** #9270 73.49
- Virtual work and the energy norm. *J. Franklin Inst.* **299** (1975), 283-285. (Ian Gladwell) **51** #2427 73.49 (65F35)
- (with Al-Banna, S.) Convergence in iterative design. *Quart. Appl. Math.* **33** (1975/76), 160-164. (Authors' summary) **56** #4854 90C40
- Spillman, Richard J.** (with Su, Stephen Y. H.) Detection of single, stuck-type failures in multivalued combinational networks. *IEEE Trans. Computers* **C-26** (1977), no. 12, 1242-1251. (Authors' summary) **58** #33580 94A20
- de Spinadel, Vera W.** On comparison theorems of differential games. (Spanish) *Rev. Un. Mat. Argentina* **26** (1972/73), 107-114. (C. R. Hadlock) **48** #10535 90D25
- Spindelböck, Klaus** (with Schomblond, Christiane) Propagateurs des champs spinoriels et vectoriels dans l'univers de de Sitter. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **62** (1976), no. 2, 124-134. (John Madore) **53** #15255 83.47
- (with Schomblond, Christiane) Conditions d'unicité pour le propagateur $D^*(x,y)$ du champ scalaire dans l'univers de de Sitter. (English summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **25** (1976/77), no. 1, 67-78. (Z. Janković) **54** #6858 83.47
- Quantification du champ scalaire dans un champ de gravitation extérieur non stationnaire. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **63** (1977), no. 1, 51-68. (H. Rund) **58** #20043 81.53
- (with Schomblond, Christiane; Henneaux, Marc) Invariance relativiste de la théorie des champs sur un espace-temps courbe. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **63** (1977), no. 2, 179-186. (J. Rosen) **57** #15099 81.53 (83.53)
- Spindelböck, Klaus** (with Reich, Ludwig) Algebraisch verzweigte Lösungen einer linearen partiellen Differentialgleichung 2. Ordnung. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **183** (1975), no. 8-10, 423-443. (Manfred W. Kracht) **52** #14576 35C10
- Zahlen der Form $x^2 - Dy^2$ in arithmetischen Folgen. (Italian and English summaries) *Rend. Ist. Mat. Univ. Trieste* **8** (1976), no. 1, 1-13. (H.-J. Kanold) **58** #16491 10A40
- Das Minimalpolynom einer Matrizenfunktion. *Ber. Math.-Statist. Sect. Forsch.*

- Graz No. 82 (1978), Exp. No. 1, 3 pp. (R. A. Melter) 57 #16330 15A18
Der Exponent der einer perspektiven Affinität zugeordneten Matrix. Ber. Math.-Statist. Sekt. Forsch. Graz No. 82 (1978), Exp. No. 2, 3 pp. (R. A. Melter) 57 #16332 15A24 (15A72, 50D05)
- Spindola, Patricia** (with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Salas, Carlos; Tomé, Bertha) Stable Gabriel filters. I. Relative finiteness conditions. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 135-154. (P. Abellanas) 58 #28050a 16-XX
(with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Salas, Carlos; Tomé, Bertha) Stable Gabriel filters. II. Relative semisimplicity conditions. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 155-173. (P. Abellanas) 58 #28050b 16-XX
(with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Salas, Carlos; Tomé, Bertha) Stable Gabriel filters. III. The relative radical of Jacobson, and some examples. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 175-191. (P. Abellanas) 58 #28050c 16-XX
- Spinel, F.** On some theorems of the electrical network theory. *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* 20 (1975), no. 2, 175-183. (I. T. Frisch) 52 #16901 94A20
- Spinelli, Giancarlo** (with Cavalleri, G.) Variational principles to obtain equations of motion for nonlinear gravitational theories. *Lett. Nuovo Cimento* (2) 9 (1974), 325-330. (From the authors' text) 56 #7730 83.49
(with Cavalleri, G.) Second-order nonlinear Lagrangian tensor field theories of gravitation in agreement with recent observations. (Italian and Russian summaries) *Nuovo Cimento B* (11) 21 (1974), 1-26. (S. Deser) 50 #3855 83.53
(with Cavalleri, G.) Second-order approximation of Einstein's gravitational theory in flat space-time. (Italian and Russian summaries) *Nuovo Cimento B* (11) 21 (1974), 27-35. (S. Deser) 50 #3856 83.53
Second order gravitational field theories with Hilbert gauge. (Italian summary) *Meccanica—J. Italian Assoc. Theoret. Appl. Mech.* 10 (1975), no. 1, 32-41. (S. Deser) 51 #7572 83.53
(with Cavalleri, G.) Lagrangian for perfect fluids in special relativity. (Italian and Russian summaries) *Nuovo Cimento B* (11) 25 (1975), 357-366. (H. A. Buchdahl) 53 #10113 83.49
(with Cavalleri, G.) Gravitation field theory in flat space (in the presence of an electromagnetic field) with the most general stress tensor: equivalence with Einstein's theory. *Phys. Rev. D* (3) 12 (1975), no. 8, 2203-2207. (R. F. Bijlajlov) 57 #15206 83.53
- croce-Spinelli, J. F.** See **Croce-Spinelli, J. F.**
- croce-Spinelli, Jean-François** See **Croce-Spinelli, Jean-François**
- Spinetto, Richard** The geometry of solution concepts for n -person cooperative games. *Management Sci.* 20 (1973/74), 1292-1299. (Louis J. Billera) 49 #8674 90D12
- Spingarn, Karl** A comparison of numerical methods for solving optimal control problems. *IEEE Trans. Aerospace and Electron. Systems* AES-7 (1971), 73-78. (H. A. Antosiewicz) 46 #8430 65L10 (49D99)
(with Kalaba, Robert E.) Optimal input system identification for homogeneous and non-homogeneous boundary conditions. *Proceedings of the Eighth Hawaii International Conference (Univ. Hawaii, Honolulu, Hawaii, 1975)*, pp. 230-232. *Western Periodicals Co., North Hollywood, Calif.*, 1975. (R. L. Kashyap) 50 #12353 93B30
(with Kalaba, Robert E.; Zagustin, Elena) On the integral equations method for buckling loads. *Appl. Math. Comput.* 1 (1975), no. 3, 253-261. (Authors' summary) 56 #1914 73.65
(with Kalaba, Robert E.) Optimal input system identification for homogeneous and nonhomogeneous boundary conditions. *J. Optimization Theory Appl.* 16 (1975), no. 5-6, 487-496. (Ivar Gustavsson) 54 #2267 93B30
(with Kalaba, Robert E.) Numerical solution of a nonlinear two-point boundary value problem by an imbedding method. *Nonlinear Anal.* 1 (1976/77), no. 2, 129-133. (From the introduction) 58 #31862 65L10
(with Kalaba, Robert E.; Zagustin, Elena) Imbedding methods for bifurcation problems and post-buckling behavior of nonlinear columns. *Nonlinear systems and applications (Proc. Internat. Conf., Univ. Texas, Arlington, Tex., 1976)*, pp. 173-187. *Academic Press, New York*, 1977. (John M. Ball) 58 #8688 73.47
(with Kalaba, Robert E.) Optimal input system identification for nonlinear dynamic systems. *J. Optimization Theory Appl.* 21 (1977), no. 1, 91-102. (B. Wittenmark) 55 #14321 93C10 (93B30)
(with Kalaba, Robert E.) Post buckling beam configurations via an imbedding method. *Comput. Math. Appl.* 4 (1978), no. 1, 1-10. (A. M. Cohen) 58 #25303 73.65
(with Kalaba, Robert E.) Optimization of functionals subject to integral constraints. *J. Optim. Theory Appl.* 24 (1978), no. 2, 325-335. (Edward J. Haug, Jr.) 58 #12611 49B35 (65K05)
(with Kalaba, Robert E.) On the numerical determination of optimal inputs. *J. Optim. Theory Appl.* 25 (1978), no. 2, 219-227. (R. Leonard Brown) 58 #9603 93C99 (65K05)
- Spinelli, G.** (with Cavalleri, G.) Hint for a deduction of the first principle of thermodynamics from microphysics. (Italian and Russian summaries) *Nuovo Cimento B* (11) 41 (1977), no. 1, 13-28. (N. D. Sengupta) 57 #2213 80.00
- de Spinoza, Benedictus** See **Spinoza in modern dress**, 56 #15350
- Spinu, E. I.** (with Ivahnenko, O. G.; Dimitrov, V. D.; Patereu, S. G.; Patrău, I. Z.) Multilayer statistical decision theory. *Aviomatica* 1971, no. 1, 51-64. (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 4 (1971), no. 1, 37-47. (D. V. Lindley) 49 #1636 62C99
- Spira, Philip M.** Complete linear proofs of systems of linear inequalities. *J. Comput. System Sci.* 6 (1972), 205-216. (A. Ben-Israel) 47 #4632 90C05
(with Pan, A.) On finding and updating shortest paths and spanning trees. 14th Annual IEEE Symposium on Switching and Automata Theory (Univ. Iowa, Iowa City, Iowa, 1973), pp. 82-84. *IEEE Comput. Soc., Northridge, Calif.*, 1973. (Nicos Christofides) 56 #7322 68A20 (90B10)
A new algorithm for finding all shortest paths in a graph of positive arcs in average time $O(n^2 \log n)$. *SIAM J. Comput.* 2 (1973), 28-32. (I. T. Frisch) 49 #50 05-04
(with Pan, A.) On finding and updating spanning trees and shortest paths. *SIAM J. Comput.* 4 (1975), no. 3, 375-380. (Armen Gabrielian) 51 #14634 68A10
(with Munro, J. Ian) Sorting and searching in multisets. *SIAM J. Comput.* 5 (1976), no. 1, 1-8. (Claus-Peter Schnorr) 52 #16118 68A20
- Spira, Robert S.** Calculation of the gamma function by Stirling's formula. *Math. Comp.* (1971), 317-322. (Author's summary) 45 #4605 65D20
The lowest zero of sections of the zeta function. *J. Reine Angew. Math.* 255 (1970), 170-189. (E. Grosswald) 45 #6776 10H05
Erratum: *Tables of the higher mathematical functions*. Vol. I. *Math. Comp.* 26 (1971), 813-814. (Editors) 47 #7887 65A05
Abstract Möbius inversion. *Math. Mag.* 45 (1972), 220-223. (T. Šalát) 47 #3206A10
Zeros of $\zeta'(s)$ in the critical strip. *Proc. Amer. Math. Soc.* 35 (1972), 59-60. (Apostol) 45 #5096 10H05
Zeros of $\zeta'(s)$ and the Riemann hypothesis. *Illinois J. Math.* 17 (1973), 147-150. (Paul Hartung) 46 #8986 10H05
Calculation of the Ramanujan τ -Dirichlet series. *Math. Comp.* 27 (1973), 379-380. (Author's summary) 48 #5337 65D20
(with Huston, Gail S.) Table errata: "On the syllogism (IV) and on the logical relations" (Trans. Cambridge Philos. Soc. 10 (1864), 331-358), by A. De Morgan. *Math. Comp.* 28 (1974), 341. (Editors) 55 #5571 12-04 (65H05)
(with Scheeline, Alexander) Table errata: "A cotangent analogue of continued fractions" (Duke Math. J. 4 (1938), 323-340) by D. H. Lehmer. *Math. Comp.* 28 (1974), 677. (Editors) 49 #10627 10-04 (10A30)
Zeros of Hurwitz zeta functions. *Math. Comp.* 30 (1976), no. 136, 863-866. (Suryanarayana) 53 #13137 10H10
See also **Computers in number theory**, 47 #3285
- Spirason, G. T.** (with Strzelecki, E.) A note on P_i -ideals. *J. Austral. Math. Soc.* 14 (1972), 304-310. (S. J. Bernau) 47 #3944 46A40 (06A65)
- Spircu, Liliana** Distribution of optimum in stochastic linear programming. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* 1977, no. 4, 8-11. (A. C. Williams) 58 #9154 90A15
- Spircu, Tiberiu** (with Gheorghe, Florin-Christian) The theorem on extension of a probability follows from the theorem on metric completion. (Romanian) *Gaz. Mat. A* 79 (1974), 58-64. (A. Spătaru) 58 #17023 28A10 (60A10)
The strongly regular radical of a ring. (Romanian. French summary) *Stud. Mat.* 26 (1974), 751-754. (G. Krause) 50 #7232 16A21
(with Popescu, Nicolae) Examples of semi-Artinian rings. (Romanian. French summary) *Stud. Cerc. Mat.* 26 (1974), 1153-1157. (G. Krause) 50 #7251 16A21
(with Popescu, Nicolae) Permanence theorems for semi-Artinian rings. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 2, 227-231. (Steve Ligh) 53 #816A46
- Spiridonov, V. D.** (with Maslov, E. P.) Inspection and control of Markov processes. (Russian) *Avtomat. i Vyčisl. Tehn.* 1969, no. 3, 65-73. (From the authors' introduction) 45 #9775 93E20
- Spiridonov, Veselin Stefanov** (with Germanov, Milčo) A certain relaxation method for solution of systems of nonlinear inequalities. (Bulgarian. Russian and English summaries) *B'lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* 10 (1973), 113-128. (H. Weber) 45 #6447 90C25
★Изследване на операциите. (Bulgarian) [Operations research] *Modern Mathematics Series 4. Izdat. Nauka i Izkustvo, Sofia*, 1973. 192 pp. (K. Zimmermann) 49 #12058 90Bxx
- Spiridonova, G. V.** (with Zlotnik, S. G.) An application of the method of Lagrange multipliers to the problem of finding a global minimum in a certain multiextremal problem of distribution of resources. (Russian) *Theory of optimal solutions (Proc. Kiev, 1969)*, No. 1 (Russian), pp. 72-92. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (I. Petrov) 46 #4920 90B05
(with Zlotnik, S. G.; Gamburd, P. R.; Kordon, L. M.) ★Алгоритмы оптимального распределения активных мощностей в тепловой энергосистеме. (Russian) [Algorithms for the optimal active power distribution in a thermal energy system] Reports of a Seminar on Cybernetics, No. 58. *Izdat. "Štiinca", Kishinev*, 39 pp. (P. Vondráček) 48 #10117 65K05
(with Gamburd, P. R.; Zlotnik, S. G.) An algorithm for the optimization of regime of a thermal energy system. (Russian) *Prikl. Mat. i Programirovanie N* (1973), 29-40, 149. (V. V. Ivanov) 48 #10107 65K05
(with Čalýi, G. V.; Zlotnik, S. G.; Lazebnik, A. I.) Methods for optimizing routine of power systems, based on the simplex procedure. (Russian) *Bul. Akad. Št. RSS Moldovei*. 1974, no. 2, 70-79, 95. (K. Zimmermann) 51 #5008 90C25 (90Bxx)
(with Čalýi, G. V.; Zlotnik, S. G.; Lazebnik, A. I.) Algorithms for optimizing power systems schedules based on the simplex method. *Kybernetes* 3 (1974), 161-172. (Editors) 52 #12783 90C25 (90B99)
- Spirkin, A. G.** See **Cybernetics—in the service of Communism**, 48 #10432
- Spirkov, V. L.** (with Vasil'kovskii, S. N.; Ljatifov, V. U.) A comparison of the element method with the finite difference method based on the example of the solution of plane static problems of elasticity theory. (Russian) *Čisl. Metody Meh. Splošn.* 8 (1977), no. 1 *Mat. Modelirovanie*, 20-28. 56 #14022 73.65
- Spira, Jeffrey R.** Multi-queue scheduling of two tasks. Papers presented at the International Symposium on Computer Performance Modeling, Measurement and Evaluation (Harvard Univ., Cambridge, Mass., 1976). *Acta Informat.* 7 (1976), 217-226. (Author's summary) 58 #15122 90B35
★Program behavior: models and measurements. Elsevier Computer Science Library: Operating and Programming Systems Series. Elsevier, New York-Oxford-Amsterdam, 1977. x+277 pp. ISBN 0-444-00219-7 ISBN 0-444-00219-7 (Zbl 381 #68014) 68A05
- Spiro, A. G.** See **Optimization, Operations research, Bionics**, 48 #1846
- Spisak, Antonina** On the existence of aperiodic solutions for a system of delay differential equations. *Zeszyty Nauk. Univ. Jagiello. Prace Mat.* No. 16 (1974), 207-215. (M. Marusiak) 50 #5137 34K05
- Spisani, Franco** Fondamenti di logica produttiva. Logica produttiva e logica formale. *Internat. Logic Rev.* No. 1 (1970), 5-12. (Editors) 46 #1564a 02C99

- Principles of productive logic. Productive logic and formal logic. *Internat. Logic Rev. No. 1* (1970), 13-20. (Editors) **46** #1564b 02C99
- Fondements de logique productive. Logique productive et logique formelle. *Internat. Logic Rev. No. 1* (1970), 21-28. (Editors) **46** #1564c 02C99
- Grundlagen der produktiven Logik. Produktivlogik und Formallogik. *Internat. Logic Rev. No. 1* (1970), 29-37. (Editors) **46** #1564d 02C99
- Fondamenti di logica produttiva. La differenza dell'identico e le logiche grammatiche. *Internat. Logic Rev. No. 2* (1970), 118-126. (Editors) **46** #1565a 02C99
- Foundations of productive logic. *Internat. Logic Rev. No. 2* (1970), 127-136. (Editors) **46** #1565b 02C99
- Fondamenti di logica produttiva. Autosintesi delle strutture operative. *Internat. Logic Rev. No. 3* (1971), 4-10. (Editors) **46** #1566a 02C99
- Foundations of productive logic. Autosynthesis of operational structures. *Internat. Logic Rev. No. 3* (1971), 11-17. (Editors) **46** #1566b 02C99
- Fondamenti di logica produttiva. Annibale alle porte. *Internat. Logic Rev. No. 4* (1971), 120-134. (Editors) **46** #1567a (E **49** #10529a) 02C99
- Foundations of productive logic. Annibale [Hannibal] at the gates. *Internat. Logic Rev. No. 4* (1971), 135-149. (Editors) **46** #1567b (E **49** #10529b) 02C99
- Fondamenti di logica produttiva. *Internat. Logic Rev. No. 5* (1972), 4-20; errata, *ibid.* **50** #6778a 02A05 (02C10)
- Foundations of productive logic. *Internat. Logic Rev. No. 5* (1972), 21-37; errata, *ibid.* **50** #6778b 02A05 (02C10)
- Errata: "Fondamenti di logica produttiva" (*Internat. Logic Rev. No. 4* (1971), 10-134). *Internat. Logic Rev. No. 5* (1972), 128. (Editors) **49** #10529a 02C10
- Errata: "Foundations of productive logic" (*Internat. Logic Rev. No. 4* (1971), 135-149). *Internat. Logic Rev. No. 5* (1972), 128. (Editors) **49** #10529b 02C10
- Lineamenti di logica produttiva. *Internat. Logic Rev. No. 6* (1972), 142-161. (Editors) **50** #6779a 02A05 (02C10)
- Outline of productive logic. *Internat. Logic Rev. No. 6* (1972), 162-181. (Editors) **50** #6779b 02A05 (02C10)
- Lineamenti di logica produttiva. I, II. *Internat. Logic Rev. No. 7* (1973), 4-15; *ibid.* **50** #6779c 02C10 (02A05)
- Outline of productive logic. I, II. *Internat. Logic Rev. No. 7* (1973), 16-28; *ibid.* **50** #6779d 02C10 (02A05)
- Lineamenti di logica produttiva. *Internat. Logic Rev. No. 9* (1974), 5-22. (Not reviewed) 02C10 (02A05)
- Outlines of productive logic. *Internat. Logic Rev. No. 9* (1974), 23-40. (Not reviewed) 02C10 (02A05)
- Lineamenti di logica produttiva. *Internat. Logic Rev. No. 12* (1975), 133-138. (See **51** #02008) 02C10 (02A05)
- Outlines of productive logic. *Internat. Logic Rev. No. 12* (1975), 139-144. (See **51** #02008) 02C10 (02A05)
- Lineamenti di logica produttiva. *Internat. Logic Rev. No. 13* (1976), 3-12. (Not reviewed) 02C10 (02A05)
- Outlines of productive logic. *Internat. Logic Rev. No. 13* (1976), 13-22. (Not reviewed) 02C10 (02A05)
- Lineamenti di logica produttiva. *Internat. Logic Rev. No. 14* (1976), 131-132. (Not reviewed) 02C10 (02A05)
- Outlines of productive logic. *Internat. Logic Rev. No. 14* (1976), 133-134. (Not reviewed) 02A05
- See also **Toms, Eric**, (Not reviewed)
- eri, Rosa Maria** Su una classe di equazioni differenziali lineari omogenee nel campo analitico. *Pubblicazioni dell'Istituto di Matematica Applicata*, No. 135, *Quaderno No. 5*, pp. 19-29. *Ist. Mat. Appl., Fac. Ingegneria, Univ. degli Stud. Roma*, Rome, 1974. (M. Tavec) **53** #5971 34A20
- l, Pierre** Critère de stabilité ou d'instabilité au sens de Liapounov pour une classe de grands systèmes différentiels se décomposant en sous-systèmes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 12, A483-A486. (D. Schmidt) **2** #6124 34D20
- (with Comte, Pierre; Miellou, Jean-Claude) La notion de H -accrétivité, applications. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 8, A456-A458. (M. Z. Nashed) **54** #11764 65J05 (47H05)
- ovs'kii, I. M.** The reconstruction of a unitary operator from two of its diagonal blocks. (Russian) *Mat. Issled.* **8** (1973), no. 4(30), 187-193, 199. (D. A. Herrero) **50** #2997 78B99
- Stability of the partial indices of the Riemann boundary value problem with a strictly nondegenerate matrix. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1974), 46-49. (S. A. Tersenov) **52** #767 30A88
- (with Nikolaïčuk, A. M.) The Riemann boundary value problem with a Hermitian matrix. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 6, 1280-1283. (N. K. Karapetjanc) **53** #8444 30A88
- (with Nikolaïčuk, A. M.) Factorization of Hermitian matrix-valued functions, and its applications to boundary value problems. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 6, 667-779, 861. (N. K. Karapetjanc) **53** #13591 30A88
- The problem of the factorization of measurable matrix-valued functions. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 3, 576-579. (A. Devinatz) **54** #1007 47B37 (5A15)
- The partial indices of continuous matrix-valued functions. (Russian) *Dokl. Akad. Nauk SSSR* **229** (1976), no. 5, 1059-1062. (F. Smithies) **55** #13278 47B35 (47G05)
- The multipliers that do not influence factorizability. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 6, 1300-1303. (R. V. Dudučava) **55** #6232 47B35 (47G05)
- (with Krein, M. G.) The factorization of matrix-valued functions on the unit circle. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 2, 287-290. (J. Bognár) **56** #1118 47B37
- The factorization of matrix-valued functions whose Hausdorff set lies inside an angle. (Russian. Georgian and English summaries) *Sakharth. SSR Mecl. Akad. Moambe* **86** (1977), no. 3, 561-564. (S. G. Samko) **57** #6456 30A88 (45E05, 47B35)
- On the question of the factorability of measurable matrix-valued functions. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1978), no. 3, 541-544. (R. V. Dudučava) **58** #12489 47B35 (30A96)
- Spitzen, Jay M.** (with Wegbreit, Ben) Proving properties of complex data structures. *J. Assoc. Comput. Mach.* **23** (1976), no. 2, 389-396. (Richard A. DeMillo) **56** #1785 68A05
- Spitzer, Frank L.** ★ Random fields and interacting particle systems. Notes on lectures given at the 1971 MAA Summer Seminar, Williams College, Williamstown, Mass. *Mathematical Association of America, Washington, D.C.*, 1971. i + 126 pp. (not consecutively paged) (Donald A. Dawson) **52** #1938 60K35
- A variational characterization of finite Markov chains. *Ann. Math. Statist.* **43** (1972), 303-307. (B. Kronfeld) **45** #9392 60J10
- Introduction aux processus de Markov à paramètre dans Z_r . *École d'Été de Probabilités de Saint-Flour, III-1973*, pp. 114-189. *Lecture Notes in Math.*, Vol. 390, Springer, Berlin, 1974. (Hans-Otto Georgii) **55** #9335 60K35
- Recurrent random walk of an infinite particle system. *Trans. Amer. Math. Soc.* **198** (1974), 191-199. (T. M. Liggett) **51** #11724 60K35
- Random time evolution of infinite particle systems. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 2, pp. 169-171. *Canad. Math. Congress, Montreal, Que.*, 1975. (Editors) **54** #3887 60K35
- Random time evolution of infinite particle systems. *Advances in Math.* **16** (1975), 139-143. (T. M. Liggett) **51** #2028 60K35
- (with Kesten, Harry) Controlled Markov chains. *Ann. Probability* **3** (1975), 32-40. (François Brodeau) **50** #16054 93E20
- Markov random fields on an infinite tree. *Ann. Probability* **3** (1975), no. 3, 387-398. (T. M. Liggett) **51** #14321 60K35
- (with Kesten, Harry; Kozlov, M. V.) A limit law for random walk in a random environment. *Compositio Math.* **30** (1975), 145-168. (K. B. Erickson) **52** #1895 60J15 (60F05, 60J80)
- Phase transition in one-dimensional nearest-neighbor systems. *J. Functional Analysis* **20** (1975), no. 3, 240-255. (Richard Holley) **52** #9419 60K35
- ★ Principles of random walks. Second edition. Graduate Texts in Mathematics, Vol. 34. Springer-Verlag, New York-Heidelberg, 1976. xiii + 408 pp. (Editors) **52** #9383 60J15
- Random time evolution of infinite particle systems. *Surveys in applied mathematics (Proc. First Los Alamos Sympos. Math. in Natural Sci., Los Alamos, N.M., 1974)*, pp. 123-127. Academic Press, New York, 1976. (Editors) **58** #31470 60K35
- (with Wan, Henry, Jr.) The characterization of optimal saving programs in a quadratic model. *J. Math. Econom.* **3** (1976), no. 1, 43-79. (Mukul Majumdar) **53** #4932 90A15
- Stochastic time evolution of one dimensional infinite particle systems. *Bull. Amer. Math. Soc.* **83** (1977), no. 5, 880-890. (T. M. Liggett) **56** #6938 60K35 (60J25)
- See also **Kingman, J. F. C.**, **50** #8663
- Spitzer, John J.** A numerically stable and efficient technique for the maintenance of positive definiteness in the Hessian for Newton-type methods. *J. Comput. Appl. Math.* **3** (1977), no. 2, 105-108. (Author's summary) **58** #13720 65K05
- Spitzlay, Karl-Josef** (with Becker, Eberhard) Zum Satz von Artin-Schreier über die Eindeutigkeit des reellen Abschlusses eines angeordneten Körpers. *Comment. Math. Helv.* **50** (1975), 81-87. (Witold Więśław) **51** #3128 12D15
- Spitznagel, C.** The lattice of congruences on a band of groups. *Glasgow Math. J.* **14** (1973), 187-197. (G. J. Lallement) **48** #8669 20M10 (06A20)
- θ -modular bands of groups. *Trans. Amer. Math. Soc.* **177** (1973), 469-482. (G. J. Lallement) **47** #6912 20M10
- Spitznagel, Edward L., Jr.** Properties of a game based on Euclid's algorithm. *Math. Mag.* **46** (1973), 87-92. (R. Güting) **47** #10087 90D20
- See also **Influence of computing on mathematical research and education**, **49** #7058
- Spivak, Avia** A note on Arrow-Hahn's resource-relatedness (or McKenzie's irreducibility). *Internat. Econom. Rev.* **19** (1978), no. 2, 527-531. (J. A. Rickard) **58** #4248 90A15
- Spivak, M. A.** On the problem of completeness in a class of Moore automata. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 3, 95-96. (RŽMat **1969** #3 V255) **45** #8452 94A30
- On a certain note of A. C. Fleck. (Russian) *Kibernetika (Kiev)* **1969**, no. 2, 97-98. (G. Blohina (RŽMat **1969** #9 V227)) **47** #1562 94A30
- On the synthesis of a finite automaton in terms of its set of experiments. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 5, 15-20. (RŽKibernet **1970** #4 G206) **46** #1515 94A30
- ★ Введение в абстрактную теорию автоматов. (Russian) [Introduction to abstract automata theory] *Izdat. Saratov. Univ., Saratov*, 1970. 108 pp. (W. Wechler) **49** #12207 94A30
- Multiple experiments with automata. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1970**, no. 5, 85-90. (Russian); translated as *Engrg. Cybernetics* **8** (1970), no. 5, 902-907. (N. N. Necula) **46** #3245 94A30
- On the formalization of the concept of automaton experimentation. (Russian. English summary insert) *Kibernetika (Kiev)* **1970**, no. 4, 14-18. (R. N. Goss) **45** #4910 94A30
- Conditions for diagnosis of automata. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 2, 102-108. (Russian); translated as *Engrg. Cybernetics* **10** (1972), no. 2, 263-268. (Pavel Strnad) **48** #10717 94A30
- A set-theoretic theorem, and its applications. (Russian) *Automata*, No. 1 (Russian), pp. 3-7, 106. *Izdat. Saratov. Univ., Saratov*, 1974. (Jiří Adámek) **57** #15779 94A25
- (with Černý, D. E.) On the minimization of the number of states of a partial automaton. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 5, 16-23. (Authors' summary) **58** #4720 94A30
- Lower bounds for the length of the shortest synchronizing and shortest compressing word. (Russian) *Automata*, No. 2 (Russian), pp. 3-13, 59. *Saratov. Univ., Saratov*, 1977. (From the text) **58** #32086 68A25 (94A30)
- See also **Automata**, **54** #9826 and **Automata**, **58** #20918
- Spivak, Michael** ★ A comprehensive introduction to differential geometry. Vol. III. Publish or Perish, Inc., Boston, Mass., 1975. ix + 474 pp. (N. J. Hicks) **51** #8962 53-02
- ★ A comprehensive introduction to differential geometry. Vol. IV. Publish or Perish, Inc., Boston, Mass., 1975. v + 561 pp. (N. J. Hicks) **52** #15254a 53-02

- ★A comprehensive introduction to differential geometry. Vol. V. *Publish or Perish, Inc., Boston, Mass.*, 1975. v + 661 pp. (N. J. Hicks) **52** #15254b 53-02
- Some left-over problems from classical differential geometry. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Part 1, Stanford Univ., Stanford, Calif., 1973)*, pp. 245-252. *Amer. Math. Soc., Providence, R.I.*, 1975. (Leo Boček) **54** #8530 53C40
- ★Analiza na rozmaitościach. (Polish) [Calculus of manifolds] Nowoczesne podejście do klasycznych twierdzeń zaawansowanej analizy. [A modern approach to classical theorems of advanced calculus] Translated from the English by Barbara Gabrys and Andrzej Solecki. *Państwowe Wydawnictwo Naukowe, Warsaw*, 1977. 154 pp. (Editors) **56** #3202 26-01
- Spivak, V. A.** (with Efimov, V. M.) Indeterminacy and probability. (Russian) *Ėkonom. i Mat. Metody* **8** (1972), 726-739. (From the authors' introduction) **46** #4910 90A15
- (with Verhovskii, B. S.) Optimal allocation and controllable random processes. (Russian) *Ėkonom. i Mat. Metody* **8** (1972), 966-972. (R. Salia) **57** #11721 90B99 (90C40)
- Spivakov, Ju. L.** Algebraic extensions of the field of formal power series $F_D((t))$. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1974**, no. 6, 15-21, 78. (Witold Węstaw) **52** #5639 12L10
- Proof of the fundamental theorem of local class field theory for the broader class $\kappa_D((t))$. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 2, 28-33. (J. Browkin) **52** #5630 12B25
- Spivakovskii, V. B.** A method of integrating nonlinear differential equations in impact problems. (Russian) *Differential equations and their applications (Russian)*, pp. 181-191, 219. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1976. (Author's summary) **58** #28746 34A05
- A method of integrating nonlinear differential equations in impact problems. (Russian) *Differential equations and their applications (Russian)*, pp. 181-186, 219. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1976. (Author's summary) **58** #30591 49A10 (34A99, 73.35)
- Spivey, W. Allen** (with Thrall, Robert M.) ★Linear optimization. *Holt, Rinehart and Winston, Inc., New York-Montreal, Que.-London*, 1970. xii + 530 pp. (M. Mañás) **52** #4940 90-01
- (with Wroblewski, William J.) Analyzing and forecasting time series. *Proceedings of the Annual Meeting of the American Statistical Association, Business and Economic Statistics Section (St. Louis, Mo., 1974)*, pp. 92-101. *Amer. Statist. Assoc., Washington, D.C.*, 1975. (Benjamin Kedem-Kimelfeld) **51** #9770 90A20 (62M20)
- (with Ansley, Craig F.; Wroblewski, William J.) On the structure of moving average processes. *J. Econometrics* **6** (1977), no. 1, 121-134. (E. J. Hannan) **56** #16961 62M10
- Spiz, G. B.** Certain properties of division algebras. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 6(186), 166. (I. L. Kantor) **53** #9210 55F25 (17C50)
- (with Litvinov, G. L.) Primary decompositions of finite-dimensional representations of Lie algebras and groups. (Russian) *Funkcional. Anal. i Priložen.* **12** (1978), no. 2, 86-87. (A. M. Gavrilik) **58** #28093 17B10 (20G05, 22E45)
- See also *Studies in the theory of functions of several real variables*, **58** #16998
- Spizzichino, Fabio** Relazioni fra le funzioni di distribuzione con uguale funzione di concentrazione. (English summary) *Rend. Mat.* (6) **7** (1974), 75-84. (G. Simboan) **51** #4347 60E05
- Spjotvoll, Emil** On the optimality of some multiple comparison procedures. *Ann. Math. Statist.* **43** (1972), 398-411. (C. H. Kraft) **46** #1026 62J15
- Multiple comparison of regression functions. *Ann. Math. Statist.* **43** (1972), 1076-1088. (E. J. Williams) **47** #1210 62J05
- Joint confidence intervals for all linear functions of means in the one-way layout with unknown group variances. *Biometrika* **59** (1972), 683-685. (M. Atiqullah) **49** #8232 62J10
- Unbiasedness of likelihood ratio confidence sets in cases without nuisance parameters. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 268-273. (D. A. Sprott) **50** #11611 62F25
- A note on a theorem of Forsythe and Golub. *SIAM J. Appl. Math.* **23** (1972), 307-311. (V. Ganapathy Iyer) **47** #5031 15A63
- (with Stoline, Michael R.) An extension of the *T*-method of multiple comparison to include the cases with unequal sample sizes. *J. Amer. Statist. Assoc.* **68** (1973), 975-978. (Jagbir Singh) **53** #1870 62J15
- (with Holme, Ingar; Tveter, Jens O.) Likelihood ratio confidence bands for a normal distribution function. *Scand. J. Statist.* **1** (1974), no. 2, 87-92. (S. John) **51** #11792 62F25
- Multiple testing in the analysis of variance. *Scand. J. Statist.* **1** (1974), no. 3, 97-114. (Federico O'Reilly) **51** #14448 62J10
- (with Volden, Rolf) On the choice of significance level in linear regression. *Scand. J. Statist.* **3** (1976), no. 1, 28-32. (H. Toutenburg) **53** #6908 62J05
- Ordering ordered parameters. *Biometrika* **64** (1977), no. 2, 327-334. (Jeffrey A. Robinson) **58** #8054 62J15
- Random coefficients regression models. A review. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Statist.* **8** (1977), no. 1, 69-93. (R. Pfaffenberger) **58** #31617 62J05
- See also *Bickel, Peter J.*, **55** #1610
- Spletstösser, Wolfgang** (with Butzer, Paul L.) A sampling theorem for duration-limited functions with error estimates. *Information and Control* **34** (1977), no. 1, 55-65. (Shunsuke Ihara) **56** #2649 94A15
- Some extensions of the sampling theorem. *Linear spaces and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977)*, pp. 615-628. *Internat. Ser. Numer. Math.*, Vol. 40, Birkhäuser, Basel, 1978. (M. C. Cheng) **58** #20821 94A15
- Špíchal, Josef** (with Knotek, Miroslav) On the unattained eightieth birthday of Jaroslav Janko. (Czech) *Ėkonom.-Mat. Obzor* **10** (1974), 221-222. (Editors) **49** #8801 01A70
- Spoar, Gary** (with Lane, Norman D.) On singular points of normal arcs of cyclic order four. *Canad. Math. Bull.* **17** (1974), no. 3, 391-396; correction, *ibid.* **17** (1974), no. 4, 623. (P. Scherk) **52** #1593 53C75
- Differentiability conditions and bounds on singular points. *Pacific J. Math.* **61** (1975), no. 1, 289-294. (P. Scherk) **53** #3968 53C75
- Spoerel, Detlef** Projektive geordnete Moduln und *n*-fache Erweiterungen geordneter Moduln. *Collect. Math.* **22** (1971), 105-116. (Z. Papp) **46** #9118 16A62 (06A06)
- A remark on Ribenboim's paper "On the extension of orders in ordered modular lattices". *Bull. Austral. Math. Soc.* **6** (1972), 251-253. (K. A. Baker) **45** #3282 06A70
- Spoglianti, Maria** See Beckenbach, Edwin F.; et al., **50** #2399
- Spohn, Herbert** Spectral properties of Liouville operators and their physical interpretation. *Phys. A* **80** (1975), no. 4, 323-338. (Etang Chen) **52** #16442 82.47
- Relaxing properties of Hamiltonian systems. *Rep. Mathematical Phys.* **8** (1975), no. 3, 363-371. (Ju. M. Suhov) **54** #10569 28A65 (82.28, 58F15)
- Quantum measurement theory including initial correlations and observables of continuous spectra. *Internat. J. Theoret. Phys.* **15** (1976), no. 5, 365-375. (S. Ghosh) **55** #1970 81.46
- The spectrum of the Liouville-von Neumann operator. *J. Mathematical Physics* (1976), no. 1, 57-60. (Ernst Albrecht) **53** #4826 (E **54** #6780) 81.47
- Relaxation of finite, closed systems. *Rep. Mathematical Phys.* **10** (1976), no. 3, 283-296. (Dorte Olesen) **57** #7200 46L10
- (with Lebowitz, Joel L.) Stationary non-equilibrium states of infinite harmonic systems. *Comm. Math. Phys.* **54** (1977), no. 2, 97-120. (Authors' summary) **58** #82.60
- Erratum: "The spectrum of the Liouville-von Neumann operator" (*J. Mathematical Physics* **17** (1976), no. 1, 57-60). *J. Mathematical Physics* **18** (1977), no. 1, 188. (Ernst Albrecht) **54** #6780 81.47
- Derivation of the transport equation for electrons moving through random impurities. *J. Statist. Phys.* **17** (1977), no. 6, 385-412. (Author's summary) **57** #82.47
- An algebraic condition for the approach to equilibrium of an open *N*-level system. *Lett. Math. Phys.* **2** (1977/78), no. 1, 33-38. (Author's summary) **57** #11503
- The Lorentz process converges to a random flight process. *Comm. Math. Phys.* (1978), no. 3, 277-290. (Burton H. Voorhees) **58** #14861 82.60
- Entropy production for quantum dynamical semigroups. *J. Mathematical Physics* (1978), no. 5, 1227-1230. (D. A. Dubin) **57** #15140 82.47 (47D05)
- Spohn, William G., Jr.** On Conway's conjecture for integer sets. *Canad. Math. Bull.* (1971), 461-462. (A. Peluso) **46** #8965 10A40
- Ist die Mathematik noch zu retten? Translated from the English original of Laugwitz. *Überblicke Mathematik, Band 4*, pp. 25-37. *Bibliographisches Inst., Mannheim*, 1972. (Editors) **49** #7066 00A25
- On the integral cuboid. *Amer. Math. Monthly* **79** (1972), 57-59. (J. H. H. Oosterloo) **46** #7158 10B05
- On the derived cuboid. *Canad. Math. Bull.* **17** (1974), no. 4, 575-577. (E. L. Codd) **51** #12693 10B05
- Letter to the editor: "Incredible identities" (*Fibonacci Quart.* **12** (1974), 271, 272). Daniel Shanks. *Fibonacci Quart.* **14** (1976), no. 1, 12. (Editors) **52** #5617 (10A30, 10B10)
- Spohn, Wolfgang** An analysis of Hansson's dyadic deontic logic. *J. Philos. Logic* **4** (1975), no. 2, 237-252. (I. Ruzsa) **57** #2885 02C10
- Spokoinev, A. N.** Necessary and sufficient conditions for the positivity of the elements of the fundamental matrix of a system of linear differential equations. (Russian) *Vysok. Shk. Ser. Fiz.-Mat. Nauk* **1973**, no. 5, 135-137. (M. Bertelino) **57** #13011 34C10
- Spoletini Cherubini, Alessandra** I sottogruppi standard di un gruppo. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **107** (1973), 357-366. (F. Napolitani) **50** #20F30
- Sui sottogruppi ammissibili standard di un gruppo con operatori. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **108** (1974), 607-622. (F. Napolitani) **52** #20F30
- Sui gruppi in cui ogni elemento ha un numero finito di immagini per automorfismi. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 2, 185-190. (John F. Bowers) **54** #5353 20E99
- Gli FA-gruppi abeliani periodici. (English summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **110** (1976), no. 5-6, 313-318. (F. Haimo) **56** #500 20K30
- (with Varisco, Ada) Sui semigruppri fortemente reversibili archimedei. (English summary) *Istit. Lombardo Accad. Sci. Lett. Rend. A* **110** (1976), no. 2, 313-321. (F. Šik) **58** #11182 20M10
- (with Varisco, Ada) Sui semigruppri fortemente reversibili separativi. (English summary) *Istit. Lombardo Accad. Sci. Lett. Rend. A* **111** (1977), no. 1, 31-43. (F. Napolitani) **59** #22360 20M10
- (with Varisco, Ada) On strongly reversible semigroups. *Semigroup Forum* **15** (1977/78), no. 3, 281-282. (J. L. Chrislock) **57** #9885 20M10
- Špol'skii, Ė. V.** Recollections of S. I. Vavilov. Sketches for a portrait of S. I. Vavilov. *Uspehi Fiz. Nauk* **117** (1975), no. 1, 159-165. (Russian); translated as *Soviet Physics Uspekhi* **18** (1975), no. 9, 732-736. (Editors) **58** #21332o 01A70
- Spooner, David L.** (with Miller, Webb) Automatic generation of floating-point test programs. *IEEE Trans. Software Engrg. SE-2* (1976), no. 3, 222-228. (George Marsaglia) **55** #1787 68A05
- Športjuk, G. A.** (with Kurpel', M. S.) A certain nonstationary projection-iteration method. (Russian) *Approximate and qualitative methods of the theory of differential and integral equations (Russian)*, pp. 73-84. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, (B. Jankó) **51** #14571 65J05 (47H15)
- (with Kurpel', M. S.) A certain projection-iteration method for an eigenvalue problem. (Russian) *Approximate and qualitative methods of the theory of differential and integral equations (Russian)*, pp. 85-92. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (B. V. Loginov) **50** #10870 47A50 (65J05)
- An application of a certain two-sided method to the eigenvalue problem. (Russian) *Methods of approximate solution of differential and integral equations (Russian)*, pp. 349-361. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) **58** #31617 65J05 (47H15)
- (with Kurpel', M. S.) The two-sided method for solving operator equations. (Russian. English summary) *Nonlinear boundary value problems of mathematical physics (Russian)*, pp. 255-263. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (B. Jankó) **51** #1512 47H15 (65J05)

- (with Kurlpel, M. S.) The approximate computation of the eigenvalues and eigenvectors of operators of Hilbert-Schmidt type. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1973**, 24-27, 92. (S. Fučík) #5675 47H15 (65J05)
- Two-sided approximations to the eigenvalues and eigenvectors of nonlinear operators. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 126-135, 144. (H. Schwetlick) #3989 47H15 (65J05)
- uk, Z. M.** A certain optimal control problem with constraints on the phase coordinates. (Russian) *Approximate and qualitative methods of the theory of differential and integral equations (Russian)*, pp. 295-299. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (Russell D. Rupp) **51** #6523 49A10
- (with Beiko, I. V.) On the solution of a problem of evasion. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 397-400. (O. Hájek) **45** #8292 90D25
- The solution of the problem of avoiding contact in a linear differential game. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 521-527, 574. (L. A. Petrosjan) **46** #10429 D25
- (with Beiko, I. V.) The solution of a certain class of deviation problems. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 683-687, 717. (J. Jarník) **47** #4100 49B10 (34H05)
- (with Ljal'ko, V. I.; Sibirceva, O. N.) Some models of inverse problems for the interpretations of geothermal anomalies on the basis of the regularization method. (Russian) *Modelling of nonstationary processes (Russian)*, pp. 44-53. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Editors) **58** #20277 86G5
- o, Garrison** Foundations of the quantum statistics of systems in equilibrium: a measure-theoretic approach. *J. Statist. Phys.* **10** (1974), 321-335. (Miroslav Grmela) #16329 81L28
- o, Vincent** (with David, H. T.) Saddle-point optimality criteria of nonlinear programming problems over cones without differentiability. *SIAM J. Appl. Math.* **20** (1971), 698-702. (A. Ben-Israel) **45** #6440 90C30
- (with David, H. T.) A note on Farkas lemmas over cone domains. *SIAM J. Appl. Math.* **22** (1972), 356-358. (S. Zlobec) **52** #12769 90C05
- Solutions of a special class of linear programming problems. Mathematical programming and its applications. *Operations Res.* **21** (1973), 386-388. (I. Marušciac) #3927 90C05
- (with Klemm, R. J.; Pyne, David A.) Useful least squares solutions over inequality restrictions. *J. Statist. Res.* **8** (1974), no. 2, 80-95. (Federico O'Reilly) **53** #4392 J05
- Modified regularity conditions for nonlinear programming problems over mixed cone domains. *Math. Programming* **6** (1974), 167-179. (A. Ben-Israel) **55** #2151 C30
- ★Linear and nonlinear programming. *The Iowa State University Press, Ames, Iowa*, 1975. x+269 pp. (R. N. Kaul) **53** #12518 90-01 (90C05, 90C30)
- (with Gentle, James E.) On the invariance of certain estimators. *Bull. Austral. Math. Soc.* **14** (1976), no. 3, 405-408. (Glen Meeden) **53** #14765 62F10 (62A05)
- On a sufficient optimality condition in nonlinear programming over mixed cone domains. *Cahiers Centre Études Recherche Opér.* **18** (1976), no. 4, 479-484. (K. Swarup) #15466 90C30
- (with Pinski, K.) Consistency of the normal equations. *Comm. Statist.—Theory Methods A5* (1976), no. 11, 1055-1057. (Authors' summary) **54** #3987 62J05 (OC05)
- (with Smith, W. C.) On a sufficient condition and a necessary condition for L_1 estimation. *J. Roy. Statist. Soc. Ser. C Appl. Statist.* **25** (1976), no. 2, 154-157. #6390 62J05
- Quadratic duality over convex cone domains. *Math. Programming* **10** (1976), no. 2, 177-283. (Robert A. Abrams) **54** #2202 90C20
- (with McCormick, Gary) Using the L_2 -estimator in L_1 -estimation. *SIAM J. Numer. Anal.* **13** (1976), no. 3, 337-343. (Authors' summary) **56** #7113 65D15
- (with Alders, C. D.) On a sufficient optimality condition over convex feasible regions. *Bull. Austral. Math. Soc.* **16** (1977), no. 2, 199-202. (G. Owen) **57** #1883 5K05
- (with Andriano, Kim; Gentle, James E.) On the asymptotic bias of Grenander's mode estimator. *Comm. Statist.—Theory Methods A6* (1977), no. 8, 773-776. (G. K. Chattacharayya) **56** #9800 62G05
- (with Gentle, James E.; Kennedy, W. J.) On some properties of L_1 estimators. *Math. Programming* **12** (1977), no. 1, 139-140. (Claude Carasso) **57** #11763 90C30
- (with Smith, Wendell; McCormick, Gary) ★Minimizing the sum of absolute deviations. *Angewandte Statistik und Ökonometrie, Heft 12. Vandenhoeck & Ruprecht, Göttingen*, 1978. 60 pp. ISBN 3-525-11243-2 (R. Pfaffenberger) **58** #24857 65D10 (1A50)
- ue, Alan P.** (with Ray-Chaudhuri, Dijen K.) Characterization of projective incidence structures. *Geometriae Dedicata* **5** (1976), no. 3, 361-376. (Francis Buekenhout) #3300 05B25 (50D35)
- Regular graphs with high edge degree. *J. Combinatorial Theory Ser. B* **22** (1977), no. 199-206. (Author's summary) **58** #21863 05C99
- Characterization of projective graphs. *J. Combin. Theory Ser. B* **24** (1978), no. 3, 294-300. (R. A. Meller) **58** #5417 05C99
- ue, Ralph H., Jr.** See *Proceedings: Hawaii International Conference on System Sciences*, **58** #19322a; *Proceedings: Hawaii International Conference on System Sciences*, **58** #19322b and *Proceedings: Hawaii International Conference on System Sciences*, **58** #19322c
- ue, Richard E.** A western view of computer history. Twenty-fifth anniversary of the association for Computing Machinery. *Comm. ACM* **15** (1972), no. 7, 686-692. (Editors) **2** #16082 68-03
- her, David A.** A survey of solved and unsolved problems on superpositions of functions. Collection of articles dedicated to J. L. Walsh on his 75th birthday, VI (Proc. Internat. Conf. Approximation Theory, Related Topics and their Applications, Univ. Maryland, College Park, Md., 1970). *J. Approximation Theory* **6** (1972), 123-134. (J. W. Jerome) **50** #845 41A30 (26A72)
- An improvement in the superposition theorem of Kolmogorov. *J. Math. Anal. Appl.* **8** (1972), 208-213. (V. Ganapathy Iyer) **46** #1981 26A72
- uw, E.** Finite element computer programs for heat conduction problems. *Numerical solution of partial differential equations (Proc. NATO Advanced Study Inst., Kjeller, 1973)*, pp. 241-266. *NATO Adv. Study Inst. Ser., Ser. C: Math. and Phys. Sci.*, **2**. Reidel, Dordrecht, 1973. (John Crank) **58** #32464 80G5
- Spreiter, John R.** (with Van Dyke, Milton D.; Vincenti, Walter G.) In memoriam Irmgard Flüge-Lotz (1903-1974). *IEEE Trans. Automatic Control* **AC-20** (1975), 183a-183b. (Editors) **51** #35 01A70
- Spreitzer, Gustav** (with Hoschek, Josef) ★Aufgaben zur darstellenden Geometrie. *Biographisches Institut, Mannheim-Vienna-Zurich*, 1974. 229 pp. (Editors) **52** #1501 50-01
- Sprejz, G.** Über eine Integralgleichung der Bevölkerungsentwicklung. *Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe* **22** (1973), 55-59. (K. Dietz) **49** #10404 92A15
- Sprekels, Jürgen** Existenz und erste Einschliessung positiver Lösungen bei superlinearen Randwertaufgaben zweiter Ordnung. (English summary) *Numer. Math.* **26** (1976), no. 4, 421-428. (H.-O. Kreiss) **56** #1730 65L10 (34B15)
- (with Collatz, Lothar; Günther, H.) Vergleich zwischen Diskretisierungsverfahren und parametrischen Methoden an einfachen Testbeispielen. (English and Russian summaries) *Z. Angew. Math. Mech.* **56** (1976), no. 1, 1-11. (D. C. Handscomb) **54** #11817 65N99
- Einige Existenz- und Einschliessungssätze für Fixpunkte expandierender Integraloperatoren. (English summary) *Aequationes Math.* **16** (1977), no. 3, 283-295. (Simeon Reich) **57** #13417 45G99 (47H10)
- (with Voss, Heinrich) Ein Verfahren zur iterativen Einschliessung des positiven Eigenvektors einer irreduziblen, nichtnegativen Matrix. (English summary) *Computing* **20** (1978), no. 1, 27-34. (H. E. Fettes) **57** #18054 65F15
- Spremann, Klaus** (with Gessner, Peter) ★Optimierung in Funktionenräumen. Lecture Notes in Economics and Mathematical Systems, Vol. 64. *Springer-Verlag, Berlin-New York*, 1972. iv+120 pp. (L. D. Berkovitz) **49** #3642 49C15
- Ein funktionalanalytischer Beweis des Maximumprinzips von Pontrjagin und dessen Verwendung zur Herleitung der Politikiteration von Howard. (English summary) *Computing (Arch. Elektron. Rechnen)* **9** (1972), 343-353. (G. M. Ewing) **47** #919 49A25
- (with Gessner, Peter) ★Konstruktive Optimierung dynamischer und stochastischer Prozesse. Mathematical Systems in Economics, 8. *Verlag Anton Hain, Meisenheim am Glan*, 1973. iv+120 pp. (S. Cruceanu) **49** #1778 65K05 (49D99, 90C30)
- Ein direkter Ansatz zur Lösung verschiedener Kontrollprobleme. *Numerische Methoden bei Optimierungsaufgaben, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 149-155. *Internat. Schriftenreihe Numer. Math., Band 23*. Birkhäuser, Basel, 1974. (From the author's introduction) **57** #8011 65K05 (49D99)
- Ein Maximumprinzip für Markovprozesse. (English summary) *Sechste Oberwolfach-Tagung über Operations Research (1973), Teil II*, pp. 135-141. *Operations Research Verfahren, Band XIX*, Hain, Meisenheim am Glan, 1974. (Ludwig Arnold) **56** #8124 93C55
- Optimierung verschiedener Steuerungsprobleme mit einem funktionalanalytischen Maximumprinzip. *Z. Angew. Math. Mech.* **54** (1974), 293-302. (Russell D. Rupp) **50** #14426 49B30
- Eine dynamische Version der Formel von Amoroso-Robinson. *Siebente Oberwolfach-Tagung über Operations Research (1974)*, pp. 205-221. *Operations Research Verfahren, Band XXI*, Hain, Meisenheim am Glan, 1975. (O. Opitz) **55** #9884 90A15 (65K05)
- Über Vektormaximierung und Analyse der Gewichtung von Subzielen. *Optimization and operations research (Proc. Conf., Oberwolfach, 1975)*, pp. 283-296. *Lecture Notes in Econom. Math. Systems*, Vol. 117, Springer, Berlin, 1976. (Jochem Zowe) **56** #10011 65K05
- The degree of monopoly and multivariable sales policies. *Theory and applications of economic indices (Proc. Internat. Sympos., Univ. Karlsruhe, Karlsruhe, 1976)*, pp. 487-533. *Physica-Verlag, Würzburg*, 1978. (From the summary) **58** #9155 90A15
- Sprent, P.** (with Chambers, John M.; Rigal, J. L.; Brewer, Kenneth R. W.; Andrews, David F.; Müller, Manfred W.; Mihram, G. Arthur; Bonnieux, F.; Fellegi, Ivan P.; Kleijnen, Jack P. C.; Brown, Robert A.; Wilkinson, G. N.) Discussion of the papers for Meeting 14. Proceedings of the 39th Session of the International Statistical Institute (Vienna, 1973). Vol. 4. *Bull. Inst. Internat. Statist.* **45** (1973), book 4, 279-286. (A. Goldman) **50** #6064 62J05
- Modified likelihood estimation of a linear relationship. *Studies in probability and statistics (papers in honour of Edwin J. G. Pitman)*, pp. 109-119. *North-Holland, Amsterdam*, 1976. (D. V. Lindley) **54** #3937 62F10
- See also **Box, Michael J.**, **47** #4376; **Anderson, T. W.**, **53** #14764 and **Lindley, Dennis V.**, et al., **54** #3939
- Spreser, Diane M.** (with Hedetniemi, Stephen T.) A property of trees in terms of unique connected subgraphs. *J. Graph Theory* **1** (1977), no. 4, 335-337. (S. F. Kapoor) **57** #156 05C05
- Spreuer, H.** (with Adams, E.) Eine Verallgemeinerung des Satzes von Müller auf parabolische Systeme von Integrodifferentialgleichungen nicht notwendig monotoner Art. (English and Russian summaries) *Z. Angew. Math. Mech.* **52** (1972), 261-271. (I. Fenyő) **55** #13199 45K05
- (with Adams, E.) Hinreichende Bedingung für Ausschluß von Eigenwerten in Parameterintervallen bei einer Klasse von linearen homogenen Funktionalgleichungen. (English and Russian summaries) *Z. Angew. Math. Mech.* **52** (1972), no. 9, 479-485. (W. C. Rheinboldt) **52** #11367 35P15
- (with Adams, E.) Uniqueness and stability for boundary value problems with weakly coupled systems of nonlinear integro-differential equations and application to chemical reactions. *J. Math. Anal. Appl.* **49** (1975), 393-410. (G. S. Jordan) **57** #1045 45K05
- (with Adams, E.) Über das Vorliegen der Eigenschaft von monotoner Art bei fortschreitend bzw. nur als ganzes lösbar Systemen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* **55** (1975), no. 4, T191-T193. (Editors) **58** #1562 35G20 (47H99, 65P05)
- (with Adams, E.; Srivastava, U. N.) Monotone Schrankenfolgen für gewöhnliche Randwertaufgaben bei schwach gekoppelten nichtlinearen Systemen. (English and

- Russian summaries) *Z. Angew. Math. Mech.* **55** (1975), no. 5, 211-218. (Leo F. Boron) **51** #11979 65L10 (34B15)
- (with Adams, E.) Pathologische Beispiele von Differenzenverfahren bei nichtlinearen gewöhnlichen Randwertaufgaben. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T304-T305. (Erich Bohl) **56** #10028 65L10
- Spriggs, James** (with Clarke, Steve; Owings, James C., Jr.) Trees with full subtrees. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory, and Computing* (Florida Atlantic Univ., Boca Raton, Fla., 1975), pp. 169-172. *Congressus Numerantium*, No. XIV, Utilitas Math., Winnipeg, Man., 1975. (H. V. Kronk) **53** #175 05C05
- Sprindžuk, V. G.** New applications of analytic and p -adic methods in Diophantine approximations. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 1, pp. 505-509. Gauthier-Villars, Paris, 1971. (Marc Reversat) **55** #2822 10K15 (10F10, 10B15)
- An application of the p -adic analysis in the Diophantine equations. *Zahlenentheorie* (Tagung, Math. Forschungsinst., Oberwolfach, 1970), pp. 185-188. *Ber. Math. Forschungsinst., Oberwolfach*, No. 5. Bibliographisches Inst., Mannheim, 1971. (A. I. Vinogradov) **51** #350 10B35 (10F45)
- Improving the estimate of rational approximations to algebraic numbers. (Russian) *Dokl. Akad. Nauk BSSR* **15** (1971), 101-104. (J. Kubilius) **45** #1845 10F25
- Estimates of the units of algebraic number fields. (Russian) *Dokl. Akad. Nauk BSSR* **15** (1971), 1065-1068. (K. Szymiczek) **45** #1831 12A45
- The rational approximations to algebraic numbers. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **35** (1971), 991-1007. (J. Kubilius) **45** #1846 10F25
- Estimation of the solutions of the Thue equation. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 712-741. (K. Szymiczek) **47** #1741 10B15
- The method of trigonometric sums in the metric theory of Diophantine approximations of dependent variables. (Russian) Collection of articles dedicated to Academician Ivan Matveevich Vinogradov on his eightieth birthday, II. *Trudy Mat. Inst. Steklov.* **128** (1972), 212-228, 261. (J. Kubilius) **48** #8424 10K15 (10F35)
- Eine Diophantische Eigenschaft der Trajektorien der Brownschen Bewegung. *Wiss. Z. Friedrich-Schiller-Univ. Jena* **21** (1972), no. 1, 157-160. (O. P. Stackelberg) **49** #2635 10K15 (10F15, 60J65)
- Square-free divisors of polynomials, and class numbers of algebraic number fields. (Russian) Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday, II. *Acta Arith.* **24** (1973), 143-149. (J. W. S. Cassels) **48** #8431 10M05 (12A50)
- The distribution of the fundamental units of real quadratic fields. *Acta Arith.* **25** (1973/74), 405-409. (T. Metsänkylä) **49** #8963 12A50 (12A25)
- "Almost every" algebraic number-field has a large class-number. *Acta Arith.* **25** (1973/74), 411-413. (T. Metsänkylä) **49** #8964 12A50 (12A45)
- (with Kotov, S. V.) An effective analysis of the Thue-Mahler equation in relative fields. (Russian) *Dokl. Akad. Nauk BSSR* **17** (1973), 393-395, 477. (Grigorii V. Čudnovskii) **50** #2088 10F30 (10B45)
- The structure of numbers representable by binary forms. (Russian) *Dokl. Akad. Nauk BSSR* **17** (1973), 685-688, 775. (J. B. Roberts) **49** #4929 10F10 (10B35)
- Applications of the method of trigonometric sums in the metric theory of Diophantine approximations of dependent quantities. (Russian) Proceedings of the International Conference on Number Theory (Moscow, 1971). *Trudy Mat. Inst. Steklov.* **132** (1973), 137-142, 265. (F. Schweiger) **49** #2634 10K15 (10G05)
- The metric theory of Diophantine approximations. (Russian) *Current problems of analytic number theory* (Proc. Summer School, Minsk, 1972) (Russian), pp. 178-198, 272. *Izdat. "Nauka i Tehnika"*, Minsk, 1974. (F. Schweiger) **49** #2636 10K15 (10F10, 10F35)
- An effective analysis of the Thue and Thue-Mahler equations. (Russian) *Current problems of analytic number theory* (Proc. Summer School, Minsk, 1972) (Russian), pp. 199-222, 272. *Izdat. "Nauka i Tehnika"*, Minsk, 1974. (Grigorii V. Čudnovskii) **54** #7371 10B15 (10F99)
- Algebraic number fields with large class number. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **38** (1974), 971-982. (T. Metsänkylä) **50** #9842 12A50 (12A95)
- Representation of numbers by the norm forms with two dominating variables. Collection of articles dedicated to K. Mahler on the occasion of his seventieth birthday. *J. Number Theory* **6** (1974), 481-486. (W. W. Adams) **50** #7045 10F25
- The vertical distribution of zeros of the zeta-function and the extended Riemann hypothesis. (Russian) Collection of articles in memory of Jurii Vladimirovič Linnik. *Acta Arith.* **27** (1975), 317-332. (Matti Jutila) **51** #3080 10H05 (10H10)
- Diophantine equations, and class numbers of ideals. (Russian) Presented at the All-Union Conference on Number Theory (Vilnius, 1974). *Mat. Zametki* **17** (1975), 161-168. (T. Metsänkylä) **52** #8086 12A50 (10B15)
- (with Kotov, S. V.) Rational approximations to algebraic numbers. (Russian) *Theoretical and applied questions of algebra and differential equations* (Russian), pp. 99-100, 122. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Editors) **58** #27817 10F25 (10B45)
- On extended Riemann hypothesis. *Topics in number theory* (Proc. Colloq., Debrecen, 1974), pp. 369-372. *Colloq. Math. Soc. János Bolyai*, Vol. 13, North-Holland, Amsterdam, 1976. (Editors) **55** #7946 10H05
- A hyperelliptic Diophantine equation, and class numbers. (Russian) *Acta Arith.* **30** (1976/77), no. 1, 95-108. (Grigorii V. Čudnovskii) **54** #5111 12A50 (10B15)
- (with Kotov, S. V.) The approximation of algebraic numbers by algebraic numbers of a given field. (Russian) *Dokl. Akad. Nauk BSSR* **20** (1976), no. 7, 581-584, 667. (Grigorii V. Čudnovskii) **54** #5125 10F30
- ★Метрическая теория диофантовых приближений. (Russian) [Metric theory of Diophantine approximations] *Izdat. "Nauka"*, Moscow, 1977. 143 pp. (F. Schweiger) **58** #16576 10K15 (10Fxx)
- (with Kotov, S. V.) The Thue-Mahler equation in a relative field, and the approximation of algebraic numbers by algebraic numbers. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 4, 723-751, 959. (John H. Loxton) **58** #5539 10F30 (10B15)
- The arithmetic structure of integer polynomials and class numbers. (Russian) Analytic number theory, mathematical analysis and their applications (dedicated to I. M. Vinogradov on his 85th birthday). *Trudy Mat. Inst. Steklov.* **143** (1977), 152-210. (John H. Loxton) **58** #589 12A50 (10B15, 10F35)
- See also **Current problems of analytic number theory**, **48** #5968; **Collection: Vinogradov, I. M.**, **49** #7050 and **Proceedings: International Conference on Number Theory**, **51** #5463
- Spring, David** Proper homotopy and immersion theory. *Topology* **11** (1972), 295-306. (C. Turner) **45** #4444 57D40
- gonzalez Springberg, Gerardo** See **Gonzalez Springberg, Gerardo**
- Springer, B. G. F.** (with Herzberg, Agnes M.; Garner, Cyril W. L.) Kiss-precise sequences of rotatable designs. *Canad. Math. Bull.* **16** (1973), 207-217. (L. D. Baumert) **48** #162K15
- Springer, C.** (with Jorna, S.) Derivation of Green-type, transitional and uniform asymptotic expansions from differential equations. V. Angular oblate spheroidal wavefunctions $ps'_s(\eta, h)$ and $qs'_s(\eta, h)$ for large h . *Proc. Roy. Soc. London Ser. A* (1971), no. 1547, 545-555. (Authors' summary) **53** #8524 33A55
- Springer, H. J.** (with Nicholson, W. Keith) Local rings with elementary Abelian groups. *Canad. Math. Bull.* **19** (1976), no. 2, 205-208. (Maria Grazia Marinari) **55** #816A48
- (with Nicholson, W. Keith) Commutativity of rings with abelian or solvable groups. *Proc. Amer. Math. Soc.* **56** (1976), 59-62. (V. C. Cateforis) **53** #3031 16A70
- Springer, Melvin D.** (with Carter, Bradley D.) The distribution of products, quotients and powers of independent H -function variates. *SIAM J. Appl. Math.* **33** (1977), 542-558. (A. M. Mathai) **58** #3152 62E15 (33A30)
- Springer, S. G.** (with Pedley, T. J.) The solution of heat transfer problems by the Wiener-Hopf technique. I. Leading edge of a hot film. *Proc. Roy. Soc. (London) Ser. A* **333** (1973), 347-362. (J. N. Kapur) **51** #12159 80A4
- Springer, Tonny Albert** Generalization of Green's polynomials. *Representation theory of finite groups and related topics* (Proc. Sympos. Pure Math., Vol. XXI, Univ. Wisconsin, Madison, Wis., 1970), pp. 149-153. *Amer. Math. Soc., Providence, R.I.*, 1971. (A. Silberger) **48** #6268 20G40 (22E45)
- Remarks on a combinatorial problem. *Nieuw Arch. Wisk.* (3) **19** (1971), 30-33. (O. Morris) **49** #2965 20F40
- A remark on the Milnor ring. *Nederl. Akad. Wetensch. Proc. Ser. A* **75** (1972), *Math.* **34** (1972), 100-105. (G. A. Efroymsen) **46** #1887 18H15 (12J10)
- Algebras. (Dutch) *Nederl. Akad. Wetensch. Verslag Afd. Natuurk.* **81** (1972), 9-10. (Editors) **48** #362 17C10
- ★Jordan algebras and algebraic groups. *Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 75*. Springer-Verlag, New York-Heidelberg, 1973. vii + 169 pp. (Kevin McCrimmon) **52** #523 17Cxx (17B10, 20G15)
- Characters of finite Chevalley groups. *Harmonic analysis on homogeneous spaces* (Proc. Sympos. Pure Math., Vol. XXVI, Williams Coll., Williamstown, Mass., 1976), 401-406. *Amer. Math. Soc., Providence, R.I.*, 1973. (S. I. Gel'fand) **49** #2916 22E45
- Caractères de groupes de Chevalley finis. *Séminaire Bourbaki, 25ème année* (1972/1973), Exp. No. 429, pp. 210-233. *Lecture Notes in Math.*, Vol. 383, Springer, Berlin, 1974. (Author's summary) **57** #3229 20C15 (20G05)
- Regular elements of finite reflection groups. *Invent. Math.* **25** (1974), 159-191. (Steinberg) **50** #7371 20H15
- On the characters of certain finite groups. *Lie groups and their representations* (Proc. Summer School, Bolyai János Math. Soc., Budapest, 1971), pp. 621-644. *Halsted, New York*, 1975. (S. I. Gel'fand) **53** #639 20G40
- The zeta function of a cuspidal representation of a finite group $GL_n(k)$. *Lie groups and their representations* (Proc. Summer School, Bolyai János Math. Soc., Budapest, 1971), pp. 645-648. *Halsted, New York*, 1975. (S. I. Gel'fand) **53** #640 20G40
- Relèvement de Brauer et représentations paraboliques de $GL_n(\mathbb{F}_q)$ (d'après Lusztig). *Séminaire Bourbaki*, Vol. 1973/1974, 26ème année, Exp. No. 441, pp. 85-91. *Lecture Notes in Math.*, Vol. 431, Springer, Berlin, 1975. (J. E. Humphreys) **54** #20C15
- Caractères d'algèbres de Lie finies. *Séminaire P. Dubreil, F. Aribaud et J. Malliauin* (28e année: 1974/75), *Algèbre*, Exp. No. 10, 6 pp. *Secrétariat Mathématique*, Paris, 1975. (S. I. Gel'fand) **53** #10879 17B10 (20G05)
- (with Cameron, Peter J.; Hall, J. I.; van Lint, Jacobus H.; van Tilborg, Henk; Carolus Adrianus) Translates of subgroups of the multiplicative group of a finite field. *Nederl. Akad. Wetensch. Proc. Ser. A* **78** = *Indag. Math.* **37** (1975), no. 4, 285-291. (Robert M. McConnell) **53** #2907 12C30
- Some results on reflection groups. (Dutch) *Nederl. Akad. Wetensch. Verslag Afd. Natuurk* **84** (1975), no. 6, 89-91. (J. S. Joel) **53** #13435 20H15
- Caractères quadratiques de groupes abéliens finis et sommes de Gauss. *Colloq. Math.* **27** (1975), 103-115. (Author's summary) **58** #27762 10C05 (12A85)
- Trigonometric sums, Green functions of finite groups and representations of finite groups. *Invent. Math.* **36** (1976), 173-207. (G. Lusztig) **56** #491 20G05
- ★Invariant theory. *Lecture Notes in Mathematics*, Vol. 585. Springer-Verlag, Berlin-New York, 1977. iv + 112 pp. (V. L. Popov) **56** #5740 20G99 (14C99, 14M15)
- Représentations de groupes de Weyl et éléments nilpotents d'algèbres de Lie. *Séminaire d'Algèbre Paul Dubreil, 29ème année* (Paris, 1975-1976), pp. 86-92. *Lecture Notes in Math.*, 586. Springer, Berlin, 1977. (From the text) **58** #28095 (20G05)
- (with Hotta, Ryoshi) A specialization theorem for certain Weyl group representations and an application to the Green polynomials of unitary groups. *Math. Ann.* **41** (1977), no. 2, 113-127. (G. Lusztig) **58** #5945 20G05
- A construction of representations of Weyl groups. *Invent. Math.* **44** (1978), 279-293. (G. I. Lehrer) **58** #11154 20G05 (20H15)
- Representations of symmetric groups. (Dutch) *Nederl. Akad. Wetensch. Verslag Afd. Natuurk.* **87** (1978), no. 2, 25-27. (G. E. Wall) **58** #5890 20C30
- See also **Seminar: Algebraic Groups**, **48** #11106 and **Kneser, Martin**, **49** #5890
- Springgate, M. W.** (with Poland, Douglas) Moments and distribution functions for polymers using Toeplitz matrices. *J. Chem. Phys.* **62** (1975), 675-679. (Authors' summary) **50** #15806 82.65
- (with Poland, Douglas) Lattice statistics using Toeplitz matrices. *J. Chem. Phys.* **62** (1975), 675-679. (Authors' summary) **50** #15806 82.65

- 1975), 680-689. (Authors' summary) **50** #15807 82.65
- Angsteel, Fred Neil** (with Ritchie, Robert W.) Language recognition by marking automata. *Information and Control* **20** (1972), 313-330. (S. A. Greibach) **48** #3649 4A30 (68A30)
- On the pre-AFL of $[\log n]$ space and related families of languages. *Theoret. Comput. Sci.* **2** (1976), no. 3, 295-304. (S. A. Greibach) **54** #6579 68A30
- Kuiper, Ida** Orthogonal polynomials in two variables. A further analysis of the polynomials orthogonal over a region bounded by two lines and a parabola. *SIAM J. Math. Anal.* **7** (1976), no. 4, 501-518. (G. Gasper) **54** #3278 42A52 (33A65)
- (with Koornwinder, Tom H.) Hypergeometric functions of 2×2 matrix argument are expressible in terms of Appel's functions F_4 . *Proc. Amer. Math. Soc.* **70** (1978), no. 1, 9-42. (P. N. Rathie) **57** #12926 33A30
- (with Koornwinder, Tom H.) Generalized power series expansions for a class of orthogonal polynomials in two variables. *SIAM J. Math. Anal.* **9** (1978), no. 3, 457-483. (G. Gasper) **58** #12170 42A52 (33A70)
- See also **Nonlinear analysis**, **58** #12531a
- Assig, Wolfgang** Über ein System zweidimensionaler singulärer Integralgleichungen nicht normalen Typs. *Wiss. Z. Techn. Hochschule Karl-Marx-Stadt* **16** (1974), 433-446. (H. Widom) **52** #1422 47G05 (45E99)
- Über ein System zweidimensionaler singulärer Integralgleichungen nicht normalen Typs. 5. Tagung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975), Heft 2, pp. 318-321. *Wiss. Schr. Techn. Hochschule Karl-Marx-Stadt, Techn. Hochschule, Karl-Marx-Stadt, 1975.* (R. C. MacCamy) **55** #3707 45E05
- Räumliches Analogon zur Voltterraschen Integralgleichung. *Wiss. Z. Techn. Hochschule Karl-Marx-Stadt* **19** (1977), no. 4, 535-537. (S. Balint) **57** #13411 45D05
- Atkinson, J. P.** Derivations and automorphisms of homogeneous C^* -algebras. *Proc. London Math. Soc.* (3) **32** (1976), no. 3, 521-536. (Christopher Lance) **53** #6336 46L05
- Derivations and pure states. *Glasgow Math. J.* **18** (1977), no. 1, 73-77. (G. A. Elliott) **55** #1081 46L05
- Att, D. A.** (with Barnard, George A.) A note on Basu's examples of anomalous ancillary statistics. With comments by D. Basu, D. R. Cox, O. Kempthorne, R. L. Prentice, C. R. Rao and J. S. Williams and a reply by the authors. *Foundations of statistical inference Proc. Sympos., Univ. Waterloo, Waterloo, Ont., 1970*, pp. 163-176. Holt, Rinehart and Winston of Canada, Toronto, Ont., 1971. (R. J. Buehler) **52** #1947 62A10
- (with Kalbfleisch, John D.) Corrigendum: "Application of likelihood methods to models involving large numbers of parameters". *J. Roy. Statist. Soc. Ser. B* **34** (1972), 24-125. (T. Pitcher) **47** #2696 62-00
- Practical uses of the likelihood function. *Inference and decision*, pp. 45-64. *Selecta Statistica Canadiana*, Vol. 1, Halsted Press, New York, 1973. (Stephen Portnoy) **52** #1949 62A10
- Normal likelihoods and their relation to large sample theory of estimation. *Biometrika* **60** (1973), 457-465. (B. L. S. Prakasa Rao) **49** #6469 62F10
- (with Kalbfleisch, John D.) Marginal and conditional likelihoods. *Sankhyā Ser. A* **35** (1973), no. 3, 311-328. (Authors' summary) **58** #24627 62A10
- Marginal and conditional sufficiency. *Biometrika* **62** (1975), no. 3, 599-605. (Margaret P. Gessaman) **52** #12133 62B05
- Application of maximum likelihood methods to finite samples. *Sankhyā Ser. B* **37** (1975), no. 3, 259-270. (Author's summary) **58** #31552 62F10
- (with Kalbfleisch, James G.) On tests of significance. With discussion. *Foundations of probability theory, statistical inference, and statistical theories of science (Proc. Internat. Res. Colloq., Univ. Western Ontario, London, Ont., 1973)*, Vol. II, pp. 259-272. *Univ. Western Ontario Ser. Philos. Sci., Vol. 6*, Reidel, Dordrecht, 1977. (Günter Menges) **57** #14205 62A99 (62F05)
- Gauss's contributions to statistics. (French summary) *Historia Math.* **5** (1978), no. 2, 183-203. (E. Seneta) **57** #17899 62-03 (01A55)
- See also **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing**, **48** #10747; **Godambe, V. P.; et al.**, **50** #15043; **Foundations of statistical inference**, **51** #9280; **Geisser, Seymour**, **52** #1951; **Rao, C. Radhakrishna**, **52** #4482; **Lindley, Dennis V.**, **52** #6932; **Kalbfleisch, John D.**, **53** #6809; **Kaleidoscope**, **53** #9444; **Martin-Löf, Per**, **53** #9470; **Martin-Löf, Per**, **54** #1447 and **Barndorff-Nielsen, Ole**, **55** #1546
- Aulay, Raymond N.** Asymptotic properties of U -statistics. *Trans. Amer. Math. Soc.* **199** (1974), 55-64. (W. Hoeffding) **50** #3318 60F15
- Balls, David J.** Homeotopy groups of compact 2-manifolds. *Fund. Math.* **90** (1975), no. 1, 99-103. (C. D. Feustel) **53** #1591 57A05
- Bach, Larry** (with Shakeshaft, Robin) Rearrangement collisions at very high energies. *Phys. Rev. A* (3) **8** (1973), 206-215. (Authors' summary) **52** #7372 81.45
- (with Gerjuoy, Edward; Rau, A. R. P.; Rosenberg, Leonard) Useful extremum principle for the variational calculation of matrix elements. *Phys. Rev. A* (3) **9** (1974), 108-117. (Authors' summary) **52** #2485 81.49
- (with Gerjuoy, Edward; Rosenberg, Leonard) Useful extremum principle for the variational calculation of matrix elements. II. *J. Mathematical Phys.* **16** (1975), 455-461. (Authors' summary) **52** #2486 81.49
- Beck, Joel** (with Gulliver, Robert D., II) The Plateau problem for surfaces of prescribed mean curvature in a cylinder. *Invent. Math.* **13** (1971), 169-178. (H. Beckert) **45** #7567 49F10 (53A10)
- Infinite boundary value problems for surfaces of constant mean curvature. *Arch. Rational Mech. Anal.* **49** (1972/73), 1-31. (E. Kreyszig) **48** #12329 53A10 (53C45)
- (with Gulliver, Robert D., II) Existence theorems for parametric surfaces of prescribed mean curvature. *Indiana Univ. Math. J.* **22** (1972/73), 445-472. (David Kinderlehrer) **46** #8016 49F10 (53A10)
- (with Gulliver, Robert D., II) Surfaces of constant mean curvature which have a simple projection. *Math. Z.* **129** (1972), 95-107. (R. Osserman) **47** #965c 53A10 (49F10, 53B25)
- An a priori estimate for the Gauss curvature of nonparametric surfaces of constant mean curvature. *Proc. Amer. Math. Soc.* **36** (1972), 217-223. (P. Scherk) **46** #6177 53A10
- On the radius of the smallest ball containing a compact manifold of positive curvature. *J. Differential Geometry* **8** (1973), 257-258. (J. E. Brothers) **49** #3768 53C20
- Gauss curvature estimates for surfaces of constant mean curvature. *Comm. Pure Appl. Math.* **27** (1974), 547-557. (R. Osserman) **51** #4123 53C45
- (with Hoffman, David A.) Sobolev and isoperimetric inequalities for Riemannian submanifolds. *Comm. Pure Appl. Math.* **27** (1974), 715-727. (Bang-yen Chen) **51** #1676 (E 53 #1484) 53C40
- (with Hoffman, David A.) A Sobolev inequality for Riemannian submanifolds. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973)*, Part 1, pp. 139-141. *Amer. Math. Soc., Providence, R.I.*, 1975. (Bang-yen Chen) **51** #13940 53C40
- On the existence of a capillary surface with prescribed contact angle. *Comm. Pure Appl. Math.* **28** (1975), 189-200. (E. A. Catchpole) **53** #2132 76.35
- (with Hoffman, David K.) A correction to: "Sobolev and isoperimetric inequalities for Riemannian submanifolds" (Comm. Pure Appl. Math. **27** (1974), 715-725). *Comm. Pure Appl. Math.* **28** (1975), no. 6, 765-766. (Bang-yen Chen) **53** #1484 53C40
- Remarks on the stability of minimal submanifolds of R^n . *Math. Z.* **144** (1975), no. 2, 169-174. (Y. Katsurada) **51** #13837 49F10
- (with Gulliver, Robert D., II) On embedded minimal surfaces. *Ann. of Math.* (2) **103** (1976), no. 2, 331-347. (William K. Allard) **53** #9011 49F10 (58E15)
- (with Simon, Leon) Existence and regularity of a capillary surface with prescribed contact angle. *Arch. Rational Mech. Anal.* **61** (1976), no. 1, 19-34. (Editors) **58** #7339 49F10 (35J65, 35Q99)
- (with Kinderlehrer, David) The shape and smoothness of stable plasma configurations. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **5** (1978), no. 1, 131-148. (A. Elcrat) **58** #1627 35J99
- Sprugnoli, Renzo** (with Aguzzi, Gianni; Pinzani, Renzo) An algorithmic approach to the semantics of programming languages. *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 147-166. *North-Holland, Amsterdam*, 1973. (M. I. Dehjar) **52** #9659 68A05
- (with Aguzzi, Gianni; Cesarini, Francesca; Pinzani, Renzo; Soda, Giovanni) Towards an automatic generation of interpreters. *Dritte Jahrestagung der Gesellschaft für Informatik (Hamburg, 1973)*, pp. 94-103. *Lecture Notes in Comp. Sci.*, Vol. 1, Springer, Berlin, 1973. (I. Kaufmann) **50** #3632 68A05
- (with Aguzzi, Gianni; Cesarini, Francesca; Pinzani, Renzo; Soda, Giovanni) Tree structures handling by APS. *Programming Symposium (Proc. Colloq. Programmation, Paris, 1974)*, pp. 120-129. *Lecture Notes in Comput. Sci.*, Vol. 19, Springer, Berlin, 1974. (Karel Čulík) **56** #4229 68A15
- (with Leoni, Gualtiero) The compilation of pointer Markov algorithms. *International Computing Symposium (Antibes, 1975)*, pp. 129-135. *North-Holland, Amsterdam*, 1975. (Gianni Aguzzi) **58** #3629 68A05 (02E10)
- (with Laganà, M. R.; Leoni, Gualtiero; Pinzani, Renzo) Improvements in the execution of Markov algorithms. (Italian summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, 473-489. (Vladimir Lifšic) **52** #7885 02F50 (02E10, 68A05)
- (with Leoni, Gualtiero) Some relations between Markov algorithms and formal languages. *Calcolo* **14** (1977), no. 3, 261-284. (S. Ginsburg) **58** #21513 02E10 (68A30)
- Perfect hashing functions: a single probe retrieving method for static sets. *Comm. ACM* **20** (1977), no. 11, 841-850. (Eberhard Lüdde) **56** #17255 68A50
- Spruill, Carl** (with Alt, Frank) A comparison of confidence intervals generated by the Scheffé and Bonferroni methods. *Comm. Statist.—Theory Methods* **A6** (1977), no. 15, 1503-1510. (Dennis O. Dixon) **58** #8000 62F25 (62J15)
- Determining the form of the mean of a stochastic process. *J. Multivariate Anal.* **7** (1977), no. 2, 278-285. (R. M. Dudley) **56** #1621 62L10 (60G15)
- Equally likely intervals in the chi-square test. *Sankhyā Ser. A* **39** (1977), no. 3, 299-302. (Lionel Weiss) **58** #3185 62G10
- (with Studden, William J.) Optimum designs when the observations are second-order processes. *J. Multivariate Anal.* **8** (1978), no. 2, 153-172. (J. Kiefer) **57** #14289 62K05
- Spruill, M. C.** (with Moore, David S.) Unified large-sample theory of general chi-squared statistics for tests of fit. *Ann. Statist.* **3** (1975), 599-616. (M. Knott) **51** #11760 62E20 (62G10)
- Cell selection in the Chernoff-Lehmann chi-square statistic. *Ann. Statist.* **4** (1976), no. 2, 375-383. (M. Knott) **52** #12200 62G20
- A comparison of chi-square goodness-of-fit tests based on approximate Bahadur slope. *Ann. Statist.* **4** (1976), no. 2, 409-412. (M. Knott) **52** #12201 62G20
- Sprygina-Slik, S. D.** (with Livšic, I. M.; Rohlin, V. I.) Minimax solution of a certain problem of resource distribution. (Russian) *Operations research (models, systems, solutions)*, No. 2 (Russian), pp. 42-57. *Vyšisl. Centr Akad. Nauk SSSR, Moscow*, 1971. (V. F. Dem'janov) **47** #4608 90B05
- Sprzeukowski, A.** Zero-sum games with incompletely defined payoff. *Differential game issue. J. Optimization Theory Appl.* **18** (1976), no. 1, 103-118. (G. Owen) **55** #5218 90D05
- Optimality in matrix games with incompletely defined payoff. *J. Optimization Theory Appl.* **21** (1977), no. 2, 225-233. (Suresh Chandra) **55** #12133 90D05
- Sprzyczyk, Jerzy** (with Baranowski, Andrzej) Some asymptotic properties of the solutions of stochastic integro-differential and integral equations. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 465 Mat.-Fiz. Zeszyt* **28** (1977), 11-31. (Kazimierz Sobczyk) **56** #13363 60H99
- Spuhler, P.** (with Simons, Stephen) $\Lambda(\alpha)$ -nuclear maps and quasi- $\Lambda(\alpha)$ -nuclear maps. *Troisième Colloque sur l'Analyse Fonctionnelle (Liège, 1970)*, pp. 19-20. *Vander, Louvain*, 1971. (W. H. Ruckle) **52** #14916 46A45
- Spulber, Dorian** On the ring of endomorphisms of a module. (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 931-934. (T. Albu) **47** #8510 13C05
- Suranneaux plats d'un anneau. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A893-A895. (N. Popescu) **47** #3374 13C10
- On localizing system of M -dense left ideals of a ring. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **18(66)** (1974), no. 1-2, 203-206 (1975). (John A. Beachy) **54** #2733 16A64
- F -Dedekind rings. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **18(66)** (1974),

- no. 3-4, 379-384 (1976). (M. Teply) **54** #7446 13F05
Observations sur les systèmes localisés réguliers et leur liaison avec la transformée Nagata d'un idéal. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 5, 559-563. (J. W. Brewer) **53** #13202 13F99 (14E15)
Induced flat epimorphisms of rings. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 3, 495-496. (N. Popescu) **58** #11018 16A62
- Spurr, B. D.** (with Mardia, K. V.) Multisample tests for multimodal and axial circular populations. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 422-436. (P. K. Bhattacharya) **49** #6480 62G10
- Spurrer, John D.** (with Locke, Charles) The use of U -statistics for testing normality against nonsymmetric alternatives. *Biometrika* **63** (1976), no. 1, 143-147. (Rudolph J. Beran) **53** #9499 (E **56** #13441) 62G10
(with Hewett, John E.) Two-stage Wilcoxon tests of hypotheses. *J. Amer. Statist. Assoc.* **71** (1976), no. 356, 982-987. (Paul Switzer) **54** #14232 62G10
(with Locke, Charles) Corrections and amendments: "The use of U -statistics for testing normality against nonsymmetric alternatives" (*Biometrika* **63** (1976), no. 1, 143-147). *Biometrika* **64** (1977), no. 1, 175. (Editors) **56** #13441 62G10
- Spyker, D. A.** (with Lee, E. B.) On linear periodic control problems. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 1, 39-40. (Ethelbert N. Chukwu) **56** #2540 93C05
- Spynu, Ye. I.** See **Spinu, E. I.**
- Spyratos, N.** (with deMercado, J.; Bowen, B. A.) A method for calculation of network reliability. *IEEE Trans. Reliab.* **R-25** (1976), no. 2, 71-76. (Fan R. K. Chung) **56** #18149 94A20
(with Bowen, A.) A fast algorithm for reliability calculations in sparse networks. *Networks* **7** (1977), no. 3, 227-246. (Andor Dobó) **57** #5049 90B25 (94A20)
- Spyropoulos, Kyriakos J.** (with Kiountouzis, E. A.; Young, Andrew) Discrete approximation in the L_1 norm. *Comput. J.* **16** (1973), 180-186. (D. C. Handscomb) **48** #5330 65D15
Linear programming and discrete polynomial type approximation in the L_1 norm. *Bull. Soc. Math. Grèce (N.S.)* **15** (1974), 123-134. (Author's summary) **58** #32919 90C05 (41A10)
Application of Hermitian splines to the initial value problem. *Bull. Soc. Math. Grèce (N.S.)* **16** (1975), 1-8. (David R. Hill) **56** #7213 65L05
(with Kioustelidis, John B.) L_1 approximations of strictly convex functions by means of first degree splines. (German summary) *Computing* **20** (1978), no. 1, 35-45. (Dietrich Braess) **57** #6962 41A15
- Spyrou, N.** (with Dionysiou, D.) Post-Newtonian integrals of motion. *Astrophys. J.* **183** (1973), 265-274. (H. A. Buchdahl) **48** #13169 83J3
The N -body problem in general relativity. *Astrophys. J.* **197** (1975), 725-743. (N. L. Balazs) **51** #14858 83J5
(with Contopoulos, G.) The center of mass in the post-Newtonian approximation of general relativity. *Astrophys. J.* **205** (1976), no. 2, part 1, 592-598. (H. A. Buchdahl) **53** #10101 83J5
Post-Galilean invariance of the post-Newtonian Eulerian equations of hydrodynamics. *Astrophys. J.* **209** (1976), no. 1, part 1, 243-244. (M. Carracci) **54** #6682 76J53
Newtonian dynamics of systems of extended bodies. *Celestial Mech.* **18** (1978), no. 4, 351-370. (Author's summary) **58** #25214 70J35 (35Q99)
Relativistic equations of motion of extended bodies. *General Relativity and Gravitation* **9** (1978), no. 6, 519-530. (Author's summary) **58** #20242 83J3
- Squier, D. P.** (with Shamma, Shawky E.) Some representations of solutions of elliptic equations. *J. Math. Anal. Appl.* **54** (1976), no. 2, 480-496. (Maurizio Chicco) **53** #13821 35J25
- Squillard, B.** (with Duneau, M.) Cluster properties of lattice and continuous systems. *Comm. Math. Phys.* **47** (1976), no. 2, 155-166. (O. Penrose) **54** #12088 82J47
- Squire, William** (with Trapp, George E., Jr.) Nonlinear Vandermonde systems for finding eigenvalues. *Proc. West Virginia Acad. Sci.* **46** (1974), no. 3-4, 293-297 (1975). (Colette Lebaud) **52** #7099 65F15
Partition-extrapolation methods for numerical quadratures. *Internat. J. Comput. Math.* **5**, no. 1, 81-91 (1975). (Thomas A. Atchison) **52** #9575 65D30
An efficient iterative method for numerical evaluation of integrals over a semi-infinite range. *Internat. J. Numer. Methods Engrg.* **10** (1976), no. 2, 478-484. (J. G. Herriot) **56** #13546 65D30
The solution of ill-conditioned linear systems arising from Fredholm equations of the first kind by steepest descents and conjugate gradients. *Internat. J. Numer. Methods Engrg.* **10** (1976), no. 3, 607-617. (Author's summary) **56** #10080 65R05 (65F10)
Improvement of Sastry's numerical solution of an integral equation by Richardson extrapolation. *Indian J. Pure Appl. Math.* **8** (1977), no. 2, 137-138. (Frank G. Hagin) **57** #11134 65R05 (45L10)
- Sra, K. S.** Generalized measures of deformation-rates in viscoelasticity and their application to cone and plate flow. *J. Mathematical and Physical Sci.* **10** (1976), no. 2, 165-173. (Author's summary) **54** #11902 73J28
- Sraer, M. G.** H. Poincaré's methods in potential theory. (Russian) *Studies in the history of mathematics*, No. 18 (Russian), pp. 203-217, 338. Izdat. "Nauka", Moscow, 1973. (J. S. Joel) **57** #6463 31-03 (01A55)
- Sragin, I. V.** Erratum: "Spaces generated by eigenfunctions" (*Dokl. Akad. Nauk SSSR* **193** (1970), no. 53-56). (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), no. 1-3, vii. (Editors) **50** #2898a 46E30
Erratum: "Conditions for the measurability of superpositions" (*Dokl. Akad. Nauk SSSR* **197** (1971), 295-298). (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), no. 1-3, vii. (Editors) **50** #2898b 46E30
The operator of superposition in modular function spaces. (Russian) *Studia Math.* **43** (1972), 61-75. (Ulrich Kosel) **47** #915 47H99 (46E30)
The Nemyckii operator that is generated by a non-Carathéodory function. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 3(165), 217-218. (L. Janos) **52** #11687 47H99
Existence theorems for two classes of nonlinear integral equations. (Russian) *Differentsial'nye Uravneniya* **11** (1975), no. 10, 1843-1852, 1909-1910. (Ulrich Kosel) **52** #11684 47H15 (45G99)
Superposition measurability. (Russian) *Izv. Vysš. Učebn. Zaved Matematika* **1975**, no. 1(152), 82-89. (T. Neubrunn) **51** #10565 28A20
Abstract Nemyckii operators are locally defined operators. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 1, 47-49. (K. Karták) **54** #1039 47H99
Conditions for the imbedding of classes of sequences, and their consequences. (Russian) *Mat. Zametki* **20** (1976), no. 5, 681-692. (J. Musielak) **56** #1022 46E30
Conditions for the convergence of superpositions. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 10, 1900-1901, 1912. (Luciana Lupas) **57** #16526 28A20
The continuity of locally defined operators. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1977), no. 2, 292-295. (Ulrich Kosel) **56** #6495 47H99
- Sragović, V. G.** The concept of a selfadjusting (adaptive) system. (Russian) *Studies in the theory of adaptive systems* (Russian), pp. 5-18. *Vychisl. Centr Akad. Nauk SSSR*, Moscow, 1971. (F. M. Kirillova) **51** #15089 93C40
Automata with multivalued input and their behavior in random media. (Russian) *Studies in the theory of adaptive systems* (Russian), pp. 19-65. *Vychisl. Centr Akad. Nauk SSSR*, Moscow, 1971. (A. D. Koršunov) **51** #5211 94A30
(with Šapiro, L. Z.) The collective behavior of type G automata. (Russian) *Studies in the theory of adaptive systems* (Russian), pp. 81-95. *Vychisl. Centr Akad. Nauk SSSR*, Moscow, 1971. (A. D. Koršunov) **51** #5213 94A30
(with Agasandjan, G. A.) Structural synthesis of stochastic automata. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 6, 121-125 (Russian); translated as *Engng. Cybernetics* **9** (1971), no. 6, 1077-1081 (1972). (H. D. Block) **49** #10466 94A30
Adaptive control systems and automata. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 4, 114-124 (Russian); translated as *Engng. Cybernetics* **10** (1972), no. 4, 663-671. (P. E. Sarachik) **49** #4613 93C40
Automata with multivalued input and their behavior in random environments. *Cybernet.* **2** (1972), no. 2, 79-108. (Editors) **48** #10718 94A30
(with Šapiro, L. Z.) Collective behavior of G -type automata. *J. Cybernet.* **2** (1972), no. 3, 101-111. (Editors) **48** #5438 68A35
Optimal properties of a certain class of control automata. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 1, 110-116 (Russian); translated as *Engng. Cybernetics* **11** (1973), no. 1, 89-97. (A. Paz) **52** #13037 94A35 (93C40)
The theory of hierarchical control systems. Basic concepts. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 2, 26-31 (Russian); translated as *Engng. Cybernetics* **13** (1975), no. 2, 18-24. (O. I. Nwokah) **53** #12657 93A10 (90D45)
★Теория адаптивных систем. (Russian) [Theory of adaptive systems] "Nauka", Moscow, 1976. 319 pp. (Vladimir Katkovnik) **58** #26484 93E20
On the subject of the theory of adaptive control systems. (Russian) *Študies in the theory of adaptive systems* (Russian), pp. 5-24, 222. *Vychisl. Centr. Akad. Nauk SSSR*, Moscow, 1976. (Author's summary) **58** #26345 93C40
Status and developing trends of the theory of adaptive systems. (Russian) *Proceedings of the Fifth Conference on Probability Theory* (Braşov, 1974), pp. 119-124. Editura Acad. R.S.R., Bucharest, 1977. (Zbigniew Nahorski) **57** #5291 93C40
(with Gessel, M.; Popov, Ju. V.) Adaptive control of partially observable Markov chains with reward. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 4, 767-770. (H.-J. Engelbert) **58** #4576 93E20 (60J25)
See also *Studies in the theory of adaptive systems*, **48** #5440 and *Studies in the theory of adaptive systems*, **58** #20705
- Šramčenko, A. A.** Representations of groups of exponent two and BIB designs. (Russian) *Kombinatornyi Anal.* **Yyp. 4** (1976), 37-39. (József Pelikán) **58** #10499 05B05
The structure of vector spaces generated by projective planes of even orders over the field of two elements. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I. Mat. Meh.* **1977**, no. 2, 12-14. (B. Orbán) **57** #10580 50D30
- Šramov, A. I.** See *Application of methods of cybernetics to the investigation of the operations of power plants and power systems*, **47** #6365
- Šranka, R. K.** The reliability of a certain class of contact-relay schemes. (Russian) *Automat. i Vychisl. Tehn.* **1969**, no. 6, 18-23. (G. Blohina (RŽMat **1970** #7 V **45** #9428 62N05 (94A20))
(with Podnieks, K. M.) Reliability of relay-contact schemes in the case of sufficiently reliable contacts. (Russian) *Automat. i Vychisl. Tehn. (Riga)* **1973**, no. 4, 44-48. (A. A. Mullin) **49** #4686 94A20
See also *Probabilistic automata and their application*, **48** #5745
- Sražidinov, A.** A way of solving a Fredholm integral equation of the first kind. (Russian) *Studies in integro-differential equations in Kirgizia* (Russian), pp. 350-353, 436. "Ilim", Frunze, 1977. (Author's summary) **58** #23397 45B05
- Srebnik, Shalom** (with Bader, Richard F. W.) Towards the development of the quantum mechanics of a subspace. *J. Chem. Phys.* **63** (1975), no. 9, 3945-3961. (Editors) **56** #4543 81J49
(with Bader, Richard F. W.; Nguyen-Dang, T. Tung) Subspace quantum mechanics and the variational principle. *J. Chem. Phys.* **68** (1978), no. 8, 3667-3671. (S. Sharma) **57** #18627a 81J49
(with Bader, Richard F. W.; Nguyen-Dang, T. Tung) Subspace quantum dynamics and the quantum action principle. *J. Chem. Phys.* **68** (1978), no. 8, 3680-3691. (S. Sharma) **57** #18627b 81J49
- Srebrny, Marian** (with Marek, Wiktor) On a predicative extension of the theory of admissible sets. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astron. Phys.* **20** (1972), 191-194. (G. Kreisel (Zbl **244** #02026)) **55** #2571 02K10 (02E10)
(with Marek, Wiktor) Gaps in the constructible universe. *Ann. Math. Log.* **1973/74**, 359-394. (Keith Devlin) **51** #10102 04A10 (02F35)
(with Marek, Wiktor) On transitive models for fragments of set theory. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astron. Phys.* **21** (1973), 389-394. (Authors' summary) **55** #7773 02K05 (02H13)
Note on a theorem of Mostowski. (Russian summary) *Bull. Acad. Polon. Sci. Math. Astron. Phys.* **22** (1974), 997-1000. (J. M. Plotkin) **54** #89 02H13
(with Marek, Wiktor) No minimal transitive model of Z^- . *Z. Math. Logik Grundlagen Math.* **21** (1975), 225-228. (M. Boffa) **52** #2884 02K15
(with Marek, Wiktor) Urelements and extendability. *Set theory and hierarchy* (Proc. Second Conf., Bierutowice, 1975), pp. 203-219. *Lecture Notes in Math.*, Vol. 561, Springer, Berlin, 1976. (John Schlipf) **56** #15415 02H20 (02F27, 02B15)

- Relatively constructible transitive models. *Fund. Math.* **96** (1977), no. 3, 161-172. (Author's summary) **58** #16273 02H20 (02F27)
- Second-order theories of countable transitive models. *Prace Nauk. Inst. Mat. Politech. Wrocław. No. 14 Ser. Konfer. No. 1* (1977), 57-61. (From the introduction) **8** #5228 02K99
- See also Set theory and hierarchy theory, **54** #2412 and Set theory and hierarchy theory, **57** #56
- U, Uri Convergence of K -quasiconformal automorphisms. *Proceedings of the Romanian-Finnish Seminar on Teichmüller Spaces and Quasiconformal Mappings* (Braşov, 1969), pp. 287-291. *Publ. House of the Acad. of the Socialist Republic of Romania, Bucharest*, 1971. (P. Caraman) **45** #8835 30A60
- Conformal capacity and quasiregular mappings. *Ann. Acad. Sci. Fenn. Ser. A I No. 29* (1973), 8 pp. (H. M. Reimann) **48** #6409 30A60
- Analogues of the elliptic modular function in R^3 . *Proceedings of the Symposium on Complex Analysis* (Univ. Kent, Canterbury, 1973), pp. 125-128. *London Math. Soc. Lecture Note Ser.*, No. 12, Cambridge Univ. Press, London, 1974. (Olli Martio) **53** #3299 30A60
- (with Martio, Olli) Automorphic mappings in R^n . *Bull. Amer. Math. Soc.* **80** (1974), 62-694. (H. M. Reimann) **49** #5342 30A58 (30A60)
- (with Martio, Olli) Automorphic quasimeromorphic mappings in R^n . *Acta Math.* **35** (1975), no. 3-4, 221-247. (H. M. Reimann) **55** #8348 30A60
- (with Martio, Olli) Periodic quasimeromorphic mappings in R^n . *J. Analyse Math.* **8** (1975), 20-40. (See Zbl 317 #30025) 30A60
- Quasiregular mappings. *Advances in complex function theory* (Proc. Sem., Univ. Maryland, College Park, Md., 1973-1974), pp. 148-163. *Lecture Notes in Math.*, Vol. 505, Springer, Berlin, 1976. (Olli Martio) **54** #13075 30A60
- (with Martio, Olli) On the existence of automorphic quasimeromorphic mappings in R^n . *Ann. Acad. Sci. Fenn. Ser. A I Math.* **3** (1977), no. 1, 123-130. (T. A. Metzger) **8** #28486 30A60 (30A58)
- (with Martio, Olli) Möbius groups and automorphic mappings in R^n . *Proceedings of the First Finnish-Polish Summer School in Complex Analysis* (Podlesice, 1977), Part II, pp. 11-20. *Univ. Łódź, Łódź*, 1978. (J. Spilker) **57** #16200 10D05 (30A60)
- (with Martio, Olli) Universal radius of injectivity for locally quasiconformal mappings. *Israel J. Math.* **29** (1978), no. 1, 17-23. (J. A. Kelings) **58** #11388 30A60
- nger, Ervin See Schrödinger, Erwin
- owicz, Paweł Czartoryski (with Odrodzenie, Paweł Rybicki) ★Historia nauki polskiej. Tom I. (Polish) [The history of Polish science. Vol. I] Edited and with an introduction by Bogdan Suchodolski. *Zakład Narodowy Imienia Ossolińskich Wydawnictwo Polskiej Akademii Nauk, Wrocław*, 1970. lxxi+448 pp. (errata insert). (Editors) **58** #26690a 01A05
- haran, K. E. (with Srivastava, Tej Narain) Life tests with periodic change in failure rate. *Defence Sci. J.* **24** (1974), 147-154. (A. C. Cohen) **52** #7058 62N05
- haran, V. P. Least squares algorithms for finding solutions of overdetermined linear equations which minimize error in an abstract norm. *Numer. Math.* **17** (1971), 387-401. (Joki) **45** #2899 65F20
- Least-squares algorithms for finding solutions of overdetermined systems of linear equations which minimize error in a smooth strictly convex norm. Collection of articles dedicated to Isaac Jacob Schoenberg on his 70th birthday, I. *J. Approximation Theory* **8** (1973), 46-61. (N. N. Abdelmalek) **49** #6590 65F20
- ari, M. The law of the iterated logarithm for independent variables. *Sankhyā Ser. A* **2** (1970), 41-52. (Author's summary) **45** #2777 60F05
- (with Dharmadhikari, S. W.) On convergence in r -mean of normalized partial sums. *Ann. Probability* **3** (1975), no. 6, 1023-1024. (N. C. Jain) **53** #1725 60G45 (60F05)
- On the unimodality of the sample median. *Gujarat Statist. Rev.* **3** (1976), no. 1, 3-19. (Ju. V. Borovskih) **53** #9455 62E15
- (with Dharmadhikari, S. W.) A note on stable characteristic functions. *Sankhyā Ser. A* **38** (1976), no. 2, 179-185. (Stephen James Wolfe) **56** #13309 60E05
- (with Shanbhag, D. N.; Pestana, D.) Some further results in infinite divisibility. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 2, 289-295. (F. W. Steutel) **56** #6789 60E05
- (with Shanbhag, D. N.) On certain self-decomposable distributions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **38** (1977), no. 3, 217-222. (S. G. Maloševskii) **55** #9214 60E05
- Hari Rao, V. (with Rama Mohana Rao, M.) Nonlinear mixed integral equations involving Lebesgue-Stieltjes integrals. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **20**(68) (1976), no. 3-4, 391-397 (1977). (M. Z. Nashed) **56** #16294 45G99
- (with Rama Mohana Rao, M.) Stability of impulsively perturbed systems. *Bull. Austral. Math. Soc.* **16** (1977), no. 1, 99-110. (T. Yoshizawa) **55** #8489 34D10
- ivasalu, V. See Sreenivasulu, V.
- ivasan, S. R. On steady force-free dynamos. *Astrophys. and Space Sci.* **51** (1977), no. 2, 341-348. (Author's summary) **56** #14107 76J53
- ivasiah, I. (with Ishimaru, Akira; Hong, Shin Tsy) Two-frequency mutual coherence interaction and pulse propagation in a random medium: an analytic solution to the plane wave case. *Radio Sci.* **11** (1976), no. 10, 775-778. (Werner Kohler) **54** #4357 78.60
- ivasulu, V. (with Singh, S. K.) Corrigendum to: "A note on entire functions"
- Istanbul Üniv. Fen Fak. Mecm. Ser. A **30** (1965), 71-75 (1968). (Turkish summary) *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **35** (1970), 101-102. (1972). (Editors) **52** #8434 30A66
- On the means of an entire function and its derivative. *Indian J. Math.* **13** (1971), 21-24. (S. M. Shah) **48** #2388 30A66
- A theorem on the order of an entire function of several complex variables. *Indian J. Pure Appl. Math.* **2** (1971), no. 2, 312-317. (J. Gopala Krishna) **45** #3755 32A15
- On the exceptional values of entire functions. *Indian J. Pure Appl. Math.* **3** (1972), no. 6, 973-978. (S. M. Shah) **49** #9214 30A70
- Certain classes of entire functions. *J. Analyse Math.* **25** (1972), 193-201. (D. Gaier) **45** #8839 30A64
- Entire functions of bounded index over non-Archimedean field. *Ann. Polon. Math.* **28** (1973), 163-173. (A. Duma) **48** #8795 30A66
- On the mean values of an entire function and its derivative. *Indian J. Math.* **15** (1973), 33-39. (D. Drasin) **50** #13523 30A66
- The maximum term and the maximum modulus of an entire Dirichlet series. *J. Indian Math. Soc. (N.S.)* **37** (1973), 197-208 (1974). (M. E. Noble) **51** #3440 30A62
- Šreider, Ju. A. (with Borščev, V. B.) Dispositions, algorithms and generating procedures. (Russian) *Tartu Riikl. Ül. Toimetised No. 226* (1969), 5-19. (Robert M. Baer) **45** #6536 68A10
- Spaces of tolerance. (Russian. English summary insert) *Kibernetika (Kiev)* **1970**, no. 2, 124-128. (R. See) **45** #4923 68A30
- ★Равенство, сходство, порядок. (Russian) [Equality, resemblance, order] *Izdat. "Nauka", Moscow*, 1971. 254 pp. (Editors) **52** #10430 04A05 (06-01)
- Tolerance spaces. *J. Cybernet.* **1** (1971), no. 2, 115-122. (Editors) **45** #9879 68A30
- Information in structures with relations. (Russian) *Investigations in mathematical linguistics, mathematical logic and information languages* (Russian), pp. 147-159, "Nauka", Moscow, 1972. (See RŽMat **1972** #6 V634) 68A50
- (with Gladkii, A. V.) ★Soviet papers in formal linguistics, Vol. III: Mathematical models of language. Edited by Ferenc Kiefer. *Linguistische Forschungen*, Band 18. *Athenäum Verlag GmbH, Frankfurt am Main*, 1973. iv+284 pp. (From the editor's preface) **55** #6988 68A30
- Translation as a morphism of models. (Russian) *Mathematical linguistics* (Russian), pp. 104-113. *Izdat. "Nauka", Moscow*, 1973. (M. Novotný) **58** #10661 08A05 (68A30)
- Stratified tolerances (toward a mathematical theory of classification). *Naučn.-Tehn. Informacija* (2) No. 2 (1973), 33-35; translated as *Automat. Document. and Math. Linguistics* **7** (1973), no. 1, 47-51. (James C. Bezdek) **53** #2073 68A45
- The logic of classification. *Naučn.-Tehn. Informacija* (2) No. 5 (1973), 3-7; translated as *Automat. Document. and Math. Linguistics* **7** (1973), no. 2, 30-36. (James C. Bezdek) **53** #2074 68A45
- On the O. S. Kulagina concept of derived relations. (Russian) *Kalmár-Festschrift. CL&CL—Comput. Linguist. Comput. Lang.* **9** (1973), 241-253. (Editors) **56** #17231 68A30
- ★What is distance? Translated and adapted from the Russian by Leslie Cohn and Harvey Edelberg. *Popular Lectures in Mathematics. The University of Chicago Press, Chicago, Ill.-London*, 1974. ix+71 pp. (Editors) **51** #11392 54-01
- Heredity of the properties of relations. (Russian) *Studies in formalized languages and nonclassical logics* (Russian), pp. 88-95. *Izdat. "Nauka", Moscow*, 1974. (RŽMat **1975** #1 A158) **58** #10457 04A05
- An algebra of classification. (Russian. English summary) *Naučn.-Tehn. Informacija (VINITY) Ser. 2. Informacionnye Processy i Sistemy* **1974**, no. 9, 3-6, 39. (B. Pondělíček) **50** #13349 20M35
- (with Panova, N. S.) The symbolic nature of classifications. (Russian. English summary) *Naučn.-Tehn. Informacija (VINITY) Ser. 2. Informacionnye Processy i Sistemy* **1974**, no. 12, 3-10, 39. (A. A. Mullin) **57** #18872 92A05 (02A05, 68A45)
- (with Vilenkin, N. Ja.) The concepts of mathematics and the objects of science. (Russian) *Voprosy Filos.* **1974**, no. 2, 116-126. (A. A. Mullin) **58** #9977 00A25 (02A05)
- ★Equality, resemblance, and order. Translated from the Russian by Martin Greendlinger. Revised from the Russian edition. *Mir Publishers, Moscow*, 1975. 279 pp. (Editors) **52** #10431 04A05 (06-01)
- Predicates and measures on Boolean σ -algebras. *Colloq. Math.* **33** (1975), no. 2, 251-254. (Robert F. Wheeler) **52** #5939 28A60
- Is intellect characteristic of a machine? (Russian) *Voprosy Filos.* **1975**, no. 2, 82-89. (A. A. Mullin) **57** #14648 68A45
- (with Vilenkin, N. Ja.) Majorant spaces and "majority" quantifier. (Russian. English summary) *Semiotics and information science*, No. 8 (Russian), pp. 45-82, 212-213. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1977. (Authors' summary) **57** #5677 02B20 (04A05, 92A20)
- (with Vilenkin, N. Ja.) Making expert decisions on the basis of majorant structures. (Russian. English summary) *Semiotics and information science*, No. 8 (Russian), pp. 83-90, 213 *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1977. (Authors' summary) **57** #73 02C10 (90A05)
- Estimating the number of solution coalitions. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 1, 126-128. (From the summary) **58** #9325 90D12 (90D35)
- See also Investigations in mathematical linguistics, mathematical logic and information languages, (Not reviewed); *Mathematical linguistics*, **48** #3312; *Cybernetics—in the service of Communism*, **48** #10432 and Marcus, Solomon, **50** #6220
- Sretenskii, L. N. Passage of long waves from one depth to another in a revolving tank. (Russian) *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Mushelišvili)* (Russian), pp. 473-494. *Izdat. "Nauka", Moscow*, 1972. (E. Zeidler) **52** #9796 76J35
- (with Kondrat'ev, K. Ja.; Smirnov, V. I.; Tihonov, A. N.) Jurii Aleksandrovič Surinov (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 6(174), 231-232. (Editors) **52** #7806 01A70
- (with Tihonov, A. N.; Samarskii, A. A.; Svešnikov, A. G.; Berezin, I. S.; Vasil'ev, F. P.; Uspenskii, A. B.) In memoriam Boris Mihailovič Budak. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 4, 106-112. (Editors) **48** #1865 01A70
- See also Biography: Sretenskii, L. N., **49** #7107; Birthday: Sretenskii, L. N., **50** #4220; Obituary: Sretenskii, L. N., **51** #7792; Obituary: Sretenskii, L. N., **57** #9444 and History of mechanics from the end of the eighteenth century to the middle of the twentieth century, **58** #21246
- Sribala, S. On Σ -ordered inverse semigroups. *Acta Sci. Math. (Szeged)* **35** (1973), 207-210. (T. Saitō) **48** #10937 06A50
- On Σ -inverse semigroups. *Pacific J. Math.* **49** (1973), 483-488. (M. Friedberg) **50** #7399 22A15 (20M10)
- Cohomology and extensions of inverse semigroups. *J. Algebra* **47** (1977), no. 1, 1-17. (H. Lausch) **56** #5758 20M10
- Sridhar, Banavar (with Lindorff, David P.) A note on pole assignment. *IEEE Trans.*

- Automatic Control* **AC-17** (1972), no. 6, 822-823. (D. H. Chyung) **53** #5090 (E 53 #5092) (E 53 #5091) 93B99
(with Jordan, David) An efficient algorithm for calculation of the Luenberger canonical form. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 3, 292-295. (Authors' summary) **55** #14291 93B10
Investigation of rank 2 and higher output feedback for pole placement. *Control system design by pole-zero assignment (Papers, Working Party, Cambridge Univ., Cambridge, 1974)*, pp. 211-225. Academic Press, London, 1977. (From the summary) **58** #26289 93B99
(with Patel, R. V.; Toda, Mitsuhiro) Robustness of linear quadratic state feedback designs in the presence of system uncertainty. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 6, 945-949. (Authors' summary) **58** #15536 93D15
See also Murdoch, Peter, **53** #5091 and Topaloglu, Toros; et al., **53** #5092
- Sridhar, C. R.** (with Vartak, M. N.) Dynamic programming solution to a one-period multi-item inventory problem. *J. Indian Statist. Assoc.* **13** (1975), 71-81. (K. Hinderer) **53** #15319 90B05 (90C47)
- Sridhar, R.** See Balakrishnan, A. V., **46** #3255; *Proceedings: International Congress of the International Federation of Automatic Control (IFAC), 51* #12360a and *Proceedings: Conference on Structure of Matter—Mathematics and Phenomenology*, **58** #32476
- Sridharan, M. R.** (with Parthasarathy, K. R.) On structure enumeration theory. *Nederl. Akad. Wetensch. Proc. Ser. A* **74**=*Indag. Math.* **33** (1971), 327-339. (R. C. Read) **45** #3255 05C30
(with Parthasarathy, K. R.) On the structure pairs of de Bruijn. *Nieuw Arch. Wisk.* (3) **19** (1971), 113-119. (E. M. Palmer) **47** #46 05A15 (05C30, 94A30)
(with Parthasarathy, K. R.) Isographs and oriented isographs. *J. Combinatorial Theory Ser. B* **13** (1972), 99-111. (R. W. Robinson) **46** #7088 05C30
Mixed self-complementary and self-converse digraphs. *Discrete Math.* **14** (1976), no. 4, 373-376. (David M. Jackson) **54** #2520 05C30
On Turán's theorem. *J. Indian Inst. Sci.* **59** (1977), no. 10, 111-112. (Jerald A. Kabeil) **58** #21822 05C35
(with Parthasarathy, K. R.) Enumeration of graphs and digraphs with local restrictions. *J. Mathematical and Physical Sci.* **11** (1977), no. 5, 483-490. (Nicholas Wormald) **58** #10582 05C30
- Sridharan, N. S.** Computer generation of vertex graphs. *Information Processing Lett.* **3** (1974/75), 57-63; erratum, *ibid.* **3** (1974/75), 164. (A. D. Koršunov) **51** #2339 68A10 (05C05)
- Sridharan, P. C.** (with Krishna Swamy, H. S.; Krishna Murthy, M. R.; Parvathamma, S.) Multiple generators of even digit numbers. *Math. Education* **11** (1977), no. 3, B41-B46. (R. Ayoub) **56** #8478 10A30
- Sridharan, R.** (with Gupta, Surender K.) Projective modules, Grothendieck groups and the Jacobson-Cartier operator. *J. Math. Kyoto Univ.* **13** (1973), 537-556. (S. Yuan) **48** #8482 13C10 (14F10)
(with Parimala, S.) Projective modules over polynomial rings over division rings. *J. Math. Kyoto Univ.* **15** (1975), 129-148. (Manuel Ojanguren) **51** #12935 16A50
(with Parimala, S.) Projective modules over quaternion algebras. *J. Pure Appl. Algebra* **9** (1976/77), no. 2, 181-193. (George Szeto) **56** #5652 16A50 (16A28, 13B05)
See also Automorphisms of the classical groups, **55** #267
- Srinath, K. P.** Multiphase sampling in nonresponse problems. (Spanish. English summary) *Estadística* **28** (1970), 196-203. (Editors) **54** #8944 62D05
Multiphase sampling in nonresponse problems. *J. Amer. Statist. Assoc.* **66** (1971), 583-586. (Author's summary) **54** #8943 62D05
(with Srivenkataramana, T.) Latin square selection without pre-stratification of population units. *Vignana Bharathi* **1** (1975), no. 1, 73-77. (Om. P. Aggarwal) **53** #11832 62D05
(with Srivenkataramana, T.) A modification of the product estimator in simple random sampling. *Vignana Bharathi* **2** (1976), no. 1, 56-60. (David Bellhouse) **54** #1434 62D05
(with Srivenkataramana, T.) Ratio and product methods of estimation in sample surveys when the two variables are moderately correlated. *Vignana Bharathi* **2** (1976), no. 2, 54-58. (David Bellhouse) **53** #14746 62D05
- Srinath, Mandyam D.** (with Sankaran, V.) Decoupling of systems with plant and measurement noise. *IEEE Trans. Automatic Control* **AC-16** (1971), 202-203. (E. B. Lee) **45** #9739 93B15
(with Rajasekaran, P. K.) Structure and parameter adaptive pattern recognition with supervised learning: a new formulation. *IEEE Trans. Information Theory* **IT-17** (1971), 499-500. (F. W. Stallmann) **48** #10627 94A05 (68A45)
(with Shukla, V.) Optimal filtering in linear distributed parameter systems with multiple time delays. *Internat. J. Control* (1) **16** (1972), 673-687. (B. Rozovskiĭ (RŽMat 1973 #2 V101)) **51** #5128 93E10
Passivity of a class of non-monotone non-linearities. *Internat. J. Control* (1) **16** (1972), 889-896. (Author's summary) **47** #3073 93D10
(with Sankaran, V.) Decoupling of linear discrete time systems by state variable feedback. *J. Math. Anal. Appl.* **39** (1972), 338-345. (Edward J. Davison) **46** #10458 93B99
(with Sankaran, V.) Duality of linear estimation and control with constraints. *J. Optimization Theory Appl.* **10** (1972), 41-50. (S. Butman) **46** #5017 93E20 (94A05)
(with Rajasekaran, P. K.) Unsupervised learning in nongaussian pattern recognition. *Pattern Recognition* **4** (1972), 401-416. (W. Greblicki) **50** #9081 68A45
(with Shukla, V.) Sequential estimation in linear systems with multiple time delays. *Information and Control* **22** (1973), 471-486. (Katsuji Uosaki) **52** #5154 93E10
(with Rajasekaran, P. K.) Unsupervised learning structure and parameter adaptive pattern recognition with discrete data. *Information Sci.* **5** (1973), 247-264. (K. D. Günther) **47** #7971 68A45
(with Keshavan, H. R.) Linear least squares estimation of complex processes. *Internat. J. Systems Sci.* **8** (1977), no. 3, 353-360. (Tohru Katayama) **56** #2595 93E10
(with Keshavan, H. R.) Enhancement of noisy images using an interpolative model in two dimensions. *IEEE Trans. Systems Man Cybernet.* **SMC-8** (1978), no. 4, 247-258. (Shinichi Tamura) **57** #19054 94A05 (68A45)
- Srinathkumar, S.** Eigenvalue/eigenvector assignment using output feedback. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 1, 79-81. (Elwyn L. Jones) **57** #15607 93B99
- Srinivas, K.** (with Gururaja, J.; Prasad, K. Krishna) An assessment of the quality selected finite difference schemes for time dependent compressible flows. *J. Computational Phys.* **20** (1976), no. 2, 140-159. (J. Gillis) **54** #4333 76G65
- Srinivas, M. D.** (with Shankara, T. S.) Remarks on the Duffin bracket for nonconservative systems. *Lett. Nuovo Cimento* (2) **6** (1973), 321-324. (Not reviewed) 81.47
Foundations of a quantum probability theory. *J. Mathematical Phys.* **16** (1975), 1672-1685. (Author's summary) **54** #2027 81G0
(with Wolf, E.) Some nonclassical features of phase-space representations of quantum mechanics. *Phys. Rev. D* (3) **11** (1975), 1477-1485. (Authors' summary) **53** #15215 81G0
Quantum counting processes. *J. Mathematical Phys.* **18** (1977), no. 11, 2138-2146. (T. Neubrunn) **56** #14293 81G6
Quantum mechanics as a generalized stochastic theory in phase space. *Phys. Rev. D* (3) **15** (1977), no. 10, 2837-2849. (V. Ja. Kreinoviĭ) **56** #2109 81G0
- Srinivasacharyulu, Kilambi** Topologie de certaines variétés presque complexes et complexes. *Rev. Roumaine Math. Pures Appl.* **15** (1970), 1535-1540. (S. Kobayashi) **214**, 489) **47** #8911 32M10
Deformations of some Γ -structures. *Math. Z.* **123** (1971), 56-60. (P. Molitor) **45** #6042 58H05
Remarks on Banach algebras. *Bull. Soc. Roy. Sci. Liège* **43** (1974), 523-529. (George Bachman) **51** #11114 46J05 (46K05)
Non linear functional equations. *Tōhoku Math. J.* (2) **28** (1976), no. 2, 235-238. (P. Kapoor) **53** #14244 47H15
- Srinivasagopalan, R.** (with Martens, G. O.) Formulas for the elements of lossy low-ladder networks. *IEEE Trans. Circuit Theory* **CT-19** (1972), 360-365. (Authors' summary) **51** #15226 94A20
- Srinivasan, B. R.** On the number of Abelian groups of a given order. *Acta Arith.* **23** (1975), 195-205. (H.-E. Richert) **49** #2610 10H25
- Srinivasan, Bhamu** On the Steinberg character of a finite simple group of Lie type. *Austral. Math. Soc.* **12** (1971), 1-14. (R. Steinberg) **45** #411 20C30
Isometries in finite groups of Lie type. *Finite groups '72 (Proc. Gainesville Conf., Univ. Florida, Gainesville, Fla., 1972)*, pp. 142-146. *North-Holland Math. Studies, Vol. 1*, North-Holland, Amsterdam, 1973. (G. I. Lehrer) **51** #734 20G05
Isometries in finite groups of Lie type. *J. Algebra* **26** (1973), 556-563. (G. I. Lehrer) **48** #4143 20G20
Green polynomials of finite classical groups. *Comm. Algebra* **5** (1977), no. 12, 1241-1258. (RŽMat 1978 #8 A462) **58** #16905 20G40 (20C15)
(with Lusztig, George) The characters of the finite unitary groups. *J. Algebra* (1977), no. 1, 167-171. (Ryoshi Hotta) **56** #12139 20G05
- Srinivasan, C.** (with Berger, James O.) Generalized Bayes estimators in multivariate problems. *Amer. Statist.* **6** (1978), no. 4, 783-801. (Arthur Cohen) **57** #17904 62C15, 62F15
- Srinivasan, Chitoor V.** Codes for error correction in high-speed memory systems. I. Correction of cell defects in integrated memories. *IEEE Trans. Computers* **C-20** (1971), 882-888. (H. Jürgensen) **46** #8764a 94A10
Codes for error correction in high-speed memory systems. II. Correction of temporary and catastrophic errors. *IEEE Trans. Computers* **C-20** (1971), 1514-1520. (H. Jürgensen) **46** #8764b 94A10
- Srinivasan, K.** (with Vetter, William J.) Linear state estimation with parameter uncertainties. *Internat. J. Systems Sci.* **4** (1973), 597-603. (R. Ahlswede) **51** #2793E10
- Srinivasan, R.** (with Mehta, Jatinder S.) On pooling data. I. Estimation of the mean. *Inst. Statist. Math.* **23** (1971), 211-224. (H. L. Harter) **48** #3171 62F10
(with Kanofsky, Paul) An approach to the construction of parametric confidence bands on cumulative distribution functions. *Biometrika* **59** (1972), 623-631. (P. K. Sen) **50** #11628 62G15
(with Wharton, R. M.) The limit distribution of a random variable used in construction of confidence bands. *Biometrika* **60** (1973), 431-432. (Authors' summary) **47** #9757 62E20
(with Godio, L. B.) A Cramér-von Mises type statistic for testing symmetry. *Biometrika* **61** (1974), 196-198. (James N. Adichie) **51** #14402 62G10
(with Kanofsky, Paul; Wharton, R. M.) Simultaneous confidence intervals for exponential distributions. *Sankhyā Ser. B* **37** (1975), no. 3, 271-292. (Authors' summary) **58** #31561 62F25
(with Wharton, R. M.) Further results on simultaneous confidence intervals for normal distribution. *Ann. Inst. Statist. Math.* **28** (1976), no. 1, 25-33. (P. K. Sen) **55** #6668 62F25
- Srinivasan, S.** (with Krishnamurthy, E. V.; Subramanian, K.; Rao, T. Mahadeva) Fourier description, compression and transformation of digital pictures. II. Picture algebra geometry. *Proc. Indian Acad. Sci. Sect. A* **79** (1974), 195-211. (3 plates) (Ar. Griffith) **53** #7159b 68A45 (94A05)
(with Basu, D.) A unified treatment of the groups $SO(4)$ and $SO(3, 1)$. *Czechoslovak J. Phys.* **27B** (1977), no. 6, 629-635. (Philip H. Butler) **56** #15822E70
- Srinivasan, S.** (with Nair, K. P. K.; Laughland, A. R.) First passage game. (From summary) *Canad. J. Statist.* **5** (1977), no. 2, 159-166. (Jaap Wessels) **58** #20590D15
- Srinivasan, S. K.** (with Vasudevan, R.) ★Introduction to random differential equations and their applications. Modern Analytic and Computational Methods in Science and Mathematics, No. 33. American Elsevier Publishing Co., Inc., New York, 1971. xii+240 pp. (G. Papanicolaou) **48** #7367 60Hxx (81G60, 82G60)
Stochastic point processes and statistical physics. *J. Mathematical and Physical* **5** (1971), 291-316. (R. Kubo) **45** #8200 82G2
(with Mehata, K. M.) A stochastic model for polymer degradation. *J. Appl. Probability* **9** (1972), 43-53. (George Weiss) **45** #6239 70G60
(with Subramanian, Ramachandran; Vasudevan, R.) Correlation functions in queueing theory. *J. Appl. Probability* **9** (1972), 604-616. (C. Mohan) **50** #3360K25

- Correlation structure of a pair of interacting point processes. *J. Mathematical and Physical Sci.* **6** (1972), 163-179. **55** #13614 60K35
(with Gopalan, M. N.) Probabilistic analysis of a 2-unit cold-standby system with a single repair facility. *IEEE Trans. Reliab.* **R-22** (1973), no. 5, 250-254. (Sami Abdelhamid) **53** #6956 62N05
(with Gopalan, M. N.) Probabilistic analysis of a two-unit system with a warm standby and a single repair facility. *Operations Res.* **21** (1973), 748-754. (Andre Aubert) **51** #2627 90B25
★Stochastic point processes and their applications. Griffin's Statistical Monographs and Courses, No. 34. *Hafner Press, New York*, 1974. xi+174 pp. (D. J. Daley) **52** #6903 60Kxx (60G55)
Analytic solution of a finite dam governed by a general input. *J. Appl. Probability* (1974), 134-144. (N. H. Bingham) **50** #8760 60K30
(with Kalpakam, S.) Finite dam with deterministic input. *J. Mathematical and Physical Sci.* **9** (1975), 31-48. (P. B. M. Roes) **50** #8761 60K30
(with Venugopalacharyulu, N.) Analytic solution of a finite dam with bounded input. *J. Mathematical and Physical Sci.* **10** (1976), no. 2, 141-164. (Emlyn Lloyd) **51** #11575 60K30
Stochastic models for fatigue failure of materials. *SM Arch.* **1** (1976), no. 1, 3-25. (Yi-Yuan Yu) **55** #7067 73.60
(with Kumaraswamy, S.) Two simple models for Gaussian noise. *J. Mathematical and Physical Sci.* **11** (1977), no. 3, 199-207. (A. Mukherjee) **58** #7817 60G15 0J25
A stochastic model of neuronal firing. *Math. Biosci.* **33** (1977), no. 1-2, 167-175. (Authors' summary) **58** #33101 92A05
Seshadri (with Gupta, Hansraj) Cycles of quadratic congruences. *Res. Bull. Panjab Univ. (N.S.)* **22** (1971), 401-404 (1972). (I. Danicic) **47** #117 10A05
(with Gupta, Hansraj) The number of 3 by 3 magic matrices. *Res. Bull. Panjab Univ. (N.S.)* **22** (1971), 525-526 (1972). (K. Györy) **47** #8331 05B20
On algebraic approximations to 2^{n^k} ($k=1,2,3,\dots$). *Indian J. Pure Appl. Math.* **5** (1974), no. 6, 513-523. (R. Wallisser) **54** #245 10F10
A footnote to the large sieve. *J. Number Theory* **9** (1977), no. 4, 493-498. (H.-E. Richert) **56** #15590 10H30
Srinivasan, T. N. (with Bhagwati, Jagdish) The ranking of policy interventions under vector market imperfections: the case of sector-specific sticky wages and unemployment. *Chandrasekhara Ser. B* **35** (1973), no. 4, 405-420. (Rubin Sapoznik) **53** #4919 90A15
(with Bhagwati, Jagdish) Alternative policy rankings in a large, open economy with sector-specific, minimum wages. *J. Econom. Theory* **11** (1975), no. 3, 356-371. (Prasanta K. Pattanaik) **54** #9631 90A15
Srinivasan, T. P. (with Kelley, John L.; Nayak, M. K.) Pre-measures on lattices of sets. II. Vector and operator valued measures and applications (Proc. Sympos., Alita, Utah, 1972), no. 155-164. *Academic Press, New York*, 1973. (A. C. Zaanen) **48** #11433 28A10
(with Kelley, John L.) On the Bochner integral. *Vector and operator valued measures and applications* (Proc. Sympos., Alita, Utah, 1972), pp. 165-174. *Academic Press, New York*, 1973. (C. W. Swartz) **48** #8745 28A45
(with Nayak, M. K.) Scalar and vector valued premeasures. *Proc. Amer. Math. Soc.* **43** (1975), 391-396. (J. E. Huneycutt, Jr.) **51** #5885 28A45
(with Kelley, John L.) A unified proof of Fubini theorem for Baire and Borel measures. *Measure theory* (Proc. Conf., Oberwolfach, 1975), pp. 25-29. *Lecture Notes in Math.*, Vol. 541, Springer, Berlin, 1976. (J. D. Knowles) **56** #3231 28A30
(with Nayak, M. K.) Vector valued inner measures. *Measure theory* (Proc. Conf., Oberwolfach, 1975), pp. 107-116. *Lecture Notes in Math.*, Vol. 541, Springer, Berlin, 1976. (William H. Graves) **56** #3239 28A45
Srinivasan, V. A hybrid algorithm for the one machine sequencing problem to minimize total tardiness. *Naval Res. Logist. Quart.* **18** (1971), 317-327. (F. Giannessi) **46** #6803 90B35
(with Rao, M. R.) A note on Sharpe's algorithm for minimizing the sum of absolute deviations in a simple regression problem. *Management Sci.* **19** (1972/73), 222-225; Erratum, *ibid.* **19** (1972/73), 1334. (M. Mañas) **48** #13278 90C50
(with Thompson, Gerald L.) An operator theory of parametric programming for the transportation problem. I, II. *Naval Res. Logist. Quart.* **19** (1972), 205-225; *ibid.* **19** (1972), 227-252. (E. S. Boylan) **47** #10058 90C05
(with Thompson, Gerald L.) Determining optimal growth paths in logistics operations. *Naval Res. Logist. Quart.* **19** (1972), 575-599. (Authors' summary) **47** #2989 90B05
(with Thompson, Gerald L.) Solving scheduling problems by applying cost operators to assignment models. Incorporating the results of discussion by Mohamed I. Messouky and Salah E. Elmaghraby. *Symposium on the Theory of Scheduling and its Applications* (North Carolina State Univ., Raleigh, N. C., 1972), pp. 399-425. *Lecture Notes in Economics and Mathematical Systems*, Vol. 86, Springer, Berlin, 1973. (Kailash C. Kapur) **53** #2360 90C05 (90B35)
(with Thompson, Gerald L.) Alternate formulations for static multi-attribute assignment models. *Management Sci.* **20** (1973), 154-158. (I. M. Stancu-Minasian) **48** #13235 90B35
(with Shocker, Allan D.) Linear programming techniques for multidimensional analysis of preferences. *Psychometrika* **38** (1973), 337-369. (Authors' summary) **44** #6436 62P15 (90C05)
(with Shocker, Allan D.) Estimating the weights for multiple attributes in a composite criterion using pairwise judgments. *Psychometrika* **38** (1973), 473-493. (E. J. Williams) **49** #8216 62H30 (62J15)
Linear programming computational procedures for ordinal regression. *J. Assoc. Comput. Mach.* **23** (1976), no. 3, 475-487. (P. Fortunati) **54** #2189 90C05
Decomposition of a multi-period media scheduling model in terms of single period equivalents. *Management Sci.* **23** (1976/77), no. 4, 349-360. (Author's summary) **55** #14184 90B35
(with Fong, C. O.) Multiperiod capacity expansion and shipment planning with near costs. *Naval Res. Logist. Quart.* **23** (1976), no. 1, 37-52. (M. Stoica) **54** #4606 0B05 (90C05)
(with Thompson, Gerald L.) Algorithms for minimizing total cost, bottleneck time and bottleneck shipment in transportation problems. *Naval Res. Logist. Quart.* **23** (1976), no. 4, 567-595. (Authors' summary) **56** #4808 90B99 (90-04, 90C05)
(with Smith, T. H. C.; Thompson, Gerald L.) Computational performance of three subtour elimination algorithms for solving asymmetric traveling salesman problems. *Studies in integer programming* (Proc. Workshop, Bonn, 1975), pp. 495-506. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (See Zbl **363** #90081; MR **56** #2376) 90C10
(with Thompson, Gerald L.) Cost operator algorithms for the transportation problem. *Math. Programming* **12** (1977), no. 3, 372-391. (J. A. Tomlin) **56** #10012 65K05 (90C10)
See also **Mathematical programming and its applications**, **49** #10355
Srinivasan, V. K. On the ideal structure of the algebra of all entire functions over complete non-archimedean valued fields. *Arch. Math. (Basel)* **24** (1973), 505-512. (L. Narici) **49** #5854 46J20
A note on harmonic functions and harmonic conjugates. *Internat. J. Math. Ed. Sci. Tech.* **8** (1977), no. 3, 323-328. (J. Ferrand) **56** #15890 30-01
Srinivasa Rao, K. (with Santhanam, T. S.; Venkatesh, K.) On the symmetries of the Racah coefficient. *J. Mathematical Phys.* **16** (1975), 1528-1530. (B. M. Agrawal) **52** #16337 81.33
(with Venkatesh, K.) Representation of the Racah coefficient as a generalized hypergeometric function. *Group theoretical methods in physics* (Proc. Fifth Internat. Colloq., Univ. Montréal, Montréal, Que., 1976), pp. 649-656. *Academic Press, New York*, 1977. (Gisèle Hadinger) **58** #4024 81.22 (33A35, 22E70)
Some computational methods in physics. *Proceedings of the Conference on Matrix Algebra, Computational Methods and Number Theory* (Mysore, 1976), Paper No. 4, 21 pp. *Matscience Report No. 87, Inst. Math. Sci., Madras*, 1977. (N. N. Janenko) **56** #16984 65-02
Srinivasengar, C. N. M. T. Naranienagar: A life sketch [1871-1940]. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 201-204 (1972). (1 plate) (Editors) **48** #3683 01A70
See also **Collection: Srinivasengar, C. N.**, **48** #1839; **Biography: Srinivasengar, C. N.**, **48** #5803 and **Collection: Srinivasengar, C. N.**, **49** #4701
Śrīpati. See **Sinha, Kripa Nath**. **58** #15824
Sriram, M. See **Mathematical programming and its applications**, **49** #10355
SriRankanathan, S. (with Sharma, C. S.) A coordinate-free treatment of the minimax and maxmini theorems for eigenvalues of self-adjoint operators on a Hilbert space. *J. Phys. A* **8** (1975), no. 12, 1853-1862. (T. Kato) **55** #6224 47A70 (49G20)
(with Sharma, C. S.) A coordinate-free treatment of Bazley lower bounds to the eigenvalues of atomic Hamiltonians. *J. Phys. A* **9** (1976), no. 6, 889-895. (Nadine Bessis) **57** #15081 81.47
Srivastav, R. P. Dual integral equations with trigonometric kernels and tempered distributions. *SIAM J. Math. Anal.* **3** (1972), 413-421. (Marvin Shinbrot) **47** #735 45F05 (46F10)
(with Lowengrub, M.) A Cauchy-type integral equation arising in potential theory. *Applicable Anal.* **4** (1974/75), 1-8. (P. M. Gupta) **55** #6142 45E05
An L_2 -theory of dual integral equations. *J. of M. A. C. T.* **9** (1976), 1-21. (S. L. Kalla) **56** #998 45F10
On dual integral equations with trigonometric kernels. *Quart. Appl. Math.* **35** (1977/78), no. 4, 524-526. (K. S. Parihar) **57** #3779 45F10
Srivastava, A. K. (with Avadhani, M. S.) A comparison of Midzuno-Sen scheme with P.P.S. sampling without replacement and its application to successive sampling. *Ann. Inst. Statist. Math.* **24** (1972), 153-164. (B. Raja Rao) **49** #9996 (EA **50**) 62D05
Srivastava, Arun K. (with Shukla, Wagish) Local reflectivity + stable + stable reflectivity = reflectivity. *General Topology and Appl.* **5** (1975), 61-68. (G. E. Strecker) **52** #528 18A40 (54B30)
(with Shukla, Wagish) A topology for automata: a note. *Information and Control* **32** (1976), no. 2, 163-168. (Itsuo Takanami) **55** #12362 94A30
Near reflections. *Czechoslovak Math. J.* **27(102)** (1977), no. 4, 619-625. (L. Skula) **57** #3212 18A40
Srivastava, Aruna On products of hypergeometric series. *J. Indian Math. Soc. (N.S.)* **35** (1971), 235-240 (1972). (U. C. Jain) **46** #7571 33A30
(with Gupta, K. C.) On certain recurrence relations. II. *Math. Nachr.* **49** (1971), 187-197. (S. K. Bose) **46** #7572 33A30
(with Gupta, K. C.) On finite integrals involving products of generalized hypergeometric functions. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 123-130. (R. N. Jain) **49** #5414 33A30
(with Gupta, K. C.) On finite expansions for the H -function. *Indian J. Pure Appl. Math.* **3** (1972), no. 2, 322-328. (U. C. Jain) **45** #7128 33A35
(with Gupta, K. C.) Fractional integral operators and self-reciprocal functions. *Indian J. Pure Appl. Math.* **3** (1972), no. 6, 1131-1140. (P. Anandani) **51** #3811 44A20
On finite integrals involving products of n -Bessel functions. *Math. Student* **40A** (1972), 134-138. (S. L. Kalla) **49** #3244 33A40
(with Gupta, K. C.) Certain results involving Kampé de Fériet's function. *Indian J. Math.* **15** (1973), 99-102. (V. L. Deshpande) **50** #13636 33A30
Laplace transform $p^{-\alpha} e^{-\eta p} W_{\kappa, \rho}(2\eta p) G_{\nu, \delta}^{\alpha, \beta} \left[\begin{matrix} (a_\nu) \\ (b_\delta) \end{matrix} \right]$. *Indian J. Pure Appl. Math.* **5** (1974), no. 9, 825-831. (P. N. Rathie) **55** #3687 44A10 (33A35)
(with Rao, A. B.) On a polynomial of the form F_λ . *Indian J. Pure Appl. Math.* **6** (1975), no. 11, 1326-1334. (Y. L. Luke) **57** #3468 33A30
An application of the theorem of Srivastava and Brenner. *Indian J. Pure Appl. Math.* **9** (1978), no. 8, 761-763. (R. A. Askey) **58** #11558 33A65
Srivastava, B. B. On the lower ψ -order of the function defined by the series $\sum_{n=0}^{\infty} a_n e^{\lambda_n \psi(x)}$. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **36** (1971), 23-28 (1974). (A. K. Agarwal) **57** #12828 30A16
Srivastava, B. N. (with Werle, M. J.; Davis, R. T.) Viscous shock-layer solutions for hypersonic sphere cones. *AIAA J.* **16** (1978), no. 2, 137-144. (Authors' summary) **56** #17441 76.35
Srivastava, D. N. (with Dubey, G. K.; Singh, B. M.) The solution of quadruple trigonometrical integral equations and their application to a crack problem. *Indian J. Pure Appl. Math.* **8** (1977), no. 10, 1145-1156. (Editors) **58** #29924 45F10

- Srivastava, G. P.** Some new transformations and reducible cases of Appell's double series and their generalizations. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 319-326 (1972). (J. P. Singhal) **48** #8871 33A30
- A generalization of the theorems of Cayley and Orr. *Ganita* **23** (1972), no. 1, 81-89. (T. Erber) **48** #2440 33A30
- (with Hamilton, R. A. H.) Complementary variational principles. *Phys. Rep.* **38C** (1978), no. 1, 1-83. (From the introduction) **58** #20032 81A49
- Srivastava, Girja S.** On the logarithmic proximate orders. *Ganita* **21** (1970), no. 2, 47-57. (Hari Shankar) **53** #815 30A66
- On the mean values of entire functions of slow growth represented by Dirichlet series. (Turkish summary) *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **35** (1970), 25-34 (1972). (A. K. Agarwal) **48** #6414 30A64
- A note on logarithmic proximate orders. (Turkish summary) *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **35** (1970), 79-83 (1972). (S. Hellerstein) **48** #8796 30A66
- (with Srivastava, R. S. L.) Some inequalities related to proximate order. *Riv. Mat. Univ. Parma* (2) **12** (1971), 167-177. (S. M. Shah) **50** #10256 30A64
- (with Bajpai, Shyam K.) On mean values of entire functions of exponential type. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **8(28)** (1973), 187-198. (A. Baillette) **50** #2489 30A64
- (with Vaish, Satendra K.) On the mean values of an entire function. *Pure Appl. Math. Sci.* **4** (1976), no. 1-2, 115-120. (J. P. Singh) **58** #17090 30A66
- (with Vaish, Satendra K.) Mean values of an entire Dirichlet series. (French summary) *Rend. Mat.* (6) **10** (1977), no. 2-3, 409-416. (P. K. Kamthan) **57** #9968 30A66
- (with Vaish, Satendra K.) On the geometric means of products of entire functions. *Pure Appl. Math. Sci.* **8** (1978), no. 1-2, 15-18. (L. R. Sons) **58** #11402 30A64
- Srivastava, Gopalji** (with Srivastava, Shambhunath) Isothermal cylinders. *J. of M. A. C. T.* **9** (1976), 61-64. (J. F. Heyda) **56** #4442 80A34
- Srivastava, H. M.** (with Verma, R. U.) On summation of Meijer's G -function of two variables. *Indian J. Math.* **12** (1970), 137-140. (A. K. Agarwal) **46** #2112 33A35
- On a generalisation of Laguerre polynomials and Mittag-Leffler's function. *Makedon. Akad. Nauk. Umet. Oddel. Prirod.-Mat. Nauk. Prirozi* **2** (1970), no. 1, 5-15. (R. K. Saxena) **45** #7138 33A65
- On reciprocal functions. *Indian J. Pure Appl. Math.* **3** (1972), no. 5, 704-713. (J. N. Pandey) **48** #6830 44A15
- On a generalisation of a function allied to Bateman's function. *Mat. Vesnik* **9(24)** (1972), 197-204. (C. J. Bouwkamp) **48** #6498 33A40
- (with Srivastava, S. C.) On the formal solution of dual integral equations of two variables. *Defence Sci. J.* **23** (1973), 71-78. (S. P. Goual) **52** #3902 45F10
- (with Chak, A. M.) An extension of a class of polynomials. III. *Riv. Mat. Univ. Parma* (3) **2** (1973), 11-18. (I. M. Sheffer) **52** #14417 33A70
- (with Kashyap, B. R. K.) ★On distribution-free analysis of $M/G/1$ and $G/M/1$ queues. Working Paper Series, No. 9. *Indian Institute of Management, Calcutta*, 1974. 14 pp. (U. Narayan Bhat) **54** #6322 60K25
- Srivastava, H. S. P.** (with Anandani, Parmanand) On Mellin transform of product involving Fox's H -function and a generalized function of two variables. *Comment. Math. Univ. St. Paul.* **21** (1972/73), no. 2, 35-42. (B. L. Sharma) **48** #587 33A35 (44A20)
- Some theorems on generalised H -transform. *Labdev—J. Sci. Tech. Part A* **13** (1975), no. 3-4, 189-193 (1978). (Author's summary) **57** #12931 33A30
- Some expansions for a generalized function of two variables in series involving exponential functions. (Turkish summary) *Istanbul Tek. Üniv. Bil.* **30** (1977), no. 2, 50-57. (See Zbl **394** #33006) 33A30
- Some infinite series involving a generalized function of two variables. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **20** (1977), no. 2, 97-104. (Author's summary) **56** #16011 33A30
- Srivastava, Hari M.** Differential equations of Lauricella's F_D . *Proc. Nat. Acad. Sci. India Sect. A* **36** (1966), 539-546. (Editors) **47** #515 33A30
- A multiplication formula associated with Lauricella's hypergeometric function F_4 . *Bull. Soc. Math. Grèce (N.S.)* **11** (1970), no. 1, 66-70. (B. S. Tavathia) **49** #5413 33A30
- A note on the evaluation of a definite integral. *J. Korean Math. Soc.* **7** (1970), 29-32. (C. M. Joshi) **48** #4362 33A30
- (with Daoust, Martha C.) Some infinite summation formulas involving generalized hypergeometric functions. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **57** (1971), 961-975. (R. N. Jain) **46** #2099 33A30
- (with Singhal, J. P.) A class of polynomials defined by generalized Rodrigues' formula. *Ann. Mat. Pura Appl.* (4) **90** (1971), 75-85. (A. G. Law) **46** #7596 33A65
- Some formulas of J. Meixner. *Arch. Rational Mech. Anal.* **43** (1971), 363-366. (Y. L. Luke) **48** #11595 33A30
- Some multiplication formulas for the generalized Lauricella functions. *Bull. Soc. Math. Grèce (N.S.)* **12** (1971), no. 1, 112-119. (B. S. Tavathia) **45** #7120 33A30
- (with Daoust, Martha C.) Some generating functions for the Jacobi polynomials. *Comment. Math. Univ. St. Paul.* **20** (1971/72), 15-21. (Y. L. Luke) **45** #5433 33A65
- A formal extension of certain generating functions. II. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **6(26)** (1971), 35-44. (Brij Mohan) **46** #405 33A30
- A class of bilateral generating functions for the Jacobi polynomial. *J. Korean Math. Soc.* **8** (1971), 25-30. (A. G. Law) **46** #3854 33A35 (33A65)
- Certain double integrals involving hypergeometric functions. *Jñānabha Sect. A* **1** (1971), no. 1, 1-10. (Y. L. Luke) **46** #406 33A30
- A new class of generating functions involving several complex variables. *Nederl. Akad. Wetensch. Proc. Ser. A* **74=Indag. Math.** **33** (1971), 483-486. (M. Nassif) **47** #2105 33A30
- A note on certain bilinear and bilateral generating relations for the Laguerre polynomial. *Proc. Indian Acad. Sci. Sect. A* **74** (1971), 299-308. (T. S. Chihara) **45** #7139 33A65
- (with Daoust, Martha C.) A double series involving Appell's function F_4 . *Rend. Mat.* (6) **4** (1971), 131-135. (B. M. Agrawal) **45** #3793 33A30
- (with Singhal, J. P.) Some formulas involving the products of several Jacobi or Laguerre polynomials. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **58** (1972), 1238-1247. (A. G. Law) **47** #7085 33A65
- Certain formulas associated with generalized Rice polynomials. II. *Ann. Pol. Math.* **27** (1972/73), 73-83. (R. C. Varma) **48** #6484 33A30
- On the product of two Laguerre polynomials. (Italian summary) *Boll. Un. Mat.* (4) **5** (1972), 1-6. (D. L. Colton) **46** #3866 33A65 (44A15)
- (with Singhal, J. P.) Certain generating functions for Jacobi, Laguerre and Legendre polynomials. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 355-363. (B. M. Agrawal) **46** #7595 33A65
- (with Choe, Young Han) On a class of polynomials associated with Lauricella hypergeometric functions. *Bull. Soc. Math. Grèce (N.S.)* **13** (1972), no. 1-2, 58-65. (B. S. Tavathia) **51** #13310 33A30
- Certain formulas involving Appell functions. *Comment. Math. Univ. St. Paul.* (1972/73), no. 1, 73-99. (N. C. Jain) **47** #8918 33A30
- A note on certain summation formulas involving generalized hypergeometric functions. *Comment. Math. Univ. St. Paul.* **21** (1972/73), no. 2, 25-34. (L. J. Slater) **54** #3053 33A30
- (with Singhal, J. P.) Some extensions of the Mehler formula. II. *Duke Math. J.* (1972), 173-177. (R. A. Askey) **45** #613 33A65
- A contour integral involving Fox's H -function. *Indian J. Math.* **14** (1972), 1-6. (Saran) **48** #8885 33A35
- (with Singhal, J. P.) On a class of generalized hypergeometric distributions. *Jñānabha Sect. A* **2** (1972), 1-9. (S. D. Bajpai) **50** #15069 62E15
- A note on certain hypergeometric differential equations. *Mat. Vesnik* **9(24)** (1972), 101-107. (R. S. Dahiya) **48** #2441 33A30
- (with Singhal, J. P.) A unified presentation of certain classical polynomials. *Math. Comp.* **26** (1972), 969-975. (A. E. Danese) **47** #2114 33A65
- (with Daoust, Martha C.) A note on the convergence of Kampé de Fériet's double hypergeometric series. *Math. Nachr.* **53** (1972), 151-159. (Harold Exton) **47** #5313 33A30
- On a generating function for the Jacobi polynomial. II. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 225-230 (1974). (R. N. Jain) **53** #912 33A65
- Some bilinear generating relations for Jacobi and Laguerre polynomials. *Mathematica (Cluj)* **14(37)** (1972), 399-406. (S. D. Bajpai) **51** #13314 33A65
- A pair of dual series equations involving generalized Bateman k -functions. *Nederl. Akad. Wetensch. Proc. Ser. A* **75=Indag. Math.** **34** (1972), 53-61. (S. L. Kalla) **46** #4126 45F05 (42A56)
- A class of integral equations involving the H function as kernel. *Nederl. Akad. Wetensch. Proc. Ser. A* **75=Indag. Math.** **34** (1972), 212-220. (C. Fox) **46** #2375 45H05
- Remark on a combinatorial identity of F. Y. Wu. *Nordisk Mat. Tidskr.* **20** (1972), 85-86, 120. (D. P. Roselle) **48** #1941 05A15
- (with Singhal, J. P.) A class of bilateral generating functions for certain classical polynomials. *Pacific J. Math.* **42** (1972), 755-762. (S. Saran) **47** #5325 33A30 (33A45)
- Remark on some integrals involving products of Whittaker functions. *Proc. Am. Math. Soc.* **31** (1972), 133-134. (L. J. Slater) **46** #5688 33A30
- Some formulas of Hermite and Carlitz. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1257-1263. (L. Carlitz) **48** #584 (EA 48) 33A30
- (with Singhal, J. P.) Some generalizations of Mehler's formula. *Rocky Mountain J. Math.* **2** (1972), no. 2, 283-287. (S. K. Chatterjea) **45** #3809 33A65
- A reduction formula for generalized hypergeometric functions. *Z. Angew. Math. Mech.* **52** (1972), no. 11, 554. (T. Erber) **52** #8518 33A30
- (with Buschman, Robert G.) Composition of fractional integral operators involving Fox's H -function. *Acta Mexicana Ci. Tecn.* **7** (1973), 21-28. (S. L. Kalla) **51** #8495 33A35
- (with Daoust, Martha C.) Generalized Lauricella functions with different multiplicities. *Bull. Soc. Math. Grèce (N.S.)* **14** (1973), 5-14. (R. G. Langebaert) **50** #13641 33A30
- On the reducibility of Appell's function F_4 . *Canad. Math. Bull.* **16** (1973), 295-300. (Harold Exton) **48** #2442 33A30
- A note on the integral representation for the product of two generalized Legendre polynomials. *Collect. Math.* **24** (1973), 117-121. (R. S. Dahiya) **49** #647 33A30
- (with Srivastava, Rekha) Certain expansion formulas involving the generalized Lauricella functions. *Comment. Math. Univ. St. Paul.* **22** (1973/74), no. 2, 19-32. (V. L. Deshpande) **51** #8490 33A30
- (with Singhal, J. P.) New generating functions for Jacobi and related polynomials. *J. Math. Anal. Appl.* **41** (1973), 748-752. (R. A. Askey) **48** #4374 33A65
- Generalized hypergeometric functions with integral parameter differences. *Nederl. Akad. Wetensch. Proc. Ser. A* **76=Indag. Math.** **35** (1973), 38-40. (Y. L. Luke) **47** #2106 33A30
- A further note on certain dual equations involving Fourier-Laguerre series. *Nederl. Akad. Wetensch. Proc. Ser. A* **76=Indag. Math.** **35** (1973), 137-141. (Brij Mohan) **47** #7358 45F10
- (with Srivastava, Rekha) Some operational techniques in the theory of special functions. *Nederl. Akad. Wetensch. Proc. Ser. A* **76=Indag. Math.** **35** (1973), 308-311. (C. M. Joshi) **48** #8872 33A30
- (with Exton, Harold) On Laplace's linear differential equation of general order. *Nederl. Akad. Wetensch. Proc. Ser. A* **76=Indag. Math.** **35** (1973), 371-374. (J. Donaldson) **49** #648 33A30 (34A05)
- On the Konhauser sets of biorthogonal polynomials suggested by the Laguerre polynomials. *Pacific J. Math.* **49** (1973), 489-492. (D. P. Gupta) **50** #7616 33A30
- (with Srivastava, Rekha) A note on the generalised Rice polynomials. *Ranchi Univ. Math. J.* **4** (1973), 65-72. (V. L. Deshpande) **49** #9288 33A65
- (with Srivastava, Rekha) Some hypergeometric transformations involving Horn's function H_3 . *Rend. Mat.* (6) **6** (1973), 859-864. (V. L. Deshpande) **50** #13641 33A30
- Some generating functions of hypergeometric polynomials. *Simon Stevin* **47** (1973/74), 39-43. (V. L. Deshpande) **48** #11622 33A65
- (with Joshi, C. M.) Integral representation for the product of a class of generalised

- hypergeometric polynomials. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **60** (1974), 919-926. (R. S. Dahiya) **50** #7608 33A30
- (with Exton, Harold) A transformation formula relating two Lauricella functions. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), 38-42. (T. Erber) **52** #3625 33A30
- Some finite summation formulas. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 3-4, 166-139 (1975). (K. M. Saksena) **53** #8527 33A70
- (with Srivastava, Rekha) Certain expansion formulas involving the generalized Lauricella functions. II. *Comment. Math. Univ. St. Paul.* **23** (1974/75), no. 1, 7-14. (V. L. Deshpande) **51** #8491 33A30
- (with Brenner, Joel) Bounds for Jacobi and related polynomials derivable by matrix methods. *J. Approximation Theory* **12** (1974), 372-377. (V. L. Deshpande) **51** #10722 33A65
- Comments on certain combinatorial identities and a paper of P. W. Karlsson ("On a formula by Srivastava" (Nordisk Mat. Tidskr. **21** (1973), 101)). *Math. Student* **42** (1974), 212-213 (1975). (From the author's summary) **53** #5324 05A19
- (with Buschman, Robert G.) Some convolution integral equations. *Nederl. Akad. Wetensch. Proc. Ser. A* **77**=*Indag. Math.* **36** (1974), 211-216. (C. Fox) **49** #11175 45H05
- Note on certain generating functions for Jacobi and Laguerre polynomials. *Publ. Inst. Math. (Beograd) (N.S.)* **17**(31) (1974), 149-154. (R. S. Dahiya) **50** #7618 33A65
- Analytic continuation of Appell's function F_4 . *Rev. Mat. Hisp.-Amer.* (4) **34** (1974), 151-156. (R. N. Jain) **50** #10349 33A30
- An integral equation involving the confluent hypergeometric function of several complex variables. *Applicable Anal.* **5** (1975/76), no. 4, 251-256. (R. G. Buschman) **53** #14052 45H05 (33A30)
- (with Srivastava, Rekha) On the unified presentation of certain classical polynomials. (Italian summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, 306-314. (C. M. Joshi) **53** #5964 33A65
- (with Srivastava, Rekha) Some recursion formulas associated with multiple hypergeometric functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 3, 243-250. (S. Saran) **52** #6052 33A30
- (with Srivastava, Rekha) Some expansion theorems and generating relations for the H function of several complex variables. *Comment. Math. Univ. St. Paul.* **24** (1975/76), no. 2, 119-137. (S. Saran) **58** #1302 33A35
- Some generating-function equivalences. *Glasgow Math. J.* **16** (1975), part 1, 34-39. (S. P. Goyal) **51** #13309 33A30
- (with Buschman, Robert G.) Inversion formulas for the integral transformation with the H -function as kernel. *Indian J. Pure Appl. Math.* **6** (1975), no. 6, 583-589. (C. K. Sharma) **56** #3372 33A35
- (with Srivastava, Rekha) An integral representation for the product of two Jacobi polynomials. *J. London Math. Soc.* (2) **12** (1975/76), no. 4, 419-425. (B. R. Bhonsle) **53** #8526 33A65 (33A30)
- (with Srivastava, Rekha) Some analytic or asymptotic confluent expansions for functions of several variables. *Math. Comput.* **29** (1975), no. 132, 1115-1128. (J. L. Fields) **52** #8534 33A65
- (with Lavoie, J.-L.) A certain method of obtaining bilateral generating functions. *Nederl. Akad. Wetensch. Proc. Ser. A* **78**=*Indag. Math.* **37** (1975), no. 4, 304-320. (H. W. Gould) **53** #13665 33-XX
- (with Gupta, K. C.; Handa, S.) A certain double integral transformation. *Nederl. Akad. Wetensch. Proc. Ser. A* **78**=*Indag. Math.* **37** (1975), no. 5, 402-406. (V. M. Bhise) **52** #8526 33A35
- An equivalence theorem on generating functions. *Proc. Amer. Math. Soc.* **52** (1975), 159-165. (H. L. Manocha) **52** #835 33A70
- (with Buschman, Robert G.) Some polynomials defined by generating relations. *Trans. Amer. Math. Soc.* **205** (1975), 360-370. (R. N. Jain) **51** #6001 (E 55 #3370) 33A70
- (with Srivastava, Rekha) Some expansion theorems and generating relations for the H function of several complex variables. II. *Comment. Math. Univ. St. Paul.* **25** (1976/77), no. 2, 167-197. (S. Saran) **58** #17246 33A30
- (with Srivastava, Rekha) Some expansions of hypergeometric functions in series of hypergeometric functions. *Glasgow Math. J.* **17** (1976), no. 1, 17-21. (B. L. Sharma) **53** #11112 33A30
- (with Srivastava, Rekha) Some bilateral generating functions for a class of generalized hypergeometric polynomials. *J. Reine Angew. Math.* **283/284** (1976), 265-274. (V. L. Deshpande) **53** #11114 33A35
- (with Srivastava, Rekha) Expansion theorems for the H function of several complex variables. *J. Reine Angew. Math.* **288** (1976), 129-145. (V. L. Deshpande) **54** #7902 33A35
- (with Carlitz, Leonard) Some hypergeometric polynomials associated with the Lauricella function F_D of several variables. I. *Mat. Vesnik* **13**(28), (1976), no. 1, 41-47. (V. L. Deshpande) **53** #11111 33A30
- (with Carlitz, Leonard) Some hypergeometric polynomials associated with the Lauricella function F_D of several variables. II. *Mat. Vesnik* **13**(28), (1976), no. 2, 143-152. (V. L. Deshpande) **54** #7911 33A65
- A note on a generating function for the generalized hermite polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), no. 5, 457-461. (Gisèle Hadinger) **54** #10713 33A65
- Some remarks on a generalization of the Stieltjes transform. *Publ. Math. Debrecen* **23** (1976), no. 1-2, 119-122. (G. M. Habibullah) **54** #3313 44A15
- (with Buschman, Robert G.) Mellin convolutions and H -function transformations. *Rocky Mountain J. Math.* **6** (1976), no. 2, 331-343. (N. C. Jain) **53** #3606 44A20
- (with Buschman, Robert G.) ★ Convolution integral equations with special function equations. *John Wiley & Sons, New York-London-Sydney*, 1977. 164 pp. ISBN 0-470-99050-3 (From the preface) **58** #29888 45-02
- The sum of a multiple hypergeometric series. *Nederl. Akad. Wetensch. Proc. Ser. A* **80** = *Indag. Math.* **39** (1977), no. 5, 448-452. (C. K. Sharma) **57** #736 33A30
- P. L. Bhatnagar: a mathematician I have known. *Pure Appl. Math. Sci.* **6** (1977), no. 1-2, 1-4. (Editors) **58** #10225 01A70
- (with Buschman, Robert G.) Addendum to: "Some polynomials defined by generating relations" (Trans. Amer. Math. Soc. **205** (1975), 360-370). *Trans. Amer. Math. Soc.* **226** (1977), 393-394. (R. N. Jain) **55** #3370 33A70
- Certain generating functions of several variables. *Z. Angew. Math. Mech.* **57** (1977), no. 6, 339-340. (Author's summary) **56** #12350 33A30
- (with Srivastava, Rekha) Certain multidimensional integral transformations. I. *Nederl. Akad. Wetensch. Proc. Ser. A* **81** = *Indag. Math.* **40** (1978), no. 1, 118-131. (William L. Perry) **58** #2039a 44A05
- (with Srivastava, Rekha) Certain multidimensional integral transformations. II. *Nederl. Akad. Wetensch. Proc. Ser. A* **81** = *Indag. Math.* **40** (1978), no. 1, 132-144. (William L. Perry) **58** #2039b 44A05
- Srivastava, J. B.** (with Sinha, I.) Ideals in commutative domains. *Math. Mag.* **44** (1971), 124-127. (T. S. Shores) **45** #6798 13G05
- (with Sinha, I.) Relative projectivity and a property of Jacobson radical. *Publ. Math. Debrecen* **18** (1971), 37-41 (1972). (C. Vraciu) **48** #2176 16A26
- (with Gupta, Vishnu) Restricted semiprimary group rings. *Math. J. Okayama Univ.* **20** (1978), no. 1, 77-82. (Ralph W. Wilkerson) **58** #10997 16A26
- Srivastava, Jagdish N.** (with McDonald, Lyman L.) ★ On the optimal two-response designs of the cyclic PBIB type. ARL 70-0022. *Aerospace Research Laboratories, Office of Aerospace Research, United States Air Force, Wright-Patterson Air Force Base, Ohio*, 1970. iv + 18 pp. (A. Hedayat) **47** #9788 62K05
- (with Chopra, D. V.) Optimal balanced 2^k fractional factorial designs of resolution V. (French summary) Proceedings of the 38th Session of the International Statistical Institute (Washington, D. C., 1971), Vol. 2. *Bull. Inst. Internat. Statist.* **44** (1971), no. 2, 139-142. (U. B. Paik) **51** #7184 62K15
- (with McDonald, Lyman L.) On the costwise optimality of certain hierarchical and standard multiresponse models under the determinant criterion. *J. Multivariate Anal.* **1** (1971), no. 1, 118-128. (Authors' summary) **46** #1027 62K05
- (with Chopra, D. V.) Balanced optimal 2^m fractional factorial designs of resolution V , $m < 6$. *Technometrics* **13** (1971), no. 2, 257-269. (Authors' summary) **53** #1876 62K15 (62K05)
- Some general existence conditions for balanced arrays of strength t and 2 symbols. *J. Combinatorial Theory Ser. A* **13** (1972), 198-206. (Jane W. Di Paola) **46** #7055 05B10
- (with Zaatar, M. K.) On the maximum likelihood classification rule for incomplete multivariate samples and its admissibility. *J. Multivariate Anal.* **2** (1972), 115-126. (Authors' summary) **46** #2793 62H99
- (with Anderson, Donald A.) Resolution IV designs of the $2^m \times 3$ series. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 377-384. (R. M. Cormack) **48** #12749 62K15
- (with Chopra, D. V.) Balanced arrays and orthogonal arrays. *A survey of combinatorial theory* (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971), pp. 411-428. North-Holland, Amsterdam, 1973. (Peter J. Cameron) **52** #2926 05B30
- An information function approach to dimensionality analysis and curved manifold clustering. *Multivariate analysis, III* (Proc. Third Internat. Sympos., Wright State Univ., Dayton, Ohio, 1972), pp. 369-382. Academic Press, New York, 1973. (T. N. Bhargava) **49** #10069 62H30 (62H25)
- (with McDonald, Lyman L.) On the extensions of Gauss-Markov theorem to subsets of the parameter space under complex multivariate linear models. *Ann. Inst. Statist. Math.* **25** (1973), 383-393. (Mir Ali) **48** #12740 62J05
- (with Chopra, D. V.) Optimal balanced 2^7 fractional factorial designs of resolution V, with $N < 42$. *Ann. Inst. Statist. Math.* **25** (1973), 587-604. (S. K. Tharthare) **53** #1877 62K15 (62K05)
- Balanced fractional factorial designs of resolution V for 3^m series. (French summary) Proceedings of the 39th Session of the International Statistical Institute (Vienna, 1973), Vol. 1. *Bull. Inst. Internat. Statist.* **45** (1973), no. 1, 271-276. (U. B. Paik) **51** #9394 62K15
- (with Chopra, D. V.) Optimal balanced 2^7 fractional factorial designs of resolution V, $49 < N < 55$. *Comm. Statist.* **2** (1973), 59-84. (M. Atiqullah) **48** #1397 62K05
- (with Zaatar, M. K.) Incomplete multivariate designs, optimal with respect to Fisher's information matrix. *Ann. Inst. Statist. Math.* **26** (1974), 299-313. (Authors' summary) **56** #13470 62K05
- (with Anderson, Donald A.) A comparison of the determinant, maximum root, and trace optimality criteria. *Comm. Statist.* **3** (1974), no. 10, 933-940. (D. V. Chopra) **52** #9527 62K05
- (with Chopra, D. V.) Optimal balanced 2^8 fractional factorial designs of resolution V, $37 < N < 51$. *Sankhyā Ser. A* **36** (1974), no. 1, 41-52. (I. M. Chakravarti) **52** #12249 62K15
- (with McDonald, Lyman L.) Analysis of growth curves under the hierarchical models. *Sankhyā Ser. A* **36** (1974), no. 3, 251-260. (C. G. Khatri) **52** #7018 62H15 (62J05)
- (with Chopra, D. V.) Balanced trace-optimal 2^7 fractional factorial designs of resolution V, with 56 to 68 runs. *Utilitas Math.* **5** (1974), 263-279. (M. Atiqullah) **50** #1430 62K15
- Designs for searching non-negligible effects. *A survey of statistical design and linear models* (Proc. Internat. Sympos., Colorado State Univ., Ft. Collins, Colo., 1973), pp. 507-519. North-Holland, Amsterdam, 1975. (U. B. Paik) **53** #1878 62K15
- On the physical applicability of the methods of probability and statistics. I. Randomisation analysis. (French summary) Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 349-353 (1976). (R. J. Buehler) **57** #4384 62A99
- (with Chopra, D. V.) Optimal balanced 2^7 fractional factorial designs of resolution V, $43 < N < 48$. *Sankhyā Ser. B* **37** (1975), no. 4, 429-447. (Authors' summary) **58** #31625 62K05
- Some further theory of search linear models. *Contributions to applied statistics*, pp. 249-256. *Experientia Supplementum*, Vol. 22, Birkhäuser, Basel, 1976. (U. B. Paik) **56** #1620 62K99
- (with Raktoc, B. L.; Pesotan, H.) On invariance and randomization in fractional replication. *Ann. Statist.* **4** (1976), no. 2, 423-430. (U. B. Paik) **52** #15892 62K15

- (with Ghosh, Subir) A series of balanced 2^m factorial designs of resolution V which allow search and estimation of one extra unknown effect. *Sankhyā Ser. B* 38 (1976), no. 3, 280-289. (Authors' summary) 58 #31648 62K15
- Optimal search designs, or designs optimal under bias free optimality criteria. *Statistical decision theory and related topics. II (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976)*, pp. 375-409. Academic Press, New York, 1977. (A. Hedayat) 56 #4069 62K05
- (with Ghosh, Subir) On the existence of search designs with continuous factors. *Ann. Inst. Statist. Math.* 29 (1977), no. 2, 301-306. (U. B. Paik) 57 #10936 62K05
- (with Ghosh, Subir) Balanced 2^m factorial designs of resolution V which allow search and estimation of one extra unknown effect, $4 < m < 8$. *Comm. Statist.-Theory Methods* A6 (1977), no. 2, 141-166. (K. R. Shah) 55 #11518 62K15
- See also *Proceedings: Session of the International Statistical Institute*, 49 #8143; *Proceedings: Session of the International Statistical Institute*, 49 #8145; *Survey of combinatorial theory*, 50 #1889 and *Survey of statistical design and linear models*, 51 #2039
- Srivastava, K. N.** (with Kumar, M.) On three part mixed boundary value problems of elastostatics for an isotropic cylinder containing two strip cracks opened by internal pressure. *Indian J. Pure Appl. Math.* 1 (1970), no. 4, 625-639. (Authors' summary) 53 #4693 73.45
- (with Gupta, Om P.) On three parts mixed boundary value problem in potential theory. *Indian J. Pure Appl. Math.* 2 (1971), no. 4, 704-712. (R. B. Kelman) 46 #1202 78.31
- (with Kumar, M.) On distribution of stress in an infinite solid containing a cylindrical cavity and two strip cracks. *Indian J. Pure Appl. Math.* 3 (1972), no. 5, 830-839. (Authors' summary) 53 #4694 73.45
- (with Kumar, M.; Nath, Baij) Thermal stresses in an infinite solid containing a cylindrical cavity and two strip cracks. *Jñānabha Sect. A* 2 (1972), 117-142. (D. Ieşan) 51 #2423 73.45
- (with Bhonsle, B. R.) A note on orthogonal polynomials. *Math. Student* 41 (1973), no. 3-4, 293-294 (1974). (A. G. Law) 52 #3633 33A65
- (with Kumar, M.; Nath, Baij) Thermal stresses in an infinite cylinder containing two strip cracks. *Indian J. Pure Appl. Math.* 5 (1974), no. 2, 201-222. (P. M. Gupta) 53 #4695 73.45
- (with Gupta, Om P.) Stress distribution in a thin circular plate having star-shaped crack. *Z. Angew. Math. Mech.* 54 (1974), 431-434. (R. P. Srivastav) 50 #11943 73.45
- (with Kumar, M.; Jha, A. C.) An edge crack in a thin semi-circular plate. *Indian J. Pure Appl. Math.* 8 (1977), no. 1, 72-83. (M. Sokolowski) 57 #11270 73.45
- (with Palaiya, R. M.; Choudhary, A.) Riemann boundary value problem technique for solving certain multiple integral equations and their applications. *J. of M.A.C.T.* 10 (1977), 85-105. (S. L. Kalla) 57 #17148 45F05
- (with Kumar, M.; Jha, A. C.) Stress distribution in a thin circular elastic plate containing a Griffith crack embedded in an infinite elastic medium. *Defence Sci. J.* 28 (1978), no. 1, 15-24. (Authors' summary) 58 #25284 73.45
- Srivastava, Krishna Kumar** On B-monoid. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* 18 (1972), 285-288. (W. E. Deskins) 48 #4176 20N05
- Annihilators in near ring. *Math. Balkanica* 2 (1972), 215-218. (John D. P. Meldrum) 47 #8636 16A76
- Srivastava, L. M.** Compatibility equation for steady transverse plane MHD flows. *Acta Phys. Acad. Sci. Hungar.* 39 (1975), no. 3, 205-208. (J. C. J. Nihoul) 54 #1852 76.35
- (with Lal, Jagdish) On the problem of unsteady magnetohydrodynamic viscous flow past an infinite flat plate. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 9, 1291-1295. (R. S. Pathak) 57 #8404 76.35
- Srivastava, M. C.** (with Singh, K. P.) Petrov classification of a non-static axially symmetric toroidal distribution. *Indian J. Pure Appl. Math.* 5 (1974), no. 6, 543-555. (A. Crumeyrolle) 53 #15280 83.53
- Srivastava, M. M.** Infinite series of H -functions. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* 34 (1969), 79-81 (1971). (U. C. Jain) 46 #7584 33A35
- On self-reciprocal functions. *Ganita* 21 (1970), no. 2, 11-16. (N. C. Jain) 47 #8929 33A35
- Srivastava, Manesh P.** (with Saraf, Jagdish R.) Non-linear Couette flow with heat transfer using the B-G-K model. (German summary) *Z. Angew. Math. Phys.* 22 (1971), no. 3, 542-551. (Authors' summary) 58 #32658 82.35
- Srivastava, Muni S.** On a class of non-parametric tests for regression parameters. *J. Statist. Res.* 4 (1970), 117-132. (S. Blumenthal) 51 #4538 62G10
- (with Saleh, A. K. Md. Ehsanes) On a class of non-parametric estimates for regression parameters. *J. Statist. Res.* 4 (1970), 133-139. (S. Blumenthal) 51 #4539 62G10
- A sequential procedure for comparing several experimental categories with a control. *J. Statist. Res.* 4 (1970), 160-173. (P. J. Huber) 50 #15202 62L10
- On fixed-width confidence bounds for regression parameters. *Ann. Math. Statist.* 42 (1971), 1403-1411. (L. J. Gleser) 45 #4548 62L10
- (with Khatri, C. G.) On exact non-null distributions of likelihood ratio criteria for sphericity test and equality of two covariance matrices. *Sankhyā Ser. A* 33 (1971), 201-206. (P. R. Krishnaiah) 48 #1385 62H10
- Asymptotically most powerful rank test for regression parameters in MANOVA. *Ann. Inst. Statist. Math.* 24 (1972), 285-297. (P. K. Sen) 48 #7473 62H15 (62G10)
- (with Taneja, V. S.) Some sequential procedures for ranking multivariate normal populations. *Ann. Inst. Statist. Math.* 24 (1972), 455-464. (Joseph A. Yahav) 54 #6411 62L10 (62F07)
- (with Sen, Ashish K.) On a sequential selection procedure based on Wilcoxon statistic. *J. Statist. Res.* 6 (1972), 43-51. (J. Sethuraman) 50 #1435 62L10
- (with Sen, Ashish K.) A sequential solution of Wilcoxon types for a slippage problem. *Multivariate statistical inference (Proc. Res. Sem., Dalhousie Univ., Halifax, N.S., 1972)*, pp. 217-229. North-Holland, Amsterdam; American Elsevier, New York, 1973. (R. H. Farrell) 49 #10016 62F07 (62L10)
- (with Khatri, C. G.) On the exact non-null distribution of likelihood ratio criteria for covariance matrices. *Ann. Inst. Statist. Math.* 25 (1973), 345-354. (I. Olkin)
- 48 #9972 62H10
- (with Sen, Ashish K.) On sequential confidence intervals based on Wilcoxon estimates. *Ann. Statist.* 1 (1973), 1200-1202. (Tze Leung Lai) 51 #11878 62L10
- Evaluation of misclassification errors. (French summary) *Canad. J. Statist.* 1 (1973), no. 1, 35-50. (Chien-Pai Han) 53 #4384 62H30
- On a class of nonparametric tests for independence—bivariate case. *Canad. Math. Bull.* 16 (1973), 337-342. (J. V. Deshpande) 49 #11713 62G10
- A sequential approach to classification: cost of not knowing the covariance matrix. *J. Multivariate Anal.* 3 (1973), 173-183. (R. H. Berk) 48 #7480 62H30 (62L10)
- The performance of a sequential procedure for a slippage problem. *J. Roy. Statist. Soc. Ser. B* 35 (1973), 97-103. (S. Blumenthal) 53 #14814 62L10
- (with Bhargava, R. P.) On Tukey's confidence intervals for the contrasts in means of the intraclass correlation model. *J. Roy. Statist. Soc. Ser. B* 35 (1973), 147-152. (I. Guttman) 48 #9999 62J15 (62F25)
- Asymptotically most powerful rank tests. *J. Statist. Res.* 7 (1973), 1-11. (Brad R. Crain) 52 #4519 62G10
- (with Sen, Ashish K.) On multivariate tests for detecting change in mean. *Sankhyā Ser. A* 35 (1973), 173-186. (G. Tintner) 48 #9985 62H15
- (with Khatri, C. G.) Asymptotic expansions of the non-null distributions of likelihood ratio criteria for covariance matrices. *Ann. Statist.* 2 (1974), 109-117. (Hayashi) 49 #10053 62H10
- (with Khatri, C. G.) On the likelihood ratio test for covariance matrix in growth curve model. *Applied statistics (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1974)*, 187-198. North-Holland, Amsterdam, 1975. (Rashid Ahmad) 52 #12209 62H10
- (with Khatri, C. G.) Asymptotic expansions of the non-null distributions of likelihood ratio criteria for covariance matrices. II. *Proceeding of the Symposium on Statistics and Related Topics (Carleton Univ., Ottawa, Ont., 1974)*, Paper No. 8, 21-30. Carleton Univ., Ottawa, Ont., 1975. (C. Hayashi) 51 #11818 62H10
- On a class of rank scores tests for censored data. *Ann. Inst. Statist. Math.* 27 (1979), 69-78. (A. P. Basu) 52 #4520 62G10
- (with Sen, Ashish K.) On tests for detecting change in mean when variance is unknown. *Ann. Inst. Statist. Math.* 27 (1975), no. 3, 479-486. (N. Giri) 54 #3962F15
- (with Sen, Ashish K.) On tests for detecting change in mean. *Ann. Statist.* 3 (1975), 98-108. (Ian B. MacNeill) 50 #15089 62F05
- (with Khatri, C. G.) Some probability inequalities connected with Schur function. *J. Multivariate Anal.* 5 (1975), no. 4, 480-486. (Authors' summary) 52 #12210 62H10
- (with Carter, E. M.; Khatri, C. G.) Nonnull distribution of likelihood ratio criteria for reality of covariance matrix. *J. Multivariate Anal.* 6 (1976), no. 1, 176-184. (D. R. Jensen) 54 #1479 62H10
- (with Carter, E. M.) Monotonicity of the power functions of modified likelihood ratio criterion for the homogeneity of variances and of the sphericity test. *J. Multivariate Anal.* 7 (1977), no. 1, 229-233. (Hisao Nagao) 55 #4517 62H15
- (with Carter, E. M.) Asymptotic non-null distribution of a likelihood ratio criterion for sphericity in the growth curve model. *Sankhyā Ser. B* 39 (1977), no. 2, 160-170. (Jack C. Lee) 58 #31588 62H15 (62E20, 62J05)
- (with Carter, E. M.) Asymptotic nonnull distributions for tests for reality of covariance matrix. *J. Multivariate Anal.* 8 (1978), no. 1, 126-133. (Hisao Nagao) 58 #18893 62H10
- Srivastava, Nilima** (with Singh, K. D.) On some strictly almost analytic vector fields on a cotangent bundle. (Serbo-Croatian summary) *Glasnik Math. Ser. III* 8(28) (1974), 131-138. (Y. Mutô) 47 #9477 53C15
- (with Singh, K. D.) On some strictly almost analytic vector fields in tangent bundles. *Mat. Vesnik* 10(25) (1973), 9-18. (H. W. Guggenheimer) 48 #2935 53C15
- (with Singh, K. D.) On some f -structure manifolds with torsion. *Demonstr. Math.* 7 (1974), 183-196. (I. Vaisman) 49 #11423 53C15
- (with Singh, K. D.) Some almost Hermitian quaternion manifolds. *Demonstr. Math.* 7 (1974), 287-296. (A. Gray) 51 #4099 53C15
- (with Singh, K. D.) Strictly almost analytic vectors in a cotangent bundle manifold with a non linear connection. *Rev. Mat. Hisp.-Amer. (4)* 36 (1976), no. 1, 179-188. (Y. Mutô) 55 #4033 53C15
- Srivastava, P. P.** Superfield propagator in a curved superspace. *Lett. Nuovo Cimento (1975)*, no. 17, 657-660. (Editors) 56 #7748 83.53
- Algebra of general covariance group in superspace as the closure of algebra of superconformal, supergauge and linear groups. *Lett. Nuovo Cimento (2)* 14 (1975), 13, 471-474. 56 #1996 81.22
- On pseudo-Lie algebra in superspace. *Lett. Nuovo Cimento (2)* 15 (1976), no. 1, 588-590. (Johan G. Belinfante) 56 #8762 22E99 (81.22, 17B65)
- Superconformal group in flat superspace. *Lett. Nuovo Cimento (2)* 17 (1976), no. 1, 357-360. (Kenneth Dunn) 58 #20243 83.53
- Supersymmetry and pseudoclassical dynamics of particle with any spin. *Lett. Nuovo Cimento (2)* 19 (1977), no. 7, 239-244. (C. J. Eliezer) 56 #7522 81.16
- Srivastava, Pramila** (with Gupta, Vijay Kumar) A note on common fixed points. *Yokohama Math. J.* 19 (1971), no. 2, 91-95. (S. P. Singh) 53 #14466 54H25
- (with Prakash, Anand) On almost convergence. *Indian J. Math.* 14 (1972), 75-80. (W. S. Mahavier) 48 #9634 54A20
- (with Gupta, Vijay Kumar) On common fixed points. *Rev. Roumaine Math. J.* 17 (1972), 531-538. (S. P. Singh) 46 #4287 47H10 (54H25)
- (with Prakash, Anand) A note on weak continuity and almost continuity. *Yokohama Math. J.* 20 (1972), 131-134. (T. Husain) 46 #8160 54C05
- (with Prakash, Anand) Almost convergence and filters. *Progr. Math. (Allahabad)* (1973), no. 2, 45-50. (W. S. Mahavier) 54 #11262 54A20
- (with Prakash, Anand) Theorems on mappings into Urysohn spaces and Hausdorff spaces. (Italian summary) *Boll. Un. Mat. Ital. (4)* 12 (1975), no. 3, 321-326. (E. Duda) 53 #6497 54D10
- (with Ranganathan, Sucharita; Gupta, Vijay Kumar) Joint sequence of iterates of common fixed points. *Nanta Math.* 9 (1976), no. 1, 92-94. (L. P. Belluce) 56 #3854H25
- Srivastava, R. C.** On a characterization of the Poisson process. *J. Appl. Probability*

- 71), 615-616. (R. Fischler) **45** #6087 60J99
- Two characterizations of the geometric distribution. *J. Amer. Statist. Assoc.* **69** (1974), 267-269. (Ramesh C. Gupta) **52** #1971 62E10
- (with Foutz, Robert V.) The performance of the likelihood ratio test when the model is incorrect. *Ann. Statist.* **5** (1977), no. 6, 1183-1194. (Rasul A. Khan) **56** #6989 2F20
- (with Verma, B. G.) The piston problem with thermal radiation in magnetogasdynamics. *J. Mathematical and Physical Sci.* **11** (1977), no. 4, 351-363. (Jumbun Hutter) **56** #17531 80.35
- (with R. K.) Multipliers for a class of entire Dirichlet series. *C. R. Acad. Bulgare Sci.* **1977**, no. 10, 1381-1383. (Benjamin Lepson) **58** #17059 30A16 (30A62, 30A82)
- (with Kumar, M.) Some applications of triple integral equations involving inverse Mellin transforms. *Indian J. Pure Appl. Math.* **9** (1978), no. 1, 87-100. (Authors' summary) **58** #14176 73.45 (45F10)
- (with R. M.) (with v. Krzywoblocki, Maria Z.) Shock theorems in magnetogasdynamics with radiation. *J. Mathematical and Physical Sci.* **10** (1976), no. 5, 441-445. (Rishi Ram) **55** #11802 76.35
- (with R. P.) (with Lal, Krishna Bihari) On plane wave solutions of gauge invariant generalization of field theories with asymmetric fundamental tensor in Bondi space-time. Commemorating volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. *Tensor (N.S.)* **25** (1972), 97-104. (F. A. E. Pirani) **48** #13150 83.53
- (with Lal, Krishna Bihari) On the wave solutions of gauge invariant generalization of field theories with asymmetric fundamental tensor in a generalized Takeno space-time. *Tensor (N.S.)* **27** (1973), 7-15. (H. A. Buchdahl) **49** #4526 83.53
- (with R. S. L.) (with Singh, Prem) On the proximate type and λ -proximate type of an entire function represented by Dirichlet series. *J. Math. (Jabalpur)* **2** (1966), 3-10. (S. K. S. K.) **52** #11043 30A66
- (with Bajpai, Shyam K.) The asymptotic values of an entire function represented by Dirichlet series. *Riv. Mat. Univ. Parma* (2) **12** (1971), 137-144. (A. G. Azpeitia) **48** #890 30A62
- (with Srivastava, Girja S.) Some inequalities related to proximate order. *Riv. Mat. Univ. Parma* (2) **12** (1971), 167-177. (S. M. Shah) **50** #10256 30A64
- (with Bajpai, Shyam K.) Some distortion theorems for univalent α -spiral functions. *Math. Sci.* **7** (1972), 1-8 (1974). (From the authors' text) **57** #12834 30A32
- (with Bajpai, Shyam K.) On the radius of convexity and starlikeness of univalent functions. *Proc. Amer. Math. Soc.* **32** (1972), 153-160. (S. M. Shah) **45** #3687 30A32
- Entire functions of systematic growth. *J. Math. (Jabalpur) (N.S.)* **1** (1973), 33-40. (H. Frank) **53** #3304 30A64
- Univalent spiral functions. *Topics in analysis (Colloq. Math. Anal., Jyväskylä, 1970)*, 327-341. *Lecture Notes in Math.*, Vol. 419, Springer, Berlin, 1974. (P. T. Mocanu) **53** #3505 30A32
- (with Juneja, Om P.) On the order of entire functions defined by Dirichlet series. *Rev. Mat. Hisp.-Amer.* (4) **34** (1974), 67-75. (M. Mikolás) **50** #608 30A64
- (with Bajpai, Shyam K.) On the maximum term of an entire series. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **10**(30) (1975), 55-61. (A. G. Azpeitia) **51** #13225 30A66
- (with Ramesh Chandra) (with Singh, K. D.) Almost Hermitian manifolds with torsion. *Vestnik* **8**(23) (1971), 125-134. (I. Vaisman) **45** #4334 53C55
- (with Singh, K. D.) R -geodesics and R -asymptotic lines. *Ann. Polon. Math.* **26** (1972), 165-173. (E. Bompiani) **46** #4415 53B25
- (with R. S. L.) Riemann recurrent spaces conformal to Einstein spaces. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **37** (1972), 135-140 (1974). (H. Rund) **53** #5665 53B20
- (with Upadhyay, M. D.) On a differential manifold defined by the algebraic equation. *I. An. Univ. Timișoara Ser. Ști. Math.* **11** (1973), 189-194. (K. Yano) **48** #6648 53C15
- (with R. S. L.) Some special properties of generalised polynomials $A_n(x)$. *Math. Pannonica* **40A** (1972), 114-118. (V. L. Deshpande) **49** #669 33A65
- (with Srivastava, Hari M.) Certain expansion formulas involving the generalized Lauricella functions. *Comment. Math. Univ. St. Paul.* **22** (1973/74), no. 2, 19-32. (V. L. Deshpande) **51** #8490 33A30
- (with Srivastava, Hari M.) Some operational techniques in the theory of special functions. *Nederl. Akad. Wetensch. Proc. Ser. A* **76**=*Indag. Math.* **35** (1973), 308-319. (M. Joshi) **48** #8872 33A30
- Some integrals associated with the generalized Lauricella functions. *Publ. Inst. Math. (Beograd) (N.S.)* **16**(30) (1973), 115-122. (V. L. Deshpande) **50** #13640 33A30
- (with Srivastava, Hari M.) A note on the generalised Rice polynomials. *Ranchi Univ. Math. J.* **4** (1973), 65-72. (V. L. Deshpande) **49** #9288 33A65
- (with Srivastava, Hari M.) Some hypergeometric transformations involving Horn's function H_3 . *Rend. Mat.* (6) **6** (1973), 859-864. (V. L. Deshpande) **50** #13644 33A30
- (with Srivastava, Hari M.) Certain expansion formulas involving the generalized Lauricella functions. II. *Comment. Math. Univ. St. Paul.* **23** (1974/75), no. 1, 7-14. (V. L. Deshpande) **51** #8491 33A30
- Some multiple series transformations. *Jñānabha Sect. A* **4** (1974), 165-168. (V. L. Deshpande) **52** #3627 33A30
- (with Srivastava, Hari M.) On the unified presentation of certain classical polynomials. (Italian summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, 306-314. (C. M. Shi) **53** #5964 33A65
- (with Srivastava, Hari M.) Some recursion formulas associated with multiple hypergeometric functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 3, 243-250. (S. Saran) **52** #6052 33A30
- (with Srivastava, Hari M.) Some expansion theorems and generating relations for the H function of several complex variables. *Comment. Math. Univ. St. Paul.* **24** (1975/76), no. 2, 119-137. (S. Saran) **58** #1302 33A35
- (with Srivastava, Hari M.) An integral representation for the product of two Jacobi polynomials. *J. London Math. Soc.* (2) **12** (1975/76), no. 4, 419-425. (B. R. Bhonsle) **52** #8526 33A65 (33A30)
- Reduction formulas for generalized Lauricella functions. *Kyungpook Math. J.* **15** (1975), 111-116. (V. L. Deshpande) **51** #8489 33A30
- An asymptotic confluent expansion for certain functions of several variables. *Mat. Vesnik* **12**(27) (1975), no. 3, 289-293. (V. L. Deshpande) **52** #3622 33A30
- (with Srivastava, Hari M.) Some analytic or asymptotic confluent expansions for functions of several variables. *Math. Comput.* **29** (1975), no. 132, 1115-1128. (J. L. Fields) **52** #8534 33A65
- Some polynomials of several variables. *Simon Stevin* **48** (1975), 27-32. (Mourad E. H. Ismail) **51** #964 33A70
- Certain dual series equations involving Laguerre polynomials. *C. R. Acad. Bulgare Sci.* **29** (1976), no. 7, 935-938. (K. N. Srivastava) **55** #1007 45F10
- (with Srivastava, Hari M.) Some expansion theorems and generating relations for the H function of several complex variables. II. *Comment. Math. Univ. St. Paul* **25** (1976/77), no. 2, 167-197. (S. Saran) **58** #17246 33A30
- (with Srivastava, Hari M.) Some expansions of hypergeometric functions in series of hypergeometric functions. *Glasgow Math. J.* **17** (1976), no. 1, 17-21. (B. L. Sharma) **53** #11112 33A30
- A theorem on bilateral generating functions. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **11**(31) (1976), no. 1, 27-30. (V. L. Deshpande) **54** #7886 33A30
- (with Srivastava, Hari M.) Some bilateral generating functions for a class of generalized hypergeometric polynomials. *J. Reine Angew. Math.* **283/284** (1976), 265-274. (V. L. Deshpande) **53** #11114 33A35
- (with Srivastava, Hari M.) Expansion theorems for the H function of several complex variables. *J. Reine Angew. Math.* **288** (1976), 129-145. (V. L. Deshpande) **54** #7902 33A35
- A note on certain reducible cases of the generalized hypergeometric function. *Nederl. Akad. Wetensch. Proc. Ser. A* **79**=*Indag. Math.* **38** (1976), no. 1, 41-45. (H. M. Srivastava) **53** #899 33A30
- A theorem on generating functions of hypergeometric polynomials of several variables. *Simon Stevin* **50** (1976/77), no. 2, 111-114. (V. L. Deshpande) **55** #3351 33A30
- Integration of certain products associated with the H -function of several variables. *Comment. Math. Univ. St. Paul.* **26** (1977/78), no. 2, 115-123. (R. K. Saxena) **57** #10019 33A35
- On a new class of polynomials. *Glasgow Math. J.* **18** (1977), no. 1, 105-108. (S. Saran) **55** #8427 33A30
- Certain dual series equations involving Laguerre polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* **80**=*Indag. Math.* **39** (1977), no. 2, 122-127. (Author's review (Zbl 333 #42005)) **58** #23415 45F10 (33A65)
- The reducible cases of certain hypergeometric functions of several variables. *Nederl. Akad. Wetensch. Proc. Ser. A* **80**=*Indag. Math.* **39** (1977), no. 5, 469-476. (C. K. Sharma) **57** #3466 33A30
- Certain integrals involving the H -function of several variables. *Publ. Inst. Math. (Beograd) (N.S.)* **22**(36) (1977), 207-210. (K. C. Sharma) **57** #16731 33A30
- A note on some generating functions for the Jacobi polynomials. *Pure Appl. Math. Sci.* **6** (1977), no. 1-2, 5-12. (R. N. Jain) **57** #16732 33A30
- (with Srivastava, Hari M.) Certain multidimensional integral transformations. I. *Nederl. Akad. Wetensch. Proc. Ser. A* **81**=*Indag. Math.* **40** (1978), no. 1, 118-131. (William L. Perry) **58** #2039a 44A05
- (with Srivastava, Hari M.) Certain multidimensional integral transformations. II. *Nederl. Akad. Wetensch. Proc. Ser. A* **81**=*Indag. Math.* **40** (1978), no. 1, 132-144. (William L. Perry) **58** #2039b 44A05
- (with Singh, Kanhaya Lal) Construction of fixed points for quasi-nonexpansive mappings. II. *Bull. Math. Soc. Sci. Math. Math. R. S. Roumanie (N.S.)* **18**(66) (1974), no. 3-4, 367-378 (1976). (A. T.-M. Lau) **57** #1213 47H10
- (with Singh, Kanhaya Lal) Some fixed point theorems. *Nanta Math.* **9** (1976), no. 2, 202-206. (L. F. Guseman, Jr.) **56** #13199 54H25
- (with Singh, Kanhaya Lal) Construction of fixed point for densifying maps. II. *Riv. Mat. Univ. Parma* (4) **2** (1976), 147-153. (From the introduction) **58** #17994 47H10
- (with S. C.) Generalized geodesics in a Finsler space. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **57** (1971), 1224-1232. (Author's summary) **46** #820 53B40
- (with Sinha, R. S.) Asymptotic lines in a hypersurface of a Finsler space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 44-52. (Makoto Matsumoto) **46** #8111 53B40
- (with Sinha, R. S.) Geodesic congruences in a Finsler space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 156-161. (J. K. Beem) **48** #7152 53B40
- (with Srivastava, H. M.) On the formal solution of dual integral equations of two variables. *Defence Sci. J.* **23** (1973), 71-78. (S. P. Goyal) **52** #3902 45F10
- (with Sinha, R. S.) Projective transformation in recurrent and Ricci-recurrent Finsler spaces. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 3-4, 181-186 (1975). (S. Kawaguchi) **53** #3937 53B40
- (with Srivastava, S. R.) (with Gupta, Vijaya Prakash) Upper bound for the size of a test procedure using preliminary tests of significance. *J. Indian Statist. Assoc.* **7** (1969), 26-29. (Robert Hultquist) **49** #4171 62J10
- (with Singh, Raj Kishor) Testing of the mean using apriori information. *Proc. Nat. Acad. Sci. India Sect. A* **42** (1972), 68-74. (S. John) **49** #6456 62F05
- (with Shukla, N. D.) Pooling of regression coefficients when conditional variances are unknown. *Trabajos Estadist.* **24** (1973), no. 1-2, 141-147. (Burt S. Holland) **54** #6389 62J05
- (with Upadhyaya, L. N.) A preliminary test estimator for the mean of a normal population. Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 354-361 (1976). (Chien-Pai Han) **57** #14236 62F10
- (with Upadhyaya, L. N.) Shrinkage estimator of the mean of a normal population after a preliminary test of significance. *J. Statist. Res.* **9** (1975), no. 2, 67-74. (Authors' summary) **58** #7989 62F10
- (with Singh, J.) Asymptotic power and efficiency of a sometimes pool test procedure in a component of variance model. *Progr. Math. (Allahabad)* **9** (1975), no. 2, 17-21. (Š. A. Hašimov) **53** #9531 62J10

- A preliminary test estimator for the variance of a normal distribution. *J. Indian Statist. Assoc.* **14** (1976), 107-111. (T. A. Bancroft) **56** #9792 62F10
- Srivastava, S. S.** Analytical study of a parallel redundant system with general repair time distribution. *J. Math. Sci.* **6** (1971), 41-46 (1974). (Author's summary) **57** #11706 90B25
- (with Garg, R. C.; Arora, S. D.) Two-sided A/S warfare with limited ammunition and range of fire power. *Trabajos Estadist.* **23** (1972), no. 1-2, 135-147. (From the authors' summary) **47** #6371 93E05
- See also **Kapur, P. K.**; et al., **53** #15325
- Srivastava, Sadanand** (with Zischka, K. A.) Radiation conditions and uniqueness theorem for n -dimensional wave equation in an infinite domain. *J. Math. Anal. Appl.* **45** (1974), 764-776. (Z. C. Motteler) **48** #9088 35J25
- Srivastava, Satya Narain** On the mean values of integral functions. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **32** (1967), 23-26 (1971). (T. Kövari) **46** #7511 30A66
- On the mean values of entire functions defined by Dirichlet series. II. *Rev. Mat. Hisp.-Amer.* (4) **30** (1970), 52-57. (A. Bailleto) **46** #9343 30A62
- On the mean values of entire functions and their derivatives defined by Dirichlet series. III. *Rev. Mat. Hisp.-Amer.* (4) **30** (1970), 172-177. (A. Bailleto) **46** #9344 30A62
- (with Bose, S. K.) On the geometric mean of an integral function. *Ganita* **22** (1971), no. 2, 1-7. (J. Gopala Krishna) **47** #466 30A66
- (with Bose, S. K.) On the mean values of an integral function represented by Dirichlet series. IV. *Ganita* **23** (1972), no. 1, 43-48. (A. Bailleto) **47** #8849 30A62
- (with Bose, S. K.) On the mean values of an integral function represented by Dirichlet series. *Ganita* **23** (1972), no. 2, 51-56. (R. S. L. Srivastava) **47** #8850 30A62
- On the maximum real part of an integral function represented by Dirichlet series. *Rev. Mat. Hisp.-Amer.* (4) **32** (1972), 119-127. (R. S. L. Srivastava) **46** #7508 30A62
- (with Bose, S. K.) On the mean values of an integral function represented by Dirichlet series. *Ganita* **25** (1974), no. 2, 13-22. (R. S. L. Srivastava) **54** #13077 30A62
- Srivastava, Shambhunath** (with Sharma, Jai Prakash) A few transformations applicable to the Lane-Emden equation. *Progr. Math. (Allahabad)* **4** (1970), no. 1, 37-42. (J. F. Clarke) **47** #7998 76J34
- (with Srivastava, Gopalji) Isothermal cylinders. *J. of M. A. C. T.* **9** (1976), 61-64. (J. F. Heyda) **56** #4442 80J34
- Srivastava, Sujan** Joint distributions based on runs and on the number of intersections. *Studia Sci. Math. Hungar.* **8** (1973), 211-224. (I. Vincze) **50** #11464 60J15
- Srivastava, Sunil Kumar** Theorems on a generalised Laplace transform. *Acta Mexicana Ci. Tecn.* **6** (1972), 59-63. (V. P. Mainra) **49** #3471 44A15
- On a generalized transform of two variables. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **18** (1972), 361-366. (H. R. Aggarwal) **48** #9287 44A15
- On the H -function of two variables. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **16** (64) (1972), no. 1, 119-123 (1973). (T. Erber) **49** #9279 33A35
- A generalised Laplace transform. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **37** (1972), 93-100 (1974). (E. J. Scott) **50** #5381 44A10
- Fourier series for H -function of two variables. *Math. Balkanica* **2** (1972), 219-225. (P. Anandani) **48** #4366 33A35
- Some expansions for generalised H -function of two variables. *Labdev—J. Sci. Tech. Part A* **12** (1974), no. 4, 150-154. (U. C. Jain) **54** #10706 33A35
- Srivastava, Surendra K.** Two-phase sampling in difference method of estimation with unequal probabilities and without replacement. *J. Indian Statist. Assoc.* **8** (1970), 68-78. (K. Vijayan) **50** #15049 62D05
- Derivatives of H -function of two variables. *C. R. Acad. Bulgare Sci.* **26** (1973), 441-444. (S. Masood) **52** #8527 33A35
- Some recurrence formulae for the H -function of two variables. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 478-482. (S. D. Bajpai) **50** #10359 33A35
- Srivastava, Suresh Chandra** Summation of series in the generalised Fourier transforms. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 483-487. (V. M. Bhise) **50** #14090 44A15 (33A35)
- Srivastava, Sushanta** (with Musa, Samuel A.) Generation of Liapunov functions using auxiliary invariant systems. *J. Franklin Inst.* **292** (1971), 357-368. (J. H. George) **47** #7174 34H05 (49E99)
- (with Musa, Samuel A.) On infinitesimal transformation and limit cycles: Some further extensions. *Internat. J. Control* (1) **15** (1972), 111-114. (Authors' summary) **47** #1521 (EA 47) 93D99
- Srivastava, Sushil Kumar** On the strong almost convergence of Fourier series. *Proc. Nat. Acad. Sci. India Sect. A* **41** (1971), 17-20. (Yung-ming Chen) **46** #9622 42A20
- On strong almost convergence of derived Fourier series. *Proc. Nat. Acad. Sci. India Sect. A* **42** (1972), 137-141. (Yung-ming Chen) **49** #3421 42A20
- On positive order of strong almost convergence of the derived Fourier series. *Proc. Nat. Acad. Sci. India Sect. A* **42** (1972), 154-162. (Yung-ming Chen) **49** #3422 42A20
- On the sequence of Fourier coefficients. *Proc. Nat. Acad. Sci. India Sect. A* **43** (1973), 246-250. (S. M. Mazhar) **52** #3858 42A24 (42A40)
- Srivastava, Tej Narain** Life tests with changing failure rate through scale parameter of Weibull distribution. *J. Indian Statist. Assoc.* **7** (1969), 66-72. (A. P. Basu) **49** #4188 (EA 50) 62N05
- Certain generalisations of Bartholomew's problem in life testing. *Defence Sci. J.* **21** (1971), 241-248. (Wolfgang Sendler) **47** #1229 62N05 (62F10)
- (with Sreedharan, K. E.) Life tests with periodic change in failure rate. *Defence Sci. J.* **24** (1974), 147-154. (A. C. Cohen) **52** #7058 62N05
- Life tests with periodic change in failure rate—grouped observations. *J. Statist. Assoc.* **70** (1975), 394-397. (A. P. Basu) **51** #11900 62N05
- Srivastava, Triloki Nath** A note on an integral transform. *Univ. Nac. Tucumán Rev.* **21** (1971), 85-94. (P. N. Rathie) **49** #3472 44A20 (33A35)
- Some theorems on generalized Bateman K -function. *Punjab Univ. J. Math. (Lahore)* **6** (1973), 35-66. (B. R. Bhonsle) **49** #638 33A10
- On the generalised Bateman k -function. *Bull. Calcutta Math. Soc.* **66** (1974) 185-192c. (B. M. Agrawal) **57** #16748 33A70
- The inversion of a convolution transform whose kernel is a generalized B k -function. *Jñānabha Sect. A* **4** (1974), 169-174. (R. G. Buschman) **52** #44A15
- A note on the generalised Bateman k -function. *Punjab Univ. J. Math. (Lahore)* **6** (1974), 45-47. (B. R. Bhonsle) **52** #6072 33A70
- On a Finsler space. I. *Tensor (N.S.)* **28** (1974), 13-18. (S. Kawaguchi) **50** 53B40
- (with Watanabe, Shōji) Some properties of indicatrices in a Finsler space. *Math. Bull.* **18** (1975), no. 5, 715-721. (R. Roşca) **53** #11530 53B40
- On a special Kawaguchi manifold. *Jñānabha Sect. A* **5** (1975), 137-143. (A. summary) **57** #13747 53B20 (53B40)
- Variations and deformations in a special Kawaguchi manifold. *Tensor (N.S.)* **29** (1975), no. 3, 303-313. (T. Ohkubo) **52** #6601 53B40
- Certain properties of bivariate distributions involving the H -function of Fox. (French summary) *Canad. J. Statist.* **4** (1976), no. 2, 227-236. (Yasuko C) **56** #6964 62E15 (33A45, 62H10)
- Srivastava, U. N.** (with Spreuer, H.; Adams, E.) Monotone Schrankenfolgen für gewöhnliche Randwertaufgaben bei schwach gekoppelten nichtlinearen Systemen. (English and Russian summaries) *Z. Angew. Math. Mech.* **55** (1975), no. 5, 2 (Leo F. Boron) **51** #11979 65L10 (34B15)
- (with Agarwal, Ravi P.) Generalized two-point boundary value problems. *J. Mathematical and Physical Sci.* **10** (1976), no. 5, 367-373. (H. I. Freedman) **55** 34B15
- Srivastava, Vinai K.** (with Lal, Krishna Bihari) Weakened field equations in relativity admitting a generalised Takeno's space-time. (Italian summary) *Atti Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **58** (1975), no. 3, 394-397. (Coli McIntosh) **54** #9552 83J35
- Srivastava, Virender Kumar** (with Roy, A. R.) On the limited information maximum likelihood method of estimation in simultaneous equations. *J. Indian Statist. Assoc.* **7** (1969), 154-157. (J. Pickands, III) **49** #8181 62F10
- Disturbance variance estimation in simultaneous equations by k -class method. *Inst. Statist. Math.* **23** (1971), 437-449. (A. Ja. Dorogovcev) **50** #6069 62J00
- Maximum-likelihood and least-squares approaches to simultaneous estimation of simultaneous equations. *Trabajos Estadist.* **22** (1971), no. 3, 79-88. (E. S. K) **47** #7856 62F10
- (with Roy, A. R.) The bias of generalized double k -class estimators. *J. Statist. Math.* **24** (1972), 495-508. (G. Tintner) **52** #2120 62P20
- On the ratio method of estimation. *Trabajos Estadist. Investigación Oper.* **25** (1975), no. 1-2, 113-117. (Kenneth R. W. Brewer) **56** #9767 62D05
- (with Tiwari, Ramji) The second order moment matrix of generalized double k -class estimators. *Comm. Statist.* **4** (1975), 575-589. (A. L. Nagar) **51** #9421 (62J05)
- Estimation of large econometric models. *J. Statist. Res.* **9** (1975), no. 1, (Takeshi Amemiya) **56** #13500 62P20
- (with Tiwari, Ramji) Two-stage and three-stage least squares estimation of dispersion matrix of disturbances in simultaneous equations. *Ann. Inst. Statist. Math.* **24** (1976), no. 3, 411-428. (Andrew Harvey) **55** #4588 62P20
- (with Tiwari, Ramji) Evaluation of expectations of products of stochastic processes. *Scand. J. Statist.* **3** (1976), no. 3, 135-138. (Authors' summary) **58** #24729 62J05
- (with Dhawan, A. K.) On a new division algorithm. *Nordisk Tidskr. Informationsbehandling (BIT)* **17** (1977), no. 4, 481-485. (I. Kaufmann) **57** #68A10 (10A30)
- (with Upadhyaya, Sushama) Large-sample approximations in seemingly unbalanced regression equations. *Ann. Inst. Statist. Math.* **30** (1978), no. 1, 89-96. **58** #62J05 (62P20)
- Srivastava, Vishnu K.** (with Bhattacharya, Samir K.) A preliminary test procedure for testing. *J. Amer. Statist. Assoc.* **69** (1974), 726-729. (T. A. Bancroft) **51** #62F99
- Srivastava, Y.** (with Friedman, Marvin H.) Yang-Mills gauge invariance on a space with Bose and Fermi coordinates. *Phys. Rev. D* (3) **15** (1977), no. 4, 1026-1032. (F. authors' summary) **56** #4550 81J35
- Srivatsa, S. K.** (with Biswas, Nripendra N.) Karnaugh map analysis and synthesis of threshold functions. *Internat. J. Systems Sci.* **8** (1977), no. 12, 1385-1399. (A. Kandel) **57** #2773 94A20
- (with Biswas, Nripendra N.) An annotated bibliography on threshold logic. *Indian Inst. Sci.* **59** (1977), no. 1, 1-28. (See Zbl 352 #94021) 94A20
- (with Biswas, Nripendra N.) Karnaugh map synthesis of multigate threshold functions. *Internat. J. Systems Sci.* **9** (1978), no. 7, 785-797. (Authors' summary) **58** #20878 94A20
- Srivenkataramana, T.** (with Srinath, K. P.) Latin square selection without pre-stratification of population units. *Vignana Bharathi* **1** (1975), no. 1, 73-77. (Om. P. Aggarwal) **53** #11832 62D05
- (with Srinath, K. P.) A modification of the product estimator in simple random sampling. *Vignana Bharathi* **2** (1976), no. 1, 56-60. (David Bellhouse) **54** #62D05
- (with Srinath, K. P.) Ratio and product methods of estimation in sample surveys when the two variables are moderately correlated. *Vignana Bharathi* **2** (1976), no. 54-58. (David Bellhouse) **53** #14746 62D05
- Sročko, V. A.** A gradient method of solution of a certain class of time-optimality problems. (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 101-108. (Constantin Virsan) **46** 93C05
- (with Gabasov, R. F.; Kirillova, F. M.; Tarasenko, N. V.) Conditions for

- order optimization. I. Derivation of singular controls (review). *Automat. i Telemekh.* 1971, no. 5, 5-21 (Russian. English summary); translated as *Automat. Remote Control* 32 (1971), no. 5, part 1, 689-704. (Editors) 46 #767a 49C05
- with Gabasov, R. F.; Kirillova, F. M.; Tarasenko, N. V.) Conditions of high-order optimality. II. Necessary conditions of high-order optimality (review). *Automat. i Telemekh.* 1971, no. 6, 5-24 (Russian. English summary); translated as *Automat. Remote Control* 32 (1971), no. 6, part 1, 857-875. (Editors) 46 #767b 49C05
- with Gabasov, R. F.; Kirillova, F. M.; Tarasenko, N. V.) Conditions for high-order optimality. III. Sufficient conditions for high-order optimality discrete systems (review). *Automat. i Telemekh.* 1971, no. 7, 5-34 (Russian. English summary); translated as *Automat. Remote Control* 32 (1971), no. 7, part 1, 1013-1040. (Editors) 46 #767c 49C05
- A method for the transformation of variations in the theory of singular controls. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 70-80, 308. *Irkutsk. Univ.*, Irkutsk, 1973. (Author's summary) 56 #16505 49E99
- An investigation of the second variation on singular controls. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 1050-1066, 1149. (Stanislav K. Myskov) 53 #3059 49B10
- Multipoint optimality conditions for singular controls. (Russian) *Numerical methods analysis (applied mathematics)* (Russian), pp. 43-50. *Akad. Nauk SSSR Sibirsk. Otdel. Kibernet. Energet. Inst.*, Irkutsk, 1976. (From the text) 58 #26375 93C99
- On the optimality of singular controls in systems with after-effect. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 12, 2275-2278, 2303. (A. Halanay) 55 #8929 93B10
- Optimality conditions for a certain class of systems with distributed parameters. (Russian) *Sibirsk. Mat. Ž.* 17 (1976), no. 5, 1108-1115, 1198. (V. Komkov) 54 #8394 93C25
- (with Vasil'ev, O. V.) On the optimization of a class of controllable processes with distributed parameters. (Russian) *Sibirsk. Mat. Ž.* 19 (1978), no. 2, 466-470, 481. (B. T. Jak) 58 #7293 49B25
- See also **Proceedings: International Conference on Nonlinear Oscillations**, 47 #8969
- Tadeusz** (with Gerstenkorn, Tadeusz) ★ *Kombinatoryka i rachunek prawdopodobieństwa*. (Polish) [Combinatorics and probability theory] Third edition. *Państwowe Wydawnictwo Naukowe*, Warsaw, 1976. 432 pp. (Editors) 54 #3775 93C01 (01-05-01)
- E. B.** (with Gerlovin, È. L.) A model for the optimization of a choice of pump regimes. (Russian) *Ékonom. i Mat. Metody* 9 (1973), 523-525. (Title) 47 #8091 93B30
- David** Sur quelques distributions de probabilité applicables aux problèmes de circulation routière. (English summary) Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 2. *Bull. Inst. Internat. Statist.* 44 (1971), no. 2, 372-376. (Author's summary) 51 #4476 60K99
- Sur quelques distributions de probabilité applicables aux problèmes de sécurité routière. *Rev. Statist. Appl.* 19 (1971), no. 2, 77-94. (J. A. Beekman) 49 #4190 93C05
- Problèmes de tests H_0 composite contre h_1 simple. Hypothèse la moins favorable et statistiques exhaustives en présence d'un bruit. *Rev. Statist. Appl.* 20 (1972), no. 1, 113. (Rose Ray) 54 #3918 62F05
- Sur quelques estimateurs du paramètre d'un processus poissonien selon que le nombre d'observations est tronqué ou non. *Rev. Statist. Appl.* 20 (1972), no. 4, 63-83. (R. Mat) 54 #3918 62F05
- R. Mat** 1973 #5 V236 62M99
- Josef** The application of Pluecker's line-geometry to the study of polar properties of quadrics. (Czech and German summaries) *Sb. Prací Přírodověd. Fak. Univ. Olomoucké v Olomouci* 33 (1971), 109-118. (M. Št. Botez) 48 #1028 50D20
- Novin, H. M.** (with Esajan, A. R.) Estimates of the spectral radius of u_0 -positive operators. (Russian) *Tadžik. Gos. Univ. Učen. Zap. Meh.-Mat. Fak.* 1 (1970), no. 1, 59. (Ju. Pokorný) (RŽMat 1971 #2 B721) 52 #15092 (E 52 #15093) 47B55
- Some theorems on the comparison of the spectral radii of positive linear operators. (Russian) *Tadžik. Gos. Univ. Učen. Zap. Meh.-Mat. Fak.* 1 (1970), no. 1, 60-66. (Ju. Pokorný) (RŽMat 1971 #2 B722) 52 #15094 (E 52 #15095) 47B55
- (with Esajan, A. R.) The comparison of the spectral radii of semicommuting operators. (Russian) *Sibirsk. Mat. Ž.* 12 (1971), 332-345. (R. Cristescu) 45 #2510 55 (46A40, 47A10)
- Letter to the editors: "Estimates of the spectral radius of u_0 -positive operators" *Tadžik. Gos. Univ. Učen. Zap. Meh.-Mat. Fak.* 1 (1970), no. 1, 53-59 by A. R. Esajan and S. Rožiddinov. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak.* No. 2 (1972), 224. (Editors) 52 #15093 47B55
- Letter to the editors: "Some theorems on the comparison of the spectral radii of positive linear operators" (Tadžik. Gos. Univ. Učen. Zap. Meh.-Mat. Fak. 1 (1970), no. 1, 60-66). (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak.* No. 2 (1972), 223-224. (Editors) 52 #15095 47B55
- (with Stecenko, V. Ja.; Esajan, A. R.) A comparison of the spectral radii of two operators. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 19 (1976), no. 11, 13. (Rosaling Reichard) 56 #6463 47B55
- K. L. S.** (with Potetjunko, È. N.) Asymptotic analysis of wave motions of a viscous fluid with a free boundary. *Prikl. Mat. Meh.* 34 (1970), 891-910 (Russian); translated as *Appl. Math. Mech.* 34 (1970), 848-868 (1971). (T. W. Kao) 46 #6713 76A1
- On the question of nonrigidity in the nonlinear theory of shallow shells. (Russian) *Akad. Nauk SSSR Ser. Mat.* 36 (1972), 890-909. (S. Drobot) 47 #2208 35Q99 93B35
- Asymptotic method of determining the critical buckling loads of shallow strictly convex shells of revolution. *Prikl. Mat. Meh.* 36 (1972), 705-716 (Russian); translated as *Appl. Math. Mech.* 36 (1972), 665-677 (1973). (P. Germain) 49 #1910 73A4
- (with Žukov, M. Ju.) Branching in a boundary effect zone for elastic shells. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions* (Drogobych, 1973), *Functional analysis and its applications* (Russian), 136-147. *Akad. Nauk SSSR Central Ékonom.-Mat. Inst., Moscow*, 1975. (Alexander Nicyn) 58 #3842 73A4
- See also **Mathematical analysis and its applications**, 48 #8169
- a, F. V.** The absolute and uniform convergence of the generalized Fourier integral. (Russian) *Differentsial'nye Uravneniya* 7 (1971), 1333-1338, 1344. (H.-J. Glaeske (Zbl 229 #42021)) 48 #4531 35P10
- Spectral decompositions connected with a polyharmonic operator. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 15 (1972), no. 6, 10-12. (H. Triebel) 48 #11807 35P10
- The localization principle for Fourier series in a fundamental system of functions of the polyharmonic operator. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 15 (1972), no. 9, 15-18. (D. M. Eidus) 51 #13472 35P10
- On the question of the calculation of the asymptotic behavior of the energy emitted by an almost periodic oscillation source as $t \rightarrow \infty$. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 19 (1976), no. 11, 7-9. (J. Muszyński) 57 #10190 35B40
- The calculation of the asymptotics of the energy radiated by an almost periodic source of oscillations as $t \rightarrow \infty$. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 7, 1272-1280, 1348. (Genowefa Majcher) 57 #3665 35P20
- Szrednicka, J.** (with Drygas, Hilmar) A new result on Hsu's model of regression analysis. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 12, 1133-1136. (Jeffrey A. Robinson) 55 #9425 62J05
- Staal, J. F.** See **Contributions to logic and methodology in honor of J. M. Bocheński**, 47 #6424; **Semantics and communication**, 49 #4731 and **Logic, methodology and philosophy of science**, 55 #7657
- Staats, Preston W., Jr.** (with Pearson, J. Boyd, Jr.) Robust controllers for linear regulators. *IEEE Trans. Automatic Control* AC-19 (1974), 231-234. (Authors' summary) 56 #6530 49E20
- (with Pearson, J. Boyd, Jr.; Shields, Robert W.) Robust solutions to linear multivariable control problems. *IEEE Trans. Automatic Control* AC-19 (1974), 508-517. (W. M. Wonham) 56 #11215 93C05
- (with Pearson, J. Boyd, Jr.) Robust solution of the linear servomechanism problem. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 43.4, 7 pp.* *IFAC, Düsseldorf*, 1975. (Authors' summary) 58 #33362 93C99
- (with Pearson, J. Boyd, Jr.) Robust solution of the linear servomechanism problem. *Automatica—J. IFAC* 13 (1977), no. 2, 125-138. (Bradley W. Dickinson) 56 #8112 93B35 (93C05)
- Stabakis, Jean** (with Stratigopoulos, Demetrios) Sur les ensembles ordonnés. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 285 (1977), no. 2, A39-A42. (Authors' summary) 55 #12584 06A10
- (with Stratigopoulos, Demetrios) Sur les ensembles ordonnés (\mathcal{P} -coupes). (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 285 (1977), no. 3, A81-A84. (Authors' summary) 56 #128 04A05 (06A05)
- Stabler, Edward P.** System description languages. *IEEE Trans. Computers* C-19 (1970), 1160-1173. (B. Brainerd) 48 #12924 68A30
- Stabler, Edward Russell** ★ *Il pensiero matematico*. Traduzione dall'inglese di Maria Grazia Stefanchi. *Boringhieri, Turin*, 1970. 351 pp. (Editors) 50 #46 02A05
- Štabnoi, M. R.** (with Korostyševskii, M. A.; Ratner, V. A.) On some principles of evolution viewed as a stochastic process. *J. Theoret. Biol.* 48 (1974), no. 1, 85-103. (A. C. Trajstman) 55 #2196 92A15
- Stacey, K. C.** (with Holton, Derek A.) Some problems in permutation graphs. *Combinatorial mathematics, III (Proc. Third Australian Conf., Univ. Queensland, St. Lucia, 1974)*, pp. 143-155. *Lecture Notes in Math.*, Vol. 452, Springer, Berlin, 1975. (Norman Biggs) 51 #7957 05C99
- The enumeration of perfect septenary forms. *J. London Math. Soc.* (2) 10 (1975), 97-104. (E. S. Barnes) 51 #5507 10E25
- (with McAvaney, K. L.; Sims, J.) The stability index of the product of a path and a tree. *Combinatorial mathematics, IV (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975)*, pp. 220-231. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (Douglas D. Grant) 55 #2642 05C25
- The perfect septenary forms with $D_4 = 2$. *J. Austral. Math. Soc. Ser. A* 22 (1976), no. 2, 144-164. (E. S. Barnes) 55 #7929 10E20
- (with Holton, Derek A.; McAvaney, K. L.) The semi-stability of lexicographic products. *Combinatorial mathematics, V (Proc. Fifth Austral. Conf., Roy. Melbourne Inst. Tech., Melbourne, 1976)*, pp. 128-132. *Lecture Notes in Math.*, Vol. 622, Springer, Berlin, 1977. (Douglas D. Grant) 57 #9596 05C25
- (with Holton, Derek A.) On the automorphism group of a tree. *J. Combinatorial Theory Ser. B* 22 (1977), no. 1, 10-25. (B. Manvel) 55 #7835 05C25
- Stacey, P. J.** Type I points in a compact convex set. *J. London Math. Soc.* (2) 10 (1975), 306-308. (Robert S. Doran) 51 #11064 46A99 (46L05)
- Admissible split faces and quasi-equivalence in a Choquet simplex. *J. London Math. Soc.* (2) 11 (1975), part 1, 99-103. (Harold H. McFaden) 51 #13644 46A99 (46E05)
- (with Edwards, C. M.) On group algebras of central group extensions. *Pacific J. Math.* 56 (1975), no. 1, 59-75. (Johan F. Aarnes) 54 #10480 22D15
- Admissible split faces in the state space of a separable C^* -algebra. *Quart. J. Math. Oxford Ser. (2)* 26 (1975), no. 104, 485-490. (S. Sakai) 53 #3721 46L05
- Split faces and projective sets in a metrizable compact convex set. *Math. Ann.* 219 (1976), no. 2, 167-170. (J. P. R. Christensen) 52 #14925 46A99
- (with Andrew, Alan L.; Morris, Sidney A.; Protomastro, Gerard P.) On mixed partial derivatives. *Austral. Math. Soc. Gaz.* 4 (1977), no. 2, 49-54. (B. Rodriguez-Salinas) 57 #3335 26A54
- The resultant of the face generated by a simplicial measure. *J. London Math. Soc.* (2) 17 (1978), no. 1, 111-117. (H. E. Lacey) 57 #3827 46A99
- Stacey, T. W.** (with Common, A. K.) Legendre Padé approximants and their application in potential scattering. *J. Phys. A* 11 (1978), no. 2, 259-273. (John Zorbas) 57 #8600 81J33
- (with Common, A. K.) The convergence of Legendre Padé approximants to the Coulomb and other scattering amplitudes. *J. Phys. A* 11 (1978), no. 2, 275-289. (John Zorbas) 57 #4888 81J33
- Stacey, Weston M., Jr.** Variational estimates and generalized perturbation theory for the ratios of linear and bilinear functionals. *J. Mathematical Phys.* 13 (1972), 1119-1125. (Author's summary) 50 #8107 46N05
- Štách, Jaromír** Optimality criteria. (Czech. English summary) *Ékonom.-Mat. Obzor* 10

- (1974), 193-206. (M. Vlach) **50** #3892 90A99
- Stach, K.** Einige Bemerkungen zur Verzweigung des Punktes durch einen Komplex von Transformationen. *Acta Univ. Carolinae—Math. et Phys.* **13** (1972), no. 2, 53-59. (J. Böhm (Zbl) **292** #50006) **56** #6539 50A15
- Stach, Květomil** Die Kummerschen Transformationen in Räumen mit abgeschlossenen Phasen. Teil B: Transformationen in Räumen der gegebenen Klasse. *Arch. Math. (Brno)* **5** (1969), 61-73. (Jerry Ridenhour) **45** #3825 34A25
- Die Kategorie der Phasenfunktionen. (Russian summary) *Spisy Přírod. Fak. Univ. Brno* **1969**, no. 508, 379-386. (N. P. Bhatia) **45** #3828 34A30
- Über einige Zerlegungen in einer Kategorie. *Arch. Math. (Brno)* **6** (1970), 203-211. (B. M. Schein (Šain)) **45** #8700 18G99 (20N99)
- Normalgruppe einer Kategorie. *Arch. Math. (Brno)* **6** (1970), 213-220. (O. Borůvka) **47** #8746 20L05 (34A30)
- Eine Äquivalenzrelation in der Kategorie der Phasenfunktionen. *Arch. Math. (Brno)* **7** (1971), 159-166 (1972). (Jerry Ridenhour) **47** #5341 30A30 (34A25)
- Die algebraische Struktur der allgemeinen Kummerschen Transformationen. *Arch. Math. (Brno)* **11** (1975), no. 2, 115-121 (1976). (H. W. Guggenheimer) **53** #11170 34C99 (34A99, 18F99)
- See also **Grundlagen der Geometrie und algebraische Methoden**, **48** #12227
- Stachel, Hellmuth** Zum Umriß der Drehflächen. *Anz. Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **1972**, no. 10, 236-243. (Lieven Vanhecke) **52** #9087 53A05
- Quasielliptische Schraubschiebflächen. *Monatsh. Math.* **76** (1972), 254-263. (J. Böhm) **46** #6145 50C05 (53A35)
- Zur Kennzeichnung quasielliptischer und elliptischer Schiebnetze. *Arch. Math. (Basel)* **25** (1974), 431-437. (R. Roşca) **50** #8331 53A35
- (with Kunze, S.) Über ein sechsgliedriges räumliches Getriebe. *Elem. Math.* **29** (1974), 25-32. (J. Hoschek) **49** #1854 70.53
- Quasielliptische Schiebflächen mit unendlich vielen Schiebnetzen. I, II. *Math. Nachr.* **68** (1975), 239-254; *ibid.* **68** (1975), 255-264. (R. Roşca) **52** #9096 53A35
- Mehrfach zerlegbare ebene Bewegungsvorgänge. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **184** (1975), no. 1-4, 65-82. (O. Bottema) **54** #14492 70.53
- Quasielliptische Schiebflächen mit einparametrischer Bewegungsgruppe. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **184** (1975), no. 8-10, 487-498. (K. Strubecker) **55** #3995 53A35
- Zur quasielliptischen Differentialgeometrie. *Ber. Math.-Statist. Sect. Forschungszentrum Graz No. 80* (1977), 38 pp. (V. V. Gol'dberg) **58** #2615 53A35
- Stachel, John** External sources in general relativity. *General Relativity and Gravitation* **3** (1972), 257-267. (Colin B. G. McIntosh) **53** #4892 83.53
- Achille Papapetrou. *General Relativity and Gravitation* **8** (1977), no. 8, 541-548. (Editors) **56** #2752 01A65 (83.00)
- Stachó, L. L.** On the volume function of parallel sets. *Acta Sci. Math. (Szeged)* **38** (1976), no. 3-4, 365-374. (C. M. Petty) **56** #588 28A75 (52A20)
- Stachow, E.-W.** (with Mittelstaedt, Peter) Operational foundation of quantum logic. *Found. Phys.* **4** (1974), 355-365. (A. R. Marlow) **54** #1910 81.06
- Completeness of quantum logic. *J. Philos. Logic* **5** (1976), no. 2, 237-280. (From the introduction) **57** #15994 02C99 (81.02)
- Stachowiak, Herbert** ★Rationalismus im Ursprung. Die Genesis des axiomatischen Denkens. Library of Exact Philosophy, Vol. 4. Springer-Verlag, Vienna-New York, 1971. xvi + 348 pp. (Editors) **57** #15830 00A25 (01A20, 02A05)
- Stachowiak-Gniliak, Danuta** The generalized Weierstrass theorem in the class $\varphi^+(L)$. *Funct. Approximatio Comment. Math.* **3** (1976), 191-196. (Lee L. Keener) **56** #6241 41A65
- The generalized Weierstrass theorem in the class $q(L)$. *Funct. Approximatio Comment. Math.* **4** (1976), 7-17. (G. D. Taylor) **56** #3507 41A10
- Remarks on topological properties of the class $\varphi(L)$. *Funct. Approximatio Comment. Math.* **5** (1977), 31-38. (A. B. Nemeth) **58** #6135 28A20
- Stachowski, E.** (with Arya, Krishan Lal) On a network of $M/M/n$ facilities with the intensity of new arrivals depending on the total number of waiting units. (Polish summary) *Zastos. Mat.* **13** (1972/73), 165-172. (Izchak Rubin) **48** #9879 60K25
- Stachurska, Barbara** On the asymptotic behavior of solutions of the second-order linear differential equation. *Ann. Polon. Math.* **24** (1970/71), 203-208. (C. S. Coleman) **45** #3863 34D05
- On a nonlinear integral inequality. *Zeszyty Nauk. Uniwers. Jagiello. Prace Mat. No. 15* (1971), 151-157. (R. K. Miller) **48** #6852 45G99
- Stäckel, Paul** See **Festschrift: Weber, Heinrich**, **50** #12626 and **Variationsrechnung**, **58** #27167
- Stackelberg, Olaf P.** A uniform law of the iterated logarithm for functions C -uniformly distributed mod 1. *Indiana Univ. Math. J.* **21** (1971/72), 515-528. (J. A. Beekman) **45** #3351 10K05 (28A05)
- (with Carlitz, Leonard; Kurtz, David C.; Scoville, Richard) Asymptotic properties of Eulerian numbers. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **23** (1972), 47-54. (J. Riordan) **46** #8961 10A40 (05Axx, 60C05)
- Metric theorems related to the Kronecker-Weyl theorem mod m . *Monatsh. Math.* **82** (1976), no. 1, 57-69. (B. Volkmann) **54** #10177 10K05 (60F05)
- Stacy, E. W.** Comment on: "Bulk queue model for computer system analysis" (IBM J. Res. Develop. **18** (1974), 370-372) by W. Chang. *IBM J. Res. Develop.* **19** (1975), 424. (J. G. C. Templeton) **51** #11719 60K30
- Stadden, V.** See **Studden, William J.**
- Stadel, Manfred** (with Hotz, Günter) Network complexity. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 405-420. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (V. Ju. Meitus) **58** #9843 94A20 (18D10)
- Das Normalisierungsproblem und der Zusammenhang mit der Zeitkomplexität der kontextsensitiven Analyse. *Theoretical computer science (Third GI Conf., Darmstadt, 1977)*, pp. 351-367. *Lecture Notes in Comput. Sci.*, Vol. 48, Springer, Berlin, 1977. (Kurt Mehlhorn) **58** #8543 68A30 (68A20)
- Die Zeitkomplexität des Normalisierungsproblems bei kontextsensitiven Grammatiken. (English summary) *Acta Inform.* **9** (1977/78), no. 4, 309-329. (Steven S. Muchnick) **58** #32117 68A30
- A remark on the time complexity of the subtree problem. (German summary) *Computing* **19** (1977/78), no. 4, 297-302. (Claus-Peter Schnorr) **57** #14604 (05C99)
- Bemerkungen zur Zeitkomplexität des Teilbaumproblems. *Datenstrukturen, Graphen, Algorithmen* (3. Fachtagung Graphentheoret. Konzepte Informatik, Linz, pp. 275-285. *Appl. Comp. Sci.*, Vol. 8, Carl Hanser, Munich, 1978. (L. E. Trotter) **58** #25127 68A20 (05C10, 05C20)
- Stadelmann, Michael** Gruppen, deren Untergruppen subnormal vom Defekt zwei sind. *Arch. Math. (Basel)* **30** (1978), no. 4, 364-371. (David McDougall) **58** #16895 20F30 (20D35)
- Stadler, Heinz** A model for decision problems with continuous time parameter. *Stoch.* **1**, no. 4, 285-293 (1975). (J. K. Ghosh) **52** #12143 62C99
- (with Österreicher, Ferdinand) On dimensioning of samples in testing hypothesis. *Kybernetika (Prague)* **13** (1977), no. 5, 343-353. (O. Gulyás) **57** #1739 62F05
- Stadler, Stefan** Über 1-positive lineare Operatoren. *Linear operators and approximation theory (Proc. Conf., Math. Res. Inst., Oberwolfach, 1974)*, pp. 391-403. *Internat. Ser. Math.*, Vol. 25, Birkhäuser, Basel, 1974. (G. Mühlbach) **52** #6265 41A35
- Stadler, Wolfram** The general solution of the classical problem of the response of an infinite plate with an elastic foundation and damping. (German summary) *J. Elast.* **1** (1971), no. 1, 37-49. (Author's summary) **58** #32211 73.34 (01A55)
- A theorem on the uniform convergence of Fourier-type integrals. *Collective articles dedicated to Salomon Bochner. J. Math. Anal. Appl.* **42** (1973), 409-417. (Muckenhoupt) **47** #9159 42A76
- Preference optimality and applications of Pareto-optimality. *Multicriteria decision making*, pp. 125-225. *Internat. Centre for Mech. Sci. (CISM) Courses and Lectures*, No. 211, Springer, Vienna, 1975. (V. Komkov) **56** #17083a 65K05
- Erratum: "Preference optimality and applications of Pareto-optimality" (Multicriteria decision making, pp. 125-225, Internat. Centre for Mech. Sci. (CISM) Courses and Lectures, No. 211, Springer, Vienna, 1975). *Multicriteria decision making*, p. 387. *Internat. Centre for Mech. Sci. (CISM) Courses and Lectures*, No. 211, Springer, Vienna, 1975. (V. Komkov) **56** #17083b 65K05
- Preference optimality (an optimality concept in multicriteria problems). *Optimization and operations research (Proc. Conf., Oberwolfach, 1975)*, pp. 297-307. *Lecture Notes in Econom. Math. Systems*, Vol. 117, Springer, Berlin, 1976. (Peter Fishburn) **56** #14567 90A05 (90A10)
- Sufficient conditions for preference optimality. *Differential game issue. J. Optimization Theory Appl.* **18** (1976), no. 1, 119-140. (P. L. Yu) **56** #2446 90D15
- Uniform shallow arches of minimum weight and minimum maximum deflection. *Optimization Theory Appl.* **23** (1977), no. 1, 137-165. (Author's summary) **58** #873.49
- Natural structural shapes of shallow arches. *Trans. ASME Ser. E. J. Appl. Mech.* (1977), no. 2, 291-298. (Cornelius O. Horgan) **56** #1905 73.49
- Natural structural shapes (the static case). *Quart. J. Mech. Appl. Math.* **31** (1977), no. 2, 169-217. (Edward J. Haug, Jr.) **58** #12657 49H05 (73.49)
- Stadnik, I. P.** Transition processes in spools with massive cores in the case of a parallel magnetic field. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1977**, no. 10, 1068-1082. **45** #4746 78.35
- The computation of vortex flows in electromagnetic devices of regular configuration by the method of eigenfunctions. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1977**, no. 8, 905-913, 954-955. (From the author's introduction) **57** #2174 78.35
- A numerical method of solving the problem of the flow of a constant current in a dielectric plate. *Magnit. Gidrodinamika* **13** (1977), no. 2, 69-75. (Russian); *transl. Magnetohydrodynamics* **13** (1977), no. 2, 186-192. **57** #8405 76.35 (78.31)
- Stadnikova, L. V.** (with Lucenko, A. V.) Partial stability in the first approximation. (Russian) *Differentsial'nye Uravneniya* **9** (1973), 1530-1533, 1552. (C. S. Coleman) **48** #8997 34D05
- Stadnikova, N. A.** (with Klabukova, L. S.) Computation of a conical body that is subject to the action of a load concentrated at the vertex. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* (1974), 955-969, 1076. (P. P. Teodorescu) **50** #11962 73.65
- (with Klabukova, L. S.) Solution of mixed boundary value problems of the theory of zero-moment shells by the differential-difference method. (Russian) *Ž. Vyčisl. Mat. Fiz.* **17** (1977), no. 2, 453-469, 548. (Authors' summary) **56** #14011 73.65
- An auxiliary algebraic problem. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 6, 1575-1578, 1629. (Author's summary) **56** #13574 65F30
- Stadter, James T.** (with Fox, David W.) An eigenvalue estimation method of Weinstein and Weinstein's intermediate problems. *SIAM J. Math. Anal.* **8** (1977), no. 3, 491-501. (M. Z. Nashed) **55** #8949 49G15 (65J05)
- Stadtlander, David** A structure theorem for δ -classes of compact semigroup actions. *Systems Theory* **5** (1971), 141-144. (R. J. Koch) **45** #9306 54H15
- Actions on plane continua. *Math. Systems Theory* **7** (1974), no. 4, 338-343. (Chew) **52** #6687 54H15
- Staël von Holstein, Carl-Axel S.** See **Concept of probability in psychological experiments**, **54** #8768 and **Role and effectiveness of theories of decision in practice**, **56** #1077
- Stafeev, V. I.** (with Fil'kov, V. G.) A comparative estimate of the complexity of learning schemes. (Russian) *Computing systems, No. 2: Computational equipment and software (First All-Union Conf., Novosibirsk, 1967)* (Russian), pp. 169-176. Izdat. "Nauka" SSSR, Novosibirsk, 1968. **45** #9821 94A20
- Staff, P. J.** (with Vaghholkar, M. K.) Stationary distributions of open Markov processes with discrete time with application to hospital planning. *J. Appl. Probability* **8** (1971), 668-680. **45** #1294 60J20
- (with Vaghholkar, M. K.) Open migration systems with uniform inflow. *Biosci.* **13** (1972), 95-108. (F. B. Knight) **46** #4614 60J10
- (with Vaghholkar, M. K.) Multivariate distributions in open Markovian systems. *Trabajos Estadist. Investigación Oper.* **25** (1974), no. 1-2, 119-140. (G. S. Datt) **56** #9700 60J20 (90A05, 90D15)
- (with Vaghholkar, M. K.) Infinite geometric products. *Canad. Math. Bull.* **20** (1977), no. 3, 359-367. (George E. Andrews) **57** #17068 40A20 (05A19, 10A45)
- Staffans, Olof J.** Nonlinear Volterra integral equations with positive definite kernels. *Amer. Math. Soc.* **51** (1975), 103-108. (R. K. Miller) **51** #6310 45D05
- An inequality for positive definite Volterra kernels. *Proc. Amer. Math. Soc.*

- 6), 205-210. (J. M. Cushing) **58** #17761 45M05 (45D05)
- Positive definite measures with applications to a Volterra equation. *Trans. Amer. Math. Soc.* **218** (1976), 219-237. (J. A. Nohel) **56** #16289 45D05 (45M05, 42-XX)
- Tauberian theorems for a positive definite form, with applications to a Volterra equation. *Trans. Amer. Math. Soc.* **218** (1976), 239-259. (H. E. Gollwitzer) **54** #10921 2E05 (45D05)
- On the asymptotic spectra of the bounded solutions of a nonlinear Volterra equation. *J. Differential Equations* **24** (1977), no. 3, 365-382. (H. E. Gollwitzer) #3794 45J05 (45D05)
- Boundedness and asymptotic behavior of solutions of a Volterra equation. *Hungarian Math. J.* **24** (1977), no. 1, 77-95. (D. F. Shea) **57** #3800 45M05
- Systems of nonlinear Volterra equations with positive definite kernels. *Trans. Amer. Math. Soc.* **228** (1977), 99-116. (D. F. Shea) **57** #3770 45D05
- On the holomorphic properties of the nonlinearity in a Volterra equation. *J. Math. Anal. Appl.* **64** (1978), no. 1, 48-60. (R. K. Miller) **58** #17731 45J05 (45D05)
- (with Londen, Stig-Olof) A note on Volterra equations in a Hilbert space. *Proc. Amer. Math. Soc.* **70** (1978), no. 1, 57-62. (M. Z. Nashed) **57** #7083 45N05 (47H15)
- (with J. T. (with Rosenberg, Alex) Global dimension of Ore extensions. *Algebra, Logic, and category theory (a collection of papers in honor of Samuel Eilenberg)*, pp. 1-188. Academic Press, New York, 1976. (Manabu Harada) **53** #13318 16A60
- Completely faithful modules and ideals of simple Noetherian rings. *Bull. London Math. Soc.* **8** (1976), no. 2, 168-173. (E. H. Feller) **53** #3010 16A46
- Stable structure of noncommutative Noetherian rings. *J. Algebra* **47** (1977), no. 2, 267-267. (Tomas Kepka) **56** #5648 16A46 (16A14)
- Weyl algebras are stably free. *J. Algebra* **48** (1977), no. 2, 297-304. (A. Rosenberg) #8622 16A50
- Stable structure of noncommutative Noetherian rings. II. *J. Algebra* **52** (1978), no. 18-235. (Tomas Kepka) **58** #16763 16A46 (16A14)
- A simple Noetherian ring not Morita equivalent to a domain. *Proc. Amer. Math. Soc.* **68** (1978), no. 2, 159-160. (J. Kuzmanovich) **57** #6090 16A40 (16A48)
- (with R. A. (with Heidel, J. W.) A new comparison theorem for scalar Riccati equations. *Bull. Amer. Math. Soc.* **80** (1974), 754-757. (R. A. Struble) **49** #7516 10
- (with T. See Malek-Shahmirzadi, Massoud, **55** #8132
- (with James D. Analytic interpolation of certain multiplier spaces. *Pacific J. Math.* **32** (1970), 241-248. (Author's summary) **54** #837 42A18 (46E35)
- The spectrum of certain lower triangular matrices as operators on the l_p spaces. *Pacific J. Math.* **42** (1972), 515-525. (E. R. Deal) **47** #4024 47A10 (47B35)
- Set approximation by lemniscates and the spectrum of an operator on an approximation space. *Pacific J. Math.* **60** (1975), no. 2, 253-265. (G. Godini) **55** #1103 410 (46M35)
- Integral representations of fractional powers of infinitesimal generators. *Illinois J. Math.* **20** (1976), no. 1, 124-133. (P. L. Butzer and U. Westphal) **53** #14217 47D05
- Functions of a matrix and their norms. *Linear Algebra and Appl.* **20** (1978), no. 1, 94. (A. S. Householder) **57** #3162 15A30
- (with William J., Jr. (with Levine, Norman) On the hyperspace of a quasi-uniform space. *Math. J. Okayama Univ.* **15** (1971/72), 101-106. (S. A. Naimpally) **48** #1182 54E15 820
- (with Levine, Norman) Correction, to: "An equivalence relation on the lattice of topologies on a set" (Kyungpook Math. J. **14** (1974), no. 2, 213-219). *Kyungpook Math. J.* **5** (1975), no. 2, 303. (Editors) **53** #1497 54A10
- Reiner See *Anwendungen statistischer und mathematischer Methoden auf naturwissenschaftliche Probleme*, **52** #15926
- (with E. E. E. Sopra alcune estensioni delle nozioni di dipendenza integrale e di località, ed applicazioni geometriche. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **48** (1970), 589-594. (C. Margaglio) **45** #8653 405 (13B20)
- Su alcune generalizzazioni della nozione di dominio fattoriale. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **19** (1974), 157-179. (P. Samuel) **51** #8103 15 (14M10)
- Le superficie cubiche di P^3 a curve sottoinsieme intersezione completa. (French and English summaries) *Atti Accad. Ligure Sci. Lett.* **31** (1974), 138-148 (1975). (H. Zuno) **50** #13053 14J25 (14M10)
- Le ipersuperficie cubiche di P_k^4 a superficie intersezione completa e sottoinsieme intersezione completa. (English summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 1-2, 1-114. (Paolo Maroscia) **53** #452 14M05
- (with P. G. Decomposition of the A -matrix of an RC-circuit into a product of matrices to describe the capacitance and resistance parts of the network. (Russian. English summary) *Teoret. Elektrotehn. Vyp.* **22** (1977), 69-73, 157. (Author's summary) #13665 65F30 (94A20)
- (with C. E. (with Ellison, William John; Ellison, Fern; Pesek, J.; Stall, D. S.) The ϕ -phantine equation $y^2 + k = x^3$. *J. Number Theory* **4** (1972), 107-117. (E. L. Cohen) #4923 10B10 (14H25)
- Gérolé A ZF system combined with type theory. (Spanish. English summary) *Revista de Matemática (Valparaíso)* **14** (1973), 105-108. (E. Mendelson) **48** #8233 02K15
- Modal models corresponding to models. *Z. Math. Logik Grundlagen Math.* **20** (1974), 407-410. (Kit Fine) **51** #7831 02C10
- Une formalisation de quelques syllogismes modaux. *Logique et Analyse (N.S.)* **19** (1976), no. 74-76, 175-217. (David Makinson) **56** #5226 02C10
- Indications formelles sur les syllogismes avec "contingent". *Logique et Analyse (S.)* **20** (1977), no. 79, 199-220. (Mary J. Sirridge) **57** #5687 02C10 (01A35, 03)
- See also *Conference: Mathematical Logic*, **48** #5804
- Engelf An n -person bargaining game in the extensive form. *Mathematical economics and game theory*, pp. 156-172. *Lecture Notes in Econ. and Math. Systems*, Vol. 141, Springer, Berlin, 1977. (Irinel Dragan) **56** #2430 90D12
- János On polyhedral games. (Polish summary) *Zastos. Mat.* **12** (1971), 175-179. (L. Petrosjan) **47** #3034 90D45
- (with Simon, András) Optimum, prices and equilibrium in international trade. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* **5** (1972), 181-195. (Authors' summary) **48** #3467 90A15
- On the doubly coupled linear programming problem. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* **7** (1974), 25-40. (A. Majthay) **51** #9793 90C05
- A linear programming decomposition procedure, and an application of it. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* **1** (1975), no. 3-4, 163-179. (Author's summary) **58** #20414 90C05
- A method for LP-decomposition. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* **8** (1975), no. 1, 37-52. (Author's summary) **55** #14194 90C05
- Decomposition procedures for convex programs. *Optimization and operations research (Proc. Conf., Oberwolfach, 1975)*, pp. 307-316. *Lecture Notes in Econom. Math. Systems*, Vol. 117, Springer, Berlin, 1976. (Jochem Zowe) **56** #10969 90C25
- On an LP decomposition procedure. *Progress in operations research, Vols. I, II (Proc. Sixth Hungarian Conf., Eger, 1974)*, pp. 895-906. *Colloq. Math. Soc. János Bolyai, Vol. 12, North-Holland, Amsterdam*, 1976. (Sztéfan Tigan) **57** #9054 90C05
- (with Heppes, Aladár; Mályusz, K.) On the solution of a sorting problem. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* **2** (1976), no. 3-4, 233-235 (1977). (Authors' summary) **57** #18798 90B99
- (with Somos, Endre) Decomposition methods in nonlinear programming problems. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* **9** (1976), no. 1-2, 41-52. (Authors' summary) **55** #7418 90C30
- See also *Inventory control and water storage*, **48** #5200
- Stahl, Kurt (with Simon, Hans) ★*Mathematik. Elfte Auflage. Nachschlagebücher für Grundlagenfächer. VEB Fachbuchverlag, Leipzig*, 1975. 670 pp. (Editors) **52** #13095 00A20
- Stahl, Saul On the Ramsey number $r(F, K_n)$ where F is a forest. *Canad. J. Math.* **27** (1975), no. 3, 585-589. (S. A. Burr) **54** #122 05C05
- (with Geller, Dennis P.) The chromatic number and other functions of the lexicographic product. *J. Combinatorial Theory Ser. B* **19** (1975), no. 1, 87-95. (Authors' summary) **52** #13462 05C15
- (with White, Arthur T.) Genus embeddings for some complete tripartite graphs. *Discrete Math.* **14** (1976), no. 3, 279-296. (Jonathan L. Gross) **54** #10060 05C10
- n -tuple colorings and associated graphs. *J. Combinatorial Theory Ser. B* **20** (1976), no. 2, 185-203. (Author's summary) **53** #10636 05C15
- (with Beineke, Lowell W.) Blocks and the nonorientable genus of graphs. *J. Graph Theory* **1** (1977), no. 1, 75-78. (Jonathan L. Gross) **57** #161 05C10
- A counting theorem for topological graph theory. *Theory and applications of graphs (Proc. Internat. Conf., Western Mich. Univ., Kalamazoo, Mich., 1976)*, pp. 534-544. *Lecture Notes in Math.*, Vol. 642, Springer, Berlin, 1978. (A. T. White) **58** #21750 05C10
- Generalized embedding schemes. *J. Graph Theory* **2** (1978), no. 1, 41-52. (Seth R. Alpert) **58** #5318 05C10
- Stahl, Stanley H. A hierarchy on the class of primitive recursive ordinal functions. *Canad. J. Math.* **28** (1976), no. 6, 1205-1209. (S. S. Wainer) **54** #7233 02F35 (02F27, 02F20)
- Primitive recursive ordinal functions with added constants. *J. Symbolic Logic* **42** (1977), no. 1, 77-82. (From the introduction) **58** #16231 02F27
- Stahl, Wolfgang ★*Sensitivitätsanalyse mehrstufiger Standortprobleme. Mathematical Systems in Economics*, No. 30. Verlag Anton Hain, Meisenheim am Glan, 1976. vii + 174 pp. (Zbl 376 #90041) **58** #20397 90B99 (90C50)
- Stahlie, T. J. See *Compstat*, **49** #9990
- Stahly, Glenn F. A construction for PBIBD(2)'s. *J. Combinatorial Theory Ser. A* **21** (1976), no. 2, 250-252. (Author's review (Zbl 341 #05012)) **57** #16100 05B05
- Stahn, Heinz Laudatio für Akademiemitglied Professor Dr. V. M. Gluschkow. *Wiss. Z. Techn. Univ. Dresden* **25** (1976), no. 4, 811-812. (Editors) **54** #40 01A70
- Stahnke, Wayne Primitive binary polynomials. *Math. Comp.* **27** (1973), 977-980. (S. D. Cohen) **48** #6064 12C05 (12-04)
- Stahov, A. P. "Fibonacci" binary positional number systems. (Russian) *Coding and discrete information transmission in communication systems (Russian)*, pp. 155-179, 196. Izdat. "Nauka", Moscow, 1976. (Author's summary) **58** #10699 10A30 (94A10)
- The principle of asymmetry in measurement logic. (Russian) *Problemy Peredachi Informacii* **12** (1976), no. 3, 69-77. (Editors) **58** #26546 94A15
- ★Введение в алгоритмическую теорию измерения. (Russian) [An introduction to the algorithmic theory of measurement] Izdat. "Sovetskoe Radio", Moscow, 1977. 288 pp. (errata insert) (R. N. Goss) **57** #9283 94A10 (10A30, 69.00)
- Staicu, C. I. See *Modern dimensional analysis, similitude and similarity*, **48** #10033
- Staiger, Ludwig (with Arold, Dorothee; Bernhardt, Lutz) Über die Entscheidung und Aufzählung regulärer Wortmengen durch Markowsche Algorithmen. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **8** (1972), 99-114. (A. Cremers) **47** #7953 68A30
- Eine Bemerkung zur Charakterisierung von Folgenmengen durch Wortmengen. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **8** (1972), 589-592. (P. Deussen) **49** #10193 68A30
- (with Lindner, Rolf) Eine Bemerkung über nichtkonstantenfreie sequentielle Operatoren. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **10** (1974), 195-202. (N. Zierler) **50** #16153 94A25
- (with Wagner, Klaus) Automatentheoretische und automatenfreie Charakterisierungen topologischer Klassen regulärer Folgenmengen. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **10** (1974), 379-392. (Authors' summary) **57** #11971 94A30 (02F10)
- (with Wagner, Klaus) Zur Theorie der abstrakten Familien von ω -Sprachen (ω -AFL). *Algorithmische Komplexität, Lern- und Erkennungsprozesse (Zweites Internat. Sympos., Friedrich-Schiller-Universität, Jena, 1976)*, pp. 79-91. Friedrich-Schiller-Universität, Jena, 1976. (S. Ginsburg) **56** #13812 68A30
- Quasilineare Automaten und die von ihnen realisierten Operatoren. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **12** (1976), no. 1-2, 83-92. (R. G. Buharev) **55** #12365 94A30
- Reguläre Nullmengen. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **12** (1976), no. 6, 307-311. (K. Jacobs) **54** #4818 94A10

- (with Lindner, Rolf) ★Algebraische Codierungstheorie. Theorie der sequentiellen Codierungen. Elektronisches Rechnen und Regeln, Band 11. Akademie-Verlag, Berlin, 1977. xi + 268 pp. (Siegm. Gerber) 57 #9281 94A10 (94A25, 94A30)
- Empty-storage-acceptance of ω -languages. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 516-521. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (Branislav Rován) 58 #25149 68A30
- (with Wagner, Klaus) Recursive ω -languages. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 532-537. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (Matti Linna) 58 #3752 68A30 (02F10)
- (with Lindner, Rolf) Erkennungs-, mass- und informations-theoretische Eigenschaften regulärer Folgenmengen. *Z. Math. Logik Grundlagen Math.* 23 (1977), no. 3, 283-287. (Wolfgang Feitscher) 58 #3770 68A45 (28A05, 94A15)
- Staikos, Vasilios A.** Oscillatory property of certain delay-differential equations. *Bull. Soc. Math. Grèce (N.S.)* 11 (1970), no. 1, 1-5. (A. G. Kartsatos) 49 #784 34K15
- (with Sfikas, Ioannis G.) Criteria for asymptotic and oscillatory character of functional differential equations of arbitrary order. (Italian summary) *Boll. Un. Mat. Ital.* (4) 6 (1972), 185-192. (J. S. Papadakis) 47 #5407 34K15
- On the asymptotic relationship at infinity between the solutions of two differential systems. *Bull. Soc. Math. Grèce (N.S.)* 13 (1972), no. 1-2, 1-11. (G. Sansone) 51 #3624 34D05
- (with Sfikas, Ioannis G.) Oscillatory and asymptotic behavior of functional differential equations. *J. Differential Equations* 12 (1972), 426-437. (S. G. Deo) 48 #9044 34K15
- (with Sfikas, Ioannis G.) Oscillations for forced second order nonlinear differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 55 (1973), 25-30 (1974). (I. Kiguradze) 51 #6043 34C10
- (with Sfikas, Ioannis G.) Some results on oscillatory and asymptotic behavior of differential equations with deviating arguments. *Proceedings of the C. Carathéodory International Symposium (Athens, 1973)*, pp. 546-553. *Greek Math. Soc., Athens*, 1974. (T. Čanturija) 57 #6743 34K15
- (with Sfikas, Ioannis G.) Oscillations of differential equations with retardations. *Hiroshima Math. J.* 4 (1974), 1-8. (D. V. V. Wend) 49 #11001 34K15
- (with Sfikas, Ioannis G.) The effect of retarded actions on nonlinear oscillations. *Proc. Amer. Math. Soc.* 46 (1974), 259-264. (V. Lakshmikantham) 50 #7744 34K15
- (with Sfikas, Ioannis G.) Oscillations of retarded differential equations. *Proc. Cambridge Philos. Soc.* 75 (1974), 95-101. (D. V. V. Wend) 48 #11727 34K15
- (with Sfikas, Ioannis G.) Oscillatory and asymptotic properties of differential equations with retarded arguments. *Applicable Anal.* 5 (1975), no. 2, 141-148. (Melvin Heard) 53 #8611 34K15
- (with Sfikas, Ioannis G.) On the oscillation of bounded solutions of forced differential equations with deviating arguments. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 58 (1975), no. 3, 318-322. (See Zbl 352 #34056) 34K15
- (with Sfikas, Ioannis G.) Forced oscillations for differential equations of arbitrary order. *J. Differential Equations* 17 (1975), 1-11. (Pavol Marušiak) 50 #7746 34K15
- (with Sfikas, Ioannis G.) Oscillatory and asymptotic characterization of the solutions of differential equations with deviating arguments. *J. London Math. Soc.* (2) 10 (1975), 39-47. (R. B. Grafton) 51 #8588 34K15
- (with Philos, Ch. G.) Some oscillation and asymptotic properties for linear differential equations. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 8* (1976), 25-30. (Bhagat Singh) 54 #5537 (E 58 #11653) 34C10
- (with Sfikas, Ioannis G.) Oscillations of differential equations with deviating arguments. *Funkcial. Ekvac.* 19 (1976), no. 1, 35-43. (G. S. Ladde) 54 #5588 34K15
- (with Grammatikopoulos, M. K.; Sfikas, Ioannis G.) On the types of nonoscillatory solutions of differential equations with deviating arguments. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 9* (1977), 65-79. (R. E. Fennell) 57 #10177 34K25
- (with Philos, Ch. G.) On the asymptotic behavior of nonoscillatory solutions of differential equations with deviating arguments. *Hiroshima Math. J.* 7 (1977), no. 1, 9-31. (Bhagat Singh) 55 #8518 34K15
- (with Philos, Ch. G.) Asymptotic properties of nonoscillatory solutions of differential equations with deviating argument. *Pacific J. Math.* 70 (1977), no. 1, 221-242. (T. G. Proctor) 57 #6750 34K20
- (with Stavroulakis, I. P.) Bounded oscillations under the effect of retardations for differential equations of arbitrary order. *Proc. Roy. Soc. Edinburgh Sect. A* 77 (1977), no. 1-2, 129-136. (D. Ramakrishna Rao) 56 #12507 34K15
- (with Philos, Ch. G.) Correction to: "Some oscillation and asymptotic properties for linear differential equations" (Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 8 (1976), 25-30). *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 10* (1978), 81-83. (Bhagat Singh) 58 #11653 34C10
- (with Grammatikopoulos, M. K.; Sfikas, Ioannis G.) Asymptotic and oscillatory criteria for retarded differential equations. *J. Math. Anal. Appl.* 63 (1978), no. 3, 591-605. (V. Sree Hari Rao) 58 #11818 34K25
- Stakgold, Ivar** Branching of solutions of nonlinear equations. *SIAM Rev.* 13 (1971), 289-332. (D. E. Edmunds) 45 #1001 (E 46 #4305) 47H15 (34C99)
- Errata: "Branching of solutions of nonlinear equations". *SIAM Rev.* 14 (1972), 492. (Editors) 46 #4305 47H15
- (with Payne, Lawrence E.) On the mean value of the fundamental mode in the fixed membrane problem. Collection of articles dedicated to Alexander Weinstein on the occasion of his 75th birthday. *Applicable Anal.* 3 (1973), 295-306. (J. Hersch) 53 #3476 35B45 (35J05)
- Global estimates for nonlinear reaction and diffusion. *Ordinary and partial differential equations (Proc. Conf., Univ. Dundee, Dundee, 1974)*, pp. 252-266. *Lecture Notes in Math.*, Vol. 415, Springer, Berlin, 1974. (D. H. Sattinger) 55 #828 35B45 (35J65)
- See also **Nonlinear problems in the physical sciences and biology**, 51 #7766
- Stakun, A. A.** Some identities for the eigenvalues of a second order differential operator that has a point of swerve. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 1819-1827, 1917. (Stefan Balint) 50 #13706 34B25
- Certain spectral relations. (Russian) *Mat. Zametki* 18 (1975), no. 4, 561-568. (R. C. Gilbert) 53 #5992 34B25 (47E05)
- Stakun, N. S.** (with Šadrin, G. A.) Construction of the fundamental solution asymptotic behavior for a certain fourth order differential equation. (Russian) *Differential equations and inequalities (Russian)*, pp. 14-25. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1973. (R. Guenther) 53 #13879 35Q99
- (with Šadrin, G. A.) Two approaches to the construction of the fundamental solution for a certain fourth order differential equation. (Russian) *Differential equations and inequalities (Russian)*, pp. 26-32. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*. (R. Guenther) 53 #13880 35Q99
- Stalbo, A. K.** Decision making in complex situations and cases of multiple-criteria problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 1, 3-11, 219 (Russian); translated as *Engng. Cybernetics* 13 (1975), no. 1, 1-8. (Neal Glassman) 52 #90C47
- (with Dymarskii, Ja. S.; Prudovskii, B. D.) A separable integer-valued problem. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 5, 23-26 (Russian); translated as *Cybernetics* 13 (1975), no. 5, 19-22. (See RZMat 1976 #5 V777) 90C10
- Staley, David H.** (with Holt, William R.; Cannon, William N., Jr.) Necessary and sufficient condition for a model insect population to go to extinction. *Bull. Math. Biol.* 36 (1974), 527-533. (L. Billard) 51 #9859 92A15
- Staley, P. A.** (with Ferguson, J.) Least squares piecewise cubic curve fitting. *Commun. Appl. Cybernetics* 13 (1975), no. 5, 15267 65D10
- Stallford, Harold L.** On the time intersections of trajectories and manifolds. *J. Math. Anal. Appl.* 34 (1971), 479-494. (A. Blaquière) 45 #3092 90D25
- Sufficient conditions for optimal control with state and control constraints. *Optimization Theory Appl.* 7 (1971), 118-135. (D. H. Chyung) 45 #7570 49E05
- (with Leitmann, G.) A sufficiency theorem for optimal control. *J. Optimization Theory Appl.* 8 (1971), 169-174. (M. Q. Jacobs) 45 #9233 49A10
- (with Leitmann, G.) A note on termination in optimal control problems. *J. Optimization Theory Appl.* 8 (1971), 228-230. 45 #7569 49B99
- (with Leitmann, G.) Sufficiency for optimal strategies in Nash equilibrium problems. *Techniques of optimization (Fourth IFIP Colloq. Optimization Techniques, Los Angeles, Calif., 1971)*, pp. 279-285. *Academic Press, New York*, 1972. (G. Zlatosvili) 53 #90D25
- (with Leitmann, G.) On representing a black box as a dynamical system. *J. Math. Anal. Appl.* 38 (1972), 348-364. (D. H. Chyung) 46 #4995 93C15
- Criteria for pareto-optimality in cooperative differential games. *J. Optimization Theory Appl.* 9 (1972), 391-398. (J. Fichet) 46 #8676 90D25
- (with Dreyfus, Stuart E.) A computational successive improvement scheme for adaptive optimal control processes. *J. Optimization Theory Appl.* 10 (1972), 78-88. (Alihashin (RZMat 1973 #2 B1100)) 51 #2283 65K05 (93C40)
- On determining the submanifolds of state space where the optimal value surface is an infinite derivative. *Fifth Conference on Optimization Techniques (Rome, 1973)*, pp. 276-291. *Lecture Notes in Comput. Sci.*, Vol. 3, Springer, Berlin, 1973. (A. summary) 56 #6532 49E99
- (with Leitmann, G.) Sufficiency conditions for Nash equilibria in N -person differential games. *Topics in differential games*, pp. 345-376. *North-Holland, Amsterdam*, 1973. (Gordon Mon) 50 #12306 90D25
- (with Kullback, Joseph) Identifying an unknown process by utilizing random chosen inputs. *Information and Control* 23 (1973), 393-406. (S. P. Bingulac) 49 #93B30
- (with Steinberg, Avraham M.) On existence of optimal controls. *J. Optimization Theory Appl.* 11 (1973), 266-273. (Authors' summary) 57 #17439 49A10 (93C15)
- (with Leitmann, G.) On saddle-point optimality in differential games. *Differential game issue. J. Optimization Theory Appl.* 18 (1976), no. 1, 141-151. (T. E. S. Ragsdale) 55 #14244 90D25
- Sufficiency theorem for discontinuous optimal cost surfaces. *SIAM J. Math. Anal.* 16 (1978), no. 1, 63-82. (Author's summary) 58 #7345 49F99
- Stall, D. S.** (with Ellison, William John; Pesek, J.; Lunn, W. Fred) A postscript paper of A. Baker. *Bull. London Math. Soc.* 3 (1971), 75-78. (H. Yokoi) 45 #12A25
- (with Ellison, William John; Ellison, Fern; Pesek, J.; Stahl, C. E.) The Diophantine equation $y^2 + k = x^3$. *J. Number Theory* 4 (1972), 107-117. (E. L. Stoll) 47 #4923 10B10 (14H25)
- Stallbohm, Volker** (with Reinermann, Jochen) Eine Anwendung des Edelsteinschen Fixpunktsatzes auf Integralgleichungen vom Abel-Liouvilleschen Typ. *Arch. Math. (Basel)* 22 (1971), 642-647. (J. S. W. Wong) 45 #9082 45E99
- (with Hetzer, Georg; Reinermann, Jochen) Fixpunktsätze von Browder und Krasnoselski für lokalkonvexe Hausdorff-Räume. *Math. Nachr.* 57 (1973), 227-236. (Daneš) 48 #9472 47H10
- (with Reinermann, Jochen) Fixed point theorems for compact and noncompact mappings on starshaped domains (preliminary communication). *Comment. Math. Carolinae* 15 (1974), 775-779. (S. Swaminathan) 51 #6511 47H10
- (with Reinermann, Jochen) Fixed point theorems for compact and noncompact mappings on starshaped domains. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 511-516. (Simeon Reich) 51 #11210 47H10
- (with Hetzer, Georg) Coincidence degree and Rabinowitz's bifurcation theorem. *Publ. Inst. Math. (Beograd) (N.S.)* 20(34) (1976), 117-129. (Jean Mawhin) 56 #47H15 (58C99)
- (with Hetzer, Georg) Eine Existenzaussage für asymptotisch lineare Störungen. *Fredholmoperators mit Index 0. (English summary) Manuscripta Math.* 21 (1977), 81-100. (Ju. G. Borisov) 56 #16465 47H15 (58B15)
- Stallings, John** ★Group theory and three-dimensional manifolds. A James K. Whittemore Lecture in Mathematics given at Yale University, 1969. *Yale Mathematical Monographs*, 4. Yale University Press, New Haven, Conn.-London, 1971. v + 100 pp. (Edward M. Bloembergen) 54 #3705 57A10 (20E30)
- Group theory and 3-manifolds. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 2, pp. 165-167. *Gauthier-Villars, Paris*, 1971. (Edward M. Bloembergen) 54 #13921 57A10 (20E40)
- The cohomology of pregroups. *Conference on Group Theory (Univ.*

- consin-Parkside, Kenosha, Wis., 1972), pp. 169-182. *Lecture Notes in Math.*, Vol. 319, Springer, Berlin, 1973. (A. Babakhanian) **52** #3364 20J99
- Quotients of the powers of the augmentation ideal in a group ring. *Knots, groups, and 3-manifolds (Papers dedicated to the memory of R. H. Fox)*, pp. 101-118. *Ann. of Math. Studies*, No. 84, Princeton Univ. Press, Princeton, N.J., 1975. (Peter M. Neumann) #590 20F99 (55A05)
- Coherence of 3-manifold fundamental groups. *Séminaire Bourbaki*, Vol. 1975/76, 6ème année, Exp. No. 481, pp. 167-173. *Lecture Notes in Math.*, Vol. 567, Springer, Berlin, 1977. (G. Peter Scott) **56** #1290 55A05 (20E40)
- See also **Algebraic topology: an introduction**, **55** #6407
- W. T. (with Boullion, Thomas L.) A spectral inverse for rectangular matrices. *Math. Math.* **20** (1970), 61-70. (Ion Enescu) **45** #6833 15A09
- (with Boullion, Thomas L.) The pseudoinverse of an r -circulant matrix. *Proc. Amer. Math. Soc.* **34** (1972), 385-388. (R. J. Plemmons) **45** #5143 15A09
- (with Boullion, Thomas L.) Computation of pseudoinverse matrices using residue arithmetic. *SIAM Rev.* **14** (1972), 152-163. (R. P. Tewarson) **46** #6576 65F20
- (with Boullion, Thomas L.) A strong spectral inverse for an r -circulant matrix. *AM J. Appl. Math.* **27** (1974), 322-325. (M. Lotkin) **50** #4606 15A09
- Robert C. (with Thomason, Richmond H.) Abstraction in first-order modal logic. *Theoria* **34** (1968), 203-207. (J. Michael Dunn) **49** #2269 02C10
- Possible worlds. *Noûs* **10** (1976), no. 1, 65-75. (I. Ruzsa) **56** #11736 02A05
- See also **Harper, William L.**, **58** #10298 and **van Fraassen, Bas C.**, **58** #16148
- Hart Johannes Regular variation of the tail of a subordinated probability distribution. *Advances in Appl. Probability* **5** (1973), 308-327. (J. L. Teugels) **49** #4112 60K05 (60E05)
- (with Smid, B.) Convergence in distribution of quotients of order statistics. *Stochastic Processes Appl.* **3** (1975), no. 3, 287-292. (Sidney I. Resnick) **53** #6686 F05 (62G30)
- (with Schmaal, Albertus; de Vries, Trienco) Tauberian theorems for limitation theorems admitting a central limit theorem. *Math. Z.* **150** (1976), no. 1, 75-82. (N. H.ingham) **54** #11464 60F05 (40E05)
- The reversed ladder of a random walk. *J. Appl. Probability* **14** (1977), no. 1, 10-194. (J. G. Wendel) **56** #13369 60J15
- Wiener's Tauberian theorem for Hausdorff limitation methods. *Nieuw Arch. Wisk.* **25** (1977), no. 2, 182-185. (Wolfgang Luh) **58** #1821 40G05 (40E05)
- Distance between sampling with and without replacement. *Statist. Neerlandica* **32** (1978), no. 2, 81-91. (Pramod K. Pathak) **58** #24649 62D05 (60F05)
- V. Ja. A certain class of operators in abstract spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 3(106), 86-91. (Hans-Jürgen Albrand) **47** #5500 A65
- Linear differential equations of infinite order with coefficients regular at infinity. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 1398-1406, 1423. (K. Seitz) **48** #11645 34A35
- de, Ionel I. Equations fonctionnelles contenant plusieurs fonctions inconnues. *Univ.ograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* No. 354-356 (1971), 123-156. (Pl. Annappan) **46** #5875 39A15
- (with Gheorghiu, Octavian Em.; Ghircioașiu, N.) Sur l'équation fonctionnelle $(x+y)A(x-y) = (A^2(x) - A^2(y))/1 - \lambda A^2(x)A^2(y)$. *Mathematica (Cluj)* **15**(38) 1973, 25-30. (M. Kuczma) **50** #13947 39A15
- telos, George D. Asymptotic distribution of the log-likelihood function for stochastic processes: some examples. *Bull. Soc. Math. Grèce (N.S.)* **17** (1976), 92-116. (B. L. S. akasa Rao) **58** #7974 62E20 (62M99)
- tescu, I. O. (with Kupsch, J.) Impact-parameter amplitudes. (Italian and Russian summaries) *Nuovo Cimento A* (11) **20** (1974), 317-353. (Evangelos Ifantis) **53** #2174 130
- (with Rothe, Klaus D.) Study of a two-dimensional model with partial-current-pseudoscalar derivative interaction. *Ann. Physics* **95** (1975), no. 1, 2-226. (Jorge André Swieca) **52** #12629 8147
- itis, Evangelos S. The theory of combinations in antiquity. (Greek. English summary) *Bull. Soc. Math. Grèce (N.S.)* **11** (1970), no. 2, 1-10. (E. B. Allen) **48** #5793 01A20
- The heliocentric system of the ancient Greeks. (Greek. German summary) *Prakt. Akad. Athenon* **46** (1971), 65-84 (1972). (E. B. Allen) **46** #5088 01A20
- ★Ιστορία των ελληνικών μαθηματικών. (Greek) [History of Greek mathematics] *Αριθμητικά—αι αρχαι της ελληνικης γεωμετρίας*. [Arithmetic—the beginnings of Greek geometry] *Evangelos S. Stamatis, Athens*, 1976. 190 pp. (Spiros Zervos) **58** #26711 A20
- See also **Euclid**, (Not reviewed); **Euclid**, (Not reviewed); **Euclid**, (Not reviewed); **Euclid**, (Not reviewed) and **Complete works: Archimedes**, **58** #26718
- ler, S. Z. Memoryless channels with synchronization errors—the general case. (Russian) *Problemy Peredaci Informacii* **6** (1970), no. 3, 43-49. (I. Vajda) **47** #4702 A05
- The Shannon principle for classes of information sources. (Russian) *Problemy Peredaci Informacii* **7** (1971), no. 2, 26-37. (I. Vajda) **47** #3108 94A15
- (with Dobrušin, R. L.) Coding theorems for classes of discrete memoryless arbitrarily time-variable channels. (Russian) *Problemy Peredaci Informacii* **11** (1975), no. 3-22. (Authors' summary) **58** #9791 94A15
- Shannon's theorems for a complete class of discrete channels whose states are known at the output. (Russian) *Problemy Peredaci Informacii* **11** (1975), no. 4, 3-12. (Authors' summary) **57** #19103 94A15
- bolieva, G. C. Projectors in free commutative semigroups with a finite number of generators. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 4, 97-105 (1973). (B. M. Schein (Šain)) **57** #6244 20M05
- ova-Stambolieva, Gena See **Cvetkova-Stambolieva, Gena**
- nov, D. B. (with Dobrev, V. K.; Hristova, E. H.; Petkova, V. B.) Symmetric part of the conformal covariant operator product expansion of two spin 1/2 fields. New developments in relativistic quantum field theory (Tenth Winter School Theoret. Phys., Vrnjačka Banja, 1973), Vol. I. *Acta Univ. Wratislav.* No. 207 (1974), 187-199. (M. A. Rashid) **7** #8549 81.22 (81.47)
- (with Dobrev, V. K.; Hristova, E. H.; Petkova, V. B.) Conformal covariant operator product expansion (OPE) of two spin 1/2 fields. (Russian summary) *Bulgar. J. Phys.* **1** (1974), no. 1, 42-57. (Authors' summary) **54** #9476a (E 54) #9476b) 81.53
- (with Dobrev, V. K.; Hristova, E. H.; Petkova, V. B.) Errata to "Conformal covariant operator product expansion (OPE) of two spin 1/2 fields" (Bulgar. J. Phys. **1** (1974), no. 1, 42-57). *Bulgar. J. Phys.* **1** (1974), no. 2, 220. (Authors' summary) **54** #9476b 81.53
- Stamgatziev, K. M. See **Differential equations and their application**, **50** #13681
- Stamm, Emil Introduction to differential topology. *Proceedings of the Thirteenth Biennial Seminar of the Canadian Mathematical Congress (Dalhousie Univ., Halifax, N.S., 1971)*, Vol. 1, pp. 281-327. *Canad. Math. Congr., Montreal, Que.*, 1972. (M. L. Gromov) **51** #6836 57Dxx
- Stamm, J. C. (with Priemer, Roland) Measurement designs to improve the computational efficiency of linear system state estimators. *Internat. J. Control* **22** (1975), no. 4, 445-460. (Edward J. Davison) **54** #11785 65K05 (93E10)
- Stammach, Urs (with Hilton, Peter John) ★A course in homological algebra. Graduate Texts in Mathematics, Vol. 4. Springer-Verlag, New York-Berlin, 1971. ix + 338 pp. (A. Fauntleroy) **49** #10751 18-02
- (with Eckmann, Beno; Hilton, Peter John) On the homology theory of central group extensions. I. The commutator map and stem extensions. *Comment. Math. Helv.* **47** (1972), 102-122. (J. A. Schafer) **47** #357 20J05 (18F25)
- (with Eckmann, Beno; Hilton, Peter John) On the homology theory of central group extensions. II. The exact sequence in the general case. *Comment. Math. Helv.* **47** (1972), 171-178. (J. A. Schafer) **47** #8699 (E 54) #10439) 20F25
- Variational homology and parafree groups. *Math. Z.* **128** (1972), 153-167. (S. Moran) **47** #5115 20E10
- ★Homology in group theory. *Lecture Notes in Mathematics*, Vol. 359. Springer-Verlag, Berlin-New York, 1973. viii + 183 pp. (A. Babakhanian) **52** #3360 20Jxx (18H10)
- (with Hilton, Peter John) On the differentials in the Lyndon-Hochschild-Serre spectral sequence. *Bull. Amer. Math. Soc.* **79** (1973), 796-799. (I. B. S. Passi) **48** #2271 20J05 (18G40, 20F25)
- (with Eckmann, Beno; Hilton, Peter John) Corrigendum to: "On the homology of central group extensions. II. The exact sequence in the general case". *Comment. Math. Helv.* **48** (1973), 136. (Editors) **54** #10439 20J05
- (with Eckmann, Beno; Hilton, Peter John) On the Schur multiplier of a central quotient of a direct product of groups. *J. Pure Appl. Algebra* **3** (1973), 73-82. (J. Wiegold) **50** #2347 20F25
- (with Passi, Inder Bir S.) A filtration of Schur multiplier. *Math. Z.* **135** (1973/74), 143-148. (A. Babakhanian) **49** #7373 20J05
- (with Hilton, Peter John) On torsion in the differentials of the Lyndon-Hochschild-Serre spectral sequence. *J. Algebra* **29** (1974), 349-367. (L. Ribes) **49** #9050 20G40 (20J05)
- (with Hilton, Peter John) Two remarks on the homology of group extensions. Collection of articles dedicated to the memory of Hanna Neumann, VII. *J. Austral. Math. Soc.* **17** (1974), 345-357. (L. Ribes) **51** #5715 18H10
- (with Hilton, Peter John) On localization and isolators. *Houston J. Math.* **2** (1976), no. 2, 195-206. (Thaddeus C. Hurley) **55** #508 20E15
- (with Gut, Arthur) On exact sequences in homology associated with a group extension. *J. Pure Appl. Algebra* **7** (1976), no. 1, 15-34. (L. R. Vermani) **52** #8224 18H10
- (with Hilton, Peter John) On group actions on groups and associated series. *Math. Proc. Cambridge Philos. Soc.* **80** (1976), no. 1, 43-55. (Jerold W. Grossman) **53** #8256 20E15 (20J05)
- (with Baumslag, Gilbert) A non-free parafree group all of whose countable subgroups are free. *Math. Z.* **148** (1976), no. 1, 63-65. (Thaddeus C. Hurley) **53** #13410 20E05
- (with Baumslag, Gilbert) On the inverse limit of free nilpotent groups. *Comment. Math. Helv.* **52** (1977), no. 2, 219-233. (Seymour Bachmuth) **57** #3257 20F20
- Cohomological characterisations of finite solvable and nilpotent groups. *J. Pure Appl. Algebra* **11** (1977/78), no. 1-3, 293-301. (K. W. Gruenberg) **57** #6225 20J05
- Another homological characterisation of finite p -nilpotent groups. *Math. Z.* **156** (1977), no. 2, 209-210. (I. B. S. Passi) **57** #12718 20J05
- (with Barnes, Donald W.; Schmid, Peters) Cohomological characterisations of saturated formations and homomorphisms of finite groups. *Comment. Math. Helv.* **53** (1978), no. 2, 165-173. (Ken-ichi Tahara) **58** #11167 20J05
- See also **Topology and algebra**, **58** #15778
- Stammler, Ludwig Über Metrikbildungen aus gegebener Metrik durch Division. *Beiträge Anal.* No. 1 (1971), 135-145. (L. M. Kelly) **46** #799 52A50 (54E35)
- Zwei elementargeometrische Zerlegungssätze. *Wiss. Beiträge Martin-Luther-Univ. Halle-Wittenberg M3* (1971), 33-40. (Johannes Böhm) **45** #9236 50B30
- (with Herrmann, Manfred; Sterz, Ulrich) Zur Charakterisierung primärer Körpererweiterungen durch den Stellenbegriff. *Monatsh. Math.* **77** (1973), 43-51. (Audun Holme) **48** #275 12F05
- Zur spezialisierungstheoretischen Charakterisierung der Freiheit und ϕ -Freiheit. Beiträge zur Algebra und Geometrie, 2. *Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M Math.* **4** (1973), 27-35 (1974). (K. Kiyek) **54** #308 14A25
- (with Herrmann, Manfred; Sterz, Ulrich) ★Geometrie auf Varietäten. Hochschulbücher für Mathematik, Band 73. VEB Deutscher Verlag der Wissenschaften, Berlin, 1975. 208 pp. (Loren D. Olson) **58** #10877 14-01
- (with Böhm, Johannes; Hertel, E.; Mögling, W.; Börner, Walter; Krötenheerdt, Otto) ★Geometrie. I. Axiomatischer Aufbau der euklidischen Geometrie. Mit historischen Bemerkungen von H. Wussing. Zweite, berichtigte Auflage. Studienbücherei. Mathematik für Lehrer, Band 6. VEB Deutscher Verlag der Wissenschaften, Berlin, 1976. 129 pp. (R. Lingenberg) **55** #11139 50A05
- See also **Beiträge: Algebra und Geometrie**, **52** #5241 and **Beiträge: Algebra und Geometrie**, **52** #5242
- Stamnes, Jakob J. (with Sherman, George C.; Lalor, Éamon) Asymptotic approximations to angular-spectrum representations. *J. Mathematical Phys.* **17** (1976), no. 5, 760-776. (Norman Bleistein) **53** #9880 78.35
- (with Sherman, George C.) Radiation of electromagnetic fields in uniaxially anisotropic media. *J. Opt. Soc. Amer.* **66** (1976), no. 8, 780-788. (Y. Hayashi) **54** #1883 78.35

- Stamon, G. (with Wendling, S.; Gagneux, G.) A set of invariants within the power spectrum of unitary transformations. *IEEE Trans. Comput.* **27** (1978), no. 12, 1213-1216. (Authors' summary) **58** #20777 94A05 (68A45)
- Stamou, George Strahlensysteme mit gemeinsamem sphärischen Bild. (English summary) *Manuscripta Math.* **15** (1975), no. 4, 329-340. (P. Scherk) **52** #1537 53A25
- Über die isotropen Strahlensysteme. (English summary) *Manuscripta Math.* **18** (1976), no. 1, 15-23. (P. Scherk) **53** #3926 53A25
- Integral- und Identitätssätze für Strahlensysteme im einfach isotropen Raum. *Arch. Math. (Basel)* **28** (1977), no. 5, 538-543. (J. Hosc hek) **56** #6554 53A40
- Global characterizations of the sphere. *Proc. Amer. Math. Soc.* **68** (1978), no. 3, 328-330. (Ju. Burago) **57** #7476 53C45
- Stamp, A. P. The self-consistent condition for the cranked harmonic oscillator potential. *Z. Phys. A* **284** (1978), no. 3, 305-312. (Author's summary) **56** #14337 81.47
- Stampacchia, Guido Variational inequalities. *Theory and Applications of Monotone Operators* (Proc. NATO Advanced Study Inst., Venice, 1968), pp. 101-192. Edizioni "Oderisi", Gubbio, 1969. (J. R. L. Webb) **54** #13652 47H15 (35J20)
- Variational inequalities. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 877-883. Gauthier-Villars, Paris, 1971. (Editors) **58** #23833 47H15
- (with Murthy, M. K. Venkatesha) Errata corrigé: "Boundary value problems for some degenerate-elliptic operators". *Ann. Mat. Pura Appl.* (4) **90** (1971), 413-414. (Editors) **46** #7706 35J70
- (with Lewy, H.) On existence and smoothness of solutions of some non-coercive variational inequalities. *Arch. Rational Mech. Anal.* **41** (1971), 241-253. (M. Birioli) **49** #11038 35J20
- Recent results in the theory of variational inequalities. *Conference on the Theory of Ordinary and Partial Differential Equations* (Univ. Dundee, Dundee, 1972), pp. 147-154. *Lecture Notes in Math.*, Vol. 280, Springer, Berlin, 1972. (M. Birioli) **56** #12586 35J60 (35D10)
- On a problem of numerical analysis connected with the theory of variational inequalities. *Symposia Mathematica, Vol. X (Convegno di Analisi Numerica, INDAM, Rome, 1972)*, pp. 281-293. Academic Press, London, 1972. (R. Temam) **51** #3998 49A40 (65K05)
- (with Vignoli, Alfonso) A remark on variational inequalities for a second order nonlinear differential operator with non Lipschitz obstacles. (Italian summary) *Boll. Un. Mat. Ital.* (4) **5** (1972), 123-131. (M. Birioli) **47** #9059 35J60 (47H05)
- (with Brézis, Haim; Nirenberg, L.) A remark on Ky Fan's minimax principle. (Italian summary) *Boll. Un. Mat. Ital.* (4) **6** (1972), 293-300. (L. Cesari) **48** #2850 47H99 (49B40)
- (with Murthy, M. K. Venkatesha) A variational inequality with mixed boundary conditions. Proceedings of the International Symposium on Partial Differential Equations and the Geometry of Normed Linear Spaces (Jerusalem, 1972). *Israel J. Math.* **13** (1972), 188-224 (1973). (David Kinderlehrer) **48** #11755 35J20
- (with Mancino, O. G.) Convex programming and variational inequalities. *J. Optimization Theory Appl.* **9** (1972), 3-23. (F. Odeh) **46** #4944 90C25
- (with Brézis, Haim) Problèmes elliptiques avec frontière libre. *Séminaire Goulaouic-Schwartz 1972-1973: Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 11, 9 pp. Centre de Math., École Polytech., Paris, 1973. (Authors' introduction) **56** #6095 35J20
- (with Brézis, Haim) Une nouvelle méthode pour l'étude d'écoulements stationnaires. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A129-A132. (W. F. Ames) **47** #4521 76.35
- On the filtration of fluid through a porous medium with variable cross section. (Russian) Translated from the English by T. D. Ventcel'. Collection of articles dedicated to the memory of Ivan Georgievich Petrovskii, II. *Uspehi Mat. Nauk* **29** (1974), no. 4(178), 89-101. (Št. I. Gheorghijă) **54** #1853 76.35
- (with Kinderlehrer, David) A free boundary value problem in potential theory. (French summary) Collection of articles dedicated to Marcel Brelot on the occasion of his 70th birthday. *Ann. Inst. Fourier (Grenoble)* **25** (1975), no. 3-4, xvii, 323-344. (Authors' summary) **58** #22609 31A25 (35J05)
- Su una diseguazione variazionale legata al comportamento elastoplastico delle travi appoggiate agli estremi. (English summary) Collection of articles dedicated to Giovanni Sansone on the occasion of his eighty-fifth birthday. *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, suppl., 444-454. (B. R. Sethi) **53** #12170 73.49
- (with Brézis, Haim) The hodograph method in fluid-dynamics in the light of variational inequalities. *Applications of methods of functional analysis to problems in mechanics* (Joint Sympos., IUTAM/IMU, Marseille, 1975), pp. 239-257. *Lecture Notes in Math.*, 503, Springer, Berlin, 1976. (M. Gass) **58** #32380 76.49 (49H05)
- Hilbert's twenty-third problem: extensions of the calculus of variations. *Mathematical developments arising from Hilbert problems* (Proc. Sympos. Pure Math., Northern Illinois Univ., De Kalb, Ill., 1974), pp. 611-628. *Proc. Sympos. Pure Math.*, Vol. XXVIII, Amer. Math. Soc., Providence, R. I., 1976. (J. E. Rubio) **55** #1178 49-02 (49-03, 47H99, 35J99)
- Free boundary problems for Poisson's equation. *New developments in differential equations* (Proc. 2nd Scheveningen Conf., Scheveningen, 1975), pp. 39-42. *North-Holland Math. Studies*, Vol. 21, North-Holland, Amsterdam, 1976. (M. Birioli) **56** #9064 35J20
- (with Brézis, Haim) The hodograph method in fluid-dynamics in the light of variational inequalities. *Arch. Rational Mech. Anal.* **61** (1976), no. 1, 1-18. (From the introduction) **57** #17029 35Q10 (35J99, 76.35)
- (with Brézis, Haim) Remarks on some fourth order variational inequalities. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **4** (1977), no. 2, 363-371. (H. Beckert) **58** #1588 35J35
- See also Séminaire: Équations aux Dérivées Partielles, **52** #11263; New variational techniques in mathematical physics, **52** #15161 and Lions, Jacques-Louis, **58** #10189
- Stampfli, Joseph G. (with Anderson, Joel) Commutators and compressions. *Israel J. Math.* **10** (1971), 433-441. (E. Berkson) **47** #874 47B45 (47A20)
- (with Fillmore, P. A.; Williams, J. P.) On the essential numerical range, the essential spectrum, and a problem of Halmos. *Acta Sci. Math. (Szeged)* **33** (1972), 179-192. (Norberto Salinas) **48** #896 47A10
- A local spectral theory for operators. IV. Invariant subspaces. *Indiana Univ. J.* **22** (1972/73), 159-167. (S. R. Caradus) **45** #5793 47A15
- A local spectral theory for operators. III. Resolvents, spectral sets and similar operators. *Trans. Amer. Math. Soc.* **168** (1972), 133-151. (S. R. Caradus) **45** #4182 47A15
- (with Daddens, James A.) On a question of Douglas and Fillmore. *Bull. Math. Soc. J.* **79** (1973), 327-330. (P. Saphar) **47** #7483 47A65
- Derivations on $\mathfrak{B}(\mathcal{H})$: the range. *Illinois J. Math.* **17** (1973), 518-524. (J. D. M. Derksen) **47** #7460 46L15
- Compact perturbations, normal eigenvalues and a problem of Salinas. *J. L. Math. Soc.* (2) **9** (1974/75), 165-175. (M. Schreiber) **51** #1449 47A55
- On the range of a hyponormal derivation. *Proc. Amer. Math. Soc.* **52** (1975), 117-120. (A. M. Sinclair) **51** #13746 47B20
- (with Wadhwa, Bhushan L.) An asymmetric Putnam-Fuglede theorem for do operators. *Indiana Univ. Math. J.* **25** (1976), no. 4, 359-365. (Mary R. Embry) **53** #14197 47B20
- (with Apostol, Constantin) On derivation ranges. *Indiana Univ. Math. J.* **25** (1976), no. 9, 857-869. (P. A. Fillmore) **54** #1011 47B47 (47A65)
- A local spectral theory for operators. V. Spectral subspaces for hyponormal operators. *Trans. Amer. Math. Soc.* **217** (1976), 285-296. (Robert G. Bartle) **54** #47B20 (47A15)
- (with Wadhwa, Bhushan L.) On dominant operators. *Monatsh. Math.* **84** (1977), 2, 143-153. (Mehdi Radjabalipour) **56** #16428 47B20
- On the twenty-ninth question of Allen Shields. *Proc. Amer. Math. Soc.* **66** (1978), no. 1, 65-68. (Lawrence Fialkow) **56** #16429 47B20
- (with Conway, John B.; Morrel, Bernard B.) The operator equation $TS = I$ representations of l^1 of the bicyclic semigroup. *Proc. Roy. Soc. Edinburgh Sect. A* (1977/78), no. 1-2, 131-136. (E. Durszt) **58** #12460 47A60 (46H15)
- Stamps, Mickie P. See Transactions: Conference of Army Mathematicians, **49** #4737
- Stan, Constantin On the p -modulus of certain families of surfaces defined by quasiconformal transformations. (Romanian. English summary) *Stud. Cerc. Mat.* (1974), no. 10, 1395-1401. (P. Caraman) **51** #10621 30A60
- Stan, Costică (with Popa, Valeriu) On a decomposition of quasi-continuity in topological spaces. (Romanian. French summary) *Stud. Cerc. Mat.* **25** (1973), 41-43. (M. Shanks) **50** #14637 54C05
- (with Popa, Valeriu; Puiu, Gabriel) Sur le point fixe commun des plusieurs applications dans des espaces Hausdorff. *Bull. Math. Soc. Sci. Math. R.S. Roum.* (N.S.) **21**(69) (1977), no. 3-4, 405-409. (V. Istrăţescu) **57** #13903 54H25
- Stan, E. (with Negoită, Constantin Virgil; Minoiu, S.) On considering imprecise dynamic linear programming. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1976**, no. 3, 83-96. (Authors' summary) **57** #1590C40
- Stan, M. On a theorem of V. Vălcovici. (Romanian. English summary) *An. Univ. Buc. Mat.-Mec.* **21** (1972), no. 2, 85-88. (W. Kecs) **49** #11893 70.34
- Stănişilă, Octavian Properties of the analytic algebras and of the quasianalytic algebras. (Romanian. English summary) *Stud. Cerc. Mat.* **21** (1969), 1533-1594. (A. D. Dăscălescu) **46** #9382 32B05
- (with Bănică, Constantin) Some results on the extension of analytic entities de out of a compact. *Ann. Scuola Norm. Sup. Pisa* (3) **25** (1971), 347-376. (H. B. L. L. L. L.) **49** #10914 32E10 (32C35)
- (with Bănică, Constantin) A remark on proper morphisms of analytic spaces. *Un. Mat. Ital.* (4) **4** (1971), 76-77. (J. Stutz) **45** #3768 32C35
- (with Bănică, Constantin) ★Métode algebrice în teoria globală a spaţiilor complexe. (Romanian) [Algebraic methods in the global theory of complex spaces. With an English summary. Editura Academiei Republicii Socialiste România, Bucharest, 1974. 348 pp. (J. S. Joel) **57** #3419 32-02 (32C35, 32D15)
- (with Lazzari, Fulvio; Tognoli, Alberto) Some remarks on q -flat C^∞ functions. (Italian summary) *Boll. Un. Mat. Ital.* (4) **9** (1974), 402-415. (O. Riemenschneider) **50** #320 14B20 (14F10, 32C35, 32K15)
- Certain algebraic properties related to local cohomology. (Romanian. English summary) *Stud. Cerc. Mat.* **26** (1974), 471-476. (C. Bănică) **50** #10319 32E10
- (with Bănică, Constantin) ★Algebraic methods in the global theory of complex spaces. Translated from the Romanian. Editura Academiei, Bucharest; John Wiley & Sons, London-New York-Sydney, 1976. 296 pp. (J. S. Joel) **57** #3420 32-02 (32D15)
- (with Bănică, Constantin) ★Méthodes algébriques dans la théorie globale des espaces complexes. Vol. 1. Avec une préface de Henri Cartan. Troisième édition. Collection "Varia Mathematica". Gauthier-Villars, Paris, 1977. x + 190 pp. ISBN 2-04-008885-7 (O. Forster) **58** #22630a 32-02 (32C35)
- (with Bănică, Constantin) ★Méthodes algébriques dans la théorie globale des espaces complexes. Vol. 2. Troisième édition. Traduit du roumain. Collection "Mathematica". Gauthier-Villars, Paris, 1977. pp. i-ii + 191-374 ISBN 2-04-009793-3 (O. Forster) **58** #22630b 32-02 (32C35)
- (with Stanomir, D.) Towards a general theory of discrete signals. I. (Romanian summary) *Bul. Inst. Politehn. Bucureşti Ser. Electrotehn.* **39** (1977), no. 3, 3-10. (S. Sharma) **58** #15656 94A05
- Stănişilă, Tatiana On some equations with random coefficients. (Romanian. English summary) *Bul. Inst. Politehn. Bucureşti* **38** (1976), no. 2, i, 11-14. (Constantin Tătaru) **55** #9269 60H99
- Probabilistic extension of a theorem of Szegő. (Romanian. English summary) *Cerc. Mat.* **28** (1976), no. 3, 381-385. (A. Spătaru) **54** #3826 60F99
- Extremal levels of certain random noises. (Romanian. English summary) *Bul. Inst. Politehn. Bucureşti Ser. Chim.-Metal.* **39** (1977), no. 1, 9-11. (Ar. Leonte) **57** #760G17
- Stanat, Donald F. Approximation of weighted type 0 languages by formal power series. *Information and Control* **21** (1972), 344-381. (Michel Fliess) **49** #11871 68A30
- A homomorphism theorem for weighted context-free grammars. *J. Comput. Sci.* **6** (1972), 217-232. (M. Fliess) **46** #2926 68A30
- (with Weiss, Stephen F.; Magó, Gyula) Algebraic parsing techniques for context-free grammars. *Automata, languages and programming* (Proc. Sympos., Rocquencourt, 1972), pp. 493-498. North-Holland, Amsterdam, 1973. (Miroslav Hilgert)

- 14665 68A30
with Bentley, Jon Louis; Williams, E. Hollins, Jr.) The complexity of finding radius near neighbors. *Information Processing Lett.* **6** (1977), no. 6, 209-212. (D. Morrison) **58** #8558 68A45 (68A20)
- E. S. (with Minčev, N. D.) The invariance up to the higher derivatives in the law of motion of machine aggregates with variable mass. (Bulgarian. Russian and English summaries) *Teoret. i Prilož. Meh.* **5** (1974), no. 4, 5, 7, 63-70. **56** #14924 93B99
- L. (with Stancovici, V.) La struttura dello spazio e del tempo nella logica intuitiva di Franco Spisani. *Internat. Logic Rev. No.* **11** (1975), 23-50. (See Zbl **341** 009) 02A05
- (with Stancovici, V.) The structure of space and time in Franco Spisani's productive work. *Internat. Logic Rev. No.* **11** (1975), 53-80. (See Zbl **341** #02009) 02A05
- (with Neumann, Maria) Eine Bemerkung über Höhen. *J. Geometry* **6** (1975), 59-64. (Jachmann) **51** #8937 50C05
- scu, Florin ★ Analiza și simularea sistemelor neliniare. (Romanian) [Analysis and simulation of nonlinear systems] Probleme neliniare in electrotehnică, electronică și mecanică. [Nonlinear problems in electrical engineering, electronics and automatic control] With an English summary and table of contents. *Editura Academiei Republicii Socialiste România, Bucharest*, 1974. 288 pp. (S.-F. Sburian) **55** #12216 93C10 20, 68A55
- Ș, V. (with Stanciu, L.) La struttura dello spazio e del tempo nella logica intuitiva di Franco Spisani. *Internat. Logic Rev. No.* **11** (1975), 23-50. (See Zbl **341** 009) 02A05
- (with Stanciu, L.) The structure of space and time in Franco Spisani's productive work. *Internat. Logic Rev. No.* **11** (1975), 53-80. (See Zbl **341** #02009) 02A05
- Alexandru (with Zelmer, Violette) Mathematical approach on behaviour of the systems. *Mathematica (Cluj)* **15**(38) (1973), 119-128. (A. A. Mullin) **51** #2673 05
- D. D. Two classes of positive linear operators. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **8** (1970), 213-220. (J. P. King) **48** #11863 41A35
- Approximation of functions of two and several variables by a class of polynomials Bernstein type. (Romanian. English summary) *Stud. Cerc. Mat.* **22** (1970), 335-345. (Lupaș) **47** #2242 41A63
- On the distribution functions for the multidimensional Bernoulli and Poisson reliability laws. (Romanian. English summary) *Stud. Cerc. Mat.* **22** (1970), 675-681. (Gh. Vodă) **47** #7848 62E10
- On the remainder of approximation of functions by means of a parameter-dependent linear polynomial operator. (Romanian and Russian summaries) *Rev. Univ. Babeș-Bolyai Ser. Math.-Mech.* **16** (1971), no. 2, 59-66. (B. Wood) #4072 41A35
- On the approximation of functions of two variables by means of a class of linear operators. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970) (Russian)*, 327-336. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (G. Mühlbach) **52** #3823 65
- Approximation of functions by means of some new classes of positive linear operators. *Numerische Methoden der Approximationstheorie, Band 1 (Tagung, Math. Forschungsinstitut, Oberwolfach, 1971)*, pp. 187-203. *Internat. Schriftenreihe Numer. Math., Band 16, Birkhäuser, Basel*, 1972. (B. Wood) **52** #1107 41A35
- A new class of uniform approximating polynomial operators in two and several variables. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, 443-455. *Akadémiai Kiadó, Budapest*, 1972. (Sław Pleśniak) **52** #14785 41A63
- A new generalization of the Meyer-König and Zeller operators. (Romanian summary) *An. Univ. Timișoara Ser. Ști. Mat.* **10** (1972), 207-214. (R. A. Askey) #11113 41A35
- Evaluation of the remainders in certain approximation procedures by Meyer-König Zeller-type operators. *Numerische Methoden der Approximationstheorie, Band 2 (Tagung, Math. Forschungsinstitut, Oberwolfach, 1973)*, pp. 139-150. *Internat. Schriftenreihe Numer. Math., Band 26, Birkhäuser, Basel*, 1975. (H. Kramer) **52** #9568 65D15 (35)
- The use of linear interpolation for the construction of a class of Bernstein polynomials. (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 3, 369-379. (H. Kramer) **54** #3226 41A10
- Use of Biermann's interpolation formula for constructing a class of positive linear operators for approximating multivariate functions. *Constructive theory of functions of several variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 267-276. *Lecture Notes in Math., Vol. 571, Springer, Berlin*, 1977. (R. N. Mohapatra) **58** #1915 63
- Felicia On the approximation of functions of one and two variables by means of operators of Baskakov. (Romanian. English summary) *Stud. Cerc. Mat.* **22** (1970), #542. (H. Kramer) **46** #9606 41A30
- Approximation of functions of two variables by means of a new class of positive linear operators. (Romanian. English summary) *An. Univ. Timișoara Ser. Ști. Mat.* **11** (3), 159-168. (Dumitru Gaspar) **51** #13542 41A35
- On some results in the approximation of functions by means of the Meyer-König Zeller operator. (Romanian. English summary) *Stud. Cerc. Mat.* **25** (1973), #627. (A. Lupaș) **52** #14769 41A35
- The construction of a new class of positive linear operators for the approximation of functions of two variables. (Romanian. Russian and English summaries) *Studia Univ. Babeș-Bolyai Ser. Math.-Mech.* **18** (1973), no. 2, 57-64. (A. Lupaș) **52** #3824 41A35
- Construction, by means of linear interpolation, of a certain class of Bernstein polynomials for a rectangular domain. (Romanian. English summary) *Stud. Cerc. Mat.* **1976**, no. 5, 605-616. (J. Friberg) **56** #6198 41A10
- Minasian, I. M. (with Stoica, Marcel) A method of approximate solution of equations of higher degree. (Romanian. French summary) *Stud. Cerc. Mat.* **23** (1971), #910. (A. S. Householder) **48** #7584 65H05
- (with Boldur, Gheorghe) Linear programming with several objective functions: a survey. (Romanian. French summary) *Stud. Cerc. Mat.* **24** (1972), 1169-1191. (I. Rusciac) **50** #12225 90C05
- A three-dimensional transportation problem with a special structured objective function. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **18**(66) (1974), no. 3-4, 385-397 (1976). (Kailash C. Kapur) **54** #2219 90C50
- Stochastic programming with multiple objective functions. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1974**, no. 1, 49-67. (S. K. Srinivasan) **57** #11741 90C15
- Note on stochastic programming with several objective functions having the vector c random. (Romanian. English summary) *Stud. Cerc. Mat.* **27** (1975), no. 4, 453-459. (G. Tintner) **53** #4974 90C15
- Analysing several points of view in mathematical programming with several objective functions. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1976**, no. 1, 17-29. (K. G. Murty) **56** #10939 90C05
- (with Wets, M. J.) A research bibliography in stochastic programming, 1955-1975. *Operations Res.* **24** (1976), no. 6, 1078-1119. (Peter Kall) **55** #5206 90C15
- On the problem of Kataoka. (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 1, 95-111. (Author's summary) **56** #17812 90C15
- On the multiple minimum risk problem. I. The case of two objective functions. (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 5, 617-623. (R. Theodorescu) **55** #12081a 90C15
- On the problem of minimum multiple risk. II. The case of $r(r > 2)$ objective functions. (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 6, 723-734. (R. Theodorescu) **55** #12081b 90C15
- On stochastic programming with multiple objective functions. (Romanian summary) *Proceedings of the Fifth Conference on Probability Theory (Brașov, 1974)*, pp. 429-436. *Editura Acad. R.S.R., Bucharest*, 1977. (Su-shing Chen) **56** #17811 90C15
- On a class of non-linear fractional programming problems. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 2, 285-290. (S. P. Aggarwal) **57** #11773 90C30
- Stanczak, Romuald Green's tensor of mixed boundary value problem of the theory of elasticity and its applications. *Demonstratio Math.* **2** (1970), no. 3, 145-157. **46** #1174 73.35
- A general mixed boundary value problem in the theory of elasticity for piecewise non-homogeneous anisotropic bodies. Collection of articles in memory of Witold Pogorzelski. *Demonstratio Math.* **5** (1973), 85-96. (D. Ieșan) **48** #10269 73.35 (73.45)
- An approximate method of solving a mixed boundary value problem in the theory of elasticity for piecewise non-homogeneous anisotropic bodies. *Demonstratio Math.* **7** (1974), 23-31. (Radu Bădescu) **50** #6268 73.35
- Stanczak, Wiesław (with Kacprzyk, Janusz) An application of the method of minimally interconnected networks to the partitioning of a group of enterprises into subgroups. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **20** (1975), no. 4, 513-526. (Authors' summary) **56** #17766 90B10
- (with Kaliszewski, Ignacy; Nowicki, Tadeusz) The decomposition of the structure of an interexchange telephone network by the method of minimal aggregates. (Polish. English, French, German and Russian summaries) *Rozprawy Elektrotech.* **21** (1975), no. 2, 573-580. (From the authors' summary) **51** #9974 94A20
- (with Nowicki, Tadeusz) Connections between trees and cut-sets in a connected one-graph. Theoretical foundations and algorithms for generating trees and cut-sets. (Polish. Russian, English, French and German summaries) *Arch. Elektrotech. (Warsaw)* **25** (1976), no. 1, 3-11. (Authors' summary) **57** #11955 94A20 (05C05)
- (with Kacprzyk, Janusz) On an extension of the method of minimally interconnected subnetworks. (Polish and Russian summaries) *Control Cybernet.* **5** (1976), no. 4, 61-77. (B. R. Myers) **57** #2760 94A20
- Standish, C. J. Truncated Taylor series approximation to the state transition matrix of a continuous parameter finite Markov chain. *Linear Algebra and Appl.* **12** (1975), no. 2, 179-183. (R. L. Tweedie) **52** #1905 60J35
- Standish, E. Myles, Jr. Sufficient conditions for escape in the three-body problem. *Celestial Mech.* **4** (1971), 44-48. (Author's summary) **47** #2880 70.34
- Sufficient conditions for return in the three-body problem. *Celestial Mech.* **6** (1972), 352-355. (D. Schmidt) **48** #1563 70.35
- Standish, T. A. See ACM Symposium: Principles of Programming Languages, **52** #2274
- Șt. Andonie, George ★ Istoria matematicilor aplicate clasice din România. (Romanian) [The history of classical applied mathematics in Romania] Mecanică și astronomie. [Mechanics and astronomy] Editura Academiei Republicii Socialiste România, Bucharest, 1971. 639 pp. (errata insert) (Editors) **52** #13175 01A60
- St. Andre, Richard See Saint Andre, Richard
- Stanek, Jean Chan Tietze-type theorems on monotone increasing sets. *Proc. Amer. Math. Soc.* **54** (1976), 286-290. (Marilyn Breen) **52** #9081 52A10
- A characterization of starshaped sets. *Canad. J. Math.* **29** (1977), no. 4, 673-680. (John D. Baidon) **56** #3746 52A30
- Characterizations of strictly monotone sets. *Proc. Amer. Math. Soc.* **64** (1977), no. 1, 112-117. (Marilyn Breen) **57** #10602 52A20 (52A10)
- Stanek, Josef See Taschenbuch Elektrotechnik in sechs Bänden, **52** #13100
- Stanek, Oleg (with Dubois, Jean-Guy; Dufour, Jean-Paul) La théorie des catastrophes. III. Caustiques de l'optique géométrique. (English summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **24** (1976), no. 3, 243-260. (A. H. Copeland, Jr.) **54** #13971 58C25
- (with Dubois, Jean-Guy; Dufour, Jean-Paul) La théorie des catastrophes. IV. Déploiements universels et leurs catastrophes. (English summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **24** (1976), no. 3, 261-300. (A. H. Copeland, Jr.) **54** #13972 58C25
- Staněk, Svatoslav Eine Bemerkung zur Lösung der Operatorgleichung $P(y)=0$. (Loose English summary) *Mat. Časopis Sloven. Akad. Vied* **20** (1970), 270-277. (J. J. Moré) **46** #2851 65H05
- Bemerkung zum Tschapyginschen Satz über Differentialungleichungen. (Czech summary) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **37** (1972), 41-44. (I. Fenyő) **49** #9307 34A40
- Asymptotic properties of dispersions of the differential equations $y'' = q(t)y$. *Arch. Math. (Brno)* **11** (1975), no. 2, 85-98 (1976). (H. W. Guggenheimer) **53** #11155 34C10
- On asymptotic properties of central dispersions of the k -th kind of $y'' = q(t)y$, $k = 1, 2, 3, 4$. *Arch. Math. (Brno)* **12** (1976), no. 2, 87-98. (C. A. Swanson) **55** #775 34C10
- (with Neuman, František) On the structure of second-order periodic differential

- equations with given characteristic multipliers. *Arch. Math. (Brno)* **13** (1977), no. 3, 149-157. (H. Hochstadt) **57** #783 34C10
- Asymptotic properties of derivatives of central dispersions of the k -th kind for the differential equation $y'' = q(t)y$. *Czechoslovak Math. J.* **27**(102) (1977), no. 4, 644-662. (V. B. Headley) **57** #787 34C10
- Integral properties of coefficients of the 2nd order linear differential equations having the same distribution of zeros of solutions. (Czech and Russian summaries) *Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci Mat.* **16** (1977), 69-73. (Author's summary) **58** #28850a 34C10
- A criterion for determining the 2nd order linear differential equations possessing the central dispersion with the index n equal to $i + \pi$. (Czech and Russian summaries) *Sb. Prací Přírodověd. Fak. Univ. Palackého v Olomouci Mat.* **16** (1977), 75-79. (Author's summary) **58** #28850b 34C10
- Stănescu, Doina** The performances of invariant linear automatic systems. (Romanian. English summary) *Bul. Inst. Politehn. București Ser. Electrotehn.* **39** (1977), no. 3, 69-77. (V. M. Popov) **57** #15644 93C45
- Stanev, H. I.** (with Glušchenko, A. A.) Solution of the hyperbolic equations of the theory of heat conductivity for certain infinite domains. (Russian. German summary) *Vysisl. Prikl. Mat. (Kiev) No. 20* (1973), 3-13, 162. (H. G. Bzhatalov) **48** #2571 35K05
- Solution of a Helmholtz type equation for special boundary conditions. (Russian. German summary) *Vysisl. Prikl. Mat. (Kiev) No. 23* (1974), 98-104, 175. (E. Ungureanu-David) **51** #9535 65N99
- (with Bončev, E. K.) On a boundary value problem for the Poisson equation in discrete formulation. (Bulgarian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Prilozna Mat.* **11** (1975), no. 4, 155-161 (1977). (Authors' summary) **57** #8086 65N99
- Stanevič, A. G.** See Cybernetics and computer technology, **48** #1733
- Stanevičene, L. I.** An algorithm for the construction of bounded-context parsers. (Russian) *Ž. Vysisl. Mat. i Mat. Fiz.* **16** (1976), no. 5, 1283-1292, 1374. (Author's summary) **58** #8544 68A30
- Stanford, A. N.** Functions satisfying a mean value property at their zeros. *Amer. Math. Monthly* **80** (1973), 665-667. (P. V. Reichelderfer) **47** #3617 26A69
- See also Questions of geometric simulation, **50** #1462
- Stanford, P. H.** Polish circles. *Z. Math. Logik Grundlagen Math.* **21** (1975), no. 5, 395-399. (K. Inoue) **53** #2621 02B05
- A formalisation of the integers in a multi-successor arithmetic. *Z. Math. Logik Grundlagen Math.* **22** (1976), no. 2, 119-121. (John Hooley) **56** #11774 02F99
- Stanford, Robert E.** (with Grinold, Richard C.) Optimal control of a graded manpower system. *Management Sci.* **20** (1973/74), 1201-1216. (S. Cruceanu) **51** #15014 90C50 (90B99)
- Analytical solution of a dynamic transaction flow problem. *Math. Programming* **10** (1976), no. 2, 214-229. (A. T. Amin) **54** #4684 90C50 (90B10)
- (with Grinold, Richard C.) Limiting distributions in a linear fractional flow model. *SIAM J. Appl. Math.* **30** (1976), no. 3, 402-406. (Authors' summary) **55** #10016 90C40
- Long-run behavior of constrained discrete-time linear dynamical systems. *Appl. Math. Optim.* **4** (1977/78), no. 3, 275-284. (Peter Bod) **58** #15070 90A15
- Stange, Kurt** ★ *Angewandte Statistik. Erster Teil: Eindimensionale Probleme.* Springer-Verlag, Berlin-New York, 1970. xvi + 592 pp. (Editors) **49** #9989 62-01
- Über die einfache lineare Regression (bei positiver Einflussgröße) mit einer Nebenbedingung. Collection of articles in honour of Professor H. C. Hamaker. *Statistica Neerlandica* **26** (1972), no. 3, 43-54. (H. Toutenburg) **51** #4571 62J05
- Ein Mittelwerttest (Prüfplan) bei Berücksichtigung von Vorkenntnissen und Kosten (kostengünstigster Bayes-Test). (English summary) *Allgemein. Statist. Arch.* **57** (1973), 165-183. (W. Uhlmann) **52** #2113 62N10
- Über einen zweiseitigen Test für die Korrelationszahl einer zweidimensionalen Normalverteilung. (English, French and Russian summaries) *Statist. Hefte (N.F.)* **14** (1973), 206-236; errata, *ibid.* (N.F.) **14** (1973), 364-365. (G. Tintner) **51** #11824 62H15
- Pläne für mündende Prüfung bei Berücksichtigung von "Vorkenntnissen" über die Verteilung der Mittelwerte. (English summary) *Metrika* **21** (1974), 231-247. (M. E. Thompson) **51** #7217 62N10
- ★ Bayes-Verfahren. Schätz- und Testverfahren bei Berücksichtigung von Vorinformationen. Herausgegeben und mit einem Vorwort von Tilmann Deutler und Peter-Th. Wilrich. Hochschule, Springer-Verlag, Berlin-New York, 1977. viii + 312 pp. ISBN 3-540-07815-0 (Johannes S. Maritz) **58** #13476 62F15
- See also Münzner, Hans, **55** #55
- Stangler, S. S.** (with Lorentz, Georg Gunther; Zeller, Karl) Regularity of some special Birkhoff matrices. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 423-436. Academic Press, New York, 1976. (A. Meir) **55** #8613 41A05
- Stanicki, Tadeusz** (with Bogdanov, Dimit'r) The minimalization method with a partitioning of the set of constraints in the presence of disturbances. (Polish. English and Russian summaries) *Prace Nauk. Inst. Cybernet. Tech. Politech. Wrocław. Ser. Stud. Materialy No. 19 Wybrane Zagadn. Optym. System. Wielopoziom.* (1975), 17-27. (Not reviewed) **90C25**
- Staniewski, Piotr** (with Płoszajski, Grzegorz) Application of stochastic search algorithms in the exterior point method. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **20** (1975), no. 3, 368-378. (Authors' summary) **56** #17078 65K05
- Stanik, Rotraut** (with Karzel, Helmut; Wähling, Heinz) Zum Anordnungsbegriff in affinen Geometrien. *Abh. Math. Sem. Univ. Hamburg* **44** (1975), 24-31 (1976). (R. Artzy) **53** #3861 50I05
- Stanilov, Groz'o** Basic formulae of the integral geometry of biaxial space. (Bulgarian. Russian and German summaries) *B"lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **10** (1969), 85-111. (B. Crstici) **45** #5935 53C65
- Classical integral geometry. (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **12**(45) (1969), 54-64. (Editors) **53** #1494 53C65
- (with Broisov, Adrijan) Differential geometry of pencils and complexes of lines. (Bulgarian. German summary) *Annuaire Univ. Sofia Fac. Math.* **65** (1970/71), 33-46 (1972). (errata insert) (M. Kucharzewski) **47** #9448 53A25
- (with Zulanke, R.) Crofton type integral formulae in the theory of line congruences in the Euclidean space E^n . (Russian. Bulgarian and German summaries) *B"lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **11** (1970), 27-37. (W. J. Firey) **46** #53C65 (52A40)
- The integral geometry of generalized biaxial spaces. (Bulgarian. Russian and German summaries) *B"lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **10** (1970), 39-53. (Z. Nădenik) **46** #840 53C65
- The solutions of a certain differential equation on a Riemannian manifold. (Bulgarian. German summary) *Annuaire Univ. Sofia Fac. Math.* **66** (1971/72), 20-24 (1974). (M. L. Gromov) **56** #6565 53C20
- Special four-dimensional Riemannian manifolds. (Bulgarian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* **68** (1973/74), 7-23 (1977). (Vladislav Go) **58** #24088 53B20
- A generalization of the Riemannian curvature, and some applications. (Bulgarian and German summaries) *B"lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **14** (1971), 211-241. (M. Kucharzewski) **51** #6631 53B20
- The Euler characteristic of a compact orientable Riemannian manifold of dimension $4m+2$. (Bulgarian. Russian and German summaries) *Plovdiv. Univ. Naučn. Trud.* **12** (1973), no. 3, 25-28. (A. V. Zarelua) **58** #13065 57D20
- Crofton's formula for a hypersurface. (Bulgarian. Russian and German summaries) *Plovdiv. Univ. Naučn. Trud.* **12** (1974), no. 1, 99-104. (W. J. Firey) **53** #1495
- On the geometry of Kählerian manifolds. (Russian) *Izv. Vysš. Učebn. Matematika* **1975**, no. 9(160), 53-58. (V. Oproiu) **54** #13815 53C55
- (with Mihova-Nehmer, V.) On the geometry of the Kählerian manifolds. *Acad. Bulgare Sci.* **29** (1976), no. 5, 623-626. (R. Roșca) **57** #13758 53B35
- Generalization of Schur's theorem of Kähler and nearly Kähler manifolds. *Acad. Bulgare Sci.* **29** (1976), no. 12, 1713-1715. (K. Yano) **57** #7449 53C15
- (with Gančev, Georgi) A generalization of a certain theorem of S. Tachibana. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 11(174), 66-70. (W. J. Firey) **58** #12838 53C25
- Generalized characteristics of certain classical Riemannian manifolds. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 12(175), 77-81. (W. Wrona) **58** #12838 53C20
- Conformal invariants of a Riemannian manifold. *Serdica* **2** (1976), no. 2, 161-166. (S. Takizawa) **55** #1253 53C20
- (with Mihova-Nehmer, V.) Characterization of an almost Hermite manifold with vanishing generalized Bochner curvature tensor. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 6, 805-808. (N. Prakash) **57** #1327 53B35
- (with Mihova-Nehmer, V.) Analog of Blair's theorem in the case of nearly Kähler manifolds. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 7, 977-980. (K. Yano) **57** #1327 53B35
- On Kähler manifolds with vanishing Bochner curvature tensor. *Pure Appl. Math.* **5** (1977), no. 1-2, 7-11. (Bang-yen Chen) **56** #3760 53B35
- Stanilova, L.** The integration of the Frenet formulas in complex Euclidean space. (Bulgarian) Commemorative Scientific Session (25th anniversary of the Higher Engineering Institute, Sofia). *Godišnik Visš. Inž.-Stroitel. Inst.* **22** (1973), no. 4, 63-66. (E. Siwek) **49** #3711 53A45
- Stanilova, L. R.** An expression of certain integral invariants of a curve through integrals on the sphere. (Bulgarian. Russian and German summaries) *Godišnik Tehn. Učebn. Zaved. Mat.* **5** (1968/69), no. 3, 93-99 (1970). (B. Crstici) **45** #53C65
- Stanishevski, A. Ju.** (with Zadorožniĭ, V. F.) The comparison principle in problems of synthesis of nonlinear systems. (Russian) *Kibernet. i Vysisl. Tehn. Vyp.* **27** (1977), no. 4, 157. (J. Jarník) **57** #3556 34H05 (93C15)
- (with Zadorožniĭ, V. F.; Nurminkii, E. A.) A minimax approach in problems of synthesis of multidimensional dynamical systems. (Russian. English summary) *Kibernetika (Kiev)* **1977**, no. 5, 111-114. (Authors' summary) **58** #15431 93C15
- Stanisz, Andrzej** A numerical algorithm for time-optimal resource allocation. (English and Russian summaries) *Podstawy Sterowania* **3** (1973), 55-64. (J. S. K. K. Yano) **48** #1676 90B05
- Staniszewski, R.** A model of the development process of a system. I. Development problems. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **24** (1976), 233-240. **56** #14859 93A10
- A model of the development process of a system. II. Dynamics of development. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **24** (1976), no. 3, 243-250. **56** #14860 93A10
- Staniszki Marzollo, M.** A criterion for recognizing similarity in graphs. *Calcolo* **13** (1976), no. 3, 351-359. (Author's summary) **58** #390 05C99
- Stanjuković, K. P.** (with Šaršeev, O. Š.) Models of the Friedman "universal" centrally symmetric reference frame. (Russian. English summary) *Astrofizika* **6** (1971), 571-580. (K.-H. Hauer) **46** #8639 83J3
- ★ Неустойчивые движения сплошной среды. (Russian) [Unsteady motions of a continuous medium] Second edition, revised and augmented. *Izdat. "Nauka", Moscow*, 1971. 854 pp. (Editors) **54** #1830 76.00
- (with Sokolik, G. A.) Algebraic theory of the space of the curvature. (Russian) *Gravitacii i Element. Častic Vyp.* **6** (1975), 6-22. (RŽFiz) **1975** #1183 57 #8932 83J3
- (with Zaharov, V. D.; Sidorov, V. M.) Plane wave solutions of Einstein's equations. (Russian) *Gravitacii i Element. Častic Vyp.* **6** (1975), 6-22. (RŽFiz) **1975** #1183 57 #8932 83J3
- (with Zaharov, V. D.; Sidorov, V. M.) Plane wave solutions of Einstein's equations. (Russian) *Gravitacii i Element. Častic Vyp.* **6** (1975), 6-22. (RŽFiz) **1975** #1183 57 #8932 83J3

- a cosmological term in the weak field approximation. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 6 (1975), 97-108. (RŽFiz 1975 #11 B111) 57 #8937
- 3
- (with Krečeta, V. G.; Lapčinskii, V. G.; Ponomarev, V. N.) Problems of gravitational collapse. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 6 (1975), 129-139. (RŽFiz 1975 #11 B160) 57 #8897 83.53
- The de Donder model of incompressible fluid in a proper gravitational field. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 7 (1976), 149-155. (Editors) 57 #4980 83.53
- Či, I. V. (with Ghehtman, M. M.; Čistjakov, A. L.) The spectrum of certain self-adjoint operators. (Russian) *Functional analysis, theory of functions, and their applications*, No. 2, Part 1 (Russian), pp. 100-126, 179-180. Dagestan. Gos. Univ., Chachkala, 1975. (Authors' summary) 57 #10463 47A55 (35P05)
- (with Ghehtman, M. M.) A generalized Kronig-Penney problem. (Russian) *Funkcional. Anal. i Priložen.* 11 (1977), no. 1, 61-62. (H. I. Freedman) 57 #16792
- 25
- Wicz, A. The generalized integro-exponential functions. *Acta Univ. Wratislav. No.* (1973), 11-42. (J. Burlak) 47 #9798 65A05 (33A10)
- Wicz, E. (with Krempa, Jan) Radicals of metaideals. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 359-365. (Anthony E. Hoffman) 49 #5070 16A21
- Wicz, Ewa (Z, Q)-machines and (Z, Q)-computations. *Demonstratio Math.* 9 (1976), no. 4, 669-680. (From the introduction) 58 #15745 94A30
- On some properties of (Z, Q)-machine and its computations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 25 (1977), no. 1, 79-84. (Author's summary) 58 #9925 94A30
- (Z, Q)-computable sets and their sets of generators. *Demonstratio Math.* 10 (1977), no. 1, 65-76. (From the introduction) 58 #33601 94A30 (02F10, 68A25)
- Wicz, Jan (with Bogowski, Franciszek; Jabłoński, Filip Franciszek) Subordination domain and inégalités des modules pour certaines classes de fonctions holomorphes le cercle unité. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 20 (1966), 23-28 (1971). (F. R. Keogh) 46 #3759 30A32
- (with Lewandowski, Zdzisław) On the region of variability of $\log f'(z)$ for some classes of close-to-convex functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 20 (1966), 45-51 (1971). (W. E. Kirwan) 46 #9322
- 32
- (with Miazga, Józef; Stankiewicz, Zofia) Radii of convexity for some classes of close-to-convex functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 20 (1966), 53-57 (1971). (S. D. Bernardi) 46 #3765
- 32
- Quelques problèmes extrémaux dans les classes des fonctions α -angulairement liées. *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 20 (1966), 59-75 (1971). (Ch. Mierlenko) 47 #3663 30A32
- On some classes of close-to-convex functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 20 (1966), 77-83 (1971). (D. E. Tepper) 47 #3768 30A32
- On a family of starlike functions. (Polish and Russian summaries) Proceedings of the Fifth Conference on Analytic Functions (Univ. Mariae Curie-Skłodowska, Lublin, 1970). *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 22-24 (1968/70), 175-181 (1972). (W. E. Kirwan) 50 #590 30A32
- Some extremal problems for the class S_{α} . (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 25 (1971), 101-107 (1973). (Selden Trimble) 46 #6394 30A32
- (with Lewandowski, Zdzisław) Majoration modulaire des fonctions et inclusion des aînées. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 1971, 917-922. (A. W. Goodman) 46 #2032 30A42
- (with Lewandowski, Zdzisław) Les majorantes modulaires étoilées et l'inclusion. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 19 (1971), 929-929. (A. W. Goodman) 46 #2033 30A42
- The influence of coefficients on some properties of regular functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 27 (1973), 99-107 (1975). (Y. Komatu) 53 #3290 30A40
- (with Waniurski, Józef) Some classes of functions subordinate to linear transformation and their applications. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 28 (1974), 85-94 (1976). (V. Linis) 56 #5858
- 32
- (with Rahman, Qazi Ibadur) Differential inequalities and local valency. *Pacific J. Math.* 54 (1974), no. 2, 165-181. (B. G. Eke) 51 #10593 30A04
- (with Fajt, Maria; Zygmunt, Jadwiga) On some classes of polynomials. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 29 (1975), 61-67 (1977). (F. Holland) 56 #12236 30A06
- (with Lewandowski, Zdzisław) On angularly accessible univalent functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 24 (1976), no. 17-221. (D. E. Tepper) 54 #2973 30A72
- Wicz, Roman (with Mika, Janusz) Nonhomogeneous boundary conditions in neutron transport. *Transport Theory Statist. Phys.* 2 (1972), no. 1, 55-67. (See Zbl 285 5058) 82.45
- Wicz, Zofia (with Miazga, Józef; Stankiewicz, Jan) Radii of convexity for some classes of close-to-convex functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 20 (1966), 53-57 (1971). (S. D. Bernardi) 46 #3765
- 32
- (with Bogowski, Franciszek) Sur la majoration modulaire des fonctions et inclusion des domaines dans la classe $S_{1/2}^*$. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 25 (1971), 5-14 (1973). (H. L. Jackson) 46 #11465 30A32
- (with Bogowski, Franciszek) Généralisation d'un problème relatif à la subordination dule et à la subordination en domaine dans le cas des minorantes de la classe H_0 . (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 25 (1971), 15-25 (1973). (H. L. Jackson) 48 #11466 30A32
- Sur la subordination en domaine de certains opérateurs dans les classes $S(\alpha, \beta)$. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 27 (1973), 109-119 (1975). (D. M. Campbell) 52 #8413 30A42
- Sur la subordination en domaine de certains opérateurs. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 28 (1974), 95-103 (1976). (L. Mikolajczyk) 56 #8837 30A42
- An integral operator and inclusion of domains. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 1201-1207. (D. M. Campbell) 51 #5912 30A32
- Stan'ko, M. A. Solution of Menger's problem in the class of compacta. (Russian) *Dokl. Akad. Nauk SSSR* 201 (1971), 1299-1302. (M. Katětov) 45 #2684 54F45
- Approximation of compacta in E^n in codimension greater than two. (Russian) *Mat. Sb. (N.S.)* 90(132) (1973), 625-636, 640. (I. Ivanišić) 49 #3957 57C55
- Approximation of embeddings of manifolds in codimension one. (Russian) *Mat. Sb. (N.S.)* 94(136) (1974), 483-494, 496. (K. Horvatić) 51 #6823 57A35 (57C55)
- (with Aleksandrov, P. S.; Sosinskiĭ, A. B.; Černavskiĭ, A. V.) Ljudmila Vsevolodovna Keldyš (on the occasion of her seventieth birthday). (Russian) *Uspehi Mat. Nauk* 29 (1974), no. 4(178), 187-192. (1 plate) (Editors) 52 #7782 01A70
- Imbedding of compacta in Euclidean space of dimension 5, 4 and 3. (Russian) *Mat. Sb. (N.S.)* 99(141) (1976), no. 4, 626-633. (I. Ivanišić) 54 #1232 57A35
- Stankov, A. N. See Questions of geometric simulation, 50 #1462
- Stanković, Bogoljub Two theorems on differential equations in locally convex spaces. *Bull. Sci. Conseil Acad. RSF Yougoslav. Sect. A* 16 (1971), 1. (E. Dubinsky) 49 #7552 34G05
- On the solvability of algebraic equations in the field of Mikusiński's operators. *Mat. Vesnik* 8(23) (1971), 391-394. (L. Berg) 46 #2368 44A40 (39A40, 46F99)
- (with Budimčević, M.) The closure in the space of Mikusiński's operators. *Publ. Inst. Math. (Beograd) (N.S.)* 11(25) (1971), 115-117. (L. Berg) 46 #2366 44A40
- Completion of the spaces C_r . *Publ. Inst. Math. (Beograd) (N.S.)* 12(26) (1971), 111-113. (From the introduction) 46 #2369 44A40 (39A40, 46F99)
- Two theorems on differential equations in locally convex spaces. (Serbo-Croatian. English summary) *Acad. Serbe Sci. Arts Glas* 283 (1972), no. 35, 33-42. (From the summary) 58 #28967 34G05
- New results in the theory of Mikusiński operators. *Math. Balkanica* 2 (1972), 226-234. (Z. Zieležny) 47 #7424 46F10 (44A40)
- (with Nikolic-Despotović, Danica) The series of Mikusiński operators of the special form. *Publ. Inst. Math. (Beograd) (N.S.)* 14(28) (1972), 163-171. (E. Gesztelyi) 53 #14041 44A40
- Theorem on differential equations for Mikusiński operators. *Publ. Inst. Math. (Beograd) (N.S.)* 18(32) (1975), 181-192. (D. Laugwitz) 51 #8762 44A40 (34A10)
- A certain class of operators. (Serbo-Croatian. English summary) *Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak.* 5 (1975), 9-12. (L. Berg) 53 #8812 44A40
- Generalized functions. (Serbo-Croatian) *Acad. Serbe Sci. Arts Glas* 300 (1976), no. 40, 20-35. (Editors) 57 #7164 46F10 (01A65, 44A40)
- Boundary value problems for differential equations of operators. *Bull. Acad. Serbe Sci. Arts Cl. Sci. Math. Natur.* 55 (1976), no. 9, 55-63. (R. S. Dahiya) 54 #5527 34B10
- (with Gajić, Lj.) Some properties of Wright's function. *Publ. Inst. Math. (Beograd) (N.S.)* 20(34) (1976), 91-98. (Y. L. Luke) 55 #10742 33A35
- (with Skendžić, Marija) On power series in the operators s^a . *Studia Math.* 57 (1976), no. 3, 229-239. (Harris S. Shultz) 55 #997 44A40
- A majorization of the coefficients of the Taylor series of a canonical element of an algebraic function. (Serbo-Croatian. English summary) *Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak.* 6 (1976), 15-18. (J. G. Krzyż) 56 #8821 30A10
- Approximate solutions of the operator linear differential equation. I. *Publ. Inst. Math. (Beograd) (N.S.)* 21(35) (1977), 185-196. (Hans-Jürgen Glaeske) 57 #13400a 44A40 (46F10)
- (with Herceg, Dragoslav) Approximate solutions of the operator linear differential equation. II. *Publ. Inst. Math. (Beograd) (N.S.)* 22(36) (1977), 77-86. (Hans-Jürgen Glaeske) 57 #13400b 44A40 (46F10)
- See also Biography: Stanković, Bogoljub, 52 #13253 and Biography: Stanković, Bogoljub, 58 #21328
- Stanković, Jovica Über einige Relationen zwischen Fakultäten und den linken Fakultäten. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of their birth. *Math. Balkanica* 3 (1973), 488-495. (J. B. Roberts) 50 #6994 10A05
- (with Žižović, Mališa R.) Noch einige Relationen zwischen den Fakultäten und den linken Fakultäten. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 555-559. (L. Carlitz) 51 #10703 33A15 (10A40)
- Stanković, Ljubomir R. (with Vasić, Petar M.) On some inequalities for convex and g-convex functions. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 412-460 (1973), 11-16. (S. Dubuc) 49 #9128 26A51
- (with Bullen, Peter S.; Vasić, Petar M.) A problem of A. Oppenheim. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 412-460 (1973), 21-30. (L. Losonczy) 48 #6338 26A51
- On an inequality for convex functions of order k . *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 461-497 (1974), 47-50. (D. Boyd) 50 #13410 26A86
- (with Lacković, Ivan B.) Some remarks on the paper: "A note on an inequality" (Nanta Math. 5 (1971), no. 1, 38-40) of V. K. Lim. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 461-497 (1974), 51-54. (H. T. Croft) 51 #8355 26A87
- Extension of Thunsdorff's inequality to the case of convex function of order k . *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 498-541 (1975), 145-148. (Z. Ziegler) 54 #493 26A86
- Contributions to the theory of analytical inequalities. (Serbo-Croatian. English summary) *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 543 (1976), 47 pp. (B. Crstici) 56 #8775 26A87
- Stanković, Miomir S. (with Mitrović, Žarko M.) Some inequalities for the angles of an acute triangle. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 357-380 (1971), 97-99. (L. A. Santaló) 45 #7610 52A40

- (with Kečkić, Jovan D.) Some inequalities for special functions. *Publ. Inst. Math. (Beograd) (N.S.)* **13**(27) (1972), 51-54. (A. E. Danese) **48** #6479 33A15 (26A87)
- (with Lacković, Ivan B.) A note on a theorem of E. Landau. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 381-409* (1972), 113-116. (D. C. Benson) **48** #8715 26A84
- (with Lacković, Ivan B.) On Hadamard's integral inequality for convex functions. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 412-460* (1973), 89-92. (Jaroslav Smítal) **50** #2427 26A86 (26A51)
- (with Milovanović, Gradimir V.) The generalization of an inequality for a function and its derivatives. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 461-497* (1974), 253-256. (D. C. Benson) **51** #10552 26A84
- Stanković, Srdjan S.** On asymptotic properties of real-time identification algorithms based on dynamic stochastic approximation. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 1, 58-61. (Valdas Pukas) **58** #9688 93E10
- Stankus, E.** The distribution of Dirichlet L -functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 2, 127-134, 229. (W. Narkiewicz) **52** #5591 10H10
- Distribution of Dirichlet L -functions with real characters in the half-plane $\text{Re } s > 1/2$. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 4, 199-214, 249. (Matti Jutila) **53** #10741 10H10
- The moments of $L(1, \chi_m)$ in arithmetic progressions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 1, 207-227, 253. (Matti Jutila) **54** #5136 10H10 (10H15)
- Stanley, H. E.** (with Nicoll, J. F.; Chang, T. S.) Approximate renormalization group based on the Wegner-Houghton differential generator. *Phys. Rev. Lett.* **33** (1974), 540-543; erratum, *ibid.* **33** (1974), 1525. (Authors' summary) **50** #12024 81.22
- (with Nicoll, J. F.; Chang, T. S.) Exact and approximate differential renormalization-group generators. *Phys. Rev. A* (3) **13** (1976), no. 3, 1251-1264. (Pierre Hillion) **52** #16326 81.22
- Stanley, Julian C.** See **Mathematical talent: discovery, description, and development**, **53** #5221
- Stanley, L. J.** On the principle square: coding and extending embeddings. *Ann. Sci. Univ. Clermont No. 60 Math. No. 13* (1976), 157-165. (Keith Devlin) **57** #2920 04A20 (02H05)
- Stanley, Richard M.** Boundary crossing probabilities for the Kolmogorov-Smirnov statistics. *Ann. Math. Statist.* **43** (1972), 664-668. **45** #7895 62G99
- Stanley, Richard P.** (with Baumert, Leonard; McEliece, Robert J.; Rodemich, Eugene R.; Rumsey, Howard C., Jr.; Taylor, Herbert) A combinatorial packing problem. *Computers in algebra and number theory (Proc. SIAM-AMS Sympos. Appl. Math., New York, 1970)*, pp. 97-108. *SIAM-AMS Proc., Vol. IV, Amer. Math. Soc., Providence, R.I.*, 1971. (W. Moser) **49** #2437 05B40
- Supersolvable semimodular lattices. *Möbius algebras (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1971)*, pp. 80-142. *Univ. Waterloo, Waterloo, Ont.*, 1971. (R. P. Dilworth) **50** #6950 06A30
- Modular elements of geometric lattices. *Algebra Universalis* **1** (1971/72), 214-217. (E. T. Schmidt) **45** #5037 06A30
- Theory and application of plane partitions. I, II. *Studies in Appl. Math.* **50** (1971), 167-188; *ibid.* **50** (1971), 259-279. (D. P. Roselle) **48** #3754 05A17
- ★ Ordered structures and partitions. *Memoirs of the American Mathematical Society*, No. 119. *American Mathematical Society, Providence, R.I.*, 1972. iii + 104 pp. (L. K. Durst) **48** #10836 05A17
- (with Doubilet, Peter; Rota, Gian-Carlo) On the foundations of combinatorial theory. VI. The idea of generating function. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. II: *Probability theory*, pp. 267-318. *Univ. California Press, Berkeley, Calif.*, 1972. (A. G. Law) **53** #7796 05A15
- Supersolvable lattices. *Algebra Universalis* **2** (1972), 197-217. (O. Frink) **46** #8920 06A20
- A Brylowski decomposition for finite ordered sets. *Discrete Math.* **4** (1973), 77-82. (Torrence D. Parsons) **46** #8918 06A10
- Acyclic orientations of graphs. *Discrete Math.* **5** (1973), 171-178. (R. C. Read) **47** #6537 05C20 (05C15, 06A10)
- Linear homogeneous Diophantine equations and magic labelings of graphs. *Duke Math. J.* **40** (1973), 607-632. (H. Gupta) **47** #6519 05B30
- The conjugate trace and trace of a plane partition. *J. Combinatorial Theory Ser. A* **14** (1973), 53-65. (D. P. Roselle) **46** #8853 05A17
- An extremal problem for finite topologies and distributive lattices. *J. Combinatorial Theory Ser. A* **14** (1973), 209-214. (L. E. Ward, Jr.) **46** #9918 54A10
- Combinatorial reciprocity theorems. *Combinatorics, Part 2: Graph theory; foundations, partitions and combinatorial geometry (Proc. Adv. Study Inst., Breukelen, 1974)*, pp. 107-118. *Math. Centre Tracts, No. 56, Math. Centrum, Amsterdam*, 1974. (Editors) **50** #9612 05A99 (05B99)
- Combinatorial reciprocity theorems. *Advances in Math.* **14** (1974), 194-253. (G. L. Alexanderson) **54** #111 05A15 (10E05)
- Finite lattices and Jordan-Hölder sets. *Algebra Universalis* **4** (1974), 361-371. (O. Frink) **50** #6951 06A30 (05A99)
- Enumeration of posets generated by disjoint unions and ordinal sums. *Proc. Amer. Math. Soc.* **45** (1974), 295-299. (Harald Scheid) **50** #4416 06A10
- Cohen-Macaulay rings and constructible polytopes. *Bull. Amer. Math. Soc.* **81** (1975), 133-135. (Melvin Hochster) **51** #486 13H10 (52A25)
- The Fibonacci lattice. *Fibonacci Quart.* **13** (1975), no. 3, 215-232. (Joel Berman) **52** #7989 06A35
- (with Carlitz, Leonard) Branchings and partitions. *Proc. Amer. Math. Soc.* **53** (1975), no. 1, 246-249. (George E. Andrews) **52** #2913 05A17 (10A45)
- The upper bound conjecture and Cohen-Macaulay rings. *Studies in Appl. Math.* **54** (1975), no. 2, 135-142. (P. McMullen) **56** #16640 57C15 (13H10, 52A25)
- Magic labelings of graphs, symmetric magic squares, systems of parameters, and Cohen-Macaulay rings. *Duke Math. J.* **43** (1976), no. 3, 511-531. (S. G. Hoggar) **56** #2865 05C30 (13H10)
- Binomial posets, Möbius inversion, and permutation enumeration. *J. Combinatorial Theory Ser. A* **20** (1976), no. 3, 336-356. (L. Carlitz) **53** #12968 05A15
- Some combinatorial aspects of the Schubert calculus. *Combinatoire et représentation du groupe symétrique (Actes Table Ronde CNRS, Univ. Louis-Pasteur Strasbourg, Strasbourg, 1976)*, pp. 217-251. *Lecture Notes in Math., Vol. 579, Springer, Berlin* (S. L. Kleiman) **57** #5766 05-02 (05A19, 14M15, 14N10)
- Cohen-Macaulay complexes. *Higher combinatorics (Proc. NATO Advanced Inst., Berlin, 1976)*, pp. 51-62. *NATO Adv. Study Inst. Ser., Ser. C: Math. and Phys.* **31. Reidel, Dordrecht**, 1977. (D. Kirby) **58** #28010 14M05 (05B35, 13F20, 55-)
- Relative invariants of finite groups generated by pseudoreflections. *J. Algebra* (1977), no. 1, 134-148. (Leopold Flatto) **57** #477 20H15 (20G05)
- Hilbert functions of graded algebras. *Advances in Math.* **28** (1978), no. 1, 5-10. (Idun Reiten) **58** #5637 13D10 (13H10)
- (with Gessel, Ira) Stirling polynomials. *J. Combinatorial Theory Ser. A* **24** (1978), no. 1, 24-33. (Stephen Tanny) **57** #2926 05A15
- Exponential structures. *Stud. Appl. Math.* **59** (1978), no. 1, 73-82. (Edward Bender) **58** #262 05A15
- See also **Finite operator calculus**, **52** #119 and **Combinatorics**, **52** #7912
- Stanley, Terence E.** Generalizations of the classes of nilpotent and hypercentral groups. *Math. Z.* **118** (1970), 180-190. (B. Amberg) **45** #2024 20D15
- A note on the sequence of Fibonacci numbers. *Math. Mag.* **44** (1971), 19-22. (Klarner) **45** #3311 10A40
- The FC-series of interdirect products of groups. *J. London Math. Soc.* (2) **6** (1973), 190-192. (B. H. Neumann) **47** #336 20E15
- Residual \mathfrak{F} -centrality in groups. *Math. Z.* **126** (1972), 1-5. (B. Amberg) **45** #20E25
- Some remarks on the periodicity of the sequence of Fibonacci numbers. *Fibonacci Quart.* **14** (1976), no. 1, 52-54. (J. Chidambaramswamy) **53** #262 10A35
- Stannard, Jerry** See **Contributions to logic and methodology in honor of J. M. Bochossian**, **47** #6424
- Stannov, Nikolai** Multi-goal properties and conflict situations in automatic control systems. (Bulgarian. Russian and English summaries) *B'lgar Akad. Nauk. Izv. Tehn. Kibernet.* **16** (1973), 5-19. (D. Obradović) **50** #1755 93A15
- Stanojević, Momir** See **Stanojević, Momir**
- Stanojević, Časlav V.** (with Ivković, Zoran A.) Distributions of coincidence of n random signals and sample range. *Math. Balkanica* **1** (1971), 126-128. **46** #8745 94-)
- (with Rees, Charles S.) Necessary and sufficient conditions for integrability of certain cosine sums. *J. Math. Anal. Appl.* **43** (1973), 579-586. (I. I. Hirschman) **48** #794 42A32
- Mielnik's probability spaces and characterization of inner product spaces. *Amer. Math. Soc.* **183** (1973), 441-448. (P. A. Fillmore) **48** #6904 46C05
- (with Guccione, S. J., Jr.) Probabilistic foundations of general quantum theories: characterizations of representation spaces. *Math. Balkanica* **5** (1975), 114-126. (reviewed) **81.46**
- (with Blakemore, Carroll F.) On functional equations related to Mielnik's probability spaces. *Proc. Amer. Math. Soc.* **52** (1975), 315-316. (Genowefa Małocha) **52** #11399 39A25
- (with Garrett, John W.) On L^1 convergence of certain cosine sums. *Bull. Math. Soc.* **82** (1976), no. 1, 129-130. (Masako Izumi) **52** #14808a 42A16
- (with Garrett, John W.) Integrability of shifted trigonometric series. *Bull. Math. Soc.* **82** (1976), no. 2, 252. (Masako Izumi) **53** #13979 42A32
- (with Guccione, S. J., Jr.) Probabilistic foundations of quantum theories and Rubin-Stone spaces. *Bull. Amer. Math. Soc.* **82** (1976), no. 3, 481-483. (T. Precup) **53** #14096 46C10 (81.60)
- (with Garrett, John W.) On integrability and L^1 convergence of certain cosine series. *Indian J. Pure Appl. Math.* **7** (1976), no. 8, 873-879. (From the introduction) **58** #42A20
- (with Garrett, John W.) On L^1 convergence of certain cosine sums. *Proc. Math. Soc.* **54** (1976), 101-105. (Masako Izumi) **52** #14808b 42A16
- (with Blass, Andreas) Partial Mielnik spaces and characterization of uniformly convex spaces. *Proc. Amer. Math. Soc.* **55** (1976), no. 1, 75-82. (V. K. Balakrishna) **52** #14926 46B05
- (with Guccione, S. J., Jr.) A class of functional equations and Mielnik probability spaces. *Proc. Amer. Math. Soc.* **59** (1976), no. 2, 317-320. (Authors' summary) **56** #12854 46C10
- (with Garrett, John W.) Necessary and sufficient conditions for L^1 convergence of trigonometric series. *Proc. Amer. Math. Soc.* **60** (1976), 68-71 (1977). (Masako Izumi) **54** #13435 42A20
- Stanojević, Momir** On two mappings associated with multivalued and point-valued mappings. *Proceedings of the International Symposium on Topology and its Applications (Buda, 1972)*, pp. 229-232. *Savez Društava Mat. Fiz. i Astronom., Belgrade*, 1973. (Cain, Jr.) **49** #11467 54C60
- Two properties of multivalued quotient maps. (Russian) Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 561-563. (E. Halfar) **51** #11423 54C60 (54D50)
- On multivalued quotient mappings. *Publ. Inst. Math. (Beograd) (N.S.)* **1** (1974), 155-161. (Edwin Duda) **50** #14653 54C60
- Stanomir, D.** Calcul matriciel-symbolique pour les phénomènes électro-élastiques. (English and German summary inserts) *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énerg.* (1974), 229-248. (I. M. Longman) **51** #2396 73.00
- (with Stănişilă, Octavian) Towards a general theory of discrete signals. I. (Romanian summary) *Bul. Inst. Politehn. Bucureşti Ser. Electrotehn.* **39** (1977), 3-10. (B. D. Sharma) **58** #15656 94A05
- Stanoulov, N.** See **Stanoulov, Nikolai**
- Stanovova, V. A.** (with Paščenko, K. K.) Tensorial stochastic approximation, an application to problems of filtering, identification and recognition of patterns. (Russian summary) *Axiometrija* **1974**, no. 5, 19-26, 111. (Authors' summary) **50** #15471 68A45
- Stansfield, B.** (with Meyer, J.) Optical mixing in a magnetized plasma. (French summary) *Canad. J. Phys.* **49** (1971), 2187-2193. (T. O. Philips) **48** #5513 78.35
- Stanshine, J. A.** (with Howard, Louis N.) Asymptotic solutions of the Field-Noyes reaction for the Belousov reaction. I. Homogeneous oscillations. *Studies in Appl. Math.*

- , no. 2, 129-165. (Authors' summary) **57** #11529a 82.35
 asymptotic solutions of the Field-Noyes model for the Belousov reaction. II. Plane waves. *Studies in Appl. Math.* **55** (1976), no. 4, 327-349. (Author's summary) 11529b 82.35
- Jerome A. (with Stone, Lawrence D.) Optimal search using uninterrupted contact investigation. *SIAM J. Appl. Math.* **20** (1971), 241-263. (D. L. Iglehart) 3057 (E 46 #3103) 90B40
- with Stone, Lawrence D.) Erratum: "Optimal search using uninterrupted contact investigation". *SIAM J. Appl. Math.* **21** (1971), 636. (Editors) **46** #3103 90C99
- with Stone, Lawrence D.; Persinger, Carl A.) Optimal search in the presence of non-distributed false targets. *SIAM J. Appl. Math.* **23** (1972), 6-27. (N. L. Johnson) 8331 60K99
- Charles (with Abelson, Harold) Poincaré's geometric theorem for flows. *J. Differential Geometry* **11** (1976), no. 1, 129-131. (Zbigniew Nitecki) **54** #3765 58F99 20
- Charles M. Bounded analytic functions on a class of open Riemann surfaces. *Michigan J. Math.* **59** (1975), no. 2, 557-565. (H. Widom) **54** #2989 30A98
- Embedding Riemann surfaces in polydisks. *Duke Math. J.* **43** (1976), no. 4, 796. (Shoshichi Kobayashi) **56** #669 32E25 (32H15)
- Nancy K. Holomorphic R-torsion for Lie groups. *Differential geometry (Proc. 5th Pure Math., Vol. XXVII, Part 2, Stanford Univ., Stanford, Calif., 1973), pp. 347. Amer. Math. Soc., Providence, R. I., 1975. (M. F. Atiyah)* **53** #9309 59
- Deformations of complex manifolds with fixed boundary structure. *Math. Ann.* **230** (1977), no. 3, 227-243. (H. Kerner) **58** #6359 32G05
- Ralph G. (with Horton, J. D.) Composition of Room squares. *Combinatorial theory and its applications, III (Proc. Colloq., Balatonfüred, 1969), pp. 1013-1021. (I. Katona) North-Holland, Amsterdam, 1970. (W. D. Wallis)* **46** #73 05B05
- with Roselle, David P.) A result on Davenport-Schinzel sequences. *Combinatorial theory and its applications, III (Proc. Colloq., Balatonfüred, 1969), pp. 1023-1027. North-Holland, Amsterdam, 1970. (N. G. de Bruijn)* **46** #3324 05A15
- with Kingsley, Roger A.) On a cubic surface block design (45, 12, 3). *Proceedings of the Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1971), pp. 451-456. Dept. Comput. Sci., Univ. Manitoba, Winnipeg, Man., 1971. (Judith Longyear)* **48** #10843 05B05
- with Reilly, James W.) The intersection-union problem. *Proceedings of the Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1971), pp. 551-555. Dept. Comput. Sci., Univ. Manitoba, Winnipeg, Man., 1971. (Edward Jenner)* **53** #10600 05A15
- with Kingsley, Roger A.) The double-six block design (36, 36, 15, 15, 6). *Proceedings of the Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1971), pp. 581-588. Dept. Comput. Sci., Univ. Manitoba, Winnipeg, Man., 1971. (From authors' introduction)* **54** #5004 05B05
- with James, Lee O.; Cowan, D. D.) Some results on tree numbers. *Proceedings of the Second Louisiana Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1971), pp. 317-330. Louisiana State Univ., Baton Rouge, La., 1971. (A. Mowshowitz)* **47** #6557 05C99
- with Mullin, Ronald C.) Construction of Room squares from orthogonal Latin squares. *Proceedings of the Second Louisiana Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1971), pp. 375-386. Louisiana State Univ., Baton Rouge, La., 1971. (S. S. Shrikhande)* **47** #8329 05B15
- with Reilly, James W.) Variable strings with a fixed substring. *Proceedings of the Second Louisiana Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1971), pp. 483-494. Louisiana State Univ., Baton Rouge, 1971. (S. G. Williamson)* **47** #8317 05A05
- with Horton, J. D.; Mullin, Ronald C.) Minimal coverings of pairs by quadruples. *Proceedings of the Second Louisiana Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1971), pp. 495-516. Louisiana State Univ., Baton Rouge, La., 1971. (W. H. Mills)* **47** #6518 05B30
- with James, Lee O.) Numerical determination of covering designs. *Proceedings of the Twenty-Fifth Summer Meeting of the Canadian Mathematical Congress (Lakehead Univ., Thunder Bay, Ont., 1971), pp. 219-230. Lakehead Univ., Thunder Bay, Ont., 1971. (R. C. Mullin)* **48** #8273 05B30
- with Kingsley, Roger A.) On a block design (56, 56, 11, 11, 2). *Proceedings of the Twenty-Fifth Summer Meeting of the Canadian Mathematical Congress (Lakehead Univ., Thunder Bay, Ont., 1971), pp. 231-244. Lakehead Univ., Thunder Bay, Ont., 1971. (A. Katritz)* **50** #1913 05B05
- with Horton, J. D.; Mullin, Ronald C.) A recursive construction for Room squares. *Aequationes Math.* **6** (1971), 39-45. (Jane W. Di Paola) **45** #6649 05B30
- with Lawless, Jerald F.) Covering problems and a family of symmetric PBIBD's. *Hyakka Ser. A* **33** (1971), 433-440. (K. Vijayan) **47** #1640 05B05 (62K10)
- with James, Lee O.; Cowan, D. D.) Tripartite path numbers. *Graph theory and computing, pp. 285-294. Academic Press, New York, 1972. (H. V. Kronk)* **49** #7180 05
- with James, Lee O.; Cowan, D. D.) Graph decomposition for undirected graphs. *Proceedings of the Third Southeastern Conference on Combinatorics, Graph Theory, and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1972), pp. 281-290. Florida Atlantic Univ., Boca Raton, Fla., 1972. (E. A. Nordhaus)* **50** #4397 05C99
- with Kingsley, Roger A.) A survey of certain balanced incomplete block designs. *Proceedings of the Third Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1972), pp. 305-310. Florida Atlantic Univ., Boca Raton, Fla., 1972. (Authors' summary)* **50** #138 05B05
- with James, Lee O.) From covering designs to graphs. *Aequationes Math.* **8** (1972), 1. (K. Vijayan) **46** #3352 05B40
- with Mullin, Ronald C.) Room quasigroups and Fermat primes. *J. Algebra* **20** (1972), 83-89. (M. Kimberley) **45** #8547 05B15
- with Horton, J. D.) A multiplication theorem for Room squares. *J. Combinatorial Theory Ser. A* **12** (1972), 322-325. (R. C. Mullin) **45** #6650 05B30
- with Mullin, Ronald C.) A map-theoretic approach to Davenport-Schinzel sequences. *Pacific J. Math.* **40** (1972), 167-172. (D. P. Roselle) **46** #1745 10L99
- (with Bate, J. A.; Cowan, D. D.) Minimal sequences with permutation subsequences. *Proceedings of the Fourth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1973), pp. 151-162. Utilitas Math., Winnipeg, Man., 1973. (D. P. Roselle)* **50** #2064 10A40
- (with Zarnke, C. R.) Labelling of balanced trees. *Proceedings of the Fourth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1973), pp. 479-495. Utilitas Math., Winnipeg, Man., 1973. (R. C. Read)* **51** #2959 05C05
- (with Kingsley, Roger A.) Covering designs and intersection numbers. *Proceedings of the Second Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1972), pp. 207-210. Congressus Numerantium, No. VII, Utilitas Math., Winnipeg, Man., 1973. (W. H. Mills)* **50** #4356 (EA 51) 05B40
- (with Mullin, Ronald C.; Richmond, L. Bruce) An asymptotic relation for cubic maps. *Proceedings of the Third Manitoba Conference on Numerical Mathematics (Winnipeg, Man., 1973), pp. 345-355. Utilitas Math., Winnipeg, Man., 1974. (L. W. Beineke)* **49** #7174 05C30
- (with Cerf, V. G.; Cowan, D. D.; Mullin, Ronald C.) Computer networks and generalized Moore graphs. *Proceedings of the Third Manitoba Conference on Numerical Mathematics (Winnipeg, Man., 1973), pp. 379-398. Utilitas Math., Winnipeg, Man., 1974. (Narsingh Deo)* **50** #1966 05C35 (68A25)
- (with Cerf, V. G.; Cowan, D. D.; Mullin, Ronald C.) A lower bound on the average shortest path length in regular graphs. *Networks* **4** (1974), 335-342. (Michel Chein) **52** #181 05C35
- (with Mullin, Ronald C.; Richmond, L. Bruce) Further results on the average activity in a rooted map. *Utilitas Math.* **6** (1974), 237-249. (W. T. Tutte) **51** #258 05C30
- (with Cerf, V. G.; Cowan, D. D.; Mullin, Ronald C.) Trivalent generalized Moore networks on sixteen nodes. *Utilitas Math.* **6** (1974), 259-283. (F. Harary) **50** #9687 05C35
- (with Cerf, V. G.; Cowan, D. D.; Mullin, Ronald C.) A partial census of trivalent generalized Moore networks. *Combinatorial mathematics, III (Proc. Third Australian Conf., Univ. Queensland, St. Lucia, 1974), pp. 1-27. Lecture Notes in Math., Vol. 452, Springer, Berlin, 1975. (Narsingh Deo)* **52** #180 05C35
- (with Collens, R. J.) Computer assisted generation of difference blocks. *Combinatorial mathematics, III (Proc. Third Australian Conf., Univ. Queensland, St. Lucia, 1974), pp. 83-89. Lecture Notes in Math., Vol. 452, Springer, Berlin, 1975. (Sanpei Kageyama)* **51** #7897 05B05 (68A10)
- (with Cerf, V. G.; Cowan, D. D.; Mullin, Ronald C.) Topological design considerations in computer communication networks. *Computer communication networks (Proc. NATO Advanced Study Inst., Univ. Sussex, Brighton, 1973), pp. 101-112. NATO Advanced Study Inst. Ser. E: Appl. Sci., Vol. 4, Noordhoff, Leyden, 1975. (W.-K. Chen)* **53** #7625 94A20
- (with Bate, J. A.; Mullin, Ronald C.) Some tables for the postage stamp problem. *Proceedings of the Fourth Manitoba Conference on Numerical Mathematics (Winnipeg, Man., 1974), pp. 351-356. Congr. Numer., No. XII, Utilitas Math., Winnipeg, Man., 1975. (G. F. Clements)* **51** #7887 05A05
- (with Cowan, D. D.; Mullin, Ronald C.) Counting algorithms for connected labelled graphs. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory, and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1975), pp. 225-236. Congressus Numerantium, No. XIV, Utilitas Math., Winnipeg, Man., 1975. (P. K. Stockmeyer)* **54** #2519 05C30
- (with Mullin, Ronald C.) Group matrices and balanced weighing designs. *Utilitas Math.* **8** (1975), 277-301. (L. D. Baumert) **52** #13440 05B30
- (with Mullin, Ronald C.) Balanced weighing matrices and group divisible designs. *Utilitas Math.* **8** (1975), 303-310. (L. D. Baumert) **52** #13422 (E 53 #7825) 05B05
- (with Collens, R. J.) A computer system for research on the family classification of BIBDs. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Roma, 1973), Tomo I, pp. 133-169. Atti dei Convegni Lincei, No. 17, Accad. Naz. Lincei, Rome, 1976. (W. D. Wallis)* **55** #12542 05B05
- (with Dirksen, P. H.) Computation of $g(1,3;12)$. *Combinatorial mathematics, IV (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), pp. 232-239. Lecture Notes in Math., Vol. 560, Springer, Berlin, 1976. (R. C. Mullin)* **54** #10052 05B30
- (with Kocay, W. L.; Dirksen, P. H.) Computation of a combinatorial function. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975), pp. 569-578. Congressus Numerantium, No. XV, Utilitas Math., Winnipeg, Man., 1976. (Richard T. Bumby)* **52** #13609 10A20 (10A30)
- (with Dirksen, P. H.) Coverings, blackings, and a problem on hypergraphs. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1975), pp. 273-278. Congressus Numerantium, No. XVI, Utilitas Math. Publ., Winnipeg, Man., 1976. (Heiko Harborth)* **54** #2501 05B40
- (with McCarthy, David; Mullin, Ronald C.; Schellenberg, Paul J.; Vanstone, S. A.) The non-existence of (7,1)-designs with $v=31$, $b<43$. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1975), pp. 479-495. Congressus Numerantium, No. XVI, Utilitas Math. Publ., Winnipeg, Man., 1976. (Edward Spence)* **54** #2496 05B05
- (with McCarthy, David; Mullin, Ronald C.; Schellenberg, Paul J.; Vanstone, S. A.) The non-existence of (7,1)-designs with $v=31$, $b>50$. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1975), pp. 497-532. Congressus Numerantium, No. XVI, Utilitas Math. Publ., Winnipeg, Man., 1976. (Edward Spence)* **54** #2497 05B05
- (with Kocay, W. L.; Graham, J. Wesley) A generalized rank for a square matrix. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1975), pp. 619-624. Congressus Numerantium, No. XVI, Utilitas Math. Publ., Winnipeg, Man., 1976. (D. J. Hartfiel)* **53** #8088 15A03
- (with Dirksen, P. H.) Davenport-Schinzel sequences. *Ars Combinatoria* **1** (1976), no. 1, 43-51. (D. P. Roselle) **53** #13106 10A40
- (with Cerf, V. G.; Cowan, D. D.; Mullin, Ronald C.) Some unique extremal graphs. *Ars Combinatoria* **1** (1976), no. 1, 119-157. (From the authors' introduction) **54** #150 05C35
- (with Williams, H. C.) An application of combinatorics in number theory. *Ars*

- Combinatoria* 1 (1976), no. 1, 321-330. (Richard T. Bumby) 54 #2575 10A30
(with McCarthy, David; Mullin, Ronald C.; Schellenberg, Paul J.; Vanstone, S. A.) On approximations to a projective plane of order 6. *Ars Combinatoria* 2 (1976), 111-168. (Joseph A. Thas) 55 #144 05B30
Some results on block lengths in (r, λ) designs. *Ars Combinatoria* 2 (1976), 213-217. (K. Vijayan) 54 #10043 05B05
(with Mullin, Ronald C.; Bate, J. A.) Isomorphism classes of a set of prime BIBD parameters. *Ars Combinatoria* 2 (1976), 251-264. (Aiden A. Bruen) 55 #2603 05B05
(with McCarthy, David; Vanstone, S. A.) On an extremal class of (r, λ) -designs related to a problem of Doehlert and Klee. *Ars Combinatoria* 2 (1976), 305-317. (Jane W. Di Paola) 55 #5462 05B05
(with Andres, T. H.; Hoskins, W. D.) The determinant of a class of skew-symmetric Toeplitz matrices. *Linear Algebra and Appl.* 14 (1976), no. 2, 179-186. (Bradley W. Dickinson) 58 #5713 15A15
(with Sudler, C., Jr.; Williams, H. C.) An upper bound for the period of the simple continued fraction for \sqrt{D} . *Pacific J. Math.* 67 (1976), no. 2, 525-536. (Richard T. Bumby) 55 #2735 10A30
(with Mullin, Ronald C.) On the nonexistence of a class of circulant balanced weighing matrices. *SIAM J. Appl. Math.* 30 (1976), no. 1, 98-102. (W. D. Wallis) 53 #12994 05B20
(with Mullin, Ronald C.) Corrigenda to: "Balanced weighing matrices and group divisible designs" (*Utilitas Math.* 8 (1975), 303-310). *Utilitas Math.* 9 (1976), 347. (L. D. Baumert) 53 #7825 05B30
(with Morphy, N. J.) A note on the Gram-Schmidt algorithm. *Utilitas Math.* 10 (1976), 193-197. (L. W. Ehrlich) 54 #11750 65F25
(with Andres, T. H.) Golay sequences. *Combinatorial mathematics, V (Proc. Fifth Austral. Conf., Roy. Melbourne Inst. Tech., Melbourne, 1976)*, pp. 44-54. *Lecture Notes in Math.*, Vol. 622, Springer, Berlin, 1977. (R. C. Mullin) 57 #5380 94A05 (94A10)
(with Vanstone, S. A.) On a problem of Doehlert and Klee. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1977)*, pp. 633-641. *Congressus Numerantium, No. XIX, Utilitas Math., Winnipeg, Man., 1977*. (L. D. Baumert) 57 #16111 05B30
(with McCarthy, David; Mullin, Ronald C.; Schellenberg, Paul J.; Vanstone, S. A.) Toward the uniqueness of the $(7, 1)$ -design on 31 varieties. *Proceedings of the Sixth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1976)*, pp. 265-285. *Congress. Numer., XVIII, Utilitas Math., Winnipeg, Man., 1977*. (Authors' summary) 58 #27552 05B05
Results on (r, λ) designs. *Proceedings of the Sixth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1976)*, pp. 411-412. *Congress. Numer., XVIII, Utilitas Math., Winnipeg, Man., 1977*. (Editors) 58 #27556 05B05
(with Wallis, Walter Denis) An application of conference matrices. *Ars Combinatoria* 3 (1977), 267-270. (Edward Spence) 56 #15464 05B20
(with Andres, T. H.; Hoskins, W. D.) The elements of the inverses of a family of difference matrices. *Ars Combinatoria* 3 (1977), 319-329. (Authors' summary) 56 #7131 65F05
(with Vanstone, S. A.) Some lower bounds on the size of Doehlert-Klee designs. *Ars Combinatoria* 4 (1977), 123-131. (L. D. Baumert) 57 #2954 05B30
(with Bate, J. A.; Mullin, Ronald C.; Nemeth, E.) Critical full block $(7, 1)$ designs. *Ars Combinatoria* 4 (1977), 143-149. (Stephen H. Y. Hung) 58 #274 05B05
(with Vanstone, S. A.) Further results on a problem of Doehlert and Klee. *Utilitas Math.* 12 (1977), 263-271. (W. D. Wallis) 58 #21719 05B30
(with Mullin, Ronald C.) A characterization of pseudo-affine designs and their relation to a problem of Cordes. *Algorithmic aspects of combinatorics (Conf., Vancouver Island, B.C., 1976)*. *Ann. Discrete Math.* 2 (1978), 231-238. (D. K. Ray-Chaudhuri) 58 #280 05B05
See also *Proceedings: Summer Meeting of the Canadian Mathematical Congress*, 48 #5776; *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, 52 #5432; *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, 54 #2471 and *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, 57 #5768
Stanton, Robert J. (with Tomas, Peter A.) Convergence of Fourier series on compact Lie groups. *Bull. Amer. Math. Soc.* 82 (1976), no. 1, 61-62. (Pierre Eymard) 53 #6241 43A50 (22C05)
Mean convergence of Fourier series on compact Lie groups. *Trans. Amer. Math. Soc.* 218 (1976), 61-87. (Jean-Louis Clerc) 54 #8173 43A90 (43A75)
(with Tomas, Peter A.) Expansions for spherical functions on noncompact symmetric spaces. *Acta Math.* 140 (1978), no. 3-4, 251-276. (Kenneth Johnson) 58 #23365 43A90 (22E30)
(with Tomas, Peter A.) Polyhedral summability of Fourier series on compact Lie groups. *Amer. J. Math.* 100 (1978), no. 3, 477-493. (Norman J. Weiss) 58 #29855 43A50 (22E30)
(with Tomas, Peter A.) A note on the Kunze-Stein phenomenon. *J. Funct. Anal.* 29 (1978), no. 2, 151-159. (Pierre Eymard) 58 #28278 22E30 (22E45)
Stanton, Robert O. An invariant for modules over a discrete valuation ring. *Proc. Amer. Math. Soc.* 49 (1975), 51-54. (C. Lemaire) 50 #13020 13J15
Decomposition bases and Ulm's theorem. *Abelian group theory (Proc. Second New Mexico State Univ. Conf., Las Cruces, N.M., 1976)*, pp. 39-56. *Lecture Notes in Math.*, Vol. 616, Springer, Berlin, 1977. (L. Fuchs) 58 #16913 20K99
Infinite decomposition bases. *Pacific J. Math.* 70 (1977), no. 2, 549-566. (Author's summary) 58 #22335 20K20
Relative S -invariants. *Proc. Amer. Math. Soc.* 65 (1977), no. 2, 221-224. (R. B. Warfield, Jr.) 56 #5521 13C05 (13F99)
Stanulov, Nikolai On the completeness of a class of suboptimal stochastic control policies. (Polish and Russian summaries) *Podstawy Sterowania* 1 (1971), 169-179. (N. U. Ahmed) 46 #5018 93E20
Investigating the completeness of a set of suboptimal control policies. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* 20 (1972), 155-159. (D. D. Sworder) 49 #6969 93B99
(with Ljuckanov, V.) Definition of useful information in terms of measurable quantities. (Russian) *C. R. Acad. Bulgare Sci.* 27 (1974), 445-448. (O. Gulyás) 50 #6648 94A15
(with Ljuckanov, V.) Pragmatic information in control. *C. R. Acad. Bulgare Sci.* (1974), 1025-1028. (J. Černý) 51 #5079 93A15
Some classifications of the basic properties of optimal control criteria. (Bulgarian and English summaries) *Problemi Tehn. Kibernet.* 1-2 (1975), 21-27. (Authors' summary) 56 #14798 90D35 (93C99)
Logical foundations of the measurability of semantic information. (Bulgarian and English summaries) *Problemi Tehn. Kibernet.* 3 (1976), 58-67. (Mullin) 55 #7727 02A05 (68A55, 94A15)
See also *Automatic control systems*, 50 #9387
Stanjukovich, K. P. See Stanjuković, K. P.
Staples, John On constructive fields. *Proc. London Math. Soc.* (3) 23 (1971), 753-760. (S. Troelstra) 45 #6587 02E99 (12L99)
Combinator realizability of constructive finite type analysis. *Cambridge Summer School in Mathematical Logic (Cambridge, 1971)*, pp. 253-273. *Lecture Notes in Math.*, Vol. 337, Springer, Berlin, 1973. (H. B. Curry) 50 #63 02C20 (02C15, 02E10)
Axioms for constructive fields. *Bull. Austral. Math. Soc.* 8 (1973), 221-232. (H. Rootselaar) 48 #74 02E05 (12E99)
Combinator realizability of a constructive Morse set theory. *J. Symbolic Logic* (1974), 226-234. (J. P. Seldin) 51 #74 02C20 (02E05, 02K10)
Church-Rosser theorems for replacement systems. *Algebra and logic (Fourth Summer Res. Inst., Austral. Math. Soc., Monash Univ., Clayton, 1974)*, pp. 291-300. *Lecture Notes in Math.*, Vol. 450, Springer, Berlin, 1975. (R. Hindley) 51 #10102 02C20
Fixed point theorems in uniformly rotund metric spaces. *Bull. Austral. Math. Soc.* 14 (1976), no. 2, 181-192. (M. Edelstein) 54 #3524 47H10 (54H25)
Asymptotic centres of filters on uniformly rotund spaces. *Bull. Austral. Math. Soc.* 15 (1976), no. 1, 87-96. (M. Edelstein) 55 #1320 54E35 (54H25, 47H10)
Optimal reduction in replacement systems. *Bull. Austral. Math. Soc.* 16 (1977), no. 3, 341-349. (P. C. Gilmore) 57 #11159 68A05
A class of replacement systems with simple optimality theory. *Bull. Austral. Math. Soc.* 17 (1977), no. 3, 335-350. (G. Berry) 58 #32041 68A10
Truth in constructive metamathematics. *Notre Dame J. Formal Logic* 19 (1978), 3, 489-494. (P. Aczel) 57 #15999 02E05
Stapleton, G. A. Test signals for linear identification. *Proc. IREE Austral.* 32 (1971), 85-92. (Author's summary) 54 #9759 93B30
Stapp, Henry P. Properties of Lorentz covariant analytic functions. *J. Mathematical Physics* 13 (1972), 1551-1568. (D. I. Olive) 47 #2940 81J32
(with Kawai, Takahiro) Microlocal study of S -matrix singularity structure. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 38-48. *Lecture Notes in Phys.*, 39, Springer, Berlin, 1975. (Authors' summary) 58 #32635 81S8 (58G99, 58G15)
(with Cahill, Kevin) Optical theorems and Steinmann relations. *Ann. Phys. (New York)* 90 (1975), 438-514. (D. I. Olive) 51 #9685 81J32
(with Coster, Joseph) Optical theorems for three-to-three processes. *J. Mathematical Phys.* 16 (1975), 1288-1323. (D. I. Olive) 52 #9871 81J32
Many-particle dispersion relations. *Structural analysis of collision amplitudes/Analyse structurale des amplitudes de collision (Lectures, École d'Été Théor., Les Houches, 1975)*, pp. 275-294. *North-Holland, Amsterdam, 1976*. (Masahito Minami) 58 #14555 81J32
(with Kashiwara, Masaki; Kawai, Takahiro) Micro-analytic structure of the S -matrix and related functions. *Proceedings of the Oji Seminar on Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., Kyoto, 1976)*. *Res. Inst. Math. Sci.* 12 (1976/77), supplement, 141-146. (D. Iagolnitzer) 58 #14158 (58G05)
(with Kawai, Takahiro) Discontinuity formula and Sato's conjecture. *Proceedings of the Oji Seminar on Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., Kyoto, 1976)*. *Publ. Res. Inst. Math. Sci.* 12 (1976/77), supplement, 155-232. (D. Iagolnitzer) 58 #14740 81S8 (58G05)
(with Cahill, Kevin) Multiple discontinuities for 2-to-4 processes. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* 26 (1977), no. 2, 193-212. (Authors' summary) 57 #2254 81J30
Topological expansion for baryons and mesons. (Italian and Russian summaries) *Nuovo Cimento A* (11) 46 (1978), no. 1, 37-60. (Author's summary) 58 #148155
See also *Structural analysis of collision amplitudes*, 57 #8521
Stapper, M. A simplified approach to the mechanics of acoustical wave propagation applicable to the problems of radiation pressure. I. On the theory of longitudinal propagation. (German and French summaries) *Acustica* 39 (1977/78), no. 2, 105-110. (G. Eason) 57 #4815a 76J35
A simplified approach to the mechanics of acoustical wave propagation applicable to the problems of radiation pressure. II. The application to Rayleigh and Lamb radiation pressure. (German and French summaries) *Acustica* 39 (1977/78), no. 2, 111-116. (G. Eason) 57 #4815b 76J35
verde Star, Luis See Verde Star, Luis
Star, Z. An asymptotic formula in the theory of compositions. *Aequationes Mathematicae* (1975), no. 3, 279-284. (H. A. Passi) 53 #315 10J20
Stará, Jana Regularity results for non-linear elliptic systems in two dimensions. *Scuola Norm. Sup. Pisa* (3) 25 (1971), 163-190. (J. Nečas) 45 #8983 35D10
(with Nečas, Jindřich) Principio di massimo per i sistemi ellittici quasi-lineari diagonali. (English summary) *Boll. Un. Mat. Ital.* (4) 6 (1972), 1-10. (Z. C. Morawetz) 47 #3830 35J45
(with John, Friedrich) Regularity results for non linear integro-differential operators in two dimensions. *Theory of nonlinear operators (Proc. Summer School, New York, 1972)*, pp. 117-123. *Schr. Zentralinst. Math. Mech. Akad. Wiss. DDR, Heft 20, Akademie-Verlag, Berlin, 1974*. (J. Frehse) 53 #3493 35J35 (47G05)
(with Souček, Jiří; Souček, Vladimír) On the nineteenth and the twentieth Hilbert problems. (Czech) *Pokroky Mat. Fyz. Astronom.* 22 (1977), no. 3, 139-150. (V. Konečný) 57 #1225 49-02 (58E15, 49F10)

- A. L.** Asymptotic integration of weakly nonlinear partial differential equations. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 3, 525-528. (A. M. Il'in) **58** #29090 B40 (35C10, 35G05)
- Arinas** An investigation of the Green function for a wave system with dissipation. (Lithuanian and English summaries) *Diferencial'nye Uravneniya i Prilozheniya. Trudy Sem. Processy Optimal. Upravleniya. I Sekciya Vyp.* **10** (1974), 67-84, (1975). (Author's summary) **58** #1703 35L99
- Michael** Extending maps from products. *Studies in topology (Proc. Conf., Univ. of Carolina, Charlotte, N.C., 1974; dedicated to Math. Sect. Polish Acad. Sci.)*, pp. 564. Academic Press, New York, 1975. (J. Dugundji) **50** #11135 54C20
- The Borsuk homotopy extension theorem without the biinormality condition.** *Fund. Math.* **87** (1975), no. 3, 207-211. (J. Dugundji) **51** #9014 54C20 (55D05)
- with Rudin, Mary Ellen** Products with a metric factor. *General Topology and Appl.* **5** (1975), no. 3, 235-248. (K. Nagami) **52** #1606 54B10
- Products with a compact factor.** *General Topology and Appl.* **6** (1976), no. 3, 303. (L. I. Sennott) **53** #9132 54C20 (54D15, 54B10)
- with Rudin, Mary Ellen** Some examples of normal Moore spaces. *Canad. J. Math.* **29** (1977), no. 1, 84-92. (George M. Reed) **56** #6618 54E30
- A complex which cannot be pushed around in E^3 .** *Proc. Amer. Math. Soc.* **63** (1977), no. 2, 363-367. (L. S. Husch) **56** #1320 57A35
- Linear isotopies in E^3 .** *Proc. Amer. Math. Soc.* **65** (1977), no. 2, 342-346. (E. M. Ryn) **56** #13224 57A10 (57A35)
- with Bing, R. H.** Super triangulations. *Pacific J. Math.* **74** (1978), no. 2, 307-325. (J. Weinstein) **57** #17659 57C35
- with Bing, R. H.** Linear isotopies in E^2 . *Trans. Amer. Math. Soc.* **237** (1978), no. 2, 222. (F. Laudenbach) **57** #1495 57A05
- T. Enflo operators on L^1 .** *Séminaire Maurey-Schwartz 1975-1976: Espaces L^p , Fonctions radonifiantes et géométrie des espaces de Banach, Exp. No. 24*, 6 pp. Centre de Math., École Polytech., Palaiseau, 1976. (P. Wojtaszczyk) **57** #3838 46E30 (47B99)
- with Benyamini, Y.** Embedding weakly compact sets into Hilbert space. *Israel J. Math.* **23** (1976), no. 2, 137-141. (D. J. Randke) **53** #1231 46B99
- R. R.** (with Quesenberry, C. P.) On optimal tests for separate hypotheses and conditional probability integral transformations. *Comm. Statist.—Theory Methods* **A5** (1976), no. 6, 507-524. (Willem Schaafsma) **54** #14201 62F05
- William H.** (with Dutton, John M.) Computer simulation models of human behavior: A history of an intellectual technology. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-1** (1971), 128-171. (Authors' summary) **46** #8461 68-03
- A. N.** The estimation of the regulating parameter in a stochastic model of an epidemic. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **14** (1970), no. 6, 53. (K. Dietz) **48** #8015 92A15
- Limit theorems for the size of an epidemic in a general probabilistic model.** (Russian) *Random processes and statistical inferences*, No. 1 (Russian), pp. 60-73. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1971. (K. Dietz) **49** #8694 92A15
- with Nagaev, A. V.** Estimation of the regulating parameter of an epidemic in a random stochastic model. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 108-117, 211-212. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (Robert Roszyski) **51** #15044 92A15
- Estimation of the rate of convergence in limit theorems for the size of an epidemic.** (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 163-172, 213. (Russian) *"Fan" Uzbek. SSR, Tashkent*, 1974. (K. Dietz) **53** #15428 92A15
- Some remarks on the mathematical modelling of epidemics.** (Russian) *Random processes and statistical inference*, No. 5 (Russian), pp. 158-163, 204. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1975. (K. Dietz) **54** #6999 92A15
- with Mirahmedov, Š. A.** Limit distributions in problems with piecewise constant boundary. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **14** (1970), no. 3, 30-37, 96. (Zdzisław Rychlik) **55** #9231 60F05 (60J15)
- The absolute continuity of distributions under transformations in R_1 .** (Russian) *Limit theorems for random processes* (Russian), pp. 113-119, 166. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1977. (E. Lukacs) **56** #9631 60E05
- Properties of distribution of functionals in R_2 .** (Russian) *Limit theorems for random processes* (Russian), pp. 119-128, 166. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1977. (E. Lukacs) **56** #9632 60E05
- V. A.** A certain generalization of the concepts of symmetric continuity and metric differentiability. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 5, 92-100. (W. Smajdor) **45** #2112 26A24
- Symmetric continuity with respect to a set.** (Russian) *Moskov. Gos. Ped. Inst. Učen. Zapiski* **277** (1971), 162-167. (Pavel Kostyrko) **46** #1970 26A15
- The smoothness of functions with respect to a set.** (Russian) *Mat. Zametki* **15** (1974), 431-436. (Pavel Kostyrko) **50** #4853 26A24
- A. G.** Selfadjointness and semiboundedness of a certain second order partial differential operator. (Russian) *Trudy Tomsk. Gos. Univ. 253 Voprosy Mat. Vyp.* **5** (1974), 55-58. (loose errata) (M. M. Skraganov) **55** #889 35P05
- M. L.** Heegaard's diagrams and colored polyhedra. (Russian. English summary) *Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **66** (1976), 180-188, 209. (D. Proiu) **56** #1318 57A10
- A. M.** (with Jaeger, J. C.) ★ An introduction to applied mathematics. Second ed. Clarendon Press, Oxford, 1974. xii + 504 pp. (Editors) **51** #12052 69.00
- M. V.** (with Vavilov, A. A.; Kozlov, Ju. M.; Maksimov, A. D.; Markov, S. I.; Popov, V. V.; Popov, E. P.; Semenko, A. I.; Topčeev, Ju. I.; Fedorov, S. M.; Ballo, E. I.; Hljamov, V. M.; Cvetkov, V. I.) ★ Метод гармонической линеаризации в проектировании нелинейных систем автоматического управления. (Russian) [The method of harmonic linearization in the design of nonlinear automatic control systems] Edited by Ju. M. Topčeev. Nonlinear Automatic Control Systems, Vol. 1. *Izdat. "Mašinostroenie", Moscow*, 1970. 567 pp. (errata insert) (S. P. Bingular) **57** #6589 (EA 53) 93C10
- A. N. G.** See Theory of languages and methods of construction of programming languages. **48** #7682
- A. O. G.** (with Boguslavceva, N. O.) Some sharp estimates for best approximations of even continuous functions with nonnegative Fourier coefficients. (Russian) *Metody i Prilozheniya* **9** (1975), 114-115, 212. (Authors' summary) **58** #1940
- Stark, Göran** Constructing orthogonal curvilinear meshes by solving initial value problems. *Numer. Math.* **28** (1977), no. 1, 25-48. (Gilbert Strang) **55** #13836 65P05
- Composite mesh difference methods for elliptic boundary value problems.** *Numer. Math.* **28** (1977), no. 2, 243-258. (Robert D. Russell) **57** #1923 65N10
- Stark, A.** Approximation methods for the solution of heat conduction problems using Gyarmati's principle. *Ann. Physik* (7) **31** (1974), 53-75. (B. Vujanovic) **52** #4830 80.49
- (with Jeschek, F.; Poppe, H.)** A compactness criterion for the space of almost periodic functions. *Math. Nachr.* **76** (1977), 159-161. (Bolis Basit) **57** #13371 42A84
- Stark, A. E.** A model of assortative mating. *Ann. Human Genetics* **39** (1975/76), no. 4, 455-464. (Edward Pollak) **54** #12247 92A10
- Some estimators of the integer-valued parameter of a Poisson variate.** *J. Amer. Statist. Assoc.* **70** (1975), no. 351, part 1, 685-689. (Rasul A. Khan) **52** #15807 62F10
- Hardy-Weinberg law: asymptotic approach to a generalized form.** *Science* **193** (1976), no. 4258, 1141-1142. (Author's summary) **58** #33160 92A15
- Two generalizations of the Hardy-Weinberg law in population genetics.** (Polish) Translated from the English by W. Kuśś. *Mat. Stos.* (3) **9** (1977), 123-137. (E. Seneta) **58** #9405 92A10
- Stark, Betty Salzberg** Some subgroups of $\Omega(V)$ generated by groups of root type 1. *Illinois J. Math.* **17** (1973), 584-607. (J. E. Humphreys) **48** #434 20G40
- Some subgroups of $\Omega(V)$ generated by groups of root type.** *J. Algebra* **29** (1974), 33-41. (E. A. Connors) **49** #7369 20G40
- Irreducible subgroups of orthogonal groups generated by groups of root type 1.** *Pacific J. Math.* **53** (1974), 611-625. (J. E. Humphreys) **50** #10110 20G40
- Rank 3 subgroups of orthogonal groups.** *Illinois J. Math.* **19** (1975), 116-121. (James C. Pomfret) **51** #13068 20G40
- Another look at Thompson's quadratic pairs.** *J. Algebra* **45** (1977), no. 2, 334-342. (Koichiro Harada) **56** #3116 20D05
- Stark, Eberhard L.** (with Butzer, Paul L.) On a trigonometric convolution operator with kernel having two zeros of simple multiplicity. *Acta Math. Acad. Sci. Hungar.* **20** (1969), 451-461. (From the authors' introduction) **54** #830 42A08
- (with Görlich, Ernst)** Über beste Konstanten und asymptotische Entwicklungen positiver Faltungsintegrale und deren Zusammenhang mit dem Saturationsproblem. *Jber. Deutsch. Math.-Verein.* **72** (1970/71), no. 1, 18-61. (See RZMat 1970 #12 B114) **41A40** (41A60)
- On approximation improvement for trigonometric singular integrals by means of finite oscillation kernels with separated zeros.** (Russian) *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970) (Russian)*, pp. 337-344. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (G. Mühlbach) **51** #3766 41A35 (42A08)
- Nikolskii constants for positive singular integrals of perturbed Fejér-type.** *Linear operators and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1971)*, pp. 348-363. *Internat. Ser. Numer. Math., Vol. 20*, Birkhäuser, Basel, 1972. (M. W. Müller) **55** #6075 41A35 (42A40)
- (with Görlich, Ernst)** A unified approach to three problems on approximation by positive linear operators. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 201-208. *Akadémi Kiadó, Budapest*, 1972. (Ralph L. James) **56** #6226 41A50 (42A08)
- A new method of evaluating the sums of $\sum_{k=1}^n (-1)^{k+1} k^{-2p}$, $p = 1, 2, 3, \dots$ and related series.** *Elem. Math.* **27** (1972), 32-34. (P. H. Diananda) **45** #3996 40A25
- An extension of a theorem of P. P. Korovkin to singular integrals with not necessarily positive kernels.** *Nederl. Akad. Wetensch. Proc. Ser. A 75 = Indag. Math.* **34** (1972), 227-235. (B. Wood) **46** #2316 41A35
- On a generalization of Abel-Poisson's singular integral having kernels of finite oscillation.** *Studia Sci. Math. Hungar.* **7** (1972), 437-449. (B. Muckenhoupt) **48** #11864 41A40
- The complete expansion of the degree of approximation for Fejér means.** (Russian) *Ukrain. Mat. Ž.* **24** (1972), 562-565, 575. (A. Lupas) **47** #2249 42A08 (41A10)
- The complete asymptotic expansion for the supremum of the deviation of functions in Lip 1 from their Abel-Poisson singular integrals.** (Russian) *Mat. Zametki* **13** (1973), 21-28. (L. Berg) **47** #5511 42A24 (41A35)
- $\sum_{k=1}^n k^{-s}$, $s = 2, 3, 4, \dots$, once more.** *Math. Mag.* **47** (1974), 197-202. (F. P. Cass) **50** #5261 40A25
- Eine Substitutionsmethode zur Bestimmung von Nikolskii-Konstanten.** (English summary) *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 215-220. *Reidel, Dordrecht*, 1975. (Tord H. Ganelius) **56** #9147 41A25
- Erzeugung und strukturelle Verknüpfungen von Kernen singulärer Faltungsintegrale.** *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math., Univ. Bonn, Bonn, 1976)*, pp. 390-402. *Springer, Berlin*, 1976. (Author's summary (Zbl 335 #42002)) **58** #29659 41A35
- Inequalities for trigonometric moments and for Fourier coefficients of positive cosine polynomials in approximation.** *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 544-576* (1976), 63-76. (R. A. Askey) **55** #10938 42A04
- (with Becker, Michael)** An extremal inequality for the Fourier coefficients of positive cosine polynomials. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 577-598* (1977), 57-58. (Yung-ming Chen) **56** #12747 42A16
- A bibliography on the approximation of functions by operators of S_{2m} or S_m involving kernels of finite oscillations.** *Linear spaces and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977)*, pp. 629-639. *Internat. Ser. Numer. Math., Vol. 40*, Birkhäuser, Basel, 1978. (J. Szabados) **58** #17664 41A35
- Application of a mean value theorem for integrals to series summation.** *Amer. Math. Monthly* **85** (1978), no. 6, 481-483. (F. Brooks) **57** #16483 26-01
- See also Dissertations.** **54** #7162
- Stark, H. M.** Class-number problems in quadratic fields. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1*, pp. 511-518. *Gauthier-Villars, Paris*, 1971. (E. Grosswald) **54** #7429 12A50 (12A25, 12A70)
- An explanation of some exotic continued fractions found by Brillhart.** *Computers in number theory (Proc. Sci. Res. Council Atlas Sympos. No. 2, Oxford, 1969)*, pp. 21-35.

- Academic Press, London*, 1971. (Morris Newman) 49 #2570 10F20
Recent advances in determining all complex quadratic fields of a given class-number. 1969 *Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969)*, pp. 401-414. *Amer. Math. Soc., Providence, R.I.*, 1971. (T. Metsänkylä) 47 #4968 12A25 (12A50)
- Some recent transcendence results. *Seminar on Modern Methods in Number Theory (Inst. Statist. Math., Tokyo, 1971)*, Paper No. 7, 7 pp. *Inst. Statist. Math., Tokyo*, 1971. (S. V. Kotov) 51 #12730 10F35
- A transcendence theorem for class-number problems. *Ann. of Math. (2)* 94 (1971), 153-173. (T. Lepistö) 45 #6767 10F35
(with Baker, Alan) On a fundamental inequality in number theory. *Ann. of Math. (2)* 94 (1971), 190-199. (P. Szűsz) 46 #1716 10F25
- Recent transcendence results. *Proceedings of the 1972 Number Theory Conference (Univ. Colorado, Boulder, Colo.)*, pp. 225-227. *Univ. Colorado, Boulder, Colo.*, 1972. (Maurice Mignotte) 52 #13667 10F35
- A transcendence theorem for class-number problems. II. *Ann. of Math. (2)* 96 (1972), 174-209. (T. Lepistö) 46 #8983 10F35 (12A25, 12A50)
- On the Riemann hypothesis in hyperelliptic function fields. *Analytic number theory (Proc. Sympos. Pure Math., Vol. XXIV, St. Louis Univ., St. Louis, Mo., 1972)*, pp. 285-302. *Amer. Math. Soc., Providence, R.I.*, 1973. (Clifford S. Queen) 48 #11119 14G13 (10B45, 12A90)
- Further advances in the theory of linear forms in logarithms. *Diophantine approximation and its applications (Proc. Conf., Washington, D.C., 1972)*, pp. 255-293. *Academic Press, New York*, 1973. (A. Baker) 50 #4504 10F35
- Class-numbers of complex quadratic fields. *Modular functions of one variable, I (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 153-174. *Lecture Notes in Mathematics, Vol. 320, Springer, Berlin*, 1973. (E. Grosswald) 49 #8965 12A50 (10D25, 10H10)
- Effective estimates of solutions of some Diophantine equations. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday, III. *Acta Arith.* 24 (1973), 251-259. (J. H. H. Chalk) 49 #4931 10B45
- Some effective cases of the Brauer-Siegel theorem. *Invent. Math.* 23 (1974), 135-152. (W. Narkiewicz) 49 #7218 10H10 (12A50, 12A70)
- L-functions at $s=1$. II. Artin L-functions with rational characters. *Advances in Math.* 17 (1975), no. 1, 60-92. (O. H. Körner) 52 #3082 10H10 (12A70)
- The analytic theory of algebraic numbers. *Bull. Amer. Math. Soc.* 81 (1975), no. 6, 961-972. (E. Grosswald) 56 #2961 12A50 (12-02)
- On complex quadratic fields with class-number two. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his seventieth birthday. *Math. Comp.* 29 (1975), 289-302. (Matti Jutila) 51 #5548 12A25 (12A50)
- L-functions at $s=1$. III. Totally real fields and Hilbert's twelfth problem. *Advances in Math.* 22 (1976), no. 1, 64-84. (O. H. Körner) 55 #10427 12A70 (10H10)
- The genus theory of number fields. *Comm. Pure Appl. Math.* 29 (1976), no. 6, 805-811. (Larry J. Goldstein) 54 #10206 12A65 (12A70)
- Class fields for real quadratic fields and L-series at 1. *Algebraic number fields: L-functions and Galois properties (Proc. Sympos., Univ. Durham, Durham, 1975)*, pp. 355-375. *Academic Press, London*, 1977. (V. V. Sokurov) 56 #11963 12A70 (12A65)
- (with Serre, Jean-Pierre) Modular forms of weight $1/2$. *Modular functions of one variable, VI (Proc. Second Internat. Conf., Univ. Bonn, Bonn, 1976)*, pp. 27-67. *Lecture Notes in Math., Vol. 627, Springer, Berlin*, 1977. (Larry J. Goldstein) 57 #12400 10D15
- Class fields and modular forms of weight one. *Modular functions of one variable, V (Proc. Second Internat. Conf., Univ. Bonn, Bonn, 1976)*, pp. 277-287. *Lecture Notes in Math., Vol. 601, Springer, Berlin*, 1977. (Judith Sunley) 56 #8539 12A70 (10D15)
- Hilbert's twelfth problem and L-series. *Bull. Amer. Math. Soc.* 83 (1977), no. 5, 1072-1074. (Helmut Koch) 56 #314 12A65
- See also *Zahlentheorie*, 50 #12875
- Stark, Henry** An extension of the Hilbert transform product theorem. *Proc. IEEE* 59 (1971), 1359-1360. (J. Horváth) 48 #11941 44A30
- Stark, K.** See *Operationsforschung*, 57 #4990c
- Stark, Lawrence** (with Hung, George) The kernel identification method (1910-1977). Review of theory, calculation, application, and interpretation. *Math. Biosci.* 37 (1977), no. 3-4, 135-190. (Authors' summary) 58 #33087 92A05
- Stark, Marcell** Hugo Steinhaus as a teacher during his Lwów period. (Polish) Papers presented at a Conference in Honor of Hugo Steinhaus (Wrocław, 1972). *Wiadom. Mat.* (2) 17, 77-84 (1973). (Editors) 52 #13234 01A70
- See also *Courant, Richard*, (See Zbl 293 #01031); *Obituary: Stark, Marcell*, 49 #7109; *Bibliography: Stark, Marcell*, 49 #8803; *Sierpiński, Waclaw*, 54 #2405; *Sierpiński, Waclaw; et al.*, 54 #2407 and *Schauder, Juliusz Pawel*, 58 #10260
- Stark, R. H.** (with Adams, J. M.; Phelan, J. M.) A note on the Hecht-Ullman characterization of nonreducible flow graphs. *SIAM J. Comput.* 3 (1974), 222-223. (W.-K. Chen) 55 #160 05C20 (94A20)
- Stark, R. M.** On zero-degree stochastic geometric programs. *J. Optimization Theory Appl.* 23 (1977), no. 1, 167-182. (G. Tintner) 57 #5096 90C15
- Stark, Valter J. E.** A generalized quadrature formula for Cauchy integrals. *AIAA J.* 9 (1971), 1854-1855. (A. M. Cohen) 45 #4639 65D30
- Starke, Peter H.** (with Thiele, H.) Über asynchrone stochastische Automaten. *Automatentheorie und formale Sprachen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 129-142. *Bibliographisches Inst., Mannheim*, 1970. (P. Turakainen) 48 #8150 94A35
- Über Minima von nicht-deterministischen Automaten. (Russian, English and French summaries) *Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* 19 (1970), 663-664. (I. Peák) 48 #1834 94A35
- Einige Bemerkungen über asynchrone stochastische Automaten. *Ann. Acad. Sci. Fenn. Ser. A I* No. 491 (1971), 21 pp. (P. Turakainen) 46 #5086 94A35
- Über die Transformation zweistufig unendlicher Folgen durch determinierte Automaten. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 7 (1971), 425-435. (W. Vollmerhaus) 48 #1829 94A30
- ★ Abstract automata. Translated from the German by I. Shepherd. *North-Holland Publishing Co., Amsterdam-London; American Elsevier Publishing Co., Inc., New York*, 1972. 419 pp. (Editors) 49 #8766 94A30 (94A35)
- Über die Experimentmengen determinierter Automaten. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 8 (1972), 67-76. (David C. 47 #6402 94A30
- (with Müntefering, Peter) Über reduzierbare Ereignisse. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 8 (1972), 187-196. (A. summary) 57 #19183 94A30
- Allgemeine Probleme und Methoden in der Automatentheorie. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 8 (1972), 489-500. (Author's summary) 47 #6403 94A30
- Über Finalexperimente an determinierten Automaten. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 8 (1972), 617-622. (A. summary) 57 #19188 94A30
- Über die Minimierung von Automaten mit halbgeordnetem Ausgabealphabet. (Russian, English and French summaries) *Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* 21 (1972), 531-533. (A. Salomaa) 48 #10719 94A30 (02F10, 68A25)
- On the sequential relations of time-variant automata. *Mathematical foundations of computer science (Proc. Sympos. and Summer School, Širbbské Pleso, 1973)*, pp. 163-171. *Math. Inst., Slovak Acad. Sci., Bratislava*, 1973. (Itsuo Takanami) 53 #2031 94A30
- (with Thiele, H.) The experiment sets of nondeterministic automata. (Russian summary) *Vychisl. Tehn. (Riga)* 1973, no. 6, 7-13. (W. Wechler) 49 #7043 94A30
- (with Dauscha, Wolfgang; Nürnberg, Gudrun; Winkler, Klaus Dieter) Theorie determinierter zeitvariabler Automaten. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 9 (1973), 455-511. (A. Salomaa) 50 #16149 94A25
- Über diagnostische Strategien an determinierten Automaten. *Z. Math. Logik Grundlagen Math.* 19 (1973), 271-276. (A. Ádám) 52 #5387 02F10 (94A25)
- On diagnosing experiments with nondeterministic automata with final states. (Russian and German summaries) *Elektron. Informationsverarbeitung. Kybernetik* 10 (1974), 471-480. (Itsuo Takanami) 53 #15594 94A30
- On the representability of relations by deterministic and nondeterministic multi-tape automata. *Mathematical foundations of computer science 1975 (Fourth Sympos., Mariánské Lázně, 1975)*, pp. 114-124. *Lecture Notes in Comput. Sci., Vol. 32, Springer, Berlin*, 1975. (Siegmund Gerber) 53 #9722 68A25 (94A30, 94A25)
- Application of two-tape-automata to analysis and synthesis of non-deterministic sequential machines. (English, Czech and Russian summaries) *Kybernetika. Věd. Spisů Vysoké. Učení Tech. v Brně B-56* (1975), 189-201. (Edward T. 52 #16906 94A25 (68A25, 94A30)
- Über die Darstellbarkeit von Relationen in Mehrbandautomaten. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 12 (1976), no. 61-81. (Cristian Calude) 56 #7331 68A25 (94A25)
- On the diagonals of n -regular relations. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 12 (1976), no. 6, 281-288. (A. A. Iskander) 54 #11721 (E 57 #8163) 68A25 (68A30)
- Closedness properties and decision problems for finite multi-tape automata. *Kybernetika (Prague)* 12 (1976), no. 2, 61-75. (Author's summary) 55 #11721 68A25 (02F15)
- Analyse und Synthese von asynchronen ND-Automaten. *Theoret. Comput. Sci.* (1976/77), no. 2, 261-266. (I. Peák) 55 #12366 94A30
- Entscheidungsprobleme für autonome Mehrbandautomaten. *Z. Math. Logik Grundlagen Math.* 22 (1976), no. 2, 131-140. (Zbl 328 #02020) 58 #177 (68A25)
- Correction to: "On the diagonals of n -regular relations" (*Elektron. Informationsverarbeitung. Kybernetik* 12 (1976), no. 6, 281-288). *Elektron. Informationsverarbeitung. Kybernetik* 13 (1977), no. 3, 147-148. (Editors) 57 #8163 68A25
- Closedness properties of multihead languages. *Found. Control Engrg.* 2 (1977), 51-63. (D. Bollman) 57 #11199 68A30
- Multitape automata and languages. Proceedings of a Seminar "Development of a General Theory of Automata", Riga, 1976. *Tanulmányok—MTA Számítástech. Automat. Kutató Int. Budapest No. 63* (1977), 13-26. (From the summary) 57 #1818 68A25
- See also *Sitzungsberichte: Plenums und der Klasse der Akademie der Wissenschaften der DDR*, 55 #2447
- Starkman, V. S.** See *Gries, David*, 53 #7140
- Starkov, Ju. M.** (with Babkin, V. F.) Combinatorial method of universal coding of discrete stationary sources. *Second International Symposium on Information Theory (Tsahkadsor, 1971)*, pp. 249-256. *Akadémiai Kiadó, Budapest*, 1973. (See RZMA 57 #8 V435) 94A15 (94A10)
- "Accurate" coding of discrete sources. *Proceedings of the IEEE-USSR Workshop on Information Theory (Moscow, 1975)*, pp. 192-211. *Inst. Electr. Engrs., New York*, 1976. (J. J. Stiffler) 58 #9804 94A15
- Coding of discrete sources with unknown statistics. *Topics in information theory (Second Colloq., Keszthely, 1975)*, pp. 559-574. *Colloq. Math. Soc. János Bolyai, V. North-Holland, Amsterdam*, 1977. (Lee D. Davison) 58 #26547 94A15
- See also *Symposium: Information Theory*, 50 #9416
- Starkov, M. A.** Grid functions with double orthogonality. (Russian) *Avtometrija* 1976, 5, 41-48, 112. (Author's introduction) 50 #16142 94A20
- (with Trofimov, O. E.; Frizen, D. G.) An automaton that counts planar objects. *Avtomat. i Telemekh.* 1976, no. 6, 134-140. (Russian. English summary); translated. *Automat. Remote Control* 37 (1976), no. 6, part 2, 927-933. (Hidemitsu Ogawa) 55 #7634 94A30
- Starkov, V. M.** The solution of biharmonic problems of elasticity theory for piezoelectric homogeneous doubly connected media with interface on the level curve. (Ukrainian and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* 564-571, 575. (J. L. Nowinski) 45 #9571 73.30
- Starkov, V. N.** See *Questions in applied mathematics*, 48 #5448
- Starkov, V. V.** A disproof of a certain conjecture on subordination for starlike functions. (Russian) *Dokl. Akad. Nauk SSSR* 214 (1974), 52-55. (R. McLaughlin) 49 #3030A32

- The subclasses S_n of univalent functions. (Russian. English summary) *Vestnik Leningrad. Univ.* 1976, no. 7 *Mat. Meh. Astronom. vyp.* 2, 82-87, 163. (L. A. Aksent'ev) #12254 30A36
- C. Frank (with Grizzle, James E.; Koch, Gary G.) Analysis of categorical data linear models. (French summary) *Biometrics* 25 (1969), no. 3, 489-504. (Authors' summary) 52 #2041 62H20
- K. B. (with Volodin, B. G.; Ganin, M. P.; Diner, I. Ja.; Komarov, L. B.; Svesnikov, A. A.) ★Сборник задач по теории вероятностей, математической статистике и теории случайных функций. (Russian) [A collection of problems on probability theory, mathematical statistics and the theory of random functions] Second ed., augmented. Edited by A. A. Svesnikov. *Izdat. "Nauka", Moscow*, 1970. 656 pp. (Editors) 50 #5871 60-01 (62-01)
- (with Komarnickaja, O. I.) ★Применение теории вероятностей в инженерных и экономических расчетах. (Russian) [Application of probability theory in calculations engineering and economics] *Izdat. Leningrad. Univ., Leningrad*, 1973. 73 pp. (Editors) #11682 62N05
- (with Diner, I. Ja.; Ganin, M. P.; Komarov, L. B.; Svesnikov, A. A.; Volodin, B. A.) ★Rachunek prawdopodobieństwa w zadaniach i problemach. (Polish) [Probability theory in problems and exercises] Translated from the Russian by Lech T. Kubik. *Państwowe Wydawnictwo Naukowe, Warsaw*, 1975. 531 pp. (Editors) 56 #6768 01
- (with Komarnickaja, O. I.) Control of batch mass-production processes. *Avtomat. i Meh.* 1976, no. 6, 58-62 (Russian. English summary); translated as *Automat. Remote Control* 37 (1976), no. 6, part 1, 861-865. (Authors' summary) 56 #7923 90B30
- ec, S. M. An algorithm for finding the greatest internally stable set of a graph. (Russian) *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1972, no. 5, 135-140. (J. Štulc [Zbl #05127]) 51 #10170 05C99 (94A30)
- The largest internally stable set of a graph. (Russian. English summary insert) *Teoriya i Prikladnaya Kibernetika (Kiev)* 1975, no. 2, 61-63. (B. Zelinka) 53 #10650 05C35
- skii, A. A. (with Krivčenko, V. D.) A note apropos infinitesimal operators of the representations of the group $O^+(4)$. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1971, no. 4-44. (K. Veselič) 45 #8181 81A7
- (with Lukáš, V. N.; Novikov, I. D.) Particle creation in the vortex cosmological model. *Ž. Eksper. Teoret. Fiz.* 69 (1975), no. 5, 1484-1500 (Russian. English summary); translated as *Soviet Physics JETP* 42 (1975), no. 5, 757-765. (P. C. Vaidya) 54 #6880 5
- bee, N. A. Relationships for the number of tunings of multi-function logical circuits. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1972, no. 4, 145-153 (Russian); translated as *Engrg. Cybernetics* 10 (1972), no. 4, 690-697. (B. Hazeltine) 48 #5736 20
- (with Varšavskii, V. I.; Rozenbljum, L. Ja.) The average time of formation of carries in aperiodic counter and adder circuits. (Russian) *Avtomat. i Vyčisl. Tehn.* (Moscow) 1975, no. 3, 88-90. (See RŽMat 1975 #10 V543) 94A20
- (with Astanovskii, A. G.; Varšavskii, V. I.; Marahovskii, V. B.; Pesčanskii, V. A.; Rozenbljum, L. Ja.; Finkel'shtein, R. L.; Cirilin, B. S.) ★Аперидические автоматы. [Aperiodic automata] Теоретические Основы Технической Кибернетики. [Theoretical Foundations of Engineering Cybernetics] *Izdat. "Nauka", Moscow*, 1975. 423 pp. (J. Černý) 58 #33599 94A30 (68A25, 68-02, 94A20)
- jaev, S. F. Curves with swerve of bounded variation on surfaces that are representable by a difference of convex functions. (Russian) *Ukrain. Geometr. Sb. No. 7* (1979), 141-152, 186 (1970). (Z. Nádeník) 48 #2952 53C45
- oms'kii, L. O. The approximation of the solutions of the Dirichlet problem in a domain with gaps. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Matematika* 1971, no. 5, 17-21, 87. (Vojislav Marić) 47 #3695 31A25 (45E99)
- The solution of an integral equation of the first kind with a logarithmic kernel and the Dirichlet problem in the plane with a gap. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* 1971, no. 5, 22-25, 88. (Vojislav Marić) 47 #3696 25 (45E99)
- Properties of the solution of a certain Dirichlet problem on the plane with cuts. (Russian) *Differentsial'nye Uravnenija* 13 (1977), no. 4, 693-704, 773. (D. M. Ėidus) #1583 35J25
- ec, P. P. (with Prusov, Ė. O.) A certain solution of the plane problem of the dynamics of an ideal incompressible fluid for noncircular domains. (Russian) *Vesci d. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1972, no. 6, 111-114, 139. (L. Dragoš) #10248 76J35
- skii, B. G. (with Lumel'skii, Ja. P.) On the question of the completeness of plans of a certain random walk scheme. (Russian) *Mat. Zametki* 17 (1975), no. 5, 783-788. (I. Romanovskii) 56 #1467 60J15 (62L12)
- enko, V. I. (with Glasko, V. B.; Guščin, G. V.) The application of A. N. Tihonov's regularization method to the solution of nonlinear systems of equations. (Russian) *Ž. Vysš. Mat. i Mat. Fiz.* 16 (1976), no. 2, 283-292, 539. (N. N. Janenko) 55 #4711 43D30
- (with Oganessian, S. M.) Iteration methods for the solution of ill-posed problems. (Russian) *Dokl. Akad. Nauk SSSR* 234 (1977), no. 2, 312-315. (A. V. Džiškariani) #4152 65J05 (46G99)
- (with Oganessian, S. M.) A regularizing iteration process that is based on A. N. Tihonov's parametric functional. (Russian) *Dokl. Akad. Nauk SSSR* 238 (1978), no. 2, 280-280. (Boro Döring) 58 #13693 65J05 (47A50)
- on, A. I. (with Sitnikov, V. M.) Finite groups with decomposable centralizers of involutions. (Russian) *Ural. Gos. Univ. Mat. Zap.* 7 (1969/70), no. 3, 200-207. (N. Ito) #370 12D99
- On Frobenius groups. (Russian) *Ukrain. Mat. Ž.* 23 (1971), 629-639. (H. Werdteger) 46 #9172 20F15
- (with Muhin, Ju. N.) Twelfth All-Union Algebraic Colloquium. (Russian) *Uspehi Matem. Nauk* 29 (1974), no. 3(177), 251-255. (Editors) 52 #7750 00A10
- (with Kabanov, V. V.) Finite groups in which the Sylow 2-subgroup of the centralizer of a certain involution is of order 16. (Russian) *Mat. Zametki* 18 (1975), no. 6, 69-876. (V. M. Busarkin) 53 #3101 20D05
- (with Kabanov, V. V.; Mahnev, A. A.) Finite groups with normal intersections of Sylow 2-subgroups. (Russian) *Algebra i Logika* 15 (1976), no. 6, 655-659, 744. (S. S. Levišenko) 58 #5915 20D20 (20D05)
- (with Odincov, V. A.) Finite groups with 9 classes of conjugate elements. (Russian) *Ural. Gos. Univ. Mat. Zap.* 10 no. 1, Issled. Sovremen. Algebre, 114-134, 152 (1976). (Sergei A. Syskin) 57 #447 20D05
- See also All-Union Colloquium: Algebra, 58 #15767a and All-Union Colloquium: Algebra, 58 #15767b
- Starostina, L. F. (with Vorob'ev, V. N.; Efimov, A. B.; Konšina, E. V.) The Green's function of a three-dimensional Riemann space with two parallel branch curves. (Russian) *Dokl. Akad. Nauk SSR* 229 (1976), no. 4, 787-789. (G. Albinus) 54 #2997 31B99
- Starowiecki, Marcel Condition suffisante de stabilité asymptotique pour les équations récurrentes vectorielles. (English and Russian summaries) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* 20 (1972), 69-71. (Author's summary) 56 #11320 93D10
- Domaines de commandabilité des processus échantillonnés non linéaires. (Polish and Russian summaries) *Podstawy Sterowania* 4 (1974), 101-113. (A. Blaquiére) 51 #11254 49E15 (93B05)
- (with Diverrez, J. C.) Application de la théorie des jeux à l'analyse des données et aux problèmes d'aggrégation. (English and Russian summaries) *Systems Sci.* 3 (1977), no. 2, 119-141. (Authors' summary) 58 #26114 90D40
- Staroverov, A. N. See Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, 48 #8022
- Staroverov, O. V. Interval prediction of the structure of a population. (Russian) *Ėkonom. i Mat. Metody* 12 (1976), no. 1, 56-71. (Robert Barteszyński) 56 #4917 92A15
- (with Aivazjan, S. A.; Bezaeva, Z. I.) ★Классификация многомерных наблюдений. (Russian) [Classification of multivariate observations] *Izdat. "Statistika", Moscow*, 1974. 240 pp. (László Györfi) 53 #11888 62H30
- On models of demographic prediction. (Russian) *Ėkonom. i Mat. Metody* 11 (1975), no. 1, 62-73. (Not reviewed) 92A15
- A reproduction of the structure of population and marriages. (Russian) *Ėkonom. i Mat. Metody* 13 (1977), no. 1, 72-82. (K. Dietz) 56 #17919 90A15
- Starovoitenko, Ž. V. - (with Fleišman, N. P.) Elastic equilibrium of a plate with a reinforced circular edge. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Fiz., Him. i Meh.-Mat.* 1968, 182-186. (B. A. Bondarenko) 49 #4369 73J30
- Starr, James H. (with Bowman, V. Joseph, Jr.) Partial orderings in implicit enumeration. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 99-116. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (See Zbl 373 #06001; MR 56 #2376) 90C10
- Starr, Martin K. (with Tapiero, Charles S.) Linear breakeven analysis under risk. *Operational Res. Quart.* 26 (1975), no. 4, part 2, 847-856. (Hans Bühlmann) 54 #6926 90B30
- Starr, Norman (with Woodroffe, Michael) Further remarks on sequential estimation: The exponential case. *Ann. Math. Statist.* 43 (1972), 1147-1154. (P. K. Bhattacharya) 47 #1223 62L12 (62L15, 65C05)
- How to win a war if you must: optimal stopping based on success runs. *Ann. Math. Statist.* 43 (1972), 1884-1893. (Adhir K. Basu) 50 #3491 62L15
- Optimal and adaptive stopping based on capture times. *J. Appl. Probability* 11 (1974), 294-301. (M. E. Thompson) 51 #7196 62L15
- (with Woodroffe, Michael) Approximations in large sample ranking problems. *Sankhyā Ser. B* 36 (1974), no. 4, 400-405. (Joseph A. Yahav) 53 #9476 62F07
- (with Sobel, Milton) Selecting the coin with the greatest bias. *Sankhyā Ser. A* 37 (1975), no. 2, 197-210. (Joseph A. Yahav) 55 #9374 62F07
- (with Wardrop, Robert L.; Woodroffe, Michael) Estimating a mean from delayed observations. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 35 (1976), no. 2, 103-113. (Joseph A. Yahav) 53 #11909 62L12 (62F15)
- Starr, Norton Majorizing operators between L^p spaces and an operator extension of Lebesgue's dominated convergence theorem. *Math. Scand.* 28 (1971), 91-104. (S. Goldberg) 46 #7960 47B99 (46E30)
- Starr, Ross M. The price of money in a pure exchange monetary economy with taxation. *Econometrica* 42 (1974), 45-54. (Alexander M. Rubinov) 54 #6908 90A15
- (with Ostroy, Joseph M.) Money and the decentralization of exchange. *Econometrica* 42 (1974), 1093-1113. (Authors' summary) 56 #10832 90A15
- Decentralized nonmonetary trade. *Econometrica* 44 (1976), no. 5, 1087-1089. (Edward Thorp) 56 #7876 90A15
- Starrett, David A. von Neumann rays and golden rules: an integrated view of intertemporal production models. *Contributions to the von Neumann growth model (Proc. Conf., Inst. Advanced Studies, Vienna, 1970)*, pp. 121-127. *Zeitschrift für Nationalökonomie, Supplementum 1*, Springer, New York, 1971. (Georg Bol) 52 #2547 90A15
- Fundamental nonconvexities in the theory of externalities. *J. Econom. Theory* 4 (1972), no. 2, 180-199. 56 #7877 90A15
- (with Dasgupta, Partha; Sen, Amartya) Notes on the measurement of inequality. *J. Econom. Theory* 6 (1973), no. 2, 180-187. (From the authors' introduction) 56 #7823 90A15
- Principles of optimal location in a large homogeneous area. *J. Econom. Theory* 9 (1974), no. 4, 418-448. (Diethard Pallaschke) 58 #9156 90A15
- (with Spence, Michael) Most rapid approach paths in accumulation problems. *Internat. Econom. Rev.* 16 (1975), no. 2, 388-403. (Colin W. Clark) 53 #7390 90A15 (93C05)
- Measuring returns to scale in the aggregate, and the scale effect of public goods. *Econometrica* 45 (1977), no. 6, 1439-1455. (Amos Katz) 58 #15071 90A15
- Market allocations of location choice in a model with free mobility. *J. Econom. Theory* 17 (1978), no. 1, 21-37. (John Roberts) 58 #15072 90A15
- Starshinskij, V. M. See Staržinskii, V. M.
- Staršinoва, L. P. (with Golovačik, P. I.) The branching of the solutions of nonlinear ordinary differential equations with several parameters. (Russian) *Differential and integral equations*, No. 1 (Russian), pp. 28-36. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (G. Vainikko) 52 #907 34C30
- (with Golovačik, P. I.) The solution of a boundary value problem for a certain class of ordinary nonlinear differential equations with a small parameter. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 219-233, 314. *Irkutsk. Gos. Univ.*,

- Irkutsk, 1973. (Authors' summary) 57 #767 34B15
(with Golovačik, P. I.) The solution of a boundary value problem for a certain system of ordinary nonlinear differential equations with small parameters. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 234-242, 314. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Authors' summary) 57 #768 34B15
- Staruhina, E. N. (with Muhin, Ju. N.) Connected groups of finite rank. (Russian) *Ural. Gos. Univ. Mat. Zap.* 8 (1972), no. 3, 94-99, 141 (1973). (H. Salzmann) 48 #4192 22D05
(with Muhin, Ju. N.) A certain finiteness condition in topological groups. (Russian) *Sibirsk. Mat. Ž.* 15 (1974), 562-569, 701. (E. Porada) 50 #10097 20F30 (22A05)
(with Muhin, Ju. N.) Groups of finite rank. (Russian) *Ural. Gos. Univ. Mat. Zap.* 9 no. 1, 56-60, 142 (1974). (Helmut Boseck) 52 #10946 22D05
Topological groups with a coatomic lattice of closed subgroups. (Russian) *Ural. Gos. Univ. Mat. Zap.* 10 (1977), no. 3 *Issled. po Sovremen. Algebre*, 173-190, 218-219. (K. A. Ross) 57 #12768 22D05
- Starun, I. I. Certain properties of linear differential systems. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 677-682, 718. (C. Olech) 51 #6049 34C20
Integration of a certain two-dimensional system with a turning point. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 6, 838-841, 863. (Vojislav Marić) 55 #3453 34E20
Asymptotic representation of the solutions of linear differential systems that contain a small parameter. (Russian) *Ukrain. Mat. Ž.* 30 (1978), no. 2, 266-270, 285. (W. S. Loud) 58 #11728 34E15
- Staruszkiewicz, Andrzej (with Heller, Michał) A physicist's view on the polemics between Leibniz and Clarke. *Organon* No. 11 (1975), 205-213. (Editors) 58 #10043 01A45 (01A60)
On two kinds of spinors. *Acta Phys. Polon. B* 7 (1976), no. 8, 557-565. (H. A. Buchdahl) 54 #11206 53A50 (83.53)
Generally covariant definition of positive frequency solutions of the wave equation for massless particles. *Acta Phys. Polon. B* 8 (1977), no. 5, 325-332. (George Leibbrandt) 56 #2178 83.53
(with Zalewski, K.) Reduced mass for relativistic quantum-mechanical problems. *Acta Phys. Polon. B* 8 (1977), no. 10, 815-817. (Pierre C. Sabatier) 57 #15003 81.31
- Starzinski, Oskar Estimation of the elements of the Leont'ev matrix. (Polish. Russian and English summaries) *Przegląd Statyst.* 19 (1972), 357-362. (I. I. Kotlarski) 47 #6050 62P20
Econometric models of economic growth in regional planning. (Polish. Russian and English summaries) Statistical-mathematical methods in economics. *Zeszyty Nauk. Szkoły Główn. Planowania i Statyst.* No. 86 (1972), 31-51. (Vladimir Strnad) 52 #7494 90A15
The stability of the elements of the Leontief matrix, and their conditional estimation. (Polish. Russian and English summaries) *Przegląd Statyst.* 21 (1974), 577-582. (I. I. Kotlarski) 54 #4028 62P20
An econometric input-output model for correlated equations. (Polish. Russian and English summaries) *Przegląd Statyst.* 23 (1976), no. 1, 99-106. (Author's summary) 57 #18774 90A15
Supplementary conditions in an econometric input-output model. (Polish. Russian and English summaries) *Przegląd Statyst.* 23 (1976), no. 2, 197-202. (From the author's summary) 55 #1693 62P20 (90C20)
See also Statistical-mathematical methods in economics, 50 #12147
- Starzinski, V. M. One variation of a method for determining periodic solutions. *Inż. Ž. Meh. Toerd. Tela* 1968, no. 6, 46-50 (Russian); translated as *Mechanics of Solids* 3 (1968), no. 6, 41-45. (A. C. Garibaldi) 48 #3329 70.34
One of the normal forms in the theory of nonlinear oscillations. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 26 (1971), no. 6, 112-118. (E. Leimanis) 45 #5491 34C20
Einige Probleme nichtlinearer Schwingungen. (English and Russian summaries) *Z. Angew. Math. Mech.* 51 (1971), 455-469. (V. M. Popov) 46 #451 34C15
(with Jakubovič, V. A.) ★Линейные дифференциальные уравнения с периодическими коэффициентами и их приложения. (Russian) [Linear differential equations with periodic coefficients and their applications] *Izdat. "Nauka", Moscow*, 1972, 718 pp. (Š. Schwabik) 51 #993 34Cxx (34A30)
Normal forms of fourth-order nonlinear oscillations. *Izv. Akad. Nauk SSSR Meh. Toerd. Tela* 1972, 5-13 (Russian); translated as *Mechanics of Solids* 7 (1972), no. 1, 1-7 (1973). (A. C. Garibaldi) 50 #11901 70.34
Certain methods in nonlinear oscillations (theory and applications). (Russian. Polish and English summaries) *Nonlinear vibration problems*, No. 14 (Proc. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part I), pp. 329-340. PWN-Polish Sci. Publ., Warsaw, 1973. (Author's summary) 56 #8979 34C15
Some applications of normal forms in nonlinear oscillations. (Russian. Bulgarian and English summaries) *B'lgar. Akad. Nauk. Izv. Mat. Inst.* 15 (1974), 285-290. (D. Bobrowski) 52 #6103 34C20
On oscillations in third-order systems when the linear approximation is neutral. *Izv. Akad. Nauk SSSR Meh. Toerd. Tela* 1974, 21-27 (Russian); translated as *Mechanics of Solids* 9 (1974), no. 5, 18-24. (C. Carton-Lebrun) 51 #4773 70.34 (34A05)
(with Jakubovič, V. A.) ★Linear differential equations with periodic coefficients. I, 2. Translated from Russian by D. Louvish. Halsted Press [John Wiley & Sons] New York-Toronto, Ont.; Israel Program for Scientific Translations, Jerusalem-London, 1975. Vol. 1: xii + 386 pp.; Vol. 2: xii + pp. 387-839. (Editors) 51 #994 34Cxx (34A30)
Oscillations in essentially nonlinear analytic autonomous systems. (Russian) *Problems in analytical mechanics, stability and control theories (Second Četaev Conf., Kazan, 1973)* (Russian), pp. 293-300, 342. *Izdat. "Nauka", Moscow*, 1975. (D. Izjumova) 56 #13863 70.34 (34C15)
Computation of normal forms. (Russian) *Mat. Fiz. Vyp.* 20 (1976), 64-71, 113. (L. Reizis) 56 #3412 34C20 (58F99)
★Прикладные методы нелинейных колебаний. (Russian) [Applied methods for nonlinear oscillations] *Izdat. "Nauka", Moscow*, 1977. 255 pp. (Editors) 58 #14067 70.34 (34C15)
Oscillations in systems that are close to conservative. (Russian) *Mat. Fiz. Vyp.* 22 (1977), 40-47, 124. (G. V. Hmelevskaja-Plotnikova) 58 #28856 34C15 (93C10)
See also Proceedings: International Conference on Nonlinear Oscillations, 47 #10124
- Starzyk, Janusz The complementation of the columns of a constant-row structural number to a factorizable number. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* 24 (1975), no. 2, 237-244. (Author's summary) 53 #7641 94A20 (05C05)
(with Kończykowska, Agnieszka) The determination of the structural number of a partitioned graph. I. General dependences. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* 24 (1975), no. 2, 245-252. (Authors' summary) 53 #7642 94A20 (05C05)
(with Kończykowska, Agnieszka) The determination of the structural number of a partitioned graph. II. Dichotomy. Determination of k -trees. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* 24 (1975), no. 2, 253-262. (Authors' summary) 53 #7631 94A20 (05C05, 68A10)
A new method for determining the complete trees of a pair of conjugate graphs. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* 26 (1977/78), no. 1, 41-46. (Author's summary) 56 #18166 94A20
An application of the method of controlled expansions to the topological analysis of circuits. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* 26 (1977/78), no. 1, 47-58. (Author's summary) 56 #18167 94A20
- Stas, Włodzimierz (with Wiertelak, Kazimierz) Some estimates in the theory of Dedekind zeta-functions. *Acta Arith.* 23 (1973), 127-135. (O. H. Körner) 49 #2668 12H25
(with Wiertelak, Kazimierz) On some estimates in the theory of $\zeta(s, x)$ -functions. *Acta Arith.* 26 (1974/75), no. 3, 293-301. (E. Grosswald) 51 #12738 10H10 (12A70)
(with Wiertelak, Kazimierz) Some estimates in the theory of functions represented by Dirichlet's series. *Funct. Approximatio Comment. Math.* 1 (1974), 107-111. (Mikolás) 52 #10627 10H25 (30A16)
(with Wiertelak, Kazimierz) Some estimates connected with the distribution of primes in arithmetical progressions. I. *Topics in number theory (Proc. Colloq., Debrecen, 1974)*, pp. 373-382. *Colloq. Math. Soc. János Bolyai*, Vol. 13, North-Holland, Amsterdam, 1976. (J. W. Porter) 55 #12665 10H20
(with Wiertelak, Kazimierz) Further applications of Turán's methods to the distribution of prime ideals in ideal classes mod f . *Acta Arith.* 31 (1976), no. 2, 153-163. (E. Grosswald) 55 #2807 10H20 (12A70)
(with Wiertelak, Kazimierz) An equivalence in ideal classes of algebraic number fields. *Funct. Approximatio Comment. Math.* 2 (1976), 219-232. (Stephen Harris) 56 #15614 12A70
(with Wiertelak, Kazimierz) A comparison of certain remainders connected with primes in arithmetical progressions. *Funct. Approximatio Comment. Math.* 3 (1976), 197-204. (Larry J. Goldstein) 56 #5465 10H10
On the order of Dedekind zeta-functions in the critical strip. *Funct. Approximatio Comment. Math.* 4 (1976), 19-26. (Larry J. Goldstein) 55 #12656 10H10
(with Wiertelak, Kazimierz) A comparison of certain remainders connected with prime ideals in ideal classes mod f . *Funct. Approximatio Comment. Math.* 4 (1976), 97-107. (E. Grosswald) 56 #281 10H15 (12A50, 12A70, 10H10)
- Stasenko, R. V. (with Kostenko, V. G.) Classification of four-parameter groups of transformations. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* 1973, no. 8, 57-61, 148. (Nicola Luca) 53 #8537 34A25 (22E05)
- Stasheff, James Dillon (with Halperin, Stephen) Differential algebra in its own right. *Proceedings of the Advanced Study Institute on Algebraic Topology (Aarhus Univ., Aarhus, 1970)*, Vol. III, pp. 567-577. *Various Publ. Ser.*, No. 13, Mat. Inst., Aarhus Univ., Aarhus, 1970. (J. P. May) 49 #3944 55H20
 H -spaces and classifying spaces: foundations and recent developments. *Algebraic topology (Proc. Sympos. Pure Math., Vol. XXII, Univ. Wisconsin, Madison, Wis., 1971)*, pp. 247-272. *Amer. Math. Soc., Providence, R.I.*, 1971. (C. S. Hoo) 47 #9612 55H20
Families of finite H -complexes—revisited. *H-spaces (Actes Réunion, Neuchâtel, 1970)*, pp. 1-4. *Lecture Notes in Mathematics*, Vol. 196, Springer, Berlin, 1971. (C. S. Hoo) 45 #6000 55D45 (57A65)
Sphere bundles over spheres as H -spaces mod $p > 2$. *Symposium on Algebraic Topology (Battelle Seattle Res. Center, Seattle, Wash., 1971)*, pp. 106-110. *Lecture Notes in Math.*, Vol. 249, Springer, Berlin, 1971. (A. Zabrodsky) 49 #8010 55D45
(with Harrison, Jerome) Families of H -spaces. *Quart. J. Math. Oxford. Ser. (2)* (1971), 347-351. (M. Arkowitz) 45 #1163 (EA 45) 55D45
(with Clough, Robert R.) BSI does not map correctly into BSF mod 2. *Manuscr. Math.* 7 (1972), 205-214. (J. P. May) 48 #5067 55E50
(with Harris, Bernard) Suspension, automorphisms, and division algebras. *Algebraic K-theory, II: "Classical" algebraic K-theory and connections with arithmetic (Proc. Conf., Battelle Seattle Res. Center, Seattle, Wash., 1972)*, pp. 337-346. *Lecture Notes in Math.*, Vol. 342, Springer, Berlin, 1973. (J. A. Schafer) 51 #10441 18F20
(with Milnor, John W.) ★Characteristic classes. *Annals of Mathematics Studies*, No. 76. Princeton University Press, Princeton, N. J.; University of Tokyo Press, Tokyo, 1974. vii + 331 pp. (F. Hirzebruch) 55 #13428 57-01 (55-02, 55F40, 57D20)
Parallel transport and classification of fibrations. *Algebraic and geometrical methods in topology (Conf. Topological Methods in Algebraic Topology, State Univ. New York Binghamton, N.Y., 1973)*, pp. 1-17. *Lecture Notes in Math.*, Vol. 428, Springer, Berlin, 1974. (D. B. Fuks) 51 #11501 55F15 (57D30)
(with Rector, David L.) Lie groups from a homotopy point of view. *Localization in group theory and homotopy theory, and related topics (Sympos., Battelle Seattle Res. Center, Seattle, Wash., 1974)*, pp. 121-131. *Lecture Notes in Math.*, Vol. 418, Springer, Berlin, 1974. (S. Y. Hussein) 51 #14037 55D35
 H -space newsletter—May, 1974. *Localization in group theory and homotopy theory and related topics (Sympos., Battelle Seattle Res. Center, Seattle, Wash., 1974)*, pp. 139-141. *Lecture Notes in Math.*, Vol. 418, Springer, Berlin, 1974. (Editors) 50 #8515 55D45
The mod p decomposition of Lie groups. *Localization in group theory and homotopy theory, and related topics (Sympos., Battelle Seattle Res. Center, Seattle, Wash., 1974)*, pp. 142-149. *Lecture Notes in Math.*, Vol. 418, Springer, Berlin, 1974. (H. Scheerer) 51 #11490 55D45
(with Husemoller, Dale; Moore, John C.) Differential homological algebra of homogeneous spaces. *J. Pure Appl. Algebra* 5 (1974), 113-185. (Harold Hastings) 51 #1823 55H20 (18G15, 57F15)
(with Bott, Raoul; Shulman, Herbert) On the de Rham theory of certain classifying spaces.

- Advances in Math. 20 (1976), no. 1, 43-56. (D. B. Fuks) 53 #6583 57D30
- Continuous cohomology of groups and classifying spaces. *Bull. Amer. Math. Soc.* 78 (1978), no. 4, 513-530. (A. V. Zarelua) 58 #13003 55B40 (57F10, 57D30)
- See also Bott, Raoul, 50 #14777
- Eugeniusz (with Bieszk, Leon) On density concomitants of the covariant curvature tensor in the two- and three-dimensional Riemann space. *Ann. Polon. Math.* 26 (1972), 85-93. (S. Gołab) 46 #4406 53A55
- (with Bieszk, Leon; Makowski, Jerzy) On density concomitants of the symmetric tensor $T_{\alpha\beta}^{\gamma}$ in the three-dimensional space X^3 . *Demonstratio Math.* 4 (1977), 87-104. (A. Rapcsák) 50 #14530 53A55
- (with Bieszk, Leon; Stasiak, Irena; Stygar, Danuta) On density (scalar) concomitants of the tensor $T_{\alpha\beta\gamma\delta}$ in the three-dimensional space X^3 . Collection of articles dedicated to Stanisław Gołab on his 70th birthday, II. *Demonstratio Math.* 6 (1977), 451-469 (1974). (Michał Lorens) 51 #1632 53A55
- (with Stasiak, Irena; Zandecka-Perl, Urszula) Scalar and density concomitants of a tensor with valency (0,3) in a three-dimensional space. *Demonstratio Math.* 8 (1977), no. 3, 253-267. (M. Kucharzewski) 52 #4151 53A55
- Irena (with Bieszk, Leon; Stasiak, Eugeniusz; Stygar, Danuta) On density (scalar) concomitants of the tensor $T_{\alpha\beta\gamma\delta}$ in the three-dimensional space X^3 . Collection of articles dedicated to Stanisław Gołab on his 70th birthday, II. *Demonstratio Math.* 6 (1977), 451-469 (1974). (Michał Lorens) 51 #1632 53A55
- (with Stasiak, Eugeniusz; Zandecka-Perl, Urszula) Scalar and density concomitants of a tensor with valency (0,3) in a three-dimensional space. *Demonstratio Math.* 8 (1977), no. 3, 253-267. (M. Kucharzewski) 52 #4151 53A55
- Vojtěch B. (with Telonis, Demetri P.; Besieris, Ioannis M.) A linear-approximation model for turbulent shear flow. *AIAA J.* 15 (1977), no. 4, 573. (Authors' summary) 57 #2158 76G0
- J. Bernhard See Jahresfeier: Geburt von Nicolaus Copernicus, 48 #29
- V. M. (with Ljance, V. È.) F. Engels and mathematics. (Ukrainian. Russian summary) *Visnik L'vov. Derž. Univ. Ser. Meh.-Mat.* 1973, no. 8, 3-8, 145. (Editors) 13157 01A55 (01A70)
- A. I. (with Eremenko, V. P.) A method for modeling differential equations. (Russian) *Modelling of nonstationary processes* (Russian), pp. 95-102. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1977.* (Vadim Komkov) 58 #24965 65L05
- oulos, G. I. (with Vinter, Richard B.) On the dimension of the chattering basis for control systems. *IEEE Trans. Automatic Control AC-22* (1977), no. 3, 470-471. (Authors' summary) 56 #14946 93C15
- (with Williams, S. A.) Comment on the reduction of an important 9-j symbol. *Mathematical Phys.* 17 (1976), no. 4, 480-481. (Gordon N. Fleming) 53 #2223
- Věnceslava (with Fučík, Svatopluk) Note to periodic solvability of the boundary value problem for nonlinear heat equation. *Comment. Math. Univ. Carolinae* 18 (1977), 735-740. (Authors' summary) 58 #17531 35K60 (35B10)
- Walenty On proofs of rejection. (Polish and Russian summaries) *Studia Logica* 29 (1977), 17-25. (J. Corcoran) 46 #3274 02C99
- (with certain interpretation of the theory of rejected propositions. (Polish and Russian summaries) *Studia Logica* 30 (1972), 147-152. (Constatin Milici) 51 #10022 02B05
- ti, P. (with Grabowski, Marian) On continuity properties of the entropy of an observable. *Rep. Mathematical Phys.* 11 (1977), no. 2, 233-237. (H. Wakita) 56 #2060 47
- On the characterization of the von Neumann entropy via the entropies of measurements. *Rep. Mathematical Phys.* 13 (1978), no. 1, 67-71. (M. Wakita) 18620 81A7 (46L99, 94A15)
- Y. A one-sided summatory function. *Proc. Amer. Math. Soc.* 60 (1976), 134-138 (1977). (A. Edrei) 54 #10615 30A86
- minia Quelques propriétés des algèbres de Morgan. *Logique, automatique, informatique*, pp. 195-207. (errata insert) *Editions Acad. R.S.R., Bucharest, 1971.* (Joel Friedman) 48 #10929 06A35 (02J05)
- On criteria for feature selection and their relationships with the error probability in pattern recognition. *Modern trends in cybernetics and systems* (Proc. Third Internat. Conf., Bucharest, 1975), Vol. III, pp. 555-572. *Springer, Berlin, 1977.* (K. S. Fu) 13834 68A45
- On some asymptotic properties of the a posteriori distribution. *An. Univ. București* 26 (1977), 103-129. (N. Gini) 58 #7953 62B10 (62E20)
- An extension of Lerman's classification algorithm. *Bull. Math. Soc. Sci. Math. R. S. Canada (N.S.)* 21(69) (1977), no. 1-2, 165-172. (From the introduction) 58 #3775 5
- On the amount of information contained by the conditional distribution. *Rev. Roumaine Math. Pures Appl.* 23 (1978), no. 1, 121-127. (I. Vajda) 58 #9805 94A15
- oulos, Konstantin Über nichtlineare kompakte Störungen von kompakten Operatoren. *Bull. Soc. Math. Grèce (N.S.)* 13 (1972), no. 1-2, 90-103. (Jürgen Jürgens) 51 #3954 47B55 (47H99)
- Ein Beitrag zur Verzweigungstheorie. (English summary) *Manuscripta Math.* 15 (1975), 211-218. (Ulrich Kosel) 51 #8913 47H99
- ria (with Marcus, Solomon; Nicolau, Edmond) ★Introduzione alla linguistica matematica. Con prefazione di Carlo Tagliavini. Traduzione dal rumeno di Filippo Piccioli. *Linguistica*, No. 5. Casa Editrice Prof. Riccardo Pàtron, Bologna, 1971. 448 pp. (R. N. Goss) 54 #9174 68A30
- See also Recherches sur la philosophie des sciences, 52 #7764
- B. S. (with Štatland, È. S.) Absolute continuity and equivalence of measures corresponding to certain random processes with values in a Hilbert space, and filtering problems. (Russian) *Theory of random processes. Questions of statistics and control* (Russian), pp. 238-256. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1974.* (R. Š. Lipcer) 57 #14124 60G30
- (with Dalec'kii, Ju. L.; Krasnyi, L. G.) The optimal detection of a signal in the field described by the wave equation. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* 15 (1976), 38-46, 154. (A. N. Širjaev) 54 #11478 65 (94A05)
- A mathematical model of a random acoustic field. (Russian. English summary) *Dokl. Akad. Nauk SSSR* 1978, no. 2, 139-140. (Editors) 58 #19794 76G60
- See also Theory of optimal decisions, 58 #32847
- Štatland, È. S. (with Truško, T. G.) A certain inventory control system. (Russian) *Theory of optimal solutions* (Proc. Sem., Kiev, 1968), No. 3 (Russian), pp. 39-41. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (Mike Sablatash) 47 #1435 90B05
- (with Andreëv, M. V.) Certain problems of the control of inhomogeneous birth-and-death processes. (Russian) *Theory of Optimal Solutions* (Proc. Seminar, Kiev, 1968), No. 4 (Russian), pp. 42-46. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (K. Dietz) 45 #1270 60J80
- (with Andreëv, M. V.; Gubenko, L. G.) Controlled Markov sequences (compact set of decisions). II. (Russian) *Theory of optimal solutions* (Proc. Sem., Kiev, 1969), No. 2 (Russian), pp. 86-91. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (M. E. Thompson) 45 #4547 62L15
- (with Andreëv, M. V.; Gubenko, L. G.) The optimal stopping of Markov processes with discounting. (Russian) *Theory of optimal solutions* (Proc. Sem., Kiev, 1969), No. 2 (Russian), pp. 92-98. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (M. E. Thompson) 45 #2860 62L15
- (with Gubenko, L. G.; Knopov, P. S.) A certain problem of control of quasidiffusion processes. (Russian) *Theory of optimal solutions* (Proc. Sem., Kiev, 1969), No. 3 (Russian), pp. 98-102. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (F. L. Spitzer) 47 #10116 93E20
- (with Andreëv, M. V.; Gubenko, L. G.) A certain optimal stopping problem with discounting. (Russian) *Theory of optimal solutions* (Proc. Sem., Kiev, 1968), No. 5 (Russian), pp. 100-102. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (M. E. Thompson) 45 #2861 62L15
- (with Andreëv, M. V.; Gubenko, L. G.) Controlled Markov sequences (finite set of decisions). I. (Russian) *Theory of optimal solutions* (Proc. Sem., Kiev, 1968), No. 5 (Russian), pp. 103-111. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (M. E. Thompson) 45 #4546 62L15
- (with Gubenko, L. G.) Controllable semi-Markov processes. (Russian. English summary insert) *Kibernetika* (Kiev) 1972, no. 2, 26-29. (G. Arseniivili) 48 #1779 93E20 (60K15)
- (with Gubenko, L. G.) On discrete time Markov decision processes. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist.* No. 7 (1972), 51-64, 163. (K. Wickwire) 48 #13275 90C40
- (with Knopov, P. S.) The absolute continuity of measures corresponding to certain random fields on the plane. (Russian) *Questions of statistics and of the control of random processes* (Russian), pp. 153-169. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973.* (Editors) 54 #14080 60G30
- (with Štatland, B. S.) Absolute continuity and equivalence of measures corresponding to certain random processes with values in a Hilbert space, and filtering problems. (Russian) *Theory of random processes. Questions of statistics and control* (Russian), pp. 238-256. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1974.* (R. Š. Lipcer) 57 #14124 60G30
- (with Knopov, P. S.) On distinguishing hypotheses for a certain class of stochastic systems with distributed parameters. (Russian. English summary insert) *Kibernetika* (Kiev) 1974, no. 2, 106-107. (D. A. Darling) 52 #9362 60G30
- See also Selected translations in mathematical statistics and probability, 49 #4728
- Statman, Richard The typed λ -calculus is not elementary recursive. *18th Annual Symposium on Foundations of Computer Science* (Providence, R.I., 1977), pp. 90-94. *IEEE Comput. Soc., Long Beach, Calif., 1977.* (From the text) 58 #27356 02C20 (02C15, 02F43, 68A20)
- Complexity of derivations from quantifier-free Horn formulae, mechanical introduction of explicit definitions, and refinement of completeness theorems. *Logic Colloquium 76* (Oxford, 1976), pp. 505-518. *Studies in Logic and Found. Math.*, Vol. 87, North-Holland, Amsterdam, 1977. (M. I. Dehtjaj'') 58 #170 02D99 (68A20)
- See also Handbook: Mathematical logic, 56 #15351 and Handbook: Mathematical logic, 58 #10343
- Statnikov, I. N. (with Sobol', I. M.) Calculation of multidimensional integrals by means of sequences. (Russian) *Mathematical simulation and the theory of electrical circuits*, No. 14 (Russian), pp. 3-8, 107. *Izdat. "Naukova Dumka", Kiev, 1976.* (Authors' summary) 58 #8141 65C05 (65D30)
- Statnikov, R. B. (with Sobol', I. M.; Ovcinnikova, N. F.) Locating the eigenvalues of a matrix. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 1581-1583, 1638. (J. Segethova) 50 #8942 65F15
- (with Sobol', I. M.) ★Постановка некоторых задач оптимального проектирования при помощи ЭВМ. (Russian) [Formulation of some optimal design problems by means of an electronic computer] With an English summary. Preprint No. 24 (1977). *Inst. Prikl. Mat. Akad. Nauk SSSR, Moscow, 1977.* 20 pp. (Authors' summary) 58 #15497 93C99
- (with Artobolevskii, I. I.; Sergeev, V. I.; Sobol', I. M.) The use of electronic computers in the formulation of the optimal machine design problem. (Russian) *Dokl. Akad. Nauk SSSR* 233 (1977), no. 4, 567-570. (Authors' introduction) 58 #9467 93A99
- See also Problems of random search, 50 #15864
- Staton, William Independence in graphs with maximum degree three. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing* (Louisiana State Univ., Baton Rouge, La., 1977), pp. 615-617. *Congressus Numerantium*, No. XIX, Utilitas Math., Winnipeg, Man., 1977. (Michael O. Albertson) 58 #10561 05C15
- Statulevičius, V. On limit theorems for random processes. *Proceedings of the Second Japan-USSR Symposium on Probability Theory* (Kyoto, 1972), pp. 433-443. *Lecture Notes in Math.*, Vol. 330, Springer, Berlin, 1973. (I. G. Žurbenko) 56 #9650 60F05 (62M15)
- (with Mitalauskas, A. A.) On local limit theorems. I. (Russian. Lithuanian and English summaries) *Lietuv. Mat. Sb.* 14 (1974), no. 4, 129-144, 239. (Š. K. Formanov) 55 #1412 60F05
- Limit theorems for dependent random variables under various regularity conditions. *Proceedings of the International Congress of Mathematicians* (Vancouver, B. C., 1974), Vol. 2, pp. 173-181. *Canad. Math. Congress, Montreal, Que., 1975.* (I. G. Žurbenko) 55 #1420 60F05

- (with Bentkus, R.; Rudzkis, R.) Exponential inequalities for estimates of the spectrum of a stationary Gaussian sequence. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 3, 25–39, 223–224. (P. S. Knopov) **54** #11697 62M15
- (with Saulis, L. I.) On large deviations for a distribution density function. Collection of articles dedicated to the memory of Wolfgang Richter. *Math. Nachr.* **70** (1975), 111–132. (Roy V. Erickson) **54** #3819 60F10
- (with Saulis, L. I.) On large deviations in the scheme of summing random variables with weights. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 2, 145–154, 244. (S. A. Book) **54** #3820 60F10
- (with Saulis, L. I.) Large deviations in a local limit theorem for sums of random variables connected in a Markov chain. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 3, 151–159, 235. (Š. K. Formanov) **55** #1423 60F10 (60J05)
- (with Mitailauskas, A. A.) An asymptotic expansion in the case of a stable approximating law. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 4, 149–166, 255. (F. N. Galstjan) **54** #11461 60F05
- Application of semi-invariants to asymptotic analysis of distributions of random processes. *Multivariate analysis, IV (Proc. Fourth Internat. Sympos., Dayton, Ohio, 1975)*, pp. 325–337. North-Holland, Amsterdam, 1977. (I. G. Žurbenko) **57** #1614 60F05 (62M15)
- (with Mitailauskas, A. A.) Local limit theorems. II. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **17** (1977), no. 4, 169–175, 234. (A. V. Nagaeu) **58** #18676 60F05
- (with Rudzkis, R.; Saulis, L. I.) A general lemma on probabilities of large deviations. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 2, 99–116, 217. (Werner Wolf) **58** #18681 60F10
- See also **2167** Selected translations in mathematical statistics and probability, **49** #4729
- Staudte, Ulrich** Kleine periodische Lösungen bei nichtlinearen stark-elliptischen Systemen von partiellen Differentialgleichungen. I. (English summary) *Manuscripta Math.* **5** (1971), 251–274. (R. C. MacCamy) **45** #3912 35B10
- Ein Eindeutigkeitsatz für periodische Lösungen der Liénard-Gleichung. *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2*, pp. 295–302. Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., No. 4N, Akademie-Verlag, Berlin, 1977. (Editors) **58** #22820 34C25
- Staudte, Robert G., Jr.** (with Koul, Hira Lal) Weak convergence of weighted empirical cumulatives based on ranks. *Ann. Math. Statist.* **43** (1972), 832–841. (Z. Šidák) **47** #6009 62E20 (62G30)
- (with Koul, Hira Lal) Asymptotic normality of signed rank statistics. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **22** (1972), 293–300. (Z. Šidák) **46** #6538 62G30
- (with Koul, Hira Lal) Power bounds for a Smirnov statistic in testing the hypothesis of symmetry. *Ann. Statist.* **4** (1976), no. 5, 924–935. (Yves Lepage) **57** #10908 62G10
- (with Maritz, J. S.; Wu, Margaret) A location estimator based on a U -statistic. *Ann. Statist.* **5** (1977), no. 4, 779–786. (W. Hoeffding) **56** #9810 62G35
- Stauduhar, Richard P.** The determination of Galois groups. *Math. Comp.* **27** (1973), 981–996. (P. Abellanas) **48** #6054 12–04 (12A55)
- Stauffer, A. D.** (with Singh, Sheo Ram) A convergence proof for the Kohn variational method. *Lett. Nuovo Cimento* (2) **10** (1974), 401–404. (Not reviewed) **81.49**
- (with Singh, Sheo Ram) A unified formulation of the variational methods in scattering theory. (Italian and Russian summaries) *Nuovo Cimento B* (11) **22** (1974), 139–152. (John Nuttall) **50** #6380 81.49
- (with Singh, Sheo Ram) A convergence proof for the Schwinger variational method for the scattering amplitude. *J. Phys. A* **8** (1975), no. 9, 1379–1383. (Nadine Bessis) **55** #5062 81.49
- (with Singh, Sheo Ram) Variational methods for bound-state problems. (Italian and Russian summaries) *Nuovo Cimento B* (11) **25** (1975), 547–556. (John Nuttall) **52** #12636 81.49
- Stauffer, H. B.** The completion of an abelian category. *Trans. Amer. Math. Soc.* **170** (1972), 403–414. (M. Barr) **46** #1881 18E10
- The multiplication problem for spheres. *Math. Student* **43** (1975), 31–38 (1976). (Donald M. Davis) **57** #7599 55G25
- Stauffer, Howard B.** Carl Friedrich Gauss. *Bull. Malaysian Math. Soc.* **6** (1975), no. 1, 1–3. (Editors) **55** #5368 01A70
- Staub, Richard** The completion of an algebraically closed valued field. (Italian summary) *Boll. Un. Mat. Ital.* (4) **10** (1974), 553–555. (Witold Węśław) **51** #5567 12J05
- The algebra of bounded continuous functions into a nonarchimedean field. *Pacific J. Math.* **50** (1974), 169–185. (L. Narici) **49** #5803 46E25 (54C40, 54D20)
- Stanton, L. P.** (with Cusson, R. Y.) Factorized wave equations on homogeneous spaces of the Poincaré groups. (Italian and Russian summaries) *Nuovo Cimento* (11) **17** (1973), 303–310. (R. L. Ingraham) **51** #12167 81.22
- Explicit Poincaré embedding of the harmonic-oscillator model of composite elementary particles. *Phys. Rev. D* (3) **8** (1973), 2446–2450. (Author's summary) **50** #15648 81.22
- A spin-1/2 positive-energy relativistic wave equation. *Phys. Rev. D* (3) **10** (1974), 1760–1767. (G. R. Allcock) **50** #12047 81.35
- (with Browne, Seán) Classical limit of relativistic positive-energy theories with intrinsic spin. *Phys. Rev. D* (3) **12** (1975), no. 4, 1026–1037. (N. D. Sengupta) **52** #16357 81.35
- Covariant Heisenberg picture of a relativistic positive-energy theory: the operator algebra of the rigid string. *Phys. Rev. D* (3) **13** (1976), no. 12, 3269–3281. (K. Kumar) **58** #20026 81.47
- Lorentz subgroup analysis of the Lie algebra of $Sp(8, R)$ and a null-plane, boson realization. *J. Mathematical Phys.* **19** (1978), no. 6, 1471–1476. (K. Kumar) **57** #18529 81.17
- Stavem, Per** (with Mohn, Erik) On the distribution of randomly placed discs. (French summary) *Biometrics* **30** (1974), 137–156. (Wolfgang Sandler) **50** #1379 62E15
- Stavi, Jonathan** On strongly and weakly defined Boolean terms. *Israel J. Math.* **15** (1973), 31–43. (R. S. Pierce) **47** #8382 06A40
- A converse of the Parow completeness theorem. *J. Symbolic Logic* **38** (1973), 594–612. (M. Yasuhara) **51** #12473 02B25 (02D99, 02G20, 02H05)
- On cardinal collapsing with reals. *Israel J. Math.* **18** (1974), 11–18. (W. M. M. 50 #1881 02K35 (04A10, 06A40)
- Extensions of Kripke's embedding theorem. *Ann. Math. Logic* **8** (1975), 345–428. (Andreas Blass) **53** #12937 02J05 (06A40, 02K15, 02H05)
- A model of ZF with an infinite free complete Boolean algebra. *Israel J. Math.* (1975), no. 2, 149–163. (Richard Mansfield) **52** #105 02K20 (06A40, 08A10)
- Applications of a theorem of Lévy to Boolean terms and algebras. *Trans. A. Math. Soc.* **205** (1975), 1–36. (Douglas E. Miller) **57** #9476 02B25 (02J05, 02J10)
- (with Makowsky, Johann Andreas; Shelah, Saharon) D-logics and generalized quantifiers. *Ann. Math. Logic* **10** (1976), no. 2, 155–192. (Bernd I. Dahn) **56** #1530 02B20 (02B25)
- (with Harel, David; Pnueli, Amir) A complete axiomatic system for proving deductions about recursive programs. *Conference Record of the Ninth Annual Symposium on Theory of Computing (Boulder, Colo., 1977)*, pp. 249–260. Assoc. Comp. Mach., New York, 1977. (Giorgio Levi) **58** #13853 68A05 (02B99)
- (with Nadel, Mark E.) The pure part of $HYP(\aleph_1)$. *J. Symbolic Logic* **42** (1977), 1, 33–46. (Stephen G. Simpson) **58** #27465 02H99 (02F27)
- (with Nadel, Mark E.) L_{ω_1} -equivalence, isomorphism and potential isomorphism. *Trans. Amer. Math. Soc.* **236** (1978), 51–74. (Alan Mekler) **57** #2907 02H10 (02K05, 02H13)
- Stavarakas, Nick M.** (with Jamison, Robert E.) On a problem of Klee. *Canad. Math. Bull.* **14** (1971), 125–126. (D. Barnette) **45** #2570 52A05 (46A

- Simpler derivation of the formulas for generalized ray tracing. *J. Opt. Soc. Amer.* **66** (5), no. 12, 1330-1333. (J. H. Harris) **55** #7131 78.53
- Stakis, I. P.** Oscillatory and asymptotic properties of differential equations with integrating arguments. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat.* **57** (8) **60** (1976), no. 5, 611-622. (H. Hochstadt) **57** #3566 34K25
- Stakos, Vasilios A.** Bounded oscillations under the effect of retardations for differential equations of arbitrary order. *Proc. Roy. Soc. Edinburgh Sect. A* **77** (1977), no. 2, 129-136. (D. Ramakrishna Rao) **56** #12507 34K15
- Stakos, Ioannis G.** On the oscillatory and asymptotic behavior of a class of differential equations with deviating arguments. *SIAM J. Math. Anal.* **9** (1978), no. 5, 966. (I. Kiguradze) **58** #22935 34K15
- Stakis, Nikias** Microfibrés et fibrés associés à certaines immersions. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 309-338. (C. L. Seebeck, III) **51** #14068 57A40
- Stakos, Vasilios A.** Extension d'un théorème de Louis Antoine. (English summary) *Proc. Amer. Math. Soc.* **39** (1973), 201-210. (R. C. Lacher) **47** #5860 55A25
- Stakos, Vasilios A.** A statistical smooth extension of Schwarzschild's metric. *Lett. Nuovo Cimento* (2) **11** (4), 427-430. **56** #7749 83.53
- Stakos, Vasilios A.** Sur les espaces riemanniens avec bords singuliers. *Ann. Scuola Norm. Sup. Pisa Cl. (4)* **2** (1975), no. 3, 389-419. (R. Miron) **55** #4040 53C20
- Stakis, Peter** (with Sarachik, Philip E.) Low sensitivity feedback gains for deterministic and stochastic control systems. *Internat. J. Control* (1) **19** (1974), 15-31. (Author's summary) **56** #11444 93E20
- Stakis, Peter** (with Tzafestas, S. G.) Walsh series approach to observer and filter design in control systems. *Internat. J. Control* **26** (1977), no. 5, 721-736. (J. P. Babary) **58** #18009 93C60 (93C55)
- Stakis, Peter** (with Tzafestas, S. G.) A Walsh series approach to time-delay control system design. *Internat. J. Systems Sci.* **9** (1978), no. 3, 287-299. (Mark Karpovsky) **59** #15655 93C99
- Stakos, Vasilios A.** Nonmetrizable normal separable Moore spaces. (Russian) *C. R. Acad. Sci. Paris* **29** (1976), no. 3, 295-297. (J. N. Younglove) **53** #14431 54E30
- Stakos, Vasilios A.** (with Leontović, A. M.; Piatetski-Shapiro, I. I.) Some mathematical problems connected with morphogenesis. *Avtomat. i Telemekh.* **1970**, no. 4, 94-107. (English summary); translated as *Automat. Remote Control* **1970**, no. 4, 596-608. (Antonelli) **47** #3038 92A05
- Stakos, Vasilios A.** (with Leontović, A. M.; Piatetski-Shapiro, I. I.) Problem of circle formation in a mathematical model of morphogenesis. *Avtomat. i Telemekh.* **1971**, no. 2, 100-110. (English summary); translated as *Automat. Remote Control* **32** (1971), no. 2, part 3-271. (P. L. Antonelli) **47** #3039 92A05
- Stakos, Vasilios A.** Investigation of convergence in the problem of "rectification". (Russian) *Mat. Sb.* **88** (130) (1971), 118-136. (A. Morimoto) **46** #901 58F10 (92A05)
- Stakos, Vasilios A.** Invariant Gibbs measures for Markov chains on finite lattices with local interaction. (Russian) *Mat. Sb. (N.S.)* **92** (134) (1973), 402-419, 503. (F. L. Spitzer) **49** #6356 60K35
- Stakos, Vasilios A.** Sufficient conditions for the uniqueness of a random field, and estimates for the correlations. (Russian) *Mat. Zametki* **18** (1975), no. 4, 609-620. (M. I. Jadrenko) **50** #802 60K35 (60G05)
- Stakos, Vasilios A.** The distribution of the roots of an almost-periodic polynomial. (Russian) *Dokl. Akad. Nauk. Gos. Ped. Inst. Učen. Zap.* **9** (1968), 3-10. (Z. Rubinstein) **45** #5325 30A08
- Stakos, Vasilios A.** A division algorithm with remainder for quasipolynomials. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* **9** (1968), 11-14. (Z. Rubinstein) **45** #5324 30A06
- Stakos, Vasilios A.** The approximation of continuous functions in a locally compact field. (Russian) *Questions on mathematical analysis. Novosibirsk. Gos. Ped. Inst. Naučn. Trudy Vyp.* **67** (1971), 52-61. (J. S. Joel) **54** #10216 12B40 (41A05)
- Stakos, Vasilios A.** The approximation of holomorphic functions by polynomials with respect to a Riesz system of functions in a locally compact field. (Russian) *Questions on mathematical analysis. Novosibirsk. Gos. Ped. Inst. Naučn. Trudy Vyp.* **67** (1971), 62-72. (J. S. Joel) **54** #10217 12B40 (41A05)
- Stakos, Vasilios A.** (with Bach, Alexander; Dürr, Detlef) Functionals of paths of a diffusion process and the Onsager-Machlup function. *Z. Phys. B* **26** (1977), no. 2, 191-193. (J. S. Joel) **55** #5116 82.60
- Stakos, Vasilios A.** Sulle deformazioni finite dei continui isotropi. (English summary) *Rend. Sem. Univ. e Politec. Torino* **33** (1974/75), 313-335 (1976). (Gérard A. Maugin) **54** #4702 73.53
- Stakos, Vasilios A.** See **Mathematical physics**, **48** #5770
- Stakos, Vasilios A.** (with Bley, Kenneth B.) Discrete stochastic differential games. *Advances in control systems: theory and applications*, Vol. 8, pp. 89-140. Academic Press, New York, 1974. (V. Komkov) **56** #15014 93E05
- Stakos, Vasilios A.** (with Lefevre, Russell J.) Stochastic optimal control with a constrained feedback information rate. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 4: Identification, feedback, regulators, linear and non-linear systems; Identification, differential equations, discrete and stochastic systems*, Paper No. 41.4, 6 pp. Internat. Fed. Automat. Control, Düsseldorf, 1971 (1972). (Authors' summary) **56** #11445 93E20
- Stakos, Vasilios A.** (with Lefevre, Russell J.) Linear stochastic optimal control under information rate constraints. *Internat. J. Control* (1) **17** (1973), 273-284. (H. S. Witsenhausen) **50** #10119 93E20
- Stakos, Vasilios A.** (with Page, J. A.) Computer aided control systems design techniques. *Control and dynamic systems: advances in theory and applications*, Vol. 11, pp. 25-143. Academic Press, New York, 1974. (Sahjendra N. Singh) **54** #4770 93C55 (94A20)
- Stakos, Vasilios A.** Noise models and independent increment processes. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976), Part 2*, pp. 391-397. Hemisphere, Washington, D.C., 1977. (Author's summary) **58** #15657 94A05
- Stearns, Robert E.** (with Lewis, Philip M., II; Rosenkrantz, Daniel J.) Attributed translations. *Fifth Annual ACM Symposium on Theory of Computing (Austin, Tex., 1973)*. *J. Comput. System Sci.* **9** (1974), 279-307. (Miroslav Hladký) **53** #12106 68A30
- Stearns, Robert E.** (with Lewis, Philip M., II; Rosenkrantz, Daniel J.) Concurrency control for database systems. *17th Annual Symposium on Foundations of Computer Science (Houston, Tex., 1976)*, pp. 19-32. IEEE Comput. Soc., Long Beach, Calif., 1976. (Robert A. Reckhow) **57** #14666 68A50
- Stearns, Robert E.** (with Rosenkrantz, Daniel J.; Lewis, Philip M., II) An analysis of several heuristics for the traveling salesman problem. *SIAM J. Comput.* **6** (1977), no. 3, 563-581. (M. M. Syslo) **56** #17809 90C10 (05C35, 90B10)
- Stearns, Robert E.** See also **Cybernetics collection**, **47** #6379 and **Cybernetics collection**, **51** #2326
- Stearns, Robert E., Jr.** (with Hunsucker, John L.; Nebb, Jack) Computational results concerning some equations involving $\sigma(n)$. *Math. Student* **41** (1973), no. 3-4, 285-289 (1974). (Chung-Ming An) **52** #8004 10-04
- Stebakov, S. N.** See **Methods and models of control**, **50** #12520
- Stebbins, G. L.** See **Proceedings: Berkeley Symposium on Mathematical Statistics and Probability**, **52** #9426
- Stebbins, J. L.** A construction of meromorphic functions with prescribed asymptotic behavior. *Nagoya Math. J.* **41** (1971), 75-87. (D. A. Storvick) **45** #559 30A72
- Stebbins, J. L.** A note on extended ambiguous points. *Nagoya Math. J.* **43** (1971), 167-168. (H. T. Mathews) **45** #558 30A72
- Stebbins, J. L.** Boundary functions and sets of asymptotic values. *J. Approximation Theory* **6** (1972), 421-430. (P. Lappan) **49** #5353 30A72
- Stebbins, Peter F.** Invariant functions of an iterative process for maximization of a polynomial. *Pacific J. Math.* **43** (1972), 765-783. (G. R. Sell) **48** #12595 58E15 (54H15)
- Stebbins, Peter F.** Conjugacy separability of certain Fuchsian groups. *Trans. Amer. Math. Soc.* **163** (1972), 173-188. (A. M. Macbeath) **45** #2030 20H10 (10D05)
- Stebbins, Peter F.** A system of ordinary differential equations and a procedure for maximization. *Collection of articles dedicated to Wilhelm Magnus. Comm. Pure Appl. Math.* **26** (1973), 837-845. (G. R. Sell) **48** #11690 34C40
- Stebbins, Peter F.** (with Anshel, Michael) The solvability of the conjugacy problem for certain HNN groups. *Bull. Amer. Math. Soc.* **80** (1974), 266-270. (Leo P. Comerford, Jr.) **54** #7633 20F05
- Stebbins, Peter F.** (with Anshel, Michael) Conjugate powers in free products with amalgamation. *Houston J. Math.* **2** (1976), no. 2, 139-147. (Leo P. Comerford, Jr.) **53** #13416 20E30
- Stebbins, Peter F.** Nests in nilpotent groups. *Houston J. Math.* **2** (1976), no. 3, 419-426. (H. Heineken) **54** #403 20E15
- Stebbins, Peter F.** Residual solvability of an equation in nilpotent groups. *Proc. Amer. Math. Soc.* **54** (1976), 57-58. (B. Amberg) **52** #8253 20E15
- Stebnovskii, S. V.** Nonstationary flow of an ideal incompressible fluid with a movable boundary in a rectilinear channel. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1974**, no. 3, 15-22. (Author's summary) **56** #17442 76.35
- Štec, Miloslav** A modified algorithm for alternative locations and allocations for the solution of the location-allocation problem. (Czech. English summary) *Ekonom.-Mat. Obzor* **8** (1972), 402-409. (K. Zimmermann) **47** #6284 90B05
- Stecenko, V. Ja.** A certain method of finding subspaces of solvability for the equation $x = Bx + f$ in the case when l belongs to the spectrum of the linear operator B . (Russian) *Dušanbin. Gos. Ped. Inst. Učen. Zap.* **53** (1966), Ser. Mat. no. 5, 105-116. (See RZMat **1967** #9 B448) 47A50
- Stecenko, V. Ja.** (with Zabreiko, P. P.; Košelev, A. I.; Krasnosel'skii, M. A.; Mihlin, S. G.; Rakovščik, L. S.) ★Интегральные уравнения. (Russian) [Integral equations] *Справочная Математическая Библиотека. [Mathematical Reference Library] Izdat. "Nauka", Moscow, 1968, 448 pp.* (See RZMat **1968** #10 B382) 45-01
- Stecenko, V. Ja.** (with Birman, M. Š.; Vilenkin, N. Ja.; Gorin, E. A.; Zabreiko, P. P.; Iohvidov, I. S.; Kadeč, M. I.; Kostjučenko, A. G.; Krasnosel'skii, M. A.; Krein, S. G.; Mitjagin, B. S.; Petunin, Ju. I.; Rutickii, Ja. B.; Semenov, E. M.; Sobolev, V. I.; Faddeev, L. D.; Citlanadze, Ė. S.) ★Функциональный анализ. (Russian) [Functional analysis] *Edited by S. G. Krein. Second edition, revised and augmented. Mathematical Reference Library. Izdat. "Nauka", Moscow, 1972, 544 pp.* (Editors) **50** #5406 46-02 (47-02)
- Stecenko, V. Ja.** (with Krasnosel'skii, M. A.; Vainikko, G.; Zabreiko, P. P.; Rutickii, Ja. B.) ★Approximate solution of operator equations. Translated from the Russian by D. Louish. *Wolters-Noordhoff Publishing, Groningen, 1972. xii + 484 pp.* (Editors) **52** #6515 47H15 (47A50)
- Stecenko, V. Ja.** (with Vilenkin, N. Ja.; Gorin, E. A.; Kostjučenko, A. G.; Krasnosel'skii, S. G.; Krein, S. G.; Maslov, V. P.; Mitjagin, B. S.; Petunin, Ju. I.; Rutickii, Ja. B.; Sobolev, V. I.; Faddeev, L. D.; Citlanadze, Ė. S.) ★Functional analysis. Translated from the Russian by Richard E. Flaherty. English edition edited by George F. Votruba with the collaboration of Leo F. Boron. *Wolters-Noordhoff Publishing, Groningen, 1972. xv + 380 pp.* (Editors) **52** #11516 46-02 (47-02)
- Stecenko, V. Ja.** (with Muhamadiev, Ė. M.) A certain criterion for the positive invertibility of an operator. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **15** (1972), no. 2, 3-6. (I. K. Marek) **46** #6088 47B55
- Stecenko, V. Ja.** (with Kurtakov, K. Š.) Estimation of the spectrum of quasipositive operators. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **15** (1972), no. 11, 10-13. (I. K. Marek) **48** #12140 47B55
- Stecenko, V. Ja.** (with Bahtina, A. A.) Almost minihedral cones. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak. Vyp.* **2** (1972), 5-16. (Constantin Niclescu) **53** #14072 46A40
- Stecenko, V. Ja.** (with Muhamadiev, Ė. M.; Sabirov, T. S.) Existence of second positive eigenvalues of positive linear operators. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak. Vyp.* **2** (1972), 17-32. (Constantin Niclescu) **53** #14213 47B55
- Stecenko, V. Ja.** A normal form for decomposable operators in Hilbert space. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **16** (1973), no. 9, 6-9. (Ana Istrățescu) **51** #8886 47A55
- Stecenko, V. Ja.** A nonlinear eigenvector problem. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **16** (1973), no. 10, 5-8. (C. Ilioi) **48** #9480 47H15
- Stecenko, V. Ja.** (with Muhtarov, S. N.) The investigation of equations with indecomposable positive operators. (Russian) *Mathematics and the methodology of its teaching, Part II* (Russian), pp. 11-17. *Tadžik. Gos. Univ., Dushanbe, 1974.* (Editors) **58** #30476 47B55

- (with Esajan, A. R.) Estimates of the spectral radius from the behavior of the operator function on an element of the cone. (Russian) *Mathematics and the methodology of its teaching, Part 1 (Russian)*, pp. 95-102. Tadžik. Gos. Univ., Dushanbe, 1974. (Editors) **58** #30474 47B55
- (with Krasnosel'skii, M. A.; Lifšic, E. A.; Pokorniy, Ju. V.) Positively invertible linear operators, and the solvability of nonlinear equations. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **17** (1974), no. 1, 12-15. (I. K. Marek) **50** #10893 47B55 (47H15)
- (with Filin, V. A.) Test for the solvability of a nonlinear eigenvalue problem and a nonlinear resolvent equation. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **17** (1974), no. 8, 12-16. (B. Jankó) **51** #1517 47H15
- (with Zabreiko, P. P.; Košelev, A. I.; Krasnosel'skii, M. A.; Mihlin, S. G.; Rakovščik, L. S.) ★Integral equations—a reference text. Translated and edited by T. O. Shaposhnikova, R. S. Anderssen and S. G. Mikhlin. *Noordhoff International Publishing, Leyden*, 1975. xix + 443 pp. (See Zbl **293** #45001) 45-01
- (with Srožiddinov, H. M.; Esajan, A. R.) A comparison of the spectral radii of two operators. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **19** (1976), no. 11, 10-13. (Rosaling Reichard) **56** #6463 47B55
- (with Tumanov, L. A.; Šutov, V. G.) On the theory of nonlinear models of balance between branches. (Russian) *Models and methods for the analysis of economic target-oriented systems (Russian)*, pp. 166-176. Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1977. (I. V. Evstigneev) **58** #32875 90A15
- (with Nijazov, R. G.) Positive operators and localization theorems. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 9, 8-12. (Björn Textorius) **57** #10451 47A10 (47A50)
- Tests for the primitiveness of positive operators. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 11, 11-14. (Andrei Rácz) **58** #2447 47B55
- See also **Mathematics and the methodology of its teaching**, **58** #20941 and **Mathematics and the methodology of its teaching**, **58** #20942
- Stech, Berthold** (with Gromes, Dieter; Rothe, Heinz J.) Field quantization on the surface $X^2 = \text{constant}$. *Nuclear Phys. B75* (1974), 313-332. (Authors' summary) **50** #9242 81.47
- Štecha, Jan** (with Fink, Miloš) Linear optimal control system with incomplete information about state of system. (Czech summary) *Kybernetika (Prague)* **7** (1971), 467-491. (C. P. Tsokos) **48** #995 49B15
- (with Kozáčíková, Alena; Kozáčík, Jaroslav) Algorithms for solution of equations $PA + A^T P = -Q$ and $M^T P M - P = -Q$ resulting in Lyapunov stability analysis of linear systems. *Kybernetika (Prague)* **9** (1973), 62-71. **48** #5697 93D05
- (with Kozáčíková, Alena; Kozáčík, Jaroslav; Lidický, Jiří) Optimal control of a linear discrete system. *Kybernetika (Prague)* **9** (1973), 374-388. **48** #3562 93C55
- Stecher, Michael** Integral operators and the noncharacteristic Cauchy problem for parabolic equations. *SIAM J. Math. Anal.* **6** (1975), no. 5, 796-811. (Manfred W. Kracht) **52** #6157 35C15 (35K10)
- (with Rundell, William) A method of ascent for parabolic and pseudoparabolic partial differential equations. *SIAM J. Math. Anal.* **7** (1976), no. 6, 898-912. (Lu-San Chen) **54** #8032 35K25
- (with Rundell, William) Maximum principles for pseudoparabolic partial differential equations. *J. Math. Anal. Appl.* **57** (1977), no. 1, 110-118. (V. G. Sigillito) **55** #13081 (E **58** #17536) 35K25
- (with Rundell, William) Remarks concerning the supports of solutions of pseudoparabolic equations. *Proc. Amer. Math. Soc.* **63** (1977), no. 1, 77-81. (D. L. Colton) **55** #6016 35K25
- (with Rundell, William) Errata: "Maximum principles for pseudoparabolic partial differential equations" (*J. Math. Anal. Appl.* **57** (1977), no. 1, 110-118). *J. Math. Anal. Appl.* **65** (1978), no. 2, 503. (Editors) **58** #17536 35K99
- (with Kiffe, Thomas R.) Existence and uniqueness of solutions to abstract Volterra integral equations. *Proc. Amer. Math. Soc.* **68** (1978), no. 2, 169-175. (J. S. W. Wong) **58** #2073 45D05 (45N05)
- Stecjura, G. G.** (with Nisnevich, L. B.) Organization of the choice of static priorities in decentralized-control systems. I. *Avtomat. i Telemekh.* **1971**, no. 6, 99-105 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 6, part 2, 943-949. (Authors' summary) **52** #2572 90B99
- (with Nisnevich, L. B.) Decentralized control of customer interactions in single-stage systems of resource flux distribution. II. *Avtomat. i Telemekh.* **1972**, no. 6, 102-110 (Russian); translated as *Automat. Remote Control* **33** (1972), no. 6, part 2, 975-982. (Authors' summary) **52** #4982 90B25
- (with Nisnevich, L. B.) Decentralized control of interactions of consumers in single-stage systems of resource flow distribution. I. *Avtomat. i Telemekh.* **1972**, no. 5, 114-122 (Russian); translated as *Automat. Remote Control* **1972**, no. 5, part 2, 808-815. (A. Benveniste) **53** #10259 90B35
- Steck, G. P.** Bounding Poisson approximations to the binomial. *Comm. Statist.* **2** (1973), 189-203. (A. F. Ifram) **49** #10009 62E99
- (with Simmons, Gustavus J.) On the distributions of R_{mn}^+ and (D_{mn}^+, R_{mn}^+) . *Studia Sci. Math. Hungar.* **8** (1973), 79-89. (H. E. Reinhardt) **49** #4133 62E15 (62G10)
- A new formula for $P(R_i < b_i, 1 \leq i \leq m | m, n, F = G^k)$. *Ann. Probability* **2** (1974), 155-160. (C. J. Park) **50** #11582 (E **51** #9303) 62E15 (62G99)
- Evaluation of some Steck determinants with applications. *Comm. Statist.* **3** (1974), 121-138. (S. G. Mohanty) **49** #4134 62E15 (05A15)
- Acknowledgement of priority to "A new formula for $P(R_i < b_i, 1 \leq i \leq m | m, n, F = G^k)$ " (*Ann. Probability* **2** (1974), 155-160). *Ann. Probability* **3** (1975), no. 4, 739. (Editors) **51** #9303 62E15 (62G99)
- (with Hanson, D. L.) Estimating the relationship between two distribution functions. (French summary) Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 362-364 (1976). (B. R. Handa) **57** #1761 62G15
- Steckelberg, James M.** (with Seth, Sharad C.) On a relation between algebraic programs and Turing machines. *Information Processing Lett.* **6** (1977), no. 6, 180-183. (A. V. Anisimov) **58** #25085 68A05 (94A30)
- Stechkan, H.** ★Güterströme in Netzen. Lecture Notes in Economics and Mathematical Systems, Vol. 88. Springer-Verlag, Berlin-New York, 1973. vii + 134 pp. (Editors)
- 50** #9332 90B10
- Engpässe, Staustellen und glatte homogene Ströme in Netzen. (English summary) *Z. Oper. Res. Ser. A-B* **22** (1978), no. 5, A199-A217. (Rainer Burkard) **58** #25085 90B10
- Stečkin, B. S.** Monotone subsequences in a permutation of n natural numbers. (Russian) *Mat. Zametki* **13** (1973), 511-514. (J. B. Roberts) **47** #4813 05A15
- Generalized valences. (Russian) *Mat. Zametki* **17** (1975), 433-442. (Author's summary) **57** #170 05C30
- Yamamoto's inequality, and gatherings. (Russian) Presented at the Third Soviet-Japanese Symposium on Probability Theory and Mathematical Statistics held in Tashkent, August-September, 1975. *Mat. Zametki* **19** (1976), no. 1, 155-160. (G. Katona) **54** #12534 05A05
- Binary functions on ordered sets (inversion theorems). (Russian) Analytic theory, mathematical analysis and their applications (dedicated to I. M. Vinogradov on his 85th birthday). *Trudy Mat. Inst. Steklov.* **143** (1977), 178-187, 211. (From introduction) **58** #21660 05A19 (06A10)
- Some combinatorial problems. (Russian) Set theory, Foundations of mathematics (Proc. Sympos., Belgrade, 1977). *Zb. Rad. Mat. Inst. Beograd (N.S.)* **2**(10) (1978), 129-137. (Author's summary) **58** #21633 05-02
- See also **Erdős, Paul**; et al., **54** #2470
- Stečkin, S. B.** The Lucas criterion for the primality of numbers of the form $N = h^2$ (Russian) *Mat. Zametki* **10** (1971), 259-268. (S. I. Gendler) **45** #165 10A25
- The approximation of continuous periodic functions by Favard sums. (Russian) *Trudy Mat. Inst. Steklov.* **109** (1971), 26-34. (J. Németh) **45** #9048 42A08 (41A08)
- A certain optimization problem. (Russian) *Numerische Methode der Approximationstheorie, Band 1 (Tagung, Math. Forschungsinst., Oberwolfach, 1971)* 205-208. *Internat. Schriftenreihe Numer. Math., Band 16*, Birkhäuser, Basel, 1972. (Ivanov) **52** #4578 65D15
- A certain extremal problem for trigonometric series with nonnegative coefficients. (Russian) *Acta Math. Acad. Sci. Hungar.* **23** (1972), 289-291. (F. Ustina) **47** #3842A32
- On the Cantor-Lebesgue theorem for double trigonometric series. (Russian) *Zametki* **12** (1972), 13-18. (R. L. Cooke) **47** #5518 42A92
- An estimate for Gaussian sums. (Russian) *Mat. Zametki* **17** (1975), no. 4, 579-584. (Karl-Heinz Indlekofer) **53** #295 10G05
- (with Besov, O. V.) A description of the moduli of continuity in L_2 . (Russian) Theory of functions and its applications (collection of articles dedicated to S. Mihailevič Nikol'skii on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **134** (1975), 23-25, 407. (Jaroslav Smital) **53** #8341 26A15
- Mean values of the modulus of a trigonometric sum. (Russian) Theory of functions and its applications (Collection of articles dedicated to Sergei Mihailevič Nikol'skii on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **134** (1975), 283-411. (Karl-Heinz Indlekofer) **53** #296 10G05
- (with Levitan, B. M.; Men'shov, D. E.; Ul'janov, P. L.) Evgenija Aleksandrovna Bredihina. Obituary. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 3(183), 147-151. (Editors) **52** #7812 01A70
- (with Subbotin, Ju. N.) ★Сплайны в вычислительной математике. (Russian) [Splines in numerical mathematics] *Izdat. "Nauka", Moscow*, 1976. 248 pp. (C. de Boor) **56** #13517 65D05 (41A15)
- An estimate of a complete rational trigonometric sum. (Russian) Analytic number theory, mathematical analysis and their applications (dedicated to I. M. Vinogradov on his 85th birthday). *Trudy Mat. Inst. Steklov.* **143** (1977), 188-207, 211. (J. W. S. Cassels) **58** #543 10G05
- On the approximation of periodic functions by de la Vallée Poussin sums. (Russian summary) *Anal. Math.* **4** (1978), no. 1, 61-74. (B. L. Gupta) **57** #13344 42A08
- (with Gavriljuk, V. T.) Approximation of continuous periodic functions by Fourier series. (Russian) *Dokl. Akad. Nauk SSSR* **241** (1978), no. 3, 525-527. (N. T. Anisimov) **58** #29741 42A08
- See also **Approximation of periodic functions**, **49** #5665; **Ahlberg, J. H.**; et al., **50** #5280; **Proceedings: Conference on Constructive Theory of Functions (Approximation Theory)**, **51** #8677; **Approximation of functions and operators**, **52** #1090; **Approximation of functions and operators**, **56** #5101 and **Theory of approximation of functions**, **58** #29582
- Stečkin, V. S.** Collections and their application in combinatorial schemes (on a combinatorial formalization). (Russian) *Combinatorial and asymptotic analysis, N. S. (Russian)*, pp. 44-54. Krasnojarsk. Gos. Univ., Krasnojarsk, 1977. (Editors) **58** #27505A05
- Stečkina, E. I.** See **Zamansky, Marc**, **49** #10486; **Lefort, G.**, **50** #1785 and **Bourgin, J. G.**, **58** #28383
- Steding, Thomas L.** (with Bergen, Arthur R.) Instability of nonlinear infinite-dimensional feedback systems using Lyapunov functionals. *SIAM J. Control* **12** (1974), 664-674. (Marshall Slemrod) **54** #9790 93D15
- Stedman, G. E.** A diagram technique for coupling calculations in compact groups. *J. Math. Phys.* **18** (1977), no. 7, 1021-1037. (Not reviewed) 81.22
- A diagram technique for basis functions and their transformation, with application to group-subgroup bases and crystal tensors. *J. Phys. A* **9** (1976), no. 12, 1999-2019. (J. Coleman) **55** #4985 81.22
- Stedry, Andrew C.** (with Hendrix, G. G.) The elementary redundancy-optimization problem: a case study in probabilistic multiple-goal programming. *Operations Research* **26** (1978), no. 3, 639-653. (Authors' summary) **58** #4355 90C50 (93A10)
- (with Reese, Richard M.) A chance-constrained distribution problem. *Naval Logist. Quart.* **24** (1977), no. 1, 35-45. (Valdas Pukas) **56** #14672 90C05
- Štědrý, Milan** (with Vejvoda, Otto) Periodic solutions to weakly nonlinear autonomous wave equations. *Czechoslovak Math. J.* **25**(100) (1975), no. 4, 536-555. (Clarence Ablow) **52** #14571 35B10 (35L05)
- Periodic solutions of a weakly nonlinear wave equation. (Loose Russian summary) *Časopis Pěst. Mat.* **102** (1977), no. 2, 128-143. (Mitsuhiko Nakao) **57** #839 35L05 (35L05)
- Steeh, Willi-H.** A note on Wick's theorem. *Lett. Math. Phys.* **1** (1975/77), no. 2, 135-140. (D. A. Dubin) **55** #5058 81.47

- comment on trace calculations for Fermi systems. *Acta Phys. Acad. Sci. Hungar.* 1977, no. 3, 171-177. (A. K. Rajagopal) 57 #15113 82.15
- lie algebras and dynamic nonlinear systems containing limit cycles. *Internat. J. Math. Phys.* 16 (1977), no. 9, 671-679. (Author's summary) 58 #11688 34C35 50, 58F05
- Nonlinear autonomous dynamic systems, limit cycles, and one-parameter groups of transformations. *Lett. Math. Phys.* 2 (1977/78), no. 2, 171-174. (L. Reiziqš) 57 #10083 C05 (22E05, 58F99)
- Nonlinear systems of differential equations involving limit cycles and conservative Hamiltonian systems. *Phys. Lett. A* 62 (1977), no. 4, 211-213. (Martin Kummer) 1559 58F05
- The Lie derivative, invariance conditions, and physical laws. *Z. Naturforsch. A* 33 (1978), no. 6, 742-748. (A. P. Stone) 58 #13112 58A10 (57D25, 69.00)
- ert M. The distribution of the product and quotient for powers of two independent generalized gamma varieties. *Metron* 33 (1975), no. 3-4, 227-233 (1978). (Author's summary) 57 #14224 62E15
- Integral transforms in statistics. *Estadística* 31 (1977), no. 118, 349-358. (A. M. ai) 58 #6947 44-01 (62E15)
- Dwight Separable quasigroups. *Aequationes Math.* 11 (1974), 189-195. (Charles dner) 53 #8310 20N05
- with Lindner, Charles C.) On the number of conjugates of a quasigroup. *Algebra Universalis* 5 (1975), no. 2, 191-196. (R. Artzy) 52 #10941 20N05
- Christopher A. A Wiener-Lévy theorem for nuclear integral operators. *J. Analyse* 32 (1977), 83-92. (M. Demuth) 58 #7225 47G05
- Descending sequences of degrees. *J. Symbolic Logic* 40 (1975), no. 1, 59-61. (I. Kobzev) 56 #8347 02F30
- omas B., Jr. (with Belnap, Nuel D., Jr.) ★The logic of questions and answers. A bibliography of the theory of questions and answers by Urs Egli and Hubert Richter. *Yale University Press, New Haven, Conn.-London*, 1976. vii + 209 pp. 0-300-01962-9 (N. B. Cocchiarella) 58 #27358 02C99
- R. A geometric optics solution for the thin shell equation. (French, German, and Russian summaries) *Internat. J. Engrg. Sci.* 9 (1971), 681-704. (J. W. gs) 46 #1175 73.35
- an asymptotic fundamental solution of the reduced wave equation on a surface. *Appl. Math.* 29 (1971/72), 509-524. (Gérard A. Maugin) 53 #12161 73.35
- ending waves in shells. *Quart. Appl. Math.* 34 (1976/77), no. 4, 385-392. (Yi-Yuan 56 #13974 73.49
- Michael When successes and failures are independent a compound process is on. *Amer. Statist.* 27 (1973), 232. 49 #4059 60-01
- limit properties of Luce's choice theory. *J. Mathematical Psychology* 11 (1974), 131. (B. G. Mirkin) 51 #2685 92A25
- limit properties of random variables associated with a partial ordering of R^d . *Ann. Probability* 5 (1977), no. 3, 395-403. (F. T. Wright) 55 #11334 60C05 (60F15)
- families of sample means converge slowly. *Ann. Probability* 5 (1977), no. 6, 1038. (Werner Wolf) 57 #1621 60F15 (62E20, 60F10)
- with del Junco, Andrés) Moving averages of ergodic processes. *Metrika* 24 (1977), 35-43. (J. R. Blum) 55 #3216 28A65
- with Hanson, F.; Stenger, Frank) Distinct sums over subsets. *Proc. Amer. Math.* 56 (1977), no. 1, 179-180. (S. L. G. Choi) 56 #5482 10L10
- Empirical discrepancies and subadditive processes. *Ann. Probability* 6 (1978), no. 1, 127. (R. M. Dudley) 57 #4310 60F15
- with Boyd, David W.) Lower bounds for nonparametric density estimation rates. *Statist.* 6 (1978), no. 4, 932-934. (Paul Deheuvels) 58 #13496 62G20
- Covering finite sets by ergodic images. *Canad. Math. Bull.* 21 (1978), no. 1, 85-91. (Krengel) 58 #1094 28A65
- with del Junco, Andrés) Growth rates for monotone subsequences. *Proc. Amer. Soc.* 71 (1978), no. 2, 179-182. (H. G. Meijer) 58 #10800 10K05
- P. Principe d'un algorithme de recherche d'un isomorphisme entre deux graphes. *Française Informat. Recherche Opérationnelle* 3 (1969), Sér. R-3, 51-69. (C. F. d) 45 #5017 05C99 (94A20)
- Arthur New models of the real-number line. *Sci. Amer.* 225 (1971), no. 2, 9. (Albert E. Hurd) 56 #5281 02H20 (02K25)
- Conjectures and counterexamples in metrization theory. *Amer. Math. Monthly* 79 (1972), 113-132. (E. P. Rozycki) 46 #8186 54E35
- Highlights in the history of spectral theory. *Amer. Math. Monthly* 80 (1973), 381. (F. Smithies) 47 #5643 47B15 (01A55, 01A60, 45A05, 46H05)
- with Gaffney, Matthew P.) ★Annotated bibliography of expository writing in the mathematical sciences. With the assistance of Paul J. Campbell. *Mathematical Association of America, Washington, D.C.*, 1976. xi + 282 pp. (J. S. Joel) 58 #4765 5 (00A20)
- solution of the four color problem. *Math. Mag.* 49 (1976), no. 4, 219-222. (Ruth 56 #5349 05C15
- Highlights in the history of spectral theory. (Polish) Translated from the English. *Amer. Math. Monthly* 80 (1973), 359-381. *Wiadom. Mat.* (2) 19 (1976), no. 2, 141-164. (ors) 55 #6207 47-03
- orman M. (with Byrne, George D.) The problem of minimizing nonlinear functionals. *Numerical solution of systems of nonlinear algebraic equations (NSF-CBMS Annual Conf., Univ. Pittsburgh, Pittsburgh, Pa., 1972)*, pp. 185-239. *Academic Press, New York*, 1973. (N. N. Abdelmalek) 53 #1958 65K05 (65H10)
- reen, P. Note on a class of differential equations of infinite order. *Nederl. Akad. Wetensch. Proc. Ser. A* 75 = *Indag. Math.* 33 (1971), 361-364. (S. G. Deo) 45 #3884 5
- Note on a theorem on slowly varying functions. *Nederl. Akad. Wetensch. Proc. Ser. = Indag. Math.* 34 (1972), 174-175. (B. K. Lahiri) 46 #5535 26A12
- W. P. ★Mathematical logic with special reference to the natural numbers. *Cambridge University Press, London-New York*, 1972. xvi + 638 pp. (S. Gottwald (Zbl 275 002)) 57 #9451 02-01
- Willem (with Sabri, M. Shaker) Discrete Hilbert transform filtering. *Proceedings of the Eighteenth Midwest Symposium on Circuits and Systems (Concordia Univ., Montreal, Que., 1975)*, pp. 449-455. *Western Periodicals, North Hollywood, Calif.*, 1975. (Sudhakar M. Reddy) 55 #2307 93E10 (94A05)
- van Steenberghen, Fernand See Van Steenberghen, Fernand
- Steenbrink, Joseph Limits of Hodge structures. *Invent. Math.* 31 (1975/76), no. 3, 229-257. (C. A. M. Peters) 55 #2894 14C30 (32J25, 14D05)
- Mixed Hodge structure on the vanishing cohomology. *Real and complex singularities (Proc. Ninth Nordic Summer School/NAVF Sympos. Math., Oslo, 1976)*, pp. 525-563. *Sijthoff and Noordhoff, Alphen aan den Rijn*, 1977. (Helmut Hamm) 58 #5670 14C30 (14B05, 14D05)
- Intersection form for quasi-homogeneous singularities. *Compositio Math.* 34 (1977), no. 2, 211-223. (Helmut Hamm) 56 #11995 14B05 (32C40)
- Steenkamp, P. J. (with Gonsalves, J. W.) Time reversal as the symmetry underlying Kramer degeneracy. (Afrikaans summary) *Tydskr. Natuurwetenskap.* 15 (1975), no. 3, 74-78. (Hsin-Yang Yeh) 52 #12575 81.22
- Steenrod, Norman E. Cohomology operations, and obstructions to extending continuous functions. *Advances in Math.* 8, 371-416 (1972). (John R. Harper) 45 #7705 55G35
- Steer, Brian (with Crabb, M. C.) Vector-bundle monomorphisms with finite singularities. *Proc. London Math. Soc.* (3) 30 (1975), 1-39. (K. H. Mayer) 51 #6841 57D25 (57D20)
- Orbits and the homotopy class of a compactification of a classical map. *Topology* 15 (1976), no. 4, 383-393. (Peter J. Eccles) 56 #3864 57D90 (55E45)
- Stefan, A. See Mathematics at a glance, 51 #7769
- Ștefan, Alexandra See Collection: Moisil, Grigore Constantin, 49 #4703
- Ștefan, Gh. M. (with Dumitrescu, Sanda) The modeling of digital logic structures as finite state systems. (Romanian. English summary) *Bul. Inst. Politehn. București Ser. Electrotehn.* 39 (1977), no. 3, 59-68. (D. Simovici) 57 #15782 94A30
- Stefan, Heinrich Strictly exposed and conical points in a projective tensor product. (Russian) *Teor. Funkcii Funkcional. Anal. i Prilozhen.* No. 22 (1975), 146-154, 164. (S. Kutateladze) 52 #8888 46B05
- Stefan, Peter Accessibility and foliations with singularities. *Bull. Amer. Math. Soc.* 80 (1974), 1142-1145. (J. Bochnak) 50 #5846 58E15 (49E15, 57D30)
- (with Taylor, J. B.) A remark on a paper of D. L. Elliott. *J. Differential Equations* 15 (1974), 210-211. (Clark Robinson) 49 #1301 49E15 (93B05)
- Accessible sets, orbits, and foliations with singularities. *Proc. London Math. Soc.* (3) 29 (1974), 699-713. (M. L. Gromov) 50 #14837 58D05 (49E15, 57D40)
- (with Chillingworth, David) Integrability of singular distributions on Banach manifolds. *Math. Proc. Cambridge Philos. Soc.* 79 (1976), no. 1, 117-128. (M. L. Gromov) 53 #1624 58A30
- A theorem of Šarkovskii on the existence of periodic orbits of continuous endomorphisms of the real line. *Comm. Math. Phys.* 54 (1977), no. 3, 237-248. (Ju. E. Gliklii) 56 #3894 58F20 (28A65)
- See also Dynamical systems, 52 #11994
- Ștefan, Viorel On existence of solutions of differential equations with unknown set functions defined in topological spaces. *Proceedings of the Institute of Mathematics (Iași, 1974)*, pp. 173-177. *Editura Acad. R. S. R., Bucharest*, 1976. (Author's introduction) 58 #6443 34A99 (39A15)
- Ștefancu, Dragoș (with Rusciur, Ștefania) A correspondence between ruled varieties in S_4 and the system of differential equations. (Romanian. French summary) *Bul. Inst. Politehn. Iași (N.S.)* 20(24) (1974), no. 3-4, part 1, 27-29. (D. I. Papuc) 51 #13878 53A15
- A class of surfaces that have the planimetry property of Amsler. (Romanian. French summary) *Bul. Inst. Politehn. Iași (N.S.)* 21(25) (1975), no. 1-2, sec. I, 17-19. (M. Șt. Botez) 53 #3908 53A05
- Ștefańczyk, M. (with Hobot, Grażyna) A scheme for error estimations of eigenvalues of differential operators obtained by the difference method connected with the QR-algorithm. (Polish) *Mat. Stas.* (3) 4 (1975), 87-94. (V. Komkov) 56 #10050 65N25 (65F15)
- Stefanelli, M. (with Ceriani, T.; Colli Franzone, Piero; Viganotti, C.) Numerical determination of intestinal membrane diffusion constants by a gradient method. (French summary) *Internat. J. Bio-Med. Comput.* 7 (1976), no. 3, 213-234. (J. P. Kernevez) 53 #12630 92A05 (65K05)
- (with Colli Franzone, Piero; Viganotti, C.) Identification of a distributed model for ferrokinetics. *Distributed parameter systems: modelling and identification (Proc. IFIP Working Conf., Rome, 1976)*, pp. 221-235. *Lecture Notes in Control and Information Sci., Vol. 1, Springer, Berlin*, 1978. (From the introduction) 58 #20551 92A05 (93B30)
- Ștefănescu, Anton Gradient method for convex continuous games. (Romanian. Russian and English summaries) *An. Univ. București Mat.-Mec.* 19 (1970), no. 1, 137-143. (R. K. Guy) 45 #6458 90D13
- Equilibrium point and min-max equality. (Romanian. English summary) *Stud. Cerc. Mat.* 23 (1971), 1575-1578. (Marcel Rădulescu) 48 #13284 90D10
- (with Mihoc, Gheorghe) ★Programarea matematică. (Romanian) [Mathematical programming] *Editura Didactică și Pedagogică, Bucharest*, 1973. 284 pp. (Csaba Fabian) 49 #8645 90Cxx
- Strong equilibrium points in the noncooperative games theory. *An. Univ. București Mat.-Mec.* 22 (1973), no. 1, 103-111. (C. Mohan) 50 #12284 90D10
- On some minimax theorems. (Romanian. English summary) *Stud. Cerc. Mat.* 25 (1973), 1001-1006. (Marcel Rădulescu) 52 #7563 90D05
- Optimal strategies for non-cooperative games. (Romanian. English summary) *Stud. Cerc. Mat.* 27 (1975), no. 5, 571-597. (Irinel Dragan) 54 #12232 90D10
- Equilibrium points in random extensions of a game. (Romanian. English summary) *Stud. Cerc. Mat.* 27 (1975), no. 5, 599-615. (R. Theodorescu) 53 #7508 90D10
- ϵ -optimal strategies in noncooperative games. (Romanian. English summary) *Stud. Cerc. Mat.* 27 (1975), no. 5, 617-624. (Irinel Dragan) 54 #12233 90D10
- On the cooperative games without side payments. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 3, 355-361. (M. Maschler) 58 #20509 90D12
- Ștefănescu, Corneliu Alex. The Yoneda-Grothendieck theorem on bicategories. (Romanian. French summary) *Stud. Cerc. Mat.* 23 (1971), 165-177. (E. Șulgeifer (RŽMat 1971 #10 A134)) 47 #6808 18D05
- Double inductive and projective limits. Commuting double functors. (Romanian.

- French summary) *Stud. Cerc. Mat.* **24** (1972), 457-468. (E. Enochs) **50** #7289 18D05
- Ștefănescu, Doru** On an example given by Samuel. (Romanian. English summary) *Stud. Cerc. Mat.* **27** (1975), no. 4, 471-475. (E. Enochs) **53** #2933 13F15
- Approximate methods for solving algebraic equations—the method of Sturm. (Romanian) *Gaz. Mat. Publ. Lună Pentru Tineret* **82** (1977), no. 9, 349-352. (D.-M. Popescu) **58** #10843 12D10
- sabba-Stefanescu, I.** See **Sabba-Stefanescu, I.**
- Stefanescu, I.-S.** (with Raszillier, I.; Schmidt, W.) On zeroes of the pion electromagnetic form factor. *J. Mathematical Phys.* **17** (1976), no. 11, 1957-1962 (R. G. Newton) **54** #6727 81.30
- Ștefănescu, Ion** A new functional and structural generation of JK edge-triggered flip-flops. (French summary) *Rev. Roumaine Phys.* **22** (1977), no. 7, 733-742. (Author's summary) **57** #5483 94A20
- Logical networks of *jk*-JK edge-triggered flip-flops: TTL and CMOS structures. (French summary) *Rev. Roumaine Phys.* **22** (1977), no. 8, 847-857. (Author's summary) **57** #5484 94A20
- Stefănescu, Mirela** (with Miron, Radu) Near-modules over special near-rings. *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **23** (1977), no. 1, 29-32. (G. Betsch) **57** #12614 16A76
- (with Miron, Radu) On distributive near-rings with a finite number of central idempotents. *An. Științ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* **23** (1977), no. 2, 235-240. **58** #22184 16A76 (06A70)
- A correspondence between a class of near-rings and a class of groups. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **62** (1977), no. 4, 439-443. (K. W. Weston) **58** #11033 16A76 (02G99, 20H25)
- Ștefănescu, Șt.** See *Recherches sur la philosophie des sciences*, **52** #7764
- Stefani, Gianna** Osservazioni sui gruppi di Aeppli. *Atti Sem. Mat. Fis. Univ. Modena* **20** (1971), no. 1, 146-152 (1972). (Manfred Hermann) **47** #227 14F25
- Su un teorema di Nevanlinna. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 271-276. (Shoshichi Kobayashi) **49** #5402 32H25
- (with Gori, Franco) Una struttura di algebra negli spazi di coomologia di grado pari di una varietà kähleriana compatta. *Atti Sem. Mat. Fis. Univ. Modena* **22** (1973), no. 2, 232-238 (1974). (A. Aeppli) **53** #8481 32C35
- (with Modugno, Marco) On gravitational and electromagnetic shock waves and their detection. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **25** (1976/77), no. 1, 91-104. (P. Rastall) **54** #12140 83.53
- Stefani, Oscar** (with Zanardo, Alessandra) Un'osservazione su una sottoalgebra di $C(X)$. *Rend. Sem. Mat. Univ. Padova* **53** (1975), 327-328. (Melvin Henriksen) **53** #14420a 54D35 (54C30)
- (with Zanardo, Alessandra) Alcune caratterizzazioni di una sottoalgebra di $C^*(X)$ e compatteficazioni ad essa associate. *Rend. Sem. Mat. Univ. Padova* **53** (1975), 363-367. (Melvin Henriksen) **53** #14420b 54D35
- Stefani, S.** (with Szegő, Giorgio P.) Formulazione analitica della funzione utilità dipendente da media e semivarianza, mediante il principio dell'utilità attesa. (English summary) *Boll. Un. Mat. Ital.* (5) **13A** (1976), no. 1, 157-162. (Massimiliano Ottaviani) **57** #11669 90A10
- Stefani, Stefano** Gradi di insolubilità e limiti. *Ann. Univ. Ferrara Sez. VII (N.S.)* **19** (1974), 51-64. (B. van Rootselaar) **53** #110 02F35 (02K30)
- On the representation of hemimorphisms between Boolean algebras. (Italian summary) *Boll. Un. Mat. Ital.* (5) **13A** (1976), no. 1, 206-211. (P. Kratochvil) **54** #5071 06A40
- Stefaniak, J.** Two-dimensional source of elastic dilatation in a magnetic field. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **21** (1973), 357-361. (P. D. S. Verma) **48** #7734 73.35
- Ștefănică, I. M.** Poisson stable solutions of linear systems of difference equations. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 2062-2072, 2113. (J. K. Hale) **48** #4555b 39A12 (34C25)
- Poisson stable sequences. (Russian) *Mat. Issled.* **7** (1972), no. 3(25), 210-230, 274. (J. K. Hale) **48** #4555a 39A12 (34C25)
- Stability and consistency of the solutions of difference equations. (Russian) *Studies in algebra, mathematical analysis, and their applications* (Russian), pp. 84-89, 123. Izdat. "Știință", Kishinev, 1977. (Author's summary) **58** #23216 39A10
- Stefanjuk, B. M.** Two-valued functions that are given by the transition tables of the variables. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 2, 35-42. (From the introduction) **50** #4172 94A30
- Stefanjuk, V. L.** (with Ginzburg, S. L.) *n*-automata game with single Nash point. *Avtomat. i Telemekh.* **1970**, no. 8, 75-83 (Russian. English summary); translated as *Automat. Remote Control* **1970**, no. 8, 1264-1272. (Louis J. Billera) **46** #3107 90D15 (94A30)
- Description of games of *e*-automata. *Avtomat. i Telemekh.* **1971**, no. 4, 83-88 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 4, part 1, 594-598. (R. E. Stearns) **46** #3109 90D15 (94A30)
- Behavior of a network of automata in the power-regulation problem. *Problemy Kibernet.* No. 20 (1968), 131-143 (Russian); translated as *Systems Theory Res.* **20** (1971), 110-122. (C. Tartia) **46** #3190 94A05
- (with Kotljars, S. B.) A certain simplified model of the interaction in a collective automata. (Russian. English summary) *Problems of Control and Information Theory / Problemy Upravleniya Teorii Informacii* **1** (1972), no. 3-4, 297-305. (A. Rapoport) **48** #13522 94A30
- A certain theorem on *M*-matrices and its applications. (Russian) *Mat. Zametki* **13** (1973), 235-246. (O. Pokorný) **47** #8562 15A15
- di Stefano, F.** See **Di Stefano, F.**
- di Stefano, Maria Elena** See **Di Stefano, Maria Elena**
- Stefanov, G. A.** See *Control in space*, **48** #8041
- Stefanov, Stefan G.** The relation between the connection in a two-dimensional Riemannian space and the intrinsic connection of a certain three-web. (Bulgarian. Russian and English summaries) *B'lgar. Akad. Nauk. Izv. Mat. Inst.* **15** (1974), 349-357. (Author's summary) **51** #4082 53B20
- Stefanova, S. D.** Two-parameter systems of two-dimensional planes in a five-dimensional biplanar space of hyperbolic type. (Bulgarian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 4, 205-215 (1977). (Author's summary) **57** #4019 53A20
- Stefanova, St.** (with Sugarev, M.) Certain spatial equiaffine curves. (Bulgarian. Russian and French summaries) *Visš. Ped. Inst. Plovdiv Naučn. Trud.* **8** (1970), no. 2, 51-60. (Stanilov) **46** #6178 53A15
- Stefanovskii, A. I.** Solution of finite difference equations by means of trigonometric (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) No. 12* (1970), 107-111. (Stamete) **46** #2282 39A10 (65Q05)
- Stefansky, Wilhelmine** Rejecting outliers by maximum normed residual. *Ann. Statist.* **42** (1971), 35-45. (I. Guttman) **45** #1303 62E99
- Stefanyuk, V. L.** See **Stefanjuk, V. L.**
- Stefek, Manfred** Berechnung der Singularitäten und Extrema einer speziellen Klasse algebraischen Kurven. *Wiss. Z. Hochsch. Verkehrswesen "Friedrich List" Dresden* (1976), no. 2, 567-582. (L. Bitay) **55** #2881 14-04 (14H20, 65D99)
- Steffen, Bernhard** Eine Bemerkung zu ebenen Problemen der Laplacegleichung mit f Rändern. *Methoden und Verfahren der mathematischen Physik, Band 7*, pp. 155-161. *Hochschultaschenbücher*, No. 726, Bibliographisches Inst., Mannheim, 1972. (Ed. 50) #11820 65N99 (35J05)
- Ein numerisches Verfahren zur Behandlung von dreidimensionalen Problemen: freiem Rand der Laplacegleichung. *Methoden und Verfahren der mathematischen Physik, Band 10*, pp. 1-19. Bibliographisches Institut, Mannheim, 1973. (Editors) **50** #11820 65N99
- A numerical method for the evaluation of an equilibrium configuration of a torus pinch. *J. Computational Phys.* **27** (1978), no. 2, 180-191. (Pekka Silvennoinen) **58** #8799 76.65
- Steffen, Günther** Irreduzible zyklische Matrixgruppen über dem Restklassenring modulo m . *Rostock. Math. Kolloq. No. 8* (1978), 5-29. (Ulrich Dempwolff) **58** #22267 20C20
- Steffen, Klaus** Flächen konstanter mittlerer Krümmung mit vorgegebenem Volumen und Flächeninhalt. *Arch. Rational Mech. Anal.* **49** (1972/73), 99-128. (R. Osserman) **49** #6011 49F22
- Ein verbesserter Existenzsatz für Flächen konstanter mittlerer Krümmung. (English summary) *Manuscripta Math.* **6** (1972), 105-139. (R. Osserman) **45** #1050 53A10 (49F10)
- Isoperimetric inequalities and the problem of Plateau. *Math. Ann.* **222** (1976), no. 3, 97-144. (Robert Gulliver) **54** #5951 49F10 (53A10)
- On the existence of surfaces with prescribed mean curvature and boundary. *Math. Z.* **146** (1976), no. 2, 113-135. (Robert Gulliver) **52** #15196 49F10
- Steffens, F. E.** On confidence sets for the ratio of two normal means. *South African Statist. J.* **5** (1971), 105-113. (Author's summary) **47** #9764 62F25
- A bivariate *t*-test for sphericity. *South African Statist. J.* **8** (1974), 59-68. (S. J. Steyn) **53** #9512 62H15
- Steffens, Franz** Input-Output-Systeme mit stückweise linearen und nicht notwendig stetigen Inputfunktionen. *Operations Research Verfahren, Band XXII*, pp. 200-209. Hain, Meisenheim am Glan, 1976. (Peter Bod) **55** #11985 90A15 (90C10)
- See also *Symposium: Operations Research*, **58** #25852a; *Symposium: Operations Research*, **58** #25852b; *Symposium: Operations Research*, **58** #32839a; *Symposium: Operations Research*, **58** #32839b and *Symposium: Operations Research*, **58** #32839c
- Steffens, Henry John** ★The development of Newtonian optics in England. *Science History Publications / USA, New York*, 1977. viii + 190 pp. ISBN 0-88202-048-X **58** #27156 01A50
- Steffens, Karsten** ★Injektive Auswahlfunktionen. Von der Fakultät für Mathematik und Naturwissenschaften der Technischen Universität Hannover zur Erlangung der Wissenschaftlichen Doktor der Naturwissenschaften (Dr. rer. nat.) genehmigte Dissertation. Schrift aus dem Gebiet der Angewandten Mathematik, No. 2. Technische Universität Hannover, 1972. iii + 69 pp. (Gabriel Lolli) **53** #12959 04A20 (04A25, 05A05)
- Injective choice functions. *J. Combinatorial Theory Ser. A* **17** (1974), 138-144. (H. Hechler) **51** #176 05A05
- Der Satz von Dilworth und Souslin's Hypothese. *Z. Math. Logik Grundlagen Math.* **21** (1975), 187-192. (Dj. Kurepa) **52** #10434 04A15
- (with Podewski, Klaus-Peter) Maximal representable subfamilies. *Bull. London Math. Soc.* **8** (1976), no. 2, 186-189. (James Baumgartner) **53** #5309 04A20
- (with Oelrich, Hayo) On Dilworth's decomposition theorem. *Discrete Mathematics* (1976), no. 3, 301-304. (Jacques Lévy-Bruhl) **54** #183 06A10
- Ergebnisse aus der Transversalentheorie. I. *J. Combinatorial Theory Ser. A* (1976), no. 2, 178-201. (Jaroslav Nešetřil) **55** #5454 05A05
- Ergebnisse aus der Transversalentheorie. II. *J. Combinatorial Theory Ser. A* (1976), no. 2, 202-229. (Jaroslav Nešetřil) **55** #5455 05A05
- (with Podewski, Klaus-Peter) Injective choice functions for countable families. *Combinatorial Theory Ser. B* **21** (1976), no. 1, 40-46. (James Baumgartner) **53** #12959 04A20
- (with Hesse, Gerhard) On the rank function for infinite sets. *J. Math. Anal. Appl.* **56** (1976), no. 3, 617-620. (James Baumgartner) **55** #7787 04A20
- (with Podewski, Klaus-Peter) Über Translationen und den Satz von Mengen unendlichen Graphen. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 69-84. (Cvetković) **58** #5381 05C35
- Matchings in countable graphs. *Canad. J. Math.* **29** (1977), no. 1, 165-168. (V. Tutte) **55** #2668 05C99
- Stegall, Charles** Characterizations of Banach spaces whose duals are L_1 spaces. *Israel Math. J.* **11** (1972), 299-308. (J. R. Holub) **45** #4126 46B10
- (with Retherford, J. R.) Fully nuclear and completely nuclear operators and applications to ℓ_1 - and ℓ_∞ -spaces. *Trans. Amer. Math. Soc.* **163** (1972), 457-471. (Authors' summary) **54** #3368 46B05 (47B10)
- (with Lewis, D. R.) Banach spaces whose duals are isomorphic to $\ell_1(I)$. *J. Functional Analysis* **12** (1973), 177-187. (A. J. Lazar) **49** #7731 46B05
- (with Hagler, James) Banach spaces whose duals contain complemented subspaces isomorphic to $C[0,1]$. *J. Functional Analysis* **13** (1973), 233-251. (G. J. O. James) **50** #2874 46B05
- Banach spaces whose duals contain $\ell_1(I)$ with applications to the study of

- spaces. *Trans. Amer. Math. Soc.* **176** (1973), 463-477. (A. J. Lazar) **47** #3953
5 (46E30)
- with Lindenstrauss, Joram) Examples of separable spaces which do not contain ℓ_1
whose duals are non-separable. *Studia Math.* **54** (1975), no. 1, 81-105. (Pierre
rd) **52** #11543 46B05
- The Radon-Nikodým property in conjugate Banach spaces. *Trans. Amer. Math.*
206 (1975), 213-223. (J. Diestel) **51** #10581 28A45 (46B99, 46G10)
- Errata: "A result of Haydon and its applications". *Séminaire Maurey-Schwartz*
5-1976), *Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*,
Exe No. 2, 3 pp. Centre Math., École Polytech., Palaiseau, 1976. (W. J. Davis)
#17786b 46B05
- A proof of the Huff-Morris Radon-Nikodým theorem. *Séminaire Maurey-Schwartz*
5-1976), *Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*,
No. 1, 5 pp. Centre Math., École Polytech., Palaiseau, 1976. (P. Mankiewicz)
#7124 46B99 (46G10)
- A result of Haydon and its applications. *Séminaire Maurey-Schwartz* (1975-1976),
Espaces L^p , applications radonifiantes et géométrie des espaces de Banach, Exp. No. 2, 8
pp. Centre Math., École Polytech., Palaiseau, 1976. (W. J. Davis) **58** #17786a 46B05
- A proof of the martingale convergence theorem in Banach spaces. *Banach spaces of*
finite functions (Proc. Pelczynski Conf., Kent State Univ., Kent, Ohio, 1976), pp.
141. *Lecture Notes in Math.*, Vol. 604, Springer, Berlin, 1977. (W. A. Woyczyński)
#17786b 60B99 (60G45)
- The duality between Asplund spaces and spaces with the Radon-Nikodým property.
J. Math. **29** (1978), no. 4, 408-412. (J. J. Uhl, Jr.) **58** #12297 46B10 (46G10)
- ner, Hans e -Invarianten bei verallgemeinerten Carlesonmengen. *Monatsh. Math.*
1976), no. 3, 217-224. (J. A. Siddiqi) **54** #5480 30A98
- Einige Bemerkungen über die Fixpunkte der schlichten Funktionen. Collection in
honor of Hans Hohn. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **185**
(1976), no. 1-3, 105-113. (W. C. Royster) **56** #12255 30A36
- Tangentiale Nullstellenfolge holomorpher Funktionen mit vorgegebenem
Rangstufenmodul $\omega(\delta)$. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **185** (1976),
no. 1-3, 267-274. (L. R. Sons) **56** #619 30A72
- Einige Bemerkungen zum Mass- und Kapazitätsbegriff bei Carlesonmengen. (Italian
English summaries) *Rend. Ist. Mat. Univ. Trieste* **8** (1976), no. 2, 123-134 (1977).
(Komatu) **58** #1187 30A98
- Mass, Dimension und Kapazität von Carlesonmengen. *Arch. Math. (Basel)* **29**
(1977), no. 2, 193-203. (Ch. Pommerenke) **57** #3378 30A44
- Blaschke-Folgen und Carleson-Mengen. (English summary) *Monatsh. Math.* **84**
(1977), no. 1, 69-78. (Y. Komatu) **58** #1186 30A98
- Zur metrischen Entropie der Lipschitzfunktionen mit vorgegebenen Nullstellen.
Slovak Math. J. **28(103)** (1978), no. 2, 286-293. (L. Kuipers) **57** #17097
#5 (10K05, 41A45)
- with Cima, Joseph A.) On the duals of some spaces of locally schlicht functions.
Univ. Math. J. **27** (1978), no. 4, 539-550. (Richard Rochberg) **58** #12312
#0 (30A36)
- ner, Johann Nullstellen analytischer Funktionen und verallgemeinerte
Carleson-Mengen. I. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **183** (1975), no.
463-503. (V. P. Havin) **52** #14302 30A72 (30A98)
- Nullstellen analytischer Funktionen und verallgemeinerte Carleson-Mengen. II.
stellen aus dem Innern der Kreisscheibe D . *Österreich. Akad. Wiss.*
-Naturwiss. Kl. S.-B. II **184** (1975), no. 1-4, 83-97. (V. P. Havin) **56** #3262
#8
- a, J. D. Méthodes combinatoires en analyse harmonique. *Séminaire d'Analyse*
monique (année 1968/1969), Exp. No. 6, 8 pp. *Fac. Sci., Univ. Paris, Orsay*, 1969.
n C. Graham) **53** #14024 43A45
- A criterion for sets of V -interpolation. *J. Functional Analysis* **8** (1971), 189-196. (A.
Willcox) **45** #906 46J15
- Wiener-Ditkin sets for certain Beurling algebras. *Monatsh. Math.* **82** (1976), no. 4,
340. (Y. Domar) **54** #10980 43A45
- a, David A. A note on spaces of type $H^\infty + C$. (French summary) *Ann. Inst.*
ier (Grenoble) **25** (1975), no. 2, xiii, 213-217. (Charles Horowitz) **52** #11546
#5 (32A10)
- Bounded Toeplitz operators on H^1 and applications of the duality between H^1 and
functions of bounded mean oscillation. *Amer. J. Math.* **98** (1976), no. 3, 573-589.
(Sarason) **54** #8340 47B35 (30A78)
- Ideals in the disk algebra. *J. Functional Analysis* **25** (1977), no. 4, 335-337. (J.
Nett) **58** #2307 46J15 (30A98)
- Sums of invariant subspaces. *Pacific J. Math.* **70** (1977), no. 2, 567-584. (D.
son) **58** #2308 46J15
- Arndt (with Bachmann, Karl-Heinz; Beyer, Otfried; Boseck, Helmut; Göhler,
Helmut; Heinrich, Winfried; Junge, Heinz; Lorenz, Günter; Oberländer, Siegfried;
Fisch, Günter; Thiele, Helmut; Walsch, Werner; Wussing, H.; Berthold, Günter;
x, Hans; Dück, Werner; Görke, Lilly; Hellwich, Manfred; Kästner, Herbert;
genfind, Fritz; Peschel, Manfred; Rossberg, H.-J.; Sulanke, Rolf; Vahle, Hans;
Schel, Gerlinde) ★Handbuch der Mathematik Mit einer Einleitung von Hans
hardt. *Buch und Zeit Verlagsgesellschaft M.B.H., Cologne*, 1972. 739 pp. (From the
isher's foreword) **56** #5108 00A20
- Arthur (with Moore, Marion) Some results on completeness in commutative rings.
Pacific J. Math. **37** (1971), 453-460. (Robert Gordon) **46** #5309 13F05
- Joseph L. (with Warming, R. F.) On the convergence of certain finite-difference
schemes by an inverse-matrix method. *J. Computational Phys.* **17** (1975), 103-121.
o Lazarov) **52** #2242 65N10
- with Kutler, Paul) Implicit finite-difference procedures for the computation of
ex wakes. *AIAA J.* **15** (1977), no. 4, 581-590. (Ph. Mathieu) **56** #10435 76F5
- er, Wolfgang Nachruf auf Rudolf Carnap. *Z. Allgemeine Wissenschaftstheorie* **2**
(1971), no. 1, 1-13. (Editors) **47** #6 01A70
- ★Unvollständigkeit und Unentscheidbarkeit. Die metamathematischen Resultate
Gödel, Church, Kleene, Rosser und ihre erkenntnistheoretische Bedeutung. Dritte,
esserte Auflage. *Springer-Verlag, Vienna-New York*, 1973. iv+116 pp. (Editors)
#5283 02Gxx (02Fxx)
- ★Probleme und Resultate der Wissenschaftstheorie und Analytischen Philosophie.
Band II: Theorie und Erfahrung. Zweiter Halbband: Theorienstrukturen und
Theoriedynamik. *Springer-Verlag, Berlin-New York*, 1973. xix+327 pp. (Evandro
Agazzi) **57** #15831 00A25 (01A05, 02A05)
- ★Probleme und Resultate der Wissenschaftstheorie und analytischen Philosophie,
Band IV. Personelle und statistische Wahrscheinlichkeit. Erster Halbband: Personelle
Wahrscheinlichkeit und rationale Entscheidung. *Springer-Verlag, Berlin-New York*,
1973. xxiv+560 pp. (Editors) **58** #27266a 02A05 (60A05, 62A99)
- ★Probleme und Resultate der Wissenschaftstheorie und analytischen Philosophie,
Band IV. Personelle und statistische Wahrscheinlichkeit. Zweiter Halbband:
Statistisches Schliessen—Statistische Begründung—Statistische Analyse.
Springer-Verlag, Berlin-New York, 1973. xvi+420 pp. (Editors) **58** #27266b 02A05
(60A05, 62A99)
- ★The structure and dynamics of theories. Translated from the German by William
Wohlhueter. *Springer-Verlag, New York-Heidelberg*, 1976. xvii+284 pp. (Mario Bunge)
55 #2480 02A05 (02G15)
- Accidental ("non-substantial") theory change and theory dislodgment. *Historical*
and philosophical dimensions of logic, methodology and philosophy of science (Proc. Fifth
Internat. Congr. Logic, Methodology and Philos. of Sci., Part IV, Univ. Western Ontario,
London, Ont., 1975), pp. 269-288. Univ. Western Ontario Sci. Philos. Sci., Vol. 12, Reidel,
Dordrecht, 1977. (Editors) **58** #27267 02A05
- A combined approach to the dynamics of theories. How to improve historical
interpretations of theory change by applying set theoretical structures. *Theory and*
Decision **9** (1978), no. 1, 39-75. (From the summary) **58** #16108 02A05
- Stegun, Irene A. (with Zucker, Ruth) Automatic computing methods for special functions.
I. *J. Res. Nat. Bur. Standards Sect. B* **74B** (1970), 211-224. (Bernard H. Rosman)
50 #15281 65D20
- (with Zucker, Ruth) Automatic computing methods for special functions. II. The
exponential integral $E_n(x)$. *J. Res. Nat. Bur. Standards Sect. B* **78B** (1974), 199-216.
(Bernard H. Rosman) **50** #15282 65D20
- (with Zucker, Ruth) Automatic computing methods for special functions. III. The
sine, cosine, exponential integrals, and related functions. *J. Res. Nat. Bur. Standards*
Sect. B **80B** (1976), no. 2, 291-311. (Martin E. Price) **55** #1707 65D20
- See also Kölbig, K. S.; et al., **47** #2788; Ninin, Paul, **52** #15944; Gautschi,
Walter, **53** #11956; Björk, Harry, **54** #4033; Denman, Harry H.; et al., **54** #4034;
Fettis, Henry E.; et al., **54** #4035; Guttman, Lester, **54** #4036; McDowell, Robin S.,
54 #4037; Skovgaard, Ove, **54** #4038; Stein, Josef, **54** #4039; Strocok, Anthony J.,
54 #4040; Wood, Van E., **54** #4041; Lackey, Jackson B.; et al., **55** #1697;
Skovgaard, Ove, **55** #9480; Skovgaard, Ove, **56** #1657 and Skovgaard, Ove,
57 #14319
- Stehlé, Jean-Luc Plongements du disque dans C^2 . *Séminaire Pierre Lelong (Analyse)*,
Année 1970-1971, pp. 119-130. *Lecture Notes in Math.*, Vol. 275, Springer, Berlin, 1972.
(H. B. Laufer) **53** #872 32E10
- Fonctions plurisousharmoniques et convexité holomorphe de certains fibrés
analytiques. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 235-238. (Klas Diederich)
51 #10693 32F05 (32E10)
- Sous-espaces de Weierstrass. *Fonctions de plusieurs variables complexes, II (Sém.*
François Norguet, 1974-1975), pp. 337-350. *Lecture Notes in Math.*, Vol. 482, Springer,
Berlin, 1975. (R. F. Lax) **52** #11121 32G15 (14H15)
- Fonctions plurisousharmoniques et convexité holomorphe de certains fibrés
analytiques. *Séminaire Pierre Lelong (Analyse)*, Année 1973-1974, pp. 155-179. *Lecture*
Notes in Math., Vol. 474, Springer, Berlin, 1975. (R. Michael Range) **53** #3368
32L05 (32E10, 32F05)
- Cohomologie locale sur les intersections complètes et faisceaux F -quasicohérents.
(English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 6, A361-A364.
(Alessandro Silva) **54** #7841 32C35
- Faisceaux F -quasi-cohérents en géométrie analytique. *Séminaire Pierre Lelong*
(Analyse) (année 1974/75), pp. 30-53. *Lecture Notes in Math.*, Vol. 524, Springer, Berlin,
1976. (Alessandro Silva) **57** #6495 32C35
- Un cas particulier de faisceau F -quasi-cohérent avec nullité des tôr. *Séminaire*
Pierre Lelong (Analyse) (année 1974/75), pp. 55-66. *Lecture Notes in Math.*, Vol. 524,
Springer, Berlin, 1976. (Alessandro Silva) **57** #6496 32C35
- Faisceaux F -quasi-cohérents définis par échelles et résolutions. (English summary)
C. R. Acad. Sci. Paris Sér. A-B **282** (1976), no. 24, A1437-A1440. (Alessandro Silva)
54 #7842 32C35
- Stehle, Werner See Optimization and design, **48** #3456
- Stehling, Frank ★Optimale Konsum- und Investitionsquoten. *Mathematical Systems in*
Economics, 3. Verlag Anton Hain, Meisenheim am Glan, 1972. iii+124 pp. (M. Rössler)
51 #14898 90A15
- Neutral inventions and CES production functions. *Production theory* (Proc.
Internat. Sem., Univ. Karlsruhe, Karlsruhe, 1973), pp. 65-94. *Lecture Notes in Econom.*
and Math. Systems, Vol. 99, Springer, Berlin, 1974. (G. Tintner) **52** #2548 90A15
(90B30)
- Balanced growth of open economies under variable degree of homogeneity.
Production theory (Proc. Internat. Sem., Univ. Karlsruhe, Karlsruhe, 1973), pp. 147-176.
Lecture Notes in Econom. and Math. Systems, Vol. 99, Springer, Berlin, 1974. (M.
Rössler) **51** #14899 90A15
- Eine neue Charakterisierung der CD- und ACMS-Produktionsfunktionen. *Siebente*
Oberwolfach Tagung über Operations Research (1974), pp. 222-238. *Operations Research*
Verfahren, Band XXI, Hain, Meisenheim am Glan, 1975. (J. Aczél) **55** #3586 39A25
(90A15)
- (with Eichhorn, Wolfgang; Funke, Helmut) Spieltheoretische Behandlung der
Preisbildung vor und nach Unternehmenszusammenschlüssen. *Mathematical economics*
and game theory, pp. 376-387. *Lecture Notes in Econ. and Math. Systems*, Vol. 141,
Springer, Berlin, 1977. (M. Rössler) **55** #14118 90A15 (90D45)
- Indices of preference inequality and the construction of social preference relations.
Theory and applications of economic indices (Proc. Internat. Sympos., Univ. Karlsruhe,
Karlsruhe, 1976), pp. 535-561. *Physica-Verlag, Würzburg*, 1978. (Maurice Salles)
57 #15310 90A05 (92A20)
- Stehling, Peter (with Merazzi, Silvio) Viscoelastic stability of shells—numerical aspects.

- Numerical analysis (Proc. Colloq., Lausanne, 1976), pp. 167-193. Internat. Ser. Numer. Math., Vol. 37, Birkhäuser, Basel, 1977. (Hwa-Shan Ho) 57 #14816 73.65*
- Stehney, Ann K.** (with Millman, Richard S.) The geometry of connections. *Amer. Math. Monthly* **80** (1973), 475-500. (K. Béteky) **49** #9776 53C05
- Courbure d'ordre p et les classes de Pontrjagin. *J. Differential Geometry* **8** (1973), 125-134. (M. L. Gromov) **50** #14775 57D20 (53C20)
- Extremal sets of p -th sectional curvature. *J. Differential Geometry* **8** (1973), 383-400. (A. L. Vitter, III) **49** #6094 53C20
- Principal null directions without spinors. *J. Mathematical Phys.* **17** (1976), no. 10, 1793-1796. (Marcos Rosenbaum) **54** #9585 83.53
- Steib, Michael L.** Linear transformations from a function space. *Portugal. Math.* **32** (1973), 75-80. (T. R. Jenkins) **47** #9259 46E15
- Steigenberger, Joachim** Sur les conditions de séparabilité des variables dans l'équation de Laplace en espace riemannien. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **17**(21) (1971), no. 1-2, part I, 91-101. (J. Lelong) **46** #2587 53B20
- Sur les conditions de séparabilité des variables dans l'équation de Laplace en espace riemannien. *Wiss. Z. Techn. Hochsch. Ilmenau* **17** (1971), no. 3, 155-164. (Colin Rogers) **47** #9042 35J05
- (with Maisser, Peter) Zugang zur Theorie elektromechanischer Systeme mittels klassischer Mechanik. I. Elektrische Systeme in Ladungsformulierung. *Wiss. Z. Techn. Hochsch. Ilmenau* **20** (1974), no. 6, 105-123. (L. G. Chambers) **54** #14482a 70.34 (78.34)
- (with Maisser, Peter) Zugang zur Theorie elektromechanischer Systeme mittels klassischer Mechanik. III. Elektrische Systeme in gemischter Formulierung. *Wiss. Z. Techn. Hochsch. Ilmenau* **22** (1976), no. 4, 123-139. (L. G. Chambers) **56** #8217 94A20
- Steiger, Arno D.** Poincaré-irreducible tensor operators for positive-mass one-particle states. I. *J. Mathematical Phys.* **12** (1971), 1178-1191. (H. Wakita) **46** #1253 81.47
- Poincaré-irreducible tensor operators for positive-mass one-particle states. II. *J. Mathematical Phys.* **12** (1971), 1497-1507. (H. Wakita) **46** #1254 81.47
- (with Pexton, Robert L.) Roots of two transcendental equations involving spherical Bessel functions. *Math. Comp.* **31** (1977), no. 139, 752-753. (W. Sibagaki) **55** #11570 65D20 (33A40)
- (with Pexton, Robert L.) Roots of two transcendental equations determining the frequency spectra of standing spherical electromagnetic waves. *Math. Comp.* **31** (1977), no. 140, iii+217 pp. (loose microfiche suppl.) (Editors) **57** #7930 65A05
- (with Pexton, Robert L.) Roots of two transcendental equations determining the frequency spectra of standing spherical electromagnetic waves. *Math. Comp.* **31** (1977), no. 140, 1000-1002. (Carl C. Grosjean) **56** #1656 65A05
- (with Pexton, Robert L.) Addendum: "Roots of two transcendental equations as functions of a continuous real parameter" (*Math. Comp.* **32** (1978), no. 142, 511-518). *Math. Comp.* **32** (1978), no. 142, loose microfiche suppl. (J. A. Grant) **58** #8222b 65H10
- (with Pexton, Robert L.) Roots of two transcendental equations as functions of a continuous real parameter. *Math. Comp.* **32** (1978), no. 142, 511-518. (J. A. Grant) **58** #8222a 65H10
- Steiger, James H.** (with Schönemann, Peter H.) Regression component analysis. *British J. Math. Statist. Psychology* **29** (1976), no. 2, 175-189. (Authors' summary) **56** #1644 62P15
- Steiger, William L.** Some problems for unimodally distributed random variables. *Math. Colloq. Univ. Cape Town* **6** (1970/71), 77-87 (1971). (S. G. Maloševskii) **54** #14043 60E05
- (with Zaremba, Stanislaw K.) The converse of the Hartman-Wintner theorem. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **22** (1972), 193-194. (H. Kesten) **46** #4593 60F15
- Limsup sequences. (French summary) *Proceedings of the Fourth Conference on Probability Theory (Braşov, 1971), pp. 199-204. Editura Acad. R.S.R., Bucharest, 1973. (R. J. Tomkins) 52 #15623 60F15*
- Correction to: "A best possible Kolmogoroff-type inequality for martingales and a characteristic property" (*Ann. Math. Statist.* **40** (1969), 764-769). *Ann. Statist.* **1** (1973), 400. (T. Hida) **51** #4374 60G45
- A generalization of Dunning's inequality. *J. London Math. Soc.* (2) **7** (1973), 1-4. (E. S. Boylan) **48** #3120 60G45
- Weak laws for dependent sums. *Proc. Amer. Math. Soc.* **41** (1973), 278-281. (V. K. Rohatgi) **47** #7786 60F05
- A remark on the log-log law. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **26** (1973), 153-156. (Adhir K. Basu) **49** #9919 60F15
- (with Kanter, Marek) Regression and autoregression with infinite variance. *Advances in Appl. Probability* **6** (1974), 768-783. (M. M. Siddiqui) **51** #2215 62M10 (62J05)
- A converse to the log-log law for martingales. Collection of articles dedicated to the memory of Hanna Neumann, VIII. *J. Austral. Math. Soc.* **17** (1974), 496-499. (S. Orey) **50** #3319 60F15 (60G45)
- (with Kanter, Marek) Estimating linear relationships for models based on random variables with infinite variance. *Proceedings of the Fifth Conference on Probability Theory (Braşov, 1974), pp. 317-323. Editura Acad. R.S.R., Bucharest, 1977. (E. J. Hannan) 56 #16963 62M10 (62J05)*
- (with Richter, G. R.) Polynomial least squares approximations with ill-conditioned bases. (German summary) *Computing* **19** (1977), no. 1, 85-88. (G. D. Taylor) **57** #1830 65D10
- Steiglitz, Kenneth** (with Bruno, John) The expression of algorithms by charts. *Algorithm specification (Courant Comput. Sci. Sympos. 4, New York, Univ., New York, 1971), pp. 97-115. Prentice-Hall Series in Automat. Comput., Prentice-Hall, Englewood Cliffs, N.J., 1972. (Andrea Maggiolo-Schettini) 54 #14424 68A05 (68A10)*
- (with Kohler, Walter H.) Characterization and theoretical comparison of branch-and-bound algorithms for permutation problems. *J. Assoc. Comput. Mach.* **21** (1974), 140-156. (P. Vondráček) **49** #8636 90B35
- (with Henderson, Peter B.) A problem in single-machine sequencing with nonlinear delay costs. *Management Sci.* **22** (1975/76), no. 12, 1342-1350. (Jan Weglarz) **55** #14178 90B35
- (with Aho, Alfred V.; Ullman, Jeffrey D.) Evaluating polynomials at fixed set points. *SIAM J. Comput.* **4** (1975), no. 4, 533-539. (Robert P. Daley) **53** #2068A10 (68A20)
- (with Papadimitriou, Christos H.) Some complexity results for the traveling salesman problem. *Eighth Annual ACM Symposium on Theory of Computing (Hershey, Pa., 1976), pp. 1-9. Assoc. Comput. Mach., New York, 1976. (M. M. Syslo) 55 #6968A20 (90C10)*
- (with Chin, Francis Y.) A fast error evaluation algorithm for polynomial approximation. *Information Processing Lett.* **6** (1977), no. 1, 18-21. (Jo Ann How) **56** #13526 65D15 (68A10, 68A20)
- (with Papadimitriou, Christos H.) On the complexity of local search for the traveling salesman problem. *SIAM J. Comput.* **6** (1977), no. 1, 76-83. (Danie Rosenkrantz) **55** #2654 05C35 (90B10)
- Steigman, G.** The case against antimatter in the universe. *Cargèse lectures in physics*, **6**, pp. 505-579. Gordon and Breach, New York, 1973. (J. Blackman) **58** #4189 83.00
- See also **General relativity and cosmology**, **49** #8567
- Steihaug, Trond** Numerical solution of linear algebraic equations where the coefficient matrix is a polynomial of a square matrix. *Nordisk Tidskr. Informationsbehandling (BIT)* **17** (1977), no. 2, 209-214. (David R. Kincaid) **58** #3367 65F15
- (with Axelsson, Owe) Some computational aspects in the numerical solution of parabolic equations. *J. Comput. Appl. Math.* **4** (1978), no. 2, 129-142. (Murli M. Gupta) **58** #19185 65M10
- Stein, Alan H.** An application of Dirichlet series in several complex variables. *Comm. Pure Appl. Math.* **28** (1975), 303-321. (R. Ayoub) **52** #13687 10H25
- On almost relatively prime integers. *Math. Mag.* **48** (1975), 169-170. (S. I. Genderson) **51** #325 10A20 (10H25)
- (with An, Chung Ming) Representations of integers by positive definite forms. *Inst. Math. Acad. Sinica* **6** (1978), no. 1, 7-14. (E. Grosswald) **58** #10739 10H10 (10H10)
- (with Stux, Ivan E.) A mean value theorem for binary digits. *Pacific J. Math.* (1978), no. 2, 565-577. (R. W. K. Odoni) **58** #27857 10H25 (10A30)
- Stein, B. E.** (with Stein, M. E.) Positioning of components of complicated systems. *Akad. Nauk SSSR Tehn. Kibernet.* **1970**, no. 1, 42-49 (Russian); translated as *Eng. Cybernetics* **1970**, no. 1, 36-42. (Authors' summary) **48** #5621 90B05
- Stein, Charles** A bound for the error in the normal approximation to the distribution of a sum of dependent random variables. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: Probability theory, pp. 583-602. Univ. California Press, Berkeley, Calif., 1972. (K. Aleškevičienė) 53 #6687 60F05*
- Estimation of the mean of a multivariate normal distribution. *Proceedings of the Prague Symposium on Asymptotic Statistics (Charles Univ., Prague, 1973), Vol. II, 345-381. Charles Univ., Prague, 1974. (Arthur Cohen) 52 #1959 62C07*
- Lectures on multivariate estimation theory. (Russian. English summary) Presented at LOMI, 1976. Russian text prepared by the author with the assistance of M. Ermakov. A. Borodin, A. Makšanov and M. S. Nikulin. Studies in statistical estimation theory. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **74** (1977), 4-65, 148. (A. L. Rukhin) **58** #18869 62F10 (62C15, 62H99)
- (with Diaconis, Persi) Some Tauberian theorems related to coin tossing. *Probability* **6** (1978), no. 3, 483-490. (N. H. Bingham) **57** #14089 60C05 (40G05)
- See also **Huber, Peter J.**, **50** #8792 (EA 51); **de Finetti, Bruno**, **50** #15022
- Efron, Bradley;** et al., **52** #2009
- Stein, D. I.** (with Berlin, V. G.; Naryškina, N. I.) Choice of an adaptive strategy for a class of decision-making problems. *Avtomat. i Telemekh.* **1975**, no. 11, 59-63 (Russian summary); translated as *Automat. Remote Control* **36** (1975), no. 11, part 1, 1798-1803 (1976). (H. Taylor) **53** #15476 93C40 (94A30)
- Stein, David M.** An asymptotic, probabilistic analysis of a routing problem. *Math. Oper. Res.* **3** (1978), no. 2, 89-101. (John C. Gittins) **58** #9187 90B20
- Stein, E.** (with Rohrbach, R.; Wriggers, P.) Vergleichende Betrachtungen des Runge-Kutta-Nyström- und des Newmark-Verfahrens zur Integration von Systemen nichtlinearer Bewegungsgleichungen. *Z. Angew. Math. Mech.* **58** (1978), no. 6, 168-178. (K. R. Schneider) **58** #13731 65L05
- Stein, Elias M.** Singular integrals, harmonic functions, and differentiability properties of functions of several variables. *Singular integrals (Proc. Sympos. Pure Math., Chicago, Ill., 1966), pp. 316-335. Amer. Math. Soc., Providence, R.I., 1967. (J. S. Joel) 58 #247G05 (31B05, 42A40, 44A25, 46E35)*
- (with Knapp, Anthony W.) The existence of complementary series. *Problem in analysis (Papers dedicated to Salomon Bochner, 1969), pp. 249-259. Princeton Univ. Press, Princeton, N.J., 1970. (P. C. Trombi) 50 #7416 22E45*
- (with Weiss, Guido) ★ Introduction to Fourier analysis on Euclidean space. *Princeton Mathematical Series, No. 32. Princeton University Press, Princeton, N.J., 1971. x+297 pp. (Edwin Hewitt) 46 #4102 42A92 (31B99, 32A99, 46F99, 47G05)*
- ★ Analytic continuation of group representations. A James K. Whittemore Lecture in Mathematics given at Yale University, 1967. *Yale Mathematical Monographs, 2. Yale University Press, New Haven, Conn.-London, 1971. iv+36 pp. (Editors) 57 #6292 22E45*
- Some problems in harmonic analysis suggested by symmetric spaces and semi-simple groups. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1, pp. 173-189. Gauthier-Villars, Paris, 1971. (Editors) 58 #28279 22E45 (43A85)*
- (with Knapp, Anthony W.) Intertwining operators for semisimple groups. *Ann. Math.* (2) **93** (1971), 489-578. (G. I. Ol'sanskii) **57** #536 22E45
- ★ Boundary behavior of holomorphic functions of several complex variables. *Mathematical Notes, No. 11. Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1972. x+72 pp. (Guy Lavalie) 57 #12890 32A30*
- (with Knapp, Anthony W.) Irreducibility theorems for the principal series. *Conference on Harmonic Analysis (Univ. Maryland, College Park, Md., 1971), 197-214. Lecture Notes in Math., Vol. 266, Springer, Berlin, 1972. (G. I. Ol'sanskii) 54 #10499 22E45*
- (with Fefferman, Charles L.) H^p spaces of several variables. *Acta Math.* **129** (1972), 137-207. (G. B. Folland) **54** #10499 32A30

- 4, 137-193. (Alberto Torchinsky) **56** #6263 42A40 (30A78, 42A18, 42A92)
 with Korányi, Adam) H^2 spaces of generalized half-planes. Collection of articles
 ring the completion by Antoni Zygmund of 50 years of scientific activity, IV.
ia Math. **44** (1972), 379-388. (Manfred Stoll) **55** #8421 (E **55** #10733) 32M10
 ★ Сингулярные интегралы и дифференциальные свойства функций. (Russian)
 ular integral and differential properties of functions] Translated from the English
 I. Burenkov and È. È. Peisahović. Edited and with two appendices by V. I.
 nkov. *Izdat. "Mir", Moscow*, 1973. 342 pp. (Editors) **50** #1061 47G05 (26A54,
 2, 46E35)
 with Folland, Gerald B.) Parametrics and estimates for the $\bar{\partial}_b$ complex on strongly
 doconvex boundaries. *A seminar on PDEs—1973*, pp. 38-42. *Rutgers Univ., New*
swick, N. J., 1973. (Editors) **58** #24393 58G05 (22E30, 32F15, 35N15)
 Singular integrals related to nilpotent groups and $\bar{\partial}$ estimates. *Harmonic analysis on*
ogeneous spaces (Proc. Sympos. Pure Math., Vol. XXVI, Williams Coll.,
amstown, Mass., 1972), pp. 363-367. *Amer. Math. Soc., Providence, R.I.*, 1973. (S.
 indikin) **49** #9440 35N15 (32F15, 35H05, 47G05)
 with Kunze, Ray A.) Uniformly bounded representations. IV. Analytic
 nation of the principle series for complex classical groups of types B_n, C_n, D_n .
nces in Math. **11** (1973), 1-71. (P. C. Trombi) **48** #4204 22E45 (22E30)
 Singular integrals and estimates for the Cauchy-Riemann equations. *Bull. Amer.*
. Soc. **79** (1973), 440-445. (D. L. Colton) **47** #3851 35N15 (32F15, 32H10)
 with Folland, Gerald B.) Parametrics and estimates for the $\bar{\partial}_b$ complex on strongly
 doconvex boundaries. *Bull. Amer. Math. Soc.* **80** (1974), 253-258. (S. G. Gindikin)
 9438 35N15 (32F15, 35H05, 47G05)
 with Folland, Gerald B.) Estimates for the $\bar{\partial}_b$ complex and analysis on the
 enberg group. *Comm. Pure Appl. Math.* **27** (1974), 429-522. (S. G. Gindikin)
 3719 35N15 (22E30, 32K15, 47G05)
 with Clerc, Jean-Louis) L^p -multipliers for noncompact symmetric spaces. *Proc.*
Acad. Sci. U.S.A. **71** (1974), 3911-3912. (A. Korányi) **51** #3803 43A85
 with Knapp, Anthony W.) Singular integrals and the principal series. III. *Proc.*
Acad. Sci. U.S.A. **71** (1974), 4622-4624. (G. Warner) **51** #3358 22E45
 with Greiner, Peter) A parametrix for the $\bar{\partial}$ -Neumann problem. *Recontre sur*
lye complexe à plusieurs variables et les systèmes surdéterminés (Textes Conf., Univ.
réal, Montréal, Que., 1974), pp. 49-63. *Presses Univ. Montréal, Montreal, Que.*,
 (Makhlof Derridj) **56** #673 32F15 (35N15, 58G05)
 with Knapp, Anthony W.) Singular integrals and the principal series. IV. *Proc.*
Acad. Sci. U.S.A. **72** (1975), 2459-2461. (Garth Warner) **51** #13139 22E45
 with Greiner, Peter; Kohn, Joseph J.) Necessary and sufficient conditions for
 bility of the Lewy equation. *Proc. Nat. Acad. Sci. U.S.A.* **72** (1975), no. 9,
 3289. (Akira Asada) **52** #1043 35N15 (32A25, 32C05, 58G05)
 Harmonic analysis on R^n . *Studies in harmonic analysis (Proc. Conf., DePaul Univ.,*
ago, Ill., 1974), pp. 97-135. *MAA Stud. Math., Vol. 13, Math. Assoc. Amer.,*
ington, D.C., 1976. (Richard Bagby) **57** #990 42-02 (43-02)
 with Rothschild, Linda Preiss) Hypoelliptic differential operators and nilpotent
 os. *Acta Math.* **137** (1976), no. 3-4, 247-320. (Gerald B. Folland) **55** #9171
 (35H05)
 Maximal functions. I. Spherical means. *Proc. Nat. Acad. Sci. U.S.A.* **73** (1976), no.
 74-2175. (Alberto Torchinsky) **54** #8133a 42A40 (43A85)
 Maximal functions. II. Homogeneous curves. *Proc. Nat. Acad. Sci. U.S.A.* **73**
 (1976), no. 7, 2176-2177. (Alberto Torchinsky) **54** #8133b 42A40 (43A85)
 Maximal functions: Poisson integrals on symmetric spaces. *Proc. Nat. Acad. Sci.*
A. **73** (1976), no. 8, 2547-2549. (Alberto Torchinsky) **54** #8133c 42A40
 (85)
 with Wainger, Stephen) Maximal functions associated to smooth curves. *Proc.*
Acad. Sci. U.S.A. **73** (1976), no. 12, 4295-4296. (R. L. Cooke) **54** #3290
 2
 with Fefferman, Charles L.; Kahane, Jean-Pierre) The scientific achievements of
 ni Zygmund. (Polish) *Wiadom. Mat. (2)* **19** (1976), no. 2, 91-126. (Editors)
 6094 42-03
 with Greiner, Peter) ★ Estimates for the $\bar{\partial}$ -Neumann problem. *Mathematical*
os. No. 19. Princeton University Press, Princeton, N.J., 1977. iv + 195 pp.
 W 0-691-08013-5 (G. M. Henkin) **58** #17218 32F15 (35N15)
 with Phong, D. H.) Estimates for the Bergman and Szegő projections on strongly
 do-convex domains. *Duke Math. J.* **44** (1977), no. 3, 695-704. (Adib Fadlalla)
 #8916 32H10
 with Kerzman, Norberto) The Szegő kernel in terms of Cauchy-Fantappiè kernels.
Math. J. **45** (1978), no. 2, 197-224. (Ingo Lieb) **58** #22676 32H10 (45E05)
 with Kerzman, Norberto) The Cauchy kernel, the Szegő kernel, and the Riemann
 ping function. *Math. Ann.* **236** (1978), no. 1, 85-93. (Jacob Burbea) **58** #6199
 81 (30A30)
 with Nagel, Alexander) A new class of pseudo-differential operators. *Proc. Nat.*
. Sci. U.S.A. **75** (1978), no. 2, 582-585. (A. S. Dynin) **58** #7222 47G05 (35S05,
 05)
 with Nagel, Alexander; Wainger, Stephen) Differentiation in lacunary directions.
. Nat. Acad. Sci. U.S.A. **75** (1978), no. 3, 1060-1062. (Calixto P. Calderón)
 #6349 28A15
 See also **Mathematics: Periodical collection of translations of foreign articles,**
 #12534; **Clerc, J. C.**, **52** #11357 and **Differential operators on manifolds,**
 #18514
 liott) A smooth action on a sphere with one fixed point. *Bull. Amer. Math. Soc.* **82**
 (5), no. 1, 49-50. (Allan Edmonds) **52** #15517 57E25
 On the orbit types in a circle action. *Proc. Amer. Math. Soc.* **66** (1977), no. 1,
 147. (Raymond Barre) **56** #9558 57E15
 Surgery on products with finite fundamental group. *Topology* **16** (1977), no. 4,
 493. (Laurence R. Taylor) **57** #13982 57D65
 Max (with Henry, Myron S.) On the uniform convergence of a best approximate
 ion of the Riccati matrix equation. *Render. Circ. Mat. Palermo (2)* **18** (1969),
 312. (W. T. Reid) **45** #7144 34A45
 with Korányi, Adam) Correction to the paper " H^2 spaces of generalized
 planes" (*Studia Math.* **44** (1972), 379-388). *Studia Math.* **48** (1973), 309. (Manfred
 Stoll) **55** #10733 32M10
 (with Holmes, Mark H.) Sturmian theory and transformations for the Riccati
 equation. *Portugal. Math.* **35** (1976), no. 1-2, 65-73. (Leon Kotin) **55** #3380 34A25
 Stein, Gunter (with Harvey, Charles A.) Quadratic weights for asymptotic regulator
 properties. *Proceedings of the 1977 IEEE Conference on Decision and Control (New*
Orleans, La., 1977), Vol. 1, pp. 1220-1228. *Inst. Electrical Electron. Engrs., New York*,
 1977. (Authors' summary) **58** #20715 93C99
 (with Harvey, Charles A.) Quadratic weights for asymptotic regulator properties.
IEEE Trans. Automat. Control **23** (1978), no. 3, 378-387. (Authors' summary)
58 #26361 93C60
 Stein, Howard Maurice Clavelin on Galileo's natural philosophy. Review of the book by
 Maurice Clavelin [*La philosophie naturelle de Galilée. Essai sur les origines et la formation*
de la mécanique classique, Colin, Paris, 1968]. *British J. Philos. Sci.* **25** (1974), 375-397.
 (Editors) **58** #21147 01A45
 See also **Historical and philosophical perspectives of science**, **50** #6717 and
Foundations of quantum mechanics, **52** #7333
 Stein, I. M. See **Applied mathematics and transportation problems**, **52** #13064
 Stein, Iliaes M. See **Stein, Elias M.**
 Stein, J. (with Kaniel, Shmuel) Least-square acceleration of iterative methods for linear
 equations. *J. Optimization Theory Appl.* **14** (1974), 431-437. (G. Maess) **51** #2266
 65F10
 Stein, J. M. (with Bhargava, Vijay K.) "(c,k, λ)configurations and self-dual codes".
Information and Control **28** (1975), no. 4, 352-355. (J.-M. Goethals) **51** #15158
 94A10
 (with Bhargava, Vijay K.; Séguin, G  rald E.) Some (mk,k) cyclic codes in
 quasi-cyclic form. *IEEE Trans. Inform. Theory* **24** (1978), no. 5, 630-632. (Authors'
 summary) **58** #20781 94A10
 Stein, James D., Jr. Two uniform boundedness theorems. *Pacific J. Math.* **38** (1971),
 251-260. (K. Sieklucki) **46** #4372 52A50 (54H20)
 A uniform-boundedness theorem for measures. *Michigan Math. J.* **19** (1972),
 161-165. (W. F. Pfeffer) **45** #8794 28A10
 The open mapping theorem for spaces with unique segments. *Pacific J. Math.* **40**
 (1972), 459-462. (Robert L. Ellis) **46** #6273 54C10 (46A30, 54E35)
 (with Laursen, Kjeld B.) Automatic continuity in Banach spaces and algebras.
Amer. J. Math. **95** (1973), 495-506. (G. K. Pedersen) **49** #7791 46L05
 Some aspects of automatic continuity. *Pacific J. Math.* **50** (1974), 187-204. (B. E.
 Johnson) **49** #7778 46H05
 Sequence of regular finitely additive set functions. *Trans. Amer. Math. Soc.* **192**
 (1974), 59-66. (T. P. Srinivasan) **52** #696 (E **58** #11304) 28A32
 Uniform absolute continuity in spaces of set functions. *Proc. Amer. Math. Soc.* **51**
 (1975), 137-140. (Robert F. Wheeler) **55** #12893 28A32
 See also **Khurana, Surjit Singh**, **58** #11304
 Stein, Joel (with Doubilet, Peter; Rota, Gian-Carlo) On the foundations of combinatorial
 theory. IX. Combinatorial methods in invariant theory. *Studies in Appl. Math.* **53**
 (1974), 185-216. (Authors' review) **58** #16736 15A72 (14M15)
 (with Rota, Gian-Carlo) Applications of Cayley algebras. (Italian summary)
Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973), Tomo II, pp. 71-97. *Atti*
dei Convegni Lincei, No. 17, *Accad. Naz. Lincei, Rome*, 1976. (S. G. Hoggar) **57** #10579
 50D30 (14M15, 50D20)
 Stein, Josef Table errata: *Handbook of mathematical functions with formulas, graphs, and*
mathematical tables (Nat. Bur. Standards, Washington, D.C., 1964) edited by Milton
 Abramowitz and Irene A. Stegun. *Math. Comp.* **24** (1970), no. 110, 503. (Editors)
54 #4039 65A05 (33-XX)
 Stein, Junior Index theory for singular quadratic functionals in the calculus of variations.
Bull. Amer. Math. Soc. **79** (1973), 1189-1192. (W. T. Reid) **48** #7068 49B10
 Hilbert space and variational methods for singular selfadjoint systems of differential
 equations. *Bull. Amer. Math. Soc.* **80** (1974), no. 4, 744-747. (J. S. Bradley) **54** #5536
 34C05
   tein, K. A. See **Bohl, Piers**, **50** #6767
 Stein, Karl Topics on holomorphic correspondences. *Rocky Mountain J. Math.* **2** (1972),
 no. 3, 443-463. (M. Herv  ) **47** #507 32D15 (32C15)
 Dependence of meromorphic mappings. *Proceedings of the Sixth Conference on*
Analytic Functions (Krakow, 1974). Ann. Polon. Math. **33** (1976/77), no. 1-2, 107-115.
 (W. Thimms) **56** #12335 32J10 (32H99)
 See also **Cartan, H.**, **53** #7684
   tein, M. E. (with Pu  in'jan, V. K.;   sin, P. D.) The problem of the optimal partitioning
 of a graph and the composition of computer devices. (Russian) *Systems for the*
distribution of resources on graphs (Russian), pp. 118-126. (errata insert) *Vychisl. Centr*
Akad. Nauk SSSR, Moscow, 1970. (W. Kwasowicz) **47** #9884 68A10 (94A20)
 (with   tein, B. E.) Positioning of components of complicated systems. *Izv. Akad.*
Nauk SSSR Tehn. Kibernet. **1970**, no. 1, 42-49. (Russian); translated as *Engrg.*
Cybernetics **1970**, no. 1, 36-42. (Authors' summary) **48** #5621 90B05
 Optimal component placement. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 4,
 133-141. (Russian); translated as *Engrg. Cybernetics* **9** (1971), no. 4, 706-713. (S.
 L. Hakimi) **47** #1555 94A20
 (with Za  ceva,   . N.) Construction of optimal Hamiltonian cycles in multivertex
 graphs. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 6, 143-145.
 (From the introduction) **58** #4265 90B10 (05C35)
 Stein, M. L. See **Stein, Myron Leo**
   tein, M.   . On an approximate method of solution of the equations of the theory of ideal
 plasticity. *Prikl. Mat. Meh.* **38** (1974), 654-662. (Russian); translated as *J. Appl. Math.*
Mech. **38** (1974), 541-549. (1975). (S. C. Das) **51** #7436 73.35
 Stein, Marjorie L. A double saddlepoint conjecture for skew matrices. *Transactions of the*
Nineteenth Conference of Army Mathematicians (U.S. Army Training Device Agency,
Naval Training Equipment Center, Orlando, Fla., 1973), pp. 1073-1088. *U.S. Army*
Research Office (Durham), Report No. 73-3, *U.S. Army Research Office (Durham),*
Durham, N.C. 1973. (M. Pearl) **50** #7197 15A06
 Saddlepoints in P-pivot classes of skew matrices. *J. Res. Nat. Bur. Standards Sect.*
B **78B** (1974), 181-191. (A. Lee) **51** #2289 65K05 (15A57)
 A saddlepoint theorem for self-dual linear systems. *Linear Algebra and Appl.* **9**

- (1974), 55-65. (M. Pearl) **52** #12770 90C05
(with Joel, Lambert S.; Shier, Douglas R.) Planes, cubes and center-representable polytopes. *Amer. Math. Monthly* **84** (1977), no. 5, 360-363. (D. Barnette) **57** #10606 52A25
- Stein, Michael R.** Generators, relations and coverings of Chevalley groups over commutative rings. *Amer. J. Math.* **93** (1971), 965-1004. (Robert Lee Wilson) **48** #437 20H25 (18F25)
Chevalley groups over commutative rings. *Bull. Amer. Math. Soc.* **77** (1971), 247-252. (D.-N. Verma) **45** #451 20G35
(with Dennis, R. Keith) A new exact sequence for K_2 and some consequences for rings of integers. *Bull. Amer. Math. Soc.* **78** (1972), 600-603. (A. V. Geramita) **46** #1775 13D15
(with Dennis, R. Keith) The functor K_2 : a survey of computations and problems. *Algebraic K-theory, II: "Classical" algebraic K-theory and connections with arithmetic* (Proc. Conf., Seattle Res. Center, Battelle Memorial Inst., 1972), pp. 243-280. *Lecture Notes in Math.*, Vol. 342, Springer, Berlin, 1973. (J. E. Humphreys) **50** #7292 18F25
(with Dennis, R. Keith) K_2 of radical ideals and semi-local rings revisited. *Algebraic K-theory, II: "Classical" algebraic K-theory and connections with arithmetic* (Proc. Conf., Battelle Memorial Inst., Seattle, Wash., 1972), pp. 281-303. *Lecture Notes in Math.*, Vol. 342, Springer, Berlin, 1973. (Andy R. Magid) **53** #10782 13D15
(with Alperin, Roger C.; Dennis, R. Keith) The non-triviality of $SK_1(Z_m)$. *Proceedings of the Conference on Orders, Group Rings and Related Topics* (Ohio State Univ., Columbus, Ohio, 1972), pp. 1-7. *Lecture Notes in Math.*, Vol. 353, Springer, Berlin, 1973. (T.-Y. Lam) **48** #11254 18F25
Surjective stability in dimension 0 for K_2 and related functors. *Trans. Amer. Math. Soc.* **178** (1973), 165-191. (Robert Lee Wilson) **48** #6267 20G35 (14L15)
(with Dennis, R. Keith) Injective stability for K_2 of local rings. *Bull. Amer. Math. Soc.* **80** (1974), 1010-1013. (J.-P. Lafon) **51** #8097 13D15
(with Dennis, R. Keith) K_2 of discrete valuation rings. *Advances in Math.* **18** (1975), no. 2, 182-238. (M. E. Keating) **55** #10544 18F25 (13H10)
The Schur multipliers of $Sp_n(Z)$, $Spin_n(Z)$, $Spin_{-n}(Z)$, and $F_4(Z)$. *Math. Ann.* **215** (1975), 165-172. (R. Steinberg) **51** #8273 20G05 (18F25)
(with Dennis, R. Keith; Keating, Michael E.) Lower bounds for the order of $K_2(ZG)$ and $Wh_2(G)$. *Math. Ann.* **223** (1976), no. 2, 97-103. (A. Dress) **54** #279 12A80 (57D60, 18F25)
(with van der Kallen, Wilberd) On the Schur multipliers of Steinberg and Chevalley groups over commutative rings. *Math. Z.* **155** (1977), no. 1, 83-94. (R. Steinberg) **57** #474 20G35
Whitehead groups of finite groups. *Bull. Amer. Math. Soc.* **84** (1978), no. 2, 201-212. (Jean-Louis Loday) **57** #6145 18F25 (57C10)
See also *Algebraic K-theory*, **55** #459
- Stein, Myron Leo** (with Metropolis, N.; Stein, Paul R.) On finite limit sets for transformations on the unit interval. *J. Combinatorial Theory Ser. A* **15** (1973), 25-44. (J. Riordan) **47** #5183 26A03 (05A15)
(with Hestenes, Magnus R.) The solution of linear equations by minimization. *J. Optimization Theory Appl.* **11** (1973), 335-359. (Editors) **51** #2265b 65F10
(with Parter, Seymour V.; Stein, Paul R.) On the multiplicity of solutions of a differential equation arising in chemical reactor theory. *Studies in Appl. Math.* **54** (1975), no. 4, 293-314. (Authors' summary) **56** #10026 65L10 (34C99)
- Stein, Norman** (with Harper, John R.) Cohomology operations and orientable sphere bundles. *Proceedings of the Advanced Study Institute on Algebraic Topology* (Aarhus Univ., Aarhus, 1970), Vol. I, pp. 170-179. *Various Publ. Ser.*, No. 13, Mat. Inst., Aarhus Univ., Aarhus, 1970. (H. Wada) **50** #14745 55F25
- Stein, Paul R.** (with Everett, C. J.) The asymptotic number of integer stochastic matrices. *Discrete Math.* **1** (1971/72), no. 1, 55-72. (N. G. de Bruijn) **52** #10451 05B20 (10H25)
(with Ulam, S.) Lectures in nonlinear algebraic transformations. *Studies in mathematical physics* (NATO Advanced Study Inst., Istanbul, 1970), pp. 263-314. *Reidel, Dordrecht*, 1973. (See Zbl **292** #65029; MR **52** #16313) 28A65 (70Z8, 54H20)
(with Riordan, John) Proof of a conjecture on Genocchi numbers. *Discrete Math.* **5** (1973), 381-388. (J. M. Gandhi) **47** #4919 10A40
(with Everett, C. J.) The asymptotic number of $(0, 1)$ -matrices with zero permanent. *Discrete Math.* **6** (1973), 29-34. (R. A. Brualdi) **47** #6511 05B20 (15A15)
(with Metropolis, N.; Stein, Myron Leo) On finite limit sets for transformations on the unit interval. *J. Combinatorial Theory Ser. A* **15** (1973), 25-44. (J. Riordan) **47** #5183 26A03 (05A15)
(with Parter, Seymour V.; Stein, Myron Leo) On the multiplicity of solutions of a differential equation arising in chemical reactor theory. *Studies in Appl. Math.* **54** (1975), no. 4, 293-314. (Authors' summary) **56** #10026 65L10 (34C99)
(with Everett, C. J.) The combinatorics of random walk with absorbing barriers. *Discrete Math.* **17** (1977), no. 1, 27-45. (S. G. Mohanty) **56** #15443 05A15 (60C05)
On a class of linked diagrams. I. Enumeration. *J. Combinatorial Theory Ser. A* **24** (1978), no. 3, 357-366. (Bernard Harris) **58** #263 05A15
(with Everett, C. J.) On a quadratic recurrence rule of Faltung type. *J. Combinatorics Information Syst. Sci.* **3** (1978), no. 1, 1-10. (J. M. Gandhi) **58** #10704 10A35
See also *Studies in mathematical physics*, **52** #16313
- Stein, Philip** (with Schönheim, J.) On Chvátal's conjecture related to hereditary systems. *Ars Combin.* **5** (1978), 275-291. (C. Berge) **58** #16334 05A99 (05C99)
See also *Cooper, Jacob Lionel Bakst*, **51** #12463
- Stein, Richard A.** On the efficiency of the simple least squares estimator in the linear model under $\mathcal{C}(V) \supset \mathcal{C}(X)$. *Proceedings of the Annual Meeting of the American Statistical Association, Social Statistics Section* (New York, 1973), pp. 421-422. *Amer. Statist. Assoc., Washington, D.C.*, 1974. (D. A. Sprott) **52** #2053 62J05
(with Salama, Ahmed I. A.) Resistance and capacitance minimization in low-pass RC ladder networks. *IEEE Trans. Circuits and Systems* **CAS-22** (1975), 27-32. (G. Berman) **53** #5183 94A20
- Stein, Roberto B.** (with Leung, Kin Vinh; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet Namik) On a class of nonlinear integro-differential equations. III. (French summary) *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **59** (1973), 492-499. (D. Ramakrishna Rao) **55** #3715 45J05
(with Leung, Kin Vinh; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet Namik) a class of nonlinear integro-differential equations. I, II. (Italian summaries) *Atti Acc. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 522-528 (1974); *ibid.* (8) (1973), 699-705 (1974). (D. Ramakrishna Rao) **52** #1224 45J05
(with Leung, Kin Vinh; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet Namik) the stability of the steady-state solutions of two neural models. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **20(24)** (1974), no. 1-2, part I, 79-89. (Editors) **50** #666 34A35 (92A05)
(with Leung, Kin Vinh; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet Namik) the stability and numerical solutions of two neural models. *Utilitas Math.* **5** (1976), 167-212. (J. D. Cowan) **50** #668 34A35 (92A05)
(with Oğuztöreli, Mehmet Namik) An analysis of oscillations in neuro-muscular systems. *J. Math. Biol.* **2** (1975), no. 2, 87-105. (Alwyn C. Scott) **52** #10085 92A05
(with Oğuztöreli, Mehmet Namik) The effects of multiple reflex pathways on oscillations in neuro-muscular systems. *J. Math. Biol.* **3** (1976), no. 1, 87-101. (Alwyn C. Scott) **54** #14807 92A05
(with Oğuztöreli, Mehmet Namik) Some recent progress in neuro-muscular systems. *Nonlinear systems and applications* (Proc. Internat. Conf., Univ. Texas, Arlington, TX, 1976), pp. 257-293. *Academic Press, New York*, 1977. (Uwe an der Heiden) **56** #1792A05
See also *Stochastic point processes: statistical analysis, theory, and applications*, **48** #10008
- Stein, Sherman K.** B -sets and planar maps. *Pacific J. Math.* **37** (1971), 217-224. (Jucović) **46** #5180 05C99
A symmetric star body that tiles but not as a lattice. *Proc. Amer. Math. Soc.* **47** (1972), 543-548. (R. P. Bambah) **47** #7604 52A45
The cardinalities of $A + A$ and $A - A$. *Canad. Math. Bull.* **16** (1973), 343-345. (Balakrishnan) **48** #8249 05A05
The density of the product of arithmetic progression. *Fibonacci Quart.* **11** (1973), no. 2, 145-152. (S. Znám) **47** #8477 10L10
Letter to the editor. *Fibonacci Quart.* **11** (1973), no. 5, 500. (S. Znám) **48** #60510L10
Algebraic tiling. *Amer. Math. Monthly* **81** (1974), 445-462. (J. Schönheim) **49** #4819 05B45 (50B30)
Tiling space by congruent polyhedra. *Bull. Amer. Math. Soc.* **80** (1974), 819-824. (H. Groemer) **50** #10988 50B30
Factors of some direct products. *Duke Math. J.* **41** (1974), 537-539. (I. Niven) **49** #10574 05B10 (10A99)
Two combinatorial covering theorems. *J. Combinatorial Theory Ser. A* **16** (1979), 391-397. (Michael S. Martin) **49** #4818 05B40
(with Hamaker, William) Splitting groups by integers. *Proc. Amer. Math. Soc.* **50** (1974), 322-324. (A. P. Street) **50** #2367 20K25
Transversals of Latin squares and their generalizations. *Pacific J. Math.* **59** (1976), no. 2, 567-575. (Judith Q. Longyear) **52** #7930 05B15
An inequality in two monotonic functions. *Amer. Math. Monthly* **83** (1976), no. 469-471. (D. Boyd) **54** #2901 26A86
The error of the trapezoidal method for a concave curve. *Amer. Math. Monthly* **83** (1976), no. 8, 643-645. (David K. Kahaner) **54** #6468 65D30
Modified linear dependence and the capacity of a cyclic graph. *Linear Algebra Appl.* **17** (1977), no. 3, 191-195. (C. R. J. Clapham) **57** #2983 05C25
The planes obtainable by gluing regular tetrahedra. *Amer. Math. Monthly* **85** (1978), no. 6, 477-479. (John H. Mason) **58** #12679 50B30
- Stein, William E.** (with Rapoport, Amnon) Decision policies minimizing risk in a multistage betting game. *J. Mathematical Psychology* **11** (1974), 42-58. (Norbert Schmitz) **52** #2611 90D15
(with Rapoport, Amnon; Kahan, James P.) Decisions of timing in experimental probabilistic duels. *J. Mathematical Psychology* **13** (1976), no. 2, 163-191. (D. M. Kilgour) **53** #5027 90D35
(with Rapoport, Amnon) A discrete time model for detection of randomly presented stimuli. *J. Mathematical Psychology* **17** (1978), no. 2, 110-137. (From summary) **58** #4471 92A25
- Steinberg, Arthur** (with Meskin, Stephen; Pietrowski, Alfred) One-relator groups via center. Collection of articles dedicated to the memory of Hanna Neumann, III. *Austral. Math. Soc.* **16** (1973), 319-323. (A. H. Rhemtulla) **49** #2953 20F05
- Steinberg, Avraham M.** On relaxed control and singular solutions. *J. Optimization Theory Appl.* **8** (1971), 441-453. (D. F. Lawden) **46** #756 49A99
Application of relaxed solutions to minimum sensitivity optimal control. *J. Optimization Theory Appl.* **10** (1972), 178-186. (S. E. Dreyfus) **48** #13357 93B35
(with Kadushin, Isaac) Stabilization of nonlinear systems with a dither control. *Math. Anal. Appl.* **43** (1973), 273-284. (Leonard Weiss) **48** #13396 93D99
The equivalent nonlinearity for a nonlinear system with dither. *J. Math. Anal. Appl.* **44** (1973), 405-413. (Author's summary) **53** #12683 93C10
(with Stafford, Harold L.) On existence of optimal controls. *J. Optimization Theory Appl.* **11** (1973), 266-273. (Authors' summary) **57** #17439 49A10 (93C15)
(with Shmueli, K.) On the terminal control problem. *J. Optimization Theory Appl.* **11** (1973), 313-320. (Authors' summary) **56** #11245 93C15
A comparison of some stability estimates in the theory of ill-posed problems. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9** (1975), no. 4, 121-127, 136 (1976). (I. K. Marichev) **58** #12457 47A50 (65J05)
- Steinberg, B. Ja.** Operators of discrete convolution type and their Noethericity. (Russian) *Mat. Zametki* **23** (1978), no. 3, 417-423. (Richard E. Frankfurt) **57** #13565 47B46 (46L99)
- Steinberg, David I.** (with Cooper, Leon) ★ Methods and applications of linear programming. *W. B. Saunders Co., Philadelphia, Pa.-London-Toronto, Ont.*, 1974. ix + 434 pp. (A. G. Azpeitia) **49** #12077 90C05
(with Jambekar, Anil B.) An implicit enumeration algorithm for the all integer programming problem. *Comput. Math. Appl.* **4** (1978), no. 1, 15-31. (A. D. Bock) **57** #9059 90C10
- Steinberg, J.** Numerical solution of a boundary value problem arising in the deflection of beams and shells. *J. Inst. Math. Appl.* **10** (1972), 10-14. (F. M. Pascal) **46** #102165L10

- Numerical solution of Volterra integral equation. *Numer. Math.* **19** (1972), 212-217. (J. J. Stiller) **46** #4767 65R05
- Numerical solution of a singular two-point boundary value problem. *J. Inst. Math.* **20** (1977), no. 1, 45-52. (Pietro Marzulli) **56** #17104 65L10
- Leon (with Altshuler, Amos) Neighboring 4-polytopes with 9 vertices. *J. Combinatorial Theory Ser. A* **15** (1973), 270-287. (P. McMullen) **48** #12300 52A25
- Altshuler, Amos) Neighboring combinatorial 3-manifolds with 9 vertices. *Discrete Math.* **8** (1974), 113-137. (D. Barnette) **49** #6242 57A10 (57C15)
- Altshuler, Amos) An enumeration of combinatorial 3-manifolds with nine vertices. *Discrete Math.* **16** (1976), no. 2, 91-108. (D. Barnette) **54** #11174 52A25 (25, 05C30)
- Steinberg, Robert
- Richard (with Mel'nikov, L. S.) One counterexample for two conjectures on coloring. *Discrete Math.* **20** (1977/78), no. 2, 203-206. (G. Laman) **58** #5332 05C25
- Robert ★Lectures on Chevalley groups. Notes prepared by John Faulkner and Robert Wilson. Yale University, New Haven, Conn., 1968. iii + 277 pp. (J. E. Humphreys) **62** #15 20G15 (14Lxx)
- Conjugacy classes in algebraic groups. Notes by Vinay V. Deodhar. Lecture Notes in Mathematics, Vol. 366. Springer-Verlag, Berlin-New York, 1974. vi + 159 pp. (S. J. G. G. G.) **50** #4766 20G15 (14B05)
- Abstract homomorphisms of simple algebraic groups (after A. Borel and J. Tits). *Annaire Bourbaki, 25^{ème} année* (1972/1973), Exp. No. 435, pp. 307-326. *Lecture Notes in Math.*, Vol. 383, Springer, Berlin, 1974. (J. E. Humphreys) **54** #2827 20G15
- Лекции о группах Шевалле. (Russian) [Lectures on Chevalley groups] Edited by A. Kirillov. Translated from the English by I. N. Bernstein and N. N. Jakovlev. Библиотека Сборника "Математика". [Library of the Journal "Matematika"] Izdat. Nauka, Moscow, 1975. 262 pp. (Editors) **57** #16422 20Gxx
- Torsion in reductive groups. *Advances in Math.* **15** (1975), 63-92. (S. I. Gelfand) **73** #369 20G15
- On a theorem of Pittie. *Topology* **14** (1975), 173-177. (S. I. Gelfand) **51** #9101 52G05
- On the desingularization of the unipotent variety. *Invent. Math.* **36** (1976), 209-224. (S. I. Gelfand) **55** #3101 20G15 (14E15, 14M15)
- On theorems of Lie-Kolchin, Borel, and Lang. *Contributions to algebra (collection of essays dedicated to Ellis Kolchin)*, pp. 349-354. Academic Press, New York, 1977. (Ju. I. Jakovlev) **57** #6216 20G15
- See also Seminar: Algebraic Groups, **48** #11106
- Stanley (with Treves, F.) Pseudo-Fokker-Planck equations and hyperdifferential operators. *J. Differential Equations* **8** (1970), 333-366. (From the authors' introduction) **10** #10821 35G10 (32A15)
- Evolution equations not of classical type and hyperdifferential operators. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, 1971)*, pp. 195-198. Amer. Math. Soc., Providence, R.I., 1973. (V. Barbu) **49** #906 35R20 (47A50)
- Finite systems of ordinary differential equations with unbounded coefficients and control problems. *J. Math. Anal. Appl.* **41** (1973), 685-694. (Stefan Balint) **48** #9024 35G05
- Miller, Marvin) The solution of the moment equations associated with a differential equation with polynomial coefficients. *J. Mathematical Phys.* **14** (1973), 337-339. (F. C. Auluck) **47** #6225 81J35
- Local time decay for solutions of the Schrodinger equation and the wave equation. *Rational Mech. Anal.* **54** (1974), 134-147. (D. L. Colton) **49** #5532 35B40
- Some unusual ill posed Cauchy problems and their applications. *Improperly posed boundary value problems (Conf., Univ. New Mexico, Albuquerque, N.M., 1974)*, pp. 17-23. *Notes in Math.*, No. 1, Pitman, London, 1975. (From the author's introduction) **13** #13259 35R25
- Existence and uniqueness of solutions of hyperbolic equations which are not necessarily strictly hyperbolic. *J. Differential Equations* **17** (1975), 119-153. (Rémi Rencourt) **50** #7833 35L30
- Applications of linear programming theory to existence and uniqueness classes for a quadratic problem. *Ann. Mat. Pura Appl.* (4) **114** (1977), 69-85. (D. Ciumasu (Zbl 361 116)) **58** #22998 35G10
- Applications of the Lie algebraic formulas of Baker, Campbell, Hausdorff, and Magnus to the calculation of explicit solutions of partial differential equations. *J. Differential Equations* **26** (1977), no. 3, 404-434. (J. Christina) **57** #3588 35C10 (58A15)
- See also Analytic methods in mathematical physics, **48** #5746
- Stuart A. Finitely-valued f -modules. *Pacific J. Math.* **40** (1972), 723-737. (G. Reich) **46** #5205 06A70
- Lattice-ordered injective hulls. *Trans. Amer. Math. Soc.* **169** (1972), 365-388. (W. C. C. C.) **47** #1713 06A55
- Quotient rings of a class of lattice-ordered-rings. *Canad. J. Math.* **25** (1973), 1445-1455. (N. Sankaran) **49** #4901 06A70
- Rings of quotients of rings without nilpotent elements. *Pacific J. Math.* **49** (1973), 1006. (J. Kuzmanovich) **50** #7228 16A08
- Armendariz, Efraim P.; Fisher, Joe W.) Central localizations of regular rings. *Amer. Math. Soc.* **46** (1974), 315-321. (E. Formanek) **50** #4651 16A30
- Armendariz, Efraim P.) Regular self-injective rings with a polynomial identity. *Amer. Math. Soc.* **190** (1974), 417-425. (W. S. Martindale, III) **50** #7240 16A30
- Lattice-ordered rings in which the square of every element is positive. *J. Austral. Math. Soc. Ser. A* **22** (1976), no. 3, 362-370. (D. G. Johnson) **55** #233 06A70
- Identities and nilpotent elements in lattice-ordered rings. *Ring theory (Proc. Conf., Univ. Athens, Ohio, 1976)*, pp. 191-212. *Lecture Notes in Pure and Appl. Math.*, Vol. 25, Dekker, New York, 1977. (P. Nanzetta) **58** #10659 06A70
- Radical theory in lattice-ordered rings. *Symposia Mathematica, Vol. XXI (Convegno di Misura su Gruppi e su Spazi Vettoriali, Convegno sui Gruppi e Anelli Ordinati, IM, Rome, 1975)*, pp. 379-400. Academic Press, London, 1977. (Klaus Keimel)
- 57** #12335 06A70 (16A21)
- Steinberger, J. (with Källén, Gunnar) ★Elementarteilchenphysik. Second edition. Translated from the English. Bibliographisches Institut, Mannheim-Vienna-Zurich, 1974. 687 pp. ISBN 3-411-01403-2 (Editors) **58** #25652 82.00
- Steinberger, Meir On multiplicative properties of families of complexes of certain loops. *Canad. J. Math.* **25** (1973), 1066-1077. (D. A. Robinson) **48** #4177 20N05
- Steinborn, E. Otto (with Filter, Eckhard) Translations of fields represented by spherical-harmonic expansions for molecular calculations. I. General concepts and methods. *Theoret. Chim. Acta* **38** (1975), no. 4, 247-260. (Authors' summary) **56** #10509 81J33
- (with Filter, Eckhard) Translations of fields represented by spherical-harmonic expansions for molecular calculations. II. Translations of powers of the length of the local vector. *Theoret. Chim. Acta* **38** (1975), no. 4, 261-271. (Authors' summary) **56** #10510 81J33
- (with Filter, Eckhard) Translations of fields represented by spherical-harmonic expansions for molecular calculations. III. Translations of reduced Bessel functions, Slater-type s -orbitals, and other functions. *Theoret. Chim. Acta* **38** (1975), no. 4, 273-281. (Authors' summary) **56** #10511 81J33
- (with Filter, Eckhard) The three-dimensional convolution of reduced Bessel functions and other functions of physical interest. *J. Mathematical Phys.* **19** (1978), no. 1, 79-84. (Authors' summary) **56** #12354 33A40
- Steinbrecher, G. (with Ciulli, S.; Pomponiu, C.; Sabba-Stefanescu, I.) CDD poles, inelasticities and optimization of N/D equations. *Nuclear Phys.* **B71** (1974), 269-291. (Authors' summary) **50** #9212 81J30
- Steinbring, H. (with Jahnke, H. N.; Vogel, D.) Zahlbegriff und Rechenfertigkeit—zur Problematik der Entwicklung wissenschaftlicher Begriffe. *Educ. Stud. Math.* **6** (1975), no. 2, 213-252. (Curt Christian) **58** #16 00A25
- Steinbuk, V. B. The quasifinite approximability of semigroups. (Russian) *Modern algebra, No. 4 (Russian)*, pp. 155-167. Leningrad. Gos. Ped. Inst., Leningrad, 1976. (G. B. Preston) **56** #5759 20M10
- Steinby, Magnus On pair algebras and state-information in automata. *Ann. Acad. Sci. Fenn. Ser. A I No.* **542** (1973), 13 pp. (Siegmar Gerber) **49** #8767 (EA 50) 94A25 (68A25)
- On algebras as tree automata. *Contributions to universal algebra (Colloq., József Attila Univ., Szeged, 1975)*, pp. 441-455. *Colloq. Math. Soc. János Bolyai, Vol. 17, North-Holland, Amsterdam, 1977.* (F. Gécseg) **57** #14607 68A25
- See also Automata, languages and programming, **56** #4210
- Steinebach, Beate Newton-Verfahren für nichtdifferenzierbare konvexe Abbildungen in endlichdimensionalen Räumen. *Math.-Phys. Semesterber.* **22** (1975), 94-108. (B. Jankó) **52** #16009 65H10
- Steinebach, Josef (with Plachky, Detlef) A theorem about probabilities of large deviations with an application to queueing theory. *Period. Math. Hungar.* **6** (1975), no. 4, 343-345. (Douglas P. Kennedy) **53** #14613 60F10 (60K25)
- (with Krauth, Joachim) Extended tables of the percentage points of the chi-square distribution for at most ten degrees of freedom. (German summary) *Biometrische Z.* **18** (1976), no. 1, 13-22. (Authors' summary) **54** #14302 62Q05
- (with Plachky, Detlef) A generalization of a result of Chernoff in large sample theory. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Statist.* **8** (1977), no. 3, 375-379. (Lionel Weiss) **58** #7978 62F05 (62F20)
- Exponential convergence properties of linear estimators under exponential and uniform distribution. *Metrika* **24** (1977), no. 3, 137-161. (T. P. Hettmansperger) **58** #7975 62E20 (62G20, 62G30)
- Convergence rates of large deviation probabilities in the multidimensional case. *Ann. Probab.* **6** (1978), no. 5, 751-759. (James W. Boyett) **58** #18682 60F10 (82.60)
- A strong law of Erdős-Rényi type for cumulative processes in renewal theory. *J. Appl. Probability* **15** (1978), no. 1, 96-111. (K. B. Erickson) **58** #7805 60F15 (60K05)
- On a necessary condition for the Erdős-Rényi law of large numbers. *Proc. Amer. Math. Soc.* **68** (1978), no. 1, 97-100. (Endre Csáki) **57** #1622 60F15
- Steiner, A. K. (with Steiner, E. F.) Relative types of points in $\beta N - N$. *Trans. Amer. Math. Soc.* **160** (1971), 279-286. (Z. Frolik) **49** #1481 54D40
- On the lattice of topologies. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971)*, pp. 411-415. Academia, Prague, 1972. (Roland E. Larson) **50** #5715 54A10
- (with Steiner, E. F.) Binding spaces: A unified completion and extension theory. *Fund. Math.* **76** (1972), no. 1, 43-61. (H. Buchwalter) **46** #8178 54D35
- (with Steiner, E. F.) On semi-uniformities. *Fund. Math.* **83** (1973), no. 1, 47-58. (R. W. Bagley) **48** #9670 54E15
- (with Steiner, E. F.) Countability and semi-uniformities. *General Topology and Appl.* **3** (1973), 249-252. (R. W. Bagley) **47** #9552 54E15
- (with Steiner, E. F.) On the reduction of the Wallman compactification problem to discrete spaces. *General Topology and Appl.* **7** (1977), no. 1, 35-37. (O. Frink) **56** #3797 54D35
- Steiner, Antonio Ein Beweis des Satzes von Plancherel. *Rend. Circ. Mat. Palermo* (2) **21** (1972), 25-30. (J. J. Price) **48** #4630 42A68
- Abschnitte von Randfunktionen beschränkter analytischer Funktionen. *Topics in analysis (Colloq. Math. Anal., Jyväskylä, 1970)*, pp. 342-351. *Lecture Notes in Math.*, Vol. 419, Springer, Berlin, 1974. (Editors) **58** #22568 30A76
- Quadratisch integrierbare Hochpassfunktionen. *Acta Sci. Math. (Szeged)* **36** (1974), 295-304. (R. P. Boas, Jr.) **50** #7947 42A68
- Eine Ungleichung über die Fouriertransformation. *Rend. Circ. Mat. Palermo* (2) **23** (1974), no. 1, 83-86. (P. G. Rooney) **52** #6312 42A68
- Steiner, Detlef (with Kaniuth, Eberhard) On complete regularity of group algebras. *Math. Ann.* **204** (1973), 305-329. (A. Hulanicki) **57** #10361 43A20 (22D15)
- Steiner, E. F. (with Steiner, A. K.) Relative types of points in $\beta N - N$. *Trans. Amer. Math. Soc.* **160** (1971), 279-286. (Z. Frolik) **49** #1481 54D40
- (with Steiner, A. K.) Binding spaces: A unified completion and extension theory. *Fund. Math.* **76** (1972), no. 1, 43-61. (H. Buchwalter) **46** #8178 54D35
- (with Steiner, A. K.) On semi-uniformities. *Fund. Math.* **83** (1973), no. 1, 47-58. (R. W. Bagley) **48** #9670 54E15

- (with Steiner, A. K.) Countability and semi-uniformities. *General Topology and Appl.* 3 (1973), 249-252. (R. W. Bagley) 47 #9552 54E15
- (with Steiner, A. K.) On the reduction of the Wallman compactification problem to discrete spaces. *General Topology and Appl.* 7 (1977), no. 1, 35-37. (O. Frink) 56 #3797 54D35
- Steiner, Hans-Georg** Nichtmeßbare Abstimmungsgremien. *Math.-Phys. Semesterber.* 22 (1975), 53-67. (M. Mañas) 51 #5040 90D12
- (with Behnke, Heinrich; Remmert, Reinhold; Tietz, Horst) ★Mathematik. I. Nachdruck der Auflage von 1964. Das Fischer Lexikon, No. 29/1. *Fischer Taschenbuch Verlag, Frankfurt am Main*, 1976. 384 pp. (Editors) 56 #2718 00A20 (00A05)
- Mathematisierungen, die auf metrische Räume führen. *Math.-Phys. Semesterber.* 23 (1976), no. 1, 17-58. (R. J. Bumcrot) 53 #5310 05-01 (52-01)
- Günter Pickerts Beiträge zur Didaktik der Mathematik. *Math.-Phys. Semesterber.* 24 (1977), no. 2, 157-171. (Editors) 58 #4953 01A70
- See also **Fundamentals of mathematics**, 49 #8786; **Fundamentals of mathematics**, 49 #8787 and **Grundlagen der modernen Mathematik**, 50 #6716
- Steiner, J. M.** (with Bhatia, P. K.) Thermal instability in a viscoelastic fluid layer in hydromagnetics. *J. Math. Anal. Appl.* 41 (1973), 271-283. (M. Sichel) 48 #1581 (E 54 #11965) 76.35
- See also **Eltayeb, I. A.**, 54 #11965
- Steiner, Jürgen** Zur Konstruktion von Schnitten für gemischtganzzahlige LO-Probleme. (English and Russian summaries) *Math. Operationsforsch. Statist.* 7 (1976), no. 6, 819-829. (Knut Richter) 56 #2374 90C10
- Steiner, Mark** ★Mathematical knowledge. *Cornell University Press, Ithaca, N.Y.-London*, 1975. 164 pp. (A. A. Mullin) 56 #11681 00A25 (02A05)
- Mathematical explanation. *Philos. Stud.* 34 (1978), no. 2, 135-151. (Editors) 58 #20972 00A25
- Steiner, R. J.** Exact sequences of conjugacy classes and rationalization. *Math. Proc. Cambridge Philos. Soc.* 82 (1977), no. 2, 249-253. (Guido Mislin) 56 #5718 20E15 (55D99)
- Localization, completion and infinite complexes. *Mathematika* 24 (1977), no. 1, 1-5. (Guido Mislin) 56 #6654 55E05
- Steiner, Ray P.** (with London, Hymie) Completion of a table of O. Hemer. *Proceedings of the Washington State University Conference on Number Theory (Washington State Univ., Pullman, Wash., 1971)*, pp. 148-159. *Dept. Math., Washington State Univ., Pullman, Wash.*, 1971. (B. Diviš) 48 #235 10B10
- (with London, Hymie) On D. J. Lewis's equation $x^3 + 117y^3 = 5$. *Canad. Math. Bull.* 14 (1971), 111. (E. L. Cohen) 45 #1830 10B10
- (with London, Hymie) On triangular numbers which are sums of consecutive squares. *J. Number Theory* 4 (1972), 455-462. (B. Garrison) 46 #3443 10B05
- (with London, Hymie) ★On Mordell's equation $y^2 - k = x^3$. *Bowling Green State University, Bowling Green, Ohio*, 1973. vi + 146 pp. (loose erratum) (L. Carlitz) 49 #4928 10B10 (14G05)
- On Fibonacci numbers which are one more than a square. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* 262/263 (1973), 171-178. (L. Carlitz) 48 #3858 10A35 (10B10)
- On Lucas numbers which are one more than a square. *Fibonacci Quart.* 13 (1975), no. 4, 340-342. (Editors) 54 #10126 10A35
- (with Rudman, Ronald J.) On an algorithm of Billevech for finding units in algebraic fields. *Math. Comp.* 30 (1976), no. 135, 598-609. (Veikko Ennola) 53 #8007 12A45
- On triangular Fibonacci numbers. *Utilitas Math.* 9 (1976), 319-327. (S. P. Mohanty) 53 #13102 10A35
- (with Rudman, Ronald J.) A generalization of Berwick's unit algorithm. *J. Number Theory* 10 (1978), no. 1, 16-34. (W. Narkiewicz) 57 #5948 12A45 (12A25)
- (with Blass, Josef) On the equation $y^2 + k = x^7$. *Utilitas Math.* 13 (1978), 293-297. (R. J. Cook) 58 #500 10B15
- Steiner, Siegfried** Pseudokonvexität und Levi-Tensor. *Festband anlässlich des 65. Geburtstages von Ernst Peschl*, pp. 77-80. *Gesellsch. Math. Datenverarbeitung Bonn, Ber. No. 57, Gesellsch. Math. Datenverarbeitung, Bonn*, 1972. (H. Wu) 53 #8493 32F15
- Lineare Zusammenhänge auf $\wedge^p M$. *Geometriae Dedicata* 4 (1975), no. 2/3/4, 159-164. (A. Kawaguchi) 53 #3938 53C05
- Zur Geometrie der Flächenräume. *Math. Z.* 147 (1976), no. 2, 181-190. (Makoto Matsumoto) 54 #8509 53B40
- Über die Riemannsche Einbettungsgeometrie der Veronesemannigfaltigkeiten. (English summary) *Manuscripta Math.* 20 (1977), no. 3, 277-300. (M. Kucharzewski) 55 #8996 53C25 (14E25)
- Eine lokale Charakterisierung der Veronesemannigfaltigkeiten. (English summary) *Manuscripta Math.* 23 (1977/78), no. 2, 155-160. (David A. Hoffman) 57 #13714 53A10
- Steinfeld, Ottó** On Litoff's theorem. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 13 (1970), 101-102 (1971). (H. Tominaga) 46 #9101 16A42
- (with Szép, Jenő) László Rédei is 70 years old. (Hungarian) *Mat. Lapok* 21 (1970), 189-197 (1971). (Editors) 46 #3259 01A70
- Über die regulären duo-Elemente in Gruppoid-Verbänden. *Acta Sci. Math. (Szeged)* 32 (1971), 327-331. (W. C. Holland) 47 #4888 06A50
- Bemerkungen über die f -Semiprimelemente der negativ geordneten σ -Verbände. *Period. Math. Hungar.* 1 (1971), no. 3, 221-227. (K. A. Baker) 45 #3264 06A20
- Über die volle Translationshalbgruppe gewisser Halbgruppen. *Studien zur Algebra und ihre Anwendungen (mit Anwendungen in der Mathematik, Physik und Rechentchnik)*, pp. 91-95. *Schr. Zentralinst. Math. Mech. Akad. Wissensch. DDR, Heft 16, Akademie Verlag, Berlin*, 1972. (E.-A. Behrens) 49 #3006 20M20
- (with Vogel, Wolfgang) Über Kettenbedingungen in teilweise geordneten Halbgruppen. *Mini-Conference on Semigroup Theory (József Attila Univ., Szeged, 1972)*, pp. 57-60. *József Attila Univ., Szeged*, 1973. (F. Sik) 54 #199 06A50
- Verallgemeinerungen gewisser ringtheoretischer Zerlegungssätze. *Rings, modules and radicals (Proc. Colloq., Keszthely, 1971)*, pp. 475-482. *Colloq. Math. Soc. János Bolyai, Vol. 6, North-Holland, Amsterdam*, 1973. (W. C. Holland) 50 #6971 06A75 (16A46)
- Sur les groupoides-treillis. *Séminaire P. Dubreil, 25e année (1971/72), Algèbre*,
- Journées sur les Demi-groupes et les Demi-groupes Ordonnés (Paris, 1972; dédiée à la mémoire de Marie-Louise Dubreil-Jacotin)*, Exp. No. J13, 5 pp. *Secrétariat Mathématique Paris*, 1973. (John M. Howie) 52 #14127 20M99
- Über Metaabsorbente in Gruppoid-Verbänden. *Acta Math. Acad. Sci. Hungar.* (1973), 313-328. (P. F. Conrad) 49 #2486 06A50
- Über Gruppoid-Verbände. II. Zerlegungssätze. *Period. Math. Hungar.* 4 (1973), 169-181. (W. C. Holland) 49 #7198 06A50
- Notes on regular duo elements, rings and semigroups. *Studia Sci. Math. Hungar.* (1973), 161-164. (Joseph Chacron) 49 #9109 20M10 (16A66)
- On a faithful representation of similarly decomposable semigroups. *Studia mathematica (in honor of A. Almeida Costa) (Portuguese)*, pp. 113-118. *Instituto de Cultura, Lisbon*, 1974. (M. Friedberg) 52 #636 20M30
- (with Vogel, Wolfgang) Über Kettenbedingungen in teilweise geordneten Halbgruppen. *Period. Math. Hungar.* 5 (1974), 289-300. (F. Sik) 51 #303 06A50
- (with Rédei, László) Einiges über Gruppoid-Verbände mit Anwendungen auf Gruppen, Ringe, Halbgruppen. *Publ. Math. Debrecen* 21 (1974), 145-150. (D. Robinson) 50 #6970 06A75
- (with Márki, László) A generalization of Green's relations in semigroups. Collection of articles dedicated to Alfred Hobbitzelle Clifford on the occasion of his birthday and to Alexander Doniphan Wallace on the occasion of his 68th birthday. *Semigroup Forum* 7 (1974), no. 1-4, 74-85. (H. J. Weinert) 52 #3390 20M10
- (with Kertész, Andor) Über reguläre Z-Ringe. Beiträge zur Algebra und Geometrie, 3. *Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M Math.* (1974), 7-10. (J. K. Luedeman) 52 #13920 16A30
- Some characterizations of semisimple rings with minimum condition on principal left ideals. *Acta Math. Acad. Sci. Hungar.* 26 (1975), no. 3-4, 377-384. (M. Djaferis) 52 #8185 16A40
- Some remarks on algebraic groupoid-lattices. *Lattice theory (Proc. Colloq., Szeged, 1974)*, pp. 413-420. *Colloq. Math. Soc. János Bolyai, Vol. 14, North-Holland, Amsterdam*, 1976. (Zbl 381 #06009) 58 #21878 06A20
- Some characterizations of groups and division rings. *Math. Japon.* 21 (1976), no. 3, 333-336. (C. F. Moppert) 55 #10513 16A40
- (with Rédei, László; Wiegandt, Richard) Die wissenschaftliche Tätigkeit von Andor Kertész. *Publ. Math. Debrecen* 23 (1976), no. 1-2, 1-9. (Editors) 53 #12801A70
- A characterization of dual semigroups without nilpotent ideals. *Semigroup Forum* 14 (1977), no. 1, 1-5. (Št. Schwarz) 56 #511 20M10
- See also **Studien zur Algebra und ihre Anwendungen**, 48 #8172 and **Problems in Semigroups**, 53 #10953
- Steingart, Alec** (with Bartels, Richard H.) Hermite interpolation using a triangular polynomial basis. *ACM Trans. Math. Software* 2 (1976), no. 3, 252-256. (Hwa-Shan Chen) 55 #4602 65D15 (65D20)
- Šteingrad, Z. A.** Harmonic reference frames, and the monadic formalism of Zel'manov. (Russian) *Dokl. Akad. Nauk SSSR* 217 (1974), 1296-1299. (R. Salia) 50 #12183.53
- On the formulation of the Cauchy problem for an arbitrary choice of reference frame in Einstein's theory of relativity. (Russian) *Dokl. Akad. Nauk SSSR* 225 (1976), no. 2, 290-292. (N. V. Micevich) 55 #5161 83.53
- (with Fedorova, S. P.) A negative result in the theory of gravitational radiation. (Russian) *Problemy Teor. Gravitacii i Element. Častic Vyp.* 6 (1975), 87-91. (RZ Fizmatlit) 57 #8933 83.53
- Steingrindt, William J.** (with Yau, Stephen Sik-Sang) A stochastic approximation method for waveform cluster center generation. *IEEE Trans. Information Theory* IT-18 (1971), 262-274. (K. D. Günther) 48 #5445 68A45
- Steinhaus, Hans** Wahrscheinlichkeitstheoretische Masse als Bewertungskriterien für Merkmaleextraktion. *Wiss. Z. Techn. Univ. Dresden* 22 (1973), 59-67. (O. Guddus) 48 #7694 68A45 (94A15)
- Steinhaus, Hans-Egon** (with Fuchs, Siegfried) ★Objekterkennung. Einführung in mathematischen Methoden der Zeichenerkennung. *VEB Verlag Technik, Berlin*, 1976. 436 pp. (S. Csibi) 55 #11761 68A50
- Steinhardt, Ulrich** (with Höpfinger, Eckhard) On the exact evaluation of finite act networks with stochastic durations of activities. *Optimization and operations research (Proc. Conf., Oberwolfach, 1975)*, pp. 143-145. *Lecture Notes in Econom. Math. Syst.* Vol. 117, *Springer, Berlin*, 1976. (A. A. Pervozvanski) 56 #11574 94A20 (90B10)
- ★Auswertung und optimale Steuerung von Entscheidungsnetzplänen. Zur Erlangung des akademischen Grades eines Doktors der Wirtschaftswissenschaften der Fakultät für Wirtschaftswissenschaften der Universität Fridericiana Karlsruhe (Technische Hochschule) genehmigte Dissertation. *Universität Fridericiana Karlsruhe (Technische Hochschule), Karlsruhe*, 1977. 95 pp. (O. Opitz) 58 #9157 90A15
- Ein Verfahren zur optimalen Steuerung bei Entscheidungsnetzplänen. *Z. Angew. Math. Mech.* 57 (1977), no. 5, T349-T350. (Knut Richter) 56 #4766 90A15
- Steinhaus, Hugo** ★100 Aufgaben. Hundert Probleme aus der elementaren Mathematik. Übertragung aus dem Polnischen von Horst Antelmann und Ludwig Boll. Wissenschaftliche Bearbeitung von Ernst Hameister. *Mathematische Schülerbücher No. 27. Urania-Verlag, Leipzig*, 1968. 169 pp. (Editors) 50 #1790 00A05
- ★100 neue Aufgaben. Translated from the Polish by Horst Antelmann. *Hundert Probleme aus der elementaren Mathematik. Verlag Harri Deutsch, Zurich-Frankfurt a.M.* 1973. 176 pp. *ISBN 3-87144-146-5* (Editors) 58 #26632 00A05
- Autobiography. (Polish) Papers presented at a Conference in Honor of Hugo Steinhaus (Wrocław, 1972). *Wiadom. Mat.* (2) 17, 3-11 (1973). (Editors) 52 #13201A70
- See also **Obituary: Steinhaus, Hugo**, 46 #1544; **Vukadinović, Svetozar**, 48 #1346; **Kac, Mark**, 49 #16; **Haverlik, Ivan**; et al., 52 #5550; **Kowarczyk, Hugon**, 52 #1313; **Lukasiewicz, J.**, 52 #13214; **Marzewski, Edward**, 52 #13216; **Marzewski, Edward**, 52 #13217; **Ryll-Nardzewski, Czesław**, 52 #13228; **Stark, Marcell**, 52 #13234; **Bibliography: Steinhaus, Hugo**, 52 #13236; **Trzyniecki, Jan**, 52 #13238; **Urban, Kazimierz**, 52 #13240; **Papers: Conference in Honor of Hugo Steinhaus**, 52 #13241; **Sander, Wolfgang**, 52 #14210 (E 55 #610); **Biography: Steinhaus, Hugo**, 53 #13242; **and Szarski, A.**, 57 #12135
- Steinhausen, D.** Fehlerschranken vom Gerschgorin-Typ für das Eigenwertproblem

- normalisierbaren Matrizen. *Methoden und Verfahren der mathematischen Physik*, Bd 7, pp. 53-61. *B. I.-Hochschultaschenbücher*, No. 726, Bibliographisches Inst., Mannheim, 1972. (K. Najzar) **51** #9458 65F15
- Busen, Detlef** (with Langer, Klaus) ★Clusteranalyse. Einführung in Methoden und Verfahren der automatischen Klassifikation. de Gruyter Lehrbuch. *Walter de Gruyter, Berlin-New York*, 1977. 206 pp. ISBN 3-11-007054-5 (P. A. K. Covey-Crump) #17958 62H30 (62-01)
- Busen, Günter** ★Definite, gerade Bilinearformen der Diskriminante 1. Zugrundeliegende Dissertation zur Erlangung des Doktorgrades der Mathematisch-Naturwissenschaftlichen Fakultät der Rheinischen Friedrich-Wilhelms-Universität, Bonn, 1974. Bonner Mathematische Schriften, No. 76. *Mathematisches Institut, Universität Bonn, Bonn*, 1974. 45 pp. (Donald Maurer) **54** #233 OC05
- Busen, L.** Analyse fastlinearer Netzwerke mit der Volterra-Reihe einer und mehrerer Variabler. I. *Nachrichtentech. Elektronik* **25** (1975), 122-126. (Not reviewed) **94A20**
- II. Analyse fastlinearer Netzwerke mit der Volterra-Reihe einer und mehrerer Variabler. II. (Russian and English summaries) *Nachrichtentech. Elektronik* **25** (1975), 215-219. (Not reviewed) **94A20**
- Butt, Harry W., Jr.** See Symposium: Theory of Scheduling and its Applications, #3481
- Butt, R. Kirk** (with Bowden, David C.) Tolerance bands for growth curves. (French summary) *Biometrics* **29** (1973), 361-371. (A. M. Mathai) **48** #12770 62P10
- Butt, John** On a monotonicity property of Bessel functions. *Math. Z.* **122** (1971), no. 4, 365. (James M. Horner) **56** #5964 33A40
- On some rules of Laguerre's, and systems of equal sums of like powers. (Italian summary) *Rend. Mat.* (6) **4** (1971), 629-644 (1972). (W. J. Ellison) **46** #8972 10B15
- Some trigonometric inequalities. *Elem. Math.* **27** (1972), 121-129. (R. S. Booth) #4247 26A87
- On an integral connected with the average order of a class of arithmetical functions. *Number Theory* **4** (1972), 463-468. (Henri Joris) **46** #5223 10A20
- A criterion for the positivity of sine polynomials. *Proc. Amer. Math. Soc.* **38** (1973), 586. (Karl Scherer) **46** #9617 42A04 (33A65)
- (with Askey, Richard A.) Some positive trigonometric sums. *Trans. Amer. Math. Soc.* **187** (1974), 295-307. (G. Gasper) **49** #3245 33A45
- (with Askey, Richard A.) A monotonic trigonometric sum. *Amer. J. Math.* **98** (1976), no. 2, 357-365. (Masako Izumi) **53** #11288 42A04
- Cass, V. W.** Crossing times in cumulative processes. *South African Statist. J.* **5** (1971), 66. (M. L. Chaudhry) **46** #10093 60K25
- Specification of stationary point processes by product-moment densities. *South African Statist. J.* **6** (1972), 41-51. (Terence P. Speed) **47** #1114 60G10
- Cass, Ernst** (with Rademacher, H.) ★Vorlesungen über die Theorie der Polyeder unter Schluss der Elemente der Topologie. Reprint der 1934 Auflage. Grundlehren der Mathematischen Wissenschaften, No. 41. *Springer-Verlag, Berlin-New York*, 1976. +351 pp. (Editors) **55** #3962 52-01 (55-01)
- Cass, Wolfgang** Verminderungsfaktoren und Restfehlerwahrscheinlichkeit zyklischer Codes. (English summary) *Arch. Elek. Übertr.* **24** (1970), 424-427. (H. F. Mattson, Jr.) **48** #10658 94A10
- Cass, Ralph C.** Nearly uniform convergence and interchange of limits. *Publ. Inst. Math. (Beograd) (N.S.)* **12**(26) (1971), 115-129. (S. P. Arya) **54** #8544 54A20
- (with Gantner, T. E.) Characterizations of quasi-uniformities. *J. London Math. Soc.* **5** (1972), 48-52. (Worthen Hunsaker) **52** #1638 54E15
- On Ascoli theorems and the product of k -spaces. *Kyungpook Math. J.* **12** (1972), 151. (W. W. Comfort) **46** #8180 54D50
- On lim and lim of nets of sets. *Math. Student* **42** (1974), 125-128 (1975). (R. F. Kman, Jr.) **53** #6481 54A20
- On Haar measure in locally compact T_2 spaces. *Amer. J. Math.* **97** (1975), 291-307. (Win Hewitt) **51** #5897 28A70
- Cass, B.** Fixpunktmannigfaltigkeiten symplektischer Matrizen. *Acta Arith.* **20** (1972), 106. (M. Eichler) **45** #3323 10D20
- (with Baltes, H. P.) Eigenfrequency density oscillations and Walfisz lattice sums. *J. Theoretical Phys.* **18** (1977), no. 6, 1275-1276. (Authors' summary) **57** #14920 35 (10J25)
- Cass, Heinrich** Ein Satz über den Leray-Schauderschen Abbildungsgrad. *Math. Z.* **126** (1972), 176-208. (R. Nussbaum) **47** #5667 47H10
- Über die verallgemeinerten Fixpunktkindizes von Iterierten verdichtender Abbildungen. *Manuscripta Math.* **8** (1973), 251-266. (R. Nussbaum) **49** #3616 47H10
- An approximation method in asymptotic fixed point theory. *Math. Ann.* **211** (1974), 218. (Jean Mawhin) **50** #8179 47H10
- A new proof of the (mod p)-theorem in asymptotic fixed point theory. *Proceedings of the Conference on Problems in Nonlinear Functional Analysis (Univ. Bonn, Bonn, 1975)*, 29-42. *Gesellsch. Math. Datenverarbeitung, St. Augustin*, 1975. (Simeon Reich) #3887 47H10
- Some new results in asymptotic fixed point theory. *Proceedings of the Conference on Problems in Nonlinear Functional Analysis (Univ. Bonn, Bonn, 1975)*, pp. 73-74. *Deutsches Math. Datenverarbeitung, St. Augustin*, 1975. (I. A. Rus) **56** #16462 47H10
- Cass, Othmar** ★Perturbation expansions in axiomatic field theory. Lecture Notes in Physics, Vol. 11. *Springer-Verlag, Berlin-New York*, 1971. iii+126 pp. (Jena-Pierre Mann) **55** #14020 81A7
- Basic notions of relativistic scattering theory. *Proceedings of the Spring School on Interactions at Low and Medium Energies (Zuoz-Engadin, 1971)*, pp. 229-287. *Organisation Européenne pour la Recherche Nucléaire, Geneva*, 1971. (C. W. Misner) **51** #4870 81O0
- Axiomatic field theory and quantum electrodynamics: the massive case. *Ann. Inst. Poincaré Sect. A (N.S.)* **23** (1975), no. 1, 61-97. (M. J. Westwater) **54** #2001 47H10
- Haag-Kastler formulation of quantum electrodynamics. *Nuclear Phys. B* **107** (1976), no. 2, 339-364. (D. Ja. Petrina) **54** #14622 81A6
- Semiclassical fields in soliton sectors. *Nuclear Phys. B* **131** (1977), no. 4-5, 459-476. (Wolfgang Lücke) **57** #11459 81J35
- Two-soliton solutions of relativistic field equations. *Comm. Math. Phys.* **60** (1978), no. 3, 269-276. (Piero de Mottoni) **58** #11840 35B40 (35L60, 81J35)
- Steinmetz, Dieter** (with Anderson, Oskar; Popp, Werner; Schaffranek, Manfred; Stenger, Horst) ★Schätzen und Testen. Eine Einführung in die Wahrscheinlichkeitsrechnung und schliessende Statistik. Heidelberger Taschenbücher, Band 177. *Springer-Verlag, Berlin-New York*, 1976. xi+385 pp. (From the author's preface) **57** #10856 62-01
- Steinmetz, Volker** ★Zur Existenz von Wachstumsgleichgewichten in Wachstumsmodellen vom von Neumannschen Typ. Mathematical Systems in Economics, 1. *Verlag Anton Hain, Meisenheim am Glan*, 1972. iii+100 pp. (M. Rössler) **48** #13200 90A15
- (with Hülsmann, J.) A note on the nonexistence of optimal price vectors in the general balanced-growth model of Gale. *Econometrica* **40** (1972), 387-389. (Michael D. Intriligator) **51** #14892 90A15
- (with Hülsmann, J.) Zur Nichtexistenz von Wachstumsgleichgewichten im Wachstumsmodell von Gale. (English summary) *Z. Operations Res. Ser. A-B* **16** (1972), no. 5, A179-A187. (G. Tintner) **55** #7313 90A15
- See also Symposium: Operations Research, **58** #25852a and Symposium: Operations Research, **58** #25852b
- Steinmetz, William J.** On a nonlinear singular perturbation boundary value problem in gas lubrication theory. *SIAM J. Appl. Math.* **26** (1974), 816-827. (R. E. O'Malley, Jr.) **50** #709 34E15 (76.34)
- Steinmüller, Karlheinz** (with Gössel, Michael) On (O, ∇) -linear automata with rational operations \circ and ∇ . *Found. Control Engng.* **3** (1978), no. 1, 41-48. (A. Ádám) **58** #9926 94A30
- Štejnviř, Ě. A.** (with Sobolev'skiĭ, P. O.) The correct solvability of an extended boundary value problem for a parabolic equation. (Russian) *Differencial'nye Uravneniya* **10** (1974), 1692-1698, 1734. (J. Kačur) **51** #3695 35K20
- Štejnviř, L. I.** (with Mitin, V. N.) Synthesis of discrete vibrational systems with maximally compressed spectrum. *Prikl. Mat. Meh.* **39** (1975), no. 4, 614-620 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 4, 587-593 (1976). (Gh. Silaș) **55** #4826 70.34
- Steinwedel, H.** Galilei-Invarianz. *Fortschr. Physik* **24** (1976), no. 4, 211-236. (H. Ezawa) **55** #11831 81.22
- Steišinas, S.** (with Paulauskas, Vyg.) The rate of convergence of the distribution of the maximum of the successive sums of independent nonidentically distributed random vectors to the limit law. (Russian. Lithuanian and English summaries) *Litoosk. Mat. Sb.* **13** (1973), no. 2 139-147, 263. (B. Volkman) **49** #4078 60F05
- The estimation of the rate of convergence in the multidimensional central limit theorem. (Russian. Lithuanian and English summaries) *Litoosk. Mat. Sb.* **14** (1974), no. 2, 127-135, 255. (Author's summary) **55** #6538 60F05
- Estimation of the rate of convergence in the limit theorem in the case of a stable limit law. (Russian. Lithuanian and English summaries) *Litoosk. Mat. Sb.* **14** (1974), no. 3, 179-185, 241. (Author's summary) **55** #6539 60F05
- Stekete, J. A.** Transformations of the equations of motion for the unsteady rectilinear flow of a perfect gas. *J. Engrg. Math.* **10** (1976), no. 1, 69-93. (R. K. Jain) **56** #1931 76.35
- Steklov, V. A.** See Vladimirov, V. S.; et al., **52** #10340; Markuš, Ī. Ī., **57** #12088; Markuš, Ī. Ī., **58** #10130 and Demčičin, A. Ī.; et al., **58** #21253
- Stekol'skiĭ, R. B.** Conditions for the regularity of representations of graphs. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 16 Sb. Statei po Nelineinym Operator. Uravn. i Prilozhen.* (1975), 58-61. (RŽMat 1976 #9 V370) **58** #5418 05C99
- (with Subbotin, V. F.) The spectrum of the Coxeter transformation and the regularity of representations of graphs. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 16 Sb. Statei po Nelineinym Operator. Uravn. i Prilozhen.* (1975), 62-65. (Editors) **58** #321 05C05
- (with Subbotin, V. F.) The Jordan form of the Coxeter transformation, and applications to representations of finite graphs. (Russian) *Funkcional. Anal. i Prilozhen.* **12** (1978), no. 1, 84-85. (Sheila Brenner) **58** #16800 17B20 (16A64, 22E15)
- Štehlík, V. G.** The problem of optimizing the structures of control systems. (Ukrainian) *Mathematical economics methods for industrial control and efficiency (Ukrainian)*, pp. 3-7. *Akad. Nauk Ukrain. RSR L'viv. Viddilennja, Kiev*, 1974. (From the text) **58** #33363 93C99 (90C50)
- See also Mathematical economics methods for industrial control and efficiency, **57** #13612 and Mathematical economics models and methods in industrial planning and control, **58** #9113
- Stell, G.** Correlation functions and their generating functionals: general relations with applications to the theory of fluids. *Phase transitions and critical phenomena, Vol. 5b*, pp. 205-258. *Academic Press, London*, 1976. (A. K. Rajagopal) **58** #19881 80.60
- (with Blum, Lesser) Solution of Ornstein-Zernike equation for wall-particle distribution function. *J. Statist. Phys.* **15** (1976), no. 6, 439-449. (Authors' summary) **56** #2125 82.45
- (with Høye, Johan S.) Ornstein-Zernike equation with core condition and direct correlation function of Yukawa form. *Molecular Phys.* **32** (1976), no. 1, 195-207. (B. Souillard) **55** #11885a 82.45
- (with Høye, Johan S.; Waisman, E.) Ornstein-Zernike equation for a two-Yukawa $c(r)$ with core condition. *Molecular Phys.* **32** (1976), no. 1, 209-230. (B. Souillard) **55** #11885b 82.45
- (with Larsen, B.; Rasaiah, J. C.) Thermodynamic perturbation theory for multipolar and ionic liquids. *Molecular Phys.* **33** (1977), no. 4, 987-1027. (V. Gheorghijă) **57** #2357 82.41
- Stella, A. L.** (with Benettin, Giancarlo; Di Castro, C.; Jona-Lasinio, Giovanni; Peliti, L.) On the equivalence of different renormalization groups. *New developments in quantum field theory and statistical mechanics (Proc. Cargèse Summer Inst., Cargèse, 1976)*, pp. 447-468. *NATO Adv. Study Inst. Ser., Ser. B: Physics*, 26. *Plenum, New York*, 1977. (From the introduction) **58** #32494 81.22
- Stellar, E. T.** See Notes and comments from Math. Mag., **54** #12422
- Stelle, K. S.** Renormalization of higher-derivative quantum gravity. *Phys. Rev. D* (3) **16** (1977), no. 4, 953-969. (Author's summary) **56** #10709 83.35
- Classical gravity with higher derivatives. *General Relativity and Gravitation* **9** (1978), no. 4, 353-371. (P. C. Vaidya) **57** #11637 83.53

Stelleckii, I. V. See *Progress in mathematics*, 49 #4726

Stellenbosch Algebra Research Group Infinite groups acting on formal power series rings.

The research group consists of J. Brewer, T. Jooste, L. le Riche, E. Martens, A. Müller, M. Sheridan and W. van Rooyen. *J. Algebra* 53 (1978), no. 2, 471-476. (J. T. Arnold) 58 #5656 13J05

Stellmacher, Bernd Einfache Gruppen, die von einer Konjugiertenklasse von Elementen der Ordnung drei erzeugt werden. *J. Algebra* 30 (1974), 320-354. (Mark P. Hale, Jr.) 50 #10054 20D05

(with Fletcher, L. R.; Stewart, W. B.) Endliche Gruppen, die kein Element der Ordnung 6 enthalten. *Quart. J. Math. Oxford Ser. (2)* 28 (1977), no. 110, 143-154. (Gernot Stroth) 56 #5706 20D05

Über endliche Gruppen mit einer 2-lokalen Untergruppe, die kein Element der Ordnung 6 enthält. *J. Algebra* 50 (1978), no. 1, 175-189. (W. Feit) 58 #22298 20D99

Stellmacher, Irène Évolution d'attitude d'un satellite dans le champ magnétique terrestre. (English abstract) *Celestial Mech.* 10 (1974), 57-69. (B. D. Jovanović) 50 #3697 70.34

Sur l'existence d'une solution périodique dans le mouvement autour du centre de gravité d'un satellite aimanté dans le champ magnétique terrestre. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), Aii, A977-A980. (C. Marchal) 52 #4761 70.34

On the motion of a magnetized satellite around its centre of mass. *Acta Astronaut.* 3 (1976), no. 1-2, 39-53. (C. J. Brookes) 54 #1756 70.34

Couplage dynamique de systèmes périodiques. Application au problème des N corps de type planétaire. Résonances. *Astron. and Astrophys.* 59 (1977), no. 3, 337-347. (From the summary) 57 #8255 70.34

Stel'mah, V. G. (with Vasil'eva, A. B.) Singularly perturbed systems in the theory of semiconductors. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 17 (1977), no. 2, 339-348, 546. (V. P. Milant'ev) 56 #7491 78.34

(with Boglaev, Ju. P.; Ždanov, A. V.) Uniform approximations to the solutions of certain singularly perturbed nonlinear equations. (Russian) *Differencial'nye Uravnenija* 14 (1978), no. 3, 395-406, 571. (P. P. Zabreiko) 58 #12256 45L05 (65R05)

Stel'masuk, N. T. A certain method of investigation of the solutions of Maxwell's system. (Russian) *Ukrain. Mat. Ž.* 24 (1972), 115-118. (D. B. Kotlow) 46 #7735 35Q99 (30A97)

Definition and properties of formal derivatives. (Russian) *Mathematics (Russian)*, pp. 52-59. *Minsk. Gos. Ped. Inst., Minsk*, 1973. (D. P. Raškovič) 52 #14318 30A97 (with Fedorov, V. S.) The solution of certain partial differential equations by the methods of F -monogenic functions. (Russian) *Rev. Roumaine Math. Pures Appl.* 18 (1973), 233-241. (J. F. Heyda) 48 #2593 35Q99

Analogues of the formulas of Green, Stokes and Ostrogradskii in formal derivatives for hypercomplex functions and their applications. (Russian) *Mathematics (Russian)*, pp. 40-49. *Gos. Ped. Inst. im. A. M. Gor'kogo, Minsk*, 1974. (Author's introduction) 58 #28546 30A97

Limit values for a Cauchy type integral of hypercomplex functions. (Russian) *Mathematics (Russian)*, pp. 49-53. *Gos. Ped. Inst. im. A. M. Gor'kogo, Minsk*, 1974. (Author's summary) 58 #28547 30A97

Construction of functionally invariant solutions of Maxwell's system for an electromagnetic field in a vacuum. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1974, no. 4, 35-39, 139. (A. Nikodemusz) 51 #7488 78.35

The construction of elementary functions in some algebras. (Russian) *Questions of mathematical physics and theory of oscillations*, No. 3 (Russian), 131-134. *Ivanov. Energet. Inst., Ivanovo*, 1975. (Not reviewed) 78.30

A form of functionally invariant solutions of the Maxwell system. (Russian) *Questions of mathematical physics and theory of oscillations*, No. 4 (Russian), pp. 108-111. *Ivanov. Energet. Inst., Ivanovo*, 1976. (From the text) 58 #32415 78.35 (35C99)

Solution of some systems of partial differential equations. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 8, 1426-1433, 1539. (P. Günther) 57 #10191 35C05

A condition for F -monogeneity. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1977, no. 2, 11-14, 139. (D. P. Raškovič) 57 #658 30A97 (35Q99)

Stelzer, Bernd Über Eigenwerte positiver linearer Abbildungen in topologischen Vektorräumen. 5. Tagung über Probleme und Methoden der Mathematischen Physik (Techn. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt, 1975), Heft 1, pp. 46-51. *Wiss. Schr. Techn. Hochschule Karl-Marx-Stadt, Techn. Hochschule, Karl-Marx-Stadt*, 1975. (Edgar Berz) 55 #13286 47B55

Über Eigenwerte positiver linearer Abbildungen in topologischen Vektorräumen. *Math. Nachr.* 71 (1976), 315-327. (K. Veselič) 53 #11425 47B55

Über Zweipunkt-Randwertaufgaben nichtlinearer Differentialgleichungen für Abbildungen eines Intervalls in einen lokalkonvexen Raum. VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975), Band I, Teil 2, pp. 303-308. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn.*, No. 4N, Akademie-Verlag, Berlin, 1977. (Russell C. Thompson) 58 #22898 34G05 (34B15)

Stelzner, Werner Eine formale Lösung epistemologischer Antinomien. *Rep. Math. Logic* 2 (1974), 33-35. (N. B. Cocchiarella) 50 #9540 02C10

Stematiu, Florica (with Ivanov, Igor) Problèmes de physique dans des revues roumaines du XIX siècle. (English summary) *Noesis, II (Travaux Colloq., Comité Roumain d'Histoire Philos. Sci., Bucharest*, 1973), pp. 175-192. *Editura Acad. R.S.R., Bucharest*, 1974. (Phillip S. Jones) 57 #5604 01A55

Stemenko, Ju. N. A nonstationary decorrelation filter. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1974, no. 8, 24-35. (A. S. Alekseev) 52 #12956 94A05 (86.00)

Stemmer, Nathan Three problems in induction. *Synthese* 23 (1971/72), 287-308. (Author's introduction) 49 #2243 02A05 (60A05)

Stemmler, Rosemarie M. (with Bateman, Paul T.; Brown, John Wesley; Hall, R. S.; Kloss, K. E.) Linear relations connecting the imaginary parts of the zeros of the zeta function. *Computers in number theory (Proc. Sci. Res. Council Atlas Sympos. No. 2, Oxford, 1969)*, pp. 11-19. *Academic Press, London*, 1971. (M. Mikolás) 48 #8408 10H05

Stempkovskaja, A. A. (with Ogiveckii, I. I.) Certain applications of the functional gamma-transform. (Russian) *Studies in contemporary problems of summability and*

approximation of functions, and their applications (Russian), pp. 106-108. *Dnepropetrovsk Univ., Dnepropetrovsk*, 1972. (Hans-Jürgen Gieske) 54 #3314 44A15

Stemple, Joel G. Geodetic graphs of diameter two. *J. Combinatorial Theory Ser.* (1974), 266-280. (Editors) 51 #285 05C99

Stencel, Robert (with Gifford, Fred; Morón, Eleanor) Astronomy and cosmology at Angkor Wat. Measurements of the temple are related to practical astronomy, religious symbolism. *Science* 193 (1976), no. 4250, 281-287. (R. C. Gupta) 56 #01A25

Stenčikov, G. L. Solution of the first order quasi-linear equation that defines the evolution of plasma turbulence. *Prikl. Mat. Meh.* 40 (1976), no. 5, 823-833 (Russian); *trans. as J. Appl. Math. Mech.* 40 (1976), no. 5, 774-785 (1977). (R. R. Gold) 57 #8478.34

Stender, Hans-Joachim Einheiten für eine allgemeine Klasse total reeller algebraischer Zahlkörper. *J. Reine Angew. Math.* 257 (1972), 151-178. (R. Güting) 47 #8412A45

Grundeinheiten für einige unendliche Klassen reiner biquadratischer Zahlkörper einer Anwendung auf die diophantische Gleichung $x^4 - ay^4 = \pm c$ ($c = 1, 2, 4$ oder 8). *Reine Angew. Math.* 264 (1973), 270-220. (W. Narkiewicz) 48 #11040 12A45 (10B10)

(with Halter-Koch, Franz) Unabhängige Einheiten für die Körper $K = \mathbb{Q}(\sqrt[n]{D} \pm d)$ mit $d|D^n$. *Abh. Math. Sem. Univ. Hamburg* 42 (1974), 33-40. (Lakkis) 51 #432 12A45

Über die Einheitengruppe der reinen algebraischen Zahlkörper sechsten Grades. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *Reine Angew. Math.* 268/269 (1974), 78-93. (K. Lakkis) 50 #2121 12A45

Eine Formel für Grundeinheiten in reinen algebraischen Zahlkörpern dritten, vierten und sechsten Grades. *J. Number Theory* 7 (1975), 235-250 (K. Lakkis) 51 #5552 12A45

Lösbare Gleichungen $ax^n - by^n = c$ und Grundeinheiten für einige algebraische Zahlkörper vom Grade $n = 3, 4, 6$. *J. Reine Angew. Math.* 290 (1977), 24-62. (Charles J. Parry) 57 #12455 12A45

"Verstümmelte" Grundeinheiten für biquadratische und bikubische Zahlkörper. *Math. Ann.* 232 (1978), no. 1, 55-64. (Charles J. Parry) 57 #269 12A45

Stender, R. See *Fundamentals of mathematics*, 49 #8787 and *Fundamentals of mathematics*, 49 #8788

Stene, Jon Nested step-down multiple decision procedures for testing homogeneity of Bernoulli trials. *Skand. Aktuarietidskr.* 1972, 92-106 (1973). (Chao-Chuan Tu) 50 #15092 62F05

Hierarchical procedures. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 753-763. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam*, 1974. (Somesh Das Gupta) 52 #1988 62F05

Sibships ascertained through a twin pair with at least one affected twin. *Human Genetics* 38 (1974/75), 361-364. (D. Ludwig) 51 #14500 62P10

On the optimal use of multiauxiliary information. *J. Amer. Statist. Assoc.* 71 (1976), no. 355, 679. (David Bellhouse) 55 #6632 62D05

A model for translocation inheritance in man, segregation patterns for a symmetric-fusion translocation. *Theoret. Population Biology* 9 (1976), no. 2, 151-161. (Charles J. Mode) 54 #6990 92A10

Assumptions for different ascertainment models in human genetics. (French summary) *Biometrics* 33 (1977), no. 3, 523-527. (Edward D. Rothman) 57 #11892A10

See also *Symposium: Mathematical Genetics*, 52 #12848

Stenflo, Lennart (with Dysthe, K. B.) Atmospheric solitary waves. *Phys. Scripta* 12 (1976), no. 6, 325-326. (Giovanni Carini) 53 #9843 76.35

(with Pereira, Nino R.) Nonlinear Schrödinger equation including growth and damping. *Phys. Fluids* 20 (1977), no. 10, part 1, 1733-1734. (Authors' summary) 56 #10379 76.35

Štengeľ, E. G. See *Cybernetics and computer technology*, 47 #8140

Stenger, Frank The reduction of two dimensional integrals into a finite number of dimensional integrals. *Aequationes Math.* 6 (1971), 278-287. (G. Meinardus) 45 #65D30 (41A55)

(with McNamee, J.; Whitney, E. L.) Whittaker's cardinal function in retrospect. *Math. Comp.* 25 (1971), 141-154. (F. J. Schuurmann) 46 #586 41A30 (65R05)

The approximate solution of Wiener-Hopf integral equations. *J. Math. Anal. Appl.* 37 (1972), 687-724. (P. M. Anselone) 46 #2919 65R05

(with Lipow, Peter R.) How slowly can quadrature formulas converge? *Math. Comp.* 26 (1972), 917-922. (D. B. Hunter) 47 #7900 65D30

Transform methods for obtaining asymptotic expansions of definite integrals. *SIAM J. Math. Anal.* 3 (1972), 20-30. (H. A. Lauwerier) 47 #7291 41A60

Integration formulae based on the trapezoidal formula. *J. Inst. Math. Appl.* (1973), 103-114. (G. Blanch) 52 #2158 (E 55 #13747) 65D30

The approximate solution of convolution-type integral equations. *SIAM J. Math. Anal.* 4 (1973), 536-555. (P. Linz) 48 #2702 45L05

(with Gearhart, William B.) An approximate convolution equation of a given type. *Optimal control theory and its applications (Proc. 14th Biennial Sem. Conf. Math. Congr., Univ. Western Ontario, London, Ont., 1973)*, Part II, pp. 168-196. *Leiden Notes in Econom. and Math. Systems*, Vol. 106, Springer, Berlin, 1974. (From the introduction) 57 #18947 93C05

On the convergence and error of the Bubnov-Galerkin method. *Proceedings of the Conference on the Numerical Solution of Ordinary Differential Equations (Univ. of Texas at Austin, Tex., 1972)*, pp. 434-450. *Lecture Notes in Math.*, Vol. 362, Springer, Berlin, 1973. (H. J. Stetter) 52 #4618 65J05

(with Rahman, Qazi Ibadur) An extremal problem for polynomials with a prescribed zero. *Proc. Amer. Math. Soc.* 43 (1974), 84-90. (M. Marden) 48 #11430A06

Connection between a Cauchy system representation of Kalaba and Fourier transforms. *Appl. Math. Comput.* 1 (1975), no. 1, 83-91. (R. P. Srivastava) 52 #8845E10

An algorithm for the topological degree of a mapping in n -space. *Bull. Amer. Math. Soc.* 81 (1975), 179-182. (Lj. Górniewicz) 51 #4224 55C25

- Chauvette, Jean) The approximate solution of the nonlinear equation. *J. Math. Anal. Appl.* **51** (1975), 229-242. (Clarence M. Ablow) **51** #9520
- Rosenberg, Ivo G.) A lower bound on the angles of triangles constructed by the longest side. *Math. Comp.* **29** (1975), 390-395. (O. Bottema) **51** #11264 (65M10)
- Computing the topological degree of a mapping in \mathbb{R}^n . *Numer. Math.* **25** (1975/76), 23-38. (Vincent Giambalvo) **52** #15440 55C25 (65D99)
- Harvey, Charles) A two-dimensional analogue to the method of bisections for nonlinear equations. *Quart. Appl. Math.* **33** (1975/76), no. 4, 351-368. (From authors' introduction) **56** #13600 65H10
- analytic function which is an approximate characteristic function. *SIAM J. Anal.* **12** (1975), 239-254. (Frank D. Burgoyne) **52** #2159 65D30
- Ikebe, Yasuhiko; Li, Tien Yien) The numerical solution of the Hilbert transform. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 338-358. *Academic New York*, 1976. (Jacob Steinberg) **55** #13840 65R05
- approximations via Whittaker's cardinal function. *J. Approximation Theory* **17** no. 3, 222-240. (R. S. Dahiya) **58** #1885 41A30
- marks on "Integration formulae based on the trapezoidal formula" (J. Inst. Math. **12** (1973), 103-114). *J. Inst. Math. Appl.* **19** (1977), no. 2, 145-147. (G. Blanch) **3747** 65D30
- optimal convergence of minimum norm approximations in H_p . *Numer. Math.* **29** (1978), no. 4, 345-362. (Hans-Jürgen Albrand) **58** #3342 65D30 (30A78)
- Hanson, F.; Steele, J. Michael) Distinct sums over subsets. *Proc. Amer. Soc.* **66** (1977), no. 1, 179-180. (S. L. G. Choi) **56** #5482 10L10
- upper and lower estimates on the rate of convergence of approximations in H_p . *Numer. Math. Soc.* **84** (1978), no. 1, 145-148. (V. Kabaila) **57** #14348 65D30
- Stichproben-theorie. *Physica-Verlag, Würzburg-Vienna*, 1971. 228 pp. (Anke) **56** #4006 62D05
- Symmetriebegriffe in der Stichproben-theorie. (English, French and Russian series) *Statist. Hefte (N.F.)* **14** (1973), 292-309. (H. L. Harter) **51** #2043
- Mehrfachstufige Stichprobenverfahren. (English summary) *Metrika* **21** (1974), 7-18. (C. Rüch) **50** #15050 62D05
- Stichproben-Parameterfunktionen in der Stichproben-theorie. (English summary) *Statist. Hefte (N.F.)* **14** (1974), 143-154. (H. E. Reinhardt) **51** #7117 62F10 (62D05)
- Anderson, Oskar; Popp, Werner; Schaffranek, Manfred; Steinmetz, Dieter) Schätzen und Testen. Eine Einführung in die Wahrscheinlichkeitsrechnung und Statistik. Heidelberg Taschenbücher, Band 177. *Springer-Verlag, New York*, 1976. xi+385 pp. (From the author's preface) **57** #10856 62-01
- William) On perturbations of finite rank. *J. Math. Anal. Appl.* **28** (1969), 625-635. (Caradus) **46** #697 47A55
- Extensions and applications of the new maximum-minimum theory of calculus. *J. Math. Mech.* **19** (1969/70), 931-949. (Editors) **56** #6536 49G15
- Weinstein, Alexander) ★Methods of intermediate problems for eigenvalues. *Analysis and ramifications. Mathematics in Science and Engineering*, Vol. 89. *Academic New York-London*, 1972. xi+235 pp. (M. S. P. Eastham (Zbl 291 #49034)) **7469** 49D99
- Hilbert (with Narayan, Jack) Uniform asymptotic splitting of linear differential systems. *Analytic theory of differential equations (Proc. Conf., Western Michigan Univ., Ann Arbor, Mich., 1970)*, pp. 170-175. *Lecture Notes in Math.*, Vol. 183, *Springer, Berlin*, 1970. (W. Wasow) **52** #6130 34E20
- Khabbaz, Samir) Normal forms for analytic matrix valued functions. *Proceedings of Liverpool Singularities Symposium, II* (1969/1970), pp. 34-57. *Lecture Notes in Math.*, Vol. 209, *Springer, Berlin*, 1971. (G. R. Belicikii) **52** #11984 58C25
- multistellensatz and a positivstellensatz in semialgebraic geometry. *Math. Ann.* **207** (1976), 87-97. (E. Graham Evans, Jr.) **48** #11073 12D15 (14A25)
- asymptotic estimates for the adiabatic invariance of a simple oscillator. *SIAM J. Anal.* **8** (1977), no. 4, 640-654. (W. Wasow) **56** #12467 34E20
- See *Proceedings: IFAC World Congress*, **50** #12338
- Stig) On the theory of non-hermitian operators. *Ann. Acad. Sci. Fenn. Ser. A VI* **9** (1970), 14 pp. (A. B. Buche) **47** #2407 47A60 (47A50)
- (with Kostjuk, V. I.; Ignatenko, V. N.) Fuel-optimal control of system with (Russian summary) *Systems Sci.* **3** (1977), no. 2, 159-169. (Authors' summary) **0707** 93C45
- Critical essays. With a bibliography of the philosophical writings of S. Acta Philos. Fenn., Fasc. 25 (1972). *North-Holland Publishing Co., Amsterdam*, 1972. 62 pp. (From the editors' foreword) **56** #8319 02A05 (01A75)
- On the foundations of mathematics (Colloq., Second Finnish Summer School of Logic, Helsinki, 1973). *Synthese* **27** (1974), 161-188. (R. Rucker) **57** #2868
- V. V. (with Solomjak, M. Z.) A certain class of multiple operator Stieltjes integrals. (Russian) *Problems of Math. Anal.*, No. 2: *Linear Operators and Operator Integrals (Russian)*, pp. 122-134. *Izdat. Leningrad. Univ., Leningrad*, 1969. (Editors) **1080** 47A60
- positive transformers that can be defined by double operator integrals. (Russian summary) *Vestnik Leningrad. Univ.* **1975**, no. 19. *Mat. Meh. Astronom. vyp.* **4**, 153, 171. (F.-H. Vasilescu) **53** #11423 47B40 (47A60)
- multiple operator integrals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, (1979), 102-115. (M. Demuth) **57** #581 28A45 (46G10)
- See also *Linear operators and operator equations*, **49** #4718
- Sören) Combinators as effectively calculable functions. *Logic and value (essays dedicated to Thorild Dahlquist on his fiftieth birthday)*, pp. 67-74. *Filosofiska Studier*, No. 18. *Filosof. Föreningen och Filosof. Inst., Uppsala Univ., Uppsala*, 1970. (R. Hindley) **1490** 02C20 (02F43)
- Introduction to combinatory logic. *Filosofiska Studier*, No. 11. *Filosofiska Institutionen och Filosofiska Institutionen vid Uppsala Universitet, Uppsala*, 1971. v+104 pp. (loose errata) (Editors) **58** #21491 02C20 (02-02, 02D99)
- ★Combinators, λ -terms and proof theory. *Synthese Library*, Vol. 42. *D. Reidel Publishing Co., Dordrecht*, 1972. 184 pp. (J. P. Seldin) **58** #21492 02C20 (02-02, 02D99)
- ★The logic of description and existence. *Filosofiska Studier*, No. 18. *Filosofiska Föreningen och Filosofiska Institutionen vid Uppsala Universitet, Uppsala*, 1973. ii+75 pp. (N. B. Cocchiarella) **50** #12668 02C10
- Descriptions in intuitionistic logic. *Proceedings of the Third Scandinavian Logic Symposium (Univ. Uppsala, Uppsala, 1973)*, pp. 197-212. *Stud. Logic Found. Math.*, Vol. 82, *North-Holland, Amsterdam*, 1975. (N. B. Cocchiarella) **52** #7857 02C15
- Stenman, Folke) Periodic orbits in a tetrahedral mirror. *Soc. Sci. Fenn. Comment. Phys.-Math.* **45** (1975), no. 2-3, 103-110. (H. T. Croft) **52** #6558 50B30
- Stens, R. L. (with Nessel, Rolf Joachim) Pointwise saturation for variation diminishing convolution transforms. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, I. *J. Approximation Theory* **13** (1975), 24-27. (L. L. Schumaker) **50** #10631 41A40
- Charakterisierung der besten algebraischen Approximation durch lokale Lipschitzbedingungen. *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math., Univ. Bonn, Bonn, 1976)*, pp. 403-415. *Springer, Berlin*, 1976. (Editors) **58** #29692 41A50
- (with Butzer, Paul L.) Fractional Chebyshev operational calculus and best algebraic approximation. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 315-319. *Academic Press, New York*, 1976. (David A. Sprecher) **55** #6060 41A10
- (with Butzer, Paul L.) Chebyshev transform methods in the theory of best algebraic approximation. *Abh. Math. Sem. Univ. Hamburg* **45** (1976), 165-190. (Dietrich Braess) **53** #13940 41A25
- (with Butzer, Paul L.; Dyckhoff, H.; Görlich, Ernst) Best trigonometric approximation, fractional order derivatives and Lipschitz classes. *Canad. J. Math.* **29** (1977), no. 4, 781-793. (M. F. Timan) **56** #947 42A08
- (with Butzer, Paul L.) The operational properties of the Chebyshev transform. I. General properties. *Funct. Approximatio Comment. Math.* **5** (1977), 129-160. (R. A. Askey) **57** #13392 44A15 (42A16)
- Stenseth, Nils Chr. (with Reed, Jon) A comment on L. E. Bobisud's paper on evolution of cannibalism: "Cannibalism as an evolutionary strategy" (Bull. Math. Biol. **38** (1976), no. 4, 359-368). *Bull. Math. Biol.* **40** (1978), no. 4, 541-545. (Anthony Leung) **58** #9408b 92A15
- Stensholt, Eivind) An application of Steinberg's construction of twisted groups. *Pacific J. Math.* **55** (1974), 595-618. (Joseph C. Ferrar) **51** #8282 20G40
- Certain embeddings among finite groups of Lie type. *J. Algebra* **53** (1978), no. 1, 136-187. (E. Vinberg) **58** #5960 20G40 (20D05)
- Stenström, Bo) ★Rings and modules of quotients. *Lecture Notes in Mathematics*, Vol. 237. *Springer-Verlag, Berlin-New York*, 1971. vii+136 pp. (G. Michler) **48** #4010 16A08
- Flatness and localization over monoids. *Math. Nachr.* **48** (1971), 315-334. (H. H. Storrer) **45** #5252 20M10 (18E35)
- The maximal ring of quotients of a triangular matrix ring. *Math. Scand.* **34** (1974), 162-166. (Darrell R. Turnidge) **50** #9927 16A08
- ★An introduction to methods of ring theory. Die Grundlehren der Mathematischen Wissenschaften, Band 217. *Springer-Verlag, New York-Heidelberg*, 1975. viii+309 pp. (G. Michler) **52** #10782 16-02
- The maximal ring of quotients of a generalized matrix ring. *Universale Algebren und Theorie der Radikale*, pp. 65-67. *Studien zur Algebra und ihre Anwendungen*, Band 1, *Akademie-Verlag, Berlin*, 1976. (J. Lambek) **56** #8602 16A08
- Stentiford, F. W. M. (with Bennetts, R. G.) Observation on the construction of C sets in incompletely specified state tables. *Electron. Lett.* **9** (1973), 27-28. (Authors' summary) **56** #11542 94A20
- Stenzel, J. See *Kongress: Mathematiker*, **53** #7713
- Stenzel, William J. (with Kubitz, William J.; Garcia, Gilles H.) A compact high-speed parallel multiplication scheme. *IEEE Trans. Computers* **C-26** (1977), no. 10, 948-957. (M. Tetrušvili) **57** #1963 68A10 (94A20)
- Stepan, A. K. (with Gamburd, P. R.; Gameckii, A. F.) An algorithm for solving a certain problem of preserving and processing perishable resources. (Russian) *Prikl. Mat. i Programirovanie Vyp.* **14** (1975), 3-10, 156. **58** #25950 90B99
- Stepan, Adolf) Mathematische Modelle und Methoden in den Wirtschaftswissenschaften: die Optimierungstheorie am Beispiel der Produktionsplanung. 9. Steiermärkisches Mathematisches Symposium (Graz, 1977). *Ber. Math.-Statist. Sekt. Forschungszentrum Graz* **No. 74-79** (1977), 50 pp. (O. Opitz and K. Schuback) **58** #20482 90C50 (90B30)
- Stepan, Alfred) See *Engelhard, Rainer*; et al., **53** #5618
- Štěpán, Jaromír) Some problems of system identification. (Czech summary) *Kybernetika (Prague)* **7** (1971), 133-155. (B. J. Leon) **46** #1394 93B30
- Štěpán, Josef) On the relation between L_∞ -convergence and convergence in distribution. *Papers from the "Open House for Probabilists" (Mat Inst., Aarhus Univ., Aarhus, 1971)*, pp. 197-200. *Various Publ. Ser.*, No. 21, *Mat. Inst., Aarhus Univ., Aarhus*, 1972. (R. J. Tomkins) **52** #6841 60F05 (62E20)
- The weak convergence of Bayes estimators. *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes (Tech. Univ. Prague, Prague, 1971; dedicated to the memory of Antonín Špaček)*, pp. 807-814. *Academia, Prague*, 1973. (Lionel Weiss) **50** #3437 62F15 (62E20)
- The probability limit identification function exists under the continuum hypothesis. *Ann. Probability* **1** (1973), 712-715. (S. D. Chatterji) **50** #8667 60F99 (28A20)
- Convergence of conditional expectations. *Comment. Math. Univ. Carolinae* **18** (1977), no. 1, 161-166. (Author's summary) **56** #5825 28A20 (62F15, 60F05)
- See also *Selected translations in mathematical statistics and probability*, **48** #1276 and *Progress in statistics*, **50** #5999
- Stepančuk, V. F. (with Šilo, A. F.) A boundary value problem with boundary conditions of conjugation type. (Russian) *Differencial'nye Uravneniya* **11** (1975), 366-370, 398. (W. Kecs) **51** #8602 35C10
- Stepanec, A. I. See *Stepanec', O. I.*

- Stepanec', N. I.** A certain two-step iteration method of solution of a system of Lamé equations. (Russian) *Numerical analysis (Proc. Semi., Kiev, 1969)*, No. 2 (Russian), pp. 97-109. *Akad. Nauk Ukrain. SSR, Kiev, 1969*. (I. Šelihova (RŽMat 1970 #8 B756)) 45 #9525 65L99 (73.65)
- (with Molčanov, Ī. M.) The method of "corrections" for the solution of a certain equation of elasticity theory in displacements. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1971, 790-795, 858. (Z. Kączkowski) 46 #2970 73.65
- An iteration method of solving a spatial problem for equations of elasticity theory in displacements. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1972, 897-900, 958. (V. Komkov) 47 #1306 65N10
- A numerical method of solution of a certain plane problem of elasticity theory. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1972, 1000-1004, 1054. (A. Kączkowski) 47 #7997 73.65
- (with Galba, Ē. F.) Numerical solution of a mixed boundary value problem for the Poisson equation. (Russian) *Numerical analysis and questions of optimization of computations (Russian)*, pp. 13-25. *Inst. Kibernet., Akad. Nauk Ukrain. SSR, Kiev, 1976*. (Editors) 58 #31893 65N20
- Stepanec', O. Ī.** (with Gavriljuk, V. T.) The approximation of Hölder class functions by S. N. Bernštejn sums. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1970, 675-677, 764. (V. Veselinov) 45 #4038 42A08 (41A30)
- (with Dzjadik, V. K.) The sequence of zeros of the integral sine. (Russian) *Metric questions of the theory of functions and mappings*, No. 2 (Russian), pp. 64-73. *Izdat. "Naukova Dumka", Kiev, 1971*. (A. Lupaş) 45 #2212 33A10
- Deviation of partial sums of a Fourier series in Hölder classes of functions of two variables. (Russian) *Dokl. Akad. Nauk SSSR* 206 (1972), 549-551. (M. Tomić) 47 #5519 42A92
- (with Dzjadik, V. K.) Asymptotic equalities for least upper bounds of the approximations of functions of Hölder classes by means of Rogosinski polynomials. (Russian) *Ukrain. Mat. Ž.* 24 (1972), 476-487, 573. (A. Lupaş) 47 #2245 42A04 (41A25)
- On a certain problem of A. N. Kolmogorov in the case of functions of two variables. (Russian) *Ukrain. Mat. Ž.* 24 (1972), 653-665, 716. (J. Szabados) 47 #2266 42A92
- Approximation of functions that satisfy Lipschitz conditions by Fourier sums. (Russian) *Ukrain. Mat. Ž.* 24 (1972), 781-799, 861. (J. Szabados) 47 #2267 42A92
- Approximation of differentiable functions of two variables by the partial sums of their Fourier series. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1973, 126-127, 190. (V. Veselinov) 47 #9164 42A92
- The approximation of continuous periodic functions of two variables by Favard sums. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1973, 511-513, 573. (S. Aljančić) 48 #2661 42A92
- Approximation of continuous periodic functions of two variables by Favard sums. (Russian) *Mat. Zametki* 13 (1973), 655-666. (L. Gogoladze) 49 #9513 42A08
- (with Gavriljuk, V. T.) Approximation of differentiable functions by Rogosinski polynomials. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 3-13, 140. (B. Bojanov) 47 #5502 42A08
- (with Gavriljuk, V. T.) Exact upper bounds of the deviations of S. N. Bernštejn sums from functions of Hölder classes. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 158-169, 284. (J. T. Scheick) 48 #4600 42A08
- Approximation of certain classes of differentiable periodic functions of two variables by Fourier sums. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 599-609, 715. (F. Schipp) 49 #5669 42A08
- Approximation of continuous periodic functions by means of a certain linear method. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1974, 408-412, 477. (M. Tomić) 51 #6263 42A12
- The approximation of continuous periodic functions of several variables by spherical Riesz sums. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1974, 534-537, 575. (M. Tomić) 50 #14055 42A92 (42A08)
- Approximation of continuous periodic functions of several variables by spherical Riesz means. (Russian) *Mat. Zametki* 15 (1974), 821-832. (F. Schipp) 52 #1132 42A08
- Approximation of certain classes of periodic functions of two variables by linear summability methods for their Fourier series. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 205-215, 284. (R. L. Cooke) 49 #3448 42A92
- Approximation of continuous periodic functions by Rogosinski polynomials. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 496-509, 574. (F. Schipp) 52 #1133 42A08
- A certain method for the approximation of continuous periodic functions. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 762-774, 861. (V. Veselinov) 52 #3851 42A08
- Approximation of continuous periodic functions of two variables by means of a certain method of interpolation type. (Russian) *Ukrain. Mat. Ž.* 27 (1975), 42-61, 141. (V. Veselinov) 52 #3852 42A08
- Approximation of continuous periodic functions by S. N. Bernštejn sums. (Russian) *Ukrain. Mat. Ž.* 27 (1975), no. 5, 701-708, 719. (M. Tomić) 54 #8104 41A45
- An extremal problem in a space of functions of two variables. (Russian) *Questions in the theory of approximation of functions and its applications (Russian)*, pp. 160-178. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1976*. (Editors) 58 #30603 49A30
- Approximation of periodic functions of Hölder classes by Riesz sums. (Russian) *Mat. Zametki* 21 (1977), no. 3, 341-354. (W. R. Madych) 56 #9164 42A08
- (with Zaderei, P. V.) Approximation of periodic functions of two variables by de la Vallée Poussin sums. (Russian) *Ukrain. Mat. Ž.* 30 (1978), no. 1, 33-44, 141. (Authors' summary) 58 #12155 42A08
- Štěpánek, Petr** Contributions to the theory of semisets. IV. *Z. Math. Logik Grundlagen Math.* 20 (1974), 373-384. (L. Bukovský) 54 #2462 02K15 (02K05, 02K10)
- (with Balcar, Bohuslav) Boolean matrices, subalgebras and automorphisms of complete Boolean algebras. *Fund. Math.* 96 (1977), no. 3, 211-223. (Thomas J. Jech) 58 #5180 02H15 (06A40)
- (with Balcar, Bohuslav) Embedding theorems for Boolean algebras and consistency results on ordinal definable sets. *J. Symbolic Logic* 42 (1977), no. 1, 64-76. (J. L. Bell) 58 #16287 02K05 (02J05)
- Štěpánek, Vladimír** Least squares estimates in linear regression when the straight line is subject to intersecting in one point. (French summary) *Proceedings of the 39th session of the International Statistical Institute (Vienna, 1973)*, Vol. 2. *Bull. Inst. Internat. Statist.* 45 (1973), no. 2, 472-477. (Burt S. Holland) 51 #7171 62J05
- Stepanenko, I. D.** See **Mathematical optimization methods and their application to the economy of Kirghizia**, 48 #13185
- Stepanenko, Ju.** (with Vukobratović, M.) Dynamics of articulated open-chain active mechanisms. *Math. Biosci.* 28 (1976), no. 1-2, 137-170. (Authors' summary) 58 #92A05
- Stepanenko, P. T.** (with Vakarčuk, B. S.) On generalized Bertrand curves in Lobachevsky space. (Russian) *Studies in contemporary problems of summability and approximation functions, and their applications (Russian)*, pp. 124-127. *Dnepropetrovsk. Univ., Dnepropetrovsk, 1972*. (M. C. Chaki) 54 #3608 53A35
- Stepanenko, V. A.** (with Dautov, Š. A.) A simple example of a bounded linearly compact but not convex domain with a smooth boundary. (Russian) *Holomorphic functions of several complex variables (Sem., Krasnoyarsk, 1972)* (Russian), pp. 175-179, 213. *Fiz. Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk, 1972*. (J. S. Joel) 57 #132F99
- Generalization of the concept of linear convexity and its applications. (Russian) *Properties of holomorphic functions of several complex variables (Russian)*, pp. 12-237. *Inst. Fiz. Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk, 1973*. (Alexandr Pankov) 57 #721 32F99 (32A25)
- (with Koršunov, Ju. M.) Filtration of random sequences with gaps using discrete filters with constant memory. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, 167-173 (Russian); translated as *Engrg. Cybernetics* 11 (1973), no. 3, 502-508. (A. Aizerman) 53 #1885 62M10 (93E10)
- Grundy games in conditions of semi-definiteness. (Russian. English summary) *Kibernetika (Kiev)* 1975, no. 1, 145-149. (Irinel Dragan) 54 #9707 90D99
- Stepanenko, V. N.** (with Koršunov, Ju. M.) Nonlinear discrete filtering of polyharmonic signals in the presence of unsuccessful observations. *Avtomat. i Telemekh.* 1973, 72-77 (Russian. English summary); translated as *Automat. Remote Control* 32 (1973), part 1, 1074-1079. (Toby Berger) 46 #5026 94A05 (93E20)
- The filtration of random sequences with gaps in a polynomial model of noise. (Russian) *Otbor i Peredača Informacii* No. 27 (1971), 14-20. (L. I. Gal'čuk) 45 #94A05
- (with Galic'kii, V. K.; Revenko, V. I.) Handling of incomplete data by the maximum likelihood method. *Avtomatika* 1973, no. 2, 31-43 (Ukrainian); translated as *Soviet Automat. Control* 6 (1973), no. 2, 21-31. (C. W. Chen) 50 #8808 (62H99)
- Construction of a decision rule for recognition as a problem of moment estimation in a normed space. *Avtomatika* 1977, no. 2, 77-81 (Ukrainian); translated as *Soviet Automat. Control* 10 (1977), no. 2, 67-71. (J. Falk) 56 #16341 46B99 (41A65)
- Stepanenko, Yu.** See **Stepanenko, Ju.**
- Stepanjan, S. S.** A necessary condition for a function to belong to the class H_p . (Russian. Armenian summary) *Molod. Naučn. Rabotnik* 1970, no. 2 (12), 50-59. (Editors) 57 #12856 30A72
- The membership in the class H_p of a function that has a finite number of points on the boundary $|z|=1$. (Russian. Georgian and English summaries) *Sakharth. SSR Akad. Moambe* 64 (1971), 537-539. (E. Zlotkiewicz) 45 #5364 30A78
- Majorants of functions of the classes A and H_p . (Russian) *Izv. Vysš. Učebn. Zavedenija Matematika* 1976, no. 7 (170), 91-95. (A. C. Offord) 56 #3264 30A10
- Stepan'jan, G. A.** (with Tararoščenko, N. S.) Structure of control rules ensuring asymptotic stability of control systems with an unstable object. *Dokl. Akad. Nauk SSSR* 193 (1970), 774-776 (Russian); translated as *Soviet Physics Dokl.* 15 (1971), 717-718. (I. H. Mufti (Zbl 215, 599)) 50 #14435 49E20
- (with Samrikov, B. M.) The existence of optimal Ljapunov functions of dynamical systems. (Russian) *Dokl. Akad. Nauk SSSR* 213 (1973), 1040-1042. (V. M. Ljapunov) 51 #1039 34D20 (93D05)
- Certain aspects of the qualitative theory of stationary discrete systems. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), 561-564. (A. Halanay) 51 #8562 (39A12)
- Combinatorial problems on the control of motion. (Russian) *Dokl. Akad. Nauk SSSR* 234 (1977), no. 5, 1028-1031. (Editors) 58 #33364 93C99 (58F99)
- Stepanjuk, N. N.** (with Minjuk, S. A.) On the theory of the complete controllability of linear systems with lag. (Russian) *Differencial'nye Uravnenija* 10 (1974), 629-633. (G. Zatiašvili) 50 #8231 49E15
- Štěpánková, Olga** Construction by transfinite induction. *Comment. Math. Univ. Carolinae* 13 (1972), 583-591. (J. M. Plotkin) 47 #1615 02K15
- (with Havel, Ivan M.) Some results concerning the situation calculus. *Mathematical foundations of computer science (Proc. Sympos. and Summer School, Štrbské Pleso, 1973)*, pp. 321-326. *Math. Inst., Slovak Acad. Sci., Bratislava, 1973*. (Editors) 56 #1068A45
- (with Havel, Ivan M.) A logical theory of robot problem solving. *Artificial Intelligence* 7 (1976), no. 2, 129-161. (K. D. Günther) 54 #1741 68A45
- (with Havel, Ivan M.) Incidental and state-dependent phenomena in robot problem solving. *Kybernetika (Prague)* 13 (1977), no. 6, 421-438. (Masaharu Mizumoto) 57 #8212 68A45
- Stepanov, A. E.** (with Paško, D. I.; Šaikevič, V. D.; Počtman, Ju. M.) ★Квазианалоговые методы моделирования краевых задач для дифференциальных уравнений в частных производных. (Russian) [Quasi-analog methods of simulation of boundary value problems for partial differential equations.] *Izdat. "Naukova Dumka", Kiev, 1973*. 174 pp. (R. N. Goss) 48 #10238 68A55 (65N05)
- The simulation of differential equations by means of finite difference schemes with improved accuracy. (Ukrainian. English and Russian summaries) *Dopovidī Akad. Nauk Ukrain. RSR Ser. A* 1973, 706-709, 764. (J. Miklíček) 48 #1479 65L10 (65N05)
- See also **Mathematical simulation and the theory of electrical circuits**, 48 #32105
- Stepanov, A. N.** (with Ešukov, L. N.; Vekov, A. A.) Problems and bibliography of the theory of boundary value problems for ordinary differential equations. (Russian) *Rjazan. Radiotehn. Inst. Vyp. 42 Differencial'nye Uravnenija* (1972), 164-192. (E.

- 6581 34Bxx (01A60)
 with Mitrohin, Ju. S.) Some critical cases of controllability of systems of nonlinear differential equations. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp. 53 Differentsial'nye uravnenija* (1974), 62-67, 185-186. (Authors' summary) **58** #33254 93B05
- On Σ -controllability in the small of nonlinear systems of differential equations with interaction. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp. 53 Differentsial'nye uravnenija* (1974), 68-73, 186. (Author's summary) **58** #33295 93C10
- with Mitrohin, Ju. S.) Controllability in the small of third order nonlinear systems with two control inputs. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp. 62 Differentsial'nye uravnenija* (1975), 44-50, 179. (Authors' summary) **57** #11857 93B05
- Critical cases of the controllability of third order nonlinear systems with two control inputs. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp. 62 Differentsial'nye uravnenija* (1975), 50-54, 179. (Author's summary) **57** #11858 93B05
- with Mitrohin, Ju. S.) Controllability in the small of a nonlinear system. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp. 62 Differentsial'nye uravnenija* (1975), 54-59, 179. (Authors' summary) **57** #18920 93B05 (49B05)
- A. V. (with Kuznecov, P. I.; Pëlinceva, L. A.) Diagnosis as a controllable control process. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1974), 1036-1038. (Janačková) **51** #5140 93E20
- with Ilieva, K. D.) The passage of thermal neutrons through a medium with localized inhomogeneities. (Russian. English summary) *Bulgar. J. Phys.* **2** (1975), no. 4, 322. (Authors' summary) **54** #9532a (E 54 #9532b) 82.47
- with Ilieva, K. D.) Errata: "The passage of thermal neutrons through a medium with localized inhomogeneities" (Bulgar. J. Phys. **2** (1974), no. 4, 312-322). *Bulgar. J. Phys.* **2** (1975), no. 5, 533. (Authors' summary) **54** #9532b 82.47
- Optical potential for ultracold neutrons. (Russian. English summary) *Fiz. tselestial. i Atom. Jadra* **7** (1976), no. 4, 991-1038. (Author's summary) **14461** 82.47
- See also **Mathematical simulation and the theory of electrical circuits**, **48** #3287
- B. M. On the α -representation of Feynman integrals. (Russian. English summary) *Teoret. Mat. Fiz.* **5** (1970), no. 3, 356-365. (Author's summary) **57** #11402
- with Medvedev, V. A.; Oleinikov, B. I.; Filinov, V. N.) The discrete representation of signals with unbounded generalized spectrum. (Russian) *Problemy teoret. i priklad. Informacii* **9** (1973), no. 3, 36-43. (Authors' summary) **54** #7098 94A05
- See also **Bremermann, Hans-Joachim**, **53** #1251
- G. D. The reality of the eigenvalues of certain boundary value problems. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak.* **1972**, no. 7, 94-95. (M. Švec) **55** #3407 82B5
- A test of the oscillatory nature of the Green's function for a two-point boundary value problem. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 793-794. (I. Kiguradze) **672** 34B05
- Sign-definiteness of class p for matrices and kernels. (Russian) *Vestnik Jaroslav. Univ.* **5** (1973), 138-151. (F. Sizarovskiy) **57** #12563 15A57
- with Levin, A. Ju.) One-dimensional boundary value problems with operators that lower the number of sign alternations. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 181, 245-246. (M. Kakabadze) **55** #8449 34B05
- with Levin, A. Ju.) One-dimensional boundary value problems with operators that do not lower the number of sign changes. I. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 3, 626, 717. (R. C. Gilbert) **54** #13638a 47G05 (34B25)
- with Levin, A. Ju.) One-dimensional boundary value problems with operators that do not lower the number of sign changes. II. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 4, 830. (R. C. Gilbert) **54** #13638b 47G05 (34B25)
- Criteria for sign-regularity of the Green's function of a two-point boundary value problem. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 4, 765-767. (Alexander Icyun) **56** #12399 34B25
- G. G. See **System and theoretical programming**, **50** #11833
- G. Ju. The theory of hydrodynamic lattices in the works of N. E. Žukovskii and Čaplygin and its subsequent development. (Russian) *Izv. Akad. Nauk SSSR Ser. Židk. Gaza* **1972**, no. 2, 3-8. (Kenneth May) **46** #8 01A60 (76.00)
- with Kurmanov, B. I.; Podvidz, G. L.) Computation of a two-dimensional gas flow through a turbine grill using the method of integral equations. (Russian) *Izv. Akad. Nauk R. Meh. Židk. Gaza* **1977**, no. 4, 90-97. (From the summary) **58** #25365 76.45
- See also **Hydromechanics**, **52** #2369
- K. N. (with Pokroev, A. G.) On the nonlinear theory of the propagation of electromagnetic waves in a plasma near hybrid resonance. (Russian. English summary) *Uchen. Fiz. Ž.* **16** (1971), 1658-1663. (M. Drăganu) **46** #3029 82.35
- N. A. ϕ -spaces in the case of the full linear group. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 3(118), 70-79. (S. Kaneyuki) **46** #6242 53C30
- Regular ϕ -spaces of the general linear group. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 6 (169), 118-121. (Rolf Sulanke) **58** #2650 53C30
- N. F. (with Nemuhin, A. V.) Fourier transform in the nonstationary perturbation theory. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **26** (1971), no. 3, 338-339. **45** #6329 81.47 (81.44)
- with Žilinskii, B. I.) Minimization of the energy functional on a special class of variational operators. (Russian. English summary) *Teoret. Mat. Fiz.* **15** (1973), no. 1, 150. (Authors' summary) **57** #15090 81.47
- with Erlykina, M. E.; Filippov, G. G.) ★Методы линейной алгебры в физической химии. (Russian) [Methods of linear algebra in physical chemistry] With collaboration of A. D. Rusin. *Izdat. Moskov. Univ., Moscow*, 1976. 360 pp. (errata) (Editors) **53** #13255 15-01
- N. I. (with Vasil'eva, T. E.; Pančenko, A. I.) On the formulation of a problem of interpretation in physics. (Russian) *Voprosy Filos.* **1978**, no. 7, 124-134. (P. K. Smrz) **25450** 81.00 (02A05)
- N. V. Pairs of ordinary differential equations that admit a finite transitive Lie group. (Russian) *Pskov. Ped. Inst. Fiz.-Mat. Fak. Učen. Zap. No. 31* (1966), 5-8. (K. Radziszewski) **48** #4431 34C35
- The geometry of a third order ordinary differential equation. (Russian) *Pskov. Ped. Inst. Fiz.-Mat. Fak. Učen. Zap. No. 31* (1966), 9-15. (K. Radziszewski) **48** #9603 53C10
- A projective scheme for Riemann's geometry. (Russian) *Pskov. Ped. Inst. Fiz.-Mat. Fak. Učen. Zap. No. 31* (1966), 41-49. (L. Bitay) **47** #7578 50C05
- Fundamental properties of E -groups on the plane. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 7(110), 71-80. (K. Radziszewski) **45** #4462 58H05 (57E25)
- Existence of a fundamental-group connection invariantly associated with the equation $y^{(n)} = f(x, y, y', \dots, y^{(n-1)})$. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 9(136), 61-69. (I. Kolář) **49** #3749 53C05
- (with Tret'jakov, V. B.; Evtušik, L. E.) Reductive Cartan connection associated with the space of m -spreads over the support elements of second order contact. (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp. 8* (1975), 89-94. (I. Kolář) **57** #7443 53C05
- The differential-geometric theory of the equation $y^n = f(x, y, y', \dots, y^{(n-1)})$. (Russian) *Problems in geometry*, Vol. 8 (Russian), pp. 47-66, 279. *Akad. Nauk SSSR Vsesojuz. Inst. Nauch. i Tehn. Informacii, Moscow*, 1977. (H. Kil'p) **58** #7471 53B99 (34A30, 58H05)
- Stepanov, S. A. Estimation of Kloosterman sums. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **35** (1971), 308-323. (J. Blass) **45** #5097 10H99
- A note on my paper "The estimation of Weil sums with prime denominator". (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **35** (1971), 965-966. (Peter Brückmann) **45** #6821 14G13
- The estimation of rational trigonometric sums with prime denominator. (Russian) Collection of articles dedicated to Academician Ivan Matveevič Vinogradov on his eightieth birthday. I. *Trudy Mat. Inst. Steklov.* **112** (1971), 346-371, 389. (errata insert) (A. I. Vinogradov) **47** #6706 14G10 (10G05)
- Congruences with two unknowns. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 683-711. (J. Browkin) **47** #3398 14G13 (10A10, 12C05)
- An elementary proof of the Hasse-Weil theorem for hyperelliptic curves. *J. Number Theory* **4** (1972), 118-143. (J. W. S. Cassels) **50** #9873 14G13
- The constructive method in the theory of equations over finite fields. (Russian) Proceedings of the International Conference on Number Theory (Moscow, 1971). *Trudy Mat. Inst. Steklov.* **132** (1973), 237-246, 266. (M. Bašmakov) **49** #2745 14G10 (12C05)
- Rational points of algebraic curves over finite fields. (Russian) *Current problems of analytic number theory* (Proc. Summer School, Minsk, 1972) (Russian), pp. 223-243, 272. *Izdat. "Nauka i Tehnika", Minsk*, 1974. (J. W. S. Cassels) **52** #5678 14G13 (10B15)
- An elementary method in the theory of equations over a finite field. (Russian) Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974), Vol. 1, pp. 383-391. *Canad. Math. Congress, Montreal, Que.*, 1975. (J. Blass) **55** #5523 10B15 (14G13)
- (with Postnikov, A. G.) On the theory of Jacobsthal sums. (Russian) Number theory, mathematical analysis and their applications. *Trudy Mat. Inst. Steklov.* **142** (1976), 208-214, 270. (Editors) **58** #27834 10G05 (14G13)
- Equations over finite fields. (Russian) Presented at the General Session of the Mathematic Branch of the Academy of Sciences of the USSR. *Mat. Zametki* **21** (1977), no. 2, 271-279. (Daniel Coray) **55** #12725 14G15 (12C15)
- Lower bounds for incomplete sums of the characters of polynomials. (Russian) Analytic number theory, mathematical analysis and their applications (dedicated to I. M. Vinogradov on his 85th birthday). *Trudy Mat. Inst. Steklov.* **143** (1977), 175-177, 210. (See RŽMat **1978** #3 A100) 10G05
- See also **Collection: Vinogradov, I. M.**, **49** #7049; **Proceedings: International Conference on Number Theory**, **51** #5463 and **Chandrasekharan, Komaravolu**, **52** #3021
- Stepanov, S. Ja. (with Wang, Tan Chih) Numerical investigation of stability on a finite time interval. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 350-364, 532. (C. Olech) **50** #7706 34D20 (65L99)
- (with Wang, Tan Chih) On the numerical construction of Ljapunov functions on a finite time interval. (Russian) *Problems in analytical mechanics, stability and control theories* (Second Četaev Conf., Kazan, 1973) (Russian), pp. 83-90, 337. *Izdat. "Nauka", Moscow*, 1975. (Wolfdietrich Müller) **56** #13671 65L99 (34D20, 93D05)
- (with Wang, Tan Chih) Stabilization of controlled motions on a finite time interval. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 4, 908-922, 1088. (M. M. Konstantinov) **52** #4090 49E20
- The correlation of the stability conditions for three different modes of cyclic motions in a system. (Russian) *Problems of analytical mechanics, stability and control theories* (Proc. Second Četaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 303-308, 414. *Kazan. Aviacion. Inst., Kazan*, 1976. (Author's summary) **58** #25215 70.35
- Stepanov, V. A. Fehlerkorrektur in redundanten logischen Schaltungen ohne Anwendung von Majoritätselementen. *Z. Elek. Informations- und Energietechnik* **2** (1972), 107-112. (Not reviewed) 94A20 (02J05)
- Stepanov, V. D. Operators in the spaces $L_p(R_n)$ that commute with shifts. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 693-699, 704. (E. R. Deal) **49** #5920 47B37
- The integral representability of the resolvent of a selfadjoint elliptic operator. (Russian) *Differentsial'nye Uravnenija* **12** (1976), no. 1, 129-136, 190. (H. Triebel) **53** #6116 35P05
- Stepanov, V. E. Random mappings with one center of gravity. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **16** (1971), 148-157. (Author's summary) **53** #14585 60C05
- Structure of the random graphs $\mathcal{G}_m(x|h)$. (Russian) *Teor. Veroyatnost. i Primenen.* **17** (1972), 238-252. (B. I. Penkov) **45** #7773 60C05
- Stepanov, V. F. (with Nikolaev, Ju. I.) A computation of the time characteristics for the introduction of large blocks of information on actual communication channels. (Russian) *Information traffic in complex systems* (Rep. Sem. Cybernetics, No. 61) (Russian), pp. 12-25, 26. *Izdat. "Sitiinca", Kishinev*, 1973. (S. Kullback) **48** #10623 94A05
- Stepanova, L. A. Solution of a certain transcendental equation containing Bessel functions. (Russian) *Trudy Leningrad. Tehnolog. Inst. Holod. Promyšl.* **17** (1968), 66-69. (RŽMat **1969** #7 B611) **58** #17605 35Q99

- An attempt to construct a fourth integral of the equations of motion of a heavy solid with a fixed point. (Russian) *Meh. Tverd. Tela Vyp.* 8 (1976), 76-77, 138. (J. S. Joel) 57 #18332 70.34
- (with Demin, V. G.) The construction and study of exact solutions of the equations of the dynamics of a rigid body. (Russian) *Prikl. Meh.* 12 (1976), no. 9, 3-17, 140. 56 #13868 70.35
- (with Harlamova, E. I.) Some assertions relating to the problem of integrating the equations of motion of a heavy rigid body having a fixed point. (Russian) *Meh. Tverd. Tela Vyp.* 9 (1977), 45-58, 125. (Editors) 58 #27008 01A55 (70.01)
- See also **History and methodology of the natural sciences**, 50 #1807
- Stepanova, L. F.** (with Makeev, G. N.) θ pairs of two-parameter families of $(n-1)$ -planes in P_{2n-1} . (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1971, no. 4(107), 59-68. (A. Urban) 45 #1055 53A20
- Stepanova, L. L.** On the question of the Pavljučuk-Čudakov hypothesis. (Russian) *Algebra and number theory. Mosk. Gos. Ped. Inst. Učen. Zap. No.* 375 (1971), 179-186. (A. I. Vinogradov) 48 #3894 10G05
- (with Flikop, E. L.) On the question of the number of solutions of the equation $\phi(x) = m$. (Russian) *Studies in number theory*, No. 4 (Russian), pp. 89-93. *Izdat. Saratov. Univ., Saratov*, 1972. (J. Blass) 53 #7922 10A20
- Stepanova, M. B.** Some Diophantine equations of a special form with prime numbers. (Russian) *Number theory: collections of studies in additive number theory. Kuibyshev. Gos. Ped. Inst. Načn. Trudy* 158 (1975), 50-52. (S. E. Schuur) 58 #16501 10B35
- Stepanova, N. N.** (with Ismailov, M. A.) On the solution of fundamental boundary value problems of the elastic equilibrium of a shallow spherical shell. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 18 (1975), no. 6, 11-14. (S. Drobot) 54 #1790 73.35
- Stepanova, N. V.** (with Romanovskii, Ju. M.; Černavskii, D. S.) ★Математическое моделирование в биофизике. (Russian) [Mathematical simulation in biophysics] Физика Жизненных Процессов. [Physics of Life Processes] *Izdat. "Nauka", Moscow*, 1975. 343 pp. (H. A. Lauwerier) 58 #20576 92A05
- Stepanova, T. V.** The zeros of quasiholomorphic functions. (Russian. English summary) *Vestnik Leningrad. Univ. No. 1 Mat. Meh. Astronom. Vyp.* 1 (1974), 76-84, 166. (D. Preiss) 49 #5280 26A90
- A generalization of the Weierstrass preparation theorem. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. Vyp.* 2 (1974), 76-79, 172. (K. Wolffhardt) 50 #4998 32B05
- The estimation from below of orders of separation in the quasianalytic case. (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 5, 930-933, 951. (K. R. Schneider) 51 #13350 34C05
- Stepanow, W. A.** See **Stepanov, V. A.**
- Stepan'yants, G. A.** See **Stepan'janc, G. A.**
- Stepaško, V. S.** (with Hiljuk, L. F.) Criterion of freedom of choice of decisions for continuous control systems. *Avtomatika* 1973, no. 4, 53-64 (Ukrainian); translated as *Soviet Automat. Control* 6 (1973), no. 4, 41-50. (Bojan Popović) 51 #2693 93B05
- (with Dubrovin, O. F.) On the stability of a one-dimensional discrete control system with prediction optimization. *Avtomatika* 1974, no. 3, 88-89 (Ukrainian); translated as *Soviet Automat. Control* 7 (1974), no. 3, 71-73. (Editors) 51 #12380 (E 51 #12381) 93C50
- (with Dubrovin, O. F.) An adaptive GMDH filter in a closed control loop. *Avtomatika* 1974, no. 5, 11-16 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 7 (1974), no. 5, 7-11. (Ivar Gustavson) 53 #12710 93E10 (93C40)
- Step'anyan, M. M.** A variant of H. T'youlyan's solution of first degree indeterminate equations. (Armenian. Russian summary) *Istor. Estestvozn. Tehn. Armen. No.* 6 (1976), 122-133. (Author's summary) 58 #27048 01A55
- Stephan, Bernd J.** Compactness and recursive enumerability in intensional logic. *Z. Math. Logik Grundlagen Math.* 21 (1975), no. 4, 343-346. (Flavio Previale) 52 #46 02C10 (02A05, 02B15)
- Stephan, Bruce H.** Periodic solutions of functional differential equations. *Seminar on Differential Equations and Dynamical Systems, II (Univ. Maryland, College Park, Md., 1969)*, pp. 196-204. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (R. E. Fennell) 53 #976 34K15
- Hereditary differential equations. *Trans. New York Acad. Sci.* (2) 33 (1971), 671-679. (R. D. Driver) 48 #4453 34K05
- Stephan, Ernst** Difference approximations for some pseudodifferential equations in \mathbb{R}^n . *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976)*, pp. 452-460. *Lecture Notes in Math.*, Vol. 564, Springer, Berlin, 1976. (Editors) 58 #29503 35S05 (35A35)
- (with Wendland, Wolfgang L.) Remarks to Galerkin and least squares methods with finite elements for general elliptic problems. *Ordinary and partial differential equations (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976)*, pp. 461-471. *Lecture Notes in Math.*, Vol. 564, Springer, Berlin, 1976. (Editors) 58 #25012 65N30
- Differenzapproximation von Pseudo-Differentialgleichungen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* 56 (1976), no. 3, T267-T268. (W. J. Sweeney) 55 #907 35S05 (47G05)
- (with Weissgerber, V.) Zur Approximation von Schalen mit hybriden Elementen. (English summary) *Computing* 20 (1978), no. 1, 75-94. (G. Paria) 57 #14821 73.65 (65N30)
- Stephani, Hans** A note on Killing tensors. *Gen. Relativity Gravitation* 9 (1978), no. 9, 789-792. (C. W. Kilmister) 58 #18209 53A45 (83.53)
- Stephani, Imtraud** Eine Verallgemeinerung des Begriffes der absolut- p -summierenden Abbildung. *Proc. Japan Acad.* 46 (1970), 949-953. (J. Horváth) 45 #2488 46L20 (47B10)
- Subjektive Operatorideale über der Gesamtheit aller Banach-Räume. *Wiss. Z. Friedrich-Schiller-Univ. Jena* 21 (1972), no. 1, 187-206. (M. S. Ramanujan) 48 #12077 46L20 (47B10)
- Surjektive Operatorideale über der Gesamtheit aller Banach-Räume und ihre Erzeugung. *Beiträge Anal.* No. 5 (1973), 75-89. (M. S. Ramanujan) 50 #5516 47B10
- Faktorisierbare Operatorideale über der Gesamtheit aller Banachräume und Erzeugung. *Beiträge Anal. Heft* 9 (1976), 113-124. (W. Timmermann) 58 #246L20
- Operator ideals with the factorization property and ideal classes of Banach spaces. *Math. Nachr.* 74 (1976), 201-210. (B. M. Makarov) 55 #8823 46L20 (47D15)
- Stephanides, H. V.** Vereinfachte Berechnung von Einschwing- und Regelvorgängen unstetig einsetzenden Funktionen. (French summary insert) *Rev. Roumaine Sci. Sér. Electrotech. Énergét.* 19 (1974), 63-91. (T. Kaczorek) 49 #7031 94A20
- Stephanidis, Nikolaos K.** Über Sechseckgewebe auf Flächen. (English summary) *J. Geometry* 2 (1972), 29-34. (F. Šemín) 46 #4447 53C45
- Eine Integralförmel für hyperbolische Geradenkongruenzen. (Italian summary) *Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 56 (1974), no. 6, 891-899. (Nádenik) 52 #9129 53C45 (53A25)
- Orthogonale Strahlensysteme mit gemeinsamer Mittenfläche. *Math. Nachr.* (1974), 317-329. (K. Strubecker) 50 #14513 53A05
- Über spezielle Geradenkongruenzen. *Abh. Math. Sem. Univ. Hamburg* 45 (1974), 156-164. (J. Hirschek) 54 #1102 53A25
- Stephanopoulos, George** (with Westberg, Arthur W.) Overcoming deficiencies of two-level method for systems optimization. *AIChE J.* 19 (1973), no. 6, 1269-1285-309. (A. Göpfert) 51 #14999 90C30 (49D30)
- (with Westberg, Arthur W.) The use of Hestenes' method of multipliers to reduce dual gaps in engineering system optimization. *J. Optimization Theory Appl.* 15 (1975), 285-309. (A. Göpfert) 51 #14999 90C30 (49D30)
- A note on the optimization of constrained design problems. *J. Optimization Theory Appl.* 17 (1975), no. 3/4, 337-342. (J. S. Kowalik) 52 #5045 90C30
- Stephas, Paul** Relativistic two-body electrodynamics. *Amer. J. Phys.* 46 (1978), no. 3, 360-365. (Author's summary) 57 #4843 78.53
- Stephen, G. Gregory** On Wiener-Hopf operators associated with the Hankel transform. *SIAM J. Math. Anal.* 4 (1973), 221-237. (I. I. Hirschman, Jr.) 48 #4811 47B35
- Stephen, Michael J.** (with Mittag, L.) A new representation of the solution of the Ising model. *J. Mathematical Phys.* 13 (1972), 1944-1951. (C. A. Hurst) 50 #3831
- (with Forster, Dieter; Nelson, David R.) Large-distance and long-time properties of a randomly stirred fluid. *Phys. Rev. A* (3) 16 (1977), no. 2, 732-749. (J. W. Thomas) 56 #17468 76.60
- Stephens, Arthur B.** (with Cohen, Joel S.) Optimization problems for K_G . *Manuscr. Math.* 13 (1974), 131-142. (A. S. Gleit) 49 #7738 46B99
- (with Cohen, Joel S.) Tensor norms on $l_p^n \otimes l_q^n$. *Math. Ann.* 209 (1974), 277-287. (D. O. Koehler) 50 #14269 46M05
- The convergence of the residual for projective approximations. *SIAM J. Numer. Anal.* 13 (1976), no. 4, 607-614. (Peter Lancaster) 55 #1728 65J05 (47A50)
- (with Kellogg, R. Bruce) Complex eigenvalues of a non-negative matrix with specified graph. *Linear Algebra and Appl.* 20 (1978), no. 2, 179-187. (R. C. Thompson) 58 #721 15A18
- Stephens, M. A.** (with Anderson, T. W.) Tests for randomness of directions at equatorial and bimodal alternatives. *Biometrika* 59 (1972), 613-621. (W. Hoel) 48 #12686 62F05
- Components of goodness-of-fit statistics. (French summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* 10 (1974), 37-54. (M. Knott) 50 #11626 62G10
- Axial and bimodal data on a sphere. *Applied statistics (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1974)*, pp. 311-323. North-Holland, Amsterdam, 1975. (S. John) 52 #12178 62F05 (62F10)
- Asymptotic properties for covariance matrices of order statistics. *Biometrika* (1975), 23-28. (Herbert T. David) 52 #2026 62G30
- A new test for the modal vector of the Fisher distribution. *Biometrika* 62 (1975), 171-174. (Author's summary) 54 #11636 62F10
- Asymptotic results for goodness-of-fit statistics with unknown parameters. *Statist.* 4 (1976), no. 2, 357-369. (M. Knott) 53 #1839 62G10 (62E20)
- (with Pettitt, A. N.) Modified Cramér-von Mises statistics for censored data. *Biometrika* 63 (1976), no. 2, 291-298. (Hira L. Koul) 56 #9804 62G10 (62N01)
- Whitworth runs on a circle. *Ann. Inst. Statist. Math.* 29 (1977), no. 2, 287-297. (Noel Cressie) 57 #1759 62G10 (62E15)
- Goodness of fit for the extreme value distributions. *Biometrika* 64 (1977), 583-588. (K. C. Chanda) 58 #8015 62G10
- (with Brown, Mark; Solomon, Herbert) Estimation of parameters of zero-one processes by interval sampling. *Operations Res.* 25 (1977), no. 3, 493-505. (J. Janssen) 56 #1637 62M99
- See also **Matthews, G. V. T.**, 54 #11536 and **Kendall, David G.**, 54 #11537
- Stephens, N. M.** On the Feit-Thompson conjecture. *Math. Comp.* 25 (1971), 625-630. (Kelly) 45 #6738 10A10
- Congruence properties of congruent numbers. *Bull. London Math. Soc.* 7 (1975), 182-184. (J. H. H. Chalk) 52 #260 10B05 (14K15)
- On the number of coprime solutions of $y^2 = x^3 + k$. *Proc. Amer. Math. Soc.* (1975), 325-327. (B. Stolt) 50 #9788 10B10
- On a conjecture of Chowla and Chowla. *J. Number Theory* 9 (1977), no. 2, 276-287. (S. P. Mohanty) 56 #251 10B15
- (with Atkinson, M. D.) Spaces of matrices of bounded rank. *Quart. J. Math. Oxford Ser. (2)* 29 (1978), no. 114, 221-223. (S. Lajos) 58 #725 15A21
- See also **Computers in number theory**, 47 #3285 and **Tables: Elliptic curves**, 52 #10557
- Stephens, P. J.** An average result for Artin's conjecture. *Mathematika* 16 (1969), 178-180. (Editors) 58 #16565 10H25
- An average form of Artin's conjecture. *Colloque de Théorie des Nombres (Bordeaux, Bordeaux, 1969)*, pp. 169-172. *Bull. Soc. Math. France Mém.*, No. 25, 1970. (Editors) 50 #12978 12A75
- Optimizing the size of $L(1, \chi)$. *Proc. London Math. Soc.* (3) 24 (1972), 1-14. (Thanigasalam) 45 #1854 10H10
- Prime divisors of second-order linear recurrences. I. *J. Number Theory* 8 (1976), 3, 313-332. (W. Narkiewicz) 54 #5142 10H15 (10A35)
- Prime divisors of second order linear recurrences. II. *J. Number Theory* 8 (1976), 3, 333-345. (W. Narkiewicz) 54 #5143 10H15 (10A35)

- F. R.** See **Place of astronomy in the ancient world**, 57 #15838
- G.** (with Rowan, D. J.) The Klein-Gordon equation in a Kerr-Newman round space. *J. Phys.* **10** (1977), no. 1, 15-23. (S. Malin) **55** #5144 83.35
- H.** (Francesco Guerra) 57 #8934 83.53
- I.** Eigenvalues of the Schrödinger equation with a Gaussian potential. *J. Phys. A* **10** (1977), no. 12, 229-232. (Author's summary) **56** #13668 65L15 (65N25)
- J. L.** (with Tewarson, Reginald P.; Jaung, L. L.) A note on solution of large systems of nonlinear equations. *J. Math. Anal. Appl.* **63** (1978), no. 2, 439-445. (Morsch-Supan) **58** #3397 65H10
- J. W.** Error estimates when using curved elements in the finite element method. *Proceedings of the Second Manitoba Conference on Numerical Mathematics* (Manitoba, Winnipeg, Man., 1972), pp. 335-341. *Congressus Numerantium*, No. 11, *Utilitas Math.*, Winnipeg, Man., 1973. (M. Zlámal) **51** #4696 65N30
- K.** Uniqueness in the finite element method when using curved triangular elements. *Proceedings of the Second Manitoba Conference on Numerical Mathematics* (Manitoba, Winnipeg, Man., 1972), pp. 343-348. *Congressus Numerantium*, No. 11, *Utilitas Math.*, Winnipeg, Man., 1973. (Robert D. Russell) **50** #15264 65D05
- John L.** Analysis of the transient behavior of kidney models. *Bull. Math.* **40** (1978), no. 2, 211-221. (Brian D. Sleeman) **57** #9118 92A05
- J. R. Garner, Jackie B.; Crump, Kenny S.** Transient behaviour of the single loop recycling model of the renal medulla. *Bull. Math. Biology* **40** (1978), no. 8, 273-300. (Foster) **57** #15547 92A05
- Kenneth** Certain integral equalities which imply equimeasurability of measures. *Canad. J. Math.* **29** (1977), no. 4, 827-844. (Kenneth F. Andersen) **57** #7182 60A20
- L.** Metrics of the Nevanlinna class. *Indiana Univ. Math. J.* **26** (1977), no. 2, 341-344. (Manfred Stoll) **55** #5885 32A30 (47B37)
- M.** Admitted values of singular inner functions. *Michigan Math. J.* **25** (1978), no. 1, 1-10. (S. Fisher) **58** #1162 30A76 (30A78)
- N. L.** (with Cohn, Jack) The gauge in general relativity. II. *General Relativity and Gravitation* **9** (1978), no. 1, 21-38. (Not reviewed) 83.53
- O. L.** (with Cohn, Jack) The gauge in general relativity. III. *General Relativity and Gravitation* **9** (1978), no. 1, 39-51. (Not reviewed) 83.53
- R. M., Jr.** Products of nearly compact spaces. *Proceedings of the University of Oklahoma Topology Conference Dedicated to Robert Lee Moore* (Norman, Okla., 1972), pp. 299-320. *Univ. of Oklahoma, Norman, Okla.*, 1972. (Chen-tung Lui) **50** #14666 54B10
- S.** Proper α -closed spaces. *Canad. J. Math.* **24** (1972), 286-292. (P. S. Schnare) **56** #565 54D15
- T.** Discrete subsets of perfectly normal spaces. *Proc. Amer. Math. Soc.* **34** (1972), no. 1, 1-8. (E. Michael) **45** #5944 54A25 (54B15)
- U.** Product spaces and the Stone-Weierstrass theorem. *General Topology and Appl.* **3** (1977), no. 1, 77-79. (A. H. Stone) **47** #4218 54D30
- V.** (with Vaughan, J. E.) Products of initially m -compact spaces. *Trans. Amer. Math. Soc.* **248** (1974), 177-189. (Jack R. Porter) **54** #13848 54D20
- W.** Not every minimal Hausdorff space is e -compact. *Proc. Amer. Math. Soc.* **52** (1975), 381-389. (Jack R. Porter) **54** #11276 54D25
- X.** Some unsolved problems concerning P -minimal and P -closed spaces. *Topology* **14** (1975), 1-10. (Ninth Annual Spring Conf., Memphis State Univ., Memphis, Tenn., 1975), pp. 1-10. (Lecture Notes in Pure and Appl. Math., Vol. 24, Dekker, New York, 1976. (Jack R. Porter) **56** #6612 54D99
- Y.** (with Harley, Peter W., III) Symmetrizable and related spaces. *Trans. Amer. Math. Soc.* **248** (1974), 89-111. (Paul R. Meyer) **54** #6092 54D55 (54E25)
- Z.** Symmetrizable, \mathbb{R} -, and weakly first countable spaces. *Canad. J. Math.* **29** (1977), no. 4, 480-488. (O. T. Alas) **56** #1260 54D20 (54A25)
- AA.** Symmetrizable-closed spaces. *Pacific J. Math.* **68** (1977), no. 2, 507-514. (John N. Green) **58** #2735 54E25 (54D25)
- BB.** Near compactness and separability of symmetrizable spaces. *Proc. Amer. Math. Soc.* **78** (1978), no. 1, 108-110. (Robert A. McCoy) **56** #16575 54E25 (54G20)
- CC.** (with Robert Allan) Jacobson structure theory for Hestenes ternary rings. *Trans. Amer. Math. Soc.* **177** (1973), 91-98. (William Lister) **49** #364 16A78 (17E05)
- DD.** (with W.) Modules whose lattice of submodules is distributive. *Proc. London Math. Soc.* **28** (1974), 291-310. (J. Kuzmanovich) **49** #2849 16A64
- EE.** (with Burgess, Walter D.) Pierce sheaves of non-commutative rings. *Comm. Algebra* **1** (1974), no. 1, 51-75. (Stuart A. Steinberg) **53** #8122 16A30
- FF.** (with Raphaël, Robert) Orthogonally complete rings. *Canad. Math. Bull.* **20** (1977), no. 4, 347-351. (J. Kuzmanovich) **57** #6085 16A30 (06A70, 13J10)
- GG.** (with Pearson, K. R.) A skew polynomial ring over a Jacobson ring need not be a von Neumann ring. *Comm. Algebra* **5** (1977), no. 8, 783-794. (Robert L. Snider) **55** #12754 16D10
- HH.** (with E. R. Stepp) A survey of minor Wajsberg's results concerning fragmentary systems of classical propositional calculus. Abstracts of the lectures delivered at the 19th International Conference of the History of Mathematical Logic (Cracow, 1973). *Polish Acad. Sci. Inst. Soc. Sci. Bull. Sect. Logic* **2** (1973), 103-106. (Editors) **55** #7731 02B05
- II.** (with Golodet, V. Ja.) Factors of type II with the property r . (Russian) *Mat. Funktsional. Anal. Vyp.* **1** (1969), 229-249, 265. (RZMat 1970 #8 B648) **57** #7197 46A10
- JJ.** Spectres des systèmes dynamiques. *Actes du Congrès International des Mathématiciens* (Nice, 1970), Tome 2, pp. 941-946. *Gauthier-Villars, Paris*, 1971. (S. Stepp) **58** #22486 28A65
- KK.** (with Pickel, B. S.) The property of the entropy equidistribution of commutative groups of metric automorphisms. (Russian) *Dokl. Akad. Nauk SSSR* **198** (1971), no. 1, 1024. (P. Gács) **46** #3750 28A65
- LL.** The cohomology of automorphism groups of a Lebesgue space. (Russian) *Funktsional. Anal. i Prilozhen.* **5** (1971), no. 2, 91-92. (J. Auslander) **45** #5316 28A65
- MM.** Dynamical systems on homogeneous spaces of semisimple Lie groups. (Russian) *Dokl. Akad. Nauk SSSR Ser. Mat.* **37** (1973), 1091-1107. (A. Morimoto) **48** #8690 (22D40, 58F99)
- NN.** The connection between the approximative and spectral properties of metric automorphisms. (Russian) *Mat. Zametki* **13** (1973), 403-409. (László Zsidó) **49** #3085 28A65
- OO.** (with Katok, A. B.; Sinai, Ja. G.) The theory of dynamical systems and general transformation groups with invariant measure. (Russian) *Mathematical analysis*, Vol. 13 (Russian), pp. 129-262. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1975. (L. A. Bunimovich) **58** #28430 28A65 (58F15)
- PP.** Bernoulli shifts on groups. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 2, 300-302. (R. K. Thomas) **53** #13521 28A65
- QQ.** Bernoulli shifts on groups and decreasing sequences of partitions. *Proceedings of the Third Japan-USSR Symposium on Probability Theory* (Tashkent, 1975), pp. 592-603. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (J.-P. Conze) **58** #11331 28A65
- RR.** (with Pidkuiko, S. I.) The solution of a certain functional-differential equation. (Russian) *Funktsional. Anal. i Prilozhen.* **10** (1976), no. 2, 84-85. (D. Bainov) **54** #10800 34K05
- SS.** Polynomial integrals of Hamiltonian systems. *Dynamical systems*, Vol. III—Warsaw, pp. 429-441. *Astérisque*, No. 51, Soc. Math. France, Paris, 1978. (D. L. Rod) **58** #7713 58F05
- TT.** See also **Kato, Tosio**, 50 #5506
- UU.** **Stepin, V.** See also **Stöpin, V.**
- VV.** **Stepin, V. P.** See **Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region**, 46 #1532
- WW.** **Stepinski, Brunon** Application of the Fokker-Planck equation to the identification of a nonlinear system with one degree of freedom. (Polish. Russian and English summaries) *Rozprawy Inż.* **25** (1977), no. 3, 441-446. **56** #17979 93B30
- XX.** **Stepleman, Robert S.** Difference analogues of quasi-linear elliptic Dirichlet problems with mixed derivatives. *Math. Comp.* **25** (1971), 257-269. (P. Laasonen) **46** #2892 65N10
- YY.** (with Chartres, Bruce A.) Convergence of difference methods for initial and boundary value problems with discontinuous data. *Math. Comp.* **25** (1971), 729-732. (W. Liniger) **46** #2875 65L10
- ZZ.** (with Chartres, Bruce A.) A general theory of convergence for numerical methods. *SIAM J. Numer. Anal.* **9** (1972), 476-492. (P. Brock) **47** #9840 65L99
- AAA.** (with Chartres, Bruce A.) Actual order of convergence of Runge-Kutta methods on differential equations with discontinuities. *SIAM J. Numer. Anal.* **11** (1974), 1193-1206. (P. Brock) **52** #2213 65L05
- BBB.** (with Chartres, Bruce A.) Order of convergence of linear multistep methods for functional differential equations. *SIAM J. Numer. Anal.* **12** (1975), no. 6, 876-886. (Gene A. Kemper) **53** #9687 65R05 (65Q05)
- CCC.** A characterization of local convergence for fixed point iterations in R^1 . *SIAM J. Numer. Anal.* **12** (1975), no. 6, 887-894. (François Robert) **54** #9076 65H05
- DDD.** (with Pelios, A.) The choice of step lengths to stabilize Newton's method. *Proceedings of the 1976 Conference on Information Sciences and Systems* (Tenth Annual Meeting, Johns Hopkins Univ., Baltimore, Md., 1976), pp. 450-455. *Dept. Electr. Engrg., Johns Hopkins Univ., Baltimore, Md.*, 1976. (Luciano Biasini) **57** #14406 65H05
- EEE.** Tridiagonal fourth order approximations to general two-point nonlinear boundary value problems with mixed boundary conditions. *Math. Comp.* **30** (1976), no. 133, 92-103. (Robert D. Russell) **53** #12024 65L10
- FFF.** (with Chartres, Bruce A.) Convergence of linear multistep methods for differential equations with discontinuities. *Numer. Math.* **27** (1976/77), no. 1, 1-10. (J. Hurt) **56** #13647 65L05 (65M10, 65Q05)
- GGG.** **Stepniak, Czesław** A note on estimation of parameters in linear models. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 1151-1154. (H. L. Harter) **51** #2179 62J05
- HHH.** (with Oktaba, Wiktor) A note on quadratic forms in the analysis of variance. (Polish) *Mat. Stos.* (3) **4** (1975), 59-63. (V. Komkov) **56** #9846 62J10
- III.** Approximate sums of squares in analysis of variance. (Polish) *Mat. Stos.* (3) **10** (1977), 71-78. (R. Kala) **57** #10934 62J10
- JJJ.** **Steponenas, Vitautas** (with Paulauskas, Celestinas) An algorithm for the classification of observations of a linear scalar dynamical system. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravljenija—Trudy Sem. Processy Optimal. Upravljenija V Sekcija No. 25* (1977), 63-72, 74. (Authors' summary) **58** #26250 93B05
- KKK.** **Stepp, James W.** The lattice of ideals of a compact semilattice. *Semigroup Forum* **5** (1972/73), 176-180. (Albert Stralka) **49** #4882 06A20
- LLL.** Topological semilattices which are embeddable in topological lattices. *J. London Math. Soc.* (2) **7** (1973), 76-82. (D. R. Brown) **49** #6183 54F05 (06A20, 22A99)
- MMM.** (with Friedberg, Michael) A note on the Bohr compactification. *Semigroup Forum* **6** (1973), no. 4, 362-364. (S. N. Hudson) **51** #8323 22A15
- NNN.** (with Byrd, Richard D.; Lloyd, Justin T.) Groups of complexes of a group. *J. Natur. Sci. and Math.* **15** (1975), no. 1-2, 83-87. (R. E. Peinado) **55** #8231 20M99
- OOO.** The free compact lattice generated by a topological semilattice. *J. Reine Angew. Math.* **273** (1975), 77-86. (S. P. Bandyopadhyay) **51** #7974 06A20
- PPP.** Algebraic maximal semilattices. *Pacific J. Math.* **58** (1975), no. 1, 243-248. (Klaus Keimel) **51** #12640 22A15 (06A20)
- QQQ.** (with Byrd, Richard D.; Lloyd, Justin T.) Groups of complexes of a lattice-ordered group. *Symposia Mathematica*, Vol. XXI (Convegno sulle Misure su Gruppi e su Spazi Vettoriali, Convegno sui Gruppi e Anelli Ordinati, INDAM, Rome, 1975), pp. 525-528. *Academic Press, London*, 1977. (Albert Stralka) **57** #12328 06A55
- RRR.** (with Byrd, Richard D.; Lloyd, Justin T.; Pedersen, Franklin D.) Automorphisms of semigroups of complexes of abelian groups. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 260-261. (N. R. Reilly) **54** #12929 20K30 (20M15)
- SSS.** (with Byrd, Richard D.; Lloyd, Justin T.; Pedersen, Franklin D.) Automorphisms of the semigroup of finite complexes of a periodic locally cyclic group. *Pacific J. Math.* **72** (1977), no. 1, 27-39. (T. E. Hall) **57** #6258 20M15
- TTT.** (with Madison, Bernard L.) Inversion and joint continuity in semigroups on k_ω -spaces. *Semigroup Forum* **15** (1977/78), no. 3, 195-198. (Jimmie D. Lawson) **57** #12759 22A05
- UUU.** (with Byrd, Richard D.; Lloyd, Justin T.) Groups of complexes of a representable lattice-ordered group. *Glasgow Math. J.* **19** (1978), no. 2, 135-139. (St. Schwarz) **57** #12759 22A05

- 58 #5442 06A55
(with Byrd, Richard D.; Lloyd, Justin T.; Pedersen, Franklin D.) Automorphisms of the semigroup of finite complexes of locally finite groups. *J. Reine Angew. Math.* 299/300 (1978), 151-160. (M. M. Murač) 57 #16439 20M15
- Steppeler, J. On a high accuracy finite difference method. *J. Computational Phys.* 19 (1975), no. 4, 390-403. (Murli M. Gupta) 53 #7052 65M05
The application of the second and third degree methods. *J. Computational Phys.* 22 (1976), no. 3, 295-318. (Author's summary) 56 #13691 65N10 (76.65)
- Šter, I. M. Intercoupled thermoelasticity with a finite velocity of heat propagation. *Inž.-Fiz. Ž.* 23 (1972), 465-471 (Russian); translated as *J. Engrg. Phys.* 23 (1974), 1132-1137. (H. Parkus) 50 #9188 80.49
- Sterbenz, P. H. (with Fike, C. T.) Minimax approximations subject to a constraint. *Math. Comp.* 25 (1971), 295-298. (I. A. Stegun) 46 #2314 41A20
- Sterbenz, Pat H. ★ Floating-point computation. Prentice-Hall Series in Automatic Computation. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1974. xv+316 pp. (F. J. Murray) 50 #1556 68A05 (65G05)
- Sterboul, François Circuits et arbres de circulation d'un graphe fortement connexe. (Loose English summary) *Rev. Française Automat. Inform. Recherche Opérationnelle* 6 (1972), Sér. R-2, 3-8. (Rudolf Halin) 51 #266 05C35
Sur une conjecture de V. Chvátal. *Hypergraph Seminar (Proc. First Working Sem., Ohio State Univ., Columbus, Ohio, 1972; dedicated to Arnold Ross)*, pp. 152-164. *Lecture Notes in Math.*, Vol. 411, Springer, Berlin, 1974. (Václav Chvátal) 52 #122 05A05
On the chromatic number of the direct product of hypergraphs. *Hypergraph Seminar (Proc. First Working Sem., Ohio State Univ., Columbus, Ohio, 1972; dedicated to Arnold Ross)*, 165-174. *Lecture Notes in Math.*, Vol. 411, Springer, Berlin, 1974. (M. Simonovits) 52 #167 05C15
Un problème extrémal en théorie des hypergraphes. *C. R. Acad. Sci. Paris. Sér. A* 278 (1974), 9-12. (C. St. J. A. Nash-Williams) 50 #1975 05C35
A new combinatorial parameter. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. III, pp. 1387-1404. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (H. A. Jung) 52 #2969 05C99
A class of extremal problems. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 493-499. *Academia*, Prague, 1975. (S. Znam) 56 #11852 05C35
L'hypergraphe des cycles d'un graphe. *Colloque sur la Théorie des Graphes (Paris, 1974). Cahiers Centre Études Recherche Opér.* 17 (1975), no. 2-3-4, 387-394. (Norman Biggs) 53 #5380 05C99
Un problème extrémal pour les graphes et les hypergraphes. *Discrete Math.* 11 (1975), 71-78. (Torrence D. Parsons) 50 #9693 05C35
Some extremal coloring problems: a survey. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 579-584. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, Man., 1976. (M. Behzad) 54 #134 05C15
A problem on triples. *Discrete Math.* 17 (1977), no. 2, 191-198. (Author's summary) 58 #27609 05C15
(with Berge, Claude) Equipartite colorings in graphs and hypergraphs. *J. Combinatorial Theory Ser. B* 22 (1977), no. 2, 97-113. (Jean-Claude Fournier) 57 #16116 05C15
An extremal problem in hypergraph coloring. *J. Combinatorial Theory Ser. B* 22 (1977), no. 2, 159-164. (P. Erdős) 56 #15492 05C35
See also *Colloque: Théorie des Graphes*, 48 #137
- Štěrbová, Dina On the spectral radius in locally multiplicatively convex topological algebras. (Czech and Russian summaries) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci Mat.* 16 (1977), 155-160. (Kiyoko Nishizawa) 58 #30287 46K05 (46H99)
- Stere, Marcel D. Numerical methods of structural analysis. (Romanian) *Stud. Cerc. Mec. Apl.* 36 (1977), no. 5, 647-664. (V. Komkov) 56 #17489 76.65
- Šterengas, S. S. Summability in the L_p norm of Fourier series in eigenfunctions by Riesz means. (Russian) *Voronež. Gos. Univ. Trudy Naučn-Issled. Inst. Mat. VGU No. 12 Sb. Statei po Prikl. Anal.* (1974), 68-75. (RŽMat 1975 #10 B75) 57 #13240 35P10
- Šterenliht, L. M. Liapunov canonic transformations and normal Hamiltonian forms. *Prikl. Mat. Meh.* 39 (1975), no. 4, 604-613 (Russian); translated as *J. Appl. Math. Mech.* 39 (1975), no. 4, 578-587 (1976). (Michel Cotsafitis) 53 #13736 34C20 (34D20)
- Sterghiou, Georges See *Papers: Balkan Mathematical Congress*, 51 #2824 and *Kapos, Demetrios A.*, 58 #85
- Steriadi, Mariana Morphological aspects in the language FORTRAN IV. (Romanian. French summary) *Stud. Cerc. Mat.* 26 (1974), 755-761. (Petre Preoteasa) 51 #7385 68A30
- Sterlin, A. M. (with Gordion, M. I.) Problems in the optimization of systems with lag in the presence of constraints. (Russian) *Theory of oscillations, applied mathematics and cybernetics*, No. 1 (Russian), pp. 187-208. *Gor'kov. Gos. Univ., Gorky*, 1973. (Authors' introduction) 58 #23909 49B35 (34K05)
- Sterlin, M. D. Exact constants in inverse theorems of approximation theory. (Russian) *Dokl. Akad. Nauk SSSR* 202 (1972), 545-547. (J. Milota) 45 #5628 42A08
Estimates of constants in inverse theorems of the constructive theory of functions. (Russian) *Dokl. Akad. Nauk SSSR* 209 (1973), 1296-1298. (V. M. Kokilašvili) 49 #972 42A08
Exact constants in inverse theorems of the constructive theory of functions. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. Vyp.* 2 (1973), 62-68, 162. (Ju. A. Šaškin) 48 #6780 41A50
Sharp estimates of the best approximations of derivatives by algebraic polynomials. (Russian. English summary) *Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp.* 3 (1973), 164-166, 175. (Hans-Jürgen Albrand) 48 #6772 41A10
On inverse extremal problems of the constructive theory of functions. (Russian) *Dokl. Akad. Nauk SSSR* 229 (1976), no. 3, 550-553. (J. Szabados) 53 #13968 42A08
- Sterling, Leon S. (with Wormald, Nicholas C.) A remark on the construction of designs for two-way elimination of heterogeneity. *Bull. Austral. Math. Soc.* 14 (1976), no. 3, 383-388. (S. S. Shrikhande) 53 #12980 05B05
- Sterling, Theodor D. See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, 52 #9427
- Sterman, George Kinoshita's theorem in Yang-Mills theories. *Phys. Rev. D* (3) 14 (1976), no. 8, 2123-2125. (J. Dennead Smith) 54 #12002 81.05
- Štern, A. I. The connection between the topologies of a locally bicomact group and dual space. (Russian) *Funkcional. Anal. i Priložen.* 5 (1971), no. 4, 56-63. (Rob. Doran) 45 #3639 22D05 (46L05)
Groups with bicomact dual space. (Russian) *Uspehi Mat. Nauk* 26 (1971), 3(159), 217-218. (R. Goodman) 46 #291 22D10
Locally bicomact groups with finite-dimensional irreducible representations. (Russian) *Mat. Sb. (N.S.)* 90(132) (1973), 86-95, 166. (A. Hulanicki) 49 #53 22D10
Dual objects of compact and discrete groups. (Russian. English summary) *Vysš. Škol. Univ. Ser. I Mat. Meh.* 1977, no. 2, 9-11. (Helmut Boseck) 56 #83 22C05
See also *Dixmier, Jacques*, 50 #5484
- Stern, Frederick An estimate for Wiener integrals connected with squared error Fourier series approximation. *Pacific J. Math.* 37 (1971), 813-815. (J. H. Neu) 46 #4084 42A16 (28A40)
Conditional expectation of the duration in the classical ruin problem. *Math.* 48 (1975), no. 4, 200-203. (A. Fuchs) 51 #14275 60J15
An independence in Brownian motion with constant drift. *Ann. Probab.* (1977), no. 4, 571-572. (J. G. Wendel) 55 #11407 60J65
The Borel-Cantelli lemma and product-sum formulas. *Amer. Math. Monthly* (1978), no. 5, 363-364. (M. Csörgö) 58 #13306 60F20 (10K99)
- Stern, G. J. A. See *Newbold, Paul; et al.*, 56 #9865 and *Harrison, P. J.; et al.*, 58 #31672
- Stern, H. Solution for some current conservation equations. *Nuovo Cimento A* (1972), 43-61. (M. Glück) 46 #8571 81.32
- Stern, Helman I. (with Rodriguez, Edgardo P.; Utter, Merlin L.) Cyclical job sequence on multiple sets of identical machines. *Naval Res. Logist. Quart.* 24 (1977), 137-151. (József Grabowski) 56 #14651 90B35
(with Gertsbach, I. B.) Minimal resources for fixed and variable job scheduling. *Operations Res.* 26 (1978), no. 1, 68-85. (Roman Słowiński) 57 #15391 90B35
- Stern, J. (with Leutwyler, H.) Singularities of current commutators on the light cone. *Nuclear Phys. B20* (1970), 77-101. (Jean Nuyts) 45 #1498 81.30
(with Leutwyler, H.) Covariant quantum mechanics on a null plane. *Phys. Lett.* 69 (1977), no. 2, 207-210. (Authors' summary) 56 #10496 81.22
(with Leutwyler, H.) Relativistic dynamics on a null plane. *Ann. Physics* 112 (1978), no. 1, 94-164. (S. Malin) 58 #8870 81.22
- Stern, Jacques Théorèmes d'interpolation obtenus par la méthode du "forcing". *Acad. Sci. Paris Sér. A-B* 275 (1972), A237-A240. (S. Feferman) 47 #1604 02B25, 02D99
Réels aléatoires et ensembles de mesure nulle en théorie descriptive des ensembles. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A1249-A1252. (E. Mendelson) 47 #31 02K30 (02K05, 04A15, 28A05)
Les premiers cardinaux compacts. *C. R. Acad. Sci. Paris Sér. A-B* 277 (1973), A401-A403. (Alexander Kechris) 49 #2387 02K35 (02K05)
Sur certaines classes d'espaces de Banach caractérisées par des formules. *Acad. Sci. Paris Sér. A* 278 (1974), 525-528. (W. A. J. Luxemburg) 49 #9594 41H05 (02H05)
Propriétés locales et ultrapuissances d'espaces de Banach. *Séminaire Maurey-Schwartz 1974-1975: Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*, Exp. Nos. VI et VII, 30 pp. (erratum, p. 2) *Centre Math., Polytech., Paris*, 1975. (C. Ward Henson) 56 #6348 46B99 (02H25)
Le problème des enveloppes. *Séminaire Maurey-Schwartz 1974-1975: Espaces radonifiantes et géométrie des espaces de Banach*, Exp. No. XXV, (erratum, p. 3) *Centre Math., École Polytech., Paris*, 1975. (C. Ward Henson) 55 #46B05
Le problème des enveloppes d'espaces de Banach. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A797-A799. (W. A. J. Luxemburg) 51 #36 46B05 (02H15)
Some measure theoretic results in effective descriptive set theory. *Israel J. Math.* (1975), no. 2, 97-110. (Alexander Kechris) 52 #7904 02K30 (02F35)
A new look at the interpolation problem. *J. Symbolic Logic* 40 (1975), no. 1, 1-11. (James H. Schmerl) 56 #2785 02B25
Some applications of model theory in Banach space theory. *Ann. Math. Log.* (1976), no. 1-2, 49-121. (W. A. J. Luxemburg) 52 #6384 46B05 (02H25)
The problem of envelopes for Banach spaces. *Israel J. Math.* 24 (1976), no. 1, 1-11. (B. R. Gelbaum) 53 #14089 46B05 (02H15)
Exemples d'application de la théorie des modèles à la théorie des espaces de Banach. *Colloque International de Logique (Clermont-Ferrand, 1975)*, pp. 19-37. *Colloques Internat. CNRS*, 249. CNRS, Paris, 1977. (Editors) 58 #30086 41H05 (02Hxx)
Singletons Π_1^1 et réels Δ_1^1 . (English summary) *C. R. Acad. Sci. Paris Sér. A-B* (1977), no. 15, A831-A833. (Author's summary) 55 #5444 02K05 (02K30, 02F35)
Partitions de la droite réelle en F_σ ou en G_δ . (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 16, A921-A922. (Author's summary) 55 #5445 02K05 (02K30)
A Ramsey theorem for trees, with an application to Banach spaces. *Israel J. Math.* 29 (1978), no. 2-3, 179-188. (Peter W. Day) 57 #16114 05C05 (02H05, 02H46A45)
- Stern, M. (with Parthasarathy, T.) Markov games—a survey. *Differential games and control theory, II (Proc. 2nd Conf., Univ. Rhode Island, Kingston, R.I., 1976)*, pp. 1-11. *Lecture Notes in Pure and Appl. Math.*, 30. Dekker, New York, 1977. (Editors) 58 #33037 90D15 (93E05)
- Stern, M. S. (with Warburton, A. E. A.) Finite difference solution of the partial-wave Schrödinger equation. *J. Phys. A* 5 (1972), 112-124. (Authors' summary) 54 #67 81.65
Simple numerical solution of the partial-wave Lippmann-Schwinger equation. *Phys. A* 5 (1972), 426-430. (Author's summary) 54 #6750 81.45
Comparison of numerical solutions of the partial-wave Schrödinger differential

- l equations. *J. Computational Phys.* **25** (1977), no. 1, 56-70. (Author's summary) 0631 81.65
- fred (with Kertész, Andor) \mathcal{A} -Verbände. I. *Wiss. Beiträge Martin-Luther-Univ. Wittenberg M3* (1971), 121-133. (A. C. Choudhury) **46** #7103 06A20
- ith Kertész, Andor) \mathcal{A} -Verbände. II. Beiträge zur Algebra und Geometrie, 2. *Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M Math.* **4** (1973), 11-18 (A. C. Choudhury) **54** #12582 06A20
- rongly planar AC-lattices in which the ideal of the finite elements is standard. *Math. Acad. Sci. Hungar.* **26** (1975), no. 3-4, 229-232. (Barbara Jeffcott) **54** #18930
- non-modular affine matroid lattice satisfying Euclid's strong parallel axiom is. *Publ. Math. Debrecen* **22** (1975), no. 1-2, 43-46. (Heinrich Werner) **54** #2557
- a problem of M. F. Janowitz. *Wiss. Beitr. Martin-Luther-Univ. Wittenberg Reihe M 6 Beitr. Algebra Geom.* **4** (1975), 89-91. (R. P. Dilworth) **888** 06A20
- a AC-lattices in which the ideal of the finite elements is neutral. *Lattice theory Colloq., Szeged*, 1974, pp. 421-425. *Colloq. Math. Soc. János Bolyai, Vol. 14, Holland, Amsterdam*, 1976. (E. T. Schmidt) **56** #195 06A20
- n radicals in lattices. *Acta Sci. Math. (Szeged)* **38** (1976), no. 1-2, 157-164. (T. S. **53** #10672 06A30
- a AC-lattices in which the ideal of the finite elements is standard. *Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe M Math.* **7** (1976), 15-21. (Ralph Freese) **690** 06A30
- C-lattices in which the standard ideals form a chain. *Period. Math. Hungar.* **8** no. 3-4, 253-260. (Heinrich Werner) **56** #15514 06A25
- omistic Wilcox lattices in which the ideal of the finite elements is standard. *Wiss. Martin-Luther-Univ. Halle-Wittenberg M 8 Beitr. Algebra Geom.* **6** (1977), **64**. (Ralph Freese) **57** #9619 06A20
- ne Charakterisierung endlich-modularer AC-Verbände n -ter Stufe. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* **26** (1977), no. 1, 89-94. (R. J. **56** #15517 06A30
- mplicity in incidence geometries of grade n . *Math. Nachr.* **82** (1978), 263-267. (R. **58** #12716 50D50 (06A20)
- hael H. (with Topkis, Donald M.) Rates of stability in nonlinear programming. *ions Res.* **24** (1976), no. 3, 462-476. (Authors' summary) **56** #10985 90C30
- holas (with Bollobás, Béla) The optimal structure of market areas. *J. Econom.* **4** (1972), no. 2, 174-179. (Editors) **57** #8996 90A15
- ald J. The tangent microbundle of a suitable manifold. *Proc. Amer. Math. Soc.* **72**, 324-326. (F. Laudenbach) **45** #1174 57A55
- ymptotic behavior of the value of differential games. *SIAM J. Control* **10** (1972), **53**, (I. V. Beiko) **47** #8133 90D25
- ith Brown, Robert F.) The number of roots in a simply-connected H -manifold. *Amer. Math. Soc.* **170** (1972), 499-505. (B. G. Casler) **46** #6347 55D45 **5**, 57C15)
- ability implies normal and disc bundles. *Bull. Amer. Math. Soc.* **79** (1973), **35**. (J. P. Levine) **46** #9978 55F25
- pen-loop approximation of differential games. *SIAM J. Control* **11** (1973), 20-31. *quière*) **49** #6950 90D25
- omputation of open loop saddle points for differential games of fixed duration. *ential games and control theory (Proc. NSF-CBMS Regional Res. Conf., Univ. Island, Kingston, R.I., 1973)*, pp. 141-149. *Lecture Notes in Pure Appl. Math., Vol. kker, New York*, 1974. (Author's summary) **56** #14790 90D25
- pen-loop Nash equilibrium of N -person nonzero sum linear-quadratic differential with magnitude restraints. *J. Math. Anal. Appl.* **46** (1974), 352-357. (V. G. **53** #7520 90D25
- ith Ben-Israel, Adi) An interior penalty function method for the construction of nt points in a multiple-criteria control problem. *J. Math. Anal. Appl.* **46** (1974), **76**. (Paul Binding) **50** #3074 49D30
- fferential games of survival with space-like terminal set. *SIAM J. Control* **12** **167**-177. (J. H. Case) **57** #5143 90D25
- ith Edmonds, Allan L.; Resolutions of homology manifolds: a classification m. *J. London Math. Soc.* (2) **11** (1975), no. 4, 474-480. (Paul F. Duval) **73734** 57C50
- ith Heymann, Michael) Controllability of linear systems with positive controls: tric considerations. *J. Math. Anal. Appl.* **52** (1975), no. 1, 36-41. (Stephen H. *stone*) **52** #6541 49E15
- n topological and piecewise linear vector fields. *Topology* **14** (1975), no. 3, **69**. (J. P. Levine) **52** #15460 55F60 (57C50)
- ith Galewski, David E.) Classification of simplicial triangulations of topological olds. *Bull. Amer. Math. Soc.* **82** (1976), no. 6, 916-918. (R. C. Kirby) **54** #8650
- ith Heymann, Michael; Pachter, Meir) Max-min control problems: a system tic approach. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 4, 455-463. *ors' summary*) **55** #10102 93C05 (90D25)
- ith Heymann, Michael; Pachter, Meir) Weak and strong max-min controllability. *Trans. Automatic Control* **AC-21** (1976), no. 4, 612-613. (Guy Jumarie) **54** #7042 **15** (90D45)
- ith Heymann, Michael) Ω -rest points in autonomous control systems. *J. ential Equations* **20** (1976), no. 2, 389-398. (Stephen H. Saperstone) **56** #3728 **93D99** (93D99)
- ith Hautus, M. L. J.; Heymann, Michael) Weak-invariance and rest points in ol systems. *Dynamical systems (Proc. Internat. Sympos., Univ. Florida, Gainesville, 1976)*, pp. 71-87. *Academic Press, New York*, 1977. (Ethelbert N. Chukwu) **19006** 93D99 (34H05)
- ith Heymann, Michael; Pachter, Meir) On linear games with subspace target. *ial. Ekoac.* **20** (1977), no. 1, 71-76. (P. Hagedorn) **56** #14782 90D25
- lassification theorems for parameterized families of smooth or piecewise linear old structures respecting a submanifold. *Illinois J. Math.* **21** (1977), no. 1, **19**. (M. L. Curtis) **55** #6436 57A35 (57C35, 57C25, 57D40)
- (with Galewski, David E.) The relationship between homology and topological manifolds via homology transversality. *Invent. Math.* **39** (1977), no. 3, 277-292. (Norman Levitt) **56** #3847 57C35 (57B99, 55F60)
- Time-optimal control under state-dependent control restraints. *J. Optim. Theory Appl.* **24** (1978), no. 4, 585-606. (Author's summary) **58** #26347 93C45
- Subspace exit properties of extremal controls. *J. Optim. Theory Appl.* **25** (1978), no. 1, 105-115. (James T. Wong) **58** #15500 93C99
- Stern, Samuel T. On isomorphisms between the naturals and the integers. *Fibonacci Quart.* **14** (1976), no. 1, 15-17. (H. L. Abbott) **52** #10586 10A99
- Stern, Thomas E. Fundamentals of nonlinear network analysis. *Network theory (Proc. Second NATO Advanced Inst., Knokke, 1969)*, pp. 361-393. *Gordon and Breach, New York*, 1972. (Author's summary) **56** #8218 94A20
- See also **Nonlinear networks: theory and analysis**, **52** #5178
- Stern, V. N. (with Gol'dštik, M. A.) A method of functional smoothing in the problem of turbulence. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1978), no. 5, 1058-1061. (S. V. Temko) **58** #14332 76.60
- Sternbach, Leonard On k -shrinking and k -boundedly complete basic sequences and quasi-reflexive spaces. *Pacific J. Math.* **37** (1971), 817-823. (Bor-Luh Lin) **46** #4177 46B15
- (with Dean, David W.; Singer, Ivan) On shrinking basic sequences in Banach spaces. *Studia Math.* **40** (1971), 23-33. (Bor-Luh Lin) **46** #5998 46B15
- Sternberg, Alice L. (with Sternberg, Robert L.; Sheets, Michael R.; Sternberg, Helen M.; Shigematsu, Abraham) Multiple Fourier analysis in rectifier problems. II. *Quart. Appl. Math.* **32** (1974/75), 293-315. (E. Lüneburg) **55** #7125 78.42
- Sternberg, Eli (with Knowles, James K.) On a class of conservation laws in linearized and finite elastostatics. *Arch. Rational Mech. Anal.* **44** (1971/72), 187-211. (G. P. Cherepanov (Čerepanov)) **49** #1883 73.49
- (with Turteltaub, Matias J.) Compression of an elastic roller between two rigid plates. *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Muskhelishvili) (Russian)*, pp. 495-515. *Izdat. "Nauka", Moscow*, 1972. (Yi-Yuan Yu) **52** #4791 73.45
- (with Knowles, James K.) An asymptotic finite-deformation analysis of the elastostatic field near the tip of a crack. (German summary) *J. Elasticity* **3** (1973), no. 2, 67-107. (From the authors' summary) **57** #14767 73.41
- (with Knowles, James K.) Finite-deformation analysis of the elastostatic field near the tip of a crack: reconsideration and higher-order results. (German summary) *J. Elasticity* **4** (1974), no. 3, 201-233. (Authors' summary) **57** #14768 73.41
- (with Knowles, James K.) On the singularity induced by certain mixed boundary conditions in linearized and nonlinear elastostatics. *Internat. J. Solids and Structures* **11** (1975), no. 11, 1173-1201. (G. P. Cherepanov) **52** #9762 73.35
- (with Knowles, James K.) On the ellipticity of the equations of nonlinear elastostatics for a special material. Special issue dedicated to A. E. Green. *J. Elasticity* **5** (1975), no. 3-4, 341-361. (Tommaso Ruggeri) **57** #14737 73.35 (73.00)
- (with Knowles, James K.) On the failure of ellipticity of the equations for finite elastostatic plane strain. *Arch. Rational Mech. Anal.* **63** (1976), no. 4, 321-336 (1977). (F. V. Pohle) **55** #4853 73.35
- See also **Eubanks, R. A.**, **58** #16025
- Sternberg, Helen M. (with Sternberg, Robert L.; Sheets, Michael R.; Shigematsu, Abraham; Sternberg, Alice L.) Multiple Fourier analysis in rectifier problems. II. *Quart. Appl. Math.* **32** (1974/75), 293-315. (E. Lüneburg) **55** #7125 78.42
- (with Sternberg, Robert L.) Backward recurrence relations for Bennett functions. *Portugal. Math.* **35** (1976), no. 1-2, 61-64. (P. N. Rathie) **55** #3371 33A70
- Sternberg, L. F. An algorithm for the refiling of pages. (Russian) *Programirovanie* **1976**, no. 2, 10-12. (Witold Lipski) **55** #7010 68A50 (68A05)
- Efficient algorithms for determining compatibility of variables. (Russian) *Programirovanie* **1977**, no. 1, 10-14, 103. (Costică Cazacu) **57** #18214 68A10
- Sternberg, Robert L. (with Sheets, Michael R.; Sternberg, Helen M.; Shigematsu, Abraham; Sternberg, Alice L.) Multiple Fourier analysis in rectifier problems. II. *Quart. Appl. Math.* **32** (1974/75), 293-315. (E. Lüneburg) **55** #7125 78.42
- (with Sternberg, Helen M.) Backward recurrence relations for Bennett functions. *Portugal. Math.* **35** (1976), no. 1-2, 61-64. (P. N. Rathie) **55** #3371 33A70
- See also **Differential games and control theory**, **50** #9361 and **Differential games and control theory**, **58** #25851
- Sternberg, Shlomo ★Celestial mechanics. Part II. Mathematics Lecture Note Series. *W. A. Benjamin, Inc., New York*, 1969. xvii + 304 pp. (See Zbl **194**, 567) 70.34 (70.53)
- ★Celestial mechanics. Part I. *W. A. Benjamin, Inc., New York-Amsterdam*, 1969. xxi + 158 pp. (Not reviewed) 70.34 (70.53)
- ★Лекции по дифференциальной геометрии. (Russian) [Lectures on differential geometry] Translated from the English by D. V. Alekseevskii. Edited by A. L. Oniščik. *Izdat. "Mir", Moscow*, 1970. 412 pp. (Editors) **52** #15255 53-02
- (with Guillemin, V.; Quillen, Daniel) The integrability of characteristics. *Comm. Pure Appl. Math.* **23** no. 1 (1970), 39-77. (V. Kac (RZMat **1971** #A1372)) **57** #1582 58H05 (17B65)
- (with Goldschmidt, Hubert) The Hamilton-Cartan formalism in the calculus of variations. (French summary) *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 1, 203-267. (H. H. Johnson) **49** #6279 58F05 (49F99, 70.58)
- (with Kosmann-Schwarzbach, Yvette) Conjugaison des sous-algèbres d'isotropie. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 777-779. (N. N. Shapovalov) **50** #7271 17B40 (22E60)
- Cronogeometry and symplectic geometry. With a question by A. Crumeyrolle and an answer by the author. *Géométrie symplectique et physique mathématique (Colloq. Internat. CNRS, No. 237, Aix-en-Provence, 1974)*, pp. 45-57. *Éditions Centre Nat. Recherche Sci., Paris*, 1975. (A. Crumeyrolle) **57** #7676 58F05 (85.58)
- (with Corwin, Lawrence; Ne'eman, Y.) Graded Lie algebras in mathematics and physics (Bose-Fermi symmetry). *Rev. Modern Phys.* **47** (1975), 573-603. (Authors' summary) **55** #11828 81.22 (17B99)
- Symplectic homogeneous spaces. *Trans. Amer. Math. Soc.* **212** (1975), 113-130. (J. L. Koszul) **52** #664 22E45 (58F05)
- (with Guillemin, V.) ★Geometric asymptotics. Mathematical Surveys, No. 14. *American Mathematical Society, Providence, R.I.*, 1977. xviii + 474 pp. (one plate) (Ju. V.

- Egorov) 58 #24404 58G15 (35C99, 41A60, 47G05, 58F05, 78.58)
Some recent results on supersymmetry. *Differential geometrical methods in mathematical physics (Proc. Sympos., Univ. Bonn, Bonn, 1975)*, pp. 145-176. *Lecture Notes in Math.*, Vol. 570, Springer, Berlin, 1977 (M. Scheunert) 56 #8756 22E45 (58F05, 17B65)
Minimal coupling and the symplectic mechanics of a classical particle in the presence of a Yang-Mills field. *Proc. Nat. Acad. Sci. U.S.A.* 74 (1977), no. 12, 5253-5254. (J. Śniatycki) 56 #16686 58F05 (81.58, 22E70)
(with Kazhdan, David; Kostant, Bertram) Hamiltonian group actions and dynamical systems of Calogero type. *Comm. Pure Appl. Math.* 31 (1978), no. 4, 481-507. (Mark Adler) 57 #17711 58F05 (22E45, 35Q99)
(with Guillemin, V.) On the equations of motion of a classical particle in a Yang-Mills field and the principle of general covariance. *Hadronic J.* 1 (1978), no. 1, 1-32. (From the summary) 58 #25636 81.58 (53C05, 58G05)
(with Wolf, Joseph A.) Hermitian Lie algebras and metaplectic representations. I. *Trans. Amer. Math. Soc.* 238 (1978), 1-43. (J. H. Rawnsley) 58 #6081 22E45 (32M15, 81.22)
See also Kijowski, Jerzy; et al., 56 #9586; Souriau, Jean-Marie, 56 #17689 and Voros, A., 57 #7678
Sternby, Jan A simple dual control problem with an analytical solution. *IEEE Trans. Automatic Control* AC-21 (1976), no. 6, 840-844. (Author's summary) 58 #33465 93E20
On consistency for the method of least squares using martingale theory. *IEEE Trans. Automatic Control* AC-22 (1977), no. 3, 346-352. (V. N. Iogolkin) 56 #15064 93E10
Sternfeld, J. Dimension theory and superpositions of continuous functions. *Israel J. Math.* 20 (1975), no. 3-4, 300-320. (Torbjörn Hedberg) 51 #10551 26A72
Sternfeld, Robert The logistic thesis. *Studien zu Frege, Band I*, pp. 139-160. *Problemata*, No. 42, Fromman-Holzboog, Stuttgart, 1976. (From the introduction) 58 #21408 02A05
The mathematization of logic: quantified sentences. *Studien zu Frege, Band II*, pp. 125-139. *Problemata*, No. 43, Fromman-Holzboog, Stuttgart, 1976. (From the introduction) 58 #21409 02A05
Sternfeld, Y. (with Hansen, A. B.) On the characterization of the dimension of a compact metric space K by the representing matrices of $C(K)$. *Israel J. Math.* 22 (1975), no. 2, 148-167. (A. B. Németh) 53 #11351 46E15 (54F45)
Uniformly separating families of functions. *Israel J. Math.* 29 (1978), no. 1, 61-91. (E. Hemmingsen) 58 #7570 54F45
Sternglass, Ernest J. See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, 52 #9427
Sternheimer, Daniel Propriétés spectrales dans les représentations de groupes de Lie. *J. Math. Pures Appl.* (9) 47 (1968), 289-319. (From the introduction) 58 #22407 22E45
(with Flato, Moshé; Simon, Jacques; Snellman, Håkan) Simple facts about analytic vectors and integrability. *Ann. Sci. École Norm. Sup.* (4) 5 (1972), 423-434. (E. A. Thieleker) 51 #13135 22E45
(with Flato, Moshé; Simon, Jacques) Sur l'intégrabilité des représentations antisymétriques des algèbres de Lie compactes. *C. R. Acad. Sci. Paris Sér. A-B* 277 (1973), A939-A942. (Rolf Sulanke) 49 #2864 17B15 (22E45)
(with Flato, Moshé; Lichnerowicz, André) Déformations 1 différentiables d'algèbres de Lie attachées à une variété symplectique ou de contact. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 877-881. (M. Craioveanu) 51 #4312 58F05
(with Flato, Moshé; Simon, Jacques) Remarks on an axiomatic approach to quantum gravity. *Helv. Phys. Acta* 47 (1974), 114-118. (H. Araki) 50 #9226 81.46
(with Maillard, Jean-Marie) Sur certaines représentations non intégrables de l'algèbre de Lie $\mathfrak{su}(2)$ et leur contenu indécomposable. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), Aii, A73-A75. (Rolf Sulanke) 51 #5686 17B15 (22E45)
(with Flato, Moshé; Lichnerowicz, André) Déformations 1-différentiables des algèbres de Lie attachées à une variété symplectique ou de contact. *Compositio Math.* 31 (1975), no. 1, 47-82. (I. Kolář) 53 #14559 58H05 (58F05)
(with Flato, Moshé; Piron, Constantin; Grea, Jean; Vigier, Jean-Pierre) Are Bell's inequalities concerning hidden variables really conclusive? *Helv. Phys. Acta* 48 (1975), no. 2, 219-225. (S. Gudder) 54 #1906 81.00
(with Flato, Moshé; Lichnerowicz, André) Algèbres de Lie attachées à une variété canonique. *J. Math. Pures Appl.* (9) 54 (1975), no. 4, 445-480. (M. Craioveanu) 56 #6723 58F05 (70.58)
(with Bayen, François; Flato, Moshé; Fronsdal, Christian; Lichnerowicz, André) Quantum mechanics as a deformation of classical mechanics. *Lett. Math. Phys.* 1 (1975/77), no. 6, 521-530. (J. S. Joel) 58 #32617 81.58 (17B35, 58F05)
(with Flato, Moshé; Lichnerowicz, André) Crochet de Moyal-Vey et quantification. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 1, Aii, A19-A24. (A. Verona) 54 #13994 58F05 (81.53, 53C15)
(with Flato, Moshé; Lichnerowicz, André) Deformations of Poisson brackets, Dirac brackets and applications. *J. Mathematical Phys.* 17 (1976), no. 9, 1754-1762. (I. Kolář) 54 #8735 58F99 (58H05, 70.58)
(with Bayen, François; Flato, Moshé; Fronsdal, Christian; Lichnerowicz, André) Deformation theory and quantization. I. Deformations of symplectic structures. *Ann. Physics* 111 (1978), no. 1, 61-110. (Hans Tilgner) 58 #14737a 81.58 (58F05, 58H05)
(with Bayen, François; Flato, Moshé; Fronsdal, Christian; Lichnerowicz, André) Deformation theory and quantization. II. Physical applications. *Ann. Physics* 111 (1978), no. 1, 111-151. (Hans Tilgner) 58 #14737b 81.58 (58F05, 58H05)
See also *Studies in mathematical physics*, 52 #16313
Sternin, B. Ju. S. L. Sobolev type boundary value problems for elliptic operators. (Russian) *Dokl. Akad. Nauk SSSR* 183 (1968), 296-299. (See *RŽMat* 1969 #5 B343) 47F05
Elliptic morphisms (riggings of elliptic operators) for submanifolds with singularities. *Dokl. Akad. Nauk SSSR* 200 (1971), 45-48. (Russian); translated as *Soviet Math. Dokl.* 12 (1971), 1338-1343. (R. D. Moyer) 46 #9574 35S05 (35J45, 47B99, 58G99)
Quasielliptic equations. (Russian) *Moskov. Inst. Élektron. Mašinstroenija—Trudy*

- minimization. *Topics in numerical analysis (Proc. Roy. Irish Acad. Conf., City Coll., Dublin, 1972)*, 277-284. Academic Press, London, 1973. (G. D. Byrne) 59 65L05 (65K05)
- finite-difference methods for ordinary differential equations. *Conference on numerical Solution of Differential Equations (Univ. Dundee, Dundee, 1973)*, pp. 3-6. *Lecture Notes in Math.*, Vol. 363, Springer, Berlin, 1974. (F. Odeh) 58 #3471 65L05
- nominal global error estimation. *Stiff differential systems (Proc. Internat. Conf., Wildbad, 1973)*, pp. 245-258. *IBM Res. Sympos. Ser.*, Plenum, New York, 1974. (F. Odeh) 53 #9655 65L05
- progress in the numerical treatment of ordinary differential equations. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, pp. 423-428. *Canad. Math. Congress, Montreal, Que.*, 1975. (Editors) 55 #9539 65L05
- Numerik für Informatiker. Computergerechte numerische Verfahren. Eine Einführung. R. Oldenbourg Verlag, Munich-Vienna, 1976. 149 pp. (Editors) 54 #1531 (68-01)
- wards a theory for discretizations of stiff differential systems. *Numerical analysis 5th Biennial Dundee Conf., Univ. Dundee, Dundee, 1975*, pp. 190-201. *Lecture Notes in Math.*, Vol. 506, Springer, Berlin, 1976. (H. Brunner) 56 #13652 65L05
- th Aktas, Z.) A classification and survey of numerical methods for boundary value problems in ordinary differential equations. *Internat. J. Numer. Methods Engrg.* 7, no. 5, 771-796. (Walter Gautschi) 56 #4177 65L10
- the defect correction principle and discretization methods. *Numer. Math.* 29 (1978), no. 4, 425-443. (David R. Hill) 57 #14436 65J05 (65B05)
- considerations concerning a theory for ODE-solvers. *Numerical treatment of ordinary differential equations (Proc. Conf., Math. Forschungsinst., Oberwolfach, 1976)*, pp. 179-199. *Lecture Notes in Math.*, Vol. 631, Springer, Berlin, 1978. (G. Alefeld) 57 #179 65L99
- Nichtnegative Matrizen mit konstanter Zeilensumme. *Elem. Math.* 27 (1972), no. 1, 1-11. (Levinger) 45 #1951 15A48
- theindeutigkeit bei gewöhnlichen Differentialgleichungen. *Math. Nachr.* 64 (1973), 233-237. (F. Brauer) 50 #10398 34A10
- theindeutigkeitssatz bei Funktional-Differentialgleichungen mit unendlicher Dimension. *Monatsh. Math.* 78 (1974), 77-82. (J. K. Hale) 50 #7734 34K05
- htlokale Existenz der Lösungen von Funktional-Differentialgleichungen. *Period. Hungar.* 5 (1974), 227-234. (S. Schwabik) 51 #10803 34K05
- punovsche Funktionen und eindeutige Auflösbarkeit von Funktional-Differentialgleichungen. *Ber. Math.-Statist. Sect. Forsch. Graz No. 64* (1976), 86-98. (Editors) 58 #28993 34K05
- A continuum of conservation laws for the sine-Gordon and for the Korteweg-de Vries equation. *Phys. Lett.* 50A (1974), 133-134. (Author's summary) 61 #81 81J35
- ether's theorem and higher conservation laws in ultrashort pulse propagation. (Author's summary) *Ann. Physik (7)* 32 (1975), no. 3, 205-216. (Author's summary) 50 #78 78J49
- ether's theorem and the conservation laws of the Korteweg-de Vries equation. (Author's summary) *Ann. Physik (7)* 32 (1975), no. 6, 445-455. (Clarence M. Ablow) 50 #90 35Q99 (76.35)
- leitung einer kontinuierlichen Mannigfaltigkeit von Erhaltungssätzen der Korteweg-de Vries-Gleichung nach dem Noetherschen Satz. (English summary) *Ann. Physik (7)* 32 (1975), no. 6, 459-465. (Clarence M. Ablow) 53 #8691 (76.35)
- infinite set of conservation laws derived by Noether's theorem for several nonlinear evolution equations. *VII. Internationale Konferenz über Nichtlineare Gleichungen (Berlin, 1975)*, Band I, Teil 2, pp. 309-312. *Abh. Akad. Wissensch. DDR, Math.-Naturwissensch.-Techn.*, No. 4N, Akademie-Verlag, Berlin, 1977. (G. L. Jr.) 58 #29050 35A30 (35Q99, 58A15, 58F05)
- sula. See Markušević, A. I., 58 #27731
- ph E. (with Evans, John P.) A revised simplex method for linear multiple regression programs. *Math. Programming* 5 (1973), 54-72. (M. Mañas) 52 #4992 65D05
- multiple objective linear programming with interval criterion weights. *Management Science* 17 (1977), no. 3, 305-316. (Author's summary) 55 #12064 90C05
- J. (with Gräff, P.; Tasso, H.) An exact 2-point distribution for Burger's equation. *Z. Naturforsch.* 28a (1973), 690-692. (Alain Brissaud) 53 #7215 76.60
- Michael Stability of solutions of mildly nonlinear elliptic problems. *Indiana Math. J.* 25 (1976), no. 11, 1083-1103. (S. V. Parter) 55 #6009 35J65 (35B35)
- anfred Ein Satz über Poincaré-Reihen lokaler Ringe. *Arch. Math. (Basel)* 25 (1975), 602-603. (Gerson Levin) 52 #5660 13H99
- th Brunotte, Horst; Klingens, Jutta) Einige Bemerkungen zu Einheiten in reinen reellen Körpern. *Arch. Math. (Basel)* 29 (1977), no. 2, 154-157. (Harvey Cohn) 56 #604 12A30
- I. See Jahrestagung: Gesellschaft für Informatik, 48 #1502
- W. (with Keilson, Julian) Families of infinitely divisible distributions closed under mixing and convolution. *Ann. Math. Statist.* 43 (1972), 242-250. (I. I. Kotlarski) 50 #780 60E05
- me recent results in infinite divisibility. *Stochastic Processes Appl.* 1 (1973), no. 3, (R. A. Horn) 51 #9152 60E05
- the tails of infinitely divisible distributions. *Z. Wahrscheinlichkeitstheorie und Gebiete* 28 (1973/74), 273-276. (R. A. Horn) 51 #9153 60E05
- th Keilson, Julian) Mixtures of distributions, moment inequalities and measures of unimodality and normality. *Ann. Probability* 2 (1974), 112-130. (B. L. S. Prakasa Rao) 50 #8651 60E05 (60F05)
- th Schurer, F.) On an inequality of Lorentz in the theory of Bernstein polynomials. *Spline functions (Proc. Internat. Sympos., Karlsruhe, 1975)*, pp. 332-338. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (From the introduction) 50 #2094 41A10
- th Schurer, F.; Sikkema, P. C.) On the degree of approximation with Bernstein polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* 79=Indag. Math. 38 (1976), no. 3, 231-239. (Helmut Brass) 53 #6155 41A10
- (with Schurer, F.) ★ On the degree of approximation of 2π -periodic functions in C^1 with positive linear operators of the Jackson type. T. H.-Report 77-WSK-02. *Department of Mathematics, Technological University Eindhoven, Eindhoven, 1977*. ii + 48 pp. (B. Bojanov) 58 #1949 42A08 (41A35)
- (with Schurer, F.) The degree of local approximation of functions in $C_1[0,1]$ by Bernstein polynomials. *J. Approximation Theory* 19 (1977), no. 1, 69-82. (Martin E. Price) 55 #10913 41A10
- (with Schurer, F.) Note on the asymptotic degree of approximation of functions in $C^1[0,1]$ by Bernstein polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* 80=Indag. Math. 39 (1977), no. 2, 128-130. (Martin E. Price) 56 #6213 41A25
- (with van Harn, K.) Generalized renewal sequences and infinitely divisible lattice distributions. *Stochastic Processes Appl.* 5 (1977), no. 1, 47-55. (S. K. Katti) 55 #9314 60K05 (60E05)
- (with Horn, Roger A.) On multivariate infinitely divisible distributions. *Stochastic Processes Appl.* 6 (1977/78), no. 2, 139-151. (V. M. Kruglov) 57 #7726 60E05
- (with Schurer, F.) On the degree of approximation of functions in $C_1[0,1]$ by the operators of Meyer-König and Zeller. *J. Math. Anal. Appl.* 63 (1978), no. 3, 719-728. (P. C. Sikkema) 58 #12120 41A35
- Stevanović, K. R. The transverse oscillations of a beam under the action of a system of masses, and intermittent forces applied to them, moving at a variable speed. (Russian) *Asymptotic and qualitative methods in the theory of nonlinear oscillations (Russian)*, pp. 180-194. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971*. (Editors) 50 #11919 73.34
- Free nonlinear transverse oscillations of a beam in a two-frequency situation. (Russian) *Analytic and qualitative methods of the theory of differential equations (Russian)*, pp. 233-246. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1972*. (Author's introduction) 50 #11933 73.35
- Transversal oscillations of a beam resting on an elastic foundation that is subject to the action of a perturbing force with several harmonics with frequencies near the first eigenfrequency. (Russian) *Mathematical physics, No. 13 (Russian)*, pp. 161-181, 194. "Naukova Dumka", Kiev, 1973. (P. P. Teodorescu) 48 #10270 73.35 (73.65)
- (with Rašković, D.) A study of "higher frequency" oscillations in a single frequency regime in nonlinear systems with several degrees of freedom and with slowly varying parameters. (Russian. Polish and English summaries) *Nonlinear vibration problems, No. 15 (Proc. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part II)*, pp. 201-220. *PWN—Polish Sci. Publ., Warsaw, 1974*. (Authors' summary) 56 #16056 34C15
- See also Mathematical physics, 48 #5766
- Stevbakov, S. N. See Methods and models of control, 50 #12520
- Stevens, C. F. (with Harrison, P. J.) A Bayesian approach to short-term forecasting. *Operational Res. Quart.* 22 (1971), 341-362. (Author's summary) 45 #1312 62F15
- (with Harrison, P. J.) Bayesian forecasting. With a discussion by M. B. Priestley, B. J. N. Blight, D. R. Cox, C. Chatfield, H. Tong, G. J. A. Stern, A. O'Hagan, T. Leonard, R. J. Bhansali, A. M. Walker, D. V. Lindley, O. D. Anderson, James M. Dickey, E. J. Godolphin, W. D. Ray and P. Newbold, and a reply by the authors. *J. Roy. Statist. Soc. Ser. B* 38 (1976), no. 3, 205-247. (Authors' summary) 58 #31672 62M20 (62C10)
- Stevens, D. C. (with Grad, Harold; Kadish, A.) A free boundary Tokamak equilibrium. *Comm. Pure Appl. Math.* 27 (1974), 39-57. (Rishi Ram) 50 #3734 76.30
- Stevens, D. L., Jr. (with Overton, W. S.) An approach to estimating the parameters of a forced linear system using an ARMA model. *Time series and ecological processes (Proc. 5th SIMS Conf., Alta, Utah, 1977)*, pp. 89-106. *SIAM-SIMS Conf. Ser., Vol. 5, Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1978. (C. Hayashi) 58 #13572 62M10 (62F10, 92A15)
- Stevens, E. H. (with Korin, B. P.) Some approximations for the distribution of a multivariate likelihood ratio criterion. *J. Roy. Statist. Soc. Ser. B* 35 (1973), 24-27. (Authors' summary) 48 #9973 62H10
- Stevens, Gary E. Some counterexamples for infinite dimensional Lie algebras. *Compositio Math.* 36 (1978), no. 2, 203-207. (Ralph K. Amayo) 58 #22210 17B65 (17B30)
- Stevens, Gerard A. (with Hoyng, Peter) Radiation from a source in a cold magnetoactive plasma, re-examined. Application to cyclotron and multipole radiation. *Phys. Fluids* 20 (1977), no. 3, 520-532. (Authors' summary) 56 #1938 76.60
- Stevens, Harlan On Jacobsthal's $g(n)$ -function. *Math. Ann.* 226 (1977), no. 1, 95-97. (R. J. Evans) 55 #247 10A20
- Stevens, Henry See Tanner, Rosalind Cecilia Hildegard, 58 #10070
- Stevens, John G. Elimination from homogeneous polynomials over a polynomial ring. *Canad. J. Math.* 28 (1976), no. 6, 1269-1276. (M. Fried) 54 #10273 14G99 (12E05)
- Stevens, Richard S. (with Osborne, Richard) Group presentations corresponding to spines of 3-manifolds. I. *Amer. J. Math.* 96 (1974), 454-471. (Benny Evans) 50 #8529 57A10 (55A05)
- Classification of homotopy torus knot spaces. *Proc. Amer. Math. Soc.* 52 (1975), 461-464. (J. S. Birman) 52 #1704 57A35 (55A05)
- Classification of 3-manifolds with certain spines. *Trans. Amer. Math. Soc.* 205 (1975), 151-166. (L. Neuwirth) 50 #11245 57A10
- (with Osborne, Richard) Group presentations corresponding to spines of 3-manifolds. II. *Trans. Amer. Math. Soc.* 234 (1977), no. 1, 213-243. (Benny Evans) 58 #7634a 57A10 (55A05)
- (with Osborne, Richard) Group presentations corresponding to spines of 3-manifolds. III. *Trans. Amer. Math. Soc.* 234 (1977), no. 1, 245-251. (Benny Evans) 58 #7634b 57A10 (55A05)
- (with Shantaram, R.) Computer-generated van der Waerden partitions. *Math. Comp.* 32 (1978), no. 142, 635-636. (Authors' summary) 58 #10714 10A45 (10-04)
- Stevens, Robert R. On a uniqueness problem in the theory of linear integral equations. *Proc. Amer. Math. Soc.* 49 (1975), 95-103. (R. P. Srivastav) 52 #8824 45A05 (26A42)
- Stevens, Tom A deterministic view of a statistical method for stable extension of unstable linear problems. *J. Math. Anal. Appl.* 64 (1978), no. 2, 251-262. (V. Gourishankar) 58 #3515 65M30
- Stevens, William F. See Mathematical programming and its applications, 49 #10355
- Stevenson, A. B. See Automatic control: classical linear theory, 52 #16755

- Stevenson, Charles L. If-iculties. *Logic & art. Essays in honor of Nelson Goodman*, pp. 279-309. Bobbs-Merrill, Indianapolis, Ind., 1972. (Editors) 58 #5069 02C10 (02A05)
- Stevenson, D. J. (with Bland, R. P.) A Bayes solution to the problem of comparing tail probabilities of normal populations. *Comm. Statist.* 3 (1974), 1197-1204. (Bruce M. Hill) 51 #2119 62F15
- Stevenson, David (with Heller, D. E.; Traub, J. F.) Accelerated iterative methods for the solution of tridiagonal systems on parallel computers. *J. Assoc. Comput. Mach.* 23 (1976), no. 4, 636-654. (R. H. Bartels) 55 #6809 65F10 (15-04)
- (with Baudet, Gérard M.) Optimal sorting algorithms for parallel computers. *IEEE Trans. Computers* C-27 (1978), no. 1, 84-87. (Yuri Breitbart) 58 #8465 68A10
- Stevenson, Duncan R. (with Thompson, Colin J.) Fairy ring kinetics. *J. Theoret. Biol.* 58 (1976), no. 1, 143-163. (Daniel M. Dubois) 56 #2464 92A05
- Stevenson, Edith Integral representations of algebraic cohomology classes on hypersurfaces. *Pacific J. Math.* 71 (1977), no. 1, 197-212. (G. A. Efroymsyn) 56 #12000 14C30 (14F25)
- Stevenson, Francis R. (with Knuth, Donald E.) Optimal measurement points for program frequency counts. *Nordisk Tidskr. Informationsbehandling (BIT)* 13 (1973), 313-322. (E. Ikauniekis) 49 #4304 68A20
- Stevenson, Frederick W. ω -metric spaces and ω -proximities. *Fund. Math.* 73 (1971/72), no. 2, 171-178. (W. J. Thron) 45 #4353 54E05
- ★Projective planes. *W. H. Freeman and Co., San Francisco, Calif.*, 1972. x+416 pp. (D. A. Foulser) 49 #9734 50D35
- A note on projective collineations. *Arch. Math. (Basel)* 23 (1972), 446-448. (J. Cofman) 50 #8288 50D35
- Product proximities. *Fund. Math.* 76 (1972), no. 2, 157-166. (Anne K. Steiner) 46 #4491 54E15 (54E05)
- The linearity of certain coordinatizing rings of a projective plane. (Italian summary) *Boll. Un. Mat. Ital.* (4) 10 (1974), 28-35. (C. Ballester Pereyra) 51 #13857 50D35
- Weakly isotopic planar ternary rings. *Canad. J. Math.* 27 (1975), 32-36. (L. A. Rosati) 51 #13858 50D35
- Stevenson, James O. Homomorphism of composition. *Bull. Amer. Math. Soc.* 80 (1974), 300-303. (G. Coeuré) 49 #9629 46G20 (58B10)
- Homomorphism of composition. *Infinite dimensional homomorphism and applications (Proc. Internat. Sympos., Univ. Estadual de Campinas, São Paulo, 1975)*, pp. 397-424. North-Holland Math. Studies, Vol. 12, Notas de Mat., No. 54, North-Holland, Amsterdam, 1977. (From the author's summary) 57 #3854 46G20 (58B10)
- Stevenson, John G. Donnelly on Geach. *Notre Dame J. Formal Logic* 13 (1972), 429-430. (K. Inoue) 46 #5096 (E 50 #1830) 02A05
- Erratum: "Donnelly on Geach" (Notre Dame J. Formal Logic 13 (1972), 429-430). *Notre Dame J. Formal Logic* 15 (1974), 648. (Editors) 50 #1830 02A05
- Stevenson, Leslie Frege's two definitions of quantification. *Philos. Quart.* 23 (1973), 207-223. (J. Corcoran) 58 #21362 02-03 (01A55, 02A05)
- A formal theory of sortal quantification. *Notre Dame J. Formal Logic* 16 (1975), 185-207. (N. B. Cocchiarella) 51 #2858 02B10
- Frege's zwei Definitionen der Quantifikation. *Studien zu Frege, Band II*, pp. 103-124. *Problematika*, No. 43, Frommann-Holzboog, Stuttgart, 1976. (Editors) 58 #27268 02A05 (01A55, 02-03)
- Stevenson, Nell Elizabeth Concerning collections of continua filling a continuum. *Proceedings of the University of Houston Point Set Topology Conference (Houston, Tex., 1971)*, pp. 96-104. Univ. Houston, Houston, Tex., 1971. (F. Burton Jones) 52 #15400 54F20
- Concerning indecomposable continua and upper semi-continuous collections of nondegenerate continua. *Fund. Math.* 74 (1972), no. 1, 35-42. (M.-E. Hamstrom) 45 #1128 54F15
- Stever, Hermann ★Superierung durch Komplexbildung. Zur Erlangung des akademischen Grades eines Doktors der Naturwissenschaften von der Fakultät für Mathematik der Universität Karlsruhe genehmigte Dissertation. Universität Karlsruhe, Karlsruhe, 1971. ii+75 pp. (K. D. Günther) 49 #4662 94A15
- Stever, John (with Thorson, Stuart J.) Classes of models for selected axiomatic theories of choice. *J. Mathematical Psychology* 11 (1974), 15-32. (A. Rapoport) 49 #4601 92A25
- Steverding, Bernard See Transactions: Conference of Army Mathematicians, 49 #4735
- Stewart, Alan (with Kendall, Maurice G.) ★Многомерный статистический анализ и временные ряды. (Russian) [Multivariate statistical analysis and time series] Translated from the English by É. L. Presman and V. I. Rotar'. Edited by A. N. Kolmogorov and Ju. V. Prohorov. Izdat. "Nauka", Moscow, 1976. 736 pp. (Editors) 56 #1515 62-02
- Stewart, B. M. Magic sets. *Graph theory and applications (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1972; dedicated to the memory of J. W. T. Youngs)*, pp. 291-296. *Lecture Notes in Math.*, Vol. 303, Springer, Berlin, 1972. (M. McLeish) 49 #4873 05C99
- (with Herzog, Fritz) Semi-regular plane polygons of integral type. *Israel J. Math.* 11 (1972), 31-52. (A. L. Whiteman) 45 #5012 05C99
- (with Nordhaus, E. A.; Ringeisen, Richard D.; White, Arthur T.) A Kuratowski-type theorem for the maximum genus of a graph. *J. Combinatorial Theory Ser. B* 12 (1972), 260-267. (Authors' summary) 45 #8571 05C10
- Stewart, C. L. The greatest prime factor of $a^n - b^n$. *Acta Arith.* 26 (1974/75), no. 4, 427-433. (A. L. Schmidt) 53 #2844 10F05
- (with Erdős, Paul) On the greatest and least prime factors of $n!+1$. *J. London Math. Soc.* (2) 13 (1976), no. 3, 513-519. (R. Tijdeman) 53 #13093 10A25
- (with Baker, Alan) Further aspects of transcendence theory. *Journées Arithmétiques de Caen (Univ. Caen, Caen, 1976)*, pp. 153-163. *Asiérisque* No. 41-42, Soc. Math. France, Paris, 1977. (R. Tijdeman) 56 #5444 10F35
- Primitive divisors of Lucas and Lehmer numbers. *Transcendence theory: advances and applications (Proc. Conf., Univ. Cambridge, Cambridge, 1976)*, pp. 79-92. Academic Press, London, 1977. (Daniel Barsky) 57 #16187 10A40
- A note on the Fermat equation. *Mathematika* 24 (1977), no. 1, 130-132. (Itaru Yamaguchi) 57 #9646 10B15 (10F35)
- On divisors of Fermat, Fibonacci, Lucas, and Lehmer numbers. *Proc. London Math. Soc.* (3) 35 (1977), no. 3, 425-447. (András Sárközy) 58 #10694 10A25
- Stewart, D. E. (with Tiku, M. L.) Estimating and testing group effects from type I censored normal samples in experimental design. *Comm. Statist.—Theory Methods* (1977), no. 15, 1485-1501. (A. C. Cohen) 58 #3164 62F10 (62K10)
- See also Singh, Vimal, 57 #5312
- Stewart, Dale F. (with Wall, Edward T.) A direct synthesis of Q in the Lyapunov equation $Q = -[A'R + RA]$. *IEEE Trans. Automatic Control* AC-17 (1972), no. 5, 726 (Authors' summary) 57 #5311 (E 57 #5312) 93D05 (93B25)
- Stewart, David B. A subcritical branching process with state dependent immigration. *Math. Biosci.* 31 (1976), no. 1-2, 175-190. (Author's summary) 58 #31428 60J35
- A supercritical branching process with state dependent immigration. *Math. Biosci.* 32 (1976), no. 3-4, 187-202. (Author's summary) 58 #31429 60J80
- Stewart, E. See Proceedings: International Congress of the International Federation of Automatic Control (IFAC), 51 #12360b
- Stewart, Elwood C. See Automatic and remote control, 51 #9864
- Stewart, Frank M. Evolution of dimorphism in a predator-prey model. *Theoret. Population Biology* 2 (1971), 493-506. (A. Blaquier) 49 #6954 92A10 (90D25)
- Variability in the amount of heterozygosity maintained by neutral mutation. *Theoret. Population Biology* 9 (1976), no. 2, 188-201. (Susan Wilson) 53 #15492A10
- (with Levin, Bruce R.) The population biology of bacterial plasmids: a population genetics approach to the existence of conjugationally transmitted factors. *Genetics* 87 (1976), no. 2, 209-228. (Burton H. Voorhees) 56 #14829 92A15
- Stewart, G. W., III Error analysis of the algorithm for shifting the zeros of a polynomial by synthetic division. *Math. Comp.* 25 (1971), 135-139. (G. Fairweather) 45 #1465H05
- Corrigendum: "PL/I program for 'On Lehmer's method for finding the zeros of a polynomial'" (Math. Comp. 23 (1969), no. 108, loose microfiche suppl., D1-D7). *Math. Comp.* 25 (1971), no. 113, 203. (Editors) 54 #4085 65H05
- On a companion operator for analytic functions. *Numer. Math.* 18 (1972), 26-43. (W. Niethammer) 45 #6182 65F10
- Error bounds for approximate invariant subspaces of closed linear operators. *J. Numer. Anal.* 8 (1971), 796-808. (Z. V. Kovarik) 45 #2907 65F35
- On the sensitivity of the eigenvalue problem $Ax = \lambda Bx$. *SIAM J. Numer. Anal.* 10 (1972), 669-686. (A. S. Householder) 47 #244 15A18 (65F15)
- ★Introduction to matrix computations. Computer Science and Applied Mathematics. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1973. xiii+441 pp. (James H. Wilkinson) 56 #17018 65F35
- Conjugate direction methods for solving systems of linear equations. *Numer. Math.* 21 (1973/74), 285-297. (A. Lee) 49 #6583 65F10
- Some iterations for factoring a polynomial. II. A generalization of the simple method. *Numer. Math.* 22 (1973/74), 33-36. (E. Frank) 48 #12814 65H05
- (with Moler, Cleve B.) An algorithm for generalized matrix eigenvalue problems. Collection of articles dedicated to the memory of George E. Forsythe. *SIAM J. Numer. Anal.* 10 (1973), 241-256. (D. B. Hunter) 49 #10135 65F15
- Error and perturbation bounds for subspaces associated with certain eigenvalue problems. *SIAM Rev.* 15 (1973), 727-764. (B. Levinger) 50 #1482 65F15
- The numerical treatment of large eigenvalue problems. *Information processing in statistics (Proc. IFIP Congress, Stockholm, 1974)*, pp. 666-672. North-Holland, Amsterdam, 1974. (Robert Todd Gregory) 53 #14889 65F15
- (with Blevins, M. M.) Calculating the eigenvectors of diagonally dominant matrices. *J. Assoc. Comput. Mach.* 21 (1974), 261-271. (T. A. Porsching) 50 #8937 65F35
- Modifying pivot elements in Gaussian elimination. *Math. Comp.* 28 (1974), 537-542. (A. Lee) 49 #8300 65F05
- (with Söderström, T.) On the numerical properties of an iterative method for computing the Moore-Penrose generalized inverse. *SIAM J. Numer. Anal.* 11 (1974), 61-74. (V. Pereyra) 49 #6589 65F20
- The convergence of multipoint iterations to multiple zeros. *SIAM J. Numer. Anal.* 11 (1974), 1105-1120. (E. R. Hansen) 55 #4653 65H05
- Methods of simultaneous iteration for calculating eigenvectors of matrices. *2nd International symposium on matrix computations (Proc. Roy. Irish Acad. Conf., Univ. College, Dublin, 1974)*, pp. 185-196. Academic Press, London, 1975. (Ludwig Elsner) 53 #9616 65F15
- Gershgorin theory for the generalized eigenvalue problem $Ax = \lambda Bx$. *Math. Comput.* 29 (1975), 600-606. (O. Pokorný) 52 #442 15A42 (65F15)
- The convergence of the method of conjugate gradients at isolated extreme points of the spectrum. *Numer. Math.* 24 (1975), no. 2, 85-93. (E. Deutsch) 52 #7100 65F15
- Simultaneous iteration for computing invariant subspaces of non-Hermitian matrices. *Numer. Math.* 25 (1975/76), no. 2, 123-136. (Ralph A. Willoughby) 53 #4508 65F15 (65F25)
- The economical storage of plane rotations. *Numer. Math.* 25 (1975/76), no. 1, 137-138. (R. P. Tewarson) 53 #7004 65F25
- A bibliographical tour of the large, sparse generalized eigenvalue problem. *Symposium on matrix computations (Proc. Sympos., Argonne Nat. Lab., Lemont, Ill., 1975)*, pp. 113-124. Academic Press, New York, 1976. (Authors' summary) 56 #13563 65F15
- (with Daniel, James W.; Gragg, William B.; Kaufman, Linda) Reorthogonalization and stable algorithms for updating the Gram-Schmidt QR factorization. *Math. Comp.* 30 (1976), no. 136, 772-795. (H. R. Schwarz) 55 #465F25
- (with Gragg, William B.) A stable variant of the secant method for solving nonlinear equations. *SIAM J. Numer. Anal.* 13 (1976), no. 6, 889-903. (W. M. Kincaid) 55 #6827 65H05
- Research, development, and LINPACK. *Mathematical software, III (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1977)*, pp. 1-14. Publ. Math. Res. Center, No. 39, Academic Press, New York, 1977. (R. P. Tewarson) 57 #14365-04 (65F05, 65F20)
- Perturbation bounds for the QR factorization of a matrix. *SIAM J. Numer. Anal.* 14 (1977), no. 3, 509-518. (Colette Lebaud) 55 #9509 65F30
- On the perturbation of pseudo-inverses, projections and linear least squares problems. *SIAM Rev.* 19 (1977), no. 4, 634-662. (M. Z. Nashed) 57 #1854 65F35
- Stewart, H. Bruce Generation of analytic semigroups by strongly elliptic operators. *Amer. Math. Soc.* 199 (1974), 141-162. (A. Pazy) 50 #10532 35J30 (47D05)
- Spectral theory of heterogeneous diffusion systems. *J. Math. Anal. Appl.* 54 (1976), no. 1, 1-14. (H. R. Schwarz) 55 #465F25

- 59-78. (J. V. Baxley) **54** #2044 82.35 (35P10)
- Stewart, N. Baer** and Fitting radicals in groups and Lie algebras. *Arch. Math. (Basel)* **22**, 385-386. (J. E. Roseblade) **47** #8643 17B05 (20F15)
- Stewart, N. Baer** Lie algebra of endomorphisms of an infinite-dimensional vector space. *Compositio Math.* **25** (1972), 79-86. (Bernard Kolman) **47** #6800 17B65
- Stewart, N. Baer** Divisible factors on infinite-dimensional Lie algebras. *J. London Math. Soc. (2)* **5** (1972), 1-10. (Bernard Kolman) **48** #2206 17B65
- Stewart, N. Baer** and Amayo, Ralph K.) Finitely generated Lie algebras. *J. London Math. Soc. (2)* **6**, 697-703. (Bernard Kolman) **48** #2205 17B65
- Stewart, N. Baer** Finite rings with a specified group of units. *Math. Z.* **126** (1972), 51-58. (W. S. Martin) **46** #207 (E 46 #9102) 16A44
- Stewart, N. Baer** Correction to: "Finite rings with a specified group of units". *Math. Z.* **128** (1972), 1-2. (W. S. Martin) **46** #9102 16A44
- Stewart, N. Baer** Galois theory. *Chapman and Hall, London*, 1973. xxv + 226 pp. (J. J. Malone) **46** #12F10 (12E10)
- Stewart, N. Baer** Finiteness conditions in soluble groups and Lie algebras. *Bull. Austral. Math. Soc.* **9**, 43-48. (J. D. Dixon) **48** #11316 20E15 (17B30)
- Stewart, N. Baer** Central simplicity and Chevalley algebras. *Compositio Math.* **26** (1973), 111-118. (Lee Wilson) **51** #629 17B20
- Stewart, N. Baer** Note on 2-step subideals of Lie algebras. *Compositio Math.* **27** (1973), 273-275. (Lee Wilson) **49** #365 17B30 (20D15)
- Stewart, N. Baer** Tensorial extensions of central simple algebras. *J. Algebra* **25** (1973), 1-14. (Helmut G. Gruber) **51** #8190 17A99
- Stewart, N. Baer** and Drukker, Mark; Robinson, Derek J. S.) The subnormal coalescence of some groups of finite rank. Collection of articles dedicated to the memory of Hans Neumann, III. *J. Austral. Math. Soc.* **16** (1973), 324-327. (R. Bryce) **49** #5191 20E05
- Stewart, N. Baer** The magnificent seven: an introduction to Thom's 'elementary catastrophes'. *On Catastrophes, Part I. Manifold* **14** (1973), 6-13, 36-37. (Not reviewed)
- Stewart, N. Baer** and Amayo, Ralph K.) ★ Infinite-dimensional Lie algebras. *Noordhoff International Publishing, Leyden*, 1974. xi + 425 pp. (Robert E. Beck) **53** #570 17B65
- Stewart, N. Baer** The structure of certain infinite-dimensional Lie algebras. *Group theoretical methods in physics (Proc. Third Internat. Colloq., Centre Phys. Théor., Marseille, 1974), Vol. 2, pp. 1-10. Centre Nat. Recherche Sci., Centre Phys. Théor., Marseille, 1974. (Johan G. M. de Vries) **56** #8649 17B65*
- Stewart, N. Baer** Soluble Lie algebras having finite-dimensional maximal subalgebras. *Bull. Austral. Math. Soc.* **11** (1974), 145-156. (A. A. Sagle) **50** #4681 17B65
- Stewart, N. Baer** Central and marginal properties of non-associative algebras. *Proc. London Math. Soc.* **28** (1974), 129-140. (D. A. Robinson) **49** #2861 17A99
- Stewart, N. Baer** Lie algebras generated by finite-dimensional ideals. *Research Notes in Mathematics, Vol. 2. Pitman Publishing, London-San Francisco, Calif.-Melbourne*, 1975. (B. Hartley) **55** #12782 17B05 (20G15)
- Stewart, N. Baer** Locally presented infinite-dimensional simple Lie algebras. *Arch. Math. (Basel)* **26**, no. 5, 504-507. (Ralph K. Amayo) **52** #3261 17B65
- Stewart, N. Baer** Conjugacy theorems for a class of locally finite Lie algebras. *Compositio Math.* **30**, 181-210. (Ralph K. Amayo) **52** #3262 17B65
- Stewart, N. Baer** and Amayo, Ralph K.) Descending chain conditions for Lie algebras of prime characteristic. *J. Algebra* **35** (1975), 86-98. (Robert Lee Wilson) **51** #10418 17B65
- Stewart, N. Baer** and Towers, David) The Frattini subalgebras of certain infinite-dimensional Lie algebras. *J. London Math. Soc. (2)* **11** (1975), no. 2, 207-215. (Ralph K. Amayo) **53** #572 17B65
- Stewart, N. Baer** and Poston, Tim) ★ Taylor expansions and catastrophes. *Research Notes in Mathematics, Vol. 7. Pitman, London-San Francisco, Calif.-Melbourne*, 1976. 168 pp. (J. V. Baxley) **58** #13142 58C25
- Stewart, N. Baer** The Wedderburn-Mal'cev theorems in a locally finite setting. *Arch. Math. (Basel)* **26**, no. 2, 120-122. (Ralph K. Amayo) **53** #3013 16A48
- Stewart, N. Baer** Mal'cev-Jordan decomposition for a class of locally finite Lie algebras. *Compositio Math.* **33** (1976), no. 1, 75-105. (Ralph K. Amayo) **54** #7563 17B05
- Stewart, N. Baer** Catastrophe theory. *Math. Chronicle* **5** (1976/77), no. 3, 140-165. (Martin J. Sklar) **57** #14022 58C25
- Stewart, N. Baer** and Beck, Robert E.; Kolman, Bernard) Computing the structure of a Lie algebra. *Contributions to nonassociative rings and algebras (Special session, 82nd Annual Meeting of the American Mathematical Society, San Antonio, Tex., 1976), pp. 167-188. Academic Press, New York*, 1976. (B. N. Allison) **58** #5800 17B05
- Stewart, N. Baer** and Brazier, George) Local theorems for parabolizability. *Arch. Math. (Basel)* **29**, no. 4, 353-362. (Ralph K. Amayo) **58** #808 17B30 (20E15)
- Stewart, N. Baer** Joint groups and the Mal'cev correspondence (a tale of four functors). *Fund. Math.* **97** (1977), no. 1, 9-16. (Bernard Kolman) **58** #16807 17B60
- Stewart, N. Baer** and Poston, Tim) ★ Catastrophe theory and its applications. With an appendix by R. Olsen, S. R. Carter and A. Rockwood. *Surveys and Reference Works in Mathematics, No. 2. Pitman, London-San Francisco, Calif.-Melbourne: distributed by Pitman Publishers, Inc., Belmont, Calif., 1978. xviii + 491 pp. ISBN 0-273-01029-8* (B. K. Francis) **58** #18535 58C25 (00A05, 69.00, 92-02)
- Stewart, N. Baer** Counterexample to a conjecture on positive definite functions. *Canad. J. Math.* **24** (1972), 926-929. (Kelly McKennon) **46** #9640 42A88 (43A35)
- Stewart, N. Baer** Functions with a finite number of negative squares. *Canad. Math. Bull.* **15** (1972), no. 10, 1070-1071. (John F. Price) **47** #707 42A88 (43A35)
- Stewart, N. Baer** Positive definite functions and generalizations, an historical survey. *Rocky Mountain J. Math.* **6** (1976), no. 3, 409-434. (J. Gil de Lamadrid) **55** #3679 42A88 (60B15, 22D10)
- Stewart, N. Baer** and Elston, R. C.) The analysis of quantitative traits or simple genetic data from parental, F_1 and backcross data. *Genetics* **73** (1973), no. 4, 695-711. (K. S. Martin) **52** #16707 92A10
- Stewart, N. Baer** and M. Relativistic thermodynamics and kinetic theory with applications to cosmology. *Cargèse lectures in physics, Vol. 6, pp. 175-226. Gordon and Breach, New York*, 1973. (From the introduction) **58** #32742 83.35 (82.35)
- Stewart, N. Baer** and Walker, Martin) Perturbations of space-times in general relativity. *Proc. Roy. Soc. London Ser. A* **341** (1974), 49-74. (Alan Barnes) **54** #9555 83.35
- Stewart, N. Baer** Transient relativistic thermodynamics and kinetic theory. *Proc. Roy. Soc. London Ser. A* **357** (1977), no. 1688, 59-75. (Ole J. Heilmann) **57** #8513 80.60
- Stewart, K. L.** See Large sparse sets of linear equations, **48** #10074
- Stewart, M. James** (with Chartrand, Gary; Polimeni, Albert D.) The existence of 1-factors in line graphs, squares, and total graphs. *Nederl. Akad. Wetensch. Proc. Ser. A* **76** = *Indag. Math.* **35** (1973), 228-232. (D. R. Lick) **48** #176 05C99
- Stewart, M. James** (with Kapoor, S. F.) A note on the Hamiltonian index of graphs. *Studia Sci. Math. Hungar.* **8** (1973), 307-308. (G. Chartrand) **50** #12805 05C35
- Stewart, M. James** (with Gudugudi, Bhalachandra) On n th subdivision graphs. *J. Karnatak Univ. Sci.* **19** (1974), 282-288. (M. Behzad) **55** #2663 05C99
- Stewart, M. James** (with Chartrand, Gary; Wall, Curtiss E.) On homeomorphically irreducible graphs. *Nanta Math.* **7** (1974), no. 1, 61-66. (F. Harary) **50** #9658 05C10
- Stewart, M. James** (with Chartrand, Gary; Polimeni, Albert D.) Intercyclic graphs. *Nanta Math.* **8** (1975), no. 2, 47-49. (Ralph Faudree) **54** #7309 05C35
- Stewart, Neil-Frederick** A heuristic to reduce the wrapping effect in the numerical solution of $x' = f(t, x)$. *Nordisk Tidskr. Informationsbehandling (BIT)* **11** (1971), 328-337. (L. Fox) **45** #1421 65L05
- Stewart, Neil-Frederick** (with Bernusou, Jacques; Hsu, Liu) Sur une majoration de l'erreur faite par traitement numérique de transformations ponctuelles conservatives du second ordre. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A545-A548. (C. Ilioi) **46** #4761 65Q05
- Stewart, Neil-Frederick** (with Nastansky, Ludwig; Selkow, Stanley M.) The enumeration of minimal phylograms. *Bull. Math. Biology* **35** (1973), 525-533. (Torrence D. Parsons) **48** #13306 92A05
- Stewart, Neil-Frederick** Interval arithmetic for guaranteed bounds in linear programming. *J. Optimization Theory Appl.* **12** (1973), 1-5. (Constantin Vîrsan) **49** #8649 90C05
- Stewart, Neil-Frederick** (with Nastansky, Ludwig; Selkow, Stanley M.) An improved solution of the generalized Camin-Sokal model for numerical cladistics. *J. Theoret. Biol.* **49** (1974), no. 2, 413-424. (George F. Estabrook) **54** #4725 92A15
- Stewart, Neil-Frederick** Computable, guaranteed local error bounds for the Adams method. *Math. Nachr.* **60** (1974), 145-153. (P. Brock) **50** #15353 65L05 (65G05)
- Stewart, Neil-Frederick** (with Nastansky, Ludwig; Selkow, Stanley M.) Cost-minimal trees in directed acyclic graphs. (German summary) *Z. Operations Res. Ser. A-B* **18** (1974), A59-A67. (Torrence D. Parsons) **51** #2984 05C35
- Stewart, Neil-Frederick** (with Jensen, Francis) ★ Solution numérique des problèmes matriciels. *Les Presses de l'Université de Montréal, Montréal, Que.; Éditions Eyrolles, Paris*, 1975. 249 pp. (Editors) **53** #6993 65Fxx
- Stewart, Neil-Frederick** Error analysis for certain transformations of interest in automatic control. (French summary) *Transformations ponctuelles et leurs applications (Colloq. Internat. CNRS, No. 229, Toulouse, 1973), pp. 481-492. Éditions Centre Nat. Recherche Sci., Paris*, 1976. (Joseph Ford) **57** #15656 93C99
- Stewart, Neil-Frederick** (with Davey, D. P.) Guaranteed error bounds for the initial value problem using polytope arithmetic. *Nordisk Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 3, 257-268. (E. R. Hansen) **55** #4678 65L05
- Stewart, Patrick N.** Strongly hereditary radical classes. *J. London Math. Soc. (2)* **4** (1971/72), 499-509. (S. A. Amitsur) **46** #5376 16A21
- Stewart, Patrick N.** On the locally antisimple radical. *Glasgow Math. J.* **13** (1972), 42-46. (R. L. Tangeman) **46** #1830 16A21
- Stewart, Patrick N.** Strongly hereditary complements of radical classes. *J. London Math. Soc. (2)* **7** (1973), 328-336. (Anthony E. Hoffman) **49** #5073 16A21
- Stewart, Patrick N.** Strict radical classes of associative rings. *Proc. Amer. Math. Soc.* **39** (1973), 273-278. (R. L. Tangeman) **47** #1851 16A21
- Stewart, Patrick N.** On the lower radical construction. *Acta Math. Acad. Sci. Hungar.* **25** (1974), 31-32. (D. Kreiling) **52** #10791 16A21
- Stewart, Patrick N.** (with Cornish, William H.) Rings with no nilpotent elements and with the maximum condition on annihilators. *Canad. Math. Bull.* **17** (1974), 35-38; correction, *ibid.* **17** (1974), no. 3, 425. (Darrell R. Turnidge) **50** #4654 16A34
- Stewart, Patrick N.** (with Gardner, B. J.) A "going down" theorem for certain reflected radicals. *Pacific J. Math.* **55** (1974), 381-389. (R. Wiegandt) **51** #8199 18A99 (16A21)
- Stewart, Patrick N.** (with Márki, László; Wiegandt, Richard) Radicals and decomposability of semigroups and rings. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **18** (1975), 27-36 (1976). (B. J. Gardner) **55** #391 16A21 (20M10)
- Stewart, Patrick N.** (with Gardner, B. J.) On semisimple radical classes. *Bull. Austral. Math. Soc.* **13** (1975), no. 3, 349-353. (R. Wiegandt) **53** #505 16A21
- Stewart, Patrick N.** Strong radical classes and idempotents. *Canad. Math. Bull.* **18** (1975), no. 5, 723-725. (Anthony E. Hoffman) **54** #2712 16A21
- Stewart, Patrick N.** A sheaf theoretic representation of rings with Boolean orthogonalities. *Pacific J. Math.* **58** (1975), no. 1, 249-254. (Klaus Keimel) **51** #12951 16A64
- Stewart, Patrick N.** Radicals and functional representations. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 3-4, 319-321. (Kwangil Koh) **54** #2713 16A21
- Stewart, Patrick N.** (with Gardner, B. J.) Reflected radical classes. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 3-4, 293-298. (W. G. Leavitt) **54** #7574 18A99
- Stewart, Patrick N.** (with Cornish, William H.) Weakly regular algebras, Boolean orthogonalities and direct products of integral domains. *Canad. J. Math.* **28** (1976), no. 1, 148-153. (J. R. Clay) **53** #5422 08A05
- Stewart, Patrick N.** (with Shum, Kar Ping) Completely prime ideals and idempotents in mobs. *Czechoslovak Math. J.* **26(101)** (1976), no. 2, 211-217. (M. Friedberg) **58** #11206 22A15
- Stewart, Robert F.** (with Bentley, John) Two-center calculations for x-ray scattering. *J. Computational Phys.* **11** (1973), 127-145. (P. Achuthan) **52** #7406 81.65
- Stewart, Thomas R.** Components of correlation and extensions of the lens model equation. *Psychometrika* **41** (1976), no. 1, 101-120. (Author's summary) **58** #8036 62H20 (62P15)
- Stewart, W. B.** (with Martineau, R. Patrick) ★ Modules over a Euclidean ring. *Mathematical Institute, Oxford University, Oxford*, 1972. 9 pp. (C. F. Moppert) **53** #13190 13C05
- Stewart, W. B.** Groups having strongly self-centralizing 3-centralizers. *Proc. London Math. Soc. (3)* **26** (1973), 653-680. (Bhama Srinivasan) **48** #4121 20D99
- Stewart, W. B.** Finite simple groups having an element of order three whose centralizer is of order fifteen. *Quart. J. Math. Oxford Ser. (2)* **25** (1974), 9-17. (Bhama Srinivasan) **49** #9071 20D05
- Stewart, W. B.** (with Fletcher, L. R.; Stellmacher, Bernd) Endliche Gruppen, die kein Element der

- Ordnung 6 enthalten. *Quart. J. Math. Oxford Ser. (2)* **28** (1977), no. 110, 143-154. (Gernot Stroth) **56** #5706 20D05
- Stewart, W. J.** (with Jennings, Alan) Simultaneous iteration for partial eigensolution of real matrices. *J. Inst. Math. Appl.* **15** (1975), 351-361. (L. Hageman) **53** #11986 65F15
- Stewartson, Keith** (with Stuart, J. T.) A non-linear instability theory for a wave system in plane Poiseuille flow. *J. Fluid Mech.* **48** (1971), 529-545. (R. Ballabh) **46** #8530 76.35
- (with Hocking, L. M.) On the nonlinear response of a marginally unstable plane parallel flow to a two-dimensional disturbance. *Proc. Roy. Soc. London Ser. A* **326** (1972), 289-313. (William B. Heard) **48** #7761 76.35
- (with Brown, Susan N.; Williams, P. G.) On expansive free interactions in boundary layers. *Proc. Roy. Soc. Edinburgh Sect. A* **74** (1974/75), 271-283 (1976). (W. R. Sears) **56** #7455 76.35
- (with Davey, A.) On three-dimensional packets of surface waves. *Proc. Roy. Soc. London Ser. A* **338** (1974), 101-110. (E. V. Laitone) **50** #1620 76.35
- (with Brown, Susan N.) Asymptotic methods in the theory of rotating fluids. *Asymptotic methods and singular perturbations (Proc. SIAM-AMS Sympos. Appl. Math., New York, 1976)*, pp. 1-21. *SIAM-AMS Proceedings, Vol. X, Amer. Math. Soc., Providence, R.I.*, 1976. (Authors' summary) **58** #25356 76.41
- (with Brown, Susan N.) On Wilhelm's self-similar solutions of the Navier-Stokes equations. *J. Mathematical and Physical Sci.* **10** (1976), no. 3, 197-209. (A. Pozzi) **54** #11950 76.35
- (with Waechter, R. T.) On Stefan's problem for spheres. *Proc. Roy. Soc. London Ser. A* **348** (1976), no. 1655, 415-426. (W. F. Ames) **53** #4756 80.35
- A note on perturbation series in fluid dynamics. *Quart. J. Mech. Appl. Math.* **29** (1976), no. 3, 377-379. (R. C. Ackerberg) **57** #8424 76.41
- (with Daniels, P. G.) On the spatial oscillations of a horizontally heated rotating fluid. *Math. Proc. Cambridge Philos. Soc.* **81** (1977), no. 2, 325-349. (M. N. L. Narasimhan) **55** #7104 76.41 (86.35)
- On the resonant interaction between a surface wave and a weak surface current. *Mathematika* **24** (1977), no. 1, 37-49. (J. W. Miles) **56** #4405 76.41
- (with Murdock, John W.) Spectra of the Orr-Sommerfeld equation. *Phys. Fluids* **20** (1977), no. 9, 1404-1411. (C. R. Illingworth) **58** #8745 76.35
- (with Brown, Susan N.) On thermal convection in a large box. *Studies in Appl. Math.* **57** (1977), no. 3, 187-204. (Jacques Mauss) **57** #8371 76.35
- (with Diver, C.) On moderate injection into a separated supersonic boundary layer, with reattachment. *J. Fluid Mech.* **88** (1978), no. 1, 115-132. (Authors' summary) **58** #19690 76.35 (35Q99)
- (with Daniels, P. G.) Overstable convection in a horizontally heated rotating fluid. *Math. Proc. Cambridge Philos. Soc.* **83** (1978), no. 2, 329-345. (L. R. Mack) **57** #2098 76.35
- (with Brown, Susan N.) On finite amplitude Bénard convection in a cylindrical container. *Proc. Roy. Soc. London Ser. A* **360** (1978), no. 1703, 455-469. (Authors' summary) **58** #3915 76.35
- Stewan, Shelby** Markov models of occupational mobility: theoretical development and empirical support. I. Careers. *J. Mathematical Sociology* **4** (1976), no. 2, 201-245. (Stephen B. Seidman) **57** #5199a 92A20
- Markov models of occupational mobility: theoretical development and empirical support. II. Continuously operative job systems. *J. Mathematical Sociology* **4** (1976), no. 2, 247-278. (Stephen B. Seidman) **57** #5199b 92A20
- (with Schinnar, Arie P.) A class of Markov models of social mobility with duration memory patterns. *J. Math. Sociol.* **6** (1978/79), no. 1, 61-86. (Alexander Mehlmann) **58** #20633 92A20 (60J20)
- Stey, G. C.** (with Gibbard, R. W.) Decay of quantum states in some exactly soluble models. *Physica* **60** (1972), 1-26. (L. S. Schulman) **51** #2540 81.47
- Quantum dynamics in Toeplitz Hamiltonian systems. *Physica* **68** (1973), 213-242. *erratum: ibid.* **73** (1974), 390. (Author's summary) **54** #6781 81.47
- The collision operator, $J(s)$, in Toeplitz Hamiltonian systems. *Physica* **68** (1973), 243-265. (Author's summary) **54** #6782 81.47
- Sur la limite du polynôme de Lommel. (English summary) *Z. Angew. Math. Phys.* **25** (1974), 300-303. (H. M. Srivastava) **49** #7490 33A65 (41A60)
- Steyaert, Herman** A m -terms series-approximation for the cumulative gamma distribution function. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **56** (1970), 1221-1230. (H. E. Fettis) **45** #2214 33A15
- Steyaert, Jean-Marc** (with Flajolet, Philippe) Complexité des problèmes de décision relatifs aux algorithmes de tri. *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 537-548. *North-Holland, Amsterdam*, 1973. (Ronald E. Prather) **54** #4183 68A20 (68A25, 68A30)
- (with Flajolet, Philippe) Decision problems for multihead finite automata. *Mathematical foundations of computer science (Proc. Sympos. and Summer School, Štrbské Pleso, 1973)*, pp. 225-230. *Math. Inst., Slovak Acad. Sci., Bratislava*, 1973. (Howard Swann) **53** #12080 68A25 (02G05)
- (with Flajolet, Philippe) On sets having only hard subsets. *Automata, languages and programming (Second Colloq., Univ. Saarbrücken, Saarbrücken, 1974)*, pp. 446-457. *Lecture Notes in Comput. Sci., Vol. 14, Springer, Berlin*, 1974. (Cristian Calude) **54** #12501 02F25 (68A30)
- (with Flajolet, Philippe) Une généralisation de la notion d'ensemble immune. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge* **8** (1974), no. R-1, 37-48. (S. Feferman) **50** #1858 02F25 (04A20, 68A05)
- (with Flajolet, Philippe) Hiérarchies de complexité et réductions entre problèmes. *Journées algorithmiques (École Norm. Sup., Paris, 1975)*, pp. 53-72. *Astérisque*, No. 38-39, Soc. Math. France, Paris, 1976. (John P. Helm) **56** #15380 02F20 (68A20)
- Sur les index rationnels des feuillages de forêts linéaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 6, A473-A476. (Author's summary) **57** #18268 68A30
- Index rationnel des ETOL-langages. *Les arbres en algèbre et en programmation (Troisième Colloq. de Lille, Lille, 1978)*, pp. 246-249. *Univ. Sci. Tech. Lille*, Lille, 1978. (Editors) **58** #19393 68A30
- Steyn, A. G. W.** (with Crouse, C. F.) Testing the homogeneity of variances against an ordered alternative. *South African Statist. J.* **9** (1975), no. 2, 91-101. (D. G. 53 #4376 62H15
- Steyn, H. S., Jr.** (with Roux, J. J.) Approximations for the non-central Wishart distribution. *South African Statist. J.* **6** (1972), 165-173. (C. G. Khatri) **48** #62H10
- (with Geertsema, J. C.) Nonparametric confidence sequences for the symmetry of a symmetric distribution. *South African Statist. J.* **8** (1974), 25-54 #11650 62G15
- On extensions of the binomial distributions of Bernoulli and Poisson. *South African Statist. J.* **9** (1975), no. 2, 163-172. (Peter Flusser) **53** #6886 62H10
- On the multivariate Poisson normal distribution. *J. Amer. Statist. Assoc.* **71** (1976), no. 353, 233-236. (Donald R. Jensen) **53** #6883 62H05
- (with Swanepoel, J. W. H.) Properties of a nonparametric sequential test of with the view towards applications. *South African Statist. J.* **11** (1977), no. 2, 187-197. (Authors' summary) **56** #13477 62L10 (62E15, 62G10)
- Sthapit, Y. R.** (with Datta, S. K.) Flow past a radially deforming sphere at small Reynolds number. *Simon Stevin* **51** (1977/78), no. 1, 49-56. (S. I. Pai) **57** #2129 76.35
- Stiassnie, Michael** (with Irmay, S.) Viscous parallel flow along cylindrical surfaces described by algebraic polynomials. *Israel J. Tech.* **8** (1970), 289-297. (W. O. Crim Jr.) **54** #1844 76.35
- Propagation of water waves over a source. *Israel J. Tech.* **15** (1977), no. 3, 112-120. (W. R. Sears) **57** #11320 76.35
- Stibitz, G. R.** See *Origins of digital computers*, **50** #6760
- Stichel, P.** (with Brüning, Erwin) On the equivalence of scaling, light-cone singular and asymptotic behaviour of the Jost-Lehmann spectral function. *Comm. Math. Phys.* **36** (1974), 137-156. (I. K. Marek) **49** #10281 81.46
- (with Brüning, Erwin) Asymptotics and light-cone singularities in quantum theory. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 72-84. *Lecture Notes in Phys.*, 39. Springer, Berlin, (Editors) **58** #32610 81.53 (46N05)
- Sticht, D. J.** (with Vincent, Thomas L.; Schultz, D. G.) Sufficiency theorems for capture. Collection of articles dedicated to Professor Adolf Busemann. *J. Optimization Theory Appl.* **17** (1975), no. 5/6, 523-543. (G. N. Mil'stein) **53** #7563 93C15 (90D25, 49E15)
- Stichtenoth, Henning** Über die Automorphismengruppe eines algebraischen Funktionenkörpers von Primzahlcharakteristik. I. Eine Abschätzung der Ordnung der Automorphismengruppe. *Arch. Math. (Basel)* **24** (1973) 527-544. (W.-D. Geyer) **49** #2749 14H05
- Über die Automorphismengruppe eines algebraischen Funktionenkörpers von Primzahlcharakteristik. II. Ein spezieller Typ von Funktionenkörpern. *Arch. Math. (Basel)* **24** (1973), 615-631. (W.-D. Geyer) **53** #8068 14H05
- Algebraische Funktionenkörper einer Variablen mit Teilkörpern von beliebig h Geschlecht. *Arch. Math. (Basel)* **25** (1974), 379-384. (Clifford Queen) **50** #714H05
- Über das Geschlecht eines inseparablen Funktionenkörpers. (English summary) *Manuscripta Math.* **14** (1974), 173-182. (Clifford Queen) **50** #7156 14H05
- Sticker, Bernhard** Mythos und Logos des Fortschritts in der Geschichte der Wissenschaften. Nicolaus Copernicus. *Deutsches Museum—Abh. und Ber.* **42** (1974), 2, 5-18. (Not reviewed) 01A40
- See also *Scriba, Christoph J.*, **58** #10219
- Stickforth, Jürgen** A simplified derivation of Kolosov's theorem of the complex formulation of plane elasticity. *J. Elasticity* **5** (1975), no. 1, 79-82. (Cornelius Horgan) **56** #1869 73.30
- Another regularization of the Kepler problem (technical note). *Celestial Mechanics* **17** (1977), no. 1, 131. (G. V. Hmelevskaja-Plotnikova) **56** #4299 70.34
- Unique distinction of the Lorentz and the anti-de Sitter group in the classical Kepler problem. *Internat. J. Theoret. Phys.* **16** (1977), no. 6, 409-417. (Author's summary) **57** #2251 81.22
- On the complementary Lagrange formalism of classical mechanics. *Amer. J. Math.* **100** (1978), no. 1, 71-73. (K. Mariwalla) **57** #4738a 70.49
- The classical Kepler problem in momentum space. *Amer. J. Phys.* **46** (1978), 74-75. (K. Mariwalla) **57** #4738b 70.49
- Stickler, D. C.** Integral representation for Maxwell's equations with arbitrary time dependence. *Proc. Inst. Elec. Engrs.* **114** (1967), 169-171. (Author's summary) **46** #4858 78.31
- Stidham, Shaler, Jr.** Regenerative processes in the theory of queues, with application to the alternating-priority queue. *Advances in Appl. Probability* **4** (1972), 542-577. (Takács) **50** #3398 60K25
- $L = \lambda W$: a discounted analogue and a new proof. *Operations Res.* **20** (1972), 1115-1126. (R. Subramanian) **49** #10426 93E99
- (with Prabhu, N. U.) Optimal control of queueing systems. *Mathematical models in queueing theory (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1973)*, 263-294. *Lecture Notes in Econom. and Math. Systems*, Vol. 98, Springer, Berlin, (Matthew J. Sobel) **51** #4979 90B99 (60K25, 90C50)
- A last word on $L = \lambda W$. *Operations Res.* **22** (1974), no. 2, 417-421. (R. L. Tweed) **53** #11805 60K25
- Stochastic clearing systems. *Stochastic Processes Appl.* **2** (1974), 85-113. (Sheldon M. Ross) **51** #4475 60K30
- Cost models for stochastic clearing systems. *Operations Res.* **25** (1977), no. 100-127. (John C. Gittins) **56** #4776 90B05 (60K25)
- (with Lippman, Steven A.) Individual versus social optimization in exponential congestion systems. *Operations Res.* **25** (1977), no. 2, 233-247. (K. Hinderer) **55** #13612 60K30 (90C40)
- (with Serfozo, Richard F.) Semi-stationary clearing processes. *Stochastic Processes Appl.* **6** (1977/78), no. 2, 165-178. (Douglas P. Kennedy) **57** #17887 60K30
- Stiebtz, Volkmar** (with Hirche, Joachim; Köhler, Jörg) Ein effektives Lösungsverfahren für das hyperbolische Transportproblem. *Beiträge Anal. Heft 7* (1975), 151-156. (

- er 56 #14722 90C30
- Eduard L.** (with Scheifele, Gerhard) ★Linear and regular celestial mechanics. Perturbed two-body motion, numerical methods, canonical theory. *Die Grundlehren der mathematischen Wissenschaften*, Band 174. Springer-Verlag, New York-Heidelberg, 1974. ix + 301 pp. (V. Szebehely) 56 #4300 70.34 (85.34)
- (with Baumgarte, Joachim W.) Examples of transformations improving the numerical accuracy of the integration of differential equations. *Proceedings of the Conference on the Numerical Solution of Ordinary Differential Equations* (Univ. Texas, Austin, Tex., 1972), pp. 207-236. *Lecture Notes in Math.*, Vol. 362, Springer, Berlin, 1974. (M. Ablow) 49 #11817 65L99
- (with Baumgarte, Joachim W.) Stabilization by manipulation of the Hamiltonian. *Comput. Math. Appl.* 10 (1974), 71-85. (Djordje Djukic) 50 #1593 70.65
- (with Scheifele, Gerhard) ★Линейная и регулярная небесная механика. [Linear and regular celestial mechanics] Возмущенная задача двух тел. Численные методы. Каноническая теория. [Perturbed two-body problem. Numerical methods. Canonical theory] Translated from the English by P. A. Ageev. Edited by V. I. Umberg. Izdat. "Nauka", Moscow, 1975. 303 pp. (Editors) 56 #17293 70.34
- (with Scheifele, Gerhard) A remark on sums of squares in dynamics. (German summary) *Z. Angew. Math. Mech.* 26 (1975), 125-126. (T. Ura) 50 #15501 70.34
- (with Scheifele, Gerhard) Einführung in die numerische Mathematik. Mit Beiträgen von Hans-Rudolf Herz. Fünfte, erweiterte Auflage. Leitfäden der Angewandten Mathematik und Mathematik. Band 2. Teubner Studienbücher, Mathematik. B. G. Teubner, Stuttgart, 1976. (Editors) 55 #4591 65-01
- (with Scheifele, Gerhard) Remarks on the numerical integration of near-parabolic orbits. *Proceedings of the Conference on Mathematical Methods in Celestial Mechanics* (Oberwolfach, Germany, 1974), Part I. *Celestial Mech.* 14 (1976), no. 1, 85-90. (Joseph Ford) 55 #4837 70.65
- (with Scheifele, Gerhard) See also *Proceedings: Oberwolfach Conference on Celestial Mechanics*, 47 #7979; *Proceedings: Conference on Mathematical Methods in Celestial Mechanics*, 54 #14484 and *Proceedings: Conference on Mathematical Methods in Celestial Mechanics*, 54 #14485
- (with Scheifele, Gerhard) The heresy of science: a twelfth-century conceptual revolution. *Isis* 68 (1977), 347-362. (1 plate) (Editors) 58 #26822 01A35
- (with Scheifele, Gerhard) I. See *Jahrestagung: Gesellschaft für Informatik*, 48 #1502
- (with Scheifele, Gerhard) Karl Ibn al Haythams Entdeckung der sphärischen longitudinalen Aberration. (German summary) *Physik—Riv. Internaz. Storia Sci.* 13 (1971), no. 1, 5-12. (E. S. Sedy) 56 #5137 01A35 (01A30)
- (with Scheifele, Gerhard) Leonardo's graphische Methode zur Korrektur der sphärischen longitudinalen Aberration bei den sphärischen konkaven Spiegeln. (Italian summary) *Physik—Riv. Internaz. Storia Sci.* 13 (1971), no. 4, 361-375. (Author's summary) 58 #26854
- (with Scheifele, Gerhard) Sur le problème des représentations de groupe des transformations réelles entières. *Ann. C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A1083-A1086. (Virgil Canu) 47 #5131 20G05 (53C50)
- (with Scheifele, Gerhard) Der Begriff des Isomorphismus und der Darstellung in der Metaphysik von Leibniz. *Des II. Internationalen Leibniz-Kongresses* (Hannover, 1972), Band IV: Logik, Erkenntnistheorie, Methodologie, Sprachphilosophie, pp. 173-186. *Studia Leibnitiana* Vol. XV, Steiner, Wiesbaden, 1975. (Editors) 58 #10069 01A45
- (with Scheifele, Gerhard) Das Problem der sphärischen Aberration und seine Lösung durch Isaac Newton: Beitrag zur Geschichte der Theorie der optischen Instrumente. *Technikgeschichte* 44 (1977), no. 2, 121-152. (M. Kline) 56 #51 01A50
- (with Scheifele, Gerhard) Andreas Eine Spektralsequenz in der stetigen Kohomologietheorie topologischer Gruppen. (English summary) *Manuscripta Math.* 16 (1975), no. 2, 151-168. (D. B. Fuks) 47 #4127 57F10 (55H25)
- (with Scheifele, Gerhard) Michael Eine Verallgemeinerung des Begriffs der Fastkonvergenz. *Math. Japon.* 23 (1973), 53-70. (J. P. King) 50 #10593 40C05
- (with Scheifele, Gerhard) Durch Matrizenfolgen erklärte Konvergenzbegriffe und ihre Wirkfelder. *Math. Z.* 118 (1973), 235-249. (J. Siddiqui) 50 #830 40H05
- (with Scheifele, Gerhard) Matrixtransformationen von unvollständigen Folgenräumen. *Math. Z.* 133 (1973), 32. (G. E. Peterson) 49 #926 40J05
- (with Scheifele, Gerhard) Singuläre Hermite-Birkhoff-Funktionale. *Math. Z.* 145 (1975), no. 3, 293-300. (M. Karon) 52 #14748 41A05
- (with Scheifele, Gerhard) Singuläre Hermite-Birkhoff-Funktionale. *Z. Angew. Math. Mech.* 55 (1975), no. 9, 32. (John M. Karon) 52 #3802 41A05
- (with Scheifele, Gerhard) Tietz, Hubert Matrixtransformationen in den Raum der quasikonvexen Folgen. *Arch. Math. (Basel)* 28 (1977), no. 5, 498-502. (Kazuo Ishiguro) 56 #9135 (46A45)
- (with Scheifele, Gerhard) Tietz, Hubert Matrixtransformationen quasikonvexer Folgen. *Hokkaido J. Math.* 6 (1977), no. 1, 10-15. (J. P. King) 56 #917 40H05
- (with Scheifele, Gerhard) Tietz, Hubert Matrixtransformationen von Folgenräumen. Eine Übersicht. *Math. Z.* 154 (1977), no. 1, 1-16. (From the authors' introduction) 5109 00A20 (40C05, 46A45)
- (with Scheifele, Gerhard) Beste Quadraturformeln für Integrale mit einer Gewichtsfunktion. (English summary) *Monatsh. Math.* 84 (1977), no. 3, 247-258. (T. J. Rivlin) 58 #23295
- (with Scheifele, Gerhard) T. J. See *Ozigova, E. P.*, 58 #16068
- (with Scheifele, Gerhard) Jan (with van der Kallen, Wilberd; Maazen, Hendrik) A presentation for some representations. *Bull. Amer. Math. Soc.* 81 (1975), no. 5, 934-936. (Keith Dennis) 51 #12993 25
- (with Scheifele, Gerhard) Jan (with Maazen, Hendrik) A presentation for K_2 of split radical pairs. *J. Pure Appl. Math.* 10 (1977/78), no. 3, 271-294. (F. E. A. Johnson) 57 #12485 13D15
- (with Scheifele, Gerhard) (with Schips, B.) Autokorrelationstests und autoregressive Schätzverfahren. (English and Russian summaries) *Z. Angew. Math. Mech.* 52 (1972), 273-282. (W. Mann) 47 #4400 62J05
- (with Scheifele, Gerhard) See also *Operations Research-Verfahren*, 50 #9307
- (with Scheifele, Gerhard) See *Stiefel, Eduard L.*
- (with Scheifele, Gerhard) Michael See *Fribus, E. A.*, 46 #6978; *Brooke, Maxey*, 55 #12412; *Černova, M.*, 56 #21079 and *Fribus, E. A.*, 58 #21082
- (with Scheifele, Gerhard) J. On the efficacy of r -on- m redundancy. *IEEE Trans. Reliab.* R-23 (1974), no. 43. (K. Sarkadi) 54 #14292 62N05
- (with Blake, Ian F.) An infinite class of generalized Room squares. *Discrete Math.* 12 (1975), 159-163. (W. D. Wallis) 51 #5343 05B30
- (with Blake, Ian F.) A construction method for generalized Room squares. *Aequationes Math.* 14 (1976), no. 1/2, 83-94. (Spyros S. Magliveras) 54 #10050 05B30
- See also *Cybernetics collection*, 50 #16063
- Stiffler, Price, Jr.** See *Global structure theories for finite semigroups*, 58 #950
- Stigler, Stephen M.** The estimation of the probability of extinction and other parameters associated with branching processes. *Biometrika* 58 (1971), 499-508. (K. Dietz) 47 #2766 62M05 (60J80)
- (with Stigler, Stephen M.) The asymptotic distribution of the trimmed mean. *Ann. Statist.* 1 (1973), 472-477. (W. Hoeffding) 50 #11589 62E20
- (with Stigler, Stephen M.) Studies in the history of probability and statistics. XXXII. Laplace, Fisher, and the discovery of the concept of sufficiency. *Biometrika* 60 (1973), 439-445. (R. J. Buehler) 48 #5214 62-03 (01A55)
- (with Stigler, Stephen M.) Simon Newcomb, Percy Daniell, and the history of robust estimation 1885-1920. *J. Amer. Statist. Assoc.* 68 (1973), 872-879. (N. Giri) 50 #15015 62-03
- (with Stigler, Stephen M.) Linear functions of order statistics with smooth weight functions. *Ann. Statist.* 2 (1974), 676-693. (J. V. Deshpande) 51 #9354 62G35 (62E20)
- (with Stigler, Stephen M.) Studies in the history of probability and statistics. XXXIII. Cauchy and the witch of Agnesi: an historical note on the Cauchy distribution. *Biometrika* 61 (1974), 375-380. (R. J. Buehler) 51 #7061 62-03
- (with Stigler, Stephen M.) Gergonne's 1815 paper on the design and analysis of polynomial regression experiments. (French summary) *Historia Math.* 1 (1974), 431-447. (D. J. Struik) 58 #10117 01A55 (62-03)
- (with Stigler, Stephen M.) Studies in the history of probability and statistics. XXXIV. Napoleonic statistics: the work of Laplace. *Biometrika* 62 (1975), no. 2, 503-517. (Author's summary) 55 #9342 62-03
- (with Stigler, Stephen M.) The transition from point to distribution estimation. (French summary) With discussion. *Proceedings of the 40th Session of the International Statistical Institute* (Warsaw, 1975), Vol. 2. Invited papers. *Bull. Inst. Internat. Statist.* 46 (1975), no. 2, 332-340, 355-360 (1976). (H. O. Lancaster) 57 #4377 62-03 (01A55)
- (with Stigler, Stephen M.) The anonymous Professor Gergonne. *Historia Math.* 3 (1976), 71-74. (Editors) 58 #15976 01A55
- (with Stigler, Stephen M.) The effect of sample heterogeneity on linear functions of order statistics, with applications to robust estimation. *J. Amer. Statist. Assoc.* 71 (1976), no. 356, 956-960. (Lionel Weiss) 56 #1584 62G35 (62G30)
- (with Stigler, Stephen M.) Do robust estimators work with real data? With discussion and a reply by the author. *Ann. Statist.* 5 (1977), no. 6, 1055-1098. (M. M. Siddiqui) 56 #13444 62G35
- (with Stigler, Stephen M.) An attack on Gauss, published by Legendre in 1820. (French summary) *Historia Math.* 4 (1977), 31-35. (Editors) 58 #4886 (E 58 #15975) 01A55
- (with Stigler, Stephen M.) Eight centuries of sampling inspection: the trial of the Pyx. *J. Amer. Statist. Assoc.* 72 (1977), no. 359, 493-500. (Author's summary) 58 #15933 01A50 (62N10)
- (with Stigler, Stephen M.) Fractional order statistics, with applications. *J. Amer. Statist. Assoc.* 72 (1977), no. 359, 544-550. (S. A. Book) 56 #4047 62G30 (62M99)
- (with Stigler, Stephen M.) Mathematical statistics in the early states. *Ann. Statist.* 6 (1978), no. 2, 239-265. (H. O. Lancaster) 58 #3137 62-03 (01A55)
- (with Stigler, Stephen M.) See also *Savage, Leonard Jimmie*, 53 #7698; *Newbold, Paul; et al.*, 56 #9865 and *Šteinić, O. B.*, 58 #15975
- Stiglitz, Joseph E.** (with Cass, David) The structure of investor preferences and asset returns, and separability in portfolio allocation: a contribution to the pure theory of mutual funds. *J. Econom. Theory* 2 (1970), 122-160. (G. Tintner) 53 #2298 90A10
- (with Stiglitz, Joseph E.) (with Rothschild, Michael) Increasing risk. I. A definition. *J. Econom. Theory* 2 (1970), 225-243. (From the introduction) 58 #20284a (E 58 #20284b) 90A05 (62B15)
- (with Stiglitz, Joseph E.) (with Rothschild, Michael) Increasing risk. II. Its economic consequences. *J. Econom. Theory* 3 (1971), 66-84. (From the introduction) 58 #20284c 90A05 (62B15)
- (with Stiglitz, Joseph E.) (with Rothschild, Michael) Addendum to: "Increasing risk. I. A definition". *J. Econom. Theory* 5 (1972), no. 2, 306. (Editors) 58 #20284b 90A05 (62B15)
- (with Stiglitz, Joseph E.) (with Rothschild, Michael) Some further results on the measurement of inequality. *J. Econom. Theory* 6 (1973), no. 2, 188-204. (Authors' introduction) 56 #7869 90A15 (92A20)
- (with Stiglitz, Joseph E.) (with Diamond, Peter A.) Increases in risk and in risk aversion. *J. Econom. Theory* 8 (1974), no. 3, 337-360. (From the introduction) 58 #15003 90A05
- (with Stiglitz, Joseph E.) (with Lau, Lawrence J.; Sheshinski, Eytan) Efficiency in the optimum supply of public goods. *Econometrica* 46 (1978), no. 2, 269-284. (Mamoru Kaneko) 58 #4206 90A05
- Štigrad, G.** A remark on polynomial projection operators with minimal norm. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astron. Vyp.* 2 (1974), 165-166, 175. (T. Bojanov) 50 #5298 41A35
- Stigum, Bernt P.** ★Asymptotic properties of dynamic stochastic parameter estimates. I. MRC Technical Summary Rep. No. 1264. *Mathematics Research Center, University of Wisconsin, Madison, Wis.*, 1972. ii + 40 pp. (E. J. Hannan) 51 #7204 62M10
- ★Asymptotic properties of dynamic stochastic parameter estimates. II. MRC Technical Summary Rep. No. 1269. *Mathematics Research Center, University of Wisconsin, Madison, Wis.*, 1972. ii + 34 pp. (E. J. Hannan) 51 #7205 62M10
- (with Stigum, Bernt P.) Finite state space and expected utility maximization. *Econometrica* 40 (1972), 253-259. (J. H. Blau) 48 #7913 90A10
- (with Stigum, Bernt P.) Resource allocation under uncertainty. *Internat. Econom. Rev.* 13 (1972), 431-459. (Michael D. Intriligator) 52 #4950 90A10
- (with Stigum, Bernt P.) Balanced growth under uncertainty. *J. Econom. Theory* 5 (1972), no. 1, 42-68. (José A. Scheinkman) 56 #17747 90A15
- (with Stigum, Bernt P.) Competitive equilibria with infinitely many commodities. *Metroecon.* 24 (1972), 221-244. (Georg Bol) 51 #2605 90A15
- (with Stigum, Bernt P.) Revealed preference—a proof of Houthakker's theorem. *Econometrica* 41 (1973), 411-423. (From the author's text) 55 #14092 90A05
- (with Stigum, Bernt P.) Competitive equilibria with infinitely many commodities. II. *J. Econom. Theory* 6 (1973), no. 5, 415-445. (Georg Bol) 53 #15311 90A15
- (with Stigum, Bernt P.) Asymptotic properties of dynamic stochastic parameter estimates. III. *J.*

- Multivariate Anal.* **4** (1974), 351-381. (E. J. Hannan) **51** #7206 62M10
Asymptotic properties of autoregressive integrated moving average processes.
Stochastic Processes Appl. **3** (1975), no. 4, 315-344. (E. J. Hannan) **52** #15913 62M10
Asymptotic properties of dynamic stochastic parameter estimates. I. *Ann. Inst. Statist. Math.* **28** (1976), no. 1, 49-75. (Editors) **53** #6944 62M10
Least squares and stochastic difference equations. *J. Econometrics* **4** (1976), no. 4, 349-370. (Peter M. Robinson) **55** #11530 62M10 (62E20)
See also Radner, Roy, **55** #14140
- Stihl, M.** Threshold behaviour and the generalized Jost function formalism. (French summary) *Rev. Roumaine Phys.* **20** (1975), no. 2, 157-163. (K. T. Mahanthappa) **55** #4999 81.33
Iterative solution of the partial-wave scattering problem. (French summary) *Rev. Roumaine Phys.* **20** (1975), no. 6, 565-584. (Y. Avishai) **52** #9884 81.45
- Stihl, Theodor** A case of decidability in the first order predicate calculus. (Romanian) *Problems of logic, Vol. V (Romanian)*, pp. 257-265. Editura Acad. R.S.R., Bucharest, 1973. (G. Georgescu) **58** #195 02G05
Une généralisation du carré logique. *Notre Dame J. Formal Logic* **14** (1973), 215-223. (J. P. Seldin) **49** #8809 02B10
An example of ontological logic. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 10, 1471-1476. (Author's summary) **57** #5697 02C99
- Stijns, Erik** (with Ronsmans, Philippe) Stability problems for a three-mode gas laser. (Dutch. English summary) *Med. Konink. Acad. Wetensch. Lett. Schone Kunst. België KI. Wetensch.* **36** (1974), no. 5, 53 pp. (1 fold-out) (Authors' summary) **55** #3440 34D99
- Stiklakyte, L.** The nonholonomic hypersurface of a generalized Euclidean space. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **11** (1971), 669-682. (K. Svoboda) **45** #7632 53A40
- Stilbans, L. S.** See Ioffe, A. F., **54** #2403
- Stiles, J. A.** (with Forsy, L. J.; Heffes, Harry; Holtzman, J. M.; Horing, S.; Messerli, E. J.; Schwartz, M. I.) A study of the analysis and control of the flow of air traffic. I, II, III. *Networks* **1** (1971/72), 15-42; *ibid.* **1** (1971/72), 209-243; *ibid.* **1** (1971/72), 303-331. **46** #8650 90B15
See also Control in space, **48** #13319
- Stiles, P. J.** (with Buchdahl, H. A.; Buchdahl, N. P.) On a relation between spherical and spherical harmonics. *J. Phys. A* **10** (1977), no. 11, 1833-1836. (W. Witschel) **57** #6542 33A45
- Stiles, Wilbur J.** On non locally p -convex spaces. *Colloq. Math.* **23** (1971), 261-262. (T. L. Hicks) **46** #9683 46A15
(with Levin, Mark) On the regularity of measures on locally compact spaces. *Proc. Amer. Math. Soc.* **36** (1972), 201-206. (T. P. Srinivasan) **47** #5207 28A32
Some properties of l_p , $0 < p < 1$. *Studia Math.* **42** (1972), 109-119. (J. T. Marti) **46** #7840 46A15
(with Lohman, Robert H.) On separability in linear topological spaces. *Proc. Amer. Math. Soc.* **42** (1974), 236-237. (M. M. Day) **48** #4694 46A99
(with Schonefeld, Steven) On the inductive limit of $\bigcup l_p$, $0 < p < 1$. *Studia Math.* **56** (1976), no. 3, 277-286. (R. H. Lohman) **55** #3743 46A45
(with Schonefeld, Steven) On the sequence space $l_{(p_n)}$, $0 < p_n < 1$. *Trans. Amer. Math. Soc.* **225** (1977), 243-257. (C. Bessaga) **56** #6337 46A45 (46A15)
- Stillinger, Frank H.** Pair distribution in the classical rigid disk and sphere systems. *J. Computational Phys.* **7** (1971), 367-384. (R. Kubo) **45** #1537 82.62
Axiomatic basis for spaces with noninteger dimension. *J. Mathematical Phys.* **18** (1977), no. 6, 1224-1234. (Author's summary) **55** #7251 82.54
- Stillman, Neil J.** (with Stillman, Rona B.) On software validation. *Survey of combinatorial theory (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971)*, pp. 429-436. North-Holland, Amsterdam, 1973. (Leon Levy) **50** #9040 68A05
- Stillman, Rona B.** (with Stillman, Neil J.) On software validation. *Survey of combinatorial theory (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971)*, pp. 429-436. North-Holland, Amsterdam, 1973. (Leon Levy) **50** #9040 68A05
The concept of weak substitution in theorem-proving. *J. Assoc. Comput. Mach.* **20** (1973), 648-667. (L. W. Szczerba) **49** #4334 68A40
- Stillwell, John** (with Crossley, John N.; Ash, C. J.; Brickhill, C. J.; Williams, N. H.) ★What is mathematical logic? Oxford Paperbacks University Series, No. 60. Oxford University Press, London-New York, 1972. ix+82 pp. (Gabriel Lolli) **54** #2411 02-01
Decidability of the "almost all" theory of degrees. *J. Symbolic Logic* **37** (1972), 501-506. (G. E. Sacks) **50** #1863 02F30 (02G05)
Concise survey of mathematical logic. *J. Austral. Math. Soc. Ser. A* **24** (1977), no. 2, 139-161. (From the author's introduction) **57** #5655 02-01
- Štil'man, M. S.** A certain approach to the problem of optimizing the work of a loading platform. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy* No. 413 (1972), 89-96, 168. (C. Berghaller) **48** #3505 90C30
(with Germeier, Ju. B.) Noncooperative recursive games with arbitrary discounting. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 1, 22-25. (M. Iosifescu) **53** #10335 90D20
The state of equilibrium in discrete stationary games with a criterion of mean income. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy Vyp. 510 Prikl. Mat. i Zadaci Železnodorož. Transporta* (1976), 24-32, 129-130. (Author's summary) **56** #14774 90D15
(with Gorelik, V. A.) A game approach to the choice of function structure of a two-level system under conditions of indeterminacy. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 5, 24-30 (Russian); translated as *Engrg. Cybernet.* **15** (1977), no. 5, 11-17 (1978). (Kåre M. Mjelde) **58** #9353 90D99
See also Applied mathematics and transportation problems, **52** #13064
- Stimm, H.** (with Schnorr, Claus-Peter) Endliche Automaten und Zufallsfolgen. (English summary) *Acta Informat.* **1** (1971/72), no. 4, 345-359. (Authors' summary) **55** #10169 94A30
- Stimson, A.** The influence of the Royal Observatory at Greenwich upon the design of 17th and 18th century angle-measuring instruments at sea. The origins, achievement and influence of the Royal Observatory, Greenwich: 1675-1975 (Proc. 4th Joint Sympos. Internat. Astronom. Union and Union Internat. Histoire et Philos. Sci., Greenwich, 1975). *Vistas Astronom.* **20** (1976), no. 1-2, 123-130. (J. S. Joel) **58** #15934 00-00
- Stinaff, R. D.** (with Helgert, Hermann Josef) Shortened BCH codes. *IEEE Trans. Information Theory* **IT-19** (1973), 818-820. (S. Guisgu) **50** #16081 94A10
- Stinaff, Russell D.** (with Helgert, Hermann Josef) Minimum-distance bounds for linear codes. *IEEE Trans. Information Theory* **IT-19** (1973), 344-356. (Authors' summary) **51** #7711 94A10
- Stinchcomb, Grace** (with Baird, L. C.) Generalized perturbation series. *Transport Statist. Phys.* **3** (1973), 199-214. (Authors' summary) **51** #7511 81.35
- Stine, Gail Caldwell** Hintikka on quantification and belief. *Noûs* **3** (1969), no. 4, 399-412. (From the introduction) **58** #5070 02C10
- Stinebrunner, Ralph** On maximal Goldie subrings of absolutely semiprime Goldie *Kyungpook Math. J.* **12** (1972), 19-26. (J. Luh) **46** #1824 16A12
- Stineman, Russell W.** Calculation of a constrained minimal symmetric matrix. *SIAM Appl. Math.* **27** (1974), 500-502. (B. Levinger) **50** #4607 15A09
- Stingl, M.** (with Rinat, A. S.) Complete angular momentum analysis of Faddeev-Lomonosov equations based on non-central pair forces. *Nuclear Phys. A154* (1970), 613-625. (Hurst) **45** #1496 81.22
- Stingl, Peter** (with Roth, Dieter) ★Mathematik für Fachhochschulen. Studienbücher Technischen Wissenschaften. Carl Hanser Verlag, Munich-Vienna, 1977. viii+318 pp. ISBN 3-446-12166-8 (V. Komkov) **57** #9 00A05
- Stingl, Volker** Eine Kennzeichnung der endlichen einfachen Gruppe der Ordnung 60. *Acta Sci. Math. (Szeged)* **37** (1975), 125-141. (Peter M. Neumann) **54** #2786 20D05
- Stinson, Douglas** Determination of a packing number. *Ars Combinatoria* **3** (1977), 81-85. (Cyril W. L. Garner) **56** #8403 05B40
- Stipančić, Ernest** Michel Petrovitch, illustre mathématicien yougoslave (à l'occasion du centenaire de sa naissance). *Arch. Internat. Histoire Sci.* **21** (1968), no. 84-85, 29-30. (Not reviewed) **01A70**
Conspectus resolutionis et compositionis of Marin Getaldic. (Serbo-Croatian. English summary) *Fifth Congress of Mathematicians, Physicists and Astronomers of Yugoslavia (Ohrid, 1970), Vol. I, Mathematics (Macedonian)*, pp. 161-165. *Sojuz Društvo. Matematika i Astronom. Jugoslav.*, Skopje, 1973. (J. S. Joel) **58** #15907 01A45
The problem of parallels as studied by Federik Grisogono. (Serbo-Croatian. English summary) *Mat. Vesnik* **10(25)** (1973), 369-377. (Ju. M. Gaiduk) **50** #21 01A45
- Stipečević, Z.** The possibility of applying noncommutative algebra to combinatorics. (Serbo-Croatian. English summary) *Proceedings of the Fifth Congress of Mathematicians and Astronomers of Yugoslavia (Ohrid, 1970), Vol. I, Mathematics (Macedonian)*, pp. 121-124. *Sojuz Društvo. Mat., Fiz. i Astronom. Jugoslav.*, Skopje, 1973. (V. D. Belousov) **58** #21661 05A19
- Štípl'man, Ja. I.** Valuations of the s field of quotients of a ring of quantum mechanics. (Russian) *Funkcional. Anal. i Priložen.* **7** (1973), no. 1, 56-63. (L. Bokut') **47** #12310 (81.22)
- Štípl, Miloš** (with Nečas, Jindřich) A paradox in the theory of linear elasticity. (Czech. loose Russian summaries) *Apl. Mat.* **21** (1976), no. 6, 431-433. (T. Bryant M. J. Stirling) **54** #11914 73.35
- Stippes, Marvin** Flux functions and balance laws. *J. Elasticity* **1** (1971), no. 2, 173-184. (Editors) **57** #18417 73.53
Linear plane waves, scalar wave equations and Kelvin's problem. Special issue dedicated to A. E. Green. *J. Elasticity* **5** (1975), no. 3-4, 337-339. (Author's summary) **57** #11267 73.35
- Stiranka, A. I.** On the question of the representation of information in the automatic control of a certain production. (Russian) *Mathematical provisioning of electronic digital computers and effective organization of the computing process (Proc. Sem., Kiev, 1968/1969)*, (Russian), pp. 37-47. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (D. Obradović) **46** #94A15
- Stirl, P. J.** See Fachtagung: Gesellschaft für Informatik, Programmiersprachen, **48** #13064
- Stirling, D. S. G.** (with Bonsall, Frank F.) Square roots in Banach *-algebras. *Glasnik Mat. J.* **13** (1972), 74. (N. Suzuki) **47** #843 46K05
Perturbations of operators which leave capacity invariant. *J. London Math. Soc.* **10** (1975), 75-78. (Bernard B. Morrell) **51** #3939 47A65
The joint capacity of elements of Banach algebras. *J. London Math. Soc.* **10** (1975), 212-218. (Robin Harte) **51** #6424 46H05
- Stirzaker, D. R.** A perturbation method for the stochastic recurrent epidemic. *J. Math. Appl.* **15** (1975), 135-160. (L. Billard) **53** #7541 92A15
On models for an epidemic. *J. Inst. Math. Appl.* **18** (1976), no. 2, 135-141. (Dietz) **55** #10067 92A15
- Stitzinger, Ernest L.** On a theorem of D. W. Barnes. *Canad. Math. Bull.* **14** (1971), 583-584. (N. R. Wallach) **48** #353 17B05
Covering-avoidance for saturated formations of solvable Lie algebras. *Math. Z.* **172** (1972), 237-249. (T. O. Hawkes) **45** #6881 17B30
Errata to two papers of Stitzinger. *Proc. Amer. Math. Soc.* **34** (1972) 631-632. (Bechtell) **45** #3571 20D15
On saturated formations of solvable Lie algebras. *Pacific J. Math.* **47** (1973), 531-538. (R. W. Carter) **49** #366 17B30
Standard and alternative algebras with completely reducible derivation algebras. *Proc. Amer. Math. Soc.* **43** (1974), 57-62. (D. Rodabaugh) **48** #11239 17D05
(with Chao, Chong Yun) Subinvariance in solvable Lie algebras. *Canad. J. Math.* **28** (1975), no. 1, 181-185 (1976). (Ralph K. Amayo) **52** #13959 17B30
Malcev algebras with J_2 -potent radical. *Proc. Amer. Math. Soc.* **50** (1975), 1-4. (S. Ravisankar) **51** #10424 17E05
A nonembedding theorem for algebras. *Proc. Amer. Math. Soc.* **50** (1975), 1-4. (D. Rodabaugh) **51** #10401 17Axx
(with Chao, Chong Yun) On nilpotent Lie algebras. *Arch. Math. (Basel)* **27** (1976), no. 3, 249-252. (Donald W. Barnes) **53** #13332 17B30
On derivation algebras of Malcev algebras and Lie triple systems. *Proc. Amer. Math. Soc.* **55** (1976), no. 1, 9-13. (A. A. Sagale) **53** #575 17E05
On derivation algebras of Malcev algebras. *Proc. Amer. Math. Soc.* **62** (1976), 31-33 (1977). (A. A. Sagale) **54** #12849 17E05
On the commutativity of semi-simple associative algebras. *Canad. Math. Bull.* **20** (1977), no. 4, 485-487. (A. O. Morris) **57** #12611 16A72

- notes on nilpotency and standard algebras. *Proc. Amer. Math. Soc.* **62** (1977), 206-210. (T. S. Ravisankar) **55** #8121 17A30
- nilpotent algebras. *Illinois J. Math.* **22** (1978), no. 3, 499-505. (C. Y. Chao) **50** #8087 17A30 (17B30, 20E05)
- Wrence E. (with Lin, Pi Erh) On difference of means with incomplete data. *Prilika* **61** (1974), 325-334. (Somesh Das Gupta) **55** #1621 62H15
- L. I. ★Логика с элементами математической логики. (Russian) [Logic with the elements of mathematical logic] A textbook. *Moskov. Gosudarstv. Istor.-Arhiv. Inst.*, v. 1974. 163 pp. (Max I. Kanovich) **53** #10541 02-01
- A. G. On the problem of constructing metacyclic fields of prime degree. *Ann. Soerdlowsk. Gos. Ped. Inst. Učen. Zap. Sb. 125 Mat. No. 4* (1971), 75-80. (W. Swicz) **52** #10702 12E10
- E. K. A study of stability in the critical case of two zero roots for systems with feedback. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9**, no. 2, 111-124, 146 (1975). (Š. Pavik) **53** #3466 34K20
- Ralph C. (with Draper, Norman R.) D-optimality for regression designs: a *Technometrics* **17** (1975), 15-23. (R. H. Farrell) **51** #9390 62K05 (62J05)
- with Draper, Norman R.) Designs in three and four components for mixtures with inverse terms. *Technometrics* **19** (1977), no. 2, 117-130. (Valery Fedorov) **56** #3680 62K05
- See Stewart, Alan
- Donald F. On oscillation of complex linear differential systems. *Proc. Amer. Math. Soc.* **36** (1972), 191-194. (T. L. Sherman) **47** #7099 34A20 (34C10)
- transformation and oscillation of linear differential systems. *Canad. J. Math.* **29** no. 2, 392-399. (L. Erbe) **55** #774 34C10
- Gang G. Zur Bestimmung der Negation in der Handlungslogik. *Philos. Natur.* **18** (1979), no. 1, 99-104. (Curt Christian) **58** #5041 02C05
- E. D. (with Makarevskii, A. Ja.) Representability in deterministic multitype automata. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 4, 29-38. *Kibernetika* **1970** #2 G160 **46** #1510 94A30
- multitype deterministic automata without end markers. *Avtomat. i Telemekh.* **1971**, 105-110. (Russian. English summary); translated as *Automat. Remote Control* **33** no. 9, part 2, 1435-1439 (1973). (H. Jürgensen) **51** #2889 02F15 (68A25)
- Hitt-Marie (with Wallin, Hans) Generalizations of a fundamental theorem in binary analysis. (Swedish. English summary) *Nordisk Mat. Tidskr.* **24** (1976), no. 1, 43. (S. D. Chatterji) **54** #10521 26A24
- g, Bernd Subspaces of weak and oriented Tchebyshev-spaces. *Manuscripta Math.* **20** (1977), no. 4, 401-407. (Hans Strauss) **56** #936 41A50
- the number of zeros of functions in a weak Tchebyshev-space. *Math. Z.* **156** no. 1, 49-57. (Allan Pinkus) **58** #6868 41A65
- lph Note on quasifibrations and manifolds. *Proc. Amer. Math. Soc.* **43** (1974), 15. (P. J. Kahn) **48** #12523 55F15
- th Heimes, Reinhard) Coverings of surfaces. *Arch. Math. (Basel)* **30** (1978), no. 1, 187. (M. L. Curtis) **58** #12995 55A10
- ernd Über das Spektrum einer Klasse von Vektordifferentialoperatoren. *Publ. Debrecen* **17** (1970), 41-55 (1971). (B. Hellwig) **46** #6099 47F05 (35P05)
- also Kolmogorov, A. N.; et al., **56** #6323
- Dieter Die Zerlegungsmatrizen der symmetrischen Gruppen S_{12} und S_{13} zur Teil 2. *Comm. Algebra* **7** (1979), no. 1, 39-45. (Author's summary) **58** #22270
- D. (with Imrich, Wilfried) Optimal embeddings of metrics into graphs. *Dokl. Akad. Nauk SSSR* **200** (1971), 279-281. (H. Fleischner) **45** #106
- normal grammars and restrictions of derivation. (Russian) *Problemy Peredači Informacii* **7** (1971), no. 1, 87-101. (Branislav Rován) **47** #2868 68A30
- derivation control in formal grammars. (Russian) *Problemy Peredači Informacii* **7** no. 3, 87-102. (Branislav Rován) **47** #2869 68A30
- generalized grammars and their properties. (Russian) *Investigations in mathematical linguistics, mathematical logic and information languages (Russian)*, pp. 1-18. "Nauka", Moscow, 1972. (See RŽMat **1972** #6 V631) **68A30**
- additional grammars with scattered context. (Russian) *Dokl. Akad. Nauk SSSR* **1972**, 796-799. (Branislav Rován) **47** #4494 68A30
- comments on M. K. Levitina's article "Some grammars with global substitution" (Russian. English summary) *Naučn.-Tehn. Informacija (VINITI) Ser. 2. Informacionnyye Processy i Sistemy* **1972**, no. 3, 37-38, 40. (M. Novotný) **48** #7672
- certain strict hierarchies of languages. (Russian. English summary) *Naučn.-Tehn. Informacija (VINITI) Ser. 2. Informacionnyye Processy i Sistemy* **1972**, no. 4, 40-45, 48. (Author's summary) **55** #13891 68A30
- th Imrich, Wilfried) The optimal embeddings of metrics into graphs. (Russian) *Mat. Ž.* **13** (1972), 558-565. (H. Fleischner) **45** #6675 05C10
- context-free grammars with restricted applicability of the deduction rules. (Russian) *Mathematical linguistics (Russian)*, pp. 114-129. *Izdat. "Nauka", Moscow*, 1973. (See *1974* #4 V760; *MR* **48** #3312) **68A30**
- generalized grammars and their properties. *Soviet papers in formal linguistics, Vol. 1. Mathematical models of language*, pp. 269-284. *Linguistische Forschungen, Band 18*, *de Gruyter, Frankfurt am Main* 1973. (M. Novotný) **57** #1984 68A30
- the properties of conditional grammars with scattered context. (Russian) *Studies in formalized languages and nonclassical logics (Russian)*, pp. 7-22. *Izdat. "Nauka", Moscow*, 1974. (A. V. Anisimov) **56** #7356 68A30
- the algorithmic properties of conditional grammars with scattered context. *Dokl. Akad. Nauk SSSR* **216** (1974), 994-997. (A. Ja. Dikovskii) **51** #4745
- th Maslov, A. N.) Certain classes of formal grammars. (Russian) *Probability and Mathematical statistics. Theoretical cybernetics, Vol. 12 (Russian)*, pp. 155-187. (Author's summary) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, Martii Penttonen) **53** #7146 68A30
- multiple period theorem for conditional grammars. (Russian) *Studies in set theory and nonclassical logics (Russian)*, pp. 192-197. *Izdat. "Nauka", Moscow*, 1976. (A. Ja. Dikovskii) **57** #18269 68A30
- (with Kats, Boris E.) Superstructures of generating grammars, and the property of semilinearity. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 2, 95-97. (T. Rus) **54** #4200 68A30
- See also Languages and automata, **55** #1857
- Stockmayer, E. (with Süsse, R.) Analytisch-iterative Methode zur Berechnung nichtlinearer Gleichstromnetzwerke. *Wiss. Z. Techn. Hochsch. Ilmenau* **24** (1978), no. 1, 121-138. (András Recski) **57** #19148 94A20
- Stockmeyer, Larry J. (with Meyer, Albert R.) Word problems requiring exponential time: preliminary report. *Fifth Annual ACM Symposium on Theory of Computing (Austin, Tex., 1973)*, pp. 1-9. *Assoc. Comput. Mach., New York*, 1973. (Forbes D. Lewis) **54** #6557 68A20 (02F47)
- (with Fischer, Michael J.) Fast on-line integer multiplication. *Fifth Annual ACM Symposium on Theory of Computing (Austin, Tex., 1973)*, pp. 67-72. *Assoc. Comput. Mach., New York*, 1973. (Editors) **53** #14977 68A20
- (with Paterson, Michael S.) On the number of nonscalar multiplications necessary to evaluate polynomials. *SIAM J. Comput.* **2** (1973), 60-66. (Authors' summary) **47** #2790 65D20 (68A20)
- (with Garey, Michael R.; Johnson, David Siffler) Some simplified NP-complete problems. *Sixth Annual ACM Symposium on Theory of Computing (Seattle, Wash., 1974)*, pp. 47-63. *Assoc. Comput. Mach., New York*, 1974. (Shimon Even) **54** #6549 68A20
- (with Pratt, Vaughan R.; Rabin, Michael O.) A characterization of the power of vector machines. *Sixth Annual ACM Symposium on Theory of Computing (Seattle, Wash., 1974)*, pp. 122-134. *Assoc. Comput. Mach., New York*, 1974. (Editors) **56** #10152 68A25
- (with Fischer, Michael J.) Fast on-line integer multiplication. *Fifth Annual ACM Symposium on Theory of Computing (Austin, Tex., 1973)*. *J. Comput. System Sci.* **9** (1974), 317-331. (Sven-Åke Gustafson) **53** #4613 68A20
- (with Rosenberg, Arnold L.) Hashing schemes for extendible arrays (extended abstract). *Seventh Annual ACM Symposium on Theory of Computing (Albuquerque, N.M., 1975)*, pp. 159-166. *Assoc. Comput. Mach., New York*, 1975. (Editors) **56** #1663 68A50
- (with Chandra, Ashok K.) Alternation. *17th Annual Symposium on Foundations of Computer Science (Houston, Tex., 1976)*, pp. 98-108. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Authors' summary) **58** #25107 68A20 (02F15, 94A30)
- (with Lipton, Richard J.) Evaluation of polynomials with super-preconditioning. *Eighth Annual ACM Symposium on Theory of Computing (Hershey, Pa., 1976)*, pp. 174-180. *Assoc. Comput. Mach., New York*, 1976. (From the authors' introduction) **56** #4233 68A20 (68A10)
- (with Rosenberg, Arnold L.) Storage schemes for boundedly extendible arrays. *Acta Inform.* **7** (1976/77), no. 3, 289-303. (K. H. V. Booth) **54** #14472 68A50
- (with Pratt, Vaughan R.) A characterization of the power of vector machines. *Sixth Annual ACM Symposium on Theory of Computing (Seattle, Wash., 1974)*. *J. Comput. System Sci.* **12** (1976), no. 2, 198-221. (A. V. Palagin) **55** #1827 68A25
- On the combinatorial complexity of certain symmetric Boolean functions. *Math. Systems Theory* **10** (1976/77), no. 4, 323-336. (Claus-Peter Schnorr) **58** #3687 68A20 (94A20)
- (with Garey, Michael R.; Johnson, David Siffler) Some simplified NP-complete graph problems. *Theoret. Comput. Sci.* **1** (1976), no. 3, 237-267. (Shimon Even) **53** #14978 68A20
- The polynomial-time hierarchy. *Theoret. Comput. Sci.* **3** (1976), no. 1, 1-22 (1977). (John T. Gill) **55** #11716 68A20
- (with Rosenberg, Arnold L.) Hashing schemes for extendible arrays. *J. Assoc. Comput. Mach.* **24** (1977), no. 2, 199-221. (K. H. V. Booth) **55** #13905 68A50
- (with Kou, Lawrence T.; Wong, C. K.) Covering edges by cliques with regard to keyword conflicts and intersection graphs. *Comm. ACM* **21** (1978), no. 2, 135-139. (A. T. Amin) **57** #4620 68A20 (05C35)
- Stockmeyer, Paul K. (with Harary, Frank) Planar composite graphs. *An. Acad. Brasil. Ci.* **43** (1971), 325-329. (H. A. Jung) **46** #7072 05C10
- (with Manvel, Bennet) On reconstruction of matrices. *Math. Mag.* **44** (1971), 218-221. (A. Mowshowitz) **45** #4998 05B20 (15A12)
- The charm bracelet problem and its applications. *Graphs and combinatorics (Proc. Capital Conf., George Washington Univ., Washington, D. C., 1973)*, pp. 339-349. *Lecture Notes in Math.*, Vol. 406, Springer, Berlin, 1974. (Richard K. Guy) **53** #7799 05A15
- The reconstruction conjecture for tournaments. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1975)*, pp. 561-566. *Congressus Numeratus*, No. XIV, *Utilitas Math.*, Winnipeg, Man., 1975. (J. Mitchem) **52** #13475 05C20
- (with Gibbs, Norman E.; Poole, William G., Jr.) An algorithm for reducing the bandwidth and profile of a sparse matrix. *SIAM J. Numer. Anal.* **13** (1976), no. 2, 236-250. (D. M. Young, Jr.) **58** #19061 65F05
- The falsity of the reconstruction conjecture for tournaments. *J. Graph Theory* **1** (1977), no. 1, 19-25. (B. Manvel) **56** #11846 05C20
- Stocks, A. Ian Simple proofs of lower bounds for polynomial evaluation. *Complexity of computer computations (Proc. Sympos., IBM Thomas J. Watson Res. Center, Yorktown Heights, N.Y., 1972)*, pp. 21-30, 187-212. *Plenum, New York*, 1972. (David Dobkin) **57** #11177 68A20
- Stocks, D. C. On certain triple integral equations with trigonometric kernels. *Glasgow Math. J.* **17** (1976), no. 2, 103-105. (P. M. Gupta) **53** #14050 45F10
- On a dual integral equation with a trigonometric kernel. *Glasgow Math. J.* **18** (1977), no. 2, 175-177. (S. L. Kalla) **56** #9204 45F10
- Corrigendum: "On a dual integral equation with a trigonometric kernel" (*Glasgow Math. J.* **18** (1977), no. 2, 175-177). *Glasgow Math. J.* **19** (1978), no. 2, 205. (Editors) **58** #29925 45F10
- Stockwell, C. W. (with Camana, P. C.; Hemami, H.) Determination of feedback for human posture control without physical intervention. *J. Cybernet.* **7** (1977), no. 3-4, 199-225. (G. S. Ladde) **58** #4404 92A05
- Stoddart, A. W. J. Convergence of bounds in optimization. *J. Optimization Theory Appl.* **12** (1973), 563-566. (G. D. Byrne) **48** #7604 65K05
- See also Analytic theory of differential equations, **51** #6002

Stodola, Aurel Boleslaw See Profos, P., 55 #7682

Stoer, Josef On the numerical solution of constrained least-squares problems. *SIAM J. Numer. Anal.* 8 (1971), 382-411. (P. J. Laurent) 45 #9452 65K05

★Einführung in die Numerische Mathematik. I. Unter Berücksichtigung von Vorlesungen von F. L. Bauer. Heidelberg Taschenbücher, Band 105. Springer-Verlag, Berlin-New York, 1972. ix + 250 pp. (Editors) 53 #4447 65-02

(with Bulirsch, Roland) ★Einführung in die Numerische Mathematik. II. Unter Berücksichtigung von Vorlesungen von F. L. Bauer. Heidelberg Taschenbücher, Band 114. Springer-Verlag, Berlin-New York, 1973. ix + 286 pp. (Editors) 53 #4448 65-02

On the convergence behaviour of some minimization algorithms. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974)*, pp. 476-482. North-Holland, Amsterdam, 1974. (Marco Gaviano) 53 #15376 90C30

(with Schuller, Günther) Über die Konvergenzordnung gewisser Rang-2-Verfahren zur Minimierung von Funktionen. (English summary) *Numerische Methoden bei Optimierungsaufgaben, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 125-147. Internat. Schriftenreihe Numer. Math., Band 23, Birkhäuser, Basel, 1974. (Authors' summary) 58 #24952 65K05 (65B99)

Extrapolation methods for the solution of initial value problems and their practical realization. *Proceedings of the Conference on the Numerical Solution of Ordinary Differential Equations (Univ. Texas, Austin, Tex., 1972)*, pp. 1-21. *Lecture Notes in Math.*, Vol. 362, Springer, Berlin, 1974. (T. E. Hull) 50 #15354 65L05

Weitere Abschätzungen für die nichttrivialen Eigenwerte stochastischer Matrizen. *Beiträge Numer. Math.* 4 (1975), 229-235. (Jan Zitzko) 56 #7146 65F15

On the convergence rate of imperfect minimization algorithms in Broyden's β -class. *Math. Programming* 9 (1975), no. 3, 313-335. (Michael J. Todd) 54 #1605 65K05 (90C30)

Quadratic termination and quadratic convergence of minimization algorithms. *Topics in numerical analysis, III (Proc. Roy. Irish Acad. Conf., Trinity Coll., Dublin, 1976)*, pp. 401-416. Academic Press, London, 1977. (Bernard Lemaire) 58 #31839 65K05 (90C30)

On the relation between quadratic termination and convergence properties of minimization algorithms. I. Theory. *Numer. Math.* 28 (1977), no. 3, 343-366. (Author's summary) 58 #15166 90C25 (90C40)

(with Baptist, P.) On the relation between quadratic termination and convergence properties of minimization algorithms. II. Applications. *Numer. Math.* 28 (1977), no. 4, 367-391. (Authors' summary) 58 #15167 90C25 (90C50)

See also Optimization and optimal control, 52 #15162; *Proceedings: Operations Research*, 55 #11955; *Optimization techniques*, 57 #9382a and *Optimization techniques*, 57 #9382b

Stoetzel, Antoine Un modèle de correspondance entre préférences individuelles et choix collectif. (English summary) *Math. Sci. Humaines No. 55* (1976), 5-23, 83. (Jean-Louis Boursin) 56 #4743 90A05 (92A20)

Stoer, G. S. The line congruences that are connected with vector field defined on a surface. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 6 (1970), no. 1, 109-114 (1972). (J. Chrastina) 48 #1068 53A25

A certain subclass of N -webs of curves whose associated affine connection has zero curvature. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 7 (1971), no. 3, 99-105 (1973). (J. Chrastina) 50 #11058 53B05

Indecomposable N -webs of curves with minimal degree of nonholonomicity of an N -dimensional manifold. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 26 (1971), no. 5, 16-24. (M. C. Chaki) 45 #4303 53A25

The classification of indecomposable N -webs of curves with minimal degree of nonholonomicity on an N -dimensional analytic manifold. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), no. 3, 163-169 (1973). (V. V. Gol'dberg) 53 #9065 53B25

A certain class of indecomposable $(2n+1)$ -webs with minimal degree of nonholonomicity. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 11(150), 88-92. (L. Tamásy) 50 #14543 53B05

Stoer, N. L. On the existence of an instantaneous rotation axis during the motion of a solid body with a constant point in Euclidean n -dimensional space. *C. R. Acad. Bulgare Sci.* 25 (1972), 587-588. (H. Brauner) 46 #4380 53A05

Stoer, Pet'r V. (with Dimiev, Stančo; Muškarov, Oleg K.; Petrov, Kalin P.) Some questions on polynomial rings. (Bulgarian. Russian and French summaries) *Mathematics and mathematical education (Proc. Third Spring Conf. Bulgar. Math. Soc., Burgas, 1974) (Bulgarian)*, pp. 145-159. B'lgar. Akad. Nauk, Sofia, 1976. (See Zbl 353 #46040) 32E25

Stoeva, Kostadinka S. Construction of asymptotic solutions of second order quasilinear autonomous differential equations of neutral type. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 6 (1970), no. 3, 45-51 (1972). (D. Bainov) 49 #788 34K25

The existence of periodic solutions of systems of differential equations of the class $G^{(3)}(k, l)$. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), no. 3, 79-88 (1973). (Author's summary) 57 #6644 34C25

Construction of periodic solutions of a system of differential equations that belongs to the class $G^{(3)}(k, l)$. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), no. 3, 89-103 (1973). (Author's summary) 57 #6645 34C25

(with Anastasova, Kapka) The existence of internal resonance in a certain autonomous mechanical system. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 3, 79-88 (1974). (M. Martinis) 53 #4663 70.34

(with Anastasova, Kapka) The existence of periodic oscillations of a certain autonomous mechanical system in the case of internal resonance. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 3, 89-97 (1974). (M. Martinis) 53 #4664 70.34

(with Anastasova, Kapka) Construction of periodic solutions of a certain autonomous mechanical system in the case of internal resonance. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 4, 111-120 (1974). (Author's summary) 57 #6646 34C25

A general algorithm for finding the n th approximation of periodic solutions of

systems of differential equations of class $G^{(3)}(k, l)$. (Bulgarian. Russian and German summaries) *Mathematics and mathematical education (Proc. Second Spring Conf. Bulgar. Math. Soc., Vidin, 1973) (Bulgarian)*, pp. 201-207. Izdat. B'lgar. Akad. Sofia, 1974. (M. Bertolino) 50 #5108 34D10

(with Stojanov, N. V.) On the stabilization of a nonlinear control system critical case of k pairs of pure imaginary roots. (Bulgarian. Russian and English summaries) Conference on Differential Equations and Applications (Ruse, *Godišnik Visš. Učebn. Zaved. Priložna Mat.* 11 (1975), no. 1, 231-238 (1977). (Author's summary) 57 #15665 93D05

On the stabilization of a nonlinear control system in critical cases. (Bulgarian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* 11 no. 4, 109-118 (1977). (Author's summary) 57 #5320 93D10

Stoffel, Andrei Totally diagonal Latin squares. (Romanian. English summary) *Stud. Mat.* 28 (1976), no. 1, 113-119. (J. B. Kelly) 53 #7814 05B15

Stoffers, K. E. Partitioning of separating edges—a new approach to combinational design. *Ninth Annual Asilomar Conference on Circuits, Systems, and Computers (Pacific Grove, Calif., 1975)*, pp. 539-545. *Western Periodicals, North Hollywood, Calif.* (Author's summary) 58 #33581 94A20

Stogni, A. O. (with Gluškov, V. M.; Vel'ickii, I. V.) A certain approach to the construction of mathematical provisioning in system form of contemporary computer. (Russian. English summary insert) *Kibernetika (Kiev)* 1972, no. 3, 25-35. (T. 46 #6654 68A30

(with Adasovskii, B. I.; Aizenberg, N. N.) A certain metric approach to the recognition problem. (Russian. English summary insert) *Kibernetika (Kiev)* 1972, no. 4, 140-145. (J. Kuntzmann) 46 #10252 68A45

(with Mihalevič, V. S.; Ljaško, I. I.; Sergienko, I. V.; Kapitonova, Ju. V.) ★Віктор Михайлович Глушков. (Ukrainian) [Viktor Mihailevič Gluškov] Бібліографія Вчених Української РСР. [Bibliography of Ukrainian Scientists.] *Vidaen. "Naukova Dumka"*, Kiev, 1975. 62 pp. (Editors) 57 #5634 01A70

(with Gluškov, V. M.; Ivanov, V. V.; Mihalevič, V. S.; Sergienko, I. V.) Research for computational optimization. (Russian) *Akad. Nauk Ukrain. SSR Inst. Kibernet. Preprint No. 67* (1977), 53 pp. (Publisher's description) 58 #25110 68A20 (65-02)

See also Automation of information systems design, 56 #5031

Stogrin, M. I. The Voronoi, Venkov and Minkowski reduction domains. (Russian) *Dokl. Akad. Nauk SSSR* 207 (1972), 1070-1073. (W. J. Firey) 49 #2563 10E25

★Правильные разбиения Дирихле-Вороноя для второй триклинной группы. (Russian) [Regular Dirichlet-Voronoi partitions for the second triclinic group] *Trudy Mat. Inst. Steklov.* 123 (1973). *Izdat. "Nauka", Moscow*, 1973. 128 pp. (E. Hecke) 51 #6557 50B30

(with Delone, B. N.; Galiulin, R. V.) The types of Bravais lattices. (Russian) *Current problems in mathematics, Vol. 2 (Russian)*, pp. 119-257. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1973. (E. J. F. Primrose) 54 #1068 50B30 (20H15, 10E25)

(with Delone, B. N.; Galiulin, R. V.; Dolbilin, N. P.; Zalgaller, V. A.) successive minima of a three-dimensional lattice. (Russian) *Dokl. Akad. Nauk SSSR* 209 (1973), 25-28. (G. C. Shephard) 48 #9559 52A40

Locally quasisdense lattice packings of spheres. (Russian) *Dokl. Akad. Nauk SSSR* 218 (1974), 62-65. (W. J. Firey) 50 #12924 10E25

The Bravais, Voronoi and Delone classifications of four-dimensional lattices. (Russian) *Dokl. Akad. Nauk SSSR* 218 (1974), 528-531. (H. W. Guggenheimer) 50 #8267 50B30

(with Delone, B. N.) A simplification of the proof of the Schönflies theorem. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), pp. 95-98. (E. J. F. Primrose) 51 #50B30 (20H15)

★Regular Dirichlet-Voronoi partitions for the second triclinic group. Translated by E. J. F. Primrose from the Russian original: *Trudy Mat. Inst. Steklov.* 123 (1973). *Proceedings of the Steklov Institute of Mathematics*, No. 123 (1973). *American Mathematical Society, Providence, R.I.*, 1975. iii + 116 pp. (Editors) 51 #11265 50B30

(with Delone, B. N.; Dolbilin, N. P.; Galiulin, R. V.) A local test for the regularity of a system of points. (Russian) *Dokl. Akad. Nauk SSSR* 227 (1976), no. 1, 19-21. (Fisher) 53 #6407 50B30

Stöhr, Karl-Otto Funktoren in der Kategorie der lokal kompakten Moduln. *J. Reine Angew. Math.* 246 (1971), 180-188. (W. V. Vasconcelos) 45 #251 13D99 (18H05) Homotopietheorie proalgebraischer Gruppen und lokale Klassenkörpertheorie. *Bonn. Math. Schr.* No. 52 (1972), vi + 46 pp. (Loren D. Olson) 46 #9008 12B25

Eine Vervollständigung der Kategorie der lokal kompakten Moduln. *J. Reine Angew. Math.* 260 (1973), 1-20. (W. V. Vasconcelos) 49 #5228 22D99 (13J99)

Eine Einbettung der Kategorie der Montelräume in eine Kategorie mit Dualitätseigenschaften. *J. Reine Angew. Math.* 261 (1973), 1-28. (A. Wiweger) 48 #4683 46A15

Nichtarchimedische reflexive Vektorräume. *J. Reine Angew. Math.* 264 (1973), 135-146. (A. F. Monna) 48 #11974 46A25

Stoia, Manuela Riemann-Roch theorem for curves with singularities. (Romanian. English summary) *Stud. Cerc. Mat.* 22 (1970), 355-371. (P. Du Val) 46 #7244 14D10 (12A90, 14C20)

Some properties of divisors of zero degree on algebraic curves. *Rev. Roumaine Math. Pures Appl.* 16 (1971), 1559-1561. (D. Gallarati) 46 #5332 14C25 (14H20)

Une remarque sur la profondeur. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A929-A930. (J. S. Joel) 47 #8543 14F05 (32C35)

Points de Gorenstein d'un morphisme. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 20, A847-A849. (Joel Roberts) 55 #8053 14H05

(with Brînzănescu, Vasile) On the cohomology of projective space. (Romanian. English summary) *Stud. Cerc. Mat.* 27 (1975), no. 4, 387-392. (J. Dieudonné) 53 #14M20 (14F10)

Reduced and normal points of a flat morphism. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 9, 1269-1272. (Andrew Markoe) 54 #10264 14E15 (14F10, 13B25)

Stoian, G. See Stoyan, Glsbert

Stoian, Gheorghe Convex sets in linear spaces. I. (Romanian) *Gaz. Mat. Ser. A* 78 (1973), 1-10.

77. (Editors) **57** #1076 46A99 (52A05)
 onvex sets in linear spaces. II. (Romanian) *Gaz. Mat. Ser. A* **78** (1973), 407-413.
 (rs) **57** #1077 46A99 (52A05)
 onvex sets in linear spaces. III. (Romanian) *Gaz. Mat. Ser. A* **78** (1973), 446-455.
 (rs) **57** #1078 46A99 (52A05)
Stoian A distribution problem. (Romanian. English, French, German and Russian
 summaries) *Bul. Inst. Politehn. București* **33** (1971), no. 1, 41-43. (Author's summary)
 1304 62E10
 on the moments of some independent random variables. (Romanian. Russian,
 h, French and German summaries) *Bul. Inst. Politehn. București* **34** (1972), no. 6,
 (G. Niculescu) **50** #3340 60-01
 he compatibility and dependence of events. (Romanian. Russian, English, French
 German summary inserts) *Bul. Inst. Politehn. București* **35** (1973), no. 6, 29-30. (E.
 hman) **49** #11581 60-01
 on sum functions. (Romanian. French summary) *Stud. Cerc. Mat.* **26** (1974),
 2. (G. Simboan) **51** #3399 28A65
 ur les processus de Markov dans le cadre des fonctions somme. *Ann. Fac. Sci.*
Nat. Zaire (Kinshasa) Sect. Math. Phys. **1** (1975), no. 1, 105-111. (G. Simboan)
 11751 60J05
 onctions somme invariantes. *Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect.*
Phys. **1** (1975), no. 2, 329-337. (I. Cuculescu) **55** #9312 60J99
 on a classification of Markov processes and sum functions. (Romanian. English
 summary) *Stud. Cerc. Mat.* **27** (1975), no. 3, 359-373. (I. Cuculescu) **53** #6744
- Anca** (with Stoica, Petre) Linear system identification using the tally principle.
 e French and German summaries) *Rev. Roumaine Sci. Tech. Sér. Électrotech.*
ét. **21** (1976), no. 3, 435-443. (Tohru Katayama) **56** #5011 93E10
 On the construction of a kernel. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no.
 7-1172. (Thomas E. Armstrong) **57** #3418 31D05
 . (with Chira, D.; Chelariu, H.) The problem of the flows of raw and related
 als and of semifinished-products in the chemical industry. (French and Russian
 summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1973**, no. 1, 23-35. (M.
 mirescu) **48** #13228 90B30
 Fuzzy algorithms in economic systems. *Econom. Comp. Econom.*
net. Stud. Res. **1975**, no. 1, 239-247. (Editors) **57** #15311 90A05 (90B35)
 olitorial concepts used in scheduling. (French and Russian summaries) *Econom.*
Econom. Cybernet. Stud. Res. **1977**, no. 3, 91-105. (I. M. Stancu-Minasian)
 15397 90B35
- Marcel** (with Stancu-Minasian, I. M.) A method of approximate solution of
 ons of higher degree. (Romanian. French summary) *Stud. Cerc. Mat.* **23** (1971),
 10. (A. S. Householder) **48** #7584 65H05
- Petre** (with Stoica, Anca) Linear system identification using the tally principle.
 e French and German summaries) *Rev. Roumaine Sci. Tech. Sér. Électrotech.*
ét. **21** (1976), no. 3, 435-443. (Tohru Katayama) **56** #5011 93E10
 he generalized least squares method with moving average model for residuals.
 anian summary) *Bul. Inst. Politehn. București Ser. Electrotehn.* **39** (1977), no. 3,
 . (Author's summary) **57** #1892 65K05 (62H20)
- Stoian** (with Söderström, T.) A method for the identification of linear systems using the
 alized least squares principle. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4,
 34. (Authors' summary) **56** #15065 93E10
- V.** (with Săcuiu, Ion; Bădin, V.) Cumulative-sums control maps for
 ntional distributions. (French and Russian summaries) *Econom. Comp. Econom.*
net. Stud. Res. **1971**, no. 1, 45-66. (Vijendra P. Singh) **46** #4672 62N10
- Stoian** (with Bădin, V.) Estimating random parameters by some economic models through
 Monte-Carlo method. (French and Russian summaries) *Econom. Comp. Econom.*
net. Stud. Res. **1973**, no. 2, 63-75. (M. Rössler) **51** #4965 90B15 (90A15)
- R.** (with Offenberger, G. N.) Zur Frage der aristotelischen Begriffsbestimmung
 falscher Prämissen. With discussion by B. Chendov, K. Berka and A. Menne. C.
 ravaux Colloq. sur la Modalité du Jugement chez Aristote et dans la Logique
 rne (Braşov, 1969). *An. Univ. Bucureşti Acta Logica* **12** (1969), 145-151. **45** #32
 C10
- See also Morpurgo-Tagliabue, Guido**, **45** #7 and **Bar-Hillel, Yehoshua**, **45** #31
- Stoian** On the completeness theorem for some many-valued predicate calculi with
 ale conjunctions and disjunctions. *Proceedings of the Institute of Mathematics*
 (1974), pp. 85-92. *Editura Acad. R. S. R., Bucharest*, 1976. (A. Tauts) **56** #5219
 5 (02B25)
- D.** See **Stoyan, Dietrich**
- Stoian** (with Bliznakov, Jordan; Petrov, Mihail; Aceva, Veska; Dilkov, Dilko;
 ov, Vasil; Angelov, Nikolai) ★Основни методи и проблеми на операционните
 двания. (Bulgarian) [Fundamental methods and problems of operations research]
B'lgar. Akad. Nauk., Sofia, 1972. 201 pp. (P. Vondráček) **49** #6896 90Bxx
St. M. (with Solakov, E. D.) The nomographic solution of a certain system of
 ions. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn.*
J. Mat. **5** (1968/69), no. 4, 89-100 (1971). (Bl. Sendov) **47** #4475 65S05
- L. S.** (with Kovalenko, I. M.) The productivity of a system and the time for
 ng a problem in case of random break-downs and periodic data storage. (Russian.
 sh summary insert) *Kibernetika (Kiev)* **1974**, no. 5, 73-75. (Viorel Gh. Vodă)
 4951 90B25 (62N05)
- Stoian** (with Špak, V. D.) Unloaded redundancy with an unreliable server. (Russian.
 sh summary insert) *Kibernetika (Kiev)* **1975**, no. 3, 99-101. (A. M. Zaharin)
 9319 60K20
- Stoian** Estimates for certain functionals that characterize reliability. (Russian. English
 summary) *Kibernetika (Kiev)* **1978**, no. 4, 113-119. (Author's summary) **58** #25925
 5 (90C05)
- Emil** The method of augmented Lagrangians in two-level static optimization.
 sh. (Russian and English summaries) *Arch. Automat. i Telemekh.* **22** (1977), no. 3,
 237. (V. Komkov) **56** #13077 49D99 (65K05)
- Simion** ★Математика şi viaţă. (Romanian) [Mathematics and life] With a
 ce by Miron Niculescu. *Editura Academiei Republicii Socialiste România, Bucharest*,
 196 pp. (Editors) **54** #12456 01A70
- Einiges über topologische Funktionentheorie auf nichtorientierbaren Flächen. *Rev.*
Roumaine Math. Pures Appl. **19** (1974), 503-505. (M. Hervé) **52** #3549 30A90
- See also Proceedings: Romanian-Finnish Seminar on Telchmüller Spaces and**
Quasiconformal Mappings, **45** #8826; **Moisil, Grigore Constantin**, **46** #1539a;
Niculescu, Miron, **46** #1539b; **Teodorescu, Nicolae Victor**, **46** #1539c and **Andreian**
Cazacu, Cabiria, **46** #1539d
- Stoianov, Vl.** Molodenskiĭ's integral equations for determining the shape of the earth.
 (Bulgarian) Commemorative Scientific Session (25th anniversary of the Higher Civil
 Engineering Institute, Sofia). *Godišnik Visš. Inž.-Stroitel. Inst.* **22** (1973), no. 4, *Geodezija*,
 215-227. (Volislav Marić) **52** #7475 86A5
- Stoianova-Penkova, N.** ★Математическо програмиране. (Bulgarian) [Mathematical
 programming] *Visš. Ikonom.-Inst. "Karl Marx", Sofia*, 1968 [1969]. 435 pp. (Editors)
49 #2076 90Cxx
- Stoinski, Stanislaw** *H*-almost periodic functions. *Funct. Approximatio Comment. Math.* **1**
 (1974), 113-122. (S. Hartman) **52** #8781 42A84
- Approximation of periodic functions by means of certain linear operators with
 regard to Hausdorff metrics. *Funct. Approximatio Comment. Math.* **1** (1974), 123-131.
 (B. N. Sahney) **52** #8766 42A08
- Approximation of *H*-almost periodic functions by means of certain linear operators.
Funct. Approximatio Comment. Math. **2** (1976), 233-241. (S. Hartman) **56** #6275
 42A84 (41A35)
- A connection between *H*-almost periodic functions and almost periodic functions of
 other types. *Funct. Approximatio Comment. Math.* **3** (1976), 205-223. (S. Hartman)
56 #6276 42A84
- On modulus of non-monotonicity of an *H*-almost periodic function. *Funct.*
Approximatio Comment. Math. **4** (1976), 85-90. (A. Precupanu) **56** #3565 42A84
- On superposition of the Bohr's almost periodic functions. *Funct. Approximatio*
Comment. Math. **5** (1977), 85-89. (Bolis Basit) **58** #2009 42A84
- Stojaković, Mirko** On the exponential properties of the implication. *Publ. Inst. Math.*
 (Beograd) (N.S.) **13(27)** (1972), 121-125. (S. Comer) **48** #8229 02J05
- A certain theorem of G. P. Barker on triangular matrices. (Serbo-Croatian. English
 summary) *Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak.* **2** (1972), 1-5. (D. Ž.
 Đoković) **47** #6735 15A24
- A certain method for the optimization of Boolean functions. (Serbo-Croatian.
 English summary) *Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak.* **3** (1973), 1-9. (J.
 Kuntzmann) **50** #4141 94A20
- Inductive and Peano models. (Serbo-Croatian. English summary) *Univ. u Novom*
Sadu Zb. Rad. Prirod.-Mat. Fak. **5** (1975), 1-8. (A. I. Omarov) **56** #15416 02H20
- A class of formal languages over a two-letter alphabet. (Serbo-Croatian. English
 summary) *Acad. Serbe Sci. Arts Glas* **301** (1977), no. 41, 17-38. (A. Blokh) **57** #5776
 05A15 (68A30)
- See also Biography: Stojaković, Mirko D.**, **52** #13254
- Stojaković, Zoran M.** (with Belousov, V. D.) On infinitary quasigroups. *Publ. Inst. Math.*
 (Beograd) (N.S.) **16(30)** (1973), 31-42. (R. Artzy) **51** #775 20N05
- (with Belousov, V. D.) On generalized (i, j) -modular quasigroups. *Publ. Inst. Math.*
 (Beograd) (N.S.) **16(30)** (1973), 43-47. (R. Artzy) **51** #781 20N15
- Balanced identities on ternary quasigroups. (Russian) *Mat. Issled.* **9** (1974), no.
 1(31) 110-119. (L. Procházka) **50** #13351 20N05
- (with Belousov, V. D.) Generalized entropy in infinitary quasigroups.
 (Serbo-Croatian summary) *Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak.* **5** (1975),
 35-42. (Pl. Kannappan) **54** #2858 20N05
- Balanced laws on ternary GD-groupoids. *Publ. Inst. Math. (Beograd) (N.S.)* **20(34)**
 (1976), 227-230. (L. Procházka) **56** #15815 20N05
- (with Belousov, V. D.) Infinitary quasigroups. Symposium en Quasigroupes et
 Équations Fonctionnelles (Belgrade-Novı Sad, 1974). *Zbornik Rad. Mat. Inst. Beograd*
 (N.S.) **1(9)** (1976), 25-29. (Editors) **55** #3131 20N05
- See also Biography: Stojaković, Zoran M.**, **52** #13255
- Stojan, Ju. G.** (with Gluško, A. G.; Rvačov, V. L.) The densest filling of a strip with
 figures of a complex geometric form. I. (Russian. English summary insert) *Kibernetika*
 (Kiev) **1968**, no. 4, 81-84. (E. Baranovskii (RŽMat 1969 #3 A476)) **45** #7616
 52A45 (90B30)
- (with Gluško, A. G.; Rvačov, V. L.) The densest filling of a strip with figures of a
 complex geometric form. II. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**,
 no. 3, 77-80. (From the authors' introduction) **45** #7617 52A45 (90B30)
- A method for seeking the best solution for a class of multi-extremal problems.
 (Russian) *Upravljajemye Sistemy No. 3* (1969), 81-88. (See RŽMat 1970 #11 B770)
 65K05
- (with Čerepahin, V. M.) Rational packing of geometric objects. (Russian)
Upravljajemye Sistemy No. 4-5 (1970) 3-12. (Not reviewed) 05B40
- (with Jalovkin, B. D.) Optimum selection of a system of control elements. (Russian)
Izv. Akad. Nauk SSSR Tehn. Kibernet. **1971**, no. 3, 60-67. (Author's summary)
52 #10139 93C10
- (with Galata, A. Ja.) The dense packing of parallelepipeds of arbitrary dimensions
 in a parallelepiped of the smallest volume. (Russian. English summary insert)
Kibernetika (Kiev) **1972**, no. 2, 81-86. (E. Hertel) **47** #960 52A45 (65K05, 90C30)
- (with Gil', M. I.) A dense arrangement function and its singularities. (Ukrainian.
 English and Russian summaries) *Dopovidi Akad. Nauk Ukraïn. RSR Ser. A* **1973**,
 350-353, 383. (E. Hertel) **48** #2904 52A45
- (with Kobylin, A. M.; Šiškin, V. N.) A solution of the problem of single-line die
 stamping that takes the whole operation into account. (Russian) *Ėkonom. i Mat. Metody*
9 (1973), 1117-1123. **48** #7960 90C05
- (with Gužva, L. A.) A certain method of lattice packing of a plane and a
 rectangular region with congruent figures. (Russian. English summary insert)
Kibernetika (Kiev) **1973**, no. 1, 130-138. (E. Jucovič) **49** #6038 52A45
- A method for the best lattice distribution of figures on the plane. (Ukrainian.
 English and Russian summaries) *Dopovidi Akad. Nauk Ukraïn. RSR Ser. A* **1974**,
 537-540, 575. (E. Jucovič) **50** #8309 52A45
- ★Размещение геометрических объектов. (Russian) [Placing of geometrical
 objects] *Izdat. "Naukoma Dumka", Kiev*, 1975. 239 pp. (E. Hertel) **54** #13733
 52A45 (65K05, 90C10)

- (with Ponomarenko, L. D.) An algorithm for the approximate solution of the problem of the densest packing of a set of parallelepipeds in a parallelepiped with forbidden domains. (Russian) *Automat. i Vychisl. Tehn. (Riga)* 1975, no. 1, 46-54. (Editors) 57 #17503 52-04 (68A45)
- (with Gil', M. I.) ★Методы и алгоритмы размещения плоских геометрических объектов. (Russian) [Methods and algorithms for the placing of plane geometric objects] *Izdat. "Naukova Dumka", Kiev*, 1976. 247 pp. (E. Hertel) 55 #8957 52A10 (90B99)
- (with Ponomarenko, L. D.) Minkowski's sum and the hodograph of the vector-valued function of a dense packing. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 10, 888-890, 959. (W. J. Firey) 58 #7409 52A45
- See also Combinatorial geometry and optimal assignments, 57 #10986 and Combinatorial geometry and optimal assignments, 58 #7271
- Stojan, N. M.** (with Kapšivii, O. O.) Solution of the axially symmetric problems of elasticity theory for a two-sheeted hyperboloid and for a half-space with a hyperboloidal sheet by the method of p -analytic functions. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev)* No. 25 (1975), 3-13, 142. (M. Mišicu) 52 #9749 73.30
- (with Kapšivii, O. O.) The approximate solution of complex x -analytic potential problems for a half-plane with a cut. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev)* Vyp. 30 (1976), 126-134, 158. (Authors' summary) 56 #12288 31A25
- (with Kapšivii, O. O.) The fundamental mixed axially symmetric problem for an elastic two-sheeted hyperboloid of revolution. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* 1977, no. 11, 1005-1011, 1056. (Authors' summary) 57 #8325 73.45
- (with Kapšivii, O. O.) A mixed axially symmetric problem for an elastic half-space with a hyperboloidal sheet. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 19* (1977), 130-139, 153. (Authors' summary) 58 #25234 73.30
- (with Kapšivii, O. O.) Solution of certain axially symmetric problems of the theory of elasticity for a one-sheeted hyperboloid using the method of p -analytic functions. (Russian) *Mat. Fiz. Vyp.* 23 (1978), 56-63, 114. (Authors' summary) 58 #19520 73.30
- Stojan, V. A.** The algorithm for the construction of semi-three-dimensional solutions of the axially symmetric problem of the elastodynamics of thick plates. (Russian) *Certain questions on simulation and systems control (Russian)*, pp. 97-105. *Izdat. "Naukova Dumka", Kiev*, 1973. (Editors) 54 #1799 73.35
- The singular solution of the axially symmetric problem of the elastodynamics of a thick layer. (Russian. English summary) *Linear boundary value problems of mathematical physics (Russian)*, pp. 331-344. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Authors' summary) 50 #11934 73.35
- The field of dynamical displacements of an elastic layer that is axisymmetrically loaded on the bounding surfaces. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* 1973, 1123-1127, 1152. (Author's summary) 49 #8483 73.35
- Stojancev, V. T.** A certain way of computing the density of a distribution in a random search. (Russian) *Problems of random search*, 2 (Russian), pp. 157-166, 221-222. *Izdat. "Zinatne", Riga*, 1973. (V. F. Dem'janov) 51 #15106 93E05
- (with Tarasenko, G. S.) Certain aspects of the construction of search algorithms that are optimal with respect to accuracy. (Russian) *Problems of random search*, 2 (Russian), pp. 167-173, 222. *Izdat. "Zinatne", Riga*, 1973. (V. F. Dem'janov) 51 #15000 90C30
- Solution of the Cauchy problem for a parabolic equation by a quasi Monte Carlo method. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 13 (1973), 1153-1160, 1362. (N. N. Janenko) 48 #7620 65M10
- (with Ždanok, A. I.) Convergence of nonstationary multistep iteration processes. (Russian) *Problemy Slučain. Poiska* No. 3 (1974), 67-76, 276. (See RŽKibernet 1975 #2 G104) 65D15
- (with Pogorzelski, W.) Optimization of functions whose set of extrema has a positive measure. (Russian) *Problemy Slučain. Poiska* No. 3 (1974), 102-107, 276. (See RŽKibernet 1975 #2 G101) 65K05 (28A20)
- Solution of the Dirichlet problem by the quasi-Monte Carlo method. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 1(181), 263-264. (T. Stýs) 53 #9579 65C05
- Stojanov, D. C.** (with Markovski, B. L.) Invariant equations for the non-linear transforming fields and the conservation laws. (Russian. English summary) *Teoret. Mat. Fiz.* 1 (1969), no. 3, 337-349. (Authors' summary) 57 #4865 81.22
- (with Molotkov, V. V.; Petrova, Svetlana Georgieva) Representations of the superconformal algebra. Two-point and three-point Green's functions of scalar superfields. (Russian. English summary) *Teoret. Mat. Fiz.* 26 (1976), no. 2, 188-197. (Authors' summary) 56 #7536 81.22
- (with Aneva, B. L.; Mihov, S. G.) Some representations of the conformal superalgebra. (Russian. English summary) *Teoret. Mat. Fiz.* 27 (1976), no. 3, 307-316. (A. U. Klimyk) 57 #2231 81.22
- (with Aneva, B. L.; Mihov, S. G.) Properties of representations of the conformal superalgebra. (Russian. English summary) *Teoret. Mat. Fiz.* 31 (1977), no. 2, 177-189. (Authors' summary) 58 #32492 81.17 (17A30)
- Stojanov, Iordan** A certain class of two-dimensional Markov processes. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* 65 (1970/71), 175-182 (1972). (errata insert) (J. L. Doob) 48 #1317 60H20 (60J25)
- Boundedness of the moments of the solutions of W - and P -systems of stochastic differential equations. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* 67 (1972/73), 471-481 (1976). (A. D. Wentzell (Ventcel')) 54 #11501 60H10
- (with Bainov, Drumi D.) The averaging method for stochastic integrodifferential equations. (Russian) *Arch. Math. (Brno)* 8 (1972), 213-218. (G. Niculescu) 49 #11632 60H99
- Limit theorems for Markov processes with jumps. (Russian) *C. R. Acad. Bulgare Sci.* 25 (1972), 1171-1174. (Petr Mandl) 47 #9714 60H20 (60F05, 60J25)
- The estimation of partially observable stochastic processes. (Russian) *Math. Balkanica* 2 (1972), 235-250. (K. Dietz) 47 #9791 62M05 (60G35)
- Filtering of general jump-like Markov processes. (Russian. Bulgarian and English summaries) *B'lgar. Akad. Nauk. Izv. Mat. Inst.* 14 (1973), 73-89. (Petr Mandl) 49 #6385 60J75 (60G35)
- Averaging in stochastic integro-differential equations. (Russian) Collection of articles dedicated to the memory of the Balkan mathematicians Constantine Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţeica in connection with the first centenary of their birth (Proc. Internat. Conf. on Integral, Differential and Functional Equations (Bled, 1973) in connection with the first centenary of the birth of Josip Plemelj). *Math. Balkanica* 3 (1973), 496-513. (Ju. M. Ryžov) 51 #4389 60H99
- (with Bainov, Drumi D.) A certain averaging scheme for stochastic integro-differential equations. (Russian) *Publ. Inst. Math. (Beograd) (N.S.)* 15(1973), 133-143. (A. Ja. Dorogovcev) 48 #7378 60H99
- Statistics of stochastic processes. (Bulgarian. Russian and English summaries) *Mathematics and mathematical education (Proc. Second Spring Conf. Bulgarian Math. Soc., Vidin, 1973) (Bulgarian)*, pp. 209-220. *Izdat. B'lgar. Akad. Nauk., Sofia*, 1974. (D. Wentzell (Ventcel')) 50 #3499 62M05
- Optimal estimation of some stochastic processes by incomplete data. *Progress statistics (European Meeting Statisticians, Budapest, 1972)*, Vol. II, pp. 773-779. *Coll. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam*, 1974. (Stuart Schwartz) 53 #5131 93E10 (62M20)
- (with Bainov, Drumi D.) The averaging method for a certain class of stochastic differential equations. (Russian) *Ukrain. Mat. Ž.* 26 (1974), 227-236, 285. (E. Car'kov) 49 #5497 34F05 (60H10)
- Differential equations with random coefficients. (Russian. Bulgarian and English summaries) Conference on Differential Equations and Applications (Ruse, 1974) *Godišnik Visš. Tehn. Učebn. Zaved. Priložna Mat.* 11 (1975), no. 3, 223-231 (1977). (Authors' summary) 58 #3039 60H10 (34F05)
- (with Mirazčičski, Ivan; Ignatov, Cvetan; Tanušev, Miroslav) ★Ръководство упражнения по теория на вероятностите. (Bulgarian) [Exercise manual in probability theory] *Izdat. Nauka i Izkustvo, Sofia*, 1976. 303 pp. (Publisher's description) 58 #18631 60-01
- Approximation of random processes obtained as solutions of a P -system of stochastic differential equations. (Bulgarian. Russian and English summaries) *Mathematics and mathematical education (Proc. Third Spring Conf. Bulg. Math. Soc., Burgas, 1974) (Bulgarian)*, pp. 264-271, *B'lgar. Akad. Nauk., Sofia*, 1976. (See Zbl. 306.60038) 60H10
- Stojanov, N. V.** (with Miluševa, S. D.; Baïnov, Drumi D.) The existence and uniqueness of the solution of a certain nonlinear system of integral equations. (Russian. Bulgarian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 2, 57-61 (1971). (Nicolae Luca) 46 #7819 45G99
- On the reduction principle. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 3, 69-74 (1970). (G. Bojadžiev) 45 #3872 34D99
- The stabilization of a nonlinear control system in a certain critical case. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 4, 5-10 (1971). (D. Bobrowski) 47 #588 34H05
- The stabilization of a nonlinear control system in the critical case of one zero root and a pair of pure imaginary roots. (Russian. Bulgarian and English summaries) *B'lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* 11 (1970), 213-220. (C. Coleman) 46 #3151 93C15
- Stability of the periodic solutions of quasilinear autonomous systems of neutral type. (Russian. Bulgarian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 6 (1970), no. 1, 53-62 (1972). (G. Niculescu) 48 #4456 34K20
- (with Gerov, Gero) A certain problem of development control. (Russian. Bulgarian and English summaries) *B'lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* 11 (1972), 193-198. (A. D. Koršunov) 55 #12329 94A20
- (with Žukovskii, V. I.) On the theory of certain differential games with time lag II, III. (Russian. Bulgarian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 1, 7-21 (1974); *ibid.* 9 (1973), no. 2, 9-21 (1974); *ibid.* 9 (1973), no. 23-41 (1974). (A. B. Kuržanskii) 54 #2234 90D25 (49B99)
- The conditional stabilization of a nonlinear control system in certain critical cases. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 1, 23-36 (1974). (Author's summary) 56 #6531 49E20
- (with Petrušev, L. N.) The stability of systems with lag in the critical case with one zero root and two pure imaginary roots. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 3, 111-125 (1974). (Authors' summary) 57 #6753 34K20
- (with Petrušev, L. N.) The stability of systems with lag in the critical case with two pairs of pure imaginary roots. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 4, 165-179 (1974). (Authors' summary) 57 #3564 34K20
- (with Stoeva, Kostadinka S.) On the stabilization of a nonlinear control system in the critical case of k pairs of pure imaginary roots. (Bulgarian. Russian and English summaries) Conference on Differential Equations and Applications (Ruse, 1974) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* 11 (1975), no. 1, 231-238 (1977). (Authors' summary) 57 #15665 93D05
- Guaranteed strategies in non-zero-sum differential games. (Russian. Bulgarian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* 11 (1975), no. 4, 69-77 (1977). (Authors' summary) 57 #5144 90D25
- (with Žukovskii, V. I.) Nonclassical game theory problems. (Russian. Bulgarian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* 12 (1976), no. 1, 177-190 (1978). (Authors' summary) 58 #26102 90D30
- Stojanov, V. I.** On inhomogeneous relativistic cosmological models. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 17 (1974), no. 4, 17-20. (R. I. Pimenov) 298 #53026j 53 #11557 53C99
- Stojanova, I.** (with Neđalkov, I. P.) Analytic continuation of a harmonic function given on a line or a segment. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Fiz.* 4 (1967), no. 1, 123-144 (1970). (Vojislav Marić) 45 #7089 31A25
- Stojanova, I. S.** (with Bonč-Brujevič, V. L.) A certain variational method in the many body problem. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 16 (1975), no.

94. (Authors' summary) 57 #15143 82.49
- Rumjiana** (with Čobanov, Ivan) Some kinematical considerations. (Bulgarian. English summary) *Annuaire Univ. Sofia Fac. Math.* **62** (1967/68), 39-70 (1969); *ibid.* **69** (1970), 39-74 (1971). (V. Topenčarov) **46** #2943 70.53
- (with Čobanov, Ivan) On the kinematics of a point in curvilinear coordinates. (Bulgarian. German summary) *Annuaire Univ. Sofia Fac. Math.* **64** (1969/70), 75-114 (1971). (V. Topenčarov) **46** #2944 70.53
- S.** (with Zaprianov, Zaprian Dimitrov) The flow field induced by an oscillating sphere. (Bulgarian and Russian summaries) *Teoret. i Prilož. Meh.* **8** (1977), no. 1, 3, 4-5. (Editors) **56** #4400 76.35
- Venkova, At.** Basic subgroups of primary abelian groups. (Bulgarian. Russian English summaries) *Plovdiv. Univ. Naučn. Trud.* **11** (1973), no. 3, 29-32. (V. N. Slennikov) **57** #12720 20K10
- The cancellation law in a groupoid of varieties of associative algebras. (Bulgarian. English summaries) *Plovdiv. Univ. Naučn. Trud.* **13** (1975), no. 1, 81-88 (1976). (Author's summary) **58** #10664 08A15 (20L99)
- Dragiša** See **Papers: Balkan Mathematical Congress**, **51** #2824
- M.** (with Orlov, Konstantin) Solving of Volterra's linear integral equations. *Vesnik* **11**(26) (1974), 280-282. (K. N. Srivastava) **51** #3817 45D05
- (with Orlov, Konstantin) Boundary problems for non-linear differential equation of second order. Analytical solution in the form of Taylor's series. Papers presented at Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 81. (I. Norman Katz) **51** #9497 65L10
- Miroslava** The use of a certain kind of transformations of differential equations as a practical way of obtaining particular solutions. (Serbo-Croatian. English summary) *Vesnik* **9**(24) (1972), 281-287. (L. Berković (RŽMat 1973 #6 B183)) **50** #11787
- Algorithms for direct obtaining Cauchy's solutions for systems of differential equations of higher order. *Mat. Vesnik* **11**(26) (1974), 82-90. (D. A. Lutz) **49** #10950
- (with Orlov, Konstantin) Pseudo-integral of differential equations of the n -th order. *Vesnik* **11**(26) (1974), 277-279. (Francesco G. Lerda) **54** #1616 65L05
- Application of analytic continuation to approximate solution of differential equations. *Mat. Vesnik* **13**(28) (1976), no. 4, 455-459. (Henning Esser) **55** #5943 (65L05)
- R.** On the principle of virtual work in the theory of oriented elastic media. *Ergebnisse der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik* (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), 782. (Editors) **50** #15546 73.49
- M., Stevan M.** Some problems in queueing theory and the mathematical theory of reliability. Optimal control of a reserve server of a closed queueing system in serving two types of customers. (Serbo-Croatian. English summary) *Proceedings of the Fifth Congress of Mathematicians, Physicists and Astronomers of Yugoslavia (Ohrid, 1970)*, Vol. *Mathematics* (Macedonian), pp. 145-149. *Sojuz Društva. Mat., Fiz. i Astronom.* (Skopje, 1973). (B. Dimitrov) **58** #7921 60K25
- The sequential sign test. (Serbo-Croatian. English summary) *Mat. Vesnik* **11**(26) (1974), 91-94. (Z. Šidák) **50** #8869 62L10 (62G10)
- Statistical estimates of the characteristics of queueing systems based on observations on outflow. (Russian) Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 575-577. (František Zitek) **51** #9262
- Ž. R. R.** See **Pop-Stojanović, Zoran R.**
- Zorka D.** On a complementary triangle inequality. *Univ. Beograd. Publ. Matem. Fak. Ser. Mat. Fiz. No.* 381-409 (1972), 111-112. (Victor I. Levin) **47** #30A04
- R.** (with Bingulac, Stanoje P.) Derivation and solution of the Riccati algebraic equation. (Serbo-Croatian) *Proceedings of the Fifth Congress of Mathematicians, Physicists and Astronomers of Yugoslavia (Ohrid, 1970)*, Vol. I, *Mathematics* (Macedonian), pp. 151-156. *Sojuz Društva. Mat., Fiz. i Astronom.* (Skopje, 1973). (T. Kaczorek) **56** #11161 93B25 (65F99)
- S.** See **Control in space**, **48** #8041
- arius I.** Alcune formule integrali concernenti le curve convesse di uno spazio euclideo V_2 dalla curvatura costante. *Rend. Sem. Mat. Messina* **12** (1968/70), 1 (1971). (H. R. Müller) **48** #2961 53C65
- (with Nicolescu, Lilly Jeanne) ★Matematici pentru ingineri. Vol. I. (Romanian) Mathematics for engineers. Vol. I] *Editura Tehnică, Bucharest*, 1969. 432 pp. (Editors) **56** #6979 00A05 (69.00)
- (with Nicolescu, Lilly Jeanne) ★Matematici pentru ingineri. Vol. II. (Romanian) Mathematics for engineers. Vol. II] *Editura Tehnică, Bucharest*, 1971. 368 pp. (Editors) **56** #6980 00A05 (69.00)
- A variance d'une variable aléatoire associée à une famille des corps convexes de l'espace euclidien E_3 . (Italian summary) *Rend. Sem. Mat. Univ. e Politech. Torino* **31** (1973), 303-309 (1974). (H. Groemer) **49** #6305 60D05 (53C65)
- Sur quelques variances attachées aux systèmes d'ovales. *Publ. Inst. Statist. Univ. Paris* **21** (1972), no. 3-4, 71-76 (1976). (Pamela J. Davy) **56** #1403 60D05
- A variance d'une variable aléatoire associée à une famille des ovales du plan euclidien. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **59** (1973), 178-184. (R. V. Ambarcumjan) **51** #1126 53C65
- Les espérances mathématiques de quelques variables aléatoires associées à des corps convexes dans des espaces euclidiens. *Rend. Circ. Mat. Palermo* (2) **22** (1973), 77-88. (R. E. Miles) **50** #11370 60D05 (53C65)
- Sur quelques problèmes de statistique mathématique. *Rend. Sem. Mat. Univ. e Politech. Torino* **32** (1973/74), 5-17 (1975). (Editors) **51** #9278 62-01
- (with Nicolescu, Lilly Jeanne) ★Mathematics for engineers. Vol. 1. Translated from the Romanian by L. J. Nicolescu and A. Georgescu. Translation edited by John Hammel. *Abacus Press, Tunbridge Wells, Kent*, 1974. 460 pp. (Editors) **50** #6700 (69.00)
- (with Nicolescu, Lilly Jeanne) ★Mathematics for engineers. Vol. 2. Translated from the Romanian by L. J. Nicolescu and A. Georgescu and edited by John Hammel. *Abacus Press, Tunbridge Wells*, 1974. (Editors) **52** #10290 00A05 (69.00)
- Sur quelques problèmes de géométrie intégrale dans l'espace euclidien E_n . (Italian summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat.* **108** (1974), no. 2, 183-193. (P. Drăgăli) **53** #1496 53C65
- Une extension du problème de l'aiguille de Buffon dans l'espace euclidien R^n . (Italian summary) *Boll. Un. Mat. Ital.* (4) **10** (1974), 386-389. (G. G. Vrăncianu) **51** #6679 53C65 (60D05)
- La variance et les covariances d'une variable aléatoire associée à une famille de corps convexes dans l'espace euclidien E_n . *Rend. Circ. Mat. Palermo* (2) **23** (1974), no. 1, 99-112. (L. A. Santaló) **52** #4373 60D05
- Les espérances mathématiques, les variances et les covariances de quelques variables aléatoires associées à des familles de figures convexes dans les espaces euclidiens à deux et trois dimensions. (Italian and English summaries) *Rend. Sem. Mat. Fis. Milano* **44** (1974), 7-45 (1975). (L. A. Santaló) **52** #15600 60D05 (53C65)
- Géométrie intégrale dans le plan projectif. Hommage au Professeur Miron Nicolescu pour son 70^e anniversaire, II. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 79-96. (L. A. Santaló) **48** #12442 53C65
- Sur quelques probabilités géométriques liées aux systèmes de corps convexes dans un espace euclidien E_n . (Italian summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 1, 22-29. (H. Groemer) **51** #11388 53C65 (60D05)
- Sur la mesure cinématique dans l'espace euclidien E_n . *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 2, 348-352. (Walter O. Vogel) **54** #3637 53C65
- Probabilités géométriques dans l'espace euclidien E_n . *Rend. Circ. Mat. Palermo* (2) **24** (1975), no. 1-2, 51-83. (L. A. Santaló) **55** #11336 60D05
- Probabilités géométriques de type "Buffon" dans le plan euclidien. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **110** (1976), no. 1-3, 53-59. (Franz Streit) **54** #8789 60D05
- Une extension de la loi de Laplace-Gauss. (Italian summary) *Boll. Un. Mat. Ital.* (5) **13A** (1976), no. 1, 130-138. (H. E. Reinhardt) **54** #1440 62E15
- Sur les variances attachées aux quelques familles d'ovaloïdes dans l'espace R_3 . *Publ. Inst. Statist. Univ. Paris* **22** (1977), no. 3-4, 99-105. (L. A. Santaló) **58** #7778 60D05 (53C65)
- Štokalo, I. Z.** (with Bogoljubov, O. M.) M. V. Ostrogradskii's "program for analytic mechanics". (Ukrainian) *Narisi Ist. Prirodzn. i Tehn. Vyp.* **15** (1971), 34-37, 95. (Editors) **58** #4887 01A55
- ★Операционное исчисление. (Russian) [Operational calculus] Обобщения и приложения. [Generalizations and applications] *Izdat. "Naukova Dumka", Kiev*, 1972. 303 pp. (Hans-Jürgen Glaeske) **55** #13177 44A10
- (with Mitropol'skii, Ju. O.; Bogoljubov, O. M.; Fil'čakov, P. F.) Mihail Alekseevič Lavrent'ev. (Russian) *Studies in the theory of functions of a complex variable and its applications* (Russian and Ukrainian), pp. 5-15. *Vidannja Inst. Mat. Akad. Nauk Ukrain. RSR, Kiev*, 1972. (Editors) **48** #5798 01A70
- (with Bogoljubov, O. M.) The development of national mathematics (on the fiftieth anniversary of Soviet education). (Russian) *Differencial'nye Uravnenija* **8** (1972), 2119-2129. **47** #1567 01A60
- (with Mitropol'skii, Ju. O.; Bogoljubov, O. M.; Lučka, A. Ju.; Sologub, V. S.) Obituary: Jurii Dmitrievič Sokolov. (Ukrainian) *Narisi Ist. Prirodzn. i Tehn. Vyp.* **17** (1972), 86-88. (Editors) **57** #12129 01A70
- (with Bogoljubov, O. M.; Sologub, V. S.) Obituary: Iosip Benediktovič Pogrebys'kii. (Ukrainian) *Narisi Ist. Prirodzn. i Tehn. Vyp.* **17** (1972), 89-90. (Editors) **57** #12134 01A70
- (with Bogoljubov, O. M.; Grigor'jan, A. T.; Kuznecov, B. G.; Juškevič, A. P.) I. B. Pogrebys'skii. (Russian) *Voprosy Ist. Estestvozn. i Tehn.* **1972**, no. 1(38), 122-123. (Editors) **58** #27102 01A70
- (with Bogoljubov, O. M.) M. V. Ostrogradskii's "Program in analytical mechanics". (Russian) *Studies in the history of mathematics*, No. 18 (Russian), pp. 289-294, 339. *Izdat. "Nauka", Moscow*, 1973. (Peeter Mürsepp) **56** #15300 01A55
- ★Operational calculus. Translated from the Russian by V. Kumar. *Hindustan Publishing Corp., Delhi; Pergamon Press, Inc., Elmsford, N. Y.*, 1976. xi+333 pp. (J. S. Joel) **55** #13178 44A10
- ★Operational calculus. Translated from the Russian by V. Kumar. Translation edited by I. N. Sneddon. Originally published in 1976 by Hindustan Publishing Corp., Delhi. *Pergamon Press, Inc., Elmsford, N. Y.*, 1977. xi+333 pp. ISBN 0-08-022041-X (Editors) **58** #29868 44-01
- (with Erugin, N. P.; Lukaševič, N. A.) Anatolii Iosifovič Jablonskii (on the occasion of his fiftieth birthday). (Russian) *Differencial'nye Uravnenija* **14** (1978), no. 4, 755-758. (Editors) **58** #16024 01A70
- See also **History of mathematical education in the USSR**, **52** #13176; **Valčev, Kim G.**, **57** #10059; **Erugin, N. P.**; et al., **58** #4936; **Bogoljubov, O. M.**; et al., **58** #21291 and **History of national mathematics in four volumes**, **58** #26682
- Stokalski, Andrzej** Control optimization in Markov models of an operational system. (Polish. English and Russian summaries) *Podstawy Sterowania* **6** (1976), no. 1, 57-70. (Author's summary) **56** #18080 93E20 (90B35)
- Stokely, Ernest M.** (with Varoutas, Panos P.; Nardizzi, Louis R.) Two-dimensional E-filtering applied to image processing. *IEEE Trans. Systems Man Cybernet.* **SMC-6** (1976), no. 6, 410-419. (Sidney Berkowitz) **54** #7100 94A05
- Stoker, J. J.** ★Nonlinear elasticity. *Gordon and Breach Science Publishers, New York-London-Paris*, 1968. xi+130 pp. (Editors) **54** #1768 73.00
- The non-linear theory of thin elastic sheets. *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Muskhelishvili)* (Russian), pp. 517-538. *Izdat. "Nauka", Moscow*, 1972. (T. W. Ting) **52** #2342 73.35
- Stokes, A. N.** A special property of the matrix Riccati equation. *Bull. Austral. Math. Soc.* **10** (1974), 245-253. (W. T. Reid) **49** #7493 34A10
- On two types of moving front in quasilinear diffusion. *Math. Biosci.* **31** (1976), no. 3-4, 307-315. (Author's summary) **58** #33120 92A10 (35K10)
- Intersections of solutions of nonlinear parabolic equations. *J. Math. Anal. Appl.* **60** (1977), no. 3, 721-727. (S. Leela) **57** #3638 35K25
- Nonlinear diffusion waveshapes generated by possibly finite initial disturbances. *J. Math. Anal. Appl.* **61** (1977), no. 2, 370-381. (Antonino Maugeri) **57** #6849 35K55
- Stokes, Arnold P.** On the existence of periodic solutions of functional differential

- equations. *Seminar on Differential Equations and Dynamical Systems, II* (Univ. Maryland, College Park, Md., 1969), pp. 205-208. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (T. G. Proctor) **52** #14544 34K15
- On the approximation of nonlinear oscillations. *J. Differential Equations* **12** (1972), 535-558. (P. Hagedorn) **48** #6548 34C15
- Stability of functional differential equations with perturbed lags. *J. Math. Anal. Appl.* **47** (1974), 604-619. (V. Staikos) **50** #13829 34K20
- Invariant subspaces, symmetry and alternative problems. *Bull. Inst. Math. Acad. Sinica* **3** (1975), no. 1, 7-14. (Jean Mawhin) **54** #3530 47H15
- On the existence of periodic solutions of functional differential equations. *J. Math. Anal. Appl.* **54** (1976), no. 3, 634-652. (Å. Elbert) **56** #16108 34K15
- Local coordinates around limit cycles of partial differential equations. *Proc. Amer. Math. Soc.* **59** (1976), no. 2, 225-231. (Lu-San Chen) **54** #691 35B10 (35K10)
- Error estimates for approximate solutions of evolution equations. (Russian summary) *Problems of the asymptotic theory of nonlinear oscillations (Russian)*, pp. 209-213, 279. *Naukova Dumka*, Kiev, 1977. (Author's summary) **58** #28968 34G05
- Stabilization of Kepler's problem. *Celestial Mech.* **16** (1977), no. 1, 27-34. (J. Moser) **57** #2025 7034
- Local coordinates around a limit cycle of a functional differential equation with applications. *J. Differential Equations* **24** (1977), no. 2, 153-172. (J. K. Hale) **55** #5981 34K15
- General time elements for the two body problem. *Celestial Mech.* **17** (1978), no. 2, 137-144. (Author's summary) **58** #14091 7065
- See also **Proceedings: International Conference on Nonlinear Oscillations**, **47** #8969 and **Advances in differential and integral equations**, **50** #10389
- Stokes, R. A. (with DeMarcus, W. C.) A new method for approximate solution of the equation of transfer. *J. Quant. Spectrosc. Radiat. Transfer* **11** (1971), no. 1, 93-115. (Attay Kovetz) **53** #12439 8265
- Stokhof, Martin (with Groenendijk, Jeroen) Modality and conversational information. *Theoret. Linguist.* **2** (1975), no. 1-2, 61-112. (Authors' summary) **58** #21472 02C10
- Stokić, D. (with Vukobratović, M.; Gluhajić, N.; Hristić, D.) One method of control for large-scale humanoid systems. *Math. Biosci.* **36** (1977), no. 3-4, 175-198. (Authors' summary) **58** #33196 93A10 (92A99)
- Stoklosa, Janusz On the serial decomposition of digital controllers. *Found. Control Engrg.* **1** (1976), no. 4, 243-251. (Author's summary) **56** #2559 93C55 (93A05)
- Serial and parallel decomposition of digital controllers. *Found. Control Engrg.* **2** (1977), no. 3, 141-151. (Bostwick F. Wyman) **57** #5519 94A30 (94A25)
- On operations preserving functions of shift registers. *Found. Control Engrg.* **2** (1977), no. 4, 211-214. (W. Wechler) **57** #15792 94A30
- Stokolova, N. A. Trends in the area of development of information retrieval languages. (Russian) *Investigations in mathematical linguistics, mathematical logic and information languages (Russian)*, pp. 160-199, "Nauka", Moscow, 1972. (See RZMat 1972 #6 V507) 68A50
- Stol, Ph. Th. ★A contribution to theory and practice of nonlinear parameter optimization. With a Dutch summary. Agricultural Research Reports, No. 835. Centre for Agricultural Publishing and Documentation, Wageningen, 1975. 197 pp. (loose errata) (Jürgen Guddat) **53** #9645 65K05 (90C30)
- Stolarski, Przemysław (with Krzyśko, Mirosław) Estimation of multivariate density functions. *Funct. Approximatio Comment. Math.* **2** (1976), 101-105. (J. R. Blum) **56** #4039 62G05 (62L20)
- (with Krzyśko, Mirosław) Classification of observations using the method of potential functions. *Funct. Approximatio Comment. Math.* **4** (1976), 159-161. (M. Arató) **57** #11209 68A45
- Stolarsky, Kenneth B. Cubic triangle inequalities. *Amer. Math. Monthly* **78** (1971), 879-881. (J. B. Wilker) **45** #1044 52A50
- (with Corzatt, Clifton E.) Sequences generated by rational operations. *Proceedings of the 1972 Number Theory Conference (Univ. Colorado, Boulder, Colo.)*, pp. 228-232. Univ. Colorado, Boulder, Colo., 1972. (K. Szymczek) **53** #260 10A35
- Sums of distances between points on a sphere. *Proc. Amer. Math. Soc.* **35** (1972), 547-549. (A. Florian) **46** #2555 52A40
- Extrapolation techniques related to transcendence proofs. *J. Res. Nat. Bur. Standards Sect. B* **77B** (1973), 45-51. (S. V. Kotov) **51** #10247 10F35
- Sums of distances between points on a sphere. II. *Proc. Amer. Math. Soc.* **41** (1973), 575-582. (A. Florian) **48** #12314 52A40
- ★Algebraic numbers and Diophantine approximation. Pure and Applied Mathematics, No. 26. Marcel Dekker, Inc., New York, 1974. xv + 329 pp. (W. W. Adams) **51** #10241 10Fxx
- (with Alexander, Ralph) Extremal problems of distance geometry related to energy integrals. *Trans. Amer. Math. Soc.* **193** (1974), 1-31. (G. J. Butler) **50** #3121 52A50
- Discrepancy and sums of distances between points of a metric space. *The geometry of metric and linear spaces (Proc. Conf., Michigan State Univ., East Lansing, Mich., 1974)*, pp. 44-56. *Lecture Notes in Math.*, Vol. 490, Springer, Berlin, 1975. (Harald Niederreiter) **53** #2881 10K30
- Generalizations of the logarithmic mean. *Math. Mag.* **48** (1975), 87-92. (V. Ganapathy Iyer) **50** #10186 26A87
- The sum of the distances to N points on a sphere. *Pacific J. Math.* **57** (1975), no. 2, 563-573. (B. Novák) **53** #284 10E99 (52A40)
- The sum of the distances to certain pointsets on the unit circle. *Pacific J. Math.* **59** (1975), no. 1, 241-251. (G. D. Chakerian) **52** #9084 52A40
- Spherical distributions of N points with maximal distance sums are well spaced. *Proc. Amer. Math. Soc.* **48** (1975), 203-206. (J. B. Wilker) **51** #1615 52A40
- Beatty sequences, continued fractions, and certain shift operators. *Canad. Math. Bull.* **19** (1976), no. 4, 473-482. (Aviezri S. Fraenkel) **56** #2908 10A40 (10L10)
- An extremal characterization of regular simplices via the addition theorem for Gegenbauer polynomials. *Geometriae Dedicata* **5** (1976), no. 2, 229-238. (Jacques Dubois) **58** #7401 52A40 (52A25)
- The sum of a digitaddition series. *Proc. Amer. Math. Soc.* **59** (1976), no. 1, 1-5. (Roland Fischer) **53** #13099 10A30
- A set of generalized Fibonacci sequences such that each natural number belongs to exactly one. *Fibonacci Quart.* **15** (1977), no. 3, 224. (J. Chidambaraswamy) **57** #12369 10A35
- Power and exponential sums of digital sums related to binomial coefficient polynomials. *SIAM J. Appl. Math.* **32** (1977), no. 4, 717-730. (L. Carlitz) **55** #12621 10A30
- See also **Problems: Geometry of metric and linear spaces**, **53** #6419
- Stolarz, Jan The solutions of a certain extremal functional equation. (Polish. Russian. English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. Zeszyt* **25** (1974), 123 (Karol Baron) **58** #17630 39A15
- A certain class of extremal functional equations. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 441 Mat.-Fiz. Zeszyt* **26** (1976), 117. (Author's summary) **56** #9128 39A15
- A certain problem of dynamical planning. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 441 Mat.-Fiz. Zeszyt* **26** (1976), 129-138. (Author's summary) **56** #4856 90C50
- Stoler, David Most-general minimality-preserving Hamiltonian. *Phys. Rev. D* (3) **11** (1975), 3033-3034. (Author's summary) **56** #14338 8147
- Stolin, Ja. N. (with Belov, I. S.) An algorithm for the single-route scheduling problem. (Russian) *Mathematical economics and functional analysis (Russian)*, pp. 248-257. "Nauka", Moscow, 1974. (V. Tanaev (RZMat 1975 #5 V723)) **56** #17780 90B10
- Stolin, V. L. (with Marinov, M. S.; Popov, V. S.) Variational approach to the relative two-center problem: critical internuclear distance. *J. Computational Phys.* **19** (1975), 3, 241-256. (Christiane Coudray) **53** #7298 8149
- Stoline, Michael R. (with Spjotvoll, Emil) An extension of the T -method of multiple comparison to include the cases with unequal sample sizes. *J. Amer. Statist. Assoc.* (1973), 975-978. (Jagbir Singh) **53** #1870 62J15
- Stoljarcuk, V. K. The construction of polynomials that realize a close-to-best approximation of the functions $\sin x$ and $\Phi(x) = 2\pi^{-1/2} \int_0^x e^{-t^2} dt$. (Russian) *Ukrain. Mat. Zh.* **26** (1974), 216-226, 284. (T. Bojanov) **49** #9482 41A10
- Uniform approximation, by polynomials on a segment, of Bessel functions of integer index. (Russian) *Ukrain. Mat. Zh.* **26** (1974), 683-686, 718. (H. Zeghib) **51** #10955 41A10 (65D15)
- Approximation, uniform on a segment, of hypergeometric functions by polynomials. (Russian) *Questions in the theory of approximation of functions and its applications (Russian)*, pp. 179-185. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1975. (Editors) **58** #29605 41A10
- Stoljarov, A. V. The classification of plane nets in P_4 . (Russian) *Čuvaš. Gos. Ped. Učen. Zap. No. 27* (1966), 64-82. (V. V. Goldberg) **52** #15270 53A20
- The intrinsic geometry of a Laplacian configuration on surfaces V_2 of the projective space P_4 . (Russian) *Proceedings of the Scientific Research Seminar on Geometry and Topology, Vol. I. Čuvaš. Gos. Ped. Inst. Učen. Zap. Vyp.* **35** (1971), 29-38. (A. C. Albu) **54** #8475 53A20
- The intrinsic geometry of multidimensional surfaces that carry a projective-Chevalley net. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 11(114), 99-103. (Svoboda) **45** #7629 53A20
- The dual geometry of nets, and polar-conjugate configurations on a hypersurface. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 4(119), 109-119. (K. Svoboda) **47** #7618 53A20
- The dual geometry of plane multidimensional nets. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 7(134), 92-102. (E. Siwek) **51** #11302 53A20
- The invariant frame field of a hypersurface that is generated by a conjugate net. (Russian) *Volž. Mat. Sb. No. 23* (1973), 66-70. (M. C. Chaki) **52** #11753 53A20
- The projective differential geometry of a regular hyperband distribution of m -dimensional line elements. (Russian. English summary) *Problems in geometry, V. 1 (Russian)*, pp. 117-151, 302. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii*, Moscow, 1975. (Adrian C. Albu) **58** #12759 53A20
- The fundamental objects of a regular hyperband. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 10(161), 97-99. (E. Siwek) **54** #8492 53A55
- Conditions for a regular hyperband to be quadratic. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 11 (162), 106-108. (M. C. Chaki) **53** #14325 53A20
- Application of the theory of regular hyperbands to the study of the geometry of multidimensional surfaces in a projective space. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 2(165), 111-113. (M. Decuyper) **58** #18193 53A20
- The intrinsic geometry of a Cartan surface. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp.* **7** (1976), 111-118, 154. (M. A. Albu) **58** #18194 53A20
- Dual linear connections on framed manifolds in a space with projective connections. (Russian) *Problems in geometry, Vol. 8 (Russian)*, pp. 25-46, 279. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii*, Moscow, 1977. (A. Goetz) **58** #2620 53B10
- The dual geometry of nets on a regular hyperband. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 8(183), 68-78. (M. A. Akivis) **57** #13733 53A20
- Affine connections on a normalized distribution of m -dimensional linear elements. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp.* **7** (1977), 82-96, 156. (J. Vilms) **58** #18195 53A20 (53B15)
- See also **Proceedings: Internumiversity Scientific Conference of the Mathematics Faculties of Pedagogical Institutes of the Ural Region**, **46** #1532 and **Proceedings: Scientific Research Seminar on Geometry and Topology**, **52** #7761
- Stoljarov, B. A. (with Janbihs, G.) Optimization of a multilevel centralized information transmission network. (Russian) *Automat. i Vychisl. Tehn. (Riga)* **1974**, no. 6, 45-50. (Authors' summary) **57** #11950 94A20
- (with Janbihs, G.) Optimization of the structure of multiprogrammed control systems for solving sets of dependent tasks. (Russian) *Automat. i Vychisl. Tehn. (Riga)* **1977**, no. 6, 62-69, 95. (Jacek Błażewicz) **57** #11714 90B35 (68A99)
- Stoljarov, G. K. See **Proceedings: Republican Conference of Belorussian Mathematicians**, **48** #3669
- Stoljarov, N. N. Nonsymmetric problems of the elastoplastic bending of flexible shallow shells. (Russian) *Differential equations and their applications, No. 2 (Russian)*, 155-162, 179. *Kuibyshev. Gos. Ped. Inst., Kuibyshev*, 1975. (Author's summary) **58** #32247 7335
- Stoljarov, S. N. (with Bolotovskii, B. M.) Current status of the electrodynamics of media (infinite media). *Uspehi Fiz. Nauk* **114** (1974), no. 3-4, 569-608 (Russian)

ated as *Soviet Physics Uspekhi* **17** (1975), no. 6, 875-895. (Andrew King) **54** #4339 35 (81.35)

V. O. (with Pidstrigač, Ja. S.) A matrix-operator method for the solution of dary value problems for systems of equations of elasticity theory. (Russian) *Mathematical methods, and physical and mechanical fields*, No. 2 (Russian), pp. 3-18, 171. *Kova Dumka*", Kiev, 1975. (J. Ignaczak) **54** #1797 73.35

solution of systems of ordinary differential equations with variable coefficients on asis of a generalization of the Hamilton-Cayley theorem. (Ukrainian. English and an summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1975**, 32-34, 93. (F. an) **51** #973 34A25

V. V. The general integral of a dynamical system. (Russian) *Differencial'nye enija (Rjazan') Vyp.* 9 (1977), 133-134. (Author's summary) **57** #6617 34C05

a, E. M. (with Gurin, L. G.) The maximum principle in a certain minimax (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 1175-1185, 1363. (F. M. ova) **50** #1084 49B40 (65K05)

with Ivanilov, Ju. P.) Some sociodemographic models. (Russian) *Optimization ds and operations research, applied mathematics* (Russian), pp. 149-156, 190. *Akad. SSSR Sibirsk. Otdel. Sibirsk. Energet. Inst., Irkutsk*, 1976. (V. D. Dimitrov) **4451** 92A15

is, L. P. An application of anharmonic ranges in space to the determination and ruction of algebraic curves and surfaces. (Russian) *Čuvaš. Gos. Ped. Inst. Učen. Vyp.* 27 (1966), 12-21. (W. Burau) **54** #12785 14H45 (14N05)

application of multielement anharmonic pencils to the synthetic representation of raic congruences and complexes in n -dimensional projective space S_n . (Russian) *Š. Gos. Ped. Inst. Učen. Zap. Vyp.* 27 (1966), 22-40 (errata insert). (B. Orbán) **13251** 14N05

he multidimensional analogue of a hyperboloid. (Russian) *Čuvaš. Gos. Ped. Inst. Zap. Vyp.* 27 (1966), 41-44. (Konrad Drechsler) **53** #460 14N05 (14J25)

ertain manifolds of fourth order space curves of the first kind. (Russian) edings of the Scientific Research Seminar on Geometry and Nomography, Vol. I. *Š. Gos. Ped. Inst. Učen. Zap. Vyp.* 35 (1971), 39-49. (B. Orbán) **53** #9022 0

he geometry of configurations that are generated by a plane net. (Russian) *nt problems in geometry and its applications*, No. 2 (Russian), pp. 35-43, 127. *Čuvaš. Univ., Cheboksary*, 1976. (Author's summary) **58** #30836 53A20

a, T. D. See *History of the exact sciences in the medieval Near and Middle East*, 5579

P. (with Waeber, W. B.) A similarity transformation of the Schrödinger equation ts application in pseudo-potential theory. *Physica* **58** (1972), 88-108. (Charles A. on) **52** #16358 81.35

with Morf, R. H.) Numerical methods for the calculation of molecular dynamics: riation of the equations of motion; calculation of correlation functions. *Numerical sis (Proc. Colloq., Lausanne*, 1976), pp. 139-152. *Internat. Ser. Numer. Math., Vol. irkhäuser, Basel*, 1977. (P. Keast) **57** #8270 70.65

nfused Properties of the space h^p ($0 < p < 1$) of harmonic functions on the unit disc. *Math. (Basel)* **25** (1974), 613-618. (Y. Komatu) **51** #8437 31A05

integral formulae for pluriharmonic functions on bounded symmetric domains. *Math. J.* **41** (1974), 393-404. (R. Michael Range) **49** #3212 32F05 (31C10)

ardy-type spaces of harmonic functions on symmetric spaces of noncompact type. *ine Angew. Math.* **271** (1974), 63-76. (J. Mitchell) **51** #945 32M15 (43A85)

he space N_* of holomorphic functions on bounded symmetric domains. *Ann. . Math.* **32** (1976), no. 1, 95-110. (J. Mitchell) **54** #5488 32A07 (32M15, 46J15)

with Roberts, James W.) Prime and principal ideals in the algebra N^+ . *Arch. . (Basel)* **27** (1976), no. 4, 387-393. (Joel H. Shapiro) **54** #10625 (E 58 #11454) 8

harmonic majorants for plurisubharmonic functions on bounded symmetric rains with applications to the spaces H_F and N_* . *J. Reine Angew. Math.* **282** (1976), 7. (J. Mitchell) **53** #8492 32F05 (32M15)

characterization of $F^+ \cap N$. *Proc. Amer. Math. Soc.* **57** (1976), no. 1, 97-98. mas McCoy) **53** #3315 30A76

with Roberts, James W.) Composition operators on F^+ . *Studia Math.* **57** (1976), 217-228. (Joel H. Shapiro) **55** #8773 46E10 (46J15, 47B37)

Mean growth and Taylor coefficients of some topological algebras of analytic ions. *Ann. Polon. Math.* **35** (1977/78), no. 2, 139-158. (S. V. Hruščev) **57** #3858 05

Mean value theorems for harmonic and holomorphic functions on bounded symmetric domains. *J. Reine Angew. Math.* **290** (1977), 191-198. (J. Mitchell) **10734** (EA 55/56) 32M15

with Roberts, James W.) Correction to the paper: "Prime and principal ideals in algebra N^{++} " (Arch. Math. (Basel) **27** (1976), 387-393). *Arch. Math. (Basel)* **30**), no. 6, 672. (Joel H. Shapiro) **58** #11454 30A98 (46J15)

bert R. ★Sets, logic and axiomatic theories. Second edition. *W. H. Freeman and San Francisco*, 1974. xi + 233 pp. (Editors) **49** #10511 02-01

thelm (with Andreotti, Aldo) ★Analytic and algebraic dependence of morphic functions. *Lecture Notes in Mathematics*, Vol. 234. *Springer-Verlag, ew-New York*, 1971. iii + 390 pp. (W. Thimm) **52** #11124 32J10

iber integration and some applications. *Symposium on Several Complex Variables City, Utah*, 1970, pp. 109-120. *Lecture Notes in Math.*, Vol. 184. *Springer, Berlin*, (H. Wu) **45** #9348 58A10

A Bezout estimate for complete intersections. *Ann. of Math. (2)* **96** (1972), 361-401. Riemschneider) **47** #2091 (E 47 #499) 32C25

Deficit and Bezout estimates. *Value-distribution theory, Part B (Proc. Tulane Univ. ram, Tulane Univ., New Orleans, La.*, 1972-1973), pp. vii-ix, 1-272. *Dekker, New 1973*. (H. Kerner (Zbl **288** #32009)) **58** #28690 32H25

with Matsumura, Yoza) Ample vector bundles on compact complex spaces. *Complex analysis*, 1972 (Proc. Conf., Rice Univ., Houston, Tex., 1972), Vol. II: Analysis ngularity. *Studia Univ. Studia* **59** (1973), no. 2, 71-107. (A. Oniščik (RŽMat **1974** 4724)) **50** #13618 32J10 (14C30)

★Holomorphic functions of finite order in several complex variables. Expository ures from the CBMS Regional Conference held at the University of Wisconsin,

Watewater, Wis., June 18-22, 1973. Conference Board of the Mathematical Sciences Regional Conference Series in Mathematics, No. 21. *American Mathematical Society, Providence, R.I.*, 1974. x + 83 pp. (L. I. Ronkin) **50** #2545 32A15

An average Bezout estimate. *Fonctions analytiques de plusieurs variables et analyse complexe (Colloq. Internat. CNRS, No. 208, Paris*, 1972), pp. 242-255. "Agora Mathematica", No. 1, Gauthier-Villars, Paris, 1974. (Editors) **58** #28691 32H25

(with Andreotti, Aldo) Meromorphic functions on complex spaces. *Fonctions de plusieurs variables complexes (Sém. François Norguet, 1970-1973; à la mémoire d'André Martineau)*, pp. 279-309. *Lecture Notes in Math.*, Vol. 409. *Springer, Berlin*, 1974. (W. Thimm) **52** #11125 32J10

(with Huckleberry, Alan T.) On the thickness of the Shilov boundary. *Math. Ann.* **207** (1974), 213-231. (Andrew Markoe) **49** #3210 32E25 (46J20)

★Invariant forms on Grassmann manifolds. *Annals of Mathematics Studies*, No. 89. *Princeton University Press, Princeton, N.J.*; *University of Tokyo Press, Tokyo*, 1977. ix + 113 pp. *ISBN 0-691-08198-0* (H. Wu) **58** #1235 32C10 (14M15, 32M15)

★Value distribution on parabolic spaces. *Lecture Notes in Mathematics*, Vol. 600. *Springer-Verlag, Berlin-New York*, 1977. viii + 216 pp. *ISBN 3-540-08341-3* (F. Sakai (Zbl **367** #32001)) **58** #28692 32H25

Value distribution on parabolic spaces. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part 2, Williams Coll., Williamstown, Mass.*, 1975), pp. 259-263. *Amer. Math. Soc., Providence, R.I.*, 1977. (Alexander A. Pankov) **56** #8919 32H25

Aspects of value distribution theory in several complex variables. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 166-183. (Michael J. Cowen) **55** #723 32H25

Variétés strictement paraboliques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 12, A757-A759. (Author's summary) **56** #15997 32H25 (32L05)

See also *Value-distribution theory*, **49** #9248

Stollberg, Jürgen (with Binder, Hans-Joachim) Kombination von Maximumprinzip und dynamischer Optimierung. *Wiss. Z. Techn. Hochsch. Leuna-Merseburg* **18** (1976), no. 2, 225-235. (K. Hinderer) **53** #15481 93C50 (49D30)

Stolle, Hans-Wolfgang Ebene Elastizitätstheorie und Spannungsfunktionen. (Russian, English and French summaries) *Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe* **16** (1967), no. 6, 797-806. (P. P. Teodorescu) **53** #2110 73.35

Liste der Veröffentlichungen von Prof. Dr. A. Schmidt. Collection of articles dedicated to Adam Schmidt on the occasion of his 65th birthday. *Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe* **23** (1974), no. 8, 604. (Editors) **53** #69 01A70

(with El-Hamaky, Bahia) Die ringsum starr gelagerte, drehelastisch eingespannte Kreisplatte. (Russian, English and French summaries) *Wiss. Z. Rostock Math.-Naturwiss. Reihe* **24** (1975), no. 10, 1239-1245. (P. Villaggio) **56** #1877 73.35

Stoller, D. S. See *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompili*, **48** #9783

Stoller, Gerald S. Form of solutions to the p -adic equation $y' = 0$. *Bull. Amer. Math. Soc.* **82** (1976), no. 4, 557-559. (A. F. Monna) **53** #13772 34G05 (12B40, 14G20)

Three problems of S. M. Ulam with solutions and generalizations. *Colloq. Math.* **36** (1976), no. 1, 43-48. (D. Kurepa) **55** #7778 04A05 (20A10)

The convergence-preserving rearrangements of real infinite series. *Pacific J. Math.* **73** (1977), no. 1, 227-231. (D. C. Russell) **58** #6802 40A05

Stollings, Dž. See *Stallings, John*

Stolov, E. L. Asymptotic behavior of a certain integral that contains Gegenbauer polynomials. (Russian) *Kazan. Gos. Univ. Učen. Zap.* **129** (1969), no. 3, 139-144. (B. S. Popov) **45** #8897 33A50

Asymptotic behavior of the Mehler-Fock transform of functions that have a singularity. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 10(137), 69-72. (S. G. Samko) **48** #11938 44A15

(with Sočalov, Ju. A.) The construction of the set of characteristic sequences of symmetric stochastic matrices. (Russian) *Probabilistic methods and cybernetics, No. X-XI (Russian)*, pp. 129-141. *Izdat. Kazan. Univ., Kazan*, 1974. (Gh. Opreșan) **58** #5733 15A51

Some inequalities for the matrix elements of the representations of $SO(n)$. (Russian) *Harmonic analysis on groups. Moskov. Gos. Zaočn. Ped. Inst. Sb. Naučn. Trudov Vyp.* 39 (1974), 213-218. (Editors) **58** #22408 22E45

(with Dolotkazin, A. H.; Dorodnov, A. V.; Ermolaev, Ju. B.; Norden, A. P.; Sahaev, I. I.; Sul'din, A. V.; Čibrikova, L. I.; Eskin, L. D.) Vladimir Vladimirovič Morozov. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 2(153), 140-141. (Editors) **51** #10010 01A70

Simplexes of commuting symmetric stochastic matrices. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 10(173), 79-82. (George P. Barker) **58** #740 15A51

Stolova, E. S. (with Sokolov, M. P.) ★Алгебраические кривые третьего и четвертого порядков. (Russian) [Third and fourth order algebraic curves] Библиографический указатель. [A bibliography] *Izdat. "Naukova Dumka", Kiev*, 1973. 199 pp. (Editors) **53** #414 14-01 (00A15, 14-03, 14H45)

Stoltenberg, R. A. An internal characterization of paracompact p -spaces. *Trans. Amer. Math. Soc.* **196** (1974), 249-263. (R. Hodel) **49** #11471 54D20

Stöltig, Rolf ★Détermination des groupes de réflexions dans des espaces vectoriels réels de dimension finie. D. E. A. de Mathématiques Pures: Option Algèbre et Géométrie. U. E. R. de Mathématiques, 1970-1971. Secrétariat des Mathématiques, Université des Sciences et Techniques du Languedoc, Publication No. 99. *Université des Sciences et Techniques du Languedoc, Montpellier*, 1971. ii + 65 pp. (loose errata) (F. A. Sher) **50** #13309 20H15

Über endliche Hjelmlev-Gruppen. *Math. Z.* **135** (1973/74), 249-255. (G. Zappa) **49** #418 20D99 (50B35)

Erweiterungen von Hjelmlev-Gruppen. *Geometriae Dedicata* **3** (1974/75), 527-537. (G. Zappa) **51** #6548 50A15

Eine besondere Klasse endlicher Hjelmlev-Gruppen. *Geometriae Dedicata* **5** (1976), no. 2, 163-170. (F. A. Sher) **54** #12871 20B25 (20D05)

Klassen von fastsingulären Hjelmlevgruppen. *Arch. Math. (Basel)* **29** (1977), no. 4, 421-425. (F. Bachmann) **58** #23968 50A20 (05B25)

See also *Bachmann, Friedrich*, **52** #9066

Stoltz, Robert A. (with Lepore, John A.) Stability of linear cylindrical shells subjected to stochastic excitations. *Stability of stochastic dynamical systems (Proc. Internat. Sympos.,*

- Univ. Warwick, Coventry, 1972), pp. 239-251. *Lecture Notes in Math.*, Vol. 294, Springer, Berlin, 1972. (T. K. Caughey) **54** #4275 73.60
- Stoltzfus, N.** (with Cahill, K.) Topological cohesion. *J. Mathematical Phys.* **19** (1978), no. 6, 1381. (Authors' summary) **58** #14729 81.55
- Stoltzfus, Neal W.** Unraveling the integral knot concordance group. *Mem. Amer. Math. Soc.* **12** (1977), no. 192, iv+91 pp. (J. P. Levine) **57** #7616 57C45 (10C05)
- Stolyarov, S. N.** See **Stoljarov, S. N.**
- Stolz, Peter** Attempt of an axiomatic foundation of quantum mechanics and more general theories. *VI. Comm. Math. Phys.* **23** (1971), 117-126. (J. M. Jauch) **45** #6279 81.00
- Stolzenberg, Gabriel** A constructive version of Wermer's theory of polynomial approximation via analytic parameterization of the spectrum. *Symposia Mathematica*, Vol. II (INDAM, Rome, 1968), pp. 321-331. Academic Press, London, 1969. (Editors) **54** #599 32E30
- (with Kopell, Nancy) Commentary on E. Bishop's talk (Historia Math. **2** (1975), 507-517). Proceedings of the American Academy Workshop on the Evolution of Modern Mathematics (Boston, Mass., 1974). *Historia Math.* **2** (1975), no. 4, 519-521. (Timothy G. McCarthy) **58** #16192b 02Exx (02A05)
- Stone, A. H.** Unions of locally compact spaces. *Proceedings of the University of Houston Point Set Topology Conference* (Houston, Tex., 1971), pp. 56-75. Univ. Houston, Houston, Tex., 1971. (Stephen Willard) **53** #9174 54H05 (54D45)
- (with Rajappan, K. P.) On Okada's method for realizing cut-set matrices. *J. Combinatorial Theory Ser. B* **10** (1971), 113-134. (F. Harary) **45** #100 05C99
- Non-separable Borel sets. II. *General Topology and Appl.* **2** (1972), 249-270. (D. Kurepa) **47** #1038 54H05 (04A15, 28A05)
- Some problems of measurability. *Topology Conference* (Virginia Polytech. Inst. and State Univ., Blacksburg, Va., 1973), pp. 242-248. *Lecture Notes in Math.*, Vol. 375, Springer, Berlin, 1974. (Roger W. Hansell) **51** #843 28A20 (04A15)
- Topology and measure theory. *Measure theory* (Proc. Conf., Oberwolfach, 1975), pp. 43-48. *Lecture Notes in Math.*, Vol. 541, Springer, Berlin, 1976. (D. Preiss) **56** #8786 28A32
- Measure-preserving maps. *General topology and its relations to modern analysis and algebra, IV* (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part A, pp. 205-210. *Lecture Notes in Math.*, Vol. 609, Springer, Berlin, 1977. (J. C. Oxtoby) **57** #6369 28A65
- Stone, A. J.** Transformation between cartesian and spherical tensors. *Molecular Phys.* **29** (1975), no. 5, 1461-1471. (Elhanan Leibowitz) **56** #4560 81.53
- Properties of Cartesian-spherical transformation coefficients. *J. Phys. A* **9** (1976), no. 4, 485-497. (C. W. Kilmister) **53** #9054 53A45
- Stone, Alexander P.** Conservation laws on manifolds. *Methods of local and global differential geometry in general relativity* (Proc. Regional Conf. on Relativity, Univ. Pittsburgh, Pittsburgh, Pa., 1970), pp. 86-91. *Lecture Notes in Physics*, Vol. 14, Springer, Berlin, 1972. (Stere Ianus) **55** #4245 58A10 (69.00)
- Induced transformations on exterior product spaces. *Tensor (N.S.)* **23** (1972), 147-150. (David Carlson) **46** #9082 15A69
- Some remarks on the Nijenhuis tensor. *Canad. J. Math.* **25** (1973), 903-907. (H. Osborn) **48** #2936 53C15
- On the integrability of a vector i -form. *J. London Math. Soc.* (2) **6** (1973), 403-411. (K. Yano) **47** #7650 53C15
- (with Eiseeman, Peter Robert) A generalized Hodge theory. *J. Differential Geometry* **9** (1974), 169-176. (J. L. Kazdan) **49** #1534 58A10
- (with Eiseeman, Peter Robert) The topology of manifolds which admit covariant constant $1-1$ tensor fields. *Tensor (N.S.)* **28** (1974), 177-183. (C.-C. Hsiung) **51** #11345 53C20
- (with Eiseeman, Peter Robert) A generalization of the Green's operator on a compact manifold. *Tensor (N.S.)* **28** (1974), 189-192. (J. L. Kazdan) **50** #5685 53C20 (58A10)
- (with Eiseeman, Peter Robert) A note on a differential concomitant. *Proc. Amer. Math. Soc.* **53** (1975), no. 1, 179-185. (A. Gray) **52** #4326 58A10
- A multilinear algebra proof of the Cayley-Hamilton theorem. *Tensor (N.S.)* **30** (1976), no. 2, 191-192. (M. Shafqat Ali) **55** #382 15A69
- See also **Improperly posed boundary value problems**, **57** #10178
- Stone, B. J.** (with Sexton, J. S.; Milne, R. D.) A stability analysis of single-point machining with varying spindle speed. *Appl. Math. Modelling* **1** (1976/77), no. 6, 310-318. (Editors) **57** #14480 65L99
- Stone, C. R.** (with Mitchell, Richard L.) Table-lookup methods for generating arbitrary random numbers. *IEEE Trans. Computers* **C-26** (1977), no. 10, 1006-1008. (Artenio De Matteis) **56** #16990 65C10
- Stone, Charles J.** (with Hoel, Paul G.; Port, Sidney C.) ★Introduction to statistical theory. The Houghton Mifflin Series in Statistics. Houghton Mifflin Co., Boston, Mass., 1971. x+237 pp. (Editors) **50** #11337a 60-01 (62-01)
- (with Hoel, Paul G.; Port, Sidney C.) ★Introduction to probability theory. The Houghton Mifflin Series in Statistics. Houghton Mifflin Co., Boston, Mass., 1971. xi+258 pp. (Editors) **50** #11337c 60-01 (62-01)
- (with Port, Sidney C.) Infinitely divisible processes and their potential theory. (French summary) *Ann. Inst. Fourier (Grenoble)* **21** (1971), no. 2, 157-275; *ibid.* **21** (1971), no. 4, 179-265. (D. Revuz) **49** #11640 60J45 (60J30)
- (with Hoel, Paul G.; Port, Sidney C.) ★Introduction to stochastic processes. The Houghton Mifflin Series in Statistics. Houghton Mifflin Co., Boston, Mass., 1972. x+203 pp. (Editors) **50** #11337b 60-01 (62-01)
- (with Port, Sidney C.) Classical potential theory and Brownian motion. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. III: Probability theory, pp. 143-176. Univ. California Press, Berkeley, Calif., 1972. (Michèle Mastrangelo-Dehen) **53** #11778 60J65 (31A15)
- (with Port, Sidney C.) Logarithmic potentials and planar Brownian motion. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. III: Probability theory, pp. 177-192. Univ. California Press, Berkeley, Calif., 1972. (Michèle Mastrangelo-Dehen) **53** #11779 60J65 (31A15)
- An upper bound for the renewal function. *Ann. Math. Statist.* **43** (1972), 2050-2052.
- (J. Gillis) **50** #8741 60K05
- (with Port, Sidney C.) Infinite particle systems. *Trans. Amer. Math. Soc.* **178** 307-340. (H. P. McKean, Jr.) **48** #5210 60K35 (82.60)
- (with Port, Sidney C.) Fisher information and the Pitman estimator of a location parameter. *Ann. Statist.* **2** (1974), 225-247. (I. R. Savage) **50** #15105 62F10
- Asymptotic properties of estimators of a location parameter. *Ann. Statist.* **2** 1127-1137. (M. Raghuvaran) **51** #2113 62F10
- (with Port, Sidney C.; Weiss, N. A.) SLLNs and CLTs for infinite particle systems. *Ann. Probability* **3** (1975), no. 5, 753-761. (D. Szász) **53** #11811 60F15
- Adaptive maximum likelihood estimators of a location parameter. *Ann. Statist.* (1975), 267-284. (Lionel Weiss) **50** #15109 62F10
- (with Port, Sidney C.) Random measures and their application to motion of incompressible fluid. *J. Appl. Probability* **13** (1976), no. 3, 498-506. (Joseph Horowitz) **54** #6247 60G10 (76.60, 28A65)
- (with Port, Sidney C.) Spacing distribution associated with a stationary random measure on the real line. *Ann. Probability* **5** (1977), no. 3, 387-394. (Alan F. Davis) **56** #1452 60G55 (60K05)
- Consistent nonparametric regression. With discussion and a reply by the author. *Ann. Statist.* **5** (1977), no. 4, 595-645. (James N. Adichie) **56** #1574 62G05
- (with Port, Sidney C.) ★Brownian motion and classical potential theory. Probability and Mathematical Statistics. Academic Press [Harcourt Brace Jovanovich Publishers], New York-London, 1978. xii+236 pp. ISBN 0-12-561850-6 (F. B. Key) **58** #11459 31A05 (31A15, 31B05, 60J45)
- Stone, David A.** ★Stratified polyhedra. *Lecture Notes in Mathematics*, Vol. 252. Springer-Verlag, Berlin-New York, 1972. ix+193 pp. (W. B. R. Lickorish) **51** #9057C50 (57B05)
- Towards the classification of block bundles with fibre $S^p \times S^q$. *Quart. J. Math. Oxford Ser. (2)* **23** (1972), 337-347. (B. J. Sanderson) **48** #7297 57C50
- Sectional curvature in piecewise linear manifolds. *Bull. Amer. Math. Soc.* **79** (1973), 1060-1063. (T. Banchoff) **47** #9507 53C70
- A combinatorial analogue of a theorem of Myers. *Illinois J. Math.* **20** (1976), 12-21. (H. R. Gluck) **53** #14350a (E 53 #14350b) 53C20
- Correction to my paper: "A combinatorial analogue of a theorem of Myers". *Illinois J. Math.* **20** (1976), no. 1, 12-21. *Illinois J. Math.* **20** (1976), no. 3, 551-552. (H. R. Gluck) **53** #14350b 53C20
- Geodesics in piecewise linear manifolds. *Trans. Amer. Math. Soc.* **215** (1976), 1-11. (T. Banchoff) **53** #6464 53C20 (57C25)
- Stone, Ellen** Characteristic submanifolds of fixed point free involutions. *Proc. Amer. Math. Soc.* **49** (1975), 449-457. (C. B. Thomas) **52** #9260 57E15
- Stone, H. E.** Ideals in halfrings. *Proc. Amer. Math. Soc.* **33** (1972), 8-14. (R. Gilkey) **45** #322 16A78
- (with Guthrie, J. A.; Reynolds, Donald F.) Connected expansions of topological groups. *Bull. Austral. Math. Soc.* **9** (1973), 259-265. (C. R. Borges) **48** #7201 54D05
- (with Guthrie, J. A.) Spaces whose connected expansions preserve connected subsets. *Fund. Math.* **80** (1973), no. 1, 91-100. (G. H. M. Thomas) **48** #9653 54D05
- Semirings with noncommutative addition. *Kyungpook Math. J.* **13** (1973), 141-144. (R. Gorton) **49** #10744 16A78
- (with Guthrie, J. A.) Expansions of mappings. *TOPO 72—general topology and its applications* (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot), pp. 164-171. *Lecture Notes in Math.*, Vol. 310, Springer, Berlin, 1974. (E. Michael) **50** #11125 54C10
- (with Dover, R. E.) On semisubtractive halfrings. *Bull. Austral. Math. Soc.* **1** (1975), no. 3, 371-378. (J. R. Mosher) **51** #10398 16A78
- (with Guthrie, J. A.) Pseudocompactness and invariance of continuity. *General Topology and Appl.* **7** (1977), no. 1, 1-13. (M. Katětov) **56** #1247 54A10
- Matrix representation of simple halfrings. *Trans. Amer. Math. Soc.* **233** (1978), 339-353. (R. Wiegandt) **57** #6113 16A78
- (with Guthrie, J. A.; Wage, Michael L.) Maximal connected expansions of topological groups. *Proc. Amer. Math. Soc.* **69** (1978), no. 1, 159-165. (Anne K. Steiner) **57** #7754A10
- Stone, Harold S.** Spectrum of incorrectly decoded bursts for cyclic burst error codes. *IEEE Trans. Information Theory* **IT-17** (1971), 742-748. (Author's summary) **48** #13468 94A10
- (with Kogge, Peter M.) A parallel algorithm for the efficient solution of a general class of recurrence equations. *IEEE Trans. Computers* **C-22** (1973), 786-793. (Luigi Bianini) **52** #16104 68A10
- An efficient parallel algorithm for the solution of a tridiagonal linear system of equations. *J. Assoc. Comput. Mach.* **20** (1973), 27-38. (Charles R. Johnson) **48** #65F05 (68A10)
- A note on a combinatorial problem of Burnett and Coffman. *Comm. ACM* **17** (1974), 165-166. (Editors) **48** #10826 05A05
- Parallel tridiagonal equation solvers. *ACM Trans. Math. Software* **1** (1975), 289-307. (V. A. Val'kovskii) **52** #9676 68A10 (68A20)
- Dynamic memories with fast random and sequential access. *IEEE Trans. Computers* **C-24** (1975), no. 12, 1167-1174. (A. D. Booth) **52** #4745 68A50
- (with Lang, Tomás) A shuffle-exchange network with simplified control. *IEEE Trans. Computers* **C-25** (1976), no. 1, 55-65. (Jürgen Dassow) **52** #13000 94A20
- Multiprocessor scheduling with the aid of network flow algorithms. *IEEE Trans. Software Engrg.* **SE-3** (1977), no. 1, 85-93. (Author's summary) **58** #4286 90B10
- See also **Complexity of sequential and parallel numerical algorithms**, **50** #6200
- Stone, J. A. R.** (with Raggett, Graham F.; Wilson, P. D.) On the use of cubic splines to solve certain circular plate problems. *Comput. Methods Appl. Mech. Engrg.* **4** (1974), 1, 39-45. (Radu Bădescu) **52** #7286 73.65
- (with Raggett, Graham F.; Wisher, S. J.) The cubic spline solution of problems modelled by hyperbolic partial differential equations. *Comput. Methods Mech. Engrg.* **8** (1976), no. 2, 139-151. (Authors' summary) **56** #13729 65N99
- Stone, Joan** (with Conniffe, D.) The efficiency factor of a class of incomplete designs. *Biometrika* **61** (1974), 633-636. (Manohar Vartak) **51** #9391 62K10

- with Conniffe, D.) Some incomplete block designs of maximum efficiency. *Biometrika* **62** (1975), no. 3, 685-686. (A. K. Nigam) **55** #13682a (E **55** #13682b) 0
- with Conniffe, D.) Correction: "Some incomplete block designs of maximum efficiency" (*Biometrika* **62** (1975), no. 3, 685-686). *Biometrika* **63** (1976), no. 3, 686. (A. Nigam) **55** #13682b 62K10
- John David Treatments of the word 'true' in Montague grammar. Logic and statistics, Part I. *Synthese* **38** (1978), no. 1, 113-125. (From the introduction) 16252 02G99
- See also Sobol', I. M., **51** #9423
- Lawrence D. (with Stanshine, Jerome A.) Optimal search using uninterrupted contact investigation. *SIAM J. Appl. Math.* **20** (1971), 241-263. (D. L. Iglehart) 3057 (E **46** #3103) 90B40
- with Stanshine, Jerome A.) Erratum: "Optimal search using uninterrupted contact investigation". *SIAM J. Appl. Math.* **21** (1971), 636. (Editors) **46** #3103 90C99
- with Belkin, Barry; Snyder, Martin Avery) Crossing problems for non-constant holds and certain non-Markov processes. *J. Appl. Probability* **9** (1972), 769-788. (Boylan) **50** #1343 60J25
- Incremental approximation of optimal allocations. *Naval Res. Logist. Quart.* **19** (1972), 111-122. (G. Berman) **47** #6298 90B40
- with Stanshine, Jerome A.; Persinger, Carl A.) Optimal search in the presence of non-distributed false targets. *SIAM J. Appl. Math.* **23** (1972), 6-27. (N. L. Johnson) 8331 60K99
- Total optimality of incrementally optimal allocations. *Naval Res. Logist. Quart.* **20** (1973), 419-430. (Author's summary) **58** #9206 90B40 (90C50)
- Necessary and sufficient conditions for optimal control of semi-Markov jump processes. *SIAM J. Control* **11** (1973), 187-201. (D. S. Adorno) **47** #6377 93E20
- with Richardson, Henry R.) Search for targets with conditionally deterministic motion. *SIAM J. Appl. Math.* **27** (1974), 239-255. (Olavi Hellman) **52** #16794 5
- with Wagner, Daniel H.) Necessity and existence results on constrained minimization of separable functionals by a multiplier rule. *SIAM J. Control* **12** (1974), 372. (M. Q. Jacobs) **51** #1548 49B99
- with Wagner, Daniel H.) Optimization of allocations under a coverability condition. *SIAM J. Control* **12** (1974), 373-379. (M. Q. Jacobs) **51** #1549 49B99
- ★Theory of optimal search. Mathematics in Science and Engineering, Vol. 118. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1975. 260 pp. (Olavi Hellman) **55** #12043 90B40
- Necessary and sufficient conditions for optimal solutions to a survivor search problem. Stochastic systems: modeling, identification and optimization, II (Proc. Conf., Univ. Kentucky, Lexington, Ky., 1975). *Math. Programming Stud.* No. 6 (1976), 227-245. (Author's summary) **56** #10917 90B40
- Incremental and total optimization of separable functionals with constraints. *SIAM Control Optimization* **14** (1976), no. 5, 791-802. (Jean E. Taylor) **53** #14257 0 (90B40)
- Search theory: a mathematical theory for finding lost objects. A model for minimizing an optimal search pattern for a wind-driven ship lost at an uncertain position. *Math. Mag.* **50** (1977), no. 5, 248-256. (P. Neumann) **57** #15398 90B40
- Search for targets with generalized conditionally deterministic motion. *SIAM J. Math.* **33** (1977), no. 3, 456-468. (Author's summary) **56** #7939 90B40
- Marshall Some comments on the spectral theorem. Collection of articles dedicated toberto González Domínguez on his sixty-fifth birthday. *Rev. Un. Mat. Argentina* **25** (1971), 67-75. (B. Sz-Nagy) **47** #7491 47B25
- A reminiscence on the extension of the Weierstrass approximation theorem. *Math. Mag.* **3** (1976), 328. (Willard Parker) **58** #21282 01A65
- everyn (with Dawid, A. P.) Un-Bayesian implications of improper Bayes inference routine statistical problems. *Biometrika* **59** (1972), 369-375. (Authors' summary) 4448 62A15
- with Dawid, A. P.) Expectation consistency of inverse probability distributions. *Biometrika* **59** (1972), 486-489. (W. E. Strawderman) **49** #8188 62F15
- with Dawid, A. P.) Expectation consistency and generalized Bayes inference. *Ann. Inst. Stat.* **1** (1973), 478-485. (Mir Ali) **50** #3434 62F15
- with Dawid, A. P.; Zidek, James V.) Marginalization paradoxes in Bayesian and mutual inference. With discussion by D. J. Bartholomew, A. D. McLaren, D. V. Ley, Bradley Efron, J. Dickey, G. N. Wilkinson, A. P. Dempster, D. V. Hinkley, M. Lovick, Seymour Geisser, D. A. S. Fraser and A. Zellner, and a reply by A. P. Dawid, M. Stone, and J. V. Zidek. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 189-233. (I. J. D.) **51** #2057 62C10
- Role of experimental randomization in Bayesian statistics: An asymptotic theory for multiple Bayesian. (German summary) *Metrika* **20** (1973), 170-176. (Bruce M. Hill) 7181 62K05 (62A15)
- Large deviation connections. *Progress in statistics (European Meeting Statisticians, Pest, 1972), Vol. II*, pp. 769-771. *Colloq. Math. Soc. János Bolyai*, Vol. 9, North-Holland, Amsterdam, 1974. (Richard A. Johnson) **52** #9473 62F20
- Large deviations of empirical probability measures. *Ann. Statist.* **2** (1974), 362-366. (Author's summary) **57** #1735 62E20 (60F10)
- with Finucan, H. M.; Galbraith, R. F.) Moments without tears in simple random sampling from a finite population. *Biometrika* **61** (1974), 151-154. (D. S. Tracy) 6956 62E15 (62D05)
- Cross-validation and multinomial prediction. *Biometrika* **61** (1974), 509-515. (Stair J. Scott) **54** #3974 62H30
- Cross-validated choice and assessment of statistical predictions. With discussion by A. Barnard, A. C. Atkinson, L. K. Chan, A. P. Dawid, F. Downton, J. Dickey, A. Baker, O. Barndorff-Nielsen, D. R. Cox, S. Geisser, D. Hinkley, R. R. Hocking, and J. Young, and with a reply by the authors. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 147. (D. A. Sprott) **50** #8847 (E **54** #3988) 62J05
- with Jensen, Louis) Cross-validated choice of weights for inter- and intrablock variation in balanced incomplete block designs. (French summary) *Biometrics* **32** (1976), no. 3, 677-681. (U. B. Paik) **54** #3989 62J10
- Strong inconsistency from uniform priors. With comments by James M. Dickey, John W. Pratt, D. V. Lindley, George A. Barnard, G. E. P. Box and G. C. Tiao, D. A. S. Fraser and C. Villegas and a reply by the author. *J. Amer. Statist. Assoc.* **71** (1976), no. 353, 114-125. (K. M. Lal Saxena) **54** #3944 62F15
- Corrigendum: "Cross-validated choice and assessment of statistical predictions" (*J. Roy. Statist. Soc. Ser. B* **36** (1974), 111-147). *J. Roy. Statist. Soc. Ser. B* **38** (1976), no. 1, 102. (Editors) **54** #3988 62J05
- A unified approach to coordinate-free multivariate analysis. *Ann. Inst. Statist. Math.* **29** (1977), no. 1, 43-57. (Franz Streit) **55** #11510 62J05 (62H05)
- Asymptotics for and against cross-validation. *Biometrika* **64** (1977), no. 1, 29-35. (Masafumi Akahira) **57** #14237 62F10 (62E20)
- An asymptotic equivalence of choice of model by cross-validation and Akaike's criterion. *J. Roy. Statist. Soc. Ser. B* **39** (1977), no. 1, 44-47. (John Kalbfleisch) **58** #18806 62A99 (62F99)
- Cross-validation: a review. *Math. Operationsforsch. Statist. Ser. Statist.* **9** (1978), no. 1, 127-139. (D. V. Lindley) **58** #13419 62-02 (62Fxx, 62Jxx)
- See also Godambe, V. P.; et al., **50** #15043 and Efron, Bradley; et al., **52** #2009
- Stone, Michael (with Thomas, Paul R.) Condensed monoleps and abelian confinement. *Phys. Rev. Lett.* **41** (1978), no. 6, 351-353. (Authors' summary) **58** #14527 81.22
- Stone, Michael G. Proper congruences do not imply a modular congruence lattice. *Colloq. Math.* **23** (1971), 25-27. (H. A. Thurston) **46** #118 08A05
- Subalgebra and automorphism structure in universal algebras; a concrete characterization. *Acta Sci. Math. (Szeged)* **33** (1972), 45-48. (E. T. Schmidt) **46** #3418 08A25
- On endomorphism structure for algebras over a fixed set. *Colloq. Math.* **33** (1975), no. 1, 41-45. (G. Grätzer) **52** #10553 08A25
- (with Sauer, Norbert) Endomorphism and subalgebra structure; a concrete characterization. *Acta Sci. Math. (Szeged)* **39** (1977), no. 3-4, 397-402. (O. Frink) **58** #464 08A25
- (with Sauer, Norbert) The algebraic closure of a semigroup of functions. *Algebra Universalis* **7** (1977), no. 2, 219-233. (I. Gy. Maurer) **58** #16924 20M20
- (with Sauer, Norbert) The algebraic closure of a function. *Algebra Universalis* **7** (1977), no. 3, 295-306. (Gilbert Crombez) **56** #222 08A25
- Stone, Richard See Ramsey, Frank Plumpton, **57** #15930
- Stone, Richard R. General identities for Fibonacci and Lucas numbers with polynomial subscripts in several variables. *Fibonacci Quart.* **13** (1975), no. 4, 289-294. (D. H. Lehmer) **52** #10579 10A35
- Stone, Stephen E. (with Ahluwalia, Daljit S.; Reiss, Edward L.) A uniform asymptotic analysis of dispersive wave motion. *Arch. Rational Mech. Anal.* **54** (1974), 340-355. (N. Zitron) **49** #11053 35L05
- Stoneham, R. G. On absolute (j, ϵ) -normality in the rational fractions with applications to normal numbers. *Acta Arith.* **22** (1972/73), 277-286. (H. G. Meijer) **47** #6621 10F35
- On the uniform ϵ -distribution of residues within the periods of rational fractions with applications to normal numbers. *Acta Arith.* **22** (1973), 371-389. (M. Mendès France) **47** #6640 10K25
- Some further results concerning (j, ϵ) -normality in the rationals. *Acta Arith.* **26** (1974/75), 83-96. (M. Mendès-France) **50** #4519 10K25 (10F35)
- Normal recurring decimals, normal periodic systems (j, ϵ) -normality, and normal numbers. *Acta Arith.* **28** (1975/76), no. 4, 349-361. (M. Mendès France) **52** #8071 10K10 (10K25)
- Stonehewer, Stewart E. Permutable subgroups of infinite groups. *Math. Z.* **125** (1972), 1-16. (D. McDougall) **45** #3580 20E20
- (with Bowers, J. F.) A theorem of Mal'cev on periodic subgroups of soluble groups. *Bull. London Math. Soc.* **5** (1973), 323-324. (I. B. S. Passi) **48** #11312 20E15
- Permutable subgroups of some finite p -groups. Collection of articles dedicated to the memory of Hanna Neumann, I. *J. Austral. Math. Soc.* **16** (1973), 90-97. (D. E. Taylor) **48** #11289 20D15
- Nilpotent residuals of subnormal subgroups. *Math. Z.* **139** (1974), 45-54. (D. J. S. Robinson) **50** #4762 20F30 (20E15)
- Permutable subgroups of some finite permutation groups. *Proc. London Math. Soc.* (3) **28** (1974), 222-236. (J. D. Dixon) **51** #13032 20D35
- Modular subgroups of infinite groups. *Symposia Mathematica, Vol. XVII (Convegno sui Gruppi Infiniti, INDAM, Roma, 1973)*, pp. 207-214. Academic Press, London, 1976. (Federico Menegazzo) **55** #8193 20F30
- Automorphisms of locally nilpotent FC-groups. *Math. Z.* **148** (1976), no. 1, 85-88. (Orin Chein) **53** #5751 20E25
- Modular subgroup structure in infinite groups. *Proc. London Math. Soc.* (3) **32** (1976), no. 1, 63-100. (Federico Menegazzo) **53** #3125 20F15
- (with Lennox, John C.; Segal, Daniel) The lower central series of a join of subnormal subgroups. *Math. Z.* **154** (1977), no. 1, 85-89. (Thaddeus C. Hurley) **56** #3127 20E15
- Stoneman, C. (with Collings, T. W. R.) The $M/M/\infty$ queue with varying arrival and departure rates. *Operations Res.* **24** (1976), no. 4, 760-773. (Jos H. A. de Smit) **57** #1692 60K25
- Stonesifer, J. Randolph Logarithmic concavity for edge lattices of graphs. *J. Combinatorial Theory Ser. A* **18** (1975), 36-46. (J. A. Bondy) **51** #12583 05B35
- Logarithmic concavity for a class of geometric lattices. *J. Combinatorial Theory Ser. A* **18** (1975), 216-218. (L. Carlitz) **50** #9637 05B35
- Stong, Robert E. On manifolds with conjugation. *Illinois J. Math.* **15** (1971), 338-353. (J. W. Vick) **46** #8246a (E **46** #8246b) 57D90 (53C15)
- On the cobordism of pairs. *Pacific J. Math.* **38** (1971), 803-816. (P. S. Landweber) **46** #6379 57D75 (57D90)
- (with Patterson, Richard R.) Orientability of bundles. *Duke Math. J.* **39** (1972), 619-622. (Ronald Brown) **47** #4248 55B20
- A note on: "On manifolds with conjugation". *Illinois J. Math.* **16** (1972), 703. (J. W. Vick) **46** #8246b 57D90 (53C15)
- A dual to the bordism concept. *Proc. Amer. Math. Soc.* **33** (1972), 554-556. (T. tom Dieck) **45** #7724 57D90
- Map bordism of maps. *Proc. Amer. Math. Soc.* **35** (1972), 259-262. (J. W. Vick) **46** #6343 55B20 (57D90)

- A cobordism. *Proc. Amer. Math. Soc.* **35** (1972), 584-586. (A. Liulevicius)
46 #4554 57D90
 Equivariant bordism and Smith theory. III. *Trans. Amer. Math. Soc.* **168** (1972), 259-263. (J. W. Vick) **45** #4449 57D85 (55C35)
 ★Заметки по теории кобордизмов. (Russian) [Notes on cobordism theory]
 Translated from the English by V. M. Buhštaber. With an appendix by V. M. Buhštaber. *Izdat. "Mir", Moscow*, 1973. 372 pp. (Editors) **49** #11513 57-02 (55-02)
 Involutions on complex manifolds. *Amer. J. Math.* **95** (1973), 384-402. (K. H. Mayer) **48** #3062 57D35 (57D85)
 Bilinear forms on manifolds. *Math. Ann.* **205** (1973), 249-263. (R. Paul Beem) **48** #12579 57D90
 Structure preserving group actions on stably almost complex manifolds. *Osaka J. Math.* **10** (1973), 43-50. (R. Paul Beem) **48** #5106 57D85
 (with Smith, Larry) Cohomology of a bounding manifold. *Proc. Amer. Math. Soc.* **39** (1973), 637-639. (M. Mahowald) **48** #5108 57D90
 On fibering of cobordism classes. *Trans. Amer. Math. Soc.* **178** (1973), 431-447. (P. S. Landweber) **47** #4282 57D75
 Equivariant bordism of maps. *Trans. Amer. Math. Soc.* **178** (1973), 449-457. (T. tom Dieck) **48** #1251 57D85
 Poincaré algebras modulo an odd prime. *Comment. Math. Helv.* **49** (1974), 382-407. (Edgar H. Brown, Jr.) **50** #14814 57D90 (55G10)
 Semi-characteristics and free group actions. *Compositio Math.* **29** (1974), 223-248. (H. Suzuki) **51** #14112 57D85
 Contact manifolds. *J. Differential Geometry* **9** (1974), 219-238. (K. H. Mayer) **49** #6258 57D85 (57D25)
 Manifolds with reflecting boundary. *J. Differential Geometry* **9** (1974), 465-474. (K. H. Mayer) **49** #6259 57D90 (57D20)
 Equivariant immersion and imbedding up to cobordism. *Proc. Amer. Math. Soc.* **44** (1974), 479-481. (S. Gitler) **49** #8042 57D85
 Subbundles of the tangent bundle. *Trans. Amer. Math. Soc.* **200** (1974), 185-197. (P. S. Landweber) **50** #8573 57D90
 Tangential cobordism. *Math. Ann.* **216** (1975), no. 2, 181-196. (Edgar H. Brown, Jr.) **51** #14115 57D90
 Torsion in manifolds and the semicharacteristic. *Indiana Univ. Math. J.* **25** (1976), no. 10, 989-993. (G. Lusztig) **55** #4223 57D75
 Orientability mod 2. *J. London Math. Soc.* (2) **14** (1976), no. 2, 296-302. (Edgar H. Brown, Jr.) **55** #11277 57D75
 Induced cobordism theories—an example. *Michigan Math. J.* **23** (1976), no. 4, 303-307 (1977). (R. K. Lashof) **56** #6683 57D90
 Equivariant bordism and Smith theory. IV. *Trans. Amer. Math. Soc.* **215** (1976), 313-321. (J. W. Vick) **53** #9257 57D85 (55C35)
 (with Ewing, John; Moolgavkar, Suresh; Smith, Larry) Stable parallelizability of lens spaces. *J. Pure Appl. Algebra* **10** (1977/78), no. 2, 177-191. (C. S. Hoo) **57** #17641 55F10 (57D90)
 The rank of an f -structure. *Kōdai Math. Sem. Rep.* **29** (1977), no. 1-2, 207-209. (K. Yano) **57** #1345 53C15
 Free S^1 actions. *Math. Ann.* **226** (1977), no. 2, 151-153. (H.-T. Ku) **55** #4225 57D85 (57E15)
 Stiefel-Whitney classes of manifolds. *Pacific J. Math.* **68** (1977), no. 1, 271-276. (F. Hirzebruch) **56** #6672 57D20
 Spin manifolds are decomposable. *Proc. Amer. Math. Soc.* **62** (1977), no. 2, 363-364. (Edgar H. Brown, Jr.) **55** #11278 57D75
 (with Winkelkemper, H. E.) Locally free actions and Stiefel-Whitney numbers. II. *Proc. Amer. Math. Soc.* **66** (1977), no. 2, 367-371. (Allan Edmonds) **56** #13235 57D85 (57E99)
Stopfkuchen, K. See *Control in space*, **48** #8040 and *Control in space*, **48** #13319
Stöpin, V. A certain method for the summability of orthogonal series. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised* No. 281 (1971), 152-156. (A. Peyerimhoff) **49** #988 42A60
Stopp, Friedmar (with Ose, G.; Schiemann, G.; Baumann, H.; Körner, W.; Lochmann, G.) ★Lehr- und Übungsbuch: Mathematik, Band IV. Mathematische Modelle, Matrizenrechnung, Lineare Optimierung, Wahrscheinlichkeitsrechnung und mathematische Statistik, Spieltheorie-Bedienungstheorie-Monte-Carlo-Methoden, Praktisches Rechnen, Nomografie. Verlag Harri Deutsch, Zurich-Frankfurt am Main, 1973. 696 pp. ISBN 3-87144-277-1 (Editors) **57** #5528 00A05
 ★Operatorenrechnung. Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und Landwirte, Band 10. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1976. 154 pp. (Editors) **57** #7057 44A40
 Über eine Klasse von Elementen des Mikusiński'schen Operatorenkörpers. *Beiträge Anal. Heft 9* (1976), 171-179. (L. Berg) **56** #3586 44A40
 See also Lebedev, N. N., **50** #2569
Stöppler, Siegmar ★Mathematik für Wirtschaftswissenschaftler: Lineare Algebra und ökonomische Anwendung. Unter Mitarbeit von Wilbrecht Hollnagel. Westdeutscher Verlag, Opladen, 1972. ix + 330 pp. (Editors) **50** #9892 15-01 (90Axx)
Stora, R. (with Becchi, C.; Rouet, A.) On the geometry of gauge fields. *Group theoretical methods in physics* (Proc. Third Internat. Colloq., Centre Phys. Théor., Marseille, 1974), Vol. 2, pp. 558-561. Centre Nat. Recherche Sci., Centre Phys. Théor., Marseille, 1974. (Jacques P. Leveille) **56** #4520 81.47
 (with Epstein, H.; Glaser, V.) Geometry of the n point p space function of quantum field theory. *Hyperfunctions and theoretical physics* (Rencontre, Nice, 1973; dédié à la mémoire de A. Martineau), pp. 143-162. *Lecture Notes in Math.*, Vol. 449, Springer, Berlin, 1975. (Aubrey Truman) **53** #12312 81.46
 Some applications of the Jost-Lehmann-Dyson theorem to the study of the global analytic structure of the n point function of quantum field theory. *Hyperfunctions and theoretical physics* (Rencontre, Nice, 1973; dédié à la mémoire de A. Martineau), pp. 163-184. *Lecture Notes in Math.*, Vol. 449, Springer, Berlin, 1975. (Jean-Pierre Eckmann) **53** #2175 81.32
 (with Bros, Jacques; Epstein, H.; Glaser, V.) Quelques aspects globaux des problèmes d'edge-of-the-wedge. *Hyperfunctions and theoretical physics* (Rencontre, Nice, 1973; dédié à la mémoire de A. Martineau), pp. 185-218. *Lecture Notes in Math.*, Vol. 449, Springer, Berlin, 1975. (Vazgain Avaniissian) **54** #7849 32D15 (46F10)
 (with Becchi, C.; Rouet, A.) Renormalization of the abelian Higgs-Kibble. *Comm. Math. Phys.* **42** (1975), 127-162. (Jean-Pierre Eckmann) **52** #9891 81.47
 (with Becchi, C.; Rouet, A.) Renormalization of gauge theories. *Ann. Phys.* (1976), no. 2, 287-321. (Derek Capper) **54** #1973 81.47
 Yang Mills instantons, geometrical aspects. *Invariant wave equations* (Proc. "Majorana" Internat. School of Math. Phys., Erice, 1977), pp. 316-338. *Lecture Notes in Math.*, Vol. 73, Springer, Berlin, 1978. (From the introduction) **58** #25634 (55F10)
 See also *Structural analysis of collision amplitudes*, **57** #8521
Storåkers, Bertil On uniqueness and stability of elastic-plastic deformation. (Polish. Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **27** (1975), no. 5-6, 821-839. Hayart) **54** #9256 73.35
 On buckling of axisymmetric thin elastic-plastic shells. *Internat. J. Solids Structures* **11** (1975), no. 12, 1329-1346. (J. W. Craggs) **52** #16226 73.35
 On uniqueness and stability under configuration-dependent loading of solids without a natural time. *J. Mech. Phys. Solids* **25** (1977), no. 4, 269-287. (K. S. Pao) **58** #3872 73.35
 See also *Instability of continuous systems*, **49** #10495
Storčai, V. F. Polygonal interpolation. (Russian) *Scientific reports: a collection of papers of graduate students at Dnepropetrovsk State University (mechanics and mathematics)* (Russian), pp. 194-198. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1970. (V. A. Ponomarev) **49** #9479 41A05 (41A15)
 Approximation of continuous functions of two variables by spline functions in the metric of C . (Russian) *Studies in contemporary problems of summability and approximation of functions, and their applications* (Russian), pp. 66-68. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1972. (Editors) **56** #6204 41A15
 Sharp estimates for the norms of differentiable functions in the uniform and integral metrics. (Russian) *Studies in contemporary problems of summability and approximation of functions, and their applications* (Russian), pp. 68-69. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1972. (S. Aljančić) **54** #10960 42A08
 Approximation of functions of two variables by polyhedral functions in the uniform metric. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 8(135), 84-88. (Veselinov) **49** #945 41A30
 (with Martinjuk, V. T.) Approximation by polygonal functions in the Hausdorff metric. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 115-120, 143. (T. Bojanov) **47** #3841A50
 Precise estimates for the norms of differentiable periodic functions in the L_2 metric. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 835-841, 863. (L. Gogoladze) **49** #969 42A08
 Exact estimates for the norms of differentiable periodic functions in the L_p metric. (Russian) *Theory of the approximation of functions, and its applications* (Russian), pp. 143-147. *Izdat. Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (See RŽMat 1975 B89; MR **50** #13975) 42A08
 (with Ligon, A. A.) The deviation of certain interpolation splines in the C and L_p metrics. (Russian) *Theory of the approximation of functions, and its applications* (Russian), pp. 148-157. *Izdat. Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (RŽMat 1975 #8 B93; MR **50** #13975) 41A05 (41A15)
 Approximation of continuous functions of two variables by polyhedral functions and spline functions in a uniform metric. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications*, No. 6 (Russian), 82-89. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1975. (From the text) **58** #29641A15
 Approximation of continuous functions of two variables in the metric of C by interpolational splines. (Russian) *Questions in the theory of approximation of functions and its applications* (Russian), pp. 186-193. *Izdat. Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Editors) **58** #29713 41A63
 (with Babenko, V. F.) Deviation of certain interpolational splines in the L_p metric. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications* (Russian), pp. 6-10, 152. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1976. (Authors' summary) **58** #29588 41A05 (41A15)
 Exact bounds for norms of differentiable periodic functions. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications* (Russian), pp. 50-54, 156. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1976. (Author's summary) **58** #30152 46E35
 (with Ligon, A. A.) The best choice of nodes in the interpolation of functions by Hermite splines. (Russian. English summary) *Anal. Math.* **2** (1976), no. 4, 267-275. (A. Popov) **56** #3513 41A15
 (with Ligon, A. A.) The best selection of nodes in the approximation by splines in the L_p metric. (Russian) Presented at the International Conference on the Theory of Approximation of Functions (Kaluza, 1975). *Mat. Zametki* **20** (1976), no. 4, 611-614. (Gheorghe Coman) **55** #8624 41A15 (41A55)
Storch, Uwe Bemerkung zu einem Satz von M. Kneser. *Arch. Math. (Basel)* **23** (1974), 403-404. (T. Matsusaka) **48** #286 13F20
 (with Scheja, Günter) Differentielle Eigenschaften der Lokalisierungen analytischer Algebren. *Math. Ann.* **197** (1972), 137-170. (Joseph Lipman) **46** #5299 13B10
 Zur Längenberechnung von Moduln. *Arch. Math. (Basel)* **24** (1973), 39-43. (G. Müller) **48** #6082 13C15
 (with Scheja, Günter) ★Lokale Verzweigungstheorie. Vorlesungen über Kommutative Algebra (Wintersemester 1973/74). Schriftenreihe des Mathematischen Institutes der Universität Freiburg, No. 5. Institut des Mathématiques, Université de Fribourg, Fribourg, 1974. viii + 151 pp. (Tadayuki Matsuoka) **54** #294 13B15 (14B99)
 (with Bingener, Jürgen) Resträume zu analytischen Mengen in Steinschen Räumen. *Math. Ann.* **210** (1974), 33-53. (W. Barth) **51** #3525 32E10
 (with Scheja, Günter) Über Spurfunktionen bei vollständigen Durchschnitten. *Reine Angew. Math.* **278/279** (1975), 174-190. (H. Kurke) **52** #13867 14M10 (13B10)
 (with Scheja, Günter) Quasi-Frobenius-Algebren und lokal vollständige Durchschnitte. (English summary) *Manuscripta Math.* **19** (1976), no. 1, 75-104. (Abellanas) **53** #10822 (E 55 #2940) 14M10 (16A36)

- lokale Algebra und lokale Geometrie. *Jber. Deutsch. Math.-Verein.* **79** (1977), no. 135. (Jonathan M. Wahl) **56** #11993 14-02 (14B99, 14M05)
- with Scheja, Günter) Addendum zu: "Quasi-Frobenius-Algebren und lokale Durchschnitte" (Manuscripta Math. **19** (1976), no. 1, 75-104). *Manuscripta Math.* **20** (1977), no. 1, 99-100. (P. Abellanas) **55** #2940 14M10
- with Platte, Erich) Invariante reguläre Differential-formen auf nilstein-Algebren. *Math. Z.* **157** (1977), no. 1, 1-11. (Mary Schaps) **57** #3118 5 (13H10, 14M10)
- G. (with Grimm, R. C.; Davies, Brian) Improvements on a new method for the numerical solution of the Schrödinger equation. *J. Computational Phys.* **9** (1972), 546. (S. Albertoni) **46** #10267 70.65
- Thomas On infinite families of difference sets in Galois domains. *J. Indian Statist.* **6** (1968), 43-56. (S. S. Shrikhande) **48** #10847 05B05 (10A99)
- Extensions of cyclotomic theory. 1969 *Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969)*, pp. 123-134. *Amer. Math. Soc., Providence, R.I.*, 1971. (A. L. Whiteman) **47** #4975 12C20
- Hurwitz on Hadamard designs. *Bull. Austral. Math. Soc.* **4** (1971), 109-112. (J. J. Oxtoby) **45** #91 05B30
- with Johnsen, Eugene C.) A special permutation matrix decomposition for combinatorial design incidence matrices. *J. Res. Nat. Bur. Standards Sect. B* **75B** (1971), 23-30. (R. A. Brualdi) **46** #8868 05B20
- with Johnsen, Eugene C.) Combinatorial structures in loops. I. Elements of the composition theory. *J. Combinatorial Theory Ser. A* **14** (1973), 149-166. (A. P. Street) **48** #8861 05B10 (05B05)
- with Johnsen, Eugene C.) Combinatorial structures in loops. IV. Steiner triple systems in neofields. *Math. Z.* **138** (1974), 1-14. (A. P. Street) **56** #5319 05B05
- with Johnsen, Erik) Combinatorial structures in loops. II. Commutative inverse property cyclic neofields of prime-power order. *Pacific J. Math.* **52** (1974), 115-127. (A. P. Street) **53** #12982 05B10 (12K05)
- with Johnsen, Erik) Combinatorial structures in loops. III. Difference sets in al cyclic neofields. *J. Number Theory* **8** (1976), no. 1, 109-130. (A. P. Street) **52** #12983 05B10 (12K05)
- Modular graphs. *J. Number Theory* **8** (1976), no. 2, 137-156. (Edward A. Bender) **52** #12984 05C15 (14E99)
- Holm (with Rosenbrock, Howard H.) ★Mathematics of dynamical systems. *Studies in dynamical systems. Thomas Nelson & Sons, Ltd., London*, 1970. x + 355 pp. (S. Chernig) (Zbl **223** #93001) **50** #6566 93-02
- with Rosenbrock, Howard H.) ★Mathematik dynamischer Systeme. Ein Lehrbuch modernen Mathematik für Ingenieure. Übersetzt aus dem Englischen von U. R. U. und R. Unbehauen. R. Oldenbourg Verlag, Munich-Vienna, 1971. 661 pp. (S. Chernig) **50** #6567 93-02
- with Benlashihier, Ali M.) Final-stability with some applications. *J. Inst. Math. Jussieu* **9** (1972), 397-410. (I. H. Muftić) **47** #3074 93D99
- M. I. (with Ryškov, S. S.; Faddeev, D. K.) Boris Nikolaevič Delone (on his 80th day). (Russian) *Uspehi Mat. Nauk* **26** (1971), no. 1(157), 233-236. (1 plate) (S. Chernig) **45** #1718 01A70
- aniel F. Structure and applications of Schreier coset graphs. *Comm. Pure Appl. Math.* **24** (1971), 797-805. (A. R. Camina) **45** #3548 20B99
- The action of the automorphism group of F_2 upon the A_6 - and $PSL(2,7)$ -defining groups of F_2 . *Trans. Amer. Math. Soc.* **172** (1972), 111-117. (A. R. Camina) **49** #19163 20E05
- ans-Georg Ein automatentheoretisches Modell einer Speicherhierarchie. *Erste Tagung der Gesellschaft für Informatik über Automatentheorie und Formale Sprachen* (1973), pp. 98-103. *Lecture Notes in Comput. Sci., Vol. 2, Springer, Berlin*, 1973. (S. Chernig) **57** #4582 68A05 (94A30)
- A note on improving input strings for paging machines. *Mathematical foundations of computer science (Proc. Sympos. and Summer School, Štrbské Pleso, 1973)*, pp. 327-330. (S. Chernig) *Inst., Slovak Acad. Sci., Bratislava*, 1973. (A. D. Booth) **53** #2005 68A05 (50)
- A theorem on linear Diophantine equations and the paging-complexity of chains. (German summary) *Computing* **17** (1976), no. 2, 105-113. (Author's summary) **58** #19319 68A05 (10B05)
- On the paging-complexity of periodic arrangements. *Theoret. Comput. Sci.* **4** (1977), 171-197. (T. Rus) **56** #13755 68A05
- erner Selbstadjungierte Differentialoperatoren erster Ordnung in $A_2(C_0)$. *Math. Z.* **217** (1975), no. 1, 69-80. (E. Müller-Pfeiffer) **52** #1415 47E05 (46E20)
- Selbstadjungierte Differentialoperatoren und nukleare (F) -Räume in $A_2(C_0)$. *Math. Z.* **141** (1975), 169-183. (H. O. Cordes) **51** #6495 47E05 (46A05)
- Reproduzierende Kerne, Fundamentalkerne und Resolventkerne. *Math. Scand.* **27** (1977), no. 1, 51-68. (J. Horváth) **56** #16439 47B37 (46E20, 47F05)
- Resolventkerne, Carleman-Operatoren in L_p -Räumen und Tamarkin-Operatoren. *Math. Z.* **153** (1977), no. 2, 167-177. (Stefan Balint) **52** #6244 47G05 (47B37)
- Decomposition of stochastic graphs and automata. I. (Russian) *Izv. Akad. Nauk. Naučn. Centra Vysš. Školy Ser. Tehn. Nauk* **1975**, no. 4, 27-31, 117. (Author's summary) **58** #26586 94A20 (94A35)
- Decomposition of stochastic graphs and automata. II. (Russian) *Izv. Akad. Nauk. Naučn. Centra Vysš. Školy Ser. Tehn. Nauk* **1976**, no. 1, 44-47, 116. (See also **1976** #9 V450) 94A20 (94A35)
- Decomposition of stochastic graphs and automata. III. (Russian) *Izv. Akad. Nauk. Naučn. Centra Vysš. Školy Ser. Tehn. Nauk* **1976**, no. 2, 12-15, 115. (R. Z. Mat) **1976** #11 V556 94A20 (94A35)
- oachim Über ein Verhalten von Automaten in determinierter Umgebung. *Rock. Math. Kolloq. Heft 3* (1977), 103-117. (Siegmar Gerber) **57** #9365 94A30
- Regina (with Ebersberger, Helmut; Gillert, Heinz; Grammlich, Lothar; Kühne, R.; Maibaum, Gert; Neumann, Peter; Nollau, Volker; Schmidt, Franz; Winkler, R.) ★Wahrscheinlichkeitsrechnung und mathematische Statistik: Lexikon. Herausgegeben von P. H. Müller. Akademie-Verlag, Berlin, 1970. x + 278 pp. (Editors) **51** #11539 62-XX (60-XX)
- ★Wahrscheinlichkeitsrechnung mathematische Statistik und statistische Qualitätskontrolle. Sechste, verbesserte Auflage. Mathematik für Ingenieure. *VEB Fachbuchverlag, Leipzig*, 1976. 359 pp. (W. Uhlmann) **58** #18800 62-01 (60-01, 62N10)
- (with Müller, Paul Heinz; Neumann, Peter) ★Tafeln der mathematischen Statistik. Second, corrected edition. With summaries in Russian, English, French, Spanish and Arabic. *Carl Hanser Verlag, Munich-Vienna*, 1977. 275 pp. *ISBN 3-446-12141-2* (Editors) **58** #31694 62Q05
- Stormark, Olle Some properties of compact natural sets in several complex variables. *Math. Scand.* **33** (1973), 359-374 (1974). (Arne Stray) **50** #2559 32E25 (46J10)
- A note on a paper by A. Andreotti and C. D. Hill concerning the Hans Lewy problem (Ann. Scuola Norm. Sup. Pisa (3) **26** (1972), 325-263; *ibid.* (3) **26** (1972), 747-806). *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **2** (1975), no. 4, 557-569. (J. S. Joel) **57** #16694 32F99 (32C05, 35N15)
- A local edge of the wedge theorem. *Comm. Math. Phys.* **43** (1975), 33-37. (A. G. Sergeev) **54** #13129 32D15
- Sörmer, Erling Asymptotically abelian systems. *Cargèse lectures in physics, Vol. 4*, pp. 195-213. *Gordon and Breach, New York*, 1970. (S. Sankaran) **56** #14234 81.22
- Automorphisms and invariant states of operator algebras. *Acta Math.* **127** (1971), no. 1-2, 1-9. (Jun Tomiyama) **52** #3978 46L10
- Hyperfinite product factors. *Ark. Mat.* **9**, 165-170 (1971). (Z. Takeda) **48** #4752 46L10
- Spectra of states and asymptotically abelian C^* -algebras. *Papers from the "Open House for Functional Analysts" (Aarhus Univ., Aarhus, 1972), Paper No. 13, 7 pp. Various Publications Ser., No. 23, Mat. Inst., Aarhus Univ., Aarhus, 1972.* (Maurice J. Dupré) **56** #6405 46L05
- Spectra of states, and asymptotically abelian C^* -algebras. *Comm. Math. Phys.* **28** (1972), 279-294. (T. W. Palmer) **48** #6955 (E **50** #3810) 46L05
- Hyperfinite product factors. II. *J. Functional Analysis* **10** (1972), 471-481. (Z. Takeda) **51** #3914 46L10
- On projection maps of von Neumann algebras. *Math. Scand.* **30** (1972), 46-50. (K. Saitō) **48** #6958 46L10
- Invariant states of von Neumann algebras. *Math. Scand.* **30** (1972), 253-256. (I. Kovács) **47** #7455 46L10
- ★Hyperfinite product factors. III. Mathematics Preprint Series, No. 1 (1973). *Matematisk Institutt, Universitetet i Oslo*, 1973. i + 9 pp. (Editors) **52** #15032 46L10
- ★Spectra of ergodic transformations. Mathematics Preprint Series, No. 11 (1973). *Matematisk Institutt, Universitetet i Oslo*, 1973. i + 19 pp. (Editors) **52** #15033 46L10
- (with Pedersen, Gert Kjaergård) Automorphisms and equivalence in von Neumann algebras. II. *Indiana Univ. Math. J.* **23** (1973/74), 121-129. (L. Longdon) **47** #9301 46L10
- Automorphisms and equivalence in von Neumann algebras. *Pacific J. Math.* **44** (1973), 371-383. (L. Longdon) **47** #7456 46L10
- Positive linear maps of C^* -algebras. *Foundations of quantum mechanics and ordered linear spaces (Advanced Study Inst., Marburg, 1973)*, pp. 85-106. *Lecture Notes in Phys., Vol. 29, Springer, Berlin*, 1974. (Author's review (Zbl **288** #46057)) **58** #7106 46L05
- Inner automorphisms of von Neumann algebras. *Comm. Math. Phys.* **36** (1974), 115-122. (Paul S. Muhly) **49** #5874 46L10
- A correction to my paper: "Spectra of states, and asymptotically abelian C^* -algebras" (Comm. Math. Phys. **28** (1972), 279-294). *Comm. Math. Phys.* **38** (1974), 341-343. (T. W. Palmer) **50** #3810 81.46
- Spectra of ergodic transformations. *J. Functional Analysis* **15** (1974), 202-215. (W. B. Arveson) **51** #13715 46L10 (22D10)
- Some aspects of ergodic theory in operator algebras. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974), Vol. 2*, pp. 111-114. *Canad. Math. Congress, Montreal, Que.*, 1975. (József Szűcs) **55** #8826 46L99
- (with Connes, Alain) Entropy for automorphisms of II_1 von Neumann algebras. *Acta Math.* **134** (1975), no. 3-4, 289-306. (François Combes) **56** #12906 46L10
- Hyperfinite product factors. III. *Amer. J. Math.* **97** (1975), no. 3, 589-595. (Z. Takeda) **52** #6451 46L10
- On the structure theory of factors. C^* -algebras and their applications to statistical mechanics and quantum field theory (Proc. Internat. School of Physics "Enrico Fermi", Course LX, Varenna, 1973), pp. 101-113. *North-Holland, Amsterdam*, 1976. (From the introduction) **58** #30298 46L05
- Spectral subspaces of automorphisms. C^* -algebras and their applications to statistical mechanics and quantum field theory (Proc. Internat. School of Physics "Enrico Fermi", Course LX, Varenna, 1973), pp. 128-138. *North-Holland, Amsterdam*, 1976. (From the introduction) **58** #30318 46L10
- Jordan algebras versus C^* -algebras. *Quantum dynamics: models and mathematics (Proc. Sympos., Centre for Interdisciplinary Res., Bielefeld Univ., Bielefeld, 1975)*, pp. 1-13. *Acta Phys. Austriaca, Suppl. XVI, Springer, Vienna*, 1976. (Author's introduction) **58** #32563 81.46 (17C99, 46L05)
- Entropy in finite von Neumann algebras. *Symposia Mathematica, Vol. XX (Convegno sulle Algebre C^* e loro Applicazioni in Fisica Teorica, Convegno sulla Teoria degli Operatori Indici e Teoria K, INDAM, Rome, 1975)*, pp. 197-205. *Academic Press, London*, 1976. (Hisashi Choda) **56** #12907 46L10
- (with Olesen, Dorte; Pedersen, Gert Kjaergård) Compact abelian groups of automorphisms of simple C^* -algebras. *Invent. Math.* **39** (1977), no. 1, 55-64. (Ola Bratteli) **55** #13250 (E **55** #13251) 46L05
- (with Alfsen, Erik M.; Shultz, Frederic W.) A Gel'fand-Neumark theorem for Jordan algebras. *Advances in Math.* **28** (1978), no. 1, 11-56. (R. Arens) **58** #2292 46H99 (17C99, 46L99)
- (with Connes, Alain) Homogeneity of the state space of factors of type III $_{\lambda}$. *J. Functional Analysis* **28** (1978), no. 2, 187-196. (H. Araki) **57** #10435 46L10
- Stone's theorem and spectral subspaces of automorphisms. *Proc. Amer. Math. Soc.* **70** (1978), no. 1, 18-20. (William Paschke) **57** #7201 46L10 (22D25)
- See also **Mathematics: Periodical collection of translations of foreign articles**, **49** #4720 and **Elliott, George A.**, **55** #13251
- Störmer, Horand ★Mathematische Theorie der Zuverlässigkeit. Einführung und

- Anwendungen. R. Oldenbourg, Munich, 1970. 329 pp. (Benjamin Epstein) **45** #1331 62N05
- Einige Ergebnisse über Semi-Markoff-Prozesse. *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes* (Tech. Univ., Prague, 1971; dedicated to the memory of Antonín Špaček), pp. 815-832. *Academia, Prague*, 1973. (Jozef L. Teugels) **50** #8742 60K15 (60E05)
- On the distribution of attributes in organizations. *J. Appl. Probability* **11** (1974), 529-543. (P. J. Staff) **52** #9385 60J20 (92A20)
- Störmer, Olaf** Shear in a perturbed Friedmann universe. *General Relativity and Gravitation* **1** (1970/71), no. 2, 103-115. (Ann Stehney) **52** #16516 83J53
- Storonkin, B. A.** The structure of polar systems. (Russian. English summary) *Teoret. Mat. Fiz.* **25** (1975), no. 3, 395-406. (Author's summary) **57** #18690 82J60
- Storøy, Sverre** An algorithm for finding a vector in the intersection of open convex polyhedral cones. *Nordisk Tidskr. Informationsbehandling (BIT)* **13** (1973), 114-119. (F. Giannesi) **48** #1467 65K05
- (with Dahl, Grete) Decomposed enumeration of extreme points in the linear programming problem. *Nordisk Tidskr. Informationsbehandling (BIT)* **15** (1975), no. 2, 151-157. (Zbl 315 #90043) **58** #20403 90C05
- Storóž, O. G.** Selfadjoint operators that are akin to differential operators. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukraïn. RSR Ser. A* **1974**, 134-137, 189. (E. Gerlach) **58** #23719 47B25 (47E05)
- Asymptotic behavior of the eigenvalues and eigenfunctions of operators that are related to differential operators. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.* **1974**, no. 9, 40-44, 133. **56** #8961 34B25 (47E05)
- Some spectral properties of an operator that is akin to a differential operator. (Russian) *Differentsial'nye Uravneniya* **11** (1975), no. 6, 1141-1143, 1152. (Leo F. Boron) **51** #10749 34B25 (47E05)
- Expansion in eigenfunctions of an operator that is related to a differential operator. (Ukrainian. Russian summary) *Visnik L'viv. Derž. Univ. Ser. Meh.-Mat. No. 10* (1975), 23-27, 96. (See RZMat **1976** #4 B784) 47B99
- Expansion in the eigenfunctions of certain selfadjoint operators. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 3, 418-421, 432. (Leo F. Boron) **53** #14221 47E05 (34B25)
- Storoženko, E. A.** Necessary and sufficient conditions for the imbedding of certain classes of functions. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **37** (1973), 386-398. (Alan Shuchat) **48** #12029 46E30
- Imbedding theorems and best approximations. (Russian) *Mat. Sb. (N.S.)* **97**(139) (1975), no. 2(6), 230-241, 317. (J. Musielak) **53** #8763 42A08
- (with Krotov, V. G.; Osval'd, P.) Direct and inverse theorems of Jackson type in the spaces L^p , $0 < p < 1$. (Russian) *Mat. Sb. (N.S.)* **98**(140) (1975), no. 3(11), 395-415, 495. (V. Veseliov) **53** #6205 42A08 (41A30)
- (with Krotov, V. G.; Osval'd, P.) Direct and inverse theorems of Jackson type in the spaces L^p ($0 < p < 1$). (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 1, 44-47. (J. Peetre) **53** #1131 42A08
- (with Osval'd, P.) Jackson's theorem in the spaces $L^p(R^k)$, $0 < p < 1$. (Russian) *Dokl. Akad. Nauk SSSR* **229** (1976), no. 3, 554-557. (J. Szabados) **53** #13969 42A08
- Approximation of functions by splines that are interpolational in the mean. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 12 (1975), 82-95. (D. D. Stancu) **56** #9144 41A15
- Certain imbedding theorems. (Russian) *Mat. Zametki* **19** (1976), no. 2, 187-200. (Jóran Bergh) **53** #14108 46E30
- (with Oswald, P.) Moduli of smoothness and best approximation in the spaces L^p , $0 < p < 1$. (Russian summary) *Anal. Math.* **3** (1977), no. 2, 141-150. (Shimshon Berkovits) **56** #6219 41A30 (42A08)
- Approximation by algebraic polynomials of functions of the class L^p , $0 < p < 1$. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 3, 652-662, 718. (V. N. Malozemov) **58** #29606 41A10
- Approximation of functions of class H^p , $0 < p < 1$. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **88** (1977), no. 1, 45-48. (M. F. Timan) **58** #11423 30A78 (30A82)
- The rate of approximation of functions of the classes H^p , $0 < p < 1$. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **66** (1978), no. 3, 145-149. (J. Girshevich) **58** #17103 30A78
- (with Osval'd, P.) Jackson's theorem in the spaces $L^p(R^k)$, $0 < p < 1$. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 4, 888-901, 956. (D. N. Zarnadze) **58** #12154 42A08 (41A10, 41A63)
- Storoženko, E. I.** (with Valčev, Kim G.) The numerical realization of an asymptotic method. (Russian) *Mat. Fiz. Vyp.* **20** (1976), 9-17, 112. (Vojislav Marić) **56** #10032 65L99 (34E05)
- Storoženko, S. A.** (with Harčenko, V. F.; Kuz'mičev, V. E.) The Bateman method and algebraic solution of the three-nucleon integral equations. *Nuclear Phys. A188* (1972), 609-631. (Lindsay Dodd) **54** #1959 81A5
- Storoženko, V. O.** (with Mitropol'skii, Ju. O.; Košljakov, V. M.; Boičuk, O. P.; Kalinovič, V. M.; Temčenko, M. E.) Works on the theory of gyroscopes at the Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 747-760, 860. (I. N. Veselovskii) **49** #7071 01A60 (70.01)
- On the method of studying nonlinear systems with random perturbations that is based on the theory of Markov processes. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 4, 314-317, 384. (A. A. Svešnikov) **54** #9229 70.60 (60J99)
- Storožev, V. I.** (with Mysovskii, Ju. V.; Šaldyryan, V. A.) Homogeneous solutions of three-dimensional problems on the forced oscillations of transropic plates. (Russian) *Teoret. i Prikl. Meh. Vyp.* **8** (1977), 66-73, 129. (M. Mišicu) **57** #4765 73J35
- Storozhenko, S. A.** See **Storoženko, S. A.**
- Storožuk, N. S.** On the solution of the optimal control problem with a free right hand endpoint of the trajectory. (Russian) *Numerical analysis (Russian)*, pp. 52-54. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1973. (Editors) **57** #13633 49B20
- Storrer, Hans H.** Rings of quotients of perfect rings. *Math. Z.* **122** (1971), 151-165. (E. A. Rutter) **45** #8684 16A08
- Rational extensions of modules. *Pacific J. Math.* **38** (1971), 785-794. (E. P. Armendariz) **46** #7314 16A64
- On Goldman's primary decomposition. *Lectures on rings and modules (Tulane Ring and Operator Theory Year, 1970-1971, Vol. 1)*, pp. 617-661. *Lecture Notes in Math.*, Vol. 246, Springer, Berlin, 1972. (G. Michler) **50** #13164 16A64
- Epimorphic extensions of non-commutative rings. *Comment. Math. Helv.* **48** (1973), 72-86. (Kazuo Kishimoto) **48** #342 16A56
- Quotient overings. Colloque d'Algèbre Non Commutative (Lyon, 1973). *Publ. Math. (Lyon)* **10** (1973), no. 1, 25-37. (B. Stenström) **49** #5064 16A08
- An algebraic proof of Isbell's zigzag theorem. *Semigroup Forum* **12** (1976), 83-88. (John M. Howie) **53** #3176 20M99
- Storvick, D. A.** (with Cameron, Robert H.) An integral equation related to the Schroedinger equation with an application to integration in function space. *Probability analysis (Papers dedicated to Salomon Bochner, 1969)*, pp. 175-193. Princeton Univ. Princeton, N.J., 1970. (M. Schilder) **50** #569 28A40
- (with Hayman, W. K.) A question of M. L. Cartwright. *J. London Math. Soc.* (1972), 419-422. (J. E. McMillan) **47** #5238 30A30
- (with Cameron, Robert H.) An operator valued function space integral applied to integrals of functions of class L_2 . Collection of articles dedicated to Salomon Bochner. *J. Math. Anal. Appl.* **42** (1973), 330-372. (M. Schilder) **47** #8803 28A40
- (with Cameron, Robert H.) An operator valued function space integral applied to multiple integrals of functions of class L_1 . *Nagoya Math. J.* **51** (1973), 91-122. (G. Johnson) **48** #6359 28A40
- (with Cameron, Robert H.) An operator-valued function-space integral applied to integrals of functions of class L_1 . *Proc. London Math. Soc.* (3) **27** (1973), 345-360. (G. Beekman) **49** #7419 28A40 (46G10)
- (with Cameron, Robert H.) Two related integrals over spaces of continuous functions. *Pacific J. Math.* **55** (1974), 19-37. (M. Schilder) **51** #5881 28A40
- (with Cameron, Robert H.) An operator valued Yeh-Wiener integral, and a Wiener integral equation. *Indiana Univ. Math. J.* **25** (1976), no. 3, 235-258. (M. Schilder) **53** #3247 28A40
- (with Cameron, Robert H.) An L_2 analytic Fourier-Feynman transform. *Michigan Math. J.* **23** (1976), no. 1, 1-30. (Tack-Wang Lee) **53** #8371 28A40 (81A6)
- Storvick, Robert M.** Improved construction techniques for (d, k) graphs. *IEEE Trans. Computers* **C-19** (1970), 1214-1216. (D. J. Kleitman) **48** #5925 05C99
- Stošek, E.** See **Sztosek, E.**
- Stoss, Hanns-Jörg** Zwei-Band Simulation von Turingmaschinen. (English summary) *Computing (Arch. Elektron. Rechnen)* **7** (1971), 222-235. (Author's summary) **45** #68A55
- Rangierkomplexität von Permutationen. (English summary) *Acta Inform.* **2** (1973), no. 1, 80-96. (D. Woodhouse) **48** #1511 68A20
- (with Paul, Wolfgang J.) Zur Komplexität von Sortierproblemen. (English summary) *Acta Inform.* **3** (1973/74), 217-225. (John T. Gill) **50** #1563 68A20
- See also **Complexity of computations and algorithms**, **51** #2325
- Stothers, W. Wilson** (with Cohen, Stephen D.; Odoni, R. W. K.) On the least primitive root modulo p^2 . *Bull. London Math. Soc.* **6** (1974), 42-46. (András Sárközi) **49** #10H35
- (with Mason, A. W.) On subgroups of $GL(n, A)$ which are generated by commutators. *Invent. Math.* **23** (1974), 327-346. (K. Wohlfahrt) **49** #2975 20C10
- Impossible specifications for the modular group. *Manuscripta Math.* **13** (1974), 415-428. (C. R. J. Clapham) **50** #13303 20H10 (10D05)
- (with Anderson, Ian; Cohen, Stephen D.) Primitive polynomial subsequences. *Mathematika* **21** (1974), 239-247. (S. L. G. Choi) **51** #418 10L10 (10H20)
- Subgroups of the modular group. *Proc. Cambridge Philos. Soc.* **75** (1974), 139-147. (J. S. Birman) **48** #10988 10D05
- Subgroups of the $(2, 3, 7)$ triangle group. *Manuscripta Math.* **20** (1977), no. 3, 323-334. (J. S. Birman) **56** #2923 10D05 (20H10)
- The number of subgroups of given index in the modular group. *Proc. Roy. Edinburgh Sect. A* **78** (1977/78), no. 1-2, 105-112. (J. S. Birman) **58** #514 10H25, 20H10
- Stotskaya, E. D.** See **Stockaja, E. D.**
- Stott, S.** (with James, L.) On the choice of an algorithm for estimating parameters in dynamic system. *Towards global optimisation (Proc. Workshop, Univ. Cagliari, Cagliari, 1974)*, pp. 258-276. North-Holland, Amsterdam, 1975. (J. Mockus) **53** #10387 93B30 (93E10)
- Stouffer, Donald C.** (with Huston, Ronald L.) A topological theory for constitutive equations. *Tensor (N.S.)* **23** (1972), 351-361. (E. J. Post) **48** #12979 73J35
- Stout, Edgar Lee** ★The theory of uniform algebras. *Bogden & Quigley, Inc., Tarrytown-on-Hudson, N. Y.*, 1971. x + 509 pp. (T. T. West) **54** #11066 46J10 (46-02, 46J15, 32E25)
- Inner functions, doubles and special analytic polyhedra. *Amer. J. Math.* **94** (1972), 343-365. (A. Hirschowitz) **47** #2090 32A30
- Extensions of rings of holomorphic functions. *Math. Ann.* **196** (1972), 275-280. (Stutz) **45** #7110 32E10
- On the multiplicative Cousin problem with bounded data. *Ann. Scuola Norm. Pisa* (3) **27** (1973), 1-17. (Michael J. Field) **51** #3524 32E05
- An integral formula for holomorphic functions on strictly pseudoconvex hypersurfaces. *Duke Math. J.* **42** (1975), 347-356. (R. Michael Range) **51** #5932A25 (32F15)
- Bounded extensions. The case of discs in polydisks. *J. Analyse Math.* **28** (1976), 239-254. (L. R. Hunt (Zbl 317 #32015)) **58** #28662 32D15
- H^p -functions on strictly pseudoconvex domains. *Amer. J. Math.* **98** (1976), no. 4, 821-852. (R. Michael Range) **54** #10671 32E30 (32F15)
- (with Burns, Daniel, Jr.) Extending functions from submanifolds of the boundary. *Duke Math. J.* **43** (1976), no. 2, 391-404. (R. Michael Range) **54** #3028 32D15 (32D15)
- (with Fornæss, John Erik) Spreading polydisks on complex manifolds. *Amer. Math. Soc.* **99** (1977), no. 5, 933-960. (B. M. Weinstock) **57** #10009 32H05 (32E30)
- The boundary values of holomorphic functions of several complex variables. *J. Math. J.* **44** (1977), no. 1, 105-108. (L. I. Ronkin) **55** #10722 32D20 (32A30)
- (with Fornæss, John Erik) Polydisks in complex manifolds. *Math. Ann.* **227** (1976), no. 3, 311-320. (L. I. Ronkin) **55** #10722 32D20 (32A30)

- 145-153. (Claudio Rea) **55** #8401 32C10 (32A07)
- Frederic Neff** Topological space objects in a topos. II. *E-completeness and completeness*. *Manuscripta Math.* **17** (1975), no. 1, 1-14. (Hugo Volger) **54** #2751 005 (02H10)
- topological properties of the real numbers object in a topos. *Cahiers Topologie Différentielle* **17** (1976), no. 3, 295-326. (Gavin Wraith) **54** #10015 02K10 05, 02H20, 02E05
- topological structure on the structure sheaf of a topological ring. *Comm. Algebra* **77**, no. 7, 695-705. (M. Weisfeld) **56** #3068 16A80
- independence theories and generalized zero-one laws. *Proc. Amer. Math. Soc.* **66** no. 1, 153-158. (Author's summary) **58** #24214 54H05 (60F20)
- William F.** A martingale analogue of Kolmogorov's law of the iterated logarithm. *Wahrscheinlichkeitstheorie und Verw. Gebiete* **15** (1970), 279-290. (D. L. Burkholder) **2778** 60G45 (60F05)
- maximal inequalities and the law of the iterated logarithm. *Ann. Probability* **1** no. 3, 322-328. (Author's summary) **50** #5911 60F15 (60G45)
- Almost sure convergence. Probability and Mathematical Statistics, Vol. 24. *Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London*, 1974. x+381 pp. (C. C. Heyde) **56** #13334 60F15
- convergence of ϕ -mixing sequences of random variables. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **31** (1974/75), 69-70. (M. Iosifescu) **11398** 60F05
- (with Philipp, Walter) Asymptotic fluctuation behaviour of sums of weakly dependent random variables. *Limit theorems of probability theory (Colloq., Keszthely, 1974)*. pp. 273-296. *Colloq. Math. Soc. János Bolyai, Vol. 11, North-Holland, Amsterdam*, (N. C. Jain) **53** #14616 60F15
- (with Jain, Naresh C.; Jogdeo, Kumar) Upper and lower functions for martingales mixing processes. *Ann. Probability* **3** (1975), 119-145. (M. Métivier) **51** #4372 60 (60B10, 60G10)
- (with Philipp, Walter) Almost sure invariance principles for partial sums of weakly dependent random variables. *Mem. Amer. Math. Soc.* **2** (1975), issue 2, no. 161, iv+140 (I. C. Jain) **55** #6570 60B10 (60F15, 42A44)
- (with Simons, Gordon) Weak convergence to stable laws by means of a weak invariance principle. *Empirical distributions and processes (Selected Papers, Meeting on Stochastics, Oberwolfach, 1976)*, pp. 127-137. *Lecture Notes in Math., Vol. 566, Springer, Berlin*, 1976. (Wim Vervaat) **55** #6537 60F05
- (with Cambanis, Stamatis; Simons, Gordon) Inequalities for $Ek(X, Y)$ when the marginals are fixed. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **36** (1976), no. 4, 394. (Giorgio Dall'Aglio) **54** #8790 60E05
- (with Lai, Tze Leung) The law of the iterated logarithm and upper-lower class tests for partial sums of stationary Gaussian sequences. *Ann. Probab.* **6** (1978), no. 5, 750. (J. L. Mijneer) **58** #13301 60F15 (60G15)
- (with Simons, Gordon) A weak invariance principle with applications to domains of attraction. *Ann. Probability* **6** (1978), no. 2, 294-315. (P. Révész) **57** #10778 60F05
- William T., Jr.** Corresponding residue systems in normal extensions. *J. Number Theory* **5** (1973), 116-122. (H. Yokoi) **52** #339 12A35
- David R.** Numerical implementation of the Schwarz alternating procedure for partial differential equations. Collection of articles dedicated to the memory of George E. Forsythe. *SIAM J. Numer. Anal.* **10** (1973), 308-326. (I. Aganović) **51** #9536 499
- analytical optimization using computer algebraic manipulation. *ACM Trans. Math. Software* **1** (1975), 147-164. (Author's summary) **58** #4363 90C99
- automatic error analysis using computer algebraic manipulation. *ACM Trans. Math. Software* **3** (1977), no. 1, 26-43. (R. P. Brent) **55** #13765 65G05
- analytically solving integral equations by using computer algebra. *ACM Trans. Math. Software* **3** (1977), no. 2, 128-146. (Sean McKee) **56** #4205 65R05
- dimensional analysis, using computer symbolic mathematics. *J. Computational Mathematics* **24** (1977), no. 2, 141-149. (A. D. Booth) **55** #11697 68A15
- automatic categorization of optimization problems: an application of computer logic mathematics. *Oper. Res.* **26** (1978), no. 5, 773-788. (Author's summary) **20495** 90C99 (68A15)
- F.** Simultanbeweis des Fermatschen und Wilsonschen Satzes. *Elem. Math.* **30** no. 3, 39-40. (Editors) **50** #12883 10A10
- Joseph E.** Denotational semantics: the Scott-Strachey approach to programming language theory. The MIT Press Series in Computer Science, Vol. 1. *The MIT Press, Cambridge, Mass.-London*, 1977. xxxi+414 pp. ISBN 0-262-19147-4 (Irène Guessarian) **8460** 68A05
- Kietrich** (with Stoyan, Helga) ★Mathematische Methoden in der Operationsforschung. *Fördertechnik—Bergbau—Transportwesen*. Mit deutschem, englischem und englischem Geleitwort von Klaus Strzodka. Mit russischem und deutschem Vorwort und Inhaltsverzeichnis. *VEB Deutscher Verlag für Maschinenbau, Leipzig*, 1971. 242 pp. (M. Rössler) **51** #14946 90B99
- (with Bandemer, Hans) Optimaler Stichprobenumfang bei a-priori-Information und gewissem Parameter. (English summary) *Biometrische Z.* **13** (1971), 376-383. (R. J. N. G.) **46** #10140 62K05
- "Teilordnungen" von Zufallsgrößen und ihre Verwendung in der Wahrscheinlichkeitstheorie. (English and Russian summaries) *Elektron. Informationsverarbeit. Math.* **7** (1971), 287-296. (H. L. Seal) **46** #978 60K25
- Über einige Eigenschaften monotoner stochastischer Prozesse. *Math. Nachr.* **52** no. 1, 21-34. (L. Takács) **47** #7796 60G05
- Halbordinationsrelationen für Verteilungsgesetze. *Math. Nachr.* **52** (1972), 315-331. (L. Takács) **47** #7797 60G05
- Warteschlangensysteme aus der Bedienungs- und Dammttheorie bei "unvollständigen Informationen" über Verteilungsfunktionen. (English and Russian summaries) *Math. Operationsforsch. Statist.* **3** (1972), no. 1, 49-59. (J. G. C. Templeton) **49** #6422 60
- Ein Stetigkeitssatz für einlinige Wartemodelle der Bedienungstheorie. (English and Russian summaries) *Math. Operationsforsch. Statist.* **3** (1972), no. 2, 103-111. (H. L. Seal) **49** #1619 60K25
- (with Stoyan, Helga) Bedienungstheoretische Anwendung von Halbordinationsrelationen für Verteilungsgesetze. *Wiss. Z. Techn. Univ. Dresden* **21** (1972), 519-523. (H. L. Seal) **49** #11666 60K25
- Monotonieigenschaften stochastischer Modelle. (English and Russian summaries) *Z. Angew. Math. Mech.* **52** (1972), 23-30. (J. R. Blum) **45** #7857 62E10
- Abschätzungen für die Bedienungs- und Zuverlässigkeitstheorie. (Polish summary) *Zastos. Mat.* **13** (1972/73), 173-185. (A. Descoux) **50** #1353 60K25
- Monotonieigenschaften einliniger Bedienungssysteme mit exponentiellen Bedienungszeiten. (Czech summary) *Apl. Mat.* **18** (1973), 268-279. (L. Takács) **47** #7834 60K25
- A continuity theorem for queue size. (Russian summary) *Bul. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 1143-1146. (M. L. Chaudhry) **49** #6415 60K25
- Queueing systems of the type $M/G/n$ under conditions of small demand. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 2, 108-110. (A. Obretenov) **52** #4458 60K25
- Abschätzungen für die Konvergenz gegen die stationäre Verteilung monotoner Markowscher Prozesse. *Math. Nachr.* **58** (1973), 305-311. (H. L. Seal) **49** #1599 (E 53 #14694) 60J35
- Bounds for the extrema of the expected value of a convex function of independent random variables. *Studia Sci. Math. Hungar.* **8** (1973), 153-159. (W. Hoeffding) **49** #6310 60E05
- Some monotonicity properties of Galton-Watson processes. (German summary) *Biometrische Z.* **16** (1974), 27-30. (E. Seneta) **53** #1769 60J80
- (with Stoyan, Helga) Inequalities for the mean waiting time in single-line queueing systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 6, 104-106, 221 (Russian); translated as *Engng. Cybernetics* **12** (1974), no. 6, 79-81. (Noël Veraverbeke) **52** #9411 60K25
- (with Franken, Peter) Stabilitätssätze für eine Klasse homogener Markowscher Prozesse. *Math. Nachr.* **61** (1974), 311-316. (B. Kronfeld) **50** #8705 60J05
- Some bounds for many-server systems $GI/G/s$. (German and Russian summaries) *Math. Operationsforsch. Statist.* **5** (1974), no. 2, 117-129. (D. J. Daley) **52** #6918 60K25
- (with Rolski, Tomasz) Two classes of semi-orderings and their application in the queueing theory. *Z. Angew. Math. Mech.* **54** (1974), 127-128. (C. Mohan) **52** #1931 60K25 (90B35)
- (with Franken, Peter) Einige Bemerkungen über monotone und vergleichbare Markowsche Prozesse. *Math. Nachr.* **66** (1975), 201-209. (George L. O'Brien) **52** #4370 60B99 (60J99)
- (with Stoyan, Helga) Some qualitative properties of single server queues. Collection of articles dedicated to the memory of Wolfgang Richter. *Math. Nachr.* **70** (1975), 29-35. (H. L. Seal) **53** #9428 60K25
- (with Bergmann, Reinhard) On exponential bounds for the waiting-time distribution function in $GI/G/1$. *J. Appl. Probability* **13** (1976), no. 2, 411-417. (Brian Conolly) **53** #9417 60K25
- Bemerkungen zu meiner Arbeit "Abschätzungen für die Konvergenz gegen die stationäre Verteilung monotoner Markowscher Prozesse" (Math. Nachr. **58** (1973), 305-311). *Math. Nachr.* **72** (1976), 321-322. (H. L. Seal) **53** #14694 60J35 (60K25)
- (with König, Dieter; Schmidt, V.) On some relations between stationary distributions of queue lengths and imbedded queue lengths in $G/G/s$ queueing systems. (German and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 4, 577-586. (Stig I. Rosenlund) **54** #11560 60K25
- Approximations for $M/G/s$ queues. (German and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 4, 587-594. (T. Rolski) **55** #4429 60K25
- (with Kotzurek, Matthias) A quantitative continuity theorem for the mean stationary waiting time in $GI/GI/1$. (German and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 4, 595-599. (William Henderson) **54** #14154 60K25
- A critical remark on a system approximation in queueing theory. (German and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 6, 953-956. (Jacqueline Loris-Teghem) **54** #14160 60K25
- (with Rolski, Tomasz) On the comparison of waiting times in $GI/G/1$ queues. *Operations Res.* **24** (1976), no. 1, 197-200. (Peter Franken) **53** #11801 60K25
- Inequalities for multiserver queues and a tandem queue. (Polish summary) *Zastos. Mat.* **15** (1976/77), no. 4, 415-419. (T. Rolski) **57** #4364 60K25
- ★Qualitative Eigenschaften und Abschätzungen stochastischer Modelle. Mit russischen und englischen Zusammenfassungen. *Akademie-Verlag, Berlin*, 1977. x+198 pp. (Peter Franken) **56** #13397 60K25
- (with Kotzurek, Matthias) A remark on the stability of the stationary distributions of Markov chains. *Math. Nachr.* **78** (1977), 7-12. (Richard Isaac) **57** #1652 60J05 (60K25)
- Further stochastic order relations among $GI/GI/1$ queues with a common traffic intensity. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 4, 541-548. (D. J. Daley) **57** #14187 60K25
- Bounds and approximations in queueing through monotonicity and continuity. *Operations Res.* **25** (1977), no. 5, 851-863. (T. Rolski) **57** #4365 60K25
- (with Koschitzki, S.) Intersections of a random process of linear segments with a given straight line. *Serdica* **3** (1977), no. 4, 344-346. (Rodney Coleman) **58** #31387 60G99 (60D05)
- (with Kirstein, Bernd Michael; Franken, Peter) Comparability and monotonicity of Markov processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **22** (1977), no. 1, 43-54. (T. Rolski) **56** #1461 60J05
- Queueing networks—insensitivity and a heuristic approximation. (German and Russian summaries) *Elektron. Informationsverarb. Kybernet.* **14** (1978), no. 3, 135-143. (Ralph L. Disney) **58** #3122 60K25
- (with Bergmann, Reinhard) Monotonicity properties of second order characteristics of stochastically monotone Markov chains. *Math. Nachr.* **82** (1978), 99-102. (D. J. Daley) **57** #17836 60J05
- (with Fainberg, M. A.) A further remark on a paper of K. T. Marshall on bounds for $GI/G/1$: "Some inequalities in queueing" (Operations Res. **16** (1968), 651-655). *Math. Operationsforsch. Statist. Ser. Optim.* **9** (1978), no. 1, 145-150. (D. N. Shanbhag)

- 58 #18773 60K25
(with Gemulla, H.) Bemerkungen zum Mehrmaschinenmodell mit Wegezeiten. *Z. Angew. Math. Mech.* 58 (1978), no. 8, 353-354. (Gerald Hammer) 58 #20361 90B25
- Stoyan, Gisbert** On the stability of additive difference schemes with respect to boundary data. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 934-947. (F. M. Pascal) 45 #8040 65M10
Zur Genauigkeit eines ökonomischen additiven Differenzschemas. *Math. Nachr.* 58 (1973), 247-255. (P. Gordon) 49 #4272 65N15
On the stability of the two-dimensional Janenko scheme with respect to boundary values. *Theory of nonlinear operators (Proc. Summer School, Neuchâtel, 1972)*, pp. 241-246. *Schr. Zentralinst. Math. Mech. Akad. Wiss. DDR, Heft 20, Akademie-Verlag, Berlin, 1974*. (N. N. Janenko) 49 #11828 65N10 (80.65)
- Higher order difference schemes for the first and third boundary value problem to $(1/r)(d/dr)(r du/dr) + f(r) = 0$. (German and Russian summaries) *Z. Angew. Math. Mech.* 55 (1975), no. 11, 635-645. (F. B. Fuller) 52 #16040 65L10
- Stoyan, Helga** (with Stoyan, Dietrich) ★Mathematische Methoden in der Operationsforschung. *Fördertechnik—Bergbau—Transportwesen. Mit deutschem, russischem und englischem Geleitwort von Klaus Strzodka. Mit russischem und englischem Vorwort und Inhaltsverzeichnis. VEB Deutscher Verlag für Grundstoffindustrie, Leipzig, 1971. 242 pp. (M. Rössler) 51 #14946 90B99*
(with Stoyan, Dietrich) Bedienungstheoretische Anwendung von Halbordnungsrelationen für Verteilungsgesetze. *Wiss. Z. Techn. Univ. Dresden* 21 (1972), 519-523. (H. L. Seal) 49 #11666 60K25
Monotonie- und Stetigkeitseigenschaften mehrliniger Wartesysteme der Bedienungstheorie. (English and Russian summaries) *Math. Operationsforsch. Statist.* 4 (1973), no. 2, 155-163. (E. A. van Doorn) 53 #9429 60K25
(with Stoyan, Dietrich) Inequalities for the mean waiting time in single-line queueing systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 6, 104-106, 221 (Russian); translated as *Engrg. Cybernetics* 12 (1974), no. 6, 79-81. (Noël Veraverbeke) 52 #9411 60K25
(with Stoyan, Dietrich) Some qualitative properties of single server queues. Collection of articles dedicated to the memory of Wolfgang Richter. *Math. Nachr.* 70 (1975), 29-35. (H. L. Seal) 53 #9428 60K25
- Stoyanov, J. M.** See **Stojanov, Jordan**
- Stoyanova, S.** See **Stojanova, S.**
- Stoye, Werner** (with Lemke, Horst) Discussion einiger Varianten bei der Einführung der reellen Zahlen als Dezimalzahlen. (English, Russian and French summaries) *Arbeiten zur Schulmathematik. Wiss. Z. Humboldt-Universität Berlin Math.-Natur. Reihe* 23 (1974), 501-510. (Authors' summary) 56 #12187 26-01
(with Lemke, Horst) Vom Satz von der oberen Grenze zur Logarithmusfunktion und den Winkelfunktionen. (English, Russian and French summaries) *Arbeiten zur Schulmathematik. Wiss. Z. Humboldt-Universität Berlin Math.-Natur. Reihe* 23 (1974), 511-519. (Authors' summary) 56 #12188 26-01
- Strachey, Christopher** (with Milne, Robert) ★A theory of programming language semantics. Part a. Indices and appendices, fundamental concepts, mathematical foundations. *Chapman and Hall, London; Halsted Press [John Wiley & Sons], New York, 1976. pp. 1-368. (Michael Marcotty) 57 #4576a 68A05*
(with Milne, Robert) ★A theory of programming language semantics. Part b. Standard semantics, store semantics, stack semantics. *Chapman and Hall, London; Halsted Press [John Wiley & Sons], New York, 1976. pp. 369-858. (Michael Marcotty) 57 #4576b 68A05*
- Strack, William A.** (with Latimer, Alexia B.; Ruckle, William H.) Nuclear topologies on m . *Bull. Soc. Roy. Sci. Liège* 42 (1973), 81-84. (D. H. Fremlin) 48 #4690 46A45
- Strade, Helmut** Einige Bemerkungen über Divisionsalgebren. *Abh. Math. Sem. Univ. Hamburg* 38 (1972), 80-87. (T. S. Ravisankar) 47 #292 17A99
Nodale nichtkommutative Jordanalgebren und Lie-Algebren bei Charakteristik $p > 2$. *J. Algebra* 21 (1972), 353-377. (J. Goldman) 48 #8584 17B20
Nonclassical simple Lie algebras and strong degeneration. *Arch. Math. (Basel)* 24 (1973), 482-485. (Robert Lee Wilson) 51 #12963 17B20
Lie algebra representations of dimension $p-1$. *Proc. Amer. Math. Soc.* 41 (1973), 419-424. (Bernard Kolman) 48 #8585 17B20
Enumeration results in nilpotent algebras. *Proc. Amer. Math. Soc.* 49 (1975), 20-24. (E. M. Patterson) 50 #9994 17A99
Cartan algebren in modularen Liealgebren. *Comm. Algebra* 5 (1977), no. 12, 1335-1359. (S. P. Demuškin) 57 #386 17A15
Representations of the Witt algebra. *J. Algebra* 49 (1977), no. 2, 595-605. (F. W. Lemire) 56 #12086 17B99
- Stradiņš, J.** Nicolaus Copernicus, his times, life, ideas. (Russian) *Latvijas PSR Zinātņu Akad. Vēstis* 1973, no. 6(311), 26-36. (I. N. Veselovskii) 49 #7069 01A40
See also *History of science and scholarship*, 56 #5119
- Stradner, Wolfgang** (with Schweiger, Fritz) Die Billingsleydimension von Mengen mit vorgeschriebenen Ziffern. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* 180 (1972), 95-109. (O. P. Stackelberg) 46 #5277 10K99
(with Schweiger, Fritz) Die Billingsleydimension von Mengen mit vorgeschriebenen Ziffern. II. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* 181 (1973), 151-155. (O. P. Stackelberg) 49 #2631 10K10
- Stradyn', Ja. P.** See **Stradiņš, J.**
- Straf, Mirou L.** Weak convergence of stochastic processes with several parameters. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: Probability theory*, pp. 187-221. *Univ. California Press, Berkeley, Calif., 1972. (Georg Neuhäus) 53 #6661 60B10*
- Straffin, Philip D., Jr.** Identities for conjugation in the Steenrod algebra. *Proc. Amer. Math. Soc.* 49 (1975), 253-255. (H. Wada) 52 #1693 55G10
Majority rule and general decision rules. *Theory and Decision* 8 (1977), no. 4, 351-360. (J. H. Blau) 57 #11812 90D35 (92A20)
- Strahl, Danuta** Forecasting the vector of characteristics. (Polish. Russian and English summaries) *Przegląd Statyst.* 25 (1978), no. 1, 95-106. (P. Vondráček) 58 #24823 62P20
- Strahle, W. C.** (with Wahbah, M. M.) Sound radiation from ducts for the case of low Mach number. *AIAA J.* 15 (1977), no. 4, 553-560. (From the authors' summary) 57 #8449 76.65
- Strahov, V. A.** Some questions on the theory of inverse problems for differential operators. (Russian) *Mat. Zametki* 21 (1977), no. 2, 151-160. (Piero Bassanini) 56 #348B25 (47E05)
- Strahov, V. N.** Approximate solution of incorrectly posed linear problems in Hilbert space with applications to exploration geophysics. I. *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1969, 30-53 (Russian); translated as *Izv. Acad. Sci. USSR Phys. Solid Earth* 1969, 495-506. (See *RZMat* 1970 #3 B622) 47A50
Approximation of solutions of incorrectly-posed linear problems in Hilbert space with applications to exploration geophysics. II. *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1969, 64-96 (Russian); translated as *Izv. Acad. Sci. USSR Phys. Solid Earth* 1969, 581-595. 58 #32835 86.47 (65J05)
The plane inverse magnetic-potential problem in the case of variable magnetization. *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1970, no. 3, 44-58 (Russian); translated as *Izv. Acad. Sci. USSR Phys. Solid Earth* 1970, 169-175. (W. Buchheim) 51 #9754 86.31
The analytic continuation of two-dimensional potential fields into arbitrary regions of the lower half-plane abutting on the Ox axis. *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1970, no. 6, 35-52 (Russian); translated as *Izv. Acad. Sci. USSR Phys. Solid Earth* 1970, 357-365. (W. Buchheim) 51 #9755 86.30
Net methods making use of conformal meshes for the analytic continuation of two-dimensional potential fields. I. *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1971, no. 44-59 (Russian); translated as *Izv. Acad. Sci. USSR Phys. Solid Earth* 1971, 708-713. (W. Buchheim) 49 #12048 86.31
Analytic continuation of two-dimensional potential fields by the conformal method. *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1971, no. 11, 40-60 (Russian); translated as *Izv. Acad. Sci. USSR Phys. Solid Earth* 1971, 775-785. (W. Buchheim) 49 #12049 86.31
Nonuniqueness of the solution of the plane inverse potential problem. *Dokl. Akad. Nauk SSSR* 200 (1971), 564-567 (Russian); translated as *Soviet Physics Dokl.* (1971/72), 727-729. (M. Brelot) 54 #7807 31A25
Inverse problem of the logarithmic potential for a contact surface. *Dokl. Akad. Nauk SSSR* 200 (1971), 817-820 (Russian); translated as *Soviet Physics Dokl.* (1971/72), 843-845. (G. L. Tautz (Zbl 243 #31004)) 56 #7759 86.31
Algorithms for the approximate solution of linear conditionally well-posed problems. (Russian) *Dokl. Akad. Nauk SSSR* 207 (1972), 1057-1059. (S. Burdakov) 47 #6087 65J05
On the question of the uniqueness of the solution of the plane inverse potential theory. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1972, no. 2, 38-43. (M. A. Atahodžajev) 52 #11080 31A25
The analytic continuation of two-dimensional potential fields into the exterior of an arbitrary simply connected domain of the lower half-plane. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1972, no. 8, 48-63. (M. A. Atahodžajev) 52 #11081 31A25
The theory of the analytic continuation of two-dimensional potential fields into the domain of the lower half-plane. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1972, no. 11, 38-55. (M. A. Atahodžajev) 52 #11082 31A25
The construction of order-optimal approximate solutions of linear conditions of well-posed problems. (Russian) *Differencial'nye Uravnenija* 9 (1973), 1862-1874, 1875-1876. (J. Daneš) 48 #9425 47A50 (35A35)
A universal scheme for the linear analysis of potential fields. (Russian) *Dokl. Akad. Nauk SSSR* 211 (1973), 90-93. (H. Zegeiling) 49 #11772 65D15
An approach to the solution of the inverse problem of gravimetry and magnetometry. (Russian) *Dokl. Akad. Nauk SSSR* 212 (1973), 1339-1342. (Jiří Nedoma) 50 #3878 86.31
Functional equations of the plane inverse potential problem, and numerical algorithms for the approximate solution of that problem. (Russian) *Dokl. Akad. Nauk SSSR* 213 (1973), 87-90. (M. A. Atahodžajev) 50 #2521 31A25
Methods for the analytic continuation of two-dimensional potential fields into the region of the lower half-plane, and their use in finding the higher derivatives and complex moments of the sources. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1973, no. 1, 58-79. (J. S. Joel) 56 #17693 86.31
(with Pučkov, E. P.) Solution of the inverse problems of gravimetry and magnetogravimetry in a bipolar coordinate system by means of a boundary condition. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1973, no. 9, 43-62. (Authors' summary) 57 #15283 86.31
The method of successive approximations for linear equations in Hilbert space. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 1041-1044, 1093. (T. Andó) 48 #6505 (47A50) (65J05)
On the question of the rate of convergence in the simple iteration method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 1602-1606, 1640. (C. Ilioi) 48 #10095 65J05 (47A05)
The solution of the direct and the inverse two-dimensional of gravimetric prospecting and magnetometric prospecting. (Russian) *Dokl. Akad. Nauk SSSR* 1974, 336-339. (Jiří Nedoma) 51 #9758 86.65
The inverse problem of logarithmic potential for a contact surface. (Russian) *Dokl. Akad. Nauk SSSR Ser. Fiz. Zemli* 1974, no. 2, 43-65. (Jiří Nedoma) 54 #2138 86.31
On the theory of the inverse problem of logarithmic potential for a contact surface. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1974, no. 6, 39-60. (S. V. Temirbulatov) 53 #7369 86.31
Certain fundamental problems of the linear analysis of anomalous potential fields. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1974, no. 7, 43-53. (Jiří Nedoma) 52 #7471 86.31
The object of linear analysis of potential fields, and the classification of problems. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1974, no. 8, 36-40. (Jiří Nedoma) 52 #7472 86.31
Basic settings of a universal scheme for the linear analysis of potential fields. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* 1974, no. 11, 86-96. (H. Zegeiling) 51 #11986 65N05
(with Tkebucava, V. V.) The analytic continuation of two-dimensional potential fields in sectorial domains. (Russian. Georgian and English summaries) *Sakharth. S.*

Kad. Moambe 74 (1974), 589-592. (C. Tanaka) **50** #4981 31A10 (86.31)
On the theory of bipolar analysis of two-dimensional potential fields. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* **1975**, no. 8, 56-74. (Author's summary) **58** #25837a
#25837b 86.31
Erratum: "On the theory of bipolar analysis of two-dimensional potential fields"
(Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* **1975**, no. 10, 96. (Author's summary)
#25837b 86.31
On the theory of the logarithmic potential in the case of variable density of the
surrounding masses. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* **1975**, no. 12,
31. (Author's summary) **58** #22606 31A15 (86.31)
(with Maslennikova, A. I.) The interpretation of gravitational anomalies of an
island symmetric distribution of masses. (Russian) *Perm. Gos. Univ. Učen. Zap. No.*
1975, 52-62. (R. S. Anderssen) **54** #4565 86.31
(with Lapina, M. I.) An assembly method for the solution of the inverse problem of
gravimetry. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 2, 344-347. (From the
text) **58** #25849 86.65
(with Valjaško, G. M.) The problem of the selection of the regularization parameter
in the solution of linear ill-posed problems. (Russian) *Dokl. Akad. Nauk SSSR* **228**
1976, no. 1, 48-51. (V. V. Vasin) **58** #30386 47A50 (65J05)
(with Valjaško, G. M.) Methods for the regularization of linear ill-posed problems.
Account taken of a priori information on the properties of noise in the input data.
(Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 2, 314-317. (Authors' review
in *Mat* **1976** #10 B619) **58** #13696 65J05 (47A50)
On the theory of the vertical electrical probe method. (Russian) *Perm. Gos. Univ.*
Učen. Zap. No. 359 Geofiz. Izyskan. Vyp. **2** (1976), 82-97, 184. (A. S. Alekseev)
#14020 73.65
A general form of the solution of the inverse problem of gravimetry. (Russian)
Izv. Akad. Nauk SSSR **235** (1977), no. 6, 1281-1284. (From the author's text)
#14538 86.49
An approach to the solution of inverse problems of gravimetry that is based on the
theory of equivalent redistributions of masses. (Russian) *Dokl. Akad. Nauk SSSR* **236**
1977, no. 3, 571-574. (From the author's text) **57** #8965 86.31
On the theory of the artificial magnetization method. (Russian) *Izv. Akad. Nauk*
Ser. Fiz. Zemli **1977**, no. 7, 56-74. (Jiri Nedoma) **56** #10742 86.35
Mikhlin, V. M. (with Baier, V. N.; Katkov, V. M.) Operator approach to quantum
hydrodynamics in an external field: the mass operator. *Ž. Eksper. Teoret. Fiz.* **67**
1974, no. 2, 453-470 (Russian. English summary); translated as *Soviet Physics JETP* **40**
1974, no. 2, 225-232 (1975). (Alan D. Sloan) **52** #4886 81.47
(with Baier, V. N.; Katkov, V. M.; Mil'shtein, A. I.) The theory of quantum
processes in the field of a strong electromagnetic wave. *Ž. Eksper. Teoret. Fiz.* **69**
1975, no. 3, 783-799 (Russian. English summary); translated as *Soviet Physics JETP* **42**
1975, no. 3, 400-407. (Kishin Mariwalla) **54** #9436 81.47
(with Baier, V. N.; Mil'shtein, A. I.) Interaction between a photon and an intense
electromagnetic wave. *Ž. Eksper. Teoret. Fiz.* **69** (1975), no. 6, 1893-1904 (Russian
English summary); translated as *Soviet Physics JETP* **42** (1975), no. 6, 961-965. (J. H.
Eberly) **55** #7118 78.35 (81.35)
Mil'shtein, K. I. See Bibliography: Strahovič, K. I., **52** #10344
Nekrasov, L. G. (with Fedorenko, R. P.) ★ Метод конечных элементов для
группового уравнения диффузии. (Russian) [The finite element method for a
group diffusion equation] Preprint No. 31 (1977). *Inst. Prikl. Mat. Akad. Nauk*
R. Moscow, 1977. 51 pp. (Authors' introduction) **58** #8363 65N30
An iterative method for the calculation of the first eigenfunction of an elliptic
operator. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 3, 649-663, 803-804.
(Author's introduction) **58** #13777 65N25
H. Joseph Applications of finite differences to the summation of series. *Pi Mu*
Epsilon **J.** **6**, 93-98 (1975). (Editors) **51** #10927 39A10
(with Lesniak-Foster, Linda M.) The chromatic number of a graph. *Ars Combin.*
1977, 39-45. (G. Chartrand) **57** #9586 05C15
Graphs which have pancyclic complements. *Internat. J. Math. Math. Sci.* **1** (1978),
177-185. (G. Chartrand) **58** #391 05C99
Teggy Tang Application of Kitagawa's functional integral to solutions of non-linear
partial equations of two variables. *Bull. Math. Statist.* **14** (1970/71), no. 3-4, 57-60.
(Schilder) **51** #10569 28A40
An identity on the maximum of a set of random variables. *J. Multivariate Anal.* **4**
1974, 494-496. (Y.-K. Chan) **51** #6970 60G50
On the maximum and minimum of partial sums of random variables. *Pacific J.*
Math. **52** (1974), 585-593. (Y.-K. Chan) **51** #6971 60G50
Level crossing probabilities for a multi-parameter Brownian process. *Pacific J.*
Math. **65** (1976), no. 1, 223-232. (Won Joon Park) **55** #1439 60G15 (60J65)
(W. V. N. See Strahov, V. N.)
Fedorenko, V. M. See Strahovenko, V. M.
Tina H. (with Lindner, Charles C.) Construction of quasigroups containing a
specified number of subquasigroups of a given order. *Algebra Universalis* **1** (1971/72),
247. (R. Artzy) **45** #3618 20N05 (05A05)
Construction of Steiner quasigroups containing a specified number of
quasigroups of a given order. *J. Combinatorial Theory Ser. A* **13** (1972), 374-382. (D.
Robinson) **46** #3672 20N05
(with Lindner, Charles C.) A note on nonisomorphic Steiner quadruple systems.
Comment. Math. Univ. Carolinae **15** (1974), 69-74. (W. M. Kantor) **49** #79 05B05
(with Lindner, Charles C.) A note on nonisomorphic reverse Steiner quasigroups.
J. Math. Debrecen **23** (1976), no. 1-2, 85-87. (Luc Teirlinck) **54** #443 20N05
Albert R. The congruence extension property for compact topological lattices.
Pacific J. Math. **38** (1971), 795-802. (R. P. Dilworth) **46** #3394 06A35
The lattice of ideals of a compact semilattice. *Proc. Amer. Math. Soc.* **33** (1972),
180. (D. R. Brown) **46** #7439 22A30 (06A20, 54H10)
(with Hofmann, Karl Heinrich) Push-outs and strict projective limits of semilattices.
Group Forum **5** (1972/73), 243-261. (L. E. Ward, Jr.) **47** #5167 22A15
Extending congruences on semigroups. *Trans. Amer. Math. Soc.* **166** (1972),
161. (M. Friedberg) **45** #3627 22A15
(with Hofmann, Karl Heinrich; Mislove, Michael W.) On the duality of

semilattices and its applications to lattice theory. *Proceedings of the University of Houston Lattice Theory Conference* (Houston, Tex., 1973), pp. 261–268. *Dept. Math., Univ. Houston, Houston, Tex.*, 1973. (James W. Lea, Jr.) **52** #14139 22A15 (06A20)

Distributive topological lattices. *Proceedings of the University of Houston Lattice Theory Conference* (Houston, Tex., 1973), pp. 269–276B. *Dept. Math., Univ. Houston, Houston, Tex.*, 1973. (D. R. Brown) **55** #226 06A35

(with Hofmann, Karl Heinrich) Mapping cylinders and compact monoids. *Math. Ann.* **205** (1973), 219–239. (P. S. Mostert) **48** #2299 22A15

(with Hofmann, Karl Heinrich; Mislove, Michael W.) Dimension raising maps in topological algebra. *Math. Z.* **135** (1973/74), 1–36. (P. S. Mostert) **49** #3019 22A99

(with Brown, Dennison R.) Problems on compact semilattices. *Semigroup Forum* **6** (1973), no. 3, 265–270. (Anne C. Baker) **51** #8326 22A99

(with Hofmann, Karl Heinrich; Mislove, Michael W.) ★The Pontryagin duality of compact 0-dimensional semilattices and its applications. *Lecture Notes in Mathematics*, Vol. 396. *Springer-Verlag, Berlin-New York*, 1974. xvi + 122pp. (K. N. Sigmon) **50** #7398 22A15 (06A20)

Imbedding locally convex lattices into compact lattices. *Colloq. Math.* **29** (1974), 147–150. (J. Karásek) **49** #4883 06A20

(with Hofmann, Karl Heinrich; Mislove, Michael W.) Dimension raising maps in topological spaces. Collection of articles dedicated to Alfred Hölzle Clifford on the occasion of his 65th birthday and to Alexander Doniphan Wallace on the occasion of his 68th birthday. *Semigroup Forum* **7** (1974), no. 1–4, 380. (K. N. Sigmon) **51** #13119 22A15

(with Hofmann, Karl Heinrich; Mislove, Michael W.) On the dimensional capacity of compact semilattices. *Houston J. Math.* **1** (1975), no. 1, 43–55. (P. S. Mostert) **54** #452 22A15

The Green equivalences and dimension in compact monoids. II. *Semigroup Forum* **10** (1975/76), no. 1, 8–24. (K. H. Hofmann) **52** #8322 22A15 (55C10)

(with Hofmann, Karl Heinrich) The algebraic theory of compact Lawson semilattices. Applications of Galois connections to compact semilattices. *Dissertationes Math. (Rozprawy Mat.)* **137** (1976), 58 pp. (Jimmie D. Lawson) **55** #213 06A20 (22A15)

Congruence extension and amalgamation in \mathcal{CL} . *Semigroup Forum* **13** (1976/77), no. 4, 355–375. (D. R. Brown) **58** #10640 06A20 (22A15)

(with Brown, Dennison R.) Compact totally instable zero-dimensional semilattices. *General Topology and Appl.* **7** (1977), no. 1, 151–159. (Jimmie D. Lawson) **55** #3144 22A15 (54F05)

See also **Problems: Compact semilattices**, **52** #13519

Strambach, Karl Vierdimensionale affine Ebenen. *Arch. Math. (Basel)* **23** (1972), 342–345. (G. J. Schellekens) **48** #1026 50D05

Sphärische Kreisebene mit dreidimensionaler nichteinfacher Automorphismengruppe. *Math. Z.* **124** (1972), 289–314. (W. Benz) **45** #7572 50A10

(with Perlt, Edeltraut) Die Norm lokal kompakter Gruppen. *Arch. Math. (Basel)* **24** (1973), 355–365. (P. S. Mostert) **48** #8683 22D05

Sphärische Kreisebenen mit einfacher Automorphismengruppe. *Geometriae Dedicata* **1** (1973), no. 2, 182–220. (H. Salzmann) **46** #9859 50D45

Kollineationsgruppen sphärischer Kreisebenen. *Abh. Math. Sem. Univ. Hamburg* **41** (1974), 133–153. (H. Salzmann) **49** #7917 50D45

(with Heineken, Hermann) Gruppen auf ebenen nichtkompakten Netzen. *Abh. Math. Sem. Univ. Hamburg* **42** (1974), 255–265. (H. Salzmann) **51** #740 20H15

(with Plaumann, Peter) Hurwitzsche Ternärkörper. *Arch. Math. (Basel)* **25** (1974), 129–134. (H. A. Thurston) **49** #10809 20N10

Der Kreisaum einer sphärischen Möbiusebene. *Monatsh. Math. 78* (1974), 156–163. (H. Salzmann) **49** #6026 50D45

(with Plaumann, Peter) Zur Existenz von Quasikörpern. *J. Algebra* **37** (1975), no. 3, 377–394. (H. J. Weinert) **52** #3254 16A78 (17A99)

(with Freudenthal, H.) Schließungssätze und Projektivitäten in der Möbius- und Laguerregeometrie. *Math. Z.* **143** (1975), no. 3, 213–234. (G. Pickert) **51** #13861 50D45

Reguläre idempotente Multiplikationen. *Math. Z.* **145** (1975), no. 1, 43–62. (P. S. Mostert) **54** #1215 55D45 (22A99)

Rechtsdistributive Quasigruppen auf 1-Mannigfaltigkeiten. *Math. Z.* **145** (1975), no. 1, 63–68. (H. Salzmann) **52** #3425 22A25

Eine Bemerkung zur Nilpotenz lokal kompakter Gruppen. (English summary) *Monatsh. Math. 79* (1975), 147–150. (Paul Milnes) **51** #10528 22D05

Moufang-Gruppen und Hurwitzsche Ternärkörper. *Nederl. Akad. Wetensch. Proc. Ser. A* **78** = *Indag. Math.* **37** (1975), no. 4, 290–303. (R. Artzy) **52** #3411 20N05 (22A30)

Algebraische Geometrien. *Rend. Sem. Mat. Univ. Padova* **53** (1975), 165–210. (O.-H. Keller) **54** #2649 14A10 (50A20)

Distributive quasigroups. *Foundations of geometry (Proc. Conf., Univ. Toronto, Toronto, Ont., 1974)*, pp. 251–276. *Univ. Toronto Press, Toronto, Ont.*, 1976. (Hermann Hahl) **54** #2861 20N05 (22A99)

Liesche Hjelmlevgruppen. *Abh. Math. Sem. Univ. Hamburg* **45** (1976), 134–155. (Karl H. Hofmann) **57** #6288 22E05

Mehrfach scharf transitive Liesche Moufang-Loops. *Beiträge zur geometrischen Algebra (Proc. Sympos., Duisburg, 1976)*, pp. 311–315. *Lehrbücher u. Monographien aus dem Gebiete der Exakt. Wiss., Math. Reihe, Band 21, Birkhäuser, Basel*, 1977. (H. Abels (Zbl 373 #57023)) **58** #22379 22A99

(with Plaumann, Peter) Zweidimensionale Quasialgebren mit Nullteilern. (English summary) *Aequationes Math.* **15** (1977), no. 2–3, 249–264. (Peter Seibt) **57** #6134 17E05

Mehrfach scharf transitive Liesche Moufang-Loops. *Arch. Math. (Basel)* **29** (1977), no. 1, 1–19. (Petr Němec) **57** #508 20N05

Kommutative distributive Quasigruppen. *Math.-Phys. Semesterber.* **24** (1977), no. 1, 71–83. (D. A. Robinson) **56** #519 20N05

Der von Staude'sche Standpunkt in lokal kompakten Geometrien. *Math. Z.* **155** (1977), no. 1, 11–21. (Rainer Löwen) **57** #10557 50A15 (50D45)

Strampp, W. Berechnung von Lösungen partieller Differentialgleichungssysteme erster

- Ordnung für eine unbekannte Funktion mit Hilfe von charakteristischen Gleichungen. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T259-T261. (J. Christina) **56** #816 35A30
- Strand, Alf E.** Gel'fand-pattern technique applied to the physically important $SU(3) \otimes SU(2) \subset SU(6)$ decomposition of $SU(6)$. *J. Mathematical Phys.* **15** (1974), 1197-1201. (Editors) **50** #3796 81.22
- Strand, K. Aa.** See Copernicus yesterday and today, **55** #7678
- Strand, Otto Neall** Coefficient errors caused by using the wrong covariance matrix in the general linear model. *Ann. Statist.* **2** (1974), 935-949. (Shelby J. Haberman) **50** #8848 62J05
- Theory and methods related to the singular-function expansion and Landweber's iteration for integral equations of the first kind. *SIAM J. Numer. Anal.* **11** (1974), 798-825. (H. Brunner) **50** #15404 65R05
- Multichannel complex maximum entropy (autoregressive) spectral analysis. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 634-640. (Author's summary) **57** #19061 (E **58** #20822) 94A05 (93E10)
- Correction to: "Multichannel complex maximum entropy (autoregressive) spectral analysis" (IEEE Trans. Automat. Control **22** (1977), no. 4, 634-640). *IEEE Trans. Automat. Control* **23** (1978), no. 3, 512. (Editors) **58** #20822 94A15
- See also Survey of statistical design and linear models, **51** #2039
- Strane, R. E.** (with Vogt, William G.) Stabilization of nonlinear systems using linear observers. *Trans. ASME Ser. G. J. Dynamic Systems, Measurement and Control* **96** (1974), 55-60. (B. P. Molinari) **53** #10413 93D15
- Strang, Gilbert** (with Berger, Alan E.; Scott, L. Ridgeway) Approximate boundary conditions in the finite element method. *Symposia Mathematica, Vol. X (Convegno di Analisi Numerica, INDAM, Rome, 1972)*, pp. 295-313. Academic Press, London, 1972. (G. H. Meyer) **53** #7070 65N30
- Variational crimes in the finite element method. *The mathematical foundations of the finite element method with applications to partial differential equations (Proc. Sympos., Univ. Maryland, Baltimore, Md., 1972)*, pp. 689-710. Academic Press, New York, 1972. (Russell C. Thompson) **54** #1668 65N30
- Approximation in the finite element method. *Numer. Math.* **19** (1972), 81-98. (M. Zlámal) **46** #4677 65D05
- (with Fix, George J.) ★An analysis of the finite element method. Prentice-Hall Series in Automatic Computation. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1973. xiv + 306 pp. (R. E. Barnhill) **56** #1747 65N30
- (with Berger, Alan E.) The change in solution due to change in domain. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971)*, pp. 199-205. Amer. Math. Soc., Providence, R.I., 1973. (J. R. Kuttler) **49** #1796 65N15
- Piecewise polynomials and the finite element method. *Bull. Amer. Math. Soc.* **79** (1973), 1128-1137. (J. R. Kuttler) **48** #5402 65N30
- (with McCarthy, Charles A.) Optimal conditioning of matrices. Collection of articles dedicated to the memory of George E. Forsythe. *SIAM J. Numer. Anal.* **10** (1973), 370-388. (F. Pecka) **48** #10087 65F35
- One-sided approximation and plate bending. *Computing methods in applied sciences and engineering (Proc. Internat. Sympos., Versailles, 1973), Part 1*, pp. 140-155. *Lecture Notes in Comput. Sci., Vol. 10*, Springer, Berlin, 1974. (Eli Passow) **55** #8642 41A30
- The dimension of piecewise polynomial spaces, and one-sided approximation. *Conference on the Numerical Solution of Differential Equations (Univ. Dundee, Dundee, 1973)*, pp. 144-152. *Lecture Notes in Math., Vol. 363*, Springer, Berlin, 1974. (Donald Kershaw) **55** #3626 41A30 (65N35)
- (with Mosco, Umberto) One-sided approximation and variational inequalities. *Bull. Amer. Math. Soc.* **80** (1974), 308-312. (R. S. Falk) **48** #10150 65N30
- The finite element method—linear and nonlinear applications. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974), Vol. 2*, pp. 429-435. *Canad. Math. Congress, Montreal, Que., 1975*. (T. Styś) **54** #11816 65N30
- (with Hager, William W.) Free boundaries and finite elements in one dimension. *Math. Comput.* **29** (1975), no. 132, 1020-1031. (I. Norman Katz) **52** #9602 65K05
- ★Linear algebra and its applications. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1976. xi + 374 pp. (Editors) **52** #5695 15-01
- Uniqueness in the theory of variational inequalities. *Advances in Math.* **22** (1976), no. 3, 356-363. (David Kinderlehrer) **54** #13666 49A25
- (with Fix, George J.) ★Теория метода конечных элементов. (Russian) [Theory of the finite element method] Translated from the English by V. I. Agoškov, V. A. Vasilenko and V. V. Šaidurov. Edited by G. I. Marčuk. Izdat. "Mir", Moscow, 1977. 349 pp. (Editors) **56** #16985 65-02 (65N30)
- Discrete plasticity and the complementarity problem. *Formulations and computational algorithms in finite element analysis (U.S.-Germany Sympos., Mass. Inst. Tech., Cambridge, Mass., 1976)*, pp. 839-854. M.I.T. Press, Cambridge, Mass., 1977. (M. N. L. Narasimhan) **57** #14822 76.65 (65N30)
- Strange, John** A generalization of Morley's theorem. *Amer. Math. Monthly* **81** (1974), 61-63. (L. M. Kelly) **48** #12264 50D25
- Strangert, Per** See Operational Research, **49** #12059
- Strano, Rosario** Sugli anelli a sottogruppi additivi tutti sottoanelli. *Matematiche (Catania)* **27** (1972), 203-218 (1973). (I. M. H. Etherington) **49** #2874 17E05
- Sulla henselizzazione di anelli di valutazione e di anelli di Prüfer. *Rend. Sem. Mat. Univ. Padova* **52** (1974), 167-183 (1975). (E. Enochs) **52** #5643 13A15
- Alcune proprietà dei corpi henseliani. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **21** (1975), 69-86. (C. F. Moppert) **53** #5552 12J10
- Sulla henselizzazione stretta di un corpo valutato. (English summary) *Ann. Univ. Ferrara VII (N.S.)* **21** (1975), 117-130. (Gerhard Pfister) **53** #5579 13J15 (14B10)
- Azumaya algebras over Hensel rings. *Pacific J. Math.* **61** (1975), no. 1, 295-303. (S. Greco) **54** #293 13A20
- Sulla henselizzazione degli anelli aritmetici. *Rend. Sem. Mat. Univ. Padova* **53** (1975), 149-163. (D. Kirby) **53** #10793 13J15 (14D15)
- Amitsur cohomology for purely inseparable extensions. *J. Algebra* **47** (1977), no. 1, 115-128. (Bodo Pareigis) **56** #5579 14L15 (18H10)
- Cohomology of an affine group scheme over a Hensel ring. *J. Algebra* **47** (1977), no. 1, 138-153. (Masaki Maruyama) **58** #16670 14F20 (14L15)
- Stránská, C.** Optimal and Sard approximation. *Comment. Math. Univ. Carolinae* **16** (1975), no. 3, 567-582. (E. W. Cheney) **54** #13427 41A65
- See also Proceedings: Conference on Basic Problems of Numerical Mathem., **51** #4621
- Strantzalos, Polychronis** Über Auf-Erweiterungen. *Bull. Soc. Math. Grèce (N.S.)* **13** (1972), no. 1-2, 117-128. (Roman Duda) **50** #14641 54C20
- Semieffektive und D-minimale Aktionen. *Bull. Soc. Math. Grèce (N.S.)* **14** (1973), 25-32. (J. E. Keesling) **52** #11874 54H15
- Endentheorie, dynamische Systeme und eigentliche Aktionen. *Proceedings of the Carathéodory International Symposium (Athens, 1973)*, pp. 554-566. Greek Math. Athens, 1974. (Herbert Abels) **57** #7555 54H15
- Über D-minimale Aktionen von zusammenhängenden Lie-Gruppen. *Bull. Math. Grèce (N.S.)* **15** (1974), 109-114. (From the text) **58** #31123 54H15 (57E10)
- Dynamische Systeme und topologische Aktionen. (English summary) *Manuscr. Math.* **13** (1974), 207-211. (A. Morimoto) **51** #1787 54H15 (57E20)
- H-transversale Aktionen auf Riemannschen Mannigfaltigkeiten. *J. Differential Geometry* **11** (1976), no. 2, 287-292. (Tudor S. Ratiu) **55** #4236 57E20 (58F99)
- Eine Charakterisierung der Fixpunktmenge bei Selbstabbildungen kompakter Mannigfaltigkeiten aus einer Homotopieklasse. (English and Russian summaries) *Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 8, 787-793. (Author's summary) **58** #18418 55C35
- Strikt fast gleichgradig-stetige und eigentliche Aktionen. (English summary) *Publ. J. Math.* **70** (1977), no. 1, 253-267. (Helmut Boseck) **58** #2758 54H15 (57E10)
- Strasberg, M.** Recherche de solutions périodiques d'équations différentielles non linéaires par des méthodes de discrétisation. *Equations différentielles et fonctionnelles non linéaires (Actes Conf. Internat. "Equa-Diff 73", Brussels/Louvain-la-Neuve, 1973)*, pp. 291-300. Hermann, Paris, 1973. (J. M. Cushing) **53** #11169 34C25 (65L99)
- Strasburger, Aleksander** (with Wawrzyńczyk, Antoni) Automorphic forms for conical representations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 921-927. (A. Morimoto) **47** #3915 43A85 (22E30)
- (with Wawrzyńczyk, Antoni) Reciprocity theorems in the theory of representations of groups. *Studia Math.* **42** (1972), 1-14. (A. Kleppner) **46** #3696 22E45
- Inducing spherical representations of semi-simple Lie groups. *Dissertationes Mathematicae (Rozprawy Mat.)* **122** (1975), 52 pp. (E. A. Thieleker) **53** #8332 22E45 (43A90)
- (with Szczyrba, Igor) On the uniqueness of number operators for certain symmetries. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 4, 409-413. (C. S. Sharma) **56** #17620 81.58
- See also Group theoretical methods in physics, **56** #14208 and Varadarajan, V. S. #10810
- Strashko, V. T.** See Strashko, V. T.
- Strasinskaja, F. F.** (with Kračkovskii, S. N.; Valaeva, N. A.) A quasilinear multipoint boundary value problem for ordinary differential equations. (Russian) *Moskov. Inž. Železnodorož. Transporta Trudy No. 438 Nekotorye Probl. Sovremen. Mat. Priložen. v Železnodorož. Transporte* (1973), 25-32, 127. (M. Kakabadze) **51** #10734B10
- (with Valaeva, N. A.) An iteration method for the solution of a multipoint boundary value problem. (Russian) *Numerical methods for signal processing (Russian) (Trudy Radiotekhn. Inst. Akad. Nauk SSSR, No. 23, Radiotekhn. Inst. Akad. Nauk SSSR, Moscow, 1975)*. (Authors' summary) **58** #3498 65L10
- Strasik, V. T.** (with Bakan, G. M.) Analytic design of control system for static plant with unknown parameters. *Avtomatika* **1976**, no. 6, 35-46. (Ukrainian. Russian and English summaries) translated as *Soviet Automat. Control* **9** (1976), no. 6, 31-40. (J. P. Barthelemy) **57** #5298 93C99
- The convergence of a class of iteration processes for the solution of a system of nonlinear equations. (Russian) *Kibernet. i Vychisl. Tehn. Vyp.* **38** (1977), 87-91, 115. (Segethová) **58** #13679 65H10
- Straskraba, Ivan** (with Vejvoda, Otto) Periodic solutions to abstract differential equations. *Proceedings of Equadiff III (Third Czechoslovak Conf. Differential Equations and Applications, Brno, 1972)*, pp. 199-203. *Folia Fac. Sci. Natur. Univ. Purkynianae Brunensis, Monograph., Tomus 1, Purkyně Univ., Brno, 1973*. (D. Ramakrishna Rao) **50** #5134G05 (35B10)
- (with Vejvoda, Otto) Periodic solutions to abstract differential equations. *Czechoslovak Math. J.* **23(98)** (1973), no. 4, 635-669. (Authors' review (Zbl 275 #34063)) **58** #17401 34G05 (35B10, 47A50, 47H15)
- (with Vejvoda, Otto) Periodic solutions to a singular abstract differential equation. *Czechoslovak Math. J.* **24(99)** (1974), 528-540. (See Zbl 329 #34053) 34G05
- On a singularly perturbed abstract diffusion equation with time periodicity condition. *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1973), Band 1, Teil 2*, pp. 313-316. *Abh. Akad. Wissensch. DDR, Abt. Math.-Naturwissensch.-Techn., No. 4N, Akademie-Verlag, Berlin, 1977*. (Russell C. Thompson) **58** #22899 34G05
- Strassen, Volker** Berechnung und Programm. I, II. (English summaries) *Acta Informatica* (1971/72), no. 4, 320-355; *ibid.* **2** (1973), no. 1, 64-79. (John T. Gill) **47** #7968A20
- (with Schönhage, Arnold) Schnelle Multiplikation grosser Zahlen. (English summary) *Computing (Arch. Elektron. Rechnen)* **7** (1971), 281-292. (Authors' summary) **45** #1431 68A20
- Evaluation of rational functions. *Complexity of computer computations (Proc. Sympos., IBM Thomas J. Watson Res. Center, Yorktown Heights, N.Y., 1972)*, pp. 187-212. Plenum, New York, 1972. (Claude Benzaken) **52** #16125 68A20
- Die Berechnungskomplexität von elementarsymmetrischen Funktionen und Interpolationskoeffizienten. (English summary) *Numer. Math.* **20** (1972/73), 238-248. (F. J. Murray) **48** #3296 68A20
- (with Huber, Peter J.) Minimax tests and the Neyman-Pearson lemma for capacities. *Ann. Statist.* **1** (1973), 251-263. (M. Skibinsky) **50** #8776 (E **50** #15027) 62C07
- Berechnungen in partiellen Algebren endlichen Typs. (English summary) *Computing (Arch. Elektron. Rechnen)* **11** (1973), no. 3, 181-196. (Hale F. Trotter) **53** #2025 68A20
- Vermeidung von Divisionen. (English summary) *J. Reine Angew. Math.* **264** (1973), 184-202. (W. Plesken and H. P. Rehm) **58** #25128 68A20 (12E05)

- Huber, Peter J.) Correction: "Minimax tests and the Neyman-Pearson lemma capacities" (Ann. Statist. 1 (1973), 251-263). *Ann. Statist.* 2 (1974), 223-224. (M. S. Sklar) 50 #15027 62C10
- Polynomials with rational coefficients which are hard to compute. *SIAM J. Math. Anal.* 3 (1974), 128-149. (V. V. Ivanov) 50 #1565 68A20
- Some results in algebraic complexity theory. *Proceedings of the International Symposium of Mathematicians (Vancouver, B. C., 1974), Vol. 2, pp. 497-501. Canad. Math. Bull., Montreal, Que., 1975.* (David Dobkin) 54 #14442 68A20
- Die Berechnungskomplexität der symbolischen Differentiation von Polynomspolynomen. *Theor. Comput. Sci.* 1 (1975), no. 1, 21-25. (R. H. Bartels) 5945 65D25 (68A20)
- Einige Resultate über Berechnungskomplexität. *Jber. Deutsch. Math.-Verein.* 78 (1977), no. 1, 1-8. (Wilfried Brauer) 55 #11713 68A20
- Computational complexity over finite fields. *SIAM J. Comput.* 5 (1976), no. 2, 11-14. (Hale F. Trotter) 55 #1815 68A20
- On Solovay, Robert M.) A fast Monte-Carlo test for primality. *SIAM J. Comput.* 7 (1978), no. 1, 84-85. (George Marsaglia) 55 #2732 (E 57 #5885) 10A25 (10-04)
- On Solovay, Robert M.) Erratum: "A fast Monte-Carlo test for primality" (SIAM J. Comput. 6 (1977), no. 1, 84-85). *SIAM J. Comput.* 7 (1978), no. 1, 118. (Editors) 5885 10A25 (10-04, 65C05)
- See also Cybernetics collection, 48 #5714 and Komplexität von Entscheidungsproblemen—ein Seminar, 57 #18232
- On Rapaport (with Levinson, Henry W.) Planarity of Cayley diagrams. *Graph Theory and applications (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1972; dedicated to the memory of J. W. T. Youngs), pp. 183-188. Lecture Notes in Math., Vol. 311, Springer, Berlin, 1972.* (L. V. Quintas) 50 #1961 05C25
- Infinitely presented groups: The deficiency. *J. Algebra* 24 (1973), 531-543. (A. K. S. Das) 46 #7391 20F05
- On knot-like groups. *Knots, groups, and 3-manifolds (papers dedicated to the memory of Fox), pp. 119-133. Ann. of Math. Studies, No. 84, Princeton Univ. Press, Princeton, 1975.* (J. S. Birman) 55 #13406 55A25 (20F05)
- On Levinson, Henry W.) Planarity of Cayley diagrams: planar presentations. *Proceedings of the Sixth Southeastern Conference on Combinatorics, Graph Theory, and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1975), pp. 567-593. Congressus Mathematicus, No. XIV, Utilitas Math., Winnipeg, Man., 1975.* (C. R. J. Clapham) 525 20F05
- See also Problems: Rings, modules and radicals, 50 #13099
- On Helmut Sufficiency and unbiased estimation. *Metrika* 19 (1972), 98-114. (T. J. G. Hall) 51 #14333 62B05
- On Bayes estimates. *J. Multivariate Anal.* 3 (1973), 293-310. (D. V. Lindley) 476 62F15
- Representation of consistent estimates relative to initial distributions. *Proceedings Prague Symposium on Asymptotic Statistics (Charles Univ., Prague, 1973), Vol. II, pp. 389-399. Charles Univ., Prague, 1974.* (Lionel Weiss) 51 #11788 62F15
- On Schmetterer, L.) Zur Theorie der erwartungstreuen Schätzungen. *Anz. Akad. Wiss. Math.-Naturwiss. Kl.* 1974, no. 6, 59-66. (Reinhard Michel) 5806 62F10 (62B05)
- On Bemerkung zur Existenz erwartungstreuer Schätzer. (English summary) *Math. Z.* 21 (1974), 1-5. (Herbert T. David) 52 #2006 62F10
- On über die Existenz von Minima konvexer Funktionen. *Monatsh. Math.* 78 (1974), 142-152. (J. Stoer) 52 #10042 90C25 (49A25)
- On several remarks on convex optimization on infinite dimensional vector spaces. *Math. Optim.* 2 (1975), no. 1, 75-81. (W. W. Breckner) 55 #7402 90C25
- On the continuity of convex functions. *Arch. Math. (Basel)* 26 (1975), no. 5, 528-535. (Roy Kestraw) 52 #8865 46A20
- On the asymptotic equivalence of Bayes and maximum likelihood estimation. *J. Multivariate Anal.* 5 (1975), 206-226. (Reinhard Michel) 51 #7118 62F10
- On convex functions on dual systems. *Math. Ann.* 214 (1975), 199-204. (M. M. Rao) 5853 46A20 (46E30)
- On Diagnose von stochastischen Prozessen. *Österreich. Akad. Wiss. Math.-Natur. Kl.* 183 (1975), no. 8-10, 335-360. (Franz Schmidt) 56 #1636 62M20 (60G25)
- On note on efficiency. *Metrika* 23 (1976), no. 2, 91-100. (Masafumi Akahira) 382 62F20
- On asymptotic properties of posterior distributions. *Z. Wahrscheinlichkeitstheorie und Gebiete* 35 (1976), no. 3, 269-282. (Richard A. Johnson) 54 #1445 62E20
- On asymptotic expansions for Bayes procedures. *Recent developments in statistics European Meeting Statisticians, Grenoble, 1976, pp. 9-35. North-Holland, Amsterdam, 1977.* (B. Ja. Levit) 58 #3171 62F15 (62F05, 62F20)
- On improved bounds for equivalence of Bayes and maximum likelihood estimation. (English summary) *Teor. Veroyatnost. i Primenen.* 22 (1977), no. 2, 358-370. (Reinhard Michel) 55 #13648 62F10
- On admissible representation of asymptotically optimal estimates. *Ann. Statist.* 6 (1978), no. 4, 867-881. (Masafumi Akahira) 58 #24689 62F10 (62C15, 62F20)
- On Karl (with Machner, Joachim) Kongruenzverbände Autonomer Semiautomaten. (English and Russian summaries) *Elektron. Informatsionssverarbeit. Kybernetik* 13 (1977), 137-146. (A. Ádám) 57 #5512 94A30
- On A. Multi-level approach to the large-scale control problem. *Mathematical systems and economics, I, II (Proc. Internat. Summer School, Varenna, 1967), pp. 481-486. Lecture Notes in Operations Research and Mathematical Economics, Vols. 11, 12, Springer, Berlin, 1969.* 47 #6352 93A15
- See also Automatic and remote control, 51 #9864 and Proceedings: International Symposium of the International Federation of Automatic Control (IFAC), 51 #12360b
- On Sz, Stefan See Addresses: Technical University of Warsaw, 50 #1822 and Otto, 58 #10205
- On J. (with Isham, C. J.; Salam, Abdus) Spontaneous breakdown of conformal symmetry. *Phys. Lett.* 31B (1970), 300-302. (A. Corciovei) 48 #7857 81.53
- On Isham, C. J.; Salam, Abdus) f -dominance of gravity. *Phys. Rev. D* (3) 3 (1971), 867-873. (R. L. Ingraham) 48 #5587 83.35
- On Isham, C. J.; Salam, Abdus) Infinity suppression in gravity-modified electrodynamics. *Phys. Rev. D* (3) 3 (1971), 1805-1817. (M. Carmeli) 49 #4488 81.53
- On (with Isham, C. J.; Salam, Abdus) $SL_{6,C}$ gauge invariance of Einstein-like Lagrangians. *Lett. Nuovo Cimento* (2) 5 (1972), 969-972. (Authors' introduction) 57 #18739 83.53
- On (with Isham, C. J.; Salam, Abdus) Is quantum gravity ambiguity-free? *Phys. Lett.* 46B (1973), 407-411. (Authors' summary) 50 #12083 81.53
- On (with Salam, Abdus) Super-gauge transformations. *Nuclear Phys.* B76 (1974), 477-482. (Authors' summary) 50 #9206 81.22
- On (with Salam, Abdus) Unitary representations of super-gauge symmetries. *Nuclear Phys.* B80 (1974), 499-505. (Authors' summary) 50 #12029 81.22
- On (with Salam, Abdus) Super-symmetry and non-abelian gauges. *Phys. Lett.* 51B (1974), 353-355. (Authors' summary) 50 #12028 81.22
- On (with Salam, Abdus) A theorem concerning Goldstone fermions. *Lett. Math. Phys.* 1 (1975/76), no. 1, 3-6. (E. Kyriakopoulos) 53 #7306 81.53
- On (with Salam, Abdus) Feynman rules for superfields. *Nuclear Phys. B* 86 (1975), 142-152. (Authors' summary) 50 #12058 81.46
- On (with Salam, Abdus) Superfields and Fermi-Bose symmetry. *Phys. Rev. D* (3) 11 (1975), 1521-1535. (Authors' summary) 53 #12394 81.53
- On (with Salam, Abdus) Supersymmetry and superfields. *Fortschr. Phys.* 26 (1978), no. 2, 57-142. (U. Cattaneo) 58 #14521 81.22
- On (with Chamseddine, Ali H.; Salam, Abdus) Strong gravity and supersymmetry. *Nuclear Phys. B* 136 (1978), no. 2, 248-258. (Martine J. Perrin) 58 #4011 81.22
- See also Nonpolynomial Lagrangians, renormalisation and gravity, 52 #9853
- On Stratigopoulos, D. Le groupe de Galois des automorphismes d'un hypercorps sur un sous-hypercorps. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 579-581. (M. Orzech) 51 #12815 12K05
- On Stratigopoulos, Demetrios Valuation faible. *Bull. Soc. Math. Grèce (N.S.)* 15 (1974), 39-45. (A. R. Monna (Zbl 318 #1211)) 58 #27933 12J20
- On (with Stabakis, Jean) Sur les ensembles ordonnés. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 285 (1977), no. 2, A39-A42. (Authors' summary) 55 #12584 06A10
- On (with Stabakis, Jean) Sur les ensembles ordonnés (f^* -coupes). (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 285 (1977), no. 3, A81-A84. (Authors' summary) 56 #128 04A05 (06A05)
- On Stratigos, Panagiotis D. Relative compactness in the vague topology. (Italian summary) *Boll. Un. Mat. Ital.* (4) 8 (1973), 198-202. (R. B. Kirk) 49 #1086 46E27
- On Application of duality theory to spaces of measures. *Bull. Soc. Math. Grèce (N.S.)* 14 (1973), 45-55. (Richard Haydon) 52 #14970 46E27
- On Duality theory and measure. *Proceedings of the C. Carathéodory International Symposium (Athens, 1973), pp. 567-579. Greek Math. Soc., Athens, 1974.* (S. A. Cobanjan) 58 #1078 28A40 (60B10)
- On Strătilă, Șerban (with Zsidó, László) Une théorie algébrique de la réduction pour les W^* -algèbres. *C. R. Acad. Sci. Paris Sér. A-B* 272 (1971), A1453-A1456. (N. Suzuki) 49 #3557 46L10
- On (with Zsidó, László) Sur la théorie algébrique de la réduction pour les W^* -algèbres. *C. R. Acad. Sci. Paris Sér. A-B* 275 (1972), A451-A454. (Maurice Dupré) 46 #7919 46L10
- On (with Zsidó, László) An algebraic reduction theory for W^* algebras. I. *J. Functional Analysis* 11 (1972), 295-313. (H. Halpern) 49 #5875 46L10
- On (with Zsidó, László) On the range of a derivation in a W^* -algebra. *Rev. Roumaine Math. Pures Appl.* 18 (1973), 101-103. (S. Sakai) 48 #4753 46L10
- On (with Zsidó, László) An algebraic reduction theory for W^* -algebras. II. *Rev. Roumaine Math. Pures Appl.* 18 (1973), 407-460. (H. Halpern) 50 #1012 46L10
- On Central spectral theory in W^* -algebras, and applications. (Romanian. English summary) *Stud. Cerc. Mat.* 25 (1973), 1167-1259. (László Zsidó) 57 #1189 47C15 (46L10)
- On (with Zsidó, László) A spectral characterization of the maximal ideal in factors. *Acta Sci. Math. (Szeged)* 36 (1974), 155-159. (H. Halpern) 49 #9642 46L10
- On (with Voiculescu, Dan Virgil) ★Representations of AF-algebras and of the group $U(\infty)$. Lecture Notes in Mathematics, Vol. 486. Springer-Verlag, Berlin-New York, 1975. viii + 169 pp. (Ola Bratteli) 56 #16391 46L05 (22D99)
- On (with Zsidó, László) ★Lecții de algebre von Neumann. (Romanian) [Lectures on von Neumann algebras] With an English summary and table of contents. Editura Academiei Republicii Socialiste România, Bucharest, 1975. 410 pp. (Gr. Arsene (Zbl 324 #46068)) 58 #30319 46L10
- On (with Voiculescu, Dan Virgil) Sur les représentations factorielles infinies de $U(\infty)$. *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A555-A558. (Ole A. Nielsen) 52 #3427 22D25 (46L10)
- On (with Voiculescu, Dan Virgil; Zsidó, László) Sur les produits croisés. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 15, A779-A782. (Jun Tomiyama) 54 #3431 46L10 (22D35)
- On (with Voiculescu, Dan Virgil; Zsidó, László) On crossed products. I. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 10, 1411-1449. (Editors) 58 #17875 46L10
- On (with Voiculescu, Dan Virgil; Zsidó, László) On crossed products. II. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 1, 83-117. (M. Takesaki) 56 #16395 46L10
- On (with Voiculescu, Dan Virgil) On a class of KMS states for the unitary group $U(\infty)$. *Math. Ann.* 235 (1978), no. 1, 87-110. (H. Araki) 58 #2327 46L05 (22D10, 22E65)
- See also Theory of operators and operator algebras, 49 #7801
- On Stratonov, P. F. See Systems analysis and algorithmization of production processes, 49 #7064
- On Stratonović, R. L. Quantity of information and entropy of segments of stationary Gaussian processes. *Problemy Peredači Informacii* 3 (1967), vyp. 2, 3-21 (Russian); translated as *Problems of Information Transmission* 3 (1967), no. 2, 1-17 (1969). (Author's summary) 57 #5427 94A15
- On The speed of convergence of algorithms for estimating the probability density function. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1969, no. 6, 3-15 (Russian); translated as *Engng. Cybernetics* 1969, no. 6, 1-13 (1970). (M. Müller) 45 #7865 62F10

- Canonical system of recurrence equations for optimal adaptation algorithms. *Avtomat. i Telemekh. 1970*, no. 5, 97-105 (Russian. English summary); translated as *Automat. Remote Control 1970*, no. 5, 765-773. (P. E. Sarachik) **47** #8221 94A30
- On a nonstationary adaptational problem in dynamic programming. *Izv. Akad. Nauk SSSR Tehn. Kibernet. 1970*, no. 5, 91-99 (Russian); translated as *Engng. Cybernetics 8* (1970), no. 5, 908-915. (K. Hinderer (Zbl 213, 454)) **46** #5085 94A30
- Optimal algorithms of the stochastic approximation type. *Izv. Akad. Nauk SSSR Tehn. Kibernet. 1970*, no. 1, 24-32 (Russian); translated as *Engng. Cybernetics 1970*, no. 1, 20-27. (D. S. Adorno) **45** #4611 65K05 (60G35)
- (with Grişanin, B. A.) Optimal filtration of quantum variables in the case of a quadratic criterion for quality. (Russian) *Problemy Peredachi Informacii 6* (1970), no. 3, 15-23. (A. Ja. Dorogovcev) **46** #10485 94A05
- Detection and estimation of signals in noise when one or both are non-Gaussian. *Proc. IEEE 58* (1970), 670-679. (S. Csibi) **46** #8753 94A05
- (with Mamaev, D. D.) Adaptive estimation of the parameters of a conditional probability distribution. *Izv. Akad. Nauk SSSR Tehn. Kibernet. 1972*, no. 2, 144-151 (Russian); translated as *Engng. Cybernetics 10* (1972), no. 2, 299-305. (M. Csorgo) **50** #3429 62F10
- (with Mamaev, D. D.) Optimal adaptive detection of pulse Markov signals. *Radio Engng. Electron. Phys. 17* (1972), 236-240. (Tohru Katayama) **51** #5153 94A05
- The superposition of quantum signals. *Radioelektron. i Elektron. 17* (1972), 2100-2106 (Russian); translated as *Radio Engng. Electron. Phys. 17* (1972), 1673-1679. (P. Caldirola) **50** #3830 81.60
- Thermal electric fluctuations in a medium with nonlinear conductance under the condition of quasistationarity. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika 16* (1973), no. 3, 439-448. (Author's summary) **57** #8514 80.60
- The quantum generalization of optimal statistical estimation and hypothesis testing. *Stochastics 1* (1973), no. 1, 87-126. (S. Takács) **48** #13442 94A05 (62F99)
- (with Krupennikov, N. A.) Nonlinear fluctuation-dissipation thermodynamics. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 15* (1974), 296-302. (Authors' summary) **58** #9017 82.60
- ★Теория информации. (Russian) [Information theory] "Sovetskoe Radio", Moscow, 1975. 424 pp. (Not reviewed) 94A15
- Optimum resolution of non-orthogonal quantum signals in the presence of small Gaussian interference. *Radioelektron. i Elektron. 21* (1976), no. 3, 538-545 (Russian); translated as *Radio Engng. Electron. Phys. 21* (1976), no. 3, 71-77. (S. Ikehara) **55** #14398 94A05
- Optimum discrimination between three symmetrical, non-orthogonal quantum signals in the presence of small interference. *Radioelektron. i Elektron. 21* (1976), no. 5, 1082-1087 (Russian); translated as *Radio Engng. Electron. Phys. 21* (1976), no. 5, 124-128. (From the author's introduction) **56** #2628 94A05
- (with Vancjan, A. G.) Some optimization methods for quantum signal reception. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 17* (1976), no. 2, 115-120. (Zdeněk Ertinger) **55** #2334 94A05
- The derivation of the time irreversibility of thermodynamic processes from the microscopic reversibility. (Russian. English summary) *Teoret. Mat. Fiz. 36* (1978), no. 1, 74-88. (Author's summary) **58** #19885 80.60
- See also Selected translations in mathematical statistics and probability, **49** #4728
- Stratopoulos, G. M.** (with Wylie, C. Ray) A new series of line involutions in S_3 . *Univ. Nac. Tucumán Rev. Ser. A 20* (1970), 63-69. (K.-A. Schmitt) **45** #5132 14N99 (50A05)
- Stratton, A. E.** A note on the splitting problem for modules over an incomplete discrete valuation ring. *Proc. London Math. Soc. (3) 23* (1971), 237-250. (J. W. Brewer) **45** #1898 13C05
- A splitting theorem for mixed abelian groups. *Symposia Mathematica, Vol. XIII (Convegno di Gruppi Abeliani, INDAM, Rome, 1972)*, pp. 109-125. Academic Press, London, 1974. (L. Bican) **51** #5802 20K15
- Quotient modules that split. *J. London Math. Soc. (2) 11* (1975), no. 1, 88-90. (L. Bican) **51** #10374 16A02
- (with Webb, M. C.) The nilpotency of torsion-free rings with given type set. *Comment. Math. Univ. Carolinae 18* (1977), no. 3, 437-444. (William J. Wickless) **57** #483 20K15
- Stratton, Howard H.** (with Brown, Herbert I.; Crawford, J. P.) On summability fields of conservative operators. *Bull. Amer. Math. Soc. 75* (1969), 992-997. (Editors) **55** #13288 47B99 (40D20)
- (with Brown, Herbert I.; Kerr, D. R.) The structure of $B[c]$ and extensions of the concept of conull matrix. *Proc. Amer. Math. Soc. 22* (1969), 7-14. (J. Diestel) **46** #4062 (E 46 #4063) 40H05
- Moments of oscillations and ruled sums. *Ann. Math. Statist. 43* (1972), 1012-1016. (P. Neumann) **46** #938 60F05
- Feller's parametric equations for laws of the iterated logarithm. *Ann. Math. Statist. 43* (1972), 2104-2109. (R. J. Tomkins) **50** #14905 60F15
- (with Brown, Herbert I.; Kerr, D. R.) Corrections to: "The structure of $B[c]$ and extensions of the concept of conull matrix". *Proc. Amer. Math. Soc. 35* (1972), 621-622. (J. Diestel) **46** #4063 40H05 (46N05)
- (with Baum, Leonard E.) Visitation of ruled sums. *Trans. Amer. Math. Soc. 182* (1973), 403-430. (H. Kesten) **48** #12645 60G50 (60F20)
- Straub, Erwin** (R. Application of reliability theory to insurance. *Asin Bull. 6* (1971/72), 97-107. (J. Buchler) **46** #4670 62N05
- Credibility in practice. With a discussion by Craig F. Ansley. *Credibility: theory and applications* (Proc. Berkeley Actuar. Res. Conf., Univ. California, Berkeley, Calif., 1974; dedicated to Edward A. Lew), pp. 347-362, 409-414. Academic Press, New York, 1975. (Gregory Taylor) **53** #14835 62P05
- Actuarial remarks on the insurance of natural hazards. *Mitt. Verein. Schweiz. Versicherungsmath. 75* (1975), no. 2, 217-221. (H. L. Seal) **52** #15931 62P05
- See also Jewell, William S., **54** #11711
- Straub, K.** (with Braun, K. A.; Dietrich, G.; Frik, G.; Lunde Johnsen, Th.; Vallianos, G.) Some hypermatrix algorithms in linear algebra. *Computing methods in applied sciences and engineering* (Second Internat. Sympos., Versailles, 1975), Part 1, pp. 23-40. *Lecture Notes in Econom. and Math. Systems*, Vol. 134, Springer, Berlin, 1976. (Robert Todd Gregory) **56** #17028 65F10 (62F15)
- Straub, Martin** Minimaxschätzungen bei Vorbewertung. (English summary) *Mathem. economics and game theory*, 505-515. *Lecture Notes in Econ. and Math. Systems*, 141, Springer, Berlin, 1977. (Norbert Schmitz) **55** #9378 62F10 (90D35, 62C99)
- Straube, Bernd** Die Analyse von resistiven Netzwerken mit idealen Dioden. *Wiss. Techn. Univ. Dresden 23* (1974), 1355-1360. (Author's summary) **54** #2356 94A05
- (with Kummer, Bernd) Eine Einführung in die Theorie unscharfer Mengen. *Z. Techn. Univ. Dresden 26* (1977), no. 2, 363-369. (W. Wechler) **56** #5096 94A05
- Štrauch, Oto** Minimal covering of a closed interval. (Slovak. English summary) *Acta Rerum Natur. Univ. Comenian. Math. Publ. 28* (1972), 1-15. (Jaroslav Smítal) **47** #326A03 (02E99)
- Strauch, Ralph E.** When a queue looks the same to an arriving customer as to an observer. *Management Sci. 17* (1970/71), 140-141. (M. L. Chaudhry) **46** #979 60K25
- (with Rolph, John E.) A countable policy set for sequential decision problems. *Ann. Math. Statist. 43* (1972), 2078-2082. (W. Hoeffding) **50** #15209 62L15
- Straughan, Brian** Further global nonexistence theorems for abstract nonlinear wave equations. *Proc. Amer. Math. Soc. 48* (1975), 381-390. (L. E. Payne) **51** #15147H15 (35R20)
- Global non-existence of solutions to Ladyzhenskaya's variants of the Navier-Stokes equations backward in time. *Proc. Roy. Soc. Edinburgh Sect. A 75* (1975/76), no. 165-170. (L. E. Payne) **56** #3479 35Q10 (76.35)
- Uniqueness and stability for the conduction-diffusion solution to the Boussinesq equations backward in time. *Proc. Roy. Soc. London Ser. A 347* (1975/76), no. 1643-446. (Joseph J. Roseman) **54** #1854 76.35
- (with Knops, R. J.) Non-existence of global solutions to non-linear Cauchy problems arising in mechanics. *Trends in applications of pure mathematics to mechanics* (Conf., Univ. Lecce, Lecce, 1975), pp. 187-206. *Monographs and Studies in Math.*, Vol. 10, Pitman, London, 1976. (L. E. Payne) **58** #1764 35Q99 (35R20, 73.35)
- (with Knops, R. J.) Convergence of solutions of the equations of dynamic linear dipolar elasticity to the solutions of classical elastodynamics. (Polish and Russian summaries) *Symposium on Continuum Models of Discrete Systems* (Jodłowy Dw. 1975). *Arch. Mech. (Arch. Mech. Stos.) 28* (1976), no. 3, 431-441. (Authors' summary) **57** #4760 73.35 (35Q99)
- (with Knops, R. J.) Continuous dependence theorems in the theory of linear elastostatics with microstructure. *Internat. J. Engng. Sci. 14* (1976), no. 6, 555-565. (Sokolowski) **57** #11251 73.34
- Growth and uniqueness theorems for an abstract nonstandard wave equation. *SIAM J. Math. Anal. 7* (1976), no. 4, 519-528. (R. S. Freeman) **53** #13773 34B40, 35Q99
- Uniqueness and continuous dependence theorems for the conduction-diffusion solution to the Boussinesq equations on an exterior domain. *J. Math. Anal. Appl. 55* (1977), no. 1, 203-233. (D. E. Edmunds) **55** #4911 76.35
- Growth and instability theorems for wave equations with dissipation, with applications in contemporary continuum mechanics. *J. Math. Anal. Appl. 61* (1977), no. 2, 303-330. (Denise Huet) **58** #11763 34G05
- (with Lindsay, K. A.) Acceleration waves and second sound in a perfect fluid. *Arch. Rational Mech. Anal. 68* (1978), no. 1, 53-87. (M. Fabrizio) **58** #8743 76.35
- Straumann, N.** Minimal assumptions leading to a Robertson-Walker model of the universe. *Helv. Phys. Acta 47* (1974), 379-383. (Marcos Rosenbaum) **53** #15282 83.53
- Štraus, A. V.** The spectral expansions of a regular symmetric operator. (Russian) *Dokl. Akad. Nauk SSSR 204* (1972), 52-55. (Chandler Davis) **46** #7955 47B25
- The extensions of a semi-bounded operator. (Russian) *Dokl. Akad. Nauk SSSR 243* (1973), 543-546. (G. Biriuk) **50** #2977 47B25
- Selfadjoint extensions of a semibounded operator. (Russian) *Functional analysis, No. 7* (Russian), pp. 161-171. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk, 1976*. (Editors) **58** #30438 47B25
- A family of extensions of a semibounded operator. (Russian) *Functional analysis, No. 6: Theory of operators in linear spaces* (Russian), pp. 155-164. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk, 1976*. (Editors) **58** #30436 47B25
- Extensions of a bounded symmetric operator with preservation of the boundedness. (Russian) *Functional analysis, No. 6: Theory of operators in linear spaces* (Russian), pp. 165-173. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk, 1976*. (Editors) **58** #30437 47B25
- On the theory of extensions of a semibounded operator. (Russian) *Functional analysis, No. 9: Harmonic analysis on groups* (Russian), pp. 167-173. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk, 1977*. (T. Andó) **58** #2417 47B25
- Resolvents of the extensions of a symmetric operator. (Russian) *Functional analysis, No. 8: Operator theory* (Russian), pp. 162-173. *Ul'janovsk. Gos. Ped. Inst., Ul'yanovsk, 1977*. (Editors) **58** #30439 47B25
- See also *Functional analysis*, **51** #1317; *Functional analysis*, **55** #6156; *Functional analysis*, **55** #8730; *Functional analysis*, **57** #6274; *Functional analysis*, **57** #7089; *Functional analysis*, **57** #7206 and *Functional analysis*, **58** #29990
- Straus, Alexis K.** See *Operational Research*, **49** #12059
- Straus, Ernst G.** (with Erdős, Paul) Nonaveraging sets. II. *Combinatorial theory and applications, II* (Proc. Colloq., Balatonfüred, 1969), pp. 405-411. North-Holland, Amsterdam, 1970. (J. Riordan) **47** #4804 04A20
- (with Hilliker, David Lee) Some p -adic versions of Polya's theorem on integer-valued analytic functions. *Proc. Amer. Math. Soc. 26* (1970), 395-400. (Authors' summary) **55** #5548 10F45 (12B40)
- Nonaveraging sets. *Combinatorics* (Proc. Sympos. Pure Math., Vol. XIX, Univ. California, Los Angeles, Calif., 1968), pp. 215-222. Amer. Math. Soc., Providence, R.I. (J. Riordan) **47** #4803 04A20 (05A05)
- (with Senge, H. G.) PV-numbers and sets of multiplicity. *Proceedings of the Washington State University Conference on Number Theory* (Washington State Univ., Pullman, Wash., 1971), pp. 55-67. Dept. Math., Washington State Univ., Pullman, Wash., 1971. (W. J. LeVeque) **47** #8452 10F05 (12A15)
- (with Adams, William W.) Non-Archimedean analytic functions taking the same values at the same points. *Proceedings of the Washington State University Conference on Number Theory* (Washington State Univ., Pullman, Wash., 1971), pp. 160-173. Dept. Math., Washington State Univ., Pullman, Wash., 1971. (W. H. J. Fuchs) **47** #88530A70

- erential rings of meromorphic functions. *Acta Arith.* **21** (1972), 271-284. (E. L. 46 #7532 30A98)
- h Erdős, Paul; Lovász, László; Simmons, A.) Dissection graphs of planar point survey of combinatorial theory (*Proc. Internat. Sympos., Colorado State Univ., Illinois, Colo., 1971*), pp. 139-149. North-Holland, Amsterdam, 1973. (A. C. 51 #241 05C20)
- erential rings of analytic functions of a non-Archimedean variable. *Diophantine and its applications* (*Proc. Conf., Washington, D.C., 1972*), pp. 295-308. Academic Press, New York, 1973. (E. L. Stout) **50** #10309 32A99 (32J10, 32K10)
- h Motzkin, Theodore S.; Sharma, Ambikeshwar) Averaging interpolation. *Functions and approximation theory* (*Proc. Sympos., Univ. Alberta, Edmonton, Alta., 1972*), pp. 191-233. *Internat. Ser. Numer. Math., Vol. 21*, Birkhäuser, Basel, 1973. (A. K. 51 #13521 41A05)
- l analytic functions as ratios of absolutely monotonic functions. *Spline functions approximation theory* (*Proc. Sympos., Univ. Alberta, Edmonton, Alta., 1972*), pp. 309-323. *Internat. Ser. Numer. Math., Vol. 21*, Birkhäuser, Basel, 1973. (A. J. van der 53 #3312 30A72)
- h Schacher, Murray M.) Some applications of a non-Archimedean analogue of Cesàro's rule of signs. *Acta Arith.* **25** (1973/74), 353-357. (Jack Sonn) **50** #290
- the greatest common divisor of some binomial coefficients. *Fibonacci Quart.* **11** (no. 1, 25-26. (S. L. Segal) **46** #8944 10A05)
- h Erdős, Paul; Graham, Ronald L.; Montgomery, P.; Rothschild, B. L.; Vaughan, J. H.; Joel H.) Euclidean Ramsey theorems. I. *J. Combinatorial Theory Ser. A* **14** (1973), 341-363. (Václav Chvátal) **47** #4825 05B30
- h Motzkin, Theodore S.; O'Neill, B.) Isolated subgroups. *Michigan Math. J.* **20** (1973), 235-248. (K.-T. Chen) **47** #6876 20F30 (53C20)
- h Senge, H. G.) PV-numbers and sets of multiplicity. Collection of articles dedicated to the memory of Alfréd Rényi, II. *Period. Math. Hungar.* **3** (1973), 93-100. (Z. 49 #4941 10F25 (12A15))
- h Graham, Ronald L.; Rothschild, B. L.) Are there $n+2$ points in E^n with odd distances? *Amer. Math. Monthly* **81** (1974), 21-25. (L. M. Kelly) **48** #11024 50B10)
- h Sharma, Ambikeshwar) On the irreducibility of a class of Euler Frobenius polynomials. *Canad. Math. Bull.* **17** (1974), 265-273. (P. Lipow) **50** #13990 41A15
- h Subbarao, M. V.) On exponential divisors. *Duke Math. J.* **41** (1974), 465-471. (Rick) **50** #2053 10A20
- h Arkin, Joseph) Latin k -cubes. *Fibonacci Quart.* **12** (1974), 288-292. (David A. 50 #4337 05B15)
- mark on the preceding paper: "Ideals in near rings of polynomials over a field" J. Math. **52** (1974), 595-600) by J. L. Brenner. *Pacific J. Math.* **52** (1974), 595-600. (Steve Ligh) **50** #9985 16A76
- h Erdős, Paul) On the irrationality of certain series. *Pacific J. Math.* **55** (1974), 347-357. (A. J. van der Poorten) **51** #3069 10F35 (10A40)
- h Bollobás, Béla; Erdős, Paul) Complete subgraphs of chromatic graphs and applications. *Utilitas Math.* **6** (1974), 343-347. (D. K. Ray-Chaudhuri) **52** #162
- h Erdős, Paul; Graham, Ronald L.; Montgomery, P.; Rothschild, B. L.; Vaughan, J. H.; Joel H.) Euclidean Ramsey theorems. II. *Infinite and finite sets* (*Colloq. Math.*, 1973; dedicated to P. Erdős on his 60th birthday), Vol. 1, pp. 529-557. *Colloq. Math. Soc. János Bolyai, Vol. 10*, North-Holland, Amsterdam, 1975. (Václav Chvátal) **53** #05C15
- h Erdős, Paul; Graham, Ronald L.; Montgomery, P.; Rothschild, B. L.; Vaughan, J. H.; Joel H.) Euclidean Ramsey theorems. III. *Infinite and finite sets* (*Colloq. Math.*, 1973; dedicated to P. Erdős on his 60th birthday), Vol. 1, pp. 559-583. *Colloq. Math. Soc. János Bolyai, Vol. 10*, North-Holland, Amsterdam, 1975. (Václav Chvátal) **53** #05C15
- h Harper, L. H.; Payne, Thomas H.; Savage, John E.) Sorting $X+Y$. *Comm. Pure Appl. Math.* **28** (1975), 347-349. (Forbes D. Lewis) **51** #14641 68A20
- h Erdős, Paul) How abelian is a finite group? *Linear and Multilinear Algebra* **3** (1975), 307-312. (David R. Mason) **53** #10933 20D99
- h Erdős, Paul; Graham, Ronald L.; Ruzsa, Imre, Jr.) On the prime factors of integers. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his 70th birthday. *Math. Comp.* **29** (1975), 83-92. (S. L. G. Choi) **51** #5523 10L10)
- combinatorial theorem in group theory. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his seventieth birthday. *Math. Comp.* **29** (1975), 303-309. (P. Erdős) **51** #3314 20F10 (05C15)
- h Cayford, A. H.) On differential rings of entire functions. *Trans. Amer. Math. Soc.* **238** (1975), 283-293. (L. R. Sons) **52** #3553 30A98
- h Arkin, Joseph; Hoggatt, Verner E., Jr.) Systems of magic Latin k -cubes. *J. Math.* **28** (1976), no. 6, 1153-1161. (Heiko Harborth) **54** #12541 05B15
- ferences of residues (mod p). *J. Number Theory* **8** (1976), no. 1, 40-42. (D. Arayana) **52** #13689 10H35
- h Brizolis, Demetrios) A basis for the ring of doubly integer-valued polynomials. *Angew. Math.* **286/287** (1976), 187-195. (L. Carlitz) **54** #5168 10M05
- h Goldberg, Moshe) Inclusion relations involving k -numerical ranges. *Linear and Appl.* **15** (1976), no. 3, 261-270. (J. P. Williams) **56** #16404 47A10
- h Erdős, Paul) On products of consecutive integers. *Number theory and algebra*, 1970. Academic Press, New York, 1977. (R. Tijdeman) **57** #3051 10A05
- h Goldberg, Moshe) Elementary inclusion relations for generalized numerical ranges. *Linear Algebra and Appl.* **18** (1977), no. 1, 1-24. (P. A. Fillmore) **58** #5727 47A10)
- h Goldberg, Moshe) On a theorem by Mirman. *Linear and Multilinear Algebra* **7** (1978), no. 2, 77-78. (R. D. McWilliams) **57** #3880 47A10
- h Goldberg, Moshe) On characterizations and integrals of generalized numerical ranges. *Pacific J. Math.* **69** (1977), no. 1, 45-54. (P. A. Fillmore) **55** #13262 47A10
- also Problems: Combinatorial theory, **46** #8855
- Strauss, V. A. Some generalizations of Rajchman's theorem on the formal product of trigonometric series. (Russian) *Works of young scientists: mathematics and mechanics*, No. 2 (Russian), pp. 162-168. Izdat. Saratov. Univ., Saratov, 1969. (R. P. Boas, Jr.) **49** #9524 42A48
- The spectral decomposition of Q -nonnegative operators in regular (\mathfrak{B}, Q) -spaces. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **21** (1972), 360-363. (J. Bognár) **51** #3953 47B50
- (with Azizov, T. Ja.; Iohvidov, I. S.) The normally solvable extensions of a closed symmetric operator. (Russian) *Mat. Issled.* **7** (1972), no. 1(23), 16-26. (G. Biriuk) **46** #7954 47B25 (47B30)
- (with Azizov, T. Ja.) The completeness of the system of root vectors of a definitizable operator in a Banach space with Hermitian form. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU Vyp. 5 Sb. Statei Teor. Operator. i Differencial. Uraevenii* (1972), 1-6. (J. Bognár) **56** #16441 47B50
- G -orthonormal systems and bases in Hilbert space. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 9(136), 108-117. (J. Bognár) **50** #960 46D05
- Continuous hermitian indefinite functions. (Russian) *Mat. Zametki* **13** (1973), 303-310. (J. Bognár) **47** #5568 46D05 (42A72, 42A88)
- The formal product of double trigonometric series. (Russian) *Ural. Gos. Univ. Mat. Zap.* **10**, no. 2 Issled. Sovremen. Mat. Anal., 187-193, 220 (1977). (RŽMat **1978** #5 B59) **58** #29822 42A92
- Strauss, A. M. (with Pepe, W. D.) Theory of viscoplastic response. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **23** (1971), 405-412. (B. R. Seth) **45** #8119 73.46
- See also Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, **48** #15
- Strauss, Aaron A geometric introduction to Liapunov's second method. *Stability problems of solutions of differential equations* (*Proc. NATO Advanced Study Inst., Padua, 1965*), pp. 19-27. Edizioni "Oderisi", Gubbio, 1966. (T. A. Burton) **53** #3449 34D20
- Perturbing asymptotically stable differential equations. *Advances in differential and integral equations* (*Conf. Qualitative Theory of Nonlinear Differential and Integral Equations*, Univ. Wisconsin, Madison, Wis., 1968; in memoriam Rudolph E. Langer (1894-1968)), pp. 194-198. *Studies in Appl. Math.*, No. 5, Soc. Indust. Appl. Math., Philadelphia, Pa., 1969. (T. Yoshizawa) **52** #14504 34D10
- A discussion of the linearization of Volterra integral equations. *Seminar on Differential Equations and Dynamical Systems, II* (Univ. Maryland, College Park, Md., 1969), pp. 209-217. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin 1970. (J. A. Nohel) **53** #3629 45M05
- A stability problem in linear differential games. *Seminar on Differential Equations and Dynamical Systems, II* (Univ. Maryland, College Park, Md., 1969), pp. 218-223. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (Editors) **56** #11041 90D25
- Global growth rates for solutions of certain perturbed differential systems. *Global differentiable dynamics* (*Proc. Conf., Case Western Reserve Univ., Cleveland, Ohio, 1969*), pp. 129-133. *Lecture Notes in Math.*, Vol. 235, Springer, Berlin, 1971. (Editors) **58** #11710 34D10
- ★Selected topics in the history of mathematics. Lectures delivered at the Dept. of Mathematics, University of Maryland during the years 1972-1973. Department of Mathematics, University of Maryland, Lecture Note, No. 12. *Department of Mathematics, University of Maryland, College Park, Md., 1975. i+107 pp.* (Editors) **52** #10322 01-01
- Strauss, Charles See Influence of computing on mathematical research and education, **49** #7058
- Strauss, David J. A model for clustering. *Biometrika* **62** (1975), no. 2, 467-475. (Donald A. Dawson) **52** #4374 60D05
- Analysing binary lattice data with the nearest-neighbor property. *J. Appl. Probability* **12** (1975), no. 4, 702-712. (Donald A. Dawson) **52** #6980 62F10 (82.62)
- Runs of occupied cells. *Biometrika* **64** (1977), no. 1, 170-171. (Bernard Harris) **58** #13257 60C05 (60F05)
- Clustering on coloured lattices. *J. Appl. Probability* **14** (1977), no. 1, 135-143. (Brian D. Ripley) **55** #6624 60K99
- Strauss, Dona Papert (with Kopp, P. Ekkehard; Yeadon, F. J.) Positive Reynolds operators on Lebesgue spaces. *J. Math. Anal. Appl.* **44** (1973), 350-365. (C. R. Putnam) **48** #4813 47B37 (60G35)
- (with Dowker, C. H.) Separation axioms for frames. *Topics in topology* (*Proc. Colloq., Keszthely, 1972*), pp. 223-240. *Colloq. Math. Soc. János Bolyai, Vol. 8*, North-Holland, Amsterdam, 1974. (E. P. Rozycki) **52** #15360 54D10 (06A23)
- (with Dowker, C. H.) Paracompact frames and closed maps. *Symposia Mathematica, Vol. XVI (Convegno sulla Topologia Insiemistica e Generale, INDAM, Rome, 1973)*, pp. 93-116. Academic Press, London, 1975. (Stephen Willard) **53** #14411 54D20 (54F05, 06A23)
- (with Dowker, C. H.) Products and sums in the category of frames. *Categorical topology* (*Proc. Conf., Mannheim, 1975*), pp. 208-219. *Lecture Notes in Math.*, Vol. 540, Springer, Berlin, 1976. (E. J. Braude) **55** #11216 54F05
- (with Dowker, C. H.) Sums in the category of frames. *Houston J. Math.* **3** (1977), no. 1, 17-32. (Stephen Willard) **56** #1275 54F05 (06A23)
- Strauss, H. R. Bifurcation of elliptic equilibrium. *Phys. Fluids* **17** (1974), 1040-1041. (L. G. Chambers) **50** #6398 82.35
- Strauss, Hans I_1 -Approximation mit Splinesfunktionen. *Numerische Methoden der Approximationstheorie, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 151-162. *Internat. Schriftenreihe Numer. Math., Band 26*, Birkhäuser, Basel, 1975. (L. L. Schumaker) **52** #3833 (EA 53) 41A50
- Eindeutigkeit bei der Gleichmäßigen Approximation mit Tschebyscheffschen Splinesfunktionen. *J. Approximation Theory* **15** (1975), no. 1, 78-82. (L. L. Schumaker) **52** #3834 41A50
- Approximation mit Splinesfunktionen und Quadraturformeln. (English summary) *Spline functions* (*Proc. Internat. Sympos., Karlsruhe, 1975*), pp. 371-419. *Lecture Notes in Math.*, Vol. 501, Springer, Berlin, 1976. (Author's summary) **58** #1874 41A15
- (with Sommer, Manfred) Eigenschaften von schwach Tschebyscheffschen Räumen. *J. Approximation Theory* **21** (1977), no. 3, 257-268. (H. Weber) **57** #6986 41A50 (41A65)

- Strauss, Martin** (with Treves, F.) Uniqueness in the Cauchy problem for first-order linear partial differential operators. *A seminar on PDEs—1973*, pp. 77-83. Rutgers Univ., New Brunswick, N.J., 1973. (Editors) **58** #29046 35A10 (35F10)
- Two concepts of probability in physics. *Logic, methodology and philosophy of science, IV* (Proc. Fourth Internat. Congr., Bucharest, 1971), pp. 603-615. *Studies in Logic and Foundations of Math.*, Vol. 74, North-Holland, Amsterdam, 1973. (M. J. Męczyński) **56** #4567 81.60 (60A05)
- Logics for quantum mechanics. *Found. Phys.* **3** (1973), 265-276. (P. Suppes) **50** #3786 81.06 (81.60)
- Rotating frames in special relativity. *Internat. J. Theoret. Phys.* **11** (1974), 107-123. (Author's summary) **54** #9586 83.53
- (with Sacks, Richard) A perturbation theorem for partial differential operators. *Proc. Amer. Math. Soc.* **50** (1975), 189-197. (Authors' review (Zbl **275** #47028)) **58** #30383 47A50 (35A35, 94A20)
- Logical, ontological and methodological aspects of scientific revolutions. *Historical and philosophical dimensions of logic, methodology and philosophy of science* (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Part IV, Univ. Western Ontario, London, Ont., 1975), pp. 31-49. Univ. Western Ontario Sci. Philos. Sci., Vol. 12, Reidel, Dordrecht, 1977. (From the introduction) **58** #20973 00A25 (02A05)
- See also **Grøn, Øyvind**, **57** #11610
- Strauss, Monty J.** The Ovcyannikov theorem. *Proceedings of a Seminar on Applications of Differential Equations to Mechanics and Physics* (Texas Tech Univ., Lubbock, Tex., 1972), pp. 16-24. *Math. Ser.*, No. 10, Texas Tech Press, Texas Tech Univ., Lubbock, Tex., 1972. (R. D. Moyer) **51** #8575 34G05 (47A50)
- Uniqueness and norm convexity in the Cauchy problem for evolution equations with convolution operators. *Proc. Amer. Math. Soc.* **35** (1972), 423-430. (R. D. Moyer) **46** #9576 35S10
- Generalizations of results of Agmon and Nirenberg to the Cauchy problem for evolution equations. *Proc. Amer. Math. Soc.* **35** (1972), 431-435. (R. D. Moyer) **46** #9577 35S10
- Variations of Korn's and Sobolev's equalities. *Partial differential equations* (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971), pp. 207-214. *Amer. Math. Soc., Providence, R.I.*, 1973. (Michael E. Taylor) **49** #5814 46E35
- (with Treves, F.) First-order linear PDEs and uniqueness in the Cauchy problem. *J. Differential Equations* **15** (1974), 195-209. (R. D. Moyer) **48** #9076 35F10
- (with Cannon, John R.; Hampton, Charles E.) A fluid flow problem involving a pipe, and a porous medium. *Matematiche (Catania)* **30** (1975), no. 1, 43-54 (1976). (R. M. Gundersen) **55** #9708 76A5
- (with Hunt, L. R.) Uniqueness of analytic continuation: necessary and sufficient conditions. *J. Differential Equations* **21** (1976), no. 2, 279-296. (Jacques Vauthier) **53** #13643 32D99
- (with Hunt, L. R.; Polking, John C.) Unique continuation for solutions to the induced Cauchy-Riemann equations. *J. Differential Equations* **23** (1977), no. 3, 436-447. (Authors' summary) **58** #28663 32D20 (35A05)
- Strauss, W.** See also **Strauß, Werner**
- Strauss, Walter A.** On weak solutions of semi-linear hyperbolic equations. *An. Acad. Brasil. Ci.* **42** (1970), 645-651. (E. D. Conway) **46** #5837 35L10 (47F05)
- Decay of solutions of hyperbolic equations with localized nonlinear terms. *Symposia Mathematica, Vol. VII* (Convegno sulle Problemi di Evoluzione, INDAM, Rome, 1970), pp. 339-355. Academic Press, London, 1971. (J. Smoller) **48** #9120 35L05
- (with Morawetz, C. S.) Asymptotics of a nonlinear relativistic wave equation. *Bull. Amer. Math. Soc.* **77** (1971), 797-798. (D. L. Russell) **45** #3962 35L05
- (with Morawetz, C. S.) Decay and scattering of solutions of a nonlinear relativistic wave equation. *Comm. Pure Appl. Math.* **25** (1972), 1-31. (D. L. Russell) **46** #2239 35L10 (78.35, 81.35)
- (with Morawetz, C. S.) Asymptotics of a nonlinear relativistic wave equation. *Partial differential equations* (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971), pp. 365-368. *Amer. Math. Soc., Providence, R.I.*, 1973. (J. Smoller) **48** #11817 35Q99 (35L05)
- (with Morawetz, C. S.) On a nonlinear scattering operator. *Comm. Pure Appl. Math.* **26** (1973), 47-54. (D. L. Russell) **50** #797 35P25
- (with Brézis, Haim) Semi-linear second-order elliptic equations in L^1 . *J. Math. Soc. Japan* **25** (1973), 565-590. (David Kinderlehrer) **49** #826 35J20 (47H15)
- Dispersion of low-energy waves for two conservative equations. *Arch. Rational Mech. Anal.* **55** (1974), 86-92. (G. L. Lamb, Jr.) **50** #5230 35Q99
- Dispersal of waves vanishing on the boundary of an exterior domain. *Comm. Pure Appl. Math.* **28** (1975), 265-278. (R. Glassey) **51** #3703 35L05 (35B40)
- (with Cooper, Jeffery M.) Energy boundedness and decay of waves reflecting off a moving obstacle. *Indiana Univ. Math. J.* **25** (1976), no. 7, 671-690. (Gerald S. S. Avila) **54** #3184 35P25
- Existence of solitary waves in higher dimensions. *Comm. Math. Phys.* **55** (1977), no. 2, 149-162. (Alan Jeffrey) **56** #12616 35L05 (81.35)
- (with Morawetz, C. S.; Ralston, James V.) Decay of solutions of the wave equation outside nontrapping obstacles. *Comm. Pure Appl. Math.* **30** (1977), no. 4, 447-508. (N. D. Kazarinoff (Zbl **372** #35008)) **58** #23091a (E **58** #23091b) 35L05 (35B40)
- (with Morawetz, C. S.; Ralston, James V.) Correction to: "Decay of solutions of the wave equation outside nontrapping obstacles" (Comm. Pure Appl. Math. **30** (1977), no. 4, 447-508). *Comm. Pure Appl. Math.* **31** (1978), no. 6, 795. (N. D. Kazarinoff (Zbl **372** #35008)) **58** #23091b 35L05 (35B40)
- (with Vazquez, Luis) Numerical solution of a nonlinear Klein-Gordon equation. *J. Comput. Phys.* **28** (1978), no. 2, 271-278. (Authors' summary) **58** #19970 81.35 (35B05, 35L99, 65P05)
- Strauß, Werner** Integralbegriffe für vektorwertige Funktionen und nukleare Räume. *J. Reine Angew. Math.* **253** (1972), 43-65. (A. Pietsch) **51** #8808 46E40
- Die Obstruktion zur strengen Lokalisierbarkeit eines Massraumes. (English summary) *Manuscripta Math.* **12** (1974), 1-10. (F. E. J. Linton) **49** #5291 28A50 (46G15)
- Retraction numbers, liftings and the decomposability of a measure space. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), 27-33. (Jan Pahl) **53** #1265 46G15
- Remarks concerning a decomposition of C. A. Rogers and S. J. Taylor. *J. Angew. Math.* **276** (1975), 177-183. (Ju. A. Abramovič) **51** #13634 46A40
- Die Abschliessbarkeit vektorwertiger Martingale. *Z. Wahrscheinlichkeitstheorie Verw. Gebiete* **33** (1975/76), no. 3, 209-214. (M. Métivier) **54** #6268 60G45
- Strawderman, William E.** Proper Bayes minimax estimators of the multivariate normal mean. *Ann. Math. Statist.* **42** (1971), no. 1, 385-388. (Author's summary) **53** #1762C10
- On the existence of proper Bayes minimax estimators of the mean of a multivariate normal distribution. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. 1: *Theory of statistics*, pp. 51-55. Univ. California Press, Berkeley, Calif., 1972. (James Berkey) **53** #4315 62C10
- (with Cohen, Arthur) Admissibility implications for different criteria in confidence estimation. *Ann. Statist.* **1** (1973), 363-366. (E. H. Lehman) **50** #1369 62C15
- (with Cohen, Arthur) Admissible confidence interval and point estimation translation or scale parameters. *Ann. Statist.* **1** (1973), 545-550. (E. S. Keppel) **50** #11566 62C15
- Proper Bayes minimax estimators of the multivariate normal mean vector for the case of common unknown variances. *Ann. Statist.* **1** (1973), 1189-1194. (A. K. Gupta) **51** #2058 62C10
- Minimax estimation of powers of the variance of a normal population with squared error loss. *Ann. Statist.* **2** (1974), 190-198. (J. Kiefer) **49** #8183 62C10
- (with Sackrowitz, Harold B.) On the admissibility of the M.L.E. for ordered binomial parameters. *Ann. Statist.* **2** (1974), 822-828. (I. V. Romanov) **51** #4483 62C15
- Minimax estimation of location parameters for certain spherically symmetric distributions. *J. Multivariate Anal.* **4** (1974), 255-264. (C. W. Chen) **50** #150262C99
- (with Brown, Lawrence D.; Cohen, Arthur) A complete class theorem for spherically symmetric monotone likelihood ratio with applications. *Ann. Statist.* **4** (1976), no. 4, 712-722. (Margaret P. Gessaman) **54** #3898 62C07
- (with Neff, Norman) Further remarks on estimating the parameter of a noncentral chi-square distribution. *Comm. Statist.-Theory Methods* **A5** (1976), no. 1, 65-76. (J. Borwankar) **53** #1821 62F10
- On linear combinations of generalized Bayes estimators of the natural parameters of an exponential family of distributions. *Sankhyā Ser. A* **38** (1976), no. 3, 287-297. (Author's introduction) **58** #31498 62C10
- (with Cohen Brandwein, Ann R.) Minimax estimation of location parameters for spherically symmetric unimodal distributions under quadratic loss. *Ann. Statist.* **6** (1978), no. 2, 377-416. (James Berger) **57** #7833 62C99 (62F10)
- Strawson, P. F.** ★Logico-linguistic papers. *Methuen & Co., Ltd., London*, 1971. viii + 192 pp. (Editors) **52** #7772 00A25 (02A05)
- Strawther, D.** (with Gudder, Stanley P.) Orthogonality and nonlinear functionals. *Amer. Math. Soc.* **80** (1974), 946-950. (R. Piziak) **50** #5434 46C05 (81.46)
- (with Gudder, Stanley P.) Orthogonally additive and orthogonally increasing functions on vector spaces. *Pacific J. Math.* **58** (1975), no. 2, 427-436. (K. Sundaresan) **52** #11542 46B05
- (with Gudder, Stanley P.) A characterization of strictly convex Banach spaces. *Proc. Amer. Math. Soc.* **47** (1975), 268. (S. Simons) **50** #8016 46B05
- (with Gudder, Stanley P.) Strictly convex normed linear spaces. *Proc. Amer. Math. Soc.* **59** (1976), no. 2, 263-267. (T. Husain) **54** #5806 46B05
- (with Gudder, Stanley P.) A converse of Pythagoras' theorem. *Amer. Math. Monthly* **84** (1977), no. 7, 551-553. (A. Climescu) **56** #12692 39A20
- Stray, Arne** Approximation and interpolation. *Pacific J. Math.* **40** (1972), 463-475. (Fisher) **46** #3802 30A82
- (with Davia, A. M.) Interpolation sets for analytic functions. *Pacific J. Math.* **47** (1972), 33-37. (N. L. Alling) **47** #2071 30A80 (30A78, 46J15)
- Interpolation by analytic functions. *Pacific J. Math.* **42** (1972), 527-533. (S. Fisher) **47** #3685 30A80 (30A78, 46E15)
- Interpolation sets for uniform algebras. *Pacific J. Math.* **43** (1972), 525-529. (Zalcman) **47** #7439 46J10
- Mergelyan and Farrel sets. *Seminar on Uniform Algebras* (Univ. Aberdeen, Aberdeen, 1973), pp. 16-23. *Dept. Math. Univ. Aberdeen, Aberdeen*, 1973. (B. A. Taylor) **50** #10277 30A82 (30A98, 46J15)
- Pointwise bounded approximation by functions satisfying a side condition. *Pacific J. Math.* **51** (1974), 301-305. (J. P. Ferrier) **50** #10276 30A82 (46J15)
- Approximation and interpolation for some spaces of analytic functions in the disc. *Pacific J. Math.* **54** (1974), no. 2, 237-251. (D. Sarason) **55** #10698 30A82 (46J15)
- Characterization of Mergelyan sets. *Proc. Amer. Math. Soc.* **44** (1974), 347-352. (Garnett) **50** #13543 30A82
- Approximation by analytic functions which are uniformly continuous on the boundary of their domain of definition. *Amer. J. Math.* **99** (1977), no. 4, 787-800. (From the book review) **58** #22579 30A82
- On uniform and asymptotic approximation. *Math. Ann.* **234** (1978), no. 1, 61-70. (V. P. Havin) **57** #9980 30A82
- A scheme for approximating bounded analytic functions on certain subsets of the unit disc. *Pacific J. Math.* **74** (1978), no. 1, 251-255. (T. W. Gamelin) **57** #16630A82
- (with Øyma, Knut) On interpolating functions with minimal norm. *Proc. Amer. Math. Soc.* **68** (1978), no. 1, 75-78. (Anthony G. O'Farrell) **56** #15938 30A80
- See also **Spaces of analytic functions**, **57** #3865
- Strazdin', I. È.** See **Strazdiņš, I. È.**
- Strazdiņš, D. P.** (with Strazdiņš, I. È.) The possibilities of enlarging the Harvard classification of Boolean functions. (Russian) *Theory of finite automata and its application*, No. 2 (Russian), pp. 24-30, 79. *Izdat. "Zinatne", Riga*, 1973. (G. B. Shakhmatov) **51** #3018 06A40 (02J05, 94A20)
- Strazdiņš, I. È.** Types of three-valued switching functions of two variables. III. (Russian) *Izv. Akad. Nauk Latv. SSR Mat. Fiz. Tekhn. Nauk*, 1978, no. 1, 1-10. (English summary) **58** #23091c 06A40 (02J05, 94A20)

- and English summaries) *Latvian mathematical yearbook*, 3 (Russian), pp. 5. *Izdat. "Zinatne"*, Riga, 1968. (A. A. Mullin) **52** #13011 94A20
- Groups of Boolean functions of four variables. (Russian) *Avtomat. i Vyčisl.* **1968**, no. 5, 18-22. (Author's summary) **45** #8430 94A20
- Types of three-valued switching functions of two variables. IV. (Russian. Latvian English summaries) *Latvian mathematical yearbook*, 5 (Russian), pp. 139-146. *Izdat. "Zinatne"*, Riga, (1969). (A. A. Mullin) **52** #13012 94A20
- Types of three-valued switching functions of two variables. II. (Russian. Latvian English summaries) *Latvian mathematical yearbook*, 2 (Russian), pp. 321-326. *Izdat. "Zinatne"*, Riga, 1969. (A. A. Mullin) **52** #13010 94A20
- Group theoretic methods in finite automata theory. (Russian) *Proceedings of the All-Union Conference on Automatic Control—Engineering Cybernetics* (Tbilisi, Vol. 3: *Automata, hybrid and control machines* (Russian), pp. 89-95, 263. *Izdat. "Nauka"*, Moscow, 1972. (See Zbl **273** #94044; MR **48** #8023) 94A30
- Structure of the semigroup of endomorphisms of the algebra of two-place Boolean functions. I. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, (Russian), pp. 102-114. *Izdat. "Zinatne"*, Riga, 1973. (A. Tauts) **49** #4749 02B05
- (with Strazdinja, D. P.) The possibilities of enlarging the Harvard classification of Boolean functions. (Russian) *Theory of finite automata and its application*, No. 2 (Russian), pp. 24-30, 79. *Izdat. "Zinatne"*, Riga, 1973. (G. Bär) **51** #3018 06A40 94A20
- Structure of the semigroup of endomorphisms of the algebra of two-place Boolean functions. II. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, (Russian), pp. 199-211. *Izdat. "Zinatne"*, Riga, 1974. (A. Tauts) **51** #2905 02J05
- Number of types of invertible binary multiterminal networks. (Russian) *Teht. i Vyčisl. Tehn. (Riga)* **1974**, no. 1, 30-34. (R. Shirladze) **51** #15227 94A20
- Linear selfdual group over GF(2), and its action on the algebra of Boolean functions. (Russian. English summary insert) *Kibernetika* (Kiev) **1974**, no. 5, 146-147. (G. Bär) **52** #13379 02J05 (94A20)
- Number of self-dual types in finite-valued logics. (Russian) *Mat. Zametki* **15** (1974), 631-639. (A. Salomaa) **50** #12652 02C05 (02J99)
- (with Brāzma, N.; Bunga, A. U.; Širone, A. M.) The teaching of mathematics at a Polytechnic Institute during the last hundred years. (Russian. Latvian English summary) *Latvian mathematical yearbook*, 16 (Russian), pp. 3-13, 271. *Izdat. "Zinatne"*, Riga, 1975. (Editors) **51** #10007 01A60 (01A55)
- Types of three-valued switching functions of two variables. V. (Russian. Latvian English summary) *Latvian mathematical yearbook*, 16 (Russian), pp. 52-61, 272. *Izdat. "Zinatne"*, Riga, 1975. (A. A. Mullin) **52** #13013 94A20
- Finite classification of Boolean functions of five variables. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1975**, no. 1, 1-9. (Author's summary) **57** #9341 94A20
- Idempotent transformations in many-valued logics. (Russian. English summary insert) *Kibernetika* (Kiev) **1975**, no. 1, 9-21. (Costică Cazacu) **53** #15582 94A20 (02C05)
- Types of three-valued switching functions of two variables. VI. (Russian) *Latvian mathematical yearbook*, 17 (Russian), pp. 238-242, 280. *Izdat. "Zinatne"*, Riga, 1976. (A. A. Mullin) **57** #5485 94A20 (94A30, 05A15)
- Complementary types of Boolean functions. (Russian) *Latvian Mat. Ežegodnik* (1976), 190-197, 223. (loose errata) (M. Stojaković) **57** #9342 94A20
- I. The quantum theory of dual charged particles. *Lett. Nuovo Cimento* (2) **9** (1973), 641-644. (Not reviewed) 81.53
- II. The electrodynamics of dually charged particles. (Russian) *Dokl. Akad. Nauk BSSR* (1975), no. 6, 495-497, 570. (Yu. S. Sayasov) **52** #7370 81.35
- (with Škol'nikov, P. L.) The Lagrangian formulation of dually symmetric classical electrodynamics. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 3, 141. (J. Ławrynowicz) **54** #6695 78.35
- (with Kruglov, S. I.) On internal symmetries of the electromagnetic field. (Russian. English summary) *Acta Phys. Polon. B* **8** (1977), no. 10, 807-814. (L. G. Chambers) **54** #1129 78.20
- (with Škol'nikov, P. L.) The isomorphism of transformations of the Gürsey group $O(3, 1)$ group. (Russian. English summary) *Comm. Partial Differential Equations* (1976), no. 10, 608-611, 668. (Authors' summary) **58** #25496 81.22 (22E70)
- On the eight-parameter invariance group of the vector and spinor field equations. (Russian. English summary) *Dokl. Akad. Nauk BSSR* **22** (1978), no. 5, 419-422, 477. (A. Martinis) **58** #4025 81.22 (22E05)
- Beata On a method for solving the two-stage stochastic programming problem. (Russian. English and Russian summaries) *Közlemények-MTA Számítástech. Kutató Int. Budapest* No. 11 (1973), 33-49. (Author's summary) **55** #9977
- An algorithm for solution of the two-stage stochastic programming problem. *Oberwolfach-Tagung über Operations Research* (1973), Teil II, pp. 142-156. (Authors' summary) *Research Verfahren, Band XIX*, Hain, Meisenheim am Glan, 1974. (Peter Kall) **58A** 90C15
- F. Infinitely divisible representations of Lie algebras. *Z. für die Theorie der Lie-Algebren* **19** (1971), 67-80. (K. R. Parthasarathy) **78** 81.60 (60B15)
- (with Mathon, Daniela) Infinitely divisible representations of Clifford algebras. *Z. für die Theorie der Lie-Algebren* **20** (1971), 308-316. (S. Sankaran) **80** 81.60 (15A66)
- Connection between the spectrum condition and the Lorentz invariance of $P(\phi)_2$. *Math. Phys.* **26** (1972), 109-120. (S. Gudder) **45** #6323 81.46
- Interpolating norms for orthogonal and spin Lie algebras. *Symposia Mathematica, IV (Convegno di Geometria Simplicistica e Fisica Matematica, INDAM, Rome, 1973)*, pp. 173-179. Academic Press, London, 1974. (H. Araki) **53** #12325 81.46
- (with Plymen, R. J.) A model of the universal covering group of $SO(H)_2$. *Bull. Math. Soc.* **7** (1975), no. 3, 283-288. (Hideki Omori) **52** #6773 58B20 (58F05)
- (with Bonnard, J.-L.) Local gauge models predicting their own superselection rules. *International Conference on the Mathematical Problems of Quantum Field Theory and Atom Statistics. Part I. Axiomatic Quantum Field Theory. Trudy Mat. Inst. Steklov.* **1975**, 81-86, 257. (Gérard G. Emch) **58** #25557 81.46
- (with Mardin, A.) On the Spinor rank of Fermi fields. *Comm. Math. Phys.* **48** (1976), no. 1, 81-83. (G. R. Allcock) **54** #14596 81.22
- Markovian representations of current algebras. *J. Phys. A* **10** (1977), no. 2, 261-266. (Mandyam D. Srinivas) **56** #17628 81.60
- (with Wightman, Arthur S.) ★PCT, spin and statistics, and all that. Second edition. Mathematical Physics Monograph Series. Benjamin/Cummings Publishing Co., Inc., Reading, Mass.-London-Amsterdam, 1978. viii + 207 pp. ISBN 0-8053-9252-1 (Editors) **57** #8707 81.47
- See also **Mathematics of contemporary physics**, **53** #7
- Strebel, Walter Über schwach hyperzentrale Ringe. *Rend. Sem. Mat. Univ. Padova* **44** (1970), 399-409. (R. L. Kruse) **45** #8685 16A48
- Über Algebren mit nilpotenten assoziierten Lie-Ringen. *Rend. Sem. Mat. Univ. Padova* **46** (1971), 137-139. (P. M. Cohn) **46** #3572 16A68 (17B30)
- Über nil Algebren mit nilpotenten Kommutatoridealen die keine von null verschiedenen Zentren besitzen. *Rend. Sem. Mat. Univ. Padova* **46** (1971), 391-395. (P. M. Cohn) **46** #3573 16A68 (17B30)
- Über Ringe die von ihren Einheitsgruppen erzeugt werden. *Rend. Sem. Mat. Univ. Padova* **47** (1972), 313-329. (C. Tsai) **50** #9966 16A48
- Über die Endlichkeit niler Ringe. *Rend. Sem. Mat. Univ. Padova* **48** (1972), 349-357 (1973). (R. L. Kruse) **49** #2819 16A22
- Eine Kennzeichnung endlicher nilpotenter Ringe. *Elem. Math.* **28** (1973), 70-71. (Editors) **48** #326 16A22
- Kennzeichnung der Klasse eines Ringes endlicher Klasse durch Kommutatormengenprodukte. *Elem. Math.* **28** (1973), 118-121. (R. L. Kruse) **48** #4031 16A48
- Gesetze in Ringen hinreichend für ihre Kommutativität. *Nieuw Tijdschr. Wisk.* **61** (1973), no. 2, 97-101. (G. Krause) **55** #12774 16A70
- Über Ringe mit auflösbaren assoziierten Lie-Ringen. *Rend. Sem. Mat. Univ. Padova* **50** (1973), 127-142 (1974). (W. G. Leavitt) **50** #4649 16A22 (16A68)
- Über die Potenzgesetze. *Enseignement Math.* (2) **20** (1974), 223-225. (Aleksiej Gainov) **51** #621 17A10
- Über Ringe mit Kommutatorbeziehungen. *Rend. Sem. Mat. Univ. Padova* **51** (1974), 27-48 (1975). (G. Krause) **52** #3227 16A46
- Endlichkeitssätze über Ringe. *Rend. Sem. Mat. Univ. Padova* **52** (1974), 185-192 (1975). (Robert Gordon) **53** #524 16A46
- Kommutatorbeziehungen in Ringen der Charakteristik 0 mit Einselement und ihren Einheitsgruppen. *Rend. Sem. Mat. Univ. Padova* **53** (1975), 105-115. (G. Krause) **53** #13302 16A38
- Gesetze in Ringen hinreichend für ihre Kommutativität und Assoziativität. *Nieuw Tijdschr. Wisk.* **63** (1976), no. 3, 143-149. (G. Krause) **54** #7557 16A70
- Über die Äquivalenz von Polynomidentitäten in Ringen. *Rend. Sem. Mat. Univ. Padova* **56** (1976), 33-48 (1978). (Zbl **384** #16006) **58** #28066 16A38
- Strebel, Kurt On the uniqueness of certain generalized Teichmüller mappings. *Proceedings of the Romanian-Finnish Seminar on Teichmüller Spaces and Quasiconformal Mappings* (Brasov, 1969), pp. 295-302. Publ. House of the Acad. of the Socialist Republic of Romania, Bucharest, 1971. (G. Schober) **47** #465 30A60
- (with Reich, Edgar) Extremal plane quasiconformal mappings with given boundary values. *Bull. Amer. Math. Soc.* **79** (1973), 488-490. (J. Ławrynowicz) **49** #3127 30A60
- (with Reich, Edgar) Extremal quasiconformal mappings with given boundary values. *Contributions to analysis (a collection of papers dedicated to Lipman Bers)*, pp. 375-391. Academic Press, New York, 1974. (H. Renelt) **50** #13511 30A60
- On the trajectory structure of quadratic differentials. *Discontinuous groups and Riemann surfaces* (Proc. Conf., Univ. Maryland, College Park, Md., 1973), pp. 419-438. *Ann. of Math. Studies*, No. 79, Princeton Univ. Press, Princeton, N.J., 1974. (H. Renggli) **52** #14287 30A60 (30A52)
- Quadratische Differentiale mit divergierenden Trajektorien. *Topics in analysis (Colloq. Math. Anal., Jyväskylä, 1970)*, pp. 352-369. *Lecture Notes in Math.*, Vol. 419, Springer, Berlin, 1974. (T. A. Metzger) **52** #5959 30A52
- On quadratic differentials and extremal quasi-conformal mappings. *Proceedings of the International Congress of Mathematicians (Vancouver, B.C., 1974)*, Vol. 2, pp. 223-227. *Canad. Math. Congress, Montreal, Que.*, 1975. (Editors) **58** #22549 30A60
- On the geometry of the metric induced by a quadratic differential. I. (Polish summary) *Bull. Soc. Sci. Lettres Łódź* **25** (1975), no. 2, 4 pp. (J. A. Jenkins (Zbl **337** #30014)) **58** #28481a 30A52 (32G15)
- On the geometry of the metric induced by a quadratic differential. II. (Polish summary) *Bull. Soc. Sci. Lettres Łódź* **25** (1975), no. 3, 5 pp. (J. A. Jenkins (Zbl **337** #30015)) **58** #28481b 30A52 (32G15)
- On quadratic differentials with closed trajectories on open Riemann surfaces. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **2** (1976), 533-551. (B. N. Apanasov) **58** #1138 30A52
- Quasikonforme Abbildungen. 8. Steiermärkisches Mathematisches Symposium (Graz, 1976). *Ber. Math.-Statist. Sect. Forsch. Graz* No. 57-63 (1976), *Ber. No.* 61, 41 pp. (Editors) **58** #28488 30A60
- On the existence of extremal Teichmüller mappings. *J. Analyse Math.* **30** (1976), 464-480. (Jukka Sarvas) **55** #12912 30A60
- On lifts of extremal quasiconformal mappings. *J. Analyse Math.* **31** (1977), 191-203. (T. Erkama (Zbl **349** #30016)) **58** #28489 30A60
- Strebel, Ralph Homological methods applied to the derived series of groups. *Comment. Math. Helv.* **49** (1974), 302-332. (U. Stambach) **50** #7373 20J05
- (with Baumslag, Gilbert) Some finitely generated, infinitely related metabelian groups with trivial multiplier. *J. Algebra* **40** (1976), no. 1, 46-62. (Ian M. Chiswell) **54** #10421 20F05
- On homological duality. *J. Pure Appl. Algebra* **8** (1976), no. 1, 75-96. (James Hein) **54** #5319 18G05
- A homological finiteness criterion. *Math. Z.* **151** (1976), no. 3, 263-275. (U. Stambach) **55** #3030 18G10 (20J05)
- A remark on subgroups of infinite index in Poincaré duality groups. *Comment. Math. Helv.* **52** (1977), no. 3, 317-324. (F. E. A. Johnson) **56** #15793 20J05 (57B10)
- (with Bieri, Robert) Almost finitely presented soluble groups. *Comment. Math. Helv.* **53** (1978), no. 2, 258-278. (B. Hartley) **58** #16890 20F05

- Strech, Karl-Heinz** Über den Zusammenhang der philosophischen Kategorien Kontinuität und Diskontinuität mit den analytischen Begriffen Stetigkeit und Diskretität. *Wiss. Z. Humboldt-Universität Berlin Math.-Natur. Reihe* 26 (1977), no. 1, 73-75. (Joong Fang) 58 #19 00A25
- Strecker, George, E.** (with Nanzetta, Philip) ★Set theory and topology. *Bogden & Quigley, Inc., Publishers, Tarrytown-on-Hudson, N.Y.*, 1971, ix+117 pp. (From the authors' preface) 57 #120 04-01 (54-01)
- (with Herrlich, Horst) Coreflective subcategories in general topology. *Fund. Math.* 73 (1971/72), no. 3, 199-218. (A. Pultr) 46 #1872 18B99 (54A05)
- (with Herrlich, Horst) Algebra \cap topology = compactness. *General Topology and Appl.* 1 (1971), 283-287. (Z. Frolík) 46 #7349 18C05 (54D30)
- (with Hajek, Darrell W.) Direct limits of Hausdorff spaces. *General topology and its relations to modern analysis and algebra, III* (Proc. Third Prague Topological Sympos., 1971), pp. 165-169. *Academia, Prague*, 1972. (H. Herrlich) 50 #8410 54B25
- Epireflection operators vs. perfect morphisms and closed classes of epimorphisms. *Bull. Austral. Math. Soc.* 7 (1972), 359-366. (J. R. Isbell) 48 #368 18A20
- (with Liu, C. T.) Concerning almost realcompactifications. *Czechoslovak Math. J.* 22(97) (1972), 181-190. (A. W. Hager) 46 #2644 54D60
- (with Herrlich, Horst) ★Category theory: an introduction. *Allyn and Bacon Series in Advanced Mathematics. Allyn and Bacon Inc., Boston, Mass.*, 1973. xii+400 pp. (M. Barr) 50 #2284 18-02
- (with Delahan, F. A.) A simplified approach to the compactification of mappings. *Bull. Amer. Math. Soc.* 79 (1973), 1030-1032. (R. F. Dickman, Jr.) 47 #7685 54C20 (54D35)
- On characterizations of perfect morphisms and epireflective hulls. *TOPO 72—general topology and its applications* (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot), pp. 468-500. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (H. Herrlich) 51 #1709 54B30 (18A20)
- Component properties and factorizations. *Topological structures* (Proc. Sympos. in honour of Johannes de Groot (1914-1972), Amsterdam, 1973), pp. 123-140. *Math. Centre Tracts*, No. 52, Math. Centrum, Amsterdam, 1974. (H. Herrlich) 50 #8421 54C10 (54B30)
- Perfect sources. *Categorical topology* (Proc. Conf., Mannheim, 1975), pp. 605-624. *Lecture Notes in Math.*, Vol. 540, Springer, Berlin, 1976. (Pavel Pták) 56 #9479 54C10 (18A20)
- (with Delahan, F. A.) Graphic extension of mappings. *Proceedings of the Second Symposium on Categorical Topology* (Univ. Cape Town, Cape Town, 1976). *Quaestiones Math.* 2 (1977/78), no. 1-3, 401-417. (K. Nagami) 58 #2692 54C20
- Strecker, H.** (with Schaich, E.) Hans Kellner (1902 bis 1976) zum Gedenken. *Metrika* 23 (1976), no. 4, 197-199. (Editors) 55 #5367 01A70
- Strecker, Heidemarie** See Kuroš, A. G., 50 #2314
- Strecker, Heinrich** (with Tintner, Gerhard; Rao, J. N. K.) ★New results in the variate difference method. With German and French summaries. *Angewandte Statistik und Ökonometrie*, Heft 11. *Vandenhoeck & Ruprecht, Göttingen*, 1978. 102 pp. ISBN 3-525-11242-4 (E. J. Hannan) 58 #8097 62M10
- Strecker, Reinhard** Induktive Isomorphie unendlicher abelscher Gruppen. *Monatsb. Deutsch. Akad. Wiss. Berlin* 13 (1971), 81-86. (K. Faltings) 46 #268 20K15
- Über kommutative Schreiersche Halbgruppenweiterungen. *Acta Math. Acad. Sci. Hungar.* 23 (1972), 33-44. (H. J. Weinert) 47 #382 20M10
- Über entropische Gruppoide. *Grundlagen der Geometrie und algebraische Methoden* (Internat. Kolloq., Pädagog. Hochschule "Karl Liebknecht", Potsdam, 1973), pp. 153-154. *Potsdamer Forschungen, Reihe B. Heft 3, Pädagog. Hochschule "Karl Liebknecht", Potsdam*, 1974. (H. A. Thurston) 50 #7384 20L05
- Homomorphe Abbildungen auf Gruppen und das Radikal $\overline{\text{rad}} S$. *Math. Nachr.* 62 (1974), 45-55. (G. Pollák) 50 #13338 20M10
- Über entropische Gruppoide. *Math. Nachr.* 64 (1974), 363-371. (H. A. Thurston) 50 #13323 20L10
- Über das Radikal \mathcal{K} -kommutativer Halbgruppen. *Math. Nachr.* 68 (1975), 49-57. (J. B. Kim) 52 #10931 20M10
- Strecker, Rheinhard** See Kuroš, A. G., 50 #2314
- Streclas, A.** (with Jannussis, A. D.; Patargias, N.; Sourlas, D.; Vlachos, K.) Wigner operators of angular momentum in phase space. *Lett. Nuovo Cimento* 2 (1977), no. 7, 238-240. (From the text) 58 #14666 81.47
- (with Jannussis, A. D.; Sourlas, D.; Vlachos, K.) Some properties of commutators and the equations of motion. *Phys. Scripta* 15 (1977), no. 3, 163-166. (H. Araki) 57 #11470 81.46
- Strecok, Anthony J.** Table errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Nat. Bur. Standards, Washington, D. C., 1964) edited by Milton Abramowitz and Irene A. Stegun. *Math. Comp.* 25 (1971), no. 114, 405. (Editors) 54 #4040 65A05 (33-XX)
- (with Gregory, John A.) High precision evaluation of the irregular Coulomb wave functions. *Math. Comp.* 26 (1972), 955-961; addendum, *ibid.* 26 (1972), no. 120, loose microfiche suppl. B1-B10. 47 #2791 65D20
- (with Cody, W. J.; Thacher, Henry C., Jr.) Chebyshev approximations for the psi function. *Math. Comp.* 27 (1973), 123-127. (Authors' summary) 48 #5328 65D15
- Stredder, Peter** Natural differential operators on Riemannian manifolds and representations of the orthogonal and special orthogonal groups. *J. Differential Geometry* 10 (1975), no. 4, 647-660. (A. P. Stone) 54 #3772 58G99
- Street, Anne Penfold** (with Rhemtulla, Akbar Hussein) Maximal sum-free sets in elementary abelian p -groups. *Canad. Math. Bull.* 14 (1971), 73-80. (I. B. S. Passi) 45 #2017 20K99
- (with Wallis, Walter Denis; Seberry, Jennifer) ★Combinatorics: Room squares, sum-free sets, Hadamard matrices. *Lecture Notes in Mathematics*, Vol. 292. Springer-Verlag, Berlin-New York, 1972. iv+508 pp. (Stanley E. Payne) 52 #13397 05-02
- Counting non-isomorphic sum-free sets. *Proceedings of the First Australian Conference on Combinatorial Mathematics* (Univ. Newcastle, Newcastle, 1972), pp. 141-143. *Univ. of Newcastle Res. Associates, Newcastle*, 1972. (S. Stein) 50 #2368 20K99 (05B10)
- Maximal sum-free sets in abelian groups of order divisible by three. *Bull. Austral. Math. Soc.* 6 (1972), 439-441. (K. Honda) 46 #5484 (E 47 #5147) 20K99
- Corrigendum: "Maximal sum-free sets in abelian groups of order divisible by three." *Bull. Austral. Math. Soc.* 7 (1972), 317-318. (K. Honda) 47 #5147 20K99 (05B10)
- (with Oates-Williams, Sheila) On laws in linear groups. *Quart. J. Math. Oxford* (2) 23 (1972), 1-12. (J. D. Dixon) 45 #6893 20E10
- (with Oates-Williams, Sheila) On Conway's conjecture for integer sets. *Bull. Austral. Math. Soc.* 8 (1973), 355-358. (A. Peluso) 47 #6642 10L05
- Eulerian washing machines. *Combinatorial mathematics* (Proc. Second Australian Conf., Univ. Melbourne, Melbourne, 1973), pp. 105-108. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (N. G. de Bruijn) 51 #12538 05-02
- (with Whitehead, Earl Glen, Jr.) Sum-free sets, difference sets and cyclotomic designs. *Combinatorial mathematics* (Proc. Second Australian Conf., Univ. Melbourne, Melbourne, 1973), pp. 109-124. *Lecture Notes in Math.*, Vol. 403, Springer, Berlin, 1974. (W. Mills) 50 #4336 05B10 (12C20, 20K99)
- (with Muskat, Joseph B.) Sum-free cyclotomic classes in finite fields. *Proceedings of the Third Manitoba Conference on Numerical Mathematics* (Winnipeg, Man., 1973), 399-406. *Utilities Math., Winnipeg, Man.*, 1974. (Authors' summary) 49 #256 12C15 (12-04)
- (with Whitehead, Earl Glen, Jr.) Group Ramsey theory. *J. Combinatorial Theory Ser. A* 17 (1974), 219-226. (S. Stein) 49 #8883 05B10 (05C25)
- A maximal sum-free set in A_5 . *Utilitas Math.* 5 (1974), 85-91. (S. Stein) 49 #805B10 (20B99)
- (with Wallis, Walter Denis) Nested designs from sum-free sets. *Combinatorial mathematics, III* (Proc. Third Australian Conf., Univ. Queensland, St. Lucia, 1974), 214-226. *Lecture Notes in Math.*, Vol. 452, Springer, Berlin, 1975. (L. D. Baum) 51 #12561 05B05
- (with Whitehead, Earl Glen, Jr.) Locally maximal sum-free sets. *Infinite and finite sets* (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, 1405-1409. *Colloq. Math. Soc. Janos Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (S. Stein) 51 #8067 10L99 (05B10)
- (with Oates-Williams, Sheila) On crystallographic colour groups. *Combinatorial mathematics, IV* (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), 149-157. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (W. Moser) 55 #20H15
- (with Billington, Elizabeth, J.; Seberry, Jennifer) Designs from cyclotomy. *Combinatorial mathematics, IV* (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), pp. 158-176. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (Michael G. G. Ganley) 55 #130 05B05 (12C20)
- Embedding proper colourings. *Combinatorial mathematics, IV* (Proc. Fourth Australian Conf., Univ. Adelaide, Adelaide, 1975), pp. 240-245. *Lecture Notes in Math.*, Vol. 560, Springer, Berlin, 1976. (W. D. Wallis) 58 #21764 05C15
- (with Wallis, Walter Denis) Sum-free sets, coloured graphs and designs. *J. Austral. Math. Soc. Ser. A* 22 (1976), no. 1, 35-53. (Jaroslav Nešetřil) 56 #5324 05C10 (05C10)
- (with Wallis, Walter Denis) ★Combinatorial theory: an introduction. *Chapman & Babbage Research Centre, Winnipeg, Man.*, 1977. x+610 pp. (J. Sheehan) 56 #2805-01
- On quasi-multiple designs. *Combinatorial mathematics, V* (Proc. Fifth Australian Conf., Roy. Melbourne Inst. Tech., Melbourne, 1976), pp. 206-208. *Lecture Notes in Math.*, 622, Springer, Berlin, 1977. (R. G. Stanton) 57 #12255 05B05
- (with Oates-Williams, Sheila) The seven friezes and how to colour them. *Utilitas Math.* 13 (1978), 271-292. (R. L. E. Schwarzenberger) 58 #16908 20H15 (22B03)
- See also *Combinatorial mathematics*, 51 #2924
- Street, Ross** Two constructions on lax functors. *Cahiers Topologie Géom. Différentielle* (1972), 217-264. (J. Duskin) 50 #436 18C15
- The formal theory of monads. *J. Pure Appl. Algebra* 2 (1972), no. 2, 149-168. (J. Linton) 45 #8701 18C15
- (with Walters, Robert) The comprehensive factorization of a functor. *Bull. Austral. Math. Soc.* 79 (1973), 936-941. (A. Pultr) 49 #10753 18A20 (18D99)
- Homotopy classification of filtered complexes. *J. Austral. Math. Soc.* 15 (1973), 298-318. (C. R. Leedham-Green) 49 #5135 18G35
- (with Kelly, Gregory M.) Review of the elements of 2-categories. *Category Seminar* (Proc. Sem., Sydney, 1972/1973), pp. 75-103. *Lecture Notes in Math.*, Vol. 420, Springer, Berlin, 1974. (E. G. Manes) 50 #10010 18D05
- Fibrations and Yoneda's lemma in a 2-category. *Category Seminar* (Proc. Sem., Sydney, 1972/1973), pp. 104-133. *Lecture Notes in Math.*, Vol. 420, Springer, Berlin, 1974. (A. Pultr) 53 #585 18D05
- Elementary cosmoi. I. *Category Seminar* (Proc. Sem., Sydney, 1972/1973), 134-180. *Lecture Notes in Math.*, Vol. 420, Springer, Berlin, 1974. (H. Gonsior) 50 #7290 18D99
- Limits indexed by category-valued 2-functors. *J. Pure Appl. Algebra* 8 (1976), no. 1, 149-181. (Robert C. Davis) 53 #5695 18D05
- (with Walters, Robert) Yoneda structures on 2-categories. *J. Algebra* 50 (1978), 2, 350-379. (Symeon Bozapalidis) 57 #3214 18D05
- Streeter, T. D.** (with Haug, Edward J., Jr.; Pan, K. C.) A computational method for optimal structural design. I. Piecewise uniform structures. *Internat. J. Numer. Methods Engrg.* 5 (1972), no. 2, 171-184. (Ulrich Eckhardt) 54 #4098a 65K05 (90C30)
- (with Haug, Edward J., Jr.; Pan, K. C.) A computational method for optimal structural design. II. Continuous problems. *Internat. J. Numer. Methods Engrg.* 9 (1974), no. 3, 649-667. (Ulrich Eckhardt) 54 #4098b 65K05 (90C30)
- See also *Transactions: Conference of Army Mathematicians*, 49 #4735
- Strehl, Burkhard** Analytische Hyperflächen mit vorgegebenen Singularitäten. *Math. Z.* 200 (1973), 165-173. (J. A. Morrow) 50 #13597 32C40 (32E10)
- Strehl, Reinhard** ★Wahrscheinlichkeitsrechnung und elementare statistische Anwendungen. *Studienbücher Mathematik. Herder, Freiburg-Basel-Vienna*, 1974. pp. (Editors) 52 #1808 60-01 (62-01)
- Strehl, Volker** (with Foata, Dominique) Rearrangements of the symmetric group and enumerative properties of the tangent and secant numbers. *Math. Z.* 137 (1976), no. 1, 1-12. (D. Foata) 53 #1808 60-01 (62-01)

4. (Stephen Tanny) **50** #450 20B05
- h Foata, Dominique) Euler numbers and variations of permutations. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Roma, 1973), Tomo I*, Atti dei Convegni Lincei, No. 17, Accad. Naz. Lincei, Rome, 1976. (Stephen Tanny) **55** #7795 05A10 (20B99)
- note on similarity relations. *Discrete Math.* **19** (1977), no. 1, 99-101. (Louis J. Strelitz) **56** #15450 05A15
- enumeration of alternating permutations according to peak sets. *J. Combinatorial Ser. A* **24** (1978), no. 2, 238-240. (Dominique Foata) **57** #9559 05A15
- h Metropolis, N.; Rota, Gian-Carlo; White, Neil L.) Partitions into chains of a partially ordered sets. *Proc. Amer. Math. Soc.* **71** (1978), no. 2, 193-196. (Curtis J. Strelitz) **58** #27667 06A10 (05B99)
- See **Fundamentals of mathematics**, **49** #8788
- arl Ein neues Differenzenschemaverfahren zur Lösung von Randwertaufgaben gewöhnlicher Differentialgleichungen. *Beiträge Numer. Math.* **1** (1975-1976), (Rolf Jeltsch) **54** #14382 65L05
- h Hoffmann, V.) Numerische Lösung von Anfangswertaufgaben gewöhnlicher Differentialgleichungen n -ter Ordnung. (English summary) *Computing* **14** (1975), no. 3, 147-154. (H. Brunner) **53** #1967 65L05
- timung symmetrischer transsonischer Profilströmungen mittels re-Transformation. (English and Russian summaries) *Z. Angew. Math. Mech.* **55** (1975), no. 11, 671-678. (E. V. Laitone) **52** #16251 76J31
- h Schrittverfahren mit Exponentialanpassung für Differentialgleichungssysteme. (English summary) *Computing* **17** (1976/77), no. 3, 247-260. (Rolf Jeltsch) **58** #383 65L05
- h Köhler, Jürgen) Ein neues Prediktor-Verfahren mit Exponentialanpassung für Randwertaufgaben gewöhnlicher Differentialgleichungssysteme 1. Ordnung. *Beiträge Numer. Math.* **6** (1977), 165-178. (J. C. Butcher) **56** #17097 65L05
- stellung ebener transsonischer Profilströmungen mittels re-Transformation für Anström-Mach-Zahlen $M_0 < 1$. *Beiträge Anal. No. 11* (1976), (Silvio Nocilla) **58** #19747 76J35
- ia On the solution of ordinary differential equations of stiff type. (Hungarian summary) *MTA Számítástechn. Automat. Kutató Int. Budapest No. 48* (1976), 67 pp. (Author's summary) **58** #31851 65L05
- lliam (with Rink, Richard A.) Application of digital computers to solve boundary value problems of a class of second-order non-linear ordinary differential equations. *IEEE Trans. Comput.* **20** (1971), 901-910. (P. Brock) **49** #8422 68A15
- mes An embedding theorem for matrices of commutative cancellative groups. *Trans. Amer. Math. Soc.* **208** (1975), 127-140. (Mohan S. Putcha) **50** #506 20M10
- ana LL(k) languages are closed under union with finite languages. *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 504-508. (Notes in Comput. Sci., Vol. 52, Springer, Berlin, 1977. (Derick Wood) **49** #394 68A30
- eriu The theory of supposition. (Romanian) *Problems of logic, Vol. V* (Romanian), pp. 111-131. Editura Acad. R.S.R., Bucharest, 1973. (Editors) **58** #113 01A35
- z (with Fraser, D. A. S.) On the Behrens-Fisher problem. *Austral. J. Statist.* **14** (1976), 167-171. (S. John) **50** #6028 62E99
- abilities for the local behavior of Poisson distributed events. *Skand. Aktuarietidskr.* **1972**, 65-72 (1973). (P. Holgate) **50** #11437 60G55
- ivariate statistical procedures for singular distributions. (French summary) *Proceedings of the 39th Session of the International Statistical Institute (Vienna, 1973)*, *Bull. Inst. Internat. Statist.* **45** (1973), no. 2, 478-484. (C. R. Rao) **54** #3970
- h Maag, Urs R.; Drouilly, Pierre A.) Goodness-of-fit tests for grouped data. *J. Statist. Assoc.* **68** (1973), 462-465. (M. Knott) **51** #7135 62G10
- an-value formulae for a class of random sets. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 437-444. (R. V. Ambarcumjan) **50** #11371 60D05
- methods and problems of geometrical stochastics. (French summary) *With on. Proceedings of the 40th Session of the International Statistical Institute (Paris, 1975)*, Vol. 2. Invited papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 2, 52, 628-630 (1976). (Herbert Ziezold) **57** #14095 60D05 (62A99)
- ults on the intersection of randomly located sets. *J. Appl. Probability* **12** (1975), 17-823. (Roger E. Miles) **52** #9325 60D05
- ification rules based on partial information on the parameters. *Recent developments in statistics (Proc. European Meeting Statisticians, Grenoble, 1976)*, pp. 1-6. North-Holland, Amsterdam, 1977. (S. John) **57** #1773 62H30 (62C15)
- ig Generalized free fields as cyclic representations of the canonical commutation relations. *Acta Phys. Austriaca* **32** (1970), 107-112. (M. E. Mayer) **51** #8147
- h Rohrlfch, F.) Dilatation and conformal invariance on null planes. (Italian summary) *Nuovo Cimento B* (11) **7** (1972), 166-174. (M. Carmeli) **46** #8562 81J22
- h Eachus, W. J.) Exact solution of the quadratic interaction Hamiltonian. *Rep. Mathematical Phys.* **4** (1973), 161-182. (T. Ikebe) **50** #9240 81J47
- h Klauder, John R.) Optical equivalence theorem for unbounded observables. *Mathematical Phys.* **15** (1974), 760-763. (M. J. Westwater) **49** #10293 81J47
- interactions which cannot be turned off. *Acta Phys. Austriaca* **42** (1975), no. 1-6. (Author's summary) **57** #15052 81J46
- wondrous things: a review of probabilistic concepts in quantum dynamics. *Problems in elementary particle and mathematical physics (Proc. XV. Internat. Physikalisches Kernphysik, Univ. Graz, Schladming, 1976)*, pp. 7-43. Acta Phys. Austriaca, Suppl. XV, Springer, Vienna, 1976. (From the introduction) **58** #25642
- h Fröhlich, Jürg) Stability of scattering phase shifts. *Acta Phys. Austriaca* **47** (1976), no. 1-2, 125-136. (M. Martinis) **56** #10531 81J35
- h Albeverio, Sergio A.; Hoegh-Krohn, Raphael J.) Energy forms, spectral properties, and distorted Brownian paths. *J. Mathematical Phys.* **18** (1977), no. 5, 1773-1787. (Francesco Guerra) **56** #4564 81J60
- h Hida, Takeyuki) On quantum theory in terms of white noise. *Nagoya Math. J.* **68** (1977), 21-34. (R. Hoegh-Krohn) **58** #20054 81J60 (60J70)
- (with Karwowski, Witold) A renormalization group model with non-Gaussian fixed point. *Rep. Mathematical Phys.* **13** (1978), no. 1, 1-12. (Gerhard C. Hegerfeldt) **58** #4104 81J60
- See also **Concepts in hadron physics**, **48** #1596; **Quantum dynamics: models and mathematics**, **55** #4965 and **Many degrees of freedom in field theory**, **58** #25453
- Streit, Roland F.) The evaluation of double series. *Nordisk Tidskr. Informationsbehandling (BIT)* **12** (1972), 400-408. (W. Niethammer) **51** #2244 65B10
- The T_{+m} transformation. *Math. Comp.* **30** (1976), no. 135, 505-511. (A. Zajta) **54** #9035 65B10
- Streit, Roy L.) Extremals and zeros in Markov systems are monotone functions of one endpoint. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 387-401. Academic Press, New York, 1976. (G. Meinardus) **55** #3627 41A30
- Streitferdt, Lothar (with Lüder, K.) Die Bestimmung optimaler Portefeuilles unter Ganzzahligkeitsbedingungen. (English summary) *Z. Operations Res. Ser. A-B* **16** (1972), B89-B113. (M. Rössler) **48** #13251 90C10
- Eine Bemerkung zur Programmierung des Dijkstra-Verfahrens. *Z. Operations Res. Ser. A-B* **16** (1972), B253-B256. (M. Rössler) **55** #5214 90C35
- Strejc, Vladimír) The physical realizability of an optimal, γ -parameter, discrete, linear control system determined in Wiener's sense. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 16, Paper 8B, 6 pp. Inst. Mech. Engrs., London, 1967. (Author's summary) **51** #9946 93E20
- State equations in control theory. (Czech) *Kybernetika (Prague)* **5** (1969), no. 4-6, suppl., 71 pp. (Editors) **56** #11108 93-01
- State space synthesis of discrete linear systems. (Czech summary) *Kybernetika (Prague)* **8** (1972), 83-113. (M. Q. Jacobs) **49** #2173 93C55
- Norbert Wiener and cybernetics. (Czech) *Pokroky Mat. Fyz. Astronom.* **19** (1974), 63-65. (Not reviewed) 01A70
- Least squares in identification theory. *Kybernetika (Prague)* **13** (1977), no. 2, 83-105. (S. P. Bingulac) **58** #20736 93E10 (93B30)
- See also **Proceedings: International Congress of the International Federation of Automatic Control (IFAC)**, **51** #12360b
- Strekalov, L. N. (with Mareev, I. V.; Solomonov, L. A.) A certain algorithm for the control of information gathering. (Russian) *Voprosy Kibernet. (Tashkent) Yyp.* **45** (1971), 113-119. **55** #2360 94A15
- Strekalovskii, A. S.) The controllability of processes described by partial differential equations. (Russian) *Numerical methods in analysis (applied mathematics) (Russian)*, pp. 51-66. Akad. Nauk SSSR Sibirsk. Otdel. Sibirsk. Energet. Inst., Irkutsk, 1976. (Author's summary) **58** #20666 93B05 (93C20)
- Strel'chenko, A. I. (with Kolosova, S. V.; Rvačov, V. L.) A certain method for solving exterior boundary value problems. (Russian) *Mathematical physics, No. 12 (Russian)*, pp. 140-144, 169. Izdat. "Naukova Dumka", Kiev, 1972. (E. Zeidler) **49** #11833 65N99
- (with Rvačov, V. L.; Veržikovskii, V. P.) The approximate calculation of multiple integrals of oscillating functions. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1974**, 131-134, 189. (A. H. Stroud) **49** #1745 65D30
- Approximation problems in some classes of Sobolev spaces, and their applications. (Russian) *Variational-difference methods for the solution of problems of mathematical physics (Proc. Second All-Union Sem., Novosibirsk, 1975) (Russian)*, pp. 152-157. Vyčisl. Centr Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk, 1976. (Gh. Adam) **57** #1935 65N30
- Strel'cov, S. V.) On necessary conditions for the optimality of the controls in hybrid systems. (Russian) *Differencial'nye Uravneniya* **12** (1976), no. 5, 940-943, 960. (Constantin Vărsan) **54** #8398 49B35
- Strel'cov, V. V.) Certain estimates for monotone curves in three-dimensional space. (Russian) *Dokl. Akad. Nauk SSSR* **202** (1972), 44-47. (Z. Nádeník) **45** #2571 53C75
- Monotone curves in three-space. (Russian) *Ukrain. Geometr. Sb. No. 15* (1974), 112-140, iii. (W. J. Firey) **52** #1583 53C45
- Completely admissible integral curvature and torsion of a monotone curve. (Russian) *Ukrain. Geometr. Sb. No. 16* (1974), 78-97, iii. (F. Neuman) **51** #4065 53A05
- Strel'cova, V. M. (with Hlybov, B. K.) The indefinite p_j -integral. (Russian) *Collection of questions of mathematics and mechanics, No. 7 (Russian)*, 107-113, 326. Kazah. Gos. Univ., Alma-Ata, 1975. (Editors) **58** #28401 28A25 (26A42)
- The p_j -comparison of functions on bounded sets. (Russian) *Collection of questions on mathematics and mechanics, No. 8 (Russian)*, pp. 98-104, 230. Izdanie Kazah. Gos. Univ., Alma-Ata, 1976. (Author's summary) **58** #28358 26A42
- Strelcyn, Jean-Marie) On topological conjugation in linear groups. *Studia Math.* **35** (1970), 261-272. (J. Lindenstrauss) **45** #4172 47B99 (57E99)
- Flots sur le tore et nombres de rotation. *Bull. Soc. Math. France* **100** (1972), 195-208. (Waldyr M. Oliva) **46** #4569 58F99 (58A30)
- (with Galgani, Luigi) On the entropy of the perfect gas with a finite number of particles. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **26** (1978), no. 4, 301-303. (D. Newton) **58** #22480 28A65
- (with Benettin, Giancarlo; Galgani, Luigi; Giorgilli, Antonio) Tous les nombres caractéristiques de Lyapounov sont effectivement calculables. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 9, A431-A433. (Authors' summary) **58** #24359 58F10 (58F15)
- (with Benettin, Giancarlo; Casartelli, Mario; Galgani, Luigi; Giorgilli, Antonio) On the reliability of numerical studies of stochasticity. I. Existence of time averages. (Italian and Russian summaries) *Nuovo Cimento B* (11) **44** (1978), no. 1, 183-195. (John Guckenheimer) **57** #17722 58F15
- Strelitz, Shlomo (with Linnik, Ju. V.; Ruhin, A. L.) Gamma-distributions and partial sufficiency of polynomials. (Russian) *Trudy Mat. Inst. Steklov.* **111** (1970), 40-51. (errata insert) (M. Hušková) **49** #1643 62E10 (62B05)
- The growth of entire transcendental solutions of differential equations. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **11** (1971), 333-341. (A.

- Corduneanu 45 #3822 34A20 (30A64)
(with Degutis, J.) The existence of eigenvalues for a certain differential operator that depends on a parameter. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 11 (1971), 535-556. (J. B. Butler, Jr.) 45 #7521 47E05 (34B25)
(with Degutis, J.) A certain method of proof for the existence of eigenvalues for a certain differential operator with boundary conditions that depend on a parameter. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 11 (1971), 683-690. (J. B. Butler, Jr.) 45 #8914 34B25
- ★ Асимптотические свойства аналитических решений дифференциальных уравнений. (Russian) [Asymptotic properties of analytic solutions of differential equations] Lithuanian and English summaries. *Izdat. "Mintis", Vilnius*, 1972. 467 pp. (loose errata) (V. Šeda (Zbl 252 #34005)) 58 #17268 34A20 (30A70, 32A30, 35B99)
(with Nekrašas, V.) The existence of eigenvalues for a system of linear differential operators that depend on a parameter. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 13 (1973), no. 3, 191-209, 237. (G. B. Gustafson) 48 #6539 34B25
(with Neniškytė, E.) The local approximation of analytic solutions of partial differential equations. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* 14 (1974), no. 2, 137-170, 255. (A. Haimovici) 52 #971 35A35 (35G05)
On the Routh-Hurwitz problem. *Amer. Math. Monthly* 84 (1977), no. 7, 542-544. (Rubin Saposnik) 57 #288 12D05 (93B15)
A remark on meromorphic solutions of differential equations. *Proc. Amer. Math. Soc.* 65 (1977), no. 2, 255-261. (D. V. V. Wend) 58 #6427 34A20
(with Wejntrob, Leon) Sufficient conditions for boundedness of solutions of linear differential equations. *J. Math. Anal. Appl.* 64 (1978), no. 2, 425-433. (R. E. Gaines) 58 #6428 34A20 (34C10)
See also Theoretical problems in mathematical statistics, 48 #7424
- Strelkov, N. A. Simplicial extensions of network functions and their application to the solution of problems of mathematical physics. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 969-981. (G. W. Hedstrom) 45 #1407 65N30
Approximations of certain function spaces, and their applications. (Russian) *Dokl. Akad. Nauk SSSR* 209 (1973), 565-568. (H. Triebel) 47 #9268 46E35 (35J99, 41A30)
The approximation of spaces of S. L. Sobolev type. (Russian) *Vestnik Jaroslav. Univ.* Vyp. 10 (1974), 123-156. (O. John) 56 #16364 46E35 (65N10)
Error estimates for projection-difference methods in metrics that are subordinated to the energy metric. (Russian) *Studies in stability and the theory of oscillations* (Russian), pp. 90-94. *Jaroslav. Gos. Univ., Yaroslavl*, 1976. (Author's review (RZMat 1977 #3 B893)) 58 #24927 65J05 (47A50)
The totality of operators in the difference and the projection-difference method. (Russian) *Variational-difference methods for the solution of problems of mathematical physics* (Proc. Second All-Union Sem., Novosibirsk, 1975) (Russian), pp. 73-78. *Vyčisl. Centr Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1976. (I. M. Sheffer) 57 #1939 65N99
The rate of convergence of a class of projection methods. (Russian) *Studies in stability and the theory of oscillations* (Russian), pp. 170-178. *Jaroslav. Gos. Univ., Yaroslavl*, 1977. (Ja. Alihaškin (RZMat 1977 #12 B1160)) 58 #19121 65J05
The choice of coordinate functions in projection-difference methods. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 17 (1977), no. 6, 1443-1457, 1627. (Murli M. Gupta) 57 #11096 65N10
- Strelkov, S. P. See Kandidov, V. P.; et al., 51 #7790
- Strelkova, N. V. The differential geometry of manifolds of a space of constant curvature. (Russian) *Trudy Irkutsk. Gos. Univ.* 64 (1969), 221-227. (E. Siwek) 47 #4162 53A35
- Štremel', M. A. (with Mel'ničenko, A. S.) Non-Gaussian random fields from independent sources in a discrete lattice. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1977, no. 6, 133-139. (Nina B. Maslova) 58 #4138 82.60
- Stremnitzer, H. On a possible algebra of first and second class currents. *Acta Phys. Austriaca* 40 (1974), 27-36. (Not reviewed) 81.17
- Streng, G. See Strang, Gilbert
- Streubel, Michael A comment on the uniqueness theorems for stationary black holes. *Gen. Relativity Gravitation* 9 (1978), no. 7, 597-619. (Ann Stehney) 58 #14967 83.53
- Strež, P. E. The asymptotic solutions of one-dimensional wave problems. (Russian) *Dokl. Akad. Nauk SSSR* 226 (1976), no. 5, 1058-1061. (Editors) 58 #25406 78.35
- Strichartz, Robert S. A note on Trudinger's extension of Sobolev's inequalities. *Indiana Univ. Math. J.* 21 (1971/72), 841-842. (R. Rao Chivukula) 45 #2466 46E35
A functional calculus for elliptic pseudo-differential operators. *Amer. J. Math.* 94 (1972), 711-722. (F. Cardoso) 46 #9811 47H05 (35S05)
Invariant pseudo-differential operators on a Lie group. *Ann. Scuola Norm. Sup. Pisa* (3) 26 (1972), 587-611. (S. G. Gindikin) 54 #8751 58G15
The Hardy space H^1 on manifolds and submanifolds. *Canad. J. Math.* 24 (1972), 915-925. (Bent E. Petersen) 47 #5585 46E35
Multipliers for spherical harmonic expansions. *Trans. Amer. Math. Soc.* 167 (1972), 115-124. (Gilles Lachaud) 46 #5945 43A75
A noncompact analogue of spherical harmonics. *Harmonic analysis on homogeneous spaces* (Proc. Sympos. Pure Math., Vol. XXVI, Williams Coll., Williamstown, Mass., 1972), pp. 357-358. *Amer. Math. Soc., Providence, R.I.*, 1973. (S. G. Gindikin) 49 #9545 43A85 (33A75)
Harmonic analysis on hyperboloids. *J. Functional Analysis* 12 (1973), 341-383. (S. G. Gindikin) 50 #5370 43A85 (22E45)
Boundary values of solutions of elliptic equations satisfying H^p conditions. *Trans. Amer. Math. Soc.* 176 (1973), 445-462. (M. Wachman) 47 #9062 35J67
Fourier transforms and non-compact rotation groups. *Indiana Univ. Math. J.* 24 (1974/75), 499-526. (S. G. Gindikin) 52 #1178 43A90
Multiplier transformations on compact Lie groups and algebras. *Trans. Amer. Math. Soc.* 193 (1974), 99-110. (E. Porada) 50 #10156 22E30 (43A75)
The explicit Fourier decomposition of $L^2(\mathrm{SO}(n)/\mathrm{SO}(n-m))$. *Canad. J. Math.* 27 (1975), 294-310. (S. G. Gindikin) 52 #1177 43A85
Singular integrals on nilpotent Lie groups. *Proc. Amer. Math. Soc.* 53 (1975), no. 2, 367-374. (Jean-Louis Clerc) 54 #8155 43A22 (22E30)
Restrictions of Fourier transforms to quadratic surfaces and decay of solutions of wave equations. *Duke Math. J.* 44 (1977), no. 3, 705-714. (R. Glassey) 58 #246F10 (35B40, 81.35)
Bochner identities for Fourier transforms. *Trans. Amer. Math. Soc.* 228 307-327. (J. N. Pandey) 55 #6126 43A30 (22E45)
Minimum-energy solutions of certain underdetermined problems in partial differential equations. *J. Differential Equations* 27 (1978), no. 1, 64-91. (M. S. Agranovič) 57 #13147 35G05
- Strick, Heinz Klaus Rekursiv definierte Folgen mit irrationalen Grenzwerten. *Math. 17* (1975), no. 5, 115-125. (See RZMat 1975 #10 B888) 26A03
- Stricker, Christophe Mesure de Föllmer en théorie des quasimartingales. *Séminaire de Probabilités, IX (Seconde Partie, Univ. Strasbourg, Strasbourg, années universitaires 1973/1974 et 1974/1975)*, pp. 408-419. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (M. Métivier) 54 #11491 60G45
Une caractérisation des quasimartingales. *Séminaire de Probabilités, IX (Seconde Partie, Univ. Strasbourg, Strasbourg, années universitaires 1973/1974 et 1974/1975)*, pp. 420-424. *Lecture Notes in Math., Vol. 465, Springer, Berlin*, 1975. (M. Métivier) 54 #11492 60G45
Quasi-martingales, martingales locales, semimartingales et filtrations naturelles (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 6, Aiv, A375- (Norihiko Kazamaki) 54 #6269 60G45
(with Dellacherie, Claude) Changements de temps et intégrales stochastiques. *Séminaire de Probabilités, XI (Univ. Strasbourg, Strasbourg, 1975/1976)*, pp. 365-370. *Lecture Notes in Math., Vol. 581, Springer, Berlin*, 1977. (Nicole El Karoui) 56 #60H05 (60G45)
Quasimartingales, martingales locales, semimartingales et filtration naturelle (English summary) *Wahrscheinlichkeitstheorie und Verw. Gebiete* 39 (1977), no. 1, 55-63. (Norihiko Kazamaki) 57 #10813 60G45
- Strickfaden, W. B. Functional integral representation of Landau-Ginsburg theory fluctuations. *Physica* 70 (1973), 320-338. (E. J. Verboven) 50 #15790 82.46
- Strickland, Elisabetta Alcune proprietà delle classi di equivalenza rispetto alle relazioni di Green in un semigrupp. (English summary) *Boll. Un. Mat. Ital.* (4) 5 (1972), 444-448. (H. A. Thurston) 46 #7420 20M10
Classificazione dei gruppi finiti semplici in cui due arbitrari sottogruppi dello stesso ordine risultano coniugati. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 54 (1973), 832-837 (1974). (Thomas Laffey) 50 #13273 20D99
Alcune proprietà dei C-gruppi. (English summary) *Rend. Mat.* (6) 6 (1973), 695-700. (Thomas Laffey) 50 #13272 20D99
Sui funtori coniugio nei gruppi $PSL(2, p^f)$. (English summary) *Atti Accad. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 56 (1974), no. 4, 464-469. (Author's summary) 56 #3143 20G40
On groups with an "augmented" proper subgroup. (Italian summary) *Rend. Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 56 (1974), no. 4, 911-916 (1976). (C. Y. Tang) 53 #13414 20E20
Sulle serie di composizione di una classe di gruppi finiti. (English summary) *Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 61 (1976), no. 1-2, 20-22. (M.ª Jesús Iranzo) 58 #22291 20D30
- Stricklen, S. A., Jr. Closed mappings of σ -locally compact metric spaces. *Proc. Amer. Math. Soc.* 51 (1975), 221-224. (Frank Siwiec) 51 #13974 54C10
An embedding theorem for Lasnev spaces. *General Topology and Appl.* 6 (1976), 145-152. (Frank Siwiec) 53 #3986 54C10 (54E35)
Closed mappings of nowhere locally compact metric spaces. *Proc. Amer. Math. Soc.* 68 (1978), no. 3, 369-374. (R. F. Gittings) 57 #17603 54E35
- Striebel, Charlotte (with Kallianpur, G.) A stochastic differential equation of Fisk type estimation and nonlinear filtering problems. *SIAM J. Appl. Math.* 21 (1971), 61-74. (Zakaj) 45 #6090 60H10
★ Optimal control of discrete time stochastic systems. *Lecture Notes in Economics and Math. Systems*, Vol. 110. *Springer-Verlag, Berlin-New York*, 1975. iii + 208 pp. (Engelbert) 54 #2315 93E20
- Strietz, Heinrich Finite partition lattices are four-generated. *Proceedings of the 1st Theory Conference (Ulm, 1975)*, pp. 257-259. *Univ. Ulm, Ulm*, 1975. (Ralph F. Fenn) 55 #2685 06A20
- Strietzel, Roland Optimierung und Information. (Russian and English summaries) *Nachrichtentech. Elektronik* 25 (1975), B, 141-145. (G. Solomon) 52 #16869 93C55
- Informationsübertragung im Optimierungsprozess. *Wiss. Z. Techn. Univ. Braunschweig* 24 (1975), no. 2, 429-433. 55 #10145 94A15
- Strigačev, A. Bohr's correspondence principle. (Bulgarian. English summary) *An. Univ. Sofia Fac. Phys.* 66 (1974/75), 57-68 (1978). (Editors) 58 #8856 81.00 (01A60)
- Strigalev, L. S. (with Černyšev, V. O.) Informational characteristics of a system of independent normally distributed vectorial random variables. (Russian) *Dokl. Akad. Nauk BSSR* 16 (1972), 795-797, 866. (S. Kotz) 48 #5724 94A15 (62B10)
- Strigin, Ju. D. A hierarchy of general recursive functionals. (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 282-284. (R. A. Di Paola) 57 #9511 02F35 (02F29)
Hierarchies of general recursive operators and general recursive types of degree ω . (Russian) *Dokl. Akad. Nauk SSSR* 210 (1973), 537-540. (R. A. Di Paola) 57 #9512 02F35 (02F29, 02F30)
- Strijbos, R. C. W. (with Kwakernaak, Huibert) Extremization of functions with equality constraints. *Math. Programming* 2 (1972), 279-295. (K. Swarup) 47 #1285 65N99
- Strikov, Jelitsaveta Kováč A characterization of the finite simple groups M_{24}, He and J_1 . *J. Algebra* 43 (1976), no. 2, 375-397. (David C. Hunt) 54 #10395 20D05
- Strikwerda, John C. Initial boundary value problems for incompletely parabolic systems. *Comm. Pure Appl. Math.* 30 (1977), no. 6, 797-822. (H.-O. Kreiss) 57 #884 35B25
- Strimbu, Cecilia The effect of summation by arithmetic means and of its inverse operation on the rate of convergence of numerical series with positive terms. (Romanian. English summary) *Rev. Anal. Numer. Teoria Aproximației* 3 (1974), no. 2, 203-207 (1975) (Peyerimhoff) 53 #1084 40A05
- Strinati, G. (with Fano, U.) Multipole expansion of the density of states about a crystalline cell. *J. Mathematical Phys.* 17 (1976), no. 3, 434-438. (M. Lawrence Glasser) 52 #16422 82.33
- Stringali, Robert W. A density relationship between $ax + b$ and $[x/c]$. *Fibonacci Quarterly* 15 (1977), no. 1, 1-4. 52 #16422 82.33

- , no. 1, 64-66. (J. Chidambaraswamy) **53** #253 10A20
- S. (with Lipparini, E.; Traini, M.) A variational approach to magnetic moments. *Phys. A* **291** (1977), no. 1, 157-164. (Ian P. Grant) **56** #14272 81.35
- John See **Operational Research**, 49 #12059
- Michael G. A solution to the matrix factorization problem. *IEEE Trans. Information Theory* **IT-18** (1972), 225-232. (R. W. Newcomb) **48** #4000 15A54
- with Bose, Nirmal K.) A solution to the multivariable matrix factorization problem. *J. Engng. Math.* **7** (1973), 263-271. (D. B. Hunter) **55** #2956 15A21
- An algebraic proof of the maximum principle. *Internat. J. Control* **22** (1975), no. 4, 71. (G. M. Ewing) **53** #1367 49B10
- Conditions for stability of nonanticipative two dimensional recursive filters. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Process Processes (Clearwater, Fla., 1976)*, pp. 204-208. *Inst. Electr. Electron. Engrs., New York*, 1976. (Author's summary) **56** #18095 94A05
- Modeling of cyclic processes. *Applications and research in information systems and systems (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 2, pp. 403-405. (M. J. Engng. Math. D.C., 1977. (Author's summary) **58** #15658 94A05
- Diagonalization, rank calculation and generalized inverses of rational matrices. *Math. Comput.* **3** (1977), no. 1, 69-84. (J. Vandergraft) **55** #5660 15A21
- Conditions for stability of nonanticipative two-dimensional recursive filters. *IEEE Automatic Control* **AC-22** (1977), no. 4, 594-597. (P. S. Knopov) **58** #7829 93E10, 94A05
- Tests of stability of multidimensional filters. *IEEE Trans. Circuits and Systems* **24** (1977), no. 8, 432-437. (S. Prusty) **58** #15659 94A05
- G. (with Mitropol'skii, Ju. O.; Samoilenko, A. M.) The reduction to standard (Russian) *Trudy Sem. Mat. Fiz. Nelinein. Koleban.* **1** (1968), no. 2, 4-20. (D. V.) **46** #455 34C30
- The periodic solutions of systems of second order nonlinear equations. (Russian) *Qualitative and qualitative methods in the theory of nonlinear oscillations (Russian)*, pp. 103. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (L. Pintér) **52** #3671 25
- Qualitative study of the oscillations of a "pendulum-load" system. (Russian) *The theory of integral manifolds in nonlinear differential equations (Russian)*, pp. 274-279. *Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (D. Bobrowski) **52** #2313
- See also **Nonlinear oscillations and stability of motion**, 57 #12950
- V. L. (with Klimenko, V. M.) Group-theoretic investigation of three-photon scattering of light. (Russian) *Quantum electronics*, No. 4 (Russian), pp. 173-184. *Kievskaya Dumka*, Kiev, 1969. (Authors' review (RŽFiz 1970 #12 D929)) **45** #1491
- On the lever problem in special relativity. (Serbo-Croatian summary) *Fizika* **2** (1970), 169-176. (R. K. Pathria) **48** #13170 83.53
- with Pahor, Sergej) On superluminal transformations. *Lett. Nuovo Cimento* (2) **14** (1976), no. 12, 458-462. (Editors) **56** #4679 83.53
- Level On optimum time bounds for recognition of some sets of words by on-line machines. (Czech summary) *Kybernetika (Prague)* **5** (1969), 266-279. (A. L. Berg) **48** #1516 68A25
- Hierarchy of optimal recognitions. (Russian. German, English and French summaries) *Wiss. Z. Humboldt-Universität Berlin Math.-Natur. Reihe* **21** (1972), 545-546. (Author's summary) **54** #9992 02F15 (68A20)
- Learning machine recognition. *Mathematical foundations of computer science (Proc. Conf. and Summer School, Štrbské Pleso, 1973)*, pp. 331-332. *Math. Inst., Slovak Acad. Sci., Bratislava*, 1973. (Richard Tenney) **53** #2026 68A20 (68A30)
- Radimír Methods of derivation of single types of production functions. (Czech. English summary) *Ekonom.-Mat. Obzor* **8** (1972), 1-17. (M. Mañas) **46** #6790 65
- Professor Jaroslav Hájek (an obituary). (Czech) *Ekonom.-Mat. Obzor* **10** (1974), 135. (Editors) **50** #1821 01A70
- A certain generalization of the Slutskii fundamental equations for the production equilibrium problem. (Czech. English summary) *Ekonom.-Mat. Obzor* **12** (1976), no. 3, 176. (Author's summary) **56** #7878 90A15
- Curtis The two-locus model with sex differences in recombination. *Genetics* **78** (1976), no. 2, 791-797. (Klaus Hinkelmann) **53** #2420 92A10
- with Antonelli, Peter L.) The geometry of random drift. I. Stochastic distance and motion. *Advances in Appl. Probability* **9** (1977), no. 2, 238-249. (Author's review (P. L. H.) **58** #26152 92A10 (60J70)
- See also **Symposium: Mathematical Genetics**, 52 #12848
- H. On a new method of determining the transfer function by simultaneous observation of the real and imaginary parts of the measured frequency response. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 2, Paper 1F, 10 pp. *Inst. Mech. Engrs., London*, (Editors) **51** #9905 93C99
- See also **Proceedings: International Congress of the International Federation of Automatic Control (IFAC)**, 51 #12360a
- . (with Gänßler, Peter; Stute, Winfried) On central limit theorems for martingale regular arrays. *Acta Math. Acad. Sci. Hungar.* **31** (1978), no. 3-4, 205-216. (Adhir K. S.) **57** #10772 60F05 (60G45)
- Poland Some automatic transformations of CF-grammars. *Methods of algorithmic logic implementation (Sympos., Novosibirsk, 1975)*, pp. 218-230. *Lecture Notes in Comput. Sci.*, Vol. 47, Springer, Berlin, 1977. (David B. Benson) **57** #4673 68A30
- Wolfgang J. On the representation of the extremal functionals on $C_b(T, X)$. *J. Approximation Theory* **10** (1974), 64-68. (Ivan Singer) **50** #2905 46E40 (41A65)
- with Haken, Hermann) An exactly solvable model for coherent and incoherent motion. *Z. Physik* **262** (1973), no. 2, 135-148. (Koichiro Matsuno) **54** #1985
- F. Gauge problem in quantum field theory. *Phys. Rev.* (2) **162** (1967), 1438. (M. J. Westwater) **47** #6226 81.35
- Gauge problem in quantum field theory. II. Difficulties of combining Einstein equations and Wightman theory. *Phys. Rev.* (2) **166** (1968), 1302-1307. (M. J.
- Westwater) **47** #6227 81.35
- Gauge problem in quantum field theory. III. Quantization of Maxwell equations and weak local commutativity. *Phys. Rev. D* (3) **2** (1970), 2334-2340. (M. J. Westwater) **47** #6228 81.35
- (with Bracci, L.) Einstein's equations and locality. *Comm. Math. Phys.* **24** (1972), 289-302. (G. Bandyopadhyay) **45** #3018 81.47 (83.35)
- (with Bracci, L.) Local and covariant quantization of linearized Einstein's equations. *J. Mathematical Phys.* **13** (1972), 1151-1163. (G. Bandyopadhyay) **48** #13089 81.53
- Gauge problem in quantum field theory. *Lett. Nuovo Cimento* (2) **3** (1972), 345-346. (R. L. Ingraham) **50** #9209 81.22
- (with Ferrari, R.; Picasso, L. E.) Some remarks on local operators in quantum electrodynamics. *Comm. Math. Phys.* **35** (1974), 25-38. (M. J. Westwater) **48** #10359 81.46
- (with Wightman, Arthur S.) Proof of the charge superselection rule in local relativistic quantum field theory. *J. Mathematical Phys.* **15** (1974), 2198-2224. (J. E. Marsden) **50** #12059 (E 54 #6759) 81.46
- (with Bracci, L.; Morchio, G.) Wigner's theorem on symmetries in indefinite metric spaces. *Comm. Math. Phys.* **41** (1975), 289-299. (Ky Fan) **51** #4889 81.46
- (with Bracci, L.) Local and covariant quantizations of linearized Einstein's equations. II. *J. Mathematical Phys.* **16** (1975), no. 12, 2522-2526. (G. Bandyopadhyay) **54** #4438 81.53 (81.47)
- (with Parenti, Cesare; Velo, Giorgio) Solutions of classical field equations with locally finite kinetic energy. *Phys. Lett. B* **59** (1975), no. 2, 157-158. (Piero de Mottoni) **57** #18575 81.35 (35Q99)
- Gauge groups in local field theory and superselection rules. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 87-92. *Lecture Notes in Phys.*, Vol. 50, Springer, Berlin, 1976. (P. Pascual) **58** #4026 81.22
- (with Bracci, L.; Morchio, G.) Description of symmetries in indefinite metric spaces. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 551-556. *Lecture Notes in Phys.*, Vol. 50, Springer, Berlin, 1976. (Nigel B. Backhouse) **58** #25467 81.22
- (with Parenti, Cesare; Velo, Giorgio) A local approach to some non-linear evolution equations of hyperbolic type. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **3** (1976), no. 3, 443-500. (From the introduction) **57** #17009 35L60 (81.35)
- (with Wightman, Arthur S.) Erratum: "Proof of the charge superselection rule in local relativistic quantum field theory" (*J. Mathematical Phys.* **15** (1974), 2198-2224). *J. Mathematical Phys.* **17** (1976), no. 10, 1930-1931. (J. E. Marsden) **54** #6759 81.46
- (with Parenti, Cesare; Velo, Giorgio) Hilbert space sectors, dynamical charges and spontaneous symmetry breaking in classical field theory. *Phys. Lett. B* **62** (1976), no. 1, 83-85. (D. Ja. Petrina) **54** #14619 81.46
- (with Parenti, Cesare; Velo, Giorgio) Hilbert space sectors for solutions of non-linear relativistic field equations. *Comm. Math. Phys.* **53** (1977), no. 1, 65-96. (Y. Kato) **55** #5029 81.46
- Spontaneous symmetry breaking in local gauge quantum field theory; the Higgs mechanism. *Comm. Math. Phys.* **56** (1977), no. 1, 57-78. (Jorge André Swieca) **57** #8708 81.47
- (with Ferrari, R.; Picasso, L. E.) Local operators and charged states in quantum electrodynamics. (Italian summary) *Nuovo Cimento A* (11) **39** (1977), no. 1, 1-8. (A. Rouet) **57** #15063 81.47
- (with Parenti, Cesare; Velo, Giorgio) Dynamical charges and symmetries in the nonlinear classical field theory. (Italian and Russian summaries) *Nuovo Cimento B* (11) **39** (1977), no. 1, 147-164. (Håkan Snellman) **55** #14005 81.35
- (with Parenti, Cesare; Velo, Giorgio) Structure properties of solutions of classical non-linear relativistic field equations. *Invariant wave equations (Proc. "Ettore Majorana" Internat. School of Math. Phys., Erice, 1977)*, pp. 250-262. *Lecture Notes in Phys.*, Vol. 73, Springer, Berlin, 1978. (From the summary) **58** #14723 81.53
- Local and covariant gauge quantum field theories. Cluster property, superselection rules, and the infrared problem. *Phys. Rev. D* (3) **17** (1978), no. 8, 2010-2021. (A. Rouet) **58** #25605 81.47
- Stroćik, T. V. A certain theorem of S. E. Warschawski. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **3** (1968), no. 6, 465-469. (L. Mikołajczyk (Zbl 203, 384)) **45** #5333 30A24
- A remark on the conformal mapping of half-strips. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 686-690, 718. (D. M. Campbell) **50** #4920 30A24
- (with Gol'dberg, A. A.) On the conformal mapping of some types of half-planes. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 2, 43-49, 240. (P. Caraman) **54** #5448 30A24
- The conformal mapping of a certain class of half-strips with a non-smooth boundary. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 1, 108-116, 143. (Z. Lewandowski) **53** #13534 30A24
- Conformal mapping of curvilinear half-strips. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 2, 223-231, 285. (I. N. Baker) **56** #12240 30A24
- Strodiot, Jean-Jacques (with Nguyen Van Hien) Une méthode numérique pour la détermination de points-selles. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 12, A683-A686. (Authors' summary) **55** #1199 49D30 (65K05)
- (with Nguyen, V. Hien) Convergence rate results for a penalty function method. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977)*, Part 2, pp. 101-106. *Lecture Notes in Control and Information Sci.*, Vol. 7, Springer, Berlin, 1978. (M. A. Wolfe) **58** #15188 90C30 (65K05)
- The strict topology on bounded sets. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 1, 135-140. (Anne K. Steiner) **58** #7091 46H25
- Strodt, Walter A differential-algebraic study of the intrusion of logarithms into asymptotic expansions. *Contributions to algebra (collection of papers dedicated to Ellis Kolchin)*, pp. 355-375. *Academic Press, New York*, 1977. (W. Watzlawek) **58** #623 12H05 (34E05)
- Stroe, G. (with Krivošein, L. E.; Mangeron, Dumitru Ion; Oğuztöreli, Mehmet Namık) Systèmes mathématiques possédant la structure complexe. II. Problèmes généralisés de valeurs initiales pour une classe d'équations intégral-différentielles aux dérivées partielles du premier ordre. (English summary) *Bull. Soc. Roy. Sci. Liège* **43** (1974), 512-516.

- (Authors' summary) **51** #6333 45K05
- Stroeker, Roelof Jacobus** ★Elliptic curves defined over imaginary quadratic number fields. A Diophantine approach. With a Dutch summary. Ph.D. Thesis. *Universiteit van Amsterdam, Amsterdam*, 1975. vi + 108 pp. (loose Dutch addenda) (Jacques Vêlu) **56** #8586 14K15 (10B10, 14G25)
- On the Diophantine equation $x^3 - Dy^2 = 1$. *Nieuw Arch. Wisk.* (3) **24** (1976), no. 3, 231-255. (H. London) **55** #10378 10B10
- On a diophantine equation of E. Bombieri: "Sulle soluzioni intere dell'equazione $4x^3 = 27y^2 + N$ " (Riv. Mat. Univ. Parma **8** (1957), 199-206). *Nederl. Akad. Wetensch. Proc. Ser. A* **80** = *Indag. Math.* **39** (1977), no. 2, 131-139. (J. W. S. Cassels) **55** #10379 10B10
- Stroescu, Elena** Some spectral properties of the \mathcal{U} -subscalar operators. (Romanian. English summary) *Stud. Cerc. Mat.* **22** (1970), 81-85. (V. Istrătescu) **47** #9337 47B40
- Generalized subspectral operators. I. (Romanian. English summary) *Stud. Cerc. Mat.* **23** (1971), 1465-1475. (V. Istrătescu) **49** #5923 47B40
- A dilation theorem for operators on Banach spaces. *Actes du Colloque d'Analyse Fonctionnelle (Univ. Bordeaux, Bordeaux, 1971)*, pp. 365-373. *Bull. Soc. Math. France Mém.*, No. 31-32, *Soc. Math. France, Paris*, 1972. (J. B. Miller) **51** #13755 47B40
- \mathcal{U} -spectral dilations for operators on Banach spaces. *J. Math. Anal. Appl.* **39** (1972), 279-295. (Henry R. Dowson) **47** #5624 47A20 (46L99, 47B40)
- \mathcal{U} -spectral dilations and \mathcal{U} -spectral extensions of operators on Banach spaces. (Romanian. French summary) *Stud. Cerc. Mat.* **24** (1972), 817-824. (F. H. Szafraniec) **51** #1474 47B40 (46L99)
- Spectral dilations of operators on Banach spaces. (Romanian. English summary) *Stud. Cerc. Mat.* **24** (1972), 919-972. (Stefan Balint) **51** #3926 47A20 (47B40)
- Isometric dilations of contractions on Banach spaces. *Pacific J. Math.* **47** (1973), 257-262. (R. G. Douglas) **48** #4776 47A20
- Operations which leave invariant the class of subspectral operators. (Romanian. English summary) *Stud. Cerc. Mat.* **25** (1973), 335-339. (F. Smithies) **51** #11182 47B40
- Functorial theory of the dilation on Banach spaces. Hommage au Professeur Miron Nicolescu pour son 70e anniversaire, II. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 97-106. (Paul S. Muhly) **50** #14285 47A20
- Weak discrete convergence of solutions of variational inequalities. (Italian summary) *Rend. Mat.* (6) **8** (1975), no. 3, 815-841. (M. Biroli) **52** #6517 47H15 (65J05)
- Perturbation of non-linear partial differential variational inequalities. I. *Proc. Roy. Soc. Edinburgh Sect. A* **76** (1976/77), no. 1, 1-12. (Gianfranco Bottaro) **56** #3450 35G20 (35J60, 47H99)
- (with Vivaldi, Maria Agostina) Strong discrete convergence of solutions of variational inequalities. (Italian summary) *Rend. Mat.* (6) **9** (1976), no. 1, 17-35. (M. Biroli) **54** #8376 47H15
- Stroganov, S. S.** (with Avramov, Luchezar L.; Todorov, A. N.) Gorenstein modules. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 4(166), 199-200. (Chr. U. Jensen) **53** #5575 13H10
- Quasimorphisms of a Koszul complex. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 6(174), 196. (C. Niță) **52** #13822 13H99
- Descent of the canonical module for rings of invariants. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 6(186), 185-186. (J. Mašek) **53** #10789 13H10 (14M05)
- Flat morphisms. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 4 (190), 277-278. (J.-E. Bertin) **54** #12756 13H10 (14E20, 13D05)
- Canonical module and anti-invariant elements. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 6, 1205-1230, 1447. (J.-E. Bertin) **58** #22092 14M05 (13H10)
- Poincaré series. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **42** (1978), no. 2, 416-454, 471. (N. Popescu) **58** #10866 13D10
- Stroh, Ethan** See **Beekman, John A.**, **50** #11684
- Strohe, Hans-Gerhard** (with Baumann, Horst; Buros, Gustav; Dück, Werner; Eilhauer, Rolf; Elster, Karl-Heinz; Freier, Manfred; Gärtner, Karl-Heinz; Köth, Heinz; Lang, Rainer; Otto, Carl; Patzer, Heiko; Runge, Walter; Sachs, Horst; Schoch, Manfred; Weiß, Manfred) ★Mathematik für ökonomische und ingenieurökonomische Fachrichtungen. Teil I: Mathematische Grundlagen. Herausgegeben von Heinz Köth, Carl Otto, Walter Runge und Manfred Schoch. Verlag Die Wirtschaft, Berlin, 1971. 997 pp. (Editors) **50** #6240 69.00
- Ströhlein, Thomas** (with Schmidt, Gunther) Some aspects in the construction of timetables. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974)*, pp. 516-520. North-Holland, Amsterdam, 1974. (A. K. Dewdney) **55** #12042 90B40 (94A20)
- Iterative Berechnung der Kerne eines Graphen und der Lösung eines Spiels. (English summary) *Graphen, Algorithmen, Datenstrukturen (Zweite Fachtagung über Graphentheoretische Konzepte der Informatik, Göttingen, 1976)*, pp. 327-336. *Appl. Comput. Sci.*, Vol. 4, Hanser, Munich, 1976. (Author's summary) **58** #392 05C99 (90D99)
- (with Schmidt, Gunther) A Boolean matrix iteration in timetable construction. *Linear Algebra and Appl.* **15** (1976), no. 1, 27-51. (Richard N. Burns) **56** #10922 90B99
- (with Zagler, L.) Analyzing games by Boolean matrix iteration. *Discrete Math.* **19** (1977), no. 2, 183-193. (R. K. Guy) **58** #33000 90D05
- Strohmeier, Alfred** Principe du maximum associé à un problème de contrôle optimal gouverné par une équation avec retard et contenant des contraintes mixtes. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A908-A911. (M. Z. Nashed) **45** #1022 49A30
- ★Le principe du maximum pour un système gouverné par une équation intégrale avec retards et soumis à des contraintes mixtes. Thèse présentée à la Faculté des Sciences de Paris pour l'obtention du Doctorat 3e cycle. Spécialité: Mathématiques. Mention: Mathématiques Économiques. *Faculté des Sciences, Université de Paris, Paris*, 1972. ix + 92 pp. (Thomas S. Angell) **50** #14431 49B35 (90A15)
- Principe du maximum associé à un problème de contrôle optimal gouverné par une équation différentielle avec retard et soumis à des contraintes d'état. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A555-A558. (Thomas S. Angell) **47** #7560 49B35
- Stroie, Aurel** See **Collection: Moisil, Grigore Constantin**, **49** #4703
- Strok, M.** A factorization lemma and its application to realization of mappings as limits. *Colloq. Math.* **29** (1974), 223-230. (K. D. Magill, Jr.) **49** #9792 54B10
- A remark on K. Borsuk's paper: "On fundamental deformation retracts some related notions" (Fund. Math. **86** (1975), 261-270). (Russian summary) *Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 7, 767-769. Himmelberg) **54** #1156 54C55
- (with Szymański, Andrzej) Compact metric spaces have binary bases. *Fund. Math.* **89** (1975), no. 1, 81-91. (R. F. Dickman, Jr.) **52** #4232 54D20 (54E45)
- On shapes of matchings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Astronom. Phys.* **24** (1976), no. 4, 265-270. (R. R. Summerhill) **54** #1159 54C45
- (with Dydak, Jerzy; Nowak, Sławomir) On the union of two FANR-sets. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), 485-489. (S. A. Bogatyĭ) **54** #1157 54C55 (55D10)
- Strok, V. V.** (with Ostroverhii, M. O.; Homenko, M. P.) Diameter critical graph digraphs. (Russian. English summary) *Topological aspects of graph theory (Russian)* 214-271, 306. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (Author's summary) **57** #2996 05C35
- (with Homenko, M. P.) Combinatorics of imbeddings of partitions. (Russian. English summary) *Topological aspects of graph theory (Russian)*, pp. 272-290, 306. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (J. B. Roberts) **52** #1305A17
- A complement to Oberschelp's theorem on the enumeration of graphs. (Russian. English summary) *Topological aspects of graph theory (Russian)*, pp. 291-298. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (J. B. Roberts) **52** #1305C30 (10H25)
- (with Homenko, M. P.) Certain combinatorial identities for sums of composition coefficients. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 830-837. (H. W. Gould) **50** #605A19
- (with Homenko, M. P.) Certain relations for compositions. (Ukrainian. English summary) *Dopovid Akad. Nauk Ukrain. SSR Ser. A* **1972**, 147-150, 151. (J. B. Roberts) **46** #70 05A05
- (with Homenko, M. P.) Combinatorial identities for sums of composition coefficients. (Ukrainian. Russian and English summaries) *q-transformations of functions (Ukrainian)*, pp. 336-345, 373-374. *Vidannya Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (J. B. Roberts) **52** #13419 05A19
- Enumeration of trees by prescribed degrees of the vertices. (Ukrainian. Russian. English summaries) *q-transformations of functions (Ukrainian)*, pp. 346-351, 374. *Vidannya Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (A. Rosa) **54** #2521 05C30
- See also **Questions in applied mathematics**, **48** #5448
- Strokov, V. A.** Extremum conditions for classical functionals that are used in measurement techniques. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* **1977**, no. 1, 70-72, 95. (Author's summary) **58** #9608 93C99
- Strokov, V. I.** (with Ageenko, N. I.; Begun, S. M.; Vizing, V. G.; Zarovnyi, V. V.) problem of operative planning of preventive maintenance of equipment. (Russian) *Ekonom. i Mat. Metody* **12** (1976), no. 2, 396-399. (E. V. Bulinskaja) **58** #490B25
- Ström, Arne** The homotopy category is a homotopy category. *Arch. Math. (Basel)* **1972**, 435-441. (A. K. Bousfield) **47** #9615 55F05
- Strom, Roberto** (with Bruni, Carlo; Giovenco, Maria Adelaide; Koch, Giorgio) The immune response as a variable structure system. *Variable structure systems with application to economics and biology (Proc. Second U.S.-Italy Sem., 1974)*, pp. 244-254. *Lecture Notes in Econom. and Math. Systems*, Vol. 111, Springer, Berlin, 1975. (Author's summary) **56** #4892 92A05
- (with Bruni, Carlo; Giovenco, Maria Adelaide; Koch, Giorgio) Modeling the immune response: a system approach. *Theoretical immunology*, pp. 379-414. *Immunology Ser.*, Vol. 8, Dekker, New York, 1978. (Rodney D. Gentry) **57** #1592A05
- Ström, Staffan** Introduction to the theory of groups and group representations. I. *and Quanta* **3** (1972/73), 263-344. (J. S. Joel) **55** #8238 22-01
- (with Peterson, Bo) T matrix for electromagnetic scattering from an arbitrary number of scatterers and representations of E(3). *Phys. Rev. D* (3) **8** (1973), 3661-3670. (Authors' summary) **50** #15594 78.22
- Ström, Torbjörn** On second order properties of stochastic dynamical systems with jump coefficients. *J. Cybernet.* **4** (1974), no. 1, 1-25. (Author's summary) **56** #1593E15
- Measurement of spectral properties for a non-Gaussian process model of EEG. *Cybernet.* **4** (1974), no. 1, 27-48. **56** #11501 94A05
- (with Signell, Svante) Analysis of periodically switched linear circuits. *IEEE Trans. Circuits and Systems* **CAS-24** (1977), no. 10, 531-541. (András Reeski) **58** #494A20
- Ström, Torsten** ★On logarithmic norms. Report NA 69.06 Department of Information Processing and Computer Science, The Royal Institute of Technology, Stockholm, i + 8 pp. (D. B. Hunter) **49** #8315 65F35
- Minimization of norms and logarithmic norms by diagonal similarities. (German summary) *Computing (Arch. Elektron. Rechnen)* **10** (1972), 1-7. (L. W. Ehrlich) **47** #2805 65F35
- Monotonicity in Romberg quadrature. *Math. Comp.* **26** (1972), 461-465. (F. F. Corbari) **46** #6568 65D30
- On the practical application of majorants for nonlinear matrix iterations. *J. Anal. Appl.* **41** (1973), 137-147. (William Hintzman) **47** #9374 47H10 (65J05)
- Practical error estimates for repeated Richardson extrapolation schemes. *Nordisk Tidskr. Informationsbehandling (BIT)* **13** (1973), 196-205. (C. Tartia) **48** #1265B05
- Monotonicity and error bounds in schemes of Romberg type for the computation of $f^{(n)}(0)$ by central differences and extrapolation. *Numer. Math.* **21** (1973), 14-21. (Hasan Abdi) **52** #15978 65D99
- A note on measures of non-normality of matrices. *Nordisk Mat. Tidskr.* **22** (1974), 9-10. (A. S. Householder) **49** #7277 15A21
- (with Lyness, J. N.) On numerical differentiation. *Nordisk Tidskr. Informationsbehandling (BIT)* **15** (1975), no. 3, 314-322. (Jerrold S. Rosenbaum)

- 740 65D25
logarithmic norms. *SIAM J. Numer. Anal.* **12** (1975), no. 5, 741-753. (David R. #11992 65F35 (15A60))
- on the determination of the Perron root. FOA Reports, Vol. 10, no. 1. *Försvarsforskningsanstalt (FOA)*, Stockholm, 1976. 6 pp. ISBN 91-7056-040-4 (Colette Lebaud) 678 65F15
- Svensson, Per) On the determination of an orthogonal transformation. *J. Appl. Math.* **2** (1976), no. 1, 7-11. (A. S. Householder) **53** #14895 65F99
- ote on the spectral radius of certain matrices. *Z. Angew. Math. Mech.* **57** (1977), -52. (H. Ratschek) **56** #13564 65F15
- Werner (with Emde, Helmut; Reysersbach, Walter) ★Mathematische Logik. Probleme in Theorie und Anwendung. Beck'sche Schwarze Reihe, Band 79. Beck Verlag, Munich, 1972. 227 pp. (J. Kuntzmann) **48** #1869 02-01 (68-01)
- einmal These von B. Russell. *Philos. Natur.* **13** (1972), no. 3, 394-398. (J. A. #56 #2780 02A05)
- Peter) On the spectral capacity of some rings. *Math. Scand.* **33** (1973), 213-228 (K. H. Hofmann) **50** #4704 18E15 (13C05)
- Jan-Olov) Bounded mean oscillation with Orlicz norms and duality of Hardy *Bull. Amer. Math. Soc.* **82** (1976), no. 6, 953-955. (D. A. Stegenga) **54** #7790
- estimates on maximal functions with rectangles in certain directions. *Ark. (1977)*, no. 2, 229-240. (M. de Guzmán) **58** #6911 42A92 (26A84)
- imal functions associated to rectangles with uniformly distributed directions. *Math.* (2) **107** (1978), no. 2, 399-402. (Calixto P. Calderón) **58** #1978 42A40
- Karl) An elementary proof of Steinhaus's theorem. *Proc. Amer. Math. Soc.* **36** 808. (C. Chou) **46** #7482 28A70 (43A05)
- h Dressler, Robert E.) The Tonelli integral. *Amer. Math. Monthly* **81** (1974), (H. Burkil) **49** #489 26A42
- ts. *Amer. Math. Monthly* **81** (1974), 349-354. (G. V. Welland) **49** #481
- h Hewitt, Edwin) Some examples of nonmeasurable sets. *J. Austral. Math. Soc.* (4), no. 2, 236-238. (From the authors' introduction) **57** #12805 28A05
- h Hewitt, Edwin) ★Real and abstract analysis. A modern treatment of the of functions of a real variable. Third printing. Graduate Texts in Mathematics, Springer-Verlag, New York-Heidelberg, 1975. x+476 pp. (Editors) **51** #3363 28-02, 46-02
- Gy. Der Lehrstuhl für darstellende Geometrie der Fakultät für Maschinenbau nischen Universität zu Budapest. *Period. Polytechn. Mech. Engrg.* **21** (1977), no. 6, (Editors) **58** #4927 01A65
- den Steinerschen Konstruktionen. *Period. Polytechn. Mech. Engrg.* **21** (1977), no. 02. (H. Brauner) **58** #7361 50B20
- Julius) Über die Kreisaxiome. *Period. Math. Hungar.* **4** (1973), 3-16. (H. #48 #7097 50A05)
- er das Schneiden von Geraden und Zyklen in der absoluten Geometrie. Beiträge bra und Geometrie, 2. Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg Reihe 4 (1973), 37-53 (1974). (R. Lingenberg) **53** #6399 50A10
- n Parallelenpostulat unabhängige Konstruktionen mit Hilfe eines Lineals mit nten, von denen die eine Gerade ist, von der jeder Punkt der anderen gleich weit *Publ. Math. Debrecen* **21** (1974), 197-206. (E. Morgantini) **50** #10992
- nstruktionen mit Hilfe eines Zirkels allein in der beschränkten Öffnung in der elliptischen Geometrie. *J. Reine Angew. Math.* **278/279** (1975), 22-36. (J. Böhm) 67 50C05
- nstruktionen mit dem rechten und schiefen Zeichnenwinkel in der absoluten rie. *Period. Math. Hungar.* **6** (1975), 87-95. (R. Lingenberg) **51** #13845
- nstruktionen mit dem Zirkel allein in der elliptischen Ebene. *Abh. Math. Sem. Hamburg* **45** (1976), 96-99. (L. Gyarmathi) **54** #1071 50C05
- Thomas O.) Triangles in arrangements of lines. *J. Combinatorial Theory Ser. A* (7), no. 3, 314-320. (E. Jucović) **57** #2949 05C25 (50D35, 52A25)
- Walter) The four-color theorem for small maps. *J. Combinatorial Theory Ser. B* (5), no. 3, 256-268. (F. Bernhart) **53** #2731 05C15
- R. Jr.) Construction of models for algebraically generalized recursive function *J. Symbolic Logic* **35** (1970), 401-409. (G. E. Sacks) **45** #3201 02F99
- whchartable recursive specifications. *Algorithm specification (Courant Comput. Sympos. 4, New York Univ., New York, 1971)*, pp. 81-96. Prentice-Hall Series in t. Comput., Prentice-Hall, Englewood Cliffs, N. J., 1972. (Hannah Chen) 47 68A10
- th Walker, S. A.) Characterizations of flowchartable recursions. Fourth Annual Symposium on the Theory of Computing (Denver, Colo., 1972). *J. Comput. Sci.* **7** (1973), 404-447. (P. C. Gilmore) **48** #10186 68A05 (02E15, 02F20)
- th Maggiolo-Schettini, Andrea; Rosen, Barry K.) Recursion structure ation. *SIAM J. Comput.* **4** (1975), no. 3, 307-320. (V. N. Agafonov) **52** #4694 65
- also Proceedings: Annual ACM Symposium on the Theory of Computing, 53 and Complexity of computations and algorithms, **51** #2325
- Raymond) See IEEE Symposium: Switching and Automata Theory, **49** #2192
- l L.) Quotient and pseudo-open images of separable metric spaces. *Proc. Amer. Soc.* **33** (1972), 582-586. (Joe A. Guthrie) **45** #9299 54B15 (54E35)
- eparability in semi-stratifiable spaces. *Colloq. Math.* **34** (1975/76), no. 1, 143. (C. R. Borges) **53** #9156 54E20
- E. See Stong, Robert E.
- l. G. (with Skarynkin, V. S.) Construction and calculation of complete entries electronic computer. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, 99-100. (Authors' summary) **45** #8071 68A50
- ulti-extremal minimization. *Avtomat. i Telemekh.* **1970**, no. 7, 63-67 (Russian. summary); translated as *Avtomat. Remote Control* **1970**, no. 7, 1085-1088.
- (Author's summary) **46** #1336 90C15
- A certain algorithm of global minimization. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **13** (1970), 539-545. (J. Morávek) **45** #1365 65K05
- Algorithms for the search for an absolute minimum. (Russian) *Problems of statistical optimization (Russian)*, pp. 51-68. Izdat. "Zinatne", Riga, 1971. (O. Gulyás) **47** #9831 65K05
- Minimization of many-extremal functions of several variables. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 6, 39-46 (Russian); translated as *Engrg. Cybernetics* **9** (1971), no. 6, 1004-1010 (1972). (G. Berman) **48** #12835 65K05 (49B20, 90A05)
- A choice of trials and the stopping condition in one-dimensional global search. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **14** (1971), 432-440. (K. Frankowski) **45** #7954 90B40
- A simple search algorithm for the global extremum of a function of several variables and its application in the problem of the approximation of functions. (Russian. English summary) *Theory of oscillations, applied mathematics and cybernetics. Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), 1077-1084. (H. Weber) **52** #16024 65K05 (41-04)
- A probabilistic approach to the problem of the determination of the root of a function. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 3-13. (G. Vainikko) **45** #7916 65C99
- Randomization of strategies in the search for a global extremum. (Russian) *Problems of random search, 2 (Russian)*, pp. 19-29, 219. Izdat. "Zinatne", Riga, 1973. (B. Bereanu) **51** #14969 90C15
- On the convergence of an algorithm for finding a global extremum. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 4, 10-16 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 4, 549-555. (S. F. McCormick) **50** #1512 65K05
- See also Theory of oscillations, applied mathematics and cybernetics, **47** #4599
- Stroock, Daniel W. (with Varadhan, S. R. S.) Diffusion processes and martingales. I. *Martingales (Report Meeting, Oberwolfach, 1970)*, pp. 60-66. *Lecture Notes in Math.*, Vol. 190, Springer, Berlin, 1971. (Editors) **50** #11479 60J60 (60G45)
- (with Varadhan, S. R. S.) Diffusion processes and martingales. II. *Martingales (Report Meeting, Oberwolfach, 1970)*, pp. 67-75. *Lecture Notes in Math.*, Vol. 190, Springer, Berlin, 1971. (Editors) **50** #11480 60J60 (60G45)
- (with Varadhan, S. R. S.) On the support of diffusion processes with applications to the strong maximum principle. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. III: Probability theory, pp. 333-359. Univ. California Press, Berkeley, Calif., 1972. (A. D. Wentzell (Fentcel')) **53** #4259 60J60
- (with Varadhan, S. R. S.) Diffusion processes. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. III: Probability theory, pp. 361-368. Univ. California Press, Berkeley, Calif., 1972. (H. P. McKean, Jr.) **53** #1755 60J60
- (with Varadhan, S. R. S.) On degenerate elliptic-parabolic operators of second order and their associated diffusions. *Comm. Pure Appl. Math.* **25** (1972), 651-713. (M. Biroli) **52** #8651 35J70 (35K10, 60J45)
- (with Varadhan, S. R. S.) Probability theory and the strong maximum principle. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971)*, pp. 215-220. *Amer. Math. Soc., Providence, R.I.*, 1973. (A. Friedman) **52** #1010 35K10 (60J60)
- Weak convergence and the invariance principle. *Topics in probability theory (Sem., Courant Inst. Math. Sci., New York, 1971-1972)*, pp. 33-57. *Courant Inst. Math. Sci., New York*, 1973. (Evarist Giné) **54** #3790 60B10
- (with Varadhan, S. R. S.) Martingales. I, II, III. *Topics in probability theory (Sem., Courant Inst. Math. Sci., New York, 1971-1972)*, pp. 113-161. *Courant Inst. Math. Sci., New York*, 1973. (Roger L. Jones) **53** #14653 60G45 (30A78)
- On a conjecture of M. Kac. *Bull. Amer. Math. Soc.* **79** (1973), 770-775. (Carlo Pagani) **48** #707 35K05
- Applications of Fefferman-Stein type interpolation to probability theory and analysis. *Comm. Pure Appl. Math.* **26** (1973), 477-495. (Burgess Davis) **49** #6348 60G45 (42A36, 46E35, 47G05)
- (with Varadhan, S. R. S.) Limit theorems for random walks on Lie groups. *Sankhyā Ser. A* **35** (1973), no. 3, 277-294. (Authors' summary) **58** #24457 60B15 (60J15)
- Some stochastic processes which arise from a model of the motion of a bacterium. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **28** (1973/74), 303-315. (D. Kannan) **52** #6897 60J70
- (with Baggett, L.) An ergodic theorem for Poisson processes on a compact group with applications to random evolutions. *J. Functional Analysis* **16** (1974), 404-414. (Thomas G. Kurtz) **50** #14873 60B15 (60J35)
- (with Varadhan, S. R. S.) A probabilistic approach to $H^p(R^d)$. *Trans. Amer. Math. Soc.* **192** (1974), 245-260. (P. W. Millar) **51** #1948 60G45 (42A36)
- Diffusion processes associated with Lévy generators. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **32** (1975), no. 3, 209-244. (R. F. Anderson) **55** #6587 60J60
- (with Holley, Richard A.) A martingale approach to infinite systems of interacting processes. *Ann. Probability* **4** (1976), no. 2, 195-228. (T. M. Liggett) **53** #1782 60K35 (60G45)
- Some comments on independent σ -algebras. *Colloq. Math.* **35** (1976), no. 1, 7-13. (Bhamidi V. Rao) **55** #3208 28A35 (60A10)
- (with Holley, Richard A.) Applications of the stochastic Ising model to the Gibbs states. *Comm. Math. Phys.* **48** (1976), no. 3, 249-265. (E. M. Klimko) **55** #2004 82.30
- (with Holley, Richard A.) L_2 theory for the stochastic Ising model. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **35** (1976), no. 2, 87-101. (T. M. Liggett) **53** #14725 60K35 (82.60)
- (with Papanicolaou, George C.; Varadhan, S. R. S.) Martingale approach to some limit theorems. *Papers from the Duke Turbulence Conference (Duke Univ., Durham, N.C., 1976)*, Paper No. 6, ii+120 pp. *Duke Univ. Math. Ser., Vol. III, Duke Univ., Durham, N.C.*, 1977. (Mark Pinsky) **57** #1669 60J60 (60H10, 60F05, 60G45)
- (with Holley, Richard A.; Williams, David A.) Applications of dual processes to diffusion theory. *Probability (Proc. Sympos. Pure Math., Vol. XXXI, Univ. Illinois, Urbana, Ill., 1976)*, pp. 23-36. *Amer. Math. Soc., Providence, R. I.*, 1977. (Hermann

- Rost) 56 #1483 60J60 (60K35)
Two limit theorems for random evolutions having non ergodic driving processes. *Proceedings of the Conference on Stochastic Differential Equations and Applications (Park City, Utah, 1976)*, pp. 241-253. Academic Press, New York, 1977. (Mark Pinsky) 57 #1670 60J60 (60H10)
(with Holley, Richard A.) Stochastic processes which arise in the study of spin-flip models in statistical mechanics. *Symposia Mathematica, Vol. XXI (Convegno sulle Misure su Gruppi e su Spazi Vettoriali, Convegno sui Gruppi e Anelli Ordinati, INDAM, Rome, 1975)*, pp. 187-195. Academic Press, London, 1977. (T. M. Liggett) 57 #4371 60K35
(with Holley, Richard A.) In one and two dimensions, every stationary measure for a stochastic Ising model is a Gibbs state. *Comm. Math. Phys.* 55 (1977), no. 1, 37-45. (Hans-Otto Georgii) 56 #9741 60K35
★Lectures on infinite interacting systems. Lectures in Mathematics, Kyoto University, No. 11. Kinokuniya Book-Store Co., Ltd., Tokyo, 1978. i+72 pp. (T. M. Liggett) 57 #17892 60K35
(with Holley, Richard A.) Nearest neighbor birth and death processes on the real line. *Acta Math.* 140 (1978), no. 1-2, 103-154. (T. M. Liggett) 58 #7928 60K35
See also **Mathematics: Periodical collection of translations of foreign articles**, 49 #4723; **Topics in probability theory**, 50 #5877 and **Mathematics: Periodical collection of translations of foreign articles**, 50 #12531 (EA 58)
- Strooker, Jan R.** Le foncteur G en théorie des multiplicités. *Comptes Rendus du Deuxième K-Colloque (Univ. Sci. Tech. Languedoc, Montpellier, 1970)*, pp. 108-133. Univ. des Sci. et Tech. Languedoc, Montpellier, 1971. (E. Graham Evans, Jr.) 49 #7257 13H15
(with Sharma, Pramod K.) On a question of Swan in algebraic K -theory. *Ann. Sci. École Norm. Sup. (4)* 6 (1973), 85-94. (Luce Gouyon) 52 #5765 18F25
Le groupe fondamental des groupes linéaires GL_n . *Séminaire P. Dubreil, F. Aribaud et M.-P. Malliauin (28e année: 1974/75), Algèbre, Exp. No. 17*, 2 pp. Secrétariat Mathématique, Paris, 1975. (Keith Dennis) 53 #8197 18F25
(with Villamayor, Orlando E.) A spectral sequence for double complexes of groups. *Advances in Math.* 15 (1975), 216-231. (L. Ribes) 52 #14004 18G40
(with Villamayor, Orlando E.) Building K -theories. *Advances in Math.* 15 (1975), 232-268. (J. A. Schafer) 51 #12994 18F25
The fundamental group of the general linear group. *J. Algebra* 48 (1977), no. 2, 477-508. (Keith Dennis) 58 #16844 18F25 (13D99, 14F05)
★Introduction to categories, homological algebra and sheaf cohomology. Cambridge University Press, Cambridge-New York-Melbourne, 1978. ix+246 pp. ISBN 0-521-21699-0 (P. Jambor) 58 #16815 18-01
- Stroth, Gernot** Gruppen mit abelschen 2-Sylow Durchschnitten. *J. Algebra* 30 (1974), 436-443. (H. Kurzweil) 50 #471 20D20
Über Gruppen, die in ähnlicher Beziehung zu M_{24} oder $L_5(2)$ stehen, wie Sz zu He , und eine Kennzeichnung von M_{24} und $L_5(2)$. I. *J. Algebra* 33 (1975), 206-223. (Ulrich Dempwolff) 50 #10055 20D05
Über Gruppen, die in ähnliche Beziehung zu M_{24} oder $L_5(2)$ stehen, wie Sz zu He , und eine Kennzeichnung von M_{24} und $L_5(2)$. II. *J. Algebra* 34 (1975), 331-364. (Ulrich Dempwolff) 51 #686 20D05
Eine Kennzeichnung der Gruppe ${}^2E_6(2^n)$. *J. Algebra* 35 (1975), 534-547. (David R. Mason) 51 #13023 20D05
Eine Kennzeichnung der 2I-Gruppen. *J. Algebra* 37 (1975), no. 1, 111-120. (H. Kurzweil) 52 #10876 20D20
On 2-groups with no abelian subgroups of rank four. *Math. Z.* 144 (1975), no. 1, 13-17. (D. Wales) 53 #10922 20D15
Über endliche Gruppen mit einer 2-lokalen Untergruppe $E_{16} \setminus S_6$. *Arch. Math. (Basel)* 27 (1976), no. 3, 232-240. (Arthur Reifart) 54 #2787 20D05
Eine Kennzeichnung der $PSL(2, 7)$ durch ihre Untergruppenstruktur. *Arch. Math. (Basel)* 27 (1976), no. 4, 360-361. (Arthur Reifart) 54 #5333 (E 57 #16396) 20D05
A characterization of Fischer's sporadic simple group of the order $2^{41} \cdot 3^{13} \cdot 5^6 \cdot 7^2 \cdot 11 \cdot 13 \cdot 17 \cdot 19 \cdot 23 \cdot 31 \cdot 47$. *J. Algebra* 40 (1976), no. 2, 499-531. (David C. Hunt) 54 #5334 20D05
Über Gruppen mit 2-Sylow-Durchschnitten vom Rang < 3 . I. *J. Algebra* 43 (1976), no. 2, 398-456. (Peter Landrock) 58 #886a 20D20
Über Gruppen mit 2-Sylow-Durchschnitten vom Rang < 3 . II. *J. Algebra* 43 (1976), no. 2, 457-505. (Peter Landrock) 58 #886b 20D20
Gruppen mit einem 2-Sylow-Durchschnitt vom Rang zwei. *J. Algebra* 44 (1977), no. 2, 488-491. (H. Kurzweil) 55 #3065 20D05
Gruppen mit kleinen 2-lokalen Untergruppen. *J. Algebra* 47 (1977), no. 2, 441-454. (L. Procházka) 56 #12118 20D25
Endliche einfache Gruppen mit einer 2-lokalen Untergruppe $E_{16}\Sigma_6$. *J. Algebra* 47 (1977), no. 2, 455-479. (David R. Mason) 57 #9833 20D05
Endliche einfache Gruppen mit einer zentralisatorgleichen elementar abelschen Untergruppe von der Ordnung 16. *J. Algebra* 47 (1977), no. 2, 480-523. (B. Hartley) 57 #12681 20D05
Einige einfache Gruppen, die keine elementar abelsche Untergruppe von der Ordnung 32 enthalten. *J. Algebra* 48 (1977), no. 1, 197-213. (Robert Steinberg) 57 #448 20D05
See also **Machi, Antonio**, 57 #16396
- Strothotte, Dieter** Hinreichende Kriterien für die Existenz von Extremstellen ohne Mittelwertsatz. *Praxis Math.* 17 (1975), no. 11, 302-305. (Not reviewed) 26A03
- Strotz, Robert H.** (with Drèze, Jacques H.) A note on interdependence as a specification error. *Econometrica* 39 (1971), 1009-1013. (J. N. K. Rao) 49 #2038 90A15
- Stroud, A. H.** ★Approximate calculation of multiple integrals. Prentice-Hall Series in Automatic Computation. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1971. xiii+431 pp. (R. D. Riess) 48 #5348 65D30
(with Chen, Kwan-wei; Wang, Ping-lei; Mao, Zunkwang) Some second and third degree harmonic interpolation formulas. *SIAM J. Numer. Anal.* 8 (1971), 681-692. (A. Lupas) 45 #7928 65D05
(with Chen, Kwan-wei) Peano error estimates for Gauss-Laguerre quadrature formulas. *SIAM J. Numer. Anal.* 9 (1972), 333-340. (Author's summary) 46 #2831 65D30
Two fifth degree harmonic interpolation formulas for the n -box. *SIAM J. Numer. Anal.* 9 (1972), 518-521. (Author's summary) 47 #1239 65D05
Some cubature formulas for the surface of the n -sphere. *SIAM J. Numer. Anal.* 10 (1973), 559-569. (R. D. Riess) 49 #6572 65D30
★Numerical quadrature and solution of ordinary differential equations. A textbook for a beginning course in numerical analysis. Applied Mathematical Sciences, Vol. 10. Springer-Verlag, New York-Heidelberg, 1974. xi+338 pp. (Henning) 51 #2241 65-02 (65D30, 65L05)
(with Barrow, David L.) Gauss formulas for the Dirichlet problem. *Bull. Math. Soc.* 80 (1974), 1230-1232. (Stephen Hilbert) 55 #9499 65D30
Gauss harmonic interpolation formulas. *Comm. ACM* 17 (1974), 471-475. (Stephen Hilbert) 50 #15265 65D05
Some interpolation formulas for the Neumann problem for the n -sphere. *SIAM J. Numer. Anal.* 12 (1975), no. 4, 593-604. (J. H. Curtiss) 53 #1906 65D05 (65D30)
Some fourth degree integration formulas for simplexes. *Math. Comp.* 30 (1978), 134, 291-294. (Author's summary) 52 #12305 65D30
(with Barrow, David L.) Existence of Gauss harmonic interpolation formulas. *SIAM J. Numer. Anal.* 13 (1976), no. 1, 18-26. (R. E. Barnhill) 54 #1539 65D30 (41A55)
Integration formulas for the wave equation in n space dimensions. *J. Computational Phys.* 25 (1977), no. 1, 32-55. (Author's summary) 57 #14487 65M99 (35L05)
(with Barrow, David L.) Integration formulas for the Poisson equation. *SIAM J. Numer. Anal.* 12 (1975), no. 5, 888-903. (R. B. Kelman) 56 #4190 65N05
- Stroud, Clyde P.** ★Laplace transforms: programmes and problems. Halsted Press, Wiley & Sons, New York, 1973. x+275 pp. (Editors) 50 #5382 44A10
See also **Multivariate statistical methods: within-groups covariation**, 52 #2028
- Stroud, L. John** On $x = a^x$. *Math. Gaz.* 53 (1969), no. 385, 289-293. (Editors) 58 #1585 (E 58 #6805) 40A05
On Mathematical Note 3232 (*Math. Gaz.* 53 (1969), no. 385, 289-293). *Math. Gaz.* 55 (1971), no. 391, 63. (Editors) 58 #6804 40A05
- Stroud, M. R.** (with Lurié, D.; Hartley, H. O.) A goodness of fit test for censored data. *Comm. Statist.* 3 (1974), 745-753. (G. Opfer) 51 #2136 62G10
- Stroud, T. W. F.** Fixed alternatives and Wald's formulation of the noncentral asymptotic behavior of the likelihood ratio statistic. *Ann. Math. Statist.* 43 (1972), 447-455. (Chernoff) 46 #6526 62E20
Noncentral convergence of Wald's large-sample test statistic in exponential families. *Ann. Statist.* 1 (1973), 161-165. (J. Kiefer) 48 #12683 62E20
Combining unbiased estimates of a parameter known to be positive. *J. Statist. Assoc.* 69 (1974), 502-506. (E. S. Keeping) 51 #2114 (E 52 #6984) 62J05
Comparing regressions when measurement error variances are known. *Psychometrika* 39 (1974), 53-68. (P. Fortunati) 50 #11646 62J05
Corrigenda: "Combining unbiased estimates of a parameter known to be positive." *J. Amer. Statist. Assoc.* 69 (1974), 502-506. *J. Amer. Statist. Assoc.* 70 (1975), no. 348, 1066. (Authors' summary) 58 #31621 62J10
See also **Applied statistics**, 52 #1944
- Stroyan, K. D.** Uniform continuity and rates of growth of meromorphic functions. *Contributions to non-standard analysis (Sympos., Oberwolfach, 1970)*, pp. 47-64. Studies in Logic and Foundations of Math., Vol. 69, North-Holland, Amsterdam, 1972. (K. R. Kugler) 58 #28550 30A91
Additional remarks on the theory of monads. *Contributions to non-standard analysis (Sympos., Oberwolfach, 1970)*, pp. 245-259. *Studies in Logic and Foundations of Math.*, Vol. 69, North-Holland, Amsterdam, 1972. (Labib Haddad) 58 #31039 54J05 (02H25)
A characterization of the Mackey uniformity $m(L^\infty, L^1)$ for finite measures. *J. Math.* 49 (1973), 223-228. (W. A. J. Luxemburg) 49 #1090 46E30 (02H25)
A nonstandard characterization of mixed topologies. *Victoria Symposium on Nonstandard Analysis (Univ. Victoria, Victoria, B.C., 1972)*, pp. 260-271. *Lecture Notes in Math.*, Vol. 369, Springer, Berlin, 1974. (D. G. Tacon) 58 #2160 46A99 (02H25)
(with Luxemburg, Wilhelmus Antonius Josephus) ★Introduction to the theory of infinitesimals. Pure and Applied Mathematics, No. 72. Academic Press [Harcourt, Brace, Jovanovich, Publishers], New York-London, 1976. xiii+326 pp. (Frank Wattenberg) 58 #10429 02H25 (26A98, 54J05)
Infinitesimal calculus on locally convex spaces. I. Fundamentals. *Trans. Am. Math. Soc.* 240 (1978), 363-383. (W. A. J. Luxemburg) 58 #12351 46G05 (02H25, 26A98, 58C20)
See also **Handbook: Mathematical logic**, 58 #10395
- Stroyls, John** Arithmetical and topological properties of U -numbers. *Proceedings of the Seventh National Mathematics Conference (Dept. Math., Azarabadegan Univ., Tabriz, 1976)*, pp. 318-363. Azarabadegan Univ., Tabriz, 1977. (W. J. LeVeque) 58 #2710F35
- Strube, Richard F. E.** A map of a polyhedron onto a disk. *Canad. Math. Bull.* 19 (1976), no. 4, 483-485. (John G. Hocking) 56 #6668 57C99
- Strube, Sin Phing Moo** A Tauberian remainder theorem with applications to Laplace summability. *Math. Scand.* 34 (1974), 137-144. (M. S. Rangachari) 50 #2741 40E05
Tauberian remainder theorems for the Borel methods. *J. Reine Angew. Math.* 275 (1975), 125-133. (Sonja Lyttkens) 51 #8673 (EA 51) 40E05
- Strubecker, Karl** ★Vorlesungen über darstellende Geometrie. Zweite, verbesserte und ergänzte Auflage. Vandenhoeck & Ruprecht, Göttingen, 1967. ix+349 pp. (Editors) 46 #8029 50D15
★Nacrtina geometrija. (Serbo-Croatian) [Descriptive geometry] Translated from the German by Dominik Palman. Tehnička Knjiga, Zagreb, 1971. 298 pp. (Editors) 46 #8030 50D15
Über die Kugelschnitte des Torus. *Österreich. Akad. Wiss. Math.-Natur. Kl. II* 180 (1972), 137-175. (H. W. Guggenheimer) 46 #1803 14N99 (50B05)
Über das isotope Gegenstück $z = \frac{3}{2} J(x + iy)^{2/3}$ der Minimalfläche von Enneper. *Abh. Math. Sem. Univ. Hamburg* 44 (1975), 152-174 (1976). (H. R. Müller) 53 #153A10

- ber einige Eigenschaften der Fläche $z = -1/2\sqrt{(x+iy)^{-2}}$. (Italian summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, 158-173. (H. W. Guggenheimer) **54** #5989 53A10
- oxodromen im isotropen Raum. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **118** (1975), no. 5-7, 269-305. (H. W. Guggenheimer) **54** #8490 53A40
- ber die isotropen Gegenstücke der Minimalfläche von Scherk. *J. Reine Angew. Math.* **293/294** (1977), 22-51. (R. N. Abdulaev) **57** #1292 53A10
- ber die Minimalflächen des isotropen Raumes, welche zugleich Minimalflächen sind. (English summary) *Monatsh. Math.* **84** (1977), no. 4, 39. (H. W. Guggenheimer) **57** #7417 53A40 (53A10)
- also *Geometrie*, **50** #8251
- iamond A. An algebraic view of distributions and operators. *Studia Math.* **37** (1971), 103-109. (Z. Zieleźny) **46** #2426 46F99
- ith Harbertson, Noel C.) Integral manifolds for perturbed nonlinear differential equations. *Applicable Anal.* **1** (1971), no. 3, 241-278. (N. Fenichel) **45** #2278
- operator homomorphisms. *Math. Z.* **130** (1973), 275-285. (Z. Zieleźny) **48** #4725 10 (35E05)
- with Hughes, Carl C.) Neocontinuous Mikusiński operators. *Trans. Amer. Math. Soc.* **185** (1973), 383-400. (S. Łojasiewicz) **48** #12043 46Fxx (44A40)
- representations of Fourier transforms for distributions. Collection of articles in celebration of the sixtieth birthday of Ky Fan. *Bull. Inst. Math. Acad. Sinica* **2** (1974), 106. (J. L. B. Cooper) **50** #8064 46F10
- metrics in locally compact groups. *Compositio Math.* **28** (1974), 217-222. (P. S. Shul'ts) **50** #535 22D05
- fractional calculus in the operator field of generalized functions. *Fractional calculus and applications (Proc. Internat. Conf., Univ. New Haven, West Haven, Conn., 1974)*, 484-497. *Lecture Notes in Math.*, Vol. 457, Springer, Berlin, 1975. (E. Gesztesy) **50** #65 44A40
- numerical-valued Fourier transforms. *Canad. Math. Bull.* **20** (1977), no. 1, 125-127. (Author's summary) **58** #29809 42A68 (44A40)
- the numerical-valued Fourier transform in the two-sided operational calculus. *J. Math. Anal.* **8** (1977), no. 2, 243-257. (Edgar Berz) **55** #10972 44A40
- near transformations in the operational calculus. *SIAM J. Math. Anal.* **8** (1977), 258-270. (Edgar Berz) **55** #10973 44A40 (46F10)
- analytical and algebraic aspects of the operational calculus. *SIAM Rev.* **19** (1977), 403-436. (Harris S. Shultz) **55** #10974 44A40
- two-sided operational calculus. *Studia Math.* **60** (1977), no. 3, 239-254. (L. Berg) **58** #44A40 (46F10)
- operators on the real line \mathbb{R} and on \mathbb{R}^n . (Russian summary) *Bull. Acad. Polon. Sci. Math. Astronom. Phys.* **26** (1978), no. 3, 247-248. (Vadim Komkov) **58** #23387 40
- (with Bunke, Helga) Estimation procedures in inadequate models: comparisons of empirical two step procedure. (German and Russian summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 2, 167-177. (Valery Fedorov) **53** #11892
- ith Bunke, Helga; Henschke, K.; Wisotzki, C.) Parameter estimation in near regression models. *Math. Operationsforsch. Statist. Ser. Statist.* **8** (1977), no. 1, 1. (Ivar Petersen) **58** #18856 62F10
- u, V. I. The gradient projection method in convex programming problems of a form. (Russian) *Mat. Voprosy Upravlen. Proizvodstvom Vyp.* **6** (1975), 26-33. (E. Štejn) **57** #2569 90C25
- Mario Un processo markoffiano di puro ingresso, a parametro continuo, to come estensione del processo discreto della frequenza di successo nel modello metrico. (English summary) *Rend. Ist. Mat. Univ. Trieste* **5** (1973), 63-76. (P. E. E) **48** #9872 60J80
- u, F. Variations of higher-dimensional quasiconformal mappings, and extremal mappings. (Russian) *Dinamika Splošn. Sredy Vyp.* **25** *Dinamika Teord. Tela* (1976), 157, 166. (P. Caraman) **56** #12259 30A60
- me properties of mappings, quasiconformal in the mean. (Russian) *Dokl. Akad. Nauk SSSR* **235** (1977), no. 6, 1277-1280. (A. D. Mednyh) **56** #15920 30A60
- uk J. The prohibition of the use of Arabic numerals in Florence. *Arch. Internat. Hist. Sci.* **21** (1968), no. 84-85, 291-294. (See Zbl **186**, 295) 01A35
- Abriß der Geschichte der Mathematik. Fünfte, erweiterte Auflage. Mit einem Vorwort über die Mathematik des 20. Jahrhunderts von I. Pogrebysski. Übersetzung der zweiten englischen Auflage von H. Karl. Übersetzung der Zusätze und des Nachtrags aus der zweiten russischen Auflage von W. Purkert. Wissenschaftliche Verlag der Zusätze und des Anhangs von H. Wussing. Studienbücherei. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1972. 255 pp. (Editors) **50** #1810 (EA 50) 05
- ith Drake, Stillman; Coxeter, Harold Scott MacDonald; Jones, Charles V.; Henry S.; Scriba, Christoph J.; Sinclair, B.; Mahoney, Michael Sean) A memorial tribute to Kenneth O. May. *Historia Math.* **5** (1978), no. 1, 3-12. (Editors) **53** #22 01A70
- also *Birthday: Struik, Dirk J.*, **58** #16055
- th Rebekka Partial converses to Lagrange's theorem. *Comm. Algebra* **6** (1978), 421-482. (J. F. Humphreys) **57** #12682 20D10
- ly Ruth Flächengleichheit und Cavalierische Gleichheit von Dreiecken. *Elem. Math.* **32** (1977), no. 6, 137-143. (O. Bottema) **58** #23972 50B05
- u, L. (with Timan, A. F.) Mathematical expectation of continuous functions of n variables, smoothness, and variance. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 3, 64, 719. (S. A. Book) **56** #12722 41A30
- y E. ★Introduction to linear programming. *Holden-Day, Inc., San Francisco, London-Amsterdam*, 1972. xi + 404 pp. (Editors) **50** #9355 90C05
- li, V. V. Methods for the solution of the systems of kinetic equations of a gas mixture. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 3, 533-536. (V. Komkov) **58** #148 76.49
- (with Solak, Wiesław W.) The secant method in Banach spaces. (German summary) *Computing* **16** (1976), no. 3, 201-209. (R. A. Tapia) **53** #4533 65J05
- Struss, Hannelore Äquivalenz zwischen den Teilkörpern des Funktionenkörpers einer algebraischen Gruppe. (Russian, English and French summaries) *Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* **19** (1970), 561-565. (R. Steinberg) **52** #5687 14L10
- Strutinskii, V. M. (with Magner, A. G.) Quasiclassical theory of the shell structure of nuclei. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* **7** (1976), no. 2, 356-418. (Authors' summary) **57** #2292 81.45 (82.47)
- Strutt, Joseph Projective homotopy classes of spheres in the stable range. *Bol. Soc. Mat. Mexicana* (2) **16** (1971), 15-25. (R. M. F. Moss) **49** #3925 55E45
- Projective homotopy classes of Stiefel manifolds. *Canad. J. Math.* **24** (1972), 465-476. (David Handel) **54** #11328 55E05 (57F15, 57D25)
- Strutt, Max J. O. ★Lamésche-Matheusche- und verwandte Funktionen in Physik und Technik. Reprint of the 1932 original. *Chelsea Publishing Co., New York*, 1967. viii + 116 pp. (Editors) **50** #2578 33A55 (01A75)
- (with Sánchez, Manuel) On the solution of Laplace's and Poisson's equations with rotational symmetry using SOR. (German summary) *AEÜ—Arch. Elek. Übertragungstech. Electron. Commun.* **25** (1971), 337-343. (Bracha-Barak) **47** #2834 65N20
- (with Bitran, Munir) Minimization of ternary logic and complete set of integrable circuits. (German summary) *AEÜ—Arch. Elek. Übertragungstech. Electron. Commun.* **25** (1971), 387-392. (B. Hazeltine) **46** #6942 94A20
- Stružak, T. G. See **Mathematical physics**, **46** #1530
- Strygin, V. V. The stability of quasistationary periodic solutions of evolution equations. (Russian) *Seventh Mathematical Summer School (Kaciveli, 1969)*, pp. 336-350. *Izdanie Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (A. Halanay) **51** #10816 34K15
- Theorems on relatedness for the periodic problem of an autonomous system of ordinary differential equations. (Russian) *Seventh Mathematical Summer School (Kaciveli, 1969)*, pp. 351-365. *Izdanie Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (A. Halanay) **51** #10817 34K15 (34C25)
- Theorems on relatedness for autonomous systems of first order differential equations with retarded argument. (Russian) *Seventh Mathematical Summer School (Kaciveli, 1969)*, pp. 366-381. *Izdanie Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (A. Halanay) **51** #10818 34K15
- Bifurcation of self-oscillations in systems of functional equations. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* **4** (1970), 104-110. (Pavol Marušiak) **53** #8612 34K15 (47H15)
- On the question of the generating solutions of a periodic problem for autonomous systems. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 1 Sb. Statei po Teorii Operatornykh Uravnenii* (1970), 159-174. (Ja. Mamedov (RŽMat **1971** #5 B940)) **54** #13249 34G05
- (with Kolesov, Ju. S.) Self-induced oscillations in three-dimensional automatic control systems. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 2 Cykl Statei po Prikl. Analizu* (1970), 1-6. (From the text) **58** #6507 34C15
- Small periodic solutions of Hamiltonian systems with vector time. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 2 Cykl Statei po Prikl. Analizu* (1970), 27-31. (Author's introduction) **58** #6516 34C25 (58F20)
- A remark on the asymptotic behavior of the eigenvalues of completely continuous operators under small perturbations. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 3* (1971), 132-141. (B. V. Loginov) **46** #7939 47A55 (47B05)
- (with Zatreiko, P. P.; Krasnosel'skii, M. A.) Invariance of rotation principles. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 5(120), 51-57. (J. Kolomý) **47** #908 47H10
- Bifurcations of small self-induced oscillations of singularly perturbed systems of retarded type. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 5 Sb. Statei Teor. Operator. i Differencial. Uravnenii* (1972), 118-141. **56** #9044 34K20
- Application of the Bubnov-Galerkin procedure to the problem of searching for selfoscillations. *Prikl. Mat. Meh.* **37** (1973), 1015-1019. (Russian); translated as *J. Appl. Math. Mech.* **37** (1973), 963-967 (1974). (G. A. Bogar) **51** #6046 34C15 (34A45)
- The bifurcation of quasistationary periodic solutions of differential-difference equations. (Russian) *Differencial'nye Uravnenija* **10** (1974), 1332-1334, 1344. (R. F. Datko) **50** #10493 34K15
- (with Cygankov, A. I.) Application of the collocation method and the difference method to the determination of the autooscillations of differential-difference equations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 691-698, 813. (Tadeusz Dłotko) **52** #16071 65Q05 (34K05)
- Integral manifolds in the problem of a singular and a parametric perturbation of a self-oscillating system. (Russian) *Differential equations and their applications*, No. 2 (Russian), pp. 108-126, 178. *Kuibyshev. Gos. Ped. Inst., Kuibyshev*, 1975. (Author's summary) **58** #28903 34D10 (34C30)
- A theorem of existence of periodic solutions of strongly nonlinear systems of differential equations. (Russian) *Proceedings of a Seminar on Differential Equations*, No. 1 (Russian), pp. 3-11, 151. *Kuibyshev. Gos. Univ., Kuibyshev*, 1975. (Author's summary) **58** #6517 34C25 (34K15)
- (with Žuravleva, E. Ja.) Note on the asymptotics of small self-oscillations of systems of differential equations. *Prikl. Mat. Meh.* **39** (1975), no. 2, 369-374. (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 2, 346-351. (L. Pintér) **55** #3444 34E10 (34C15)
- Systems of differential equations that have a manifold of stationary states and are near the limit of the stability domain. (Russian) *Differential equations (Russian)*, pp. 72-126, 168. *Kuibyshev. Gos. Univ., Kuibyshev*, 1976. (Author's summary) **58** #6550 34D20 (34C30, 58F10)
- (with Sobolev, V. A.) The method of integral manifolds in the problem of stabilization of bodies with the aid of passive shock absorbers. (Russian) *Differential equations (Russian)*, pp. 127-164, 168. *Kuibyshev. Gos. Univ., Kuibyshev*, 1976. (Authors' summary) **58** #8609 70.34 (34D15)
- See also **Differential equations**, **57** #16752 and **Proceedings: Seminar on Differential Equations**, **57** #16755
- Strygina, S. O. A certain method of approximate solution for an equation with a

- completely continuous operator. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 4* (1970), 110-117. **56** #9344 47H15 (65J05)
- Approximate determination of periodic solutions of parabolic equations in a Hilbert space. (Russian) *Differential equations and their applications, No. 2* (Russian), pp. 127-133, 178. *Kuibyshev. Gos. Ped. Inst., Kuibyshev*, 1975. (Author's summary) **58** #28969 34G05
- On the question of Cesari's index. (Russian) *Proceedings of a Seminar on Differential Equations, No. 1* (Russian), pp. 67-78, 154. *Kuibyshev. Gos. Univ., Kuibyshev*, 1975. (Author's summary) **58** #12561 47H15 (58E05)
- The convergence of Galerkin's method for a multipoint boundary value problem. (Russian) *Proceedings of a Seminar on Differential Equations, No. 1* (Russian), pp. 79-86, 155. *Kuibyshev. Gos. Univ., Kuibyshev*, 1975. (Author's summary) **58** #8308 65L10
- (with Rassadina, M. G.) Convergence of the collocation method for nonlinear boundary value problems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 5, 1315-1320, 1336. (Ulrich Eckhardt) **56** #13662 65L10
- Strzelecki, E.** (with Spirason, G. T.) A note on P -ideals. *J. Austral. Math. Soc.* **14** (1972), 304-310. (S. J. Bernau) **47** #3944 46A40 (06A65)
- Banach lattice not weakly projectable. *J. Austral. Math. Soc.* **18** (1974), 76-77. (K. Kutzler) **54** #11024 46A40
- On sequences $\{\epsilon_n \pmod{1}\}$. *Canad. Math. Bull.* **18** (1975), no. 5, 727-738. (I. Danicic) **53** #10734 10F40
- Strzodka, Klaus** See Stoyan, Dietrich; et al., **51** #14946
- Stuart, Alan** (with Kendall, Maurice G.) ★The advanced theory of statistics. Vol. 2. Inference and relationship. Third edition. *Hafner Publishing Co., New York*, 1973. x + 723 pp. (Editors) **57** #14198 62-02
- (with Kendall, Maurice G.) ★The advanced theory of statistics. Vol. 3. Design and analysis, and time-series. Third edition. *Hafner Press [Macmillan Publishing Co., Inc.]*, New York, 1976. x + 585 pp. ISBN 0-02-847640-9 (Editors) **57** #7819 62-02
- (with Kendall, Maurice G.) ★The advanced theory of statistics. Vol. 1. Distribution theory. Fourth edition. *Macmillan Publishing Co., Inc., New York*, 1977. xii + 472 pp. ISBN 0-02-847630-1 (Editors) **57** #7820 62-02
- See also Statistical papers of George Udny Yule, **50** #12627 and Smith, T. M. F., **56** #4005
- Stuart, Allan E. G.** (with Hiley, Basil J.) Phase space, fibre bundles and current algebras. *Internat. J. Theoret. Phys.* **4** (1971), 247-265. (Authors' summary) **51** #14773 81.22 (81.55)
- (with Baracca, A.; Bohm, David; Hiley, Basil J.) On some new notions concerning locality and nonlocality in the quantum theory. (Italian and Russian summaries) *Nuovo Cimento B* (11) **28** (1975), no. 2, 453-466. (Koichiro Matsuno) **52** #9839 81.00
- (with Barrett, Gordon W.; Rose, Larry J.) Minimal differential equations for the Kilmister-Yang model of gravity. *Phys. Lett. A* **60** (1977), no. 4, 278-280. (Authors' summary) **57** #11584 83.35
- (with Rose, Larry J.; Barrett, Gordon W.) Some conformally-flat space-times of a divergence-free Riemann tensor. *J. Phys. A* **11** (1978), no. 4, 709-713. (H. D. Pande) **57** #15256 83.53
- Stuart, Charles A.** On the Navier-Stokes equations. *Quart. J. Math. Oxford Ser. (2)* **22** (1971), 309-319. (D. R. Smith) **45** #7315 35Q10
- Bifurcation theory for equations with nonlocal potentials. *Conference on the Theory of Ordinary and Partial Differential Equations* (Univ. Dundee, Dundee, 1972), pp. 341-346. *Lecture Notes in Math., Vol. 280, Springer, Berlin*, 1972. (B. Hellwig) **56** #6026 34C99 (58E99)
- The fixed point index of a differentiable $(\beta)k$ -set contraction. *J. London Math. Soc. (2)* **5** (1972), 691-696. (S. Fučík) **47** #907 47H10
- Self-adjoint square roots of positive self-adjoint bounded linear operators. *Proc. Edinburgh Math. Soc. (2)* **18** (1972/73), 77-79. (T. Andô) **47** #5639 47A60
- (with Edmunds, David Eric) A priori estimates and nonlinear parabolic equations of arbitrary order. *Proc. Roy. Soc. Edinburgh Sect. A* **69**, no. 4, 287-293 (1972). (V. G. Sigillito) **49** #9423 35K60
- (with Edmunds, David Eric; Potter, A. J. B.) Non-compact positive operators. *Proc. Roy. Soc. London Ser. A* **328** (1972), no. 1572, 67-81. (Authors' summary) **58** #30581 47H99 (47B55, 47H10)
- Existence theory for the Hartree equation. *Arch. Rational Mech. Anal.* **51** (1973), 60-69. (I. K. Marek) **49** #11998 81.47
- (with Toland, John F.) The fixed point index of a linear k -set contraction. *J. London Math. Soc. (2)* **6** (1973), 317-320. (P. M. Fitzpatrick) **47** #2453 47H10 (47A50)
- Some bifurcation theory for k -set contractions. *Proc. London Math. Soc. (3)* **27** (1973), 531-550. (R. Nussbaum) **48** #12178 47H10 (47E05)
- The measure of non-compactness of some linear integral operators. *Proc. Roy. Soc. Edinburgh Sect. A* **71**, part 2, 167-179 (1973). (G. O. Okikiolu) **48** #4845 47G05
- Solutions of large norm for non-linear Sturm-Liouville problems. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 129-139. (P. Waltman) **47** #7112 34B25
- (with Toland, John F.) A global result applicable to nonlinear Steklov problems. *J. Differential Equations* **15** (1974), 247-268. (J. W. Thomas) **50** #1072 47H15
- Concave solutions of singular non-linear differential equations. *Math. Z.* **136** (1974), 117-135. (S. Fučík) **49** #5969 47H15 (34B15)
- Existence theorems for a class of non-linear integral equations. *Math. Z.* **137** (1974), 49-66. (S. Fučík) **50** #914 45G05 (35I60)
- Set-contractions in the L^2 -theory of differential equations. *Proceedings of the Conference on Problems in Nonlinear Functional Analysis* (Univ. Bonn, Bonn, 1975), pp. 43-49. *Gesellsch. Math. Datenverarbeitung, St. Augustin*, 1975. (K. Goebel) **55** #8503 34G05 (47H15)
- Global properties of components of solutions of non-linear second order ordinary differential equations on the half-line. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* **2** (1975), no. 2, 265-286. (Richard Brown) **52** #917 34C99 (47E05)
- Integral equations with decreasing nonlinearities and applications. *J. Differential Equations* **18** (1975), 202-217. (J. W. Neuberger) **52** #1219 45G99
- An example in nonlinear functional analysis: the Hartree equation. *J. Math. Anal. Appl.* **49** (1975), 725-733. (Jürgen Batt) **52** #11685 47H15 (81.34)
- Spectral theory of rotating chains. *Proc. Roy. Soc. Edinburgh Sect. A* **73** (1975), 199-214. (William Margulies) **52** #9736 70.35
- Steadily rotating chains. *Applications of methods of functional analysis to probability mechanics* (Joint Sympos., IUTAM/IMU, Marseille, 1975), pp. 490-499. *Lecture Notes in Math.*, 503. *Springer, Berlin*, 1976. (From the introduction) **58** #32186 70.35
- Boundary-value problems with discontinuous non-linearities. *Ordinary and differential equations* (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976), pp. 47. *Lecture Notes in Math.*, Vol. 564. *Springer, Berlin*, 1976. (Editors) **58** #28791
- Differential equations with discontinuous non-linearities. *Arch. Rational Anal.* **63** (1976/77), no. 1, 59-75. (RZMat 1977 #9 B278) **58** #1355 34B15
- The principal component of solutions for nonlinear eigenvalue problems. (I summary) *Boll. Un. Mat. Ital. B* (5) **13** (1976), no. 3, 726-742. (Norman D. 55 #3895 47H15 (58E99)
- (with Nussbaum, Roger D.) A singular bifurcation problem. *J. London Math. (2)* **14** (1976), no. 1, 31-38. (Theodore Laetsch) **55** #755 34B15
- (with Raveché, Harold J.) Bifurcation of solutions with crystalline symmetry. *Mathematical Phys.* **17** (1976), no. 11, 1949-1953. (Norman Dancer) **54** #6812
- Existence and approximation of solutions of non-linear elliptic equations. *Math. 147* (1976), no. 1, 53-63. (S. N. Kružkov) **53** #8654 35J60 (35A35)
- The number of solutions of boundary value problems with discontinuous non-linearities. *Arch. Rational Mech. Anal.* **66** (1977), no. 3, 225-235. (Theodore Laetsch) **57** #6593 34B15
- Des bifurcations sans valeurs propres. (English summary) *C. R. Acad. Sci. Sér. A-B* **284** (1977), no. 21, A1373-A1375. (Author's summary) **56** #1156 34C99
- Stuart, Donald M., Jr.** (with Leondes, Cornelius T.) Stochastic differential games complexity-constrained strategies. *IEEE Trans. Automatic Control* **AC-17** (1972), 121-124. (Authors' summary) **55** #10126 93E05
- Stuart, E.** (with Cohen, A. M.; Cutts, J. F.; Fielder, R.; Jones, D. E.; Ribbar) ★Numerical analysis. *McGraw-Hill, London-New York*, 1973. xiii + 341 pp. (Editors) **50** #11697 65-01
- (with Cohen, A. M.; Cutts, J. F.; Fielder, R.; Jones, D. E.; Ribbans, J.) ★Numerical analysis. *Halsted Press [John Wiley and Sons], New York*, 1973. xiii + 341 pp. (Editors) **50** #11698 65-01
- Stuart, G. F.** (with Barrodale, Ian) A new variant of Gaussian elimination. *J. Inst. Appl. Math.* **19** (1977), no. 1, 39-47. (F. Szidarovszky) **55** #13749 65F05
- See also Proceedings: Manitoba Conference on Numerical Mathematics, **50** #11697
- Stuart, J. T.** (with Stewartson, Keith) A non-linear instability theory for a wave system plane Poiseuille flow. *J. Fluid Mech.* **48** (1971), 529-545. (R. Ballabh) **46** #76.35
- Partial differential equations and nonlinear hydrodynamic stability. *Dynamical systems* (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974), Vol. 277-282. *Academic Press, New York*, 1976. (From the introduction) **58** #32186 76.35
- Bifurcation theory in non-linear hydrodynamic stability. *Applications of bifurcation theory* (Proc. Advanced Sem., Univ. Wisconsin, Madison, Wis., 1976), pp. 127-147. *Math. Res. Center, No. 38, Academic Press, New York*, 1977. (Salvatore Rionero) **58** #14299 76.35
- Stubberud, Allen R.** (with Seal, C. E.) Comments on "On optimal terminal control". *Trans. Automatic Control* **AC-15** (1970), 498. (Authors' summary) **45** #1650 93C15
- (with Seal, C. E.) Final value control systems. *Advances in control systems: theory and applications*, Vol. 8, pp. 23-52. *Academic Press, New York*, 1971. **56** #14299 93C15
- (with Simon, Kurt) Singular problems in linear estimation and control. *Advances in control systems: theory and applications*, Vol. 8, pp. 53-88. *Academic Press, New York*, 1971. (V. Komkov) **56** #15059 93E10
- (with Crane, Robert N.) Closed loop formulations of optimal control problems of minimum sensitivity. *Control and dynamic systems: advances in theory and applications*, Vol. 9, pp. 375-505. *Academic Press, New York*, 1973. (Editors) **57** #18986 49B50
- (with Westphal, L. C.) The associated maximization problem for separable growth. *Math. Programming* **5** (1973), 374-380. (G. Owen) **48** #13283 90D05
- (with Sugar, Ronald D.) Decomposition technique for minimum time trajectory optimization. *J. Optimization Theory Appl.* **14** (1974), 233-250. (Authors' summary) **55** #49A99
- (with Westphal, L. C.) On the computation of solutions of certain dynamic growth problems. *Internat. J. Control* **21** (1975), 193-201. (Norman P. Coleman, Jr.) **53** #15401 90D20 (90C47)
- (with Martin, W. C.) The innovations process with applications to identification. *Control and dynamic systems, Advances in theory and applications*, Vol. 12, pp. 173-188. *Academic Press, New York*, 1976. (Lennart Ljung) **53** #5127 93E10
- (with Ohap, R. F.) Adaptive minimum variance estimation in discrete-time systems. *Control and dynamic systems, Advances in theory and applications*, Vol. 12, pp. 583-624. *Academic Press, New York*, 1976. (Lennart Ljung) **53** #5128 93E10
- (with Martin, W. C.) An uncoupling method for linear system identification. *Trans. Automatic Control* **AC-21** (1976), no. 4, 506-509. (Andor Dobó) **54** #493E10
- Stubbs, Derek F.** (with Good, Phillip I.) Connectivity in random networks. *Bull. Math. Biol.* **38** (1976), no. 3, 295-304. (Robert J. Mulholland) **58** #9395 92A05
- Stubbs, Patricia A.** (with Amir-Moéz, Ali R.) Menelaus theorem in a vector space. *J. Epsilon J.* **6**, no. 4, 211-214 (1976). (Peter M. Gibson) **54** #2676 15A03
- Stuchlik, Z.** (with Bičák, J.; Šob, M.) Scalar fields around a charged rotating black hole. *Czechoslovak J. Phys.* **28B** (1978), no. 2, 121-124. (Hsin-Yang Yeh) **57** #1883.53
- Stuck, B. W.** On some mathematical aspects of deterministic classical electrodynamics. *Mathematical Phys.* **45** (1974), 383-393. (B. K. Datta) **52** #7329 78.58
- Distinguishing stable probability measures. I. Discrete time. *Bell System Tech. J.* **55** (1976), no. 8, 1125-1182. (Rashid Ahmad) **57** #14228a 62F05 (60J30, 62M99)
- Distinguishing stable probability measures. II. Continuous time. *Bell System Tech. J.* **55** (1976), no. 8, 1183-1196. (Rashid Ahmad) **57** #14228b 62F05 (60J30, 62M99)
- (with Chambers, John M.; Mallows, Colin L.) A method for simulating

- variables. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 340-344. (Authors' summary) **54** #4059 65C10 (62E99)
- on G. See **Special section on testing**, **54** #4163
- See **Symposium: Information Theory**, **50** #9416
- Jürgen (with Vogel, Wolfgang) Über die h_1 -Bedingung in der idealtheoretischen Lixitätstheorie. *Wiss. Beiträge Martin-Luther-Univ. Halle-Wittenberg* **M3** (1971), (K. Kiyek) **45** #8650 13F20
- ith Vogel, Wolfgang) Ein Korrekturglied in der Multiplizitätstheorie von D. G. zott und Anwendungen. *Monatsh. Math.* **76** (1972), 264-271. (Chr. U. Jensen) **305** 13H15 (14A05)
- ith Vogel, Wolfgang) Eine Verallgemeinerung der Cohen-Macaulay Ringe und dungen auf ein Problem der Multiplizitätstheorie. *J. Math. Kyoto Univ.* **13** 513-528. (P. Samuel) **49** #285 13H15
- Eine Bemerkung über die höheren Hilbertkoeffizienten. *Beiträge zur algebraischen rie*, pp. 85-100. *Veröffentlichungen Univ. Innsbruck*, No. 91, *Math. Studien*, No. 1, *Verlag, Innsbruck*, 1974. (José M. Aroca) **54** #2640 13C15 (14E15)
- othendieck-Gruppen abelscher Kategorien und Multiplizitäten. *Math. Nachr.* **62** 5-26. (Manfred Herrmann) **50** #7149 14F15 (13H15, 14A25)
- ith Vogel, Wolfgang) Über das Amsterdamer Programm von W. Gröbner und aum Varietäten. *Monatsh. Math.* **78** (1974), 433-445. (Editors) **58** #16707 13H99
- ith Renschuch, Bodo; Vogel, Wolfgang) Weitere Bemerkungen zu einem me der Schnitttheorie und über ein Mass von A. Seidenberg für die Imperfekteit. *bra* **37** (1975), no. 3, 447-471. (H. Kurke) **54** #12757 13H15 (14B15)
- See also **Studien zur Algebra und ihre Anwendungen**, **48** #8172
- Stephen (with Helton, Jon C.) Numerical approximation of product integrals. *Anal. Appl.* **56** (1976), no. 2, 410-437. (Gheorghe Coman) **55** #1708 65D30
- Zwei Sätze über die lineare Realisierbarkeit endlicher Automaten.
- atentheorie und formale Sprachen (Bericht Tagung, Math. Forschungsinst., olfach, 1969), pp. 97-109. *Bibliographisches Inst., Mannheim*, 1970. (W. Wechler) **3523** 94A30
- ith Vollmar, J.) Ein Verfahren zur exakten Auswertung von äufigkeitstafeln. (English summary) *Biometrische Z.* **17** (1975), no. 3, 147-162. (im Krauth) **52** #15743 62-04
- William J.) Optimal designs and spline regression. *Optimizing methods in statistics Sympos.*, *Ohio State Univ.*, Columbus, Ohio, 1971, pp. 63-76. *Academic Press*, ork, 1971. (Vedula N. Murty) **52** #4541 62K05
- iving's theorem and optimal designs for quadratic loss. *Ann. Math. Statist.* **42** 1613-1621. (J. Wolfowitz) **49** #6517 62K05
- ith Murty, V. N.) Optimal designs for estimating the slope of a polynomial ion. *J. Amer. Statist. Assoc.* **67** (1972), 869-873. (Ivar Petersen) **50** #11657
- ith Karlin, Samuel) ★Чебышевские системы и их применение в анализе и тике. (Russian) [Chebyshev systems and their applications in analysis and statistics] ated from the English by V. A. Egorov, V. B. Melas and E. V. Sedunov. Edited by Emakov. *Izdat. "Nauka"*, Moscow, 1976. 568 pp. (Editors) **56** #920 41-02
- ith Kiefer, Jack C.) Optimal designs for large degree polynomial regression. *Ann. Math. Statist.* **4** (1976), no. 6, 1113-1123. (Valery Fedorov) **54** #11676 62K05
- ith Tsay, Jia Yeong) Remez's procedure for finding optimal designs. *Ann. Statist.* **5**, no. 6, 1271-1279. (J. Kiefer) **54** #6395 62K05
- Optimal designs for integrated variance in polynomial regression. *Statistical n theory and related topics. II (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976)*, 142-140. *Academic Press*, New York, 1977. (B. L. Granovskii) **56** #1614 62K05
- ith Spruill, Carl) Optimum designs when the observations are second-order ses. *J. Multivariate Anal.* **8** (1978), no. 2, 153-172. (J. Kiefer) **57** #14289
- See also **Fedorov, V. V.**, **53** #6916
- (with Neuhold, E. J.) The use of Hoare's method of program verification for the ort algorithm. (German summary) *Computing* **18** (1977), no. 4, 281-293. (Giorgio **56** #13753 68A05 (68A10)
- u. P. The theory of infinitely divisible laws in the class $B. I.$ (Russian. English ary) *Teor. Veroyatnost. i Mat. Statist.* No. 2 (1970), 183-192. (M. Loève) **713** 60E05
- ith Orban, Ju. M.) Airy and Fresnel type functions as limit laws for convolutions ctions of bounded variation. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 323-331, 428. (Langebartel) **48** #11901 42A72
- ith Doboš, V. I.) Randomization of the theory of positive definiteness of higher orms. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, 873-876, 959. (Authors' summary) **58** #5532 10E25
- ith Doboš, V. I.) The modelling of quasi-probability schemes. (Russian. English ary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 8, 680-683, 763. (Authors' ary) **57** #14325 65C05
- ith Peten'ko, V. O.) An analogue of a two-dimensional local limit theorem. (an) *Ukrain. Mat. Ž.* **29** (1977), no. 4, 541-549, 565. (J. G. Wendel) **56** #9649 (60J60)
- Ivan Non-existence of Cartesian groups of order $2p^m$. *Comment. Math. Univ. ae* **13** (1972), 721-725. (G. Pickert) **47** #7589 50D35
- See **Geometrie**, **50** #8251 and **Festschrift: Weber, Heinrich**, **50** #12626
- Jan A comparison of the static optimization methods of Powell (two methods) angwill. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **17** 503-512. (I. Maruściac) **47** #10076 90C30
- pplication of selected static optimization methods to certain identification and l problems. (Polish. Russian and English summaries) *Arch. Automat. i Telemech.* **75**, no. 3, 379-389. (Author's summary) **57** #5255 93B30
- erg de Breidenbach, E. C. G. (with Poncet, J.; Scheurer, P. B.) Sur une question cul de variations sous contraintes. (English summary) *Helv. Phys. Acta* **44** (1971), 29. (J. Adler) **50** #12006 80A9
- ith Chevalier, Jean) On a covariant expression of energy-momentum in a istic theory of gravitation. *Helv. Phys. Acta* **45** (1972/73), 587-592. (M. Carmeli) **9278** 83.35
- (with Scheurer, Paul B.) ★Thermocinétique phénoménologique galiléenne. Lehrbücher und Monographien aus dem Gebiete der exakten Wissenschaften, Physikalische Reihe, Band 6. *Birkhäuser Verlag, Basel-Stuttgart*, 1974. 253 pp. (M. Fabrizio) **58** #25435 80.53
- Stuewer, Roger H. ★The Compton effect. Turning point in physics. *Science History Publications*, New York, 1975. xii + 367 pp. (Editors) **52** #16315 81.01
- See also **Historical and philosophical perspectives of science**, **50** #6717
- Stuhler, Ulrich Unipotente und nilpotente Klassen in einfachen Gruppen und Liealgebren vom Typ G_2 . *Nederl. Akad. Wetensch. Proc. Ser. A* **74**=*Indag. Math.* **33** (1971), 365-378. (E. M. Luks) **46** #1866 17B45
- (with Kallmann, A.; Kneser, Martin) Invariante Untermoduln quadratischer Moduln. *J. Reine Angew. Math.* **258** (1973), 51-54. (Manfred Knebusch) **49** #340 15A63
- Eine Bemerkung zur Reduktionstheorie quadratischer Formen. *Arch. Math. (Basel)* **27** (1976), no. 6, 604-610. (Carl Riehm) **54** #12666 10E25
- Vektorbündel auf Kurven mit Singularitäten. *Math. Ann.* **220** (1976), no. 2, 137-142. (S. Ramanan) **54** #316 14F05
- Zur Frage der endlichen Präsentierbarkeit gewisser arithmetischer Gruppen im Funktionenkörperfall. *Math. Ann.* **224** (1976), no. 3, 217-232. (J. E. Humphreys) **54** #7649 20G30 (14F05)
- Zur Reduktionstheorie der positiven quadratischen Formen. II. *Arch. Math. (Basel)* **28** (1977), no. 6, 611-619. (Carl Riehm) **56** #5441 10E25 (18F25)
- (with Lange, Herbert) Vektorbündel auf Kurven und Darstellungen der algebraischen Fundamentalgruppe. *Math. Z.* **156** (1977), no. 1, 73-83. (Knud Lønsted) **57** #12517 14F05
- (with Lange, Herbert) Divisoren von rationalen Schnitten in torsionsfreien Garben und ein Satz von Tango. *Arch. Math. (Basel)* **30** (1978), no. 2, 146-152. (Knud Lønsted) **58** #27970 14C20 (14F05)
- Stuhlmann-Laeisz, Rainer See **Tarski, Alfred**, **55** #7716
- Stuit, V. A. See **Computer technology and questions of cybernetics**, **47** #9874
- Stukalo, O. S. (with Ohrimenko, M. G.; Sergienko, I. V.) Efficient organization of the computations in the solution of systems of linear equations. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1978**, no. 1, 67-70, 95. (L. B. Rall) **58** #13655 65F10 (65-04)
- See also **Theory of languages and methods of construction of programming systems**, **48** #7682
- Štukař, V. L. The properties of global and general local triples. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 3, 27-31, 139. (W. T. van Est) **52** #5868 22E05
- Generalized Frattini subalgebras of a Lie algebra. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 2, 5-8, 139. (G. P. Kukin) **54** #364 17B05
- Homogeneous q -spaces of the group of motions of the Euclidean space E_q . (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1976**, no. 1, 81-83, 96. (V. Oproiu) **53** #9265 57E25 (53C30)
- Subtriples and quotient triples of a regular global triple. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 4, 21-26, 140. (I. L. Kantor) **58** #12841 53C30
- Štulajter, František The linear filtration and prediction of indirectly observed random processes. *Kybernetika (Prague)* **12** (1976), no. 5, 316-327. (R. S. Bucy) **56** #5012 93E10
- Štůl, Jiří On an abstract mathematical base of algorithms for a determination of complex lists of parts. (Czech and Russian summaries) *Information Processing Machines* **17** (1974), 221-260. (Petre Preoteasa) **56** #2309 90B25 (68A10)
- On an abstract mathematical base of algorithms for determination of complex lists of parts. II. (Czech and Russian summaries) *Information Processing Machines* **18** (1975), 121-159. (Petre Preoteasa) **56** #2310 90B25 (68A10)
- Stuller, John A. Generalized likelihood signal resolution. *IEEE Trans. Information Theory* **IT-21** (1975), 276-282. (Carl W. Helstrom) **53** #9472 62F05
- (with Kurz, B.) Two-dimensional Markov representations of sampled images. *IEEE Trans. Comm. COM-24* (1976), no. 10, 1148-1152. (Authors' summary) **57** #5428 94A15 (68A45)
- Stuloff, Nikolai Die Mathematik in philosophischer Kritik zu Beginn des 19. Jahrhunderts. *Actes XII^e Congrès Internat. d'Histoire des Sciences (Paris, 1968), Tome IV: Histoire des Mathématiques et de la Mécanique*, pp. 171-174. *Librairie Sci. et Techn. A. Blanchard, Paris*, 1971. (J. S. Joel) **55** #5345 01A55
- Stummel, Friedrich ★Rand- und Eigenwertaufgaben in Sobolewschen Räumen. *Lecture Notes in Mathematics*, Vol. 102. *Springer-Verlag, Berlin-New York*, 1969. viii + 386 pp. (Editors) **57** #3845 46E35
- Diskrete Konvergenz linearer Operatoren. I. *Math. Ann.* **190** (1970/71), 45-92. (W. V. Petryshyn) **45** #959 65J05
- Diskrete Konvergenz linearer Operatoren. II. *Math. Z.* **120** (1971), 231-264. (W. V. Petryshyn) **45** #960 47A55 (65J05)
- Singular perturbations of elliptic sesquilinear forms. *Conference on the Theory of Ordinary and Partial Differential Equations (Univ. Dundee, Dundee, 1972)*, pp. 155-180. *Lecture Notes in Math.*, Vol. 280, *Springer, Berlin*, 1972. (W. M. Greenlee) **55** #822 35B25 (35J35, 47A99)
- Diskrete Konvergenz linearer Operatoren. III. *Linear operators and approximation (Proc. Conf., Oberwolfach, 1971)*, pp. 196-216. *Internat. Ser. Numer. Math.*, Vol. 20, *Birkhäuser, Basel*, 1972. (W. V. Petryshyn) **53** #14180 47A50 (65J05)
- ★Approximation methods in analysis. *Lectures delivered during the Spring Semester, 1973. Lecture Notes Series*, No. 35. *Matematisk Institut, Aarhus Universitet, Aarhus*, 1973. v + 114 pp. (not consecutively paged) (From the preface) **57** #7941 65Dxx (41-02)
- (with Reinhardt, Hans-Jürgen) Discrete convergence of continuous mappings in metric spaces. *Numerische, insbesondere approximatiotheoretische Behandlung von Funktionalgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1972)*, pp. 218-242. *Lecture Notes in Math.*, Vol. 333, *Springer, Berlin*, 1973. (V. Pereyra) **55** #4667 65J05
- Discrete convergence of mappings. *Topics in numerical analysis (Proc. Roy. Irish Acad. Conf., University Coll., Dublin, 1972)*, pp. 285-310. *Academic Press, London*, 1973.

- (J. S. Shipman) **49** #11848 65J05 (65Q05)
- Difference methods for linear initial value problems. *Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 123-135. *Lecture Notes in Math.*, Vol. 395, Springer, Berlin, 1974. (C. Bardos) **51** #7308 (EA 52) 65M10
- Perturbations of non-linear integral operators. *Proc. Roy. Soc. Edinburgh Sect. A* **74** (1974/75), 55-70 (1976). (J. W. Neuberger) **56** #9210 45L05
- Biconvergence, bistability and consistency of one-step methods for the numerical solution of initial value problems in ordinary differential equations. *Topics in numerical analysis, II (Proc. Roy. Irish Acad. Conf., Univ. College, Dublin, 1974)*, pp. 197-211. Academic Press, London, 1975. (H. J. Stetter) **54** #9089 65L05
- Discretely uniform approximation of continuous functions. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, II. *J. Approximation Theory* **13** (1975), 178-191. (J. S. Shipman) **54** #828 41A65
- Perturbation theory for Sobolev spaces. *Proc. Roy. Soc. Edinburgh Sect. A* **73** (1975), 5-49. (D. Pascali) **53** #14182 47A55
- Perturbation of domains in elliptic boundary value problems. *Applications of methods of functional analysis to problems in mechanics (Joint Sympos., IUTAM/IMU, Marseille, 1975)*, pp. 110-136. *Lecture Notes in Math.*, 503. Springer, Berlin, 1976. (J. Wloka (Zbl 355 #65074)) **58** #30504 47F05 (35J99, 65N99)
- Weak stability and weak discrete convergence of continuous mappings. *Numer. Math.* **26** (1976), no. 3, 301-315. (Henning Esser) **55** #9521 65J05
- Stability and discrete convergence of differentiable mappings. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 1, 63-96. (H. Amann) **53** #14904 65J05
- Approximation methods for eigenvalue problems in elliptic differential equations. *Numerik und Anwendungen von Eigenwertaufgaben und Verzweigungsproblemen (Tagung, Math. Forschungsinst., Oberwolfach, 1976)*, pp. 133-165. *Internat. Schriftenreihe Numer. Math.*, Vol. 38, Birkhäuser, Basel, 1977. (Klaus Glashoff) **58** #31901 65N25 (65J05)
- Remarks concerning the patch test for nonconforming finite elements. *Z. Angew. Math. Mech.* **58** (1978), no. 6, 124-126. (Author's summary) **58** #19234 65N30
- See also **Ordinary and partial differential equations**, **50** #10391
- Stump, Daniel R.** (with Huang, Kerson) Mixing of internal and space-time symmetries. *Phys. Rev. Lett.* **37** (1976), no. 9, 545-548. (S. Deser) **53** #15209 81S3
- Local version of the Atiyah-Singer index theorem for vector fields. *Phys. Lett. B* **76** (1978), no. 3, 307-309. (From the introduction) **58** #20049 81S7 (57D25, 58G10)
- Stumpe, D.** (with Manteuffel, K.) ★Spieltheorie. Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und Landwirte, Band 21/1. B. G. Teubner Verlagsgesellschaft, Leipzig, 1977. 60 pp. (G. A. Heuer) **58** #9110 90-01 (90Dxx)
- Stumpf, Botho** See **Engelhard, Rainer**; et al., **53** #5618
- Stumpf, G.** (with Schnorr, Claus-Peter) A characterization of complexity sequences. *Z. Math. Logik Grundlagen Math.* **21** (1975), 47-56. (John T. Gill) **51** #12027 68A20 (02F10)
- Stumpf, Harald** (with Scheerer, K.; Mürtl, H. G.) Symmetry conditions on nonlinear spinor field functionals. *Z. Naturforsch.* **25a** (1970), 1556-1561. (Robert L. Warnock) **53** #2190 81A6
- (with Engeser, W.; Illig, K.) Functional quantum theory of scattering processes. III. *Z. Naturforsch.* **26a** (1971), 1723-1729. (R. C. Gilbert) **46** #6762 81A7
- Functional quantum theory of scattering processes. IV. *Z. Naturforsch.* **26a** (1971), 1730-1739. (R. C. Gilbert) **46** #6763 81A7
- On the calculation of nonlinear spinor field functionals. *Z. Naturforsch.* **26a** (1971), no. 4, 623-630. (Author's summary) **52** #16396 81A7
- On the functional definition and calculation of global observables in nonlinear spinor field quantum theory. *Z. Naturforsch.* **27a** (1972), 1058-1072. (Kishin Mariwalla) **49** #8553 81A7
- (with Englert, D.) On the normalization of meson eigenstates in functional quantum theory of the nonlinear spinor field. *Z. Naturforsch.* **29a** (1974), 376-384. (Corneliu Eftimiu) **53** #4810 81A7
- On the calculation of nonlinear spinor field functionals. II. *Z. Naturforsch.* **29a** (1974), 549-555. (Author's summary) **52** #16397 81A7
- Scalarproducts of spinor field functionals and state representations in nonlinear spinor field quantum theory. *Z. Naturforsch.* **30a** (1975), no. 6/7, 708-720. (Corneliu Eftimiu) **54** #2002 81A7
- (with Scheerer, K.) On the construction of relativistic representation spaces in functional quantum theory of the nonlinear spinor field. *Z. Naturforsch.* **30a** (1975), no. 11, 1361-1371. (Authors' summary) **57** #8709 81A7
- Funktionale Quantentheorie. *Methoden und Verfahren der mathematischen Physik*, Band 16, pp. 3-28. *Bibliographisches Inst., Mannheim*, 1976. (Robert L. Warnock) **54** #2003 81A7
- On the calculation of nonlinear spinor field functionals. III. *Z. Naturforsch.* **31a** (1976), no. 6, 528-539. (Author's summary) **53** #12373 81A7
- See also **Elementary particle physics: multiparticle aspects**, **48** #1597
- Stumpf, Helmut** Zum Eigenwertschrankenverfahren nach Trefftz-Fichera. *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* **16** (1971), 1033-1047. (W. Prager) **47** #6187 73G5
- Lower bounds to the frequencies of continuous elastic systems. *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Muskhelishvili) (Russian)*, pp. 667-676. *Izdat. "Nauka", Moscow*, 1972. (L. E. Payne) **52** #9767 73G5
- Zur numerischen Berechnung zweiseitiger Schranken für beliebige vektorielle und tensorielle Feldgrößen elastischer Eigenschwingungszustände. (English and Russian summaries) *Z. Angew. Math. Mech.* **52** (1972), 37-44. (H. J. Weinitschke) **46** #4842 73G5
- Fehlerabschätzung bei der angenäherten Berechnung von Eigenwerten und Eigenzustandsgrößen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), T82-T84. (Z. Kączkowski) **52** #12487 73G5
- Dual extremum principles and error bounds in the theory of plates with large deflections. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Sios.)* **27** (1975), no. 3, 485-496. (W. Prager) **54** #1818 73A9
- Generating functionals and extremum principles in nonlinear elasticity with applications to nonlinear plate and shallow shell theory. *Applications of methods of functional analysis to problems in mechanics (Joint Sympos., IUTAM/IMU, Ma*
- 1975)*, pp. 500-510. *Lecture Notes in Math.*, 503. Springer, Berlin, 1976. (From introduction) **58** #32285 73A9
- Die dualen Variationsprinzipien mit Extremaleigenschaft in der nichtlinearen Theorie flacher Schalen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math.* **56** (1976), no. 3, T153-T155. (P. Villaggio) **54** #1819 73A9
- Zur Dualität in der nichtlinearen Elastizitätstheorie. *Z. Angew. Math. Mech.* (1977), no. 5, T157-T159. (J. P. Boehler) **56** #10327 73G5
- Zur Berechnung von Fehlerschranken in der nichtlinearen Elastomechanik. *Angew. Math. Mech.* **58** (1978), no. 6, 232-234. (R. Kodnár) **58** #19643 73G5
- Stupakov, M. I.** See **Calculation of three-dimensional constructions**, **48** #7754
- Stuparyk, J.** (with Burkowski, Forbes J.) The numerical solution of initial value problems with state dependent retardations. *Proceedings of the Fourth Southeastern Conference Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, 1973)*, pp. 497-514. *Utilitas Math., Winnipeg, Man.*, 1973. (W. H. Enright) **50** #6165L10
- Stupelis, L.** (with Ladyženskaja, O. A.) Boundary value problems for equations of mixed type. (Russian) Boundary value problems of mathematical physics, 7. *Trudy Mat. Steklov.* **116** (1971), 101-136, 235, 237. (T. Kal'menov) **50** #13909 35M05
- Boundary value problems for elliptic-hyperbolic equations. (Russian) Boundary value problems of mathematical physics, 8. *Trudy Mat. Inst. Steklov.* **125** (1971), 211-229, 235. (S. A. Tersenov) **50** #789 35M05
- Solvability of the first boundary value problem in $W_p^2(\Omega)$ for a certain class of integrodifferential equations. (Russian. Lithuanian and English summaries) *Lithuanian Math. J.* **14** (1974), no. 3, 187-193, 243. (D. K. Gvazava) **52** #14624 35J25 (45L05)
- Initial-boundary value problems for equations of mixed type. (Russian) Boundary value problems of mathematical physics, 9. *Trudy Mat. Inst. Steklov.* **127** (1971), 115-145, 155. (V. N. Vragov) **58** #29401 35M05
- A nonstationary problem of magnetohydrodynamics. (Russian. English summary) Boundary value problems of mathematical physics, and related questions in the theory of functions, 8. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* (1975), 175-217, 220. (V. Ju. Ljapidevskii) **57** #4816 76J35
- The solvability of the initial-boundary value problem of magnetohydrodynamics. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 10. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **69** (1977), 219-239, 277-278. (From the introduction) **58** #17597 35Q10 (76J35)
- See also **Boundary value problems of mathematical physics**, **50** #2656 and **Boundary value problems of mathematical physics**, **51** #6096
- Stupina, I. D.** The force of certain δ -operations. (Russian) *Volgograd. Gos. Ped. Inst. Učen. Zap. No. 23* (1969), 79-104. (D. Kurepa) **45** #73 04A15 (54H05)
- The problem of finding the points of total power of $(v)R$ -operations. (Russian) *Volgograd. Gos. Ped. Inst. Učen. Zap. No. 23* (1969), 128-136. (V. Amstislavskii (RZ 1970 #8 A48)) **52** #7902 02K30
- A comparison of the strength of set-theoretic operations and that of the branch hypothesis. (Russian) *Dissertationes Math. (Rozprawy Mat.)* **99** (1973), 85 pp. (D. Čudnovskii) **52** #5426 04A15
- Stupjalis, L. I.** See **Stupelis, L.**
- szemplińska-Stupnicka, Wanda** See **Szemplińska-Stupnicka, Wanda**
- Stupnikov, V. M.** Expansion of the eigenfunctions of a difference operator with unbounded operator coefficients. (Russian) *Functional analysis, No. 7 (Russian)*, pp. 125-147. *Ul'janovsk. Gos. Ped. Inst., Ul'janovsk*, 1976. (From the introduction) **58** #30447B44 (39A10)
- Stupočenko, E. V.** The possible generalization of the thermodynamics of irreversible processes to certain essentially nonequilibrium systems. (Russian) *Vestnik Moskovsk. Univ. Ser. III Fiz. Astronom.* **18** (1977), no. 6, 100-107. (Author's summary) **58** #18235
- Sturany, Klaus** Einige Konvergenzprobleme bei Folgen von Martingalen. *Monatsh. Math. Phys.* **76** (1972), 55-65. (S. Orey) **48** #7362 60G45
- Šturf, Ján** A model for retrieval systems and some mathematical problems behind it. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 484-492. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (F. Nishida) **57** #4715 68A50
- Sture, K.** (with Nordholm, J.; Zwanzig, Robert) Strategies for fluctuation renormalization in nonlinear transport theory. *J. Statist. Phys.* **11** (1974), 143-158. (Hans Kadanoff) **51** #7545 82A5
- Sturgeon, Michael L.** The ergodic decomposition of conservative Baire measures. *Amer. Math. Soc.* **44** (1974), 141-146. (Michael Lin) **48** #9850 60J05
- Sturges, Leroy D.** (with Joseph, Daniel D.) Slow motion and viscometric motion. V. The free surface on a simple fluid flowing down a tilted trough. *Arch. Rational Mech. Anal.* **59** (1975), no. 4, 359-387. (T. W. Ting) **54** #6676 76A1
- (with Joseph, Daniel D.) The free surface on a liquid filling a trench heated from one side. *J. Fluid Mech.* **69** (1975), no. 3, 565-589. (A. C. Srivastava) **52** #16263 76A1
- (with Joseph, Daniel D.) The free surface on a simple fluid between cylinders undergoing torsional oscillations. III. Oscillating planes. *Arch. Rational Mech. Anal.* (1977), no. 3, 245-267. (From the introduction) **58** #14300 76G35
- (with Joseph, Daniel D.) The convergence of biorthogonal series for biharmonic problems and Stokes flow edge problems. II. *SIAM J. Appl. Math.* **34** (1978), no. 1, 7-26. (Peter Chen) **57** #14765 73A0
- Sturm, C.** See **Stability of motion**, **51** #7796
- Sturm, Jacob** (with Shinnar, Meir) The maximal inscribed ball of a Fuchsian group. *Discontinuous groups and Riemann surfaces (Proc. Conf., Univ. Maryland, College Park, Md., 1973)*, pp. 439-443. *Ann. of Math. Studies*, No. 79, Princeton Univ. Press, Princeton, N.J., 1974. (J. Lehner) **50** #2487 30A58
- Sturm, Klaus-Jürgen** (with Binder, Hans-Joachim) Modelle optimaler Steuerungsprobleme die durch Integralgleichungen beschrieben werden. *Wiss. Z. Techn. Hochsch. Leuna-Merseburg* **19** (1977), no. 1, 92-96. (From the text) **58** #33343 93C99 (49J10)
- Sturm, L. B. J. M.** A simple optimality proof of Moore's sequencing algorithm. *Management Sci.* **17** (1970/71), 116-118. (Editors) **48** #10484 90B35

- Verbände von Kernen isotoner Abbildungen. *Czechoslovak Math. J.* **22**(97) (1972), 126-144. (A. C. Choudhury) **46** #7034 04A05 (06A10)
- Äquivalenz- und Ordnungsrelationen. *Czechoslovak Math. J.* **22**(97) (1972), 192. (R. J. Bumcrot) **47** #6564 06A10
- A categorical conception of the theory of kernels of isotonic mappings. (Czech) *Scientific Conference, College of Transport Engineering, Žilina, Section 1: Mathematics, Physics, Cybernetics (Slovak)*, pp. 117-120. *Vysoká Škola Dopravná v Žilina*, 1973. (L. Skula) **52** #13984 18B10 (06A20)
- Äquivalenz- und Ordnungsrelationen. *Czechoslovak Math. J.* **23**(98) (1973), 174. (A. C. Choudhury) **48** #8312 06A05
- Einige Charakterisationen von Ketten. *Czechoslovak Math. J.* **23**(98) (1973), 191. (A. C. Choudhury) **48** #8324 06A20
- Congruences in ordered sets. (Czech. English and Russian summaries) *Knižnice Věd. Spisů Vysoké. Učení Tech. v Brně B-56* (1975), 131-135. (L. Beran) **53** #5384 06A10
- On the lattices of kernels of isotonic mappings. II. *Czechoslovak Math. J.* **27**(102) (1977), 2, 258-295. (A. C. Choudhury) **58** #16439 06A20
- Stefano Sul funzionale di Cavalieri. *Archimede* **24** (1972), 164-171. (Zbl **243** 02) **58** #22434 26A24
- Ein Automatenmodell und dessen Anwendung in der digitalen Kommunikationstechnik. *Z. Elek. Informations- und Energietechnik* **2** (1972), 165-171. (Author's summary) **46** #2922 68A25
- Polynomials that have rational roots simultaneously with their derivatives. (Russian. Russian and French summaries) *Bul. Ști. Tehn. Inst. Politehn. Cluj-Napoca—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **15**(29) (1970), no. 1, 39-45. (N. Popescu) **49** #989 13B25
- On uniform convergence of measures with applications to uniform convergence of empirical distributions. *Empirical distributions processes (Selected Papers, Meeting on Math. Stochastics, Oberwolfach, 1976)*, pp. 138-140. *Lecture Notes in Math.*, Vol. 566, Springer, Berlin, 1976. (R. M. Dudley) **55** #5510 60B10 (60F15)
- A necessary condition for the convergence of the isotrope discrepancy. *Empirical distributions and processes (Selected Papers, Meeting Math. Stochastics, Oberwolfach, 1976)*, pp. 138-140. *Lecture Notes in Math.*, Vol. 566, Springer, Berlin, 1976. (R. N. Bhattacharya) **56** #13335 60F15
- A generalization of the Glivenko-Cantelli theorem. *Z. Wahrscheinlichkeitstheorie verw. Gebiete* **35** (1976), no. 2, 167-175. (R. N. Bhattacharya) **53** #11719 (60B10)
- On uniform convergence of measures with applications to uniform convergence of empirical distributions. *Springer-Verlag, Berlin-New York*, 1977. xii + 418 pp. *ISBN 3-540-08418-5* (David J. Scott) **58** #18632 60-02
- Convergence rates for the isotrope discrepancy. *Ann. Probability* **5** (1977), no. 5, 123. (M. Csörgö) **56** #13336 60F15
- On central limit theorems for martingale triangular arrays. *Acta Math. Acad. Sci. Hungar.* **31** (1978), no. 3-4, 205-216. (Adhir K. Ghosh) **57** #10772 60F05 (60G45)
- Translations of commutative unique factorization groups. *Semigroup Forum* **4** (1972), 87-92. (E.-A. Behrens) **45** #3598 20M10
- Equisingularity and equisaturation in codimension 1. *Amer. J. Math.* **94** (1972), 1245-1268. (J. A. Morrow) **48** #11565 32C40
- Functions in analytic sets. *Indiana Univ. Math. J.* **22** (1972/73), 795-800. (M. J. Heule) **46** #9383 32B15
- Analytic sets as branched coverings. *Trans. Amer. Math. Soc.* **166** (1972), 241-259. (J. A. Morrow) **48** #2420 32C40
- The C^1 embedding dimension of certain analytic sets. *Math. J.* **40** (1973), 221-231. (K. Wolffhardt) **47** #5291 32B10 (32C40)
- Resolving singularities via local quadratic transformations. *Complex analysis, 1972 (Proc. Conf., Rice Univ., Houston, Tex., 1972)*, Vol. 1: Geometry of singularities. *Rice Univ. Studies* **59** (1973), no. 1, 1-9. (H. B. Laufer) **52** #3245 32C45
- Primitive elements for modules over $\mathcal{O}(Y)$. *Duke Math. J.* **41** (1974), 329-331. (E. R. Stein) **49** #3208 32E10
- The disjunctive-facet problem: formulation and solution techniques. *Operations Res.* **22** (1974), no. 3, 582-601. (From the authors' summary) **57** #2585 90C50
- V-positivity, poverses and the arithmetic global unicity theorems of Gale and Nikaido. (German summary) *Math. Res. Ser. A-B* **19** (1975), no. 3, A115-A121. (J. Abraham) **51** #12897 (90A15)
- Residual equisingularity. *Proc. Amer. Math. Soc.* **56** (1976), 217-220. (J. A. Morrow) **54** #3018 32C40
- Equisingularity and local analytic geometry. *Several complex variables (Proc. Pure Math., Vol. XXX, Part I, Williams Coll., Williamstown, Mass., 1975)*, pp. 1-11. *Amer. Math. Soc., Providence, R.I.*, 1977. (Bernard Teissier) **58** #11507 (32B10)
- Mathematical programming. **48** #7956
- Die elementare Formulierbarkeit von Dimension und Grad algebraischer Vielfachtheiten. *Arch. Math. (Basel)* **28** (1977), no. 3, 270-273. (D. Klucký) **53** #1425 (02H15)
- Eine Darstellung unbegrenzt teilbarer reeller Zufallsgrößen. *Math. Nachr.* **70** (1975), 167-176. (Olav Kallenberg) **53** #11698 60E05
- Collection of articles dedicated to the memory of Wolfgang Richter. *Math. Nachr.* **70** (1975), 283-301. (F. Engelou) **53** #9373 60G55 (60E05)
- On the uniform distribution of prime powers. *Comm. Pure Appl. Math.* **27** (1972), 729-740. (S. V. Kotov) **51** #3090 10H25 (10F40)
- Distribution of squarefree integers in non-linear sequences. *Pacific J. Math.* **59** (1976), no. 2, 577-584. (H. G. Meijer) **52** #8061 10H20 (10F40)
- A mean value theorem for binary digits. *Pacific J. Math.* **75** (1978), no. 2, 565-577. (R. W. K. Odoni) **58** #27857 10H25 (10A30)
- When does rank $(A+B) = \text{rank}(A) + \text{rank}(B)$? *Canad. Math. Bull.* **15** (1972), 451-452. (A. R. Amir-Moëz) **47** #236 15A03
- Optimality properties of Theil's BLUS residuals. *J. Amer. Statist. Assoc.* **67** (1972), 672-673. (I. Guttman) **52** #7030 62J05
- When does least squares give the best linear unbiased estimate? *Multivariate statistical inference (Proc. Res. Sem., Dalhousie Univ., Halifax, N.S., 1972)*, pp. 241-246. *North-Holland, Amsterdam; American Elsevier, New York*, 1973. (I. Guttman) **52** #9518 62J05
- Markov chains and M -matrices: inequalities and equalities. *J. Math. Anal. Appl.* **41** (1973), 439-459. (J. F. C. Kingman) **47** #3422 15A42 (60J10)
- Numerical computations for univariate linear models. *J. Statist. Comput. Simulation* **2** (1973), 253-274. (Valery Fedorov) **51** #11840 62J05 (65F05)
- Hadamard products and multivariate statistical analysis. *Linear Algebra and Appl.* **6** (1973), 217-240. (David Carlson) **47** #6724 15A15 (62H99)
- The convergence of Markov chains with nonstationary transition probabilities and constant causative matrix. *Stochastic Processes Appl.* **1** (1973), 279-285. (M. Iosifescu) **53** #14665 60J05
- Equalities and inequalities for ranks of matrices. *Linear and Multilinear Algebra* **2** (1974/75), 269-292. (A. R. Amir-Moëz) **52** #5711 15A45
- Rank conditions for generalized inverses of partitioned matrices. *Sankhyā Ser. A* **36** (1974), no. 4, 437-442. (Thomas L. Boullion) **52** #5699 15A09
- Comparisons between maximum likelihood and naive estimators in a multivariate normal population with data missing on one variate. (French summary) *Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975)*, Vol. 3. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 3, 303-308 (1976). (Donald B. Rubin) **58** #8024 62H10 (62F10)
- Serial correlation and distributions on the sphere. *Comm. Statist.—Theory Methods* **A5** (1976), no. 2, 97-118. (Andrew Harvey) **56** #13460 62J05 (62M10)
- A decomposition of an idempotent matrix where nonnegativity implies idempotence and none of the matrices need be symmetric. *Sankhyā Ser. A* **38** (1976), no. 4, 400-403. (C. G. Khatri) **57** #12554 15A24
- A bibliography of multivariate statistical analysis. Reprint. *Robert E. Krieger Publishing Co., Huntington, N. Y.*, 1977. x + 642 pp. (Editors) **56** #1585 62Hxx
- Discriminant analysis and applications. **57** #17959
- A numerical method for solving the Cauchy problem in some parabolic cases. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **22** (1974), 871-874. (C. W. Gear) **53** #12029 65M99 (76G55)
- Steady viscous incompressible flow around a given contour. *Proceedings of the Fourth International Conference on Numerical Methods in Fluid Dynamics (Univ. Colorado, Boulder, Colo., 1974)*, pp. 385-391. *Lecture Notes in Phys.*, Vol. 35, Springer, Berlin, 1975. (From the author's text) **56** #17490 76G65
- The solution of the Navier-Stokes equations via successive approximations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **25** (1977), no. 8, 709-717. (C. R. Illingworth) **58** #19810 76G65
- A transportation system in the raw material preparation department of a cement plant: mathematical model and control algorithm. (Polish. English and Russian summaries) *Podstawy Sterowania* **4** (1974), 315-333. (W. Greblicki) **51** #14947 90B99
- Mathematical model for a certain class of dynamic transportation systems. (Russian summary) *Systems Sci.* **1** (1975), no. 2, 63-76 (1976). (E. Ja. Gabovič) **53** #10226 90B05
- Close-to-convex multivalent functions with respect to weakly starlike functions. *Trans. Amer. Math. Soc.* **169** (1972), 105-112. (W. R. Derrick) **47** #3666 30A36 (30A32)
- On weakly starlike multivalent functions. *J. Analyse Math.* **26** (1973), 217-233. (A. W. Goodman) **48** #6395 30A32
- On the valence of the sum of two convex functions. *Proc. Amer. Math. Soc.* **37** (1973), 511-516. (Y. Komatu) **47** #2049 30A32
- The use of the monodromy theorem and entire functions with nonvanishing derivative. *Amer. Math. Monthly* **81** (1974), 639-642. (Horst Tietz) **49** #5348 30A66
- Multivalent convex functions. *J. Analyse Math.* **28** (1975), 60-77. (See Zbl **348** #30009) 30A32
- An analytic characterization of geometrically starlike functions. *Michigan Math. J.* **23** (1976), no. 2, 137-139. (K. W. Lucas) **53** #13544 30A32
- Typically-real functions and their associated functions of positive real part. *Proc. London Math. Soc.* (3) **34** (1977), no. 2, 193-212. (James A. Hummel) **56** #3275 30A32 (30A72)
- Goodman's conjecture and the coefficients of univalent functions. *Proc. Amer. Math. Soc.* **69** (1978), no. 1, 111-114. (A. W. Goodman) **57** #612 30A34
- On density (scalar) concomitants of the tensor $T_{\alpha\beta\gamma\delta}$ in the three-dimensional space X^3 . Collection of articles dedicated to Stanisław Gołąb on his 70th birthday. *II. Demonstratio Math.* **6** (1973), 451-469 (1974). (Michał Lorens) **51** #1632 53A55
- The general form of density (scalar) concomitants and certain allowable sets of the antisymmetric tensor $T_{\alpha\beta}$ in the three-dimensional space X^3 . *Demonstratio Math.* **7** (1974), 125-153. (Michał Lorens) **51** #13893 53A55
- Density concomitants of the curvature tensor $R_{\alpha\beta\gamma\delta}$ in the projective-Euclidean space. *Demonstratio Math.* **9** (1976), no. 4, 517-534. (J. Aczél) **56** #3755 53A55
- A method for the approximate determination of a differential equation with nondiverging argument that describes a field of directions given by an equation with

- deviating argument. (Russian) *Trudy Irkutsk. Gos. Univ.* **74** (1970), Ser. Mat. no. 6, 80-101. (I. Šelihova (RŽMat 1972 #11 B1082)) **58** #8320 65L99
- The fundamental initial problem for ordinary differential equations with deviating argument from the point of view of a geometric interpretation. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 27-32, 307. Irkutsk. Gos. Univ., Irkutsk, 1973. (Author's summary) **57** #826 34K05 (34A10)
- One of P. A. Zarubin's mathematical instruments. (Russian) *Voprosy Istor. Estestvozn. i Tehn. Vyp.* 3(44) (1973), 63-65. (J. S. Joel) **58** #15977 01A55
- Some questions on the history of mathematical analysis and on the evolution of computational means. (Russian) *Istor.-Mat. Issled. Vyp.* 22 (1977), 252-273, 304. (Editors) **58** #26930a 01A45 (26-03)
- See also **Leibniz, Gottfried Wilhelm**, **58** #26930b; **Huygens, Christiaan**, **58** #26930c; **Bernoulli, Johann**, **58** #26930d and **Bernoulli, Jacques**, **58** #26930e
- Stypiński, Zenon** Certain remarks on Besov-Orlicz spaces. (Polish. English and Russian summaries) *Fasc. Math.* No. 5 (1970), 93-106 (1971). (A. Kufner) **47** #813 46E35
- Theorem of Voronovskaya for Szász-Chlodovsky operators. *Funct. Approximatio Comment. Math.* **1** (1974), 133-137. (G. Mühlbach) **52** #8735 41A35
- (with Kotkowski, Bogdan) A method of introduction of Lebesgue integral. *Funct. Approximatio Comment. Math.* **3** (1976), 125-134. (Piotr Antosik) **56** #12209 28A25 (60A10)
- On some approximations of functions of two variables. *Funct. Approximatio Comment. Math.* **3** (1976), 225-231. (M. F. Timan) **56** #6251 42A08
- Approximation of real functions by the induced Cesàro's integrals. *Funct. Approximatio Comment. Math.* **3** (1976), 233-241. (M. F. Timan) **56** #6252 42A08 (41A10)
- On some approximation by trigonometric polynomials. *Funct. Approximatio Comment. Math.* **4** (1976), 91-96. (G. Sunouchi) **56** #6253 42A08
- On some approximation by algebraic polynomials. *Funct. Approximatio Comment. Math.* **5** (1977), 47-52. (John A. Roulier) **58** #17658 41A10 (41A35)
- Styrikovič, R. S.** (with Lebedev, B. D.) The effectiveness of the Gomory method for a certain class of integer programming problems. (Russian) *Ekonom. i Mat. Metody* **7** (1971), 769-772. (C. Berghaller) **45** #1595 90C10
- Integer formulation of a programming problem with a separable target function. (Russian) *Ekonom. i Mat. Metody* **8** (1972), 617-619. (M. Mañas) **46** #6843 90C30 (90C10)
- Styrylska, Teresa** Two-stage equalization of direct conditioned observations. (Polish) *Mat. Stos.* (3) **4** (1975), 29-33. (V. Komkov) **56** #9950 65F35
- Styś, Tadeusz** On the maximum principle for a certain system of the difference equations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 963-966. (P. Laasonen) **46** #10231 65Q05
- The maximum principle for the system of nonlinear differential equations of the Monge-Ampère type. *Numerische Behandlung nichtlinearer Integrodifferential- und Differenzgleichungen* (Tagung, Math. Forschungsinst., Oberwolfach, 1973), pp. 235-243. *Lecture Notes in Math.*, Vol. 395, Springer, Berlin, 1974. (O. John) **50** #7806 35J60 (65P05)
- The maximum principle for systems of nonlinear equations. (Polish) *Mat. Stos.* (3) **8** (1976), 13-16. (V. Komkov) **56** #10047 65N20
- A maximum principle for systems of ordinary differential equations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 9, 875-878. (H. O. Tejumola) **58** #11568 34A10
- The method of lines for nonlinear parabolic equations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 9, 907-910. (Zbl 351 #65022) **58** #24987 65M20
- Styszyński, Antoni** An n -silent-vs.-noisy duel with arbitrary accuracy functions. (Polish summary) *Zastos. Mat.* **14** (1974), 205-225. (G. Owen) **50** #3975 90D05
- An n -silent-vs.-noisy duel with equal accuracy functions. (German and French summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 3, 367-384. (Author's summary) **56** #2453 90D99
- Su, C. H.** (with Sehgal, V. M.) Some fixed point theorems for nonexpansive mappings in locally convex spaces. (Italian summary) *Boll. Un. Mat. Ital.* (4) **10** (1974), 598-601. (E. Dubinsky) **52** #4047 47H10
- (with Sehgal, V. M.) Some fixed point theorems for condensing multifunctions in locally convex spaces. *Proc. Amer. Math. Soc.* **50** (1975), 150-154. (C. J. Himmelberg) **52** #1430 47H10
- (with Sehgal, V. M.) Some fixed point theorems for nonexpansive multifunctions in locally convex spaces. *Bull. Inst. Math. Acad. Sinica* **4** (1976), no. 1, 49-53. (Authors' summary) **57** #13594 47H10
- Su, Chan** (with Sun, Chia Chung) Long range interactions between molecules. *Sci. Sinica* **19** (1976), no. 1, 91-116. (Porter W. Johnson) **56** #4480 81.33
- Su, Chen-jyi** (with Su, Li Pi) About $\mathfrak{B}(X)$ in $C(X, Z)$. *Tamkang J. Math.* **1** (1970), no. 2, 97-102. (N. L. Alling) **45** #7457 46E25 (54C35)
- Su, Der Ruenn** Classical limit of the probability density for a perturbed change in the Hamiltonian. *Internat. J. Theoret. Phys.* **4** (1971), 233-241. (Author's summary) **51** #14808 81.47
- Su, J. C.** (with Ku, Hsiung Tung; Mann, L. N.; Sicks, J. L.) Degree of symmetry of closed manifolds. *Proceedings of the Second Conference on Compact Transformation Groups* (Univ. Massachusetts, Amherst, Mass., 1971), Part I, pp. 430-436. *Lecture Notes in Math.*, Vol. 298, Springer, Berlin, 1972. (R. Schultz) **50** #14822 57E15
- Integral weight system of S^1 actions on cohomology complex projective spaces. *Chinese J. Math.* **2** (1974), no. 1, 77-112. (Allan Edmonds) **52** #4322 57E25
- (with Hsiang, Wu Yi) A cohomological structural theorem for topological actions of Z_2 -tori on spaces of Z_2 -cohomology type of successive fibration of projective spaces. *Bull. Amer. Math. Soc.* **81** (1975), 714-717. (Czes Kosniowski) **51** #9092 57E10
- (with Hsiang, Wu Yi) On the geometric weight system of topological actions on cohomology quaternionic projective spaces. *Invent. Math.* **28** (1975), 107-127. (G. E. Bredon) **52** #1743 57E25
- See also **Proceedings: Conference on Compact Transformation Groups**, **48** #7281 and **Proceedings: Conference on Compact Transformation Groups**, **48** #7282
- Su, L. Y.** (with Chui, Charles K.; Smith, Philip W.) A minimization problem related to Padé synthesis of recursive digital filters. *Padé and rational approximation* (Proc. Internat. Sympos., Univ. South Florida, Tampa, Fla., 1976), pp. 247-256. *Academic Press*, New York, 1977. (N. S. Kambo) **57** #13305 41A20 (94A20)
- Su, Li Pi** (with Su, Chen-jyi) About $\mathfrak{B}(X)$ in $C(X, Z)$. *Tamkang J. Math.* **1** (1970), 97-102. (N. L. Alling) **45** #7457 46E25 (54C35)
- Homomorphisms of near-rings of continuous functions. *Pacific J. Math.* **38** (1972), 261-266. (M. F. Smiley) **46** #7330 16A80
- Rings of analytic functions on any subset of the complex plane. *Pacific J. Math.* (1972), 535-538. (N. L. Alling) **47** #2076 30A98
- (with Piacun, Norma M.) Wallman compactifications on E -completely re spaces. *Pacific J. Math.* **45** (1973), 321-326. (Richard A. Alò) **47** #7694 54D10
- Wallman-type compactifications on 0-dimensional spaces. *Proc. Amer. Math. Soc.* **43** (1974), 455-460. (Richard A. Alò) **49** #3842 54D35
- A characterization of real-compactness. *Proc. Amer. Math. Soc.* **50** (1975), 412-413. (Richard A. Alò) **52** #11839 54D60 (54E05)
- Round subsets of Wallman-type compactifications. *J. Austral. Math. Soc. Ser. B* (1976), no. 2, 224-233. (R. F. Dickman, Jr.) **53** #1522 54D35
- See also **Proceedings: University of Oklahoma Topology Conference**, **49** #6114
- Su, Stephen Y. H.** (with Sarris, Achilles A.) The relationship between multivalued switching algebra and Boolean algebra under different definitions of complement. *IEEE Trans. Computers* **C-21** (1972), 479-485. (J. C. Muzio) **48** #13507 (E 51 #51) 94A20
- (with Cheung, Peter T.) Computer minimization of multivalued switching functions. *IEEE Trans. Computers* **C-21** (1972), 995-1003. (Authors' summary) **56** #1162 94A20
- (with Cheung, Peter T.) Cubical notation for computer-aided processing of multiple-valued switching functions. *Proceedings of the Sixth International Symposium on Multiple-Valued Logic* (Univ. Center, Utah State Univ., Logan, Utah, 1976), 24-29. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Authors' summary) **58** #2087 94A20
- (with Breuer, Melvin A.; Chang, Shih Jeh) Identification of multiple stuck-faults in combinational networks. *IEEE Trans. Computers* **C-25** (1976), no. 1, 44-48. (Karel Čulik) **53** #2525 94A20
- (with Spillman, Richard J.) Detection of single, stuck-type failures in multivalued combinational networks. *IEEE Trans. Computers* **C-26** (1977), no. 12, 1242-1248. (Authors' summary) **58** #33580 94A20
- See also **Du Casse, Edgar**; et al., **51** #5188 and **Du Casse, Edgar**; et al., **53** #5188
- Su, Yueh-ling Hsiao** (with Owen, Donald B.) Screening based on normal variates. *Technometrics* **19** (1977), no. 1, 65-68. (W. Uhlmann) **55** #9470 (EA 55/56) 62N01
- Su, Zaw Sing** (with Baker, Kenneth R.) Sequencing with due-dates and early start time to minimize maximum tardiness. *Naval Res. Logist. Quart.* **21** (1974), 171-176. (Petrović) **49** #8632 90B35
- (with Sevcik, Kenneth C.) A combinatorial approach to dynamic scheduling problems. *Oper. Res.* **26** (1978), no. 5, 836-844. (Authors' summary) **58** #2039 90B35
- nguen Suan Han** See **Nguen Suan Han**
- nguen Suan-hi** See **Nguen Suan-hi**
- le Suan Kan** See **Le Suan Kan**
- nguen Suan Nguet** See **Nguen Suan Nguet**
- Suardiaz, E.** (with Diego, Antonio; de Pousa, A. G.) Notes on extremal semitensor products. *Math. Japon.* **22** (1977), no. 1, 1-12. (R. P. Dilworth) **56** #15452 05A99
- payatos Suárez, Francisco** See **Poyatos Suárez, Francisco**
- Suárez, Manuel** Sequentially topological vector spaces. (Spanish) *Rev. Real Acad. Ci. Exact. Fis. Natur. Madrid* **71** (1977), no. 2, 253-287. (P. Pérez Carreras) **58** #1220 46A15
- Suárez, Marco F.** Localization of the cohomology of a finite Galois group in a Dedekind domain. *Rev. Colombiana Mat.* **10** (1976), no. 1, 51-55. (G. Whaples) **53** #1318 12G05
- Suárez, Rodolfo** On approximations of solutions in control systems. (Spanish) *Differential Equations* (Third Mexico-U.S. Sympos., Mexico City, 1975) (Spanish), pp. 355-367. *Math. Notes and Sympos.*, Vol. 2, Fondo de Cultura Económ., Mexico City, 1976. (J. E. Rubio) **56** #9426 49E10
- Suarez C., R.** See **Conference: Differential Equations**, **51** #966
- Šuba, Ī. M.** (with Lomsadze, Ju. M.; Krivskii, I. Ju.) Construction of Wightman's axiomatic scheme for a concentratable field. I. The field as a concentratable function. (Russian. English summary) *Ukrain. Fiz. Ž.* **19** (1974), 538-546, 695. (Authors' summary) **57** #8651a 81.46
- (with Lomsadze, Ju. M.; Krivskii, I. Ju.) Construction of Wightman's axiomatic scheme for a concentratable field. II. Axioms of the global properties of a general Wightman field. (Russian. English summary) *Ukrain. Fiz. Ž.* **20** (1975), no. 4, 621-697. (Authors' summary) **57** #8651b 81.46
- (with Lomsadze, Ju. M.; Krivskii, I. Ju.) Construction of Wightman's axiomatic scheme for a concentratable field. III. Problem of the existence and uniqueness of S -operator. (Russian. English summary) *Ukrain. Fiz. Ž.* **21** (1976), no. 1, 1-9. (Authors' summary) **57** #8651c 81.46
- (with Lomsadze, Ju. M.; Krivskii, I. Ju.) Construction of Wightman's axiomatic scheme for a concentratable field. IV. The WR-axiom. (Russian. English summary) *Ukrain. Fiz. Ž.* **21** (1976), no. 9, 1409-1418, 1573. (Authors' summary) **57** #8651d 81.46
- (with Lomsadze, Ju. M.; Krivskii, I. Ju.) Construction of Wightman's axiomatic scheme for a concentratable field. V. The VR-axiom. (Russian. English summary) *Ukrain. Fiz. Ž.* **22** (1977), no. 4, 531-540, 695. (Authors' summary) **57** #8651e 81.46
- (with Lomsadze, Ju. M.; Krivskii, I. Ju.) Construction of Wightman's axiomatic scheme for a concentratable field. VI. The axiom of local commutativity. (Russian. English summary) *Ukrain. Fiz. Ž.* **22** (1977), no. 5, 745-751, 870. (Authors' summary) **57** #8651f 81.46
- (with Lomsadze, Ju. M.; Krivskii, I. Ju.) Construction of Wightman's axiomatic scheme for a concentratable field. VII. The VR-field as a generalized function, and free field as a VR-field. (Russian. English summary) *Ukrain. Fiz. Ž.* **22** (1977), no. 1959-1967, 2104. (Authors' summary) **57** #8651g 81.46
- Subbaiah, Perla** (with Mudholkar, Govind S.; Davidson, Michael L.) Extended li

- theses' and simultaneous tests in multivariate analysis of variance. *Biometrika* **61** (1974), 467-477. (Steven Arnold) **51** #11849 62J10
- with Mudholkar, Govind S.; Davidson, Michael L.) A note on the intersection character of some MANOVA procedures. *J. Multivariate Anal.* **4** (1974), 486-493. (M. D. Perlman) **51** #2164 62H15
- with Mudholkar, Govind S.) A note on MANOVA multiple comparisons based step-down procedure. *Sankhyā Ser. B* **37** (1975), no. 3, 300-307. (Authors' summary) **58** #31624 62J15 (62F25)
- with Mudholkar, Govind S.) Unequal precision multiple comparisons for randomized block designs under nonstandard conditions. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 429-434. (Jeffrey A. Robinson) **53** #14807 62J15
- with Mudholkar, Govind S.; George, Stephen L.) A note on the estimation of two ordered Poisson parameters. *Metrika* **24** (1977), no. 2, 87-98. (Gary G. Makowski) **6889** 62F10
- pa, B. See Subbarayappa, B. V.
- o, F. (with Pegoraro, Francesco) Effects of weak interactions on the breaking of intrinsic internal symmetry. *Nuclear Phys.* **B44** (1972), 221-235. (Eldad Gal-Ezer) **16328** 81.22
- o, G. (with Balakrishnan, P.; Rajappan, K. P.) On coefficient accuracy of dimensional digital filters. *Z. Elek. Informations- und Energietechnik* **6** (1976), no. 3, 186. (Authors' summary) **56** #18096 94A05
- K. Spurious relevant eigenvalues in the renormalization group for lattice systems. *Phys. Rev. B* (3) **15** (1977), no. 5, 2813-2818. **58** #25688 82.47
- M. V. Combinatorial proofs of some identities. *Proceedings of the Washington University Conference on Number Theory* (Washington State Univ., Pullman, Wash., 1971), pp. 80-91. *Dept. Math., Washington State Univ., Pullman, Wash.*, 1971. (W. H. Mills) **48** #8255 05A19 (10A45)
- with Feng, Y. K.) On the density of (k, r) integers. *Pacific J. Math.* **38** (1971), 518. (H. G. Meijer) **46** #7182 10H25
- with Erdős, Paul) On the iterates of some arithmetic functions. *The theory of arithmetic functions* (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1971), pp. 225-25. *Lecture Notes in Math., Vol. 251, Springer, Berlin*, 1972. (E. M. Horadam) **11012** 10H25
- On some arithmetic convolutions. *The theory of arithmetic functions* (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1971), pp. 247-271. *Lecture Notes in Math., Vol. 251, Springer, Berlin*, 1972. (Kenneth Yocom) **49** #2510 10A20
- with Suryanarayana, D.) Some theorems in additive number theory. *Ann. Univ. Budapest. Eötvös Sect. Math.* **15** (1972), 5-16 (1973). (G. Greaves) **48** #3906 10A20
- with Andrews, George E.; Vidyasagar, Mathukumalli) A family of combinatorial identities. *Canad. Math. Bull.* **15** (1972), 11-18. (R. E. Greenwood) **47** #1633 10A45
- with Cook, T. J.; Newberry, R. S.; Weber, J. M.) On unitary perfect numbers. *(Waukesha)* **3** (1972/73), no. 1, 22-26. (H. J. Godwin) **48** #224 10A30
- with Carlitz, Leonard) On a combinatorial identity of Winquist and its generalization. *Duke Math. J.* **39** (1972), 165-172. (R. L. Graham) **45** #1775 10A20
- A note on the parity of $p(n)$. *Indian J. Math.* **14** (1972), 147-148. (H. Gupta) **9823** 10J20
- Two new combinatorial identities. *Norske Vid. Selsk. Skr. (Trondheim)* **1972**, no. 21, (Stephen Tanny) **48** #115 05A19
- with Suryanarayana, D.) On an identity of Eckford Cohen. *Proc. Amer. Math. Soc.* **33** (1972), 20-24. (E. M. Horadam) **45** #1860 10H99
- with Carlitz, Leonard) Transformation of arithmetic functions. *Duke Math. J.* **40** (1978), 949-958. (M. S. Cheema) **48** #8361 10A20
- with Harris, V. C.) An arithmetic sum with an application to quasi k -free integers. *Austral. Math. Soc.* **15** (1973), 272-278. (S. L. Segal) **48** #8363 10A20
- with Suryanarayana, D.) The divisor problem for (k, r) -integers. *J. Austral. Math. Soc.* **15** (1973), 430-440. (J. Knopfmacher) **48** #6038 10H25
- with Straus, Ernst G.) On exponential divisors. *Duke Math. J.* **41** (1974), 465-471. (Leiarick) **50** #2053 10A20
- with Suryanarayana, D.) On the order of the error function of the (k, r) -integers. *Number Theory* **6** (1974), 112-123. (T. M. Apostol) **49** #235 10H15
- On two congruences for primality. *Pacific J. Math.* **52** (1974), 261-268. (J. B. Roberts) **50** #2049 10A10 (10A25)
- with Diananda, P. H.) On the Schnirelmann density of the k -free integers. *Proc. Amer. Math. Soc.* **62** (1976), no. 1, 7-10 (1977). (Donald L. Goldsmith) **55** #7986 10A20
- with Subrahmanyasastry, V. V.) A transformation formula for products arising in partition theory. *Rocky Mountain J. Math.* **6** (1976), no. 2, 345-356. (G. L. Anderson) **53** #2822 10A45
- with Suryanarayana, D.) On the order of the error function of the (k, r) -integers. *Canad. Math. Bull.* **20** (1977), no. 3, 397-399. (V. C. Harris) **58** #16566 10H25
- with Richmond, L. Bruce) On certain weighted partitions and finite semisimple algebras. *Proc. Amer. Math. Soc.* **64** (1977), no. 1, 13-19. (J. Knopfmacher) **55** #12673 10A20
- o, P. V. (with Satyanarayan Rao, Aribindi; Ramachandra Rao, B.) A simple use of Schur's inequality. *Math. Education* **5** (1971), A65-A66. (D. Ž. Đoković) **46** #9259 A87
- with Sharma, Ram Krishan) Stationary solutions and their characteristic exponents of the restricted three-body problem when the more massive primary is an oblate spheroid. *Celestial Mech.* **13** (1976), no. 2, 137-149. (F. V. Pohle) **54** #1762 70.65
- with Chatterjee, Gurudas) Inversion of a typical block matrix. *J. Mathematical and Physical Sci.* **10** (1976), no. 4, 289-293. (Iain S. Duff) **57** #14361 65F05
- o, R. See System identification and time-series analysis, **50** #4006
- o, S. (with Keilson, Julian) A process with chain dependent growth rate. II. The ergodic problems. *Advances in Appl. Probability* **3** (1971), 315-338. (Z. Šidák) **7838** 60J99
- with Bhat, U. Narayan) A statistical technique for the control of traffic intensity in queueing systems $M/G/1$ and $GI/M/1$. *Operations Res.* **20** (1972), 955-966. (S. Ekberg) **50** #3387 60K25
- (with Chandrasekaran, R.) A special case of the transportation problem. *Operations Res.* **25** (1977), no. 3, 525-528. (Robert A. Abrams) **56** #4811 90C05
- Subba Rao, T. (with Tong, H.) A test for time-dependence of linear open-loop systems. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 235-250. (E. Parzen) **54** #9020 62M15
- (with Priestley, M. B.; Tong, H.) Identification of the structure of multivariable stochastic systems. *Multivariate analysis, III* (Proc. Third Internat. Sympos., Wright State Univ., Dayton, Ohio, 1972), pp. 351-368. Academic Press, New York, 1973. (E. Parzen) **48** #10022 62M15 (62H25, 93E10)
- (with Tong, H.) On some tests for the time dependence of a transfer function. *Biometrika* **60** (1973), 589-597. (P. H. Diananda) **51** #7208 62M15 (93C05)
- An innovation approach to the reduction of the dimensions in a multivariable stochastic system. *Internat. J. Control* **21** (1975), 673-680. (E. Parzen) **51** #15139 93E99
- (with Priestley, M. B.) The estimation of factor scores and Kalman filtering for discrete parameter stationary processes. *Internat. J. Control* **21** (1975), no. 6, 971-975. (Ludwig Arnold) **53** #5129 93E10
- A note on the bias in the Kalman-Bucy filter. *Internat. J. Control* **23** (1976), no. 5, 641-645. (H. Salehi) **55** #2310 93E10
- Canonical factor analysis and stationary time series models. *Sankhyā Ser. B* **38** (1976), no. 3, 256-271. (Authors' summary) **58** #31594 62H25 (62M10)
- See also Hammond, J. K., **49** #1718; Priestley, M. B.; et al., **49** #1719; System identification and time-series analysis, **50** #4006 and Brown, R. Leonard; et al., **51** #14478
- Subba Rao, V. (with Subrahmanyam, P. V.) A note on the solution of certain functional equations. *J. Mathematical and Physical Sci.* **10** (1976), no. 2, 191-195. (Ivan L. Reilly) **54** #3208 (E 55 #6051) 39A40
- (with Subrahmanyam, P. V.) Errata: "A note on the solution of certain functional equations" (J. Mathematical and Physical Sci. **10** (1976), no. 2, 191-195). *J. Mathematical and Physical Sci.* **10** (1976), no. 3, 277. (Ivan L. Reilly) **55** #6051 39A40
- Subbarayappa, B. V. (with Chintamani, B. M.) History of sciences in India: Pali sources. *Indian J. History Sci.* **6** (1971), 102-112. (A. I. Volodarskii) **58** #10000 01A25
- The development of scientific studies in India. (Russian. English summary) *Voprosy Istor. Estestvozn. i Tehn.* **1974**, no. 2-3 (47-48), 93-98, 221. (Editors) **58** #15825 01A25
- (with Ahmad, S. Maqbul; Ram Behari) al-Bīrūnī: an introduction to his life and writings on the Indian sciences. Proceedings of the Symposium on al-Bīrūnī and Indian Sciences (New Delhi, 1971). *Indian J. History Sci.* **10** (1975), no. 2, 98-110. (A. I. Volodarskii) **57** #5572 01A30
- Subbiah, Saraswathi Another proof of a theorem of Evans. *Semigroup Forum* **6** (1973), no. 1, 93-94. (B. H. Neumann) **51** #13105 20M20
- (with Magill, Kenneth D., Jr.) Green's relations for regular elements of semigroups of endomorphisms. *Canad. J. Math.* **26** (1974), 1484-1497. (L. Potemkin) **51** #10509 20M20
- (with Magill, Kenneth D., Jr.) Embedding $S(X)$ into $S(Y)$. *Dissertationes Math. (Rozprawy Mat.)* **120** (1974), 47pp. (A. B. Paalman-de Miranda) **50** #13363 22A15 (54H15)
- The common right multiple property in semigroup rings. *Semigroup Forum* **8** (1974), no. 4, 361-367. (Uno Kaljula) **52** #635 20M25
- Dense subsemigroups of semigroups of continuous selfmaps. *Studies in topology* (Proc. Conf., Univ. North Carolina, Charlotte, N.C., 1974; dedicated to Math. Sect. Polish Acad. Sci.), pp. 565-572. Academic Press, New York, 1975. (K. N. Sigmon) **50** #7393 20M20
- (with Cezus, Frank A.; Magill, Kenneth D., Jr.) Maximal ideals of semigroups of endomorphisms. *Bull. Austral. Math. Soc.* **12** (1975), 211-225. (J. Chacron) **51** #8299 20M10 (54H15)
- Some finitely generated subsemigroups of $S(X)$. *Fund. Math.* **86** (1975), no. 3, 221-231. (Y.-F. Lin) **53** #9177 54H15 (22A99)
- (with Magill, Kenneth D., Jr.) Green's relations for regular elements of sandwich semigroups. I. General results. *Proc. London Math. Soc.* (3) **31** (1975), no. 2, 194-210. (L. Potemkin) **52** #3389 20M10
- (with Magill, Kenneth D., Jr.) Schützenberger groups of some irregular H -classes. *Semigroup Forum* **10** (1975), no. 4, 283-314. (K. N. Sigmon) **53** #10961 20M20 (22A15)
- (with Magill, Kenneth D., Jr.) Schützenberger groups of \mathcal{R} -classes containing odd degree polynomials. *Semigroup Forum* **11** (1975), no. 1, 49-78. (Anne L. Hudson) **52** #14120 20M20 (54H15)
- (with Magill, Kenneth D., Jr.) The partially ordered collection of regular R -classes of $S(X)$. *Aequationes Math.* **15** (1977), no. 1, 91-97. (G. R. Wood) **56** #3788 54C40
- (with Magill, Kenneth D., Jr.) Green's relations for regular elements of sandwich semigroups. II. Semigroups of continuous functions. *J. Austral. Math. Soc. Ser. A* **25** (1978), no. 1, 45-65. (M. Friedberg) **58** #961 20M20
- Subbotin, A. I. (with Barabanova, N. N.) On continuous evasion strategies in game problems on the encounter of motions. *Prikl. Mat. Meh.* **34** (1970), 796-803 (Russian); translated as *J. Appl. Math. Mech.* **34** (1970), 765-772 (1971). (O. Hájek) **47** #1473 90D25
- (with Krasovskii, N. N.) An alternative for the game problem of convergence. *Prikl. Mat. Meh.* **34** (1970), 1005-1022 (Russian); translated as *J. Appl. Math. Mech.* **34** (1970), 948-965 (1971). (A. Friedman) **46** #1362 90D25
- (with Batuhin, V. D.) The regular case in a linear differential game. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 6, 8-12 (Russian); translated as *Engrg. Cybernetics* **9** (1971), no. 6, 978-982 (1972). (Pan-Tai Liu) **49** #2118 90D25
- (with Krasovskii, N. N.) On the structure of game problems of dynamics. *Prikl. Mat. Meh.* **35** (1971), 110-122 (Russian); translated as *J. Appl. Math. Mech.* **35** (1971), 81-91. (A. Blaquiére) **46** #3115 90D25
- (with Barabanova, N. N.) On classes of strategies in differential games of evasion of contact. *Prikl. Mat. Meh.* **35** (1971), 385-392 (Russian); translated as *J. Appl. Math. Mech.* **35** (1971), 349-356 (1972). (J. Fichet) **50** #6530 20D25
- (with Krasovskii, N. N.; Ušakov, V. N.) A minimax differential game. (Russian)

- Dokl. Akad. Nauk SSSR* **206** (1972), 277-280. (A. Friedman) **47** #3024 90D25
Extremal strategies in differential games with complete memory. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 552-555. (A. Friedman) **47** #3030 90D25
(with Batutinin, V. D.) Conditions for terminating a pursuit game. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 1, 3-8 (Russian); translated as *Engrg. Cybernetics* **10** (1972), no. 1, 1-5. (Authors' summary) **57** #2603 90D25
Program and position absorption in differential games. *Prikl. Mat. Meh.* **36** (1972), 740-743 (Russian); translated as *J. Appl. Math. Mech.* **36** (1972), 701-704 (1973). (J. Fichet) **48** #13299 90D25
(with Krasovskii, N. N.) The saddle point of a positional differential game. (Russian) Collection of articles dedicated to Academician Ivan Matveevich Vinogradov on his eightieth birthday, II. *Trudy Mat. Inst. Steklov.* **128** (1972), 22-33, 258. (A. B. Kuržanskii) **49** #8678 90D25
(with Krasovskii, N. N.) Approximation in a differential game. *Prikl. Mat. Meh.* **37** (1973), 197-204 (Russian); translated as *J. Appl. Math. Mech.* **37** (1973), 185-192. (Authors' summary) **58** #15249 90D25
(with Krasovskii, N. N.) ★Позиционные дифференциальные игры. (Russian) [Positional differential games] *Izdat. "Nauka", Moscow*, 1974. 456 pp. (N. N. Petrov) **55** #10040 90D25
Differential games with complete memory. (Russian) *Trudy Inst. Mat. i Meh. Ural. Nauch. Centr Akad. Nauk SSSR No. 8 Ekstremal. Strategii v Pozicion. Differentsial. Igrah* (1974), 211-223, 277. (RZMat **1974** #11 B616) **58** #33048 90D25
(with Krasovskii, N. N.) Differential games in mixed strategies. (Russian) *Problems in analytical mechanics, stability and control theories (Second Četaev Conf., Kazan, 1973)* (Russian), pp. 11-18, 336. *Izdat. "Nauka", Moscow*, 1975. (Ė. G. Al'breht) **56** #17871 90D25
Control under indeterminacy and conflict conditions. (Russian) *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974), Vol. 2*, pp. 361-366. *Canad. Math. Congress, Montreal, Que., 1975*. (Milan Medved') **54** #9699 90D25
(with Krasovskii, N. N.; Rossohin, V. F.) Stochastic strategies in differential games. (Russian) *Dokl. Akad. Nauk SSSR* **220** (1975), 1023-1026. (F. M. Kirillova) **51** #15028 90D25
(with Ušakov, V. N.) Alternative for an encounter-evasion differential game with integral constraints on the players' controls. *Prikl. Mat. Meh.* **39** (1975), no. 3, 387-396 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 3, 367-375 (1976). (W. E. Schmitendorf) **54** #2233a 90D25
(with Subbotina, N. N.) Alternative for the encounter-evasion differential game with constraints on the momenta of the players' controls. *Prikl. Mat. Meh.* **39** (1975), no. 3, 397-406 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 3, 376-385 (1976). (W. E. Schmitendorf) **54** #2233b 90D25
(with Krasovskii, N. N.) ★Jeux différentiels. Traduit du russe par Djilali Embarek. *Éditions Mir, Moscow*, 1977. 446 pp. (Editors) **56** #14784 90D25
A dynamical encounter-evasion game. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 2, 323-326. (J. M. Skowronski) **55** #12154 90D25
(with Subbotina, N. N.) A game problem of control in the case of incomplete information. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 5, 14-23 (Russian); translated as *Engrg. Cybernet.* **15** (1977), no. 5, 1-10 (1978). (Anthony Ephremides) **58** #26485 93E20 (90D05)
See also *Proceedings: Republican Conference of Belorussian Mathematicians*, **48** #3669 and *Collection: Vinogradov, I. M.*, **49** #7050
Subbotin, A. L. (with Pjatnycyn, B. N.) De quelques approches de la classification des systèmes logiques. Logique et méthodologie des sciences en U.R.S.S. *Rev. Internat. Philos.* **25** (1971), no. 4, 520-527. (Editors) **58** #27292 02B05 (02C10)
Leibniz, Kant and their principles of the philosophy of mathematics. (Russian) *Philosophy and logic* (Russian), pp. 35-54. *Nauka, Moscow*, 1974. (Editors) **58** #27269 02A05
Subbotin, Ī. Ī. Finite groups in which each subgroup of the commutant is normal. (Russian) *Mat. Zametki* **12** (1972), 739-746. (G. S. Mikaeljan) **52** #8250 20D40
Finite p -groups in which every subgroup of the commutant is invariant. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1974**, 1072-1074, 1148. (Sergei A. Syskin) **51** #10463 20D15
Infinite finitely generated groups in which every subgroup of the commutant is invariant. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 3, 406-411, 432. (J. Wiegold) **52** #5818 20F35
Finite solvable groups with a quasicentralizer condition for normal subgroups. (Russian) *Studies in group theory* (Russian), pp. 139-161, 171. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Author's summary) **57** #16400 20D10
Finite nonsolvable groups with a quasicentralizer condition for normal subgroups. (Russian) *Akad. Nauk Ukrain. SSR Inst. Mat. Preprint No.* **16** (1977), 31 pp. (L. A. Kurdačenko) **58** #11122 20D99
Subbotin, Ju. N. Approximation by spline functions, and estimates of widths. (Russian) *Trudy Mat. Inst. Steklov.* **109** (1971), 35-60. (H. E. Warren) **45** #7365 41A15
Approximation by splines with restrictions on the norms of their derivatives. (Russian) *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970)* (Russian), pp. 107-111. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (V. A. Popov) **51** #6234 41A15
The application of splines in approximation theory. (Russian) *Linear operators and approximation (Proc. Conf., Oberwolfach, 1971)*, pp. 405-418. *Internat. Ser. Numer. Math.*, Vol. 20. *Birkhäuser, Basel*, 1972. (V. M. Kokilašvili) **54** #13395 41A15
Spline approximation and smooth bases in $C(0, 2\pi)$. (Russian) *Mat. Zametki* **12** (1972), 43-51. (C. de Boor) **47** #5493 41A15 (42A08)
Extremal function interpolation and splines. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 56-58. (C. de Boor) **50** #2762 41A15
Extremal functional interpolation, and approximation by splines. (Russian) *Mat. Zametki* **16** (1974), 843-854. (V. A. Popov) **51** #10960 41A35 (30A82)
Interpolating splines. *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 221-234. *Reidel, Dordrecht*, 1975. (Franz-Jürgen Delvos) **57** #13294 41A05
Extremal problems of functional interpolation, and mean interpolation splines. (Russian) Approximation of functions and operators. *Trudy Mat. Inst. Steklov.* **138** (1975), 118-173, 200. (V. A. Popov) **58** #23261 41A15 (41A05)
(with Stečkin, S. B.) ★Сплайны в вычислительной математике. (Russian) [Splines in numerical mathematics] *Izdat. "Nauka", Moscow*, 1976. 248 pp. (C. de Boor) **56** #13517 65D05 (41A15)
Approximative properties of splines. *Approximation theory (Proc. Internat. Conf. Angew. Math., Univ. Bonn, Bonn, 1976)*, pp. 416-427. *Springer, Berlin*, 1976. (Editors) **58** #29621 41A15 (30A82)
See also *Approximation of periodic functions*, **49** #5665 and Ahlberg, J. H.; et al. **50** #5280
Subbotin, V. F. (with Puljaev, V. F.) On the existence of periodic solutions of systems of differential equations with deviating argument. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 135-142. (See RZMat **1972** #1 B359) **34K15**
(with Baskakov, A. G.; Čan Zui Bong) Bounded solutions of differential-difference equations in a Banach space. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. No. 3* (1971), 135-142. (From the text) **58** #28942 34G05 (34K15)
(with Baskakov, A. G.; Čan Zui Bong) The bounded solutions of linear differential equations with retarded argument in a Banach space. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU Vyp. 7* (1973), 1-7. (T. Enikeeva (RZMat **1974** B906)) **57** #6733 34K15 (34G05)
(with Martem'janov, A. N.) Some criteria for periodic solutions of systems of differential equations with heredity. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 12 Sb. Rabot po Nelineinym Operator. Uravn. i Primenen.* (1974), 37-45. (Čanturija) **57** #16915a 34K15
(with Stekol'sčik, R. B.) The spectrum of the Coxeter transformation and regularity of representations of graphs. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 16 Sb. Statei po Nelineinym Operator. Uravn. i Priložen.* (1975), 62-65. (Editors) **58** #321 05C05
(with Martem'janov, A. N.) Letter to the editors: "Some criteria for periodic solutions of systems of differential equations with heredity" (Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 12 Sb. Rabot po Nelineinym Operator. Uravn. i Primenen. (1974), 37-45). (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 16 Sb. Statei po Nelineinym Operator. Uravn. i Priložen.* (1975), 70. (T. Čanturija) **57** #16915b 34K15
(with Stekol'sčik, R. B.) The Jordan form of the Coxeter transformation, and applications to representations of finite graphs. (Russian) *Funkcional. Anal. i Priložen.* **12** (1978), no. 1, 84-85. (Sheila Brenner) **58** #16800 17B20 (16A64, 22E15)
Subbotin, V. V. See *Studies in the theory of plates and shells*, **48** #3343
Subbotin, Yu. N. See *Subbotin, Ju. N.*
Subbotina, N. N. On a game problem of conflicting control. *Prikl. Mat. Meš.* **36** (1972), 598-605 (Russian); translated as *J. Appl. Math. Mech.* **36** (1972), 564-571 (1973). (J. Case) **50** #3976 90D25
(with Subbotin, A. I.) Alternative for the encounter-evasion differential game with constraints on the momenta of the players' controls. *Prikl. Mat. Meh.* **39** (1975), no. 3, 397-406 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 3, 376-385 (1976). (W. E. Schmitendorf) **54** #2233b 90D25
(with Subbotin, A. I.) A game problem of control in the case of incomplete information. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 5, 14-23 (Russian); translated as *Engrg. Cybernet.* **15** (1977), no. 5, 1-10 (1978). (Anthony Ephremides) **58** #26485 93E20 (90D05)
Šubė, A. S. (with Sibirskii, K. S.) Semi-dynamical systems on the line. (Russian) *Differentsial'nye Uravnenija* **13** (1977), no. 12, 2207-2212, 2302. (Ju. E. Glikli) **57** #4148 54H20
Subelman, Eduardo J. On the class of Markov chains with finite convergence time. *Stochastic Processes Appl.* **4** (1976), no. 3, 253-259. (Richard Madsen) **53** #1467 60J10
Šubenko-Šubin, L. O. (with Litvin, O. M.; Pereverzev, D. A.; Skuibida, L. G.) On the question of obtaining continuous solutions of nonstationary heat conduction problems. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1974**, 652-654, 672. (Authors' summary) **50** #1649 80J35
Suber, H. H. Integral manifolds for perturbed nonlinear systems. *SIAM J. Appl. Math.* **31** (1971), 571-589. (A. C. Garibaldi) **45** #5492 34C30
Subbannulov, M. A. (with Karimova, M. M.) A sharpening of the Hardy-Littlewood theorem and the Knopp theorem on double power series. (Russian) *Dušanbin. Gos. Inst. Učen. Zap.* **53** (1966), Ser. Mat. no. 5, 68-76. (See RZMat **1967** #12 B2) **40B05**
(with Izrailova, M. M.) Tauberian theorems with a remainder term for double Laplace and Laplace-Stieltjes integrals. (Russian) *Dušanbin. Gos. Ped. Inst. Učen. Zap.* **53** (1966), Ser. Mat. no. 5, 77-104. (See RZMat **1968** #2 B15) **40E05**
(with An, F. I.) Complex Tauberian theorems of the type of the Keldyš theorem with remainder. (Russian) *Dokl. Akad. Nauk SSSR* **202** (1972), 772-774. (L. B. Ahlberg) **45** #775 40E05 (40C15)
(with Izrailova, M. M.; Ljubimova, L. S.) Approximation by Poisson integrals of the partial sums of multiple conjugate Fourier series of functions whose measure of continuity is prescribed in the mean. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak. Vyp. 2* (1972), 46-49. (E. Reimers) **53** #13919 40E05
(with Izrailova, M. M.; Ljubimova, L. S.) Approximation by Poisson integrals of the partial sums of multiple conjugate Fourier series of functions whose measure of continuity is given in the mean. (Russian) *Tadžik. Gos. Univ. Trudy Meh.-Mat. Fak. Vyp. 2* (1972), 68-92. (R. L. Cooke) **53** #11302 42A92
Complex Tauberian theorems with a remainder for power series. (Russian) *Bashkir. Gos. Univ. Učen. Zap. Vyp. 74 Tauberovoy Teoremy* (1973), 3-46. (R. P. Boas, Jr.) **56** #16198 40E05
Tauberian theorems of the type of the Landau-Ikehara theorem, and their connection with the distribution of primes. (Russian) *Bashkir. Gos. Univ. Učen. Zap. Vyp. 74 Tauberovoy Teoremy* (1973), 47-69. (Larry J. Goldstein) **57** #253 10H10

- with Safarov, T. M.) Complex Tauberian theorems with a remainder term for the sided Stieltjes transform. (Russian) *Bašk. Gos. Univ. Učen. Zap. Vyp. 74*
erovy Teoremy (1973), 86-98. (E. Reimers) **56** #16200 40E05
- with Safarov, T. M.) Complex Tauberian theorems with remainder term for the sided Stieltjes transform. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik.*
16 (1973), no. 11, 6-8. (E. Reimers) **49** #7643 40E05
- with Izrailova, M. M.; Ljubimova, L. S.) The rate of convergence of multiple er series and conjugate series of a certain class of functions. (Russian)
ematics and the methodology of its teaching, Part II (Russian), 62-90. *Tadžik. Gos.*
Dushanbe, 1974. (From the text) **58** #29823 42A92
- with An, F. I.) Complex Tauberian theorems for the one-sided and two-sided es transform. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **38** (1974), 138-169. (E. ers) **51** #6209 40E05
- ★Тauberовы теоремы с остатком. [Tauberian theorems with remainder]
 "Nauka", Moscow, 1976. 399 pp. (Publisher's description) **58** #29565 40E05
- Approximation of incomplete conjugate functions by partial sums of conjugate and by singular integrals. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik.*
19 (1976), no. 3, 12-18. (Paul Nevai) **53** #13985 42A40
- Theorems of Fatou type, and the (R^*, α) , (c, α) -summability of Fourier series and conjugate series. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **19**
), no. 4, 7-12. (L. Gogoladze) **56** #9170 42A20
- with Gafarov, A.) The rate of summability by the Riesz method of the multiple er series and conjugate series of functions that belong to the class $H^{\alpha, \beta}$. (Russian. i summary) *Dokl. Akad. Nauk Tadžik. SSR* **19** (1976), no. 6, 7-13. (S. Baron) **10949** 42A24 (42A92)
- with Izrailova, M. M.) A theorem of Fatou type for multiple power series whose icients are given in a certain vector space. (Russian. Tajiki summary) *Dokl. Akad.*
Tadžik. SSR **20** (1977), no. 1, 8-11. (L. Gogoladze) **57** #3740 42A92
- with Izrailova, M. M.) A theorem of Fatou type for multiple power series, and the of convergence of multiple conjugate trigonometric series for functions of the class (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **20** (1977), no. 2, 14-17. (Gogoladze) **57** #3741 42A92
- See also Adhamov, A. A.; et al., **57** #12098
- los S. On a local property of good frames in Thom-Boardman singularities. *Ann. École Norm. Sup. (4)* **10** (1977), no. 3, 393-403. (Jonathan M. Wahl) **57** #316
- 5
- elson Formule des traces de Selberg d'après McKean. *Séminaire de Théorie ale* (1972/73), *Exp. No. VII*, 16 pp. *Inst. Recherche Math. Avancée, Lab. Assoc. R.S., Univ. Louis Pasteur, Strasbourg*, 1973. (Editors) **58** #31315 58G99
- 15, 30A58)
- Formule de Selberg et formes d'espaces hyperboliques compactes. *Analyse onique sur les groupes de Lie (Sém., Nancy-Strasbourg, 1973-75)*, pp. 674-700. *re Notes in Math., Vol. 497, Springer, Berlin*, 1975. (Jürgen Elstrodt) **53** #2839
- 5 (58G99, 22E30)
- Kazimierz A certain retrieval model. (Polish. Russian and English summaries) *Automat. i Telemekh.* **17** (1972), 59-71. (I. Kramosil) **46** #2933 68A50
- A mathematical model of the process of retrieval. (Polish. Russian and English aries) *Arch. Automat. i Telemekh.* **19** (1974), 253-270. (Witold Lipski) **54** #1743
- A50
- quential search. (Polish. Russian and English summaries) *Arch. Automat. i mech.* **19** (1974), 369-381. (P. Vondráček) **50** #9343 90B40
- B. See Optimization, Operations research, Bionics, **48** #1846
- A. N. Statistical methods in nuclear theory. (Russian. English summary) *Fiz. entar. Částic i Atom. Jdra* **5** (1974), no. 4, 1023-1074. (Author's summary) **11521** 81.62
- Šubin, L. O. See Šubenko-Šubin, L. O.
- A. The index of families of Wiener-Hopf operators. (Russian) *Mat. Sb. (N.S.)* **66** (1971), 537-558. (E. Heyn (Zbl **218** #47021)) **58** #18614 58G10 (45B05, 57G05, 58B15)
- Factorization of matrices that depend on a parameter, and elliptic equations in a space. (Russian) *Mat. Sb. (N.S.)* **85**(127) (1971), 65-84. (E. Gerlach) **58** #30459
- 7 (46G99, 58G10)
- with Berezin, F. A.) Symbols of operators and quantization. *Hilbert space tors and operator algebras (Proc. Internat. Conf., Tihany, 1970)*, pp. 21-52. *Colloq. . Soc. János Bolyai, No. 5, North-Holland, Amsterdam*, 1972. (M. J. Męczyński) **2529** 81.47 (47G05)
- Certain properties of pseudodifferential operators with nonsmooth symbols. *Dokl. Akad. Nauk SSSR* **207** (1972), 551-553. (Monty Strauss) **47** #2211
- 5 (47G05)
- Conditions for the discreteness of the spectrum of certain operators. (Russian) *Mat. etki* **11** (1972), 233-240. (W. Faris) **45** #7529 47F05 (35P05)
- with Tulovskii, V. N.) The asymptotic distribution of the eigenvalues of odifferential operators in \mathbb{R}^n . (Russian) *Mat. Sb. (N.S.)* **92**(134) (1973), 571-588. (Monty Strauss) **48** #9465 47G05 (35S05)
- with Tulovskii, V. N.) The asymptotic behavior of the eigenvalues of odifferential operators in $L^2(\mathbb{R}^n)$. (Russian) *Uspehi Mat. Nauk* **28** (1973), no.), 242. (Ju. V. Kostarčuk) **52** #14688 35P20 (47G05)
- The spectral properties of operators with covariant and contravariant symbols, and ain variational principle. (Russian. English summary) *Vestnik Moskov. Univ. Ser. t. Meh.* **28** (1973), no. 3, 51-57. (W. Faris) **50** #5534 47B37 (81.47)
- Spaces of almost periodic functions, and differential operators. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 4, 95-96. (O. John) **56** #16365 46E35
- 0)
- Differential and pseudodifferential operators in spaces of almost periodic functions. (Russian) *Mat. Sb. (N.S.)* **95**(137) (1974), 560-587, 632. (Ja. A. Roitberg) **50** #10911
- 5 (35J30)
- with Bagirov, L. A.) The stabilization of the solution of the Cauchy problem for olitic equations with coefficients that are almost periodic in the space variables. (Russian) *Differencial'nye Urauneniia* **11** (1975), no. 12, 2205-2209, 2301. (J. Vencko
- 54** #10816 35B15 (35K30)
- The Favard-Muhamediev theory, and pseudodifferential operators. (Russian) *Dokl. Akad. Nauk SSSR* **225** (1975), no. 6, 1278-1280. (Toader Jucan) **53** #6364 47G05 (35S05)
- Elliptic almost periodic operators and von Neumann algebras. (Russian) *Funkcional. Anal. i Priložen.* **9** (1975), no. 1, 89-90. (J. S. Joel) **58** #23168 35P20 (46L10, 58G10)
- The density of states for elliptic operators with almost periodic coefficients. (Russian. Bulgarian and English summaries) Conference on Differential Equations and Applications (Ruse, 1975). *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **11** (1975), no. 2, 209-216 (1977). (J. S. Joel) **57** #13245 35P20 (58G10, 81.46)
- The coincidence of the ordinary and von Neumann spectrum of an elliptic operator. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 3(183), 185-186. (Ju. V. Kostarčuk) **53** #6358 47F05 (35J30)
- The essential selfadjointness of uniformly hypoelliptic operators. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 2, 91-94. (V. S. Rabinovič) **52** #14598 35H05
- The regularity of generalized almost periodic solutions of hypoelliptic equations. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 5, 53-57. (Ju. V. Kostarčuk) **52** #14582 35D10 (35S05, 47G05)
- Almost periodic elliptic operators and von Neumann algebras. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 17 Teor. Operator. Uraunenii* (1975), 95-99. (P. Saworotnow) **58** #1738 35P20 (46L10, 58G10)
- (with Gelfand, I. M.; Manin, Ju. I.) Poisson brackets and the kernel of the variational derivative in the formal calculus of variations. (Russian) *Funkcional. Anal. i Priložen.* **10** (1976), no. 4, 30-34. (Alexander A. Pankov) **55** #13486 58F05 (35Q99)
- Theorems on the coincidence of the spectra of a pseudodifferential almost periodic operator in the spaces $L^2(\mathbb{R}^n)$ and $B^2(\mathbb{R}^n)$. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 1, 200-215, 240. (Ja. A. Roitberg) **53** #6365 47G05 (58G10)
- Almost periodic pseudodifferential operators, and von Neumann algebras. (Russian) *Trudy Moskov. Mat. Obšč.* **35** (1976), 103-164. (V. S. Rabinovič) **58** #30521 47G05 (35S05, 46L10, 58G10)
- Weyl's theorem for the Schrödinger operator with an almost periodic potential. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 2, 84-88. (M. M. Skrikanov) **53** #13868 35P20 (35J10)
- (with Fedosov, B. V.) The index of random elliptic operators and of families of them. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 4, 812-815. (Ja. A. Roitberg) **58** #24397 58G10
- (with Fedosov, B. V.) The index of random elliptic operators. I. (Russian) *Mat. Sb. (N.S.)* **106**(148) (1978), no. 1, 108-140, 144. (G. Wildenhain) **58** #18610 58G10 (60H99)
- (with Fedosov, B. V.) The index of random elliptic operators. II. (Russian) *Mat. Sb. (N.S.)* **106**(148) (1978), no. 3, 455-483, 496. (G. Wildenhain) **58** #18611 58G10 (60H99)
- The density of states of selfadjoint elliptic operators with almost periodic coefficients. (Russian) *Trudy Sem. Petrovsk.* **3** (1978), 243-275. (G. Albinus) **58** #17587 35P05 (46L10, 47F05)
- Almost periodic functions and partial differential operators. (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 2(200), 3-47, 247. (V. S. Rabinovič) **58** #30522 47G05 (35S05, 46L10, 58G10)
- See also Choquet-Bruhat, Y., **53** #11676 and Schapira, Pierre, **58** #30194
- Šubinskii, I. B. See Accuracy and reliability of cybernetic systems, **47** #9873
- Šubitič, N. I. (with Džibuti, R. I.; Tomčinskii, V. Ju.) Transformation coefficients in the hyperspherical approach to the nonequal mass four-body problem. *Jadernaja Fiz.* **18** (1973), 1164-1172 (Russian); translated as *Soviet J. Nuclear Phys.* **18** (1974), 597-600. (Authors' summary) **56** #10231 70.33
- (with Džibuti, R. I.) Connection between the Raynal-Revai four-particle coefficients and the Talmi-Moshinsky three- and two-particle coefficients. *Jadernaja Fiz.* **20** (1974), 666-670 (Russian); translated as *Soviet J. Nuclear Phys.* **20** (1975), 357-358. (H. M. Srivastava) **53** #9770 70.33
- Šublade, A. M. (with Emel'janov, S. V.; Utkin, V. I.; Taran, V. A.; Kostyleva, N. E.; Ezerov, V. B.; Dubrovskii, E. N.) ★Теория систем с переменной структурой. (Russian) [Theory of systems with variable structure] Edited by S. V. Emel'janov. *Izdat. "Nauka", Moscow*, 1970. 592 pp. (J. Erschler) **45** #3106 93C05
- (with Broslavskii, A. D.; Korovin, S. K.; Kostyleva, N. E.; Utkin, V. I.) Sliding modes in the problems of static optimization, programming and identification. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 4: Education, feedback, regulators, linear and non-linear systems, Identification, differential games, discrete and stochastic systems, Paper No. 32.4, 6 pp. Internat. Fed. Automat. Control, Düsseldorf*, 1971 (1972). (R. M. DeSantis) **52** #7619 93B99
- On one identification method. *Avtomat. i Telemekh.* **1975**, no. 11, 80-92 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 11, part 1, 1819-1829 (1976). (Andrew P. Sage) **53** #15459 93B30
- (with Ulanov, A. G.) Methods of design of adaptive general-purpose controllers. *Avtomat. i Telemekh.* **1976**, no. 4, 66-77 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 4, part 1, 532-543. (From the authors' introduction) **56** #14961 93C40
- Identification of linear dynamic plants. *Avtomat. i Telemekh.* **1976**, no. 8, 54-61 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 8, part 1, 1184-1190. (Arild Thowsen) **57** #9248 93E10
- (with Ulanov, A. G.) Design of adaptive controllers in the form of variable-structure systems. *Avtomat. i Telemekh.* **1977**, no. 5, 54-60 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 5, part 1, 657-663. (Authors' summary) **56** #14962 93C40
- (with Ulanov, A. G.) Design of discontinuous controls for plants with variable delay. *Avtomat. i Telemekh.* **1977**, no. 7, 9-15 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 7, part 1, 954-959. (Eleanor M. James) **56** #14947 93C15
- Methods of identification of the parameters of linear dynamic objects in noises. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 4, 209-216 (Russian); translated as

- Engrg. Cybernet. **15** (1977), no. 4, 170-179 (1978). (Author's summary) **58** #15590 93E10
- Šubnikov, A. V. What memory preserves. Sketches for a portrait of S. I. Vavilov, I. Uspehi Fiz. Nauk **111** (1973), no. 1-2, 179-180 (Russian); translated as Soviet Physics Uspekhi **16** (1974), no. 5, 705-706. (Editors) **58** #21332c 01A70
- Suboč, Ju. F. A group property of systems of differential equations. (Russian) *Dinamika Splošn. Sredy Vyp.* **6** (1970), 201-207. (J. Chrastina) **57** #837 35A22 (58H05)
- Group properties of model systems of differential equations. (Russian) *Dinamika Splošn. Sredy Vyp.* **7** (1971), 25-32. (Editors) **58** #7755 58H05 (22E05, 35A30)
- On a method of group modelling of differential equations. (Russian) *Dinamika Splošn. Sredy Vyp.* **17** *Bystroprotekajušče Processy* (1974), 68-80, 117. (Genowefa Majcher) **57** #1584 58H05
- A criterion of invariance for the solution of the Cauchy problem in relation to the Lie-Bäcklund transformation group. (Russian) *Dinamika Splošn. Sredy No. 34* *Nekotorye Problemy Uprugosti i Plastičnosti* (1978), 80-91, 143. (J. S. Joel) **58** #29045 35A30 (58H05)
- Šubov, V. I. The decomposition of a quasiregular representation of a Lie group by means of the method of orbits. (Russian) *Differential geometry, Lie groups and mechanics. Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **37** (1973), 77-96. (V. S. Varadarajan) **49** #6278 58F05 (22E45)
- Subrahmaniam, P. (with Suryanarayana, D.) The maximal k -free divisor of m which is prime to n . *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 49-67. (E. J. Scourfield) **56** #15588 10H25
- Subrahmaniam, Kathleen (with Subrahmaniam, Kocherlakota) ★ Multivariate analysis. A selected and abstracted bibliography, 1957-1972. Statistics: Textbooks and Monographs, Vol. 4. Marcel Dekker, Inc., New York, 1973. xi+265 pp. (Editors) **48** #1383 62Hxx
- (with Subrahmaniam, Kocherlakota) On the multivariate Behrens-Fisher problem. *Biometrika* **60** (1973), 107-111. (M. D. Perlman) **48** #12732 62H15
- (with Subrahmaniam, Kocherlakota) On the estimation of the parameters in the bivariate negative binomial distribution. *J. Roy Statist. Soc. Ser. B* **35** (1973), 131-146. (A. Goldman) **49** #6470 62F10
- (with Subrahmaniam, Kocherlakota) On the confidence region comparison of some solutions for the multivariate Behrens-Fisher problem. *Comm. Statist.* **4** (1975), 57-67. (Authors' summary) **50** #15161 62H15
- (with Subrahmaniam, Kocherlakota) On the performance of some statistics in discriminant analysis based on covariates. *J. Multivariate Anal.* **6** (1976), no. 2, 330-337. (Peter A. Lachenbruch) **53** #11891 62H30
- Subrahmaniam, Kocherlakota On quadratic forms from mixtures of two normal populations. *South African Statist. J.* **6** (1972), 103-120. (Ramesh C. Gupta) **51** #7090 62E15
- (with Subrahmaniam, Kathleen) ★ Multivariate analysis. A selected and abstracted bibliography, 1957-1972. Statistics: Textbooks and Monographs, Vol. 4. Marcel Dekker, Inc., New York, 1973. xi+265 pp. (Editors) **48** #1383 62Hxx
- (with Subrahmaniam, Kathleen) On the multivariate Behrens-Fisher problem. *Biometrika* **60** (1973), 107-111. (M. D. Perlman) **48** #12732 62H15
- (with Subrahmaniam, Kathleen) On the estimation of the parameters in the bivariate negative binomial distribution. *J. Roy Statist. Soc. Ser. B* **35** (1973), 131-146. (A. Goldman) **49** #6470 62F10
- On some functions of matrix argument. *Utilitas Math.* **3** (1973), 83-106. (K. M. Saksena) **48** #11596 33A30
- On the asymptotic distributions of some statistics used for testing $\Sigma_1 = \Sigma_2$. *Ann. Statist.* **3** (1975), no. 4, 916-925. (M. S. Srivastava and E. M. Carter) **52** #15848 62H10
- (with Subrahmaniam, Kathleen) On the confidence region comparison of some solutions for the multivariate Behrens-Fisher problem. *Comm. Statist.* **4** (1975), 57-67. (Authors' summary) **50** #15161 62H15
- (with Subrahmaniam, Kathleen) On the performance of some statistics in discriminant analysis based on covariates. *J. Multivariate Anal.* **6** (1976), no. 2, 330-337. (Peter A. Lachenbruch) **53** #11891 62H30
- Recent trends in multivariate normal distribution theory: on the zonal polynomials and other functions of matrix argument. *Sankhyā Ser. A* **38** (1976), no. 3, 221-258. (Author's summary) **58** #31583 62H10
- Subrahmanian, H. (with Rajagopalan, M.) Dense subgroups of locally compact groups. *Colloq. Math.* **35** (1976), no. 2, 289-292. (Paul Milnes) **54** #5381 22B05
- Subrahmanya, M. R. A note on a problem of Rivlin. Collection of articles dedicated to J. L. Walsh on his 75th birthday, VIII. *J. Approximation Theory* **6** (1972), 359-361. (R. Feinerman) **49** #9503 41A50
- (with Brosowski, Bruno) On the existence of functions with prescribed best approximations. *J. Approximation Theory* **15** (1975), no. 2, 143-155. (Ivan Singer) **52** #8738 41A50
- Subrahmanya, M. T. The equitable quality level and error-volumes under the multivariate OC of acceptance sampling plans. *Sankhyā Ser. B* **35** (1973), 93-98. (Benjamin Epstein) **51** #9413 62N10
- Equitable quality level and error-areas under the operating characteristic curves of normal single sampling inspection plans (with σ known). *Ann. Inst. Statist. Math.* **28** (1976), no. 2, 277-290. (W. Uhlmann) **55** #11542 62N10
- Subrahmanyam, M. A property of simple least squares estimates. *Sankhyā Ser. B* **34** (1972), 355-356. (Hubert J. Chen) **51** #14444 62J05
- Subrahmanyam, M. B. (with Eyman, Earl D.) Time-optimal control of a certain second-order plant with restricted phase coordinates. *Internat. J. Control* **21** (1975), 505-516. (Marcel Amouroux) **54** #8393 49B15
- Necessary conditions for minimum in problems with nonstandard cost functionals. *J. Math. Anal. Appl.* **60** (1977), no. 3, 601-616. (Ja. I. Al'ber) **57** #10547 49B35
- Subrahmanyam, Mari G. (with Merton, Robert C.) The optimality of a competitive stock market. Symposium on the optimality of competitive capital markets. *Bell J. Econom. and Management Sci.* **5** (1974), no. 1, 145-170. (Nancy L. Schwartz) **53** #4924 90A15
- Subrahmanyam, P. V. Remarks on some fixed-point theorems related to Banach's contraction principle. *J. Mathematical and Physical Sci.* **8** (1974), 445-457; errata, *ibid.*
- 9** (1975), 195. (T. C. Lim) **50** #11208 54H25
- Completeness and fixed-points. *Monatsh. Math.* **80** (1975), no. 4, 325-330. (Kannan) **52** #11887 54H25
- (with Subba Rao, V.) A note on the solution of certain functional equations. *Mathematical and Physical Sci.* **10** (1976), no. 2, 191-195. (Ivan L. Reilly) **54** #32055 #6051 39A40
- (with Subba Rao, V.) Errata: "A note on the solution of certain functional equations" (*J. Mathematical and Physical Sci.* **10** (1976), no. 2, 191-195). *J. Mathematical and Physical Sci.* **10** (1976), no. 3, 277. (Ivan L. Reilly) **55** #60539A40
- A new approach to fixed points and coincidences. (Russian summary) *Bull. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 8, 775-780. (Michel Smol) **57** #13905 54H25
- An application of a fixed point theorem to best approximation. *J. Approximation Theory* **20** (1977), no. 2, 165-172. (J. W. Schmidt) **56** #3539 41A65 (47H10)
- Subrahmanyasastry, V. V. Partitions with congruence conditions. *J. Indian Math. Soc. (N.S.)* **36** (1972), 177-194 (1973). (H. Gupta) **48** #3907 10J20 (10A45)
- (with Hanumanthachari, J.) Certain totient functions—allied Ramanujan sums and applications to certain linear congruences. *Math. Student* **42** (1974), 214-222 (1975). (M. S. Cheema) **53** #250 10A20
- (with Subbarao, M. V.) A transformation formula for products arising in partition theory. *Rocky Mountain J. Math.* **6** (1976), no. 2, 345-356. (G. L. Alexandersson) **53** #2822 10A45
- Subrahmanian, A. K. (with Zaborsky, John; Tarn, Tzyh Jong; Lu, Keh Ming) A new space for emergency control in the interconnected power system. *IEEE Trans. Automatic Control AC-22* (1977), no. 4, 505-517. (B. D. Doneski) **57** #2655 93A05
- Subrahmanian, B. On the inclusion $L^p(\mu) \subset L^q(\mu)$. *Amer. Math. Monthly* **85** (1978), no. 4, 479-481. (R. H. Cox) **58** #2221 46E30
- Subrahmanian, H. Integer-valued continuous functions. II. *Canad. Math. Bull.* **14** (1971), 235-237. (J. Kist) **47** #817 46E99
- The non-cut points in a non-degenerate continuum. Volume dedicated to memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 295-296 (1972). (L. E. Ward) **48** #7226 54F15 (13A15)
- (with Sundaraman, T. R.) Precomplete varieties of semigroups. *Semigroup Forum* **8** (1974), no. 3, 278-281. (M. Gould) **51** #5818 20M10
- (with Hill, Paul) The freeness of a group based on a distributive lattice. *Proc. Amer. Math. Soc.* **51** (1975), 260-262. (P. Crawley) **51** #13082 20K99
- Subrahmanian, K. (with Krishnamurthy, E. V.; Rao, T. Mahadeva) Formal description, compression and transformation of digital pictures. I. Picture encoding and decoding. *Proc. Indian Acad. Sci. Sect. A* **79** (1974), 139-159. (1 plate) (Arnold Griffith) **53** #7159a 68A45 (94A05)
- (with Krishnamurthy, E. V.; Rao, T. Mahadeva; Srinivasan, S.) Formal description, compression and transformation of digital pictures. II. Picture algebraic geometry. *Proc. Indian Acad. Sci. Sect. A* **79** (1974), 195-211. (3 plates) (Arnold Griffith) **53** #7159b 68A45 (94A05)
- (with Krishnamurthy, E. V.; Rao, T. Mahadeva) Finite segment p -adic number systems with applications to exact computation. *Proc. Indian Acad. Sci. Sect. A* (1975), 58-79. (James Howland) **51** #2343 68A20 (65F10)
- (with Krishnamurthy, E. V.; Rao, T. Mahadeva) p -adic arithmetic procedures exact matrix computations. *Proc. Indian Acad. Sci. Sect. A* **82** (1975), no. 5, 165-171. (Robert Todd Gregory) **52** #13615 10A30 (65F99, 68A15)
- (with Rao, T. Mahadeva; Krishnamurthy, E. V.) Residue arithmetic algorithms exact computation of g -inverses of matrices. *SIAM J. Numer. Anal.* **13** (1976), no. 1, 155-171. (Robert Todd Gregory) **55** #13761 65F20
- Subrahmanian, K. G. (with Siromoney, Rani; Rangarajan, K.) Control on kolam arrangements. *Information and Control* **32** (1976), no. 3, 272-275. (Itsuo Takanami) **55** #117368A30
- (with Siromoney, Rani; Rangarajan, K.) Parallel/sequential rectangular arrays with tables. *Internat. J. Comput. Math.* **6** (1977/78), no. 2, 143-157. (Tadao Takao) **57** #11198 68A30
- Subrahmanian, Kumar A model for concurrent diagnosis in a microprogrammable system using a dynamic test scheme. *Information processing 77 (Proc. IFIP Congr., Toronto, Ont., 1977)*, pp. 421-426. *IFIP Congr. Ser., Vol. 7, North-Holland, Amsterdam, 1978*. (Author's summary) **57** #19157 94A25
- Subrahmanian, N. R. (with Sivakrishna Prasad, P.) Incompressible potential flow past 'not-so-slender' bodies of revolution at an angle of attack. *J. Fluid Mech.* **70** (1975), no. 4, 651-661. (J. P. Guiraud) **52** #2394 76A1
- Subrahmanian, P. K. Two-norm spaces and decompositions of Banach spaces. I. *Studia Math.* **43** (1972), 179-194. (W. H. Ruckle) **47** #3963 46B15
- (with Rothman, S.) Two-norm spaces and decompositions of Banach spaces. *Trans. Amer. Math. Soc.* **181** (1973), 313-327. (W. H. Ruckle) **47** #9254 46B15
- Two-norm spaces and quasi-reflexivity. *Tamkang J. Math.* **8** (1977), no. 1, 17-24. (Ivan Singer) **58** #2186 46B99
- Subrahmanian, P. R. A short note on the Bernoulli polynomial of the first kind. *Math. Student* **42** (1974), 57-59 (1975). (S. P. Goyal) **53** #817 30A70
- Subrahmanian, R. (with Bhagwat, K. V.) Relativistic generalization of the Saxon-Hutcheon theorem. (Russian summary) *Phys. Status Solidi (B)* **48** (1971), no. 1, 399-406. (N. Sengupta) **47** #1393 81J4
- Product of transition semi-groups and the hypothesis (L). *Sankhyā Ser. A* **34** (1972), 453-456. (Hing Lun Chow) **49** #1603 60J45
- (with Bhagwat, K. V.) Inequalities between means of positive operators. *Math. Proc. Cambridge Philos. Soc.* **83** (1978), no. 3, 393-401. (Arthur Lubin) **57** #72347B15
- Subrahmanian, Ramachandran (with Srinivasan, S. K.; Vasudevan, R.) Correlation functions in queueing theory. *J. Appl. Probability* **9** (1972), 604-616. (C. Mohan) **50** #3397 60K25
- (with Kumaraswamy, S.) A stochastic model for linear viscoelastic substances. (Czech summary) *Apl. Mat.* **18** (1973), 141-145. (J. Murzewski) **47** #9925 73B6
- On a conjecture on singular martingales. *J. Math. Anal. Appl.* **43** (1973), 455-461. (D. Siegmund) **50** #11424 60G45

- a generalization of martingales due to Blake. *Pacific J. Math.* **48** (1973), 78. (P. W. Millar) **50** #11425a 60G45
- ith Von Wolff, M. R.) Optimal readjustment intervals. *Operations Res.* **22** (1974), 191-192. (Ralph L. Disney) **53** #7424 90B25 (60K10)
- ith Kistner, Klaus-Peter) Die Zuverlässigkeit eines Systems mit redundanten fälligen Komponenten und Reparaturmöglichkeiten. (English summary) *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **18** (1974), A117-A129. (B. Dimitrov) **51** #14926 90B25
- note on a two-unit redundant system. *Cahiers Centre Études Recherche Opér.* **17** 75-90. (B. Dimitrov) **51** #14928 90B25
- ith Van Wolff, M. R.) Age replacement in simple systems with increasing loss ons. *IEEE Trans. Reliab.* **R-25** (1976), no. 1, 32-34. (Peter J. Brockwell) **1922** 62N05
- ith Venkatakrishnan, K. S.; Kistner, Klaus-Peter) Reliability of a repairable with standby failure. *Operations Res.* **24** (1976), no. 1, 169-176. (G. K. Charyya) **55** #9316 60K10
- ith von Wolff, M. R.) Optimal timing of periodic follow-up advertising impulses. (English summary) *Z. Operations Res. Ser. A-B* **21** (1977), no. 3, A89-A101. (Tadashi U.) **56** #17752 90A15
- an, S. (with Swamy, Subramanian) Some recent mathematical developments in micis. *Internat. J. Math. Ed. Sci. Tech.* **3** (1972), no. 1, 77-88. (J. S. Joel) **5294** 90Axx
- yam, K. (with Ghosh, J. K.) Second order efficiency of maximum likelihood tors. *Sankhyā Ser. A* **36** (1974), no. 4, 325-358. (Masafumi Akahira) **55** #1593
- ith Ghosh, J. K.) Inference about separated families in large samples. *Sankhyā* **37** (1975), no. 4, 502-513. (Rasul A. Khan) **57** #1744 62F10 (62C15)
- yam, S. S. Oblique pedal lines of cyclic polygons. II. Volume dedicated to the try of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 73-79 (1972). (H. R. Müller) **2233** 50B05
- a certain chains. *Math. Mag.* **45** (1972), 65-72. (S. R. Mandan) **45** #7573
- oré The p -rank of Artin-Schreier curves. *Manuscripta Math.* **16** (1975), no. 2, 93. (K. Kiyek) **51** #12868 14H45 (14H30)
- enko, Ju. A. Watson operators with power kernels. (Russian) *Dokl. Akad. Nauk SSSR* **224** (1975), no. 3, 553-556. (V. G. Čelidze) **52** #11494 44A15 (44A05)
- See Martinelli, Enzo, **48** #9700
- ncesco Spazi (R, C)-misti generali. (English summary) *Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 282-286 (1972). (A. Tognoli) **49** #3227 32C05
- na categoria di germi di successioni spettrali. (English summary) Collection in try of Enrico Bompiani. *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, suppl., 423-436. (Laplace) **54** #2762 18G40
- iani, Rosanna Sulle categorie quasi abeliane. *Rev. Roumaine Math. Pures Appl.* **17** (1973), 105-119. (G. M. Kelly) **52** #3278 18E05
- untori satelliti per le categorie quasi abeliane. (English summary) *Rend. Mat.* (6) **4**, 97-117. (M. Tierney) **52** #13994 18E05
- il funtore Ext di Yoneda. (English summary) Collection in memory of Enrico iani. *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, suppl., 398-406. (M. L. Laplace) **761** 18G15
- a teoria delle relazioni nello studio di categorie regolari e di categorie esatte. *Riv. Univ. Parma* (4) **1** (1975), 143-158. (G. M. Kelly) **56** #446 18D05
- a teoria delle relazioni e le categorie di concetti. (French summary) *Rend. Mat.* (6) **77**, no. 1, 61-74. (Gavin Wraith) **57** #9790 18B10 (02J99, 18A15)
- y, G. (with Čeban, V. G.) A certain two-dimensional problem for a hyperbolic equation. (Russian) *Prikl. Mat. i Programirovanie* No. 6 (1971), 122-126. **969** 35K05
- erald E. Operators associated with a pair of nonnegative matrices. *Proc. Amer. Soc.* **35** (1972), 53-54. (B. Levinger) **45** #5153 15A48
- Ginter One more definition of the curvature and torsion of smooth curves. *Ann. Math.* **25** (1971/72), 167-174. (A. Fialkow) **46** #2565 53A05
- ber eine Definition der Krümmungen und mehrdimensionalen Schmiegesebenen l differenzierbarer Kurven im euklidischen Raum R_n . *Ann. Polon. Math.* **26** 45-51. (H. R. Müller) **46** #2620 53C70
- L. Stress functions for the "second" plane problem of micropolar elasticity. (English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **20** (1972), 831-840. (D. Ieşan) **730** 73J5
- n stress and displacement functions for the "second" problem of two-dimensional polar elasticity. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **20** 841-850. (D. Ieşan) **49** #6731 73J5
- Louis (with Fong, Humphrey) On the ratio ergodic theorem for semi-groups. *J. Math.* **39** (1971), 659-667. (M. A. Akcoglu) **46** #6094 47D05 (28A65)
- ith Brunel, Antoine) Sur quelques conditions équivalentes à la super-réflexivité es espaces de Banach. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A993-A994. (J. rti) **47** #7389 46B10
- ith Akcoglu, Mustafa A.) On operator convergence in Hilbert space and in gue space. Collection of articles dedicated to the memory of Alfréd Rényi, I. *Math. Hungar.* **2** (1972), 235-244. (U. Krengel) **48** #4777 47A35
- ith Fong, Humphrey) On unaveraged convergence of positive operators in gue space. *Trans. Amer. Math. Soc.* **179** (1973), 383-397. (U. Krengel) **48** #7351 15 (28A65)
- ith Fong, Humphrey) On a mixing property of operators in L_p spaces. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **28** (1973/74), 165-171. (M. A. Akcoglu) **394** 28A65
- ith Brunel, Antoine) On B -convex Banach spaces. *Math. Systems Theory* **7** no. 4, 294-299. (Pier Luigi Papini) **55** #11004 46B05
- ith Akcoglu, Mustafa A.) On the dominated ergodic theorem in L_2 space. *Proc. Math. Soc.* **43** (1974), 379-382. (U. Krengel) **48** #12094 47A35 (28A65)
- ith Akcoglu, Mustafa A.) On weak and strong convergence of positive ctions in L_p spaces. *Bull. Amer. Math. Soc.* **81** (1975), 105-106. (Humphrey S.) **50** #13445 28A65 (47A35)
- (with Akcoglu, Mustafa A.) On convergence of iterates of positive contractions in L_p spaces. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday. *IV. J. Approximation Theory* **13** (1975), 348-362. (Michael Lin) **51** #3393 28A65
- (with Brunel, Antoine; Fong, Humphrey) An ergodic super-property of Banach spaces defined by a class of matrices. *Proc. Amer. Math. Soc.* **49** (1975), 373-378. (R. J. Nagel) **51** #1433 47A35 (28A65)
- (with Akcoglu, Mustafa A.) Remarks on dilations in L_p -spaces. *Proc. Amer. Math. Soc.* **53** (1975), no. 1, 80-82. (Michael Lin) **51** #13729 47A35 (28A65)
- (with Brunel, Antoine) On J -convexity and some ergodic super-properties of Banach spaces. *Trans. Amer. Math. Soc.* **204** (1975), 79-90. (K. Sundaresan) **52** #1261 46B05
- (with Akcoglu, Mustafa A.) Weak convergence of positive contractions implies strong convergence of averages. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **32** (1975), 139-145. (Humphrey S. Fong) **51** #13730 47A35 (28A65)
- (with Chacon, R. V.) On convergence of vector-valued asymptotic martingales. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **33** (1975/76), no. 1, 55-59. (S. D. Chatterji) **52** #15658 60G45 (46G10)
- (with Akcoglu, Mustafa A.) On positive dilations to isometries in L_p spaces. *Measure theory (Proc. Conf., Oberwolfach, 1975)*, pp. 389-401. *Lecture Notes in Math.*, Vol. 541, Springer, Berlin, 1976. (Humphrey S. Fong) **56** #9296 47A35 (28A65)
- (with Brunel, Antoine) On sequences invariant under spreading in Banach spaces. *Probability in Banach spaces (Proc. First Internat. Conf., Oberwolfach, 1975)*, pp. 21-31. *Lecture Note in Math.*, Vol. 526, Springer, Berlin, 1976. (Bor-Luh Lin) **57** #1085 46B15
- Les amarts (martingales asymptotiques). *Séminaire Maurey-Schwartz* (1975-1976), *Espaces L^p , applications radonifiantes et géométrie des espaces de Banach*, Exp. No. 8, 7 pp. Centre Math., École Polytech., Palaiseau, 1976. (S. D. Chatterji) **57** #7757 60G45 (28A45)
- (with Figiel, T.) An application of Ramsey sets in analysis. *Advances in Math.* **20** (1976), no. 2, 103-105. (K. Sundaresan) **54** #5805 46B05
- (with Edgar, Gerald A.) The Riesz decomposition for vector-valued amarts. *Bull. Amer. Math. Soc.* **82** (1976), no. 4, 632-634. (C. L. Scheffer) **54** #3841 60G45
- (with Edgar, Gerald A.) Les amarts: une classe de martingales asymptotiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 13, A715-A718. (M. M. Rao) **53** #6727 60G45
- (with Brunel, Antoine) Sur les amarts faibles à valeurs vectorielles. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 17, A1011-A1014. (David J. Scott) **54** #3840 60G45
- (with Brunel, Antoine) Sur les amarts à valeurs vectorielles. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 15, A1037-A1040. (David J. Scott) **55** #11378 60G45
- (with Brunel, Antoine) Equal signs additive sequences in Banach spaces. *J. Functional Analysis* **21** (1976), no. 3, 286-304. (Bor-Luh Lin) **53** #1228 46B15
- (with Edgar, Gerald A.) Amarts: a class of asymptotic martingales. A. Discrete parameter. *J. Multivariate Anal.* **6** (1976), no. 2, 193-221. (S. D. Chatterji) **54** #1368 60G45
- (with Edgar, Gerald A.) Amarts: a class of asymptotic martingales. B. Continuous parameter. *J. Multivariate Anal.* **6** (1976), no. 4, 572-591. (S. D. Chatterji) **55** #4370 60G45
- (with Edgar, Gerald A.) The Riesz decomposition for vector-valued amarts. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **36** (1976), no. 1, 85-92. (S. D. Chatterji) **54** #1369 60G45
- (with Krengel, Ulrich) Semiamarts and finite values. *Bull. Amer. Math. Soc.* **83** (1977), no. 4, 745-747. (S. D. Chatterji) **55** #9261 60G45
- (with Brunel, Antoine) Une caractérisation probabiliste de la séparabilité du dual d'un espace de Banach. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 22, A1469-A1472. (Authors' summary) **55** #13566 60G45 (46B10)
- (with Akcoglu, Mustafa A.) Un théorème ergodique général pour les processus sur-additifs. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 9, A637-A639. (Authors' summary) **56** #8803 28A65
- (with Akcoglu, Mustafa A.) Dilations of positive contractions on L_p spaces. *Canad. Math. Bull.* **20** (1977), no. 3, 285-292. (William B. Johnson) **56** #16433 47B37 (47A20)
- (with Edgar, Gerald A.) Martingales in the limit and amarts. *Proc. Amer. Math. Soc.* **67** (1977), no. 2, 315-320. (Louis Blake) **58** #7832 60G45
- (with Edgar, Gerald A.) On vector-valued amarts and dimension of Banach spaces. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **39** (1977), no. 3, 213-216. (W. A. Woyczyński) **56** #6843 60G45 (46B05)
- (with Ghoussoub, Nassif) A refinement of the Riesz decomposition for amarts and semiamarts. *J. Multivariate Anal.* **8** (1978), no. 1, 146-150. (S. D. Chatterji) **58** #13334 60G45
- Suchkov, V. P. See Sučkov, V. P.
- Suchodolski, B. Perspectives on the history of science. (Russian. English summary) *Voprosy Ist. Estestvozn. i Tehn.* **1974**, no. 2-3(47-48), 36-41, 220. (Editors) **58** #15797 01A05
- See also Anniversaire: Naissance de Nicolas Copernicus, **50** #22; Średniowiecze, Paweł Czartoryski; et al., **58** #26690a and Barok, Henryk Barycz; et al., **58** #26690b
- Suchomel, J. Über die Zerlegungen von linearen homogenen Differentialoperatoren. *Czechoslovak Math. J.* **21**(96) (1971), 696-699. (A. G. Kartsatos) **45** #628 34A30 (47E05)
- Über die Zerlegungen von linearen homogenen Differentialoperatoren in Operatoren erster Ordnung. (Czech summary) *Časopis Pěst. Mat.* **97** (1972), 198-200, 206. (E. K. H. Hoehn) **46** #7615 34A30 (47E05)
- Decomposition of linear homogeneous differential operators into first order factors. (Russian) *Arch. Math. (Brno)* **12** (1976), no. 4, 191-198. (Stefan Balint) **55** #5940 34A25
- Transformation of higher order linear homogeneous differential equations. (Russian) *Arch. Math. (Brno)* **13** (1977), no. 1, 41-45. (G. S. Ladde) **58** #17276 34A30

- Súchoň, Wojciech** On non equivalence of two definitions of the algebras of Łukasiewicz. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972), no. 1, 35-37. (Editors) 50 #12653 02C05 (02J99)
- Non-equivalence of certain definitions of infinite Łukasiewicz algebras. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972), no. 2, 10-16. (Editors) 50 #12654 02C05 (02J99)
- Inéquivalence des deux définitions des algèbres de Łukasiewicz. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki* No. 7 (1972), 31-34. (M. Stojaković) 47 #6482 02J99 (02C05)
- Application of the theory of logical matrices in the independence proofs. Abstracts of the lectures delivered at the 19th Conference of the History of Mathematical Logic (Cracow, 1973). *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* 2 (1973), 121-126. (Editors) 55 #7732 02B05
- On defining Moisil's functors in n -valued Łukasiewicz propositional logic. *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* 2 (1973), 195-196. (R. Cignoli) 52 #13323 02C05 (02J99)
- Inéquivalence de certaines définitions des algèbres infinies de Łukasiewicz. *Rep. Math. Logic* 1 (1973), 21-26. (R. Cignoli) 49 #8858 02J99 (02C05)
- Matrix Łukasiewicz algebras. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 3 (1974), no. 3/4, 9-16. (Annalisa Marcja) 53 #2627 02C05
- La méthode de Smullyan de construire le calcul n -valent de Łukasiewicz avec implication et négation. *Rep. Math. Logic* 2 (1974), 37-42. (A. Rose) 54 #2419 02C05 (02D99)
- Définition des foncteurs modaux de Moisil dans le calcul n -valent des propositions de Łukasiewicz avec implication et négation. *Rep. Math. Logic* 2 (1974), 43-47. (Alasdair Urquhart) 50 #6793 02C05
- Matrix Łukasiewicz algebras. *Rep. Math. Logic* No. 4 (1975), 91-104. (R. Cignoli) 54 #4973 02J05 (02C05)
- Definition of Moisil functors in n -valued implicative-negative Łukasiewicz propositional calculus. (Polish with English translation) Papers presented at the Logic Conference (Opole, 1973). *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* 15 *Logika Mat.* (1975), 17-18, 19-20. (Author's summary) 54 #2420 02C05
- Smullyan's method of constructing Łukasiewicz's n -valued implicational-negational sentential calculus. *Selected papers on Łukasiewicz sentential calculi*, pp. 119-124. *Zakład Narod. im. Ossoliń., Wydawn. Polsk. Akad. Nauk, Wrocław, 1977.* (Editors) 58 #21447 02C05 (02D99)
- Suchting, W. A.** See *Methodological and historical essays in the natural and social sciences*, 52 #13078
- Suchy, Kurt** (with Weinert, Ulrich) Generalization of the moment method of Maxwell-Grad for multi-temperature gas mixtures and plasmas. *Z. Naturforsch.* 32a (1977), no. 5, 390-400. (L. A. Turski) 57 #11546 82.47
- Suciu, Ion** Harnack inequalities for a functional calculus. *Hilbert space operators and operator algebras (Proc. Internat. Conf., Tihany, 1970)*, pp. 499-511. *Colloq. Math. Soc. János Bolyai, 5, North-Holland, Amsterdam, 1972.* (J. D. Gray) 50 #14309 47A60
- Dilatation and extension theorems for operator-valued mappings. (Romanian. English summary) *The theory of operators and operator algebras (Romanian)*, pp. 93-130, 490. *Editura Acad. R.S.R., Bucharest, 1973.* (F. H. Szafraniec) 51 #6453 47A20
- Analytic relations between functional models for contractions. *Acta Sci. Math. (Szeged)* 34 (1973), 359-365. (D. A. Herrero) 47 #9317 47A45
- Functional models for positive maps on $C(X)$. *Linear operators and approximation, II (Proc. Conf., Math. Res. Inst., Oberwolfach, 1974)*, pp. 81-95. *Internat. Ser. Numer. Math., Vol. 25, Birkhäuser, Basel, 1974.* (Paul S. Muhly) 52 #15024 46J25 (46L99)
- ★Function algebras. Translated from the Romanian by Mihaela Mihailescu. *Editura Academiei Republicii Socialiste România, Bucharest: Noordhoff International Publishing, Leyden, 1975.* 272 pp. (Editors) 51 #6428 (EA 52) 46Jxx
- (with Valușescu, Ilie) On the hyperbolic metric on Harnack parts. *Studia Math.* 55 (1975/76), no. 1, 97-109. (J. Tomiyama (Zbl 328 #46074)) 58 #30299 (E 58 #30300) 46L05
- (with Valușescu, Ilie) Factorization of semi-spectral measures. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 6, 773-793. (M. M. Rao) 54 #11476 60G25 (47B40)
- (with Valușescu, Ilie) Correction to: "On the hyperbolic metric on Harnack parts" (*Studia Math.* 55 (1975/76), no. 1, 97-109). *Studia Math.* 58 (1976), no. 1, 99-100. (J. Tomiyama (Zbl 348 #46047)) 58 #30300 46L05
- (with Valușescu, Ilie) Essential parameters in prediction. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 10, 1477-1495. (Hannu Niemi) 57 #14122 60G25 (47A45, 60G10)
- Suciu, Nicolae** Selection of mutually absolutely continuous semi-spectral measures. *Rev. Roumaine Math. Pures Appl.* 20 (1975), no. 10, 1153-1161. (H. S. Bear) 53 #1285 46L05
- Bishop-Creese decompositions for a functional calculus. (Romanian summary) *An. Univ. Timișoara Ser. Științ. Mat.* 15 (1977), no. 2, 133-148 (1978). (J. Ernest) 58 #30301 46L05 (46J10)
- Suck, J.** Notiz zum Satz des Pythagoras. (English summary) *Nordisk Mat. Tidskr.* 25/26 (1978), no. 2, 110, 112. (From the text) 58 #23973 50B05
- Sučkov, L. N.** Optimization of the reliability exponents of complex systems whose functioning is expressible in terms of semi-Markov processes. (Russian) *Complex systems and simulation (Proc. Sem., Kiev, 1969)*, No. 2 (Russian), pp. 33-41. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (V. Kašanov (RŽMat 1970 #9 V235)) 45 #8291 93E20
- (with Matvišin, Ja. O.) A certain problem of the optimal control of a semi-Markov object. (Russian) *Complex systems and simulation (Proc. Sem., Kiev, 1969)*, No. 2 (Russian), pp. 42-49. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* ((RŽMat 1970 #8 V80)) 45 #8371 93E20
- Optimization of the sojourn time of a semi-Markov process in a fixed set of states. (Russian) *Complex systems and simulation (Proc. Sem., Kiev, 1968/1969)*, No. 1 (Russian), pp. 67-73. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (V. Rykov (RŽMat 1970 #10 V74)) 45 #9708 93E15
- Sučkov, V. A.** Plane potential flows with stationary stream lines. (Russian) *Difference methods for the solution of problems of mathematical physics, Part II. Trudy Mat. Inst. Steklov.* 122 (1973), 52-65, 99. (Hans Kaper) 51 #14742 76.35

- See also *Difference methods of solving problems of mathematical physics*, 51
- Sučkov, V. K.** (with Azleckii, S. P.) Classes of finite groups Ω_k and $\tilde{\Omega}_k$ for certain parameters of the number k . (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1978(147), 3-10. (J. Wiegold) 51 #691 20D20
- G_p^n -groups. (Russian) *Finite groups (Proc. Gomel Sem., 1973/1974)* (Russian) 180-187, 231. *Izdat. "Nauka i Tehnika", Minsk, 1975.* (G. Pic) 53 #13407 20
- Sučkov, V. P.** (with Cirilin, A. M.) Nonlinear programming in the mean and the distribution of loads among parallel machines. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1972, no. 3, 17-24 (Russian); translated as *Engrg. Cybernetics* 10 (1972), no. 3, 38a (W. W. Breckner) 50 #6501 90C30
- (with Vainštein, A. G.; Cirilin, A. M.) Bounds of the solution of a non-linear programming problem in the mean. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1976, 29-33 (Russian); translated as *Engrg. Cybernetics* 14 (1976), no. 1, 18-22 (Authors' summary) 58 #15193 90C30
- Suckow, Siegfried** Automorphismen des Siegelischen Quotienten zweiten Grades. *Ann.* 200 (1973), 85-94. (H. Klingens) 48 #6477 32N05 (32M05)
- garcía Sucre, Máximo** See *García Sucre, Máximo*
- Sud, A. R.** (with Sud, Krishan) The solutions of the first order matrix differential equation $dU/dr = (A/r - B)U$. *J. Phys. A* 11 (1978), no. 3, L39-L43. (Wolfgang Bühl) 58 #17277 34A30
- Sud, Krishan** (with Wright, L. E.) A new analytic continuation of Appell's hypergeometric series F_2 . *J. Mathematical Phys.* 17 (1976), no. 9, 1719-1721. (A. Erdélyi) 54 #633A30
- (with Wright, L. E.; Onley, D. S.) Radial integrals with finite energy loss Dirac-Coulomb functions. *J. Mathematical Phys.* 17 (1976), no. 12, 2175-2181. (Sakakawa) 54 #14604 81.33
- (with Sud, A. R.) The solutions of the first order matrix differential equation $dU/dr = (A/r - B)U$. *J. Phys. A* 11 (1978), no. 3, L39-L43. (Wolfgang Bühl) 58 #17277 34A30
- Suda, Nobuhide** (with Fujii, Takao) Use of a low order model for regulating large systems under the influence of disturbances. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 3: Ecology and systems engineering, Large scale sensitivity optimization and adaptation theory, Paper No. 30.4, 6 pp.* *Internat. Fed. Automat. Control, Düsseldorf, 1971* [1972]. (H. J. Kushner) 50 #16059 93E20
- (with Fujii, Takao) On the equivalence and simplification of linear time-invariant discrete systems with noise. (Japanese. English summary) *Systems and Control* (1973), 765-774. (M. Aoki) 50 #4086 93E20
- (with Kodama, Shinzo) Polynomial matrices and their applications (the foundations). (Japanese) *Systems and Control* 19 (1975), no. 4, 190-200. (Katsuro Tamura) 53 #13269 15A21
- (with Kodama, Shinzo) Polynomial matrices and their applications (the applications). (Japanese) *Systems and Control* 19 (1975), no. 5, 255-264. (Katsuro Tamura) 53 #13270 15A21 (93B25)
- Sudakov, D. M.** (with Morozov, A. M.) Distribution of the moments of time of the intersection of a normal random process by the increasing level. (Russian) *Sakhs. SSR Mecn. Akad. Gamotol. Centr. Šrom.* 9 (1970), no. 4, 80-86. (E. V. Bulinskii) 47 #1117 60G15
- See also *Probabilistic automata and their application*, 48 #5745 and *Questions of mathematical and engineering cybernetics*, 53 #2574
- Sudakov, R. S.** On the question of interval estimation of the index of reliability of a sequential system. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 3, 86-94 (Russian); translated as *Engrg. Cybernetics* 12 (1974), no. 3, 55-63. (Sami Abdelhamid) 52 #190B25 (62N05)
- (with Teskin, O. I.; Filippov, V. A.) A method of determining the requirements for the reliability of the elements of a system when a lower confidence limit is given for the probability of a faultless performance of the system. (Russian) *Nadežn. i Kor. Kačestva* 1974, no. 3, 50-56, 79. (Z. Khalil) 50 #15887 90B25
- Modification transformation of a result by A. D. Solov'ev and R. A. Mirnov in the case of a system with standby. (Russian) *Točn. i Nadežn. Kibernet. Sistem.* No. 3 (1976), 107-112, 158. (See RŽMat 1975 #12 V358) 90B25
- (with Tveritinov, D. I.) Computation of the probability of N events and problems in the reliability of systems. (Russian) *Točn. i Nadežn. Kibernet. Sistem.* (1976), 74-77, 104. (R. H. Rodine) 57 #17739 60-01
- Sudakov, V. N.** The representation of bistochastic integral operators by means of disjunctive isomorphisms. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Steklov. (LOMI)* 19 (1970), 196-208. (H. Salehi) 45 #990 47G05 (60H05)
- A remark on marginal sufficiency. (Russian) *Dokl. Akad. Nauk SSSR* 198 (1971), 301-302. (Daniel Solomon) 52 #12134 62B05
- (with Dovbyš, L. N.) The condition number of a coordinate system. (Russian) *Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 23 (1971), 16-32. (Charles Davis) 45 #9110 46C05 (15A18, 65F15)
- (with Pribyš, B. N.) A remark on a certain theorem of V. S. Mihalevič. (Russian) Problems in the theory of probability distributions. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 29 (1972), 14-17. (Ju. M. Ryžov) 48 #7508 62B05 (62B05)
- The marginal sufficiency of statistics. (Russian) Problems in the theory of probability distributions. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 29 (1972), 92-101. (Viorel Gh. Vodă) 55 #1550 62B05
- Measures on subsets of direct products. (Russian) Problems in the theory of probability distributions. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 29 (1972), 113-128. (H. Salehi) 48 #7319 60A10 (28A35)
- The existence of bistochastic densities. (Russian) Problems in the theory of probability distributions. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 29 (1972), 129-146. (H. Salehi) 48 #7320 60A10 (28A35)
- A remark on the criterion of continuity of Gaussian sample function. *Proceedings of the Second Japan-USSR Symposium on Probability Theory (Kyoto, 1972)*, pp. 444-445. *Lecture Notes in Math., Vol. 330, Springer, Berlin, 1973.* (R. M. Dudley) 56 #1460G15
- The existence of a probability measure with given projections. (Russian) *Zametki* 14 (1973), 573-576. (K. Jacobs) 48 #5134 60A10 (28A35)

- (with Cirel'son, B. S.) Extremal properties of half-spaces for spherically invariant measures. (Russian.) Problems in the theory of probability distributions, II. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **41** (1974), 14–24, 165. (R. M. M.) **51** #1932 60G15
 (with Zalgaller, V. A.) Some problems on centrally symmetric convex bodies. Problems in global geometry. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **45** (1974), 75–82, 119. (N. Poláková) **51** #4053 52A20
 (with Cirel'son, B. S.; Ibragimov, I. A.) Norms of Gaussian sample functions. Proceedings of the Third Japan-USSR Symposium on Probability Theory (Tashkent, 1973), pp. 20–41. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (R. M. M.) **56** #16756 60G15
 (with Zalgaller, V. A.) Metric problems of the theory of infinite-dimensional probability distributions. *Trudy Mat. Inst. Steklov.* **141** (1976), 191 pp. (R. M. Dudley) **55** #4359 (28A35)
 (with Zalgaller, V. A.) Remark on measurable additive lifting in a space of measurable functions with a metric. (Russian. English summary) Problems of the theory of probability distributions, IV. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **72** (1977), 150–153, 218, 222. (M. P. Eršov) **58** #12357 46G15 (28A40)
 (with Zalgaller, V. A.) Limit distributions of random functionals over a process. (Russian. English summary) Problems of the theory of probability distributions, IV. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **72** (1977), 154–160, 218–219, 222. (W. A. J. van der Vaart) **57** #7719 60B05
 (with Zalgaller, V. A.) also Investigations in linear operators and function theory, **46** #7927;
 Problems in the theory of stochastic processes, **46** #8286; Problems in the theory of probability distributions, **48** #1274; Theoretical problems in mathematical statistics, **48** #1274; Problems in the theory of probability distributions, **50** #11343; Problems in the theory of probability distributions, **52** #4355; Problems in the theory of probability distributions, **53** #6652 and Problems of the theory of probability distributions, **53** #719
 (with Zalgaller, V. A.) Sur l'arithmétique transfinie. *Bull. Math. Soc. Sci. Math. R.S. Roumanie* **14**(62) (1970), no. 4, 461–466 (1972). (N. H. Williams) **47** #8306 04A10
 (with Zalgaller, V. A.) also Teodorescu, Nicolae Victor, **58** #10229
 (with Zalgaller, V. A.) N. (with Pfirsch, D.) Conditions for the existence of shock-like solutions of the Burgers equation with dissipation. *Phys. Fluids* **14** (1971), 1033–1035. (R. M. M.) **53** #13884 35Q99
 (with Zalgaller, V. A.) N. (with Molčanov, S. A.) Gibbsian states in a spherical model. (Russian) *Akad. Nauk SSSR* **224** (1975), no. 3, 536–539. (Hans-Otto Georgii) **53** #4300 (82.60)
 (with Zalgaller, V. A.) also Poincaré, Henri, **52** #5337
 Rao, J. C. See Operational Research, **49** #12059
 Rao, C. G. (with Simoni, A.; Zaccaria, F.) On kernels realizing associative operations between phase-space functions. (Italian and Russian summaries) *Nuovo Cim. B* (11) **5** (1971), 134–142. (K. Kumar) **47** #8047 81A7
 (with Biswas, S. N.; Pradhan, T.) Completeness of states, shadow states, ergodic condition, and poles of the S-matrix. *Nuclear Phys.* **B50** (1972), 269–284. (R. M. M.) **54** #1974 81A7
 (with Mehra, Jagdish) Some reflections on the nature of entropy, irreversibility and second law of thermodynamics. (Italian and Russian summaries) *Nuovo Cimento B* (1972), 215–256. (H. A. Buchdahl) **48** #10396 82.00
 (with Mukunda, N.) ★Classical dynamics: a modern perspective. *Interscience [John Wiley & Sons]*, New York-London-Sydney, 1974. xi+615 pp. (Huddleston) **55** #7016 70.22 (81.22, 22E70)
 (with Gorini, Vittorio) Irreversibility and dynamical maps of statistical operators. *Annals of quantum mechanics and ordered linear spaces (Advanced Study Inst., 1973)*, pp. 260–268. *Lecture Notes in Phys.*, Vol. 29, Springer, Berlin, 1974. (R. M. M.) **57** #18589 81A6
 (with Hurley, William J.) Algebraic study of a class of relativistic wave equations. *Phys. Rev. A* **85** (1974), 546–590. (Authors' summary) **54** #12008 81.22
 (with Rajagopal, A. K.) Some generalizations of the Marcinkiewicz theorem and its applications to certain approximation schemes in many-particle physics. *Phys. Rev. A* (1974), 1852–1857. (Authors' summary) **53** #10043 81.60
 (with Hsu, J. P.) Theory of massive and massless Yang-Mills fields. *Phys. Rev. D* (1974), 1678–1686. (Authors' summary) **53** #12318 81.46
 (with Mainland, G. B.) Poincaré invariance of the spin- $\frac{1}{2}$ field in the presence of a local external electromagnetic interaction. *Phys. Rev. D* (3) **10** (1974), 3343–3349. (Authors' summary) **53** #10032 81.53
 (with Hurley, William J.) On the determination of the relativistic wave equations tested with a given representation of SL(2, C). *J. Mathematical Phys.* **16** (1975), no. 3, 2098–2098. (Marcos D. Maia) **55** #7157 81.22
 (with Ananthakrishna, G.; Gorini, Vittorio) Entropy increase for a class of causal maps. *Rep. Mathematical Phys.* **8** (1975), no. 1, 25–32. (Ju. M. Suhov) **52** #8247
 (with Gorini, Vittorio) Extreme affine transformations. *Comm. Math. Phys.* **46** (1975), no. 1, 43–52. (Mary Katherine Bennett) **54** #6817 82.50
 (with Gorini, Vittorio; Kossakowski, Andrzej) Completely positive dynamical groups of N-level systems. *J. Mathematical Phys.* **17** (1976), no. 5, 821–825. (Authors' summary) **53** #9998 81.47
 (with Mukunda, N.) Relation between Nambu and Hamiltonian mechanics. *Phys. Rev. D* (3) **13** (1976), no. 10, 2846–2850. (Authors' summary) **56** #2071 81.47
 (with Misra, Baidyanath) The Zeno's paradox in quantum theory. *J. Mathematical Phys.* (1977), no. 4, 756–763. (M. J. Gacyński) **55** #5076 81.60
 (with Khalil, M. A. K.; Hurley, William J.) A criterion for reducibility of a stochastic wave equation. *J. Mathematical Phys.* **18** (1977), no. 5, 855–857. (Authors' summary) **58** #25606 81.47
 (with Chiu, C. B.; Misra, Baidyanath) Time evolution of unstable quantum states and resolution of Zeno's paradox. *Phys. Rev. D* (3) **16** (1977), no. 2, 520–529. (G. R. M.) **56** #7543 81.30
 (with Titulaer, U. M., **54** #6831
 S. M. See Continued fractions, **58** #23269
 (with Zalgaller, V. A.) Algebraic realisations of chiral SU(3)×SU(3) symmetry. *Nuclear Phys.* **B20**

- Statist.* **42** (1971), 1697-1705. (Nagata Furukawa) **53** #6723 60G40 (62L15)
 A "Fatou equation" for randomly stopped variables. *Ann. Math. Statist.* **42** (1971), 2143-2146. (D. Siegmund) **45** #9416 62L15
 On the Dubins and Savage characterization of optimal strategies. *Ann. Math. Statist.* **43** (1972), 498-507. (M. Iosifescu) **45** #9379 60G99
 (with Heath, David C.) On a theorem of de Finetti, oddsmaking, and game theory. *Ann. Math. Statist.* **43** (1972), 2072-2077. (K. S. Fu) **50** #3960 90D10 (62C05)
 (with Heath, David C.; Pruitt, William E.) Subfair red-and-black with a limit. *Proc. Amer. Math. Soc.* **35** (1972), 555-560. (N. C. Jain) **46** #8683 90D99
 (with Heath, David C.) Continuous-time gambling problems. *Advances in Appl. Probability* **6** (1974), 651-665. (Michael Orkin) **50** #8684 60G40 (93E20)
 (with Berry, Donald A.; Heath, David C.) Red-and-black with unknown win probability. Collection of articles dedicated to Jerzy Neyman on his 80th birthday. *Ann. Statist.* **2** (1974), 602-608. (H. Chernoff) **54** #11483 60G40
 (with Dubins, Lester E.) An example in which stationary strategies are not adequate. *Ann. Probability* **3** (1975), no. 4, 722-725. (H. Taylor) **51** #14267 60G99
 (with Heath, David C.) De Finetti's theorem on exchangeable variables. *Amer. Statist.* **30** (1976), no. 4, 188-189. (A. Fuchs) **58** #18692 60F99
 (with Purves, Roger A.) Some finitely additive probability. *Ann. Probability* **4** (1976), no. 2, 259-276. (Robert Chen) **53** #6702 60G05 (60A10, 60G45)
 (with Gilat, David) Generalized Kolmogorov inequalities for martingales. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **36** (1976), no. 1, 67-73. (Robert Chen) **53** #14649 60G45
 (with Gilat, David) Timid play when large bets are profitable. *Ann. Probability* **5** (1977), no. 4, 573-576. (Robert Chen) **56** #16777 60G45 (62L99)
 (with Dubins, Lester E.) Persistently ϵ -optimal strategies. *Math. Oper. Res.* **2** (1977), no. 2, 125-134. (Nagata Furukawa) **56** #14794 90D30
 (with Dubins, Lester E.) Countably additive gambling and optimal stopping. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **41** (1977/78), no. 1, 59-72. (E.-A. Weiss, Jr.) **57** #10815 60G99
 (with Heath, David C.) On finitely additive priors, coherence, and extended admissibility. *Ann. Statist.* **6** (1978), no. 2, 333-345. (R. J. Buehler) **57** #4380 62A05 (62C10)
- Sudhakar, Divakaruni P.** (with Eyman, Earl D.) Optimal control problems with non-differentiable isoperimetric constraints. *Internat. J. Control* **25** (1977), no. 1, 129-152. (J. Warga) **54** #13685 49B35
- Sudjana** (with Pillai, K. C. S.) ★ On some distribution problems concerning the characteristic roots of $S_1 S_2^{-1}$ under violations. *ARL 72-0145. Aerospace Research Laboratories, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio, 1972. iv+24 pp.* (M. S. Srivastava) **49** #10055 62H10
 (with Pillai, K. C. S.) On the distribution of Hotelling's trace and power comparisons. *Comm. Statist.* **3** (1974), 433-454. (Authors' summary) **50** #15155 62H10
 (with Pillai, K. C. S.) Exact robustness studies of tests of two multivariate hypotheses based on four criteria and their distribution problems under violations. *Ann. Statist.* **3** (1975), 617-636. (M. S. Srivastava) **51** #14419 62H10
- Sudkamp, Thomas A.** A proof of Sobocinski's conjecture concerning a certain set of lattice-theoretical formulas. *Notre Dame J. Formal Logic* **17** (1976), no. 4, 615-616. (Ivan Rival) **56** #196 06A20
 Self-conjugate functions on Boolean algebras. *Notre Dame J. Formal Logic* **19** (1978), no. 3, 504-512. (F. M. Yaqub) **58** #426 06A40
- Sudler, C., Jr.** (with Stanton, Ralph G.; Williams, H. C.) An upper bound for the period of the simple continued fraction for \sqrt{D} . *Pacific J. Math.* **67** (1976), no. 2, 525-536. (Richard T. Bumby) **55** #2735 10A30
- Sudo, Masaki** A remark on Siegel domains of second kind. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **22** (1975), no. 2, 199-203. (W. Kaup) **53** #894 32M05 (32M15)
 On infinitesimal automorphisms of some non-degenerate Siegel domains. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **22** (1975), no. 3, 429-436. (E. Vinberg) **54** #615 32M15 (32M05)
 (with Fujiwara, Masahiko) Some forms of odd degree for which the Hasse principle fails. *Pacific J. Math.* **67** (1976), no. 1, 161-169. (R. Jacobowitz) **55** #2748 10C10
- Sudo, Masaru** (with Sekimoto, Shoji; Mukai, Kuniaki) A method of minimizing LR(k) parsers. *Systems-Computers-Controls* **4** (1973), no. 5, 73-80. (Miroslav Hladký) **51** #14663 68A30
 (with Mukai, Kuniaki; Sekimoto, Shoji) A formal semantics for algorithmic languages based on Scott's logic. Proceedings of the Third Symposium on Basic Theory of Programs (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1973) and of the Workshop for Proof Theory about Algorithms (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1974). *Sūrikaiseikenkyūsho Kōkyūroku* No. 236 (1975), 38-45. (Authors' summary) **58** #3631 68A05
- Sudo, Riichi** See Ōya, Shinichi, (Not reviewed)
- Sudžič, Daina** (with Gorelik, L.) Certain balanced pairs of strategies in games on the unit square. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 343-350. (I. V. Beiko) **45** #3086 90D99
 Nonantagonistic games on the unit square with different discontinuity curves for the game kernels. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **12** (1972), no. 3, 165-179, 213. (S. Cruceanu) **48** #10541 90D99
 Convergence of ϵ -equilibrium strategies to equilibrium strategies in nonantagonistic games with a time-moment choice. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **14** (1974), no. 3, 195-222, 243-244. (V. G. Ramm) **52** #10076 90D40
 Equilibrium and ϵ -equilibrium strategies in the two person non-zero sum games of timing. (Russian and Lithuanian summaries) *Mat. Metody v Social. Nauk.-Trudy Sem. Processy Optimal. Upravleniya II Sekcija Vyp.* **5** (1975), 37-62. (Author's summary) **56** #2431 90D12
 Equilibria in three-person zero-sum games with choice of timing. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), no. 3, 189-201, 237. (M. Mañas) **54** #9691 90D10
 On the question of the convergence of ϵ -equilibria to equilibria in non-antagonistic two-person games with choice of timing. (Russian. Lithuanian and English summaries)
- Litovsk. Mat. Sb.* **16** (1976), no. 3, 203-215, 238. (O. N. Bondareva) **55** #790D12 (90D05)
 The equilibrium position in a three-person zero-sum noncyclic game of type (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **16** (1976), 219-231, 256. (D. Marc Kilgour) **57** #5128 90D05
 Equilibria in a market with two sellers and one buyer. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 1, 203-210, 244. (Author's summary) **58** #15268 90D40 (90A15)
 A market with two sellers and one buyer in which there exists an equilibrium in strategies. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 3, 149-158, 216. (Author's summary) **58** #20324 90A15 (90D40)
 See also *Advances in game theory*, **48** #10519
- Suematsu, Yoshikazu** (with Ito, Tadayasu; Takagi, Shoji; Honda, Akihiro) A study on vortex oscillator. I. On a mathematical model of a confined vortex oscillator. *JSME* **20** (1977), no. 147, 1153-1160. (Authors' summary) **56** #14037 7634
- Suen, Ching Y.** (with Radhakrishnan, T.) Recognition of hand-drawn flowcharts. *Proceedings of the Third International Joint Conference on Pattern Recognition (Corona, Calif., 1976)*, pp. 424-428. *IEEE Comput. Soc., Long Beach, Calif., 1976.* (A. Griffith) **57** #4696 68A45
- Suen, L. C.** (with Liu, Ruey Wen) Minimal dimension realization and identifiability input-output sequences. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 2, 227-228. (Agostino Villa) **56** #14889 93B15
 (with Liu, Ruey Wen) Determination of the structure of multivariable stochastic linear systems. *IEEE Trans. Automat. Control* **23** (1978), no. 3, 458-464. (Authors' summary) **58** #26457 93E10 (93B30)
- Suendermann, J.** The application of finite element and finite difference techniques to hydrodynamical numerical models. *Formulations and computational algorithms in finite element analysis (U.S.-Germany Sympos., Mass. Inst. Tech., Cambridge, Mass., 1976)* 986-1011. *M.I.T. Press, Cambridge, Mass., 1977.* (David F. Griffiths) **58** #397665
- Suesada, Shunichi** (with Sugimura, Masahiko; Asano, Chooichiro) Truncated and untruncated sequential designs based on Markov chains for selecting one of two treatments. *Rep. Fac. Engng. Oita Univ.* No. 2 (1976), 37-56. (C. W. Chen) **58** #8062L05
- Suetenko, A. V.** The problem of electromagnetic wave scattering on a plasma bubble. (Russian) *Funkcional. Anal. i Prilozhen.* **5** (1971), no. 4, 44-55. (J. R. Schulenberg) **45** #4205 47A40 (78.47, 82.47)
 An inverse problem of the scattering of electromagnetic waves on a plasma bubble. (Russian) *Uspehi Mat. Nauk* **26** (1971), no. 4(160), 249. (J. R. Schulenberg) **45** #7847
- Suetin, P. K.** Approximation of analytic functions by Faber series in a closed domain. (Russian) *Ural. Gos. Univ. Mat. Zap.* **6** (1967), no. 2, 133-147 (1968). **55** #8330A82
 Areally orthogonal polynomials and Bieberbach polynomials. (Russian) *Dokl. Akad. Nauk SSSR* **188** (1969), 294-296. (I. N. Baker (Zbl 219, 171)) **45** #8830A82 (42A52)
 ★ Многочлены, ортогональные по площади, и многочлены Биебербаха. (Russian) [Polynomials orthogonal with respect to area, and Bieberbach polynomials] *Trudy Mat. Inst. Steklov.* **100** (1971). *Izdat. "Nauka", Moscow, 1971. 92 pp.* (W. Fuchs (Zbl 231 #30038)) **57** #3732a 42A52
 Certain asymptotic and approximation properties of polynomials that are orthogonal over a smooth contour. (Russian) *A collection of articles on the construction of functions and the extremal problems of functional analysis (Russian)*, 126-130. *Kalinin. Gos. Univ., Kalinin, 1972.* (Peter Russev) **52** #3541 30A82
 ★ Polynomials orthogonal over a region and Bieberbach polynomials. Translated from the Russian by R. P. Boas. Proceedings of the Steklov Institute of Mathematics No. 100 (1971). *American Mathematical Society, Providence, R.I., 1974. iv+91 pp.* (H. Fuchs (Zbl 231 #30038)) **57** #3732b 42A52
 Series in Faber polynomials and some of their generalizations. (Russian) *Current problems in mathematics, Vol. 5 (Russian)*, pp. 73-140. *Akad. Nauk SSSR Vsesojuz. Nauch. i Tehn. Informacii, Moscow, 1975.* (Peter Russev) **56** #15896 30A16
 ★ Классические ортогональные многочлены. (Russian) [Classical orthogonal polynomials] *Izdat. "Nauka", Moscow, 1976. 327 pp.* (R. P. Boas, Jr.) **56** #5933A65
 V. A. Steklov's problem in the theory of orthogonal polynomials. (Russian) *Mathematical analysis, Vol. 15 (Russian)*, pp. 5-82. *Akad. Nauk SSSR Vsesojuz. Nauch. i Tehn. Informacii, Moscow, 1977.* (F. Möriz) **58** #12173 42A52
- Suetin, S. P.** The convergence of the rational approximations of polynomial expansion to the domains of meromorphy of a given function. (Russian) *Mat. Sb. (N.S.)* **105** (1978), no. 3, 413-430, 464. (J. Gregor) **58** #11434 30A82
- Suétuna, Zyoiti** See Chitsusawa, Tadanori, **58** #27131 and *Obituary: Suetuna, Zyoiti*, **58** #27136
- Sueur-Pontier, M.** (with Frémond, C.) Caractérisation des groupes localement compacts de type (T) ayant la propriété de point fixe. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **7** (1971), 293-298. (Robert Azencott) **46** #2354 43A05 (60B15)
 (with Belaiache-Frémond, C.) Théorème de renouvellement pour les groupes abéliens localement compacts. *Séminaire KGB sur les Marches Aléatoires (Rennes, 1971-1972)*, pp. 17-25. *Astérisque, 4, Soc. Math. France, Paris, 1973.* (Editors) **57** #17868 60B15
 (with Roynette, Bernard) Marches aléatoires sur un groupe nilpotent. (English summary) *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **30** (1974), 129-138. (Michael Keane) **55** #4389 60J15
- Suffczynski, M.** (with Krupski, J.) Number of Green's function graphs. *Acta Phys. Polon. A* **46** (1974), 73-77. **53** #12239 81.05
 (with Krupski, J.) Number of Green's function graphs with non-zero contribution to the case of a uniform electron gas. *Acta Phys. Polon. A* **46** (1974), 79-82. **53** #12281.05
- Suffel, Charles L.** On set functions with values in a topological vector space. *Ann. Pura Appl.* (4) **93** (1972), 81-88. (A. Mallios) **49** #1112 46G10
 (with Beckenstein, Edward; Narici, Lawrence) Lattice theory and Jacobson radical

- summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 57 (1974), 596-605 (1975). (Zbl 331 #54301) 58 #18337 54C40 (13F99)
- with Beckenstein, Edward; Narici, Lawrence) A note on permanently singular points in topological algebras. *Colloq. Math.* 31 (1974), 115-123. (W. Żelazko) 4224 46H05
- with Beckenstein, Edward; Narici, Lawrence) ★Topological algebras. *North-Holland Mathematics Studies*, Vol. 24. Notas de Matemática, No. 60. Mathematical Notes, No. 60] *North-Holland Publishing Co., Amsterdam-New Oxford*, 1977. xii + 370 pp. (Melvin Henriksen) 57 #13495 46Jxx (46Hxx, 46Jxx)
- with Beckenstein, Edward; Narici, Lawrence; Warner, Seth) Maximal ideals in rings of continuous functions. *J. Analyse Math.* 31 (1977), 293-297. (G. Maltese) 12379 46J10
- with Boesch, Francis T.; Tindell, R.) The spanning subgraphs of Eulerian graphs. *Graph Theory* 1 (1977), no. 1, 79-84. (Linda Lesniak-Foster) 56 #8425 05C35
- with G. G. When do star clusters have unphysical distribution functions? *J. Phys. A* 10 (1977), no. 11, 1897-1903. (R. L. Ingraham) 57 #8956 85S3
- Teddy J. (with Royster, Wimberley C.) Typically real polynomials. (Polish and English summaries) Proceedings of the Fifth Conference on Analytic Functions (Univ. of Curie-Skłodowska, Lublin, 1970). *Ann. Univ. Mariae Curie-Skłodowska Sect. A* (1968/70), 161-164 (1972). (Editors) 49 #5357 30A76
- with Royster, Wimberley C.) Typically real polynomials. *Publ. Math. Debrecen* 17 (1971), 307-312 (1971). (R. McLaughlin) 46 #2065 30A76
- with Hayden, T. L.) Biholomorphic maps in Hilbert space have a fixed point. *J. Math.* 38 (1971), 419-422. (Soo Bong Chae) 46 #4288 32A99 (46G20)
- with Hayden, T. L.) Extreme points in a class of polynomials having univalent sequential limits. *Trans. Am. Math. Soc.* 163 (1972), 225-237. (Ch. Pommerenke) 45 #3679 30A06
- with Hayden, T. L.) Starlike and convex maps in Banach spaces. *Pacific J. Math.* 46 (1973), 575-589. (S. S. Long) 51 #11110 46G20
- with common fixed points of commuting holomorphic maps of the hyperball. *Michigan J. Math.* 21 (1974), 309-314. (E. L. Stout) 51 #3903 46G20
- with Pfaltzgraff, John A.) Close-to-starlike holomorphic functions of several variables. *Pacific J. Math.* 57 (1975), no. 1, 271-279. (M. Hervé) 52 #14343 32A10
- with Starlike functions as limits of polynomials. *Advances in complex function theory* (Sem., Univ. Maryland, College Park, Md., 1973-1974), pp. 164-203. *Lecture Notes in Math.*, Vol. 505, Springer, Berlin, 1976. (Zbl 324 #30018) 58 #1122 30A32
- with Hayden, T. L.) Fixed points of holomorphic maps in Banach spaces. *Proc. Am. Math. Soc.* 60 (1976), 95-105 (1977). (Soo Bong Chae) 54 #5917 47H10
- with Warupchand M. Shah, Professor of Mathematics, University of Kentucky. *Complex analysis* (Proc. Conf., Univ. Kentucky, Lexington, Ky., 1976), pp. v-vi. *Lecture Notes in Math.*, Vol. 599, Springer, Berlin, 1977. (Editors) 56 #11725 01A70
- with Starlikeness, convexity and other geometric properties of holomorphic maps in dimensions. *Complex analysis* (Proc. Conf., Univ. Kentucky, Lexington, Ky., 1976), pp. 146-159. *Lecture Notes in Math.*, Vol. 599, Springer, Berlin, 1977. (Editors) 56 #8894 32A30
- with Marie Chollet) 56 #8894 32A30
- See also Proceedings: Infinite Dimensional Holomorphy, 48 #9397 and Complex Analysis, 56 #3260
- with A. S. See Abstracts: Conference of the Faculties on Advances in Research, 3665
- Kunio On the cut locus and the topology of Riemannian manifolds. *J. Math. Univ. Tokyo* 14 (1974), 391-411. (C.-C. Hsiung) 51 #1666 53C20 (57D70)
- with On the diameter of certain Riemannian manifolds. *Publ. Res. Inst. Math. Sci.* 11 (1976), no. 3, 835-847. (Sheila Carter) 54 #3627 53C20
- I. Isolated periodic solutions of nonlinear systems of differential equations with delay argument. (Russian) *Approximate methods for the study of nonlinear systems* (Moscow, 1976). *Izdanie Inst. Mat. Akad. Nauk SSR, Kiev*, 1976. (L. J. Grimm) 11807 34K15
- with V. I. (with Verlan, E. M.) ★Основы специальной теории относительности. (Ukrainian) *Fundamentals of special relativity theory* *Vidavn. Ob'ednannya "Višča Škola"*, Kiev, 1977. (Publisher's annotation) 58 #9032 83.00
- Kozzo Note on separability of endomorphism rings. *J. Fac. Sci. Hokkaido Univ.* 21 (1970/71), 196-208. (Robert S. Cunningham) 45 #3465 16A42
- with Centralizers in separable extensions. II. *Osaka J. Math.* 8 (1971), 465-469. (B. J. P. R.) 46 #7287 16A16
- with On some commutator theorems of rings. *Hokkaido Math. J.* 1 (1972), 242-249. (F. R. Meyer) 47 #5056 16A70
- with Nakamoto, Taichi) Note on H -separable extensions. *Hokkaido Math. J.* 4 (1973), no. 2, 295-299. (Kazuo Kishimoto) 51 #12907 16A16
- with On projective H -separable extensions. *Hokkaido Math. J.* 5 (1976), no. 1, 44-54. (Kazuo Kishimoto) 53 #3021 16A56
- with A. T. (with Aikawa, K.; Hisamoto, T.) An electrostatic problem in bi-cyclide coordinates. *Quart. Appl. Math.* 35 (1977/78), no. 2, 297-304. (J. P. Singhal) 18490 78.33 (31A35)
- with Donald D. Multilevel optimization of multiple arc trajectories. *Control and dynamic systems: advances in theory and applications*, Vol. 11, pp. 145-254. *Academic Press, New York*, 1974. (D. F. Lawden) 53 #10401 93C15 (65K05, 49D99)
- with Stubberud, Allen R.) Decomposition technique for minimum time trajectories. *Optimization Theory Appl.* 14 (1974), 233-250. (Authors' summary) 55 #8928
- with M. (with Stefanova, St.) Certain spatial equiaffine curves. (Bulgarian. Russian summaries) *Visš Ped. Inst. Plovdiv Naučn. Trud.* 8 (1970), no. 2, 51-60. (Gr. Iov) 46 #6178 53A15
- with Tazuhiro The stability of threshold functions. *Systems-Computers-Controls* 3 (1973), no. 2, 47-56. (B. Hazeltine) 50 #12472 94A20
- with Morita, Kenichi) A method for transformation between a Turing machine and a Turing's primitive computer. *Systems-Computers-Controls* 4 (1973), no. 2, 1-7. (S. A. Burch) 48 #12900 68A25
- with Umeo, Hiroshi; Morita, Kenichi) The language accepted by a rebound automaton and its computing ability. *Electron. Comm. Japan* 60 (1977), no. 4, 11-18. (Kenneth B. Salomon) 58 #19371 68A25
- Sugatani, Takasi (with Mizuno, Toru) Note on the norms of affinoid algebras. *Math. Rep. Toyama Univ.* 1 (1978), 37-46. (W. Bartenwerfer) 58 #1251 32E25 (13J99)
- On quasi-Noetherian rings which are not Noetherian. *Math. Rep. Toyama Univ.* 1 (1978), 65-73. (W. Bartenwerfer) 58 #664 14B99 (13E05, 32E99)
- Sugawara, Hirotaka (with Arafune, J.; Hara, Yasuo) Theorems on Pomeron coupling. *Phys. Lett.* 37B (1971), 92-94. (K. T. Mahanthappa) 48 #1605 81.30
- with Pakvasa, Sandip) Discrete symmetry and Cabibbo angle. *Phys. Lett. B* 73 (1978), no. 1, 61-64. (Authors' summary) 58 #14514 81.22
- Sugawara, Masahiro ★Introduction à la topologie. Texte japonais translittéré en regard. Édition préparée par Hideki Imanishi. Documents de Linguistique Quantitative, No. 15. Éditions Jean-Favard; Éditions Dunod, Paris, 1971. 196 leaves. (Editors) 57 #11981 00A05 (54-01)
- with Komatsu, A.; Nakaoka, Minoru) ★Isô kikagaku. I. (Japanese) [Algebraic topology. I] Third printing. Gendai Sûgaku Enshû Sôsho [Modern Mathematics Exercise Series], 6. Iwanami Shoten, Tokyo, 1971. ix + 721 pp. (Editors) 58 #31044 55-01
- with Kobayashi, Teiichi) K_A -rings of lens spaces $L^n(4)$. *Hiroshima Math. J.* 1 (1971), 253-271. (M. Mahowald) 47 #1061 55E20
- with Kawaguchi, Toshihisa) K - and KO -rings of the lens space $L^n(p^2)$ for odd prime p . *Hiroshima Math. J.* 1 (1971), 273-286. (M. Mahowald) 47 #1053 55F50
- with Kobayashi, Teiichi) On stable homotopy types of stunted lens spaces. *Hiroshima Math. J.* 1 (1971), 287-304. (M. Mahowald) 47 #1062 57A65 (55E10)
- with Oka, Shichirô; Sawashita, Norichika) On the group of self-equivalences of a mapping cone. *Hiroshima Math. J.* 4 (1974), 9-28. (J. W. Rutter) 49 #11503 55D10
- with Imaoka, Mitsunori) On the K -ring of the orbit manifold $(S^{2m+1} \times S^1)/D_n$ by the dihedral group D_n . *Hiroshima Math. J.* 4 (1974), 53-70. (R. De Sapiro) 50 #5831 57E25 (57F15)
- with Kobayashi, Teiichi; Murakami, Shinichi) Note on J -groups of lens spaces. *Hiroshima Math. J.* 7 (1977), no. 1, 387-409. (J. F. Adams) 55 #4167 55F50
- with Kobayashi, Teiichi) On stable homotopy types of stunted lens spaces. II. *Hiroshima Math. J.* 7 (1977), no. 3, 689-705. (M. Mahowald) 57 #4155 55D15
- with Fujii, Kensô; Kobayashi, Teiichi; Shimomura, Katsumi) KO -groups of lens spaces modulo powers of two. *Hiroshima Math. J.* 8 (1978), no. 3, 469-489. (Richard R. Patterson) 58 #24241 55B15
- Sugawara, Tamio On the type of an associative H -spaces of rank four. *Mem. Fac. Sci. Kyushu Univ. Ser. A* 25 (1971), 191-196. (H. Scheerer) 46 #6351 55D45
- with Jimi, Sakio) Reduced power operations on $H^*(BU(N), \mathbb{Z}_p)$ ($p=3$). *Mem. Fac. Sci. Kyushu Univ. Ser. A* 26 (1972), no. 2, 285-291. (J. F. Adams) 53 #14489 55F40
- with Kamata, Masayoshi) A note on Landweber-Novikov operations on the complex cobordism ring U^* . *Mem. Fac. Sci. Kyushu Univ. Ser. A* 29 (1975), no. 1, 51-58. (P. S. Landweber) 51 #9089 57D90 (55B20)
- Landweber-Novikov operations on the complex cobordism ring of HP^n . *Mem. Fac. Sci. Kyushu Univ. Ser. A* 29 (1975), no. 1, 193-202. (P. S. Landweber) 51 #9090 57D90 (55B20)
- Immersion and embedding problems for complex flag manifolds. *Osaka J. Math.* 15 (1978), no. 1, 117-135. (S. G. Hoggar) 58 #13079 57D40 (32M15)
- Sugeno, Michio (with Terano, T.) Conditional fuzzy measures and their applications. *Fuzzy sets and their applications to cognitive and decision processes* (Proc. U. S.-Japan Sem., Univ. Calif., Berkeley, Calif., 1974), pp. 151-170. *Academic Press, New York*, 1975. (Ju. I. Petunin) 53 #5835 28A99
- The development of the theory of fuzzy sets. (Japanese) Fuzzy sets and their applications. *Systems and Control* 19 (1975), no. 5, 229-234. (Y. Kakuda) 53 #7787 04-01
- Fuzzy measures and fuzzy integrals—a survey. *Fuzzy automata and decision processes*, pp. 89-102. *North-Holland, New York*, 1977. (Nasharu Mizumoto) 57 #8164 68A25
- with Terano, T.) Analytical representation of fuzzy systems. *Fuzzy automata and decision processes*, pp. 177-189. *North-Holland, New York*, 1977. (A. K. Vjatkin) 58 #26217 93A10
- Sugg, Merritt N. (with Hutcheson, Kermit) Gauss-Krawtchouk quadrature approximations for moments of multinomial type distributions. *Biometrika* 63 (1976), no. 2, 395-400. (Authors' summary) 54 #14190 62E15
- Sugie, Noboru Reducible linear time-varying control systems. *Internat. J. Control* (1) 14 (1971), 149-160. (Author's summary) 46 #6877 93C05 (93C50)
- Sugimoto, Fumikazu (with Osaki, Shunji) Optimal policies for terminating the repair of a system subject to intermittent blows. (Japanese) *Systems and Control* 19 (1975), no. 4, 222-223. (Takehisa Fujisawa) 53 #4954 90B25 (60K10)
- with Osaki, Shunji) Optimum repair limit replacement policies for a system subject to intermittent blows. *Cahiers Centre Études Recherche Opér.* 18 (1976), no. 4, 485-491. (S. M. Pandit) 57 #11707 90B25
- Sugimoto, Hiroyuki Basic research on an application of geometric programming to sequential unconstrained minimization technique. *Mem. Muroran Inst. Tech.* 9 (1978), no. 3, 669-677. (Author's summary) 58 #26019 90C30
- Sugimoto, Kenji On the history and application of axiomatics. I. (Japanese) *Sûgakushi Kenkyû No. 55* (1972), 18-26. 58 #21033 01A25
- Sugimoto, Midori See Goto, Midori
- Sugimoto, Nobumasa (with Kakutani, Tsunehiko) Krylov-Bogoliubov-Mitropolsky method for nonlinear wave modulation. *Phys. Fluids* 17 (1974), 1617-1625. (S. Kaliski) 50 #3746 76.35
- with Hirao, Masahiko) Nonlinear mode coupling of elastic waves. *J. Acoust. Soc. Amer.* 62 (1977), no. 1, 23-32. (Authors' summary) 56 #1892 73.35
- Sugimoto, S. (with Kozin, Frank) Relations between sample and moment stability for linear stochastic differential equations. *Proceedings of the Conference on Stochastic Differential Equations and Applications* (Park City, Utah, 1976), pp. 145-162. *Academic Press, New York*, 1977. (Kunio Nishioka) 58 #7842 60H10 (93E20)
- with Kozin, Frank) Decision criteria for stability of stochastic systems from

(with Kasahara, Masao; Hirasawa, Shigeichi; Namekawa, Toshiniko) New class of binary codes constructed on the basis of concatenated codes and product codes

- Trans. Information Theory* **IT-22** (1976), no. 4, 462-468. (Philippe Piret) 2746 94A10
- with Kasahara, Masao; Hirasawa, Shigeichi; Namekawa, Toshihiko) Further on Goppa codes and their applications to constructing efficient binary codes. *Trans. Information Theory* **IT-22** (1976), no. 5, 518-526. (Authors' summary) 9083 94A10
- with Kasahara, Masao; Hirasawa, Shigeichi; Namekawa, Toshihiko) Correction of erasures-and-errors decoding algorithm for Goppa codes" (IEEE Trans. Information Theory **IT-22** (1976), no. 2, 238-241). *IEEE Trans. Information Theory* (1976), no. 6, 765. (Editors) **55** #7579 94A10
- with Kasahara, Masao; Hirasawa, Shigeichi; Namekawa, Toshihiko) A new class of codes for deterministic pushdown automata. *IEEE Trans. Information Theory* **IT-24** (1978), no. 2, 198-204. (F. J. MacWilliams) **58** #4620 94A10
- Yuji (with Taniguchi, Ken-ichi; Kasami, Tadao) On the decidability of the problem for deterministic pushdown automata. *Systems-Computers-Controls* **6** (1975), no. 1, 36-44. (From the summary) **57** #18235 68A25
- with Okui, Jun; Kasami, Tadao) Deadlock avoidance in an environment with only source of each type. *Systems-Computers-Controls* **7** (1976), no. 6, 10-18 (1977). (Cremer) **57** #8226 68A50
- with Araki, Toshiro; Kasami, Tadao; Okui, Jun) Complexity of the deadlock avoidance problem. *Systems-Comput.-Controls* **8** (1977), no. 2, 44-51 (1978). (Authors' summary) **58** #25086 68A05 (68A20)
- M. A system of linear hyperbolic equations defined on a complex. (Russian) *Izvestiya Akad. Nauk SSSR. Ser. Fiz. Matem. Nauk* **5** (1970), 89-95. (Not reviewed) 35L40
- on the correctness of the formulation of the exclusion method for solving algebraic systems of equations. (Russian) *Dinamika Splošn. Sredy Vyp.* **5** (1970), 96-117. (From production) **58** #31779 65F10
- symmetric differential equations. II. (Russian) *Sibirsk. Mat. Ž.* **11** (1970), 677-696. (Geymonat) **45** #3905 35A05 (65N05)
- symmetric differential equations. III. (Russian) *Sibirsk. Mat. Ž.* **11** (1970), 698-708. (G. Geymonat) **45** #3906 35A05 (65N05)
- strong and weak extension of differential operators. (Russian) *Differentsial'nye Uravneniya* **11** (1975), no. 11, 2067-2082, 2110. (Bert-Wolfgang Schulze) **54** #3143 (35F05)
- G. V. The approximate representation of relaxation oscillations. (Russian) *Differentsial'nye Uravneniya* **12** (1976), no. 2, 365-368, 383. (G. V. Evskaya-Plotnikova) **53** #6011 34C15 (65L99)
- uneo Minoru Urabe (1912-1975). *Mem. Fac. Sci. Kyushu Univ. Ser. A* **30** (1976), no. 2, 157-168. (Editors) **54** #41 01A70
- with Ueno, Suetoshi) Some notes on infinitesimal conformal transformations. *Ann. of Math. (N.S.)* **24** (1972), 253-260. (R. Osserman) **49** #1369 53B20
- with Nakayama, Shigeru) D-conformal deformations on almost contact metric spaces. *Tensor (N.S.)* **28** (1974), 125-129. (Shūichi Tanno) **50** #8364 53C15
- remark on derivations and skew-derivations on $\mathfrak{Q}(M)$. *Proc. Amer. Math. Soc.* **76**, 403-404. (J. Eells) **52** #11969 58A10
- see also Tomita, M., **58** #96
- Bae (with Ki, U Hang; Pak, Jin-Suk) On $(f, g, u_{(k)}, \alpha_{(k)})$ -structures. *Kōdai Math. Sem. Rep.* **26** (1974/75), 160-175. (G. D. Ludden) **52** #9115 53C15
- with Ki, U Hang) On hypersurfaces with normal $(f, g, u_{(k)}, \alpha_{(k)})$ -structure in an n -dimensional sphere. *Kōdai Math. Sem. Rep.* **26** (1975), no. 4, 424-437. (K. Yano) **55** #559 53C15
- (with Lenjuk, M. P.) The B-wave equation. (Russian. English summary) *Linear Algebra and its Applications* **12** (1976), no. 1, 153-164. *Izdatie Inst. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (V.-V. Olariu) **51** #3704 35L10
- V. (with Sen, Pranab Kumar; Bhattacharyya, B. B.) Limiting behavior of the sum of certain sample functions. *Ann. Statist.* **1** (1973), 297-311. (J. Sethuraman) **57** #5787 62E20
- Automorphisms of quasi-associative algebras. *Kyungpook Math. J.* **18** (1978), 1-2. (Alekssei Gainov) **58** #22186 17A05
- Exact Fermi energy, susceptibilities, and their singularities for an electron gas in a magnetic field at $T=0^\circ\text{K}$. *Ann. Phys.* **94** (1975), no. 2, 243-257. (M. Neuberger) **52** #12652 82C3
- N. A. (with Bendrikov, G. A.; Ogorodnikov, V. I.) General properties of the solutions of the roots of equations with complex coefficients. (Russian) *Vestnik Vuzov. Ser. III Fiz. Astronom.* **26** (1971), no. 6, 682-690. (Š. Schwabik) **50** #906 34A25 (93C15)
- Anton (with Pahor, Sergej; Zakrajšek, E.) A new method for solving the matrix transport equation in radiative transfer. *Publ. Dept. Math. (Ljubljana)* **6** (1971/73), 1-10. (Edward W. Larsen) **52** #16430 82A45
- on a system of integro-differential equations. *SIAM J. Appl. Math.* **21** (1971), 106-116. (S. I. Grossman) **47** #5535 45J05
- with Pahor, Sergej) On half-range completeness in multigroup transport theory. *Phys. Theory Statist. Phys.* **2** (1972), no. 4, 335-345. (Authors' summary) **57** #11536 57M05
- certain quadrature formula. (Slovenian. English summary) *Postgraduate Seminar Mathematics, Part 3-4* (1971/1972) (Slovenian), pp. 23-30. *Inst. Mat., Fiz. Meh. Mat. Univ. v Ljubljani, Ljubljana*, 1973. (Editors) **55** #6798 65D30
- with Vidav, Ivan) Linearized Boltzmann equation in spaces of measures. *Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Țițeica in connection with the first centenary of their birth* (Proc. Internat. Conf. Integral, Differential and Functional Equations (Bled, 1973) in connection with the first centenary of the birth of Plemelj). *Math. Balkanica* **3** (1973), 514-529. (C. V. Pao) **52** #9930 82A45
- with Kramar, Edi) Fredholm integral equations of the first kind. (Slovenian. English summary) *Obzornik Mat. Fiz.* **21** (1974), 17-25. (Authors' summary) **51** #3183 45B05
- with Omladič, M.; Pahor, Sergej) On a new type of quadrature formulas. *Numer. Math.* **25** (1975/76), no. 4, 421-426. (P. Keast) **55** #6794 65D30
- allocation. (Slovenian. English summary) *Obzornik Mat. Fiz.* **22** (1975), no. 5, 168-171. (Author's summary) **58** #8309 65L10
- On a recent result about Fourier series. (Slovenian. English summary) *Obzornik Mat. Fiz.* **23** (1976), no. 4, 109-112. (J. S. Joel) **58** #6882 42A20
- ★Sebi adjungirani operatorji v Hilbertovem prostoru. (Slovenian) [Selfadjoint operators in Hilbert space] Kratak pregled pojmov in rezultatov za rabo pri predmetu "Uvod v Teoretično Fiziko". [A brief survey of concepts and results for use in the course "Introduction to Theoretical Physics"] *Društvo Matematikov, Fizikov in Astronomov SRS, Ljubljana*, 1977. i + 14 pp. **58** #12427 47-01
- See also Publications: Department of Mathematics, **51** #15; Publications: Department of Mathematics, **51** #16 and Vidav, Ivan, **53** #12816
- Suhanov, A. A. Observable regular subgroups of complex semisimple Lie groups. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 1, 64-67. (Mark E. Novodvorsky) **54** #2829 20G20
- Observable subgroups of a complex semisimple Lie group. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1977**, no. 1, 50-53. (H. de Vries) **56** #12140 20G10 (22E10)
- Suhanov, A. D. (with Medvedev, B. V.; Pavlov, V. P.; Polivanov, M. K.) Method of the extended S-matrix in quantum field theory. (Russian. English summary) *Teoret. Mat. Fiz.* **13** (1972), no. 1, 3-40. (Authors' summary) **57** #15077 81A7 (81Q2)
- (with Medvedev, B. V.; Pavlov, V. P.; Polivanov, M. K.) The method of the augmented S-matrix in quantum field theory. (Russian. English summary) International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part I. Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 186-197, 260. (Woodford W. Zachary) **56** #10593 81A7
- (with Medvedev, B. V.) T-products in Bogolubov's axiomatics. International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part I. Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 198-200, 261. (Woodford W. Zachary) **56** #10594 81A7
- (with Logunov, A. A.; Medvedev, B. V.; Mestvirishvili, M. A.; Pavlov, V. P.; Polivanov, M. K.) A dispersion relation for the $3 \rightarrow 3$ forward amplitude and a generalized optical theorem. (Russian. English summary) *Teoret. Mat. Fiz.* **33** (1977), no. 2, 149-173. (Andrzej Trautman) **57** #2315 81A7
- Suhanov, E. V. The groupoid of varieties of idempotent semigroups. *Semigroup Forum* **14** (1977), no. 2, 143-159. (T. Tamura) **56** #12156 20M10
- Varieties and bands of semigroups. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 2, 419-428, 479. (Anna Ja. Aizenštāt) **56** #15809 20M10
- Suhanov, G. B. (with Haritonov, B. S.; Šepel'kova, L. V.) ★Комбинаторные задачи в вычислительной технике. (Russian) [Combinatorial problems in computer science] *Izdat. "Ilim", Frunze*, 1973. 51 pp. (errata insert) (I. Văduva) **50** #15431 68A15
- Suhanov, Ju. N. (with Guljaev, V. V.) An algorithm of search for a global extremum with recognition of the structure of the optimizing function. (Russian) *Avtomat. i Vychisl. Tehn.* **1973**, no. 1, 46-51. (M. Arató) **48** #1460 65K05
- Suhanov, V. M. See Control in space, **48** #8040
- Suhanova, N. I. (with Kovalenko, I. M.; Ivnickii, V. A.) Certain practical methods for the formation of multidimensional random numbers with uniform distribution inside a polyhedron. (Russian) *Complex systems and simulation* (Proc. Sem., Kiev, 1968/1969), No. 1 (Russian), pp. 3-14. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (Authors' introduction) **45** #9443 65C10
- Suhara, J. See Udaguchi, Teruyoshi; et al., **51** #7322
- Suhăreanu, Eugen (with Suhăreanu, Maria) The study of Bode's variable equalizer with the aid of a conformal mapping. *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* **17** (1972), 683-690. (Authors' summary) **48** #3634 94A20
- Suhăreanu, Maria (with Suhăreanu, Eugen) The study of Bode's variable equalizer with the aid of a conformal mapping. *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* **17** (1972), 683-690. (Authors' summary) **48** #3634 94A20
- Suharev, A. G. Certain games on the unit square. (Russian) *Cybernetics—in the service of Communism*, Vol. 6 (Russian), pp. 202-206. "Énergija", Moscow, 1971. (I. V. Romanovskii) **51** #5036 90D05
- Optimal strategies of the search for an extremum. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **11** (1971), 910-924. (O. Pokorná) **45** #6169 65K05
- The best strategies of successive search for the extremum. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **12** (1972), 35-50. (O. Pokorná) **46** #6596 65K05
- Optimal passive and sequentially optimal algorithms for the construction of best approximations for functions that satisfy a Lipschitz condition. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 4, 814-817. (Hans-Jürgen Albrand) **55** #3640 41A50 (65D15)
- Optimal search of a root of a function that satisfies a Lipschitz condition. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **16** (1976), no. 1, 20-29, 275. (Boro Döring) **54** #14350 65H05
- An optimal method for the construction of the best uniform approximations for a certain class of functions. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **18** (1978), no. 2, 302-313, 523. (Authors' summary) **58** #8156 65D15
- Suharev, Ju. P. (with Sačunov, Ju. V.) Projection by rays of congruences (K_4) . (Russian) *Penz. Politehn. Inst. Učen. Zap. Mat. Meh.* **1969**, no. 2, 80-84. **54** #11198 53A25
- See also Cybernetics and computer technology, **47** #8140
- Suharev, M. G. On choosing a method for the calculation of flows in networks on an electronic computer. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 6, 9-11. (I. Šelihova (RŽMat 1970 #9 B638)) **46** #3056 90B10
- Suharevskii, I. V. (with Grinberg, S. I.; Semjenjaka, E. N.) Short wave asymptotic analysis of the Green's function of the problem of diffraction by a plane layer. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **13** (1973), 670-682, 813. (A. Nikodémusz) **49** #8508 78.35 (35J05)
- Suhinin, M. F. The conditional extremum of a functional in linear topological spaces. (Russian) *Mat. Zametki* **14** (1973), 375-382. (J. Daneš) **48** #9753 58C20 (46G05, 58E05)
- Several theorems on inverse and implicit functions in linear topological spaces. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 1(169), 251-252. (P. Mankiewicz) **52** #15540 58C15 (46G05)
- A fixed point principle and its application in the theory of operators in topological linear spaces. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 1(175), 189-190. (S. Fučík)

52 #15141 47H10 (58E05)

Two theorems on the conditional minimum of a functional in locally convex spaces. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 3(183), 175-176. (A. D. Ioffe) 53 #11459 49B30

A weakened version of Lagrange's multiplier rule in a Banach space. (Russian) *Mat. Zametki* 21 (1977), no. 2, 223-228. (Theodore S. Bolis) 56 #9574 58E05 (46G05)

An integrodifferential equation. (Russian) *Uspehi Mat. Nauk* 32 (1977), no. 1 (193), 175-176. (Stefan Balint) 55 #8721 45K05 (47H15)

Suhinin, V. P. See **Mathematics and progress in science and technology**, 48 #8170

Suhl, Uwe (with Mevert, P.) Implicit enumeration with generalized upper bounds. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 393-402. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (Korolan Gilezan) 58 #20420 90C10

An algorithm and efficient data structures for the binary knapsack problem. *European J. Oper. Res.* 2 (1978), no. 6, 420-428. (Author's summary) 58 #25982 90C10

Suhman, I. G. (with Poljačenko, V. L.) Stability of gravitating systems with a quadratic potential. I. Systems bounded in phase space; oscillation spectrum for a Maclaurin stellar disk. *Astronom. Ž.* 50 (1973), 97-100; translated as *Soviet Astronom. AJ* 17 (1973), 62-64. (Author's summary) 49 #2028 85.35

Suhodol'skii, B. See **Suchodolski, B.**

Suhomel, I. See **Suchomel, J.**

Suhomlin, N. B. (with Šapovalov, V. N.) Integral collections and the separation of variables in the Klein-Gordon equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1973, no. 11, 122-125. (Authors' summary) 58 #25542 81.35

(with Šapovalov, V. N.) The canonical transformation of Hamilton's equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1974, no. 6, 34-36. (B. D. Jovanović) 50 #3699 70.35

(with Šapovalov, V. N.) Separation of variables in the nonstationary Schrödinger equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1974, no. 12, 100-105. (Authors' summary) 58 #25536 81.35

A study of the covariant properties and the symmetry of kinetic equations. (Russian) *Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk.* 1976, no. 3, 12-15, 116. (From the author's summary) 56 #17581 81.35

A study of the covariant properties and symmetry of the kinetic equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1976, no. 12, 46-52. (Author's summary) 58 #32452 80.35

(with Barinov, N. P.) Separation of variables in Kolmogorov's equation. I. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1977, no. 8, 16-20. (V. G. Kolomic) 58 #4139 82.60 (60J70)

Suhonov, V. I. A mixed boundary value problem for the Navier-Stokes equations. (Russian) *Dinamika Splošn. Sredy Vyp. 26 Kraevye Zadači Vyroždujaščih. Uravn. Gidrodinamiki* (1976), 125-133, 163. (From the author's text) 56 #12663 35Q10

Suhorebrii, V. G. (with Litvinov, V. N.; Nesvovai, A. G.) Mathematical physics. No. 13. (Russian) *Discrete filters on the basis of mathematical approximation. Mathematical physics*, No. 13 (Russian), pp. 46-51, 192. "Naukova Dumka", Kiev, 1973. (H. Zegeling) 49 #7004 94A05 (93C55)

(with Aizenberg, Ja. Ė.; Filipenko, I. G.; Kuz'min, I. V.) Checking the "potential" operability of dynamic plants by a hybrid frequency-time method. *Avtomatika* 1973, no. 1, 3-13 (Ukrainian); translated as *Soviet Automat. Control* 6 (1973), no. 1, 1-10. (T. Kaczorek) 50 #12383 93C99 (90B25)

See also **Dynamical systems and questions on the stability of the solutions of differential equations**, 50 #7624

Suhoručenko, Ė. M. (with Germeier, Ju. B.) Optimal allocation of resources while striving to reach a prescribed efficiency level on all the subdivisions. (Russian) *Cybernetics—in the service of Communism*, Vol. 6 (Russian), pp. 233-248. "Energiya", Moscow, 1971. (D. Obradović) 51 #7596 90B05

Suhorukov, A. P. (with Azimov, B. S.; Karamzin, Ju. N.; Suhorukova, A. K.) Generation of waves on summary and difference frequencies by short impulses in dispersive media. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 78* (1978), 29 pp. (From the summary) 58 #25394 78.35

Suhorukov, G. A. (with Beljanskii, V. L.) The controllability, observability, and identifiability of systems. (Russian) *Complex control systems (Proc. Sem., Kiev, 1969)*, No. 2 (Russian), pp. 3-20. *Akad. Nauk Ukrain. SSR, Kiev, 1969. (RŽKibernet 1970 #8 G445)* 46 #1388 93B05

(with Gorbunov, S. D.) Aggregation-decomposition synthesis of hierarchic control systems. (Russian) *Complex control systems (Russian)*, pp. 18-64. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1972. (K. Amborski) 51 #9869 93A15

(with Gorbunov, S. D.) Synthesis of hierarchical control systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1974, no. 1, 22-33, 234 (Russian); translated as *Engrg. Cybernetics* 12 (1974), 18-29. (Authors' summary) 56 #14983 93C99 (93A15)

See also **Control of complex technological and economic systems**, 56 #2486

Suhorukova, A. K. (with Azimov, B. S.; Karamzin, Ju. N.; Suhorukov, A. P.) Generation of waves on summary and difference frequencies by short impulses in dispersive media. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 78* (1978), 29 pp. (From the summary) 58 #25394 78.35

Suhotin, A. M. (with Vasenin, V. V.) The nonholonomic surface in three dimensional symplectic space. (Russian) *Trudy Irkutsk. Gos. Univ.* 74 (1970), Ser. Mat. no. 6, 270-286. (Not reviewed) 53A20

(with Vasenin, V. V.) The invariant differential forms and fundamental invariants of a nonholonomic surface. (Russian) *Trudy Irkutsk. Gos. Univ.* 74 (1970), Ser. Mat. no. 6, 301-314. (Editors) 58 #24029 53A05

(with Ivlev, E. T.; Podskrebko, Ė. N.) The normalization of a framed multidimensional surface in a space with projective connection. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp. 7* (1976), 26-32, 150. (A. Goetz) 58 #12770 53B10

Suhov, A. N. Comparison of the median and the arithmetic mean in the case of a small sample. *Izv. Vysš. Učebn. Zaved. Geod. i Aerofot.* 1971, no. 6, 59-65 (Russian); translated as *Geodes. and Aerophot.* 1971, 326-329 (1973). (M. Atiqullah) 48 #1371 62F10

Suhov, Ju. M. A matrix method for continuous systems of classical statistical mechanics. (Russian) *Trudy Moskov. Mat. Obšč.* 24 (1971), 175-200. (Editors) 55 #9797

Gibbs free energy for one-dimensional continuous quantum systems. (Russian. English summary) *Teoret. Mat. Fiz.* 10 (1972), no. 1, 113-122. (Author's summary) 57 #15084 81.47

Regularity properties of limit density matrices for one-dimensional continuous quantum systems. (Russian) *Trudy Moskov. Mat. Obšč.* 26 (1972), 151-179. (From author's introduction) 55 #9791 82.47

One-dimensional continuous quantum systems without a hard core. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 1(169), 253-254. (Gheorghe Nenciu) 55 #2082.47 (81.47)

(with Gurevič, B. M.; Sinaĭ, Ja. G.) Invariant measures of dynamical systems in one-dimensional statistical mechanics. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 1(173), 45-82. (L. A. Bunimovič) 53 #3266 28A65 (82.60, 58F15)

Sur les systèmes continus de la mécanique statistique quantique à une dimension avec une interaction de portée infinie. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 433-434. (Author's summary) 55 #7249 82.47

(with Sinaĭ, Ja. G.) On an existence theorem for the solutions of Bogoljubov's chain of equations. (Russian. English summary) *Teoret. Mat. Fiz.* 19 (1974), 344-363. (Authors' summary) 57 #8762 82.45

(with Gurevič, B. M.) Stationary solutions of a chain of Bogoljubov equations in classical statistical mechanics. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 276-279. (Gheorghe Nenciu) 54 #6805 82.35

(with Gurevič, B. M.) Stationary solutions of the Bogoljubov hierarchy equations in classical statistical mechanics. I. *Comm. Math. Phys.* 49 (1976), no. 1, 63-96. (Neubrunn) 54 #4449 82.28

Random point processes and DLR equations. *Comm. Math. Phys.* 50 (1976), no. 113-132. (Hans-Otto Georgii) 55 #1539 60K35 (82.60)

(with Dobrušin, R. L.) An asymptotic study of star-shaped message switch networks with a large number of radial rays. (Russian) *Problemy Peredači Informacii* (1976), no. 1, 70-94. (Ju. D. Burtin) 53 #14715 60K25

(with Gurevič, B. M.) Stationary solutions of the Bogoljubov hierarchy equations in classical statistical mechanics. II. *Comm. Math. Phys.* 54 (1977), no. 1, 81-96. (Neubrunn) 56 #2121 82.35

(with Gurevič, B. M.) Stationary solutions of the Bogoljubov hierarchy equations in classical statistical mechanics. III. *Comm. Math. Phys.* 56 (1977), no. 3, 225-236. (Neubrunn) 57 #15117 82.28

Limit Gibbs state for some classes of one-dimensional systems of quantum statistical mechanics. *Comm. Math. Phys.* 62 (1978), no. 2, 119-136. (Eiang Chong) 58 #20134 82.60

(with Gurevič, B. M.) Time evolution of Gibbs states in one-dimensional classical statistical mechanics. (Russian) *Dokl. Akad. Nauk SSSR* 242 (1978), no. 2, 276-279. (Nicolae Angelescu) 58 #25706 82.60

See also **Transactions of the Moscow Mathematical Society**, 50 #9475;

Transactions of the Moscow Mathematical Society, 50 #9477 and **Ruelle, D.**, 56 #2145

Šuhubi, Erdoğan S. Moving rough punch on an elastic half-space. (Turkish summary) *Istanbul Tek. Üniv. Bül.* 25 (1972), no. 2, 72-110. (Radu Bădescu) 51 #7437 73.35

(with Eringen, A. Cemal) ★Elastodynamics. Vol. I. Finite motions. *Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers]*, New York-London, 1975. xv + 341 pp. (Peter J. Chen) 54 #6623 73.35

(with Jeffrey, Alan) Propagation of weak discontinuities in a layered hyperelastic half-space. *Proc. Roy. Soc. Edinburgh Sect. A* 75 (1975/76), no. 3, 209-221. (Radu Bădescu) 57 #18378 73.35 (35L60)

(with Teymur, M.) Wave propagation in dissipative or dispersive non-linear media. *J. Inst. Math. Appl.* 21 (1978), no. 1, 25-40. (I. M. Longman) 57 #8318 73.41

Suiseth, Richard See **Hoskin, M. A.**; et al., (Not reviewed) and **Lewis, Christopher J.**, 57 #15869

Suisset, R. See **Širokov, V. S.**, 58 #15864

Suita, Nobuyuki Analytic mapping and harmonic length. *Kōdai Math. Sem. Rep.* (1971), 351-356. (Y. Kusunoki) 45 #3697 30A52

(with Kato, Takao) On harmonic length. (Japanese) *Sūgaku* 23 (1971), no. 1, 47-50. (Author's review (N.S.)) 58 #28478 30A50

Capacities and kernels on Riemann surfaces. *Arch. Rational Mech. Anal.* 46 (1972), 212-217. (M. Ohtsuka) 51 #3423 30A44

(with Jenkins, James A.) On regular functions on Riemann surfaces. *Illinois Math. J.* 17 (1973), 563-570. (T. Kubo) 48 #2373 30A40 (30A46)

On a metric induced by analytic capacity. *Kōdai Math. Sem. Rep.* 25 (1975), 215-218. (M. H. Heins) 47 #7024 30A52

(with Ozawa, Mitsuru) On the existence of analytic mappings. *Kōdai Math. Sem. Rep.* 25 (1973), 397-405. (D. Drasin) 49 #3121 30A48

(with Jenkins, James A.) On analytic self-mappings of Riemann surfaces. *Math. Ann.* 202 (1973), 37-56. (R. Osserman) 58 #22535a 30A46

(with Jenkins, James A.) On analytic self-mappings of Riemann surfaces. II. *Math. Ann.* 209 (1974), 109-115. (R. Osserman) 58 #22535b 30A46

On a class of analytic functions. *Proc. Amer. Math. Soc.* 43 (1974), 249-250. (L. V. Ahlfors) 49 #565 30A40

(with Jenkins, James A.) On regular functions on Riemann surfaces. II. *Illinois Math. J.* 19 (1975), 122-126. (T. Kubo) 51 #13205 30A30

On a metric induced by analytic capacity. II. *Kōdai Math. Sem. Rep.* 27 (1976), 1-2, 159-162. (M. H. Heins) 53 #8403 30A31

(with Yamada, Akira) On the Lu Qi-keng conjecture. *Proc. Amer. Math. Soc.* (1976), no. 2, 222-224. (Peter Russev) 54 #13142 32H10 (30A31)

Šujan, Štefan A generalized coding problem for discrete information sources. *Kybernetika* (Prague) 13 (1977), suppl., 96 pp. (John C. Kieffer) 57 #5429 94A15

Sujarov, U. Equations that determine the adjoint Lie group for conservative Čaplygin systems with two free parameters. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.)* 1973, 235 *Voprosy Algebra, Teorii Čisel, Differentsial. i Integral. Uraunienii* (1973), 83-90. (Author's summary) 58 #28758 34A25 (22E05)

See also **Abstracts: Conference of the Faculties on Advances in Research**, 48 #3845

- S. (with Hodzhev, L. S.) Properties of the Wightman function in a polynomial Lagrangian field theory. (Russian. Uzbek summary) *Izv. Akad. Nauk R Ser. Fiz.-Mat. Nauk* 1975, no. 3, 66-70, 97. (Ju. M. Širokov) 53 #9933
- A. M. The asymptotic behavior of the regular solutions of certain classes of first ordinary differential equations in a neighborhood of a singular point. (Russian) *Samarkand. Gos. Univ. (N.S.) Vyp. 224 Voprosy Kačestven. Teorii Differentsial. Uravnenij* (1972), 103-117. (Editors) 57 #6618 34C05
- On the asymptotic integration of nonautonomous triangular systems in a neighborhood of a singular point. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1974, no. 12, 1-5. (G. Niculescu) 51 #6070 34E05
- See also Abstracts: Conference of the Faculties on Advances in Research, 48 #3665
- Y. F. On the demo-economic theory of mortality. (Russian) *Ekonom. i Mat. Stat.* 14 (1978), no. 2, 257-278. (From the introduction) 58 #20623 92A15
- A. A. (with Fil'čakov, P. F.; Matvišin, Ja. O.) On the solution of a multidimensional multiparameter extremal problem by the method of power series. *Mat. Sb.* 115 (1969), 125-129. (Not reviewed) 49A15
- With Fil'čakov, P. F. On the question of the determination of eigenvalues of single term problems by the method of power series. (Ukrainian. English and Russian summaries) *Dopovidni Akad. Nauk Ukrain. RSR Ser. A* 1971, 891-894, 957. (J. Švedjda) 910 34B25 (65L15)
- A. D. See Suhanov, A. D.
- E. V. See Suhanov, E. V.
- B. V. (with Avadhani, M. S.) A comparison of two sampling procedures with allocation to successive sampling. Translated from the English original (J. Roy. Stat. Soc. Ser. C Appl. Statist. 19 (1970), 251-259). *Estatistica* 28 (1970), 370-379. (Editors) 50 #11571 62D05
- With Avadhani, M. S. A comparison of two sampling procedures with allocation to successive sampling. *J. Roy. Statist. Soc. Ser. C Appl. Statist.* 19 (1970), 251-259. (Editors) 50 #11571 62D05
- With Singh, Ravindra) Optimum stratification in sampling with varying probabilities. *Ann. Inst. Statist. Math.* 24 (1972), 485-494. (P. K. Bhattacharya) 219 62D05
- With Avadhani, M. S. Sampling on several successive occasions with equal and unequal probabilities and without replacement. *Austral. J. Statist.* 14 (1972), 109-119. (Editors) 51 #7075 62D05
- With Tang, Victor K. T. Use of preliminary test of significance for allocation in nested sampling. *J. Indian Statist. Assoc.* 10 (1972), 100-114. (U. B. Paik) 51 #2069 62D05
- With Avadhani, M. S. Estimation in sampling on two successive occasions. *Statistica Neerlandica* 26 (1972), no. 2, 47-54. (Mir Ali) 46 #10102 62D05
- With Singh, Ravindra) Optimum stratification with ratio and regression methods of allocation. *Ann. Inst. Statist. Math.* 25 (1973), 627-633. (M. Atiqullah) 50 #1373 62D05
- With David, Isidoro P. A note on Koop's approach for finding the bias of the ratio estimator. With a comment by J. C. Koop and a rejoinder by B. V. Sukhatme and P. David. *J. Amer. Statist. Assoc.* 68 (1973), 405-408. (B. Raja Rao) 51 #9292 62D05
- With Grimes, J. E. A regression-type estimator based on preliminary test of significance. *Proceedings of the Annual Meeting of the American Statistical Association, Statistics Section (New York, 1973)*, pp. 262-267. *Amer. Statist. Assoc.*, Washington, D.C., 1974. (B. Raja Rao) 51 #2062 62D05
- With David, Isidoro P. On the bias and mean square error of the ratio estimator. *Amer. Statist. Assoc.* 69 (1974), 464-466. (David Bellhouse) 50 #15039 62D05
- With Asok, C. On Sampford's procedure of unequal probability sampling without replacement. *Proceedings of the Annual Meeting of the American Statistical Association, Statistics Section (St. Louis, Mo., 1974)*, pp. 220-225. *Amer. Statist. Assoc.*, Washington, D.C., 1975. (David Bellhouse) 52 #4477 62D05
- With Tang, Victor K. T. Allocation in stratified sampling subsequent to preliminary test of significance. *J. Amer. Statist. Assoc.* 70 (1975), 175-179. (Chien-Pai) 51 #11753 62D05
- With Asok, C. On Sampford's procedure of unequal probability sampling without replacement. *J. Amer. Statist. Assoc.* 71 (1976), no. 356, 912-918. (Authors' summary) 1503 62D05
- P. V. See Survey of statistical design and linear models, 51 #2039
- Shashikala Fredholm determinant of a positive definite kernel of a special type of application. *Ann. Math. Statist.* 43 (1972), 1914-1926. (P. K. Bhattacharya) 092 62E20
- See also Suhorebril, V. G.
- See Suhorukov, G. A.
- See Suhov, A. N.
- G. S. Random triangles on the plane. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 66 (1978), no. 3, 150-155. (Rolf Sulanke) 58 #24461 52C10
- I. V. (with Bondarenko, V. I.; Kirpichnikov, V. M.) Numerical solution of problems in control theory. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1976, no. 6, 574-578. (Editors) 58 #26293 93C05
- M. (with Davydov, Jurij) A local limit theorem for weighted sums of independent random variables. (Russian. English summary) *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom. Vyp.* 3 (1975), 140-142, 154. (P. Révész) 53 #4177 60F05
- Local limit theorems for weighted sums of independent random variables. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 21 (1976), no. 1, 135-142. (M. U. Uspenskiy) 54 #8808 60F05
- Li, O. L. (with Ovander, L. M.) Resonance combination scattering of light with frequency mixing. (Russian. English summary) *Ukrain. Fiz. Ž.* 20 (1975), no. 3, 377-383, 518. (Editors' summary) 57 #11415 81J22
- V. E. (with Potockii, S. I.; Savin, M. M.; Marinin, V. I.) Introduction to the theory of time-optimal adaptive systems of automatic control. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* 1972, no. 12, 1277-1288, 1398. (Bojan Popović) 48 #8488 93C05
- Suktharank, Neela S. On Grimm's conjecture in algebraic number fields. *Nederl. Akad. Wetensch. Proc. Ser. A* 76 = *Indag. Math.* 35 (1973), 475-484. (G. Greaves) 49 #4953 10H15
- (with Ramachandra, K.) On Jutila numbers. *J. Pure Appl. Algebra* 6 (1975), no. 3, 219-222. (J. W. Porter) 52 #3085 10H15
- On Grimm's conjecture in algebraic number fields. II. *Nederl. Akad. Wetensch. Proc. Ser. A* 78 = *Indag. Math.* 37 (1975), 13-25. (G. Greaves) 53 #2866 10H15 (12A45)
- On Grimm's conjecture in algebraic number fields. III. *Nederl. Akad. Wetensch. Proc. Ser. A* 80 = *Indag. Math.* 39 (1977), no. 4, 342-348. (G. Greaves) 57 #12448 12A20
- Sukup, Dwight V. (with Peterson, Allan C.) On the first conjugate point function for nonlinear differential equations. *Canad. Math. Bull.* 18 (1975), no. 4, 577-585. (T. L. Sherman) 54 #3088 34C10
- On the existence of solutions to multipoint boundary value problems. *Rocky Mountain J. Math.* 6 (1976), no. 2, 357-375. (G. A. Klaassen) 53 #13707 34B15
- Šukurjan, Ju. G. Automata without cycles in the final state that are optimal with respect to an average speed. (Russian. English summary insert) *Kibernetika (Kiev)* 1968, no. 4, 15-20. (Author's summary) 45 #8453 94A30
- A comparison of discrete transformers with respect to absolute time-optimality in a certain equivalence class. (Russian. English summary insert) *Kibernetika (Kiev)* 1971, no. 1, 14-16. (R. N. Goss) 45 #1701 94A30
- On the average speed of automaton with terminal state. *International Symposium on Theoretical Programming (Novosibirsk, 1972)*, pp. 124-126. *Lecture Notes in Comput. Sci., Vol. 5, Springer, Berlin, 1974.* (A. V. Anisimov) 54 #6563 68A25
- (with Petrosjan, A. V.; Markosjan, S. E.; Ambarjan, S. L.) A certain approach to the automation of the design of printed circuit boards. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 1, 50-57. (P. Vondráček) 52 #7733 94A20
- (with Petrosjan, A. V.; Lazarian, E. A.) On the problem of automated generation of computer circuit tests. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 5, 77-83. (Authors' summary) 56 #15203 94A20
- Šukurjan, S. K. Some decidable cases of the special problem of functional equivalence for X-Y-automata. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 63 (1976), no. 1, 27-32. (Author's introduction) 58 #20913 94A30 (02G05)
- Solvability of the equivalence problem in a class of multitape multithread automata and flow charts over memory. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 4, 12-16. (Author's summary) 58 #3701 68A25
- The comparison of two-sided automata with respect to operating time, and the solvability of the problem of functional equivalence in a certain class of discrete transformers and flow charts over memory. (Russian. English summary insert) *Kibernetika (Kiev)* 1977, no. 2, 9-14. (Author's summary) 58 #9927 94A30
- Šukurov, V. S. A boundary value problem for degenerate nonlinear ordinary differential equations. (Russian) *Boundary value problems for differential equations, 4 (Russian)*, pp. 152-159, 192. *Izdat. "Fan" Uzbek. SSR, Tashkent, 1974.* (Author's summary) 57 #12979 34B15
- Estimates for degenerate ordinary differential equations. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Vyp.* 27 (1974), 3-10, 231. (Author's summary) 58 #17281 34A45
- A priori estimates of the derivatives of the bounded solutions of the two-point boundary value problem for second order ordinary degenerate differential equations. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) No.* 38 (1975), 33-42, 156. (RZMat) 1976 #7 B1065 58 #28792 34B15
- Sulaberidze, T. G. (with Piranašvili, Z. A.) The prediction and filtering of a certain class of random processes. (Russian. Georgian and English summaries) *Sakharth*

- and English summaries. *Izdat. Tbilis. Univ., Tbilisi*, 1976. 31 pp. (Not reviewed) 82.45
(with Germogenova, T. A.) The characteristic equation of radiation transfer theory. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 4, 841-844. (V. P. Milantiev) **55** #5093 82.45
- Sulakvelidze, L. A.** The representation of numbers by certain ternary quadratic forms that belong to multiclass genera. (Russian. Georgian summary) Collection of articles dedicated to Academician V. D. Kupradze on the occasion of his 70th birthday. *Tbilis. Univ. Šrom. A* **8**(153) (1974), 39-56. (L. A. Kogan) **53** #2833 10C15
The representation of numbers by certain positive ternary quadratic forms. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **88** (1977), no. 1, 21-24. (A. A. Bondarenko) **58** #510 10C15 (10B35)
- Sulanke, Rolf** Zu den Grundlagen der Differentialgeometrie. (Russian, English and French summaries) *Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* **19** (1970), 589-592. (M. Craioveanu) **48** #9601 53C05 (55F10)
(with Wintgen, Peter) ★Differentialgeometrie und Faserbündel. Lehrbücher und Monographien aus dem Gebiete der exakten Wissenschaften, Mathematische Reihe, Band 48. *Birkhäuser Verlag, Basel-Stuttgart*, 1972. 299 pp. (loose errata) (H. R. Müller) **54** #1274 58-01
(with Bachmann, Karl-Heinz; Beyer, Otfried; Boseck, Helmut; Göhler, Wilhelm; Heinrich, Winfried; Junge, Heinz; Lorenz, Günter; Oberländer, Siegfried; Pietzsch, Günter; Steger, Arndt; Thiele, Helmut; Walsch, Werner; Wussing, H.; Berthold, Günter; Bock, Hans; Dück, Werner; Görke, Lilly; Hellwich, Manfred; Kästner, Herbert; Neigenfind, Fritz; Peschel, Manfred; Rossberg, H.-J.; Vahle, Hans; Wussing, Gerlinde) ★Handbuch der Mathematik Mit einer Einleitung von Hans Reichardt. *Buch und Zeit Verlagsgesellschaft M.B.H., Cologne*, 1972. 739 pp. (From the publisher's foreword) **56** #5108 00A20
(with Wintgen, Peter) Zufällige konvexe Polyeder im N -dimensionalen euklidischen Raum. Collection of articles dedicated to the memory of Alfréd Rényi, I. *Period. Math. Hungar.* **2** (1972), 215-221. (R. V. Ambarcumjan) **48** #9795 60D05
(with Wintgen, Peter) ★Geometria różniczkowa i teoria wiązek. (Polish) [Differential geometry and fiber bundles] Translated from the German by Piotr Kucharczyk. *Matematyka dla Politechnik. [Mathematics for Engineering Colleges]* Państwowe Wydawnictwo Naukowe, Warsaw, 1977. 305 pp. (errata insert) (Editors) **55** #1373 58-02
(with Oniščik, A. L.) ★Algebra und Geometrie. Eine Einführung. Studienbücherei. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1977. 352 pp. (J. Ohm) **58** #9954 00A05
Kurven in Grassmann-Mannigfaltigkeiten und in Räumen von k -Ebenen. *Math. Nachr.* **76** (1977), 213-229. (P. Scherk) **58** #18208 53A40
See also Fisz, Marek, **49** #8067; Sitzungsberichte: Plenums und der Klasse der Akademie der Wissenschaften der DDR, **55** #2447 and Dieudonné, Jean A., **58** #24308
- Sularia, M.** (with Negoită, Constantin Virgil) On fuzzy mathematical programming and tolerances in planning. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1976**, no. 1, 3-15 (Authors' summary) **56** #8018 90C50
(with Negoită, Constantin Virgil; Flondor, Paul) On fuzzy environment in optimization problems. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1977**, no. 1, 13-24. (D. Driankov) **56** #10936 90C05
(with Negoită, Constantin Virgil; Flondor, Paul) Optimization problem in fuzzy environments. *Automat. i Telemekh.* **1978**, no. 3, 121-130 (Russian. English summary); translated as *Automat. Remote Control* **39** (1978), no. 3, part 2, 411-418. (Authors' summary) **58** #26500 93E99
(with Negoită, Constantin Virgil) A selection method of nondominated points in multicriteria decision problems. (French and Russian summaries) *Econom. Comput. Econom. Cybernet. Stud. Res.* **1978**, no. 1, 19-24. (L. C. Thomas) **58** #9309 90C99
See also Modern trends in cybernetics and systems, **56** #2488b
- Sularie, Mircea** (with Rus, Teodor) On the notion of representation between operator schemes defined by context-free grammars. (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 1, 79-94. (R. N. Goss) **54** #11864 68A30
- Sulariya, M.** See **Sularia, M.**
- Sulavko, T. S.** Estimation and stability of the solution of a parabolic equation with retarded argument. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 1235-1241. (L. E. Bobisud) **46** #4030 35R10 (35K99)
(with Azbelev, N. V.) On the question of the stability of the solutions of differential equations with retarded argument. (Russian) *Differentsial'nye Uravneniya* **10** (1974), 2091-2100, 2307. (D. Wexler) **50** #13823 34K20
- Šul'c, G. See Schulz, H.**
- Šul'c, M. M.** The existence and uniqueness of preimages in a multivalued mapping. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. No. 166 Teorija Koblebanii, Prikl. Mat. i Kibernet.* (1973), 207-210. (W. Wechler) **50** #6859 04A05
Relations that are definable by functions of the algebra of logic. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. Vyp. 166 Teorija Koblebanii, Prikl. Mat. i Kibernet.* (1973), 211-215. **56** #2898 08A05
Optimal bounding of matrices for the Strassen algorithm. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 5, 1296-1298, 1335. (Author's summary) **56** #13575 65F30 (90C10, 68A10)
- Šul'ce, B.-V. See Schulze, Bert-Wolfgang**
- Sul'din, A. V.** Curves and operators in a Hilbert space. (Russian) *Kazan. Gos. Univ. Učen. Zap.* **128** (1968), no. 2, 15-47. (Ju. Daleckii (RŽMat 1969 #7 B561)) **58** #7840 60C99 (46C99, 58D99)
(with Zabotin, V. I.; Semenišina, N. P.) Certain operators in Hilbert space. (Russian) *Kazan. Gos. Univ. Učen. Zap.* **129** (1969), no. 4, 90-95. (From the introduction) **58** #7683 58B99 (47H99)
(with Dolotkazin, A. H.; Dorodnov, A. V.; Ermolaev, Ju. B.; Norden, A. P.; Sahaev, I. I.; Stolov, E. L.; Čibrikova, L. I.; Eskin, L. D.) Vladimir Vladimirovič Morozov. *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 2(153), 140-141. (Editors) **51** #10010 01A70
- Suleimanov, A. S.** (with Bondarenko, B. A.) A class of particular solutions of the three-dimensional dynamical equations of elasticity theory. (Russian) *Boundary value problems for differential equations, No. 2 (Russian), pp. 73-79, 186. Izdat. "Fan" SSR, Tashkent*, 1972. (Authors' summary) **56** #13902 73.35
(with Bondarenko, B. A.) Solution of the Cauchy problem for the system of differential equations of the dynamical theory of elasticity. (Russian. Uzbek sur. *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 3-9, 104. (A. 52 #12475 73.35
- Suleimanov, D. N.** The existence and uniqueness of the generalized solution of a self-mixed problem for a hyperbolic system with a nonlinear second order part. (Russian) *Functional analysis and its application (Russian), pp. 178-192. Izdat. "Elm", Baku* (Genowefa Majcher) **52** #11344 35L60
(with Atakulov, M. T.) The solutions of a mixed problem for a certain system of differential equations with a nonlinear term. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 7, 8-10. (From the introduction) **57** #17010 35L99
- Suleimanov, Ja. M.** (with Rasulov, M. L.) Solution of a mixed problem for a second-order parabolic equation under boundary conditions of mixed type. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 3, 497-508, 573. (V. S. Rabinović) **58** #11921 35K05
- Suleimanov, N. M.** Well-posed boundary value problems in the quarter plane. Infinite system of partial differential equations in generalized functions. (Russian) *Studies of special questions in the theory of differential equations (Russian), pp. 18-24. Izdat. "Elm", Baku*, 1974. (J. Chrastina) **55** #3507 35E99
Wiman-Valiron type estimates for the solutions of inversely parabolic equations. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 6, 1315-1318. (M. A. Atakulov) **57** #3552 34G05 (35K99)
An ordinary differential inequality and the Wiman-Valiron theorem on functions. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. Dokl.* **34** (1978), no. 1, 3-5. (A. D. Ziebur) **57** #16594 30A66 (34A40)
- Suleimanov, S. P.** The order of approximation of functions by integral operators in infinite domain in the Hausdorff metric. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **28** (1972), no. 2, 14-18. (B. Bojanov) **48** #41A35
(with Gasanov, G. M.) The order of the convergence of cubature processes for a class of bounded functions. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1973**, no. 2, 61-66. (B. Bojanov) **52** #14779 41A55
The approximate solution by the collocation method of a linear integral equation of the two-dimensional case. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1974**, no. 2, 138-142. (J. K. 50 #6196 65R05
- The order of approximation of functions of two variables by positive linear operators in terms of the modulus of non-monotonicity and its application. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1977**, no. 5, 88-92. (B. Bojanov) **57** #6978 41A35
- Suleimenov, Ž.** The characteristic numbers of systems of linear differential equations with coefficients that are functions with weak variation. (Russian) *Mathematics and mechanics, No. 3 (Russian), pp. 35-43, 187. Ministerstvo Vysš. i Sredn. Spec. Obrazovanija Kazah. SSR, Alma-Ata*, 1968 (1971). (See RŽMat **1971** #11 B320; *Mat. Nauk* **1971** #6724) **34D05**
Characteristic numbers of the solutions of differential equations in normed spaces. (Russian) *Akad. Nauk Kazah. SSR Trudy Inst. Mat. i Meh.* **2** (1971), 77-80. (Author's summary) **56** #12486 34G05
Characteristic numbers of the solutions of a countable system of differential equations. (Russian) *Akad. Nauk Kazah. SSR Trudy Inst. Mat. i Meh.* **2** (1971), 341-342. (Author's summary) **56** #12487 34G05
See also **Mathematics and mechanics**, **50** #6724
- Sulem, Catherine** Quelques résultats de régularité pour les équations de la magnétohydrodynamique. (English summary) *C. R. Acad. Sci. Paris Sér. A* (1977), no. 5, A365-A368. (Author's summary) **56** #899 35Q99 (76.35)
- Sulem, Pierre-Louis** (with Frisch, Uriel) Remarque sur la multiplication dans les espaces de Sobolev et application aux équations d'Euler d'un fluide incompressible. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A1117-A1120. (Howard A. L. 51 #3728 35Q99 (46E35, 76.35)
(with Bardos, Claude; Penel, Patrick; Frisch, Uriel) Modified dissipativity nonlinear evolution equation arising in turbulence. *Turbulence and Navier-Stokes equations (Proc. Conf., Univ. Paris-Sud, Orsay, 1975), pp. 14-23. Lecture Notes in Math.* **Vol. 565, Springer, Berlin, 1976. (G. Papanicolaou) **56** #10357 76.35 (35Q99)
(with Lesieur, M.) Les équations spectrales en turbulence homogène et isotrope. Quelques résultats théoriques et numériques. *Turbulence and Navier-Stokes equations (Proc. Conf., Univ. Paris-Sud, Orsay, 1975), pp. 113-120. Lecture Notes in Math.* **Vol. 565, Springer, Berlin, 1976. (Authors' summary) **57** #4824 76.60
(with Rose, Harvey A.) Fully developed turbulence and statistical mechanics. (French summary) *J. Physique* **39** (1978), no. 5, 441-484. (Authors' summary) **58** #19793 76.60****
- Sulenin, V. P.** (with Dmitriev, Ju. G.; Koškin, G. M.; Simahin, V. A.; Tarasenko, V. A.) ★Непараметрическое оценивание функционалов по стационарным выборкам. (Russian) [Nonparametric estimation of functionals from stationary samples] *Tomsk. Gos. Univ., Tomsk*, 1974. 91 pp. (errata insert) (Š. A. Hašimov) **58** #862G05
- Sulenina, G. V.** Frame fields of submanifolds in manifolds of conics in three-dimensional projective space. (Russian) *Geometry collection, No. 9. Trudy Tomsk. Gos. Univ.* (1972), 49-71. (I. Kolář) **49** #1344 (E 52 #15271) 53A20
Letter to the editors: "Frame fields of submanifolds in manifolds of conics in three-dimensional projective space" (Trudy Tomsk. Gos. Univ. **212** (1972), 49-71. (Russian) *Geometry collection, No. 12. Trudy Tomsk. Gos. Univ.* **244** (1975), 1-11. (I. Kolář) **52** #15271 53A20
- Šulepov, V. N.** Isolating the roots of certain types of algebraic and transcendental equations by the method of root-determining functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 3(142), 111-118. (A. S. Householder) **50** #8958 65H05
- Šulev, K. Z.** The general solution of J. Halm's differential equation. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **4** (1967), no. 3, 1-11. (Authors' summary) **50** #10010 34K20

- (J. Muszyński) 46 #9421 34A20
- the general solutions of two unsolved differential equations. (Bulgarian. Russian and French summaries) *Godišnik Visš. Učebn. Zaved. Mat.* 4 (1967), no. 3, 97-112 (J. Muszyński) 46 #9422 34A20
- the operator of fractional integration and differentiation for an analytic function. (Russian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna* 2 (1976), no. 3, 97-109 (1978). (Author's summary) 58 #28353 26A33
- curvatures, Coriolis' and relative acceleration in the case of motion of a fluid body. (Russian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna* 2 (1976), no. 4, 101-109 (1977). (Editors) 58 #25351 76.35
- D. On the question of the connection between topological and order boundedness in ordered topological vector spaces. (Russian) *Taškent. Gos. Univ. Naučn. Vyp.* 460 *Voprosy Mat.* (1974), 157-162, 181. (Rosalind Reichard) 54 #5793
- on the question of the connection between different kinds of boundedness in locally convex spaces. (Russian) *Dokl. Akad. Nauk UzSSR* 1976, no. 1, 3-4. (L. Reichard) 54 #8227 46A40
- order boundedness of topologically bounded subsets. (Russian) *Taškent. Gos. Univ. Naučn. Vyp.* 490 *Voprosy Matematiki* (1976), 241-245, 274. (Author's summary) 3442 46A40
- N. Optimization of the maintenance process in network systems. (Russian) *Mathematical methods in economic research* (Russian), pp. 90-99. Izdat. "Nauka", Moscow, 1974. (A. M. Zaharin) 55 #12022 90B25
- mathematical model of service control in network systems. (Russian. English summary insert) *Kibernetika (Kiev)* 1977, no. 1, 117-125. (P. Vondráček) 57 #5044
- O. A certain method of solving plane problems of elasticity theory for nonholonomic domains. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1972, 261-263, 287. (J. Švejda) 46 #2961 (EA 46) 73.35
- optimality conditions in optimization problems with fixed frequency. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1974, 36, 863. (V. Komkov) 50 #3060 49B10
- E. G. (with Calenko, M. Š.) ★Лекции по теории категорий. (Russian) *Series in category theory* *Moskov. Gosudarstv. Univ., Moscow*, 1970. 280 pp. (Editors) 54 #5309 18-02
- varieties in categories. (Russian) *Sibirsk. Mat. Ž.* 11 (1970), 1362-1389. (M. L. G. A.) 54 #3514 18A30
- the category of functors over a variety of universal algebras. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 36 (1972), 386-400. (J. R. Isbell) 46 #229 18A25 (08A25)
- Schreier's theorem in normal categories. (Russian) *Sibirsk. Mat. Ž.* 13 (1972), 97. (V. Topenčarov) 46 #1869 18A20
- varieties and the Galois correspondence in a category of functors. (Russian) *Ann. of Math.* 29 (1973), 261-276. (V. A. Artamonov) 51 #10428 18A25
- (with Calenko, M. Š.) ★Основы теории категорий. (Russian) [Foundations of category theory] Современная Алгебра. [Monographs in Modern Algebra] Izdat. "Nauka", Moscow, 1974. 256 pp. (V. A. Artamonov) 51 #10425 18-02
- functional bivarieties in a functor category. (Russian) *Sibirsk. Mat. Ž.* 15 (1974), 38, 702. (C. Niță) 50 #4684 18A25
- (with Calenko, M. Š.) Categories. (Russian) *Algebra. Topology. Geometry, Vol. 13* (1974), pp. 51-147, 343. (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Informacii, Moscow*, 1975. (J. R. Isbell) 56 #3081 18-02
- also *Transactions of the Moscow Mathematical Society*, 52 #10313
- M. On a theorem of Hamilton-Jacobi type. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1968, no. 2, 13-16. (Q. K. Ghorji) 51 #9608 70.35
- an integrability criterion for a Hamilton-Jacobi type equation. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1968, no. 9, 13-15. (B. Vujanovic) 52 #9738
- application of the Hamilton-Jacobi and Poisson methods to certain mechanical systems of variable mass. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 316 Voprosy Mat.* (1968), 61-79. (B. Vujanovic) 50 #1587 70.35
- the separation of variables in equations of Hamilton-Jacobi type. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 67-75. (B. Vujanovic) 45 #6234 (EA 70.35)
- application of the method of variation of arbitrary constants to certain conservative mechanical systems. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 76-81. (B. Vujanovic) 45 #6235 70.35
- (with Šul'gina, M. F.; Dovletov, M. D.) An application of the Hamilton-Jacobi and Poisson methods to certain equations of motion of holonomic systems of variable mass with impulse factors of the connections. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 125-133. (Q. K. Ghorji) 45 #6233 70.35
- (with Kramarovskii, B. I.) Integrability of an equation of Hamilton-Jacobi type by the method of variables. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) No. 7* (1971), (See RŽMat 1972 #6 A103) 70.34
- (with Andreev, A. S.) The asymptotic stability of a certain nonautonomous system. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1975, no. 7, 10-12. (Ljubomir Lilov) 54 #10768 34D05
- (with Andreev, A. S.) The asymptotic behavior of a certain autonomous dynamical system. (Russian) *Dokl. Akad. Nauk UzSSR* (1976), no. 7, 19-20. (L. Reizis) 56 #773 35
- (with Šančenko, N. I.) Averaging over the fast variables in quasi-Stäckel systems. (Russian) *Dokl. Akad. Nauk UzSSR* 1976, no. 11, 21-23. (Ljubomir Lilov) 56 #13871 1
- (with Andreev, A. S.) Asymptotic stabilization of the stationary motions of certain dynamical systems. (Russian) *Dokl. Akad. Nauk UzSSR* 1977, no. 6, 20-22. (Q. K. Ghorji) 57 #14687 70.35
- (with Andreev, A. S.) The asymptotic stability of certain nonautonomous systems. (Russian) *Dokl. Akad. Nauk UzSSR* 1977, no. 10, 12-14. (D. Bobrowski) 58 #1421
- F. The Jacobi multiplier for the Poincaré-Voronec equations in the case of drag proportional to momentum. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 316 Voprosy Meh. i Mat.* (1968), 97-103. (B. Vujanovic) 50 #1588 70.35
- On the question of the singular solutions of the canonical equations of dynamics. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 316 Voprosy Meh. i Mat.* (1968), 104-111. (B. Vujanovic) 50 #1589 70.35
- Lagrange equations in redundant coordinates. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 320* (1968), 99-105. (I. Aržanyh (RŽMat 1969 #7 B242)) 45 #7141 34A05 (70.34)
- (with Nagornov, V. A.; Krygin, V. I.) On the theory of equations of analytical dynamics in generalized coordinates. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 394* (1970), 201-214 (1971). (B. Dolapčiev) 46 #2942 70.35
- On the theory of the equations of dynamics with impulse factors of the connections. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 36-48. (Q. K. Ghorji) 45 #6230 70.35
- (with Dovletov, M. D.) Particular solutions of the equations of dynamics with impulse factors of G. K. Suslov. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 60-66. (Q. K. Ghorji) 45 #6232 70.35
- (with Šul'gina, I. M.) Generalized forms of the Lagrange equations for nonlinear nonholonomic systems of variable mass. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 88-95. (B. Vujanovic) 45 #6236 70.35
- Poisson's theorem in the case of the existence of conditional equations. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 102-106. (B. Vujanovic) 45 #6237 70.35
- (with Dovletov, M. D.; Šul'gin, A. M.) An application of the Hamilton-Jacobi and Poisson methods to certain equations of motion of holonomic systems of variable mass with impulse factors of the connections. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 125-133. (Q. K. Ghorji) 45 #6233 70.35
- Šul'gina, I. M. The relative motion of nonholonomic mechanical systems of variable mass. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 316 Voprosy Meh. i Mat.* (1968), 127-144. (B. D. Jovanović) 50 #15502 70.34
- Nonholonomic motion of a system of variable mass relative to the earth. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 316 Voprosy Meh. i Mat.* (1968), 145-156. (B. D. Jovanović) 50 #15503 70.34
- (with Šul'gin, M. F.) Generalized forms of the Lagrange equations for nonlinear nonholonomic systems of variable mass. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 397* (1971), 88-95. (B. Vujanovic) 45 #6236 70.35
- Šul'gina, L. T. The linear transformation with constant coefficients of functions of two integral arguments. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1971, no. 5, 122-125. (S. Mărușter) 46 #563 39A12 (40A05)
- An interpolational transformation with an increasing number of nodes of functions of two integral arguments. (Russian) *Dokl. Akad. Nauk BSSR* 16 (1972), 101-103. (A. Lupas) 45 #2362 40B05
- The preservation of the limit in Aitken transformations. (Russian) *Dokl. Akad. Nauk BSSR* 16 (1972), 489-490. (M. Tomić) 46 #7763 40G99
- Regularity of certain nonlinear transformations. (Russian) *Dokl. Akad. Nauk BSSR* 17 (1973), 400-402, 477. (J. Németh) 49 #3369 40A25
- Improving the convergence of sequences that are nearly a linear combination of exponential functions. (Russian) *Dokl. Akad. Nauk BSSR* 17 (1973), 494-496, 577. (M. Tomić) 49 #11091 40A05
- (with Krylov, V. I.) Regularity conditions for nonlinear transformations. (Russian) *Dokl. Akad. Nauk BSSR* 17 (1973), 589-590, 675. (J. Németh) 49 #9700 47H99
- Šul'gina, N. B. See Babikov, V. V., 57 #18573
- Sulhanisvili, G. I. The construction of an exact solution of the Samarskii-Nikolaev difference scheme of increased order of accuracy. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 70 (1973), 529-532. (I. M. Sheffer) 49 #6645 65N20
- An approximate solution of the first boundary value problem for elliptic systems. (Russian. Georgian summary) A collection of articles on the equations of mathematical physics. 4. *Sakharth. SSR Mecn. Akad. Math. Inst. Šrom.* 44 (1974), 133-154. (From the author's introduction) 58 #8378 65N99
- The uniform convergence of the Samarskii-Nikolaev difference scheme. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 73 (1974), 541-544. (C. Ilioi) 49 #10165 65N10
- Difference schemes of the sixth order of accuracy for a Poisson equation of an arbitrary number of dimensions. (Russian) *Differencial'nye Uravnenija* 11 (1975), no. 5, 934-936, 952. (T. Styš) 51 #14611 (E 52 #16061) 65N10
- Letter to the editors: "Difference schemes of the sixth order of accuracy for a Poisson equation of an arbitrary number of dimensions" (*Differencial'nye Uravnenija* 11 (1975), no. 5, 934-936). (Russian) *Differencial'nye Uravnenija* 12 (1976), no. 1, 183. (Editors) 52 #16061 65N10
- Sulhanisvili, I. G. Synthesis of certain diagrams from logical elements with delay. (Russian) *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 9 (1970), no. 3, 126-136. (W. Wechler) 45 #1683 94A20
- The structural synthesis of automata from two-input logical elements with delay. (Russian) Problems of applied mathematics—Mushelišvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 11 (1972), no. 1, 121-127. (F. Gécség) 48 #8144 94A30
- The improvement of an algorithm for the structural synthesis of automata. (Russian) Problems of applied mathematics—Mushelišvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 11 (1972), no. 1, 128-134. (F. Gécség) 48 #8145 94A30
- Suliciu, Ion (with Malvern, L. E.; Cristescu, N.) Remarks concerning the "plateau" in dynamic plasticity. Collection of articles dedicated to Professor Waclaw Olszak on his seventieth birthday. *Arch. Mech. (Arch. Mech. Stos.)* 24 (1972), 999-1011. (Cataldo Agostinelli) 56 #17345 73.35
- (with Lee, Shiang Yu; Ames, William F.) Nonlinear traveling waves for a class of rate-type materials. Collection of articles dedicated to Salomon Bochner. *J. Math. Anal. Appl.* 42 (1973), 313-322. (P. Villaggio) 48 #3341 (EA 48) 73.35
- Motions with discontinuities in solids. Nonlinear models. (Romanian. English summary) *Stud. Cerc. Mat.* 25 (1973), 53-170. (N. Cristescu) 52 #2343 73.35

- Classes of discontinuous motions in elastic and rate-type materials. One-dimensional case. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **26** (1974), 675-699. (D. R. Bland) **51** #2419 73.35
- (with Malvern, L. E.; Cristescu, N.) Quasilinear rate-type constitutive equations and incremental stress waves. *Internat. J. Solids and Structures* **10** (1974), 21-33. (J. Bejda) **48** #12965 73.35
- Additional comments on Suliciu, Malvern and Cristescu's paper: "Remarks concerning the 'plateau' in dynamic plasticity" (*Arch. Mech. (Arch. Mech. Stos.)* **24** (1972), no. 5-6, 999-1011). *Arch. Mech. (Arch. Mech. Stos.)* **27** (1975), no. 4, 665-668. (Cataldo Agostinelli) **56** #17346 73.35
- Symmetric waves in materials with internal state variables. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **27** (1975), no. 5-6, 841-856. (J. Bejda) **54** #9257 73.35
- (with Mihăilescu-Suliciu, Mihaela) Riemann and Goursat step data problems for extensible strings. *J. Math. Anal. Appl.* **52** (1975), no. 1, 10-24. (A. Elcrat) **52** #3763 35Q99
- (with Mihăilescu-Suliciu, Mihaela) Riemann and Goursat step data problems for extensible strings with non-convex stress-strain relation. *Rev. Roumaine Math. Pures Appl.* **20** (1975), no. 5, 551-559. (A. Elcrat) **53** #13882 35Q99
- (with Mihăilescu, M.) Finite and symmetric thermomechanical waves in materials with internal state variables. *Internat. J. Solids and Structures* **12** (1976), no. 8, 559-575. (H. Parkus) **54** #9251 73.35
- See also *Nonlinear analysis and applications in mechanics*, **58** #17977
- mihăilescu-Suliciu, Mihaela** See **Mihăilescu-Suliciu, Mihaela**
- Sulicki, V. N.** An informational approach to the estimation of the error of a prediction of an employment structure. (Russian) *Ekonom. i Mat. Metody* **10** (1974), 181-186. (V. D. Dimitrov) **52** #2563 90B30
- Sulikašvili, R. S.** Stationary motions of a gravitating spheroid and of a gravitating dynamically symmetric gyroscope, and their stability. (Russian) Questions of the theory of functions and mathematical physics. *Sakharth. SSR Mecn. Akad. Math. Inst. Šrom.* **58** (1978), 197-207. (From the introduction) **58** #19489 70.34
- Šulikovskii, V. I.** (with Višnevskii, V. V.; Kopp, V. G.; Laptev, B. L.; Širokov, A. P.) Aleksandr Petrovič Norden (on the occasion of his seventieth birthday). (Russian) *Proceedings of the Seminar of the Department of Geometry, No. VII (Russian)*, pp. 7-19. *Izdat. Kazan. Univ., Kazan*, 1974. (Editors) **53** #64 01A70
- A generalization of Norden's conjugacy. (Russian) *Proceedings of the Seminar of the Department of Geometry, No. VII (Russian)*, pp. 185-188. *Izdat. Kazan. Univ., Kazan*, 1974. (A. Goetz) **53** #14333 53B05
- (with Hačatryan, A. E.) Three-webs in a Riemannian space V_3 . (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 7(182), 94-98. (Adrian C. Albu) **57** #1317 53B20
- See also *Differential geometry*, **53** #1429
- Sulim, G. T.** Regularity of some systems of linear algebraic equations. (Ukrainian. Russian summary) *Visnik L'vov. Derž. Univ. Ser. Meh.-Mat. No. 10* (1975), 76-79, 99. (Author's summary) **57** #18363 73.15
- Sulima, L. P.** Singlevaluedness of movable singular points of a certain equation. (Russian) *Differencial'nye Uravneniya* **9** (1973), 880-889, 977. (Z. Rubinstein) **47** #5337 34A20
- On the theory of the third order homogeneous equation of degree two. (Russian) *Differencial'nye Uravneniya* **9** (1973), 1351, 1360. (T. Canturija) **47** #8945 34A20
- On the theory of the second order differential equation of degree two. (Russian) *Differencial'nye Uravneniya* **9** (1973), 2010-2019, 2115. (J. Rausen) **49** #5435 34A20
- Sulimov, Ju. V.** (with Skvorcov, E. F.) An approach to the problem of decoding Bose-Chaudhuri-Hocquenghem codes. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 4, 36-45. (Authors' summary) **58** #15685 94A10
- Sulinski, A.** (with Divinsky, N.) Radical pairs. *Canad. J. Math.* **29** (1977), no. 5, 1086-1091. (Author's review) **58** #16743 16A21
- Suljagić, Salih** Reduction of completely non-unitary contractions. (Serbo-Croatian summary) *Glasnik Mat. Ser. III S(25)* (1970), 281-291. (From the author's introduction) **54** #970 47A15
- Suljagina, L. A.** (with Lozinskii, S. M.) Quadrature formulae and one-step numerical integration methods that use derivatives. III. (Russian. English summary) *Vestnik Leningrad. Univ.* **1978**, No. 1 *Mat. Meh. Astronom. vyp.* 1, 40-49, 155. (Walter Gautschi) **58** #8278 65L05 (41A55)
- Suljandziga, P. B.** On the question of the analytic continuation of the logarithmic potential. (Russian) *Dinamika Splošn. Sredy Vyp. 24 Dinamika Židk. so Svobod. Granicami* (1976), 159-162, 174. (L. I. Hedberg) **58** #17148 31A15 (30A14)
- The plane inverse problem for magnetic potential. (Russian) *Differencial'nye Uravneniya* **13** (1977), no. 3, 529-537, 574. (J. Veselý) **57** #12875 31A25
- The solvability of the two-dimensional inverse problem of magnetic potential. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **87** (1977), no. 3, 537-540. (L. I. Hedberg) **58** #17157 31A25 (30A14)
- Šuljar, M. A.** (with Kazimirs'kii, P. S.; Petričević, V. M.) A canonical form for a pair of commuting matrices. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukraïn. RSR Ser. A* **1973**, 492-495, 571. (Authors' summary) **58** #22108 15A21
- (with Petričević, V. M.) The absolute decomposability of a matrix quadratic trinomial. (Russian) *Mathematical methods, and physical and mechanical fields*, No. 1 (Russian), pp. 188-190, 221. "Naukova Dumka", Keio, 1975. (R. C. Thompson) **54** #336 15A24
- (with Šušvar, B. A.) The zeros of a polynomial with coefficients from a Banach algebra. (Ukrainian. Russian summary) *Visnik L'vov. Politehn. Inst.* **1977**, no. 119 *Mat. i Meh.*, 172-175, 202. (Authors' summary) **58** #30257 46H05
- Šulka, Robert** The maximal semilattice decomposition of a semigroup, radicals and nilpotency. *Mat. Časopis Sloven. Akad. Vied* **20** (1970), 172-180. (O. Steinfeld) **47** #383 20M10
- The maximal semilattice decomposition of a semigroup. *Mat. Časopis Sloven. Akad. Vied* **21** (1971), 269-276. (B. Pondělíček) **46** #3660 20M10
- orlov-Sul'kin, V. V.** See **Orlov-Sul'kin, V. V.**
- Sulley, L. J.** On countable inductive limits of locally compact abelian groups. *J. London Math. Soc.* (2) **5** (1972), 629-637. (I. Glicksberg) **47** #6936 22B05
- Sullivan, Dennis** ★Geometric topology. Part I. Localization, periodicity, and symmetry. Revised version. *Massachusetts Institute of Technology, Cambridge*, 1971. 432 pp. (not consecutively paged) (Editors) **58** #13006a 55D15
- Galois symmetry in manifold theory at the primes. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 169-175. Gauthier-Villars, Paris, 1971. (F. Atiyah) **56** #9541 57D15 (57C25, 55D15)
- Singularities in spaces. *Proceedings of Liverpool Singularities Symposium, II* (1969/1970), pp. 196-206. *Lecture Notes in Math.*, Vol. 209, Springer, Berlin, 1970. (L. Curtis) **49** #4002 57D95
- (with Rourke, C. P.) On the Kervaire obstruction. *Ann. of Math.* (2) **94** (1971), 397-413. (H. Suzuki) **46** #4546 57C50 (57C35)
- (with Morgan, John W.) The transversality characteristic class and linking of surgery theory. *Ann. of Math.* (2) **99** (1974), 463-544. (R. K. Lashof) **50** #3157D20 (57D65)
- Genetics of homotopy theory and the Adams conjecture. *Ann. of Math.* (2) (1974), 1-79. (D. B. Fuks) **56** #1305 55F25 (55D15, 57F99)
- (with Shub, Michael) A remark on the Lefschetz fixed point formula for differentiable maps. *Topology* **13** (1974), 189-191. (R. S. Palais) **50** #3274 58B15
- ★Геометрическая топология. (Russian) [Geometric topology] Локализация, периодичность и симметрия Галуа. [Localization, periodicity and Galois symmetry] Библиотечка Сборника "Математика". [Library of the Journal "Matematika"] Translated from the English and edited by D. B. Fuks. *Izdat. "Mir", Moscow*, 1975. pp. (Editors) **58** #13006b 55D15
- (with Palis, Jacob, Jr.; Pugh, Charles C.; Shub, Michael) Genericity theorems in topological dynamics. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented C. Zeeman on his fiftieth birthday)*, pp. 241-250. *Lecture Notes in Math.*, Vol. 317, Springer, Berlin, 1975. (W. L. Reddy (Zbl 341 #54053)) **58** #31268 58F15 (28B15)
- Differential forms and the topology of manifolds. *Manifolds—Tokyo 1973 (Internat. Conf., Tokyo, 1973)*, pp. 37-49. *Univ. Tokyo Press, Tokyo*, 1975. (M. F. Atiyah) **51** #6838 57D15 (32C10, 55D15)
- Inside and outside manifolds. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 1, pp. 201-207. *Canad. Math. Cong. Montreal, Que.*, 1975. (M. L. Gromov) **54** #13915 57-02 (58F99, 57D65, 57D15)
- (with Kostant, Bertram) The Euler characteristic of an affine space form is 1. *Bull. Amer. Math. Soc.* **81** (1975), no. 5, 937-938. (W. S. Piper) **51** #11536 57D15
- (with Vigué-Poirrier, Micheline) Sur l'existence d'une infinité de géodésiques périodiques sur une variété riemannienne compacte. (English summary) **281** (1975), 9, Aii, A289-A291. *C. R. Acad. Sci. Paris Sér. A-B* (J. Sacks) **53** #4133 58C20 (53C20)
- La classe d'Euler réelle d'un fibré vectoriel à groupe structural $SL_n(\mathbb{Z})$ est 1. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 1, Aii, A17-A19. (F. Adams) **51** #9077 57D20 (55F40)
- (with Deligne, Pierre) Fibrés vectoriels complexes à groupe structural discret. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 24, Ai, A1081-A1083. (P. E. Newstead) **53** #1587 55F10 (32L05)
- (with Deligne, Pierre; Griffiths, Phillip; Morgan, John W.) Real homotopy theory of Kähler manifolds. *Invent. Math.* **29** (1975), no. 3, 245-274. (M. F. Atiyah) **52** #32C10 (57D15)
- (with Shub, Michael) Homology theory and dynamical systems. *Topology* **14** (1975), 109-132. (J. W. Robbin) **53** #4141 58F10 (57D50)
- On the intersection ring of compact three manifolds. *Topology* **14** (1975), 275-277. (M. F. Atiyah) **52** #4296 57A10 (32C40)
- (with Parry, Bill) A topological invariant of flows on 1-dimensional spaces. *Topology* **14** (1975), no. 4, 297-299. (Gustav A. Hedlund) **53** #9179 54H20 (58B15)
- (with Ruelle, D.) Currents, flows and diffeomorphisms. *Topology* **14** (1975), 319-327. (J. W. Robbin) **54** #3759 58F10 (58A20)
- Cartan-de Rham homotopy theory. *Colloque "Analyse et Topologie" en l'Honneur de Henri Cartan (Orsay, 1974)*, pp. 227-254. *Astérisque*, No. 32-33, Soc. Math. Fr. Paris, 1976. (R. E. Stong) **53** #6543 55D05 (58A10)
- A new flow. *Bull. Amer. Math. Soc.* **82** (1976), no. 2, 331-332. (M. C. I. Adams) **53** #6638 58F20
- A generalization of Milnor's inequality concerning affine foliations and manifolds. *Comment. Math. Helv.* **51** (1976), no. 2, 183-189. (John W. Wood) **54** #6163 57D30
- A counterexample to the periodic orbit conjecture. *Inst. Hautes Études Sci. Math. No. 46* (1976), 5-14. (D. B. Epstein) **58** #18492 57D30 (34C25, 58F15)
- Cycles for the dynamical study of foliated manifolds and complex manifolds. *Invent. Math.* **36** (1976), 225-255. (Robert Roussarie) **55** #6440 57D15
- (with Ranicki, Andrew) A semi-local combinatorial formula for the signature of a $4k$ -manifold. *J. Differential Geometry* **11** (1976), no. 1, 23-29. (K. Lamotke) **54** #157D20
- (with Vigué-Poirrier, Micheline) The homology theory of the closed geodesic problem. *J. Differential Geometry* **11** (1976), no. 4, 633-644. (Peter Klein) **56** #13258E10
- (with Williams, Robert F.) On the homology of attractors. *Topology* **15** (1976), 3, 259-262. (C. S. Hartzman) **54** #1304 58F15 (58F10)
- Infinitesimal computations in topology. *Inst. Hautes Études Sci. Publ. Math. N. S.* (1977), 269-331 (1978). (J. F. Adams) **58** #31119 57D99 (55D99, 58A10)
- (with Edwards, Robert D.; Millett, Kenneth C.) Foliations with all leaves compact. *Topology* **16** (1977), no. 1, 13-32. (C. S. Hartzman) **55** #11268 57D30 (58A25)
- (with Griffiths, Phillip; Deligne, Pierre; Morgan, John W.) Real homotopy theory of Kähler manifolds. (Russian) Translated from the English by Ju. I. Manin. *Ukrainian Math. J.* **32** (1977), no. 3(195), 119-152, 247. (Editors) **57** #693 32C10 (57D15)
- See also *Dynamical systems*, **52** #11994; *Morgan, John W.*, **56** #13209 and *Lehmann, Daniel*, **58** #7161
- Sullivan, Francis E.** (with Byrne, Charles, Jr.) Contractive projections with contractible complement in L_p space. *J. Multivariate Anal.* **2** (1972), 1-13. (Authors' summary) **46** #2412 46E30

- (with Byrne, Charles, Jr.; Cohen, H. B.) A note on contractive projections on L^p spaces. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1569-1574. (T. Andô) **48** #936 37
- (with Byrne, Charles, Jr.) Independence and contractive projections on L_p . *Vector operator valued measures and applications* (Proc. Sympos., Alta, Utah, 1972), pp. 67-87. Academic Press, New York, 1973. (T. Andô) **48** #9444 47B37 (60A10)
- (with Auestam, Barbro) Descent methods in smooth, rotund spaces with applications to approximation in L^p . *J. Math. Anal. Appl.* **48** (1974), 155-164. (F. F. Fichtengolts) **50** #5318 41A65
- A generalization of best approximation operators. *Ann. Mat. Pura Appl.* (4) **107** (1975), 245-261 (1976). (Ralph L. James) **53** #3564 41A50
- An approximation-theoretic characterization of uniformly rotund spaces. *J. Approximation Theory* **16** (1976), no. 3, 281-286. (Alexander M. Rubinov) **53** #3655 05 (41A05)
- (with Auestam, Barbro) Iteration with best approximation operators. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 2, 125-131. (D. E. Wulbert) **53** #6188 65
- (with Smith, Mark A.) Extremely smooth Banach spaces. *Banach spaces of analytic functions* (Proc. Pelczynski Conf., Kent State Univ., Kent, Ohio, 1976), pp. 125-137. *Pure Notes in Math.*, Vol. 604, Springer, Berlin, 1977. (M. I. Kadec) **56** #16328 05
- Geometrical properties determined by the higher duals of a Banach space. *Illinois J. Math.* **21** (1977), no. 2, 315-331. (D. Dean) **56** #16327 46B05
- Dentability, smoothability and stronger properties in Banach spaces. *Indiana Univ. Math. J.* **26** (1977), no. 3, 545-553. (M. Edelstein) **55** #11007 46B05
- On the duality between Asplund spaces and spaces with the Radon-Nikodým property. *Proc. Amer. Math. Soc.* **71** (1978), no. 1, 155-156. (I. Namioka) **58** #2177 10
- Francis J.** p -torsion in the class group of curves with two many automorphisms. *Math. (Basel)* **26** (1975), 253-261. (W.-D. Geyer) **52** #13846 14H05
- J. J.** Padé approximants via the continued fraction approach. *Amer. J. Phys.* **46** (1978), no. 5, 489-494. (Author's summary) **57** #3706 41A20
- John Brendan** Affine group schemes with integrals. *J. Algebra* **22** (1972), 555-558. (R. G. Larson) **46** #3553 16A24
- A decomposition theorem for pro-affine solvable algebraic groups over algebraically closed fields. *Amer. J. Math.* **95** (1973), 221-228. (David Birkes) **50** #13061 14L25 (850)
- Automorphisms of affine unipotent groups in positive characteristic. *J. Algebra* **26** (1973), 140-151. (Bruno Harris) **51** #590 16A24
- A proof of the finite generation of invariants of a normal subgroup. *Pacific J. Math.* **51** (1974), 571-572. (Zbl **297** #20051) **58** #5942 20F30
- Products of Witt groups. *Illinois J. Math.* **19** (1975), 27-32. (T. Ono) **51** #12873 15 (20G15)
- Completely reducible actions of connected algebraic groups on finite-dimensional associative algebras. *Illinois J. Math.* **20** (1976), no. 3, 425-433. (Amassa Fauntleroy) **51** #16423 20G05 (16A16)
- Some representation theory for the modular general linear groups. *J. Algebra* **45** (1977), no. 2, 516-535. (From the author's introduction) **57** #3275 20G05
- Representations of the hyperalgebra of an algebraic group. *Amer. J. Math.* **100** (1978), no. 3, 643-652. (J. E. Humphreys) **58** #813 17B45 (14L15)
- John J.** N th rank tensor representations of $U(n)$ symmetry adapted to subgroups of the symmetric group S_N . *J. Mathematical Phys.* **14** (1973), 387-395. (D. B. Fairlie) **51** #13026 81.20
- Double coset analysis for symmetry adapting N th rank tensors of $U(n)$ to its unitary groups. *J. Mathematical Phys.* **16** (1975), 756-760. (F. R. Halpern) **51** #7506 (E 51 581) 81.22
- Orthonormality properties of double coset matrix elements. *J. Mathematical Phys.* **17** (1975), no. 9, 1707-1709. (F. R. Halpern) **52** #669 22E70
- Erratum: "Double coset analysis for symmetry adapting N th rank tensors of $U(n)$ to unitary subgroups" (J. Mathematical Phys. **16** (1975), 756-760). *J. Mathematical Phys.* **16** (1975), no. 9, 1959. (Editors) **51** #9681 81.22
- Recoupling coefficients of the symmetric group involving outer plethysms. *J. Math. Phys.* **19** (1978), no. 8, 1674-1680. (T. Janssen) **58** #14528 81.22
- R. P.** (with Collyer, P. J.) Closure operators. *J. Austral. Math. Soc.* **19** (1975), 333-336. (Evelyn Nelson) **51** #12629 06A15
- Generalised partial transformation semigroups. *J. Austral. Math. Soc.* **19** (1975), 470-473. (J. B. Kim) **51** #8311 20M20
- Automorphisms of transformation semigroups. *J. Austral. Math. Soc.* **20** (1975), 1, 77-84. (J. B. Kim) **51** #8312 20M20
- (with Cresp, J.) Semigroups in rings. *J. Austral. Math. Soc.* **20** (1975), no. 2, 177-178. (S. Lajos) **52** #3229 16A48
- (with Godwin, D. C.) An instance of the binomial theorem in set theory. *Math. Z.* **143** (1975), 21-24 (1976). (J. E. Graver) **56** #134 05A05
- R. W.** Linear models for compact groups acting on spheres. *Topology* **13** (1974), 87. (Soon-Kyu Kim) **49** #4006 57E15
- Transformation groups resembling the adjoint representation. *Proc. Amer. Math. Soc.* **47** (1975), 491-494. (H. Scherer) **51** #4296 57E15
- Theodore F.** Affine geometry having a solid as primitive. *Notre Dame J. Formal Logic* **12** (1971), 1-61. (F. Bachmann) **45** #4253 50D05
- The name solid as primitive in projective geometry. *Notre Dame J. Formal Logic* **13** (1972), 95-97. (From the author's introduction) **45** #8516 02H15 (50A25)
- Tarski's definition of point in Banach spaces. *J. Geometry* **3** (1973), 179-189. (A. Czyk) **51** #4062 52A50
- The geometry of solids in Hilbert spaces. *Notre Dame J. Formal Logic* **14** (1973), 580-580. (R. C. James) **49** #1081 46C05
- Wayne G.** (with Joseph, Anthony) A commutant property of symmetric ternary algebras. *Proc. Cambridge Philos. Soc.* **70** (1971), 1-4. (J. D. Stein, Jr.) **45** #4165 99 (47B99)
- Potentials for almost Markovian random fields. *Comm. Math. Phys.* **33** (1973), 74. (Richard Holley) **53** #14727 60K35 (82.60)
- Finite range random fields and energy fields. *J. Math. Anal. Appl.* **44** (1973), 710-724. (G. Papanicolaou) **51** #7554 82.60
- A unified existence and ergodic theorem for Markov evolution of random fields. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **31** (1974/75), 47-56. (T. M. Liggett) **51** #11725 60K35
- Markov processes for random fields. *Comm. Dublin Inst. Adv. Studies Ser. A No. 23* (1975), ii + 75 pp. (Hans-Otto Georgii) **55** #13615 60K35
- Mean square relaxation times for evolution of random fields. *Comm. Math. Phys.* **40** (1975), 249-258. (Author's summary) **50** #12103 82.47 (82.60)
- Processes with infinitely many jumping particles. *Proc. Amer. Math. Soc.* **54** (1976), 326-330. (Richard Holley) **52** #15739 60K35
- Specific information gain for interacting Markov processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **37** (1976/77), no. 1, 77-90. (Richard Holley) **55** #4435 60K35
- Sullo, Pasquale** (with Proschan, Frank) Estimating the parameters of a bivariate exponential distribution in several sampling situations. *Reliability and biometry: statistical analysis of lifelength* (Proc. Conf., Florida State Univ., Tallahassee, Fla., 1973), pp. 423-440. *Soc. Indust. Appl. Math., Philadelphia, Pa.*, 1974. (A. Goldman) **50** #1395 62F10 (62N05)
- (with Proschan, Frank) Estimating the parameters of a multivariate exponential distribution. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 465-472. (S. John) **53** #11921 62N05
- (with Jensen, George L.; Paulson, Albert S.) Explicit steady state solutions for a particular $M^{(x)}/M/1$ queueing system. *Naval Res. Logist. Quart.* **24** (1977), no. 4, 651-659. (Carl M. Harris) **57** #7800 60K25
- Šul'man, O. H.** The connection between game theory and abstract automata theory. (Russian) *Mathematical models of behavior*, No. 2 (Russian), pp. 85-89, 96. Izdat. Saratov. Univ., Saratov, 1975. (Author's summary) **58** #9928 94A30 (90D99)
- (with Bjal'skiĭ, M. A.; Vasil'ev, N. N.) Hierarchical integral games. (Russian) *Mathematical models of behavior*, No. 3 (Russian), pp. 10-16, 86. Saratov. Gos. Univ., Saratov, 1978. (Authors' summary) **58** #33016 90D99
- Šul'man, T. A.** (with Širjaev, A. F.) Application of mathematical programming methods to the computation of elastic systems with one-sided connections. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy* No. 385 (1971), 45-54. (Authors' summary) **52** #16246 73.65
- (with Pul'er, Ju. M.; Šmukler, A. I.) Signal transmission with time quantization. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy* No. 385 (1971), 54-64. (O. A. Glonti) **48** #5718 94A05
- On the computation of elastic systems with one-sided connections. (Russian) *Moskov. Inst. Inž. Železnodorož. Transporta Trudy* No. 433 Mat. Metody i Primenen. v Zadačah Transporta (1973), 3-9, 153. (Author's introduction) **52** #16247 73.65
- (with Šmukler, A. I.) Certain properties of Kotelnikov series. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 3(142), 93-103. (S. Baron) **50** #14036 42A20
- (with Šmukler, A. I.) Quantization of a stochastic signal. (Russian) Applied mathematics and transportation problems. *Moskov. Inst. Inž. Železnodorož. Transporta Trudy Vyp.* 473 (1974), 99-109. (Editors) **58** #9754 94A05
- See also **Applied mathematics and transportation problems**, **52** #13064
- Šul'man, V. S.** The operator algebras in a space with an indefinite metric of type π_1 . (Russian) *Dokl. Akad. Nauk SSSR* **201** (1971), 44-47. (E. Durszt) **45** #915 46L99 (47B50)
- (with Loginov, A. I.) The Sarason theorem and the Radjavi-Rosenthal conjecture. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 284-285. (F. H. Szafraniec) **46** #4221 46L10 (47A15)
- Reflexive operator algebras. *Mat. Sb. (N.S.)* **87(129)** (1972), 179-187. (F. H. Szafraniec) **45** #7488 46L10 (47A15)
- Symmetric Banach algebras of operators in a space of type Π_1 . (Russian) *Mat. Sb. (N.S.)* **89(131)** (1972), 264-279, 350. (J. M. G. Fell) **49** #1147 46L15 (47B50)
- The Fuglede-Putnam theorem, and reflexivity. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 543-544. (D. Sarason) **48** #921 47A65 (47B99)
- (with Loginov, A. I.) The hereditary and intermediate reflexivity of W^* -algebras. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 810-812. (D. Sarason) **49** #5877 46L15 (47A15)
- (with Liberzon, V. I.) Nondegenerate algebras of operators in spaces with an indefinite metric. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **37** (1973), 533-538. (I. Kovacs) **49** #1145 46L15
- (with Naimark, M. A.; Loginov, A. I.) Nonselfadjoint operator algebras in Hilbert space. (Russian) *Mathematical analysis*, Vol. 12 (Russian), pp. 413-465, 468. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1974. (D. A. Herrero) **55** #1092 46L15 (47A15, 47B99)
- (with Loginov, A. I.) Reductive operator algebras, and the invariant subspace problem. (Russian) *Dokl. Akad. Nauk SSSR* **216** (1974), 36-38. (Edward Azoff) **50** #2944 47A15 (46L15)
- Multiplication operators in C^* -algebras, and the reflexivity problem for algebras that contain an m.a.s.a. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 1, 92-93. (J. M. G. Fell) **49** #1134 46L05
- Operator algebras with strictly cyclic vectors. (Russian) *Mat. Zametki* **16** (1974), 253-257. (D. A. Herrero) **51** #11129 46L20 (47A15)
- Linear operator equations with generalized scalar coefficients. (Russian) *Dokl. Akad. Nauk SSSR* **225** (1975), no. 1, 56-58. (Șt. Frunză (Zbl **336** #47009)) **58** #7156 47A60 (46L20)
- (with Loginov, A. N.) Hereditary and intermediate reflexivity of W^* -algebras. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **39** (1975), no. 6, 1260-1273, 1437. (G. Arsene) **53** #8919 46L10
- (with Loginov, A. I.) Reductive operators and operator algebras. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 4, 845-854, 950. (D. A. Herrero) **55** #1093 46L15 (47A15)
- Representations of C^* -algebras in spaces with an indefinite metric. (Russian) *Mat. Zametki* **22** (1977), no. 4, 583-592. (A. Hulanicki) **58** #17866 46L05 (47B50)
- (with Loginov, A. I.) Irreducible J -symmetric algebras of operators in spaces with an indefinite metric. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1978), no. 1, 21-23. (J.

- Bognár 58 #23745 47B50 (46L05)
- Sultan, Alan Lattice realcompactifications. *Ann. Mat. Pura Appl.* (4) 106 (1975), 293-303. (R. Grant Woods) 53 #14422 54D60
General rings of functions. *J. Austral. Math. Soc. Ser. A* 20 (1975), no. 3, 359-365. (R. Grant Woods) 52 #9185 54D35
Hausdorff compactifications and Wallman spaces. *Acta Math. Acad. Sci. Hungar.* 28 (1976), no. 3-4, 253-255. (Olav Njåstad) 54 #6090 54D35
(with Bachman, George) Regular lattice measures: mappings and spaces. *Pacific J. Math.* 67 (1976), no. 2, 291-321. (Authors' summary) 58 #22476 28A55
(with Bachman, George) Extensions of regular lattice measures with topological applications. *J. Math. Anal. Appl.* 57 (1977), no. 3, 539-559. (V. S. Krishnan) 55 #601 28A10
Measure, compactification and representation. *Canad. J. Math.* 30 (1978), no. 1, 54-65. (Robert F. Wheeler) 57 #4103 54D35
A general measure extension procedure. *Proc. Amer. Math. Soc.* 69 (1978), no. 1, 37-45. (Robert F. Wheeler) 57 #6348 28A10
- Şagi-Sultan, I. Z. See Şagi-Sultan, I. Z.
- Sultan, M. A. A method of analysis of a limit cycling relay system. (Russian summary) *Problems of Control and Information Theory / Problemy Upravleniya i Teorii Informacii* 5 (1976), no. 2, 167-180. (Takashi Yahagi) 54 #7061 93D15
- Sultanaev, Ja. T. (with Otelbaev, M. O.) On the formulae for the distribution of eigenvalues of singular differential operators. (Russian) *Mat. Zametki* 14 (1973), 361-368. (Boris Pavlov) 49 #7845 47E05
The asymptotic behavior of the spectrum of a differential operator in a space of vector-valued functions. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 1673-1683, 1733. (J. B. Butler, Jr.) 51 #8889 47E05 (34B25)
Asymptotic behavior of the discrete spectrum of one-dimensional singular differential operators. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 2010-2020, 2084. (Leo F. Boron) 50 #10907 47E05 (34B25)
A two-sided Tauberian theorem for ratios. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 1(140), 103-112. (E. Reimers) 52 #8717 40E05
Asymptotic behavior of the discrete spectrum of one-dimensional singular differential operators in the indefinite case. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1975, no. 3, 86-88, 94. (Alexander Alenicyan) 53 #5993 34B25
Asymptotic behavior of the spectrum of singular differential operators in the indefinite case. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 3, 21-30. (R. C. Gilbert) 52 #11186 34B25 (47E05)
- Sultangazin, U. M. On the question of the solution of a linear system of equations with several right-hand sides by the method of bordering. (Russian) *Mathematics and mechanics*, No. 3 (Russian), pp. 142-148, 193-194. *Ministerstvo Vysš. i Sredn. Spec. Obrazovaniya Kazah. SSR, Alma-Ata*, 1968 (1971). (See RZMat 1971 #10 B726; MR 50 #6724) 65F10 (15A06)
A certain method of successive approximations. (Russian) *Mathematics and mechanics*, No. 3 (Russian), pp. 148-151, 194. *Ministerstvo Vysš. i Sredn. Spec. Obrazovaniya Kazah. SSR, Alma-Ata*, 1968 (1971). (See RZMat 1971 #10 B725; MR 50 #6724) 65F10
(with Godunov, S. K.) Discrete models of the Boltzmann kinetic equation. (Russian) *Uspehi Mat. Nauk* 26 (1971), no. 3(159), 3-51. (L. Arkeryd) 45 #3027 82.45
(with Godunov, S. K.) The dissipativity of V. S. Vladimirov's boundary conditions for a symmetric system of the method of spherical harmonics. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 688-704. (N. D. Kazarinoff) 45 #7281 35L35 (82.35)
On the question of the convergence of the method of spherical harmonics for the non-stationary transport equation. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 166-178, 269. (M. Drăganu) 49 #6854 82.45
(with Došanova, M. M.) Differential properties of the solution of systems of equations that are obtained by the method of spherical harmonics—approximations of a nonstationary transport equation. (Russian) *Collection of questions of mathematics and mechanics*, No. 7 (Russian), pp. 114-132, 326-327. *Kazah. Gos. Univ., Alma-Ata*, 1975. (Editors) 58 #29468 35Q99
(with Mika, S.) Convergence of the method of spherical harmonics for a multigroup kinetic equation. (Russian) *Čisl. Metody Meh. Splošn. Sredy* 6 (1975), no. 4, 69-85. (From the introduction) 58 #32722 82.65
(with Kremlev, V. Ja.; Erzanov, R. Ž.; Šeryšev, V. P.) Difference methods for the solution of certain two-dimensional problems of functionally integrated structures. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1976, no. 5, 42-47, 88. (Authors' summary) 56 #4439 78.65
(with Rektorys, K.) A model problem for the heat equation. (Russian. Kazakh summary) *Vestnik Akad. Nauk Kazah. SSR* 1976, no. 5, 63-68. (A. D. Solomon) 55 #11643 65N20 (65F10)
(with Kaišibaeva, G. K.) The construction of a difference scheme for systems of equations of the method of spherical harmonics. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 17 (1977), no. 6, 1474-1481, 1627. (Authors' summary) 56 #13695 65N20
See also Questions of applied mathematics and mechanics, 57 #15811
- Sultanov, A. (with Berkinov, H. B.) A parametric representation of the solution of the problem of nonstationary gas transfer in commutative differential operators. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Vyp.* 24 (1974), 147-152, 237. (Authors' summary) 58 #19676 76.34
- Sultanov, A. G. (with Bunjatov, M. R.) Polygonal homology and cohomology of abstract Boolean algebras with closure. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* 32 (1976), no. 3, 8-12. (V. A. Artamonov) 54 #10094 06A40
- Sultanov, A. Ja. Three-dimensional spaces with projective connection of small mobility. (Russian) *Rjazan. Gos. Ped. Inst. Učen. Zap.* 1974 Dvižen. Obobščen. Prostranstv., 27-32. (From the introduction) 58 #24103 53B40
- Sultanov, I. A. Ambiguous sliding motions in relay systems. *Avtomat. i Telemekh.* 1977, no. 7, 45-61 (Russian. English summary); translated as *Automat. Remote Control* 38 (1977), no. 7, part 1, 983-996. (N. U. Ahmed) 57 #18989 93C99
- Sultanov, R. M. (with Novruzov, G. M.) Investigations, with respect to a parameter, of the solutions of differential equations with a Volterra operator. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1973, no. 1, 61-69. (A. Szép) 51 #1057 34G05
(with Novruzov, G. M.) Some successive approximations for the solution of systems of differential equations with Volterra operators. (Russian. Azerbaijani and English summaries) *Azerbaidžan. Gos. Univ. Učen. Zap.* 1974, no. 2-3 Fiz. i Mat., 139-148. (M. I. Kamenskii) 57 #16887 34G05
- Sultanov, Š. Š. Tensor products of representations of the group $SL(2, R)$. (Russian) *Funkcional. Anal. i Priložen.* 10 (1976), no. 2, 90-92. (G. L. Litvinov) 53 #13481 (EA 54) 22E45
Tensor products of representations of the group $SL(2, C)$. (Russian) *Funkcional. Anal. i Priložen.* 11 (1977), no. 4, 92-93. (Marc A. Rieffel) 57 #12788 22E45
- Sultanov, T. M. A method of computing the probabilities of losses of multicausal switching circuits. (Russian) *Problems on the distribution of information (Russian)*, pp. 180-191, 197. *Izdat. "Nauka", Moscow*, 1973. (Author's summary) 51 #15228 94A20
- Sultanova, D. H. A certain servicing system with preventive maintenance and renewal. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1968, no. 12, 3-4. (See RZMat 1969 #6 V173) 60K25
Asymptotic problems for a system with preventive inspection and renewal of several types. (Russian) Studies in mathematical statistics, and related questions. *Taşkent. Gos. Univ. Naučn. Trudy* No. 402 (1972), 116-122. (Z. Khalil) 49 #2061 90B25 (60K25)
Loss probability for a queueing system with preventive maintenance and renewal. (Russian) *Taşkent. Gos. Univ. Naučn. Trudy Vyp.* 490 *Voprosy Matematiki* (1976), 171-173, 269. (Author's summary) 58 #3123 60K25
- Sultanova, E. S. (with Iskander-Zade, Z. A.) Solutions of a system of differential equations with a right hand part in the form of a second order homogeneous polynomial. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1977, no. 6, 9-14. (Authors' summary) 58 #11630 34C05
- Sultanova, I. A. Effective estimation of the error of the network method of solution of boundary value problems for the Laplace and Poisson equations on a rectangle and on special triangles. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 1205-1218. (G. C. Barozzi) 45 #2937 65N15
Estimates of certain derivatives of the solution of a mixed boundary value problem for the Laplace equation in a rectangle. (Russian) *Collection of scientific works of the Department of Higher Mathematics*, No. 3 (Russian), pp. 84-90, 124. *Tul'sk. Politehn. Inst., Tula*, 1975. (Editors) 58 #29152 35J05 (35B45)
- Sultanova, M. M. (with Azlarov, T. A.; Džamirzaev, A. A.) Characterizing properties of the exponential distribution, and their stability. (Russian) *Random processes and statistical inference*, No. 11 (Russian), pp. 10-19, 94. *Izdat. "Fan" Uzbek. SSR, Taškent*, 1972. (R. H. Rodine) 48 #3150 62E10
- Sultanova, Z. T. (with Borisov, S. N.) On the question of the approximation of tables with two inputs. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* 31 (1975), no. 7, 3-6. (J. S. Shipman) 52 #9563 65D05 (65S05)
- Sulyok, Miklós (with Komlós, János) On the sum of elements of ± 1 matrices. *Combinatorial theory and its applications, II (Proc. Colloq., Balatonfüred, 1969)*, pp. 721-728. *North-Holland, Amsterdam*, 1970. (J. W. Moon) 45 #8548 05B20 (15A36)
(with Komlós, János; Szemerédi, Endre) A lemma of combinatorial number theory (Hungarian. English summary) *Mat. Lapok* 23 (1972), 103-108 (1973). (András Sárközy) 50 #2048 10A10
(with Komlós, János; Szemerédi, Endre) Linear problems in combinatorial number theory. *Acta Math. Acad. Sci. Hungar.* 26 (1975), 113-121. (S. L. G. Choi) 51 #342 10A99
- hoang Sum See Hoang Sum
- Šumai, V. I. See Coding theory and information modeling, 49 #6994
- Šumakov, V. I. See Proceedings: IFAC World Congress, 50 #12338
- Šuman, V. Z. (with Ostrovskii, V. I.) An algorithm for coding the internal states of partial automata. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1976, no. 1, 1-7. (Authors' summary) 58 #20890 94A25
- Sumarokov, L. N. (with Popov, I. I.; Romanenko, A. G.) A model and an algorithm for the two-level control of information flows in a sectorial automated system of scientific and technological information. (Russian. English summary) *Naučn.-Tehn. Informacii (VINITI) Ser. 2. Informacionnye Processy i Sistemy* 1974, no. 8, 3-10, 45. (Authors' summary) 50 #3638 68A10
- Sumarokov, S. V. (with Hramov, A. V.) A method for the solution of a multiextremal problem on the optimization of multistream hydraulic networks. (Russian) *Optimization methods and operations research, applied mathematics (Russian)*, pp. 157-167, 190. *Akad. Nauk SSSR Sibirsk. Otdel. Sibirsk. Energet. Inst., Irkutsk*, 1976. (Authors' summary) 58 #4358 90C50 (90B10)
A method for the solution of the multiextremal network problem. (Russian) *Ekonom. i Mat. Metody* 12 (1976), no. 5, 1016-1018. (P. Vondráček) 56 #10879 90B10 (90C35)
- Sumarokov, V. M. Some combinatorial properties of a certain class of associative test structures. (Russian) *Programmirovaniye* 1976, no. 2, 19-28, 95. (Witold Lipski) 55 #7011 68A50 (05C05)
On the synthesis of optimal tree-like structures in information retrieval systems. (Russian) *Voprosy Informacii. Teorii i Praktiki* No. 2 (1976), 79-95. (loose errata) (From the introduction) 57 #18295 68A50
(with Ivančev, Miroslav D.; Janev, Nikola I.) Increasing single-link search trees. (Russian) *Dokl. Akad. Nauk SSSR* 232 (1977), no. 2, 296-299. (See RZMat 1977 #1 V614) 68A50
(with Ivančev, Miroslav D.; Janev, Nikola I.) Combinatorial analysis of balanced test trees with a variable branching factor. (Russian) *Programmirovaniye* 1977, no. 4, 75-82, 96. (Witold Lipski) 58 #19442 68A50
- Sumbatov, A. S. A certain theorem of the Hamilton-Jacobi type for equations of motion with multipliers of the constraints. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 26 (1971), no. 1, 86-91. (E. Leimanis) 45 #1437 70.35
Integration of dynamic equations with constraint multipliers. *Prikl. Mat. Meh.* 36 (1972), 163-171 (Russian); translated as *J. Appl. Math. Mech.* 36 (1972), 153-162. (D. Schmidt) 49 #4357 70.35
On the application of certain generalizations of the area theorem in systems with

- rolling of rigid bodies. *Prikl. Mat. Meh.* **40** (1976), no. 4, 599-605 (Russian); translated as *J. Appl. Math. Mech.* **40** (1976), no. 4, 552-558 (1977). (M. Hussain) **57** #18338 70.35
- nei, A. S.** Syntactic analysis of input text by defining symbols. *Avtomat. i Telemekh.* **1971**, no. 1, 114-122 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 12, part 2, 1959-1966 (1972). (Horst Reichel) **50** #15461 68A30
- (with Trahtengerc, È. A.) Syntactic analysis of languages that are generated by unambiguous precedence grammars. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **11** (1971), 1005-1013. (I. M. Havel) **45** #4924 68A30
- Algorithm for syntactic analysis in a grammar with degenerate precedence matrix. *Avtomat. i Telemekh.* **1973**, no. 9, 85-90 (Russian. English summary); translated as *Automat. Remote Control* **34** (1973), no. 9, part 1, 1440-1444 (1974). **56** #10177 68A30
- (with Pedanov, I. E.) Extension of the class of LR(0) grammars. *Avtomat. i Telemekh.* **1973**, no. 11, 150-154 (Russian); translated as *Automat. Remote Control* **34** (1973), no. 11, part 2, 1844-1848 (1974). (Authors' summary) **58** #3743 68A30
- (with Trahtengerc, È. A.) The equivalent transformation of generating grammars to precedence grammars. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 446-455, 533. (I. M. Havel) **49** #8439 68A30
- (with Trahtengerc, È. A.) The existence of precedence functions for phrase structure grammars. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 520-522, 536. (V. N. Agafonov) **50** #3658 68A30
- The use of weak precedence relations between determining symbols in a syntactic analyzer. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 5, 69-76. (Author's summary) **57** #14638 68A30
- (with Zonis, V. S.) Syntactical analysis for single-valued grammars. (Russian) *Programirovanie* **1975**, no. 3, 22-29, 94. (Authors' summary) **58** #19395 68A30
- Accelerated syntactic analysis of symbolic programs. *Avtomat. i Telemekh.* **1976**, no. 5, 158-164 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 5, part 2, 783-788. (Author's summary) **56** #10178 68A30
- (with Zonis, V. S.) Optimization of a syntactic analyzer that is constructed according to the method of LR(k) grammars. (Russian) *Programirovanie* **1976**, no. 2, 3-9, 95. (V. I. Konstantinov) **55** #11737 68A30
- (with Rodionov, V. V.) Grammatical text analysis of a programming language by defining symbols. (Russian) *Programirovanie* **1977**, no. 1, 21-27, 103. (A. Ja. Dikovskii) **58** #8538 68A30 (68A05)
- neiko, G. G.** Gradient method for the solution of matrix games. (Russian) *Ekonom. i Mat. Metody* **11** (1975), no. 4, 754-758. (RŽMat **1975** #12 V170) **57** #11799 90D05
- A method of finding a saddle point in a closed bounded domain. (Russian) *Ekonom. i Mat. Metody* **14** (1978), no. 1, 181-185. (Joachim Hirche) **58** #9314 90D05 (65K05, 90C25)
- nihiro, Hideyasu** Equivariant completion. *J. Math. Kyoto Univ.* **14** (1974), 1-28. (V. L. Popov) **49** #2732 14E25 (20G99)
- Equivariant completion. II. *J. Math. Kyoto Univ.* **15** (1975), no. 3, 573-605. (V. L. Popov) **52** #8137 14L99
- nilina, M. K.** An integral representation of Althammer polynomials. (Russian) *Penz. Politehn. Inst. Učen. Zap. Mat. Meh.* **1975**, no. 6, 59-64, 115. (Author's summary) **58** #17247 33A30
- milov, A. N.** (with Skopee, Zalman) A constructive method for obtaining a Laguerre transformation on the Lobachevskii plane. (Russian) *Jaroslav. Gos. Ped. Inst. Učen. Zap. Vyp.* **61 Geometrija** (1967), 152-159. (J. B. Pavlíček) **54** #8430 50C05
- See also Proceedings: Interuniversity Scientific Conference of the Mathematical Faculties of Pedagogical Institutes of the Ural Region, **46** #1532
- milov, B. F.** (with Alekperov, V. P.; Andrievskii, V. R.; Bahanov, L. E.; Bykov, V. P.; Zubkov, M. Ja.; Ivanenko, V. G.; Modjaev, A. D.; Potemkin, V. G.; Tepljakov, È. P.; Topčeev, Ju. I.; Fedorov, S. M.; Hlyupalo, E. I.; Černikov, S. A.; Čudov, M. A.; Šipilov, A. I.; Ščerbakov, V. A.) ★Нелинейные корректирующие устройства в системах автоматического управления. (Russian) [Nonlinear correcting devices in automatic control systems] Edited by Ju. I. Topčeev. Nonlinear Automatic Control Systems, Vol. 2. *Izdat. "Mašinostroenie", Moscow*, 1971. 466 pp. (Bojan Popović) **50** #4005 93-06
- milov, B. M.** The spline approximation of functions of several variables. (Russian) *Vyčisl. Sistemy Vyp. 65 Metody Splajn-Funkcii* (1975), 83-88, 163. (D. D. Stancu) **57** #13300 41A15 (41A50)
- min, V. I.** (with Plotnikov, V. I.) Problems of the stability of nonlinear Goursat-Darboux systems. (Russian) *Differencial'nye Uravnenija* **8** (1972), 845-856. (J. Muszyński) **46** #3964 35B35
- (with Morozov, S. F.) A certain problem of optimal control of nonstationary transport processes. (Russian) *Differencial'nye Uravnenija* **8** (1972), 2235-2243. (L. Finkelstein) **48** #1631 82.45
- (with Plotnikov, V. I.) Optimization of objects with distributed parameters that can be described by Goursat-Darboux systems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 61-77. (S. P. Bingulac) **45** #8356 49B25
- (with Morozov, S. F.) Multidimensional variational problems in a class of discontinuous functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 8(135), 54-67. (L. C. Young) **48** #9502 49B25
- (with Morozov, S. F.) Necessary optimality conditions for controlled stationary transport processes. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 10(149), 46-56. (L. Mikolajczyk) **51** #1545 49B35
- (with Morozov, S. F.) Time-optimality problems in the theory of the optimal control of transfer processes. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 4, 727-740, 766. (L. von Wolfersdorf) **57** #3946 49B25
- (with Plotnikov, V. I.) The first variation and the conjugate problem in optimal control theory. (Russian) *Funkcional. Anal. i Priložen.* **10** (1976), no. 4, 95-96. (Rolf Klötzler) **55** #11132 49B35
- (with Morozov, S. F.) A nonlinear integrodifferential equation of nonstationary transfer. (Russian) *Mat. Zametki* **21** (1977), no. 5, 665-676. (D. Bañov) **57** #7073 45J05
- (with Morozov, S. F.) Nonlinear integro-differential systems of equations of nonstationary transfer. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 4, 842-848, 955.

- (Ulrich Kosel) **58** #20086 82.45
- Sumioka, Takeshi** A note on the Grothendieck group of a finite abelian group. *Osaka J. Math.* **10** (1973), 21-24. (B. Fein) **49** #5095 16A54
- A characterization of the triangular matrix rings over QF rings. *Osaka J. Math.* **12** (1975), no. 2, 449-456. (Darrell R. Turnidge) **52** #3223 16A36
- Sumitomo, Takeshi** On a certain class of Riemannian homogeneous spaces. Collection of articles commemorating Władysław Ślebodziński. *Colloq. Math.* **26** (1972), 129-133, 385. (J. D. Zund) **48** #12411 53C35 (43A85)
- On the commutator of differential operators. *Hokkaido Math. J.* **1** (1972), 30-42. (K. Nomizu) **47** #5785 53C30 (43A85)
- Summer, S. D.** An exact solution of the equation of propagation of magneto-acoustic waves. *Proc. Roy. Soc. (London) Ser. A* **343** (1975), 421-425. (S. H. Lam) **54** #4306 76.35
- Summerfield, G. C.** (with Mirkovitch, M.) Méthodes quasi classiques pour particules avec spin. (English summary) *J. Physique* **34** (1973), 499-509. (Authors' summary) **52** #2475 81.47
- Summerhill, R. Richard** (with Geoghegan, Ross) Infinite-dimensional methods in finite-dimensional geometric topology. *Bull. Amer. Math. Soc.* **78** (1972), 1009-1014. (H. R. Gluck) **47** #1058 57A15
- Unknotting cones in the topological category. *Pacific J. Math.* **40** (1972), 221-228. (Morton Brown) **46** #9991 57A35
- General position for closed subsets of Euclidean space. *General Topology and Appl.* **3** (1973), 339-345. (P. T. Church) **48** #9682 54F45 (57A35)
- (with Geoghegan, Ross) Concerning the shapes of finite-dimensional compacta. *Trans. Amer. Math. Soc.* **179** (1973), 281-292. (T. A. Chapman) **48** #2987 54C56
- (with Geoghegan, Ross) Finite-dimensional spaces having many of the topological properties of separable Hilbert space l_2 . (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 949-954. (D. E. Sanderson) **54** #1228 57A15 (54C56)
- A characterization of the connectivity of a manifold in terms of large open cells. *Proc. Amer. Math. Soc.* **45** (1974), 285-290. (W. Haken) **52** #1705 57A60
- (with Geoghegan, Ross) Pseudo-boundaries and pseudo-interiors in Euclidean spaces and topological manifolds. *Trans. Amer. Math. Soc.* **194** (1974), 141-165. (H. R. Gluck) **50** #8532 57A15
- Summers, Marguerite K.** Factorization in Fréchet modules. *J. London Math. Soc.* (2) **5** (1972), 243-248. (W. Żelazko) **47** #832 46H25
- Summers, Phillip D.** A methodology for LISP program construction from examples. Papers from the Third ACM Symposium on Principles of Programming Languages (Atlanta, Ga., 1976). *J. Assoc. Comput. Mach.* **24** (1977), no. 1, 161-175. (K. H. V. Booth) **56** #7305 68A05
- Summers, Stephen** See Osterwalder, Konrad; et al., **51** #12189
- Summers, T.** (with Lal, Mohan; Tiller, G.) Unitary sociable numbers. *Proceedings of the Second Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1972), pp. 211-216. *Congressus Numerantium*, No. VII, *Utilitas Math.*, Winnipeg, Man., 1973. (Kenneth Yocum) **50** #4471 10A40 (10A20)
- Summers, W. H.** Full-completeness in weighted spaces. *Canad. J. Math.* **22** (1970), 1196-1207. (T. Husain) **46** #654 46H25
- Factorization in Fréchet spaces. *Studia Math.* **39** (1971), 209-216. (D. J. Patil) **46** #6032 46H25
- Separability in the strict and substrict topologies. *Proc. Amer. Math. Soc.* **35** (1972), 507-514. (R. C. Buck) **46** #2410 46E10 (54E35)
- Weighted approximation for modules of continuous functions. *Bull. Amer. Math. Soc.* **79** (1973), 386-388. (D. E. Wulbert) **47** #2328 46E10 (41A65)
- The bounded case of the weighted approximation problem. *Functional analysis and applications* (Proc. Sympos. Analysis, Univ. Fed. Pernambuco, Recife, 1972), pp. 177-183. *Lecture Notes in Math.*, Vol. 384, Springer, Berlin, 1974. (D. E. Wulbert) **52** #6284 41A65
- (with Mukherjee, Tarun Kumar) Continuous linear functionals arising from convergence in measure. *Amer. Math. Monthly* **81** (1974), 63-66. (T. P. Srinivasan) **49** #9609 46E30
- ★Function algebras and related topics. *Monografias de Matemática Pura e Aplicada*, No. 3. [Monographs in Pure and Applied Mathematics, No. 3] Instituto de Matemática, Estatística e Ciência da Computação, Universidade Estadual de Campinas, Campinas, 1975. iii + 35 pp. (I. Tweddle) **57** #13502 46J10 (41A65)
- Weighted approximation for modules of continuous functions. II. *Analyse fonctionnelle et applications* (Comptes Rendus Colloq. d'Analyse, Inst. Mat., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1972), pp. 277-283. *Actualités Sci. Indust.*, No. 1367, Hermann, Paris, 1975. (D. E. Wulbert) **52** #6283 41A65
- Weighted approximation and full completeness in spaces of continuous functions. *Functional analysis* (Proc. Brazilian Math. Soc. Sympos., Inst. Mat. Univ. Estad. Campinas, São Paulo, 1974), pp. 301-308. *Lecture Notes in Pure and Appl. Math.*, 18, Dekker, New York, 1976. (Editors) **58** #30097 46E10 (41A65, 46E99)
- Sumner, A.** See Chinal, Jean P., **50** #9436
- Sumner, David P.** Point determination in graphs. *Discrete Math.* **5** (1973), 179-187. (R. L. Hemminger) **47** #4867 05C99
- Graphs indecomposable with respect to the X-join. *Discrete Math.* **6** (1973), 281-298. (R. L. Hemminger) **48** #3815 05C99
- On Tutte's factorization theorem. *Graphs and combinatorics* (Proc. Capital Conf., George Washington Univ., Washington, D.C., 1973), pp. 350-355. *Lecture Notes in Math.*, Vol. 406, Springer, Berlin, 1974. (Ian Anderson) **51** #287 05C99
- A criterion for n-fold transitivity of transformation groups. *Elem. Math.* **29** (1974), 64-66. (David R. Mason) **49** #10763 20B20
- Dacey graphs. *J. Austral. Math. Soc.* **18** (1974), 492-502. (H. A. Jung) **52** #2970 05C99
- l-factors of point determining graphs. *J. Combinatorial Theory Ser. B* **16** (1974), 35-41. (R. L. Hemminger) **48** #10905 05C99
- Graphs with l-factors. *Proc. Amer. Math. Soc.* **42** (1974), 8-12. (W. T. Tutte) **48** #2004 05C99
- The nucleus of a point determining graph. *Discrete Math.* **14** (1976), no. 1, 91-97. (R. L. Hemminger) **56** #2878 05C99

- Minimal line graphs. *Glasgow Math. J.* **17** (1976), no. 1, 12-16. (L. W. Beineke) 53 #13032 05C35
- 1-factors and antifactor sets. *J. London Math. Soc.* (2) **13** (1976), no. 2, 351-359. (G. Chartrand) 53 #13047 05C99 (94A10)
- (with Trotter, William T., Jr.; Moore, John I., Jr.) The dimension of a comparability graph. *Proc. Amer. Math. Soc.* **60** (1976), 35-38 (1977). (Curtis Greene) 54 #5062 06A10
- (with Geoffroy, Dennis P.) The edge nucleus of a point-determining graph. *J. Combinatorial Theory Ser. B* **24** (1978), no. 2, 189-201. (William T. Trotter, Jr.) 58 #10609 05C99
- (with Geoffroy, Dennis P.) An upper bound on the size of a largest clique in a graph. *J. Graph Theory* **2** (1978), no. 3, 223-230. (J. W. Moon) 58 #21811 05C35
- Summers, D. W. Polynomial invariants and the integral homology of coverings of knots and links. *Invent. Math.* **15** (1972), 78-90. (J. P. Levine) 45 #1150 (E 48 #1211) 55A25
- Addendum to: "Polynomial invariants and the integral homology of coverings of knots and links" (*Invent. Math.* **15** (1972), 78-90). *Invent. Math.* **17** (1972), 94. (J. P. Levine) 48 #1211 55A25
- A note on an example of Poenaru. *Topology* **11** (1972), 319-321. (J. P. Levine) 45 #4400 55A25 (57C45)
- (with Woods, J. M.) A short proof of finite monodromy for analytically irreducible plane curves. *Compositio Math.* **28** (1974), 213-216. (J. M. McPherson) 49 #7476 32C40 (14B05, 57C45)
- On the homology of finite cyclic coverings of higher-dimensional links. *Proc. Amer. Math. Soc.* **46** (1974), 143-149. (Alan H. Durfee) 50 #3239 57C45
- (with Gordon, C. McA.) Knotted ball pairs whose product with an interval is unknotted. *Math. Ann.* **217** (1975), no. 1, 47-52. (Wilbur Whitten) 52 #1713 57C45
- Smooth Z_p -actions on spheres which leave knots pointwise fixed. *Trans. Amer. Math. Soc.* **217** (1975), 193-203. (C. B. Thomas) 51 #9097 57E25
- (with Woods, J. M.) The monodromy of reducible plane curves. *Invent. Math.* **40** (1977), no. 2, 107-141. (Richard Randell) 56 #16643 57C45 (14B05)
- Šumov, N. G. (with Gelfandbeins, J.) A statistical identification of the centrifugal pump as a link in an automatic control system. (Russian) *Cybernetics and diagnostics*, No. 5 (Russian), pp. 131-138. Izdat. "Zinatne", Riga, 1972. (Editors) 50 #4047 93C99
- See also *Cybernetic methods in diagnostics*, 48 #8018
- Šumovskaja, A. G. (with Bogoljubov, N. N. (ml.); Šumovskii, A. S.) Generalization of the minimax principle for problems of the quasi-spin model. (Russian. English summary) *Teoret. Mat. Fiz.* **21** (1974), no. 2, 258-265. (Authors' summary) 57 #15058 81.47
- (with Bogoljubov, N. N. (ml.); Šumovskii, A. S.) Limit relations for model systems in the case of degeneracy of the statistical equilibrium state. (Russian. English summary) *Teoret. Mat. Fiz.* **29** (1976), no. 3, 388-393. (Authors' summary) 56 #14451 82.47
- Šumovskii, A. G. (with Bogoljubov, N. N. (ml.); Šumovskii, A. S.) The time correlations for the Thirring model with positive interaction. *Phys. Lett.* **47A** (1974), 269-270. (Chanchal K. Majumdar) 53 #15235 82.62
- Šumovskii, A. S. (with Bogoljubov, N. N. (ml.); Šumovskii, A. G.) The time correlations for the Thirring model with positive interaction. *Phys. Lett.* **47A** (1974), 269-270. (Chanchal K. Majumdar) 53 #15235 82.62
- (with Bogoljubov, N. N. (ml.); Šumovskaja, A. G.) Generalization of the minimax principle for problems of the quasi-spin model. (Russian. English summary) *Teoret. Mat. Fiz.* **21** (1974), no. 2, 258-265. (Authors' summary) 57 #15058 81.47
- (with Bogoljubov, N. N. (ml.)) A method for computing quasimeans. (Russian) With a discussion in English and Russian. International Conference: Mathematical Problems of Quantum Field Theory and Quantum Statistics (Moscow, 1972), Part II. *Trudy Mat. Inst. Steklov.* **136** (1975), 351-361, 441. (J. Fritz) 57 #18678 82.60
- (with Bogoljubov, N. N. (ml.); Šumovskaja, A. G.) Limit relations for model systems in the case of degeneracy of the statistical equilibrium state. (Russian. English summary) *Teoret. Mat. Fiz.* **29** (1976), no. 3, 388-393. (Authors' summary) 56 #14451 82.47
- (with Kudrjavcev, I. K.) The contribution of the spin-phonon interaction to the thermodynamics of a spin system. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 6, 1293-1295. (M. Lawrence Glasser) 56 #2064 81.47
- Šumskii, G. M. A non-linear problem of motion of a section near a corrugated wall. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR Ser. Tehn. Nauk* **1977**, no. 8, 79-84, 159. (From the text) 58 #19748 76.35
- Šumunov, L. N. (with Ostrovskii, G. M.) The method of quasilinearization for the computation of optimal systems with distributed parameters. (Russian) *Optimization methods for multivariable control systems (Russian)*, pp. 62-76, 127. Izdat. "Nauka", Moscow, 1972. (J. S. Joel) 58 #4520 93C20 (65N20)
- Sun, C. K. (with Šiljak, Dragoslav D.) Exponential absolute stability of discrete systems. (German and Russian summaries) *Z. Angew. Math. Mech.* **51** (1971), 271-275. (N. Harris McClamroch) 53 #12700 93D05
- (with Šiljak, Dragoslav D.) On exponential absolute stability. *Internat. J. Control* (1) **16** (1972), 1003-1008; corrigendum, *ibid.* (1) **17** (1973), 448. (K. R. Meyer) 47 #4690 93D99
- Sun, Chia Chung (with Su, Chan) Long range interactions between molecules. *Sci. Sinica* **19** (1976), no. 1, 91-116. (Porter W. Johnson) 56 #4480 81.33
- Sun, Fang Kuo (with Ho, Yu Chi) Value of information in two-team zero-sum problems. Collection of articles dedicated to Magnus R. Hestenes. *J. Optimization Theory Appl.* **14** (1974), 557-571. (T. L. Saaty) 50 #6512 90D05
- (with Ho, Yu Chi) Role of information in the stochastic zero-sum differential game. Differential game issue. *J. Optimization Theory Appl.* **18** (1976), no. 1, 153-163. (Tamer Basar) 55 #2176 90D25 (93E05)
- (with Ho, Yu Chi) Value of information in zero-sum games. Stochastic systems: modeling, identification and optimization, I (Proc. Sympos., Univ. Kentucky, Lexington, Ky., 1975). *Math. Programming Stud.* No. 5 (1976), 211-226. (Stanislaw Zdrzałka) 56 #8028 90D05
- Sun, Hugo S. A group whose squares generate a dicyclic group. *Amer. Math. Monthly* **78** (1971), 992-993. (D. Solitar) 45 #6927 20F05
- A group-theoretical proof of a theorem in elementary number theory. *Fibonacci Quart.* **11** (1973), no. 2, 161-162. (W. H. Simons) 47 #3294 10A10
- Embedding a semigroup in a ring. *Fibonacci Quart.* **13** (1975), 50. (W. E. Desl) 50 #10131 20M10
- Structure of the reduced residue system with composite modulus. *Fibonacci Quart.* **13** (1975), no. 4, 329-330. (M. S. Cheema) 52 #3028 10A10
- Embedding a group in the p th powers. *Fibonacci Quart.* **16** (1978), no. 1, 4. (Fra Miglorini) 57 #12692 20D30
- Sun, Jia Chang The spline function in local coordinates and the circular spline curve (Chinese) *Acta Math. Sinica* **20** (1977), no. 1, 28-40. (From the introduction) 58 #29622 41A15
- Sun, Jing You (with Wang, Shen Lin; Shen, Chang Si; Chen, Shi Jie) Application of finite element method in numerical weather forecasting. (Chinese) *Kexue Tongbao* (1977), no. 6, 263-266. (Not reviewed) 65N30
- Sun, Shun Hua A stability problem for linear systems in Hilbert space. (Chinese) *Math. Sinica* **18** (1975), no. 4, 297-299. (See RŽMat **1976** #10 B743) 34G05
- Sun, Tze Chien (with Tserpes, Nicholas A.) Idempotent probability measures on local compact abelian semigroups. *J. Math. Mech.* **19** (1969/70), 1113-1116. (From authors' introduction) 56 #6278 43A05 (60B15)
- (with Mukherjee, Arunava; Tserpes, Nicholas A.) Random walks on compact semigroups. *Proc. Amer. Math. Soc.* **39** (1973), 599-605. (J. H. B. Kemperman) 47 #5967 60J15 (60B15)
- (with Mukherjee, Arunava; Tserpes, Nicholas A.) On recurrent random walks on semigroups. *Trans. Amer. Math. Soc.* **185** (1973), 213-227. (D. Revuz) 49 #1163 60J15
- Limits of convolutions of probability measures on the set of 2×2 stochastic matrices. *Bull. Inst. Math. Acad. Sinica* **3** (1975), no. 2, 235-248. (Göran Högn) 52 #6823 60B15 (43A05)
- Sunada, Toshikazu The solution spaces of non-linear partial differential equations of elliptic type on compact manifolds. *Proc. Japan Acad.* **49** (1973), 385-389. (R. S. Palais) 48 #7313 58G99
- On bounded Reinhardt domains. *Proc. Japan Acad.* **50** (1974), 119-123. (W. Karamata) 54 #3007 32A07
- Non-linear elliptic operators on a compact manifold and an implicit function theorem. *Nagoya Math. J.* **56** (1975), 175-200. (H. Jacobowitz) 51 #9114 58G60 (35J60)
- Holomorphic mappings into a compact quotient of symmetric bounded domains. *Nagoya Math. J.* **64** (1976), 159-175. (A. L. Oniščik) 54 #7866 32H25 (32M15)
- Holomorphic equivalence problem for bounded Reinhardt domains. *Math. Ann.* **235** (1978), no. 2, 111-128. (Hugo Rossi) 58 #1211 32A07
- Closed geodesics in a locally symmetric space. *Tōhoku Math. J.* (2) **30** (1978), no. 59-68. (Wolfgang Ziller) 57 #17567 53C35 (58E10)
- Sunaga, Teruo (with Kondo, Eiji; Biswas, Shyamal Kanti) An approximation method using continuous models for queueing problems. (Japanese summary) *J. Operations Res. Soc. Japan* **21** (1978), no. 1, 29-44. (Masafumi Sasaki) 57 #14188 60K25
- Sunahara, Yoshifumi (with Sawaragi, Yoshikazu; Katayama, Tohru) Stochastic optimal synthesis of time-variant control systems by introducing non-linear elements. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC, London, 1966), Vol. 1, p. 34, Paper 18A, 9 pp. Inst. Mech. Engrs., London, 1967. (From the summary) 51 #9945 93E20*
- (with Sawaragi, Yoshikazu; Hara, Kei) On a statistical analysis of non-linear time-variant control systems with a dead time subjected to a suddenly applied random disturbance with the mean value. *Proceedings of the Sixteenth Japan National Congress for Applied Mechanics (Univ. Tokyo, Tokyo, 1966)*, pp. 356-363. *Sci. Council of Japan* **1967**, 1967. (Authors' summary) 56 #11466 93E99
- (with Ohsumi, Akira) Stochastic linearization technique and its application to optimal control. *Mem. Fac. Indust. Arts Kyoto Tech. Univ. Sci. and Tech.* **19** (1971), 11-27. (F. M. Kirillova) 47 #4696 93E20
- (with Sawaragi, Yoshikazu; Ohminato, Kohji) On the estimation of stochastic sensitivity for non-linear dynamical systems in state estimation problems. *Internat. J. Control* (1) **13** (1971), 1083-1095. (N. U. Ahmed) 45 #9776 93E10
- (with Ohsumi, Akira; Usuda, Hiroshi) On a class of stochastic estimation problems for optimal control for nonlinear dynamical systems with state-dependent noise. *Mem. Fac. Indust. Arts Kyoto Tech. Univ. Sci. and Tech.* **20** (1971), 29-39. (M. Zakai) 49 #6988 93E10
- (with Ohsumi, Akira) Sub-optimal state estimation and control for nonlinear stochastic systems with state-dependent noise. *Mem. Fac. Indust. Arts Kyoto Tech. Univ. Sci. and Tech.* **22** (1973), 15-31. (Authors' summary) 56 #11405 93E10
- (with Kabeuchi, Teruo; Asada, Yoshiharu; Aihara, Shin'ichi; Kishino, Kiyotaka) On stochastic controllability for nonlinear systems. *IEEE Trans. Automatic Control* **AC-19** (1974), 49-54. (Peter Stavroulakis) 50 #12415 93E20
- (with Kishino, Kiyotaka; Aihara, Shin'ichi) On stochastic observability of non-linear discrete-time dynamical systems. *Internat. J. Control* **19** (1974), 719-732. (N. Igolkin) 49 #8722 93E15
- An introduction to stochastic control. I. (Japanese) *Systems and Control* **18** (1971), 81-89. (M. Aoki) 49 #12145 93E20
- An introduction to stochastic control. II. (Japanese) *Systems and Control* **18** (1971), 166-174. (M. Aoki) 50 #6615 93E20
- An introduction to stochastic control. III. (Japanese) *Systems and Control* **18** (1974), 211-218. (M. Aoki) 50 #12416 93E20
- An introduction to stochastic control. IV. (Japanese) *Systems and Control* **18** (1971), 295-302. (M. Aoki) 50 #12417 93E20
- An introduction to stochastic control. V, VI, VII, VIII. (Japanese) *Systems and Control* **18** (1974) 339-346; *ibid.* **18** (1974), 427-434; *ibid.* **18** (1974), 468-474; *ibid.* (1974), 536-542. (M. Aoki) 51 #2745 93E20
- An introduction to stochastic control. IX. (Japanese) *Systems and Control* **18** (1971), no. 10, 574-580. (Editors) 58 #4584 93E20
- (with Hamatsuka, Teruo) Optimal control for distributed parameter systems with random coefficients. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 15.2, 10 pp. IFAC, Düsseldorf, 1975. (Authors' summary) 58 #33466 93E20*
- (with Aihara, Shin'ichi; Kishino, Kiyotaka) On the stochastic observability of

- controllability non-linear systems. *Internat. J. Control* **22** (1975), no. 1, 65-82. (R. Rishel) **53** #2446 93B05 (93E10)
- (with Aihara, Shin'ichi; Shiraiwa, Masayuki) The stochastic observability for noisy non-linear stochastic systems. *Internat. J. Control* **22** (1975), no. 4, 461-480. (H. J. Kushner) **54** #12323 93E10
- Analysis of distributed parameter systems having random coefficients (an introduction to random eigenvalue problems). I. (Japanese) *Systems and Control* **19** (1975), no. 8, 431-437. (Katsuji Uosaki) **53** #12717 93E10 (60H15, 34F05)
- Analysis of distributed parameter systems having random coefficients (an introduction to random eigenvalue problems). II. (Japanese) *Systems and Control* **19** (1975), no. 9, 473-480. (Katsuji Uosaki) **53** #12718 93E10 (60H15, 34F05)
- (with Ohsumi, Akira; Imamura, M.) A method of parameter identification for linear distributed parameter systems. *Automatica—J. IFAC* **12** (1976), no. 3, 245-256. (C. J. Harris) **53** #15521 93E10
- (with Kojima, Fumio; Koyama, Muneshi; Aihara, Shin'ichi) On the optimal control for distributed parameter systems with Markov chain coefficients. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 1, pp. 27-31. Hemisphere, Washington, D.C., 1977. (Authors' summary) **58** #9729 93E20
- (with Aihara, Shin'ichi; Kojima, Fumio) Filtering for distributed parameter systems with stochastic coefficients. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 2, pp. 371-375. Hemisphere, Washington, D.C., 1977. (Authors' summary) **58** #15591 93E10
- (with Asakura, T.; Morita, Y.) On the asymptotic behaviour of nonlinear stochastic dynamical systems considering the initial states. With discussion. *Stochastic problems in dynamics (Sympos., Univ. Southampton, Southampton, 1976)*, pp. 138-175. Pitman, London, 1977. (Bradley W. Dickinson) **57** #15703 93E15
- (with Aihara, Shin'ichi; Kamejima, Koji; Kishino, Kiyotaka) On stochastic observability and controllability for nonlinear distributed parameter systems. *Information and Control* **34** (1977), no. 4, 348-371. (Pierre-Louis Lions) **58** #9699 93E15
- See also *Proceedings: International Congress of the International Federation of Automatic Control (IFAC)*, **51** #12360a
- Kakawa, Sigenobu (with Hirooka, Masahiko) Theory of scattering in three-particle system. *Progr. Theoret. Phys.* **52** (1974), 131-146. (M. J. Westwater) **54** #1986 81.47
- (with Yamasaki, Shuichiro; Kebukawa, Takeji) On the collective variables in many-boson system. *Progr. Theoret. Phys.* **53** (1975), no. 5, 1243-1266. (Authors' summary) **54** #9537 82.47
- Kaliev, R. M. A certain asymptotic method in the theory of integro-differential equations. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 2, 11-12. (C. Corduneanu) **47** #9207 45J05
- On the construction of asymptotics in the averaging method. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* No. 5 (1971), 28-30. (See RŽMat **1972** #8 B820) **34C30**
- (with Kadyrbekov, T.) On averaging of a certain class of differential equations. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* Vyp. 9 (1971), 3-9. (RŽMat **1972** #4 B366) **57** #13030 34C30
- (with Larionov, G. S.) The higher approximations in the averaging method. (Russian) *Differencial'nye Uravneniya* **8** (1972), 917-920. (J. A. Morrison) **46** #3915 34C30
- (with Il'jušin, A. A.; Movljankulov, H.; Filatov, A. N.) Certain methods of investigation of nonlinear problems of the theory of visco-elasticity. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 59-61. (J. Bejda) **47** #9936 73.45
- A way of constructing higher order approximations for systems of differential equations in standard form. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* Vyp. 24 (1974), 17-26, 233-234. (Author's summary) **58** #22735 34A45 (65L05)
- Some ways of constructing higher approximations for systems of integrodifferential equations of standard type. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* Vyp. 26 (1974), 45-57, 200. (Author's summary) **58** #23440 45J05
- (with Rjabov, Ju. A.) Convergent successive approximations for the solutions of differential equations in standard form. (Russian) *Mat. Fiz. Vyp.* **19** (1976), 58-65, 123. (M. Ráb) **56** #16034 34A45 (34E15)
- Čeleev, R. Ja. Systems of second-order equations that are invariant under certain groups of transformations. (Russian) *Taškent. Inst. Inž. Železnodorozh. Transporta Trudy* No. 56 (1968), 3-20. (See RŽMat **1969** #5 B505) **35A30** (22E05)
- (with Salihov, R. M.) Determining temperature stresses in a bounded viscoelastic cylinder. (Russian) *Prikl. Meh.* **13** (1977), no. 8, 8-15, 140. (From the introduction) **58** #8686 73.45
- Čeleev, R. R. (with Kirillov, A. A.) Algebra of measures on the group of affine transformations of the p -adic interval. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1975**, no. 2, 3-4. (J. S. Joel) **52** #3881 43A10 (22E50)
- Infinite-dimensional representations of the group $\text{Aff } Z_p$. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 6, 30-35, 90-91. (J. S. Joel) **57** #6300 22E50
- Spaces of continuous functions of a p -adic argument that are translation invariant. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **30** (1975), no. 3, 41-44. (J. S. Joel) **51** #13664 46E15
- The structure of the algebra of measures on the group of affine transformations of the p -adic interval. (Russian) *Taškent. Gos. Univ. Naučn. Trudy* No. 548 *Voprosy Mat.* (1977), 83-87, 144-145. (Editors) **58** #27916 12B40 (22E50)
- Čev, V. N. (with Larin, V. B.; Naumenko, K. I.) The stabilization of multi-dimensional objects under random disturbances. (Russian) *Theory of automatic control (Proc. Sem., Kiev, 1969)*, No. 2 (Russian), pp. 49-72. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (From the authors' introduction) **46** #1433 93E15
- (with Naumenko, K. I.) Synthesis of an optimal multidimensional system of stabilization of an object under random perturbations. (Russian) *Mathematical physics*, No. 8 (Russian), pp. 122-131. *Naukova Dumka, Kiev*, 1970. (V. N. Igolkin) **45** #1659 93E20
- (with Larin, V. B.; Naumenko, K. I.) Optimal stabilization of several plant coordinates by a single controlling action. *Dokl. Akad. Nauk SSSR* **198** (1971), 307-309 (Russian); translated as *Soviet Physics Dokl.* **16** (1971), 355-357. (M. D. Srinath) **54** #14836 93C45
- (with Larin, V. B.; Naumenko, K. I.) The conflict problem of approach. (Russian) *Analytic and qualitative methods of the theory of differential equations (Russian)*, pp. 143-157. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1972. (N. N. Petrov) **51** #12347 90D25
- (with Larin, V. B.; Naumenko, K. I.) ★Синтез оптимальных линейных систем с обратной связью. (Russian) [Synthesis of optimal linear systems with feedback] *Izdat. "Naukova Dumka", Kiev*, 1973. 151 pp. (V. N. Igolkin) **50** #4036 93C05
- (with Larin, V. B.; Naumenko, K. I.) The reproduction of a useful signal by linear systems with feedback. (Russian) *Mathematical physics*, No. 13 (Russian), pp. 42-46, 192. "Naukova Dumka", Kiev, 1973. (D. Obradović) **49** #12149 94A05
- Optimal stabilization of moving objects in the case of incomplete information on their coordinates. (Russian) *Cybernetics and computer technology*, No. 23: *Complex control systems (Russian)*, pp. 44-50, 156. "Naukova Dumka", Kiev, 1974. (G. N. Mil'stein) **53** #2462 93C15
- Optimal control of a multivariable plant with redundant information about certain plant coordinates and no information about others. *Automatika* **1977**, no. 1, 33-38 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* **10** (1977), no. 1, 25-29. (L. D. Berkovitz) **56** #11446 93E20
- See also *Proceedings: International Conference on Nonlinear Oscillations*, **47** #8970 and *Cybernetics and computer technology*, **48** #1736
- Sund, Terje Square-integrable representations and the Mackey theory. *Trans. Amer. Math. Soc.* **194** (1974), 131-139. (G. W. Mackey) **49** #9115 22D10
- Duality theory for locally compact groups with precompact conjugacy classes. I. The character space. *Trans. Amer. Math. Soc.* **211** (1975), 185-202. (L. Corwin) **52** #8332 22D35 (22D10)
- Isolated points in duals of certain locally compact groups. *Math. Ann.* **224** (1976), no. 1, 33-39. (A. Kleppner) **54** #10477 22D10 (22D35)
- A note on integrable representations. *Proc. Amer. Math. Soc.* **59** (1976), no. 2, 358-360. (Robert S. Doran) **55** #3154 22D30
- Duality theory for locally compact groups with precompact conjugacy classes. II. The dual space. *Trans. Amer. Math. Soc.* **224** (1976), no. 2, 313-321. (L. Corwin) **55** #12863 22D35
- (with Skjelbred, Tor) Sur la classification des algèbres de Lie nilpotentes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 5, A241-A242. (Authors' summary) **58** #16802 17B30
- Multipier representations of exponential Lie groups. *Math. Ann.* **232** (1978), no. 3, 287-290. (A. Kleppner) **57** #16467 22E25
- (with Peters, Justin) Automorphisms of locally compact groups. *Pacific J. Math.* **76** (1978), no. 1, 143-156. (Siegfried Grosser) **58** #28263 22D45
- Sundaramoorthy, G. The contribution of the cult of sacrifice to the development of Indian astronomy. With discussion by M. L. Sharma and K. V. Sarma. *Proceedings of the Symposium on Copernicus and Astronomy (New Delhi, 1973)*, *Indian J. History Sci.* **9** (1974), no. 1, 100-106, 142 (1975). **58** #26766 01A25
- Sundararajan, N. (with Cruz, José B., Jr.; Haddad, Abraham) ϵ -coupling method for near-optimum design of large-scale linear systems. *Proc. Inst. Elec. Engrs.* **117** (1970), 223-224. (R. F. Albrecht) **47** #1487 93A15
- Sundararaman, D. Normal filtration of $H^*(M, \theta)$. *J. Differential Geometry* **8** (1973), 225-248. (H. Kerner) **49** #635 32G05
- Normal families of complex structures. *J. Indian Math. Soc. (N.S.)* **39** (1975), 149-154 (1976). (H. Kerner) **54** #3030 32G13 (32G05, 58A10)
- Deformations and classifications of compact complex manifolds. *Complex analysis and its applications (Lectures, Internat. Sem., Trieste, 1975)*, Vol. III, pp. 133-180. *Internat. Atomic Energy Agency, Vienna*, 1976. (H. Kerner) **58** #6360 32G10
- Sundararaman, T. R. (with Subramanian, H.) Precomplete varieties of semigroups. *Semigroup Forum*, **8** (1974), no. 3, 278-281. (M. Gould) **51** #5818 20M10
- Precomplete varieties of R -algebras. *Algebra Universalis* **5** (1975), no. 3, 397-405. (Chang M. Bang) **54** #5086 08A15
- Lattice of precomplete varieties of rings. *Nederl. Akad. Wetensch. Proc. Ser. A. 78 = Indag. Math.* **37** (1975), 144-148. (S. P. Bandyopadhyay) **51** #8168 16A48
- Sundaresan, Kondagunta Extreme points of convex sets and selection theorems. *Pre-valued mappings, selections and topological properties of 2^X (Proc. Conf., SUNY, Buffalo, N.Y., 1969)*, pp. 82-87. *Lecture Notes in Math.*, Vol. 171, Springer, Berlin, 1970. (J. M. Day) **45** #1106 54C60 (28A10, 46E30)
- Some geometric properties of the unit cell in spaces $C(X; B)$. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 1007-1012. (B. Yood) **46** #2411 46E15
- Uniform convexity of Banach spaces $l(\{p_i\})$. *Studia Math.* **39** (1971), 227-231. (A. J. Lazar) **46** #7859 46B05
- (with Woyczyński, Wojbor A.) L -orthogonally scattered measures. *Pacific J. Math.* **43** (1972), 785-797. (A. de Korvin) **47** #3638 28A55 (28A45, 60H99)
- Orthogonality and nonlinear functionals on Banach spaces. *Proc. Amer. Math. Soc.* **34** (1972), 187-190. (R. C. James) **45** #925 47A99
- (with Day, Peter W.) Regularity of group valued Baire and Borel measures. *Proc. Amer. Math. Soc.* **36** (1972), 609-612. (N. Dinculeanu) **46** #5567 28A45
- (with Leonard, I. Edward) Geometry of Lebesgue-Bochner function spaces—smoothness. *Bull. Amer. Math. Soc.* **79** (1973), 546-549. (R. A. Tapia) **48** #4720 46E40
- (with Kapoor, Om Parkash) T -orthogonality and nonlinear functionals on topological vector spaces. *Canad. J. Math.* **25** (1973), 1121-1131. (R. C. James) **48** #9330 46A15
- (with Leonard, E.) A note on smooth Banach spaces. *J. Math. Anal. Appl.* **43** (1973), 450-454. (John R. Giles) **48** #4695 46B05
- Spaces of continuous functions into a Banach space. *Studia Math.* **48** (1973), 15-22. (E. R. Deal) **48** #9377 46E40
- Banach lattices of Lebesgue-Bochner function spaces and conditional expectation operators. I. Collection of articles in celebration of the sixtieth birthday of Ky Fan. *Bull. Inst. Math. Acad. Sinica* **2** (1974), 165-184. (H. E. Lacey) **50** #8058 46E40 (60A10)

- (with Fesmire, Steven H.) Compact nonlinear operators with the Hammerstein property. Collection of articles in celebration of the sixtieth birthday of Ky Fan. *Bull. Inst. Math. Acad. Sinica* 2 (1974), 225-232. (Jürgen Batt) 50 #8188 47H99
- (with Leonard, I. Edward) Smoothness and duality in $L_p(E, \mu)$. *J. Math. Anal. Appl.* 46 (1974), 513-522. (R. Rao Chivukula) 49 #9608 46E30
- (with Leonard, I. Edward) Geometry of Lebesgue-Bochner function spaces—smoothness. *Trans. Amer. Math. Soc.* 198 (1974), 229-251. (Jürgen Batt) 51 #3894 46E40 (58C20)
- Banach spaces with Banach-Stone property. *Studies in topology (Proc. Conf., Univ. North Carolina, Charlotte, N.C., 1974; dedicated to Math. Sect. Polish Acad. Sci.)*, pp. 573-580. Academic Press, New York, 1975. (E. R. Deal) 50 #10809 46E40 (46B05, 54C35)
- Smoothness classification of reflexive spaces. I. *The geometry of metric and linear spaces (Proc. Conf., Michigan State Univ., East Lansing, Mich., 1974)*, pp. 107-115. *Lecture Notes in Math.*, Vol. 490, Springer, Berlin, 1975. (John R. Giles) 54 #901 46B10
- Lebesgue-Bochner function spaces and conditional expectation operators. II. *Bull. Inst. Math. Acad. Sinica* 3 (1975), no. 2, 249-257. (H. E. Lacey) 52 #6402 46E30
- T -orthogonally scattered measures and a Radon-Nikodým theorem. *J. Math. Anal. Appl.* 52 (1975), no. 2, 294-299. (A. de Korvin) 53 #3255 28A45
- (with Hlavac, Paul) Geometry of Banach spaces of functions associated with concave functions. *Trans. Amer. Math. Soc.* 215 (1976), 161-189. (J. A. Johnson) 52 #8917 46E40 (46B05)
- The Radon-Nikodým theorem for Lebesgue-Bochner function spaces. *J. Functional Analysis* 24 (1977), no. 3, 276-279. (J. Diestel) 56 #9246 46E30 (28A45)
- See also **Vector and operator valued measures and applications**, 48 #4264
- Sundareshan, Malur K.** (with Thathachar, M. A. L.) Allowable regions for stability multiplier characteristics. *AIAA J.* 10 (1972), 1246-1248. (V. M. Popov) 47 #3079 93D99
- (with Thathachar, M. A. L.) L_2 -stability of linear time-varying systems—conditions involving noncausal multipliers. *IEEE Trans. Automatic Control* AC-17 (1972), no. 4, 504-510. (G. Zames) 58 #33401 93D99
- (with Thathachar, M. A. L.) Improved conditions for the L_2 -stability of nonstationary feedback systems. *IEEE Trans. Automatic Control* AC-18 (1973), 674-675. (N. Harris McClamroch) 56 #8136 93D99
- (with Thathachar, M. A. L.) Time-domain criteria for the L_2 -stability of nonstationary feedback systems. *IEEE Trans. Automatic Control* AC-18 (1973), no. 1, 80-81. (Authors' summary) 56 #4990 93D15
- (with Thathachar, M. A. L.) Generalized factorizability conditions for stability multipliers. *IEEE Trans. Automatic Control* AC-18 (1973), no. 2, 183-184. (V. M. Popov) 56 #8134 93D15
- (with Thathachar, M. A. L.) Time-varying system stability-interchangeability of the bounds on the logarithmic variation of gain. *IEEE Trans. Automatic Control* AC-18 (1973), no. 4, 405-407. (Authors' summary) 56 #11345 93D99
- (with Thathachar, M. A. L.) Extended time-frequency conditions for the L_2 -stability of a class of non-linear time-varying systems. *Internat. J. Systems Sci.* 4 (1973), 517-526. (W. D. Collins) 49 #4625 93D99
- (with Thathachar, M. A. L.) On the L_2 -stability of a class of nonlinear systems. *J. Math. Anal. Appl.* 42 (1973), 674-683. (Edward J. Davison) 48 #13391 93D10
- (with Thathachar, M. A. L.) L_2 -stability of nonstationary feedback systems: frequency-domain criteria. *IEEE Trans. Automatic Control* AC-19 (1974), 217-224. (Authors' summary) 54 #12307 93D99
- (with Thathachar, M. A. L.) Average variation L_2 -stability criteria for time-varying feedback systems—a unified approach. *IEEE Trans. Automatic Control* AC-19 (1974), 427-429. (V. M. Popov) 57 #2700 93D99
- (with Thathachar, M. A. L.) L_2 -stability of a class of nonstationary feedback systems with dynamical nonlinear subsystems. *IEEE Trans. Automatic Control* AC-20 (1975), 412-415. (Luciano Pandolfi) 55 #10119 93D15
- Decentralized observation in large-scale systems. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 659-664. *Inst. Electr. Electron. Engrs.*, New York, 1976. (Author's summary) 56 #17942 93A15
- (with Šiljak, Dragoslav D.) A multilevel optimization of large-scale dynamic systems. *IEEE Trans. Automatic Control* AC-21 (1976), no. 1, 79-84. (O. I. Nwokah) 53 #7562 93C15 (93D99, 93A15)
- A condition for decentralization in model reference adaptive systems. *IEEE Trans. Automatic Control* AC-21 (1976), no. 6, 880-881. (Lennart Ljung) 56 #14959 93C40
- Large-scale discrete systems: a two-level optimization scheme. *Internat. J. Systems Sci.* 7 (1976), no. 8, 901-909. (Mitsuhiko Araki) 54 #14837 93C55
- (with Thathachar, M. A. L.) On the positivity and stability of non-stationary systems. *J. Franklin Inst.* 302 (1976), no. 4, 319-330. (Authors' summary) 56 #15009 93D99
- Decentral and multilevel controllability of large-scale systems. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 1, pp. 123-128. *Inst. Electrical Electron. Engrs.*, New York, 1977. (Author's summary) 58 #20653 93A15
- (with Vidyasagar, Mathukumalli) L_2 -stability of large-scale dynamical systems: criteria via positive operator theory. *IEEE Trans. Automatic Control* AC-22 (1977), no. 3, 396-399. (Authors' summary) 56 #15011 93D99
- Generation of multilevel control and estimation schemes for large-scale systems: a perturbational approach. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 3, 144-152. (M. Aoki) 58 #9477 93A99
- Exponential stabilization of large-scale systems: decentralized and multilevel schemes. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 6, 478-482. (Author's summary) 58 #26225 93A15 (93D99)
- Decentralized observation in large-scale systems. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 12, 863-867. (Masao Ikeda) 56 #14866 93A15 (93B05)
- See also **DeSantis, Romano M.** (Not reviewed)
- Sundareshan, S. K.** (with Šiljak, Dragoslav D.) Large-scale systems: optimality vs. reliability. *Directions in large-scale systems, many-person optimization and decentralized control (Proc. Sympos., Wakefield, Mass., 1975)*, pp. 411-425. Plenum, New York, (Peter A. Cook) 56 #11220 93C05 (93A15)
- Sundareswaran, K. K.** (with Bayoumi, M. M.) Eigenvalue assignment in linear multivariable systems. *Electron. Lett.* 7 (1971), 573-574. (Authors' summary) 47 #15A18 (93B05)
- (with Bayoumi, M. M.) Canonical forms for linear digital controllers for red arithmetic and storage. (French summary) *Automatic Control Theory Appl.* 1 (1972), 3, 16-19. (Edward J. Davison) 49 #6964 93B10
- (with Bayoumi, M. M.) An observability problem for non-linear discrete systems. *Automatica—J. IFAC* 11 (1975), 105-108. (D. H. Chyung) 52 #7607 93B05
- (with McLane, P. J.; Bayoumi, M. M.) Observers for linear systems with arbitrary plant disturbances. *IEEE Trans. Automatic Control* AC-22 (1977), no. 5, 870-871. (Authors' summary) 56 #14886 93B05
- Sunday, Daniel M., Jr.** The self-equivalences of an H -space. *Pacific J. Math.* 49 (1975), 507-517. (C. S. Hoo) 50 #8516 55D45
- The total curvature of knotted spheres. *Bull. Amer. Math. Soc.* 82 (1976), no. 1, 140-142. (R. K. Lashof) 53 #1486 53C40
- See also **Dynamical systems**, 52 #11994
- Sunday, J. G.** Presentations of the groups $SL(2, m)$ and $PSL(2, m)$. *Canad. J. Math.* (1972), 1129-1131. (A. Peluso) 47 #344 20F05
- Hypergraphs and abstract polygons. *Geometriae Dedicata* 4 (1975), no. 2/3, 363-371. (H. T. Croft) 54 #177 05C99 (50B30)
- Regular polygons in affine spaces. *Proc. London Math. Soc.* (3) 30 (1975), 301-311. (J. F. Rigby) 51 #6565 50D05 (20H15)
- Sundberg, Carl-Erik W.** A class of soft decision error detectors for the Gaussian channel. *IEEE Trans. Comm.* COM-24 (1976), no. 1, 106-112. (J. J. Stiffler) 56 #2694A10
- (with Einarsson, Göran) A note on soft decision decoding with successive erasure. *IEEE Trans. Information Theory* IT-22 (1976), no. 1, 88-96. (N. J. A. Sloane) 52 #94A10
- Asymptotically optimal soft decision decoding algorithms for Hamming codes. *Electron. Lett.* 13 (1977), no. 2, 38-40. (Author's summary) 56 #11518 94A10
- Erasure and error decoding for semiconductor memories. *IEEE Trans. Computers* 27 (1978), no. 8, 696-705. (Jan Grabowski) 58 #9886 94A20 (94A10)
- Sundberg, Rolf** A comment on a note on the sum $\sum_{k=1}^n \epsilon_k \cdot k$, $\epsilon_k = \pm 1$. *Nordisk Mat. Tidskrift* 1 (1973), 5-6. (M. S. Cheema) 48 #8422 10K10 (10A30)
- On estimation and testing for the folded normal distribution. *Comm. Statist.* 3 (1974), 55-72. (G. Roussas) 49 #6471 62F10 (62F05)
- Maximum likelihood theory for incomplete data from an exponential family. *Scand. J. Statist.* 1 (1974), no. 2, 49-58. (A. P. Dawid) 52 #2007 62F10
- Some results about decomposable (or Markov-type) models for multidimensional contingency tables: distribution of marginals and partitioning of tests. *Scand. J. Statist.* 2 (1975), no. 2, 71-79. (Joachim Krauth) 51 #11825 62H15
- An iterative method for solution of the likelihood equations for incomplete data from exponential families. *Comm. Statist.—Simulation Comput.* B5 (1976), no. 1, 55-64. (Donald B. Rubin) 56 #1561 62F10
- (with Moberg, Lars) Maximum likelihood estimation of a linear functional relationship when one of the departure variances is known. *Scand. J. Statist.* 5 (1976), no. 1, 61-64. (Hans-Peter Höschel) 57 #10926 62J05 (62F10)
- Sundblad, Y.** (with Cohen, H. I.; Leringe, Ö.) The use of algebraic computing in general relativity. *General Relativity and Gravitation* 7 (1976), no. 3, 269-286. (R. A. d'Inverno) 57 #8948 83.65
- Sunderesan, K.** Differential categories of locally convex spaces. *Topology (Proc. New Annual Spring Conf., Memphis State Univ., Memphis, Tenn., 1975)*, pp. 115-124. *Lecture Notes in Pure and Appl. Math.*, Vol. 24, Dekker, New York, 1976. (Jean-François Colombeau) 55 #9147 58C20 (58D15, 46G05)
- Sundholm, Göran** A completeness proof for an infinitary tense logic. *Polish Acad. Sci. Philos. Social. Bull. Sect. Logic* 6 (1977), no. 2, 70-73. (Editors) 57 #12182 02C10
- A completeness proof for an infinitary tense-logic. *Theoria* 43 (1977), no. 1, 47-54. (Kristen Segerberg) 56 #15370 02C10
- Sundström, Arne** (with Gustafsson, Bertil; Kreiss, Heinz-Otto) Stability theory of difference approximations for mixed initial boundary value problems. II. *Math. Comp.* 26 (1972), 649-686. (A. O. Gardner, Jr.) 49 #6634 (E 51 #12134) 65M10
- Note on the paper: "Boundary conditions in finite difference fluid dynamic codes" (J. Computational Phys. 15 (1974), 476-491) by C. K. Chu and Aron Sereny. *Computational Phys.* 17 (1975), 450-454. (David F. Griffiths) 51 #12134 76.65
- (with Gustafsson, Bertil) Incompletely parabolic problems in fluid dynamics. *SIAM J. Appl. Math.* 35 (1978), no. 2, 343-357. (M. N. L. Narasimhan) 58 #19763.35
- (with Oliger, Joseph) Theoretical and practical aspects of some initial boundary value problems in fluid dynamics. *SIAM J. Appl. Math.* 35 (1978), no. 3, 419-446. (Elcra) 58 #25389 76.65 (35Q99, 65N99)
- Sundström, Daniel** (with Appelgren, Leif; Zachrisson, Lars Erik) ★Optimeringsmetoder (Swedish) [Optimization methods] Problem med ändligt antal variabler. [Problems with a finite number of variables] *Studentlitteratur, Lund*, 1970. 150 pp. (Editors) 51 #25390-01
- Sundstrom, Robert J.** See **Special issue: Fault-tolerant computing**, 54 #1693
- Sundstrom, Theodore A.** Groups of automorphisms of simple rings. *J. Algebra* 29 (1974), 555-566. (W. E. Baxter) 50 #392 16A40
- Sundukova, T. L.** (with Evseev, A. E.) The relative freeness of the cells of subsets of a semigroup. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* 496 (1972), no. 1, 1-14. (Pondulíček) 46 #7424 20M99
- Sung, C. C.** (with Bowden, C. M.) Effect of spin-spin interaction on the super-radiant phase transition for the Dicke Hamiltonian. *J. Phys. A* 11 (1978), no. 1, 151-161. (Authors' summary) 57 #2375 82A7
- Sung, Chao Ho** Adiabatic stability of rotating gaseous masses. *Astronom. and Astrophys.* (1977), no. 3, 393-404. (Author's summary) 57 #15276 85.35
- Sung, Chia Hsiang** (with Coates, Clarence L., Jr.) Tessellation aspect of combinatorial cellular array testing. *IEEE Trans. Computers* C-23 (1974), 363-369. (E. Ikauni

- 51 #9979 94A20 (68A25)
Testable sequential cellular arrays. *IEEE Trans. Computers C-25* (1976), no. 1, 11-18. (Boleslaw Mikołajczak) **56** #8227 94A25
- g, **Jian** (with Yu, Jing Yuan) On the theory of distributed parameter systems with ordinary feedback control. *Sci. Sinica* **18** (1975), no. 3, 281-310. (G. Bojadziev) **56** #2553 93C20 (47A50)
- gatullin, **R. Z.** Design of beams of least volume with two-sided restrictions on the displacement. (Russian) *Trudy Kazan. Aviacion. Inst. No.* 113 (1969), 109-118. **46** #1091 65K05
- jaev, **A. S.** Synthesis of approximately optimal control for a class of discrete systems. (Russian) *Differential and integral equations, No. 3 (Russian)*, pp. 286-295, 306. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Author's summary) **58** #33365 93C99
- klodas, **J.** An estimate of the rate of convergence in the central limit theorem for weakly dependent random variables. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **17** (1977), no. 3, 41-51, 211-212. (G. K. Eagleson) **56** #13328 60F05
- Some estimates for the distributions of sums of weakly dependent random variables. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 1, 211-215, 244-245. (G. K. Eagleson) **57** #17786 60F05
- kov, **V. P.** The power of a periodic group with abelian 2-subgroups of finite rank. (Russian) *Algebra i Logika* **8** (1969), 601-618. (J. Wiegold) **45** #358 20F50
- A certain class of p -groups. *Algebra i Logika* **9** (1970), 484-496. (J. Wiegold) **45** #359 20D15
- Abstract characterizations of certain linear groups. (Russian) *Matrices and matrix groups (Proc. Sem. Algebraic Systems, No. 1 (Krasnoyarsk, 1969-1970)) (Russian)*, pp. 5-54. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Fiz., Krasnoyarsk*, 1971. (M. Herzog) **53** #5752 20E25
- Locally finite groups of finite rank. (Russian) *Algebra i Logika* **10** (1971), 199-225. (F. Haimo) **45** #2002 20E25
- The conjugacy of Sylow p -subgroups in SF -groups. (Russian) *Algebra i Logika* **10** (1971), 587-597. (D. I. Zaicev) **46** #3624 20E25
- Periodic groups with an almost regular involution. (Russian) *Algebra i Logika* **11** (1972), 470-493, 496. (A. I. Moskalenko) **47** #8706 20F50
- Abelian subgroups in biprimatively finite groups. (Russian) *Algebra i Logika* **12** (1973), 603-614, 618-619. (B. Hartley) **50** #10099 20F50
- Infinite centralizers in groups. (Russian) *Algebra i Logika* **13** (1974), 224-226, 235. (D. I. Zaicev) **51** #10477 20E20
- (with Pavljuk, I. I.; Šafiro, A. A.) Locally finite groups with the primary minimality condition for subgroups. (Russian) *Algebra i Logika* **13** (1974), 324-336, 364. (B. Hartley) **54** #10417 20E25
- (with Ostylovskii, A. N.) The local finiteness of a certain class of groups with the minimality condition. (Russian) *Studies in group theory (Russian)*, pp. 32-48, 149. *Inst. Fiz. im. Kirenskogo Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1975. (Ju. I. Merzljakov) **55** #3087 20E25
- (with Šafiro, A. A.) Locally finite groups with Černikov centralizers of involutions. (Russian) *Studies in group theory (Russian)*, pp. 128-146, 150. *Inst. Fiz. im. Kirenskogo Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1975. (B. Hartley) **55** #3095 20F50
- (with Ostylovskii, A. N.) q -biprimatively finite groups with a minimal condition for the q -subgroups. (Russian) *Algebra i Logika* **14** (1975), no. 1, 61-78, 118. (L. A. Kurdacenko) **57** #12687 20D20
- A test for the nonsimplicity of groups. (Russian) *Algebra i Logika* **14** (1975), no. 5, 576-603, 607. (N. D. Podufalov) **55** #514 20F15
- Sufficient conditions for a group to have infinite locally finite subgroups. (Russian) *Algebra i Logika* **15** (1976), no. 6, 716-737, 745. (N. S. Černikov) **58** #22307 20E25
- (with Sozutov, A. I.) A generalization of the Frobenius theorem to infinite groups. (Russian) *Mat. Sb. (N.S.)* **100(142)** (1976), no. 4, 495-506, 647. (David McDougall) **54** #10420 20E99
- See also *Studies in group theory*, **54** #5322
- ley, **Judith S.** Remarks concerning generalized prime discriminants. *Proceedings of the 1972 Number theory Conference (Univ. Colorado, Boulder, Colo.)*, pp. 233-237. *Univ. Colorado, Boulder, Colo.*, 1972. (Ezra Brown) **53** #349 12A50
- On the class numbers of totally imaginary quadratic extensions of totally real fields. *Bull. Amer. Math. Soc.* **78** (1972), 74-76. (O. F. G. Schilling) **45** #221 12A50
- Class numbers of totally imaginary fields. *Analytic number theory (Proc. Sympos. Pure Math., Vol. XXIV, St. Louis Univ., St. Louis, Mo., 1972)*, pp. 303-304. *Amer. Math. Soc., Providence, R.I.*, 1973. (Editors) **48** #11048 12A50 (12A35)
- Class numbers of totally imaginary quadratic extensions of totally real fields. *Trans. Amer. Math. Soc.* **175** (1973), 209-232. (H. Yokoi) **47** #184 12A50
- ohara, **Shoichi** (with Nakamura, Yatsuka; Furuya, Masakazu) An optimal orthogonal expansion for classification of patterns. *IEEE Trans. Computers C-26* (1977), no. 12, 1288-1290. (K. S. Fu) **57** #18285 68A45
- ouchi, **Chōichirō** A generalization of Schatten-von Neumann-Dixmier theorem for type I AW^* -algebras. *Tōhoku Math. J. (2)* **23** (1971), 727-734. (H. Halpern) **46** #4226 46L10
- ouchi, **Gen-ichirō** Direct theorem in the theory of saturation. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 457-466. *Akadémiiai Kiadó, Budapest*, 1972. (L. Leindler) **53** #1118 41A40
- (with Kojima, Michitaka) Characterization of saturation classes in $L(R^n)$. *Studia Math.* **48** (1973), 71-81. (R. J. Nessel) **49** #11114 41A40
- Local saturation of trigonometric operators. *Linear operators and approximation, II (Proc. Conf., Oberwolfach Math. Res. Inst., Oberwolfach, 1974)*, pp. 421-440. *Internat. Ser. Numer. Math., Vol. 25, Birkhäuser, Basel*, 1974. (S. Izumi) **53** #1132 42A08 (41A40)
- Fourier effective methods of summation. *Acta Sci. Math. (Szeged)* **36** (1974), 161-166. (S. Izumi) **50** #5333 42A24
- On the approximation and saturation of periodic continuous functions by certain trigonometric interpolation polynomials. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 3-4, 323-328. (J. T. Scheick) **54** #8122 42A08
- (with Lee, E. T. Y.) On the majorant properties in l^p . *Bull. Inst. Math. Acad. Sinica* **4** (1976), no. 2, 327-336. (Colin Bennett) **58** #1953 42A16
- See also *Collection: Sunouchi, Gen-ichirō*, **48** #777
- Sunter, **A. B.** List sequential sampling with equal or unequal probabilities without replacement. *J. Roy. Statist. Soc. Ser. C Appl. Statist.* **26** (1977), no. 3, 261-268. (Victor K. T. Tang) **57** #7838 62D05
- See also *Proceedings: Session of the International Statistical Institute*, **49** #8146
- Suntsev, **V. N.** See Suncev, V. N.
- Sunyah, **Christian** Sur le théorème du graphe fermé. *Séminaire Pierre Lelong (Analyse) (année 1967-1968)*, pp. 33-37. *Lecture Notes in Math., Vol. 71, Springer, Berlin*, 1968. (Benno Fuchssteiner) **52** #1240 46A30
- Inégalité de Pietsch et factorisation des applications 0-radonifiantes. *Séminaire Laurent Schwartz 1969-1970: Applications radonifiantes, Annexe 2, 5 pp. Centre de Math., École Polytech., Paris*, 1970. (A. Badrikian) **54** #8335 47B10 (28A40)
- Complétude et théorème du graphe fermé. *Séminaire Pierre Lelong (Analyse) (année 1969)*, pp. 168-174. *Lecture Notes in Math., Vol. 116, Springer, Berlin*, 1970. (K. Floret) **52** #8868 46A30
- Inégalité de Pietsch et factorisation des applications radonifiantes. *C. R. Acad. Sci. Paris Sér. A-B* **270** (1970), A1520-A1522. (N. Dinculeanu) **45** #9093 46A15
- Une classe de chaînes de Markov récurrentes sur un espace métrique complet. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **11** (1975), no. 4, 325-343 (1976). (Michel Viot) **53** #14667 60J05 (60H15)
- Semi-groupes sous-markoviens faiblement continus. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aii, A1201-A1203. (Wilfried Hazod) **51** #11195 47D05 (60J35)
- Principe du maximum récurrent et construction de résolvantes récurrentes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 14, Ai, A747-A750. (Yoichi Oshima) **53** #6761 60J45
- Sur la théorie du renouvellement pour les groupes unimodulaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 10, A547-A549. (Author's summary) **55** #1488 60J15
- hoang Suoc See Hoang Suoc
- Suomela, **P.** Factorings of finite dimensional distributions. *Soc. Sci. Fenn. Comment. Phys.-Math.* **42** (1972), 231-243. (J. D. Mason) **49** #8082 60E05
- Construction of nearest neighbour systems. Dissertation for the degree of Doctor of Philosophy, University of Jyväskylä, 9th July 1976. *Ann. Acad. Sci. Fenn. Ser. A I Math. Dissertationes No. 10* (1976), 56 pp. (T. M. Liggett) **53** #14728 60K35 (82.60)
- Suominen, **Kalevi** (with Mumford, David) Introduction to the theory of muldi. *Algebraic geometry, Oslo 1970 (Proc. Fifth Nordic Summer-School in Math.)*, pp. 171-222. *Wolters-Noordhoff, Groningen*, 1972. (H. Popp) **55** #10455 14D20
- Localization of sheaves and Cousin complexes. *Acta Math.* **131** (1973), 27-41. (C. Bănică) **54** #2651 14B15 (14F05, 32C35)
- Map coloring problems. (Finnish. English summary) *Arkhimedes* **29** (1977), no. 4, 153-164. (Author's summary) **58** #21765 05C15
- kurki-Suonio, **R.** See Kurki-Suonio, R.
- Suonsivu, **E.** See Conference: Optimization Techniques, **48** #5759
- Suponja, **A. A.** (with Abramov, O. V.; Zdor, V. V.) ★Допуски и номиналы систем управления. (Russian) [Tolerances and ratings of control systems] *Izdat. "Nauka", Moscow*, 1976. 160 pp. (errata insert) (Vadim Komkov) **58** #15324 93-02
- Suppe, **Conrad** (with Elster, Karl-Heinz) Über homogene Optimierungsprobleme. *Wiss. Z. Techn. Hochsch. Ilmenau* **18** (1972), no. 2, 3-23. (G. Opfer) **48** #1714 90C30
- (with Elster, Karl-Heinz) Symmetrische homogene nichtlineare Optimierungsprobleme. *Wiss. Z. Techn. Hochsch. Ilmenau* **18** (1972), no. 3, 53-68. (M. Rössler) **49** #4570 90C25
- (with Elster, Karl-Heinz) Zur Dualitätstheorie homogener nichtlinearer Optimierungsprobleme. (English and Russian summaries) *Math. Operationsforsch. Statist.* **4** (1973), no. 5, 351-363. (Werner Krabs) **53** #7482 90C30 (90C25)
- Hyperbolische Optimierungsprobleme mit homogenen Funktionen. (English and Czech summaries) *Ekonom.-Mat. Obzor* **12** (1976), no. 4, 438-443. (Author's summary) **56** #10986 90C30
- Suppe, **Frederick** Theoretical laws. *Formal methods in the methodology of empirical sciences (Proc. Conf., Warsaw, 1974)*, pp. 247-267. *Synthese Library*, 103. *Reidel, Dordrecht*, 1976. (Editors) **58** #27437 02G99
- See also *Structure of scientific theories*, **52** #13085
- Suppes, **Patrick** ★A probabilistic theory of causality. *Acta Philosophica Fennica*, Fasc. 24. *North-Holland Publishing Co., Amsterdam*, 1970. 130 pp. (From the author's introduction) **57** #5663 02A05
- (with Krantz, David H.; Luce, R. Duncan; Tversky, Amos) ★Foundations of measurement. Vol. I: Additive and polynomial representations. *Academic Press, New York-London*, 1971. xiv + 577 pp. (V. Komkov) **56** #17265 69.00
- ★Axiomatic set theory. Unabridged and corrected republication of the 1960 original with a new preface and a new section (8.4). *Dover Publications, Inc., New York*, 1972. xii + 267 pp. (Editors) **50** #1883 04-02
- Finite equal-interval measurement structures. *Theoria* **38** (1972), 45-63. (S. Kanger) **51** #9863 92A25
- New foundations of objective probability: axioms for propensities. *Logic, methodology and philosophy of science, IV (Proc. Fourth Internat. Congr., Bucharest, 1971)*, pp. 515-529. *Studies in Logic and Foundations of Math., Vol. 74, North-Holland, Amsterdam*, 1973. (Author's review) **58** #24432 60A05 (69.00)
- (with Estes, William K.) Foundations of stimulus sampling theory. *Contemporary developments in mathematical psychology, Vol. I: Learning, memory and thinking (Proc. Sympos., Univ. Michigan, Ann Arbor, Mich., 1972)*, pp. 163-183. *Freeman, San Francisco, Calif.*, 1974. (K. D. Günther) **52** #12858 92A25 (60J20)
- The axiomatic method in the empirical sciences. *Proceedings of the Tarski Symposium (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971)*, pp. 465-479. *Amer. Math. Soc., Providence, R.I.*, 1974. (A. Rapoport) **51** #2829 00A25
- The measurement of belief. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 160-175. (R. D. Luce) **52** #6802 62A05 (92A25)
- Testing theories and the foundations of statistics. With a discussion by the author, D. V. Lindley, P. Teller, P. D. Finch, and R. N. Giere. *Foundations of probability theory*,

- statistical inference, and statistical theories of science (Proc. Internat. Res. Colloq., Univ. Western Ontario, London, Ont., 1973), Vol. II, pp. 437-455. Univ. Western Ontario Ser. Philos. Sci., Vol. 6, Reidel, Dordrecht, 1976. (A. P. Dawid) **58** #18807 62A99
- (with Zanotti, Mario) On the determinism of hidden variable theories with strict correlation and conditional statistical independence of observables. *Logic and probability in quantum mechanics*, pp. 445-455. *Synthese Library*, 78, Reidel, Dordrecht, 1976. (From the introduction) **58** #32488 81.02
- Elimination of quantifiers in the semantics of natural language by use of extended relation algebras. *Rev. Internat. Philos.* **30** (1976), no. 3-4, 243-259. (U. Wybraniec-Skardowska) **56** #10179 68A30 (02B99, 02H10)
- A survey of contemporary learning theories. *Foundational problems in the special sciences* (Proc. Fifth Internat. Congr. Logic, Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975), Part II, pp. 217-239. Univ. Western Ontario Ser. Philos. Sci., Vol. 10, Reidel, Dordrecht, 1977. (M. M. Flood) **58** #19429 68A45 (92-02, 92A05, 92A25)
- (with Zanotti, Mario) On using random relations to generate upper and lower probabilities. Foundations of probability and statistics, III. *Synthese* **36** (1977), no. 4, 427-440. (Editors) **58** #24433 60A05 (62A99)
- See also Semantics and communication, **49** #4731; Contemporary developments in mathematical psychology, **50** #6554; Contemporary developments in mathematical psychology, **50** #6555; Discussion: Papers by Professor Tversky and by Professor Suppes, **52** #6803; Structure of scientific theories, **52** #13085; Logic, methodology and philosophy of science, **55** #7657; Quantitative sociology, **56** #2480; Mortimer, Halina, **57** #5664 and Logic and probability in quantum mechanics, **58** #32473
- Suprun, A. N.** Certain methods of recognizing and describing the effect of the deformation destabilization in rheonomous media. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 64-67. (S. Kaliski) **47** #4515 73.45
- An extension of the class of operators of the theory of viscoelasticity. (Russian) *Applied problems in strength and plasticity*, 5 (Russian), pp. 15-26, 105. *Gor'kov. Gos. Univ., Gorky*, 1976. (From the introduction) **58** #8690 73.47
- Some ways of extending the class of operators of viscoelasticity theory. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 6, 1323-1326. (J. Ignaczak) **56** #13965 73.47
- Suprun, V. M.** (with D'jačkovskii, S. V.; Firdžanov, B.) On the excess over the boundary for compound Poisson processes with drift. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist. Vyp.* **13** (1975), 53-59, 162. (J. G. Wendel) **54** #1398 60J30
- (with Šurenkov, V. M.) On the resolvent of a process with independent increments that is terminated at the time of exit to the negative half-line. (Russian) *Studies in the theory of random processes* (Russian), pp. 170-174. *Izdanje Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1976. (N. H. Bingham) **55** #13583 60J30
- The value of the excess over the zero boundary for a homogeneous process with independent increments and with jumps of a single sign. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 4, 318-320, 385. (J. G. Wendel) **53** #14688 60J30
- (with Koroljuk, V. S.; Šurenkov, V. M.) A potential-theoretic method in boundary problems for processes with independent increments and jumps of the same sign. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **21** (1976), no. 2, 253-259. (J. G. Wendel) **53** #14687 60J30
- The ruin problem and the resolvent of a killed independent increment process. (Russian) *Ukrain. Mat. Ž.* **28** (1976), no. 1, 53-61, 142. (J. G. Wendel) **55** #1497 60J30
- The joint distribution of the time of attainment and the excess over the zero level for a homogeneous process with independent increments and jumps of a single sign (the critical case). (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 1, 20-21, 95. (N. H. Bingham) **57** #14157 60J30
- Suprun, V. P.** Realization of certain functions by schemes on elements of Sheffer type. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1975**, no. 1, 72-74, 91. (Author's summary) **51** #5198 94A20
- (with Novikov, S. V.; Komissarov, V. È.) The minimal realization of the function $f = x_1 x_2 \dots x_n$ by schemes of elements of Sheffer type. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1975**, no. 2, 13-18, 99. (W. Wechler) **51** #15220 94A20
- (with Zolotarevič, L. A.) Certain questions on the analysis of sequential circuits. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1975**, no. 3, 14-18, 92. (Authors' summary) **57** #19155 94A20
- The synthesis of logic circuits of linear complexity. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* **1976**, no. 5, 22-25, 91. (Author's summary) **58** #4701 94A20
- The minimization of the number of arguments of a Boolean function. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1976**, no. 1, 7-11, 93. (S. Rudeanu) **56** #8219 94A20
- (with Novikov, S. V.) An estimate for the number of inputs of micromodules in logical circuits. (Russian. German and English summaries) *Elektron. Informationsverarbeitung. Kybernetik* **13** (1977), no. 7-8, 345-349. (I. E. Straziņš) **56** #18153 94A20
- (with Novikov, S. V.) The maximally useful number of inputs of elements in logical circuits. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 2, 47-52. (Authors' summary) **58** #9874 94A20
- Suprunenko, D. A.** The values of a linear form on a set of permutations. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 2, 59-63. (L. Afanas'eva) **45** #6829 15A06 (13C99, 90B99)
- Finite irreducible solvable linear groups. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1971**, no. 3, 7-16. (J. D. Dixon) **45** #2035 20G20
- Solvable matrix groups over a field of prime characteristic. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1971**, no. 5, 120-121. (E. M. Levič) **45** #5235 20G15
- ★ Группы матриц. (Russian) [Matrix groups] Monographs in Contemporary Algebra. Izdat. "Nauka", Moscow, 1972. 351 pp. (Andrzej Białynicki-Birula) **51** #13001 20-02 (20G35)
- Minimal irreducible solvable linear groups of prime degree. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 540-541. (J. D. Dixon) **46** #5477 20H20
- (with Metel'skii, N. N.) The assignment problem, and the minimization of a sum linear forms on a symmetric group. (Russian. English summary insert) *Kibernetika (Kiev)* **1973** no. 3, 64-68. (E. Ja. Gabovič) **49** #6919 90C05
- (with Andrunakievič, V. A.; Baranovič, T. M.; Belousov, V. D.; Berman, S.; Gluskin, L. M.; Golovin, O. N.; Zavalov, S. T.; Kalužnin, L. A.; Plotkin, B. I.; Sadovskii, L. E.; Skornjakov, L. A.; Ševrin, L. N.; Šmel'kin, A. L.) In memoriam Aleksandr Gennadijevič Kuroš (January 19, 1908-May 18, 1971). (Russian) Collection of articles commemorating Aleksandr Gennadijevič Kuroš. *Trudy Moskov. Mat. Obšč.* **29** (1973), 3-4. (Editors) **51** #7787 01A70
- Minimal irreducible solvable linear groups of prime degree. (Russian) Collection of articles commemorating Aleksandr Gennadijevič Kuroš. *Trudy Moskov. Mat. Obšč.* (1973), 223-234. (J. D. Dixon) **51** #13075 20H20
- Remarks on minimal irreducible linear groups. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1974**, no. 3, 5-8, 138. (S. I. Gel'fand) **50** #495 20G15
- On the assignment problem. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1974**, no. 4, 5-10, 138. (Author's summary) **57** #15381 90B10 (90C50)
- On König's theorem. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 4, 128-133. (From the summary) **58** #735 15A36
- On the traveling salesman problem. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 5, 121-124. (Author's summary) **56** #4818 90C05 (90C50)
- The traveling salesman problem. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1975** no. 5, 5-11, 137. (József Pelikán) **53** #8208 20B25
- ★ Matrix groups. Translated from the Russian. Translation edited by K. A. Hirsh. Translations of Mathematical Monographs, Vol. 45. *American Mathematical Society, Providence, R.I.*, 1976. viii + 252 pp. (Editors) **52** #10852 20-02 (20G35)
- A class of monomial minimal irreducible groups. (Russian) *Dokl. Akad. Nauk BSSR* **20** (1976), no. 10, 869-872, 955. (V. D. Mazurov) **54** #10438 20H20
- (with Kalužnin, L. A.; Litver, E. L.; Mokriščev, K. K.; Haplanov, M. G.) Vladimir Petrovič Vel'min. Obituary. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 1(11), 229-235. (Editors) **53** #12842 01A70
- The circulant and special automorphisms of a linear space over a finite field. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 4, 5-10, 139. (J. Brenner) **58** #5961 20G40
- Real minimal irreducible matrix groups. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1978), no. 1, 29-32. (V. D. Mazurov) **58** #5953 20G20
- See also Zaleskii, A. E.; et al., **52** #30 and Transactions of the Moscow Mathematical Society, **52** #10313
- Suprunenko, I. D.** (with Zaleskii, A. E.) Irreducible linear groups. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 5, 43-45, 138. (J. D. Dixon) **52** #8272 20G15
- Suquet, Pierre-Marie** Sur un nouveau cadre fonctionnel pour les équations de la plasticité. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 23, A1129-A1131. (Author's summary) **58** #14217 73.53
- Sur, B. N.** (with Majumdar, S. K.) On the convergence of an infinite continued fraction arising from Chebyshev equation. *Indian J. Pure Appl. Math.* **5** (1974), no. 4, 351-353. (David F. Dawson) **52** #3775 40A15
- Error analysis for polynomial and Fourier series evaluation. *Indian J. Pure Appl. Math.* **9** (1978), no. 4, 382-388. (J. A. Grant) **57** #14395 65G05
- Šur, M. G.** A Martin compactum with a non-negligible irregular boundary point. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **17** (1972), 366-370. (B. Walczak) **46** #377 31D05 (60J45)
- Functions that are harmonic for a Markov process. (Russian) *Mat. Zametki* (1973), 587-596. (I. Cuculescu) **49** #9960 60J45
- An example of a Martin compactum with a nonnegligible irregular boundary point. (Russian) *Trudy Moskov. Mat. Obšč.* **28** (1973), 159-179. (J. L. Doob) **51** #9131 31D05
- Functional of dual Markov processes. (Russian) *Uspehi Mat. Nauk* **28** (1973), 1(169), 255-256. (Hermann Rost) **52** #15698 60J40
- The approximation of additive functionals. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 6(180), 183-184. (J. L. Doob) **53** #6764 60J55
- Elements of potential theory for inhomogeneous Markov processes. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **20** (1975), no. 2, 267-291. (Arthur Pittenger) **53** #11774 60J45
- An ergodic theorem for Markov processes. I. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **21** (1976), no. 2, 410-416. (J. L. Doob) **54** #3863 60J40
- Dual Markov processes. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **22** (1977), no. 2, 264-278. (J. L. Doob) **56** #1481 60J40
- An ergodic theorem for Markov processes. II. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **22** (1977), no. 4, 712-728. (J. L. Doob) **57** #14156 60J20
- Echo of ergodicity for parts of recurrent processes. (Russian) *Mat. Zametki* (1978), no. 1, 133-140, 144. (Pierre Crépel) **58** #18733 60J05
- See also Transactions of the Moscow Mathematical Society, **50** #9479 and Dellacherie, Claude, **56** #6811
- Šur, V. N.** See Mathematical methods in economic research, **52** #16531
- Šura-Bura, M. R.** (with Eršov, A. P.) The state of programming in the USSR (initial development). (Russian) *Akad. Nauk SSSR Sibirsk. Otdel. Vychisl. Centr Preprint. Ser. I* **12** (1976), 49 pp. (J. S. Joel) **58** #27090a 01A65 (68-03)
- (with Eršov, A. P.) The state of programming in the USSR (transition to the second generation of languages and machines). (Russian) *Akad. Nauk SSSR Sibirsk. Otdel. Vychisl. Centr Preprint. No. 13* (1976), 42 pp. (J. S. Joel) **58** #27090b 01A65 (68-03)
- (with Eršov, A. P.) Paths in the development of programming in the USSR. (Russian. English summary insert) *Kibernetika (Kiev)* **1976**, no. 6, 141-160. (J. S. Joel) **57** #14562 68-03 (01A65)
- Šuraic, Ju. M.** (with Bronštein, I. I.; Trahtengerc, È. A.) Determination of an optimal plan for realization of an algorithm on a multiprocessor computer. *Avtomat. i Telemekh.* **1975**, no. 4, 122-127. (Russian. English summary); translated as *Avtomat. Remote Control* **36** (1975), no. 4, part 2, 633-638. (Authors' summary) **56** #8016 90C50 (90C05)
- (with Bronštein, I. I.; Trahtengerc, È. A.) Minimization of execution time of group of programs with distinct durations of processing of a multi-processor computer. *Avtomat. i Telemekh.* **1976**, no. 1, 179-186. (Russian. English summary); translated

- Automat. Remote Control* **37** (1976), no. 1, part 2, 114-120 (1976). (Jerzy Seidler) #8114 68A05
- Method of determining the computer resources necessary to solve problems requiring multiple execution of a program package. *Automat. i Telemekh.* **1976**, no. 5, 180-183 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 5, part 2, 802-806. (Author's summary) **57** #18799 90B99 (90C05)
- Minimization of waiting time for performing sets of operations in two-stage servicing. *Automat. i Telemekh.* **1977**, no. 12, 138-144 (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 12, part 2, 1857-1863 (1978). (Jan Teglarz) **58** #4287 90B35
- Yi, János Lattice point free rectangles. *Zahlenentheorie (Tagung, Math. Forschungsinst. Oberwolfach, 1970)*, pp. 195-202. *Ber. Math. Forschungsinst., Oberwolfach, Heft 5*, Bibliographisches Inst., Mannheim, 1971. (V. C. Dumir) **53** #7955 10E05
- Some combinatorial problems of geometry. (Hungarian. English summary) *Mat. Lapok* **22** (1971), 215-230 (1972). (W. G. Brown) **49** #143 05C35 (52A40)
- (with Härtig, Klaus) Combinatorial and geometric thoughts on number theory. (Hungarian) *Mat. Lapok* **23** (1972), 25-29 (1973). (T. Šalát) **50** #2070 10A99
- A certain way of presenting finite abelian groups. (Hungarian. English summary) *Mat. Lapok* **23** (1972), 257-259 (1974). (L. Fuchs) **55** #12835 20K99
- (with Härtig, Klaus) Combinatorial and geometrical investigations in elementary number theory. *Period. Math. Hungar.* **6** (1975), no. 3, 235-240. (Ian Anderson) #8017 10A25 (10A10)
- (with Kürschák, József; Neukomm, G.; Hajós, György) ★Венгерские математические олимпиады. (Russian) [The Hungarian Mathematical Olympiads] translated from the Hungarian by Ju. A. Danilov. Edited and with a foreword by V. M. Iosifesev. *Izdat. "Mir", Moscow*, 1976. 544 pp. (From the publisher's description) #5 #2420 00A05
- Yi, L. On a problem of P. Erdős and A. Hajnal. *Combinatorial theory and its applications, III (Proc. Colloq., Balatonfüred, 1969)*, pp. 1029-1041. North-Holland, Amsterdam, 1970. (P. Erdős) **45** #6669 05C99
- Yi, László (with Hoffmann, György) An exposition of the first arithmetic proof of the prime number theorem. (Hungarian. English summary.) *Mat. Lapok* **23** (1972), 31-51 (1973). (P. Erdős) **50** #252 10H15
- On line critical graphs. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to Erdős on his 60th birthday)*, Vol. III, pp. 1411-1444. *Colloq. Math. Soc. János Bolyai*, vol. 10, North-Holland, Amsterdam, 1975. (M. Aigner) **53** #5381 05C99
- (with Rosta, Vera) A note on the Ramsey-multiplicity of the circuit. *Period. Math. Hungar.* **7** (1976), no. 3-4, 223-227. (J. A. Bondy) **57** #163 05C15
- Yi, P. (with Scania, J. J. G.) Rigorous bounds on inclusive and exclusive cross sections. I. Lower bound on the integral of an analytic function. *J. Mathematical Phys.* (1976), no. 5, 747-752. (G. R. Alcock) **54** #6728 81J30
- Yi, S. (with Çelebi, A. Okay) On the decomposition formulae for the solutions of a class of partial differential equations of even order. (Turkish summary) *Comm. Fac. Sci. Univ. Ankara Sér. A* **22** (1973), 57-66. (L. E. Payne) **48** #9072 35C99
- Yi, Franz (with Weinrichter, Hans) Interlacing properties of shift-register sequences generated by polynomials irreducible over GF(p). *IEEE Trans. Information Theory* **24** (1978), no. 3, 386-389. (R. J. McEliece) **58** #20801 94A10 (12C10)
- Yi, Aldo. See Lo Surdo, Camillo
- Yi, Alexandru The symbolic interpretation of the first chapters of Aristotle's article "Categoriae". (Romanian) *Problems of logic, Vol. V (Romanian)*, pp. 133-147. *Editura Acad. R.S.R., Bucharest*, 1973. (Editors) **57** #2860 02-03 (01A20)
- Aristotle's problem of the universal from the perspective of the article "Categoriae". (Romanian) *Problems of logic, Vol. V (Romanian)*, pp. 291-304. *Editura Acad. R.S.R., Bucharest*, 1973. (Editors) **57** #2861 02-03 (01A20)
- Logicistic, formalistic and intuitionistic problems in Greek philosophy. (Romanian. French summary) *Problems of logic, Vol. VI (Romanian)*, pp. 135-169. *Editura Acad. R.S.R., Bucharest*, 1975. (Author's summary) **57** #2862 02-03 (01A20, 02A05)
- The perspectives of modern logic. (Romanian) *Problems of logic, Vol. VII (Romanian)*, pp. 183-190. *Ed. Acad. RS România, Bucharest*, 1977. (Editors) **58** #27270 02A05
- Yi, Yves Sous-hypergroupe engendré par deux sous-hypergroupes et sous-hypergroupe tra-clos d'un hypergroupe. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 17, A983-A984. (Author's summary) **55** #5782 20N15
- Une notion de conjugaison dans les hypergroupes et hypergroupes homomorphes à un groupe. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 18, A1101-A1103. (Author's summary) **55** #5783 20N15
- Yi, K. (with Jackson, L. W.) A fourth order exponentially fitted method. *SIAM J. Numer. Anal.* **11** (1974), 965-978. (W. H. Enright) **50** #15364 65L15
- Yi, K. (with Leibowitz, M. A.) Optimal control of a class of distributed systems. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 1, 69-70. (Shinzo Kitamura) #5 #2550 93C20 (49D05)
- Quasistatic control of xenon spatial oscillations. *Internat. J. Systems Sci.* **6** (1975), 269-279. (Ivar Ekeland) **51** #15086 93C20
- Yi, V. M. Certain limit theorems for vector-valued branching processes with a continuous phase space. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 304-305. (P. Rogers) **47** #5975 60J80 (60F15)
- Limit theorems for branching processes with immigration that is regulated by a finite Markov chain. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 554-556. (P. Rogers) **47** #5976 60J80
- A remark on the asymptotic behavior of vector-valued branching processes with continuous phase space. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **8** (1973), 169-172, 179. (Miloslav Jiřina) **55** #1516 60J80
- Certain limit theorems for branching processes with continuous phase space. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **9** (1973), 167-172, 178. (E. Seneta) **54** #1409a (E **54** #1409b) 60J80
- A simple proof of the ergodic theorem of Skorohod. (Russian) *Theory of random processes, Questions of statistics and control (Russian)*, pp. 257-261. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (M. Iosifescu) **58** #13368 60J25
- (with Davidovič, Ju. S.) Corrections of homogenous Markov processes. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **10** (1974), 56-68, 174. (Jürgen Groh) **54** #6291 60J25
- Local characteristics of branching processes with a finite number of types and with continuous phase space. (Russian) *Theory of random processes, No. 3 (Russian)*, pp. 150-155, 160. *Izdat. "Naukova Dumka", Kiev*, 1975. (E. Seneta) **51** #9247 60J80
- (with Vigman, B. A.; Ešov, I. I.) On some characteristics of specialized and universal queueing systems. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **13** (1975), 34-38, 161. (H. T. Tašmanov) **54** #8928 60K25
- Letter to the editors: "Certain limit theorems for branching processes with a continuous phase space" (Teor. Veroyatnost. i Mat. Statist. Vyp. **9** (1973), 167-172). (Russian) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **13** (1975), 166. (E. Seneta) **54** #1409b 60J80
- A remark on the multivariate renewal equation. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **20** (1975), no. 4, 848-851. (J. G. Wendel) **52** #12114 60K05
- (with Suprun, V. M.) On the resolvent of a process with independent increments that is terminated at the time of exit to the negative half-line. (Russian) *Studies in the theory of random processes (Russian)*, pp. 170-174. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1976. (N. H. Bingham) **55** #13583 60J30
- (with Koroljuk, V. S.) The method of potential in boundary problems for random walks on a Markov chain. (Russian) *Dokl. Akad. Nauk SSSR* **230** (1976), no. 5, 1056-1058. (J. G. Wendel) **55** #4415 60K15
- A change of time that preserves the semi-Markov property, and regularity conditions. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **14** (1976), 148-152, 158. (O. K. Zakusilo) **54** #8914 60K15
- (with Davidovič, Ju. S.) On an inventory control model. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **15** (1976), 31-37, 154. (M. A. Fainberg) **55** #1524 60K25 (90B05)
- (with Koroljuk, V. S.; Suprun, V. M.) A potential-theoretic method in boundary problems for processes with independent increments and jumps of the same sign. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 2, 253-259. (J. G. Wendel) **53** #14687 60J30
- Two limit theorems for critical branching processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 3, 548-558. (E. Seneta) **54** #8907 60J80
- (with Ešov, I. I.) Ergodic theorems connected with the Markov property of random processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 3, 635-639. (M. Iosifescu) **54** #8856 60G99 (60G40)
- Kolmogorov's equations for a class of transition functions. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 4, 875-879. (M. Iosifescu) **55** #4395 60J35
- Transformations of random processes preserving the Markov property. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **22** (1977), no. 1, 122-126. (M. Iosifescu) **55** #6580 60J25
- (with Koroljuk, V. S.) The method of potential in boundary problems for random walks on a Markov chain. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 4, 464-471, 563. (J. G. Wendel) **57** #1658 60J15 (60K15)
- Limiting distributions of the exit time out of an expanding interval and of the position at this time for a process with independent increments and jumps of the same sign. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **23** (1978), no. 2, 419-425. (D. V. Gusak) **58** #24572 60J30
- Šurenkov, V. V. (with Gabrovski, Ivan Z.) A queueing system with reproduction. (Russian) *Serdica* **2** (1976), no. 4, 305-314. (M. A. Fainberg) **55** #13602 60K25
- Suresh, B. R. (with Shenoi, B. A.) Exact realisation of 2-dimensional digital filters by separable filters. *Electron. Lett.* **12** (1976), no. 10, 242-244. (Shinichi Tamura) **53** #15583 94A20
- Sureshchander An algorithm for testing assemblability of Boolean functions. *IEEE Trans. Computers* **C-23** (1974), 188-191. (W.-K. Chen) **50** #12473 94A20
- Minimization of switching functions—a fast technique. *IEEE Trans. Computers.* **C-24** (1975), 753-756. (J. C. Muzio) **53** #7642 94A20
- Sureshkumar A note on Ashvinikumar's paper: "The intuitionist contradictoriness of certain classical set-theoretic results" (Nieuw Arch. Wisk. (3) **17** (1969), 218-222). *Nieuw Arch. Wisk.* (3) **25** (1977), no. 1, 40-47. (B. van Rootselaar) **56** #15374 02E05 (02K10)
- Surgailis, D. Random processes as solutions of K. Ito's stochastic equation. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 189-197. (E. B. Dynkin) **45** #7845 60H20
- Certain properties of the optimal risk in the generalized two-armed bandit problem. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **12** (1972), no. 3, 181-184, 213. (W. Hoeffding) **48** #7503 62L15
- A certain limit for convex monotone functions on $M[0, 1]$. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **12** (1972), no. 4, 219-224, 243. (W. Hoeffding) **48** #7504 62L15
- On the "innovation theorem". (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 1, 221-226, 240. (Petr Mandl) **47** #7810 60H05 (60G30)
- A "Schwarz inequality" and certain other results for square integrable martingales. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 3, 211-217, 237. (Ju. I. Petunin) **49** #9938 60G45
- Stochastic integrals for martingales that are p th power integrable. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 4, 205-210, 225. (I. Cuculescu) **51** #9206 60H05 (60G45)
- A characterization of a supermartingale by certain stopping times. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **14** (1974), no. 1, 189-193, 233. (J. L. Doob) **52** #4402 60G45
- (with Kudźma, R. A.) Adjoint Brownian motions with oblique reflection. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **14** (1974), no. 2, 71-77, 251. (J. L. Doob) **52** #4439 60J65
- Šurgaja, A. V. The strong coupling method in gauge theory. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **88** (1977), no. 2, 325-328. (Author's summary) **58** #14529 81J22
- Suri, Hira L. (with Lopresti, Philip V.) A fast algorithm for the estimation of autocorrelation functions. *IEEE Trans. Acoust. Speech Signal Processing ASSP-22* (1974), no. 6, 449-453. (D. J. Eustice) **54** #7087 (E **54** #7088) 93E25

- See also Larsen, Hugh, 54 #7088
- Suri, Rajan** (with Denning, Peter J.; Kahn, Kevin C.; Leroudier, Jacques; Potier, Dominique) Optimal multiprogramming. Papers presented at the International Symposium on Computer Performance Modeling, Measurement and Evaluation (Harvard Univ., Cambridge, Mass., 1976). *Acta Informat.* 7 (1976), no. 2, 197-216. (R. L. Graves) 56 #7928 90B35 (68A05)
- vigna Suria, Giuseppe** See Vigna Suria, Giuseppe
- Suria, Giuseppe Vigna** Schemi quasi compatti massimali. (English summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 109 (1975), no. 3-4, 327-334. (Ezio Stagnaro) 53 #2938 14A15 (54D10, 13A15)
- Surin, S. S.** The method of successive improvement of an admissible plan, and linear programming problems with a large number of constraints. (Russian) *Operations research and statistical modeling*, No. 1 (Russian), pp. 173-180. Izdat. Leningrad. Univ., Leningrad, 1972. (S. Zlobec) 50 #6480 90C05
- See also Operations research and statistical simulation, 48 #10430 and Operations research and statistical simulation, 50 #3881
- Šurinov, Ju. A.** The iteration zonal method of investigation and calculation of the local characteristics of radiation heat exchange. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR* 1971, no. 13, 28-36. (M. Drăganu) 49 #8522 80.65
- (with Zavarzina, N. A.; Listrov, A. T.) Group invariant properties of the equations of a micropolar visco-elastic Maxwell model. (Russian) *Voronež. Gos. Univ. Sb. Naučn. Trudov Fak. Prikl. Mat. Meh. VGU No. 1* (1971), 95-108. (J. D. Kečkić) 47 #3861 35Q99 (73.35)
- Some applications of probability theory. (Russian) *Numerical analysis, and statistical models of complex systems, Part II* (Russian), pp. 41-80. Moskov. Ėkonom.-Statist. Inst., Moscow, 1974. (Zdzisław Rychlik) 56 #14480 82.60
- A generalized zonal method of investigation and computation of radiant heat transfer in an absorbing and scattering medium. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR Ser. Tehn. Nauk* 1977, no. 8, 13-29, 157. (From the author's introduction) 57 #14953 80.45
- See also Kondrat'ev, K. Ja.; et al., 52 #7806
- Surkov, E. L.** (with Kil'djušov, M. S.) Representations of the O_4 group arising in the five-body problem. *Jadernaja Fiz.* 13 (1971), 904-912 (Russian); translated as *Soviet J. Nuclear Phys.* 13 (1971), 517-521. (A. O. Barut) 50 #9200 81.22
- (with Kil'djušov, M. S.) A complete set of hyperspherical functions for the four-body problem. *Jadernaja Fiz.* 22 (1975), no. 3, 648-658 (Russian); translated as *Soviet J. Nuclear Phys.* 22 (1975), no. 3, 333-338. (R. A. Askey) 53 #11116 33A45 (81.33)
- Surkov, F. A.** (with Dombrovskii, Ju. A.) The problem of optimal exploitation of a system of reproducible resources. (Russian) *Mathematical programming and related questions* (Proc. Seventh Winter School, Drogobych, 1974), *Numerical methods* (Russian), pp. 213-223. Central. Ėkonom.-Mat. Inst. Akad. Nauk SSSR, Moscow, 1976. (From the introduction) 58 #32857 90A15
- Surla, Katarina** (with Herceg, Dragoslav; Pejović, Pavle) A certain approach to the numerical solution of a Fredholm integral equation of the second kind by means of a computer. (Serbo-Croatian. English summary) *Mat. Vesnik* 12(27) (1975), no. 3, 257-263. (Authors' summary) 55 #6899 65R05
- (with Herceg, Dragoslav) Some possibilities in solving operator equations using non stationary iterative method. *Mat. Vesnik* 1(14)(29) (1977), no. 4, 371-377. (Abbas I. Abdel Karim) 57 #14437 65J05
- koprivica-Surla, Katarina** See Koprivica-Surla, Katarina
- Surma, Stanisław J.** On the question of natural deduction in modal logic. With discussion by Gr. C. Moisil. *Comptes Rendus et Travaux du Colloque sur la Modalité du Jugement chez Aristote et dans la Logique Moderne* (Braşov, 1969). *An. Univ. Bucureşti Acta Logica* 12 (1969), 181-184. (I. Ruzsa) 46 #7000 02C10
- (with Kabziński, Jacek K.) Diagrams of models in the sense of A. Robinson and the neopositivist concept of protocol sentences. (Polish. English summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki No. 5*, (1970), 9-14. (A. Sochor) 46 #1546 02A05
- On the axiomatic treatment of the theory of models. II. Syntactical characterization of a fragment of the theory of models. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki No. 5* (1970), 43-55. (D. Monk) 45 #1746 02H10
- On the axiomatic treatment of the theory of models. III. The function of model content. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki No. 5* (1970), 57-63. (D. Monk) 45 #1747 02H10
- Concerning natural deduction in modal logic. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* 10 *Logika Mat.* (1970), 21-29. (Jerzy Kotas) 53 #12879 02C10
- Jaśkowski's matrix criterion for the intuitionistic propositional calculus. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki No. 6* (1971), 21-54. (D. Nelson) 45 #3165 02C15
- Method of natural deduction in the equivalential and equivalential-negational propositional calculus. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki No. 6* (1971), 55-68. (E. W. Chapin, Jr.) 45 #3156 02B05
- Deduction theorems in modal systems constructed by Gödel's method. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki No. 6* (1971), 69-83. (R. H. Thomason) 45 #1738 02C10
- The deduction theorems valid in certain fragments of the Lewis' system S2 and the system of Feys-von Wright. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972), no. 1, 45-52. (Editors) 50 #12659 02C10
- A uniform method of proof of the completeness theorem for the equivalential propositional calculus and for some of its extensions. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972), no. 1, 53-62. (John T. Canty) 54 #9973a 02B05 (02G20)
- A method of axiomatization of two-valued propositional connectives. *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* 1 (1972), no. 4, 32-37. (Editors) 58 #27293 02B05 (02G10)
- A uniform method of proof of the completeness theorem for the equivalential propositional calculus and for some of its extension. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki Zeszyt* 7 (1972), 35-50. (John T. Canty) 54 #9973b 02G20 (02B05)
- A survey of the results and methods of investigations of the equivalential propositional calculus. (Polish summary) *Zeszyty Nauk. Univ. Jagiello. Prace z Logiki Zeszyt* 7 (1972), 51-75. (Author's introduction) 58 #16119 02B05
- The conference on the scientific achievement of Mordchaj Wajsberg. Abstracts of the lectures delivered at the 19th Conference of the History of Mathematical (Cracow, 1973). *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* 2 (1973), 87-90. (Editors) 55 #7704 01A70
- Mordchaj Wajsberg. Life and works. Abstracts of the lectures delivered at the Conference of the History of Mathematical Logic (Cracow, 1973). *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* 2 (1973), 91-96. (Editors) 55 #7705 01A70
- A method of axiomatization of two-valued propositional connectives. *Rep. Math. Logic* 1 (1973), 27-32. (Stephen L. Bloom) 49 #10525 02B05 (02G10)
- The deduction theorems valid in certain fragments of the Lewis' system S2 and system T of Feys-von Wright. (Polish and Russian summaries) *Studia Logica* 31 (1975), 127-138. (S. K. Thomason) 47 #8250 02C10
- A note on the question of indirect deduction theorems that are valid in Łukasiewicz's finitely-valued propositional calculi. (Polish. English and Russian summaries) *Studia Logica* 31 (1973), 139-143. (Jerzy Kotas) 53 #12872 02C05
- (with Wroński, Andrzej; Zachorowski, Stanisław) On Jaśkowski-type semantics of the intuitionistic propositional logic. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 3 (1974), no. 2, 6-10. (Carlo Cellucci) 53 #98 02C15
- An algorithm for axiomatizing every finite logic. *Rep. Math. Logic* No. 3 (1974), 57-61. (Flavio Previale) 51 #123 (EA 51) 02G10
- A method of the construction of finite Łukasiewiczian algebras and its application to a Gentzen-style characterization of finite logics. *Rep. Math. Logic* 2 (1974), 49-53. (Cignoli) 52 #91 02J05 (02C05)
- (with Wroński, Andrzej; Zachorowski, Stanisław) On Jaśkowski-type semantics of the intuitionistic propositional logic. Stanisław Jaśkowski's achievements in mathematical logic (Proc. 20th Conf. History of Logic, Cracow, 1974). *Studia Logica* 31 (1975), no. 2, 145-148. (Michael Beeson) 53 #12885 02C15
- A certain method for constructing Łukasiewicz algebras, and its application to Gentzenisation of Łukasiewicz logics. (Polish with English translation) Papers presented at the Logic Conference (Opole, 1973). *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu* 15 *Logika Mat.* (1975), 7-11, 11-15. (Daniel Ponasse) 54 #4923 02C05 (02J05)
- Every reduct of two-element Boolean algebra can be finitely axiomatized by means of the propositional calculus. *Proceedings of the Sixth International Symposium on Multiple-Valued Logic* (Univ. Center, Utah State Univ., Logan, Utah, 1976), pp. 110-111. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Author's summary) 58 #16120 02B05
- On the work and influence of Stanisław Leśniewski. *Logic Colloquium* 76 (Opole, 1976), pp. 191-220. *Studies in Logic and Foundations of Math.*, Vol. 87, North-Holland, Amsterdam, 1977. (Editors) 58 #21363 02-03 (01A70)
- On definitions of logic and their operational meaning. *Proceedings of the Sixth International Symposium on Multiple-Valued Logic* (Charlotte, N.C., 1977), pp. 110-111. *IEEE Comput. Soc., Long Beach, Calif.*, 1977. (From the introduction) 58 #21364 02B99 (68A99)
- A method of the construction of finite Łukasiewiczian algebras and its application to a Gentzen-style characterization of finite logics. *Selected papers on Łukasiewiczian propositional calculi*, pp. 93-99. Zakład Narod. im. Ossoliń., Wydawn. Polsk. Akad. Nauk, Wrocław, 1977. (Editors) 58 #21448 02C05 (02J05)
- See also Studies in the history of mathematical logic, 56 #5193 and Leśniewski's systems, 57 #15936
- Surmanidze, O. Ė.** Weakly locally compact abelian groups. (Russian) *Sakharth. SSR Inst. Šrom. Phiz.-Math. Ser.* 1 (1974), 169-172. (K. A. Ross) 54 #5372 22B05 (22B05)
- Weakly linearly compact topological abelian groups. (Russian. Georgian and English summaries) Collection of articles on algebra, I. *Sakharth. SSR Mecl. i Math. Inst. Šrom.* 46 (1975), 77-108. (Alexandr Ju. Soifer) 52 #10907 20K45 (22A99)
- Surmenev, E. V.** (with Kim, K. V.; Kraïnov, G. A.) A problem of compiling a schedule. (Russian) *Ėkonom. i Mat. Metody* 12 (1976), no. 4, 767-772. (M. M. Sysło) 57 #5090B35
- Surmont, J.** (with Chen, Yung Ming) Numerical solutions of a nonlinear radiative transfer equation with inadequate data. *J. Computational Phys.* 13 (1973), 288-302. (G. Geffen) 50 #9191 80.65
- (with Chen, Yung Ming) Iterative algorithms for constructing approximate solutions of nonlinear problems from erroneous inadequate data. *J. Math. Anal. Appl.* 46 (1975), no. 2, 149-159. (Bhama Srinivasan) 52 #3351 20G40
- (with Chen, Yung Ming) Iterative algorithms for nonlinear problems in remote sensing. *Appl. Math. Comput.* 2 (1976), no. 3, 197-228. (Dietrich Braess) 54 #14365J05 (86.65)
- Surov, K. L.** See Calculation of three-dimensional constructions, 48 #7754
- Surovcov, L. K.** A mathematical model of the control of a livestock breeding system. (Russian) *Primenen. Mat. Ėkonom.* No. 8 (1973), 88-94. 48 #1664 90A15
- Surowski, David B.** (with Benson, Clark T.; Grove, Larry C.) Semilinear automorphism and dimension functions for certain characters of finite Chevalley groups. *Math. Z.* 147 (1975), no. 2, 149-159. (Bhama Srinivasan) 52 #3351 20G40
- (with Benson, Clark T.; Grove, Larry C.) On the degrees of certain characters of Chevalley groups. *Proceedings of the Conference on Finite Groups* (Univ. Utah, City, Utah, 1975), pp. 331-337. Academic Press, New York, 1976. (Editors) 53 #8220G40
- Representations of a subalgebra of the generic algebra corresponding to the group of type F_4 . *Comm. Algebra* 5 (1977), no. 8, 873-888. (G. Karpilovsky) 56 #420G05
- Surrey, M. J. C.** ★An introduction to econometrics. Clarendon Press, Oxford, 1976. iii + 76 pp. (Peter M. Robinson) 50 #11690 62P20 (90-01)
- Surry, Claude** (with Aribert, Jean-Marie) Justification variationnelle de la méthode des approximations successives pour le calcul d'une plaque en flexion. *C. R. Acad. Sci. Paris Sér. B* 278 (1974), 679-682. (H. Beckert) 50 #3759 76.49
- Šurškova, E. G.** (with Kupcov, V. I.) The convergence of a modified Newton method

- (Russian) *Computing Methods and Programming, XIV (Russian)*, pp. 157-165. Izdat. Moskov. Univ., Moscow, 1970. (I. Šelihova (RŽMat 1971 #2 B896)) **51** #7277 65H10
- uliz, Kenan (with Vajzović, Fikret) On solutions of the Maxwell-Jüttner functional equation. (Serbo-Croatian summary) *Akad. Nauka i Umjet. Bosne i Hercegov. Rad. No. 45 Okljel. Prirod. Mat. Nauka* no. 12 (1973), 139-144. (J. Täuber) **49** #9463 39A30
- vila, P. The limit distribution of a certain functional of a sequence of independent random variables. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **11** (1971), 351-365. (W. A. Woyczyński) **45** #4488 60F05
- The distribution of sums of independent random variables. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 4, 215-224, 249. (M. U. Gafurov) **54** #6271 60G50 (60F05)
- The growth of sums of independent random variables. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **18** (1978), no. 3, 159-172, 216-217. (R. J. Tomkins) **58** #13304 60F15
- villo, G. S. Linear summability methods. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 2, 381-391, 479. (E. Jürimäe) **53** #13978 42A24
- yanarayana, E. R. Characteristic manifolds in non-equilibrium magneto-gas-dynamics. *Rend. Circ. Mat. Palermo (2)* **20** (1971), 219-228 (1972). (H. K. Cheng) **48** #5497 76.35
- On steady parallel flows. *J. Math. Anal. Appl.* **40** (1972), 791-802. (A. Pozzi) **48** #5498 76.35
- Intrinsic equations for hydromagnetic flows. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 103-112. (Author's summary) **46** #2973 76.34
- On steady three dimensional circulation preserving flows in a gas. *J. Mathematical and Physical Sci.* **9** (1975), 135-141. (A. Pozzi) **50** #11988 76.53
- yanarayana, D. (with Siva Rama Prasad, V.) The number of k -free divisors of an integer. *Acta Arith.* **17** (1970/71), 345-354. (L. Carlitz) **48** #6039 10H25
- New inversion properties of μ^* and μ . *Elem. Math.* **26** (1971), 136-138. (J. M. Gandhi) **45** #164 (EA 58) 10A20
- Some theorems concerning the k -ary divisors of an integer. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 384-394 (1972). (E. M. Horadam) **48** #8416 10H25
- The number of bi-unitary divisors of an integer. *The theory of arithmetic functions (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1971)*, pp. 273-282. *Lecture Notes in Math.*, Vol. 251, Springer, Berlin, 1972. (E. M. Horadam) **48** #11018 10H25
- (with Subbarao, M. V.) Some theorems in additive number theory. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **15** (1972), 5-16 (1973). (G. Greaves) **48** #3906 10J10
- (with Sitaramachandra Rao, R.) On the average order of the function $E(x) = \sum_{n \leq x} \phi(n) - 3x^2/\pi^2$. *Ark. Mat.* **10**, 99-106 (1972). (T. M. Apostol) **46** #8988 10H25
- On the core of an integer. *Indian J. Math.* **14** (1972), 65-74. (D. Rearick) **48** #8417 10H25
- (with Siva Rama Prasad, V.) The number of pairs of generalized integers with $C.M. < x$. *J. Austral. Math. Soc.* **13** (1972), 411-416. (E. M. Horadam) **46** #8990 10H40
- A remark on "Extensions of Dedekind's ψ -function". *Math. Scand.* **30** (1972), 337-338. (D. Rearick) **47** #3341 10H25
- Two arithmetic functions and asymptotic densities of related sets. *Portugal. Math.* **31** (1972), 1-11. (E. M. Horadam) **46** #1694 10A20
- (with Subbarao, M. V.) On an identity of Eckford Cohen. *Proc. Amer. Math. Soc.* **33** (1972), 20-24. (E. M. Horadam) **45** #1860 10H99
- (with Sitaramachandra Rao, R.) The number of square-full divisors of an integer. *Proc. Amer. Math. Soc.* **34** (1972), 79-80. (T. M. Apostol) **45** #198 (EA 45) 10H15
- (with Abbott, H. L.; Aull, C. E.; Brown, Ezra) Quasiperfect numbers. *Acta Arith.* **22** (1973), 439-447. (G. Greaves) **47** #4915 (E 54 #12626) 10A40 (10A25)
- (with Sitaramachandra Rao, R.) The distribution of square-full integers. *Ark. Mat.* **11**, 195-201 (1973). (E. Grosswald) **49** #8948 10H15 (10H05, 10H25)
- There is no odd super perfect number of the form p^{2a} . *Elem. Math.* **28** (1973), 148-150. (R. Finkelstein) **48** #8374 10A40
- (with Siva Rama Prasad, V.) Sum functions of k -ary and semi- k -ary divisors. *J. Austral. Math. Soc.* **15** (1973), 148-162. (T. M. Apostol) **48** #6040 10H25 (10H35)
- A remark on "Uniform O -estimates of certain error functions connected with k -free integers". *J. Austral. Math. Soc.* **15** (1973), 177-178. (L. Carlitz) **48** #257 10H15
- (with Subbarao, M. V.) The divisor problem for (k, r) -integers. *J. Austral. Math. Soc.* **15** (1973), 430-440. (J. Knopfmacher) **48** #6038 10H25
- (with Sitaramachandra Rao, R.) Uniform O -estimate for k -free integers. *J. Reine Angew. Math.* **261** (1973), 146-152. (G. Greaves) **47** #8459 10H15
- (with Siva Rama Prasad, V.) The number of k -free and k -ary divisors of m which are prime to n . *J. Reine Angew. Math.* **264** (1973), 56-75. (T. M. Apostol) **48** #6041 (E 49 #2612) 10H25
- (with Sitaramachandra Rao, R.) On an asymptotic formula of Ramanujan. *Math. Scand.* **32** (1973), 258-264 (1974). (A. L. Whiteman) **49** #2611 10H25
- On odd perfect numbers. *Math. Student* **41** (1973), 153-154. (H. J. Godwin) **49** #236 10H15 (10A40)
- (with Sitaramachandra Rao, R.) Distribution of semi- k -free integers. *Proc. Amer. Math. Soc.* **37** (1973), 340-346. (T. M. Apostol) **47** #161 10H25
- (with Sitaramachandra Rao, R.) On $\sum_n < \sigma^*(n)$ and $\sum_n < \phi^*(n)$. *Proc. Amer. Math. Soc.* **41** (1973), 61-66. (W. J. Ellison) **47** #8463 10H25 (10A20)
- (with Subbarao, M. V.) On the order of the error function of the (k, r) -integers. *J. Number Theory* **6** (1974), 112-123. (T. M. Apostol) **49** #235 10H15
- (with Siva Rama Prasad, V.) Correction to: "The number of k -free and k -ary divisors of m which are prime to n ". *J. Reine Angew. Math.* **264** (1973), 56-74. *J. Reine Angew. Math.* **265** (1974), 182. (T. M. Apostol) **49** #2612 10H25
- Sums of the Riemann zeta function. *Math. Student* **42** (1974), 141-143 (1975). (M. I. Israliov) **54** #251 10H05
- (with Siva Rama Prasad, V.) The number of k -ary divisors of a generalized integer. *Portugal. Math.* **33** (1974), 85-92. (E. M. Horadam) **48** #8419 10H40
- On $\Delta(x, n) = \phi(x, n) - x\phi(n)/n$. *Proc. Amer. Math. Soc.* **44** (1974), 17-21. (H. Gupta) **48** #10962 10A20
- Congruences for sums of powers of primitive roots and Ramanujan's sum. *Elem. Math.* **30** (1975), no. 6, 129-133. (Klaus Burde) **52** #13603 (E 54 #2567) 10A10
- (with Sitaramachandra Rao, R.) Distribution of unitarily k -free integers. *J. Austral. Math. Soc.* **20** (1975), no. 2, 129-141. (J. W. Porter) **52** #306 10H15
- (with Sitaramachandra Rao, R.) The number of bi-unitary divisors of an integer. II. *J. Indian Math. Soc. (N.S.)* **39** (1975), 261-280 (1976). (E. M. Horadam) **54** #2605 10H25
- (with Siva Rama Prasad, V.) The number of k -ary, $(k+1)$ -free divisors of an integer. *J. Reine Angew. Math.* **276** (1975), 15-35. (T. M. Apostol) **51** #12749 10H25
- (with Siva Rama Prasad, V.) The number of k -free divisors of an integer. II. *J. Reine Angew. Math.* **276** (1975), 200-205. (L. Carlitz) **51** #10258 10H25
- (with Sitaramachandra Rao, R.) On the true maximum order of a class of arithmetical functions. *Math. J. Okayama Univ.* **17** (1975), no. 2, 95-101. (J. Knopfmacher) **52** #310 10H25
- (with Abbott, H. L.; Aull, C. E.; Brown, Ezra) Corrections to the paper: "Quasiperfect numbers" (Acta Arith. 22 (1973), 439-447). *Acta Arith.* **29** (1976), no. 4, 427-428. (G. Greaves) **54** #12626 10A40
- Berichtigung: "Congruences for sums of powers of primitive roots and Ramanujan's sum" (Elem. Math 30 (1975), no. 6, 129-133) *Elem. Math.* **31** (1976), no. 4, 104. (Klaus Burde) **54** #2567 10A10
- (with Sitaramachandra Rao, R.) The number of unitarily k -free divisors of an integer. *J. Austral. Math. Soc. Ser. A* **21** (1976), no. 1, 19-35. (T. M. Apostol) **52** #10622 10H15
- On a conjecture of S. Chowla. *Proc. Amer. Math. Soc.* **56** (1976), 27-33. (S. L. Segal) **53** #5509 10H25
- (with Subrahmanyam, P.) The maximal k -free divisor of m which is prime to n . I. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 49-67. (E. J. Scourfield) **56** #15588 10H25
- On a class of sequences of integers. *Amer. Math. Monthly* **84** (1977), no. 9, 728-730. (N. G. de Bruijn) **58** #10797 10H25
- (with Siva Rama Prasad, V.) The number of semi- k -free divisors of an integer. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **20** (1977), 5-19. (Bruce C. Berndt) **57** #5927 10H15
- (with Sitaramachandra Rao, R.) On the maximum and minimum exponents in factoring integers. *Arch. Math. (Basel)* **28** (1977), no. 3, 261-269. (H. L. Abbott) **55** #10368 10A25
- (with Subbarao, M. V.) On the order of the error function of the (k, r) -integers. II. *Canad. Math. Bull.* **20** (1977), no. 3, 397-399. (V. C. Harris) **58** #16566 10H25
- (with Walker, David T.) Some generalizations of an identity of Subhankulov. *Canad. Math. Bull.* **20** (1977), no. 4, 489-494. (J. Chidambaraswamy) **57** #16180 10A20
- A remark on uniform O -estimate for k -free integers. *J. Reine Angew. Math.* **293/294** (1977), 18-21. (T. M. Apostol) **56** #287 10H25
- The divisor problem for (k, r) -integers. II. *J. Reine Angew. Math.* **295** (1977), 49-56. (J. Knopfmacher) **56** #15589 10H25
- On a theorem of Apostol concerning Möbius functions of order k . *Pacific J. Math.* **68** (1977), no. 1, 277-281. (T. M. Apostol) **56** #288 10H25
- On the distribution of some generalized square-full integers. *Pacific J. Math.* **72** (1977), no. 2, 547-555. (Jean-Marie De Koninck) **56** #11933 10H20 (10H25)
- On a functional equation relating to the Brauer-Rademacher identity. *Enseign. Math. (2)* **24** (1978), no. 1-2, 55-62. (M. V. Subbarao) **58** #21915 10A20
- Suryanarayana, K. V. (with Chakravarti, Indra-Mohan) Partial difference sets and partially balanced weighing designs for calibration and tournaments. *J. Combinatorial Theory Ser. A* **13** (1972), 426-431. (K. Yamamoto) **46** #7054 05B10
- Suryanarayana, M. B. On multidimensional integral equations of Volterra type. *Pacific J. Math.* **41** (1972), 809-828. (J. A. Nohel) **48** #2693 45D05
- Necessary conditions for optimization problems with hyperbolic partial differential equations. *SIAM J. Control* **11** (1973), 130-147. (L. Cesari) **47** #5684 49B25
- (with Cesari, Lamberto) Convexity and property (Q) in optimal control theory. *SIAM J. Control* **12** (1974), 705-720. (Thomas S. Angell) **51** #1530 49A50
- Linear control problems with total differential equations without convexity. *Trans. Amer. Math. Soc.* **200** (1974), 233-249. (G. M. Ewing) **50** #8203 49A35
- Existence theorems for optimization problems concerning hyperbolic partial differential equations. Existence theory in the calculus of variations and optimal control. *J. Optimization Theory Appl.* **15** (1975), 361-392. (T. Zolezzi) **55** #1182 49A20
- (with Cesari, Lamberto) Closure theorems without seminormality conditions. Existence theory in the calculus of variations and optimal control. *J. Optimization Theory Appl.* **15** (1975), 441-465. (F. J. Almgren) **51** #1531 49A50
- (with Cesari, Lamberto) Existence theorems for Pareto problems of optimization. Erroneously published without M. B. Suryanarayana's name. *Calculus of variations and control theory (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1975; dedicated to Laurence Chisholm Young on the occasion of his 70th birthday)*, pp. 139-154. *Publ. Math. Res. Center Univ. Wisconsin, No. 36, Academic Press, New York, 1976.* (Thomas S. Angell) **58** #2545 49B30
- (with Cesari, Lamberto) Existence theorems for Pareto optimization in Banach spaces. *Bull. Amer. Math. Soc.* **82** (1976), no. 2, 306-308. (A. D. Ioffe) **53** #3822 49A25
- Monotonicity and upper semicontinuity. *Bull. Amer. Math. Soc.* **82** (1976), no. 6, 936-938. (Joseph C. Dunn) **55** #6250 47H10 (49A25)
- Existence theorems for optimization problems concerning linear, hyperbolic partial differential equations without convexity conditions. Existence theorem issue. *J. Optimization Theory Appl.* **19** (1976), no. 1, 47-61. (J. E. Rubio) **55** #1183 49A20
- Remarks on lower semicontinuity and lower closure. Existence theorem issue. *J. Optimization Theory Appl.* **19** (1976), no. 1, 125-140. (C. Olech) **56** #1168 49A50
- (with Kaiser, Paul J.) Orienter field equations in Banach spaces. Existence theorem issue. *J. Optimization Theory Appl.* **19** (1976), no. 1, 141-183. (J. E. Rubio) **55** #1187 49A50

- (with Cesari, Lamberto) Nemitsky's operators and lower closure theorems. Existence theorem issue. *J. Optimization Theory Appl.* **19** (1976), no. 1, 165-183. (C. Olech) **56** #1169 49A50
- Remarks on existence theorems for Pareto optimality. *Dynamical systems (Proc. Internat. Sympos., Univ. Florida, Gainesville, Fla., 1976)*, pp. 335-347. Academic Press, New York, 1977. (C. Olech) **58** #18035 49A25
- A Sobolev space and a Darboux problem. *Pacific J. Math.* **69** (1977), no. 2, 535-550. (J. E. Rubio) **55** #13235 46E35 (49A20)
- Suryanarayanan, K. L.** (with Soudack, A. C.; Rao, S. G.) A unified approach to discrete-time systems identification. *Internat. J. Control* (1) **14** (1971), 1009-1029. (Authors' summary) **47** #1498 93B30
- Šurygin, V. A.** Constructive sets with an equality and their mappings. (Russian) *Trudy Mat. Inst. Steklov.* **113** (1970), 173-259. (errata insert) (E. Mendelson) **45** #58 02F25
- Invertibility and regularity of constructive operators. (Russian) *Studies in the theory of algorithms and mathematical logic, Vol. 1 (Russian)*, pp. 262-286. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1973. (E. Mendelson) **49** #2305 02E99 (54E35)
- Certain properties of the complexity of constructive real numbers. (Russian) *Theory of algorithms, and mathematical logic (Russian)*, pp. 177-194, 213. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1974. (Author's summary) **58** #16211 02E15 (26A03)
- Pseudoregular and quasiregular constructive operators. (Russian) *Studies in the theory of algorithms and mathematical logic, Vol. 2 (Russian)*, pp. 130-139, 160. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1976. (From the introduction) **58** #16212 02E15 (47B99)
- Traceable operators in constructive analysis. (Russian) *Dokl. Akad. Nauk SSSR* **230** (1976), no. 4, 795-798. (E. Mendelson) **55** #86 02E99 (65J05)
- Estimates of the complexity of algorithmic problems of constructive analysis. (Russian) *Dokl. Akad. Nauk SSSR* **233** (1977), no. 6, 1064-1067. (Robert P. Daley) **57** #16003 02E10 (02F50)
- See also **Studies in constructive mathematics and mathematical logic**, **46** #8817 and **Problems in the constructive trend in mathematics**, **49** #4761
- Šurygin, V. V.** (with Norden, A. P.) The realization of a complex Weyl space. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 2(153), 62-74. (K. Radziszewski) **52** #6596 53B15
- Induced connections on the surfaces of a space over an algebra. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 9(184), 127-130. (A. Šec) **57** #10623 53B25
- Pure tensors on manifolds with a commutative algebraic structure. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1978**, no. 3(190), 120-124. (S. S. Singh) **58** #12827 53C15
- Susarla, V.** Rates of convergence in the sequence-compound squared-distance loss estimation and linear-loss two-action problems for a family of scale parameter exponential distributions. *Ann. Inst. Statist. Math.* **26** (1974), 87-102. (H. E. Reinhardt) **50** #15036 62C25
- Rate of convergence in the sequence-compound squared-distance loss estimation problem for a family of m -variate normal distributions. *Ann. Statist.* **2** (1974), 118-133. (Author's summary) **54** #6342 62C25
- (with O'Bryan, Thomas E.) An empirical Bayes two action problem with nonidentical components for a translated exponential distribution. *Comm. Statist.* **4** (1975), no. 8, 767-775. (Johannes S. Maritz) **52** #6984 62F15
- (with O'Bryan, Thomas E.) An empirical Bayes estimation problem with nonidentical components involving normal distributions. *Comm. Statist.* **4** (1975), no. 11, 1033-1042. (Johannes S. Maritz) **52** #12138 62C25
- (with Kumar, Satindar) Estimation of partial derivatives of the average of densities belonging to a family of densities. *J. Austral. Math. Soc.* **20** (1975), part 2, 230-241. (G. Manija) **51** #14394 62G05
- (with O'Bryan, Thomas E.) Rates in the empirical Bayes estimation problem with non-identical components—case of normal distributions. *Ann. Inst. Statist. Math.* **28** (1976), no. 3, 389-397. (Susan D. Horn) **55** #4454 62C25 (62G05)
- (with Phadia, E. G.) Empirical Bayes testing of a distribution function with Dirichlet process priors. *Comm. Statist.-Theory Methods* **A5** (1976), no. 5, 455-469. (David W. Balmer) **55** #9353 (EA 55/56) 62C25 (62G10)
- (with Van Ryzin, John) Nonparametric Bayesian estimation of survival curves from incomplete observations. *J. Amer. Statist. Assoc.* **71** (1976), no. 356, 897-902. (K. M. Lal Saxena) **55** #9392 62G05
- A property of Stein's estimator for the mean of a multivariate normal distribution. *Statistica Neerlandica* **30** (1976), no. 1, 1-5. (W. E. Strawderman) **55** #4456 62C99
- (with Blum, Julius R.) Estimation of a mixing distribution function. *Ann. Probability* **5** (1977), no. 2, 200-209. (Glen Meeden) **56** #4038 62G05
- (with Van Ryzin, John) On the empirical Bayes approach to multiple decision problems. *Ann. Statist.* **5** (1977), no. 1, 172-181. (Susan D. Horn) **55** #4455 62C25
- (with O'Bryan, Thomas E.) Empirical Bayes estimation with non-identical components. Continuous case. *Austral. J. Statist.* **19** (1977), no. 2, 115-125. (Pi-Erh Lin) **58** #13440 62C25 (62F15)
- (with Blum, Julius R.) A Fourier inversion method for the estimation of a density and its derivatives. *J. Austral. Math. Soc. Ser. A* **23** (1977), no. 2, 166-171. (James N. Adichie) **56** #6994 62G05
- (with Blum, Julius R.) On the posterior distribution of a Dirichlet process given randomly right censored observations. *Stochastic Processes Appl.* **5** (1977), no. 3, 207-211. (Ramesh M. Korwar) **57** #14240 62F15 (62G99)
- (with Van Ryzin, John) Large sample theory for a Bayesian nonparametric survival curve estimator based on censored samples. *Ann. Statist.* **6** (1978), no. 4, 755-768. (Bruce W. Turnbull) **58** #3155 62E20 (62F15, 62G05)
- Šušbaev, S. Š.** An algorithm for the calculation of groups of integer automorphisms of perfect forms in n (> 2) variables. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) Vyp.* **22** (1973), 3-13, 195. (Author's summary) **58** #16516 10C30 (10E45)
- The determination of the groups of integer automorphisms of perfect quadratic forms. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 1, 16-18. (V. L. Popov) **49** #7215 10E45 (10C30, 10E25)
- (with Ėndibaev, K. M.) The connection between the rotation of an n -dimensional regular simplex and the automorphism groups of the quadratic forms $\omega(x)$. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) Vyp.* **28** (1974), 46-54, 179-180. (Authors' summary) **58** #16517 10C30
- An estimate of the origin of the ray of extremality of the principal perfect form in four variables. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 9, 15-16. (R. A. Rankin) **55** #2769 10E25 (10H15)
- The origin of a ray of extremality of the principal perfect form. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) No.* **42** (1976), 3-13, 187. (RŽMat **1977** #5) **58** #27810 10E25
- Estimate of the origin of the ray of extremality of the second perfect form in variables. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 5, 17-19. (R. A. Rankin) **57** #12407 10E20
- Estimate of the origin of the ray of extremality of the principal perfect form in n (> 2) variables. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 6, 11-13. (R. A. Rankin) **57** #12408 10E20
- The Dirichlet-Voronoi domain for the second perfect form. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) No.* **45** (1977), 3-11, 189. (Author's summary) **58** #27811 10E25
- An estimate of the origin of the ray of extremality of the principal perfect form in five variables. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) Vyp.* **46** (1977), 191. (Author's introduction) **58** #16535 10E25
- (with Maksudova, M. K.) A computational scheme for the automorphism group of positive quadratic forms. (Russian) *Voprosy Vychisl. i Prikl. Mat. (Tashkent) No.* **46** (1977), 16-25, 160-161. (Harvey Cohn) **58** #16536 10E45
- The Rankin-Sobolev problem on extrema of Epstein's zeta function. The origin of the ray of extremality of the principal perfect form. (Russian. Uzbek summary) *Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 1, 33-39, 92. (H. Iwaniec) **57** #16213 10E25 (10H99)
- Suščanskii, V. I.** Verbal subgroups of Sylow p -subgroups of finite symmetric groups. (Ukrainian. English and loose Russian summaries) *Visnik Kiiv. Univ.* **1970**, no. 134-141. (G. Pic) **45** #5227 20D20
- Wreath products of elementary abelian groups. (Russian) *Mat. Zametki* **11** (1973), 61-72. (Charles S. Holmes) **46** #5466 20F25
- (with Kalužnin, L. A.) Wreath products of abelian groups. (Russian) Collection of articles commemorating Aleksandr Gennadiyevich Kuroš. *Trudy Moskov. Mat. Obšč.* **1973**, 147-163. (Ja. G. Berković) **53** #13437 (EA 54) 20K25
- Wreath products of elementary abelian groups, and the structure of the group variety A_2^2 . (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* **1975**, no. 12, 1086-1089, 1150. (M. Greendlinger) **54** #12898 20E10
- Engel length of the group varieties \mathfrak{A}_m^2 ($m > 2$). (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 2, 126-130, 191. (F. Haimo) **53** #8252 20E10 (20F45)
- (with Lakatos, Piroška) The coincidence of central series in wreath products. (Russian) *Publ. Math. Debrecen* **23** (1976), no. 1-2, 167-176. (A. I. Moskatov) **54** #10427 20F25
- See also **Transactions of the Moscow Mathematical Society**, **52** #10313
- Suschow, Dietrich** (with Kreisselmeier, Gerhard) Ein Algorithmus zur zyklisch invarianten Zerlegung eines endlich-dimensionalen Vektorraums bezüglich einer linearen Selbstabbildung. (English summary) *Numer. Math.* **22** (1973/74), 69-74. (Ratschek) **49** #2777 15-04
- Sushko, V. N.** See **Suško, V. N.**
- Sushkov, B. G.** See **Suškov, B. G.**
- Sušinskas, J.** (with Bentkus, R.; Rudziskis, R.) The average of the estimates of the spectral of a homogeneous field. (Russian. Lithuanian and English summaries) *Lietovsk. Mat. Sb.* **14** (1974), no. 3, 67-74, 235. (Jiří Anděl) **52** #7051 62M15
- Suškevič, A. K.** See **Gluskin, L. M.; et al.** **46** #3670
- Suško, R.** See **Suszko, R.**
- Suško, V. G.** (with Čudov, L. A.) An asymptotic investigation of a quasilinear equation that simulates the Navier-Stokes system. (Russian) Third All-Union Seminar on Numerical Methods in the Mechanics of Viscous Fluids (Alma-Ata, 1970). *Čisl. Meh. Meh. Splošnoi Sredy* **2** (1971), no. 1, 74-90. (T. V. Kuskova) (RŽMeh **1971** #B5) **52** #7306 76J65
- The small-parameter asymptotics for a certain quasilinear parabolic equation. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 794-797. (K. Seitz) **46** #7713 35K55 (35B20)
- Certain estimates for the solutions of a quasilinear equation with small parameter. (Russian) *Differencial'nye Uravnenija* **10** (1974), 905-918, 957. (I. Łojczyński-Królikiewicz) **50** #5197 35K60
- The behavior of the solutions of a certain parabolic equation in the neighborhood of the initial plane. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 6, 1078-1080. (R. Guenther) **51** #10877 35K20
- Suško, V. N.** (with Zavjalov, O. I.) Canonical variables in the physics of infinite systems. (Russian. English summary) *Teoret. Mat. Fiz.* **1** (1969), no. 2, 153-181. (Authors' summary) **56** #17540 81.17
- (with Horužii, S. S.) Vector states on algebras of observables and superselection rules. I. Vector states and Hilbert space. (Russian. English summary) *Teoret. Mat. Fiz.* **1970**, no. 2, 171-195. (Authors' summary) **57** #4895a 81.46
- (with Horužii, S. S.) Vector states on algebras of observables and superselection rules. II. Algebraic theory of superselection rules. (Russian. English summary) *Teoret. Mat. Fiz.* **4** (1970), no. 3, 341-359. (Authors' summary) **57** #4895b 81.46 (46L1)
- (with Horužii, S. S.) Properties of the pre-images of vector states on algebras of observables. (Russian. English summary) *Teoret. Mat. Fiz.* **8** (1971), no. 3, 324-330. (Authors' summary) **57** #11479 81.46
- (with Horužii, S. S.) Local and asymptotic structure of quantum systems with superselection rules. (Russian. English summary) *Teoret. Mat. Fiz.* **13** (1972), no. 291-312. (Authors' summary) **57** #8660 81.46
- (with Zinov'ev, Ju. M.) Physical symmetry in the P -class theory of local observables. (Russian. English summary) *Teoret. Mat. Fiz.* **18** (1974), 14-26. (Authors' summary) **57** #8665 81.46
- (with Pogrebkov, A. K.) Hamilton theory of the interaction of massive vector

- massless fermion fields in two-dimensional space-time: $(\bar{\Psi}\gamma^\mu\Psi B_\mu)_{\text{int}}$ -interaction. I. Space of states with the positive-definite metrics. (Russian. English summary) *Teoret. Mat. Fiz.* **22** (1975), no. 2, 159-176. (Authors' summary) **58** #14681 81.47
(with Aref'eva, I. Ja.; Pogrebkov, A. K.; Volović, I. V.) The renormalized Hamiltonian, the local fields, and the scattering theory for some translationally-invariant models of quantum field theory. (Russian summary) International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part I. Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 95-104, 257. (J. Glimm) **56** #2043 81.46
(with Zinov'ev, Ju. M.; Horuži, S. S.) Equivalence properties of coherent superselection sectors and description of physical symmetries in algebraic axiomatic theory. (Russian summary) International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part I. Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 127-136, 258. (From the authors' introduction) **56** #4518 81.46 (81.22)
(with Pogrebkov, A. K.) Quantum solitons, and their connection with fermion fields for the $(\sin \phi)_2$ -interaction. (Russian. English summary) *Teoret. Mat. Fiz.* **26** (1976), no. 3, 419-424. (Authors' summary) **56** #7576 81.35
See also Hepp, K., **50** #12067; Statistical physics and quantum field theory, **52** #16312; Reed, Michael C.; et al., **58** #12430a; Reed, Michael C.; et al., **58** #12430b and Constructive field theory, **58** #14466
ov, B. G. A qualitative investigation of the dynamics of neuron nets. (Russian) *Studies in the theory of adaptive systems* (Russian), pp. 223-266. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1971. (A. A. Mullin) **56** #11072 92A05
Qualitative study of dynamics of neuron nets. *J. Cybernet.* **3** (1973), no. 1, 108-138. (Editors) **48** #8010 92A05
Symmetric games of large collectives of probabilistic automata. (Russian) *Problemy Peredachi Informacii* **9** (1973), no. 3, 95-99. (Author's summary) **54** #7145 94A35
(with Samylovskii, A. I.) The construction of the characteristic function of a nonconvex set and the quadratic integer programming problem that is connected with it. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **18** (1978), no. 2, 322-337, 524. (Jürgen Guddat) **58** #15149 90C10 (90C20)
ov, Ju. A. A certain application of plane graphs. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 2, 68-72. (Author's summary) **46** #3226 94A20
A certain way of organizing a random search. (Russian) *Operations research and statistical modeling*, No. 1 (Russian), pp. 180-186. *Izdat. Leningrad. Univ., Leningrad*, 1972. (V. Fabian) **53** #7473 90C15 (90C30)
(1,q)-matchings. (Russian. English summary) *Vestnik Leningrad. Univ.* **1975**, no. 19 *Mat. Meh. Astron. vyp.* 4, 50-55, 167. (Pavol Hell) **54** #2549 05C99 (05A05)
Multistate systems with variable structure. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* **1977**, no. 1, 9-12, 116. (Author's summary) **57** #2665 93B20
A multifunctional logic element as a multistate system with bridges. (Russian) *Vychisl. Tehn. i Voprosy Kibernet. Vyp.* **14** (1977), 112-120, 208. (Václav Koubek) **57** #19147 94A20 (02F10)
ov, V. I. (with Voiton, E. F.) Search for the path of steepest descent in certain minimax problems. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **12** (1972), 1013-1021, 1086. (S. Zlobec) **48** #1700 90C20
A nonlinear mathematical programming problem. (Russian) *Ekonom. i Mat. Metody* **10** (1974), no. 6, 1228-1229. (Not reviewed) **90C30**
ov, V. S. On the question of modelling random processes in Monte-Carlo problems. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **16** (1976), no. 4, 1053-1057, 1087. (P. Neumann) **54** #14280 62M10 (65C05)
ikov, O. G. Trigonometric Fourier series with gaps. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 6, 46-55. (M. Tomić) **49** #7686 42A44
in, A. A. (with Vaserštejn, L. N.) Serre's problem on projective modules over polynomial rings, and algebraic K-theory. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 2, 65-66. (H. Bass) **50** #303 13C10 (14F05)
Projective modules over polynomial rings. (Russian) *Mat. Sb. (N.S.)* **93** (135) (1974), 588-595, 630. (H. Bass) **49** #8977 13C10 (14F05)
Projective modules over polynomial rings are free. (Russian) *Dokl. Akad. Nauk SSSR* **229** (1976), no. 5, 1063-1066. (H. Bass) **57** #9685 13C10 (13F20, 14F05)
(with Vaserštejn, L. N.) Serre's problem on projective modules over polynomial rings, and algebraic K-theory. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 5, 993-1054, 1199. (H. Bass) **56** #5560 14F05 (13C10)
On a theorem of Cohn. (Russian) Rings and modules. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **64** (1976), 127-130, 162. (P. M. Cohn) **56** #5736 20G25
(with Tulenbaev, M. S.) A theorem on stabilization for Milnor's K_2 -functor. (Russian) Rings and modules. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **64** (1976), 131-152, 162. (A. A. Ranicki) **56** #15730 18F25 (12A65)
A cancellation theorem for projective modules over algebras. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 4, 808-811. (J.-E. Bertin) **57** #5986 13A15 (14F05)
The structure of the special linear group over rings of polynomials. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 2, 235-252, 477. (Chr. U. Jensen) **57** #12482 13C10 (14F05)
Locally polynomial rings and symmetric algebras. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 3, 503-515, 717. (Chr. U. Jensen) **56** #2997 13F20 (15A78)
Stably free modules. (Russian) *Mat. Sb. (N.S.)* **102** (144) (1977), no. 4, 537-550, 632. (Chr. U. Jensen) **56** #340 13C10
(with Koike, V. I.) Quadratic modules and the orthogonal group over polynomial rings. (Russian) Modules and representations. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **71** (1977), 216-250, 287. (Chr. U. Jensen) **57** #9694 13F20 (10C05, 13B99, 18F25)
See also Ferrand, Daniel, **56** #2996
japan, E. A. (with Barabanov, A. T.; Kuznecov, V. M.) Necessary conditions for the optimal control of continuous-discrete systems. (Russian) *Adapt. Sistemy Avtomat. Upravlenija* No. 5 (1977), 27-32, ii. (Editors) **58** #7278 49B05
onov, V. M. The solution of optimal control problems with constraints of inequality type with the use of the method of penalty functions. (Russian) *Problems of analytical mechanics, stability and control theories* (Proc. Second Četaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 308-312, 415. *Kazan. Aviacion. Inst., Kazan*, 1976. (Author's summary) **58** #9562 93C15
Susloparova, G. P. (with Giršovič, M. V.) ★Геометрия. Вып. 3. (Russian) [Geometry. No. 3] Lecture notes. *Kalinin. Gosudarstv. Univ., Kalinin*, 1974. 106 pp. (Editors) **52** #4094 50-01 (53-01)
A classification of surfaces of degree two in a three-dimensional Appell space of hyperbolic type. (Russian) *Collection of articles on differential geometry* (Russian), pp. 107-119. *Kalinin. Gos. Univ., Kalinin*, 1974. (K. Svoboda) **54** #13713 50C25
Suslov, A. I. On the effect of injection on boundary layer separation. *Prikl. Mat. Meh.* **38** (1974), 166-169 (Russian); translated as *J. App. Math. Mech.* **38** (1974), 148-152. (R. P. Kanwal) **50** #6303 76.35
The system of equations for a boundary layer with a surface of discontinuity. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 3 (177), 231-232. (L. Kočeva (RŽMat 1974 #11 B495)) **55** #902 35Q99
The system of equations of a magnetohydrodynamic boundary layer. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 2, 62-70. (L. Dragoš) **52** #2389 76.35
Nonseparating flows in the case of injection. (Russian) *Problems in mechanics and mathematical physics* (Russian), pp. 265-278, 298. *Izdat. "Nauka", Moscow*, 1976. (Djordje Djukic) **57** #2130 76.35
Prandtl's system of equations for a boundary layer with a surface of discontinuity. (Russian) *Trudy Sem. Petrovsk. Vyp.* **2** (1976), 243-259. (N. D. Kopačevskii) **56** #4398 76.35
On Stefan's problem occurring in the theory of powder burning. *Prikl. Mat. Meh.* **41** (1977), no. 1, 95-101 (Russian); translated as *J. Appl. Math. Mech.* **41** (1977), no. 1, 87-92. (Lu-San Chen) **57** #16994 35K20
See also Problems in mechanics and mathematical physics, **56** #2715
Suslov, G. K. See Grigor'jan, A. T.; et al., **58** #4896
Suslov, O. N. (with Tirska, G. A.) Definition, properties, and calculation of effective ambipolar diffusion coefficients in a laminar multicomponent ionized boundary layer. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1970**, no. 4, 60-72. (From the summary) **45** #1485 80.35
Suslov, O. P. (with Hižnjak, V. I.) An economico-mathematical model and a method for optimizing a mine production plan. (Russian) *Mathematical methods for the study and optimization of systems* (Proc. Sem. Appl. Math. Methods Econom. Res. Planning, Kiev-Lvov, 1971) (Russian), pp. 323-340. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (Editors) **51** #14932 90B30
Suslov, V. M. Asymptotic behavior of the eigenvalues of a boundary value problem with a spectral parameter that occurs in the boundary condition. (Russian) *Functional analysis*, No. 3 (Russian), pp. 203-208. *Ul'janovsk. Gos. Univ., Ulyanovsk*, 1974. (Alexander Alenicyan) **56** #6011 34B25
Sušnikov, B. S. The manifold $E(1,2,2)$ in P_4 . (Russian) Geometry collection, No. 13. *Trudy Tomsk. Gos. Univ.* **246** (1973), 87-97. (M. Decuyper) **51** #4072 53A20
Pseudocongruences of 2-planes in P_6 . (Russian) Geometry collection, No. 14. *Trudy Tomsk. Gos. Univ.* **255** (1974), 91-113. **58** #24066 53A20
(with Krugljakov, L. Z.) Pseudocongruences of d -planes in P_{2d+2} . (Russian) Geometry collection, No. 15. *Trudy Tomsk. Gos. Univ.* **258** (1975), 57-74, 234-235. (Josef Vala) **55** #3985 53A20
Süss, W. See Fundamentals of mathematics, **49** #8786; Fundamentals of mathematics, **49** #8787 and Fundamentals of mathematics, **49** #8788
Süsse, Herbert (with Oelschlägel, Dieter) Intervallarithmetische Methoden in der Optimierung. *Wiss. Z. Tech. Hochsch. Leuna-Merseburg* **19** (1977), no. 2, 303-308. (G. Alefeld) **58** #31792 65G05 (65K05)
Süsse, R. (with Stockmayer, E.) Analytisch-iterative Methode zur Berechnung nichtlinearer Gleichstromnetzwerke. *Wiss. Z. Techn. Hochsch. Ilmenau* **24** (1978), no. 1, 121-138. (András Recski) **57** #19148 94A20
Susskind, Alfred K. See Special issue: Fault-tolerant computing, **54** #1693
Susskind, Charles See Philosophers and machines, **52** #5275
Susskind, Leonard (with Finkelstein, David; Frye, Graham) Space-time code. *V. Phys. Rev. D* (3) **9** (1974), 2231-2236. (Authors' summary) **53** #12344 81.47
(with Fradkin, Eduardo) Order and disorder in gauge systems and magnets. *Phys. Rev. D* (3) **17** (1978), no. 10, 2637-2658. (C. S. Sharma) **57** #15144 82.49
Sussman, Myron M. On uniqueness in Cauchy's problem for elliptic operators with characteristics of multiplicity greater than two. *Bull. Amer. Math. Soc.* **81** (1975), 625-628. (Z. C. Motzler) **51** #3689 35J40
On uniqueness in Cauchy's problem for elliptic partial differential operators with characteristics of multiplicity greater than two. *Tōhoku Math. J.* **29** (1977), no. 2, 165-188. (F. Cardoso) **57** #3636 35J99 (35S10)
Sussmann, Bernard G. Scheduling problems with interval disjunctions. *Z. Operations Res. Ser. A-B* **16** (1972), no. 5, A165-A178. (Paul C. Kainen) **55** #2112 90B35
Sussmann, Hector J. The control problem $\dot{x} = (A(1-u) + Bu)x$: A comment on an article by J. Kučera. *Czechoslovak Math. J.* **22** (97) (1972), 423-426. (E. O. Roxin) **46** #8013 49E15 (93C15)
The control problem $\dot{x} = A(u)x$. *Czechoslovak Math. J.* **22** (97) (1972), 490-494. (E. O. Roxin) **46** #8014 49E15 (93C15)
(with Jurčević, Velimir) Controllability of nonlinear systems. *J. Differential Equations* **12** (1972), 95-116. (Henry Hermes) **49** #3646 49E15 (58E99)
(with Jurčević, Velimir) Control systems on Lie groups. *J. Differential Equations* **12** (1972), 313-329. (Henry Hermes) **48** #9519 49E15 (43A80)
(with Brockett, Roger W.) Tangent bundles of homogeneous spaces are homogeneous spaces. *Proc. Amer. Math. Soc.* **35** (1972), 550-551. (C. Teleman) **46** #9906 53C30 (58A20)
The "bang-bang" problem for certain control systems in $GL(n, R)$. *SIAM J. Control* **10** (1972), 470-476. (Henry Hermes) **46** #9834 49A35
Orbits of families of vector fields and integrability of systems with singularities. *Bull. Amer. Math. Soc.* **79** (1973), 197-199. (U. D'Ambrosio) **46** #10020 58A30 (57D30)
Generalized spectral theory and second order ordinary differential operators.

- Canad. J. Math.* **25** (1973), 178-193. (R. R. D. Kemp) **47** #5658 47E05 (34B25)
Orbits of families of vector fields and integrability of distributions. *Trans. Amer. Math. Soc.* **180** (1973), 171-188. (A. Morimoto) **47** #9666 58A30 (53C10)
On quotients of manifolds: a generalization of the closed subgroup theorem. *Bull. Amer. Math. Soc.* **80** (1974), 573-575. (R. S. Palais) **48** #9749 58A05 (58C99)
An extension of a theorem of Nagano on transitive Lie algebras. *Proc. Amer. Math. Soc.* **45** (1974), 349-356. (A. A. Sagle) **50** #8587 58A15 (57D25)
A generalization of the closed subgroup theorem to quotients of arbitrary manifolds. *J. Differential Geometry* **10** (1975), 151-166. (D. K. Arrowsmith) **54** #13964 58A99 (57D25)
On the number of directions needed to achieve controllability. *SIAM J. Control* **13** (1975), 414-419. (David L. Elliott) **55** #4268 58E15 (49E15, 57D25)
(with Levitt, Norman) On controllability by means of two vector fields. *SIAM J. Control* **13** (1975), no. 6, 1271-1281. (Claude E. Lobry) **53** #6626 58E99 (49E15)
Catastrophe theory. Mathematical methods of the social sciences. *Synthese* **31** (1975), no. 2, 229-270. (I. Stewart) **57** #14023 58C25 (69.00)
Semigroup representations, bilinear approximation of input-output maps, and generalized inputs. *Mathematical systems theory (Proc. Internat. Sympos., Internat. Centre Mech. Sci., Udine, 1975)*, pp. 172-191. *Lecture Notes in Econom. and Math. Systems*, 131. Springer, Berlin, 1976. (From the introduction) **58** #33232 93A99
Some properties of vector field systems that are not altered by small perturbations. *J. Differential Equations* **20** (1976), no. 2, 292-315. (Claude E. Lobry) **52** #15555 58E15 (49E15, 58F99)
Minimal realizations and canonical forms for bilinear systems. *J. Franklin Inst.* **301** (1976), no. 6, 593-604. (Ronald Hirschorn) **55** #2216 93B15
Existence and uniqueness of minimal realizations of nonlinear systems. *Math. Systems Theory* **10** (1976/77), no. 3, 263-284. (Claude E. Lobry) **55** #10091 93B15 (58F99)
(with Levitt, Norman) The generalized pursuit problem where the pursuer uses bang-bang controls. *Differential games and control theory, II (Proc. 2nd Conf., Univ. Rhode Island, Kingston, R.I., 1976)*, pp. 253-264. *Lecture Notes in Pure and Appl. Math.*, 30. Dekker, New York, 1977. (Editors) **58** #33030 90D25
An introduction to catastrophe theory. The 1976 Ames Research Center (NASA) Conference on Geometric Control Theory (Moffett Field, Calif., 1976), pp. 157-202. *Lie Groups: History Frontiers and Appl., Vol. VII, Math Sci Press, Brookline, Mass., 1977*. (M. J. Sewell) **57** #14024 58C25
An interpretation of stochastic differential equations as ordinary differential equations which depend on the sample point. *Bull. Amer. Math. Soc.* **83** (1977), no. 2, 296-298. (S. R. S. Varadhan) **54** #7981 34F05 (60H10)
On the gap between deterministic and stochastic ordinary differential equations. *Ann. Probability* **6** (1978), no. 1, 19-41. (Ludwig Arnold) **57** #1649 60H10 (34F05)
A sufficient condition for local controllability. *SIAM J. Control Optim.* **16** (1978), no. 5, 790-802. (Author's summary) **58** #26251 93B05
Süssmilch, J. P. See **Smith, David P.**, **58** #4456
Sust, M. (with Neugebauer, Gernot) Reduktion von Krümmungs- und Ricci-Tensoren n -dimensionaler Riemannscher Räume bezüglich eines beliebigen, nicht isotropen Vektorfeldes. (Russian and English summaries) *Wiss. Z. Friedrich-Schiller-Univ. Jena Math.-Naturwiss. Reihe* **24** (1975), no. 5/6, 547-553. (C. W. Kilmister) **55** #1236 53A45 (83.53)
(with Neugebauer, Gernot) Scherungs- und beschleunigungsfreie Strömungen in der Einsteinschen Gravitationstheorie. (Russian and English summaries) *Wiss. Z. Friedrich-Schiller-Univ. Jena Math.-Naturwiss. Reihe* **25** (1976), no. 4, 455-460. (Authors' summary) **55** #11904 83.53
Suštašvili, I. I. Algorithmization of the selection of optimal variants in stochastic network graphs that include connecting and disconnecting paths. (Russian. Georgian and English summaries) *Sakhar. SSR Mecn. Akad. Moambe* **79** (1975), no. 3, 569-572. (E. Ja. Gabovič) **53** #10236 90B15
Sústal, Jiří The degree of distinguishability of stochastic-sequential machines and related problems. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **10** (1974), 203-214. (A. Paz) **50** #12486 94A35
On the size of the set of all reducible stochastic sequential machines. *Information and Control* **26** (1974), no. 4, 301-311. (H. D. Block) **53** #5206 94A35
 ϵ -Äquivalenz der Anfangsverteilungen eines stochastischen Automaten. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **11** (1975), no. 9, 533-544. (P. Turakainen) **54** #4877 94A35
Comments on the structural synthesis of stochastic automata. (Czech and Russian summaries) *Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně B-56* (1975), 217-223. (H. Jürgensen) **54** #7146 94A35
Suster, A. P. (with Epstein, B. S.) The construction of the initial tabular values in the numerical integration of a system of ordinary differential equations. (Russian) *Metody Vychisl.* **8** (1973), 19-22. (H. Shintani) **50** #8988 65L05
Suster, L. A. (with Grinšpun, Z. S.) Some elementary inequalities of the theory of orthogonal polynomials. (Russian) *Collection of questions on mathematics and mechanics, No. 8 (Russian)*, pp. 28-32, 226-227. *Izdanie Kazah. Gos. Univ., Alma-Ata*, 1976. (Authors' summary) **58** #23327 42A52 (33A65)
Suštikov, V. M. A qualitative study of a homogeneous relay system. (Russian) A collection of articles on the qualitative theory of differential equations. *Rjazan. Gos. Ped. Inst. Učen. Zap.* **102** (1971), 128-131. (Editors) **57** #16813 34C10
Controllability in the small of second order homogeneous dynamical systems. (Russian) *Differencial'nye Uravnenija (Rjazan') Vyp.* **7** (1976), 230-236. (G. Zatiašvili) **57** #2664 93B05
Sustov, A. V. (with Galiulin, R. V.; Nardov, A. V.; Delone, B. N.) The role of the normalizer of a crystal class in the theory of simple shapes of crystals. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 3, 607-610. (J. C. Fisher) **54** #12926 20H15
Susukov, A. U. (with Vitjazev, V. V.) A generalization of the fundamental integral equation of the theory of radiative transfer. (Russian) *Theory of functions. Differential equations and their applications, No. 1 (Russian)*, pp. 195-209, 221. *Kalmyck. Gos. Univ., Elista*, 1976. (Authors' summary) **58** #32454 80.45
Susurin, G. E. (with Levašev, A. E.) A solution of the Einstein tetrad equation with Schwinger-Rodichev calibration of the tetrads. (Russian) *Gravitation and the theory of*
- relativity, No. 4-5 (Russian)*, pp. 129-135. *Izdat. Kazan. Univ., Kazan*, 1968. (G. Zadonskii (RŽFiz **1969** #8 B142)) **45** #6367 83.53
Suszko, R. Non-Frege logic and theories that are based on it. (Russian) *Nonclassical (Russian)*, pp. 349-383. *Izdat. "Nauka", Moscow*, 1970. (E. Mendelson) **47** #6402C10
Identity connective and modality. (Polish and Russian summaries) *Studia Logica* (1971), 7-41. (M. J. Cresswell) **45** #6594 02C10
(with Bloom, Stephen L.) Semantics for the sentential calculus with identity. (Polish and Russian summaries) *Studia Logica* **28** (1971), 77-82. (From the authors' introduction) **45** #6570 02B05
Quasi-completeness in non-Fregean logic. (Polish and Russian summaries) *Studia Logica* **29** (1971), 7-16. (R. I. Goldblatt) **46** #5115 02C99
(with Zandarowska, Wiesława) Lewis's systems S_4 and S_5 and the identity connective. (Polish. Russian and English summaries) *Studia Logica* **29** (1971), 169-199. (G. E. Minc) **46** #3271 02C10
Sentential variables versus arbitrary sentential constants. (Polish summary) *Zes. Nauk. Univ. Jagiello. Prace z Logiki No. 6* (1971), 85-88. (Stephen L. Bloom) **50** #02C99 (02B05)
(with Bloom, Stephen L.) Investigations into the sentential calculus with identity. *Notre Dame J. Formal Logic* **13** (1972), 289-308. (N. B. Cocchiarella) **51** #12478 (02C10)
Equational logic and theories in sentential language. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **1** (1972), no. 2, 2-9. (Editors) **50** #12714 02J10 (08A05)
(with Omyła, Mieczysław) Descriptions in theories of kind W . *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **1** (1972), no. 3, 8-13. (Stephen L. Bloom) **51** #02C99
(with Omyła, Mieczysław) Definitions in theories of kind W . *Polish Acad. Sci. Philos. Sociol. Bull. Sect. Logic* **1** (1972), no. 3, 14-19. (Stephen L. Bloom) **51** #02C99
A note on modal systems and SCI. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **1** (1972), no. 4, 38-41. (Editors) **58** #27347 02C10
A note on adequate models for non-Fregean sentential calculi. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **1** (1972), no. 4, 42-45. (Editors) **58** #27347 02C10
Adequate models for the non-Fregean sentential calculus (SCI). *Logic, language and probability (Selected Papers, Fourth Internat. Congr. Logic, Methodology, and Philosophy, Bucharest, 1971)*, pp. 49-54. *Synthese Library, Vol. 51, Reidel, Dordrecht*, 1972. (Stephen L. Bloom) **57** #64 02C05
(with Brown, Donald J.; Bloom, Stephen L.) Abstract logics. *Dissertationes Mathematicae (Rozprawy Mat.)* **102** (1973), 52 pp. (G. Georgescu) **56** #5284 02J05
Equational logic and theories in sentential languages. *Colloq. Math.* **29** (1973), 19-23. (S. Comer) **49** #39 02J10 (08A05)
(with Michaels, Aileen) EN-logic. *Polish Acad. Sci. Inst. Philos. Sociology. Bull. Sect. Logic* **3** (1974), no. 1, 13. (Annalisa Marcja) **52** #13316 02B10 (02J99)
(with Quackenbush, Robert W.) Dual spaces for topological Boolean algebras. *Polish Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* **3** (1974), no. 1, 16-19. (Timothy J. Cramer) **53** #224 06A40
A note on intuitionistic sentential calculus (ISC). *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **3** (1974), no. 1, 20-21. (Dirk van Dalen) **53** #5269 02J05
Some notions and theorems of McKinsey and Tarski and SCI. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **3** (1974), no. 2, 3-5. (Daniel Ponasse) **53** #102J05
Abolition of the Fregean axiom. *Logic Colloquium (Boston, Mass., 1972-1973)* 169-239. *Lecture Notes in Math., Vol. 453, Springer, Berlin*, 1975. (David Makinson) **56** #11760 02C10 (02A05)
(with Bloom, Stephen L.) Ultraproducts of SCI models. *Polish Acad. Sci. Philos. Sociol. Bull. Sect. Logic* **4** (1975), 9-14. (J. M. Plotkin) **53** #119 02H13
Remarks on Łukasiewicz's three-valued logic. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **4** (1975), no. 3, 87-90. (C. J. Brickhill) **53** #5257 02C05
A note on the least Boolean theory in SCI. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **4** (1975), no. 4, 136-137. (Stephen L. Bloom) **54** #12521 02J99
(with Bloom, Stephen L.) Errata: "Investigations into the sentential calculus identity" (Notre Dame J. Formal Logic **13** (1972), no. 3, 289-308). *Notre Dame J. Formal Logic* **17** (1976), no. 4, 640. (Editors) **53** #12874 02C10
(with Michaels, Aileen) Sentential calculus of identity and negation. *Rep. Math. Logic No. 7* (1976), 87-106. (From the introduction) **58** #21496 02C99
(with Dzik, Wojciech) On distributivity of closure systems. *Polish Acad. Sci. Philos. Sociol. Bull. Sect. Logic* **6** (1977), no. 2, 64-66. (I. Petrescu) **58** #27610 06A35 (08A25)
On filters and closure systems. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* **6** (1977), no. 4, 151-155. (W. Russell Belding) **57** #16149 06A10
The Fregean axiom and Polish mathematical logic in the 1920s. On Leśniewski systems (Proc. XXII Conf. Hist. Logic, Kraków, 1976). *Studia Logica* **36** (1977/78), 4, 377-380. (Ruth Manor) **58** #10266 02-03 (01A60, 02A05)
Suszyski, Alfred A remark on nearly extendable maps. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 12, 1257-1259. (J. Mioduszewski) **58** #7546 54C55
Sutar, V. K. (with Teli, M. T.) Subluminal and superluminal causal transformations through transformations of metrics. *Lett. Nuovo Cimento* (2) **21** (1978), no. 4, 127-130. (From the text) **58** #20246 83.53
Sutcliffe, B. T. Fundamentals of computational quantum chemistry. *Computational techniques in quantum chemistry and molecular physics (Proc. NATO Adv. Study Inst. Ramsau, 1974)*, pp. 1-105. *NATO Advanced Study Inst. Ser., Ser. C: Math. and Phys. Sci., Vol. 15, Reidel, Dordrecht*, 1975. (Ernest R. Davidson) **56** #14393 81.65
The convergence properties of direct energy minimisation with respect to linear coefficients in the MC-LCAO-MO-SCF approach. *Theoret. Chim. Acta* **39** (1975), no. 93-102. (J.-L. Calais) **56** #10013 65K05 (81.65)
See also *Computational techniques in quantum chemistry and molecular physics*, **56** #4454
Suter, Bruce W. The modular arithmetic of arbitrarily long sequences of digits. *J. Math.*

- Trans. Computers C-23* (1974), no. 12, 1301-1303. (A. D. Booth) **52** #9681 68A15 (9A25)
- r, Dietrich** Charakter von Mengensystemen. *Math. Ann.* **199** (1972), 37-43. (V. Novák) **51** #5319 04A20 (08A25)
- n*-Hüllenoperatoren und algebraische Operationen. *Nederl. Akad. Wetensch. Proc. Ser. A 76=Indag. Math.* **35** (1973), 108-112. (D. Monk) **47** #4903 08A25
- Relative Algebraisierbarkeit von Untervollverbänden eines Unteralgebrensystems. (English summary) *Algebra Universalis* **4** (1974), 229-234. (H. F. J. Lowig) **51** #3024 08A05
- r, Glen H.** Recursive elements and constructive extensions of computable local integral domains. *J. Symbolic Logic* **38** (1973), 272-290. (G. Cherlin) **52** #54 02E99 (13L05)
- An elementary example of a transcendental *p*-adic number. *Math. Mag.* **49** (1976), no. 1, 42. (Editors) **52** #13668 10F35
- r, Ronald** Frege und Russell über das "Paradox der Identität". *Studien zu Frege, Band II*, pp. 257-268. *Problemata*, No. 43, Frommann-Holzboog, Stuttgart, 1976. (Editors) **58** #27271 02A05 (01A55, 01A60, 02-03)
- r, Ueli** (with Held, René P.) Die Bestimmung der unitären *K*-Theorie von $SO(n)$ mit Hilfe der Atiyah-Hirzebruch-Spektralreihe. *Math. Z.* **122** (1971), 33-52. (J. A. Schafer) **45** #1191 57F35 (55H25)
- (with Sigrist, François) On symplectic Stiefel manifolds. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 493-497. (R. E. Stong) **48** #5070 55F10 (55B15)
- (with Sigrist, François) Eine Anwendung der *K*-Theorie in der Theorie der *H*-Räume. *Comment. Math. Helv.* **47** (1972), 36-52. (C. S. Hoo) **46** #6350 55D45
- (with Sigrist, François) Cross-sections of quaternionic Stiefel manifolds. *Symposia Mathematica*, Vol. XI (Convegno di Geometria, INDAM, Rome, 1972), pp. 355-357. Academic Press, London, 1973. (M. F. Atiyah) **49** #3943 55G40
- (with Held, René P.) On torsion in unitary *K*-theory of compact Lie groups. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 493-495 (1974). (A. Verona) **51** #4217 55B15 (57F10)
- (with Held, René P.) On the unitary *K*-theory of compact Lie groups with finite fundamental group. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 343-356. (J. W. Vick) **48** #5110 57F10 (55B15)
- (with Sigrist, François) Cross-sections of symplectic Stiefel manifolds. *Trans. Amer. Math. Soc.* **184** (1973), 247-259. (J. F. Adams) **48** #5071 55F10 (55B15)
- On the groups $J(CP^m)$ and $J(HP^m)$. *Bol. Soc. Brasil. Mat.* **5** (1974), no. 2, 221-231. (Donald M. Davis) **54** #8631 55E50
- (with Held, René P.) L'anneau de Grothendieck des groupes orthogonaux projectifs. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 213-216. (Richard R. Patterson) **51** #4247 55F50 (55F10)
- (with Held, René P.) Stable vector bundles over the projective orthogonal groups. *Comment. Math. Helv.* **50** (1975), 93-114. (Richard R. Patterson) **51** #4246 55F50 (57F10)
- (with Sigrist, François) Sur les groupes fondamentaux des *H*-espaces de rang 2. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 12, A887-A889. (Guido Mislin) **54** #11324 55D45
- erland, Arthur A., Jr.** See *Applied optimal estimation*, **49** #10419
- erland, Colin E.** Direct integral theory for weights, and the Plancherel formula. *Bull. Amer. Math. Soc.* **80** (1974), 456-461. (J. M. G. Fell) **49** #3553 46K15 (22D25)
- Crossed products, direct integrals and Connes' classification of type III factors. *Math. Scand.* **40** (1977), no. 2, 209-214. (Ole A. Nielsen) **57** #1146 46L10
- erland, Michael** (with Holland, Paul W.; Fienberg, Stephen E.) Combining Bayes and frequency approaches to estimate a multinomial parameter. *Studies in Bayesian Econometrics and statistics (in honor of Leonard J. Savage)*, pp. 585-617. *Contributions to Economic Analysis*, No. 86, North-Holland, Amsterdam, 1975. (I. J. Good) **55** #6662 52F10
- erland, Patrick** (with Lakshmikantham, V.) On the zeros of monotone operators of retarded type in a Banach space. *Appl. Math. Comput.* **4** (1978), no. 1, 81-91. (J. Kolomý) **57** #16907 34K05 (47H05)
- erland, W. A.** Vanishing of Stiefel-Whitney classes. *Proc. Amer. Math. Soc.* **31** (1972), 637. (J. W. Rutter) **45** #1168 55F40
- An example concerning stably complex manifolds. *J. London Math. Soc.* (2) **6** (1973), 348-350. (F. Hirzebruch) **47** #1071 57D15 (55F25)
- (with James, Ioan M.) On stunted real projective spaces. *Quart. J. Math. Oxford Ser. (2)* **25** (1974), 101-112. (J. F. Adams) **49** #3921 55D99
- ★ Introduction to metric and topological spaces. *Clarendon Press, Oxford*, 1975. iii + 181 pp. (From the author's preface) **56** #1244 54-01
- The Browder-Dupont invariant. *Proc. London Math. Soc.* (3) **33** (1976), no. 1, 94-112. (Edgar H. Brown, Jr.) **54** #11346 57D20
- erland, W. R. S.** (with Cassidy, R. Gordon; Field, C. A.) Inverse programming: theory and examples. *Math. Programming* **4** (1973), 297-308. (Marcel Rădulescu) **48** #5649 90C30
- en, Jon G.** (with Chang, Mou Hsiung) A stochastic optimal control model for a problem in resource economics. *Differential games and control theory, II* (Proc. 2nd Conf., Univ. Rhode Island, Kingston, R.I., 1976), pp. 329-344. *Lecture Notes in Pure and Appl. Math.*, 30, Dekker, New York, 1977. (Editors) **58** #33450 93E20
- aitis, V. P.** (with Rajackas, R. L.) On the problem of modeling the interrelations between society and nature. (Russian) *Ekonom. i Mat. Metody* **14** (1978), no. 3, 448-464. (E. Vilkas) **58** #15319 92A20 (90A15)
- o, A. M.** (with Armand, N. A.; Bašarinov, A. E.) Studies of the environment by the methods of radiophysics. (Russian) *Izv. Vysš. Učebn. Zaved. Radiofizika* **20** (1977), no. 5, 809-841. (Editors) **57** #11653 86.00
- rihin, G. N.** An application of the supplementary central projection (perspective) to the determination of distance between surfaces. (Russian) *Trudy Altaisk. Politehn. Inst. Vyp. 3* (1967), 132-136. (L. Bitay) **53** #9020 50D15
- Construction of a tangent to second order curves by using homology transformations. (Russian) *Trudy Altaisk. Politehn. Inst. No. 3* (1967), 137-143. (V. Medek) **52** #15215 50B05
- v, E. G.** Letter to the editors: "Embedding of semigroups into simple semigroups with one-sided division" (Izv. Vysš. Učebn. Zaved. Matematika **1964**, no. 5(42), 143-148). *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 4(131), 120. (Editors) **48** #11372 20M10
- Semigroups with ideal subsemigroups. (Russian) *Modern algebra*, No. 3 (Russian), pp. 134-158. Leningrad. Gos. Ped. Inst., Leningrad, 1975. (B. Pondělíček) **55** #12843 20M10
- See also *Sverdlovsk Symposium*, **45** #6958 and *Hercen Lectures*, **47** #4749
- Šutov, V. G.** (with Stecenko, V. Ja.; Tumanov, L. A.) On the theory of nonlinear models of balance between branches. (Russian) *Models and methods for the analysis of economic target-oriented systems* (Russian), pp. 166-176. Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1977. (I. V. Evstigneev) **58** #32875 90A15
- Šutova, L. P.** See *Mathematical analysis and the theory of functions*, **58** #29266
- Sutter, Jean** See *Demographic genetics*, **52** #10091 and *Jacquard, Albert*, **54** #9718a
- Sutti, Carla** (with Dolci, Paolo; Fagioli, Enrico) Approssimazione di un ciclo limite mediante funzioni di Liapunov. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **104** (1970), 758-764. (J. J. Schäffer) **46** #9429 34C05
- Metodi di minimizzazione monodimensionale. (English summary) *Minimization algorithms, mathematical theories and computer results* (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971), pp. 147-173. Academic Press, New York, 1972. (G. Opfer) **52** #4626 65K05 (90C30)
- (with Trabattini, L.; Brughiera, P.) A method for minimization of a one-dimensional nonunimodal function. *Minimization algorithms, mathematical theories and computer results* (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971), pp. 181-192. Academic Press, New York, 1972. (G. Opfer) **52** #4627 65K05 (90C30)
- (with Roversi, A.) L' "interpolazione più regolare" mediante il calcolo variazionale. *Riv. Mat. Univ. Parma* (3) **3** (1974), 335-342. (J. Friberg) **55** #3617 41A15
- A new method for unconstrained minimisation without derivatives. *Towards global optimisation* (Proc. Workshop, Univ. Cagliari, Cagliari, 1974), pp. 277-289. North-Holland, Amsterdam, 1975. (J. S. Kowalik) **52** #12332 65K05
- Remarks on conjugate direction methods for minimisation without derivatives. *Towards global optimisation* (Proc. Workshop, Univ. Cagliari, Cagliari, 1974), pp. 290-304. North-Holland, Amsterdam, 1975. (Wolfgang Wetterling) **53** #9646 65K05 (90C30)
- A technique for the global minimization of a polynomial. *Calcolo* **13** (1976), no. 4, 397-402 (1977). (Author's summary) **58** #24953 65K05
- Convergence proof of minimization algorithms for nonconvex functions. *J. Optimization Theory Appl.* **23** (1977), no. 2, 203-210. (J. C. Allwright) **57** #1893 65K05
- Suttle, Jimmie** (with Cifan, Mikael) Group theoretical and combinatorial analysis of histocompatibility and switching algebra. *Math. Biosci.* **16** (1973), 315-358. (Authors' summary) **48** #13307 92A05 (94A20)
- Sutton, B. R.** Symmetries of the positive-energy Kustaanheimo-regularized Kepler problem revisited. (Italian and Russian summaries) *Nuovo Cimento B* (11) **25** (1975), 662-668. (G. Bandyopadhyay) **54** #4504 83.22 (58F05)
- Sutton, T. W.** (with Mardia, K. V.) On the modes of a mixture of two von Mises distributions. *Biometrika* **62** (1975), no. 3, 699-701. (Authors' summary) **52** #9330 60E05
- Sutton, W. G.** (with George, John H.; Martin, Clyde F.) On a triangle inequality used in Lyapunov function construction. *IEEE Trans. Automatic Control* **AC-17** (1972), no. 5, 721. (Authors' summary) **55** #14335 93D05
- Suttorp, L. G.** Exact solutions of the spinor Bethe-Salpeter equation for tightly bound states. (Italian and Russian summaries) *Nuovo Cimento A* (11) **29** (1975), no. 2, 225-255. (N. Nakanishi) **54** #14606 81.34
- Suturin, M. G.** (with Pavlov, B. S.) The sharpness of a certain uniqueness theorem. (Russian) Investigations on linear operators and the theory of functions, III. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **30** (1972), 170-171. (L. I. Hedberg) **49** #3094 30A08
- Inner factors of functions of Gevrey classes. (Russian) *Problems in mathematical physics*, No. 7 (Russian), pp. 149-162, 184. Izdat. Leningrad. Univ., Leningrad, 1974. (D. Sarason) **56** #3304 30A78
- The spectrum of a nonselfadjoint Schrödinger operator with a rapidly decreasing potential. (Russian) *Mat. Issled.* **9** (1974), no. 1(31), 120-130. (J. Wiesner) **50** #9250 81.47 (47E05)
- The spectral properties of the Dirac operator with optical potential. (Russian. English summary) *Vestnik Leningrad. Univ. No. 22 Fiz. Him. Vyp. 4* (1974), 24-27. (J. Wiesner) **51** #7523 81.47
- On the spectral analysis of the nonselfadjoint Dirac operator. (Russian. English summary) *Vestnik Leningrad. Univ. No. 13 Mat. Meh. Astronom. Vyp. 3* (1975), 146-148, 154. (R. C. Gilbert) **52** #11660 47E05 (34B25)
- The spectral structure of a Schrödinger operator with a complex boundary condition. (Russian) *Problems in mathematical physics*, No. 8 (Russian), pp. 155-158, 175. Izdat. Leningrad. Univ., Leningrad, 1976. (Author's summary) **58** #22753 34B25
- See also *Investigations on linear operators and the theory of functions*, **52** #14241 (EA 53)
- Suura, H.** (with Young, Bing Lin) Derivation of general conservation laws and Ward-Takahashi identities in the functional integration method. *Phys. Rev. D* (3) **8** (1973), 4353-4371. (Authors' summary) **50** #15740 81.49
- (with Geffen, D. A.) Solutions to a gauge-invariant, equal-time two-body wave equation. Light-mass quark-antiquark system. *Phys. Rev. D* (3) **16** (1977), no. 11, 3305-3319. (Authors' summary) **56** #14307 81.47
- Suurballe, J. W.** Disjoint paths in a network. *Networks* **4** (1974), 125-145. (Narsingh Deo) **53** #10507 94A20
- Šuvaev, A. K.** Delta-methods for the numerical inversion of the Laplace transform, and their convergence. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 6, 1389-1398, 1623. (Walter Gautschi) **53** #4499 65D30 (44A10)
- Suvak, John A.** Full ideals and ring groups in $Z_n[x]$. *Canad. Math. Bull.* **19** (1976), no. 3, 329-335. (William James Lewis) **57** #3112 13F20
- Šuvalov, L. A.** See *Wooster, W. A.*, **58** #32648b
- Šušar, B. A.** The majorant principle for operator equations. (Russian) *Methods of*

- approximate solution of differential and integral equations (Russian), pp. 362-370. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1973. (Editors) **58** #2504 47H15 (65J05)
(with Kurpel', M. S.) Two-sided operator inequalities for equations of Volterra type. (Russian. English summary) *Nonlinear boundary value problems of mathematical physics (Russian)*, pp. 264-282. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1973. (B. Jankó) **51** #1523 47H99
(with Kurpel', M. S.) Operator and integral inequalities. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 386-390, 431. (Victor I. Levin) **48** #7051 47H99 (45D05)
(with Kurpel', M. S.) A certain class of operator equations, and two-sided operator inequalities. (Ukrainian. Russian summary) *Projective-iterative methods for the solution of differential and integral equations (Ukrainian)*, pp. 86-92, 201. *Vidannya Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1974. (Authors' summary) **57** #13602 47H15
(with Migović, F. M.) Application of certain modifications of the Čaplygin method to Volterra type integral equations in a Banach space. (Ukrainian. Russian summary) *Projective-iterative methods for the solution of differential and integral equations (Ukrainian)*, pp. 131-135, 203. *Vidannya Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1974. (Authors' summary) **57** #3768 45D05
(with Suljar, M. A.) The zeros of a polynomial with coefficients from a Banach algebra. (Ukrainian. Russian summary) *Visnik L'viv. Politehn. Inst.* **1977**, no. 119 *Mat. i Meh.*, 172-175, 202. (Authors' summary) **58** #30257 46H05
- Süveges, M.** Is Poincaré invariance compatible with general relativity? (Russian summary) *Acta Phys. Acad. Sci. Hungar.* **27** (1969), 261-268. (B. K. Datta) **45** #6350 83.22
- Suveika, I. V.** The Cauchy problem for a certain nonstationary equation. (Russian) *Differencial'nye Uravnenija* **9** (1973), 1339-1346, 1359. (J. R. Schulenberger) **48** #4469 35B40
Solution of the Cauchy problem for a certain nonstationary equation, and its asymptotic behavior for large time values. I. (Russian) *Differencial'nye Uravnenija* **10** (1974), 310-329, 373. (J. Muszyński) **49** #11028 35G05
Solution of the Cauchy problem for a certain nonstationary equation, and its asymptotic behavior for large time values. II. (Russian) *Differencial'nye Uravnenija* **10** (1974), 730-743, 767. (J. Muszyński) **51** #1143 35L30
The representation of the solution of the Cauchy problem for I. G. Petrovskii well-posed equations with constant coefficients in the case of one space variable. (Russian) *Mat. Issled.* **9** (1974), no. 4(34), 121-136, 176-177. (D. K. Cohoon) **53** #6073 35E15
The method of a priori estimates in the Cauchy problem for I. G. Petrovskii well-posed systems of equations with variable coefficients. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 10, 1855-1866, 1909. (Monty Strauss) **57** #851 35G10
The fundamental matrix of the solutions of a system of differential equations in the case of one space variable. (Russian) *Boundary value problems for differential equations. Mat. Issled.* No. 46 (1978), 91-95, 98. (Author's summary) **58** #17269 34A20
- Suvorčenkova, G. A.** A connection between the asymptotic behavior of the spectral function of a second order elliptic differential operator and the geometry of a closed manifold. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 538-541. (I. Vaisman) **48** #9775 58G15 (35P20)
An application of Sobolev's method to the study of the connection between the spectrum of a second order elliptic differential operator and the geometry of a manifold without boundary. (Russian) *Differencial'nye Uravnenija* **11** (1975), 358-365, 397. (Bert-Wolfgang Schulze) **52** #1802 58G99 (35J15)
The solution of the Cauchy problem for a first order linear differential equation with operator coefficients. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 1(187), 263-264. (M. S. Agranovič) **54** #13634 47E05 (34G05)
Asymptotic behavior of the spectral function of a first order differential equation with an unbounded operator coefficient. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 2(188), 231-232. (J. R. Schulenberger) **54** #3080 34B25 (47E05)
- Suvorov, B. P.** Use of a thesaurus in the algorithmic provisioning of an information retrieval system of economic indices. (Russian) *Planning and prediction problems (dedicated to V. S. Nemčinov) (Russian)*, pp. 243-267. *Izdat. "Nauka", Moscow*, 1974. (D. Obradović) **51** #9591 68A50
(with Aronovič, A. B.; Gorbatenko, N. G.; Ežov, È. V.; Florinskii, A. B.)
★Информационный поиск в АСУ. (Russian) [Information retrieval in ASU (automatic management)] *Izdat. "Nauka", Moscow*, 1975, 174 pp. (From the authors' introduction) **54** #14469 68A50 (93A10)
- Suvorov, B. V.** (with Marasnov, V. V.; Marčukov, B. A.; Kuprijanov, V. V.)
★Современные методы анализа и синтеза автоматических систем. (Russian) [Modern methods for analysis and synthesis of automatic systems] *Izdat. "Štiinca", Kishinev*, 1976. 126 pp. (V. Komkov) **57** #2651 93-01
- Suvorov, G. D.** (with Lufarenko, V. P.) The concept of the body of a prime end in Carathéodory's theory. (Russian) *Metric questions of the theory of functions and mappings*, No. 3 (Proc. Second Colloq. Theory of Quasiconformal Mappings and its Generalizations, dedicated to M. A. Lavrent'ev's seventieth birthday, Donetsk, 1970) (Russian), pp. 71-79. *Izdat. "Naukova Dumka", Kiev*, 1971. (J. G. Krzyż) **50** #4956 30A72
(with Mikljukov, V. M.) The existence and uniqueness of quasiconformal mappings with unbounded characteristics. (Russian) *Studies in the theory of functions of a complex variable and its applications (Russian and Ukrainian)*, pp. 45-53. *Vidannya Inst. Mat. Akad. Nauk Ukrain. SSR*, Kiev, 1972. (K. W. Lucas) **49** #3126 30A60
(with Lufarenko, V. P.) Families of homeomorphisms, relative metrics and the Carathéodory theorem. (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 368-383. (Roman Duda) **45** #5947 54H20
(with Myškis, A. D.) Conformally invariant bicomact extensions of a plane simply connected domain. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 822-824. (P. Caraman) **49** #594 30A72
(with Gold'smidt, A. I.) A theorem on limit sets, and a nonmetrizable bicomactification of a domain that is invariant under conformal mappings. (Russian) *Dokl. Akad. Nauk SSSR* **213** (1973), 1018-1020. (P. T. Mocanu) **49** #9175 30A30
A metric theory of prime ends of a plane domain. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1974**, 608-610, 670. (R. Kühnau) **51** #10638 30A72
(with Gallo, V. F.) Monogeneity sets of plane continuous annular mappings. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 3, 523-526. (P. Caraman) **51** #13200 30A02
(with Gold'smidt, A. I.) Limit sets of transformations and non-metrizable bicomactification of metric spaces. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 1, 58-238. (P. T. Mocanu) **55** #5860 30A72 (54D35)
(with Pomel'nikov, Ju. V.) A new family of conformally invariant metrizable bicomact extensions of a plane domain. (Russian) *Dokl. Akad. Nauk SSSR* (1977), no. 5, 1017-1019. (E. Grassmann) **56** #12242 30A30
See also *Metric questions of the theory of functions and mappings*, **51** #13200
Metric questions in the theory of functions and mappings, **58** #20936 and *Metric questions of the theory of functions and mappings*, **58** #28444
- Suvorov, N. M.** A duality theorem for distributive transitive topological quasigroups. (Russian) *Mat. Issled.* **4** (1969), no. 4(14), 162-166. (B. Pondělíček) **46** #1958 22A99
(with Ufnarovskaja, T. P.) An example of an infinite quasigroup admitting discrete topologization. (Russian) *Studies in the theory of quasigroups and loops (Russian)*, pp. 163-165, 200. *Izdat. "Štiinca", Kishinev*, 1973. (G. Čupona) **50** #4820N05
(with Krjučkov, N. I.) Examples of certain quasigroups and loops that permit the discrete topologization. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 2, 471-473. (V. Havel) **54** #444 20N05
- Suvorov, N. P.** A model of the flow of correlated errors in a discrete communication channel. (Russian) *Radiotekhn. (Har'kov) No. 12* (1971), 41-46. (E. A. Haroutunian) **45** #9794 94A10
(with Glazin, E. F.) On the question of agreement of cyclic codes with a flow of errors in the communication channel. (Russian) *Radiotekhn. (Har'kov) No. 12* (1971), 47-54. (E. A. Haroutunian) **45** #9795 94A10
(with Zaderenko, I. D.; Suvorova, I. G.) On the question of the application of redundant codes and multiposition signals in discrete information transmission systems. (Russian) *Vestnik Har'kov. Gos. Univ. No. 113 Mat. i Meh. Vyp. 39* (1974), 107-124. (J. Černý) **54** #2330 94A10 (94A15)
- Suvorov, P. Ju.** (with Davydov, G. V.) Reduction of propositional tautology to coloring in three colors. (Russian. English summary) Investigations in constructive mathematics and mathematical logic, VI (dedicated to A. A. Markov on the occasion of his 70th birthday). *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* (1974), 10-13, 155. (M. Tetrušvili) **51** #43 02B05 (05C15)
Recognition of the tautology of propositional formulas. (Russian. English summary) *Studies in constructive mathematics and mathematical logic, VII. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **60** (1976), 197-206, 226-227. (Author's summary) **58** #27294 02B05 (02E10)
- Suvorov, S. G.** Eigenvalues of certain nonlinear operators. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1970**, 501-504, 572-573. (Zeidler) **45** #5841 47H10
Characterization of the type of the Morse index of degenerate critical points. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1971**, 606-608, 668. (Ju. Ju. Trohimčuk) **47** #5900 58E05 (46G99, 47H99)
Eigenvalues of certain nonlinear operators. (Russian) *Mathematical physics, No. 13 (Russian)*, pp. 148-156. *Naukova Dumka*, Kiev, 1972. (E. Zeidler) **46** #6102 47H99 (58E05)
Stationary points of certain dynamical systems. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1972**, 718-720, 766. (K. Krzyżewski) **46** #9953 54H20 (34C35, 47H10)
Finite dimensionality of the set of eigenfunctions with bounded eigenvalues of a class of nonlinear operators. (Russian) *Mathematical physics, No. 13 (Russian)*, pp. 181-195. *"Naukova Dumka", Kiev*, 1973. (Ulrich Kosel) **49** #7862 47H15
Critical points of functionals with discontinuous gradients. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1974**, 52-53, 94-95. (D. V. Dževs) **49** #4031 58E05 (47H99)
The conditional extremum of functionals with discontinuous gradients. (Russian) *Mat. Zametki* **20** (1976), no. 4, 581-588. (M. L. Gromov) **55** #4269 58E15 (49J10)
The epistemology of Max Born and of dialectical materialism. *Uspehi Fiz. Nauk* **118** (1976), no. 4, 641-671 (Russian); translated as *Soviet Physics Uspekhi* **19** (1976), 4, 317-336. **58** #27272 02A05
See also *Einstein collection*, **51** #4924
- Suvorov, V. D.** (with Gol'din, S. V.) Analytic continuation of the hodograph of reflection waves. (Russian) *Dokl. Akad. Nauk SSSR* **222** (1975), no. 4, 825-828. (Jiří Nedelka) **52** #4936 86.30
- Suvorova, I. G.** (with Zaderenko, I. D.; Suvorov, N. P.) On the question of the application of redundant codes and multiposition signals in discrete information transmission systems. (Russian) *Vestnik Har'kov. Gos. Univ. No. 113 Mat. i Meh. Vyp. 39* (1974), 107-118, 124. (J. Černý) **54** #2330 94A10 (94A15)
- Suvorova, M. D.** (with Asel'derov, Z. M.; Gonina, E. E.; Kostyrko, V. F.) A macroalgorithm for the solution of equations with one unknown in a free group. (Russian) *Theory of problems and of methods for their solution (Russian)*, pp. 48-57. *Akad. Nauk Ukrain. SSR Inst.*, Kiev, 1973. (Editors) **56** #15777 20F10
- Suwa, Tatsumi** (with Sakawa, Masatoshi; Narutaki, Ryonosuke) Optimal control of linear systems with several cost functionals through a multicriteria simplex method. *Int. J. Control* **25** (1977), no. 6, 901-914. (Kailash C. Kapur) **56** #14932 93C05 (90C05)
- Suwa, Tatsuo** Stratification of local moduli spaces of Hirzebruch manifolds. *Complex analysis, 1972 (Proc. Conf., Rice Univ., Houston, Tex., 1972), Vol. II: Analytic singularities. Rice Univ. Studies* **59** (1973), no. 2, 129-146. (M. Schneider) **48** #4332G05
Compact quotient spaces of C^2 by affine transformation groups. *J. Differential Geometry* **10** (1975), 239-252. (J. A. Morrow) **51** #5977 32J15 (32M05)
(with Bedford, Eric) Eigenvalues of Hopf manifolds. *Proc. Amer. Math. Soc.* **56** (1976), 259-264. (Harold Donnelly) **54** #6214 58G99 (32C10)
Compact quotients of C^3 by affine transformation groups. II. *Complex analysis in algebraic geometry*, pp. 259-278. *Iwanami Shoten, Tokyo*, 1977. (A. L. Oniščik) **56** #12344 32M99 (32C10)

- Compact quotients of C^3 by affine transformation groups. *Several complex variables* (Proc. Sympos. Pure Math., Vol. XXX, Part 1, Williams Coll., Williamstown, Mass., 1975), pp. 293-295. *Amer. Math. Soc., Providence, R.I.*, 1977. (A. L. Oniščik) **56** #12343 32M99 (32C10)
- va, Yuriko** A note on the five term exact sequence concerning Galois extensions and normal bases. *Sci. Rep. Tokyo Woman's Christian College No. 29-31* (1973), 353-360. (Lindsay N. Childs) **50** #7116 13B05
- yama, Yoshihiko** (with Tsukamoto, Yōtarō) Riemannian manifolds admitting a certain conformal transformation group. *J. Differential Geometry* **5** (1971), 415-426. (C. B. Allendoerfer) **45** #7643 53C20
- On the first main theorem of holomorphic mappings from C^2 into $Q_{n-1}(C)$. *Osaka J. Math.* **11** (1974), 425-449. (J. J. Hirschfelder) **50** #5036 32H25
- yambulingom, C.** (with Sankaranarayanan, G.) Distribution of the maximum of the number of impulses at any instant in a type II counter in a given interval of time. *Metrika* **18** (1971/72), 227-233; correction, *ibid.* **20** (1973), 245. (Prem S. Puri) **54** #1421 60K25
- (with Balakrishnan, V. K.; Sankaranarayanan, G.) Ordered cycle lengths in a random permutation. *Pacific J. Math.* **36** (1971), 603-613. (Bernard Harris) **52** #12037 60C05
- zdaľ, V. G.** See *Advances in game theory*, **48** #10519
- zdaľ, V. D.** See *Linear boundary value problems of mathematical physics*, **50** #6719
- zdaľ, nický, I. D.** (with Kuršin, L. M.) On the representation of solutions for a cylindrical shell that is weakened by perforations. *Dokl. Akad. Nauk SSSR* **219** (1974), 832-835. (J. Mazumdar) **53** #9819 73A5
- zikov, G. V.** Certain properties of the Green's function of a certain Dirichlet problem. (Russian. English summary) *Mathematical physics and functional analysis, No. 4 (Russian)*, pp. 52-63, 161. *Fiz.-Tehn. Inst. Nizkikh Temperatur, Akad. Nauk Ukrain. SSR, Kharkov*, 1973. (Author's summary) **57** #16965 35J25
- An averaged boundary condition for a certain mixed boundary value problem for an equation of elliptic type. (Russian. English summary) *Mathematical physics and functional analysis, No. 4 (Russian)*, pp. 64-73, 161. *Fiz.-Tehn. Inst. Nizkikh Temperatur, Akad. Nauk Ukrain. SSR, Kharkov*, 1973. (Author's summary) **57** #16966 35J25
- ko, A. A.** (with Zahar'ev, B. N.; Nijazgulov, S. A.) Approximate methods in the inverse problem of nuclear theory. *Jadernaja Fiz.* **20** (1975), no. 6, 1273-1281 (Russian); translated as *Soviet J. Nuclear Phys.* **20** (1975), no. 6, 667-670. (Christiane Coudray) **55** #2001 81G5
- (with Zahar'ev, B. N.; Mel'nikov, V. N.; Rudjak, B. V.) The inverse scattering problem (a finite difference approach). (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* **8** (1977), no. 2, 290-329. (Authors' summary) **57** #2325 81A7
- ukawa, Henry H., Jr.** (with Cheng, Vera B.; Wolfsberg, Max) Investigations of a nonrandom numerical method for multidimensional integration. *J. Chem. Phys.* **59** (1973), 3992-3999. (Authors' summary) **50** #15286 65D30
- (with Thompson, Donald L.; Cheng, Vera B.; Wolfsberg, Max) Empirical testing of the suitability of a nonrandom integration method for classical trajectory calculations: comparisons with Monte Carlo techniques. *J. Chem. Phys.* **59** (1973), 4000-4008. (Authors' summary) **50** #15293 65D30 (65C05)
- uki, Atsuyuki** (with Harao, Masateru; Noguchi, Shoichi; Ozumi, Juro) Synthesis of multistage logical network with multiple outputs. *Electron. Commun. Japan* **52** (1969), no. 9, 138-149. (Not reviewed) **94A20**
- uki, Chisato** A quasi-Hermite $(0, q)$ -interpolation problem and its explicit solution. *Information Processing in Japan* **17** (1977), 137-143. (Author's summary) **57** #18020 65D05
- uki, Fukuzō** (with Michiwaki, Yoshimasa) On the Ren Jutsu Henkan. (Japanese) *Sūgakushi Kenkyū* No. 61 (1974), 1-13. **58** #26746 01A25
- uki, Giitiro** Distributions of Kac-statistics. *Ann. Inst. Statist. Math.* **24** (1972), 415-421. (Lionel Weiss) **48** #3162 62E15
- Robustness of Bayes classification region. *Ann. Inst. Statist. Math.* **26** (1974), 1-13. (D. V. Lindley) **50** #8818 62F15
- Modified binomial distribution model-Bernoulli trials with controllable success rate. (Japanese. English summary) *Proc. Inst. Statist. Math.* **24** (1976/77), no. 1, 41-46. (Minoru Siotani) **54** #14191 62E15
- Detecting optimum time of control action for a manufacturing system. *Ann. Inst. Statist. Math.* **30** (1978), no. 1, 15-26. (Author's summary) **58** #26302 93C05
- Nonparametric test procedures for a change in a location parameter. (Japanese. English summary) *Proc. Inst. Statist. Math.* **25** (1978), no. 2, 65-80. (Minoru Siotani) **58** #8016 62G10
- uki, Haruo** A note on S^1 -acting cobordisms. *J. Fac. Sci. Hokkaido Univ. Ser. I* **21** (1970/71), 177-183. (R. E. Stong) **45** #2720 57D75
- Spin-cobordism invariants of some S^1 -manifolds. *Geometry of manifolds* (Proc. Sympos., RIMS, Kyōto Univ., Kyoto, 1972), pp. 36-44. *R.I.M.S. Sem. Rep. No. 158, Res. Inst. Math. Sci. Kyōto Univ., Kyoto*, 1972. (C. B. Thomas) **53** #14519 57E15 (57D85, 57D20)
- On higher order non-singular immersions of RP^n of CP^m . *J. Fac. Sci. Hokkaido Univ. Ser. I* **22** (1972), 161-170. (Robert Wells) **46** #8239 57D40
- α -invariants of some differentiable S^1 -actions. *Tōhoku Math. J. (2)* **25** (1973), 509-520. (W. D. Neumann) **48** #12573 57D85 (57E15)
- (with Sato, Inaho) On almost complex structures on the products and connected sums of the quaternion projective spaces. *Hokkaido Math. J.* **3** (1974), 98-103. (K. Yano) **48** #4959 53C15
- Characteristic classes of foliated principal GL_r -bundles. *Hokkaido Math. J.* **4** (1975), no. 2, 159-168. (P. Molino) **51** #14101 57D30 (57D20)
- A property of a characteristic class of an orbit foliation. *Transformation groups* (Proc. Conf., Univ. Newcastle upon Tyne, Newcastle upon Tyne, 1976), pp. 190-203. *London Math. Soc. Lecture Note Series, No. 26, Cambridge Univ. Press, Cambridge*, 1977. (B. Cenkli) **57** #13974 57D30
- uki, Hideaki** Notes on (f, U, V, u, v, λ) -structures. *Kōdai Math. Sem. Rep.* **25** (1973), 153-162. (M. Okumura) **47** #5772 53C15
- uki, Hideo** (with Kemp, Murray C.) International trade with a wasting but possibly replenishable resource. *Internat. Econom. Rev.* **16** (1975), no. 3, 712-732. (Wolfgang Mayer) **54** #12175 90A15
- Suzuki, Hiroshi** State estimation that includes detection of change of configuration. (Japanese) *Systems and Control* **19** (1975), no. 10, 523-529. (Editors) **54** #2309 93E10
- Suzuki, Hiroyuki** On the commutation relation $AB - BA = C$. *Proc. Japan Acad.* **47** (1971), 173-176. (S. Kantorovitz) **45** #966 47D05
- Suzuki, Hisao** Jihei Momokawa and Chūbei Momokawa. (Japanese) *Sūgakushi Kenkyū* No. 43 (1969), 18-32. (S. Hitotumatu) **58** #21034 01A25
- "Jinkō ki" and Edo literature. (Japanese) *Sūgakushi Kenkyū* No. 71 (1976), 1-10. **58** #21035 01A25
- The four estates and arithmetic-shi (samurai). (Japanese) *Sūgakushi Kenkyū* No. 76 (1978), 6-18. (S. Hitotumatu) **58** #15826 01A25
- Suzuki, Humio** On the semi-local existence of real analytic solutions of a partial differential equation. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 245-252 (1972). (P. Schapira) **46** #9513 35H05
- On the global existence of holomorphic solutions of the equation $\partial u / \partial \bar{x}_1 = f$. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 253-258 (1972). (P. Schapira) **46** #9555 35N15 (32C99)
- The existence in the large of analytic solutions of first order linear partial differential equations, and their applications. (Japanese) Collection of articles on hyperfunctions. *Sūgaku* **25** (1973), 262-265. (Editors) **58** #2908 58G05 (35F10)
- Suzuki, Jingoro** On pre- σ -spaces. *Bull. Tokyo Gakuuei Univ.* (4) **28** (1976), 22-32. (E. Michael) **55** #6349 54C10 (54D99)
- On strong Morita spaces. *Bull. Tokyo Gakuuei Univ.* (4) **29** (1977), 61-78. (Gary Gruenhagen) **56** #13161 54D20
- Suzuki, Junji** (with Toda, Nobushige) Some notes on Picard constant. *Kōdai Math. Sem. Rep.* **26** (1974/75), 69-74. (H. Aogai) **51** #10613 30A48
- Suzuki, Kan-ichi** On the pointwise "o" saturation theorem for positive convolution operators. *Sci. Rep. Kanazawa Univ.* **22** (1977), no. 1, 1-7. (M. M. Chawla) **57** #13317 41A40
- Suzuki, Kazumasa** Some remarks on eigenvalue problems. (Japanese) *Kenkyū Kiyō-Gakushūin Kōtōka* No. 1, 45-50 (1965). (Teruo Ikebe) **45** #5610 35P99
- On eigenvalue problems. V. Estimates of Schauder type (continued). (Japanese) *Kenkyū Kiyō-Gakushūin Kōtōka* No. 6, 1-16 (1973). (Teruo Ikebe) **50** #7788a 35J20
- On eigenvalue problems. VI. (Japanese) *Kenkyū Kiyō-Gakushūin Kōtōka* No. 6, 17-25 (1973). (Teruo Ikebe) **50** #7788b 35J20
- Remarks on the estimates of solutions of linear elliptic equations. *Bull. Fukuoka Univ. Ed. III* **24** (1974), 25-40. (A. Avantaggiati) **52** #14650 35J70
- Suzuki, Kazuo** On a theorem of E. Cartan. *Mem. Fac. Gen. Ed. Kumamoto Univ. Natur. Sci. No. 5* (1970), part 1, 1-5. (R. Steinberg) **52** #3431 22E15 (20G10)
- Dimension of compact groups and their representations. *Tōhoku Math. J. (2)* **23** (1971), 663-670. (L. N. Argabright) **46** #9229 22C05
- On parabolic subgroups of Chevalley groups over local rings. *Tōhoku Math. J. (2)* **28** (1976), no. 1, 57-66. (R. Steinberg) **53** #8274 20G35
- (with Abe, Eiichi) On normal subgroups of Chevalley groups over commutative rings. *Tōhoku Math. J. (2)* **28** (1976), no. 2, 185-198. (J. E. Humphreys) **55** #12828 20H05
- On parabolic subgroups of Chevalley groups over commutative rings. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 366-382, 225-232 (1977). (S. I. Gelfand) **56** #5580 14L15 (20H25)
- On normal subgroups of twisted Chevalley groups over local rings. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 366-382, 238-249 (1977). (R. Steinberg) **56** #5738 20G35
- Suzuki, Manabu** Interpretation of canonical correlation analysis. *TRU Math.* **12** (1976), no. 2, 51-63. (Author's introduction and summary) **58** #31592 62H20
- Suzuki, Masaaki** (with Kajiwara, Joji) Real analytic solutions of a singular equation $(1 - x^2 - y^2)\Delta u + 4u = 0$. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **26** (1972), 174-178. (J. Conlan) **46** #2195 35A20
- Suzuki, Masakazu** Sur les relations d'équivalence ouvertes dans les espaces analytiques. *Ann. Sci. École Norm. Sup.* (4) **7** (1974), 531-541 (1975). (Ngô van Quê) **51** #8454 32C15 (57D30)
- Propriétés topologiques des polynômes de deux variables complexes, et automorphismes algébriques de l'espace C^2 . *J. Math. Soc. Japan* **26** (1974), 241-257. (J. Kajiwara) **49** #3188 32A15 (32C40)
- Sur les opérations holomorphes du groupe additif complexe sur l'espace de deux variables complexes. *Ann. Sci. École Norm. Sup.* (4) **10** (1977), no. 4, 517-546. (Author's introduction) **58** #28702 32M05 (32C40)
- Suzuki, Masayuki** (with Adachi, Kenzō; Yoshida, Masaaki) Continuation of holomorphic mappings, with values in a complex Lie group. *Pacific J. Math.* **47** (1973), 1-4. (H. Röhrli) **50** #5013 32D15
- (with Niwa, Shohei; Kono, Michio; Hosoe, S.) On the controllability and the stabilizability of linear systems. *IEEE Trans. Automatic Control* **AC-20** (1975), no. 5, 707. (Masao Ikeda) **53** #5083 93B05 (93D15)
- (with Miura, M.) Stabilizing feedback controllers for singularly perturbed linear constant systems. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 1, 123-124. (P. C. Parks) **52** #16786 93D15
- Suzuki, Masuo** Ergodicity, constants of motion and bounds for susceptibilities. *Physica* **51** (1971), 277-291. (R. Kubo) **47** #2954 82G0
- Relationship among exactly soluble models of critical phenomena. I. 2D Ising model, dimer problem and the generalized XY-model. *Progr. Theoret. Phys.* **46** (1971), 1337-1359. (J. E. Marsden) **46** #4899 82A6
- (with Hilhorst, H. J.; Felderhof, B. U.) Kinetics of the stochastic Ising chain in a two-flip model. *Physica* **60** (1972), 199-222. (Chanchal K. Majumdar) **53** #15237 82G2
- Rigorous results for Ising ferromagnets of general spin with degeneracy or symmetric potentials. *J. Mathematical Phys.* **14** (1973), 1088-1093. (C. A. Hurst) **48** #3422 82J30
- Thermodynamic limit of non-equilibrium systems—extensive property, fluctuation and nonlinear relaxation. *International Symposium on Mathematical Problems in Theoretical Physics* (Kyoto Univ., Kyoto, 1975), pp. 423-431. *Lecture Notes in Phys.*, **39**. Springer, Berlin, 1975. (Editors) **58** #32715 82G0

- Statistical mechanics of non-equilibrium systems. I. Extensive property, fluctuation and non-linear response. *Progr. Theoret. Phys.* **53** (1975), no. 6, 1657-1674. (Author's summary) **56** #4613 82.60
- Generalized Trotter's formula and systematic approximants of exponential operators and inner derivations with applications to many-body problems. *Comm. Math. Phys.* **51** (1976), no. 2, 183-190. (John Duncan) **54** #13632 47D05 (47A60)
- Fluctuation, relaxation, and extensivity of macrovariables in nonequilibrium systems. *J. Statist. Phys.* **14** (1976), no. 2, 129-151. (Author's summary) **56** #2141 82.47
- Statistical mechanics of non-equilibrium systems. II. Extensivity, fluctuation and relaxation of Markoffian macrovariables. *Progr. Theoret. Phys.* **55** (1976), no. 2, 383-399. (Author's summary) **56** #4614 82.60
- Statistical mechanics of non-equilibrium systems. III. Fluctuation and relaxation of quantal macrovariables. *Progr. Theoret. Phys.* **55** (1976), no. 4, 1064-1081. (Author's summary) **56** #4615 82.60
- Scaling theory of non-equilibrium systems near the instability point. I. General aspects of transient phenomena. *Progr. Theoret. Phys.* **56** (1976), no. 1, 77-94. (Koichiro Matsuno) **54** #14693 82.60
- Relationship between d -dimensional quantal spin systems and $(d+1)$ -dimensional Ising systems. Equivalence, critical exponents and systematic approximants of the partition function and spin correlations. *Progr. Theoret. Phys.* **56** (1976), no. 5, 1454-1469. (David M. Burley) **55** #5125 82.60
- On the convergence of exponential operators—the Zassenhaus formula, BCH formula and systematic approximants. *Comm. Math. Phys.* **57** (1977), no. 3, 193-200. (John Duncan) **57** #3911 47D05 (17B65, 46H05)
- (with Yamazaki, Yoshitake) Critical behavior of isotropic systems with long-range interactions. *Progr. Theoret. Phys.* **57** (1977), no. 6, 1886-1899. (Authors' summary) **56** #14432 82.41
- (with Miyashita, Seiji; Kurodo, Akira) Monte Carlo simulation of quantum spin systems. I. *Progr. Theoret. Phys.* **58** (1977), no. 5, 1377-1387. (Authors' summary) **56** #10628 81.60
- Suzuki, Michio** Characterizations of some finite simple groups. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1, pp. 371-373. Gauthier-Villars, Paris, 1971.* (David R. Mason) **55** #486 20D05
- A transfer theorem. *J. Algebra* **51** (1978), no. 2, 608-618. (I. M. Isaacs) **57** #12690 20D25
- Suzuki, Naoyoshi** (with Gotô, Shirô; Watanabe, Keiichi) On affine semigroup rings. *Japan. J. Math. (N.S.)* **2** (1976), no. 1, 1-12. (Paolo Maroscia) **56** #8553 13H10 (14M05)
- Suzuki, Noboru** Reduction theory of operators on Hilbert space—the invariant subspace problem. Proceedings of an International Symposium on Operator Theory (Indiana Univ., Bloomington, Ind., 1970). *Indiana Univ. Math. J.* **20** (1971), no. 10, 953-958. (Andrei Rácz) **53** #8926 47A15
- On the convergence of Neumann series in Banach space. *Math. Ann.* **220** (1976), no. 2, 143-146. (B. Finkel) **54** #976 47A50 (65J05)
- The finite Hilbert transform on $L_2(0, \pi)$ is a shift. *Proc. Japan Acad.* **52** (1976), no. 10, 544-547. (C. R. Putnam) **55** #3881 47G05 (47B47)
- Suzuki, Norihisa** (with Luckham, David C.) Proof of termination within a weak logic of programs. *Acta Informat.* **8** (1977), no. 1, 21-36. (D. Vaida) **56** #7301 68A05
- (with Jefferson, David) Verification decidability of Presburger array programs. *Proceedings of a Conference on Theoretical Computer Science (Univ. Waterloo, Waterloo, Ont., 1977), pp. 202-212. Comput. Sci. Dept., Univ. Waterloo, Waterloo, Ont., 1978.* (From the introduction) **58** #13880 68A05
- Suzuki, Osamu** Neighborhoods of a compact non-singular algebraic curve imbedded in a 2-dimensional complex manifold. *Publ. Res. Inst. Math. Sci.* **11** (1975/76), no. 1, 185-199. (M. Schneider) **52** #8477 32A10 (32F10)
- Simple proofs of Nakano's vanishing theorem and Kazama's approximation theorem for weakly 1-complete manifolds. *Publ. Res. Inst. Math. Sci.* **11** (1975/76), no. 1, 201-211. (Y.-T. Siu) **52** #8508 32L10
- Pseudoconvex domains on a Kähler manifold with positive holomorphic bisectional curvature. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 1, 191-214. (Y.-T. Siu) **56** #8905 32E05 (32F15)
- Supplement to: "Pseudoconvex domains on a Kähler manifold with positive holomorphic bisectional curvature" (Publ. Res. Inst. Math. Sci. **12** (1976/77), no. 1, 191-214). *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 2, 439-445. (Y.-T. Siu) **56** #8906 32E05 (32E10)
- (with Sasaki, Takeshi) Some applications of Sygne's formula to the theory of several complex variables. *Nagoya Math. J.* **67** (1977), 53-64. (H. Wu) **56** #667 32E10 (32F05, 53C55)
- A new class of domains of holomorphy. I. The concepts of boundary resolutions and L -manifolds. *Publ. Res. Inst. Math. Sci.* **13** (1977/78), no. 2, 497-521. (Y.-T. Siu) **58** #6339a 32D05 (32E05, 32F15)
- A new class of domains of holomorphy. II. Domains of holomorphy on a three dimensional Stein space with an isolated singularity. *Publ. Res. Inst. Math. Sci.* **13** (1977/78), no. 2, 523-571. (Y.-T. Siu) **58** #6339b 32D05 (32L05)
- Suzuki, Satoshi** ★Differentials of commutative rings. *Queen's Papers in Pure and Applied Mathematics*, No. 29. *Queen's University, Kingston, Ont., 1971.* vi + 162 pp. (Y. Nakai) **51** #12820 13B10 (14F10)
- A note on Malliavin's result. *J. Math. Kyoto Univ.* **13** (1973), 53-58. (Joseph Lipman) **47** #1804 13H99
- (with Nishimura, Jun-ichi) Higher differential algebras of discrete valuation rings. *Bull. Amer. Math. Soc.* **80** (1974), 865-867. (Y. Nakai) **51** #12821 13B10
- (with Nishimura, Jun-ichi) Higher differential algebras of discrete valuation rings. *J. Math. Kyoto Univ.* **15** (1975), 25-52. (H. D. Warner) **51** #462 12H05 (13H99)
- Suzuki, Shigemichi** See *Operational Research*, **49** #12059
- Suzuki, Shin'ichi** On a complexity of a surface in 3-sphere. *Osaka J. Math.* **11** (1974), 113-127. (J. S. Birman) **49** #11515 57A10 (55A99)
- On surfaces in 3-sphere: prime decompositions. *Hokkaido Math. J.* **4** (1975), no. 2, 179-195. (R. J. Daverman) **51** #14083 57C99
- On surfaces in 3-sphere: stable congruence. *Math. Japon.* **20** (1975), no. 1, 65-83. (R. J. Daverman) **52** #11919 57A10
- Knotting problems of 2-spheres in 4-sphere. *Math. Sem. Notes Kobe Univ.* **4** (1975), no. 3, 241-371. (A. Černavskii and M. Š. Farber) **56** #3848 57C45
- On homeomorphisms of a 3-dimensional handlebody. *Canad. J. Math.* **29** (1977), no. 1, 111-124. (Benny Evans) **55** #6409 57A05 (57A10)
- (with Nishida, Osamu) Remarks on branched covering spaces of the 3-sphere. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 3, 401-411. (Kenneth A. Perko) **57** #13910 55A10
- Suzuki, Shoichi** A constructive theory of the recognition system based on detectable invariants. *Electron. Commun. Japan* **55** (1972), no. 8, 92-99. (S. Gudmundsson) **48** #7695 68A45
- Suzuki, Shōsuke** Non-triviality of the even-dimensional integral cohomology groups. *Rep. Miyagi Tech. College No. 10* (1973), 131-132. (A. Babakhanian) **54** #28320310
- On cohomologically trivial modules in permutation representations. (Japanese. English summary) *Res. Rep. Miyagi Tech. College No. 11* (1974), 51-53. (K. Tachikawa) **53** #8220 20C20 (18A15)
- On Harrison cohomology. (Japanese. English summary) Addendum to: "Abelian extensions and a cohomology theory of Harrison" (Proc. Conf. Categorical Algebra Jolla, Calif., 1965), 375-403, Springer, New York, 1966), by S. U. Chase. *Res. Rep. Miyagi Tech. College No. 11* (1974), 55-62. (Manabu Harada) **56** #8661 18H05
- Involutions in $\bar{K}^0(\mathbb{Z}G)$. (Japanese. English summary) *Res. Rep. Miyagi Tech. College No. 13* (1976), 107-109. (Author's summary) **58** #787 16A54
- Suzuki, Takashi** Derivation of diffraction theory from rigorous dispersion theory. *J. Soc. Amer.* **61** (1971), 1029-1034. (R. F. Millar) **49** #1931 78.45
- On generation of sensitivity functions using minimal order model. *Mem. Defense Acad.* **12** (1972), 209-219. (J. H. Case) **49** #4609 93B35
- (with Andoh, Masanori) Design of a discrete adaptive observer using hyperstability theorem. *Proceedings of the Ninth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1976), pp. 201-203. Western Periodicals, North Hollywood, Calif., 1974.* (Authors' summary) **56** #18005 93C45 (93B05, 93C55)
- Improvement of response characteristics of adaptive observer. *Mem. Defense Acad.* **15** (1975), no. 1, 1-10. (Bojan Popović) **53** #15457 93B30
- Generalization of classical rigorous theory of dispersion and Helmholtz-Kirchhoff integral theorem. *Phys. Lett. A* **55** (1975/76), no. 4, 205-206. (Y. Hayashi) **52** #1678.45
- (with Dohimoto, Yasunari) A modified scheme for the model reference adaptive control with augmented error signal. *Internat. J. Control* **27** (1978), no. 2, 199-210. (Authors' summary) **57** #9209 93C40
- An abstract study of Galerkin's method for the evolution equation $u_t + A(t)u = 0$ of parabolic type with the Neumann boundary condition. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **25** (1978), no. 1, 25-46. (From the introduction) **58** #17612 35P30 (35K99, 65N30)
- Suzuki, Takeji** (with Kawashima, Takeshi) Reduction methods for tandem queueing systems. *J. Operations Res. Soc. Japan* **17** (1974), 133-144. (H. L. Seal) **50** #87560K25
- Suzuki, Takeru** Relative efficiency of the sequences of statistical tests. *Osaka J. Math.* **1** (1974), 37-48. (G. E. Noether) **49** #8197 62G10
- The singularity of infinite product measures. *Osaka J. Math.* **11** (1974), 653-660. (G. Roussas) **50** #14915 60G30
- Suzuki, Tatsuzo** (with Takahashi, Koiti; Sakasegawa, Hirotsugu) Some notes on randomized response techniques. (Japanese. English summary) *Proc. Inst. Statist. Math.* **24** (1976/77), no. 1, 1-13. (C. Hayashi) **55** #1558 62D05
- Suzuki, Teruo** (with Ando, Tsuyoshi) Normalizable operators. *J. Fac. Sci. Hokkaido Univ. Ser. I* **21** (1970/71), 209-220. (P. Rosenthal) **45** #5794 47B20
- (with Ando, Tsuyoshi; Sekiguchi, Takashi) Approximation by positive operators. *Math. Z.* **131** (1973), 273-282. (S. K. Berberian) **47** #9326 47A99 (41A65)
- Suzuki, Tetsutaro** (with Tsuboi, Michio) On the holomorphic mappings of complex space onto complex manifolds. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 221-226 (1974). (Gerd Fischer) **47** #3707 32C35
- (with Yoshinaga, Etsuo) The conductor number and weakly holomorphic functions on an analytic curve in \mathbb{C}^2 . *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13** no. 347-350, 140-146 (1975). (Thomas Bloom) **53** #866 32C40
- (with Takijima, Kunio) On the trivial extension of equivalence relations on analytic spaces. *Trans. Amer. Math. Soc.* **219** (1976), 369-377. (R. Michael Range) **54** #5832C25 (32C15)
- Suzuki, Toshiaki** On the Fourier transform for relative invariants in a prehomogeneous vector space. (Japanese) Distributions and linear differential equations (Proc. Fourth Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikenkyūsho Kōkyūroku No. 248* (1975), 205-211. (Hiroshi Saito) **57** #16224 10H10
- On the zeta-functions of quadratic forms with variable coefficients. (Japanese) Research on microlocal analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikenkyūsho Kōkyūroku No. 295* (1977), 1-11. (Hiroshi Saito) **58** #508 10C05
- Suzuki, Tosio** The limiting absorption principle and spectral theory for a certain non-selfadjoint operator and its application. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **1** (1973), 401-412. (J. V. Baxley) **51** #6455 47A40 (35P25)
- Suzuki, Tsugio** On deficiencies of an entire algebraic function. *Kōdai Math. Sem. Rep.* **1** (1972), 62-74. (J. Winkler) **47** #8861 30A70
- Suzuki, Tsuneo** (with Tameike, Seiichi; Yamada, Eiji) Some remarks on null-plane quantization. *Progr. Theoret. Phys.* **55** (1976), no. 3, 922-928. (K. T. Mahanthappa) **53** #7296 81.47
- Suzuki, Yasutaka** Double centralizers of torsionless modules. *Proc. Japan Acad.* **50** (1974), 612-615. (E. A. Rutter) **52** #507 16A64
- Suzuki, Yau** (with Koga, Yoshiaki) Three-port network reliability evaluation. *Electron. Commun. Japan* **60** (1977), no. 12, 87-93. (Authors' summary) **58** #33554 94A20
- Suzuki, Yoshindo** Haar measures of compact and metrizable dynamical systems. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 1077-1080. (Robert Azencott) **46** #2012 28A70 (54H20)
- (with Wilmers, George) Non-standard models for set theory. *The Proceedings of*

- Bertrand Russell Memorial Logic Conference (Uldum, 1971), pp. 278-314. Bertrand Russell Memorial Logic Conf., Leeds, 1973. (M. Boffa) **50** #4302 02K15 (02H20, 02K05)
- nuki, Yoshiya** (with Watanabe, Satoshi) Saturation of local approximation by some singular integrals. *Bull. Yamagata Univ. Natur. Sci.* **8** (1973), no. 3, 349-355. (J. R. Rice) **50** #847 41A40
- nuki, Yukata** (with Pak, Pyong Sik) Analysis and design of multivariable feedback control system in the frequency domain. (Japanese) *Systems and Control* **17** (1973), 403-411. **47** #10104 93C05
- nuki, Yukio** On empirical Bayes models. Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 372-385 (1976). (Johannes S. Maritz) **57** #4389 62C25
- rumura, Kotaro** (with Ono, Hiroshi) On a class of additive utility functions. *Metroecon.* **22** (1970), 287-290. (Authors' summary) **48** #3458 90A10
- International equalization of factor prices in Leontief model with variable coefficients. *Metroecon.* **23** (1971), 1-15. (A. L. Nagar) **48** #1665 90A15
- (with Blair, Douglas H.; Bordes, Georges; Kelly, Jerry Stewart) Impossibility theorems without collective rationality. *J. Econom. Theory* **13** (1976), no. 3, 361-379. (Maurice Salles) **55** #9828 90A05
- Houthakker's axiom in the theory of rational choice. *J. Econom. Theory* **14** (1977), no. 2, 284-290. (James W. Friedman) **55** #14093 90A05 (90A10)
- rumura, Nobuo** (with Ishii, Naohiro) On the estimation of the order of a Markov process from the random data of the time series. (Japanese. English summary) *Bull. Nagoya Inst. Tech.* **27** (1975), 445-453. (Shunsuke Ihara) **57** #7910 62M10
- (with Ishii, Naohiro; Iwata, Akira) Identification by autoregressive model using maximum likelihood method. (Japanese. English summary) *Bull. Nagoya Inst. Tech.* **29** (1977), 421-428. (From the summary) **58** #26437 93E10 (62M10)
- (with Ishii, Naohiro) Estimation of the order of autoregressive process. *Internat. J. Systems Sci.* **8** (1977), no. 8, 905-913. (Roch Roy) **58** #3252 62M10
- (with Ishii, Naohiro; Nishino, Shinichi) Invariants of the Markov process by the transformation of variables. *Internat. J. Systems Sci.* **8** (1977), no. 12, 1327-1336. (Zbigniew Nahorski) **57** #2727 93E99
- rb, N. D.** (with Brodi, S. M.) A queueing system with different levels of restrictions on the waiting time. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 2, 79-85 (Russian); translated as *Engrg. Cybernetics* **12** (1974), 55-61. (Andrew D. Barbour) **52** #6907 60K25
- (with Kuhta, T. K.) A system with a variable number of channels. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 2, 146-148. (H. T. Tašmanov) **54** #3879 60K25
- rbjuk, V. I.** A variant of the generalized theory of transversally isotropic plates. (Russian) *Prikl. Meh.* **10** (1974), no. 11, 87-92, 142. (V. Komkov) **56** #10295 73J35
- rbvová, Milada** (with Marunová, Eva) A modification of Habr's frequency method for solving a certain type of a three-dimensional transportation problem. (Czech. English summary) *Ekonom.-Mat. Obzor* **8** (1972), 310-322. (K. Zimmermann) **57** #5075 90C05
- (with Marunová, Eva) Generalization of the MODI-method for obtaining a certain type of optimal solution of a three-dimensional transportation problem. (Czech. English summary) *Ekonom.-Mat. Obzor* **9** (1973), 201-211. (Vladimir Strnad) **47** #10035 90B05
- ři, O. ř** (with Dzjadik, V. K.) The approximation of functions of Hölder classes on closed sets with sharp exterior angles. (Russian) *Metric questions of the theory of functions and mappings*, No. 2 (Russian), pp. 74-164. *Izdat. "Naukova Dumka", Kiev*, 1971. (R. P. Boas, Jr.) **45** #5372 30A82
- Approximation of analytic functions by de la Vallée-Poussin polynomials. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 848-853, 864. (V. P. Havin) **50** #4966 30A82
- řiko, N. Ju.** A variant of the theory of plasticity for materials without an expressed elastic segment on the diagram $\sigma_e - \epsilon_e$. (Russian) *Prikl. Meh.* **13** (1977), no. 9, 3-9, 139. (From the author's text) **57** #11247 73J00
- řlov, A. M.** Flow of gas following the Chapman-Jouguet detonation wave in the neighborhood of the discontinuity curve of the surface curvature of the wave. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1978**, no. 1, 120-126. (From the introduction) **58** #14301 76J35
- řnadze, K. N.** Certain questions of the moment theory of elasticity for the case of steady-state oscillations. (Georgian. Russian summary) *Al. Čulukidzis. Saĥelob. Khuhaisi. Saĥelmc. Ped. Inst. řrom.* **32** (1969), 299-306. (T. G. Gegelia) **47** #9933 73J35
- The solution of the fundamental plane boundary value problems of steady oscillations, taking into account the moment stresses. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **62** (1971), 285-288. (T. G. Gegelia) **47** #9934 73J35
- Generalized versions of the theorem of Ljapunov-Tauber and of Poisson's formula in the moment theory of elasticity. (Russian. Georgian summary) *Sakharth. SSR Ped. Inst. řrom. Fiz.-Math. Ser.* **2** (1975), 119-124. (From the text) **58** #14164 73J35
- The solution of fundamental plane boundary value problems of stable oscillations of an isotropic elastic body with allowance for the moment stresses for a half-plane. (Russian. Georgian summary) *Sakharth. SSR Ped. Inst. řrom. Fiz.-Math. Ser.* **2** (1975), 125-128. (From the text) **58** #14165 73J35
- řnes, Torgny** Arithmetic normality for projective embeddings of flag manifolds. *Math. Scand.* **33** (1973), 55-68. (Joel Roberts) **50** #7177 14M15 (14N10)
- Coherent cohomology on Schubert subschemes of flag schemes and applications. *Advances in Math.* **14** (1974), 369-453. (Joel Roberts) **54** #7490 14M15 (14N10)
- Some criteria for rigidity of Noetherian rings. *Math. Z.* **144** (1975), no. 2, 135-145. (Michael Schlesinger) **53** #13223 14D15 (14F15)
- řnidze, N. V.** A correction term for eigenfrequencies of a three-dimensional resonator with undistorted reflections. (Russian) *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **15** (1969), 161-175. (A. Nikodemusz) **46** #10308 78J35
- řarc, A. S.** The formulation of problems in statistical physics. (Russian) *Trudy Moskov. Mat. Obšč.* **22** (1970), 127-160. (K. Kumar) **50** #6358 81.46 (82.46)
- (with Lihachev, V. N.; Tjupkin, Ju. S.) An adiabatic theorem in quantum field theory. (Russian. English summary) *Teoret. Mat. Fiz.* **10** (1972), no. 1, 63-84. (Authors' summary) **57** #15073 81.47
- (with Fateev, V. A.) Dressing operators in quantum field theory. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 66-69. (M. E. Mayer) **54** #14632 81.47
- (with Fateev, V. A.) On asymptotic scattering theory. (Russian. English summary) *Teoret. Mat. Fiz.* **14** (1973), no. 2, 152-169. (Authors' summary) **57** #18610 81.47 (47A40)
- Adiabatic theorem in axiomatic quantum field theory. *Comm. Math. Phys.* **39** (1974), 33-48. (E. Zeidler) **50** #15729 81.47
- ★Математические основы квантовой теории поля. (Russian) [The mathematical foundations of quantum field theory] *Atomizdat, Moscow*, 1975. 368 pp. (Woodford W. Zachary) **57** #8661 81.46
- ★Элементы квантовой теории поля: бозонные взаимодействия. (Russian) [Elements of quantum field theory: boson interactions] *Atomizdat, Moscow*, 1975. 192 pp. (James D. Fabrey) **58** #8926 81.46
- (with Tjupkin, Ju. S.; Fateev, V. A.) The classical limit of the scattering matrix in quantum field theory. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 1, 70-73. (Yu. S. Sayasov) **51** #14809 81.47
- (with Belavin, A. A.; Poljakov, A. M.; Tjupkin, Ju. S.) Pseudoparticle solutions of the Yang-Mills equations. *Phys. Lett. B* **59** (1975), no. 1, 85-87. (P. P. Divakaran) **55** #7152 81.22
- (with Tjupkin, Ju. S.; Fateev, V. A.) Connection between particle-like solutions of classical equations and quantum particles. *Jadernaja Fiz.* **22** (1975), no. 3, 622-631 (Russian); translated as *Soviet J. Nuclear Phys.* **22** (1975), no. 3, 321-325. (Mayer Humi) **53** #9962 81.35
- The existence of solitons and generalized solitons in one-dimensional nonlinear equations. (Russian. English summary) *Teoret. Mat. Fiz.* **24** (1975), no. 3, 333-346. (Author's summary) **58** #6761 35Q99 (81.35)
- Axiomatic scattering theory. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* **20** (1975), 90-91. (Boris Pavlov) **58** #17900 47A40 (81.47)
- Topologically nontrivial solutions of classical equations and their role in quantum field theory. *Nonlocal, nonlinear and nonrenormalizable field theories (Proc. Fourth Internat. Sympos. Nonlocal Field Theories, Alushta, 1976) (Russian)*, pp. 224-240. *Ob'ed. Inst. Jadern. Issled., Dubna*, 1976. (R. A. Minlos) **56** #14375 81.58 (58G10)
- Magnetic monopoles in gauge theories. *Nuclear Phys. B* **112** (1976), no. 2, 358-364. (Anthony J. Bracken) **54** #4388 81.22
- (with Tjupkin, Ju. S.; Fateev, V. A.) Particle-like solutions of the equations of gauge field theories. (Russian. English summary) *Teoret. Mat. Fiz.* **26** (1976), no. 3, 397-402. (Authors' summary) **56** #7541 81.22
- On symmetric gauge fields. *Comm. Math. Phys.* **56** (1977), no. 1, 79-86. (Martine J. Perrin) **56** #15846 22E70 (55F10, 81.55)
- The partition function of degenerate quadratic functional and Ray-Singer invariants. *Lett. Math. Phys.* **2** (1977/78), no. 3, 247-252. (Dietrich A. Uhlenbrock) **58** #32690 82.58 (58G10)
- (with Romanov, V. N.; Tjupkin, Ju. S.) On spherically symmetric fields in gauge theories. *Nuclear Phys. B* **130** (1977), no. 2, 209-220. (L. O'Raifeartaigh) **58** #14736 81.57 (58G10)
- On regular solutions of Euclidean Yang-Mills equations. *Phys. Lett. B* **67** (1977), no. 2, 172-174. (Author's summary) **56** #2037 81.35
- See also *Transactions of the Moscow Mathematical Society*, **50** #9473
- Švarc, K. R. Methods for the solution of discrete optimization problems. (Russian) *Primenen. Mat. řkonom. No. 8* (1973), 37-55. (Tomas Gal) **49** #1779 65K05
- (with Abramov, L. M.) Problems of the classification of economic objects. (Russian) *Primenen. Mat. řkonom. No. 8* (1973), 62-65. (From the authors' introduction) **48** #1670 90A99
- Švarc, L. B. (with Lanin, M. I.) Concerning the optimization of serving priorities. *Automat. i Telemekh.* **1975**, no. 3, 57-64 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 3, part 1, 402-408. (Authors' summary) **56** #6925 60K25 (90C05)
- Realizability conditions for given stationary regimes in priority queueing systems. *Automat. i Telemekh.* **1975**, no. 10, 55-64 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 10, part 1, 1620-1628 (1976). (Takehisa Fujisawa) **53** #1779 60K25 (90C50)
- Švarc, Loran See Schwartz, Laurent
- Švarc, P. S. (with Mel'cer, M. M.; Rubštejn, B. A.) Computation of the topological entropy of a certain class of homeomorphisms. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 1, 3-5. (Zbigniew Nitecki) **51** #4320 58F20 (54H20)
- (with Mel'cer, M. M.; Rubštejn, B. A.) Invariant measures in the space of sequences from p symbols. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 394* (1970), 94-101 (1971). (László Zsidó) **46** #3747 28A65 (54H20)
- (with Mel'cer, M. M.; Rubštejn, B. A.) Calculation of the topological entropy of certain diffeomorphisms. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No. 394* (1970), 102-107 (1971). (László Zsidó) **46** #3748 28A65 (54H20)
- Švarc, Rudolf On the range of values of the sum of a continuous and a Darboux function. (Czech summary) *Časopis Pěst. Mat.* **98** (1973), 178-180, 213. (A. M. Bruckner) **48** #470 26A15
- (with Doktor, Alexander; Nečas, Jindřich) A remark on applications of the Laplace transform to abstract differential equations of parabolic type. (Czech. English and loose Russian summaries) *Časopis Pěst. Mat.* **101** (1976), no. 1, 7-19. (Authors' summary) **57** #16884 34G05 (35K99)
- Švarc, S. A characterization of the category of ordered sets. (Russian summary) *Scripta Fac. Sci. Natur. UJEP Brunensis—Math.* **3** (1973), 1-6. (M. Barr) **49** #9046 18B05
- Švarc, S. K. See Schwartz, S. C.
- Švarc, Štefan See Schwarz, Štefan
- Švarc, Svatoopluk Realizations of metrizable spaces by convergence structures. (Czech and Russian summaries) *Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně B-56* (1975), 95-99. (J. R. Isbell) **52** #6636 54A20
- Švarc, T. B. Generating sets of the semigroup of lattice endomorphisms of a finite Boolean algebra. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* **496** (1972), no. 1, 69-82. (S. Rudeanu) **46** #5202 06A40

- Švarc, V. A. (with Červoný, A. A.; Čobanjan, V. A.; Terehov, N. E.; Frolov, A. I.; Kozlovcev, A. P.) ★Методы определения и контроля надежности больших систем. (Russian) [Methods for the determination and control of the reliability of large-scale systems] *Izdat. "Énergija", Moscow*, 1976. 264 pp. (Publisher's description) **55** #7475 93A15 (90B15)
- Švarc, V. Ja. (with Gluskin, L. M.) On the theory of associatives. (Russian) *Mat. Zametki* **11** (1972), 545-554. (A. Astromoff) **46** #1678 08A05
- The reducibility of a ternary quasigroup to a group. (Russian) *Studies in the theory of quasigroups and loops* (Russian), pp. 186-192, 201. *Izdat. "Štintca", Kishinev*, 1973. (B. M. Schein (Šain)) **49** #10810 20N10
- The reducibility of an operative. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 11(138), 79-87. (V. Topenčarov) **49** #182 08A05
- Commutative bands. (Russian) *Vestnik Har'kov. Gos. Univ. No. 93 Mat. Vyp.* **38** (1973), 16-22, 1. (Author's summary) **51** #13099 20M10 (08A10)
- (with Gluskin, L. M.) Bands of operatives. (Russian) *Theory of semigroups and its applications*, No. 3 (Russian), pp. 6-15, 151. *Izdat. Saratov. Univ., Saratov*, 1974. (P. Goralcik) **56** #15818 20N15
- Švarc, Vladimir Aleksandrovič See Švarc, V. A.
- Švarcburg, A. B. Evolution of a modulated wave pulse in a medium with a saturated non-linearity. *Ž. Éksper. Teoret. Fiz.* **70** (1976), no. 5, 1640-1650 (Russian. English summary); translated as *Soviet Physics JETP* **43** (1976), no. 5, 855-860. (Author's summary) **56** #10448 78.35 (35Q99)
- Švarcman, Ja. S. (with Brodskii, V. M.) Invariant subspaces of contractions. (Russian) *Dokl. Akad. Nauk SSSR* **201** (1971), 519-522. (N. K. Nikol'skii) **45** #2515 47A15
- A functional model of a dissipative colligation. (Russian) *Mat. Issled.* **7** (1972), no. 2(24), 158-180, 290. (Chandler Davis) **51** #6456 47A45
- Invariant subspaces of a dissipative operator, and the divisors of its characteristic function. (Russian) *Mat. Issled.* **8** (1973), no. 1(27), 201-216, 242. (Chandler Davis) **51** #6457 47A45
- (with Brodskii, M. S.) Root lineals and characteristic functions of contraction operators. (Russian. English summary) *Investigations on linear operators and the theory of functions*, V. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **47** (1974), 155-158, 187-188, 193. (L. de Branges) **51** #3921 47A15
- (with Brodskii, V. M.) Invariant subspaces of a contraction, and factorization of the characteristic function. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp.* **22** (1975), 15-35, 160. (G. K. Kalisch) **55** #3824 47A15 (47A45)
- Švarcman, Ju. P. On the theory of the reception of seismic waves with interference. (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* **1973**, no. 1, 48-57. (J. S. Joel) **56** #18123 94A15
- An iteration algorithm for the solution of systems of linear equations with a rectangular matrix. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **18** (1978), no. 3, 754-756, 814. (Author's summary) **58** #19073 65F10
- Švarcman, L. G. An example of an elliptic problem without eigenvalues. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 2, 19-22. (Genowefa Majcher) **48** #9089 35J25
- Švarcman, M. I. Copying in commutation-operator schemata. *International Symposium on Theoretical Programming* (Novosibirsk, 1972), pp. 29-55. *Lecture Notes in Comput. Sci.*, Vol. 5, Springer, Berlin, 1974. (E. Ikaunakis) **56** #13756 68A05
- Švarcman, O. V. Discrete groups with simply connected nonsingular quotient space. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 2(170), 236. (J. S. Joel) **52** #11131 32M10
- Simple connectedness of a factor space of the modular Hilbert group. (Russian) *Funkcional. Anal. i Priložen.* **8** (1974), no. 2, 99-100. (Don Zagier) **52** #13857 14J25 (14D20, 32N05)
- See also Raghunathan, M. S., **58** #22394b
- Švarcman, P. A. (with Nudel'man, A. A.) The existence of solutions of certain operator inequalities. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 3, 562-571, 645. (Authors' summary) **57** #10466 47A60 (93C25)
- The convergence of an iteration series. (Russian) *Vestnik Jaroslav. Univ. Vyp.* **12** (1975), 155-159. (Roman Ger) **57** #550 26A18 (40A05)
- Švarcman, Š. M. (with Bagrov, V. G.; Gitman, D. M.; Gavrilov, S. P.) The creation of boson pairs from a vacuum. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 3, 71-74. (Authors' summary) **58** #25573 81.47
- (with Gitman, D. M.; Šahmatov, V. M.) The completeness and orthogonality on the zero plane of a certain class of solutions of relativistic wave equations. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1975**, no. 8, 43-49. (Authors' summary) **58** #25525 81.35
- Svårdson, B. See Conference: Optimization Techniques, **48** #5759
- Svaricevskaja, N. A. A Cauchy-Peano existence theorem for ordinary differential equations with constant lag. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1970**, no. 3, 36-40. (G. B. Gustafson) **45** #5516 34K05
- (with Jagubov, M. A.) A certain problem of perturbed differential equations with constant lag. (Russian. Azerbaijani summary) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1971**, no. 2, 35-39. (C. Corduneanu) **45** #5517 34K05
- (with Ahmedov, K. T.; Jagubov, M. A.) An approximate solution of a two-point boundary value problem with a parameter by the method of averaging functional corrections. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **29** (1973), no. 8, 3-7. (R. S. Levitin) **49** #700 34A45
- (with Jagubov, M. A.) Approximate solution of a nonlinear integral equation with a parameter by means of a combination of quasilinearization with the averaging of functional corrections. (Russian. Azerbaijani and English summaries) *Akad. Nauk Azerbaidžan. SSR Dokl.* **31** (1975), no. 4, 3-7. (Zbl 313 #45011) **57** #11135 65R05 (45L05)
- Approximate solution of nonlinear integral equations by combining the Newton-Kantorovič method and averaging the functional corrections method. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap.* **1977**, no. 3, 34-41. (N. A. Sidorov) **58** #25046 65R05
- Švartia, S. M. A certain algorithm for the planning of minimal time transfers. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 2, 321-329, 538. (K. Zimmermann) **51** #12306 90B05
- (with Žuravlev, Ju. I.; Mirošnik, S. N.) A certain approach to optimization in class of parametric recognition algorithms. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* (1976), no. 1, 209-218, 278. (Josef Kittler) **54** #1742 68A45
- Švec, Alois On certain groups of holomorphic maps. *Acta Univ. Carolinae—Math. et Phys.* **13** (1972), no. 2, 3-27. (Koichi Ogue) **57** #12919 32M05
- On real submanifolds of C^2 and C^3 . *Comment. Math. Univ. Carolinae* **13** (1972), 403-407. (B. Smyth) **47** #4189 53C55
- On the sixtieth birthday of Karel Havlíček. (Czech) *Časopis Pěst. Mat.* **98** (1972), 327-331. (Editors) **47** #8228 01A70
- On transitive submanifolds of C^2 and C^3 . *Czechoslovak Math. J.* **23(98)** (1973), 306-338. (H. H. Johnson) **47** #9665 58A15 (35N99, 58H05)
- Surfaces in hermitian 3-spaces. *Czechoslovak Math. J.* **23(98)** (1973), 339-341. (F. Pohl) **47** #4190 53C55
- On a group of holomorphic transformations in C^2 . *Czechoslovak Math. J.* **24** (1974), 97-106. (Shoshichi Kobayashi) **50** #647 32M05 (53C40)
- On a partial product structure. *Czechoslovak Math. J.* **24(99)** (1974), 107-113. (Vamannu) **50** #5676 53C10
- On mappings of a manifold into a Lie group. *Czechoslovak Math. J.* **24(99)** (1974), 143-149. (P. Molino) **50** #5675 53C05
- On infinitesimal isometries of a hypersurface. *Czechoslovak Math. J.* **24(99)** (1974), 150-163. (R. Miron) **49** #11435 53C40 (58H05)
- On orthogonal conjugate nets in E^4 . *Comment. Math. Univ. Carolinae* **16** (1975), 183-187. (Lieven Vanhecke) **51** #1624 (EA 51) 53A05
- On minimal surfaces in E^5 . *Comment. Math. Univ. Carolinae* **16** (1975), 353-363. (H. W. Guggenheimer) **51** #6609 53A10
- On a global version of the Gauss-Bonnet theorem. *Czechoslovak Math. J.* **25(100)** (1975), no. 4, 638-644. (C.-C. Hsiung) **53** #9087 53C40
- Several new characterizations of the sphere. *Czechoslovak Math. J.* **25(100)** (1975), no. 4, 645-652. (F. Šemin) **52** #9130 53C45
- On a partial complex structure. *Czechoslovak Math. J.* **25(100)** (1975), no. 4, 653-660. (Bang-ye Chen) **57** #14081 58H05 (32C05, 53C55)
- On 3-dimensional Lie algebras of vector fields. *Czechoslovak Math. J.* **25(100)** (1975), no. 4, 661-672. (H. H. Johnson) **53** #6608 58A30
- Two applications of elliptic systems to the theory of surfaces. (Czech and Russian summaries) *Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně B-56* (1975), 5-10. (R. Miron) **52** #9131 53C45
- A remark on the differential equations on the sphere. (Czech and loose Russian summaries) *Časopis Pěst. Mat.* **101** (1976), no. 3, 278-282. (George Stamou) **57** #13131 53A05
- Harmonic mappings of surfaces. (Czech and loose Russian summaries) *Časopis Pěst. Mat.* **101** (1976), no. 3, 283-292. (Samuel I. Goldberg) **58** #7489 53C40 (32H99, 58E99)
- On ovaloids in E^4 . (Loose Russian summary) *Časopis Pěst. Mat.* **101** (1976), no. 3, 389-392. (George Stamou) **57** #17573 53C45
- On the $(H, K)_p$ -theorems. *Comment. Math. Univ. Carolinae* **17** (1976), no. 1, 1-10. (O. Giering) **53** #9096 53C45
- On the existence of parallel normal vector fields of surfaces in E^4 . *Czechoslovak Math. J.* **26(101)** (1976), no. 2, 297-303. (Aristide Sanini) **53** #9047 53A05
- On infinitesimal isometries of surfaces in E^4 . *Czechoslovak Math. J.* **26(101)** (1976), no. 4, 628-631. (Walter O. Vogel) **55** #4054 53C40
- Several characterizations of the sphere. *Period. Math. Hungar.* **7** (1976), no. 3, 313-317. (H. R. Müller) **56** #6576 53C45
- On the non-existence of certain ovaloids. (Russian and Czech summaries) *Acta Univ. Carolinae—Math. et Phys.* **18** (1977), no. 1, 47-49. (V. T. Fomenko) **57** #7473 53C45
- Finite Killing vector fields. *Comment. Math. Univ. Carolinae* **18** (1977), no. 1, 65-69. (C.-C. Hsiung) **57** #4047 53C20
- On a class of tangential Cauchy-Riemann maps. *Comment. Math. Univ. Carolinae* **18** (1977), no. 2, 401-408. (A. Aepli) **56** #15973 32C05 (53C15)
- On the rigidity of certain surfaces in E^5 . *Czechoslovak Math. J.* **27(102)** (1977), 2, 250-257. (Z. Nádeník) **57** #10658 53C40
- Contributions to the global differential geometry of surfaces. (Russian summary) *Rozprawy Československé Akad. Věd Řada Mat. Přírod. Věd* **87** (1977), no. 1, 94 pp. (Burago) **57** #7464 53C40
- Determination of a surface by its mean curvature. (Czech and loose Russian summaries) *Časopis Pěst. Mat.* **103** (1978), no. 2, 175-180, 203. (David Blair) **58** #18173 53A10 (53A05)
- Cubic forms on Riemannian surfaces. (Czech and Russian summaries) *Časopis Pěst. Mat.* **103** (1978), no. 2, 181-185, 203. (David Blair) **58** #18314 53C99
- Švec, I. T. See Problems in electronics and computer science, **56** #1767
- Švec, Marko Some remarks on the asymptotic equivalence. *Proceedings of Equadiff (Third Czechoslovak Conf. Differential Equations and their Applications, Brno, 1972)*, 155-160. *Folia Fac. Sci. Natur. Univ. Purkynianae Brunensis, Ser. Monograph., Tomu Purkyně Univ., Brno*, 1973. (N. Onuchic) **49** #10977 34D05
- Asymptotic relationship between solutions of two systems of differential equations. *Czechoslovak Math. J.* **24(99)** (1974), 44-58. (J. Kato) **50** #700 34D05
- Some properties of functional differential equations. (Italian summary) *Collectanea Mathematica* **28** (1977), no. 1, 1-10. (Giovanni Sansone) **57** #10658 34D05
- Švec, R. M. (with Pidstrigač, Ja. S.; Pavlina, V. S.) A quasi-static problem of thermomdiffusion for deformable solid bodies. (Russian) *Prikladna. Meh.* **7** (1971), no. 11-16. (C. I. Bors) **45** #8104 73.35 (80.35)
- (with Fijačok, V. M.) The fundamental equations of thermoelastic orthotropic shells, with allowance for transversal shear and normal strains. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 6, 540-545, 576. (Komkov) **53** #15069 73.49
- (with Dasjuk, Ja. I.) Variational theorems on the thermomdiffusion of deformable solid bodies. (Russian) *Mat. Fiz. Vyp.* **22** (1977), 102-108, 126. (M. Sokolow) **57** #8333 73.49
- Svečinskii, V. B. Random search in probabilistic iterative algorithms. (Russian. English summary) *Mat. Fiz. Vyp.* **22** (1977), 102-108, 126. (M. Sokolow) **57** #8333 73.49

- summary) *Avtomat. i Telemekh.* **1971**, no. 1, 85-89. (Author's summary) **51** #7621 90C15
- (with Mamaev, D. D.) Synthesis of an informational system. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 6, 120-126 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 6, 985-991. (L. L. Campbell) **50** #12403 93E10 (90C50)
- ekki, B. L. (with Rozenblat, M. Š.) Displacement error of digital spectral analyzers. (Russian) *Avtometrija* **1974**, no. 2, 49-54, 114. (Authors' summary) **50** #9408 94A05
- (with Rozenblat, M. Š.) Increasing the efficiency of processors of the fast Fourier transform. (Russian) *Otbor i Peredača Informacii* No. 42 (1974), 25-34, 105. (Authors' summary) **51** #14537 65D30 (68A20)
- (with Rozenblat, M. Š.) A fast-Fourier-transform algorithm. *Avtomat. i Telemekh.* **1975**, no. 4, 138-147 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 4, part 2, 648-656. (Authors' summary) **56** #7307 68A10 (68A20, 65T05)
- ekki, M. V. The functionally invariant solutions of a second order quasilinear partial differential equation. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 8, 1534-1536, 1544. (P. Günther) **57** #10207 35G20 (35C05)
- ecov, K. Ja. A generalization of the probability density formula for a sum of squares of random variables. (Russian) *Radiotekhn. i Elektron.* **15** (1970), 2390-2392. **48** #9919 62E15
- ecová, Hana Auflösung linearer Gleichungssysteme mit Vollständiger pivotsuche und spezieller Behandlung bei numerischer Singularität (Prozedure liglei). *Numerische Prozeduren aus Nachlass und Lehre von Heinz Rutishauser*, pp. 19-37. *Internat. Ser. Numer. Math.*, Vol. 33, Birkhäuser, Basel, 1977. (See Zbl **358** #65021; MR **58** #8132) 65F10
- See also *Numerische Prozeduren aus Nachlass und Lehre von Heinz Rutishauser*, **58** #8132
- ecova, N. A. A nonisotropic generalization of De Sitter space. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1974**, no. 3, 149-151. (R. I. Pimenov) **50** #9297 83J53
- ed, Marta Units in pure cubic number fields. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **13** (1970), 141-149 (1971). (R. Güting) **47** #1754 10F20 (12A45)
- A generalisation of the binomial coefficients. *Combinatorial mathematics, V (Proc. Fifth Austral. Conf., Roy. Melbourne Inst. Tech., Melbourne, 1976)*, pp. 209-213. *Lecture Notes in Math.*, Vol. 622, Springer, Berlin, 1977. (R. A. Razen) **57** #2924 05A10
- ed, T. I. (with Kondratenja, S. G.; Proliko, E. G.) The solutions of differential equations with singular initial conditions. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 1396-1403. (Z. Nehari) **46** #7609 34A20
- ed, V. I. (with Gorskiĭ, V. G.) Application of the simplex method of optimum search to the solution of integer programming problems. (Russian) *Voprosy Kibernet. (Tashtent)* No. 41 (1970), 71-75. (C. Berghaller) **49** #6918 90C10
- edenko, L. A. (with Emel'janov, V. F.) A problem of P. L. Ul'janov. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 3(166), 99-102. (H. J. Landau) **54** #10973 42A64
- edenko, S. V. Interpolation properties of certain classes of analytic and harmonic functions. (Russian) *Applications of functional analysis in approximation theory*, No. 1 (Russian), pp. 156-163. Kalinin. Gos. Univ., Kalinin, 1973. (L. I. Hedberg) **50** #613 30A80
- An interpolation problem in the class of H^p functions. (Russian) *Application of functional analysis in approximation theory*, No. 2 (Russian), pp. 137-144. Kalinin. Gos. Univ., Kalinin, 1974. (L. I. Hedberg) **53** #5878 30A78
- Functional interpolation of the sequence spaces l^p in the Hardy class H^2 . (Russian) *Application of functional analysis in approximation theory*, No. 2 (Russian), pp. 145-150. Kalinin. Gos. Univ., Kalinin, 1974. (L. I. Hedberg) **53** #5879 30A78
- Interpolation in certain Hilbert spaces of analytic functions. (Russian) *Mat. Zametki* **15** (1974), 101-112. (V. P. Havin) **50** #4963 30A80
- (with Turku, H.) Interpolation in the class H^2 in the half-plane. (Russian) *Dokl. Akad. Nauk SSSR* **225** (1975), no. 4, 771-774. (V. Kabaĭla) **53** #823 30A80
- Functional interpolation in the Hardy classes H^p . (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 4(155), 108-111. (V. Kabaĭla) **52** #11059 30A80
- (with Turku, H.) Interpolation of l^p sequences by H^2 functions along a sequence of points in a half-plane. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **12**(32) (1977), no. 2, 271-282. (George L. Csordas) **57** #12858 30A76
- Interpolation of sequences from l^p by functions from H^p . (Russian) *Mat. Zametki* **21** (1977), no. 4, 503-508. (V. Kabaĭla) **56** #625 30A80 (30A78)
- edov, I. A. (with Kuz'minov, V. I.) Homologies induced by cohomology functors. (Russian) *Dokl. Akad. Nauk SSSR* **200** (1971), 764-766. (G. Chogoshvili) **46** #884 55B35
- (with Kuz'minov, V. I.) The homology of the limit of a spectrum of bicomplexa. (Russian) *Dokl. Akad. Nauk SSSR* **203** (1972), 756-757. (G. Chogoshvili) **46** #882 55B20
- (with Kuz'minov, V. I.) Quasiexact sequences of complexes, and hyperhomology. (Russian) *Sibirsk. Mat. Ž.* **14** (1973), 791-805, 910. (H. Inassaridze) **49** #7335 18G99 (55J05)
- (with Kuz'minov, V. I.) Spectra of coverings in the cohomology and homology theories of topological spaces. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 1083-1102, 1181. (I. Pop) **50** #8501 55B20
- (with Kuz'minov, V. I.) The hyperhomology of the limit of a direct spectrum of complexes, and homology groups of topological spaces. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), 62-74, 196. (I. Pop) **51** #6781 55B05
- (with Kuz'minov, V. I.) The Bredon cohomological dimension of hereditarily paracompact spaces. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 1, 24-27. (I. Pop) **57** #4152 55B30
- On P. S. Aleksandrov's obstruction theorem. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 5(191), 185-190. (Włodzimierz Holsztyński) **58** #24247 55C15 (57B99)
- See also *Proceedings: International Symposium on Topology and Its Applications*, **48** #7188
- edova, K. V. (with Kindalev, B. S.; Luk'janova, R. G.; Fadeev, S. I.) On the calculation of the equilibrium of elastic constructions that are used in the electromechanics of magnetic tapes. (Russian) *Vychisl. Sistemy Vyp.* **66** (1975), 33-60, 139-140. **56** #14010 73.65
- Šveidel', A. P. Certain properties of point-set mappings. (Russian) *Optimizacija* No. 4(21) (1971), 142-152. (E. Hertel) **49** #1215 47B99 (52A05)
- Supremal generation of subsets of the space of continuous functions. (Russian) *Application of functional analysis in approximation theory*, No. 4 (Russian), pp. 132-141. Kalinin. Gos. Univ., Kalinin, 1974. (Editors) **58** #30103 46E15 (49A99, 90C99)
- A certain generalization of the decomposition theorem. (Russian) *Application of functional analysis in approximation theory*, No. 2 (Russian), pp. 151-155. Kalinin. Gos. Univ., Kalinin, 1974. (T. Figiel) **51** #11057 46A40
- Supremal generation of monotone functions and upper semi-lattices of $P(H)$ when H is a subspace of the space of continuous functions. (Russian) *Application of functional analysis in approximation theory* (Russian), pp. 149-152, 156. Kalinin. Gos. Univ., Kalinin, 1977. (Author's summary) **58** #30091 46E05
- Šveikin, P. I. (with Ostianu, N. M.; Ryžkov, V. V.) Essay on the scientific investigations of German Fedorovič Laptev. (Russian. English summary) Collection of articles dedicated to the memory of German Fedorovič Laptev. *Trudy Geometr. Sem.* **4** (1973), 7-70. (errata insert) (A. Švec) **51** #12467 01A70 (53-03)
- (with Ostianu, N. M.; Ryžkov, V. V.) German Fedorovič Laptev: obituary. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 2(170), 215-220. (1 plate) (Editors) **52** #5321 01A70
- Application of normal objects to the geometry of a surface in a projective space. (Russian. English summary) *Trudy Geometr. Sem.* **6** (1974), 157-170. (E. Siwek) **53** #6445 53A20
- Šveikin, I. A. Riemannian spaces with a pole. (Russian) *Trudy Rižsk. Inst. Inž. Graždan. Aviaiv Vyp.* 195 Kraevye Zadači Differentsial'nyh Uravnenii (1972), 68-79. **56** #13129 53C20
- Švejda, Jaromír A certain generalization of Volterra integral equations. (Czech. Russian, French, English and German summaries) *Sb. Práci Vys. Školy Doprov. v Žilíně a Výzkum. Ústav. Doprov. v Praze* **34** (1970), 21-45. (S. Burjšek) **45** #4084 45D05
- Round-off errors in numerical computations. (Czech. Russian, French, English and German summaries) *Sb. Práci Vys. Školy Doprov. v Žilíně a Výzkum. Ústav. Doprov. v Praze* **34** (1970), 47-74. (S. Burjšek) **45** #4698 65G05
- Sveklo, L. V. Some transformations of continued fractions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 3(166), 56-64. (S. V. Kotov) **54** #13364 40A15
- Švelasvili, A. E. See *Studies of equations of mathematical physics*, **50** #4197
- Švelidze, N. P. Integrability theorems for functions that are representable by certain function series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **84** (1976), no. 2, 293-296. (R. P. Boas, Jr.) **55** #967 42A32
- Švelidze, N. V. Imbedding theorems in certain function spaces. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **83** (1976), no. 2, 289-292. (L. Cattabriga) **57** #13466 46E35
- Svenonius, Lars Translation and reduction. Proceedings of the First Symposium on Exact Philosophy (McGill Univ., Montreal, Que., 1971). *J. Philos. Logic* **1** (1972), no. 3-4, 297-316. (J. A. Makowsky) **55** #94 02G10 (02A05)
- On the first-order logic of terms. *J. Symbolic Logic* **38** (1973), 177-188. (M. Makkai) **51** #5261 02B10 (02D99)
- Svenson, A. N. See *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)
- Svenson, Erik Zur Theorie der singulären Integralgleichungen. *Math. Nachr.* **60** (1974), 63-70. (S. Prössdorf) **51** #3821 45E05
- Svensson, Ingvar Estimates for the Fourier transform of the characteristic function of a convex set. *Ark. Mat.* **9**, 11-22 (1971). (M. de Guzmán) **48** #6813 42A92
- Svensson, Lars E. O. The stock market, the objective function of the firm, and intertemporal Pareto efficiency—the certainty case. *Bell J. Econom.* **8** (1977), no. 1, 207-216. (M. B. Suryanarayana) **57** #11683 90A15
- Svensson, Per (with Ström, Torsten) On the determination of an orthogonal transformation. *J. Comput. Appl. Math.* **2** (1976), no. 1, 7-11. (A. S. Householder) **53** #14895 65F99
- Sventickaja, I. N. (with Savel'eva, T. A.; Šapiro, Ju. A.) A certain method of solving a boundary value problem for potential theory. (Russian. English summary) *Vestnik Leningrad. Univ. No. 1 Mat. Meh. Astronom. Vyp.* **1** (1974), 161-162, 168. (F. Barański) **53** #8456 31B20
- Sverdan, M. L. (with Sljusarčuk, V. E.) The stability of systems of difference equations. (Russian) *Analytic and qualitative methods of the theory of differential equations* (Russian), pp. 224-232. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1972. (I. M. Sheffer) **51** #8663 39A10
- (with Car'kov, E. F.) Linear difference equations with random coefficients. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 5(120), 80-83. (B. Choczewski) **46** #5868 39A10 (60H99)
- Sverdlík, M. B. (with Meleškevič, A. N.) Synthesis of optimum pulsed sequences having the property of "no more than one coincidence". *Radiotekhn. i Elektron.* **19** (1974), 721-729 (Russian); translated as *Radio Engrg. Electron. Phys.* **19** (1974), 46-54. (J.-M. Goethals) **51** #5154 94A05
- Sverdlov, A. G. (with Nosova, E. G.; Feinberg, V. Z.) Algorithms for partitioning plane figures in systems for computer design of integrated circuits. (Russian. English summary) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 5, 16-23, 141. (Authors' summary) **58** #26575 94A20 (68A45)
- Sverdlov, L. Z. (with Bessonov, A. A.) The reliability of systems with discrete-time development of resources and with regulated control of efficiency. (Russian) *Avtomat. i Vychisl. Tehn.* **1969**, no. 5, 42-48. (Authors' summary) **45** #9655 90B25
- Sverdrup, Erling Tests without power. *Scand. J. Statist.* **2** (1975), no. 3, 158-160. (D. V. Lindley) **52** #6967a (E 57 #14229) 62F05
- Significance testing in multiple statistical inference. *Scand. J. Statist.* **3** (1976), no. 2, 73-78. (Lubomír Kubáček) **53** #14759 62F05
- A rejoinder to: "Tests without power" (Scand. J. Statist. **2** (1975), 161-165) by P. Martin-Löf. *Scand. J. Statist.* **4** (1977), no. 3, 136-138. (Glen Meeden) **57** #14229 62F05
- See also *Martin-Löf, Per*, **52** #6967b (E 57 #14229)
- Sveshnikov, A. A. See *Svešnikov, A. A.*
- Sveshnikov, A. G. See *Svešnikov, A. G.*
- Svešnikov, A. A. (with Volodin, B. G.; Ganin, M. P.; Diner, I. Ja.; Komarov, L. B.;

- Starobin, K. B.) ★Сборник задач по теории вероятностей, математической статистике и теории случайных функций. (Russian) [A collection of problems on probability theory, mathematical statistics and the theory of random functions] Second edition, augmented. Edited by A. A. Svešnikov. Izdat. "Nauka", Moscow, 1970. 656 pp. (Editors) 50 #5871 60-01 (62-01)
- (with Kruglikov, V. K.) Boundary conditions in many-dimensional problems of attainment of bounds. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1971, no. 1, 71-75 (Russian); translated as *Engrg. Cybernetics* 9 (1971), no. 1, 60-63. (T. V. Avadhani) 47 #4326 60G15
- (with Beljaev, Ju. K.; Nosko, V. P.) Probabilistic properties of upward crossings of a two-dimensional random field. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist.* No. 6 (1972), 24-31. (A. I. Ponomarenko) 46 #8299 60G99
- (with Habalov, V. D.) Estimation of the average number of overshoots of a two-dimensional random field. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 3, 94-99. (Authors' introduction) 48 #12763 62M99
- (with Rivkin, S. S.) ★Вероятностные методы в прикладной теории гироскопов. (Russian) [Probabilistic methods in the applied theory of gyroscopes] Izdat. "Nauka", Moscow, 1974. 536 pp. (V. G. Kolomic) 55 #13915 70.60 (70.34)
- (with Diner, I. Ja.; Ganin, M. P.; Komarov, L. B.; Starobin, K. B.; Volodin, B. G.) ★Rachunek prawdopodobieństwa w zadaniach i problemach. (Polish) [Probability theory in problems and exercises] Translated from the Russian by Lech T. Kubik. Państwowe Wydawnictwo Naukowe, Warsaw, 1975. 531 pp. (Editors) 56 #6768 60 01
- See also **Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics**, 47 #4666 (EA 47); **Proceedings: International Conference on Nonlinear Oscillations**, 47 #8970 and **Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics**, 48 #8022
- Svešnikov, A. G. (with Tihonov, A. N.) ★Теория функций комплексной переменной. (Russian) [Theory of functions of a complex variable] A course in higher mathematics and mathematical physics, No. 4. Izdat. "Nauka", Moscow, 1967. 304 pp. (Editors) 50 #2452 30-01
- Diffraction on a celestial body in a medium with variable coefficients (the plane case). (Russian) *Computing methods and programming, XIII (Russian)*, pp. 145-151. Izdat. Moskov. Univ., Moscow, 1969. (V. A. Andrianov (RŽFiz 1969 #12 Z149)) 45 #9591 78.34
- (with Tihonov, A. N.) ★Теория функций комплексной переменной. (Russian) [Theory of functions of a complex variable] Second, unrevised edition. A course in higher mathematics and mathematical physics, No. 4. Izdat. "Nauka", Moscow, 1970. 304 pp. (Editors) 50 #2453 30-01
- (with Dmitriev, V. I.; Il'inskiĭ, A. S.) Development of methods of solution of the boundary value problems of electrodynamics at the computing center of the university. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 25 (1970), no. 4, 71-90. (J. R. Schulenberg) 45 #6272 78.35 (78.65)
- (with Tihonov, A. N.) ★The theory of functions of a complex variable. Translated from the Russian by George Yankovsky. Mir Publishers, Moscow, 1971. 311 pp. (Editors) 50 #2454 30-01
- (with Il'inskiĭ, A. S.) The direct method for problems of diffraction on a local nonhomogeneous body. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 960-968. (Authors' summary) 46 #3001 78.65
- (with Tihonov, A. N.) ★The theory of functions of a complex variable. Translated from the Russian by George Yankovsky. Mir Publishers, Moscow, 1973. 311 pp. (Editors) 50 #2455 30-01
- (with Tihonov, A. N.; Samarskiĭ, A. A.; Berezin, I. S.; Vasil'ev, F. P.; Uspenskii, A. B.; Sretenskii, L. N.) In memoriam Boris Mihailovič Budak. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 28 (1973), no. 4, 106-112. (Editors) 48 #1865 01A70
- (with Tihonov, A. N.) ★Теория функций комплексной переменной. (Russian) [Theory of functions of a complex variable] Third, augmented edition. A course in higher mathematics and mathematical physics, No. 4. Izdat. "Nauka", Moscow, 1974. 319 pp. (Editors) 50 #4910 30-01
- (with Martynova, T. A.) The correct formulation of synthesis problems, and the solution of a certain problem of waveguide synthesis. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 29 (1974), no. 6, 689-698. (Authors' summary) 53 #7228 78.35
- (with Eremin, Ju. A.) A certain numerical algorithm for solving problems of diffraction by a locally inhomogeneous body. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 499-504, 535. (J. E. Rosenthal) 50 #6329 78.65
- (with Bogoljubov, A. N.) Application of an iteration method to the investigation of plane waveguides with inhomogeneous filling. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 947-954, 1076. (Authors' summary) 50 #1645 78.65
- Numerical methods in diffraction theory. (Russian) *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 2, pp. 437-442. *Canad. Math. Congress, Montreal, Que.*, 1975. (V. M. Babič) 54 #11993 78.65 (65P05)
- (with Eremin, Ju. A.) The projection method in exterior diffraction problems. (Russian) *Dokl. Akad. Nauk SSSR* 221 (1975), no. 1, 38-41. (N. D. Kazarinoff) 52 #2415 78.35
- (with Šatov, A. K.) A numerical method for the solution of integral equations of the first kind in problems of diffraction by solids of revolution. (Russian) *Vyčisl. Metody i Programirovanie* No. 24 (1975), 68-80. (See RŽMat 1976 #5 B443) 65R05
- (with Gaponenko, A. L.; Eremin, Ju. A.) Numerical solution of the problems of scalar diffraction by a locally inhomogeneous body. (Russian) *Vyčisl. Metody i Programirovanie* Vyp. 24 (1975), 80-91. 58 #25417 78.65
- (with Bogoljubov, A. N.) An application of the iteration method to the computation of a plane waveguide with an inhomogeneous filling. (Russian) *Vyčisl. Metody i Programirovanie* Vyp. 24 (1975), 262-279. (Kazimierz Sobczyk) 58 #8830 78.65
- (with Bicadze, A. V.; Il'in, V. A.; Samarskiĭ, A. A.) Andrei Nikolaevič Tihonov (on the occasion of his seventieth birthday). (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 10, 1731-1735. (Editors) 54 #9929 01A70
- (with Eremin, Ju. A.) Methods for the solution of problems of electromagnetic diffraction by an axially symmetric body with account taken of the geometry of the scatterer. (Russian) *Dokl. Akad. Nauk SSSR* 228 (1976), no. 6, 1290-1293. (L. I. Chambers) 53 #15108 78.35
- (with Bicadze, A. V.; Il'in, V. A.; Samarskiĭ, A. A.) Andrei Nikolaevič Tihonov (on the occasion of his seventieth birthday). (Russian) *Uspehi Mat. Nauk* 31 (1976), 6(192), 3-12. (1 plate) (Editors) 57 #9429 01A70
- (with Dmitriev, V. I.; Il'inskiĭ, A. S.) Development of mathematical methods for study of direct and inverse problems of electrodynamics. (Russian) *Uspehi Mat. Nauk* 31 (1976), no. 6(192), 123-141. (Authors' summary) 58 #19855 78.65
- (with Eremin, Ju. A.) The study of scalar diffraction by a locally inhomogeneous body by means of the projection method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* (1976), no. 3, 800-804, 823. (V. M. Babič) 55 #7122 78.41
- The incomplete Galerkin method. (Russian) *Dokl. Akad. Nauk SSSR* 236 (1977), no. 5, 1076-1079. (Ju. K. Dem'janovič) 57 #8080 65N30
- See also **Tihonov, A. N.; et al.**, 51 #12469
- Svešnikov, V. I. (with Astahov, Ju. N.; Venikov, V. A.; Gordievskii, I. G.; Karasev, D.; Kiselev, Ju. N.; Fedoseev, A. A.) Certain questions of the optimization of laser systems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1972), 1145-1158, 1363. (Alexander M. Rubinov) 47 #8115 90C30
- Svešnikov, V. M. (with Il'in, V. P.) Difference methods on a sequence of networks. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* 2 (1971), no. 1, 43-54. (C. Ilioi) 48 #765N10
- Svešnikova, G. L. Congruences of second order curves with two degenerate focal surfaces. (Russian) *Trudy Kaliningrad. Gos. Univ. Differentsial'naja Geometr. Mnogoobraz. Figur* No. 1 (1970), 61-71. (From Marcus) 46 #6182 53A20
- Congruences of second order curves with three degenerate focal surfaces. (Russian) *Trudy Kaliningrad. Gos. Univ. Differentsial'naja Geometr. Mnogoobraz. Figur* No. 1 (1971), 75-82. (From Marcus) 46 #6183 53A20
- Congruences of second order curves with one degenerate focal surface. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp. 3* (1971), 113-125. (M. Decuyper) 57 #1301 53A20
- A class of congruences [2, 0]. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp. 5* (1974), 131-140. (A. Švec) 57 #4018 53A20
- A class of stratifiable pairs of congruences of conics with degenerate focal surfaces. (Russian) *Trudy Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp. 4* (1974), 151-160. (R. M. Geidel'man) 54 #13745 53A20
- Tangentially framed congruences of second order curves with degenerate focal surfaces. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur* No. 6 (1975), 156-168. (Author's introduction) 58 #30818 53A20
- A class of congruences of conics in P_3 . (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp. 7* (1976), 94-98, 153. (R. M. Geidel'man) 58 #24067 53A20
- Svet, S. D. A certain method of filtration of Markov diffusion processes. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* 13 (1970), 81-87. (G. E. Denz) 45 #7813 60J60
- Svetal'skaja, L. V. See **Svital's'ka, L. V.**
- Svetašov, G. A. (with Gerasimov, A. N.) The sensitivity of optimal estimates. (Russian) *Sensitivity of control systems (Proc. All-Union School-Seminar Theory of Sensitivity Control Systems and its Application, Vladivostok, 1975)*, Vol. I (Russian), pp. 313-335. *Akad. Nauk SSR Dal'nevostočn. Naučn. Centr, Vladivostok*, 1976. (Authors' summary) 58 #9517 93B35
- Svetitsky, Benjamin (with Drell, Sidney D.; Weinstein, Marvin) Fermion field theory on a lattice: variational analysis of the Thirring model. *Phys. Rev. D* (3) 17 (1978), no. 5, 523-536. (Authors' summary) 57 #2327 81.49
- Svetlichny, George On the domains of generalized operators. *Comm. Math. Phys.* (1973), 243-251. (E. C. G. Sudarshan) 54 #2004 81.47
- Svetlov, V. A. The Finnish school of induction: fundamental results. (Russian) *Vopr. Filoz.* 1977, no. 12, 142-147. (Editors) 58 #21283 01A65 (02-03)
- Svetnik, V. B. (with Zarickii, V. S.; Šimelevič, L. I.) Monte-Carlo technique in problems of optimal information processing. *Avtomat. i Telemekh.* 1975, no. 12, 95-103 (Russian summary); translated as *Automat. Remote Control* 36 (1975), no. 12, part 2015-2022. (Andor Dobó) 55 #1701 65C05 (65K05)
- Švidkaja, G. D. Certain mean characteristics of queueing systems. (Russian) *Mater. Sem. Kibernet. Vyp.* 41-42 (1972), 22-29, 52-53. (Author's summary) 54 #11567 60K25
- Svilans, M. P. ★Элементы теории информации (применительно к автоматизированным системам управления). (Russian) [Elements of information theory (as applied to automatic control systems)] Izdat. "Zinatne", Riga, 1973. 252 p. (loose errata) (Jerzy Seidler) 51 #12407 94-02
- gregorius a S. Vincentio See **Gregorius a S. Vincentio**
- Svin'in, I. R. A quantum description of Brownian motion in an external field. (Russian. English summary) *Teoret. Mat. Fiz.* 27 (1976), no. 2, 270-278. (Author's summary) 58 #20077 82.35
- Svin'in, S. F. On coefficient expansion into orthogonal bases of piecewise-smooth functions in simulation of nonstationary systems. *Avtomat. i Telemekh.* 1976, no. 187-190 (Russian. English summary); translated as *Automat. Remote Control* 37 (1977), no. 1, part 2, 121-124 (1976). (Roger Y. Goulet) 54 #10944 41A35 (65B10)
- Svirčevs, K. Z. S. (with Lisevič, L. M.) Existence of an almost periodic solution of a certain problem for a second order hyperbolic equation. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1973, 611-613, 669. (Muszyński) 48 #6629 35B15
- Svirčev, Ju. M. (with Elizarov, E. Ja.) Optimal productivity of biogeocenoses. (Russian) *Problemy Kibernet.* No. 22 (1970), 191-202, 298. (From the authors' introduction) 48 #13304 92A05
- (with Logofet, D. O.) Stability in models of interacting populations. (Russian) Issue dedicated to the memory of Alekseĭ Andreevič Ljapunov. *Problemy Kibernet.* No. 19 (1977), 187-202, 247. (Authors' summary) 58 #26170 92A15
- A systemic analysis of the biosphere: the current status of the concepts of the Russian classical school. (Russian) Issue dedicated to the memory of Alekseĭ Andreĭ Ljapunov. *Problemy Kibernet.* No. 32 (1977), 225-236, 247. (Author's summary) 58 #26174 92A15

- See also **Volterra, Vito**, 58 #16070
- rid, G. P.** (with Segal, V. M.) Finite element forms for the formulation of problems in the study of visco-plastic flows. (Russian) *Dokl. Akad. Nauk BSSR* 20 (1976), no. 7, 613-616, 668. (N. Cristescu) 54 #4278 73.65 (76.65)
- ridenko, D. I.** Some questions on the mathematical semantics of programming languages. (Russian) *Vychisl. Sistemy* No. 67 *Empir. Predskazanie i Raspoznavanie Obrazov* (1976), 93-105, 167. (Sorin Istrail) 58 #3642 68A05
- See also **Keisler, H. J.**; et al., 57 #9519
- ridov, A. P.** (with Uskov, V. G.; Boev, B. N.; Dergunov, M. N.) A Markov model of the process of programmed control of knowledge. (Russian) *Trudy Moskov. Orden. Lenin Energet. Inst. Vyp.* 168 (1973), 36-43. 55 #7469 92A25
- ridov, D. T.** (with Smirnov, Ju. F.; Tolstoi, V. N.) The construction of the wave functions of quantum systems with the symmetry of G_2 . (Russian) *Dokl. Akad. Nauk SSSR* 206 (1972), 1317-1320. (A. J. Coleman) 47 #6217 81.22
- The Bravais problem for n -dimensional crystallography ($n > 3$). (Russian) *Dokl. Akad. Nauk SSSR* 228 (1976), no. 6, 1332-1333. (J. C. Fisher) 57 #3964 50-01
- ridov, Ju. B.** (with Vinogradov, N. V.) The method of an integral equation of the second kind in the theory of the diffraction of sound by a wavy surface. (Russian) *Prikl. Mat. i Programirovanie* No. 11 (1974), 87-95, 130-131. (S. Kaliski) 49 #4422 76.35
- rin, Ju. P.** (with Ptichin, V. A.) Determination and use of methodological and random errors in the construction of the conditional mathematical expectation by the method of least squares. (Russian) *Computer science in mechanical engineering (Russian)*, pp. 33-40. *Akad. Nauk Beloruss. SSR Inst. Tehn. Kibernet.*, Minsk, 1971 (1972). (From the authors' summary) 50 #15179 62J05
- rkunov, P. N.** Propagation of electromagnetic radiation in a randomly inhomogeneous medium of Poisson type. (Russian. English summary) *Izv. Vys. Uchebn. Zaved. Radiofizika* 20 (1977), no. 3, 399-405. (Author's summary) 57 #14941 78.60 (78.47)
- rls, B.** See **Jeffreys, Bertha Swirles**
- rkii, I. V.** [Методы типа Бубнова-Галеркина и последовательных приближений. (Russian) *Methods of Bubnov-Galerkin type and of successive approximations*] *Izdat. "Nauka"*, Moscow, 1968. 199 pp. (Loose errata) (A. Solomon (Zbl 185, 336)) 54 #9271 73.49
- ste'nik, A. A.** (with Savchenko, Ju. G.) Decoding of group codes. (Russian) *Avtomat. i Vychisl. Tehn.* 1969, no. 1, 50-54. (L. Bassalygo (RZMat 1969 #9 V258)) 45 #9793 94A10
- stkov, G. P.** (with Zinov'ev, B. S.) Finding the reproducing Bergman and Szegő kernels for a certain class of multiply circular domains. (Russian) *Properties of holomorphic functions of several complex variables (Russian)*, pp. 209-214, 240. *Inst. Fiz. Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1973. (I. P. Ramadanov) 57 #12911 32H10
- stunov, P. P.** The bifurcations of a differential equation that has two particular integrals. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) Vyp. 224 Voprosy Kačestven. Teorii Differencial. Uravnenii* (1972), 87-96. (Editors) 57 #6664 34C99
- (with Kajumov, D. H.) On the question of the construction of domains of acyclicity for a differential equation. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) Vyp. 224 Voprosy Kačestven. Teorii Differencial. Uravnenii* (1972), 96-103. (Editors) 57 #6619 34C05
- (with Raisov, M. R.) A certain method for the determination of bifurcation parameter values for an algebraic differential equation. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1973, no. 6, 6-8. (J. A. Morrison) 48 #2487 34C05
- (with Kajumov, D. H.) The separatrix cycle of a differential quadratic equation that is defined by the loop of a diverging parabola. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 17 (1973), no. 5, 19-23, 77. (M. Bertolino) 49 #717 34C05
- (with Filinyh, V. V.) The method of translation surfaces for finding the bifurcation values of the parameter for a class of dynamical systems that was introduced by N. P. Erugin. (Russian) *Dokl. Akad. Nauk UzSSR* 1976, no. 7, 11-13. (L. Reizigš) 55 #8465 34C05
- See also **Questions on differential equations**, 52 #7762
- tal's'ka, L. V.** (with Kurčenko, T. S.) Some nonstationary versions of Seidel's method for the solution of nonlinear operator equations. (Russian) *Methods of approximate solution of differential and integral equations (Russian)*, pp. 97-105. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) 58 #3387 65H05 (47H15)
- The construction of monotone successive approximations to the solution of linear operator equations. (Ukrainian. Russian summary) *Projective-iterative methods for the solution of differential and integral equations (Ukrainian)*, pp. 155-161, 205. *Vidannja Inst. Mat. Akad. Nauk Ukrain. RSR, Kiev*, 1974. (Author's summary) 57 #13544 47A50 (65J05)
- (with Kurčenko, T. S.) Solution of linear operator equations by the method of nonstationary approximation of the inverse operator. (Russian) *Ukrain. Mat. Ž.* 27 (1975), no. 4, 534-540, 575. (C. Ilioi) 52 #4615 65J05 (65R05)
- tra, Donatas** A study of the auto-oscillations of the Minorsky equation. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 14 (1974), no. 2, 171-176, 255. (A. Haimovici) 52 #893 34C15
- The harmonic balance method in the theory of sinusoidal auto-oscillations of n th order differential equations with aftereffect. (Russian) *Vestnik Jaroslav. Univ. Vyp.* 7 (1974), 116-123. (A. Halanay) 57 #6744 34K15
- (with Kolesov, Ju. S.) Behavior of the solutions of nonlinear differential equations with aftereffect in the near critical case of one zero root. (Russian) *Vestnik Jaroslav. Univ. Vyp.* 10 (1974), 115-122. (Russell C. Thompson) 57 #13103 34K20
- Harmonic auto-oscillations of differential equations with a lag that depends on the unknown function. (Russian) *Vestnik Jaroslav. Univ. Vyp.* 10 (1974), 157-160. (Russell C. Thompson) 57 #13104 34K20
- A case that is near a critical one of a zero root for n th order nonlinear differential equations with aftereffect. (Russian. Lithuanian and English summaries) *Differencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp.* 12 (1975), 59-70, 75. (István Györi) 58 #1491 34K20
- (with Kolesov, Ju. S.) Mathematical simulation of the combustion process in the chamber of a liquid propellant rocket motor. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* 15 (1975), no. 4, 153-167, 245. (Authors' summary) 56 #1917 76.34
- (with Kulikov, Anatolii) Bifurcation of the small periodic solutions of differential equations with lag of neutral type. (Russian. Lithuanian and English summaries) *Differencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp.* 16 (1976), 41-59, 100. (M. I. Kamenskii) 58 #11798 34K15
- (with Kolesov, Ju. S.) Auto-oscillations in a transmission line with a tunnel diode. (Russian. Lithuanian and English summaries) *Differencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija Vyp.* 18 (1977), 27-49, 77. (A. Halanay) 57 #3563 34K15 (34C15)
- Vjatodub, V. K.** Criteria for the static stability of symmetric aircraft in spatial motion. (Russian) *Učen. Zap. CAGI* 6 (1975), no. 5, 101-109. (Author's summary) 57 #2701 93D99
- Vjatogor, L. A.** Determination of sufficient statistics in the problem of the recognition of representations that are subject to admissible transformations. (Russian) *Cybernetics and computer technology*, No. 3; *Pattern recognition (Russian)*, pp. 26-35. *Naukova Dumka, Kiev*, 1969. (S. Berkovič (RZMat 1970 #8 V544)) 45 #9546 68A45
- Vsoboda, Antonin** (with de Vries, Ronald C.) Multiple-output optimization with mosaics of Boolean functions. *IEEE Trans. Comput. C-24* (1975), no. 8, 777-785. (RZMat 1976 #4 V511) 94A30
- The concept of term exclusiveness and its effect on the theory of Boolean functions. *J. Assoc. Comput. Mach.* 22 (1975), 425-440. (Dorothy Bollman) 51 #12434 94A20
- Vsoboda, František** On the use of the sieve for the design of combinational switching networks. *Acta Tech. ČSAV* 18 (1973), 292-301. (From the author's summary) 49 #12190 94A20
- Vsoboda, Jiří** A remark on the definition of regular ideals. (Russian) *Arch. Math. (Brno)* 13 (1977), no. 1, 47-49. (L. A. Skornjakov) 57 #12608 16A66
- Vsoboda, Karel** Remarque sur la déformation symplectique des congruences de droites. (Russian summary) *Scripta Fac. Sci. Natur. UJEP Brunensis—Math.* 1 (1971), 25-35. (I. Vaisman) 50 #11053 53A40
- Note sur les pseudocongruences complètement focales. (Czech and Russian summaries) *Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně B-56* (1975), 13-16. (A. Švec) 52 #6587 53A20
- Remark to the characterization of the sphere in E^4 . *Comment. Math. Univ. Carolinae* 18 (1977), no. 4, 715-722. (George Stamou) 58 #12861 53C45
- Vsoboda, Rudy** Periodic differential difference equations of order $m+n$. *J. Differential Equations* 13 (1973), 213-230. (Robert M. Bullock) 48 #9036 34K05
- Svrcek, W. Y.** (with Xuyen, V. T.) On equivalence of the Gauss-Newton technique, the parameter influence coefficient technique, and the quasilinearization technique in dynamic system identification by least squares. *J. Optimization Theory Appl.* 22 (1977), no. 1, 117-123. (Agostino Villa) 56 #14911 93B30
- Švyrev, B. M.** Periodic solutions of singularly perturbed systems with lag in the case of a family of generating solutions. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp.* 7 (1973), 95-104. (N. Rozov (RZMat 1974 #7 B246)) 57 #6745 34K15
- Švyrkov, V. V.** See **Walter, Jaromir**, 57 #5032
- Švytov, I. A.** A model for the selection of strains of single-cell algae in a turbidostat, taking into account the probability of degeneracy. (Russian) *Problemy Kibernet.* No. 25 (1972), 153-159. (M. Arató) 46 #6857 92A05
- Swafford, B. E.** Hospherical subalgebras of real Lie algebras. *J. Algebra* 44 (1977), no. 2, 363-369. (Robert E. Beck) 56 #8646 17B30
- Swain, A. J.** A class of factor analysis estimation procedures with common asymptotic sampling properties. *Psychometrika* 40 (1975), no. 3, 315-335. (Author's summary) 58 #8039 62H25
- Swain, A. K. P. C.** Interval estimation of the normal mean when the sample size is random. *Trabajos Estadist.* 24 (1973), no. 1-2, 159-165. (Author's summary) 49 #8184 62F10
- Swain, P. H.** (with Fu, King Sun) Stochastic programmed grammars for syntactic pattern recognition. *Pattern Recognition* 4 (1972), no. 1, 83-100. (Authors' summary) 45 #1433 68A45 (68A30)
- Swain, S.** Continued fraction solutions to systems of linear equations. *J. Phys. A* 9 (1976), no. 11, 1811-1821. (B. D. Donevski) 56 #10483 81.15
- Continued fraction solutions in degenerate perturbation theory. *J. Phys. A* 10 (1977), no. 2, 155-165. (Francesco Calogero) 56 #2111 81.65
- Swamidhas, P.** (with Abraham, G.; Arthur, B. M.) Canonical forms of pseudo-orthogonal matrices. *Proc. Indian Acad. Sci. Sect. A* 74 (1971), 159-166. (C. F. Moppert) 45 #6837 15A21
- Swaminathan, K.** 36 self-inscribed enneagons in the Pappus configuration 9₃. *J. Mathematical and Physical Sci.* 7 (1973), 297-300. (R. Lingenberg) 49 #7344 20B25
- An exact solution of the Navier-Stokes equations. *J. Mathematical and Physical Sci.* 9 (1975), no. 4, 400-404. (J. P. Guiraud) 52 #4811 76.35
- Swaminathan, K. D.** Jyotisa in Kerala. *Indian J. Hist. Sci.* 8 (1973), 28-36. 58 #26767 01A25
- Swaminathan, Srinivasa** (with Edelstein, Michael) On the representation of mappings of normal Hausdorff spaces as restrictions of linear transformations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 50 (1971), 676-678. (L. Janos) 46 #2628 54C20
- Sur les espaces uniformes pseudocompacts. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 51 (1971), 500-501 (1972). (R. W. Bagley) 48 #3012 54E15
- (with Thompson, A. C.) Sizes of sets and some fixed point theorems. *Comment. Math. Univ. Carolinae* 12 (1971), 537-549. (J. Daneš) 45 #4236 47H10 (54H25)
- (with Pittas, P. A.) Uniform spaces of countably paracompact character. *Proc. Japan Acad.* 47 (1971), suppl. I, 859-860. (G. L. Cain, Jr.) 47 #7691 54D20 (54E15)
- A probabilistic characterisation of reflexive spaces. *An. Acad. Brasil. Ci.* 45 (1973), 345-347. (K. Jacobs) 51 #11611 60B10 (46B10)
- (with Goldstein, M.) Pseudo-uniform convexity of the Hardy class H on Riemann surfaces. *Math. Ann.* 226 (1977), no. 3, 271-273. (Walter Rudin) 55 #10696 30A78
- (with Goldstein, Myron) Pseudo-uniform convexity in Hardy spaces over Riemann surfaces. *Math. Ann.* 237 (1978), no. 3, 287-288. (M. H. Heins) 58 #17100 30A78
- See also **General topology and its relations to modern analysis and algebra**, 49 #3800 and **Fixed point theory and its applications**, 54 #11112
- Swaminathan, V.** A note on the family $F(a, q)$ of summability methods. *Math. Z.* 138

- (1974), 119-122. (J. Tzimbarario) **50** #828 40G05
 A note on the Valiron method of summability. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 3-4, 211-217. (J. P. King) **55** #921 40C05 (42A56)
 The Gibbs phenomenon for $[S, \alpha_n]$ means and $[T, \alpha_n]$ means. *Canad. Math. Bull.* **19** (1976), no. 2, 209-211. (A. Meir) **54** #13438 42A24
 (with Sitaraman, Y.) Tauberian theorems for the family $F(a, q)$ of summability methods. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 45-47. (F. W. Hartmann) **56** #16197 40E05
 The Gibbs phenomenon and Lebesgue constants for regular $A(\lambda)$ means. *Mat. Vesnik* **1(14)(29)** (1977), no. 3, 271-277. (J. P. King) **58** #6884 42A24
- krishna Swamy, H. S.** See **Krishna Swamy, H. S.**
Swamy, H. S. Krishna Taylor's mean value theorem for functions of two variables. *Math. Student* **41** (1973), nos. 3-4, 385-387 (1974). (R. S. Booth) **51** #13160 26A54
Swamy, K. L. N. (with Rao, N. Prabhakara) Ideals in autometrized algebras. *J. Austral. Math. Soc. Ser. A* **24** (1977), no. 3, 362-374. (Mary Katherine Bennett) **57** #9624 06A30
 Isometries in autometrized lattice ordered groups. II. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 211-214. (J. Jakubik) **57** #3037b 06A60 (52A50)
 Isometries in autometrized lattice ordered groups. *Algebra Universalis* **8** (1978), no. 1, 59-64. (J. Jakubik) **57** #3037a 06A60 (52A50)
Swamy, M. (with Purushotham, G.) On geometrization of viscous compressible steady flows. *Tensor (N.S.)* **31** (1977), no. 3, 275-283. (L. N. Tao) **58** #8780 7653
Swamy, M. N. S. (with Thulasiraman, K.) Relationship between cutset and node-pair transformation matrices. *Electron. Lett.* **7** (1971), 276-277. (From the authors' summary) **47** #8210 94A20
 (with Thulasiraman, K.) On a theorem in graph theory. *Matrix Tensor Quart.* **22** (1971/72), 31-32. (Editors) **47** #3259 05C99
 (with Thulasiraman, K.) Unimodular property of fundamental cut-set and circuit matrices. *Matrix Tensor Quart.* **22** (1971/72), 65-67. (R. A. Brualdi) **46** #5181 05C99
 (with Bhushan, Champa; Thulasiraman, K.) Sensitivity invariants for active lumped/distributed networks. *Electron. Lett.* **8** (1972), 26-27. (Authors' summary) **50** #4142 94A20
 (with Thulasiraman, K.) A sufficient condition for the synthesis of the K-matrix of n-port networks. *IEEE Trans. Circuit Theory* **CT-19** (1972), 378-380. (Israel Cederbaum) **51** #9980 94A20
 (with Thulasiraman, K.) Realization of the A-matrix of RLC networks. *IEEE Trans. Circuit Theory* **CT-19** (1972), 515-518. (W.-K. Chen) **51** #12435 94A20
 (with Giguere, J. C.; Vidyasagar, Mathukumalli) Input-output stability of two broad classes of lumped-distributed networks. *J. Franklin Inst.* **294** (1972), 203-213. (Authors' summary) **50** #1772 94A20
 On a formula for evaluating e^{At} when the eigenvalues of A are not necessarily distinct. *Matrix Tensor Quart.* **23** (1972/73), 67-72. (Editors) **47** #3414a 15A15
 On generalized Fibonacci quaternions. *Fibonacci Quart.* **11** (1973), no. 5, 547-549. (H. J. Godwin) **48** #8370 10A35
 (with Giguere, J. C.; Ramachandran, V.) A proof for Talbot's conjecture. *IEEE Trans. Circuits and Systems* **CAS-21** (1974), 154-155. (Maurice Mignotte) **52** #16875 94A20 (12D10)
 (with Reddy, C. H.; Ramachandran, V.) On the Foster form decomposition of a class of multivariable reactance functions. *Proceedings of the Eighteenth Midwest Symposium on Circuits and Systems (Concordia Univ., Montreal, Que., 1975)*, pp. 343-346. *Western Periodicals, North Hollywood, Calif.*, 1975. (Zdeněk Ertinger) **56** #15206 94A20
 (with Naidu, M. G. Govindarajulu; Thulasiraman, K.) The n-port resistive network synthesis from prescribed sensitivity coefficients. *IEEE Trans. Circuits and Systems* **CAS-22** (1975), 482-485. (S. Bhargava) **53** #5179 94A20
 (with Sankara Rao, K.) A note on generation of constituent matrices. *Proc. IEEE* **63** (1975), no. 1, 200-201. (A. S. Householder) **52** #432 15A18 (65F30)
 (with Bhushan, Champa; Bhattacharyya, B. B.) Generalized dual transposition and its applications. *J. Franklin Inst.* **301** (1976), no. 5, 465-476. (W.-K. Chen) **53** #12786 94A20
 (with Bhattacharyya, B. B.; Chakrabarti, Satyabrata) A general theory of decoupling a system of lossless coupled lines using linear transformations. *J. Franklin Inst.* **302** (1976), no. 1, 55-83. (Authors' summary) **56** #11544 94A20 (93B99)
 A formula for $\sum_{k=0}^n F_k(x)y^{n-k}$ and its generalization to r-bonacci polynomials. *Fibonacci Quart.* **15** (1977), no. 1, 73-77. (L. Carlitz) **55** #257 10A35
 (with Chakrabarti, Satyabrata; Bhattacharyya, B. B.) Approximation of two-variable filter specifications in analog domain. *IEEE Trans. Circuits and Systems* **CAS-24** (1977), no. 7, 378-388. (B. D. Donevski) **58** #4595 94A05
 (with Ramachandran, V.; Takhar, G. S.) A multivariable transformation and its use in the synthesis of driving-point functions. *IEEE Trans. Circuits and Systems* **CAS-24** (1977), no. 10, 551-559. (Authors' summary) **58** #26580 94A20
 See also **Proceedings: Midwest Symposium on Circuits and Systems, **54** #12403**
- Swamy, N. V. V. J.** (with Chaffin, E. F.) A relativistic equivalent oscillator in cylindrical co-ordinates. (Italian and Russian summaries) *Nuovo Cimento B* (11) **25** (1975), 28-34. (G. P. Bava) **51** #4883 8135
- Swamy, Paravastu A. V. B.** ★Statistical inference in random coefficient regression models. *Lecture Notes in Operations Research and Mathematical Systems*, Vol. 55. Springer-Verlag, Berlin-New York, 1971. viii + 209 pp. (D. S. Tracy) **48** #7488 62J05 (62M10, 62P20, 90A20)
 (with Arora, S. S.) The exact finite sample properties of the estimators of coefficients in the error components regression models. *Econometrica* **40** (1972), 261-275. (I. Guttman) **49** #1723 62P20
 (with Rao, J. N. K.) Maximum likelihood estimation of distributed lag model with autocorrelated errors. *J. Indian Statist. Assoc.* **10** (1972), 87-99. (Jiri Anděl) **51** #2218 (E 53 #9552) 62M10
 (with Mehta, Jatinder S.) Bayesian analysis of error components regression models. *J. Amer. Statist. Assoc.* **68** (1973), 648-658. (D. V. Lindley) **50** #15180 62J05
 (with Mehta, Jatinder S.) Bayesian analysis of a bivariate normal distribution with incomplete observations. *J. Amer. Statist. Assoc.* **68** (1973), 922-927. (Mir Ali)
- 50** #11609 62F15
 (with Mehta, Jatinder S.) Bayesian analysis of variance components in a regression model when there is a restriction on the range of a coefficient. *Trabajos Estadist.* (1973), no. 1-2, 167-176. (Lionel Weiss) **49** #10079 62J05
 (with Mehta, Jatinder S.) On alternative estimators of the difference of means in presence of missing observations. *Trabajos Estadist.* **24** (1973), no. 3, 89-97. (M. Siddiqui) **52** #4502 62F10
 (with Mehta, Jatinder S.) Efficient method of estimating the level of a stationary first-order autoregressive process. *Comm. Statist.* **3** (1974), 81-88. (E. J. Hann) **50** #11672 62M10
 (with Mehta, Jatinder S.) The exact finite sample distribution of Theil's compatibility test statistic and its application. *J. Amer. Statist. Assoc.* **69** (1974), 154-158. (Donald R. Jensen) **52** #12231 62J05 (62P20)
 (with Mehta, Jatinder S.) Bayesian analysis of a bivariate normal distribution with some observations are missing. *Studies in Bayesian econometrics and statistics (in honor of Leonard J. Savage)*, pp. 289-309. *Contributions to Economic Analysis*, No. 86, North-Holland, Amsterdam, 1975. (Lyle D. Broemeling) **54** #8969 62F15
 (with Mehta, Jatinder S.) Bayesian and non-Bayesian analysis of switching regressions and of random coefficient regression models. *J. Amer. Statist. Assoc.* (1975), no. 351, part 1, 593-602. (Bruce M. Hill) **53** #1826 62F15 (62J05)
 (with Mehta, Jatinder S.) On Bayesian estimation of seemingly unrelated regressions when some observations are missing. *J. Econometrics* **3** (1975), no. 2, 157-169. (D. Lindley) **55** #1694 62P20 (62F15)
 (with Rao, J. N. K.) Corrigendum: "Maximum likelihood estimation of distributed lag models with autocorrelated errors" (*J. Indian Statist. Assoc.* **10** (1972), 87-99). *Indian Statist. Assoc.* **13** (1975), 91-92. (Jiri Anděl) **53** #9552 62M10
 (with Mehta, Jatinder S.) Minimum average risk estimators for coefficients in linear models. *Comm. Statist.—Theory Methods* **A5** (1976), no. 9, 803-818. (Lubomir Kubáček) **55** #9429 62J05 (62F10)
 (with Mehta, Jatinder S.) Further evidence on the relative efficiencies of Zellner's seemingly unrelated regressions estimator. *J. Amer. Statist. Assoc.* **71** (1976), no. 3, 634-639. (Federico O'Reilly) **56** #9835 62J05
 (with Mehta, Jatinder S.) Robustness of Theil's mixed regression estimators. (French summary) *Canad. J. Statist.* **5** (1977), no. 1, 93-109. (P. C. B. Phillips) **56** #7092 62P20
 (with Mehta, Jatinder S.) A note on minimum average risk estimators for coefficients in linear models. *Comm. Statist.—Theory Methods* **A6** (1977), no. 1181-1186. (C. M. Theobald) **58** #8046 62J05
 (with Mehta, Jatinder S.) Estimation of linear models with time and cross-sectionally varying coefficients. *J. Amer. Statist. Assoc.* **72** (1977), no. 360, part 890-898. (Andrew Harvey) **58** #8047 62J05 (62P20)
 (with Mehta, Jatinder S.) The existence of moments of some simple Bayes estimators of coefficients in a simultaneous equation model. *J. Econometrics* **7** (1979), no. 1, 1-13. (G. Tintner) **57** #10976 62P20
- Swamy, S. R.** (with Kulkarni, V. N.) On the univalence of some analytic functions. *Ind. J. Pure Appl. Math.* **9** (1978), no. 5, 467-480. (S. M. Shah) **57** #16562 30A32
- Swamy, Sowmitri** (with Savage, John E.) Space-time trade-offs on the FFT algorithm. *IEEE Trans. Inform. Theory* **24** (1978), no. 5, 563-568. (David Dobkin) **58** #2512 68A20 (94A05)
- Swamy, Subramanian** (with Subramanian, S.) Some recent mathematical developments in economics. *Internat. J. Math. Ed. Sci. Tech.* **3** (1972), no. 1, 77-88. (J. S. Jha) **57** #15294 90Axx
- Swamy, U. Maddana** Representation of universal algebras by sheaves. *Proc. Amer. Math. Soc.* **45** (1974), 55-58. (Klaus Keimel) **49** #4910 08A25
 (with Rama Rao, V. V.) Triple and sheaf representations of Stone lattices. *Algebra Universalis* **5** (1975), 104-113. (Terence P. Speed) **52** #2998 06A35
- Swan, George W.** Derivation of the equation for concentration profiles in a binary diffusing system. *Mathematical problems in biology (Conf., Univ. Victoria, Victoria, B.C., 1973)*, pp. 226-235. *Lecture Notes in Biomath.*, Vol. 2, Springer, Berlin, 1974. (J. Cowan) **51** #2671 92A05
 A bibliography of mathematical biology. *Mathematical problems in biology (Conf., Univ. Victoria, Victoria, B.C., 1973)*, pp. 273-280. *Lecture Notes in Biomath.*, Vol. 2, Springer, Berlin, 1974. (Editors) **49** #12106 92A05 (00A15)
 Some strategies for harvesting a single species. *Bull. Math. Biology* **37** (1975), no. 659-673. (K. P. Hadeler) **53** #5055 92A15
 A mathematical model for the density of malignant cells in the spread of cancer in the uterus. *Math. Biosci.* **25** (1975), no. 3/4, 319-329. (Kuang-Ho Chen) **54** #2255 92A15 (35K05)
 Introduction to a singular perturbation problem in enzyme kinetics. *Bull. Inst. Math. Appl.* **12** (1976), no. 3, 78-80. (From the author's introduction) **56** #3433 35B25 (92A05)
 Solution of linear one-dimensional diffusion equations. *Bull. Math. Biology* (1976), no. 1, 1-13. (John M. Chadam) **53** #6061 35-01
 Exact fundamental solutions of linear parabolic equations with spatially varying coefficients. *Bull. Math. Biology* **39** (1977), no. 4, 435-451. (Lu-San Chen) **56** #1261 35K99
 (with Marietta, M. G.) A Lagrangian formulation for continuous media. (French and German summaries) *Internat. J. Non-Linear Mech.* **12** (1977), no. 2, 49-59. (Yi-Yuan Yu) **56** #13969 73A9
 See also **Transactions: Conference of Army Mathematicians, **49** #4735 and **Mathematical problems in biology, **49** #10392****
- Swan, Richard G.** ★K-theory of finite groups and orders. *Lecture Notes in Mathematics*, Vol. 149. Springer-Verlag, Berlin-New York, 1970. iv + 237 pp. (H. Bass) **46** #7310 16A54 (18F25)
 Algebraic K-theory. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 1, pp. 191-199. Gauthier-Villars, Paris, 1971. (J. S. Joel) **55** #8146 18F25
 A splitting principle in algebraic K-theory. *Representation theory of finite groups and related topics (Proc. Sympos. Pure Math., Vol. XXI, Univ. Wisconsin, Madison, Wis., 1970)*, pp. 155-159. *Amer. Math. Soc., Providence, R.I.*, 1971. (J.-P. Jouanolou) **47** #5079 18F25 (14F15)

- Excision in algebraic K -theory. *J. Pure Appl. Algebra* **1** (1971), no. 3, 221-252. (H. Bass) **46** #7354 18F25
- Some relations between higher K -functors. *J. Algebra* **21** (1972), 113-136. (H. Bass) **47** #1916 18F25
- K -theory and algebraic correspondences. *Proceedings of the Conference on Orders, Group Rings and Related Topics* (Ohio State Univ., Columbus, Ohio, 1972), pp. 161-179. *Lecture Notes in Math.*, Vol. 353, Springer, Berlin, 1973. (H. Bass) **49** #8990 14E10 (18F25)
- A cancellation theorem for projective modules in the metastable range. *Invent. Math.* **27** (1974), 23-43. (H. Bass) **51** #12856 14F05 (13C10)
- Serre's problem. *Conference on Commutative Algebra-1975* (Queen's Univ., Kingston, Ont., 1975), pp. 1-60. *Queen's Papers on Pure and Applied Math.*, No. 42, Queen's Univ., Kingston, Ont., 1975. (H. Bass) **53** #394 13C10 (14F05)
- (with Towber, Jacob) A class of projective modules which are nearly free. *J. Algebra* **36** (1975), no. 3, 427-434. (H. Bass) **51** #12857 13F05 (13C10)
- Thom's theory of differential forms on simplicial sets. *Topology* **14** (1975), no. 3, 271-273. (M. F. Atiyah) **52** #4327 58A10 (55J15, 57D95)
- (with Murthy, M. Pavanam) Vector bundles over affine surfaces. *Invent. Math.* **36** (1976), 125-165. (G. Horrocks) **55** #12724 14F05
- Topological examples of projective modules. *Trans. Amer. Math. Soc.* **230** (1977), 201-234. (Kwangil Koh) **56** #6657 55F25 (13J99, 16A80, 14F05)
- Projective modules over Laurent polynomial rings. *Trans. Amer. Math. Soc.* **237** (1978), 111-120. (P. Schenzel) **57** #9686 13C10 (13F20, 14F05)
- wandic, J. R. Time-dependent transport by some order-of-scattering methods. *J. Math. Anal. Appl.* **63** (1978), no. 2, 525-548. (V. P. Kalashnikov) **58** #14440 80.47
- wanek, James J. ★Linear integer programming. Mathematics Research Center, Report 74-1. NRL Report 7797. Naval Research Laboratory, Washington, D.C., 1974. iii + 44 pp. (Csaba Fabian) **51** #5001 90C10
- wanepoel, J. W. H. (with Geertsema, J. C.) Selection sequences for selecting the best of k normal populations. *South African Statist. J.* **7** (1973), 11-21. (S. Panchapakesan) **49** #8172 62F07
- (with Geertsema, J. C.) Nonparametric sequential procedures for selecting the best of k populations. *South African Statist. J.* **7** (1973), 85-94. (M. L. Puri) **51** #2198 62L05 (62F07)
- (with Venter, J. H.) On the construction of sequential selection procedures. *South African Statist. J.* **9** (1975), no. 2, 103-118. (I. D. Dariyal) **53** #14762 62F07 (62L10)
- (with Venter, J. H.) A class of elimination selection procedures based on ranks. *South African Statist. J.* **9** (1975), no. 2, 119-128. (Joachim Krauth) **52** #9461 62F07 (62L10)
- (with Geertsema, J. C.) Sequential procedures with elimination for selecting the best of k normal populations. *South African Statist. J.* **10** (1976), no. 1, 9-36. (Nitis Mukhopadhyay) **54** #11684 62L10 (62F10)
- (with Geertsema, J. C.) Asymptotically optimal tests of power one for the location parameter of an exponential distribution. *South African Statist. J.* **10** (1976), no. 1, 37-48. (Nanak Chand) **54** #14264 62L10
- (with Geertsema, J. C.) A method for deriving the asymptotic distribution of one-sided stopping rules. *South African Statist. J.* **10** (1976), no. 2, 135-142. (Ashim Mallik) **54** #14266 62L10
- (with Geertsema, J. C.) A comparison of exact and asymptotic properties of tests of power one for the location parameter of an exponential distribution. *South African Statist. J.* **10** (1976), no. 2, 143-152. (Nanak Chand) **54** #14265 62L10
- Nonparametric elimination selection procedures based on robust estimators. *South African Statist. J.* **11** (1977), no. 1, 27-41. (Bruce W. Turnbull) **56** #13445 62G35 (62L12)
- (with Nienaber, E. S.) Almost sure asymptotic representations of the trimmed Wilcoxon statistic and trimmed Hodges-Lehmann estimator with applications. *South African Statist. J.* **11** (1977), no. 1, 63-77. (T. P. Hettmansperger) **56** #4040 62G05
- (with Steyn, H. S., Jr.) Properties of a nonparametric sequential test of Miller with the view towards applications. *South African Statist. J.* **11** (1977), no. 2, 187-199. (Authors' summary) **56** #13477 62L10 (62E15, 62G10)
- wann, Dale W. Kernels with only a finite number of characteristic values. *Proc. Cambridge Philos. Soc.* **70** (1971), 257-262. (H. E. Fettis) **45** #834 45C05
- wann, H. S. G. The existence and uniqueness of nonstationary ideal incompressible flow in bounded domains in R_3 . *Trans. Amer. Math. Soc.* **179** (1973), 167-180. (D. B. Kotlow) **48** #4542 35Q99
- wann, W. H. Constrained optimization by direct search. *Numerical methods for constrained optimization* (Proc. Sympos., National Physical Lab., Teddington, 1974), pp. 191-217. Academic Press, London, 1974. (Marco Gaviano) **55** #10011 90C30 (65K05)
- wanson, Charles A. ★Comparison and oscillation theory of linear differential equations. Mathematics in Science and Engineering, Vol. 48. Academic Press, New York-London, 1968. viii + 227 pp. ((Zbl **191**, 99)) **57** #3515 34C10
- (with Noussair, E. S.) Oscillation criteria for differential systems. *J. Math. Anal. Appl.* **36** (1971), 575-580. (T. L. Sherman) **45** #5477 34C10
- Remarks on Picone's identity and related identities. (Italian summary) *Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Sez. Ia* (8) **11** (1972/73), no. 1, 3-15. ((Zbl **292** #35032) **58** #28886 34C99
- Remarks on a comparison theorem of Kreith and Travis. *J. Differential Equations* **11** (1972), 624-627. (C. C. Travis) **45** #3911 35B05
- (with Noussair, E. S.) Oscillation theorems for vector differential equations. *Utilitas Math.* **1** (1972), 97-109. (Curtis C. Travis) **46** #5807 35B05
- Strong oscillation of elliptic equations in general domains. *Canad. Math. Bull.* **16** (1973), 105-110. (Curtis C. Travis) **48** #11740 35B05
- A comparison theorem for eigenfunctions. *Proc. Amer. Math. Soc.* **37** (1973), 537-540. (Curtis C. Travis) **47** #603 35B05
- (with Allegretto, Walter) Comparison theorems for eigenvalues. *Ann. Mat. Pura Appl.* (4) **99** (1974), 81-107. (Curtis C. Travis) **50** #792 35P15
- (with Noussair, E. S.) Comparison theorems for elliptic and parabolic inequalities. *Illinois J. Math.* **18** (1974), 165-169. (K. Kreith) **48** #6626 35B05
- (with Noussair, E. S.) Oscillation theory for semilinear Schrödinger equations and inequalities. *Proc. Roy. Soc. Edinburgh Sect. A* **75** (1975/76), no. 1, 67-81. (W. Allegretto) **56** #818 35B05
- Picone's identity. (Italian summary) Collection of articles dedicated to Mauro Picone on the occasion of his ninetieth birthday, II. *Rend. Mat.* (6) **8** (1975), no. 2, 373-397. (Allan C. Peterson) **53** #6009 34C10 (35B05)
- (with Noussair, E. S.) Oscillation of nonlinear vector differential equations. *Ann. Mat. Pura Appl.* (4) **109** (1976), 305-315. (V. B. Headley) **54** #13277 35B05
- A domain perturbation problem for elliptic operators. *Ann. Mat. Pura Appl.* (4) **114** (1977), 229-240. (J. Kačur) **58** #6693 35J99
- A dichotomy of PDE Sturmian theory. *SIAM Rev.* **20** (1978), no. 2, 285-300. (K. Kreith) **57** #6770 35B05
- Swanson, D. G. Mode conversion of toroidal Alfvén waves. *Phys. Fluids* **18** (1975), no. 10, 1269-1276. (Tommaso Ruggeri) **53** #4728 76J35
- Swanson, D. L. See Kaufmann, A., **58** #5245b
- Swanson, Laif Generators of factors of Bernoulli shifts. *Pacific J. Math.* **71** (1977), no. 1, 213-220. (Paul C. Shields) **56** #3255 28A65
- Swanson, Leonard G. (with Crittenden, Richard B.) An elementary proof that the unit disc is a Swiss cheese. *Amer. Math. Monthly* **83** (1976), no. 7, 552-554. (D. Boyd) **54** #1090 52A45
- (with Crittenden, Richard B.) Uniqueness for sets of functions generated by matrices. *Michigan Math. J.* **25** (1978), no. 1, 85-89. (W. R. Wade) **58** #1980 42A52
- Swanson, Roger C. Interconnections for parallel memories to unscramble p -ordered vectors. *IEEE Trans. Computers* **C-23** (1974), 1105-1115. (I. Kaufmann) **51** #2352 68A25
- Swanström, Peter (with Hegelund, Flemming) Molecular properties. *Computational techniques in quantum chemistry and molecular physics* (Proc. NATO Adv. Study Inst., Ramsau, 1974), pp. 299-345. NATO Advanced Study Inst. Ser., Ser. C: Math. and Phys. Sci., Vol. 15, Reidel, Dordrecht, 1975. (J. V. Greenman) **56** #10634 82.02 (81.47)
- Swanton, Donald W. Compact composition operators on $B(D)$. *Proc. Amer. Math. Soc.* **56** (1976), 152-156. (Balmohan V. Limaye) **53** #11420 47B37 (46J15)
- Swarbrick, S. J. (with Bloore, F. J.) Wavefunctions of identical particles. *J. Mathematical Phys.* **19** (1978), no. 4, 878-879. (J. G. Taylor) **58** #4096 81.58 (58F05)
- Swarc, W. See Elmaghraby, Salah E.; et al., **53** #7435
- Swaroop, Kanti (with Bhatia, H. L.; Puri, M. C.) A procedure for time minimization transportation problem. *Indian J. Pure Appl. Math.* **8** (1977), no. 8, 920-929. (K. Zimmermann) **57** #15411 90C05
- Swart, Edward Reinier Some basic theorems on the abstract theory of Kempe-chain interchanges. *Utilitas Math.* **10** (1976), 209-228. (F. Bernhart) **55** #5475 05C15
- de Swart, Henricus Cornelius Maria ★Intuitionistic logic in intuitionistic metamathematics. Doctoral dissertation, Catholic University, Nijmegen. With a Dutch summary. *Faculteit der Wetkunde en Natuurwetenschappen, Katholieke Universiteit, Nijmegen*, 1976. vi + 113 pp. (D. Nelson) **53** #12887 02C15 (02E05, 02H10)
- Another intuitionistic completeness proof. *J. Symbolic Logic* **41** (1976), no. 3, 644-662. (From the introduction) **58** #5176 02H10 (02C15)
- Elements of intuitionistic analysis. *Z. Math. Logik Grundlagen Math.* **22** (1976), no. 4, 289-298. (E. Mendelson) **57** #12189a 02E05
- Elements of intuitionistic analysis. II. The Stone-Weierstrass theorem and Ascoli's theorem. *Z. Math. Logik Grundlagen Math.* **22** (1976), no. 6, 501-508. (E. Mendelson) **57** #12189b 02E05
- An intuitionistically plausible interpretation of intuitionistic logic. *J. Symbolic Logic* **42** (1977), no. 4, 564-578. (Editors) **58** #27354 02C15
- Swart, J. H. An application of the canonical formalism of Rund to the problem of Plateau. *Utilitas Math.* **13** (1978), 231-248. (R. N. Abdulaev) **58** #18174 53A10
- de Swart, J. J. Projective representations of connected linear Lie groups. *Group theoretical methods in physics* (Proc. Third Internat. Colloq., Centre Phys. Theor., Marseille, 1974), Vol. 2, pp. 378-387. Centre Nat. Recherche Sci., Centre Phys. Theor., Marseille, 1974. (J. F. Cornwell) **56** #5799 22E45
- See also Proceedings: International Colloquium on Group Theoretical Methods in Physics, **48** #10342
- Swart, Johan Total disconnectedness in bitopological spaces and product bitopological spaces. *Nederl. Akad. Wetensch. Proc. Ser. A* **74** = *Indag. Math.* **33** (1971), 135-145. (W. J. Pervin) **46** #4497 54E55
- An axiomatic topological characterization of Hilbert space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 166-174. (P. Fletcher) **48** #4985 54B10
- (with Jarchow, Hans) On Mackey convergence in locally convex spaces. *Israel J. Math.* **16** (1973), 150-158. (D. J. Randtke) **48** #11971 46A09
- An axiomatic topological characterization of an uncountable product of real lines. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 6, 897-898. (P. S. Schnare) **54** #13879 54F65
- Zur Theorie der Schwartz-Räume. *Math. Ann.* **211** (1974), 261-276. (D. J. Randtke) **50** #10736 46A05
- (with Ruckle, William H.) Schwartz topologies on sequence spaces. *Math. Ann.* **230** (1977), no. 1, 91-95. (H. Jarchow) **57** #7112 46A45
- Swart, W. W. A method of parameter estimation with particular applicability to curve fitting. (Turkish summary) *METU J. Pure Appl. Sci.* **5** (1972), no. 1, 1-14. (R. H. Bartels) **52** #2139 65F10
- Swartwout, Robert E. (with Nuttner, Roy S., Jr.; Rine, David C.) Equivalence and transformations for PDE multivalued algebras. *IEEE Trans. Computers* **C-23** (1974), 294-300. (T. C. Wesselkamper) **53** #12871 02C05 (94A20)
- Swartz, Blair (with Varga, Richard S.) Error bounds for spline and L -spline interpolation. Collection of articles dedicated to J. L. Walsh on his 75th birthday, V. *J. Approximation Theory* **6** (1972), 6-49. (C. de Boor) **51** #3756 41A15
- (with Varga, Richard S.) A note on lacunary interpolation by splines. *SIAM J. Numer. Anal.* **10** (1973), 443-447. (J. W. Jerome) **48** #12776 65D05 (41A05)
- (with de Boor, Carl) Collocation at Gaussian points. *SIAM J. Numer. Anal.* **10** (1973), 582-606. (R. B. Simpson) **51** #9528 65N35
- (with Wendroff, Burton) The comparative efficiency of certain finite element and finite difference methods for a hyperbolic problem. *Conference on the Numerical*

- Solution of Differential Equations (Univ. Dundee, Dundee, 1973), pp. 153-163. Lecture Notes in Math., Vol. 363, Springer, Berlin, 1974. (A. R. Gourlay) 55 #4736 65N25*
 (with Wendroff, Burton) The relative efficiency of finite difference and finite element methods. I. Hyperbolic problems and splines. *SIAM J. Numer. Anal.* **11** (1974), 979-993. (V. Thomée) **50** #15390 65N35
 (with Wendroff, Burton) The relation between the Galerkin and collocation methods using smooth splines. *SIAM J. Numer. Anal.* **11** (1974), 994-996. (V. Thomée) **50** #15391 65N35
 (with Daniel, James W.) Extrapolated collocation for two-point boundary-value problems using cubic splines. *J. Inst. Math. Appl.* **16** (1975), no. 2, 161-174. (David R. Hill) **52** #12340 65L10
 (with de Boor, Carl) Piecewise monotone interpolation. *J. Approximation Theory* **21** (1977), no. 4, 411-416. (Eli Passow) **58** #1826 41A05 (41A15)
 (with de Boor, Carl) Comments on: "A comparison of global methods for linear two-point boundary value problems" (Math. Comp. **29** (1975), no. 132, 1007-1019) by R. D. Russell and J. M. Varah. *Math. Comp.* **31** (1977), no. 140, 916-921. (Authors' summary) **58** #19158 65L10
 See also **Mathematical aspects of finite elements in partial differential equations**, **50** #1525
- Swartz, Charles** The nuclearity of $K\{M_p\}$ spaces. *Math. Nachr.* **44** (1970), 193-197. (Editors) **54** #3396 46F05
 Distributional boundary values. *Indiana Univ. Math. J.* **21** (1971/72), 689-692. (J. N. Pandey) **45** #2469 46F10
 (with Myers, Donald E.) Random functionals on $K\{M_p\}$ spaces. *Studia Math.* **39** (1971), 233-240. (Vo-Khac Khoan) **46** #8271 (E **46** #9722) 46F05 (60B99)
 Unconditionally converging operators on the space of continuous functions. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1695-1702. (Ivan Dobrakov) **48** #12137 47B37
 Vector measures of bounded variation. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1703-1704. (I. Dobrakov) **48** #12053 46G10 (47B10)
 Convolution in $K\{M_p\}$ spaces. *Rocky Mountain J. Math.* **2** (1972), no. 2, 259-263. (Jörgen Löfström) **45** #891 46F10
 Continuous linear functionals on certain $K\{M_p\}$ spaces. *SIAM J. Math. Anal.* **3** (1972), 595-598. (G. L. Krabbe) **47** #819 46F05
 Convergence of convolution operators. *Studia Math.* **42** (1972), 249-257. (W. Słowiński) **47** #3987 46F10
 (with Myers, Donald E.) Correction to the paper: "Random functionals on $K\{M_p\}$ spaces". *Studia Math.* **43** (1972), 273. (Vo-Khac Khoan) **46** #9722 46F05 (60B99)
 Absolutely summing operators on $C_X(S)$. *Vector and operator valued measures and applications (Proc. Sympos., Snowbird Resort, Alta, Utah, 1972), pp. 351-353. Academic Press, New York, 1973. (Jürgen Batt) 49 #1204 47B37 (46G10)*
 The product of vector-valued measures. *Bull. Austral. Math. Soc.* **8** (1973), 359-366. (A. de Korvin) **47** #6988 28A45
 Weakly compact operators from a B -space into the space of Bochner integrable functions. *Colloq. Math.* **28** (1973), 69-76. (S. D. Chatterji) **50** #14342 47B37
 (with Alexander, George D.) Linear operators on c_r . *Czechoslovak Math. J.* **23** (98) (1973), 231-234. (E. R. Deal) **47** #3949 46B05 (46A45, 47B99)
 An operator characterization of vector measures which have Radon-Nikodym derivatives. *Math. Ann.* **202** (1973), 77-84. (Lawrence Fialkow) **48** #4263 28A45 (47B10)
 Vector measures and nuclear spaces. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 1261-1268. (Alan Shuchat) **49** #7772 46G10
 Fourier transforms of convolution operators. *Studia Math.* **45** (1973), 211-219. (Z. Zieleżny) **49** #3537 46F10
 Absolutely summing and dominated operators on spaces of vector-valued continuous functions. *Trans. Amer. Math. Soc.* **179** (1973), 123-131. (A. Pietsch) **47** #9330 47B10
 (with Kitchens, Larry) Convergence in the dual of certain $K\{M_p\}$ -spaces. *Colloq. Math.* **30** (1974), 149-155. (J. Horváth) **50** #8060 46F05
 Products of vector measures. *Mat. Časopis Sloven. Akad. Vied* **24** (1974), no. 4, 289-299. (Igor Klavánek) **52** #3468 28A45
 The Nikodým and Vitali-Hahn-Saks theorems for algebras. *Amer. Math. Monthly* **82** (1975), no. 8, 833-834. (O. Costinescu) **52** #3462 28A10
 Translation invariant linear operators and generalized functions. *Czechoslovak Math. J.* **25** (100) (1975), 202-213. (V. K. Balakrishnan) **52** #1295 46F10 (47B37)
 Linear operators on $C_X(U)$ for U dispersed. *Czechoslovak Math. J.* **25** (100) (1975), no. 4, 511-513. (Jürgen Batt) **53** #3697 46G10 (46E10, 47B37)
 A generalization of a theorem of Duchon on products of vector measures. *J. Math. Anal. Appl.* **51** (1975), no. 3, 621-628. (Igor Klavánek) **51** #10582 28A45 (28A35, 46G10)
 (with Bagby, Richard J.) Projective tensor product of l^p -valued measures. *Mat. Časopis Sloven. Akad. Vied* **25** (1975), no. 3, 265-269. (Miloslav Duchoň) **54** #503 28A45 (46G10)
 Integration with respect to vector measures. *Bull. Soc. Roy. Sci. Liège* **45** (1976), no. 3-4, 76-79. (Barbara T. Faires) **55** #615 28A45
 Tensor products of l^2 -valued measures. *J. Austral. Math. Soc. Ser. A* **21** (1976), no. 2, 241-246. (Igor Klavánek) **52** #10993 28A45 (46G10)
 Unconditionally converging and Dunford-Pettis operators on $C_X(S)$. *Studia Math.* **57** (1976), no. 1, 85-90. (J. J. Uhl, Jr.) **56** #16440 47B37 (46E15)
 Nikodym's theorems for set functions on algebras. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 3, 347-353. (Paul Lewis) **56** #8798 28A45
 Applications of the Mikusiński diagonal theorem. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **26** (1978), no. 5, 421-424. (C. D. Aliprantis) **58** #12299 46B15
 Correction to: "Unconditionally converging and Dunford-Pettis operators on $C_X(S)$ " (Studia Math. **57** (1976), no. 1, 85-90). *Studia Math.* **62** (1978), no. 1, 103. (Editors) **58** #17846 46G99
- Swartz, G. Boyd** (with Murthy, V. K.) Minimum risk estimators with applications. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 410-416. (Bernard Harris) **49** #6427 62C05
 Bounds on system lifetime. *IEEE Trans. Reliab.* **R-23** (1974), no. 1, 57-59. (Peter
- Purdue) **52** #15921 62N05
 A short proof of a characterization by conditional expectations. *IEEE Trans. Reliab.* **R-24** (1975), no. 1, 76. (Peter Purdue) **54** #1436 62E10
 (with Murthy, V. K.) Estimation of Weibull parameters from two-order statistics. *Roy. Statist. Soc. Ser. B* **37** (1975), 96-102. (Mir Ali) **51** #4517 62F10
 See also **Collection: Walsh, John E.**, **49** #10491
- Swartzlander, Earl E., Jr.** (with Alexopoulos, Aristides G.) The sign/logarithm number system. *IEEE Trans. Computers* **C-24** (1975), no. 12, 1238-1242. (I. Kaufmann) **52** #4702 68A15 (68A10)
 See also **Computer design development**, **56** #15221
- Swarup, G. Ananda** Pseudo-isotopies of $S^3 \times S^1$. *Math. Z.* **121** (1971), 201-205. (H. Gluck) **45** #2717 57C10
 Pseudo-isotopie des sphères de codimension 1. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1973), A781-A784. (P. J. Kahn) **48** #12561 57D40
 On incompressible surfaces in the complements of knots. *J. Indian Math. Soc. (N.S.)* **37** (1973), 9-24 (1974). (C. D. Feustel) **50** #14757 (E **52** #11890) 57A10
 Finding incompressible surfaces in 3-manifolds. *J. London Math. Soc.* (2) **6** (1973), 441-452. (J. S. Birman) **52** #1661 55A05
 On embedded spheres in 3-manifolds. *Math. Ann.* **203** (1973), 89-102. (J. Birman) **48** #7252 55A05 (57A35)
 Projective planes in irreducible 3-manifolds. *Math. Z.* **132** (1973), 305-317. (C. Feustel) **48** #1244 57C30
 Addendum to: "On incompressible surfaces in the complements of knots" (J. Indian Math. Soc. (N.S.) **37** (1973), 9-24 (1974)). *J. Indian Math. Soc. (N.S.)* **38** (1974), no. 1, 411-413 (1975). (C. D. Feustel) **52** #11890 55A05
 On a theorem of C. B. Thomas. *J. London Math. Soc.* (2) **8** (1974), 13-21. (J. Birman) **49** #6225 55D10
 An unknotting criterion. *J. Pure Appl. Algebra* **6** (1975), no. 3, 291-296. (J. Levine) **52** #15487 57C45
 On embedded spheres in 3-manifolds. II. *J. Indian Math. Soc. (N.S.)* **41** (1977), 1-2, 99-116. (J. S. Birman) **58** #24271 57A10 (55A05, 55A35)
 Relative version of a theorem of Stallings. *J. Pure Appl. Algebra* **11** (1977/78), 1-3, 75-82. (Jerrold W. Grossman) **57** #6206 20F15 (57A10, 57A15)
 Homeomorphisms of compact 3-manifolds. *Topology* **16** (1977), no. 2, 119-130. (S. Birman) **55** #11258 57A15
- Swarup, K.** (with Sharma, I. C.) On duality in linear fractional functional programming (German summary) *Z. Operations Res. Ser. A-B* **16** (1972), A91-A100. (I. M. Stancu-Minasian) **46** #8665 90C30
- Swarup, Kanti** (with Anand, Promila) Minimization of an indefinite quadratic function with linear constraints. (Czech summary) *Ekonom.-Mat. Obzor* **6** (1970), 380-388. (Maruściac) **45** #6442 90C20
 (with Kirby, M. J. L.; Love, H. R.) A cutting-plane algorithm for extreme point mathematical programming. *Cahiers Centre Études Recherche Opér.* **14** (1972), 27-30. (I. Maruściac) **47** #3004 90C05
 (with Kirby, M. J. L.; Love, H. R.) Extreme point mathematical programming. *Management Sci.* **18** (1972), 540-549. (I. Maruściac) **46** #10399 90C05
 Some aspects of fractional programming. *Mat. Vesnik* **9** (24) (1972), 97-100. (J. Berman) **48** #3498 90C25
 (with Aggarwal, S. P.; Gupta, R. K.) Stochastic indefinite quadratic programming. *Z. Angew. Math. Mech.* **52** (1972), 371-373. (From the authors' introduction) **55** #12082 90C15
 (with Kirby, M. J. L.; Love, H. R.) Extreme point programming with nonlinear constraints. *Discrete Math.* **5** (1973), 345-365. (I. Maruściac) **49** #8667 90C40
 (with Sharma, I. C.) A primal-like algorithm for zero-one integer fractional programming problem. *Trabajos Estadist.* **24** (1973), no. 3, 123-136. (D. Hochstädt) **52** #7541 90C10
 (with Puri, M. C.) Strong-cut enumerative procedure for extreme point mathematical programming problems. (German summary) *Z. Operations Res. Ser. A* **17** (1973), no. 3, A97-A105. (I. Maruściac) **52** #10029 90C05
 (with Agrawal, S. C.) On integer solutions to quadratic programs. *Acta Ci. Indica* **no. 1**, 73-78 (1974). (Authors' summary) **57** #2546 90C10 (90C20)
 (with Gupta, R. K.) A cutting plane algorithm for extreme point linear fractional functional programming. *Cahiers Centre Études Recherche Opér.* **16** (1974), 161-177. (P. Aggarwal) **51** #9822 90C30
 (with Puri, M. C.) Simple enumerative method for fixed charge problem. *Indian Pure Appl. Math.* **5** (1974), no. 10, 894-901. (F. Giannessi) **55** #12060 90C30 (90C35, 90B99)
 (with Kirby, M. J. L.; Love, H. R.) A primal-like algorithm for extreme point mathematical programming. *J. Math. Sci.* **7** (1972), 9-14 (1974). (Authors' summary) **57** #11793 90C99
 (with Puri, M. C.) A systematic extreme point enumeration procedure for fixed charge problem. *Trabajos Estadist. Investigación Oper.* **25** (1974), no. 1-2, 99-106. (Authors' summary) **56** #7954 90C05
 On duality in non-linear fractional programming problems. *Z. Angew. Math. Mech.* **54** (1974), 734. (M. Yamasaki) **51** #2644 90C25
 (with Puri, M. C.) Extreme point linear fractional functional programming. *Operations Res. Ser. A-B* **18** (1974), A131-A139. (I. Maruściac) **51** #12341 90C30
 (with Bedi, Mohinder Kaur) Convex simplex method and non-linear programming problems. *Indian J. Pure Appl. Math.* **6** (1975), no. 2, 190-209. (Robert A. Abraham) **55** #7419 90C30
 (with Puri, M. C.) Strong-cut cutting plane procedure for extreme point mathematical programming problems. *Indian J. Pure Appl. Math.* **6** (1975), no. 2, 227-236. (See RZMat **1978** #6 V854) 90C05
 (with Das, C.) Complex fractional functionals programming with nonlinear constraints. *Z. Angew. Math. Mech.* **55** (1975), no. 7-8, 441-442. (I. Maruściac) **52** #2587 90C30
 (with Bedi, Mohinder Kaur) Linear fractional functionals programming with absolute-value fractional functionals. *Cahiers Centre Études Recherche Opér.* **18** (1974), no. 3, 367-375. (Siegfried Schable) **55** #7377 90C05
 (with Bhatia, H. L.; Puri, M. C.) Time minimizing solid transportation problem

- (German and Russian summaries) *Math. Operationsforsch. Statist.* 7 (1976), no. 3, 395-403. (O. Pokorná) 57 #9049 90C05 (90B10)
- (with Bhatia, H. L.; Puri, M. C.) Time-cost trade-off in a transportation problem. *Opsearch* 13 (1976), no. 3-4, 129-142. (C. B. Garcia) 56 #11007 90C50
- (with Arora, S. R.; Puri, M. C.) The set covering problem with linear fractional functional. *Indian J. Pure Appl. Math.* 8 (1977), no. 5, 578-588. (Authors' summary) 57 #5105 90C30
- (with Sharma, J. K.) Indefinite quadratic programming and transportation technique. *Indian J. Pure Appl. Math.* 8 (1977), no. 9, 1029-1031. (B. Ross Barnish) 58 #4327 90C20
- (with Arora, S. R.; Puri, M. C.) An enumerative technique for the set covering problem. *New Zealand Oper. Res.* 5 (1977), no. 2, 119-128. (Edward Minieka) 56 #2359 90C10
- (with Sharma, J. K.) Time minimizing transportation problems. *Proc. Indian Acad. Sci. Sect. A* 86 (1977), no. 6, 513-518. (Jacques A. Ferland) 57 #15475 90C35
- (with Das, C.) Nonlinear complex programming with nonlinear constraints. (German and Russian summaries) *Z. Angew. Math. Mech.* 57 (1977), no. 6, 333-338. (R. N. Kaul) 56 #14717 90C30
- (with Das, C.) A class of nonlinear nondifferentiable complex programming. (German and Russian summaries) *Z. Angew. Math. Mech.* 57 (1977), no. 8, 481-484. (A. I. Schiop) 57 #15461 90C30
- (with Arora, S. R.; Puri, M. C.) Cutting plane technique for the set covering problem with linear fractional functional. (German and Russian summaries) *Z. Angew. Math. Mech.* 57 (1977), no. 10, 597-602. (Authors' summary) 56 #17821 90C30
- (with Garg, K. C.) Complementary programming with linear fractional objective function. *Cahiers Centre Études Rech. Opér.* 20 (1978), no. 1, 83-94. (Authors' summary) 58 #15176 90C30
- Varup, Shanti** Mass transfer from a porous sphere in Stokes flow with second order surface reaction. *Bull. Math. Soc. Sci. Math. R.S. Roumanie (N.S.)* 22(70) (1978), no. 2, 205-213. (Harald E. Krogstad) 58 #8766 76A1
- Varztrauber, Paul N.** On the numerical solution of the Dirichlet problem for a region of general shape. *SIAM J. Numer. Anal.* 9 (1972), 300-306. (D. Gaier) 46 #4757 65N99
- (with Sweet, Roland A.) The direct solution of the discrete Poisson equation on a disk. *SIAM J. Numer. Anal.* 10 (1973), 900-907. (Clarence M. Ablow) 51 #4695 65N20
- The direct solution of the discrete Poisson equation on the surface of a sphere. *J. Computational Phys.* 15 (1974), 46-54. (R. B. Kelman) 51 #7330 65P05
- A direct method for the discrete solution of separable elliptic equations. *SIAM J. Numer. Anal.* 11 (1974), 1136-1150. (J. R. Kuttler) 51 #4640 65F05
- The methods of cyclic reduction, Fourier analysis and the FACR algorithm for the discrete solution of Poisson's equation on a rectangle. *SIAM Rev.* 19 (1977), no. 3, 490-501. (O. Widlund) 55 #11639 65N05
- Wayne, D. A.** (with Lawson, J. Douglas) A simple efficient algorithm for the solution of heat conduction problems. *Proceedings of the Sixth Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1976)*, pp. 239-250. *Congress. Numer., XVIII. Utilitas Math., Winnipeg, Man., 1977*. (From the text) 58 #31879 65N20
- Wheat, Calvin W.** A duel complicated by false targets and uncertainty as to opponent type. *Naval Res. Logist. Quart.* 19 (1972), 355-367. (J. D. Hwang) 47 #4692 93E05
- Wiedler, Moss Eisenberg** Introduction to groups of simple algebras. *Ring theory (Proc. Conf., Park City, Utah, 1971)*, pp. 353-362. *Academic Press, New York, 1972*. (Editors) 49 #2835 16A40
- Lie nilpotent and solvable associative algebras. *J. Algebra* 26 (1973), 422-430. (Ralph K. Amayo) 52 #509 16A68
- Groups of simple algebras. *Inst. Hautes Études Sci. Publ. Math. No. 44* (1974), 79-189. (Lindsay N. Childs) 51 #587 16A16 (18H15)
- Nilpotent and solvable associative algebras. *J. Algebra* 28 (1974), 102-110. (Editors) 52 #8195 16A68
- Something like the Brauer group. *Proceedings of the International Congress of Mathematicians (Vancouver, B.C., 1974)*, Vol. 1, pp. 337-341. *Canad. Math. Congress, Montreal, Que., 1975*. (S. Yuan) 54 #10312 16A16
- Purely inseparable algebras. *J. Algebra* 35 (1975), 342-355. (Lindsay N. Childs) 52 #499 16A56
- When is the tensor product of algebras local? *Proc. Amer. Math. Soc.* 48 (1975), 8-10. (S. S. Page) 50 #13016 13H99
- The predual theorem to the Jacobson-Bourbaki theorem. *Trans. Amer. Math. Soc.* 213 (1975), 391-406. (A. Rosenberg) 52 #8188 16A49 (16A24, 16A74)
- Conjugacy of Borel subgroups: an easy proof. *Advances in Math.* 20 (1976), no. 1, 86-100. (David Birkes) 53 #636 20G15
- Noncommutative purely inseparable extensions. *Ring theory, II (Proc. Second Conf., Univ. Oklahoma, Norman, Okla., 1975)*, pp. 45-54. *Lecture Notes in Pure and Appl. Math., Vol. 26, Dekker, New York, 1977*. (Lindsay N. Childs) 56 #418 16A56
- Commutative descent theory. *Ring theory, II (Proc. Second Conf., Univ. Oklahoma, Norman, Okla., 1975)*, pp. 55-67. *Lecture Notes in Pure and Appl. Math., Vol. 26, Dekker, New York, 1977*. (Gerson Levin) 58 #27946 13C99 (16A64)
- Two classical splitting theorems: easy proofs. *J. Pure Appl. Algebra* 13 (1978), no. 1, 33-35. (Warren Dicks) 58 #22160 16A40
- Wheaney, Dennis J.** Upper and lower bounds via penalty functions for control problems. *IEEE Trans. Automatic Control AC-19* (1974), 161-162. (Jean E. Taylor) 53 #1374 49E15
- (with Tatham, Ronad L.) An improved long-run model for multiple warehouse location. *Management Sci.* 22 (1975/76), no. 7, 748-758. (T. Salia) 53 #12549 90B05 (90C50)
- (with Abad, Prakash) An iterative algorithm for optimal control of a system with multiple criteria. *Internat. J. Systems Sci.* 8 (1977), no. 2, 221-229. (J. Cullum) 56 #3722 49D99 (65K05)
- Wheaney, James L.** Quality, commodity hierarchies, and housing markets. *Econometrica* 42 (1974), 147-167. (Author's summary) 55 #9885 90A15
- Housing unit maintenance and the mode of tenure. *J. Econom. Theory* 8 (1974), no. 2, 111-138. (Carl P. Simon) 57 #11684 90A15
- Sweeney, John W., Jr.** See Justice and utility, including a symposium on Rawls, 49 #12112
- Sweeney, W. J.** A uniqueness theorem for the Neumann problem. *Ann. of Math. (2)* 90 (1969), 353-360. (Zbl 182, 426) 58 #31286 58G05 (35J99, 35N15)
- Triangular operators. *Global analysis (Proc. Sympos. Pure Math., Vol. XVI, Berkeley, Calif., 1968)*, pp. 221-224. *Amer. Math. Soc., Providence, R.I., 1970*. (J. S. Joel) 52 #9297 58G05 (35N15)
- Coerciveness in the Neumann problem. *J. Differential Geometry* 6 (1971/72), 375-393. (J. Eells) 45 #7757 58G05
- A condition for subellipticity in Spencer's Neumann problem. *A seminar on PDEs — 1973*, pp. 84-103. *Rutgers Univ., New Brunswick, N. J., 1973*. (Editors) 58 #24396 58G05 (35H05)
- Coerciveness for the Neumann problem. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971)*, pp. 221-223. *Amer. Math. Soc., Providence, R.I., 1973*. (H. Goldschmidt) 50 #5859 58G05 (35N15)
- A characterization of local subellipticity for pseudodifferential complexes. *J. Differential Equations* 13 (1973), 495-505. (H. Goldschmidt) 48 #7312 58G15 (35S05)
- Microlocalization of estimates for the Neumann problem. *Rencontre sur l'analyse complexe à plusieurs variables et les systèmes surdéterminés (Textes Conf., Univ. Montréal, Montréal, Que., 1974)*, pp. 181-192. *Presses Univ. Montréal, Montréal, Que., 1975*. (Akira Asada) 58 #2909 58G05
- A condition for subellipticity in Spencer's Neumann problem. *J. Differential Equations* 21 (1976), no. 2, 316-362. (J. Eells) 54 #1313 58G05 (35N15)
- Sweet, Albert** The pragmatics of first order languages. I. *Notre Dame J. Formal Logic* 13 (1972), 145-160. (D. Monk) 45 #6604 02J15
- The pragmatics of first order languages. II. *Notre Dame J. Formal Logic* 16 (1975), 119-131. (D. Monk) 50 #9578 02J15 (02A05)
- Sweet, Daniel** Stability criterion for periodic families. *Seminar on Differential Equations and Dynamical Systems, II (Univ. Maryland, College Park, Md., 1969)*, pp. 224-229. *Lecture Notes in Math., Vol. 144, Springer, Berlin, 1970*. (J. S. Joel) 57 #3539 34D30 (58F05)
- Periodic families of systems possessing a first integral. *SIAM J. Appl. Math.* 22 (1972), 359-372. (N. P. Bhatia) 47 #3770 34C35
- Periodic solutions for dynamical systems possessing a first integral in the resonance case. *J. Differential Equations* 14 (1973), 171-183. (N. Fenichel) 48 #11689 34C35
- (with Schmidt, Dieters) A unifying theory in determining periodic families for Hamiltonian systems at resonance. *J. Differential Equations* 14 (1973), 597-609. (N. Fenichel) 48 #6563 34C35 (70.34)
- Choosing projection operators for the alternative method. *Nonlinear functional analysis and differential equations (Proc. Conf., Mich. State Univ., East Lansing, Mich., 1975)*, pp. 347-352. *Lecture Notes in Pure and Appl. Math., Vol. 19, Marcel Dekker, New York, 1976*. (R. Iino (Zbl 352 #47031)) 58 #12562 47H15 (34C25)
- (with Sánchez, David A.) An iteration scheme for determining equations of dynamical systems. *Applicable Anal.* 6 (1976/77), no. 3, 223-228. (M. Rama Mohana Rao) 56 #7158 65H05 (34C25)
- An iteration scheme for periodic dynamical systems possessing a first integral. *J. Differential Equations* 28 (1978), no. 2, 246-252. (Joseph C. Wilson) 58 #1403 34C25
- Sweet, Lowell** On involutions of quasi-division algebras. *Canad. Math. Bull.* 17 (1974/75), no. 5, 723-725. (Ralph K. Amayo) 51 #12955 17A99
- On homogeneous algebras. *Pacific J. Math.* 59 (1975), no. 2, 585-594. (Ralph K. Amayo) 52 #8202 17A99
- On doubly homogeneous algebras. *Pacific J. Math.* 59 (1975), no. 2, 595-597. (Ralph K. Amayo) 52 #8203 17A99
- On the triviality of homogeneous algebras over an algebraically closed field. *Proc. Amer. Math. Soc.* 48 (1975), 321-324. (A. A. Sagle) 51 #637 17E05
- (with MacDougall, J. A.) Three dimensional homogeneous algebras. *Pacific J. Math.* 74 (1978), no. 1, 153-162. (William H. Gustafson) 57 #6121 17A99
- Sweet, Melvin M.** A theorem in Diophantine approximations. *J. Number Theory* 5 (1973), 245-251. (R. P. Bambah) 49 #2568 10F10
- An asymptotic formula in adele Diophantine approximations. *Trans. Amer. Math. Soc.* 195 (1974), 81-96. (D. G. Cantor) 51 #10243 10F30
- (with Baum, Leonard E.) Continued fractions of algebraic power series in characteristic 2. *Ann. of Math. (2)* 103 (1976), no. 3, 593-610. (Thomas W. Cusick) 53 #13127 10F25
- (with Baum, Leonard E.) Badly approximable power series in characteristic 2. *Ann. of Math. (2)* 105 (1977), no. 3, 573-580. (P. Bundschuh) 56 #2928 10F20
- (with Baum, Leonard E.; Herzberg, Norman P.; Lomonaco, S. J., Jr.) Fields of almost periodic sequences. *J. Combinatorial Theory Ser. A* 22 (1977), no. 2, 169-180. (S. L. G. Choi) 58 #258 05A15 (12C99)
- Sweet, Roland A.** (with Dennis, J. E., Jr.) Some minimum properties of the trapezoidal rule. *SIAM J. Numer. Anal.* 9 (1972), 230-236. (D. Schultz) 46 #10209 65L05
- Direct methods for the solution of Poisson's equation on a staggered grid. *J. Computational Phys.* 12 (1973), 422-428. (G. T. Symm) 48 #7626 65N20
- (with Ciment, Melvyn) Mesh refinements for parabolic equations. *J. Computational Phys.* 12 (1973), 513-525. (P. Keast) 53 #12027 65M10
- (with Swartztrauber, Paul N.) The direct solution of the discrete Poisson equation on a disk. *SIAM J. Numer. Anal.* 10 (1973), 900-907. (Clarence M. Ablow) 51 #4695 65N20
- A generalized cyclic reduction algorithm. *SIAM J. Numer. Anal.* 11 (1974), 506-520. (From the introduction and summary) 58 #24997 65N20
- (with Schumann, U.) A direct method for the solution of Poisson's equation with Neumann boundary conditions on a staggered grid of arbitrary size. *J. Computational Phys.* 20 (1976), no. 2, 171-182. (A. O. Garder, Jr.) 52 #16055 65N05
- A cyclic reduction algorithm for solving block tridiagonal systems of arbitrary dimension. *SIAM J. Numer. Anal.* 14 (1977), no. 4, 706-720. (R. P. Tewarson) 56 #4192 65N20 (65F05)
- Sweeting, Trevor J.** Speeds of convergence for the multidimensional central limit theorem. *Ann. Probability* 5 (1977), no. 1, 28-41. (R. N. Bhattacharya) 55 #1421 60F05

- On efficient tests for branching processes. *Biometrika* **65** (1978), no. 1, 123-127. (Niels Keiding) **58** #13561 62M05
- Sweetser, T. H., III A minimal set-valued strong derivative for vector-valued Lipschitz functions. *J. Optimization Theory Appl.* **23** (1977), no. 4, 549-562. (S. F. McCormick) **57** #8012 65K05 (49A99)
- Sweigart, J. R. (with Carbone, Robert) Equity and selective pollution abatement procedures. *Management Sci.* **23** (1976/77), no. 4, 361-370. (Authors' summary) **55** #12158 90D45 (90B99)
- Swenson, Carl Direct sum subset decompositions of Z . *Pacific J. Math.* **53** (1974), 629-633. (N. G. de Bruijn) **50** #9833 10L05 (05B10)
- Swenson, Carl E. On two addition theorems of H. P. Yap. *Nanta Math.* **5** (1972), no. 3, 77-79. (A. P. Street) **49** #443 20K99
- Swenson, J. R. The chromatic polynomial of a complete bipartite graph. *Amer. Math. Monthly* **80** (1973), 797-798. (R. E. Greenwood) **48** #151 05C15
- Swenson, Richard G. (with Green, David M.) On the relations between random walk models for two-choice response times. *J. Mathematical Psychology* **15** (1977), no. 3, 282-291. (Authors' summary) **58** #24818 62P15
- Swerdlow, Noel M. (with Goldstein, Bernard R.) Planetary distances and sizes in an anonymous Arabic treatise preserved in Bodleian Ms. Marsh 621. *Centaurus* **15** (1970/71), no. 2, 135-170. (E. J. Aiton (Zbl 259 #01003)) **58** #26780 01A30
- Al-Battānī's determination of the solar distance. *Centaurus* **17** (1972), no. 2, 97-105. (J. Vernet) **57** #12032 01A30
- Aristotelian planetary theory in the Renaissance: Giovanni Battista Amico's homocentric spheres. *J. Hist. Astronom.* **3** (1972), no. 1, 36-48. (V. E. Thoren) **58** #21097 01A40
- The holograph of *De revolutionibus* and the chronology of its composition. *J. Hist. Astronom.* **5** (1974), 186-198. (Editors) **58** #26855 01A40
- The origin of the Gregorian civil calendar. *J. Hist. Astronom.* **5** (1974), part 1, 48-49. (J. S. Joel) **58** #21098 01A40
- The planetary theory of François Viète. I. The fundamental planetary models. *J. Hist. Astronom.* **6** (1975), no. 3, 185-208. (Peeter Müürsepp) **56** #8283 01A40
- Pseudodoxia Copernicana: or, enquiries into very many received tenets and commonly presumed truths, mostly concerning spheres. *Arch. Internat. Histoire Sci.* **26** (1976), no. 98, 108-158. (Ja. O. Matvišin) **56** #8280 01A40
- See also Rosen, Edward, **56** #8281
- Swetits, J. J. (with Wood, Bruce) Approximation of a class of unbounded functions. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 491-494. Academic Press, New York, 1973. (L. Hoischen) **49** #5653 41A30
- (with Wood, Bruce) On a class of positive linear operators. *Canad. Math. Bull.* **16** (1973) 557-559. (A. Sharma) **50** #10630 41A35
- (with Wood, Bruce) Generalized Bernstein power series. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 461-471. (G. Albinus) **47** #7278 41A10
- The $E(x, \{a_n\})$ summability transform. *Bull. Inst. Math. Acad. Sinica* **2** (1974), no. 1, 109-120. (G. U. Brauer) **49** #7641 40C05
- Strongly almost convergent sequences. *Publ. Inst. Math. (Beograd) (N.S.)* **22**(36) (1977), 259-265. (C. Chou) **58** #6813 40C05
- (with Rogers, Colin) On complementary extremum principles. *J. Math. Anal. Appl.* **62** (1978), no. 3, 445-452. (L. B. Rall) **58** #12658 49H05 (49G20, 76.49)
- Swetz, Frank J. ★Mathematics education in China: its growth and development. *The M.I.T. Press, Cambridge, Mass.-London*, 1974. xiv+364 pp. (Editors) **52** #13172 01A60 (00A05)
- The introduction of mathematics in higher education in China, 1865-1887. (German summary) *Historia Math.* **1** (1974), 167-179. (Stephen H. Y. Hung) **56** #15276 01A25 (01A55)
- The "open-door" policy and the reform of mathematics education in the People's Republic of China. *Educational Studies in Math.* **8** (1977), no. 4, 461-478. (M. Kline) **58** #10145 01A65
- Świątak, Halina On the regularity of the locally integrable solutions of the functional equations $\sum_{i=1}^n a_i(x, t)f(x + \varphi_i(t)) = b(x, t)$. *Aequationes Math.* **4** (1970), 291-296. (Editors) **53** #11255 39A25
- (with Hosszú, M.) Notes on functional equations of polynomial form. *Publ. Math. Debrecen* **17** (1970), 61-66 (1971). (R. A. Rosenbaum) **47** #674 39A30
- On the regularity of the integrable solutions of the functional equations $\sum_{i=1}^n a_i(x, y) = \sum_{j=1}^m b_j(x, y) + \sum_{k=1}^p c_k(x, y)g(x_k)$. *Publ. Math. Debrecen* **17** (1970), 259-266 (1971). (V. Murgescu) **46** #4041 39A30
- A proof of the equivalence of the equation $f(x+y-xy)+f(xy)=f(x)+f(y)$ and Jensen's functional equation. *Aequationes Math.* **6** (1971), 24-29. (B. Schweizer) **45** #766 39A40
- Criteria for the regularity of continuous and locally integrable solutions of a class of linear functional equations. *Aequationes Math.* **6** (1971), 170-187. (J. Täuber) **45** #763 39A30
- A certain regularity problems for solutions of functional equations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 209-212. (V. Herman) **45** #7335 39A15 (35H05)
- On linear functional equations with nonpolynomial C^∞ solutions. *Canad. Math. Bull.* **14** (1971), 239-244. (J. Aczél) **46** #9585 39A30
- (with Gołb, Stanisław) Note on inner products in vector spaces. *Aequationes Math.* **8** (1972), 74-75. (T. H. Hildebrandt) **46** #4180 46C05
- (with Lawruk, Bohdan) On functions satisfying a generalized mean value equation. *Aequationes Math.* **11** (1974), 1-10. (A. Climescu) **49** #9460 39A15
- On a class of functional equations with several unknown functions. *Aequationes Math.* **12** (1975), 39-64. (Karol Baron) **51** #3738 39A30
- A characterization of exponential functions with non-linear exponents. *Canad. Math. Bull.* **18** (1975), no. 2, 277-281. (Karol Baron) **52** #8698 39A15
- The regularity of the locally integrable and continuous solutions of nonlinear functional equations. *Trans. Amer. Math. Soc.* **221** (1976), no. 1, 97-118. (Karol Baron) **55** #3583 39A15
- Existence and regularity problems for nonlinear functional equations. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 21-31. (Karol Baron) **57** #942 39A30
- On alternative functional equations. *Aequationes Math.* **15** (1977), no. 1, 35-47. (A. Smajdor) **55** #13117 39A40
- Świątkowski, Tadeusz Remarks on the Weierstrass-Stone theorem. (Polish. English summary) *Zeszyty Nauk. Univ. Łódź. Nauki Mat. Przyrod. Ser. II No. 52 Mat.* (1973) 1-5. (E. Halfar) **52** #4234 54D30 (54C35)
- (with Wilczyński, Władysław) Remarks on the homeomorphic equivalence of measurable and summable functions. (Polish. English summary) *Zeszyty Nauk. Univ. Łódź. Nauki Mat. Przyrod. Ser. II No. 52 Mat.* (1973), 45-51. (J. Lukeš) **49** #5284 28A20
- A certain theorem of Dini. (Polish. English summary) *Zeszyty Nauk. Univ. Łódź. Nauki Mat. Przyrod. Ser. II No. 52 Mat.* (1973), 53-56. (E. Halfar) **52** #6650 54C30 (54D30)
- (with Kocela, Edward) On some characterization of uniform convergence. (Polish and Russian summaries) *Zeszyty Nauk. Politech. Łódź. Mat. No. 7* (1976), 11-15. (L. Reilly) **54** #8543 54A20
- Swick, David A. Asymptotic distribution of a discrete transform of an arbitrarily sampled homogeneous random field. *Advances in Appl. Probability* **7** (1975), 140-153. (E. Hannan) **54** #9016 62M10
- Harmonic relationships among random variables. *SIAM J. Appl. Math.* **33** (1977), no. 3, 490-498. (Dan Anbar) **57** #4399 62E15
- Swick, K. E. Boundedness and stability for a nonlinear third order differential equation. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1977), no. 6, 859-865. (J. O. C. Ezeilo) **53** #3440 34D05
- A model of single species population growth. *SIAM J. Math. Anal.* **7** (1976), no. 5, 565-576. (Kuang-Ho Chen) **56** #4918 92A15
- Convergence of solutions of nonlinear differential equations. *Ann. Mat. Pura Appl.* (4) **114** (1977), 1-26. (P. Waltman) **58** #1435 34D35
- A nonlinear age-dependent model of single species population dynamics. *SIAM Appl. Math.* **32** (1977), no. 2, 484-498. (Tore Schweder) **58** #9423 92A15
- Świderski, Jacek Diagnosis of modular systems in computer control systems. (Polish and Russian summaries) *Arch. Automat. Telemekh.* **23** (1978), no. 1-2, 171-176. (Author's summary) **58** #20880 94A20
- Świeca, Jorge Andre (with Schroer, Bert; Seiler, Rudolf) Problems of stability for quantum fields in external time-dependent potentials. *Phys. Rev. D* (3) **2** (1970), 2927-2937. (M. J. Westwater) **48** #7836 81.46
- (with Schroer, Bert) Indefinite metric and stationary external interactions of quantized fields. *Phys. Rev. D* (3) **2** (1970), 2938-2944. (M. J. Westwater) **48** #7852 81.47
- (with Lowenstein, John H.) Quantum electrodynamics in two dimensions. *Adv. Phys.* **68** (1971), 172-195. (L. Streit) **46** #6757 81.47
- (with Völkel, A. H.) Remarks on conformal invariance. *Comm. Math. Phys.* (1973), 319-342. (G. W. Johnson) **47** #9990 81.47
- (with Schroer, Bert) Conformal transformations for quantized fields. *Phys. Rev. D* (3) **10** (1974), 480-485. (Authors' summary) **53** #9920 81.22
- Świącicka, J. (with Boratyński, Maksymilian) Hilbert-Samuel functions of Cohen-Macaulay rings. *Proc. Amer. Math. Soc.* **51** (1975), 19-24. (Joel Roberts) **55** #5617 13H10 (13H15)
- Świerczkowski, S. On the cohomology of local groups. *J. Austral. Math. Soc.* **12** (1971), 249-255. (L. Ribes) **45** #2026 20J05 (18H10)
- The path-functor on Banach Lie algebras. *Nederl. Akad. Wetensch. Proc. Ser. A* **74**=*Indag. Math.* **33** (1971), 235-239. (Robert E. Beck) **45** #330 17B65 (46H99)
- Cohomology of group germs and Lie algebras. *Pacific J. Math.* **39** (1971), 471-480. (W. T. van Est) **47** #308 18H25 (22E05, 57F10)
- ★Sets and numbers. Library of Mathematics. Routledge & Kegan Paul, London-Boston, Mass., 1972. vi+74 pp. (A. H. Lightstone (Zbl 282 #04002)) **58** #104-01
- (with van Est, W. T.) The path functor and faithful representability of Banach Lie algebras. Collection of articles dedicated to the memory of Hannare Neumann, I. *Austral. Math. Soc.* **16** (1973), 54-69. (I. Stewart) **49** #5111 17B65 (22E65, 46H99)
- A description of the tangent functor category. *Colloq. Math.* **31** (1974), 165-170. (H. Röhrli) **52** #533 18F15
- Small local groups. *Nederl. Akad. Wetensch. Proc. Ser. A* **78**=*Indag. Math.* (1975), no. 4, 356-363. (K. H. Hofmann) **53** #2797 08A05 (20A05)
- Swiesznikow, A. A. See Svešnikov, A. A.
- Świątochowski, Zbigniew On second order Cauchy's problem in a Hilbert space with applications to the mixed problems for hyperbolic equations. I. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **29** (1975), 123-134 (1977). (Author's summary) **57** #16891a 34G05 (35L20)
- On second order Cauchy's problem in a Hilbert space with applications to mixed problems for hyperbolic equations. II. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **29** (1975), 135-144 (1977). (Author's summary) **57** #16891b 34G05 (35L20)
- Some remarks on the wave operator in a curvilinear coordinate system. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **29** (1975), 145-150 (1977). (Volkmar Wünsch) **57** #893 35L10 (58G99)
- Swift, Adrian ★Comparison of some derivative free methods for numerical computation of real zeros of a function of a single variable. Occasional Publications in Mathematics No. 3. Department of Mathematics, Massey University, Palmerston North, 1977. i+26 pp. (Ian Gladwell) **57** #14409 65H05
- Swift, J. Dean On (k, l) -coverings and disjoint systems. *Combinatorics (Proc. Symp. Pure Math., Vol. XIX, Univ. California, Los Angeles, Calif., 1968)*, pp. 223-228. Am. Math. Soc., Providence, R.I., 1971. (L. D. Baumert) **47** #3212 05B30
- Errata to D. H. Lehmer's "Table errata: 'Table des nombres composés vérifiant le théorème de Fermat pour le module 2 jusqu'à 100.000.000' by P. Poulet" (Math. Comp. **25** (1971), no. 116, 944-945). *Math. Comp.* **26** (1972), 814. (Editors) **58** #31707 65A05 (10A99)
- (with Paige, Lowell J.; Slobko, Thomas A.) ★Elements of linear algebra. Second edition. Xerox College Publishing, Lexington, Mass.-Toronto, Ont., 1974. ix+287 pp. (Editors) **50** #9891 15-01
- Swiggart, Peter Self reference in formal languages. *Noire Dame J. Formal Logic* **15** (1974), 608-612. (Robert G. Jeroslow) **51** #2882 02D99

- Quine's logic and the class paradox. *Mind* **84** (1975), no. 335, 321-337. (Editors) **58** #16296 02K15
- Jitnik, Zeno G. Two suggestions for Ramsey-reducts of infinite theories. *Philos. Sci.* **43** (1976), no. 4, 575-577. (M. Makkai) **58** #5000 02A05
- Eliminability in a cardinal. *Studia Logica* **35** (1976), no. 1, 71-89. (Gabriel Lolli) **56** #5268 02H05
- Illens, Stéphane (with Paiva, Manuel) A stochastic method for the solution of the diffusion equation. *Simulation* **25** (1975), no. 2, 33-41. (Siegfried Filippi) **52** #16056 65N05 (65C05)
- Indel, Benec F. (with Yandle, David O.) Allocation in stratified sampling as a game. *J. Amer. Statist. Assoc.* **67** (1972), 684-686. (Om P. Aggarwal) **52** #12152 62D05 (62C15)
- Good ridge estimators based on prior information. *Comm. Statist.-Theory Methods* **A5** (1976), no. 11, 1065-1075. (Guillermo Zárate De Lara) **55** #13675 62J05
- Inerd, G. G. On the energy of a cosmological field of gravitational radiation. *Proc. Roy. Soc. Edinburgh Sect. A* **77** (1977), no. 1-2, 49-63. (Author's summary) **58** #9081 83.53
- Jings, P. In memoriam Léon Rosenfeld. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **60** (1974), 665-662. (Editors) **50** #6765 01A70
- Innerton-Dyer, H. P. F. (with Atkin, A. O. L.) Modular forms on noncongruence subgroups. *Combinatorics (Proc. Sympos. Pure Math., Vol. XIX, Univ. California, Los Angeles, Calif., 1968)*, pp. 1-25. *Amer. Math. Soc., Providence, R.I.*, 1971. (Morris Newman) **49** #2550 10D05
- Applications of computers to the geometry of numbers. *Computers in algebra and number theory (Proc. Sympos. Appl. Math., New York, 1970)*, pp. 55-62. *SIAM-AMS Proc., Vol. IV, Amer. Math. Soc., Providence, R.I.*, 1971. (E. S. Barnes) **49** #4938 10E05 (10-04)
- Applications of algebraic geometry to number theory. 1969 *Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969)*, pp. 1-52. *Amer. Math. Soc., Providence, R.I.*, 1971. (M. Fried) **49** #2720 14-02 (10-02, 10B99, 14G99)
- On the product of three homogeneous linear forms. *Acta Arith.* **18** (1971), 371-385. (D. H. Lehmer) **45** #1844 10E15
- An outline of Hodge theory. *Algebraic geometry, Oslo 1970 (Proc. Fifth Nordic Summer School in Math.)*, pp. 277-286. *Wolters-Noordhoff, Groningen*, 1972. (Editors) **51** #8109 14C30 (32J25)
- Rational points on del Pezzo surfaces of degree 5. *Algebraic geometry, Oslo 1970 (Proc. Fifth Nordic Summer School in Math.)*, pp. 287-290. *Wolters-Noordhoff, Groningen*, 1972. (M. Fried) **51** #12859 (EA 52) 14G05 (14J25)
- On l -adic representations and congruences for coefficients of modular forms. *Modular functions of one variable, III (Proc. Internat. Summer School, Univ. Antwerp, 1972)*, pp. 1-55. *Lecture Notes in Math., Vol. 350, Springer, Berlin*, 1973. (K.-B. Gundlach) **53** #10717a (E 53 #10717b) 10D05
- An enumeration of all varieties of degree 4. *Amer. J. Math.* **95** (1973), 403-418. (P. F. Newstead) **49** #5008 14A25
- (with Artin, Michael) The Shafarevich-Tate conjecture for pencils of elliptic curves on $K3$ surfaces. *Invent. Math.* **20** (1973), 249-266. (J. S. Milne) **54** #5240 14G13 (14J25, 14J20)
- ★Analytic theory of abelian varieties. London Mathematical Society Lecture Note Series, No. 14. *Cambridge University Press, London-New York*, 1974. viii + 90 pp. (H. Klingen) **51** #3180 14K20
- (with Cartwright, Mary L.) Boundedness theorems for some second order differential equations. I. Collection of articles dedicated to the memory of Tadeusz Ważewski, III. *Ann. Polon. Math.* **29** (1974), 233-258. (W. S. Loud) **50** #7667 34C10
- (with Mazur, Barry C.) Arithmetic of Weil curves. *Invent. Math.* **25** (1974), 1-61. (J. S. Milne) **50** #7152 14G05 (10D05)
- The number of lattice points on a convex curve. *J. Number Theory* **6** (1974), 128-135. (C. G. Lekkerkerker) **49** #2626 10J25
- (with Birch, B. J.) Elliptic curves and modular functions. *Modular functions of one variable, IV (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 2-32. *Lecture Notes in Math., Vol. 476, Springer, Berlin*, 1975. (Kuang-yen Shih) **52** #5685 14K15 (10D05)
- Correction to: "On l -adic representations and congruences for coefficients of modular forms" (Modular functions of one variable, III (Proc. Internat. Summer School, Univ. Antwerp, 1972), pp. 1-55, Lecture Notes in Math., Vol. 350, Springer, Berlin, 1973). *Modular functions of one variable, IV (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 149. *Lecture Notes in Math., Vol. 476, Springer, Berlin*, 1975. (K.-B. Gundlach) **53** #10717b 10D05
- (with Birch, B. J.) The Hasse problem for rational surfaces. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, III. *J. Reine Angew. Math.* **274/275** (1975), 164-174. (D. J. Lewis) **55** #2922 14J20 (14G25, 10C20)
- Almost-conservative second-order differential equations. *Math. Proc. Cambridge Philos. Soc.* **77** (1975), 159-169. (C. S. Coleman) **50** #7687 34C99
- (with Cartwright, Mary L.) The boundedness of solutions of systems of differential equations. *Differential equations (Colloq., Keszthely, 1974)*, pp. 121-130. *Colloq. Math. Soc. János Bolyai, Vol. 15, North-Holland, Amsterdam*, 1977. (Joseph C. Wilson) **57** #13003 34C10
- Arithmetic groups. *Discrete groups and automorphic functions (Proc. Conf., Cambridge, 1975)*, pp. 377-401. *Academic Press, London*, 1977. (Editors) **58** #11229 22E40 (30A58)
- On l -adic representations and congruences for coefficients of modular forms. II. *Modular functions of one variable, V (Proc. Second Internat. Conf., Univ. Bonn, Bonn, 1976)*, pp. 63-90. *Lecture Notes in Math., Vol. 601, Springer, Berlin*, 1977. (K.-B. Gundlach) **58** #16520 10D05
- The Hopf bifurcation theorem in three dimensions. *Math. Proc. Cambridge Philos. Soc.* **82** (1977), no. 3, 469-483. (J. E. Marsden) **56** #6748 58F10 (34C35)
- Small parameter theory: the method of averaging. *Proc. London Math. Soc. (3)* **34** (1977), no. 3, 385-420. (W. M. Greenlee) **58** #22829 34C30 (34E05)
- See also **Computers in number theory**, **47** #3285 and **Tables: Elliptic curves**, **52** #10557
- Swint, David O. (with Yen, David H. Y.) Periodic solutions in a class of nonlinear dual-mass systems. *Computational methods in nonlinear mechanics (Proc. Internat. Conf., Austin, Tex., 1974)*, pp. 67-75. *Texas Inst. Comput. Mech., Austin, Tex.*, 1974. (Cataldo Agostinelli) **54** #14496 73.34
- Świrszcz, Tadeusz Monadic functors and convexity. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 39-42. (R. Fritsch) **52** #10846 18C15
- (with Semadeni, Zbigniew) Reflective and coreflective subcategories of categories of Banach spaces and abelian groups. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 11, 1105-1107. (R. Fritsch) **57** #16376 18A40
- Świrszczowski, S. See Sewell, M. J., **57** #11242
- Switzer, Paul Efficiency robustness of estimators. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971)*, Vol. I: *Theory of statistics*, pp. 283-291. *Univ. California Press, Berkeley, Calif.*, 1972. (Rudolph J. Beran) **53** #6879 62G35
- Confidence procedures for two-sample problems. *Biometrika* **63** (1976), no. 1, 13-25. (M. S. Nikulin) **54** #3960 62G15
- Geometrical measures of the smoothness of random functions. *J. Appl. Probability* **13** (1976), no. 1, 86-95. (Werner Fieger) **53** #11728 60G15
- Switzer, Robert M. (with Adams, John Frank; Harris, A. S.) Hopf algebras of cooperations for real and complex K -theory. *Proc. London Math. Soc. (3)* **23** (1971), 385-408. (Larry Smith) **45** #2694 55B15
- Homology comodules. *Invent. Math.* **20** (1973), 97-102. (Harold Hastings) **50** #5797 55F40 (55G10)
- ★Algebraic topology—homotopy and homology. Die Grundlehren der mathematischen Wissenschaften, Band 212. *Springer-Verlag, New York-Heidelberg*, 1975. xii + 526 pp. (S. Y. Husseini) **52** #6695 55-02
- (with Ray, Nigel; Taylor, Laurence R.) Normal structures and bordism theory, with applications to $M\text{Sp}$. *Mem. Amer. Math. Soc.* **12** (1977), no. 193, ix + 66 pp. (Edgar H. Brown, Jr.) **57** #1505 57D15 (57D90)
- Swoboda, Joachim See Jahrestagung: Gesellschaft für Informatik, **48** #1502
- Swoboda, Wolfram (with Hobek, Friedrich) Richard Avenarius. Mit einer Bibliographie. (English summary) *Conceptus* **9** (1975), no. 26, 25-39. (Authors' summary) **58** #21266 01A60 (01A70)
- Swonger, C. W. See **Frontiers of pattern recognition**, **52** #9723
- Sworder, David D. (with Elliott, D. F.) A variable metric technique for parameter optimization. (French, German and Russian summaries) *Automatica-J. IFAC* **5** (1969), 811-816. (Authors' summary) **48** #5378 65K05 (90C15)
- (with Rogers, R. O.) Suboptimal control of linear systems derived from models of lower dimension. *AIAA J.* **9** (1971), 1461-1467. (E. Ar) **45** #8358 93C05
- (with Sworder, S. C.) Feedback estimation systems and the separation principle of stochastic control. *IEEE Trans. Automatic Control* **AC-16** (1971), 350-354. (H. S. Witsenhausen) **45** #1660 93E20
- Gaussian feedback communication systems with weak noise in the feedback link. *J. Math. Anal. Appl.* **34** (1971), 42-52. (Zbl 251 #94005) **58** #9757 94A05
- (with Kazangery, Thomas) Optimal control, repair, and inventory strategies for a linear stochastic system. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-2** (1972), 342-347. (Chelsea C. White and Andrew P. Sage) **48** #13426 93E20 (90B25)
- (with Robinson, Vernon G.) Feedback regulators for jump parameter systems with state and control dependent transition rates. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 4, 355-360. (Authors' summary) **55** #14390 93E20
- (with Jain, Anil K.) Constrained linear filtering as a multistage process. *J. Math. Anal. Appl.* **44** (1973), 48-56. (N. U. Ahmed) **48** #3591 94A05
- (with Robinson, Vernon G.) A computational algorithm for design of regulators for linear jump parameter systems. *IEEE Trans. Automatic Control* **AC-19** (1974), 47-49. (Stuart Schwartz) **53** #5137 93E20
- (with Blair, William P., Jr.) Continuous-time regulation of a class of econometric models. *IEEE Trans. Systems Man Cybernet.* **SMC-5** (1975), no. 3, 341-346. (Authors' summary) **57** #9213 93C55 (90A15)
- (with Blair, William P., Jr.) Feedback control of a class of linear discrete systems with jump parameters and quadratic cost criteria. *Internat. J. Control* **21** (1975), 833-841. (M. B. Suryanarayana) **53** #5139 93E25
- (with Choi, Lin L.) Stationary cost densities for optimally controlled stochastic systems. *IEEE Trans. Automatic Control* **AC-21**, (1976), no. 4, 492-499. (Jean-Michel Bismut) **54** #14861 93E20
- (with Choi, Lin L.) Density functions for random matrix equations. Stochastic systems: modeling, identification and optimization, II (Proc. Sympos., Univ. Kentucky, Lexington, Ky., 1975). *Math. Programming Stud.* **6** (1976), 246-257. (I. M. Stojanov) **57** #2724 93E20
- Control of systems subject to sudden change in character. Special issue on adaptive systems. *Proc. IEEE* **64** (1976), no. 8, 1219-1225. (Bojan Popović) **54** #12335 93E20
- A feedback regulator for following a reference trajectory. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 6, 957-959. (Author's summary) **58** #15501 93C99
- (with Archer, S. M.) Influence of sensor failures on LQG regulators. *J. Cybernet.* **7** (1977), no. 3-4, 269-278. (Lennart Ljung) **56** #15099 93E20
- Sworder, S. C. (with Sworder, David D.) Feedback estimation systems and the separation principle of stochastic control. *IEEE Trans. Automatic Control* **AC-16** (1971), 350-354. (H. S. Witsenhausen) **45** #1660 93E20
- Swoveland, Cary A two-stage decomposition algorithm for a generalized multi-commodity flow problem. (French summary) *INFOR—Canad. J. Operational Res. and Information Processing* **11** (1973), 232-244. (D. L. Iglehart) **48** #7936 90B10
- A deterministic multi-period production planning model with piecewise concave production and holding-backorder costs. *Management Sci.* **21** (1974/75), no. 9, 1007-1013. (Author's summary) **55** #12027 90B30
- A note on column generation in Dantzig-Wolfe decomposition algorithms. *Math. Programming* **6** (1974), 365-370. (Neal Glassman) **50** #1731 90C30
- Syamala Devi, V. See V. Syamala Devi
- Syc, Czesław A topological method of solving systems of linear equations by the method of conjugate structural numbers with the aid of digital computers. (Polish. Russian and

- English summaries) *Arch. Elektrotech. (Warsaw)* **20** (1971), 103-133. (P. Vondráček) **45** #7958 65F30
- Application of the algebra of structural numbers to the analysis of electronic linear systems. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* **20** (1971), 975-982. (P. Vondráček) **46** #5064 94A20
- A method for the successive determination of the trees of a nonoriented graph with the aid of digital computers. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* **21** (1972), 589-595. (B. Zelinka) **47** #6527 05C05 (68A10)
- Analysis of linear electronic systems by the method of structural numbers, with the aid of digital computers. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* **21** (1972), 797-818. (B. Zelinka) **47** #8209 94A20
- A means of successive determination of the oriented trees of an oriented graph by the method of conjugate structural numbers with the aid of digital computers. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* **22** (1973), 407-426. (B. Zelinka) **47** #6538 05C20 (68A10)
- Analysis of direct-current linear electronic circuits by the method of conjugate structural numbers using digital computers. (Polish. English, French, German and Russian summaries) *Rozprawy Elektrotech.* **19** (1973), 3-15. (P. Vondráček) **50** #9430 94A20
- Topological analysis of linear active systems. (Polish. English, French, German and Russian summaries) *Rozprawy Elektrotech.* **22** (1976), no. 3, 483-497. (Author's summary) **57** #2774 94A20
- Sycara-Cyranski, E.** (with DeMillo, Richard A.; Vairavan, K.) A study of schedules as models of synchronous parallel computation. *J. Assoc. Comput. Mach.* **24** (1977), no. 4, 544-565. (Authors' summary) **58** #25065 68A05 (90B30)
- Syčev, A. N.** (with Kammozev, N. F.) Spectral interpretation of tuning operations for multifunctional logic modules. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* **1978**, no. 1, 12-15, 91. (Authors' summary) **58** #20847 94A20
- Syčev, A. V.** Moduli of families of curves and surfaces that pass through a point. (Russian) *Metric questions of the theory of functions and mappings*, No. 3 (Proc. Second Colloq. Theory of Quasiconformal Mappings and its Generalizations, dedicated to M. A. Lavrent'ev's seventieth birthday, Donetsk, 1970) (Russian), pp. 118-126. *Izdat. "Naukova Dumka", Kiev*, 1971. (G. Kneis (Zbl 251 #28008)) **51** #1570 49F25 (28A75)
- A certain quasiconformal mapping of the ball onto itself. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 556-558. (F. W. Gehring) **49** #3128 30A60
- (with Aseev, V. V.) Sets that are removable for quasiconformal mappings in space. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 1213-1227, 1429. (J. Ławrynowicz) **50** #7516 30A60
- Conformality conditions for certain domains. (Russian) *Some problems in modern function theory (Proc. Conf. Modern Problems of Geometric Theory of Functions, Inst. Math., Acad. Sci. USSR, Novosibirsk, 1976)* (Russian), pp. 146-149. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Mat., Novosibirsk*, 1976. (Editors) **58** #22498 30A24
- (with Popov, V. A.; Lysenko, E. V.; Skibenko, I. T.) Synthesis of universal linear transformations. (Russian) *Avtomat. Sistemy Upravljenija i Priboiry Avtomat. Vyp.* **41** (1977), 50-53, 2. (Authors' summary) **58** #15720 94A20 (93B99)
- Coefficients of quasiconformality of dihedral wedges. (Russian) *Dokl. Akad. Nauk SSSR* **239** (1978), no. 2, 279-281. (M. Näätänen) **58** #17083 30A60 (30A72)
- Linear quasiconformality coefficients of a pair of domains. (Russian) *Dokl. Akad. Nauk SSSR* **239** (1978), no. 3, 542-545. (P. Caraman) **58** #11397 30A60
- Syčev, V. V.** (with Golubinskii, A. A.) A self-similar solution of the Navier-Stokes equations. (Russian) *Učen. Zap. CAGI* **7** (1976), no. 6, 11-17. (Authors' summary) **58** #8734 76.35
- See also **Problems in applied mathematics and mechanics**, **58** #8593
- Syčeva, E. P.** (with Baranenkova, G. S.; Demidovič, B. P.; Efimenko, V. A.; Kogan, S. M.; Lunc, G. L.; Poršneva, E. F.; Frolov, S. V.; Šostak, R. Ja.; Janpol'skii, A. R.) ★Problems in mathematical analysis. Edited by B. Demidovič [B. P. Demidovič]. Translated from the Russian by G. Yankovsky [G. Jankovskii]. Third printing. *Mir Publishers, Moscow*, 1973. 496 pp. (Editors) **50** #2398 26-01
- (with Baranenkova, G. S.; Demidovič, B. P.; Efimenko, V. A.; Frolov, S. V.; Kogan, S. M.; Lunc, G. L.; Poršneva, E. F.; Šostak, R. Ja.; Janpol'skii, A. R.) ★Esercizi e problemi di analisi matematica. A cura di B. Demidovič. Tradutto dall'edizione russa di 1959. Nuova Biblioteca di Cultura, Serie Scientifica, No. 138. *Editori Riuniti, Rome; Edizioni Mir, Moscow*, 1975. 486 pp. (Editors) **54** #2370 00A05 (26-01)
- (with Baranenkova, G. S.; Demidovič, B. P.; Efimenko, V. A.; Kogan, S. M.; Lunc, G. L.; Poršneva, E. F.; Frolov, S. V.; Šostak, R. Ja.; Janpol'skii, A. R.) ★Problems in mathematical analysis. Under the editorship of B. Demidovich. Translated from the Russian by G. Yankovsky. Fourth printing. *Mir Publishers, Moscow*, 1976. 496 pp. (Editors) **55** #5804 26-01
- Syčeva, N. I.** (with Eidel'nant, M. I.) A certain generalization of the crossing out numeration algorithm. (Russian) *Taškent. Inst. Narod. Hoz. Naučn. Zap. No. 34 Mat. v Priložen.* (1970), 39-50. (J. Abraham) **51** #9787 90C05
- Syčeva, V. G.** Strongly parabolic congruences of lines in P_4 . (Russian) *Moskov. Inst. Élektron. Mašinostronjenija—Trudy MIEM No. 15 Funkcional. Anal. i Priložen.* (1971), 137-150. (See RŽMat **1971** #8 A492) **53A20**
- Syčeva, E.** See **Syčeva, E. P.**
- Syčikov, A. F.** (with Andronov, I. K.; Spasskii, A. F.) Obituary: Vladimir Modestovič Bradis. (Russian) *Mat. v Škole* **1975**, no. 4, 96. (Not reviewed) **01A70**
- Syč'ko, Ju. I.** (with Gudzenko, L. I.; Evstigneev, V. V.; Lakoba, I. S.; Marčenko, V. S.; Sorkina, A. E.; Čertoprud, V. E.; Jakovlenko, S. I.) The kinetics of simple models of oscillation theory. (Russian) *Trudy Fiz. Inst. Lebedev.* **90** (1976), 208 pp. (Publisher's description) **57** #8453 78.00 (80.34)
- Sydow, Achim** A contribution to the analysis and synthesis of discrete-time systems by contraction principle. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **13** (1977), no. 10, 535-547. (Joseph D. Cole) **57** #11889 93C55
- See also **Dictionary: Cybernetics**, **51** #2827
- von Sydow, Björn** (with Løvtrup, Søren) D'Arcy Thompson's theorems and the shape of the molluscan shell. *Bull. Math. Biology* **36** (1974), 567-575. (John Cantwell) **52** #2634 (E 57 #9114) 92A05
- (with Karlsson, Johan) The convergence of Padé approximants to series of Stieltjes type. *Ark. Mat.* **14** (1976), no. 1, 43-53. (Charles K. Chui) **54** #3237 41A20
- (with Løvtrup, Søren) An addendum to: "D'Arcy Thompson's theorems and shape of the molluscan shell" (Bull. Math. Biology **36** (1974), 567-575). *Bull. Math. Biology* **38** (1976), no. 3, 321-322. (Editors) **57** #9114 92A05
- Padé approximation of matrix-valued series of Stieltjes. *Ark. Mat.* **15** (1977), no. 1, 199-210. (W. J. Kotzé) **58** #12121 41A35
- Error estimates for Gaussian quadrature formulae. *Numer. Math.* **29** (1977/78), 1, 59-64. (N. S. Kambo) **57** #11007 65D30 (41A55)
- Sydow, Walter** Homfunctoren für die Topologie. *Nordwestdeutsches Kategoriensymposium (Tagung, Bremen, 1976)*, pp. 169-177. *Math.-Arbeitspapiere, No. 7, Teil A: Math. Forschungspapiere, Univ. Bremen, Bremen*, 1976. (Walter Tholen) **58** #5835 18D99, 54C35
- Sydsaeter, Knut** Note on a difference equation occurring in growth theory. *J. Econ. Theory* **1** (1969), 104-106 (1970). (James A. LaVita) **53** #3530 39A10 (90A99)
- ★Matematisk analyse. Bind I. (Norwegian) [Mathematical analysis. Vol. I] Third edition. Scandinavian University Books. *Universitetsforlaget, Oslo*, 1973. xii+498 pp. (Editors) **50** #6701 00A05 (26-01)
- ★Matematisk analyse. Bind II. (Norwegian) [Mathematical analysis. Vol. II] Third edition. Scandinavian University Books. *Universitetsforlaget, Oslo*, 1973. xiii+575 pp. (Editors) **50** #6702 00A05 (26-01)
- Letter to the editor on some frequently occurring errors in the economic literature concerning problems of maxima and minima. *J. Econom. Theory* **9** (1974), no. 4, 464-466. (Author's summary) **57** #9018 90A99
- (with Øksendal, Bernt K.) ★Linear algebra. (Norwegian) [Linear algebra] framstilling av den elementære teorien beregnet på anvendelsen. [A presentation of elementary theory with a view to applications] *Universitetsforlaget, Oslo*, 1977. v+118 pp. ISBN 82-00-02431-8 (Jon Stene) **58** #5704 15-01
- (with Seierstad, Atle) Sufficient conditions in optimal control theory. *Internat. Econom. Rev.* **18** (1977), no. 2, 367-391. (Nancy L. Schwartz) **56** #13041 49B10
- Sykes, A.** See **Software for numerical mathematics**, **50** #6095
- Sykes, A. M.** Multiplicative semigroups and p -functions. *Stochastic analysis (a tribute to the memory of Rollo Davidson)*, pp. 252-265. *Wiley, London*, 1973. (H. Kesten) **51** #4446 60K05 (60J25)
- Sykes, J.** (with Brooker, G. A.) Decay of a perturbation in a Fermi liquid. *Ann. Phys.* (NY) **127**, 67-111. (D. ter Haar) **47** #4571 82.45
- The structure of time-dependent correlation functions for classical liquids. *J. Phys. A* **9** (1976), no. 10, 1771-1788. (Katsuhiko Fujii) **56** #14481 82.60
- Sykes, J. B.** See **Lifšic, E. M.**; et al., **52** #9852; **Landau, L. D.**; et al., **53** #4761
- Landau, L. D.**; et al., **57** #14673
- Sykes, M. F.** (with Hunter, D. L.) On the determination of weights for the high temperature star cluster expansion of the free energy of the Ising model in zero magnetic field. *J. Phys. A* **7** (1974), 1589-1595. (Authors' summary) **53** #12408 82.05
- Sykes, Z. M.** Some stochastic versions of the matrix model for population dynamics. *Amer. Statist. Assoc.* **64** (1969), no. 325, 111-130. (V. Kolčín (RŽMat **1970** #1 V22)) **52** #16726 92A15
- Sýkora, Jiří** See **Automatisierungstechnik**, **58** #9963
- Sýkora, Ondřej** A fast non-commutative algorithm for matrix multiplication. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 504-512. *Lecture Notes in Comput. Sci., Vol. 53, Springer, Berlin*, 1978. (Ahmed H. Sameh) **57** #4609 68A10 (65F30)
- Sýkora, Stanislav** Quantum theory and the Bayesian inference problems. *J. Statist. Phys.* **11** (1974), 17-27. (R. K. Pathria) **51** #14821 81.62
- Syler, G. W.** (with Smith, W. B.; Zeis, C. D.) Three parameter lognormal estimation from censored data. *J. Indian Statist. Assoc.* **11** (1973), 15-31. (A. K. Md. Ehsanes Saleh) **51** #7116 62F10
- Sylvan, M.** (with Olkin, Ingram) Correlational analysis when some variances and covariances are known. *Multivariate analysis, IV (Proc. Fourth Internat. Symp. Dayton, Ohio, 1975)*, pp. 175-191. *North-Holland, Amsterdam*, 1977. (S. John) **56** #9620H15
- Sylvester, Garrett S.** Representations and inequalities for Ising model Ursell functions. *Comm. Math. Phys.* **42** (1975), 209-220. (G. Della Riccia) **53** #10092 82.60
- Inequalities for continuous-spin Ising ferromagnets. *J. Statist. Phys.* **15** (1976), 4, 327-341. (Nicolae Angelescu) **55** #9792 82.47
- (with van Beijeren, Henk) Phase transitions for continuous-spin Ising ferromagnets. *J. Functional Analysis* **28** (1978), no. 2, 145-167. (Herbert Spohn) **58** #4128 82.60
- Sylvester, J. J.** See **Algebraic geometry**, **56** #8558; **Woolf, Harry**, **57** #41 and **Nový, Luboš**, **58** #15963
- Sylwestrzak, Janina** A certain linear programming problem. (Polish. Russian and English summaries) *Statistical-mathematical methods in economics. Zeszyty Nauk. Szk. Główn. Planowania i Statyst. No. 86* (1972), 149-168. (J. S. Kowalik) **51** #9799 90C05
- Sym, A.** A simple derivation of some results connected with the sine-Gordon equation. *Phys. Lett. A* **58** (1976), no. 2, 77-78. (Author's summary) **53** #15179 81.35
- Symanzik, Kurt** Renormalization of theories with broken symmetry. *Cargèse lectures in physics*, Vol. 5, pp. 179-237. *Gordon and Breach, New York*, 1972. (From the author's introduction) **57** #4913 81.47
- Small-distance behaviour in field theory. *Particles, quantum fields and statistical mechanics (Proc. Summer Inst. Theoret. Phys., Centro Investigación Estudios Avanzados, IPN, Mexico City, 1973)*, pp. 20-72. *Lecture Notes in Physics*, Vol. 32, *Springer, Berlin*, 1975. (F. Srinivasan) **57** #11504 81.47
- Renormalization problem in nonrenormalizable massless Φ^4 theory. *Comm. Math. Phys.* **45** (1975), no. 1, 79-98. (Tetz Yoshimura) **52** #7395 81.47
- See also **Zav'jalov, O. I.**, **58** #25456
- Symm, G. T.** Problems in two-dimensional potential theory. *Numerical solution of integral equations (Liverpool-Manchester Summer School, 1973)*, pp. 267-274. *Clarendon Press, Oxford*, 1974. (R. P. Srivastava) **58** #11463 31A25
- Potential problems in three dimensions. *Numerical solution of integral equations (Liverpool-Manchester Summer School, 1973)*, pp. 312-320. *Clarendon Press, Oxford*, 1974. (M. M. Schiffer) **57** #16640 31B20 (45L10)

- (with Papamichael, N.) Numerical techniques for two-dimensional Laplacian problems. *Comput. Methods Appl. Mech. Engrg.* **6** (1975), no. 2, 175-194. (A. Ženišek) **54** #1672 65N99
- (with Jaswon, M. A.) ★Integral equation methods in potential theory and elastostatics. Computational Mathematics and Applications. *Academic Press [Harcourt Brace Jovanovich, Publishers], London-New York, 1977. xiv + 287 pp. ISBN 0-12-381050-7* (Editors) **58** #17147 31A15 (76.31)
- monds, P. S.** (with Wierzbicki, T.) On an extremum principle for mode form solutions in plastic structural dynamics. *Trans. ASME Ser. E. J. Appl. Mech.* **42** (1975), no. 3, 630-640. (René Hayart) **53** #12171 73.49
- See also **Collection: Prager, William**, **48** #1566
- monds, R. G.** (with Jain, S. K.; Singh, Surjeet) Rings whose proper cyclic modules are quasi-injective. *Pacific J. Math.* **67** (1976), no. 2, 461-472. (V. C. Cateforis) **54** #12829 16A52
- mons, J. S. V.** (with Fearnley-Sander, Desmond) Apollonius and inner products. *Amer. Math. Monthly* **81** (1974), 990-993. (A. R. Amir-Moéz) **50** #4637 15A63
- Normal transformation semigroups. *J. Austral. Math. Soc. Ser. A* **22** (1976), no. 4, 385-390. (E.-A. Behrens) **55** #10592 20M20
- mons, James** Irreducible representations of the group of movements of the Euclidean plane. *J. Austral. Math. Soc.* **18** (1974), 78-96. (Mitsuo Sugira) **51** #812 22E45
- Completely rigid graphs. *J. Austral. Math. Soc.* **18** (1974), 310-317. (L. S. Mel'nikov) **51** #5385 05C25
- (with Fitzpatrick, S. P.) Automorphisms of transformation semigroups. *Proc. Edinburgh Math. Soc.* (2) **19** (1974/75), no. 4, 327-329. (G. B. Preston) **52** #8306 20M20
- On a generalization of the transformation semigroup. *J. Austral. Math. Soc.* **19** (1975), 47-61. (Anne L. Hudson) **51** #5821 20M20
- Some results concerning a transformation semigroup. *J. Austral. Math. Soc.* **19** (1975), no. 4, 413-425. (M. Friedberg) **51** #13106 20M20
- Embedding a semigroup of transformations. *J. Austral. Math. Soc.* **20** (1975), no. 2, 222-224. (K. D. Magill, Jr.) **52** #633 20M20 (54H15)
- nah, V. S.** (with Kudrin, V. D.; Kuzin, V. A.; Fage, M. K.) Some nonlinear problems of mathematical chemistry and physics. (Russian) *Some problems of numerical and applied mathematics* (Russian), pp. 154-163, 310. *Nauka Sibirsk. Otdel., Novosibirsk, 1975.* (Authors' summary) **58** #32435 80.35 (49H05, 78.35)
- See also **Problems of numerical and applied mathematics**, **58** #19015
- nge, John L.** (with Florides, Petros S.) Coordinate conditions in a Riemannian space for coordinates based on a subspace. *Proc. Roy. Soc. London Ser. A* **323** (1971), 1-10. (D. K. Sen) **49** #1365 53B20
- Geometrical approach to the Heisenberg uncertainty relation and its generalization. *Proc. Roy. Soc. London Ser. A* **325** (1971), 151-156. (Alan Barnes) **48** #7838 81.46
- A special class of solutions of the Schrödinger equation for a free particle. *Found. Phys.* **2** (1972), 35-40. (K. J. Le Couteur) **49** #1972 81.35
- (with Hogan, P. A.) Model of a gravitating sphere set in rotation by internal stress. *General Relativity and Gravitation* **3** (1972), 269-280. (P. S. Florides) **53** #2290 83.65
- (with Yodzis, P.) Kinematics, angular momentum, and Eulerian dynamics in Hilbert space. *Proc. Roy. Irish Acad. Sect. A* **72**, 121-147 (1972). (J. Hoschek) **47** #9921 70.46
- Geometry of dynamical null lines. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. I. *Tensor (N.S.)* **24** (1972), 69-74. (W. B. Bonnor) **48** #13171 83.53
- A steering problem. *Quart. Appl. Math.* **31** (1973), 295-302. (J. Hoschek) **55** #4817 70.26
- The hypercircle method. *Studies in numerical analysis (papers in honour of Cornelius Lanczos on the occasion of his 80th birthday)*, pp. 201-217. *Academic Press, London, 1974.* (H. F. Weinberger) **50** #11817 65N30 (35J20)
- Model universes with spherical symmetry. *Ann. Mat. Pura Appl.* (4) **98** (1974), 239-255. (R. L. Ingraham) **49** #6882 83.57
- Anti-Compton scattering. *Proc. Roy. Irish Acad. Sect. A* **74** (1974), 67-72. (Author's summary) **49** #4535 83.53
- Note on a paper by N. Anderson and A. M. Arthurs: "Complementary variational principles for a boundary-value problem in twisting of ring sectors" (*Quart. Appl. Math.* **33** (1975), 87-89). *Quart. Appl. Math.* **33** (1975/76), 91-92. (V. Komkov) **56** #4359 73.49
- See also **Collection: Prager, William**, **48** #1566; **General relativity**, **57** #4945; **Bibliography: Sygne, John L.**, **58** #16051 and **Biography: Sygne, John L.**, **58** #16054
- načke, Ju.** The operator that is conjugate to a regular one, and certain applications of it to the question of the complete continuity and weak complete continuity of regular operators. (Russian. English summary) *Vestnik Leningrad. Univ.* **1972**, no. 1, 60-69. (I. K. Marek) **47** #876 47B55 (46A40)
- nnatšchke, J.** Der Operator $\partial T_C: A \rightarrow BAC$ als vollstetiger Fastintegraloperator. Beiträge zur Theorie nichtnormierter topologischer Algebren. *Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe* **24** (1975), no. 5, 529-534. (R. J. Nagel) **55** #1132 47B55
- Eine Bemerkung zu gewissen Operatoridealen in bedingt vollständigen Vektorverbänden. *Math. Nachr.* **82** (1978), 89-98. (W. A. J. Luxemburg) **58** #2448 47B55
- nowiec, John** A normed space of polygenic functions. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **18**(22) (1972), no. 1-2, sect. I, 5-13. (Kenneth O. Leland) **47** #3690 30A92
- oka, L.** (with Korczyński, Jan; Pietrzyk, B.; Wierzbicka, I.) Sufficient conditions for absolute summability of orthogonal series by the matrix method with the property (K). *Demonstratio Math.* **8** (1975), no. 2, 133-144. (L. Leindler) **56** #3548 42A60
- rbe, M.** (with Freund, E.) Control of industrial robots by means of microprocessors. *New trends in systems analysis (Proc. Internat. Sympos., Versailles, 1976)*, pp. 167-185. *Lecture Notes in Control and Informat. Sci., Vol. 2, Springer, Berlin, 1977.* (Authors' summary) **58** #15483 93C99 (68A45)
- rmus, T.** See **Sörmus, T.**
- rney, V. P.** (with Maul', G. G.) Approximate analytic method for determination of numerical characteristics of execution time of a set of jobs specified by a network graph. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 5, 16-24 (Russian); translated as *Engrg. Cybernetics* **12** (1974), no. 5, 13-21. (P. Vondráček) **52** #10016 90B35
- Syroezin, I. M.** (with Parfenova, V. E.) A mathematical economics analysis of organizational hierarchy. (Russian) *Primenen. Mat. Ekonom. No. 7* (1972), 54-63. (M. Mañas) **46** #10397 90B99
- (with Parfenova, V. E.) Simulation and suboptimization of hierarchic structures for a certain class of economic systems. (Russian) *Primenen. Mat. Ekonom. No. 8* (1973), 109-119. **48** #1671 90A99
- Syroid, I. P.** See **Siroid, I. P.**
- Syroid, Ju. B.** A geometric criterion for the linear reducibility of differential systems to triangular form. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1973**, no. 2, 16-17, 87. (Nicolae Luca) **48** #8923 34A30
- Triangular and triangularizable differential systems. (Russian) *Differencial'nye Uravneniya* **10** (1974), 265-269, 372. (K. R. Schneider) **49** #3268 34C20
- Composition of differential systems. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1974**, no. 2, 19-22, 93. (C. E. Langenhop) **51** #13327 34A25
- Syros, C.** Structural properties and finite range elementary solutions of the linear Boltzmann equation. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **59** (1973), 500-518. (J. P. Guiraud) **52** #9931 82.45
- Spectral properties and finite range elementary solutions of the linear Boltzmann equation. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **59** (1973), 926-947. (H. S. Green) **49** #1042 45L05
- Structural properties and finite-range polynomial solutions of the linear Boltzmann equation. *Lett. Nuovo Cimento* (2) **6** (1973), 273-274. (Not reviewed) 82.45
- Anisotropic scattering Boltzmann distributions and structural properties. (Greek summary) *Prakt. Akad. Athēnōn* **48** (1973), 136-146. (Shawky Shamma) **50** #14132 45K05 (78.45)
- Eigenvalue bounds to the Boltzmann equation. (Greek summary) *Prakt. Akad. Athēnōn* **48** (1973), no. 3, 355-358 (1974). (H. E. Fettes) **52** #8826 45C05
- On the origin of the quantum concepts. *Lett. Nuovo Cimento* (2) **10** (1974), 718-722. (Not reviewed) 81.00
- Degenerate-kernel Boltzmann distribution functions on $R^p \otimes U^p$. (Italian and Russian summaries) *Nuovo Cimento B* (11) **25** (1975), 315-327. (L. Finkelstein) **52** #9932 82.45
- (with Flessas, G. P.) On the quantization of the Liouville equation. *Lett. Nuovo Cimento* (2) **20** (1977), no. 6, 213-215. (Not reviewed) 81.35
- A new description of dissipative systems in quantum statistical mechanics. *Phys. Lett. A* **64** (1977), no. 1, 17-18. **56** #14339 81.47
- Syrov, Ju. P.** (with Čurkveidze, Š. S.) The method of auxiliary functions and a generalization of an attempt at its application. (Russian) *Ekon. i Mat. Metody* **14** (1978), no. 1, 129-136. (Joachim Hirche) **57** #11774 90C30 (90C50)
- Syrovatka, A. A.** (with Men'ko, Ja. P.) The asymptotic representation of the solution of an optimal control problem with retarded argument. (Russian) *Approximation methods of mathematical analysis* (Russian), pp. 46-57. *Kiev. Gos. Ped. Inst., Kiev, 1976.* (Authors' summary) **58** #12610 49B30
- Syrovatka, A. A.** Construction of the solution of a system of linear inhomogeneous differential equations with retarded argument in the general case. (Russian) *Trudy Nikolaev. Korablestroitel. Inst. No. 50 Stroitel. Meh. Sudovoyh Mašin* (1971), 137-141. (D. Bañov) **49** #9368 34K05
- (with Men'ko, Ja. P.) Construction of a formal particular solution of a system of inhomogeneous second order linear differential equations with retarded argument in the case of a multiple root. (Russian) *Trudy Nikolaev. Korablestroitel. Inst. No. 50 Stroitel. Meh. Sudovoyh Mašin* (1971), 142-146. (D. Bañov) **49** #9369 34K05
- Syrovatskii, S. I.** (with Bulanov, S. V.) Motion of charged particles in the neighborhood of the zero line of a magnetic field. (Russian) *Trudy Fiz. Inst. Lebedev.* **88** (1976), 114-126. (From the text) **58** #32409 78.35
- (with Brušlinskii, K. V.; Zaborov, A. M.) Numerical modeling of a two-dimensional plasma flow in the neighborhood of the magnetic zero line. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 61* (1977), 39 pp. (Authors' summary) **58** #14405 78.65
- Syrovoi, V. A.** (with Borisov, N. F.) Equations of viscous supersonic jets with a high degree of incompressibility. (Russian) *Izv. Akad. Nauk SSSR Meh. Židk. Gaza* **1977**, no. 2, 137-147. (From the authors' summary) **56** #17406 76.35
- Sysak, Ja. P.** ★Группы с дополняемыми элементарными абелевыми подгруппами непустых порядков. (Russian) [Groups with complemented elementary abelian subgroups of nonprime orders] Preprint IM-76-18. *Akad. Nauk Ukrain. SSR Inst. Mat., Kiev, 1976.* 40 pp. (From the text) **58** #28179 20E25 (20E15)
- Finite elementarily factorizable groups. (Russian) *Mathematics collection* (Russian), pp. 108-111. *Izdat. "Naukova Dumka", Kiev, 1976.* (J. Wiegold) **56** #15762 20D10
- Finite elementarily factorizable groups. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 1, 67-76, 142. (R. R. Struik) **57** #9841 20D40
- Syski, R.** (with Keilson, Julian) Compensation measures in the theory of Markov chains. *Stochastic Processes Appl.* **2** (1974), no. 1, 59-72. (Herman Callaert) **50** #14936 60J10
- Perturbation models. *Stochastic Processes Appl.* **5** (1977), no. 2, 93-129. (Terence P. Speed) **56** #1471 60J25
- Ergodic potential. *Stochastic Process. Appl.* **7** (1978), no. 3, 311-336. (M. G. Šur) **58** #24569 60J25 (60J45)
- See also **Probabilistic methods in applied mathematics**, **52** #15582
- Syskin, S. A.** The finite groups with solvable involution centralizers. (Russian) *Algebra i Logika* **10** (1971), 329-347. (M. Herzog) **45** #5219 20D05
- Simple finite groups of 2-rank 3 with solvable involution centralizers. (Russian) *Algebra i Logika* **10** (1971), 668-709. (N. Ito) **46** #5430 20D05
- A remark on the junction of 2-elements in a finite group. (Russian) *Algebra i Logika* **12** (1973), 349-350, 365. (L. Dornhoff) **52** #8244 20D05
- Finite groups of 2-rank 3. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 782-784. (D. L. Barnett) **50** #464 20D05
- (with Kabanov, V. V.; Mazurov, V. D.) Finite simple groups whose Sylow 2-subgroups have an extraspecial subgroup of index 2. (Russian) *Mat. Zametki* **14**

- (1973), 127-132. (Peter M. Neumann) **48** #11277 20D05
(with Mazurov, V. D.) Finite groups with special Sylow 2-subgroups. (Russian) *Mat. Zametki* **14** (1973), 217-222. (Peter M. Neumann) **48** #411 20D05
(with Mazurov, V. D.) A characterization of $L_3(2^n)$ by Sylow 2-subgroups. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **38** (1974), 513-517. (Ė. M. Pal'čik) **50** #2330 20D20
(with Mazurov, V. D.) Finite groups with 2-Sylow intersections of rank < 2 . (Russian) *Mat. Zametki* **16** (1974), 129-134. (N. Ito) **51** #5741 20D05
- Syslo, Maciej M.** Optimal complementation of an acircuit graph to a reconstructed graph. I, II. (Polish and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały* no. 6 *Zagadnienia kombinatoryczne* (1972), 27-35; *ibid. Grafy i hypergrafy* (1973), no. 9, 33-44. (Author's summary) **55** #7854 05C99
(with Grabowski, Józef) On a machine sequencing problem. I. (Polish summary) *Zastos. Mat.* **13** (1972/73), 347-350. (R. Balakrishnan) **48** #1936 05A05
A new solvable case of the traveling salesman problem. *Math. Programming* **4** (1973), 347-348. (Václav Chvátal) **53** #13023 05C20 (90B10)
An algorithm for bridges of a graph. (Polish and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały* no. 9 *Grafy i hipergrafy* (1973), 73-75. (D. G. Corneli) **54** #7323 05C99
Remarks on line digraphs. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astron. Phys.* **22** (1974), 5-10. (M. Behzad) **52** #7957 05C20
On some machine sequencing problems. II. (Polish summary) *Zastos. Mat.* **14** (1974), 93-97. (Narsingh Deo) **49** #8641 90B35
Remarks on addition processes of positive floating-point numbers. (Polish summary) *Zastos. Mat.* **14** (1974), 415-417. (Sven-Åke Gustafson) **50** #8953 65G05
(with Grabowski, Józef) New solvable cases of m -machine and n -element sequencing problems. (Polish summary) *Zastos. Mat.* **14** (1974/75), no. 4, 599-606. (Knut Richter) **56** #2326 90B35
(with Hubicka, Elżbieta) Minimal bases of cycles of a graph. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 283-293. *Academia, Prague*, 1975. (Authors' summary) **52** #2952 05C35
Applied graph theory. II. Extremal path problems in graphs and nets. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **20** (1975), no. 3, 287-300. (G. O. H. Katona) **58** #367b 05C35
Applied graph theory. Application of graph theory to numerical methods. (Polish) *Mat. Stos.* (3) **5** (1975), 69-87. (G. O. H. Katona) **58** #367a 05C35 (94A20, 65F99)
(with Skupień, Zdzisław) Applied graph theory. III. Euler and Hamiltonian graphs. The traveling salesman problem. (Polish) *Mat. Stos.* (3) **10** (1977), 5-54. (G. O. H. Katona) **58** #367c 05C35 (65F99)
- Syssoev, Ju. S.** A linear inhomogeneous equation on a Lie group. (Russian) *Differentsial'nye Uravneniya* **10** (1974), 364-366, 376. (S. G. Gindikin) **49** #9455 35R15
Differential equations on a Lie group. (Russian) *Dokl. Akad. Nauk SSSR* **215** (1974), 1317-1320. (G. S. Gindikin) **51** #13133 22E30 (35R20, 58F05)
- Syssoev, L. P.** Statistical learning methods based on teacher identification. *Avtomat. i Telemekh.* **1970**, no. 11, 19-28 (Russian. English summary); translated as *Automat. Remote Control* **1970**, no. 11, 1733-1741 (1971). (Author's summary) **46** #1443 93E20 (92A25)
Training procedures which combine stochastic approximation and minimization of the empirical risk. *Avtomat. i Telemekh.* **1973**, no. 3, 69-83 (Russian. English summary); translated as *Automat. Remote Control* **34** (1973), no. 3, part 1, 398-411. (J. Mockus) **54** #2198 90C15 (93E20, 62L20)
(with Dubenko, T. I.; Šaĭkin, M. E.) Symmetry properties and characterization of covariance matrices in the experiment design problem with randomized blocks. *Avtomat. i Telemekh.* **1976**, no. 3, 73-82 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 3, part 1, 378-386. (A. Hedayat) **55** #6726 62K10
(with Dubenko, T. I.; Šaĭkin, M. E.) Sufficient statistics and estimates of specially structured covariance matrices for two experimental design models. *Avtomat. i Telemekh.* **1976**, no. 4, 25-34 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 4, part 1, 492-500. (I. M. Chakravarti) **55** #9431 62K10
(with Šaĭkin, M. E.) Algebraic methods of investigating the correlation connections in incompletely balanced block-schemes for experiment design. I. Characterization of covariance matrices in the case of asymmetric block-schemes. *Avtomat. i Telemekh.* **1976**, no. 5, 64-73 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 5, part 1, 696-704. (I. M. Chakravarti) **55** #11516a 62K10
(with Šaĭkin, M. E.) Algebraic methods of investigating the correlation connections in incompletely balanced block-schemes for experiment design. II. Relationship algebras and characterization of covariance matrices in the case of symmetric block-schemes. *Avtomat. i Telemekh.* **1976**, no. 7, 57-67 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 7, part 1, 1022-1031. (I. M. Chakravarti) **55** #11516b 62K10
See also *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)
- Syssoeva, F. A.** New generalizations of a certain inequality of Hardy. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap. No. 277* (1971), 192-196. (L. Losonczi) **46** #3723 26A86
(with Godunova, E. K.) Two generalizations of a Hardy inequality to an arbitrary weight. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap. No. 277* (1971), 197-200. (L. Losonczi) **46** #3724 26A86
Inequalities of Hilbert type for functions with bounded mixed norms. (Russian) *Moskov. Gos. Ped. Inst. Učen. Zap.* **460** (1972), 43-51. (J. Albrycht) **48** #6919 46E35
An inequality of Hardy-Littlewood type for a product of functions. (Russian) *Differential equations and inequalities (Russian)*, pp. 43-49. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1973. (Luciana Lupaş) **55** #10625 26A86
- Syssoeva, T. Ju.** Reductive linear algebraic groups generated by quasi-reflections. (Russian) *Serdica* **1** (1975), no. 3, 337-345. (J. L. Brenner) **53** #5764 20G20 (17B20)
- Sysuev, E. V.** (with Aizenberg, N. N.; Rud'ko, V. P.) Haar functions and discrete transformation. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 6, 86-94, 221 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 6, 65-73. (Authors' summary) **56** #18087 94A05 (94A20)
- Sytaja, G. N.** Certain asymptotic representations for a Gaussian measure in Hilbert space. (Russian) *Theory of random processes*, No. 2 (Russian), pp. 93-104, 140. *Izdat. "Naukova Dumka", Kiev*, 1974. (R. M. Dudley) **50** #14912 60G15
Asymptotic representation of the probability of small deviation of the trajectory of Brownian motion from a given function. (Russian) *Theory of random processes*, No. 2 (Russian), pp. 117-121, 160. *Izdat. "Naukova Dumka", Kiev*, 1975. (A. D. Wentzel (Ventcel')) **51** #9241 60J65
The asymptotic behavior of the Wiener measure of small spheres. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **16** (1977), 121-135, 157. (Mou-Hsiung Chang) **56** #1485 60J65
- Sytenko, L. V.** (with Popov, P. N.) Time-optimality and statistical properties of random search on a hypercube. (Russian) *Avtomat. i Vychisl. Tehn.* **1970**, no. 3, 33-39. (Author's summary) **45** #1345 65C05
See also *Problems of statistical optimization*, **47** #6378
- Sytseva, E.** See Syčeva, E. P.
- Szabados, Ádám** Questions on the stability of numerical methods. (Hungarian) *Informác.-Elektron.* **8** (1973), 150-157. (C. Tartia) **48** #10080 65F10
- Szabados, József** Rational approximation to analytic functions on an inner part of the domain of analyticity. *Approximation Theory (Proc. Sympos., Lancaster, 1969)*, 165-171. *Academic Press, London*, 1970. (See Zbl **225** #30042) 30A82
(with Freud, Géza) Remark on a theorem of H. Bohr. (Hungarian. Russian and English summaries) *Mat. Lapok* **21** (1970), 253-257 (1971). (From the authors' summary) **46** #7788 42A52
Rational approximation to continuous functions on the entire real line. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970)* (Russian), pp. 345-350. *Izdat. Bolgar. Akad. Nauk, Sofia*, 1972. (J. R. Rice) **51** #1215 41A20 (30A82)
Rational approximation to analytic functions with finite number of singularities on the real axis. II. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 467-474. *Akadémiai Kiadó, Budapest*, 1970. (L. Alpar) **56** #6212 41A20
On rational L_p -approximation. *Acta Math. Acad. Sci. Hungar.* **23** (1972), 197-201. (P. C. Sikkema) **47** #7287 41A50
On parametric approximation. *Acta Math. Acad. Sci. Hungar.* **23** (1972), 275-281. (V. A. Popov) **52** #8732 41A25
On Hermite-Fejér interpolation for the Jacobi abscissas. *Acta Math. Acad. Sci. Hungar.* **23** (1972), 449-464. (J. H. Curtiss) **47** #681 41A05
On an interpolation problem pertaining to the complex unit circle. (Hungarian. English summary) *Mat. Lapok* **23** (1972), 297-300 (1974). (A. Meir) **51** #6227 41A05
On the convergence of Hermite-Fejér interpolation for the Laguerre abscissas. *Acta Math. Acad. Sci. Hungar.* **24** (1973), 243-250. (A. Sharma) **47** #5490 41A05
On the convergence and saturation problem of the Jackson polynomials. *Acta Math. Acad. Sci. Hungar.* **24** (1973), 399-406. (R. Feinerman) **49** #11124 42A05 (41A40)
On the convergence of Hermite-Fejér interpolation based on the roots of the Legendre polynomials. *Acta Sci. Math. (Szeged)* **34** (1973), 367-370. (A. K. Varma) **49** #9480 41A05
Generalization of a problem of P. Turán. *Studia Sci. Math. Hungar.* **8** (1973), 485-495. (J. H. Curtiss) **51** #1204 41A05
Convergence and saturation problems of discrete linear operators. *Linear operators and approximation, II (Proc. Conf., Oberwolfach Math. Res. Inst., Oberwolfach, 1974)*, pp. 405-419. *Internat. Ser. Numer. Math., Vol. 25, Birkhäuser, Basel*, 1974. (Z. Ditzian) **54** #3245 41A40
(with Popov, V. A.) On a general localization theorem and some applications in the theory of rational approximation. *Acta Math. Acad. Sci. Hungar.* **25** (1974), 165-171. (H. L. Loeb) **55** #6073 41A25
On the asymptotic behavior of orthogonal polynomials. (Hungarian. English summary) *Mat. Lapok* **25** (1974), no. 1-2, 115-118 (1977). (Author's summary) **55** #12975 33A65
On an interpolatory analogon of the de la Vallée-Poussin means. *Studia Sci. Math. Hungar.* **9** (1974), 187-190 (1975). (From the author's introduction) **54** #5714 42A12
On some interpolatory procedures based on the roots of unity. *Acta Math. Acad. Sci. Hungar.* **25** (1975), 159-164. (Helmut Brass) **53** #824 30A80 (41A05)
(with DeVore, Ronald A.) Saturation theorems for discretized linear operators. (Russian summary) *Anal. Math.* **1** (1975), no. 2, 81-89. (G. Mühlbach) **52** #6267 41A35
(with Popov, V. A.) A remark on the rational approximation of functions. *C. R. Acad. Bulgare Sci.* **28** (1975), no. 10, 1303-1306. (Jean Tzimbarario) **53** #1113 41A20
On convolution operators with kernels of finite oscillations. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 1-2, 179-192. (G. Mühlbach) **53** #13970 42A08 (41A35)
On a problem of R. DeVore. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 1-2, 219-223. (V. A. Popov) **54** #3227 41A10
On a problem of L. Leindler concerning strong approximation by Fourier series. (Russian summary) *Anal. Math.* **2** (1976), no. 2, 155-161. (Manfred v. Golitschek) **53** #13971 42A08
(with Márki, László) Interpolation and best polynomial approximation in the domain of p -adic integers. (Russian summary) *Anal. Math.* **2** (1976), no. 4, 277-285. (W. J. LeVeque) **57** #5968 12B40 (10F45, 41A50)
(with Márki, László; Somorjai, G.) Müntz-Jackson type theorems via interpolation. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 1-2, 185-191. (A. K. Varma) **58** #1832 41A05
On some problems in interpolation theory. *Linear spaces and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977)*, pp. 375-380. *Internat. Ser. Numer. Math. Vol. 40, Birkhäuser, Basel*, 1978. (U. Tippenhauer) **58** #17675 42A12 (41A05)
See also *Problems: Linear operators and approximation*, **51** #12450

- at, B.W. See Šabat, B. V.
- atin, Jerzy A matrix method for identifying indistinguishable states in nondeterministic sequential machines. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **19** (1974), 89-105. (E. Ikauniks) **49** #8755 94A25
- ewski, W. Ähnlichkeitsgesetz des Spektrums der Turbulenzenergie für den Trägheitsbereich $k \gg k_0$ in homogener isotroper Turbulenz. (English and Russian summaries) *Z. Angew. Math. Mech.* **58** (1978), no. 3, 143-150. (Author's summary) **7** #18478 76.60
- owski, Bogumił Generalized trees. (Polish. English and Russian summaries) *Prace Nauk. Inst. Cybernet. Tech. Politech. Wrocław. Ser. Stud. Materialy No. 22 Grafy w Teor. System.* (1977), 31-46. (Author's summary) **58** #27580 05C05 (94A10)
- owski, Paweł, J. Identification of the parameters of a discrete stochastic process by the method of estimating functions. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **20** (1975), no. 3, 351-367. (Author's summary) **57** #2715 3E10
- Generalized stochastic approximation and its application to parameter identification of discrete stochastic processes. *Differential games and control theory, II* (Proc. 2nd Conf., Univ. Rhode Island, Kingston, R.I., 1976), pp. 461-470. *Lecture Notes in Pure and Appl. Math.*, **30**. Dekker, New York, 1977. (Zbl 357 #62058) **58** #33438 93E10
- h, Árpád K. Wie kamen die Pythagoreer zu dem Satz Eucl., Elem. II₅? (Greek summary) *Prakt. Akad. Athēnōn* **43** (1968), 203-232 (1969). (P. Ver Eecke) **45** #10 1A20
- "Die Muse der Pythagoreer" zur Frühgeschichte der Geometrie. (English and Hungarian summaries) *Historia Math.* **1** (1974), 291-316. (H. L. L. Busard) **57** #2815 01A20
- The measurement of angles and the start of trigonometry. (Bulgarian) *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* **20**(53) (1977), no. 2, 150-160. (Editors) **58** #21008 1A20
- See also Kondo, Yoichi, **58** #21002 and Hintikka, Jaakko; et al., **58** #21388
- h, Atila (with Mitchell, D. John; McQuarrie, D. A.; Groeneveld, J.) On the second-moment condition of Stilling and Lovett. *J. Statist. Phys.* **17** (1977), no. 1, 5-20. (Authors' summary) **58** #32669 82.45
- h, Barna A. (with Kassos, Tony) Linear equality constraints in finite element approximation. *Internat. J. Numer. Methods Engrg.* **9** (1975), no. 3, 563-580. (Authors' summary) **56** #13641 65K05 (65N30)
- h, István Über die sog. "Bernoullische Gleichung" der Hydromechanik. Die Stromfadentheorie Daniel und Johann Bernoullis. *Technikgeschichte* **37** (1970), no. 1, 77-84. (M. Kline) **56** #2743 01A50
- Die Grundlegung der linearen Elastizitätstheorie für homogene und isotrope Körper. *Technikgeschichte* **40** (1973), no. 4, 301-336. (Editors) **58** #15908 01A45 01A50, 73.01)
- (with Wellnitz, Karl; Zander, Wolfgang) ★Mathematik. Zweite, erweiterte und verbesserte Auflage. Mit einem Vorwort von W. Sommerfeldt und W. Stenger. Hütte Taschenbücher der Technik. Springer-Verlag, Berlin-New York, 1974. xx + 373 pp. (Editors) **52** #1 00A05
- An application of network techniques in a programming problem of mixed character. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Társaság* **7** (1974), 1-9. (From the author's summary) **50** #6504 90C35
- ★Geschichte der mechanischen Prinzipien und ihrer wichtigsten Anwendungen. Wissenschaft und Kultur, 32. Birkhäuser Verlag, Basel-Stuttgart, 1977. xv + 491 pp. (E. J. Kiton (Zbl 342 #01001)) **58** #26681 01-02 (01A45, 01A50, 01A55, 70.01, 73.01, 76.01)
- On a class of lattice-ordered semigroups. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 1-2, 141-147. (S. P. Bandyopadhyay) **56** #15525 06A50
- h, J. Die Verallgemeinerung des zentralen Einschnideverfahrens auf den n -dimensionalen Fall. *Publ. Math. Debrecen* **17** (1970), 27-33 (1971). (E. Morgantini) **6** #8031 50D15
- Die einheitliche Lösung der Maßaufgaben der Axonometrie mit Hilfe des Eckhartschen Einschnideverfahrens. *Publ. Math. Debrecen* **21** (1974), 249-253. (E. J. Primrose) **50** #8279 50D15
- (with Kátai, Imre) Canonical number systems for complex integers. *Acta Sci. Math.* (Szeged) **37** (1975), no. 3-4, 255-260. (J. M. Gandhi) **52** #10590 10B35 10A10
- Eine Methode zur Lösung von metrischen Aufgaben der Perspektive Zentralaxonometrie. *Publ. Math. Debrecen* **24** (1977), no. 1-2, 97-100. (V. Medek) **7** #10559 50B05
- h, L. Tessellation transformations. (Russian summary) *Acta Cybernet.* **2** no. 3, 49-260 (1975). (R. N. Goss) **52** #10279 94A30
- Endomorphism monoids and clones. *Acta Math. Acad. Sci. Hungar.* **26** (1975), no. 4, 279-280. (M. Gould) **52** #5527 08A25
- Characterization of some related semigroups of universal algebras. *Acta Sci. Math.* (Szeged) **37** (1975), 143-147. (I. Gy. Maurer) **53** #7914 08A25 (20M20)
- Concrete representation of related structures of universal algebras. I. *Acta Sci. Math.* (Szeged) **40** (1978), no. 1-2, 175-184. (M. G. Stone) **58** #443 08A05
- h, Manfred E. A categorical characterization of Boolean algebras. *Algebra Universalis* (1974), 192-194. (M. M. Richter) **51** #301 06A40
- A categorical equivalence of proofs. *Notre Dame J. Formal Logic* **15** (1974), 77-191. (H. Gonshor) **50** #6805 (E 52 #5379) 02D99 (18A15)
- A counter-example to coherence in Cartesian closed categories. *Canad. Math. Bull.* **8** (1975), no. 1, 111-114. (H. Gonshor) **51** #12989 18D15 (02H15)
- Polycategories. *Comm. Algebra* **3** (1975), no. 8, 663-689. (H. Gonshor) **51** #10046 02D99 (18D05)
- Quantifier-complete categories. *J. Pure Appl. Algebra* **7** (1976), no. 1, 97-114. (J. A. Makowsky) **53** #2648 02D99 (18A15)
- An addendum to my paper: "A categorical equivalence of proofs" (Notre Dame J. Formal Logic **15** (1974), 177-191). *Notre Dame J. Formal Logic* **17** (1976), no. 1, 78. (H. Gonshor) **52** #5379 02D99 (18A15)
- The logic of closed categories. *Notre Dame J. Formal Logic* **18** (1977), no. 3, 441-457. (J. Lambek) **58** #5093 02D99 (02J99, 18D15)
- h, N. On the phase transition in A^4 -phonon theory. *Helv. Phys. Acta* **50** (1977), no. 6, 763-766. (Editors) **57** #15134 82.46
- A proof of spontaneous magnetization in the d -dimensional Ising-, XY- and Heisenberg-models, $d > 2$. *Helv. Phys. Acta* **51** (1978), no. 1, 167-172. (G. Papanicolaou) **58** #9022 82.60
- Szabo, Thomas L. Generalized Fourier transform diffraction theory for parabolically anisotropic media. *J. Acoust. Soc. Amer.* **63** (1978), no. 1, 28-34. (Author's summary) **58** #14396 78.44
- Szabó, Z. I. Ein Finslerscher Raum ist gerade dann von skalarer Krümmung, wenn seine Weylsche Projektivkrümmung verschwindet. *Acta Sci. Math.* (Szeged) **39** (1977), no. 1-2, 163-168. (H. Rund) **55** #8987 53B40
- Szabó, Zoltán Über gleichungslösende Iterationen ohne Divergenzpunkt. I. *Publ. Math. Debrecen* **20** (1973), 223-233 (1974). (Gerhard Merz) **48** #12815 65H05
- Über gleichungslösende Iterationen ohne Divergenzpunkt. II. *Publ. Math. Debrecen* **21** (1974), 285-293. (Editors) **50** #11764 65H05
- Über den "relativen Zuwachs" von Verteilungsfunktionen. (German summary) *Biometrische Z.* **18** (1976), no. 1, 33-40. (Author's summary) **54** #14195 62E99 (62P10)
- See also Progress in statistics, **50** #5999 and Report: Gyula Farkas Prize, **52** #7833
- Szadkowski, A. (with Radziszewski, Bogusław) The selection of the best Ljapunov function. (Polish) *Prace IPPT/IFTR Rep.* **1975**, no. 74, 9 pp. **55** #14337 93D05 (34H05)
- See also Proceedings: International Conference on Nonlinear Oscillations, **47** #8969
- Szadkowski, Andrzej Flows that are determined by a system of ordinary differential equations. (Russian. Polish and English summaries) *Nonlinear vibration problems*, No. 15 (Proc. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part II), pp. 269-272. PWN—Polish Sci. Publ., Warsaw, 1974. (Author's summary) **56** #16070 34C35
- Szadkowski, Jerzy Sur un problème de synthèse pour les équations différentielles du second ordre non linéaires. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **17** (1969), 9-15. (D. Pascali) **50** #3977 90D25 (34H05)
- (with Wicher, Jerzy; Ziemia, Stefan; Muszyńska, Agnieszka; Radziszewski, Bogusław) A survey of certain trends and scientific works in the theory of oscillations and machine dynamics carried out by the researchers of the Mechanical Systems Section of the Institute for Fundamental Problems of Technology of the Polish Academy of Science. (Russian. Polish and English summaries) *Nonlinear vibration problems*, No. 11, pp. 9-40. Państw. Wydawn. Nauk., Warsaw, 1971. (V. Komkov) **56** #10230 70.00
- (with Bogusz, Władysław; Giergiel, J.; Kasprzyk, Stanisław; Zabawa, M.; Muszyńska, Agnieszka; Muszyński, Jerzy; Radziszewski, Bogusław) A study of stability in discrete systems. (Polish. Russian and English summaries) *Nonlinear vibration problems*, No. 12, pp. 9-52. Państw. Wydawn. Nauk., Warsaw, 1971. (V. Komkov) **56** #11290 93Dxx (34D99)
- (with Muszyńska, Agnieszka; Radziszewski, Bogusław; Ziemia, Stefan) Some problems of the theory of vibrations. (Polish and Russian summaries) *Nonlinear vibration problems*, No. 13, pp. 7-20. PWN—Polish Sci. Publ., Warsaw, 1972. (V. Komkov) **56** #10229 70.00
- Stability synthesis of a plane dynamic system. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **25** (1973), 745-751. (J. M. Skowroński) **51** #8568 34D20 (90D25)
- Existence of prolongable unique solutions of ordinary differential equations involving discontinuous functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **22** (1974), 887-893. (F. Brauer) **53** #8532 34A10
- Synthesis of differential models by reduction to differential game problems "with nature". (Polish) *Prace IPPT/IFTR Rep.* **1974**, no. 52, 87 pp. **56** #11157 93B15 (34H05, 90D25)
- Synthesis of a nonlinear mechanical system with a time-optimal condition. (Polish) *Prace IPPT/IFTR Rep.* **1975**, no. 91, 16 pp. (1976). **55** #14245 90D25
- Szafirski, B. Characteristic functionals and turbulent diffusion. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 785-789. (F. Roudy) **46** #8536 76.46
- Diffusion by turbulent movements. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 791-797. (F. Roudy) **46** #8537 76.46
- Turbulent diffusion and Hopf's equation based on the equation of Oseen's type. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 799-803. (F. Roudy) **46** #8538 76.46
- Szafraniec, Bolesław A proof of Wichman's theorem. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 441 Mat.-Fiz. Zeszyt* **26** (1976), 155-159. (Author's summary) **56** #10699 82.60
- Szafraniec, Franciszek Hugon Some spectral properties of operator-valued representations of function algebras. *Ann. Polon. Math.* **25** (1971/72), 187-194. (loose errata) (R. G. Douglas) **46** #674 46J25 (47A10)
- Orthogonal decompositions of non-contractive operator valued representations of Banach algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 937-940. (R. G. Douglas) **46** #2437 46J25 (47A99)
- Decompositions of non-contractive operator-valued representations of Banach algebras. *Studia Math.* **42** (1972), 97-108. (R. G. Douglas) **46** #675 46J25 (47A99)
- (with Lasota, Andrzej) On Hammerstein integral equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 1-2, 65-67 (1976). (Jagdish Chandra) **56** #9205 45G99
- On the boundedness condition involved in dilation theory. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 10, 877-881. (K. K. Oberai) **54** #13599 47A20
- A general dilation theorem. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 3, 263-267. (K. K. Oberai) **56** #3651 47A20
- Dilations on involution semigroups. *Proc. Amer. Math. Soc.* **66** (1977), no. 1, 30-32. (Author's summary) **57** #13532 47A20 (47B20)
- Szafraniec, Krystyna A note on a difference inequality. *Zeszyty Nauk. Uniwers. Jagielloń.* **403** *Prace Mat. No. 17* (1975), 143-145. (I. Stamate) **53** #13903 39A10
- A difference method for a non-linear two-point boundary value problem. *Zeszyty Nauk. Uniwers. Jagielloń.* **441** *Prace Mat. Zeszyt* **18** (1977), 139-141. (From the author's

- introduction) 56 #13666 65L10
- Szafrński, Zdzisław** (with Werbowski, Jarosław) On some oscillation criteria for nonlinear partial differential equations of second order. (Polish summary) *Fasc. Math. No. 9* (1975), 39-49. (V. B. Headley) 56 #819 35B05
- Szafron, D. A.** (with Weston, J. H.) An internal solution to the problem of linearization of a convexity space. *Canad. Math. Bull.* 19 (1976), no. 4, 487-494. (Roy M. Rakestraw) 56 #9230 46A99 (52A05)
- (with Wainwright, J.) A class of inhomogeneous perfect fluid cosmologies. *J. Mathematical Phys.* 18 (1977), no. 8, 1668-1672. (Authors' introduction) 56 #2180 83.53
- Inhomogeneous cosmologies: new exact solutions and their evolution. *J. Mathematical Phys.* 18 (1977), no. 8, 1673-1677. (Author's introduction) 56 #2181 83.53
- Szajcz, Sándor** (with Dobó, Andor) Mathematical investigations in the field of system identification and data detection. (Hungarian) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 20 (1971), 157-163. (P. Fischer) 53 #5086 93B30
- (with Dobó, Andor) Optimization of a certain failure search procedure. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 20 (1972), no. 3-4, 349-359. (Authors' summary) 56 #7937 90B40
- (with Dobó, Andor) A capture problem on the surface on a sphere. (Hungarian) *Mat. Lapok* 24 (1973), 131-135 (1975). (F. J. Papp) 58 #23887 49A99 (90D25)
- (with Dobó, Andor) On the creation of optimal algorithms. I, II. (Hungarian. Russian and English summaries) *Informác.-Elektron.* 9 (1974), 25-29; *ibid* 9 (1974), 132-138. (V. V. Ivanov) 51 #14639 68A20
- (with Dobó, Andor) Some problems of probability theory related to the evaluation of lists. (Hungarian) *Mat. Lapok* 25 (1974), no. 1-2, 129-135 (1977). (I. Vincze) 57 #4281 60C05
- (with Dobó, Andor; Fenyves, Ferenc) The similarity function and some of its properties. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* 10 (1977), no. 1-2, 25-48. (From the summary) 58 #25190 69.00 (90B99)
- See also **Selected translations in mathematical statistics and probability**, 49 #4728
- Szajowski, K.** The number of orthogonal Latin squares. (Polish summary) *Zastos. Mat.* 15 (1976), no. 1, 85-102. (Damaraju Raghavarao) 54 #5013 05B15
- Szalai, Krystyna** Solution of the biharmonic problem in a certain domain of space. (Polish. English and Russian summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No.* 21 (1973), 37-50. (F. Barański) 50 #10291 31B30
- On a certain boundary problem for the biharmonic equation. *Zeszyty Nauk. Uniw. Jagielloń.* 403 *Prace Mat. No.* 17 (1975), 161-174. (D. H. Armitage) 53 #3332 31B30
- Szalay, István** On generalized absolute Cesàro summability of orthogonal series. *Acta Sci. Math. (Szeged)* 32 (1971), 51-57. (B. N. Sahney) 47 #700 42A28
- On the best approximation of factorized Fourier series. *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 235-241. Reidel, Dordrecht, 1975. (R. L. Stens) 58 #23315 42A08
- On orthogonal trigonometric polynomials. *Acta Sci. Math. (Szeged)* 37 (1975), no. 3-4, 287-292. (F. C. Hsiang) 55 #3666 42A52
- On generalized absolute Cesàro summability factors. *Publ. Math. Debrecen* 24 (1977), no. 3-4, 343-349. (G. Sunouchi) 57 #3727 42A24
- Szalay, Michael** On the distribution of primitive roots mod p . (Hungarian. English summary) *Mat. Lapok* 21 (1970), 357-362 (1971). (Author's summary) 46 #3480 10L10
- On the class number of quadratic forms. (Hungarian) *Mat. Lapok* 22 (1971), 111-117 (1972). (P. Erdős) 48 #2075 10C15
- On a theorem of Landau. (Hungarian. English summary) *Mat. Lapok* 22 (1971), 317-321 (1972). (Author's summary) 50 #9821 10H25
- On a theorem of J. W. S. Cassels. (Hungarian. English summary) *Mat. Lapok* 23 (1972), 109-112 (1973). (Author's summary) 49 #2580 10F99
- On the distribution of the primitive roots of a prime. *J. Number Theory* 7 (1975), 184-188. (S. L. Segal) 51 #5524 10H15
- A note on the dimensions of representations of S_n . *Topics in number theory (Proc. Colloq., Debrecen, 1974)*, pp. 383-388. *Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam, 1976.* (P. Erdős) 55 #12660 10H15 (20C30)
- (with Turán, Pál) On some problems of the statistical theory of partitions with application to characters of the symmetric group. I. *Acta Math. Acad. Sci. Hungar.* 29 (1977), no. 3-4, 361-379. (W. Narkiewicz) 58 #21991a 10J20 (10H25, 10K20, 20B25)
- (with Turán, Pál) On some problems of the statistical theory of partitions with application to characters of the symmetric group. II. *Acta Math. Acad. Sci. Hungar.* 29 (1977), no. 3-4, 381-392. (W. Narkiewicz) 58 #21991b 10J20 (10H25, 10K20, 20B25)
- Szalek, Marek A.** A method for reducing electromagnetic problems to integral equations of the second kind. (Polish) *Prace IPPT/IFTR Rep.* 1974, no. 15 (*Prace Zakładu Teorii Fal Elektromagnetycznych Prace No. 104*), 34 pp. (Author's summary) 57 #11368 78.45
- A method of error estimation for certain waveguide problems. (Polish) *Prace IPPT/IFTR Rep.* 1975, no. 82 (*Prace Zakładu Elektrodynamiki Ośrodków Ciepłych Prace No. 126*), 30 pp. (1976). (Author's summary) 57 #11369 78.45
- Szankolowicz, Lucjan** Sur la classification des graphes en vue des propriétés de leurs nœuds. (Polish and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały No. 3 Teoria Grafów* (1970), 15-22. (Jean-Claude Bermond) 52 #5493 05C99
- On the problems connected with the concept of the cut of the finite anti-symmetric directed graph. (Russian. English summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 19 (1971), 691-693. (L. S. Mel'nikov) 48 #3787 05C20
- The foundations of the theory of network planning. I. (Polish. English and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały No. 4 Grafy i Sieci* (1972), 3-16. (J. Bosák) 50 #1959a 05C20 (94A20)
- The foundations of the theory of network planning. II. (Polish. English and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały No. 6 Zagadnienia kombinatoryczne* (1972), 59-66. (J. Bosák) 50 #1959b 05C20
- Neighborhood information of a graph, and a problem of Ulam. (Polish. English and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały No. 9 Grafy i Hipergrafy* (1973), 3-7. (Author's summary) 50 #1959c 05C99
- Certain problems of the mathematics of finite sets. (Polish. English and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały No. 9 Grafy i Hipergrafy* (1973), 27-32. (H. Hanani) 51 #7902 05B05
- Remarks on the theory of graph characteristics. *Ann. Mat. Pura Appl.* (4) 98 (1975), 257-261. (J. Sedláček) 51 #3002 05C99
- On problems of the elementary theory of graphical matroids. *Recent advances graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 501-505. *Academia Prague, 1975.* (Thomas Brylawski) 56 #166 05B35
- Some remarks on stable sets of a hypergraph. (Polish and Russian summaries) *Prace Nauk. Inst. Mat. Politechn. Wrocław. No. 17 Ser. Stud. i Materiały No. 13* (1975), 27-32. (G. O. H. Katona) 57 #16146 05C99
- Szaniawski, Andrzej** Equations of steady flow through slightly curved multifilament bundles. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* 29 (1977), 4, 519-530. (J. N. Kapur) 57 #4817 76.35
- (with Zachara, Andrzej) A laminar flow in a channel of variable cross-section of movable and porous walls. (Polish. Russian and English summaries) *Mech. Teoret. i Eksper.* 16 (1978), no. 3, 329-342. (Authors' summary) 58 #19749 76.35 (35Q10)
- Szaniawski, Klemens** The role of information in games. *Reports of the Seminar on Formal Methodology of Empirical Sciences* (1973), pp. 20-28. *Inst. Philos. and Sociology, Polish Acad. Sci., Wrocław, 1973.* (Nigel Howard) 53 #12616 90D05
- Types of information and their role in the methodology of science. *Formal methods in the methodology of empirical sciences (Proc. Conf., Warsaw, 1974)*, pp. 296-306. *Synthese Library*, 103. Reidel, Dordrecht, 1976. (From the introduction) 58 #2743 02G99 (94A15)
- See also **Formal methods in the methodology of empirical sciences**, 58 #21365
- Szaniszló, M.** The design of distribution networks with several rings by Branch and Bound method. (German and Russian summaries) *Acta Tech. Acad. Sci. Hungar.* 72 (1975), 95-115. (Narsingh Deo) 48 #10457 90B10
- Szankowski, A.** (with Zippin, M.) A stability property of the unit vector basis of l_p . *Israel J. Math.* 20 (1975), no. 3-4, 216-227. (Pierre Billard) 52 #3934 (EA 53) 46B15
- Szankowski, Andrzej** An example of a universal Banach space. *Israel J. Math.* 11 (1973), 292-296. (W. A. J. Luxemburg) 45 #4127 46B05
- Embedding Banach spaces with unconditional bases into spaces with symmetric bases. *Israel J. Math.* 15 (1973), 53-59. (W. J. Davis) 54 #13542 46B15
- On Dvoretzky's theorem on almost spherical sections of convex bodies. *Israel J. Math.* 17 (1974), 325-338. (T. Figiel) 50 #2881 46B15 (52A05)
- A Banach lattice without the approximation property. *Israel J. Math.* 24 (1976), 3-4, 329-337. (A. V. Buhvalov) 54 #8245 46B15 (46A40)
- (with Johnson, William B.) Complementably universal Banach spaces. *Studia Math.* 58 (1976), no. 1, 91-97. (M. I. Kadec) 54 #13536 46B05
- See also **Bessaga, Czesław**, 46 #6388
- Szántai, Tamás** On limiting distributions for the sums of random number of random variables concerning the rarefaction of recurrent process. *Studia Sci. Math. Hungar.* (1971), 443-452. (P. M. Lee) 45 #6088 60K05
- On an invariance problem related to different rarefactions of recurrent process. *Studia Sci. Math. Hungar.* 6 (1971), 453-456. (A. M. Mathai) 45 #2811 60K05
- (with Prékopa, András) A new multivariate gamma distribution and its fitting empirical data. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* 1 (1975), no. 3, 299-318. (Authors' summary) 57 #10916 62H05 (65C05)
- (with Prékopa, András) On multi-stage stochastic programming (with application to optimal control of water supply). *Progress in operations research, Vols. I, II (Proc. S. Hungarian Conf., Eger, 1974)*, pp. 733-755. *Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam, 1976.* (S. K. Srinivasan) 55 #9975 90C15
- An algorithm for determining the values of multivariate normal distributions their gradients. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* 2 (1976), no. 27-39. (See RZMat 1978 #3 V9) 62-04
- An algorithm for determining the values of multivariate normal distributions their gradients. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* 2 (1976), no. 27-39. (From the author's summary) 55 #11448 62-04
- On the numerical solution of the stochastic programming model STABIL. *Prékopa, (Hungarian. English summary) Alkalmaz. Mat. Lapok* 2 (1976), no. 1, 93-101. (Author's summary) 55 #11627 65K05 (90C15)
- Szapiel, Wojciech** (with Koczan, Leopold) Sur certaines classes de fonctions holomorphes définies par une intégrale de Stieltjes. (Polish and Russian summaries) *Ann. U. Mariae Curie-Skłodowska Sect. A* 28 (1974), 39-51 (1976). (D. A. Storch) 55 #1030A76
- (with Koczan, Leopold) Sur certaines sous-classes de fonctions typiquement réelles. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 115-120. (E. C. Schlesinger) 49 #5356 30A76
- Points extrémaux dans les ensembles convexes. I. Théorie générale. (English and Russian summaries) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 23 (1975), no. 9, 939-945. (Eggert Briem) 52 #15231 52A05
- Szapiro, T.** (with Gawędzki, K.) On quantization of dynamical groups. *Rep. Math. Phys.* 6 (1974), no. 3, 477-485. (Nicholas M. J. Woodhouse) 52 #5890 22F05 (58F05)
- Szaraniec, Bogumił** A numerical method of describing the probabilistic characteristics of random functions that are given by differential equations. (Polish. Russian and English summaries) *Biul. Wojsk. Akad. Tech.* 20 (1971), no. 12(232), 31-43. (E. F. Carls) 49 #8378 65L99 (60H10)
- Szaraniec, Edward** Stability, instability and aperiodicity tests for linear discrete systems. (French, German and Russian summaries) *Automatica—J. IFAC* 9 (1973), no. 5, 513-516. (Eliahu I. Jury) 55 #2267 93D05
- Szarek, S. J.** On the best constants in the Khinchin inequality. *Studia Math.* 58 (1976), 2, 197-208. (Grahame Bennett) 55 #3672 42A56
- Szarski, A.** Hugo Steinhaus (1887-1972). (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* 15(48) (1972), no. 4, 328-329. (Editors) 57 #12135 01A70

- Tadeusz Ważewski (1896-1972). (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **15**(48) (1972), no. 4, 329. (Editors) **56** #15333 01A70
- ski, Jacek** Uniqueness of solutions of a mixed problem for parabolic differential-functional equations. *Ann. Polon. Math.* **28** (1973), 57-65. (Paul Binding) **48** #9142 35R10
- (with Olech, Czesław; Szmydt, Zofia) Tadeusz Ważewski (1896-1972). Collection of articles dedicated to the memory of Tadeusz Ważewski. *Ann. Polon. Math.* **29** (1974), 1-13. (Editors) **49** #7101 01A70
- Strong maximum principle for non-linear parabolic differential-functional inequalities. Collection of articles dedicated to the memory of Tadeusz Ważewski. III. *Ann. Polon. Math.* **29** (1974), 207-214. (M. H. Protter) **51** #6197 35R10 (35K40)
- Strong maximum principle for non-linear parabolic differential-functional inequalities in arbitrary domains. *Ann. Polon. Math.* **31** (1975), no. 2, 197-203. (M. H. Protter) **54** #765 35R10 (35K10)
- Generalized Cauchy problem for differential-functional equations with first order partial derivatives. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 8, 575-580. (H. Kumano-go) **55** #10881 35R10
- Uniqueness of the solution to a mixed problem for parabolic functional-differential equations in arbitrary domains. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 10, 841-849. (Genowefa Majcher) **55** #3576 35R10
- (with Olech, Czesław; Szmydt, Zofia) Tadeusz Ważewski (1896-1972). (Polish) *Wiadom. Mat.* (2) **20** (1976), no. 1, 55-62. (Editors) **55** #5361 01A70
- Differential inequalities and first order partial differential equations in the scientific works of Tadeusz Ważewski. (Polish) *Wiadom. Mat.* (2) **20** (1976), no. 1, 71-76. (Editors) **55** #5941 34A40 (35B45, 01A70, 34E05)
- ski, Jan** See Dictionary: Polish-Russian, **54** #12430
- sz, Domokos** (with Katona, Gyula) Matching problems. *Combinatorial theory and its applications, II* (Proc. Colloq., Balatonfüred, 1969), pp. 695-703. North-Holland, Amsterdam, 1970. (N. G. de Bruijn) **46** #3351 05B40
- Once more on the Poisson process. *Studia Sci. Math. Hungar.* **5** (1970), 441-444. (M. Csorgo) **46** #10079 60J30
- (with Katona, Gyula) Matching problems. *J. Combinatorial Theory Ser. B* **10** (1971), 60-92. (R. J. Hans-Gill) **46** #798 52A45 (05B40)
- (with Freyer, B.) A certain problem of the theory of summing with a random index. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 181-187. (V. S. Koroljuk) **46** #2719 60F05
- The convergence of the sums of independent, integer-valued processes. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 867-874. (P. Révész) **45** #1240 60G50
- On the weak convergence of sequences of probability distributions. (Hungarian. English summary) *Mat. Lapok* **22** (1971), 283-288 (1972). (M. Csorgo) **48** #1280 60B10
- Limit theorems for randomly stopped stochastic processes. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **16** (1971), 567-569. (Author's summary) **49** #6323 60F05
- On the convergence of sums of point processes with integer marks. *Stochastic point processes: statistical analysis, theory, and applications* (Conf., IBM Res. Center, Yorktown Heights, N. Y., 1971), pp. 607-615. Wiley-Interscience, New York, 1972. (W. A. Woyczynski) **51** #4339 60B10 (60G55)
- Stability and law of large numbers for sums of a random number of random variables. *Acta Sci. Math. (Szeged)* **33** (1972), 269-274. (V. K. Rohatgi) **47** #9696 60F15
- Limit theorems for the distributions of the sums of a random number of random variables. *Ann. Math. Statist.* **43** (1972), 1902-1913. (C. W. Anderson) **50** #11399 60F05
- Classes of limit distributions for sums of a random number of independent identically distributed random variables. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 424-439. (J. Galambos) **46** #6424 60F05
- Limit theorems for the sums of a random number of random variables. *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes* (Technical Univ. Prague, Prague, 1971; dedicated to the memory of Antonín Špaček), pp. 833-838. Academia, Prague, 1973. (B. L. S. Prakasa Rao) **50** #8659 (EA 51) 60F05
- On a "rolling" characteristic function. Collection of articles dedicated to the memory of Alfréd Rényi, II. *Period. Math. Hungar.* **3** (1973), 13-17. (S. M. Samuels) **48** #9803 60E05
- On the rate of convergence in Lévy's metric for random indexed sums. *Progress in statistics* (European Meeting Statisticians, Budapest, 1972), pp. 781-787. *Colloq. Math. Soc. János Bolyai*, Vol. 9, North-Holland, Amsterdam, 1974. (Stanley Sawyer) **51** #9168 60F05
- A limit theorem for semi-Markov processes. *J. Appl. Probability* **11** (1974), 521-528. (A. F. Turbin) **51** #4449 60K15 (60F05)
- On a metrization of the vague convergence. *Stud. Sci. Math. Hungar.* **9** (1974), 219-222 (1975). (H. Heyer) **52** #12030 60B10 (28A32)
- A certain nonlinear optimization problem. (Russian) *Studia Sci. Math. Hungar.* **9** (1974), 93-100 (1975). (B. Dimitrov) **52** #4987 90B99 (93E99)
- (with Dao-Quang-Tuyen) A collision model on the two-dimensional square-lattice. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **31** (1974/75), 75-77. (Richard Holley) **52** #15736 60K35
- Shocks in a two component paralleled system. *Limit theorems of probability theory* (Colloq., Keszthely, 1974), pp. 347-349. *Colloq. Math. Soc. János Bolyai*, Vol. 11, North-Holland, Amsterdam, 1975. (Olav Kallenberg) **52** #12116 60K10
- Some results and problems in the limit theory of random sums (independent case). *Limit theorems of probability theory* (Colloq., Keszthely, 1974), pp. 351-363. *Colloq. Math. Soc. János Bolyai*, Vol. 11, North-Holland, Amsterdam, 1975. (F. W. Steutel) **52** #15617 60F05 (60E05)
- (with Gács, Peter) On a problem of Cox concerning point processes in R^k of "controlled variability". *Ann. Probability* **3** (1975), no. 4, 597-607. (R. V. Ambarcumjan) **52** #9372 60G55 (60D05)
- (with Major, Peter) Letter to the editors: A counterexample to a theorem in D. S. Sil'vestrov's article "Remarks on the limit of a composite random function" (*Teor. Veroyatnost. i Primenen.* **17** (1972), 707-715). (Russian) *Teor. Veroyatnost. i Primenen.* **20** (1975), 219-220; misprints, *ibid.* **20** (1975), no. 2, 460. (P. Révész) **52** #4385 60F05
- A problem of two lifts. *Ann. Probability* **5** (1977), no. 4, 550-559. (Douglas R. Miller) **57** #1685 60K10
- Uniformity in Stone's decomposition of the renewal measure. *Ann. Probability* **5** (1977), no. 4, 560-564. (Douglas R. Miller) **57** #1681 60K05
- Szász, Ferenc Andor** Notes on modules. I, II, III. *Proc. Japan Acad.* **46** (1970), 349-350; *ibid.* **46** (1970), 351-353; *ibid.* **46** (1970), 354-357. (Victor Camillo) **52** #5743 16A64
- On the adjoint semigroups of rings. I. *Proc. Japan Acad.* **46** (1970), no. 7, supplement, 773-775. (Heinrich Seidel) **45** #6955 20M25 (16A26)
- Beiträge zur Radikaltheorie der Ringe. *Publ. Math. Debrecen* **17** (1970), 267-272 (1971). (R. Wiegandt (Zbl **243** #16006)) **50** #7233 (E **54** #5287) 16A21
- Äquivalenzrelation für die Charakterisierung des Jacobson'schen Radikals. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 85-86. (R. Wiegandt) **45** #8674 16A21
- (with Lajos, Sándor) Bi-ideals in associative rings. *Acta Sci. Math. (Szeged)* **32** (1971), 185-193. (T. de W. Jooste) **46** #5397 16A66
- On minimal biideals of rings. *Acta Sci. Math. (Szeged)* **32** (1971), 333-336. (T. de W. Jooste) **46** #5398 16A66
- Rings, which are radical modules. *Math. Japon.* **16** (1971), 103-104. (W. S. Martindale, III) **45** #8673 16A21
- On the idealizer of a subring. *Monatsh. Math.* **75** (1971), 65-68. (J. C. Robson) **45** #3472 16A48
- Further characterizations for the Jacobson radical of a ring. *Proc. Japan Acad.* **47** (1971), suppl. I, 810-811. (Editors) **46** #9094 16A21
- A criterion for the existence of the twosided unit element of semigroups. *Proc. Japan Acad.* **47** (1971), suppl. I, 812-814. (Editors) **46** #9209 20M10
- Certain subdirect sums of finite prime fields. *Colloq. Math.* **25** (1972), 43-48, 163. (S. Lajos) **46** #1843 16A48
- Short elementary proof of a ring theoretical result. *Math. Japon.* **17** (1972), 113-114. (Editors) **48** #340 16A48
- Some generalizations of strongly regular rings. I. *Math. Japon.* **17** (1972), 115-118. (Z. Papp) **48** #2178 16A30
- On right residuals in lattice ordered groupoids. *Math. Nachr.* **53** (1972), 69-75. (L. Fuchs) **48** #8333 06A50
- An almost subidempotent radical property of rings. *Rings, modules and radicals* (Proc. Colloq., Keszthely, 1971), pp. 483-499. *Colloq. Math. Soc. János Bolyai*, Vol. 6, North-Holland, Amsterdam, 1973. (J. Zelmanowitz) **50** #7234 (E **54** #5288) 16A21
- Über das im Operatorring enthaltene allgemeine Radikal eines Untermoduls. *Acta Sci. Math. (Szeged)* **34** (1973), 371-376. (Rainer Mlitz) **47** #6754 16A21
- On some weakly supernilpotent radicals of rings. *Colloq. Math.* **28** (1973), 195-201, 329. (R. Wiegandt) **48** #4014 16A21
- The module-theoretic analogue of a ring-theoretic result of Ottó Steinfeld. (Hungarian. German summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **21** (1973), 443-447. (Z. Papp) **48** #2191 16A64
- Some generalizations of strongly regular rings. II, III. *Math. Japon.* **18** (1973), 87-90; *ibid.* **18** (1973), 91-94. (Z. Papp) **49** #7302 16A30
- On left magnifying elements and quasimodular right ideals of rings. *Math. Japon.* **18** (1973), 221-223. (P. M. Cohn) **50** #411 16A66
- On some simple Jacobson radical rings. *Math. Japon.* **18** (1973), 225-228. (P. M. Cohn) **50** #379 16A22
- On Hashimotoian universal algebras with some properties of Hopf. *Math. Japon.* **18** (1973), 229-234. (P. M. Cohn) **50** #210 08A25
- On generalized subcommutative regular rings. *Monatsh. Math.* **77** (1973), 67-71. (H. H. Storrer) **47** #5045 16A30
- Rings with radical maximal submodules. *Monatsh. Math.* **77** (1973), 354-356. (M. Djabali) **49** #348 16A21
- (with Wiegandt, Richard) On hereditary radicals. *Period. Math. Hungar.* **3** (1973), no. 3-4, 235-241. (E. P. Armendariz) **48** #6158 (E **51** #5645) 16A21
- Bemerkungen zu meiner Arbeit: "An almost subidempotent radical property of rings" (Rings, modules and radicals (Proc. Colloq., Keszthely, 1971), pp. 483-499, *Colloq. Math. Soc. János Bolyai*, Vol. 6, North-Holland, Amsterdam, 1973). *Studies in mathematics* (in honor of A. Almeida Costa) (Portuguese), pp. 127-130. Instituto de Alta Cultura, Lisbon, 1974. (Rainer Mlitz) **54** #5288 16A21
- Further characterization of strongly regular rings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 243-245. (Louis Herman) **49** #7301 16A30
- Investigations in radical theory of algebraic structures. I. (Hungarian) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **22** (1974), no. 2-4, 215-255 (1976). (R. Wiegandt) **53** #8118 16A21
- Remarks on my paper "The radical property of rings such that every homomorphic image has no nonzero left annihilators" (*Math. Nachr.* **48** (1971), 371-375). *Math. Nachr.* **64** (1974), 393-395. (R. L. Tangeman) **50** #4648 16A21
- On strong simplicities of semigroups with zero. *Period. Math. Hungar.* **5** (1974), 145-148. (H. D'Alarcao) **50** #13339 20M10
- ★Radikale der Ringe. *VEB Deutscher Verlag der Wissenschaften, Berlin*, 1975. 300 pp. (W. G. Leavitt) **55** #8086 16A21 (16-01)
- The join-representation of some intersections in complete lattices. Collection of articles dedicated to Tatsujiro Shimizu on the occasion of his 77th birthday. *Math. Japon.* **20** (1975), special issue, 17-19. (Iqbalunnisa) **54** #5066 06A23
- On hereditary radicals of semigroups with zero. *Math. Japon.* **20** (1975), no. 1, 89-91. (D. R. LaTorre) **52** #10932 20M10
- The solution of a problem on upper radicals of rings. *Math. Nachr.* **66** (1975), 101. (R. F. Rossa) **52** #3214 16A21
- A second almost subidempotent radical for rings. *Math. Nachr.* **66** (1975), 283-289. (R. L. Tangeman) **52** #469 16A21
- (with Wiegandt, Richard) Correction to our paper "On hereditary radicals" (*Period.*

- Math. Hungar. 3 (1973), no. 3-4, 235-241). *Period. Math. Hungar.* 6 (1975), 21. (E. P. Armendariz) 51 #5645 16A21
- Ringe, in welchen jedes Element ein Linksmultiplikator ist. *Acta Sci. Math. (Szeged)* 38 (1976), no. 1-2, 165-166. (W. G. Leavitt) 53 #8135 16A48
- (with Lajos, Sándor) On regular rings. *Mat. Vesnik* 13(28) (1976), no. 2, 163-165. (V. C. Cateforis) 56 #3050 16A30
- Ein kurzer elementarer Beweis eines Satzes von O. Steinfield über die einstufig nichtprimen Ringe. *Period. Math. Hungar.* 7 (1976), no. 1, 9-10. (V. C. Cateforis) 54 #7521 16A12
- Bemerkungen zu meiner Arbeit: "Beiträge zur Radikaltheorie der Ringe" (Publ. Math. Debrecen 17 (1970), 267-272 (1971)). *Publ. Math. Debrecen* 23 (1976), no. 1-2, 49-51. (R. Wiegandt) 54 #5287 16A21
- Investigations in radical theory of algebraic structures. II. (Hungarian) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 23 (1977), no. 1-2, 1-32. (R. Wiegandt) 55 #5677 16A21
- On the total logical independence of the axiom system of S. A. Amitsur for general radicals of rings. *Math. Sem. Notes Kobe Univ.* 6 (1978), no. 1, 149-151. (Terry L. Jenkins) 58 #5756 16A21
- See also Faisant, Alain, 52 #14109
- Szász, Gábor Eine Charakteristik der Primidealhalbgruppen. *Publ. Math. Debrecen* 17 (1970), 209-213 (1971). (H.-J. Hoehnke) 46 #5503 20M10
- Eine neue Behandlung mehrfacher Wurzeln algebraischer Gleichungen. *Wiss. Z. Hochsch. Verkehrswesen "Friedrich List" Dresden* 17 (1970), 581-582. (W. Ledermann) 47 #8494 12E05
- ★Théorie des treillis. Traduit de l'anglais par L. Chambadal. Monographies Universitaires de Mathématiques, No. 36. Dunod, Paris, 1971. xi+227 pp. (Editors) 48 #185 06-XX
- On semigroups with T -ideals. *Mat. Vesnik* 11(26) (1974), 293-296. (J. B. Kim) 51 #765 20M10
- Semigroups with idempotent ideals. *Publ. Math. Debrecen* 21 (1974), 115-117. (H.-J. Hoehnke) 50 #10132 20M10
- (with Lajos, Sándor) ★Generalized regularity in semigroups. DM 75-7.
- Department of Mathematics, Karl Marx University of Economics, Budapest, 1975. i+23 pp. (D. R. LaTorre) 52 #10924 20M10
- Derivations of lattices. *Acta Sci. Math. (Szeged)* 37 (1975), 149-154. (V. S. Krishnan) 52 #2978 06A20
- On semigroups in which $a \in Sa^kS$ for any element. *Math. Japon.* 20 (1975), no. 4, 283-284 (1976). (R. B. Hora) 53 #8302 20M10
- Contributions to the theory of semimodular lattices. *Publ. Math. Debrecen* 22 (1975), no. 3-4, 205-209. (Barbara Jeffcott) 54 #190 06A30
- Decomposable elements and ideals in semigroups. *Acta Sci. Math. (Szeged)* 38 (1976), no. 3-4, 375-378. (John W. Hogan) 55 #3123 20M10
- Unitary subsemigroups in commutative semigroups. *Acta Sci. Math. (Szeged)* 38 (1976), no. 3-4, 379-381. (John W. Hogan) 55 #3124 20M10
- Contributions to some generalizations of lattices. *Mat. Vesnik* 13(28) (1976), no. 4, 461-464. (R. P. Dilworth) 56 #2889 06A20
- Contributions to the ideal theory of semigroups. *Publ. Math. Debrecen* 23 (1976), no. 1-2, 19-22. (M. Satyanarayana) 54 #438 20M10
- On generalized complements in lattices. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 9, 1297-1302. (Hartmut Höft) 57 #3023 06A25
- On the De Morgan formulae and the antitony of complements in lattices. *Czechoslovak Math. J.* 28(103) (1978), no. 3, 400-406. (E. Fried) 58 #415 06A25
- Szász, Gy. I. On a variational principle for decaying states. *Phys. Lett. A* 55 (1975/76), no. 6, 327-328. (J. V. Greenman) 53 #4833 81A9
- Szász, Levente Pseudopotential theory of atoms and molecules. I. A new method for the calculation of correlated pair functions. *J. Chem. Phys.* 49 (1968), 679-691. (K. Kumar) 47 #8048 81A7
- Self-consistent field with pseudowavefunctions. *J. Chem. Phys.* 64 (1976), no. 2, 492-499. (Editors) 56 #7580 81B35
- Szász, Pál ★Bevezetés a Bolyai-Lobacevskij-féle geometriába. (Hungarian) [Introduction to Bolyai-Lobachevskian geometry] Disquisitiones Mathematicae Hungaricae, No. 5. Akadémiai Kiadó, Budapest, 1973. 296 pp. (L. Bitay) 54 #1072 50C05
- A simpler presentation of hyperbolic trigonometry via the classical method. (Hungarian) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 22 (1974), 11-54. (L. Bitay) 50 #14443 50A10
- A remark on Hermite-Fejér interpolation. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* 183 (1975), no. 8-10, 453-462. (A. K. Varma) 52 #14749 41A05
- Szata, Mieczysław (with Kasprzak, Wacław; Lysik, Bertold) Problems of the selection of a dimensional base in experiment design and planning. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* 25 (1977), no. 8, 631-639. (A. R. Mitchell) 58 #8595 70.15
- Szatyschneider, W. A more deterministic version of Harris-Spitzer's "random constant velocity" model for infinite systems of particles. *Probability-winter school (Proc. Fourth Winter School, Karpacz, 1975), pp. 157-168. Lecture Notes in Math., Vol. 472, Springer, Berlin, 1975. (F. L. Spitzer) 55 #1540 60K35*
- Szász, Árpád Zweiteitige Operatorenrechnung. *Publ. Math. Debrecen* 18 (1971), 211-237 (1972). (D. Myers) 46 #5956 44A40
- Krabbe's generalized functions as convolution quotients. *Publ. Math. Debrecen* 19 (1972), 287-290 (1973). (G. L. Krabbe) 49 #1104 (E 49 #1105) 46F99 (44A40)
- (with Szász, G.) Additive relations. *Publ. Math. Debrecen* 20 (1973), 259-272 (1974). (Pl. Kannappan) 49 #5628 39A40 (20L99)
- Convolution multipliers and distributions. *Pacific J. Math.* 60 (1975), no. 2, 267-275. (J. L. Griffith) 53 #14116 46F10
- Convolution quotients and distributions. *Publ. Math. Debrecen* 22 (1975), no. 3-4, 245-250. (Harris S. Shultz) 52 #3954 46F10 (44A40)
- Some remarks about a paper: "Partial derivatives of the Vandermonde determinant and their application to the synthesis of linear control systems" (Zastos. Mat. 13 (1972/73), 329-337) by T. Kaczorek and T. Traczyk. (Polish summary) *Zastos. Mat.* 15 (1976), no. 1, 103-104. (See Zbl 345 #93030) 93B99 (34A99)
- On the multiplier extension of commutative H^* -algebras. *Comment. Math. Univ. Paul.* 26 (1977/78), no. 1, 17-23. (P. Saworotnow) 57 #1136 46K15
- Periodic convolution multipliers. *Math. Nachr.* 82 (1978), 21-27. (R. A. Struble) 58 #2060 44A35
- See also Gesztelyi, Ernő, 49 #1105
- Szász, Árpád The multiplier extensions of admissible vector modules and the Mikusiński-type convergences. *Serdica* 3 (1977), no. 1, 82-87. (R. A. Struble) 56 #944A40
- Szász, G. (with Szász, Árpád) Additive relations. *Publ. Math. Debrecen* 20 (1973), 259-272 (1974). (Pl. Kannappan) 49 #5628 39A40 (20L99)
- Szczerba, R. H. On isometric immersions of Riemannian manifolds in Euclidean space. *Bol. Soc. Brasil. Mat.* 1 (1970), no. 2, 31-45. (C. B. Allendoerfer) 47 #4182 53A10
- (with Hsiang, Wu Chung) On embedding surfaces in four-manifolds. *Algebraic topology (Proc. Sympos. Pure Math., Vol. XXII, Univ. Wisconsin, Madison, Wis., 1971), pp. 97-103. Amer. Math. Soc., Providence, R.I., 1971. (J. M. Boardman) 49 #40057D95*
- (with Lee, Ronnie) On the integral Pontrjagin classes of a Riemannian flat manifold. *Geometriae Dedicata* 3 (1974), 1-9. (Ph. Tondeur) 49 #6092 53C20 (57D20)
- (with Auslander, Louis) Vector bundles over tori and noncompact solvmanifolds. *Amer. J. Math.* 97 (1975), 260-281. (S. Kaneyuki) 52 #4324 57F15
- (with Hsiang, Louis) On free nilmanifolds and their associated non compact solvmanifolds. *Duke Math. J.* 42 (1975), 357-369. (A. L. Oniščik) 52 #656 22E20 (57E20)
- (with Lee, Ronnie) On the homology of congruence subgroups and $K_3(\mathbb{Z})$. *Proc. Nat. Acad. Sci. U.S.A.* 72 (1975), 651-653. (Kenneth S. Brown) 52 #5825 20H10 (18F25, 57F10)
- (with Lee, Ronnie) The group $K_3(\mathbb{Z})$ is cyclic of order forty-eight. *Ann. of Math.* 104 (1976), no. 1, 31-60. (R. E. Staffeldt) 56 #1309 55F50 (18F25, 57D65)
- (with Lee, Ronnie) On the homology and cohomology of congruence subgroups. *Invent. Math.* 33 (1976), no. 1, 15-53. (Kenneth S. Brown) 54 #10485 22H05 (20H05)
- (with Lee, Ronnie) On algebraic K -theory and the homology of congruence subgroups. *K-theory and operator algebras (Proc. Conf., Univ. Georgia, Athens, Ga., 1975), pp. 78-87. Lecture Notes in Math., Vol. 575, Springer, Berlin, 1977. (Editors) 58 #28138 18F25*
- (with Lee, Ronnie) On the torsion in $K_4(\mathbb{Z})$ and $K_5(\mathbb{Z})$. *Duke Math. J.* 45 (1978), no. 1, 101-129. (R. E. Staffeldt) 58 #11074a 18F25 (10E45, 55F40)
- See also Soule, Christophe, 58 #11074b
- Szczęch, Władysław Axiomatizability of finite matrices. Abstracts of the lectures delivered at the 19th Conference of the History of Mathematical Logic (Cracow, 1973). *Pol. Acad. Sci. Inst. Philos. Sociology Bull. Sect. Logic* 2 (1973), 118-120. (Editors) 55 #702G10 (02B05)
- On one of Wajsberg's theorems. *Rep. Math. Logic* 1 (1973), 33-37. (K. Iwano) 49 #7114 02B05
- Szczepanek, W. (with Jakubowicz, Antoni) On some gravitational field satisfying Einstein equation. *Tensor (N.S.)* 23 (1972), 157-158. 46 #3037 83J53
- Szczepaniak, Zbigniew The consistency of the theory $ZF + L^1 \neq HOD$. *Set theory and hierarchy theory, V (Proc. Third Conf., Bierutowice, 1976), pp. 285-290. Lecture Notes in Math., Vol. 619, Springer, Berlin, 1977. (E. Mendelson) 57 #12220 02K05*
- Szczepanik, Bonifacy The number of quaternion algebras over a field. (Polish summary) *Univ. Ślaski w Katowicach Prace Naukowe No. 87 Prace Mat. No. 6 (1975), 29-34. (Craig Cordes) 52 #10595 10C05 (12A80)*
- Szczepanik, Lucyna Quaternion algebras and binary quadratic forms. (Polish summary) *Univ. Ślaski w Katowicach Prace Naukowe No. 87 Prace Mat. No. 6 (1975), 17-22. (Craig Cordes) 52 #10596 10C05*
- Szczepankiewicz, Eugeniusz An exponential-hyperbolic class of correlation functions in n -dimensional random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. No. 9 Zastos. Mat. (1971), 27-35. (Author's summary) 50 #15222 62M10*
- (with Krowicki, Stanisław) A certain sampling problem in n -dimensional Euclidean space. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. No. 9 Zastos. Mat. (1971), 37-44. (Authors' summary) 50 #15225 62M10 (62D05)*
- A certain dependence of the sample on the dimension of the Euclidean space. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. No. 9 Zastos. Mat. (1971), 45-55. (Author's summary) 50 #15226 62M10 (62D05)*
- A certain extension of classes of correlation functions. (Polish. Russian and English summaries) *Przegląd Statyst.* 19 (1972), 33-41. (M. Hušková) 46 #10055 60G10
- Certain linear estimators. (Polish. Russian and English summaries) *Przegląd Statyst.* 19 (1972), 283-297. (M. Hušková) 47 #7881 62M99
- Some remarks on sampling in n -dimensional Euclidean space. (Polish. Russian and English summaries) *Przegląd Statyst.* 20 (1973), 27-37. (A. I. Ponomarenko) 47 #162D05
- A certain class of quasi-isotropic random fields. (Polish. Russian and English summaries) *Przegląd Statyst.* 20 (1973), 141-152. (A. I. Ponomarenko) 48 #13060G10
- A certain formula. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 14 Zastos. Mat. (1973), 69-73. (Author's summary) 54 #14044 60E05*
- (with Gniazdowski, Andrzej) Some generalizations of the exponential class of correlation functions. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 12 Zastos. Mat. (1973), 19-26. (Editors) 54 #11693a 62M10*
- (with Krowicki, Stanisław) Some generalizations of the correlation function. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 12 Zastos. Mat. (1973), 27-34. (Editors) 54 #11693b 62M10*
- (with Ditchen, Ryszard) Correlation functions, and sampling. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 12 Zastos. Mat. (1973), 35-44. (Editors) 54 #11694 62M10*
- Some linear estimators. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 12 Zastos. Mat. (1973), 45-67. (Author's summary) 54 #11693 62F10*

- (with Sawicki, Tadeusz) Ordinary moments of certain random variables. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **12** *Zastos. Mat.* (1973), 69-80. (Editors) **54** #11615 62E15
- Certain classes of correlation functions of stochastic processes that are stationary in the wide sense. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **14** *Zastos. Mat.* (1973), 23-36. (Editors) **55** #6544a 60G10 (62M99)
- Some remarks on sampling in the case of stochastic processes that are stationary in the wide sense. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **14** *Zastos. Mat.* (1973), 37-53. (Editors) **55** #6544b 60G10 (62M99)
- (with Małek, Karol; Sawicki, Tadeusz; Serafin-Kołodziejczyk, Ewa) Sampling in the case of some particular random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **14** *Zastos. Mat.* (1973), 55-67. (Editors) **55** #6544c 60G10 (62M99)
- A certain class of quasi-isotropic homogeneous random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **14** *Zastos. Mat.* (1973), 85-86. (From the author's summary) **55** #6550 60G20
- A certain criterion. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **17** *Zastos. Mat.* (1974), 35-53. (From the author's summary) **55** #6751 62M99
- (with Paluch, Artur) A certain cyclometric correlation function. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **17** *Zastos. Mat.* (1974), 55-60. (From the authors' summary) **55** #6750 62M99
- (with Sawicki, Tadeusz) The central moments of certain random variables. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **17** *Zastos. Mat.* (1974), 61-72. **54** #11616 62E15
- A certain generalization of quasi-isotropic random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **17** *Zastos. Mat.* (1974), 73-91. (From the author's summary) **55** #6551 60G20
- (with Krowicki, Stanisław) A certain sampling problem in the case of quasi-isotropic random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **17** *Zastos. Mat.* (1974), 93-105. (From the authors' summary) **56** #6749 62M99
- The moments of certain random variables. I. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **17** *Zastos. Mat.* (1975), 103-137. (Editors) **56** #4016 62E15
- (with Kołodziej, Henryk) A dependence of the sample on the dimension of the space in the case of quasi-isotropic fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **18** *Zastos. Mat.* (1975), 87-94. (Authors' summary) **56** #16966 62M99
- (with Kołodziej, Henryk) Sampling in the case of certain quasi-isotropic random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **18** *Zastos. Mat.* (1975), 95-101. (Authors' summary) **56** #16967 62M99
- A problem of estimators and a certain boundary relation. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **18** *Zastos. Mat.* (1975), 139-164. (Authors' summary) **56** #4086 62M10
- Estimates of a certain mean value. (Polish) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **18** *Zastos. Mat.* (1975), 165-172. (Jiří Anděl) **56** #1632 62M10
- (with Kołodziej, Henryk) Certain properties of sampling in the case of almost stationary random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **19** *Logika Mat.* (1976), 349-354. (Authors' summary) **56** #4090 62M99
- A certain limit theorem. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **19** *Logika Mat.* (1976), 355-359. (A. I. Ponomarenko) **58** #18986 62M99
- (with Paluch, Artur) A certain class of almost stationary isotropic random fields. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **19** *Logika Mat.* (1976), 361-373. (Authors' summary) **56** #4091 62M99
- (with Krzysztalowicz, Aleksander) On certain symbols. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **20** *Algebra, Zastos. Mat.* (1978), 195-208. (Authors' summary) **58** #28431 28A65 (54H20)
- rb, Lesław W.** Undecidability of elementary Pasch-free geometry. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 469-474. (V. Schwabhäuser) **46** #1580 02G05
- The Pasch-free geometry with the continuity axiom. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 613-616. (R. J. Bumcrot) **56** #2533 50A25
- Weak general affine geometry. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 753-761. (E. Morgantini) **47** #4118 50D05
- A paradoxical model of Euclidean affine geometry. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 845-851. (K. Strubecker) **56** #943 50Axx
- Automatic theorem proving. (Polish) *Wiadom. Mat.* (2) **14** (1972), 25-38. (Editors) **56** #13814 68A40 (02D99)
- The notion of an elementary subsystem for a Boolean-valued relational system. *Fund. Math.* **80** (1973), no. 1, 5-12. (Stephen L. Bloom) **48** #1919 02J10 (02H10)
- (with Schwabhäuser, Wolfram) An affine space as union of spaces of higher dimension. *Proceedings of the Tarski Symposium (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971)*, pp. 133-138. *Amer. Math. Soc., Providence, R. I.* 1974. (J. Katerínák) **53** #5290 02G15 (50A25)
- (with Schwabhäuser, Wolfram) Relations on lines as primitive notions for Euclidean geometry. Collection of articles dedicated to Andrzej Mostowski on his sixtieth birthday. *VIII. Fund. Math.* **82** (1974/75), 347-355. (V. Havel) **50** #12697 (E 51 #5282) 02G10 (50A25)
- (with Schwabhäuser, Wolfram) Errata to the paper: "Relations on lines as primitive notions for Euclidean geometry" (*Fund. Math.* **82** (1974/75), 347-355). *Fund. Math.* **87** (1975), no. 3, 283. (Editors) **51** #5282 02G10 (50A25)
- (with Prażmowski, K.) Interpretability and categoricity. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 5, 309-312. (John T. Baldwin) **56** #8356 02G20 (02H05)
- Interpretability of elementary theories. *Logic, foundations of mathematics and computability theory (Proc. Fifth Internat. Congr. of Logic, Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975), Part I*, pp. 129-145. *Univ. Western Ontario Ser. Philos. Sci., Vol. 9, Reidel, Dordrecht*, 1977. (John Cowles) **57** #16040 02G99
- Notions in geometry. *Math. Chronicle* **6** (1977), 1-5. (Editors) **58** #16271 02H15 (50A25)
- (with Kordos, Mavek; Moszyńska, Maria) Wanda Szmelew 1918-1976. *Studia Logica* **36** (1977/78), no. 4, 241-244. (Editors) **58** #16031 01A70
- Szczodrowska-Kozar, B.** Periodic orbits in the regularized restricted three-body problem. I. Regularization of the equation of motion. (Polish summary) *Acta Univ. Wratislav. No.* **231** (1974), 61-71. (*errata insert*) (Giorgio E. O. Giacaglia) **57** #4729a 70.34
- Periodic orbits in the regularized restricted three-body problem. II. Series solution of the regularized equations of motion. (Polish summary) *Acta Univ. Wratislav. No.* **271** (1976), 23-35. (Giorgio E. O. Giacaglia) **57** #4729b 70.34
- Szczotka, F. A.** On a method of ordering and clustering of objects. (Polish summary) *Zastos. Mat.* **13** (1972/73), 23-34. (Joseph Neggers) **48** #188 06A10
- Szczotka, Władysław** M/G/1 queueing system with "fagging" service channel. (Polish summary) *Zastos. Mat.* **13** (1972/73), 439-463. (L. Takács) **48** #9891 60K25
- Immediate service in a Beneš-type G/G/1 queueing system. (Polish summary) *Zastos. Mat.* **14** (1974), 357-363. (P. R. Milch) **51** #2021 60K25
- A case of the invariance principle. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 12, 1113-1117. (Douglas P. Kennedy) **57** #14113 60F05 (60B10)
- An invariance principle for queues in heavy traffic. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 12, 1119-1125. (Douglas P. Kennedy) **57** #14189 60K25
- An invariance principle for queues in heavy traffic. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 4, 591-631. (Richard F. Serfozo) **58** #3124 60K25 (60B10)
- Szczupak, J.** (with Mitra, Sanjit K.; Jury, Elisha I.) Some new results on discrete system stability. *IEEE Trans. Acoust. Speech Signal Process.* **AASSP-25** (1977), no. 1, 101-102. (K. B. Datta) **57** #5325 93D99
- Szyciel, Jerzy** A method for the construction of the equation of motion of a system with one degree of freedom from the family of experimental curves. (Polish. Russian and English summaries) *Prace Inst. Maszyn Przepływowych* **66** (1975), 119-154. **56** #4305 73.35
- Szczyrba, Igor** On the multiplicities of irreducible representations of $U(n)$ in some particular cases. *Rep. Mathematical Phys.* **6** (1974), no. 2, 199-212. (J. M. G. Fell) **52** #665 22E45
- An axiomatic approach to the number operator and its application to parastatistics. *Rep. Mathematical Phys.* **7** (1975), no. 2, 251-274. (Etang Chen) **52** #4867 81.22 (81.47)
- (with Strasburger, Aleksander) On the uniqueness of number operators for certain symmetries. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 4, 409-413. (C. S. Sharma) **56** #17620 81.58
- See also **Group theoretical methods in physics**, **56** #14208
- Szczyrba, Wiktor** Differentiation in locally convex spaces. *Studia Math.* **39** (1971), 289-306. (H. H. Keller) **46** #6027 46G05
- (with Komorowski, Jacek) F - S manifolds in the theory of geodesic fields. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 177-183. *Internat. Atomic Energy Agency, Vienna*, 1974. (J. E. Marsden) **56** #1354 58E99
- A Lagrangian and canonical formalism in the hydrodynamics of an incompressible fluid. *Rep. Mathematical Phys.* **6** (1974), no. 2, 289-302. (Murray Cantor) **52** #6780 58D05
- (with Kijowski, Jerzy) Multisymplectic manifolds and the geometrical construction of the Poisson brackets in the classical field theory. (French summary) With questions by S. Sternberg, K. Gawędzki and W. Klingenberg and replies by Kijowski. *Géométrie symplectique et physique mathématique (Colloq. Internat. C.N.R.S., Aix-en-Provence, 1974)*, pp. 347-349. *Editions Centre Nat. Recherche Sci., Paris*, 1975. (Joseph Klein) **56** #9586 58F05 (81.58)
- Harmonic forms and deformations of Riemannian metric on compact manifold. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), 49-54. (Murray Cantor) **53** #1639 58D05 (58E99)
- Lagrangian formalism in the classical field theory. *Ann. Polon. Math.* **32** (1976), no. 2, 145-185. (*errata insert*) (Hans P. Künzle) **53** #14560 58H05 (58F05, 58E99)
- (with Kijowski, Jerzy) A canonical structure for classical field theories. *Comm. Math. Phys.* **46** (1976), no. 2, 183-206. (David J. Simms) **53** #10038 81.58
- A symplectic structure on the set of Einstein metrics. A canonical formalism for general relativity. *Comm. Math. Phys.* **51** (1976), no. 2, 163-182. (Paul E. Ehrlich) **55** #4305 58H05 (53B30)
- On a symplectic structure of general relativity. *Differential geometrical methods in mathematical physics (Proc. Sympos., Univ. Bonn, Bonn, 1975)*, pp. 482-497. *Lecture Notes in Math., Vol. 570, Springer, Berlin*, 1977. (W. M. Tulczyjew) **56** #13282 58F05 (83.58)
- On the geometric structure of the set of solutions of Einstein equations. *Dissertationes Math. (Rozprawy Mat.)* **150** (1977), 83 pp. (Arthur Fischer) **58** #31206 58E99 (58D05, 83.58)
- Field equations and contracted Bianchi identities in the generalized Einstein-Cartan theory. *Lett. Math. Phys.* **2** (1977/78), no. 4, 265-274. (Editors) **58** #20244 83.53
- A symplectic structure for the Einstein-Maxwell field. *Rep. Mathematical Phys.* **12** (1977), no. 2, 169-191. (W. M. Tulczyjew) **57** #7659 58D05 (83.58)
- The canonical variables, the symplectic structure and the initial value formulation of the generalized Einstein-Cartan theory of gravity. *Comm. Math. Phys.* **60** (1978), no. 3, 215-232. (Elhanan Leibowitz) **58** #13176 58F05 (53C25, 83.58)
- Sze, Daniel** (with Singh, Shankar; Singh, Vijendra Pal) Pulse-mode asynchronous sequential circuits. *Proceedings of the Eighth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1975)*, pp. 148-150. *Western Periodicals Co., North Hollywood, Calif.*, 1975. (C. Tartia) **51** #5197 94A20
- Sze, Michael** Markov processes associated with critical Galton-Watson processes with application to extinction probabilities. *Advances in Appl. Probability* **8** (1976), no. 2,

- 278-295. (N. H. Bingham) **53** #11787 60J80
- Szebehely, Victor** Regularization in celestial mechanics. *Computational mechanics (Internat. Conf. Computational Methods in Nonlinear Mech., Austin, Tex., 1974)*, pp. 257-263. *Lecture Notes in Math.*, Vol. 461, Springer, Berlin, 1975. (Editors) **52** #16209 70.34
- (with Zare, K.) Time transformations in the extended phase-space. *Celestial Mech.* **11** (1975), 469-482. (C. Marchal) **51** #14688 70.34
- Three theorems on relative motion. *Proceedings of the Fifth Conference on Mathematical Methods in Celestial Mechanics (Oberwolfach, 1975)*, Part I. *Celestial Mech.* **14** (1976), no. 1, 113-119. (Hans P. Künzle) **55** #7034 70.53
- Linearization of dynamical systems using integrals of the motion. *Celestial Mech.* **14** (1976), no. 4, 499-508. (Julian I. Palmore) **56** #17294 70.34
- See also *Proceedings: Oberwolfach Conference on Celestial Mechanics*, **47** #7979; *Copernicus and modern dynamical astronomy*, **48** #10246; *Computational methods in nonlinear mechanics*, **52** #4799; *Long-time predictions in dynamics*, **54** #7157; *Proceedings: Conference on Mathematical Methods in Celestial Mechanics*, **54** #14484 and *Proceedings: Conference on Mathematical Methods in Celestial Mechanics*, **54** #14485
- rosłonek-Szefel, Elżbieta** See *Rosłonek-Szefel, Elżbieta*
- Szefer, Wlodon** (with Grabacki, Jan) Examples of ultradistribution solutions to the equations of a plate strip. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* **11** (1973), 95-111. (V. Komkov) **49** #8484 73.46
- (with Gaszyński, J.) Axisymmetric problem of the punch for the consolidating semi-space with mixed boundary permeability conditions. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **30** (1978), no. 1, 17-26. (K. S. Parihar) **58** #3877 73.45
- Szegő, Gábor** ★Orthogonal polynomials. Third edition. American Mathematical Society Colloquium Publications, Vol. 23. *American Mathematical Society, Providence, R.I.*, 1967. xiii + 423 pp. (J. Burlak) **46** #9631 42A52 (33A65)
- (with Pólya, George) ★Aufgaben und Lehrsätze aus der Analysis. Band II: Funktionentheorie, Nullstellen, Polynome Determinanten, Zahlentheorie. Vierte Auflage. Heidelberg Taschenbücher, Band 74. *Springer-Verlag, Berlin-New York*, 1971. xii + 407 pp. (loose errata) (Editors) **49** #8781 00A05
- (with Pólya, George) ★Problems and theorems in analysis. Vol. I: Series, integral calculus, theory of functions. Translated from the German by D. Aepli Die Grundlehren der mathematischen Wissenschaften, Band 193. *Springer-Verlag, New York-Berlin*, 1972. xix + 389 pp. (Editors) **49** #8782 00A05
- The contributions of L. Fejér to the constructive function theory. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 19-26. *Akadémiai Kiadó, Budapest*, 1972. (Editors) **52** #5325 01A70 (41-03)
- ★Orthogonal polynomials. Fourth edition. American Mathematical Society, Colloquium Publications, Vol. XXIII. *American Mathematical Society, Providence, R.I.*, 1975. xiii + 432 pp. (Editors) **51** #8724 42A52 (33A65)
- (with Pólya, George) ★Problems and theorems in analysis. Vol. II. Theory of functions, zeros, polynomials, determinants, number theory, geometry. Revised and enlarged translation by C. E. Billigheimer of the fourth German edition. Die Grundlehren der Mathematischen Wissenschaften, Band 216. *Springer-Verlag, New York-Heidelberg*, 1976. xi + 392 pp. (Editors) **53** #2 00A05
- (with Pólya, George) ★Problems and theorems in analysis. Vol. II. Theory of functions, zeros, polynomials, determinants, number theory, geometry. Revised and enlarged translation by C. E. Billigheimer of the fourth German edition. Springer Study Edition. *Springer-Verlag, New York-Heidelberg*, 1976. xi + 391 pp. ISBN 0-387-90291-0 (Editors) **57** #5529 00A05 (01A75)
- (with Pólya, George) ★Задачи и теоремы из анализа. Часть первая. (Russian) [Problems and theorems in analysis. Part one] Ряды. Интегральное исчисление. Теория функций. [Series. Integral calculus. Function theory] Third Russian edition. Translated from the German by D. A. Raikov. *Izdat. "Nauka", Moscow*, 1978. 391 pp. (Editors) **58** #26630 00A05 (26-01, 30-01)
- Szegő, Giorgio P.** New theorems on stability and attraction and their application to a control problem. *Stability problems of solutions of differential equations (Proc. NATO Advanced Study Inst., Padua, 1965)*, pp. 107-175. *Edizioni "Oderisi", Gubbio*, 1966. (J. Kato) **54** #5949 49E20
- Asymptotic behavior of time-varying, forced, nonlinear, discrete systems. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 23, Paper 12B. 7 pp. *Inst. Mech. Engrs., London*, 1967. (T. Sasagawa) **52** #7660 93D99 (93C10, 93C55)
- Extension theorems for flows without uniqueness. *Advances in differential and integral equations (Conf. Qualitative Theory of Nonlinear Differential and Integral Equations, Univ. Wisconsin, Madison, Wis., 1968; in memoriam Rudolph E. Langer (1894-1968))*, pp. 125-130. *Studies in Appl. Math.*, No. 5, Soc. Indust. Appl. Math., Philadelphia, Pa., 1969. (Roger C. McCann) **52** #8573 34C35
- (with Treccani, Giulio) Liapunov functions on the region of unstable weak attraction. *Seminar on Differential Equations and Dynamical Systems, II (Univ. Maryland, College Park, Md., 1969)*, pp. 230-249. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (Prem Bajaj) **52** #11214 34C35
- (with Treccani, Giulio) An abstract formulation of minimization algorithms. *Differential games and related topics (Proc. Internat. Summer School, Varenna, 1970)*, pp. 279-297. *North-Holland, Amsterdam*, 1971. (P. J. Laurent) **50** #12256 90C25
- Programmazione matematica. (English summary) *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 1-39. *Academic Press, New York*, 1972. (F. Giannessi) **51** #15001 90C30
- (with Treccani, Giulio) Teoria matematica degli algoritmi di minimizzazione. (English summary) *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 103-145. *Academic Press, New York*, 1972. (F. Giannessi) **51** #15002 90C30
- (with Treccani, Giulio) Axiomatization of minimization algorithms and a new conjugate gradient method. *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 193-216. *Academic Press, New York*, 1972. (From the authors' introduction) **51** #9487 65K05
- (with Treccani, Giulio; Trabattini, L.) A numerical method for the isolation minima. *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 239-289. *Academic Press, New York*, 1972. (P. J. Laurent) **52** #9610 65K05 (90C30)
- On nonlinear programming of homogeneous polynomials. (Polish and Russian summaries) *Arch. Automat. i Telemekh.* **17** (1972), 351-361. (G. Opfer) **48** #1790C30
- Numerical methods for global minimization. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 57.3, 9 pp.* IFAC, Düsseldorf, 1975. (Author's summary) **58** #33366 93C99 (65K05)
- (with Dixon, L. C. W.; Gomulka, J.) Towards a global optimisation technique. *Towards global optimisation (Proc. Workshop, Univ. Cagliari, Cagliari, 1974)*, pp. 29-34. *North-Holland, Amsterdam*, 1975. (Editors) **57** #14440 65K05
- (with Bertoni, Alberto; Mazzoleni, Piera) On the analytical identification of optimal loan and deposit interest rates of a commercial bank. *Metroeconomica* (1975), no. 1, 44-67. (From the introduction) **58** #15032 90A15
- (with Stefani, S.) Formulazione analitica della funzione utilità dipendente da me semivarianza, mediante il principio dell'utilità attesa. (English summary) *Boll. Mat. Ital.* (5) **13A** (1976), no. 1, 157-162. (Massimiliano Ottaviani) **57** #11669 90A10
- Alcuni aspetti della teoria matematica della selezione degli investimenti. (English summary) *Rend. Sem. Mat. Fis. Milano* **46** (1976), 73-88 (1978). (Author's summary) **58** #25896 90A15
- See also *Mathematical systems theory and economics*, **47** #6279; *Minimization algorithms, mathematical theories and computer results*, **48** #10489 and *Towards global optimisation*, **52** #2210
- Szegő, K.** (with Tóth, K.) Expansions of the unequal-mass scattering amplitude in terms of Poincaré representations and complex angular momentum at zero energy. *Phys. Rev.* (3) **5** (1972), 1297-1307. (K. T. Mahanthappa) **48** #13042 81.30
- Gelfand-Naimark spin variables in field theory. New developments in relativistic quantum field theory (Tenth Winter School Theoret. Phys., Karpacz, 1973), Vol. I. *Univ. Wroclaw*, No. 207 (1974), 319-333. (Jacques P. Leveille) **55** #4986 81.22
- Szego, Peter** (with Lorch, Lee; Muldoon, Martin E.) Higher monotonicity properties of certain Sturm-Liouville functions. IV. *Canad. J. Math.* **24** (1972), 349-368. (G. Sansone) **45** #7165 34C99
- (with Lorch, Lee; Muldoon, Martin E.) Some monotonicity properties of Bessel functions. *SIAM J. Math. Anal.* **4** (1973), 385-392. (F. W. J. Olver) **49** #32433A40
- Szeidl, L.** (with Ruda, Mihály; Tusnády, Gábor) Time series analysis on CDC 3600. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 661-664. *Colloq. Math. Soc. János Bolyai*, Vol. 9, North-Holland, Amsterdam, 1974. (Editors) **51** #2224 62M99 (65D10)
- (with Benczúr, András) On absolute continuity of measures defined by multidimensional diffusion processes with respect to the Wiener measure. (Russian summary) *Közlemények—MTA Számítástech. Automat. Kutató Int. Budapesti Nemzetközi Szeminárium* (1974), 5-9. (Masuyuki Hitsuada) **53** #1716 60G30 (60J60)
- Székely, Béla** (with Szepesi, György) Further analysis of a dynamic input-output model. (Hungarian. English and Russian summaries) *Sigma—Mat.-Közgazdasági Folyóirat* (1972), 233-248. (Authors' summary) **48** #5614 90A15
- Székely, Eugène** (with Karabinta, Amadou) Sur les empilements optimaux de cercles congruents sur la sphère. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **16** (1974), 143-154 (1974). (H. Groemer) **51** #13874 52A45
- Sur le problème de Tammes. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* (1974), 157-175 (1975). (E. Jucović) **52** #4141 52A45
- Székely, Gábor J.** On an inhomogeneous Markov-chain in patrolling machines. I. *Periodica Math. Hungar.* **1** (1971), no. 2, 121-134. (From the author's introduction) **55** #11399 60J20 (60K10)
- On limit distributions. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **16** (1974), 65-67 (1974). (J. D. Mason) **50** #11400 60F05
- On the coefficients of polynomials with negative zeros. *Studia Sci. Math. Hungar.* (1973), 123-124. (Adhir K. Basu) **48** #7346 60F05 (26A78)
- Statistical theory of topological groups. *Progress in statistics (European Meeting Statisticians, Budapest, 1972), Vol. II*, pp. 789-791. *Colloq. Math. Soc. János Bolyai*, Vol. 9, North-Holland, Amsterdam, 1974. (Editors) **57** #17755 60B15 (22B99)
- On the asymptotic properties of diffusion processes. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **17** (1974), 69-71 (1975). (S. R. S. Varadhan) **51** #14292 60F15 (60F15)
- On the polynomials of independent random variables. *Limit theorems of probability theory (Colloq., Keszthely, 1974)*, pp. 365-371. *Colloq. Math. Soc. János Bolyai*, Vol. 9, North-Holland, Amsterdam, 1975. (W. Hoeffding) **52** #12056 60F15
- A classification of means. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **18** (1976), 129-133 (1976). (Gary G. Makowski) **54** #7723 26A86 (60E05)
- (with Halász, Gábor) On the elementary symmetric polynomials of independent random variables. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 3-4, 397-400. (Hoeffding) **54** #11467 60F15
- Probabilities in operator structures. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* (1976), 141-142 (1977). (S. A. Peregudov) **58** #23231 39A40
- The Brownian taboo bridge with an application in the theory of nonparametric statistics. *Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the Eighth European Meeting of Statisticians (Tech. Univ. Prague, Prague, 1974), Vol. A*, pp. 563-566. *Reidel, Dordrecht*, 1977. (P. K. Sen) **58** #7883 60J65 (62G99)
- Székely, S.** (with Gécseg, F.) On equational classes of unoids. *Acta Sci. Math. (Szeged)* (1973), 99-101. (A. Yaquib) **47** #6591 08A25 (02F10)
- Székelyhidi, László** The general representation of an additive function on an open partition set. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **21** (1973), 503-509. (L. Losonczi) **48** #4561 39A20
- (with Daróczy, Zoltán; Lajkó, K.) Functional equations on ordered fields. *Math. Debrecen* **24** (1977), no. 1-2, 173-179. (Pl. Kannappan) **56** #6178 39A40

- eres, George Multidimensional continued fractions. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **13** (1970), 113-140 (1971). (R. Güting) **47** #1753 10E20 (10F10)
- Cyclotomy and complementary difference sets. *Acta Arith.* **18** (1971), 349-353. (B. M. Stewart) **45** #209 12C20 (05A17)
- The average value of skew Hadamard matrices. *Proceedings of the First Australian Conference on Combinatorial Mathematics (Univ. Newcastle, Newcastle, 1972)*, pp. 55-59. (Univ. of Newcastle Res. Associates, Newcastle, 1972. (A. Lee) **50** #2201 15A15 (05F30)
- Polyhedral decompositions of cubic graphs. *Bull. Austral. Math. Soc.* **8** (1973), 367-387. (C. St. J. A. Nash-Williams) **48** #3785 05C15
- Oriented Tait graphs. Collection of articles dedicated to the memory of Hanna Neumann, III. *J. Austral. Math. Soc.* **16** (1973), 328-331. (B. Manvel) **48** #10879 5C20
- Determinants of skew type ± 1 matrices. *Period. Math. Hungar.* **3** (1973), no. 3-4, 29-234. (R. A. Brualdi) **51** #12567 05B20
- On the number of divisors of $x^2 + x + A$. Collection of articles dedicated to K. Mahler on the occasion of his seventieth birthday. *J. Number Theory* **6** (1974), 434-442. (L. Carlitz) **51** #422 10M05
- Non-colourable trivalent graphs. *Combinatorial mathematics, III (Proc. Third Australian Conf., Univ. Queensland, St. Lucia, 1974)*, pp. 227-233. *Lecture Notes in Math.*, Vol. 452, Springer, Berlin, 1975. (Paul C. Kainen) **51** #7928 05C15
- Homogeneous ideals in $K[x, y, z]$. *Acta Math. Acad. Sci. Hungar.* **26** (1975), no. 3-4, 55-367. (D. Kirby) **52** #5664 14A25 (13C10)
- Infinite values of meromorphic matrix functions. *Nederl. Akad. Wetensch. Indag. Math.* **40** (1978), no. 2, 287-295. (M. Hervé) **58** #22559 30A68
- See also Giles, J. R.; et al., **53** #5231 and *Computers and mathematics with applications*, **55** #10178
- eres, István A function-theoretic description of the learning process. (Hungarian) *Mat. Lapok* **23** (1972), 319-336 (1974). (M. Arató) **52** #5095 92A25
- eres, Peter Colliding plane gravitational waves. *J. Mathematical Phys.* **13** (1972), 86-294. (M. Carmeli) **45** #8211 83J5
- (with Morgan, F. H.) Extensions of the Curzon metric. *Comm. Math. Phys.* **32** (1973), 313-318. (J. K. Beem) **48** #7901 83J53
- (with Bell, P.) Interacting electromagnetic shock waves in general relativity. *General Relativity and Gravitation* **5** (1974), no. 3, 275-286. (Barry Aronson) **54** #4525 83J53
- A class of inhomogeneous cosmological models. *Comm. Math. Phys.* **41** (1975), 5-64. (J. K. Beem) **51** #4936 83J53
- (with Rankin, John R.) Homogeneous Newtonian cosmologies and their perturbations. *J. Austral. Math. Soc. Ser. B* **20** (1977/78), no. 1, 114-128. (Authors' summary) **58** #32826 85J53
- Andrzej (with Jakubowski, Ryszard) Functional graphs as an extension of Petri nets. Marking processes over functional graphs. (Polish and Russian summaries) *Podstawy Teorii 6* (1976), no. 4, 401-412. (Authors' introduction) **57** #5457 94A20 (58A05)
- czka, Jerzy On Laplace transformation in spaces $D'_{\ell,1}$. *Comment. Math. Prace Mat.* **15** (1971), 57-59. (J. N. Pandey) **47** #822 46F10 (44A10)
- On absolute convergence of multiple Haar and Rademacher series. *Comment. Math. Prace Mat.* **17** (1973/74), 475-479. (D. J. Eustice) **49** #11132 42A56
- On absolute convergence of multiple Fourier series of functions p -integrable with mixed powers. *Comment. Math. Prace Mat.* **18** (1974/75), no. 2, 297-310. (R. L. Cooke) **52** #8787 42A92
- On some properties of integral moduli of continuity of functions of several variables integrable with mixed powers. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **29** (1975), 117-121 (1977). (From the introduction) **48** #23339 42A92
- erédi, A. (with Erdős, Paul) On a Ramsey type theorem. Collection of articles dedicated to the memory of Alfréd Rényi, I. *Period. Math. Hungar.* **2** (1972), 295-299. (J. E. Graver) **48** #3793 05C30
- (with Erdős, Paul) On multiplicative representations of integers. *J. Austral. Math. Soc. Ser. A* **21** (1976), no. 4, 418-427. (H. J. Kanold) **54** #5167 10L99
- erédi, Endre (with Hajnal, András) Proof of a conjecture of P. Erdős. *Combinatorial theory and its applications, II (Proc. Colloq., Balatonfüred, 1969)*, pp. 601-623. (North-Holland, Amsterdam, 1970. (J. W. Moon) **45** #6661 05C99
- On a problem of P. Erdős. *Combinatorial theory and its applications, III (Proc. Colloq., Balatonfüred, 1969)*, pp. 1051-1053. (North-Holland, Amsterdam, 1970. (András Hajnal) **45** #6670 05C99
- (with Sárközy, András) On intersections of subsets of finite sets. (Hungarian. English summary) *Mat. Lapok* **21** (1970), 269-278 (1971). (L. Bukovský) **47** #3188 05A05
- On a problem of W. Schmidt. *Studia Sci. Math. Hungar.* **6** (1971), 287-288. (R. Güting) **45** #8625 10K99
- (with Hajnal, András; Milner, E. C.) A cure for the telephone disease. *Canad. Math. Bull.* **15** (1972), 447-450. (R. L. Graham) **47** #3184 05A05
- (with Komlós, János; Sulyok, Miklós) A lemma of combinatorial number theory. (Hungarian. English summary) *Mat. Lapok* **23** (1972), 103-108 (1973). (András Sárközy) **40** #2048 10A10
- On graphs containing no complete subgraph with 4 vertices. (Hungarian) *Mat. Lapok* **23** (1972), 113-116 (1973). (S. Znám) **50** #4385 05C35
- (with Petruska, G.) On a combinatorial problem. I. *Studia Sci. Math. Hungar.* **7** (1972), 363-374. (Harald Scheid) **51** #177 05A05
- (with Erdős, Paul) On the number of solutions of $m = \sum_{i=1}^k \chi_i^k$. *Analytic number theory (Proc. Sympos. Pure Math., Vol. XXIV, St. Louis Univ., St. Louis, Mo., 1972)*, pp. 83-90. *Amer. Math. Soc., Providence, R.I.*, 1973. (K. Thanigasalam) **49** #2529 0B15
- On the difference of consecutive terms of sequences defined by divisibility properties. II. *Acta Arith.* **23** (1973), 359-361. (P. Szűsz) **48** #8412 10H20
- On a problem of Davenport and Schinzel. *Acta Arith.* **25** (1973/74), 213-224. (S. L. G. Choi) **49** #244 10L10
- On a problem of P. Erdős. *Mathematika* **20** (1973), 226-228. (J. M. Gandhi)
- 50** #7017 10A40 (05B10)
- (with Ajtai, M.) Sets of lattice points that form no squares. *Stud. Sci. Math. Hungar.* **9** (1974), 9-11 (1975). (A. C. Woods) **51** #5534 10J25 (10E05)
- The number of squares in an arithmetic progression. *Studia Sci. Math. Hungar.* **9** (1974), no. 3-4, 417 (1975). (D. Suryanarayana) **53** #5525 10L10 (10H20)
- (with Józsa, S.) The number of unit distance on the plane. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. II, pp. 939-950. *Colloq. Math. Soc. János Bolyai, Vol. 10, North-Holland, Amsterdam, 1975.* (N. G. de Bruijn) **52** #10624 10H25
- (with Komlós, János) Hamilton cycles in random graphs. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday)*, Vol. II, pp. 1003-1010. *Colloq. Math. Soc. János Bolyai, Vol. 10, North-Holland, Amsterdam, 1975.* (D. W. Walkup) **52** #13491 05C35
- On sets of integers containing no k elements in arithmetic progression. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 2, pp. 503-505. *Canad. Math. Congress, Montreal, Que.*, 1975. (S. L. G. Choi) **54** #10183 10L05 (10H20)
- (with Choi, S. L. G.; Erdős, Paul) Some additive and multiplicative problems in number theory. Collection of articles in memory of Juriĭ Vladimirovič Linnik. *Acta Arith.* **27** (1975), 37-50. (N. G. de Bruijn) **51** #5540 10L05
- On sets of integers containing no k elements in arithmetic progression. Collection of articles in memory of Juriĭ Vladimirovič Linnik. *Acta Arith.* **27** (1975), 199-245. (S. L. G. Choi) **51** #5547 10L10
- (with Komlós, János; Sulyok, Miklós) Linear problems in combinatorial number theory. *Acta Math. Acad. Sci. Hungar.* **26** (1975), 113-121. (S. L. G. Choi) **51** #342 10A99
- (with Bollobás, Béla; Erdős, Paul) On complete subgraphs of r -chromatic graphs. *Discrete Math.* **13** (1975), no. 2, 97-107. (F. Harary) **52** #10470 05C15
- (with Choi, S. L. G.; Komlós, János) On sum-free subsequences. *Trans. Amer. Math. Soc.* **212** (1975), 307-313. (A. L. Whiteman) **51** #12769 10L05
- (with Erdős, Paul; Graham, Ronald L.) On sparse graphs with dense long paths. *Computers and mathematics with applications*, pp. 365-369. Pergamon, Oxford, 1976. (J. Spencer) **57** #16131 05C35
- (with Guibas, Leo J.) The analysis of double hashing (extended abstract). *Eighth Annual ACM Symposium on Theory of Computing (Hershey, Pa., 1976)*, pp. 187-191. *Assoc. Comput. Mach., New York, 1976.* (Eberhard Lüdde) **55** #4813 68A50
- On a problem of P. Erdős. *J. Number Theory* **8** (1976), no. 3, 264-270. (S. L. G. Choi) **54** #2614 10L99
- (with Erdős, Paul) On a problem of Graham. *Publ. Math. Debrecen* **23** (1976), no. 1-2, 123-127. (Robert Meyer) **54** #12609 10A10
- (with Erdős, Paul) Combinatorial properties of systems of sets. *J. Combinatorial Theory Ser. A* **24** (1978), no. 3, 308-313. (William T. Trotter, Jr.) **58** #10467 05A05 (04A20, 05C35)
- (with Graham, Ronald L.) On subgraph number independence in trees. *J. Combinatorial Theory Ser. B* **24** (1978), no. 2, 213-222. (J. A. Bondy) **58** #10539 05C05
- (with Guibas, Leo J.) The analysis of double hashing. *J. Comput. System Sci.* **16** (1978), no. 2, 226-274. (George Marsaglia) **58** #8579 68A50
- Szemplinska-Stupnicka, Wanda An approximate method of treating transients in nonlinear multi-degree-of-freedom vibrating systems. *Équations différentielles et fonctionnelles non linéaires (Actes Conf. Internat. "Equa-Diff 73", Brussels/Louvain-la-Neuve, 1973)*, pp. 153-173. *Hermann, Paris, 1973.* (Siegfried Filippi) **53** #7184 70.65 (34C15)
- A study of main and secondary resonances in non-linear multi-degree of freedom vibrating systems. (French and German summaries) *Internat. J. Non-Linear Mech.* **10** (1975), no. 6, 289-304. (Silvio Nocilla) **55** #7029 70.41
- On certain new phenomena arising in nonlinear multi-degree-of-freedom vibrating systems. *VII. Internationale Konferenz über Nichtlineare Schwingungen (Berlin, 1975)*, Band I, Teil 2, pp. 317-327. *Abh. Akad. Wissensch. DDR, Berlin, 1977.* (James A. Murdock) **58** #22787 34C15 (70.34)
- Szenássy, Barna ★ A magyarországi matematika története (a legrégibb időktől a 20. század elejéig). (Hungarian) [History of the mathematics of Hungary (from the earliest times to the beginning of the 20th century)] *Akadémiai Kiadó, Budapest, 1970.* 381 pp. (S. Regoczi) **46** #5087 01A05
- Szendrei, Ágnes Idempotent reducts of abelian groups. *Acta Sci. Math. (Szeged)* **38** (1976), no. 1-2, 171-182. (G. Grätzer) **54** #10110 08A25 (20K99)
- The operation ISKP on classes of algebras. *Algebra Universalis* **6** (1976), no. 3, 349-353. (Jaroslav Ježek) **55** #242 08A15
- On affine modules. *Contributions to universal algebra (Colloq., József Attila Univ., Szeged, 1975)*, pp. 457-464. *Colloq. Math. Soc. János Bolyai, Vol. 17, North-Holland, Amsterdam, 1977.* (W. Taylor) **57** #12606 16A64 (08A25)
- Torsion theories in affine categories. *Acta Math. Acad. Sci. Hungar.* **30** (1977), no. 3-4, 351-369. (N. Popescu) **58** #11070 18E40
- On the arity of affine modules. *Colloq. Math.* **38** (1977), no. 1, 1-4. (G. Grätzer) **57** #5988 13B25
- Szendrei, J. Über die Verallgemeinerung einer Erweiterung von Ringen. *Acta Sci. Math. (Szeged)* **34** (1973), 377-381. (G. Krause) **48** #343 16A56
- Szendrei, Maria On the structure of orthodox semigroups. *Semigroup Forum* **13** (1976/77), no. 3, 271-279. (K. S. S. Nambooripad) **55** #539 20M10
- On an extension of semigroups. *Acta Sci. Math. (Szeged)* **39** (1977), no. 3-4, 367-389. (J. L. Chrislock) **57** #9886 20M10
- Szenthe, J. A metric characterization of homogeneous Riemannian manifolds. *Acta Sci. Math. (Szeged)* **33** (1972), 137-151. (C. B. Allendoerfer) **46** #4451 53C70
- On the metric theory of Euclidean space curves. I. *Period. Math. Hungar.* **3** (1973), no. 3-4, 319-337. (B. B. Phadke) **48** #9628 53C70
- On the topological characterization of Lie groups and transitive Lie group actions. *Topics in topology (Proc. Colloq., Keszthely, 1972)*, pp. 585-588. *Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam, 1974.* (K. H. Hofmann) **50** #13369 22D05 (57E99)
- On the topological characterization of transitive Lie group actions. *Acta Sci. Math.*

- (Szeged) 36 (1974), 323-344. (K. H. Hofmann) 50 #13368 22D05 (57E99)
 Sur la connexion naturelle à torsion nulle. *Acta Sci. Math. (Szeged)* 38 (1976), no. 3-4, 383-398. (Rolf Sulanke) 55 #4044 53C30
 On reductive structures and their applications. *Period. Polytechn. Mech. Engrg.* 21 (1977), no. 2, 111-128. (Jacek Gancarzewicz) 58 #2651 53C30
- Szép, Andriás** Linear iterates of polygons. (Hungarian. English summary) *Mat. Lapok* 21 (1970), 363-368 (1971). (Author's summary) 46 #4366 52-XX
 Existence theorem for weak solutions of ordinary differential equations in reflexive Banach spaces. *Studia Sci. Math. Hungar.* 6 (1971), 197-203. (G. Ladas) 48 #9025 34G05
 Some remarks on random number transformation. *Studia Sci. Math. Hungar.* 6 (1971), 393-397. (J. H. Halton) 45 #9445 65-XX
 The non-orthogonal Menchoff-Rademacher theorem. *Acta Sci. Math. (Szeged)* 33 (1972), 231-235. (R. Liedl) 49 #9532 42A60
 Rademacher-Mensov-type inequalities. *Proceedings of the Fourth Conference on Probability Theory (Braşov, 1971)*, pp. 205-208. Editura Acad. R.S.R., Bucharest, 1973. (K. Tandori) 52 #15618 60F05 (42A56)
 (with Alexits, György) On series of product functions. Collection of articles dedicated to the memory of Alfréd Rényi, II. *Period. Math. Hungar.* 3 (1973), 37-39. (A. Sharma) 49 #5682 42A52 (40A20)
 S_p -systems and their generalizations. *Limit theorems of probability theory (Colloq., Keszthely, 1974)*, pp. 373-379. *Colloq. Math. Soc. János Bolyai*, Vol. 11, North-Holland, Amsterdam, 1975. (Shigeru Takahashi) 52 #11460 42A60 (60F15)
 Variational problems and singular differential equations. (Russian and Bulgarian summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* 12 (1976), no. 1, 167-175 (1978). (Author's summary) 58 #23900 49B10
- Szép, Jenő** ★On foundations of game theory. DM 70-3. Department of Mathematics, Karl Marx University of Economics, Budapest, 1970. i + 11 pp. (G. Owen) 45 #3087 90D12
 (with Steinfeld, Ottó) László Rédei is 70 years old. (Hungarian) *Mat. Lapok* 21 (1970), 189-197 (1971). (Editors) 46 #3259 01A70
 Sui fondamenti della teoria dei giochi. (English summary) *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompij, pp. 615-623*. Edizioni Oderisi, Gubbio, 1971. (N. Zierler) 50 #15944 90D12
 (with Hegedűs, Miklós) ★On equilibrium systems. I. Report DM 73-4. Department of Mathematics, Karl Marx University of Economics, Budapest, 1973. 37 pp. (Editors) 53 #2319 90A15
 (with Zappa, Guido) Generalizzazione di un teorema di Gaschütz sui sylowizzatori. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 55 (1973), 167-171 (1974). (Thomas Laffey) 52 #5798 20D20
 (with Hegedűs, Miklós) Equilibrium systems. I. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* 6 (1973), 254-272. (Authors' summary) 48 #13201 90A15
 (with Hegedűs, Miklós) ★On equilibrium systems. II. Report DM 74-3. Department of Mathematics, Karl Marx University of Economics, Budapest, 1974. 30 pp. (Editors) 53 #2321 90A15
 (with Hegedűs, Miklós) Equilibrium systems. II. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* 7 (1974), 177-190. (Authors' summary) 53 #2320 90A15
 On a finite algebra with two operations. *Acta Math. Acad. Sci. Hungar.* 26 (1975), no. 3-4, 347-348. (Kazimierz Głazek) 52 #8003 08A25
 (with Hegedűs, Miklós) Equilibrium systems. III. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* 8 (1975), no. 2-3, 101-110. (Authors' summary) 55 #7327 90A15
 (with Migliorini, Franco) Su una particolare decomposizione dei semigrupp regulari. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 62 (1977), no. 6, 728-733. (M. Gould) 58 #6012 20M10
 (with Migliorini, Franco) On a special decomposition of regular semigroups. *Acta Sci. Math. (Szeged)* 40 (1978), no. 1-2, 121-128. (André Lentin) 58 #6011 20M10
- Szépe, György** See *Festschrift: Kalmár, László*, 52 #4685
- Szepesi, György** (with Skékely, Béla) Optimal paths of economic growth in a controlled economic system. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* 4 (1971), 137-151. (Authors' summary) 45 #1567 90A15
 (with Skékely, Béla) Further analysis of a dynamic input-output model. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* 5 (1972), 233-248. (Authors' summary) 48 #5614 90A15
- Szepesvári, István** A convergent finite difference method for a certain degenerate nonlinear parabolic equation in several variables. (Hungarian. English and Russian summaries) *Közlemények—MTA Számítástech. Automat. Kutató Int. Budapest No. 12* (1974), 3-24. (Author's summary) 54 #9104 65M05
- Szépfalusi, P.** See *Statistical physics*, 56 #10633
- Szeptycki, Paweł** (with Emery, J. D.) Integral transformations on product spaces. *Ann. Polon. Math.* 28 (1973), 17-24. (P. R. Halmos) 50 #7959 44A05
 Equations of hydrodynamics on compact Riemannian manifolds. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 335-339. (P. C. Vaidya) 47 #4531 7635
 Equations of hydrodynamics on manifold diffeomorphic to the sphere. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Mat. Astronom. Phys.* 21 (1973), 341-344. (P. C. Vaidya) 47 #4532 7635
 (with Aronszajn, Nachman) Theory of Bessel potentials. IV. Potentials on subcartesian spaces with singularities of polyhedral type. (French summary) Collection of articles dedicated to Marcel Brelot on the occasion of his 70th birthday. *Ann. Inst. Fourier (Grenoble)* 25 (1975), no. 3-4, xiii, 27-69. (Editors) 55 #8780 46E35
 Extensions by mollifiers in Besov spaces. *Studia Math.* 54 (1975), no. 1, 55-72. (A. Kufner) 53 #8885 46E35
 A nonsteady problem in the theory of fluid flow through porous media; existence and uniqueness of weak solutions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 25 (1977), no. 8, 839-844. (A. Pozzi) 57 #18437 7635
 (with Madych, Wolodymyr R.) Nice sets of multi-indices. *Proc. Amer. Math. Soc.* 69 (1978), no. 1, 70-72. (Wo-Sang Young) 58 #1954 42A16
- Szeto, George** On a class of projective modules over central separable algebras. I. *Canad. Math. Bull.* 14 (1971), 415-417; *ibid.* 15 (1972), 411-415. (F. DeMeyer) 47 #16A64 (16A16)
 The Azumaya algebra of some polynomial closed rings. *Indiana Univ. Math. J.* (1972/73), 731-737. (F. DeMeyer) 46 #7288 16A16 (13A20)
 On a class of near-rings. *J. Austral. Math. Soc.* 14 (1972), 17-19. (J. R. Cl) 47 #5060 16A76
 On the Wedderburn theorem. *Canad. J. Math.* 25 (1973), 525-530. (Rosario Stra) 57 #9738 16A16
 The subsemigroups excluding zero of a near-ring. *Monatsh. Math.* 77 (1973), 357-362. (Steve Ligh) 48 #8575 16A76
 On a sheaf of division rings. *Canad. Math. Bull.* 17 (1974/75), no. 5, 727-731. (Papp) 51 #12936 16A50
 Finite near-rings with trivial annihilators. *J. Austral. Math. Soc.* 18 (1974), no. 194-199. (From the author's introduction) 57 #12616 16A76
 On regular near-rings with no non-zero nilpotent elements. *Math. Japon.* 19 (1974), 65-70. (Steve Ligh) 51 #3235 16A76
 Planar and strongly uniform near-rings. *Proc. Amer. Math. Soc.* 44 (1974), 269-271. (R. Gorton) 49 #5106 16A76
 On almost hereditary rings. *J. Algebra* 34 (1975), 97-104. (Kwangil Koh) 54 #10342 16A66
 The Pierce representation of Azumaya algebras. *Brauer groups (Proc. Conf., Northwestern Univ., Evanston, Ill., 1975)*, pp. 86-91. *Lecture Notes in Math.*, Vol. 5, Springer, Berlin, 1976. (Claudio Procesi) 55 #8081 16A16
 On the planarity of rings. *J. Algebra* 39 (1976), no. 1, 227-234. (J. R. Cl) 53 #3001 16A34
 A characterization of Azumaya algebras. *J. Pure Appl. Algebra* 9 (1976/77), no. 65-71. (Lindsay N. Childs) 54 #12817 16A16
 A construction of right groups from a connected groupoid. *Semigroup Forum* (1976/77), no. 2, 185-186. (D. A. Robinson) 55 #3114 20L99
 On an exact sequence of modules. *Arch. Math. (Basel)* 29 (1977), no. 1, 67-70. (Tomas Kepka) 57 #307 13C10
 On sheaf representation of a biregular near-ring. *Canad. Math. Bull.* 20 (1977), 4, 495-500. (J. Lambek) 57 #9762 16A76
 The structure of semiperfect rings. *Comm. Algebra* 5 (1977), no. 3, 219-229. (Elliger) 56 #3052 16A32
 The sheaf representation of near-rings and its applications. *Comm. Algebra* (1977), no. 7, 773-782. (Howard E. Bell) 55 #10534 16A76
 On a sheaf representation of a class of near-rings. *J. Austral. Math. Soc. Ser. A* (1977), no. 1, 78-83. (Andy R. Magid) 55 #12775 16A76
 A generalization of the Artin-Procesi theorem. *J. London Math. Soc.* (2) 15 (1977), no. 3, 406-408. (Louis Rowen) 56 #8611 16A38
 (with Wong, Yuen Fat) On sheaf representations of near-algebras without nilpotent elements. *Math. Japon.* 22 (1977), no. 2, 175-181. (Kwangil Koh) 58 #11034 16A76 (14A20)
 The automorphism group of a class of semi-groups. *Monatsh. Math.* 83 (1977), 1, 53-58. (Eckehart Hotzel) 56 #512 20M10
 Classical algebras of quotients and central quotients of algebras. *Acta Math. Acad. Sci. Hungar.* 32 (1978), no. 1-2, 59-62. (Beth Barnwell) 58 #27941 13B99
- Szeto, M. W.** See *Stochastic point processes: statistical analysis, theory, and applications*, 48 #10008
- Szewczak, E. J.** Iterated modalities and the parallel between deontic and modal logic. *Logique et Analyse (N.S.)* 17 (1974), no. 67-68, 323-333. (I. Ruzsa) 55 #85 02N05
- Szewczyk, Albin A.** See *Numerical methods in fluid dynamics*, 49 #10260
- Szewczyk, Zbigniew** (with Pietrucha, Józef) A method of modal control and its application to the stabilization of the flight of a helicopter. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* 14 (1976), no. 4, 571-584. (Authors' summary) 56 #14997 93D15
- Szidarovszky, Ferenc** On an iteration procedure. (Hungarian. Russian summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 20 (1972), no. 3-4, 395-397. (Author's summary) 56 #7143 65F10
 On reductional errors of roots of polynomials. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 21 (1973), 53-62. (B. Jankó) 47 #608 65H05
 Determination of polynomials possessing real roots by means of Newton's method. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 21 (1973), 63-69. (B. Jankó) 47 #6081 65H05
 A remark on the method of Danilevskii. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 21 (1973), 383-384. (B. Jankó) 50 #11745 65H05
 A note on iterations of Newton-Moser type. (Hungarian. English summary) *Alkamaz. Mat. Lapok* 2 (1976), no. 1-2, 123-125. (Author's summary) 55 #914 58C15 (65H05)
 An r -equilibrium problem of the oligopoly game. (Hungarian. English summary) *Alkamaz. Mat. Lapok* 3 (1977), no. 1-2, 105-110. (Author's summary) 58 #2053 90D30 (90D40)
 (with Yakowitz, Sidney J.) A new proof of the existence and uniqueness of Cournot equilibrium. *Internat. Econom. Rev.* 18 (1977), no. 3, 787-789. (Alb) 56 #17748 90A15
 The nondifferentiable oligopoly problem. (Hungarian. English and Russian summaries) *Szigma-Mat.-Közgazdasági Folyóirat* 10 (1977), no. 1-2, 69-74. (A. Németh) 58 #33061 90D45 (90D10)
- Szigeti, Ferenc** On covering homotopy theorems. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 13 (1970), 89-91 (1971). (J. Stasheff) 47 #1048 55F25
 Differentiable approximation on Banach manifolds. (Italian summary) *Ricerche Mat.* 19 (1970), 171-178. (J. Leslie) 46 #6392 58B20
 Components of the space of the Fredholm operators. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 14 (1971), 19-22 (1972). (G. Neubauer) 47 #4049 47B30 (47A55)
 Differentiable approximations of continuous cross sections. *Ann. Univ. Sci.*

- Appest. Eötvös Sect. Math.* **14** (1971), 97-106 (1972). (P. S. Landweber) **46** #10021 10
- On behaviour of smooth norms near to zero. (Italian summary) *Rend. Accad. Sci. Mat. Napoli* (4) **38** (1971), 1-9. (C. Bessaga) **49** #4015 58B10 (46B99)
- Decompositions of the Fredholm operators. *Publ. Math. Debrecen* **19** (1972), 189 (1973). (Mary R. Embry) **50** #10886 47B30
- Differential topology in smooth Banach spaces. *Topics in topology (Proc. Colloq., Eötvös Sect. Math., 1972)*, pp. 589-608. *Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam, 1974.* (C. Bessaga) **51** #1864 58B10
- Miklós (with Maurer, Iulius Gy.) Sur une équation de type Fredholm définie sur les algèbres universelles topologiques. (Italian and English summaries) *Rend. Ist. Mat. Univ. Trieste* **3** (1971), 200-206 (1972). (J. G. Dhombres) **48** #6751 39A40 (2A25)
- (with Maurer, Iulius Gy.) Errata corrige: Une rectification dans notre travail "Sur les produits filtrés de certains groupes topologiques". *Rend. Sem. Mat. Univ. Padova* **45** (1), 379. (Editors) **45** #8767 22A05
- Fixed point theorem in the category of universal algebras. (Romanian summary) *Univ. Timișoara Ser. Ști. Mat.* **10** (1972), 215-220. (H. Gonsior) **49** #4911 25
- The interior sum in the category of topological Ω -groups. (Italian summary) *Rend. Mat.* (6) **5** (1972), 463-471. (K. H. Hofmann) **48** #462 22A05
- The summability of the partial functions with values in a topological Ω -group. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 943-957. (D. L. Prullage) **48** #760 40J05
- On ordered Ω -groups. Collection of articles dedicated to G. Călugăreanu on his twentieth birthday. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1439-1450. (J. A. H. Papp) **49** #2489 06A55 (08A25)
- (with Maurer, Iulius Gy.) Sur les séries et les sommes définies dans certaines catégories universelles topologiques. (Italian and English summaries) *Rend. Ist. Mat. Univ. Trieste* **5** (1973), 1-8. (G. Cupona) **48** #4190 22A99
- Some properties of topological Ω -groups. I. (Romanian and Russian summaries) *Studia Univ. Babeș-Bolyai Ser. Math.-Mech.* **18** (1973), no. 1, 3-12. (K. N. Sigmon) **53** #531 22A99
- Some properties of the topological Ω -groups. II. *Studia Univ. Babeș-Bolyai Ser. Math.-Mech.* **19** (1974), no. 1, 3-11. (K. N. Sigmon) **50** #532 22A99
- About an interior interpretation of the notion of product in the category of groups. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 8, 1125-1129. (K. N. Sigmon) **54** #12916 20F99
- Paul The eigenvalues of the Bitzadze operator. (Romanian. Russian and English summaries) *Studia Univ. Babeș-Bolyai Ser. Math.-Mech.* **16** (1971), no. 2, 45-49. (J. Sch) **46** #4011 35P05
- The Dirichlet problem for an elliptic system. (Romanian. Russian and English summaries) *Studia Univ. Babeș-Bolyai Ser. Math.-Mech.* **18** (1973), no. 2, 31-38. (Ileana Ștefănescu) **52** #14625 35J25
- Dirichlet'sche Probleme mit unendlich vielen Lösungen. *Arch. Math. (Basel)* **26** (1975), 75-81. (E. Kreyszig) **51** #3690 35J55
- T. Generalization of the implicit function theorem and of Banach's open mapping theorem. *Acta Sci. Math. (Szeged)* **39** (1977), no. 3-4, 391-396. (M. Craioveanu) **53** #18527 58C15 (46G05)
- Inverse function theorem—without assuming continuous differentiability. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **20** (1977), 107-110. (M. Joshi) **57** #14018 15 (26A57)
- Andrew L. (with Dewdney, A. K.) Tours in machines and digraphs. *IEEE Trans. Comput.* **C-22** (1973), 635-639. (R. Saeks) **50** #9674 05C20 (94A30)
- Ω -OL systems. *L systems (Third Open House, Comput. Sci. Dept., Aarhus Univ., 1974)*, pp. 258-291, 327-338. *Lecture Notes in Computer Science, Vol. 15, Springer, Berlin, 1974.* (Hermann Walter) **54** #12607 08A25 (68A30)
- (with Baker, H. H.; Dewdney, A. K.) Generating the nine-point graphs. *Math. Mag.* **28** (1974), 833-838. (Authors' summary) **51** #7355 68A05
- Károly On the Wolff-Noshiro-Warschawski-theorem in the theory of univalent functions. (Hungarian. Russian and English summaries) *Mat. Lapok* **21** (1970), 45-49. (Vermees) **46** #7499 30A36
- Über die Abschätzung der Koeffizienten der Potenzreihe einer analytischen Funktion, die eine schlichte Abbildung des Einheitskreises auf ein Sterngebiet bewirkt. *Proceedings of the Conference on the Constructive Theory of Functions (approximation Theory)* (Budapest, 1969), pp. 475-476. *Akadémiai Kiadó, Budapest, 1972.* (Editors) **52** #5954 30A32
- Derivatives and "differential equations" of functions defined on non-negative lattices. (Hungarian) *Mat. Lapok* **25** (1974), no. 1-2, 105-114 (1977). (J. Aczél) **53** #13182 44A40
- Rudolph A numerical procedure for independent check of finite element solutions. *Computers & Structures* **6** (1976), no. 4-5, 291-296. (Author's summary) **56** #13692 410
- E. Upper bounds for the Bayesian error probability. *Topics in information theory (Conf. Colloq., Keszthely, 1975)*, pp. 575-586. *Colloq. Math. Soc. János Bolyai, Vol. 16, North-Holland, Amsterdam, 1977.* (Mir Ali) **57** #14209 62C10
- Szilvási, Márta See Nagyné Szilvási, Márta
- Sz.-Nagy, Márta On some metrics and connections in the tangent bundle. *Period. Polytechn. Mech. Engrg.* **21** (1977), no. 2, 145-152. (K. Yano) **57** #7442 53C05
- Thomas On the problem of the interchangeable clock hands. *J. Recreational Math.* **7** (1975), no. 3, 159-168. (J. B. Roberts) **54** #10122 10A30 (05A15)
- ay, J. (with Pawlikowski, K.) The method of aggregation and its application to the minimization of dynamical processes. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* **15** (1970), 409-429. (Authors' summary) **46** #10440 93A15
- od, A. V. See Skorohod, A. V.
- J. Ein asymptotisches Verfahren in der Superaerodynamik. *Monatsb. Deutsch. Akad. Wiss. Berlin* **13** (1971), 713-730. (From the author's text) **56** #14095 76A1
- Jurgis See Guedenko, B. V.; et al., **55** #4424
- Wiesław Some spectral aspects of topological dynamical systems. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 313-316. (Zsidó) **49** #3877 54H20
- ★Dynamical systems. Lectures delivered during 1971/72. *Lecture Notes Series, No. 41. Matematisk Institut, Aarhus Universitet, Aarhus, 1974. ii + 198 pp.* (Clark Robinson) **50** #8601 58Fxx (34C35)
- On non-smoothly equivalent diffeomorphisms of the circle. *Colloq. Math.* **32** (1975), no. 2, 257-259, 310. (Martin Golubitsky) **51** #11587 58F10 (57D50)
- A characterization of dynamical systems with a finite number of ergodic, invariant measures. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 11, 951-956. (Manfred Denker) **55** #625 28A65
- (with Misurewicz, Michał) Entropy of piecewise monotone mappings. *Dynamical systems, Vol. II—Warsaw, pp. 299-310. Astérisque, No. 50, Soc. Math. France, Paris, 1977.* (Alan Saleski) **58** #7577 54H20
- Szmajda, Błażej Estimation of the interval of existence and uniqueness of solutions of a certain boundary value problem. (Polish. English and Russian summaries) *Fasc. Math.* **5** (1970), 23-31 (1971). (F. H. Szafraniec) **46** #9426 34B10
- On the length of the interpolation interval for a class of linear differential equations. *Rev. Anal. Numér. Théor. Approx.* **4** (1975), no. 2, 201-211 (1976). (From the text) **58** #29593 41A05 (34A30)
- Disconjugacy criteria for linear vector differential equations. (Russian summary) *Math. Slovaca* **26** (1976), no. 4, 351-360. (Peter Smith) **55** #776 34C10 (34A30)
- On the length of the interpolation interval for a class of linear differential equations. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 544-576* (1976), 85-92. (Marvin S. Keener) **55** #10774 34C10
- Szmidt, Janusz On Frobenius reciprocity theorem for representations induced in Hilbert module tensor products. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 35-39. (L. Corwin) **47** #6941 22D30
- (with Wawrzyńczyk, Antoni) On C^∞ -vectors and intertwining operators for Banach space representations of Lie groups. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 513-520. (E. A. Thieleker) **50** #2394 22E30
- Invariant kernels on locally compact groups and cyclic representations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 10, 1073-1078. (Kenneth I. Gross) **54** #5383 22D10
- The duality theorem for integrable representations and Langlands conjectures. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 12, 1215-1219. (P. C. Trombi) **58** #28305 22E45 (10D20)
- Szmielew, Wanda The order and the semi-order of n -dimensional Euclidean space in the axiomatic and model-theoretic aspects. *Grundlagen der Geometrie und algebraische Methoden (Internat. Kolloq., Pädagog. Hochsch. "Karl Liebknecht", Potsdam, 1973)*, pp. 69-79. *Potsdamer Forschungen, Reihe B, Heft 3, Pädagog. Hochsch. "Karl Liebknecht", Potsdam, 1974.* (W. Benz) **53** #112 02G15 (50A25)
- The role of the Pasch axiom in the foundations of Euclidean geometry. *Proceedings of the Tarski Symposium (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971)*, pp. 123-132. *Amer. Math. Soc., Providence, R.I., 1974.* (W. Schwabhäuser) **51** #10072 02G15 (50A25)
- Oriented and nonoriented linear orders. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 7, 659-665. (E. Mendelson) **57** #3010a 06A05 (50A99)
- See also Kordos, Mavek; et al., **58** #16031
- Szmit, Katarzyna (with Kosinski, Witold) Stress wave propagation in an elastic/viscoplastic body at high strain rates. (Polish and Russian summaries) *J. Tech. Phys.* **16** (1975), no. 1, 45-56. (S. C. Das) **55** #4855 73J35
- (with Kosinski, Witold) On waves in elastic materials at low temperatures. I. Hyperbolicity in thermoelasticity. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **25** (1977), no. 1, 23-30. (Tatsuo Tokuoka) **58** #14427 80J35 (73J35)
- Szmydt, Zofia ★Transformacja Fouriera i równania różniczkowe liniowe. (Polish) [Fourier transforms and linear differential equations] *Panst. Wydawn. Nauk., Warsaw, 1972.* (Editors) **58** #22952a 35-01 (46-01)
- On regular temperate distributions. Collection of articles honoring the completion by Antoni Zygmund of 50 years of scientific activity, IV. *Studia Math.* **44** (1972), 309-314. (D. Myers) **48** #12047 46F10
- (with Olech, Czesław; Szarski, Jacek) Tadeusz Ważewski (1896-1972). Collection of articles dedicated to the memory of Tadeusz Ważewski. *Ann. Polon. Math.* **29** (1974), 1-13. (Editors) **49** #7101 01A70
- (with Olech, Czesław; Szarski, Jacek) Tadeusz Ważewski (1896-1972). (Polish) *Wiadom. Mat. (2)* **20** (1976), no. 1, 55-62. (Editors) **55** #5361 01A70
- ★Fourier transformation and linear differential equations. Translated from the Polish by Marcin E. Kuczmarski. Revised edition. *D. Reidel Publishing Co., Dordrecht-Boston, Mass.; PWN—Polish Scientific Publishers, Warsaw, 1977.* xix + 503 pp. (errata insert) ISBN 90-277-0622-0 (Z. Zielezny) **58** #22952b 35-01 (46-01)
- Sz.-Nagy, Béla (with Foias, C.) Opérateurs sans multiplicité. *Acta Sci. Math. (Szeged)* **30** (1969), 1-18. (From the authors' introduction) **54** #8330 47A65
- Sous-espaces invariants d'un opérateur et factorisations de sa fonction caractéristique. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 459-465. *Gauthier-Villars, Paris, 1971.* (Lawrence Fialkow) **55** #13266 47A45 (47A15)
- (with Foias, C.) Vecteurs cycliques et commutativité des commutants. *Acta Sci. Math. (Szeged)* **32** (1971), 177-183. (F. Gilfeather) **46** #4247 47A65
- (with Foias, C.) The "lifting theorem" for intertwining operators and some new applications. *Proceedings of an International Symposium on Operator Theory (Indiana Univ., Bloomington, Ind., 1970).* *Indiana Univ. Math. J.* **20** (1971), no. 10, 901-904. (Paul S. Muhly) **54** #5863 47A20
- (with Foias, C.) Local characterization of operators of class C_0 . *J. Functional Analysis* **8** (1971), 76-81. (D. Sarason) **45** #950 47A45
- Quasi-similarity of operators of class C_0 . *Hilbert space operators and operator algebras (Proc. Internat. Conf., Tihany, 1970)*, pp. 513-517. *Colloq. Math. Soc. János Bolyai, 5, North-Holland, Amsterdam, 1972.* (Eric Nordgren) **51** #11140 47A45
- Cyclic vectors and commutants. *Linear operators and approximation (Proc. Conf., Oberwolfach, 1971)*, pp. 62-67. *Internat. Ser. Numer. Math., Vol. 20, Birkhäuser, Basel, 1972.* (M. B. Abrahamse) **51** #8872 47A65
- (with Foias, C.) Compléments à l'étude des opérateurs de classe C_0 . II. *Acta Sci. Math. (Szeged)* **33** (1972), 113-116. (R. G. Douglas) **46** #6073 47A45

- (with Foiaş, C.) Accretive operators: Corrections. *Acta Sci. Math. (Szeged)* 33 (1972), 117-118. (F. Gilfeather) 46 #6076 47A65
- (with Foiaş, C.) Échelles continues de sous-espaces invariants. II. *Acta Sci. Math. (Szeged)* 33 (1972), 355-356. (R. G. Douglas) 47 #7471 47A15
- (with Riesz, Frigyes) ★Vorlesungen über Funktionalanalysis. Dritte Auflage. Übersetzung aus dem Französischen nach der 2. und 3. Auflage: Siegfried Brehmer und Brigitte Mai. Hochschulbücher für Mathematik, Band 27. VEB Deutscher Verlag der Wissenschaften, Berlin, 1973. xi + 482 pp. (Editors) 49 #9570 46-02 (28-XX, 47-02)
- (with Foiaş, C.) On the structure of intertwining operators. *Acta Sci. Math. (Szeged)* 35 (1973), 225-254. (T. L. Kriete, III) 53 #3737 47A45
- ★Unitary dilations of Hilbert space operators and related topics. Expository Lectures from the CBMS Regional Conference held at the University of New Hampshire, Durham, N.H., June 7-11, 1971. Conference Board of the Mathematical Sciences Regional Conference Series in Mathematics, No. 19. American Mathematical Society, Providence, R.I., 1974. viii + 54 pp. (R. G. Douglas) 58 #2364 47A20
- A general view on unitary dilations. *Functional analysis and its applications (Internat. Conf., Eleventh Anniversary of Matscience, Madras, 1973; dedicated to Alladi Ramakrishnan)*, pp. 382-395. *Lecture Notes in Math.*, Vol. 399, Springer, Berlin, 1974. (James A. Daddens) 52 #15050 47A20
- (with Foiaş, C.) Injection of shifts into strict contractions. *Linear operators and approximation, II (Proc. Conf., Math. Res. Inst., Oberwolfach, 1974)*, pp. 29-37. *Internat. Ser. Numer. Math.*, Vol. 25, Birkhäuser, Basel, 1974. (Eric Nordgren) 52 #4003 47A65
- On a property of operators of class C_0 . *Acta Sci. Math. (Szeged)* 36 (1974), 219-220. (P. Rosenthal) 50 #1021 47A15
- (with Foiaş, C.) Jordan model for contractions of class C_0 . *Acta Sci. Math. (Szeged)* 36 (1974), 305-322. (Eric Nordgren) 51 #8858 47A45
- (with Foiaş, C.) Regular factorizations of contractions. *Proc. Amer. Math. Soc.* 43 (1974), 91-93. (P. A. Fillmore) 49 #1186 47A65
- Models of Hilbert space operators. Spectral Theory Symposium (Trinity College, Dublin, 1974). *Proc. Roy. Irish Acad. Sect. A* 74 (1974), 263-270. (J. Rovnyak) 50 #10869 47A45
- (with Foiaş, C.) An application of dilation theory to hypornormal operators. *Acta Sci. Math. (Szeged)* 37 (1975), 155-159. (C. R. Putnam) 52 #4012 47B20
- (with Bercovici, Hari; Foiaş, C.) Compléments à l'étude des opérateurs de classe C_0 . III. *Acta Sci. Math. (Szeged)* 37 (1975), no. 3-4, 313-322. (R. G. Douglas) 52 #15054 47A45
- Diagonalization of matrices over H^∞ . *Acta Sci. Math. (Szeged)* 38 (1976), no. 3-4, 223-238. (Eric Nordgren) 55 #8858 47A65 (47B37)
- (with Foiaş, C.) Commutants and bicommutants of operators of class C_0 . *Acta Sci. Math. (Szeged)* 38 (1976), no. 3-4, 311-315. (Eric Nordgren) 55 #8859 47A65
- (with Foiaş, C.) On contractions similar to isometries and Toeplitz operators. *Ann. Acad. Sci. Fenn. Ser. A I Math.* 2 (1976), 553-564. (From the introduction) 58 #30376 47A45 (47B35)
- Quasi-similarity of Hilbert space operators. *Differential equations (Proc. Internat. Conf., Uppsala, 1977)*, pp. 179-188. *Sympos. Univ. Upsaliensis Ann. Quingentesimum Celebrantis*, No. 7, Almqvist & Wiksell, Stockholm, 1977. (Vo-Khac Khoan) 57 #17344 47A65 (47A45)
- (with Foiaş, C.) Vecteurs cycliques et commutativité des commutants. II. *Acta Sci. Math. (Szeged)* 39 (1977), no. 1-2, 169-174. (F. Gilfeather) 56 #1109 47A65
- Diagonalization of matrices over H^∞ . *Linear spaces and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977)*, pp. 37-46. *Internat. Ser. Numer. Math.*, Vol. 40, Birkhäuser, Basel, 1978. (L. J. Wallen) 58 #17928 47A65
- (with Foiaş, C.) On injections, intertwining operators of class C_0 . *Acta Sci. Math. (Szeged)* 40 (1978), no. 1-2, 163-167. (F. Gilfeather) 58 #7143 47A45
- See also Hilbert space operators and operator algebras, 49 #11275; Linear operators and approximation, 50 #5498; Linear operators and approximation, 50 #6720; Problems: Linear operators and approximation, 51 #6219 and Linear spaces and approximation, 57 #11998
- Sznajder, Roman** On isomorphic subspaces of $C(T)$ and $C^m(T)$. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astron. Phys.* 25 (1977), no. 1, 19-22. (R. B. Burckel) 55 #8775 46E15 (42A16)
- Sznajder, Szymon** On some classes of distributions. *Colloq. Math.* 23 (1971), 133-139. (M. Hasumi) 46 #7890 46F05
- (with Lukierski, Jerzy) The definition of the product $\delta(x) \cdot x^{-\alpha}$ ($\alpha > 0$, real) and its applications. *Rep. Mathematical Phys.* 4 (1973), 65-75. (W. Güttiger) 48 #1617 81.46
- (with Zielezny, Z.) Solvability of convolution equations in \mathcal{H}'_p , $p > 1$. *Pacific J. Math.* 63 (1976), no. 2, 539-544. (Denise Huet) 54 #3401 46F10 (47B37)
- (with Zielezny, Z.) Solvability of convolution equations in \mathcal{H}'_p . *Proc. Amer. Math. Soc.* 57 (1976), no. 1, 103-106. (Philip Heywood) 53 #14117 45E10 (46F10)
- Szniętko, Wanda** On certain special case of the nonlinear Hilbert boundary problem. *Demonstratio Math.* 2 (1970), 241-248. (R. B. Kelman) 45 #8862 30A88
- Nonlinear Hilbert boundary problem in the Euclidean space E_3 . *Demonstratio Math.* 3 (1971), 71-88. (Catherine Bandle) 46 #628 45G99 (30A88)
- The non-linear Hilbert problem for a system of arbitrary power. *Demonstratio Math.* 7 (1974), 257-277. (S. A. Tersenov) 55 #5871 30A88
- Investigation of regular continuity for some singular surface integral. *Demonstratio Math.* 8 (1975), 67-76. (I. I. Bavrin) 51 #8758 44A25
- Investigation of the existence of a solution of the generalized Hilbert problem for a system of arbitrary power. *Demonstratio Math.* 8 (1975), no. 2, 235-248. (M. Hervé) 56 #3449 35F99
- Properties of a certain singular integral and their applications to solution of Hilbert problem in the space. *Demonstratio Math.* 9 (1976), no. 2, 181-190. (R. C. MacCamy) 54 #584 30A88
- Szocińska, Ewa** (with Czech, Adam) The boundedness of the stochastic solutions of boundary value problems and initial value problems. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 24* (1974), 53-61. (J. Zabczyk) 51 #12400 93E15
- (with Czech, Adam; Jama, Danuta; Janiec, Barbara) Asymptotic properties of the solutions of stochastic boundary value problems on the plane. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. Zeszyt* 25 (1974), 105 (W. A. Woyczynski) 54 #8867 60H15 (35K99)
- The stability of certain continuous systems with retarded argument. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 441 Mat.-Fiz. Zeszyt* (1976), 201-208. (Author's summary) 56 #9437 49E20 (35Rxx)
- Szociński, Brunon** (with Kucharzewski, Mieczysław) Über eine kanonische Form der regulären doppelt pseudostochastischen Matrizen. (Polish summary) *Uniw. Śląsk. Katowicach—Prace Mat.* 4 (1973), 35-43. (loose errata) (Pl. Kannappan) 48 #315A21
- Scalar product and pseudoproduct in Kleinian geometry. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. Zeszyt* 25 (1974), 1 (R. I. Pimenov) 54 #13752 53A40
- Invariants of a pair of points of doubly pseudostochastic geometry. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 24* (1974), 2 (Z. Moszner) 51 #6622 53A55 (39A30)
- (with Kucharzewski, Mieczysław) Über Homomorphismen einer Gruppe von Matrizen. *Ann. Polon. Math.* 30 (1975), no. 3, 237-242. (Thomas H. Foregger) 55 #8068 15A51
- Szoda, Lajos** (with Arany, Ilona; Smyth, W. F.) An improved method for reducing bandwidth of sparse symmetric matrices. *Information processing* 71 (*Proc. IFIP Conf. Ljubljana, 1971*), Vol. 2: Applications, pp. 1246-1250. North-Holland, Amsterdam, (Authors' summary) 57 #4589 68A10 (05C35)
- (with Arany, Ilona) Band width reduction of sparse symmetric matrices. (Hungarian. Russian and English summaries) *Informác.-Elektron.* 8 (1973), 237-242. (S. Zidarovsky) 49 #8310 65F30
- Szoda, Zenon** A priori estimates of the solutions of boundary value problems for systems of multidimensional difference equations. (Russian) *Ann. Polon. Math.* 26 (1975), 115-124. (R. Kodnár) 46 #2283 39A10
- Szőke, László** Number-configurations of Bell numbers and Stirling numbers of the second kind. (Hungarian. Russian and English summaries) *Mat. Lapok* 22 (1971), 303-312. (József Pelikán) 48 #5879 05A17
- Szőkefalvi-Nagy, Béla** See Sz.-Nagy, Béla
- Szoleszányi, Endre** Hyperflächen mit Riemannscher Maßbestimmung im Finslerschen Raum. *Publ. Math. Debrecen* 22 (1975), no. 1-2, 133-150. (M. C. Chaki) 51 #1153B40
- Szopa, Halina** (with Szopa, Janusz) Stochastic stability of a certain system. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 24* (1974), 143-147. (Authors' summary) 51 #15124 93E15
- Szopa, Janusz** (with Szopa, Halina) Stochastic stability of a certain system. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 24* (1974), 143-147. (Authors' summary) 51 #15124 93E15
- Application of Volterra stochastic integral equations of the second kind to the analysis of dynamic systems of variable inertia. (Polish and Russian summaries) *Tech. Phys.* 17 (1976), no. 4, 423-433. (William D. Ray) 55 #2322 93E20
- A method determining a function of the moments of output of nonstationary stochastic linear systems. (Polish. Russian and English summaries) *Arch. Automat. Telemekh.* 22 (1977), no. 4, 359-374. (Author's summary) 56 #18086 93E99 (60G40)
- Characteristics of stochastic systems described by stochastic Volterra integral equations of the second kind, and their application to stochastic differential equations. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. Zeszyt* 28 (1977), 177-186. (Kazimierz Sobczyk) 56 #6870 60H20
- Determining the variance of stochastic dynamic systems by means of stochastic integral equations taking into consideration a single term of the resolvent. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Śląsk. No. 465 Mat.-Fiz. Zeszyt* 28 (1977), 187-202. (Kazimierz Sobczyk) 56 #3946 60H10
- Szostak, Ewa** Note on: "An implicit function theorem for non differentiable mappings". (Proc. Amer. Math. Soc. 34 (1972), 141-146) by S. N. Chow and A. Lasota. *Zeszyty Nauk. Uniw. Jagielloń.* 441 *Prace Mat. Zeszyt* 18 (1977), 159-162. (Editors) 55 #58C15
- Szpigel, Bernardo** See Operational Research, 49 #12059
- Szpikowski, Stanisław** (with Zajac, Krystyna) Matrix elements of iso-scalar $T=0$ π forces and coefficients of fractional parentage. (Polish and Russian summaries) *Lubel. Towarz. Nauk. Mat. Fiz. Chem.* 20 (1978), no. 1, 37-45. (From the text) 58 #25607 81.47
- Szpilczyński, Stanisław** See Anniversaire: Naissance de Nicolas Copernicus, 50 #22
- Szpirglas, Jacques** Sur des équations différentielles stochastiques intervenant dans le filtrage non linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), 8, A671-A674. (L. I. Gal'čuk) 54 #11482 60G35 (60H10)
- On the equivalence of some measure-valued stochastic differential equations occurring in non linear filtering theory. *Recent developments in statistics (Proc. Eur. Meeting Statisticians, Grenoble, 1976)*, pp. 603-607. North-Holland, Amsterdam, 1977. (Š. Lipcer) 57 #14140 60H10 (60G35)
- Szpiro, Lucien** Variétés de codimension 2 dans P^n . *Colloque d'Algèbre Commutative (Rennes, 1972)*, Exp. No. 15, 7 pp. *Publ. Sém. Math. Univ. Rennes, Année 1972*, Rennes, Rennes, 1972. (J. S. Joel) 57 #3142 14M10 (14C20, 14M05)
- Travaux de Kempf, Kleiman, Laksov sur les diviseurs exceptionnels. *Séminaire Bourbaki, 24^{ème} année (1971/1972)*, Exp. No. 417, pp. 339-353. *Lecture Notes in Math.*, Vol. 317, Springer, Berlin, 1973. (Allen B. Altman) 54 #12784 14H40 (14C20)
- (with Peskine, Christian) Dimension projective finie et cohomologie locale. Applications à la démonstration de conjectures de M. Auslander, H. Bass, G. Brouder, Grothendieck. *Inst. Hautes Études Sci. Publ. Math.* No. 42 (1973), 47-119. (M. Hochster) 51 #10330 14B15 (13D05, 13H10)
- (with Peskine, Christian) Syzygies et multiplicités. *C. R. Acad. Sci. Paris Sér. I* (1974), 1421-1424. (Y. Nakai) 50 #2152 13D05 (13H15)
- (with Peskine, Christian) Liaison des variétés algébriques. I. *Invent. Math.* (1974), 271-302. (G. Horrocks) 51 #526 14M10
- Cohomologie des ouverts de l'espace projectif sur un corps de caractéristique p (d'après A. Ogus). *Séminaire Bourbaki (1974/1975: Exposé Nos. 453-470)*, Exp. No. 453, 1975. (A. Ogus) 56 #10330 14B15 (13D05, 13H10)

- , pp. 81-96. *Lecture Notes in Math.*, Vol. 514, Springer, Berlin, 1976. (Robert Speiser) #5549 14B10
- See also Boutot, Jean-François, #5548
- er, Kazimierz On certain type of periodical vibrations. (Polish and Russian summaries) *Nonlinear vibration problems*, No. 14 (*Proc. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part I*), pp. 169-174. PWN-Polish Sci. Publ., Warsaw, 1973. (Author's summary) #56 #8980 34C15
- Vibration of a certain nonlinear system. *Nonlinear vibration problems*, No. 14 (*Proc. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part I*), pp. 175-179. (Author's summary) #56 #8981 34C15
- r, Wanda Doubly commuting operator representations of Dirichlet algebras. *Ann. of Math.* **30** (1974), 97-103. (S. K. Berberian) #9 #7785 46J25
- The evolution equation for normal operators. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 7, 647-651. (R. G. Douglas) #1196 47D05
- Urszula Some properties of solutions of differential equations with retarded arguments. *Demonstratio Math.* **9** (1976), no. 4, 563-571. (V. Staikos) #55 #3482 34C15
- c, Jerzy (with Grabski, Zbigniew) On some existential theorems of the classical interval calculus. *Bull. Soc. Sci. Lettres Łódź* **26** (1976), no. 6, 12+ii pp. (Rolf Stitzler) #57 #7293 49A05
- T. (with Almásy, G. A.) Checking and correction of measurements on the basis of error system model. (Russian summary) *Problems of Control and Information Theory / Problemy Uprawnienia i Teorii Informacji* **4** (1975), no. 1, 57-69. (Arunabha Ghosh) #56 #11198 93C05 (62G10)
- nger, Jacek (with Milo, Władysław; Welfe, Władysław; Wesoly, Zygmunt) Precasting the performance of a branch of industry. (Polish. Russian and English summaries) *Przegląd Statyst.* **23** (1976), no. 1, 27-47. (Authors' summary) #54 #12182 99
- , E. (with Winter, H.) On the definition of the operations: equivalence relation, order relation partial order relation, order relation, group, metric. (Russian. Hungarian and English summaries) *Közlemények—MTA Számítástech. Automat. Kutató Int. Budapest* No. 17 (1976), 41-55. (Jerzy Jaroń) #57 #18900 93A05 (04A05)
- Harold (with Szu, S. C.; Hermans, J. J.) Fluctuation-dissipation theorems on the basis of hydrodynamic propagators. *Phys. Fluids* **17** (1974), 903-907. (Marvin Shinbrot) #2464 76.47
- (with Carroll, C. E.; Ahn, Saeyoung) ★ Reformulation of the plasma inverse scattering problem. NRL Memorandum Report 3108. *Math Sciences Staff, Plasma Physics Division, Naval Research Laboratory, Washington, D. C.*, 1975. ii+11 pp. (Authors' summary) #55 #4947 78.45
- (with Carroll, C. E.; Yang, Chung Chun; Ahn, Saeyoung) A new functional equation in the plasma inverse problem and its analytic properties. *J. Mathematical Phys.* **17** (1976), no. 7, 1236-1247. (J. Wiesner) #54 #2038 82.30 (86.30)
- Swaling H. Brownian motion of elastically deformable bodies. *Phys. Rev. A* (3) **11** (1975), 350-359. (Author's summary) #53 #15228 82.47
- Kęng Boundedness and stability of the solutions of systems of nonlinear differential equations of neutral type having variable time lag. (Chinese) *Acta Mathematica* **17** (1974), no. 3, 197-204. (K. W. Chang) #58 #6627 34K20
- C. (with Szu, H. Harold; Hermans, J. J.) Fluctuation-dissipation theorems on the basis of hydrodynamic propagators. *Phys. Fluids* **17** (1974), 903-907. (Marvin Shinbrot) #2464 76.47
- A. Cobordism groups of l -immersions. I. (A) Homotopy representability of the cobordism group of immersions with a given multiplicity of self-intersections. (Russian) *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 3-4, 343-358. (C. Teleman) #55 #13431 58A10 (57A35, 58D10)
- Cobordism groups of l -immersions. II. (Russian) *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 1-2, 93-102. (C. Teleman) #55 #13432 57A70 (57A35, 58D10)
- Cobordism of smooth mappings with a singularity. (Russian) *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 3-4, 305-307. (P. S. Landweber) #56 #16652 57D45 (57D90)
- A geometric proof of a theorem of Serre on p -components of $\pi_{n+k}(S^k)$. *Period. Math. Hungar.* **8** (1977), no. 1, 9-13. (Richard Holzinger) #56 #13212 55E40 (D40)
- József (with Máté, Attila) On measure-theoretic problems involving retrospective potential functions. *Acta Cybernet.* **1** (1971), 81-91. (A. J. Lohwater) #45 #492 510
- (with Conway, John B.) The weak sequential closure of certain sets of extreme points in a von Neumann algebra. *Indiana Univ. Math. J.* **22** (1972/73), 763-768. (H. Loper) #46 #9756 46L10
- (with Matolcsi, Tamás) Intersection des mesures spectrales conjuguées. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A841-A843. (Colin C. Graham) #48 #4804 47B15 (A15, 81.47)
- (with Abdalla, S. M.) On an ergodic type theorem for von Neumann algebras. *Acta Math. (Szeged)* **36** (1974), 167-172. (M. Takesaki) #49 #11269 46L10
- Diagonalization theorems for matrices over certain domains. *Acta Sci. Math. (Szeged)* **36** (1974), 193-201. (Lawrence Fialkow) #49 #11286 47A45 (15A21)
- On non-localizable measure spaces. *Acta Sci. Math. (Szeged)* **37** (1975), no. 3-4, 283-295. (W. F. Pfeffer) #52 #8369 28A10
- Stanisław Measure of non-compactness and ordinary differential equations in Banach spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 831-835. (R. R. D. Kemp) #46 #2185 34G05 (47H10)
- Structure of the solutions set of ordinary differential equations in Banach space. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 141-144. (P. Hartman) #48 #11715 34G05
- Solutions sets of nonlinear equations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 971-976. (P. P. Zabrejko) #49 #9698 34G05 (54C99)
- Some properties of the solutions set of ordinary differential equations. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 675-678. (G. Geobel) #50 #7721 34G05
- On the existence of solutions of Volterra integral equations in Banach space. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 1209-1213. (R. K. Miller) #52 #1206 45D05 (45N05)
- Solutions sets of non-linear integral equations. *Funkcial. Ekvac.* **17** (1974), 67-71. (R. K. Miller) #49 #9566 45G99
- On the structure of solutions sets of differential and integral equations in Banach spaces. *Ann. Polon. Math.* **34** (1977), no. 2, 165-177. (Janusz Mika) #57 #3553 34G05 (45N05)
- On Volterra integral equations in Banach spaces. *Funkcial. Ekvac.* **20** (1977), no. 3, 247-258. (Author's review (Zbl 379 #45025)) #58 #23402 45D05 (45N05)
- On the equation $x' = f(t, x)$ in Banach spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **26** (1978), no. 5, 401-406. (W. R. Utz) #58 #17402 34G05
- Kneser's theorem for weak solutions of ordinary differential equations in reflexive Banach spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **26** (1978), no. 5, 407-413. (J. E. Lagnese) #58 #11764 34G05
- holnicki-Szulc, J. See Holnicki-Szulc, J.
- Szulewski, P. A. (with Adrien, W. R.; Frick, Pieter A.) A model for the design and analysis of distributed real-time digital systems. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 1, pp. 221-228. Hemisphere, Washington, D. C., 1977. (Authors' summary) #57 #18177 68A05
- Szulga, Jerzy (with Woźczyński, Wojbor A.) Convergence of submartingales in Banach lattices. *Ann. Probability* **4** (1976), no. 3, 464-469. (S. D. Chatterji) #53 #9370 60G45 (46B99, 28A45)
- Three series theorem for martingales in Banach spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 2, 175-180. (N. C. Jain) #56 #3937 60G40 (60B05)
- On the L_r -convergence, $r > 0$, for $n^{-1/r} S_n$ in Banach space. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 10, 1011-1013. (J. Hoffmann-Jorgensen) #58 #2958 60B99 (60F99)
- The law of the iterated logarithm for martingales in Banach spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 10, 1015-1021. (N. C. Jain) #58 #7772 60B99
- On the submartingale characterization of Banach lattices isomorphic to l_1 . (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **26** (1978), no. 1, 65-68. (David J. Aldous) #57 #17750 60B05 (60G45)
- Szulkin, A. AR-spaces with continuum left and continuum right r -neighbours. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 1117-1122. (B. J. Ball) #49 #3825 (E 51 #1722) 54C55
- Errata: "AR-spaces with continuum left and continuum right r -neighbours" (Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. **21** (1973), 1117-1122). *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 1 loose p. (B. J. Ball) #51 #1722 54C55
- Szulkin, P. Sur le problème des décalages stochastiques. (English summary) *Rev. CETHEDC* No. 26 (1971), 93-109. (M. Zakai) #46 #8754 94A05
- Szumilas, J. (with Butkiewicz, Jan) On a class of multivariate distributions with marginal gamma distributions. (French summary) *Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975)*, Vol. 3. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 3, 150-155 (1976). (Steven Arnold) #58 #8020 62H05
- Szurek, Michał What is algebraic geometry about? (Polish) *Wiadom. Mat.* (2) **20** (1976), no. 1, 7-27. (J. Blass) #58 #5659 14-01 (14-03)
- Some topological theorems on the fixed point property. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 6, 549-553. (Gilles Fournier) #58 #12988 54H25 (55C20)
- Szűsz, P. On the law of iterated logarithm for continued fractions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **19** (1971), 167-171. (T. M. Liggett) #45 #9372 60F05
- On a theorem of Segre. *Acta Arith.* **23** (1973), 371-377. (R. F. Churchhouse) #49 #8942 10F20
- (with Klee, K.) A Mercerian theorem for Nörlund means. *Monatsh. Math.* **77** (1973), 113-119. (S. M. Mazhar) #47 #9118 40G05
- (with Lung, K.) On Müntz-Jackson's theorem. *Collection of articles dedicated to the memory of Alfréd Rényi, II. Period. Math. Hungar.* **3** (1973), 85-92. (N. Passell) #49 #3392 41A25
- Remark to a theorem of P. Erdős. *Acta Arith.* **26** (1974/75), 97-100. (W. J. LeVeque) #50 #263 10K20 (60E05)
- Remark on a theorem of Aharonov and Walsh. *Israel J. Math.* **17** (1974), 108-110. (E. B. Saff) #51 #3463 30A82
- On Mercer's theorem for $(C, 2)$ -means. *Monatsh. Math.* **81** (1976), no. 2, 149-152. (William T. Sledd) #55 #3599 40G05
- Szwarc, Włodzimierz (with Meinguet, Jean) A note on a special class of demand functions. *Mathematica (Cluj)* **13** (36) (1971), 213-218. (A. C. Williams) #53 #10186 90A10
- The dynamic transportation problem. *Mathematica (Cluj)* **13** (36) (1971), 335-345. (I. T. Frisch) #48 #13217 90B10
- The transportation paradox. *Naval Res. Logist. Quart.* **18** (1971), 185-202. (R. Sallia) #46 #10403 90C05
- Elimination methods in the $m \times n$ sequencing problem. *Naval Res. Logist. Quart.* **18** (1971), 295-305. (C. Ratiu-Suciu) #46 #6804 90B35
- Some remarks on the time transportation problem. *Naval Res. Logist. Quart.* **18** (1971), 473-485. (P. L. Hammer) #49 #2067 90B30
- Optimal elimination methods in the $m \times n$ flow-shop scheduling problem. *Operations Res.* **21** (1973), no. 6, 1250-1259. (Author's summary) #57 #2529 (E 57 #2530) 90B35
- (with Meinguet, Jean) Derivation of demand functions from Slutsky's conditions. *Mathematica (Cluj)* **16** (39) (1974), no. 1, 57-64. (James W. Friedman) #54 #2144 90A10
- The mixed integer linear programming problem when the integer variables are zero or one. *Mathematica (Cluj)* **16** (39) (1974), no. 1, 183-187. (J. A. Tomlin) #54 #4646 90C10

- Mathematical aspects of the $3 \times n$ job-shop sequencing problem. *Naval Res. Logist. Quart.* **21** (1974), 145-153. (D. Hochstädter) **49** #12072 90B35
- A note on mathematical aspects of the $3 \times n$ job-shop sequencing problem. *Naval Res. Logist. Quart.* **21** (1974), 725-726. (R. Weinberg) **50** #15895 90B35
- Instant transportation solutions. *Naval Res. Logist. Quart.* **22** (1975), no. 3, 427-440. (R. Sallia) **52** #10019 90B35 (90C05)
- Remarks on: "Optimal production schedules for flow shops" (CORS J. 7 (1969), 141-151) by G. B. McMahon. *Operations Res.* **23** (1975), no. 5, 1043. (E. S. Boylan) **57** #2530 90B35
- (with Hutchinson, George K.) Johnson's approximate method for the $3 \times n$ job shop problem. *Naval Res. Logist. Quart.* **24** (1977), no. 1, 153-157. (Jan Weglarz) **56** #10913 90B35
- Special cases of the flow-shop problem. *Naval Res. Logist. Quart.* **24** (1977), no. 3, 483-492. (Tadashi Kurisu) **56** #17788 90B35
- Optimal two-machine orderings in the $3 \times n$ flow-shop problem. *Operations Res.* **25** (1977), no. 1, 70-77. (Author's summary) **58** #25944 90B35
- Dominance conditions for the three-machine flow-shop problem. *Operations Res.* **26** (1978), no. 1, 203-206. (John C. Gittins) **58** #4288 90B35
- Szwarcfiter, Jayme L.** (with Lauer, Peter E.) A search strategy for the elementary cycles of a directed graph. *Nordisk Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 2, 192-204. (B. Zelinka) **55** #12566 05C30 (68A10)
- (with Wilson, L. B.) Some properties of ternary trees. *Comput. J.* **21** (1978), no. 1, 66-72. (Fan R. K. Chung) **57** #14667 68A50 (68A05)
- Szwed, P.** A scale of a radical in commutative B_0 -algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 745-752. (S. Rolewicz) **47** #2366 46H05
- Szwieć, Wiesław** (with Romanowicz, Zbigniew; Woźniak, Krzysztof) On the Grundy function on a certain graph of the Nim type game. (Polish and Russian summaries) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. Ser. Studia i Materiały No. 9 Grafy i Hipergrafy* (1973), 15-25. (R. K. Guy) **50** #6517 90D05
- A certain pursuit game on the plane. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. w Opolu Mat.* **14** Zastos. Mat. (1973), 5-22. (J. M. Skowroński) **54** #12240 90D25
- (with Kowolik, Jan) Optimal synthesis of a dynamical system with bounded velocities. (Polish. English summary) *Zeszyty Nauk. Wyz. Szkoły Ped. W Opolu Mat.* **20** Algebra, Zastos. Mat. (1978), 93-103. (Authors' summary) **58** #26373 93C99
- Szybiak, A.** Structure of spaces with centro-projective connection. (Russian) *Ukrain. Geometr. Sb. No. 7* (1969), 172-179, 187 (1970). (A. Goetz) **48** #9586 53B10
- Center-projective connections. *Czechoslovak Math. J.* **21**(96) (1971), 99-108. (Shoshichi Kobayashi) **45** #4315 53B10
- Canonical form on a groupoid related to regular prolongations of Lie groups. Collection of articles commemorating Władysław Ślebodziński. *Colloq. Math.* **26** (1972), 229-239. (P. Ver Eecke) **49** #11555 58A20
- A contribution to the connection of V. Hlavatý. *Ann. Polon. Math.* **28** (1973), 141-151. (P. Molino) **49** #1406 53C05
- (with Trần đình-Viên) On the theorem of Meusnier in Weyl spaces. *Ann. Polon. Math.* **28** (1973), 189-194. (S. Takizawa) **48** #9589 53B25
- Intrinsic construction of the metric in the model of Poincaré of hyperbolic planimetry. *Comment. Math. Prace Mat.* **17** (1973/74), 481-487. (L. Gyarmathi) **50** #5605 50C05
- Cross-ratio in Grassmann spaces. Collection of articles dedicated to Stanisław Gołąb on his 70th birthday. *Demonstratio Math.* **6** (1973), 367-371. (E. Morgantini) **49** #7931 53A40
- Grassmannian connections. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **28** (1974), 105-114 (1976). (Jean Pradines) **54** #3618 53C05
- A model of hyperbolic stereometry based on the algebra of quaternions. *Colloq. Math.* **32** (1975), no. 2, 277-284. (H. W. Guggenheimer) **51** #11263 50A10
- Grassmannians of higher order and equations of moving frame. *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **22** (1976), no. 2, 201-212. (Samuel A. Ilori) **55** #6335 53C30 (58A20, 57F15)
- Szymonowska, A.** An approximate determination of the anisotropy constant in thin films of ferromagnets with the uniaxial anisotropy. *Acta Phys. Polon. A* **52** (1977), no. 4, 487-497. (Author's summary) **56** #14131 78.30
- Szymonowski, Jacek** (with Findeisen, Władysław; Wierzbicki, Andrzej P.) ★Teoria i metody obliczeniowe optymalizacji. (Polish) [Theory and numerical methods of optimization] Biblioteka Naukowa Inżyniera. [Science Library for the Engineer] Państwowe Wydawnictwo Naukowe, Warsaw, 1977. 708 pp. (errata insert) (S. Rolewicz) **56** #3716 49Dxx (65K05, 90Bxx)
- (with Ruszczyński, Andrzej) An accuracy selection algorithm for the modified gradient projection method in minimax problems. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977), Part 2*, pp. 169-178. *Lecture Notes in Control and Informat. Sci.*, Vol. 7, Springer, Berlin, 1978. (From the introduction) **58** #13721 65K05
- Szymanski, Andrzej** Regression operator in infinite dimensional vector spaces and its application to some identification problems. *Fifth Conference on Optimization Techniques (Rome, 1973), Part I*, pp. 69-82. *Lecture Notes in Comput. Sci.*, Vol. 3, Springer, Berlin, 1973. (From the author's introduction) **56** #9868 62M10 (93E10)
- (with Turzański, Marian) A characterization of generalized Cantor discontinua. (Polish summary) *Uniw. Śląski w Katowicach—Prace Mat.* **4** (1973), 73-75. (Stephen G. BeMiller) **49** #6197 (EA 58) 54F05
- (with Kulpa, Władysław) Accumulation points of nowhere dense sets. *Colloq. Math.* **32** (1974), 69-70, 150. (Anthony D'Aristotle) **51** #4132 54A20 (54D25)
- Remarks on the absolute suspension. *Fund. Math.* **86** (1974), 157-161. (R. H. Rosen) **51** #1830 57A15 (54F65)
- (with Turzański, M.) A characterization of cubes and spheres. *Dissertationes Math. (Rozprawy Mat.)* **121** (1975), 29 pp. (R. H. Rosen) **52** #4298 57A15 (54F65)
- (with Strok, M.) Compact metric spaces have binary bases. *Fund. Math.* **89** (1975), no. 1, 81-91. (R. F. Dickman, Jr.) **52** #4232 54D20 (54E45)
- (with Turzański, Marian) βN and sequential compactness. *Colloq. Math.* **35** (1976), no. 2, 205-208. (James C. Smith) **53** #14418 54D30 (54A25)
- (with Kucia, Anna) Absolute points in $\beta N \setminus N$. *Czechoslovak Math. J.* **24** (1976), no. 3, 381-387. (D. V. Čudnovskij) **54** #1167 54D35 (04A15, 54A25)
- (with Kulpa, Władysław) Decompositions into nowhere dense sets. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), 37-39. (Stojan Nedev) **55** #11192 54B15
- (with Kucia, Anna) There are absolute ultrafilters on N which are not minimal. *Colloq. Math.* **37** (1977), no. 1, 29-34. (Alan D. Taylor) **58** #5239 04A20
- The existence of $P(\alpha)$ -points of N^* for $\aleph_0 < \alpha < \aleph_1$. *Colloq. Math.* **37** (1977), 179-184. (Paul R. Meyer) **58** #7571 54G10 (02K05)
- (with Emeryk, A.) Continua with a connected set of points of indecomposability. *Colloq. Math.* **37** (1977), no. 2, 185-191. (F. Burton Jones) **57** #4123 54F20
- On the existence of ω -points. *Proc. Amer. Math. Soc.* **66** (1977), no. 1, 128-131. (F. Dickman, Jr.) **56** #16598 54G99
- Szymanski, Thomas G.** (with Brown, Steven; Gries, David) Program schemes with pushdown stores. *SIAM J. Comput.* **1** (1972), no. 3, 242-268. (I. Kaufmann) **47** #68A05
- (with Williams, John H.) Non-canonical parsing. *14th Annual IEEE Symposium on Switching and Automata Theory (Univ. Iowa, Iowa City, Iowa, 1973), pp. 122-129.* *Comput. Soc., Northridge, Calif.*, 1973. (Daniel J. Rosenkrantz) **55** #4805 68A05
- (with Hunt, Harry B., III; Ullman, Jeffrey D.) Operations on sparse relations: efficient algorithms for grammar problems (extended abstract). *15th Annual Symposium on Switching and Automata Theory (Univ. New Orleans, New Orleans, La., 1974), pp. 127-132.* *IEEE Comput. Soc., Long Beach, Calif.*, 1974. (Robert L. Cannon) **58** #3725 68A30
- (with Ullman, Jeffrey D.) Evaluating relational expressions with dense and sparse arguments. *16th Annual Symposium on Foundations of Computer Science (Berkeley, Calif., 1975), pp. 90-97.* *IEEE Computer Society, Long Beach, Calif.*, 1975. (Steven S. Muchnick) **54** #9155 68A20 (02F43)
- (with Geller, Matthew M.; Hunt, Harry B., III; Ullman, Jeffrey D.) Economic description by parsers, DPDA's and PDA's. *16th Annual Symposium on Foundations of Computer Science (Berkeley, Calif., 1975), pp. 122-127.* *IEEE Computer Society, Long Beach, Calif.*, 1975. (Authors' summary) **55** #1838 68A30
- (with Hunt, Harry B., III) On the complexity of grammar and related problems. *Seventh Annual ACM Symposium on Theory of Computing (Albuquerque, N. M., 1975), pp. 54-65.* *Assoc. Comput. Mach., New York*, 1975. (From the authors' introduction) **55** #6948 68A20 (68A30, 68A05)
- (with Hunt, Harry B., III; Ullman, Jeffrey D.) On the complexity of LR(k) tests. *Papers from the Second ACM Symposium on Principles of Programming Languages (Palo Alto, Calif., 1975).* *Comm. ACM* **18** (1975), no. 12, 707-716. (Pavel Stasov) **52** #12402 68A20 (68A30)
- (with Hunt, Harry B., III) Dichotomization, reachability, and the forbidden subgraph problem (extended abstract). *Eighth Annual ACM Symposium on Theory of Computing (Hershey, Pa., 1976), pp. 126-134.* *Assoc. Comput. Mach., New York*, 1976. (A. J. Kfoury) **56** #13806 68A30 (68A20)
- (with Hunt, Harry B., III; Rosenkrantz, Daniel J.) On the equivalence, containment, and covering problems for the regular and context-free languages. *Annual ACM Symposium on the Theory of Computing (Seattle, Wash., 1976), pp. 222-268.* *Comput. System Sci.* **12** (1976), no. 2, 222-268. (Steven S. Muchnick) **53** #4402 68A20 (68A30)
- (with Hunt, Harry B., III) Complexity metatheorems for context-free grammar problems. Working Papers presented at the ACM-SIGACT Symposium on the Theory of Computing (Albuquerque, N.M., 1975). *J. Comput. System Sci.* **13** (1976), 318-334. (S. A. Greibach) **58** #3726 68A30
- (with Williams, John H.) Noncanonical extensions of bottom-up parsing techniques. *SIAM J. Comput.* **5** (1976), no. 2, 231-250. (A. V. Anisimov) **53** #12114 68A20
- (with Hunt, Harry B., III; Rosenkrantz, Daniel J.) The covering problem for context-free grammars. *Theoret. Comput. Sci.* **2** (1976), no. 3, 361-382. (Tadao Takiuchi) **54** #6568 68A30
- Concerning bounded-right-context grammars. *Theoret. Comput. Sci.* **3** (1976), no. 3, 273-282. (Daniel J. Rosenkrantz) **56** #7357 68A30
- (with Hunt, Harry B., III; Ullman, Jeffrey D.) Operations on sparse relations. *Comm. ACM* **20** (1977), no. 3, 171-176. (Armin Cremers) **55** #4774 68A20 (68A05)
- (with Hunt, James W.) A fast algorithm for computing longest common subsequences. *Comm. ACM* **20** (1977), no. 5, 350-353. (C. L. Liu) **55** #9596 68A20 (68A20)
- (with Ullman, Jeffrey D.) Evaluating relational expressions with dense and sparse arguments. *SIAM J. Comput.* **6** (1977), no. 1, 109-122. (Steven S. Muchnick) **56** #13811 68A20
- (with Schmidt, Erik Meineche) Succinctness of descriptions of unambiguous context-free languages. *SIAM J. Comput.* **6** (1977), no. 3, 547-553. (R. E. Stearns) **56** #13811 68A30
- (with Geller, Matthew M.; Hunt, Harry B., III; Ullman, Jeffrey D.) Economic description of parsers, DPDA's, and PDA's. *Theoret. Comput. Sci.* **4** (1977), 143-153. (Daniel J. Rosenkrantz) **57** #18244 68A30
- (with Hunt, Harry B., III) Lower bounds and reductions between grammar problems. *J. Assoc. Comput. Mach.* **25** (1978), no. 1, 32-51. (Ju. G. Karpov) **57** #68A20 (68A30)
- Szymański, Wacław** Characters of finitely generated C^* -algebras. *Ann. Polon. Math.* **28** (1973), 317-322. (N. Suzuki) **48** #12071 46L05 (47A10)
- Decompositions of operator-valued functions in Hilbert spaces. *Studia Math.* **51** (1974), 265-280. (W. B. Arveson) **51** #13740 47A65 (46L15)
- Szegő-type properties in a non-commutative case. *Ann. Polon. Math.* **34** (1977), 97-105. (P. G. Spain (Zbl 361 #46060)) **58** #30302 46L05
- (with Ryll-Nardzewski, Czesław) Topological type decompositions of operator functions in Hilbert spaces. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Astronom. Phys.* **25** (1977), no. 3, 255-261. (Kazuyuki Saitō) **58** #30316 46G20 (46G20)
- Antisymmetry of subalgebras of C^* -algebras. *Studia Math.* **60** (1977), no. 1, 97-105. (James A. Daddens) **55** #3804 46L05
- Szymiczek, Kazimierz** Several theorems on pseudoprime numbers. (Polish. English

- summary) *Wyż. Szkół. Ped. w Katowicach—Zeszyty Nauk. Sekc. Mat. No. 5* (1966), 46 (1967). (B. Novák) **51** #336 10A40
- Two proofs of the Forsythe-Czarnota theorem. (Polish. English summary) *Wyż. Szkół. Ped. w Katowicach—Zeszyty Nauk. Sekc. Mat. No. 6* (1968), 49–53. (W. Rkiewicz) **47** #4957 10H35
- (with Wakulicz, Antoni) ★Wstęp do algebry wyższej. II. (Polish) [Introduction to higher algebra. II] Uniwersytet Śląski w Katowicach, Wydawnictwo Dydaktyczne, No. Wydawnictwo Uniwersytetu Śląskiego, Katowice, 1969. 235 pp. (Editors) **52** #13057 A05
- Note on arithmetical progressions with equal products of five terms. *Elem. Math.* (1972), 11–12. (B. M. Stewart) **46** #130 10A35
- The integer solutions of the equation $ax^2 + by^2 + cz^2 = 0$ in quadratic fields. (Polish summary) *Univ. Śląski w Katowicach—Prace Mat. 2* (1972), 91–94. (W. H. Mills) #5237 10B05
- Note on a paper by T. Nagell. *Acta Arith.* **25** (1973/74), 313–314. (Ezra Brown) #2528 10B05
- Grothendieck groups of quadratic forms and G -equivalence of fields. *Proc. Cambridge Philos. Soc.* **73** (1973), 29–36; corrigendum, *ibid.* **74** (1973), 199. (H. Gross) #3933 12E99 (10C05)
- Note on semigroup homomorphisms. (Polish summary) *Univ. Śląski w Katowicach Prace Mat. 3* (1973), 75–78. (J. B. Kim) **47** #8735 20M15
- Quadratic forms over fields with finite square class number. *Acta Arith.* **28** (1975/76), no. 2, 195–221. (Craig Cordes) **54** #234 10C05
- Universal binary quadratic forms. (Polish summary) *Univ. Śląski w Katowicach Prace Naukowe No. 59 Prace Mat. No. 5* (1975), 49–57. (Kenneth Mandelberg) #2832 10C05
- A structure theorem for Grothendieck group of quadratic forms over a field. *Topics number theory (Proc. Colloq., Debrecen, 1974)*, pp. 389–397. *Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam, 1976.* (D. G. James) **55** #10387 10C05
- Quadratic forms over fields. (Polish. English and Russian summaries) *Univ. Śląski Katowicach Prace Naukowe No. 134* (1976), 52 pp. (J. Browkin) **53** #13113 10C05
- Quadratic forms over fields. *Dissertationes Math. (Rozprawy Mat.) 152* (1977), 63 (Ron Brown) **56** #8495 10C05 (15A63)
- See also **Quadling, D. A.**, **58** #16490b
- Anna** (with Szyal, Jan; Zygmunt, Jadwiga) On the coefficients of functions whose real part is bounded. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **26** (1972), 63–70 (1974). (R. J. Libera) **50** #2476 30A32
- Dominik** (with Rychlik, Zdzisław) On the limit behaviour of the sums of a random number of independent random variables. *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 401–406. (Editors) **47** #9691 60F05
- On almost complete convergence for the sum of a random number of independent random variables. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 571–574. (V. K. Rohatgi) **47** #1104 60F10
- Sur une loi faible des grands nombres de variables aléatoires enchaînées. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1091–1095. (J. Walsh) **47** #7787 60F05
- On the limit behavior of a sequence of quantiles of a sample with a random number of items. (Polish summary) *Zastos. Mat.* **13** (1972/73), 321–327. (M. Csorgo) **50** #1322 60F15
- An extension of the Hájek-Rényi inequality for one maximum of partial sums. *Ann. Statist.* **1** (1973), 740–744. (S. G. Mohanty) **49** #1565 60F15
- (with Zięba, Wiesław) On infinitely divisible generalized distributions in R_k . (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **27** (1973), 1–129 (1975). (Authors' introduction) **55** #9216 60E05
- (with Rychlik, Zdzisław) On the limit behaviour of sums of a random number of dependent random variables. *Colloq. Math.* **28** (1973), 147–159. (S. M. Samuels) #12630 60F05
- Sur une loi forte des grands nombres de variables aléatoires enchaînées. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **28** (1974), 115–120 (1976). (N. H. Bingham) **53** #11720 60F15 (60J10)
- On the random-sums central limit theorem without moment conditions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 313–318. (K. Rohatgi) **49** #8093 60F05
- (with Rychlik, Zdzisław) On the convergence rates in the central limit theorem for sums of a random number of independent identically distributed random variables. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 3–690. (T. Robertson) **51** #6931 60F05
- (with Zięba, Wiesław) On some type of convergence in law. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 1143–1149. (R. J. Smkins) **53** #6662 60B10
- (with Sobich, Lucja) Some properties of inflated binomial distribution. *Canad. Math. Bull.* **17** (1974), no. 4, 611–613. (Peter Flusser) **54** #3911 62E15
- (with Janicki, Sławomir) Some remarks on the extension of a finite set of stochastic automata. (Polish summary) *Zastos. Mat.* **14** (1974/75), no. 4, 549–564. (P. Turakainen) **52** #7747 94A35
- (with Janicki, Sławomir) Some remarks on extension of a finite set of stochastic automata. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 2, 183–187. (Eugene S. Santos) **51** #15254 94A35
- (with Rychlik, Zdzisław) A functional random-sum central limit theorem. *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 9, 1013–1018. (J. Galambos) **52** #12029 60B10 (60F05)
- (with Rychlik, Zdzisław) Convergence rates in the central limit theorem for sums of a random number of independent random variables. (Russian summary) *Teor. Veroyatnost. i Primenen.* **20** (1975), no. 2, 359–370. (J. E. A. Dunnage) **52** #1842 60F05
- (with Freudentberg, W.) Limit laws for a random number of record values. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 3, 193–199. (Sidney I. Resnick) **53** #11702 60F05
- On limit distribution theorems for sums of a random number of random variables appearing in the study of rarefaction of a recurrent process. (Polish summary) *Zastos. Mat.* **15** (1976), no. 3, 277–288. (N. R. Mohan) **58** #2994 60F05
- (with Rychlik, Zdzisław) Inflated truncated negative binomial acceptance sampling plan. (Czech and loose Russian summaries) *Apl. Mat.* **22** (1977), no. 3, 157–165. (A. C. Cohen) **56** #4096 62N10
- (with Polak, Mieczysław) An approximation of Poisson processes defined on an abstract space. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 10, 1037–1043. (Olav Kallenberg) **57** #14133 60G55
- (with Zapala, Michał August) Convergence rates for weighted sums of random variables with random indices. *Colloq. Math.* **38** (1977), no. 1, 111–127. (F. T. Wright) **56** #16745 60F05
- (with Freudentberg, W.) On domains of attraction of record value distributions. *Colloq. Math.* **38** (1977), no. 1, 129–139. (Aart J. Stam) **57** #1607 60F05
- (with Janicki, Sławomir) On extension of stochastic k -automata. *Fund. Informat.* (4) **1** (1977), no. 2, 231–241. (Authors' summary) **57** #19195 94A35
- Szyal, Jan** On a certain class of regular functions. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **25** (1971), 109–120 (1973). (K. Szilárd) **48** #8773 30A32
- (with Szyal, Anna; Zygmunt, Jadwiga) On the coefficients of functions whose real part is bounded. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **26** (1972), 63–70 (1974). (R. J. Libera) **50** #2476 30A32
- Some remarks on coefficients inequality for α -convex functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 917–919. (J. E. Miller) **47** #454 30A34
- (with Lewandowski, Zdzisław; Miazga, Józef) On an application of Sakaguchi's method to extremal problems for functions with positive real part with vanishing coefficients. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 241–243. (M. S. Robertson) **47** #5248 30A38 (30A16)
- (with Lewandowski, Zdzisław; Wajler, Stanisław) On the covering sets and the majorization of functions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 29–34. (Jochen Becker) **50** #2475 30A32
- Regions of variability of functionals represented by Stieltjes integral with side conditions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 897–901. (Evelyn M. Silvia) **53** #794 30A38
- (with Wajler, Stanisław) On the fourth coefficient for α -convex functions. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 1153–1157. (M. Reade) **50** #10229 30A32
- (with Lewandowski, Zdzisław; Miazga, Józef) Koebe domains for univalent functions with real coefficients under Montel's normalization. *Ann. Polon. Math.* **30** (1975), no. 3, 333–336. (Carl P. McCarty) **51** #13210 30A32
- (with Wajler, Stanisław) Sur les fonctions H -quasi-étoilées. *Demonstratio Math.* **8** (1975), no. 2, 205–214. (W. E. Kirwan) **57** #3374 30A32
- (with Rahman, Qazi Ibadur) On some classes of univalent polynomials. *Canad. J. Math.* **30** (1978), no. 2, 332–349. (J. Dieudonné) **57** #3359 30A06
- Szyndler, Jerzy** A note on a certain property of Hilbert's implicative sentential calculus. (Polish. English summary) *Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat.* **10** *Logika Mat.* (1970), 51–59. (Author's summary) **53** #10544 02B05
- Szynka, Jerzy** Berechnung des globalen Raum-Zeit-Verhaltens nichtlinearer zellulärer Systeme mit Hilfe diskreter Transformationen. *Wiss. Z. Techn. Univ. Dresden* **25** (1976), no. 4, 823–826. (W. Wechler) **55** #12367 94A30
- Szyszkiewicz, J.** (with Seidler, Jerzy; Nowakowski, Jerzy; Kroszczyński, J.; Oszywa, W.; Kulikowski, J. L.) ★Współczesne metody optymalizacji systemów telekomunikacyjnych. (Polish) [Modern optimization methods for telecommunication systems] Biblioteka Problemów Telekomunikacji, No. 8. [Library on Telecommunication Problems, No. 8] Wydawnictwa Komunikacji i Łączności, Warsaw, 1965. 255 pp. (errata insert) (Editors) **52** #12955 94A05

- On the homology groups of real projective spaces. (Romanian. French summary) *Stud. Cerc. Mat.* **28** (1976), no. 4, 485-488. (Konrad Drechsler) **55** #4137 55B10 4F25)
- (with Teleman, Kostake) Généralisation des suites spectrales. *Enseignement Math.* **23** (1977), no. 1-2, 111-116. (A. V. Zarelua) **57** #1494 55H05
- C. T. (with Cherkas, Barry M.) A priori estimates for solution operators of diffusion equations. *Applicable Anal.* **2** (1972), no. 1, 47-59. (M. Artola) **46** #559 35R20 7F05)
- (with Junghenn, Hugo D.) Arcs defined by one-parameter semigroups of operators. *Proc. Amer. Math. Soc.* **44** (1974), 113-120. (Ju. M. Vuvunikjan) **48** #9448 47D05
- Ossi Einige Extremalprobleme für n -dimensionale quasikonforme Abbildungen. *Ann. Acad. Sci. Fenn. Ser. A I* No. 553 (1973), 19 pp. (H. Renelt) **48** #11495 30A60
- Extremal quasiconformal mappings of a cone. *Ann. Acad. Sci. Fenn. Ser. A I Math.* (1975), no. 1, 65-76. (T. Kuusalo) **52** #8421 30A60
- On the outer coefficient of quasiconformality of a convex dihedral wedge. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **3** (1977), no. 2, 215-221. (G. D. Anderson) **58** #22550 30A60
- nik, E. B. (with Antimirov, M.) Determination of the integral heat flow toward the walls in the case of flow of fluid or gas through a pipe. (Russian) *Latvian mathematical yearbook*, 17 (Russian), pp. 100-120, 277. Izdat. "Zinatne", Riga, 1976. (V. P. alašnikov) **55** #4895 7635
- nikov, M. I. The spectral properties of block matrices. (Russian) *Sibirsk. Mat. Ž.* **12** (1971), 1411-1415. (D. Ž. Đoković) **45** #285 15A60
- (with Kiržner, V. M.) A problem of optimal choice. (Russian) *Vychisl. Mat. i Vychisl. tehn.* (Kharkov) **1971**, no. 2, 20-25, 158. (See RŽMat **1972** #2 V545) 90C30
- Estimates of the rate of convergence of simple and Seidel iterations by means of the coupling coefficients. (Russian) *Numerical mathematics and computer technology*, No. III (Russian), pp. 90-96. Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkih Temperatur, Kharkov, 1972. (A. S. Householder) **56** #13559 65F10
- Uniqueness theorems for infinite systems of linear equations. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 40-43. (A. Buraczewski) **48** #4787 47A50 (05C20)
- Application of graphs to questions of uniqueness for infinite systems of linear equations. (Russian) *Proceedings of the Sixth Winter School on Mathematical programming and Related Questions* (Drogobych, 1973). *Functional analysis and its applications* (Russian), pp. 268-276. Akad. Nauk SSSR Central. Ekonom.-Mat. Inst., Moscow, 1975. (George R. Barker) **57** #7996 65J05 (05C99)
- ari, A. A. (with Devdariani, R. G.) ★О численных результатах решения некорректно поставленных задач методом квазиобращения. (Russian) [Numerical results on the solution of ill-posed problems by the method of quasi-reversibility] *Izdat. Tbilis. Univ.*, Tbilisi, 1977. 25 pp. (V. Komkov) **56** #10039 65M30
- l, Daniel (with Kuo, Benjamin C.) ★Optimal control by mathematical programming. Prentice-Hall, Englewood Cliffs, N. J., 1971. xiii + 237 pp. (Editors) **53** #2432 93-02 (00Cxx)
- Application of modern control and optimization techniques to transportation systems. *Control and dynamic systems: advances in theory and applications*, Vol. 10, pp. 435-434. Academic Press, New York, 1973. (From the author's text) **56** #7959 (00C05 (90B99))
- (with Kuo, Benjamin C.) ★Оптимальное управление и математическое программирование. (Russian) [Optimal control, and mathematical programming] translated from the English by L. A. Meerovich. Edited by Ja. Z. Cypkin. Серия "Теоретические Основы Технической Кибернетики". [Theoretical Foundations of Engineering Cybernetics Series] *Izdat. "Nauka", Moscow*, 1975. 279 pp. (Editors) **53** #2433 93-022 (90Cxx)
- Computed solutions of differential games. *The theory and application of differential games* (Proc. NATO Advanced Study Inst., Univ. Warwick, Coventry, 1974), pp. 221-227. NATO Adv. Study Inst. Ser., Ser. C: Math. and Phys. Sci., 13, Reidel, Dordrecht, 1975. (Author's summary) **58** #26097 90D25
- (with Gilai, David) An alternative formulation of a distributed-parameter optimal control problem applied to nuclear shielding. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 5, 668-676. (S. G. Tzafestas) **56** #11251 93C20
- (with Zager, Eliahu) Optimal control of a class of unconstrained bilinear systems. *Internat. J. Systems Sci.* **7** (1976), no. 12, 1349-1354. (David N. Burghes) **55** #10108 (00C15 (90B99))
- in, F. (with Austern, N.; Silver, M.) Multiple scattering theory with target nucleus antisymmetry. *Amer. J. Phys.* **45** (1977), no. 4, 361-366. (Authors' summary) **56** #2052 81.47
- ov, Dimit'r See Petkancin, Bojan L., **53** #56 and Birthday: Tabakov, Dimit'r, **3** #72
- ova, S. (with Zaprianov, Zaprian Dimitrov) A nonstationary and stationary boundary layer of a viscous fluid around an oscillating elliptic cylinder. (Bulgarian) *Teoret. Prilož. Meh.* **9** (1978), no. 1, 65-76. **58** #19758 7635
- ow, Iwan Georgiew Technical diagnostics of information networks. (Polish. English and Russian summaries) *Prace Nauk Inst. Cybernet. Techn. Politech. Wrocław*. No. 17 Ser. Monograf. No. 2 (1974), 84 pp. (From the summary) **58** #4702 94A20 (68A99)
- One-sided optimization of the dendrite of a two-person multistage diagnostic game. (Polish. English and Russian summaries) *Podstawy Sterowania* **4** (1974), 171-189. (Author's summary) **50** #6528 90D15 (94A15)
- Problems of optimization of the mean cost of a diagnostic tree. (Polish. English and Russian summaries) *Prace Nauk Inst. Cybernet. Techn. Politech. Wrocław. Ser. Konfer.* No. 5 *Diagnostyka Systemów* (1975), 17-35. (Author's summary) **58** #26587 94A20
- The theory of diagnosable systems. Distinguishability of faults in informational networks. (Polish. English and Russian summaries) *Prace Nauk Inst. Cybernet. Techn. Politech. Wrocław*. No. 23 Ser. Monograf. No. 5 (1975), 145 pp. (V. Komkov) **56** #11627 94A20
- dyev, B. R. An inverse problem for a quasilinear heat equation. (Russian) *Izv. Akad. Nauk Kirgiz. SSR* **1974**, no. 1, 12-17. (V. M. Isakov) **49** #9456 35R30
- Curves with coordinated parametrization, and the problem of the reconstruction of the coefficient of a first order partial differential equation. (Russian) *Studies in integro-differential equations in Kirgizia* (Russian), pp. 265-274, 434. Izdat. "Ilim", Frunze, 1977. (Author's summary) **58** #23194 35R30
- Reconstruction of the unknown function from the coefficients of a partial differential equation of parabolic type. (Russian) *Studies in integro-differential equations in Kirgizia* (Russian), pp. 275-297, 435. Izdat. "Ilim", Frunze, 1977. (Author's summary) **58** #23195 35R30 (35K99)
- Tabari, Abū Ja'far Muḥammad ben Ayyūb See Hermelink, Heinrich, **58** #15842
- al-Tabari, Muḥammad ibn Ayyūb Miṭṭah al-mu'ammalat ★Shumārnamah. (Persian) [Book of reckoning] From the hand-written manuscript from the Holy Palace. With an introduction and appendix by Taghi Binesh. Science in Iran, Vol. 1; Iranian Cultural Foundation Publications, Vol. 7. Bonyad Farhang Publishers, Tehran, 1966. 160 pp. **58** #27160 01A75 (01A30)
- ★Miṭṭah al-Mu'amilat. (Persian) [Keys to contrasts] Mathematical text from the fifth century based on the only manuscript dated 632 (a.h.s.) by al-Ṭabarī with efforts of Mohammad Amine Reyahi. Translated from the Arabic by Husayn Khadyūjīm. Ilim dar Irān [Science in Iran], 12. Bonyad Farhang Publishers, Tehran, 1970. xii + 287 pp. **58** #26801 01A30 (01A75)
- Tabarrok, B. (with Gass, N.) Ein neues Variationsprinzip mit Anwendung auf Schwingungen flacher Schalen nach der Methode der finiten Elemente. (English and Russian summaries) *Z. Angew. Math. Mech.* **53** (1973), 773-781. (Z. Kączkowski) **50** #1614 7365
- (with Farshad, M.) On dualities in the oscillations of naturally curved and pretwisted rods. *Internat. J. Solids and Structures* **12** (1976), no. 8, 601-609. (S. C. Das) **54** #4257 7335
- (with Dost, S.) Generalized micropolar thermoelasticity. *Internat. J. Engrg. Sci.* **16** (1978), no. 3, 173-183. (G. Tiwari) **58** #14130 7335
- (with Gass, N.) A variational formulation for plate buckling problems by the hybrid finite element method. *Internat. J. Solids and Structures* **14** (1978), no. 1, 67-80. (B. A. Bondarenko) **57** #4788 7365
- Tabata, Akihisa (with Konishi, Reiko) Some convergences on the Mikusinski operator field. *Comment. Math. Univ. St. Paul.* **23** (1974/75), no. 2, 135-137. (D. Myers) **51** #6304 44A40 (54A20)
- Tabata, Hiroyoshi A generalized free structure and several properties of universal Horn classes. *Math. Japon.* **16** (1971), 91-102. (B. Węglorz) **46** #120 08A10
- An application of a certain argument about isomorphisms of α -saturated structures. *Proc. Japan Acad.* **49** (1973), 262-264. (James H. Schmerl) **48** #5850 02H05
- Tabata, Masahisa (with Yamaguti, Masaya) Approximate solution of the second order elliptic differential equation in a domain with piecewise smooth boundary by the finite-element method using singularity functions. *Theoretical and applied mechanics*, Vol. 22 (Proc. 22nd Japan Nat. Congress for Appl. Mech., Tokyo, 1972), pp. 165-173. Univ. Tokyo Press, Tokyo, 1974. (Jacques Couot) **53** #14945 65N30
- Higher-order approximate solutions of Neumann problems by isoparametric finite element method with relevant lumping operator. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 2, 297-316. (Reinhard Scholz) **55** #6890 65N30
- A finite element approximation corresponding to the upwind finite differencing. *Mem. Numer. Math. No. 4* (1977), 47-63. (Reinhard Scholz) **56** #7262 65N30
- Uniform convergence of the upwind finite element approximation for semilinear parabolic problems. *J. Math. Kyoto Univ.* **18** (1978), no. 2, 327-351. (V. Thomée) **58** #13792 65N30
- Tabata, Tsuyoshi (with Shima, Susumu; Oyane, Moriya; Kawakami, Takashi) Upper bound theory for deformation of porous materials. *Mem. Fac. Engrg. Kyoto Univ.* **38** (1976), no. 3, 117-137. (From the summary) **58** #19630 7349
- Tabensky, Romualdo (with Taub, A. H.) Plane symmetric self-gravitating fluids with pressure equal to energy density. *Comm. Math. Phys.* **29** (1973), 61-77. (P. Havas) **47** #10022 83.53
- (with Letelier, Patricio S.) The general solution to Einstein-Maxwell equations with plane symmetry. *J. Mathematical Phys.* **15** (1974), 594-595. (Authors' summary) **48** #13152 83.53
- (with Melnick, Jorge) Exact solutions to Einstein field equations. *J. Mathematical Phys.* **16** (1975), 958-960. (Authors' summary) **51** #2578 83.53
- (with Letelier, Patricio S.) Cylindrical self-gravitating fluids with pressure equal to energy density. (Italian and Russian summaries) *Nuovo Cimento B* (11) **28** (1975), no. 2, 407-414. (A. H. Taub) **52** #9944 83.53
- Unification of gauge and gravitation theories. *J. Mathematical Phys.* **17** (1976), no. 1, 1-5. (John Madore) **54** #9587 83.53
- (with Teitelboim, Claudio) The square root of general relativity. *Phys. Lett. B* **69** (1977), no. 4, 453-456. (Authors' summary) **57** #15259 83.53
- psych-Taberska, Paulina See Pych-Taberska, Paulina
- Taberski, Roman Strong summability of certain trigonometric polynomials. (Polish. English and Russian summaries) *Fasc. Math. No. 5* (1970), 39-48 (1971). (K. Karták) **46** #9620 42A08
- Strong Abel-Poisson summability. (Polish. English and Russian summaries) *Fasc. Math. No. 5* (1970), 49-53 (1971). (K. Karták) **46** #9629 42A24
- Trigonometric interpolation. III. *Colloq. Math.* **23** (1971), 145-156. (A. K. Varma) **46** #2335 42A12
- Some properties of M -variations. *Comment. Math. Prace Mat.* **15** (1971), 141-146. (F. Brooks) **47** #412 26A45
- Trigonometric interpolation. IV. Collection of articles commemorating Władysław Ślebodziński. *Colloq. Math.* **26** (1972), 353-366. (A. K. Varma) **48** #6794 42A12
- Approximation of real functions by the double trigonometric polynomials. *Comment. Math. Prace Mat.* **16** (1972), 113-123. (S. Izumi) **48** #2636 42A08 (42A92)
- On general Dirichlet's integrals. *Comment. Math. Prace Mat.* **17** (1973/74), 499-512. (S. Baron) **50** #2788 42A20
- Convergence of some trigonometric sums. *Demonstratio Math.* **5** (1973), 101-117. (S. M. Mazhar) **51** #1246 42A20
- Trigonometric interpolation. V. *Colloq. Math.* **29** (1974), 267-278. (A. K. Varma) **49** #3416 42A12
- Convergence of Fourier-Bessel sums. *Funct. Approximatio Comment. Math.* **1** (1974), 139-148. (D. P. Gupta) **53** #3590 42A56
- On the Riesz means of Fourier-Bessel series. *Approximation theory* (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972), pp. 243-258. Reidel, Dordrecht,

1975. (B. Kuttner) **56** #6254 42A08
A theorem of the Steckin and Leindler type connected with Abel summability of Fourier series. *Demonstratio Math.* **8** (1975), no. 2, 215-225. (L. Leindler) **56** #9165 42A08
On double singular integrals. *Comment. Math. Prace Mat.* **19** (1976), no. 1, 155-160. (Satoru Igari) **54** #13452 42A60 (40C10)
Differences, moduli and derivatives of fractional orders. *Comment. Math. Prace Mat.* **19** (1976/77), no. 2, 389-400. (J. Musielak) **57** #17100 42A08 (26A33)
Two indirect approximation theorems. *Demonstratio Math.* **9** (1976), no. 2, 243-255. (Masako Izumi) **54** #13433 42A08
Two approximation theorems connected with strong summability of trigonometric interpolating polynomials. *Funct. Approximatio Comment. Math.* **2** (1976), 243-261. (Darell J. Johnson) **57** #993 42A08
On the speed of summability of double Fourier series. *Funct. Approximatio Comment. Math.* **3** (1976), 243-258. (L. Leindler) **56** #3569 42A92
Approximation of functions possessing derivatives of positive orders. *Ann. Polon. Math.* **34** (1977), no. 1, 13-23. (errata insert) (G. Sunouchi) **58** #1950 42A08
Some estimates for functions of two variables. *Demonstratio Math.* **10** (1977), no. 1, 211-239. (J. S. Byrnes) **56** #951 42A08
Estimates for the deviations of some trigonometric polynomials. *Funct. Approximatio Comment. Math.* **5** (1977), 69-84. (J. Szabados) **57** #13345 42A12
- Tabidze, G. S.** The approximate solution of a two-point singular boundary value problem for a second-order ordinary differential equation. (Russian) *Differentsial'nye Uravneniya* **10** (1974), 851-859, 955. (Russell C. Thompson) **50** #15362 65L10
The uniqueness of the solution of a two-point difference boundary value problem. (Russian) *Differentsial'nye Uravneniya* **11** (1975), no. 12, 2162-2176, 2299. (R. Kodnár) **52** #14721 39A10
On the approximate solution of the singular problem of Cauchy for ordinary differential equations. *J. Math. Anal. Appl.* **49** (1975), 535-544. (Clarence M. Ablow) **51** #14591 65L05
★ О двухточечной краевой задаче для разностных уравнений второго порядка. (Russian) [The two-point boundary value problem for second order difference equations] With Georgian and English summaries. *Izdat. Tbilis. Univ., Tbilisi*, 1977. 48 pp. (I. M. Sheffer) **58** #29521 39A10
The inconjugacy of a second order linear difference equation. (Russian) *Differentsial'nye Uravneniya* **13** (1977), no. 11, 2093-2095, 2111. (I. Kiguradze) **58** #1791 39A12 (34C10)
- Tablavišvili, O. M.** See Questions on mathematical and engineering cybernetics, **53** #2574
- Tabloski, Theodore F.** (with Mowle, Frederic J.) A numerical expansion technique and its application to minimal multiplexer logic circuits. *IEEE Trans. Computers* **C-25** (1976), no. 7, 684-702. (J. C. Muzio) **57** #11959 94A20
- Táboas, Plácido Z.** (with Onuchic, Nelson; Onuchic, Lourdes R.) Invariance properties in the theory of stability for ordinary differential systems and applications. *Applicable Anal.* **5** (1975), no. 2, 101-107. (T. Yoshizawa) **53** #8575 34D05
(with Onuchic, Nelson) Qualitative properties of nonlinear ordinary differential equations. *Proc. Roy. Soc. Edinburgh Sect. A* **79** (1977/78), no. 1-2, 79-85. (Authors' review) **58** #22846 34D10
- Tabor, David** Homomorphisms of torsion complete abelian p -groups. *Arch. Math. (Basel)* **24** (1973), 6-13. (L. Fuchs) **48** #4148 20K10
- Tabor, Józef** The unique orientability of the groups L_n^+ . (Polish. English and Russian summaries) *Wyż. Szkół. Ped. Krakow. Rocznik Nauk.-Dydakt. Zeszyt 31 Prace Mat. No. 5* (1968), 103-108. (E. Siwek) **46** #6200 53A55
Solution of the translation equation in Brandt and Ehresmann groupoids, and the invariant distributions of these groupoids. (Polish. French summary) *Prace Nauk. Inst. Mat. Fiz. Teoret. Politechn. Wrocław. No. 2 Ser. Studia i Materiały No. 2 Geom. Różniczk.* (1970), 43-46. (Z. Moszner) **50** #5253 39A40 (53A55)
Some remarks on distance in natural sciences. (Polish summary) *Zastos. Mat.* **13** (1972/73), 291-296. (L. M. Kelly) **48** #3521 92A05 (52A50)
The translation equation and algebraic objects. *Ann. Polon. Math.* **27** (1973), 219-229. (R. Miron) **47** #1990 20N05
(with Midura, Stanisław) Sur les itérations avec un paramètre réel des fonctions sous-modules. Collection of articles dedicated to Stanisław Gołąb on his 70th birthday, I. *Demonstratio Math.* **6** (1973), 271-287. (M. Kuczma) **50** #13948 39A15 (26A18)
(with Grzaślewicz, Andrzej) On the equivalence of two definitions of the fulfilment of the translation equation and on the extensions of the solutions of this equation. *Wyż. Szkół. Ped. Krakow. Rocznik Nauk.-Dydakt. Zeszyt 51 Prace Mat. No. 7* (1974), 47-57. (L. Klukovits) **51** #15209 94A20
(with Moszner, Zenon) L'équation de translation sur une structure avec zéro. *Ann. Polon. Math.* **31** (1975/76), no. 3, 255-264. (Pl. Kannappan) **53** #13910 39A40 (08A05)
Solution of Cauchy's functional equation on a restricted domain. *Colloq. Math.* **33** (1975), no. 2, 203-208. (M. Kuczma) **52** #8701 39A20
Characterization of subgroupoids of a given groupoid. *Tensor (N.S.)* **29** (1975), no. 1, 64-68. (D. A. Robinson) **52** #3415 20N99 (20L05)
On the extensions of algebraic objects over a Brandt groupoid. *Tensor (N.S.)* **29** (1975), no. 1, 85-88. (D. A. Robinson) **52** #3416 20N99 (20L05)
Remarks on J. Gancarzewicz's paper: "On commutative algebraic objects over a groupoid" (*Zeszyty Nauk Uniwers. Jagielloń. Prace Mat.* No. 12 (1968), 19-25). *Zeszyty Nauk. Univ. Jagielloń.* **403 Prace Mat. no. 17** (1975), 89-92. (M. Kuczma) **53** #13440 20L99 (53A55)
On the translation equation occurring in the iteration theory. *Demonstratio Math.* **9** (1976), no. 1, 119-127. (F. J. Papp) **54** #5657 39A15
Regular extensions of algebraic objects. *Tensor (N.S.)* **30** (1976), no. 2, 186-190. (H. S. Park) **55** #3142 22A05 (53A55)
(with Midura, Stanisław) The translation equation on a direct product of groups. *Ann. Polon. Math.* **35** (1977/78), no. 3, 223-228. (Franco Migliorini) **58** #913 20F99
Algebraic objects over a small category. *Dissertationes Math. (Rozprawy Mat.)* **155** (1978), 62 pp. (A. Wiweger) **58** #16830 18C15
(with Grzaślewicz, Andrzej; Powązka, Zbigniew) On Cauchy's nucleus. *Publ.*
- Math. Debrecen* **25** (1978), no. 1-2, 47-51. (M. Kuczma) **58** #23229 39A40 (20L99)
- Tabor, M.** (with Berry, M. V.) Closed orbits and the regular bound spectrum. *Proc. Soc. London Ser. A* **349** (1976), no. 1656, 101-123. (Jean-Paul Marchand) **57** #118135
- Tabourier, Yves** Un algorithme pour le problème d'affectation. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle* **6** (1972), No. V-3, 3-11. (Berman) **48** #7937 90B10
All shortest distances in a graph. An improvement to Dantzig's inductive algorithm. *Discrete Math.* **4** (1973), 83-87. (Author's summary) **47** #1672 05C35 (68A10)
- Tatov, I. B.** The existence of resolvent distributions of dimension $n-r-1$ for not completely integrable Pfaffian system of rank r in R^n . (Russian) *Uspehi Mat. Nauk* (1974), no. 4(178), 183-184. (P. Ver Eecke) **53** #1622 58A15 (35A30)
The extension of resolving distributions of Pfaffian systems. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 5(179), 243-244. (L. Reizipš) **53** #9274 58A30 (57D30)
Determination of a function from its derivative with respect to a subspace. (Russian summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 2, 71-76. (Szafriski) **50** #8066 46G05
The linear differential equation with derivative with respect to a subspace. (Russian summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 5, 43-46. (Szafriski) **50** #14218 46G05 (34G05)
The existence of resolving distributions of dimension $n-r-1$ and $n-r-2$ for Pfaffian system of rank r in R^n . (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 6(187-188. (L. Reizipš) **53** #9275 58A30 (57D30)
- Tabuchi, Toshiaki** (with Soeda, Takashi; Yoshimura, Toshio) A suboptimal identification of noise covariances in discrete-time linear systems. *Internat. J. Control* **27** (1978), no. 3, 393-406. (Ivar Gustavsson) **58** #15589 93E10
(with Soeda, Takashi; Yoshimura, Toshio) On the estimation of noise covariance in linear discrete-time systems. *Internat. J. Systems Sci.* **9** (1978), no. 5, 531-540. (Authors' summary) **58** #4571 93E10
- Tabueva, V. A.** (with Barbašin, E. A.; Geraščenko, E. I.; Ėidinov, R. M.) The method of analysing the stability of automatic control systems with a variable structure. *Automat. and remote control III* (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966), Vol. 1, p. 77, Paper 40D, 8pp. *Inst. Mech. Engrs., London*, 1967. (Authors' summary) **51** #9906 93Dxx
(with Barbašin, E. A.) ★ Динамические системы с цилиндрическим фазовым пространством. (Russian) [Dynamical systems with cylindrical phase space] *Izv. Akad. Nauk SSSR Tekhn. Kibernet.* (1969), 299 pp. (E. Leimanis) **49** #3273 34C35
The existence of a sign-variable periodic solution of a differential equation. (Russian) *Sverdlovsk. Gos. Ped. Inst. Naučn. Trudy Sb.* **185 Mat. Vyp.** **6** (1973), 123-127. (G. S. Ladde) **55** #784 34C25
(with Giniatulin, V. A.) A qualitative study of a system with a discontinuous characteristic. (Russian) *Sverdlovsk. Gos. Ped. Inst. Naučn. Trudy No. 219 Algebr. Mat. Anal.* (1974), 170-198. (A. A. Reinfelds) **52** #6094 34C05
See also Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360c
- Tabukašvili, C. V.** (with Čanturija, T. A.) Certain boundary value problems for strongly nonlinear second-order ordinary differential equations. (Russian) *Differentsial'nye Uravneniya* **10** (1974), 943-946, 959. (P. B. Bailey) **49** #9316 34B15
(with Kakabadze, Miranda) Some boundary value problems with integral conditions for second order ordinary differential equations. (Russian. Georgian summary) *Tbilis. Sahelmc. Univ. Gamoqeneb. Math. Inst. Šrom.* **4** (1975), 35-40. (Russell C. Thompson) **53** #11138 34B15
- Tabyšov, R.** The Cauchy problem for a nonlinear singular integrodifferential equation with a small parameter multiplying the derivative. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Fiz.-Mat. Nauk Vyp.* **10** (1974), 106-113. (Editors) **54** #3333 45J05
- Tachibana, Sadao** (with Gotô, Shirô) A complex associated with a symmetric matrix. *Math. Kyoto Univ.* **17** (1977), no. 1, 51-54. (Melvin Hochster) **58** #22043 13C10 (13C10)
- Tachibana, Shun-ichi** On projective Killing tensor. *Natur. Sci. Rep. Ochanomizu Univ.* (1970), 67-80. (K. Yano) **45** #2620 53C20
(with Kuo, Ying Yan) On the distribution appeared in contact 3-structure. *Taiwan. J. Math.* **2** (1970), 17-24. (G. D. Ludden) **46** #8115 53C15
On a characterization of Riemannian spaces admitting minimal subspaces complementary orthogonal. *Natur. Sci. Rep. Ochanomizu Univ.* **22** (1971), 85-89. (D. Datta) **48** #1114 53C40
On a generalization of Schur's theorem in Riemannian and Kählerian spaces. *Differential geometry (in honor of Kentaro Yano), pp. 459-468. Kinokuniya, Tokyo*, 1973. (W. S. Piper) **48** #7139 53B20
On the characteristic function of spaces of constant holomorphic curvature. Collection of articles commemorating Władysław Ślebodziński. *Colloq. Math.* **26** (1973), 149-155. (J. D. Zund) **49** #1451 53C55
On the geodesic projective transformation in Riemannian spaces. *Hokkaido Math. J.* **1** (1972), 87-94. (M. Ulanovskii (RŽMat 1973 #5 A709)) **51** #13923 53C20
On an application of the stereographic projection to CP^m . *Kyungpook Math. J.* (1972), 183-197. (C. S. Houh) **49** #6075 53B35
On examples of Riemannian spaces harmonic relative to Killing vectors. *Natur. Sci. Rep. Ochanomizu Univ.* **23** (1972), 1-7. (C. B. Allendoerfer) **46** #9903 53C20
On Riemannian spaces admitting geodesic conformal transformations. Commemoration volumes for Prof. Dr. Akisugu Kawaguchi's seventieth birthday, II. *Tensor (N.S.)* **25** (1972), 323-331. (T. J. Willmore) **49** #1370 53B20
The mean curvature for p -plane. *J. Differential Geometry* **8** (1973), 47-52. (Katsurada) **50** #11085 53C20
(with Kashiwada, Toyoko) On a characterization of spaces of constant holomorphic curvature in terms of geodesic hypersphere. *Kyungpook Math. J.* **13** (1973), 109-115. (D. Zund) **47** #9468 53B35
On harmonic simple forms. *Tensor (N.S.)* **27** (1973), 123-130. (Yung-Chow Wu) **50** #8374 53C20 (58A10)
On the mean curvature for holomorphic $2p$ -plane in Kählerian spaces. Collection of articles dedicated to Shigeo Sasaki on his sixtieth birthday. *Tôhoku Math. J.* (2) (1973), 157-165. (Koichi Ogue) **48** #1084 53B35

- On Kählerian manifolds of σ -positive curvature operator. *Natur. Sci. Rep. Ochanomizu Univ.* **25** (1974), no. 1, 7-16. (Samuel I. Goldberg) **55** #4071 53C55
- A theorem of Riemannian manifolds of positive curvature operator. *Proc. Japan Acad.* **50** (1974), 301-302. (J. R. Vanstone) **51** #1667 53C20
- (with Sekizawa, Masami) On the k -th relative nullity space of a Riemannian manifold in E^N . *Tamkang J. Math.* **5** (1974), no. 1, 133-138. (K. Yano) **51** #6633 53B25
- (with Sekizawa, Masami) On the k -th nullity space of the Riemannian curvature tensor. *Tōhoku Math. J. (2)* **27** (1975), 25-30. (Shūkichi Tanno) **51** #1668 53C20 (58A30)
- (with Yano, Kentaro) Sur les déformations complexes isométriques des hypersurfaces complexes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 17, A1003-A1005. (Authors' summary) **57** #1381 53C55
- On the isometric deformation vector of the hypersurface in Riemannian manifolds. *Natur. Sci. Rep. Ochanomizu Univ.* **27** (1976), no. 1, 1-9. (Y. Katsurada) **54** #6041 53C40
- On Killing tensors in Riemannian manifolds of positive curvature operator. *Tōhoku Math. J. (2)* **28** (1976), no. 2, 177-184. (S. Takizawa) **53** #14351 53C20
- hikawa, Hiroyuki Localization and Artinian quotient rings. *Math. Z.* **119** (1971), 239-253. (John J. Hutchinson) **46** #7284 16A08
- ★Lectures on QF-3 and QF-1 rings. Notes by Claus Michael Ringel. Carleton Mathematical Lecture Notes, No. 1. *Department of Mathematics, Carleton University, Ottawa, Ont.*, 1972. v + 117 + iii pp. (E. A. Rutter) **52** #484 16A36
- ★Quasi-Frobenius rings and generalizations. QF-3 and QF-1 rings. Notes by Claus Michael Ringel. Lecture Notes in Mathematics, Vol. 351. *Springer-Verlag, Berlin-New York*, 1973. xi + 172 pp. (K. R. Fuller) **50** #2233 16A36
- (with Iwanaga, Yasuo) Morita's F_3 -condition and double centralizers. I. *J. Algebra* **26** (1973), 167-171. (L. A. Koifman) **49** #362 16A64
- Balancedness and left serial algebras of finite type. *Proceedings of the International Conference on Representations of Algebras (Carleton Univ., Ottawa, Ont., 1974), Paper No. 26, 28 pp.* Carleton Math. Lecture Notes, No. 9, Carleton Univ., Ottawa, Ont., 1974. (E. A. Rutter) **52** #490 16A46
- QF-3 rings and categories of projective modules. *J. Algebra* **28** (1974), 408-413. (B. Stenström) **55** #5682 16A36
- (with Iwanaga, Yasuo) Morita's F_3 -condition and double centralizers. II. *J. Algebra* **31** (1974), 73-90. (L. A. Koifman) **50** #4658 16A48
- (with Ringel, Claus Michael) QF-3 rings. *J. Reine Angew. Math.* **272** (1974), 49-72. (E. A. Rutter) **52** #483 16A36
- Balanced modules and constructible submodules. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 347-365, 37-45 (1975). (C. M. Ringel) **53** #543 16A64
- Commutative perfect QF-1 rings. *Proc. Amer. Math. Soc.* **68** (1978), no. 3, 261-264. (C. M. Ringel) **57** #12588 16A36
- See also **Representations of algebras**, **52** #3207 and **Proceedings: Symposium on Ring Theory**, **57** #6067
- ti, R. M. On the construction of characteristic series for multiparameter systems in continuum mechanics. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 9, 819-821. (S. Drobot) **54** #7927 34A25
- cker, Edgar C. (with Linton, Thomas D.; Sanders, Charles W., Jr.) Open-loop optimal control of a class of continuous-time stochastic systems—a simulation study. *Internat. J. Control* **19** (1974), 1165-1175. (Bojan Popović) **50** #9406 93E25
- (with Sanders, Charles W., Jr.; Linton, Thomas D.) Stability and performance of a class of decentralized filters. *Internat. J. Control* **23** (1976), no. 2, 197-206. (Tsuneo Yoshikawa) **54** #9805 93E10
- (with Sanders, Charles W., Jr.; Linton, Thomas D.; Ling, Robert Y. S.) Specific structures for large-scale state estimation algorithms having information exchange. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 2, 255-261. (Authors' summary) **58** #15351 93A15
- on, D. G. Weak compactness in normed linear spaces. *J. Austral. Math. Soc.* **14** (1972), 9-16. (Sandy Grabiner) **47** #3954 46B05 (02H25)
- Weak compactness in locally convex spaces. *Trans. Amer. Math. Soc.* **180** (1973), 463-474. (R. W. Cross) **48** #829 46A25
- onis-Haantjes, Elselen (with de Haan, Laurens) Asymptotic properties of a correlation coefficient type statistic connected with the general linear model. *J. Econometrics* **7** (1978), no. 1, 15-21. (H. Toutenburg) **57** #17917 62E20
- csar, M. I. Optimal planning over infinite time interval under random factors. *Mathematical models in economics (Proc. Sympos. and Conf. on von Neumann Models, Warsaw, 1972)*, pp. 289-298. North-Holland, Amsterdam, 1974. (E. B. Dynkin) **53** #4933 90A15
- da, F. (with Akizuki, Kageo) The analysis of relay control systems with coloured noise inputs. *Internat. J. Control* **25** (1977), no. 6, 949-963. (Jifi Šustal) **56** #18082 93E99
- ddei, F. (with Andreuzzi, F.) Minimizzazione di funzioni convesse con vincoli lineari di uguaglianza. (English summary) *Calcolo* **13** (1976), no. 3, 313-320. (Authors' summary) **58** #19126 65K05 (90C99)
- ddei, Franco Il problems del moto per un continuo incoerente in relatività generale. (English summary) *Boll. Un. Mat. Ital. (4)* **12** (1975), no. 3, 295-305. (A. Crumeyrolle) **53** #15253 83J35
- deusiewicz, Michał Analysis of a certain class of nonlinear resistance circuits in the space m_n . (Polish. English, French, German and Russian summaries) *Rozprawy Elektrotech.* **19** (1973), 215-230. (T. Kaczorek) **50** #6662 94A20
- Computation of electrical networks that contain nonlinear resistors. (Polish. English, German and Russian summaries) *Rozprawy Elektrotech.* **20** (1974), 255-266. (T. Kaczorek) **50** #12474 94A20
- Calculation of resistance networks which contain diodes. (Polish. English, French, German and Russian summaries) *Rozprawy Elektrotech.* **21** (1975), no. 4, 807-819. (Author's summary) **56** #8220 94A20 (65H99)
- dikamalla, Pandu R. Computer generation of gamma random variables. *Comm. ACM* **21** (1978), no. 5, 419-422. (George Marsaglia) **58** #13614 65C10
- ndini, Wilson Mauricio (with da Silva, Eurípedes Alves) Jacobian extensions of ideals. (Portuguese. English summary) *Naturalia* **1** (1975), 99-130. (K. R. Mount) **58** #31183a 58C25
- (with Loibel, Gilberto Francisco) Finitely determined germs and the Boardman symbol. (Portuguese. English summary) *An. Acad. Brasil. Ci.* **49** (1977), no. 4, 499-506. (W. Güttinger) **57** #17698 58C25
- (with da Silva, Eurípedes Alves) Algebra of truncated formal series. (Portuguese. English summary) *Naturalia* **3** (1977), 113-120. (K. R. Mount) **58** #31183b 58C25
- Tadjbakhsh, I. (with Odeh, F.) The shape of the strongest column with a follower load. Collection of articles dedicated to William Prager. *J. Optimization Theory Appl.* **15** (1975), 103-118. (G. Rieder) **51** #7442 73A9
- Tadmor, Eitan (with Goldberg, Moshe; Zwas, Gideon) Numerical radius of positive matrices. *Linear Algebra and Appl.* **12** (1975), no. 3, 209-214. (George P. Barker) **52** #3201 15A60 (47A10)
- (with Goldberg, Moshe; Zwas, Gideon) The numerical radius and spectral matrices. *Linear and Multilinear Algebra* **2** (1975), 317-326. (George P. Barker) **51** #566 15A60
- Tadumadze, T. A. The problem of Lagrange with variable lags. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **71** (1973), 529-532. (I. Muntean) **49** #1285 49B35
- Maximum principle for certain controllable systems of neutral type. (Russian. Georgian and English summaries) *Gamoqeneb. Math. Inst. Sem. Mohsen. Anotacie. No. 9* (1974), 9-13. (F. M. Kirillova) **52** #9035 49B10 (93C15)
- (with Haratišvili, G. L.) Quasiconvex filters in optimal systems with lags. (Russian. Georgian summary) *Tbilis. Sahelmec. Univ. Gamoqeneb. Math. Inst. Šrom.* **4** (1975), 85-100. (From the introduction) **58** #15403 93B30
- A sufficient condition of quasiconvexity for a class of control systems with lags. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **85** (1977), no. 2, 277-279. (Author's summary) **56** #9398 49B35
- (with Haratišvili, G. L.) Questions of quasiconvexity and existence in optimal systems with delays. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **86** (1977), no. 3, 569-572. (Authors' summary) **56** #13025 49A30
- The existence of a solution in optimal problems with deviating argument. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **89** (1978), no. 2, 313-316. (Editors) **58** #23878 49A30
- Tadziabev, A. (with Latypov, K. Š.) Reduction of the solution of jet problems to a singular integral equation (SIE). (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 10, 17-20. (Ll. G. Chambers) **57** #8426 76J45
- (with Latypov, K. Š.) A singular integral equation. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 12, 11-13. (T. A. Ėbanoidze) **58** #17721 45E05
- Tadziabeva, K. (with Begnaev, H.) Certain properties of systems of integro-differential equations in standard form. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 1, 14-15. (A. Corduneanu) **49** #5751 45J05
- Tadziev, A. (with Koroljuk, V. S.) An asymptotic expansion for the distribution of the absorption time of a semi-Markov process. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 12, 1065-1068, 1149. (K. Dietz) **57** #10845 60K15
- Asymptotic expansion for the distribution of the absorption time of a semi-Markov process. (Russian) *Ukrain. Mat. Ž.* **30** (1978), no. 3, 422-426, 431. (K. Dietz) **58** #13393 60K15
- Tadziev, Š. I. A study of the characteristics of a certain system in four-dimensional space. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1975**, no. 5, 7-9. (D. Izjumova) **52** #6102 34C15
- Taeschner, M. Strukturanalyse und algebraische Synthese linearer Einfachregelungen. (English summary) *Regelungstech. Prozeß-Datenverarbeitung* **18** (1970), no. 5, 211-215. (T. Kaczorek) **52** #10004 90B25
- Taeuber, Irene Barnes See Coale, Ansley J., **49** #7079
- Tafel, Jacek Cosmological models with a spinor field. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 6, 593-596. (W. B. Bonnor) **57** #2447 83J53
- Tafel, R. E. (with Beckenbach, Edwin F.; Eng, F. H.) Global properties of rational and logarithmico-rational minimal surfaces. *Pacific J. Math.* **50** (1974), 355-381. (R. Osserman) **50** #8317 53A10 (30A70, 32H25, 49F10)
- Taffara, L. (with Anni, R.; Renna, L.) Debye expansion and JWKB approximation for the elastic scattering of heavy charged particles. (Italian and Russian summaries) *Nuovo Cimento A* **39** (1977), no. 3, 403-424. (Authors' summary) **58** #25512a (E **58** #25512b) 81J34
- (with Anni, R.; Renna, L.) Errata: "Debye expansion and JWKB approximation for the elastic scattering of heavy charged particles". *Nuovo Cimento A* (11) **41** (1977), no. 3, 594-596. (Authors' summary) **58** #25512b 81J34
- Taft, Earl J. Reflexivity of algebras and coalgebras. *Amer. J. Math.* **94** (1972), 1111-1130. (Bodo Pareigis) **46** #9095 16A24
- Antipodes of finite-dimensional Hopf algebras. *Proceedings of the International Conference on Representations of Algebras (Carleton Univ., Ottawa, Ont., 1974), Paper No. 27, 7 pp.* Carleton Math. Lecture Notes, No. 9, Carleton Univ., Ottawa, Ont., 1974. (Kenneth Newman) **51** #12916 16A24
- (with Wilson, Robert Lee) On antipodes in pointed Hopf algebras. *J. Algebra* **29** (1974), 27-32. (Kenneth Newman) **49** #2820 16A24
- (with Radford, David E.; Wilson, Robert Lee) Forms of certain Hopf algebras. *Manuscripta Math.* **17** (1975), no. 4, 333-338. (Kenneth Newman) **53** #513 16A24
- (with Wilson, Robert Lee) Hopf algebras with nonsemisimple antipode. *Proc. Amer. Math. Soc.* **49** (1975), 269-276. (Kenneth Newman) **51** #12917 16A24
- Reflexivity of algebras and coalgebras. II. *Comm. Algebra* **5** (1977), no. 14, 1549-1560. (Bodo Pareigis) **58** #781 16A48 (16A78)
- Representable monoids. *Proc. Amer. Math. Soc.* **70** (1978), no. 1, 1-4. (I. S. Ponizovskii) **58** #6021 20M25 (20M30)
- See also **Séminaire: Algèbre Non Commutative**, **48** #5782
- Taft, V. A. (with Heifec, S. B.) Application of a generalization of Hill's method to the investigation of stability of linear systems with variable parameters. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 5, 163-170 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 5, 854-861. (Guy Jumarie) **50** #6600 93D99
- (with Heifec, S. B.) The application of the generalized Hill method to the investigation of systems with distributed and periodic parameters. (Russian) *Moskov.*

- Inst. Inž. Železnodorož. Transporta Trudy* No. 433 *Mat. Metody i Primenen. v Zadačah Transporta* (1973), 104-110, 155. (Russell C. Thompson) **50** #6188 65P05
- Taga, Yasushi** (with Noda, Kazuo) Minimax estimation method for the optimum decomposition of a sample space based on prior information. *Ann. Inst. Statist. Math.* **23** (1971), 1-29. (R. H. Farrell) **45** #9412 (EA 46) 62C25
- On the convergence of optimum stratifications for empiric distribution function in univariate case. *Ann. Inst. Statist. Math.* **23** (1971), 355-363. (J. V. Deshpande) **47** #7845 62D05
- (with Wakimoto, Kazumasa; Yanagawa, Takashi) Generalized U statistics for stratified random samples. *Skand. Aktuarietidskr.* **1973**, 30-51. (A. Hedayat) **50** #6011 62D05
- (with Isii, K.) Bound on the classification error for discriminating between multivariate populations with specified means and covariance matrices. *Ann. Statist.* **6** (1978), no. 1, 132-141. (Minoru Siotani) **57** #7875 62H30
- Tagami, Yukiko** A perm-selective model membrane exhibiting oscillatory behavior. *J. Theoret. Biol.* **73** (1978), no. 4, 739-754. (J. P. Kernevez) **58** #15291 92A05
- Tagamicki, Jaroslav** (with Mastrangelo-Dehen, Michèle) L'induction topologique. Rédaction et démonstrations par Michèle Dehen. *Séminaire Choquet, 10e année* (1970/71), *Initiation à l'analyse, Fasc. 1, Exp. No. 1, 7 pp.* Secrétariat Mathématique, Paris, 1971. (Zbl **232** #46002) **57** #17219 46A99 (46N05)
- A boundary value problem in linear spaces. *C. R. Acad. Bulgare Sci.* **29** (1976), no. 3, 307-309. (S. Kutateladze) **53** #8853 46A40 (52A05)
- See also Doicinov, Doicin, **58** #82
- Taganov, I. N.** See **Quantitative sociology**, **56** #2480
- Tagare, S. G.** (with Prasad, Phoolan) Approximation of a system of first order quasi-linear partial differential equations in the neighbourhood of a multiple characteristic. *Indian J. Pure Appl. Math.* **5** (1974), no. 9, 845-853. (David F. Griffiths) **54** #14567 76.65
- Tagawa, Ryoazaburo** New design of linear control systems based on the principle of state and output feed-back. *Sensitivity, adaptivity and optimality (Proc. Third IFAC Sympos., Ischia, 1973)*, pp. 207-218. Instrument Soc. Amer., Pittsburgh, Pa., 1973. (Editors) **56** #14933 93C05
- Tagawa, Shōjiro** On a class of nonlinear programming in a Banach space. *Bull. Math. Statist.* **16** (1974/75), no. 1-2, 95-114. (Norman P. Coleman, Jr.) **51** #2651 90C30
- Generalized convexities of continuous functions and their applications to mathematical programming. *Bull. Math. Statist.* **16** (1974/75), no. 1-2, 115-125. (A. Göpfert) **51** #7624 90C25
- Sufficient conditions for switching functions to be threshold ones and their applications. *Bull. Math. Statist.* **16** (1975), no. 3-4, 115-126. (Dorothy Bollman) **52** #7735 94A20
- On a convergence of minimizing sequences for uniformly convex functions. *Bull. Math. Statist.* **17** (1976), no. 1-2, 1-16. (A. D. Ioffe) **55** #8924 49A25
- On a class of nonlinear programming with equality constraints in Banach spaces. *Bull. Math. Statist.* **17** (1976), no. 1-2, 17-31. (A. D. Ioffe) **55** #10012 90C30 (49B30)
- Nonlinear programming in Banach spaces with applications to optimal control problems. *Bull. Math. Statist.* **17** (1976), no. 1-2, 49-61. (A. D. Ioffe) **55** #10013 90C30 (49B15)
- Taggart, D. A.** (with Schott, F. W.) Ferrite-filled cavity resonators. *Appl. Sci. Res.* **25** (1971/72), 35-53. (A. Ishimaru) **47** #2924 78.49
- Tagiev, A. G.** On the question of determining the optimal number of reserve parts. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1971**, no. 1, 62-65. (A. Prékopa) **47** #2990 90B05
- Tagiev, F. A.** A certain method for solving the first boundary value problem for an equation of parabolic type by the method of finite differences. (Russian) *Problems of computational mathematics (Russian)*, pp. 70-75. Izdat. "Ėlm", Baku, 1970. (T. Styš) **47** #4465 65N10
- (with Mamatkulov, A.) The solution of a certain boundary value problem for a mixed type equation by the finite difference method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **10** (1970), 1191-1198. (R. N. Goss) **45** #3951 35M05 (65N05)
- (with Guseinov, A. M.) A certain finite-difference method for the solution of the Lavrent'ev-Bicadze problem. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* **1972**, no. 3, 136-142. (N. N. Janenko) **50** #11803 65N10
- (with Mamatkulov, A.) Solution of the Dirichlet problem by the finite difference method for an elliptic equation in a domain whose boundary contains a piece of the line of parabolic degeneracy. (Russian) *Questions on differential equations, number theory, algebra and geometry. Trudy Samarkand. Gos. Univ. (N.S.) No. 202* (1972), 182-191. (See RŽMat **1972** #8 B860; MR **52** #7763) 65N05
- (with Novruzov, A. A.) Solution of the Lavrent'ev-Bicadze problem by the method of finite differences in a domain with two lines of degeneracy. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Voprosy Prikl. Mat. i Kibernet.* **1973**, 163-177. (From the authors' summary) **57** #14492 65N05
- Solution of the Lavrent'ev-Bicadze problem in a multidimensional domain by the finite difference method. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. 1974*, no. 1 *Voprosy Prikl. Mat. i Kibernet.*, 139-153. (Editors) **57** #11101 65N20
- (with Babaev, T. A.) Numerical solution of the Tricomi problem for mixed type equations by the finite difference method. (Russian) *Questions of mathematical cybernetics and applied mathematics, No. 1 (Russian)*, pp. 125-148. Izdat. "Ėlm", Baku, 1975. (Megumi Saigo) **55** #6029 35M05 (65N10)
- (with Popov, A. S.) Solution of the Lavrent'ev-Bicadze problem with a break of the first kind on a line of degeneracy by the finite difference method. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1976**, no. 3, 12-19. (RŽMat **1977** #7 B1109) **58** #8344 65N20
- Tagiev, I. G.** An approximate method for solving boundary-value problems for shallow shells of variable thickness and curvature. *Inž. Ž. Meh. Toerd. Tela* **1967**, no. 3, 16-118 (Russian); translated as *Mechanics of Solids* **2** (1967), no. 3, 75-76 (1971). **46** #4843 73.35 (73.65)
- Tagieva, M. A.** (with Ismailov, A. Ja.) Interpolation by pseudopolynomials in the complex domain. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1971**, no. 1, 66-73. (Boris Pavlov) **45** #5374 30A80
- Approximation by pseudopolynomials in the complex domain. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1971**, no. 3, 24-30. (V. M. Kokilašvili) **52** #11073 30A93 (41A30)
- (with Ismailov, A. Ja.) Uniqueness theorems for entire generalized analytic functions. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1976**, 3, 27-32. (I. N. Baker) **56** #8865 30A92
- (with Ismailov, A. Ja.) The problem of "two points" in a class of entire generalized analytic functions. (Russian) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1976**, no. 4, 27-30. **57** #16623 30A92
- Tagirov, M. A.** Estimation of domains of stability "in the large" as a nonlinear programming problem. (Russian) *Problems in analytical mechanics, stability and control theories (Second četaev Conf., Kazan, 1973) (Russian)*, pp. 300-303, 342. Izdat. "Nauka", Moscow, 1975. (Szymon Dolecki) **57** #3536 34D20
- Tagirov, T. S.** See **Orthogonal polynomial expansion**, **58** #29733
- Tagi-zade, A. G.** (with Čerepanov, G. P.; Smol'skii, V. M.) Optimal design of certain engineering materials. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* **29** (1976), no. 3, 51-62, 79. (From the authors' summary) **56** #17362 73.49
- Tagi-Zade, A. K.** From the history of the invention of the astrolabe. (Russian. English summary) *Voprosy Istor. Estestvoznani. i Tehn.* **1974**, no. 4(49), 42-45, 101. (Editor) **58** #9997 01A20 (01A30, 01A35)
- (with Rozenfel'd, B. A.) Newton's formula in eleventh century writings. (Russian) *Mat. v Škole* **1975**, no. 4, 86-87. (Editors) **57** #15847 01A30
- Āryabhata—the "Copernicus of the East" (on the occasion of the 1500th anniversary of his birth). (Russian) *Mat. v Škole* **1975**, no. 4, 87. (Editors) **58** #3901A25
- Quadrants in the medieval East. (Russian) *Istor.-Astronom. Issled. Vyp.* **13** (1971), 183-200. (E. S. Kennedy) **58** #21056 01A30
- Tagliabue, Giorgio** See **Conference: Optimization Techniques**, **48** #5758
- Tagliabue, Guido** See **Morpurgo-Tagliabue, Guido**
- Tagliasco, Vincenzo** (with Morasso, Pietro; Sandini, Giulio; Zaccaria, Renato) Control strategies in the eye-head coordination system. *IEEE Trans. Systems Man Cybernet.* **SMC-7** (1977), no. 9, 639-651. (Stephen W. Brady) **57** #9115 92A05
- Tagliavini, Carlo** See **Marcus, Solomon; et al.**, **54** #9174
- Taguchi, Azuma** Maximum-flow problem in discrete continuous compound system and numerical approach. (Japanese summary) *J. Oper. Res. Soc. Japan* **21** (1978), no. 245-273. (Rainer Burkard) **58** #4264 90B10
- Taguchi, Tokio** On some local properties of two dimensional concentration surface. (Japanese. English summary) *Proc. Inst. Statist. Math.* **19** (1971/72), no. 1, 29-34. (From the author's summary) **56** #9819 62H20
- On the two-dimensional concentration surface and extensions of concentration coefficient and Pareto distribution to the two dimensional case (on an application of differential geometric methods to statistical analysis). I. *Ann. Inst. Statist. Math.* **19** (1972), 355-381. (C. Hayashi) **49** #10116 62P20
- On the two-dimensional concentration surface and extensions of concentration coefficient and Pareto distribution to the two dimensional case (on an application of differential geometric methods to statistical analysis). II. *Ann. Inst. Statist. Math.* **19** (1972), 599-619. (C. Hayashi) **49** #10117 62P20
- Concentration polyhedron, two dimensional concentration coefficient for discrete type distribution and some new correlation coefficients, etc. On an analytical method of business concentration. (Japanese. English summary) *Proc. Inst. Statist. Math.* **19** (1972), 77-115. (C. Hayashi) **49** #10119 62P20
- On the two-dimensional concentration surface and extensions of concentration coefficient and Pareto distribution to the two dimensional case (on an application of differential geometric methods to statistical analysis). III. *Ann. Inst. Statist. Math.* **19** (1973), 215-237. (C. Hayashi) **49** #10118 62P20
- On some optimum multiple stratified two-stage sampling design with simple c function. (Japanese. English summary) *Proc. Inst. Statist. Math.* **21** (1973), 1-21. (C. Hayashi) **52** #9436 62D05
- On Fechner's thesis and statistics with norm p . *Ann. Inst. Statist. Math.* **26** (1978), 175-193. (I. J. Good) **52** #2054 62J05
- On the size and share distributions in economic statistics. (Japanese. English summary) *Proc. Inst. Statist. Math.* **22** (1974/75), no. 1, 1-43. (Author's summary) **58** #31692 62P20
- Taguchi, Yukio** (with Yamamoto, Kunio) Lorentz invariance and normal product. *Progr. Theoret. Phys.* **44** (1970), 1280-1286. (J. Rosen) **46** #1255 81.47
- (with Yamamoto, Kunio) Lorentz invariance and normal product in an interaction system. *Progr. Theoret. Phys.* **44** (1970), 1287-1290. (J. Rosen) **46** #1256 81.47
- (with Shigemoto, Kazuyasu; Tanaka, Azuma; Yamamoto, Kunio) Inevitable surface dependence of some operator products and integrability. *Progr. Theoret. Phys.* **55** (1976), no. 1, 287-296. (Authors' summary) **54** #9462 81.47
- (with Tanaka, Azuma; Yamamoto, Kunio) A finite formulation of renormalization field theory based on improved operator products. *Nuclear Phys. B* **132** (1978), no. 3, 333-356. (Authors' summary) **57** #18618 81.47
- (with Tanaka, Azuma; Yamamoto, Kunio) A finite formulation of quantum electrodynamics based on improved operator products. *Nuclear Phys. B* **135** (1978), no. 3, 503-528. (Authors' summary) **58** #14695 81.47
- Taguri, Masaaki** Some modified Monte Carlo method to solve non-linear optimization problems. *J. Japan Statist. Soc.* **5** (1974/75), no. 2, 65-76. (J. Spanier) **58** #8142 65C05 (65K05)
- Taha, Hamdy A.** ★Operations research. An introduction. *The Macmillan Co., New York Collier-Macmillan Ltd., London*, 1971. xvi + 703 pp. (F. G. Foster) **49** #8610 90B10
- A Balasian-based algorithm for zero-one polynomial programming. *Management Sci.* **18** (1971/72), B328-B343. (E. Balas) **48** #7972 90C10
- (with Curry, Guy L.) Classical derivation of the necessary and sufficient conditions for optimal linear programs. *Operations Res.* **19** (1971), 1045-1050. (A. G. Azpeitia) **45** #8260 90C05
- Further improvements in the polynomial zero-one algorithm. *Management Sci.* **19** (1972/73), 226-227. (S. P. Aggarwal) **52** #5010 90C10

- Concave minimization over a convex polyhedron. *Naval Res. Logist. Quart.* **20** (1973), 533-548. (Gerard G. L. Meyer) **49** #1780 65K05
- ★ Integer programming. Theory, applications and computations. Operations Research and Industrial Engineering. *Academic Press* [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1975. xii+380 pp. (Robert G. Jeroslow) **54** #4647 90C10
- An algorithm for zero-one fractional programming. *AIIE Trans.* **7** (1975), 29-34. (S. P. Aggarwal) **51** #9830 90C30
- A note on the relationship between some specialized binary algorithms and the algorithm of Land and Doig. *Naval Res. Logist. Quart.* **22** (1975), no. 3, 609-613. (M. Rössler) **53** #10293 90C10
- See also Raïke, William M.; et al., **51** #2637; Emmons, Hamilton, **53** #6782 and Nuttle, Henry L. W.; et al., **55** #14182
- a, M. O. (with Abdel-Rahman, A.-M. M.; Ahmed, Mubarak) Causality, current algebra, and fixed poles. *Phys. Rev. D* (3) **9** (1974), 2349-2355. (Authors' summary) **53** #12309 81A6
- a, Mohamed A. H. On the empirical distribution function. *Publ. Inst. Statist. Univ. Paris* **19** (1970), no. 4, 77-90. (From the author's introduction) **56** #9808 62G10
- Polynomial approximation for the LMPRT. (French summary) Proceedings of the 39th Session of the International Statistical Institute (Vienna, 1973), Vol. 2. *Bull. Inst. Internat. Statist.* **45** (1973), no. 2, 485-497. (I. R. Savage) **51** #7138 62G10
- (with el Nadi, K. E.) On a solution of the Chapman-Kolmogorov equation. *Proceedings of the Prague Symposium on Asymptotic Statistics* (Charles Univ., Prague, 1973), Vol. II, pp. 401-411. *Charles Univ., Prague*, 1974. (G. Niculescu) **52** #15696 60J35
- aha, S. A. See Al-Taha, S. A.
- ara, Akihiko (with Nishida, Toshio) Optimal replacement policies for a system with incomplete recoveries by repairs. *Tech. Rep. Osaka Univ.* **21** (1971), 13-25. (B. Raja Rao) **49** #8256 62N05
- (with Nishida, Toshio; Hanai, Hiromi) Optimal design for heterogeneous two-server queue. *Tech. Rep. Osaka Univ.* **22** (1972), 295-301. (P. R. Milch) **50** #14989 60K25
- (with Nishida, Toshio) Optimal replacement policies for a repairable system with Markovian transition of states. *J. Operations Res. Soc. Japan* **16** (1973), 78-103. (F. Giannessi) **48** #10468 90B25
- (with Nishida, Toshio; Watanabe, Ryoji) Poisson queue with correlated two servers. *Tech. Rep. Osaka Univ.* **24** (1974), 403-409. (Jos H. A. de Smit) **51** #14313 60K25
- (with Nishida, Toshio; Doi, Yoshiaki) Optimal allocation of service rates for two-stage tandem queue. *Tech. Rep. Osaka Univ.* **24** (1974), 411-416. (Jos H. A. de Smit) **51** #14314 60K25
- (with Nishida, Toshio) Optimal allocation of service rates for multi-server Markovian queue. *J. Operations Res. Soc. Japan* **18** (1975), no. 1-2, 90-96. (C. W. Anderson) **52** #9412 60K25
- (with Nishida, Toshio) Optimal replacement policy for minimal repair model. *J. Operations Res. Soc. Japan* **18** (1975), no. 3-4, 113-124. (Wolfgang Domschke) **53** #7423 90B25
- (with Takeda, Eiji; Nakajima, Nobuyuki) Fuzzy information in product spaces. *Tech. Rep. Osaka Univ.* **25** (1975), no. 1230-1253, 1-8. (M. Terrenoire) **52** #10239 94A15
- (with Takeda, Eiji; Nakajima, Nobuyuki) Information content of a fuzzy message. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **23** (1976), no. 4, 16-20. (K. S. Fu) **56** #8184 94A15
- ara, Hidetoshi Hyperbolic equations of Fuchsian type. (Japanese) Distributions and linear differential equations (Proc. Fourth Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No.* 248 (1975), 19-59. (Chung Lie Wang) **57** #10260 35L99
- The structure of local solutions of partial differential equations of the Fuchsian type. Proceedings of the Oji Seminar on Algebraic Analysis and the RIMS Symposium on Algebraic Analysis (Kyoto Univ., Kyoto, 1976). *Publ. Res. Inst. Math. Sci.* **12** (1976/77), supplement, 465-468. (P. Schapira) **56** #6065 35A20 (32C40)
- The structure of the hyperfunction solutions of a Fuchsian equation of hyperbolic type. (Japanese) Various problems in algebraic analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No.* 266 (1976), 142-175. (Sadakazu Aizawa) **58** #1676 35L25
- Cauchy problems for Fuchsian hyperbolic partial differential equations. *Proc. Japan Acad. Ser. A Math. Sci.* **54** (1978), no. 4, 92-96. (J. Unterberger) **58** #11824 35A05
- ara, Ken Ichi On the second cohomology groups of semidirect products. *Math. Z.* **129** (1972), 365-379. (L. Ribes) **47** #1971 20J05
- The fourth dimension subgroups and polynomial maps. *J. Algebra* **45** (1977), no. 1, 102-131. (I. B. S. Passi) **55** #5746 20E20
- On the structure of $Q_3(G)$ and the fourth dimension subgroups. *Japan. J. Math.* (N.S.) **3** (1977), no. 2, 381-394. (I. B. S. Passi) **58** #28157 20C05
- The fourth dimension subgroups and polynomial maps. II. *Nagoya Math. J.* **69** (1978), 1-7. (I. B. S. Passi) **58** #901 20E20
- ara, Michio (with Tanaka, Sueo) Functional completeness and polychecks in 3-valued logic. *Systems-Computers-Controls* **1** (1970), no. 1, 64-73. (A. Rose) **48** #63 02C05
- ari, H. (with Young, D. H.) A comparison of sequential sampling procedures for selecting the better of two binomial populations. *Biometrika* **61** (1974), 585-592. (R. A. Wijsman) **51** #7189 62L10 (62F07)
- (with Young, D. H.) An inverse sampling procedure for selecting a subset containing the best binomial population. *Sankhyā Ser. B* **39** (1977), no. 2, 130-144. (Authors' summary) **58** #24681 62F07
- hian, C. (with Rahman, Matiur) Stability of turbulent shear flow in a pipe. *Tensor* (N.S.) **31** (1977), no. 1, 64-70. (G. Wilks) **57** #11314 76J35
- him, Gurcharan S. (with Gillespie, John V.; Zinnes, Dina A.) Embedded game analysis of a problem in international relations. *IEEE Trans. Systems Man Cybernet.* **8** (1978), no. 8, 612-621. (Marwan Simaan) **58** #15270 90D45 (90D25)
- hir-Kheli, R. A. Heisenberg ferromagnet in the Green's function approximation. *Phase transitions and critical phenomena*, Vol. 5b, pp. 259-341. *Academic Press*, London, 1976. (A. K. Rajagopal) **58** #19886 80.60
- Tahirov, A. (with Azlarov, T. A.) Probability distributions of the states and busy period of the system $GI/M/1/N$. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 3-13, 209. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (Z. Khalil) **52** #1918 60K25
- (with Azlarov, T. A.) The limiting distributions for a single-channel system with limited number of waiting places. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 5, 53-57 (Russian); translated as *Engrg. Cybernetics* **12** (1974), no. 5, 47-51. (Douglas P. Kennedy) **53** #14711 60K25
- Limit theorems for the busy period in a $GI/M/1/N$ system. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 6, 3-4. (B. Dimitrov) **58** #24614 60K25
- Tahir Shah, K. (with Rafique, M.) Invariant operators of inhomogeneous unitary group. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **21** (1974), 341-345. (J. Rosen) **51** #8343 22E70
- Tahraoui, Rabah (with Aubert, Gilles) Théorèmes d'existence en calcul des variations. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 5, A355-A356. (Authors' summary) **56** #1162 49A05
- Täht, M. (with Baron, S. A.) Summability factors of double series for $A^{a,\beta}$ methods. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* 305 (1972), 185-198. (H.-H. Körle) **52** #3780 40D15
- Täht, T. Multipliers of summability bases, and summability factors. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* 355 (1975), 157-164. (A. Alexiewicz) **55** #1032 46A40 (46B15, 40H05)
- Multipliers and complementary spaces of BK -spaces. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* 374 (1975), 141-154. (A. Alexiewicz) **55** #1033 46A40 (40H05)
- Multipliers of BK -spaces. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **430** (1977), 29-43. (S. Kutateladze) **57** #17070 40B05 (46A45)
- Tahtadžjan, L. A. Hamiltonian systems connected with the Dirac equation. (Russian) Differential geometry, Lie groups and mechanics. *Zap. Nauch. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **37** (1973), 66-76. (Yu. S. Sayasov) **49** #902 35Q99 (81.35)
- (with Zaharov, V. E.; Faddeev, L. D.) A complete description of the solutions of the "sine-Gordon" equation. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1974), 1334-1337. (Corneliu Eftimiu) **52** #9881 81.35
- (with Faddeev, L. D.) The Hamiltonian system connected with the equation $u_{xx} + \sin u = 0$. (Russian) Number theory, mathematical analysis and their applications. *Trudy Mat. Inst. Steklov.* **142** (1976), 254-266, 271. (Editors) **58** #31231 58F05 (35Q99)
- (with Budagov, A. S.) A nonlinear one-dimensional model of classical field theory with internal degrees of freedom. (Russian) *Dokl. Akad. Nauk SSSR* **235** (1977), no. 4, 805-808. (A. A. Arsen'ev) **56** #7527 81.22
- Integration of the continuous Heisenberg spin chain through the inverse scattering method. *Phys. Lett. A* **64** (1977), no. 2, 235-237. (Author's summary) **56** #14283 81.45
- Tahvanov, G. I. (with Ešukov, L. N.) Linear operators of convolution type in a finite-dimensional Hilbert space. (Russian) Differential equations. *Trudy Rjazan. Radiotekh. Inst. No.* 20 (1969), 149-154. (See RŽMat **1971** #1 B722; MR **52** #13071) 47B35
- le lyong Tai See Le Lyong Tai
- Tai, C. H. (with Chan, Wai Leung) Dual variational principles with deviating argument and discontinuous extremals. *J. Optimization Theory Appl.* **23** (1977), no. 4, 593-605. (Authors' summary) **58** #23908 49B35
- Tai, Chen To ★ Dyadic Green's functions in electromagnetic theory. With a foreword by David K. Cheng. The Intext Monograph Series in Electrical Engineering. *Intext Educational Publishers*, Scranton, Penn.-Toronto, Ont., 1971. xvii+246 pp. (Y. Hayashi) **55** #4936 78.00
- On the presentation of Maxwell's theory. *Proc. IEEE* **60** (1972), 936-945. (N. Zitron) **49** #11954 78.01
- On the eigenfunction expansion of dyadic Green's functions. *Proc. IEEE* **61** (1973), 480-481. (T. Erber) **50** #3778 78.35
- (with Rozenfeld, Pawel) Different representations of dyadic Green's functions for a rectangular cavity. *IEEE Trans. Microwave Theory Tech.* **MTT-24** (1976), no. 9, 597-601. (Gérard A. Maugin) **56** #14149 78.35
- Tai, Ju Wei (with Li, Pow So) An iterative method for terminal control and time optimal control systems. *Automatic and remote control III* (Proc. Third Congr. Internat. Federation Automatic Control, London, 1966), Vol. 1, pp. 25, Paper 13B, 7 pp. *Inst. Mech. Engrs., London*, 1967. (From the authors' introduction) **55** #8937 49D99 (65K05, 93C50)
- Tai, M. L. (with Smirnova, V. N.) On the investigation of a steady process in a multidimensional extremal system in the presence of interference. (Russian) *Izv. Vysš. Učebn. Zaved. Radiofizika* **11** (1968), 1723-1729. (G. N. Mil'shtein) **49** #10425 93E99
- (with Smirnova, V. N.) Multidimensional discrete extremal systems in the presence of noise. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics* (Tbilisi, 1968), Vol. 1: *Optimal and adaptive systems* (Russian), pp. 252-259, 310. *Izdat. "Nauka", Moscow*, 1972. (L. I. Gal'čuk) **49** #2111 90C40
- (with Smirnova, V. N.) Some algorithms for successive accumulation in extremal systems. (Russian. English summary) Theory of oscillations, applied mathematics and cybernetics. *Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), no. 11, 1738-1748. (Authors' summary) **56** #18081 93E25
- On the analysis of algorithms for successive accumulation in extremal systems. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. No.* 166 *Teorija Kolebaniĭ, Prikl. Mat. i Kibernet.* (1973), 15-27. (Bojan Popović) **51** #15135 93E25
- A study of the steady-state process in automatic optimization systems with relaxation control algorithms. (Russian) *Dinamika Sistem Vyp.* **2** (1974), 170-182. (From the text) **58** #15623 93E20
- (with Muhin, V. I.) Investigation of a class of stochastic control algorithms. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 1, 20-25, 219 (Russian); translated as *Engrg.*

- Cybernetics* 13 (1975), no. 1, 15-21. (A. B. Schwarzkopf) 55 #12271 93E99
(with Grigorenko, Valeri P.; Smirnova, V. N.) A certain method for the solution of nonlinear boundary value problems that describe the distribution of inessential carriers in the base of a transistor structure. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 15 (1975), no. 4, 923-930, 1088. (N. N. Janenko) 52 #12341 65L10 (94A20)
See also *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, 47 #4666 (EA 47)
- Tai, Y.** (with Ash, Avner; Mumford, David; Rapoport, Michael) ★Smooth compactification of locally symmetric varieties. Lie Groups: History, Frontiers and Applications, Vol. IV. *Math. Sci. Press, Brookline, Mass.*, 1975. iv+335 pp. (Ichiro Satake) 56 #15642 14D20 (32N10, 32M15)
- Taiani, Geraldine** Non-existence of solutions to the Cauchy problem for first order partial differential equations. *Indiana Univ. Math. J.* 25 (1976), no. 10, 1005-1016. (Maria Cinquini-Cibrario) 54 #7992 35A05 (35F05)
- Taibleson, Mitchell H.** (with Hunt, Richard A.) Almost everywhere convergence of Fourier series on the ring of integers of a local field. *SIAM J. Math. Anal.* 2 (1971), 607-625. (V. R. Celeste) 47 #718 43A50 (12J99)
(with Chao, Jia Arng) A sub-regularity inequality for conjugate systems on local fields. *Studia Math.* 46 (1973), 249-257. (George Bachman) 49 #3459 43A70 (12B40, 32C99)
★Fourier analysis on local fields. *Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo*, 1975. xii+294 pp. (James E. Daly) 58 #6943 43A75
(with Gandulfo, A.; García-Cuerva, J.) Conjugate system characterizations of H^1 : counter examples for the Euclidean plane and local fields. *Bull. Amer. Math. Soc.* 82 (1976), no. 1, 83-85. (Satoru Igari) 52 #14820 42A40
The existence of natural field structures for finite dimensional vector spaces over local fields. *Pacific J. Math.* 63 (1976), no. 2, 545-551. (M. Hasumi) 54 #5195 12B40 (43A70)
The failure of even conjugate characterizations of H^1 on local fields. *Pacific J. Math.* 74 (1978), no. 2, 501-506. (J. A. Chao) 58 #6941 43A70 (12B40)
- Taie, O. G.** The flow around a thin axisymmetric body with a given velocity distribution on a part of a surface. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* 1968, no. 1, 80-88. (S. Raman) 45 #4744 76A5
- Taichin, M. A.** ★Теория моделей. (Russian) [Model theory] Publications of the Department of Algebra and Mathematical Logic of the Novosibirsk State University. No. 6. *Novosibirsk. Gosudarst. Univ., Novosibirsk*, 1970. 214 pp. (M. Benda) 49 #2350 02H05
(with Abakumov, A. I.; Paljutin, E. A.; Šišmarev, Ju. E.) Categorical quasivarieties. (Russian) *Algebra i Logika* 11 (1972), 3-38, 121. (N. Both (Zbl 249 #02024)) 50 #12857 08A15 (02G20)
(with Belegardek, O. V.) Two remarks on the varieties $\mathfrak{U}_{m,n}$. (Russian) *Algebra i Logika* 11 (1972), 501-508, 614. (S. P. Bandyopadhyay) 47 #8396 08A15
(with Mal'cev, A. I.; Doohovskoy, A. P.; Smirnov, D. M.) ★Algebraic systems. Posthumous edition, edited by D. Smirnov and M. Taichin. Translated from the Russian by B. D. Seckler and A. P. Doohovskoy. *Akademie-Verlag, Berlin*, 1973. xii+317 pp. (Editors) 52 #13380 02J10 (02H15, 08A05)
(with Eršov, Ju. L.; Paljutin, E. A.) ★Математическая логика. (Russian) [Mathematical logic] Lectures given at Novosibirsk State University. Library of the Department of Algebra and Mathematical Logic, Novosibirsk University, No. 12. *Novosibirsk. Gosudarst. Univ., Novosibirsk*, 1973. 159 pp. (Jerzy Kotas) 57 #9448 02-01
Existentially closed regular commutative semigroups. (Russian) *Algebra i Logika* 12 (1973), 689-703, 735-736. (A. I. Omarov) 52 #10413 02H15 (20M10)
The isomorphism problem for commutative semigroups. (Russian) *Mat. Sb. (N.S.)* 93(135) (1974), 103-128, 152. (B. M. Schein (Šain)) 48 #8663 20M05 (02F47)
Existentially closed commutative semigroups. (Russian. English summary) *Fund. Math.* 94 (1977), no. 3, 231-243. (A. I. Omarov) 55 #5436 02H15 (20M99)
See also Mal'cev, A. I., 50 #1878
- Taikov, L. B.** See *Approximation of periodic functions*, 49 #5665
- Taikov, L. V.** The divergence everywhere of transposed Fourier series of continuous functions. (Russian) *Mat. Zametki* 9 (1971), 459-465. (W. C. Connett) 45 #7375 30A78
Analytic continuation of functions with an error. (Russian) *Trudy Mat. Inst. Steklov.* 109 (1971), 61-64. (P. L. Duren) 45 #7071 30A78
Some sharp inequalities in the theory of the approximation of functions. (Russian. English summary) *Anal. Math.* 2 (1976), no. 1, 77-85. (V. M. Kokilašvili) 58 #11424 30A78
Inequalities containing best approximations, and the modulus of continuity of functions in L_2 . (Russian) Presented at the International Conference on the Theory of Approximation of Functions, held at Kaluga, July 24-28, 1975. *Mat. Zametki* 20 (1976), no. 3, 433-438. (M. F. Timan) 55 #960 42A08
Widths of some classes of analytic functions. (Russian) *Mat. Zametki* 22 (1977), no. 2, 285-295. (Anthony G. O'Farrell) 57 #6444 30A82 (41A45)
Best approximations of differentiable functions in the metric of the space L_2 . (Russian) *Mat. Zametki* 22 (1977), no. 4, 535-542. (M. F. Timan) 57 #3719 42A08
- Tailor, J. K.** (with Jain, R. C.) A note on test of hypothesis about mean after preliminary testing. *Trabajos Estadist.* 23 (1972), no. 1-2, 77-83. (Mir Ali) 47 #9758 62F05
(with Saxena, K. P.) Approximate formulae for power components of sometimes pool test procedure based on a mixed model. *Sankhyā Ser. B* 36 (1974), no. 3, 267-277. (Lubomír Kubáček) 53 #9532 (E 58 #31622) 62J10
(with Saxena, K. P.) Corrigenda: "Approximate formulae for power components of sometimes pool test procedure based on a mixed model" (Sankhyā Ser. B 36 (1974), no. 3, 267-277). *Sankhyā Ser. B* 37 (1975), no. 2, 254. (Editors) 58 #31622 62J10
(with Saxena, K. P.) A note on inference in a mixed model. *Vikram* 19 (1975), no. 1-3, 43-53. (Authors' summary) 58 #24676 62F05
- Taimanov, A. D.** (with Mustafin, T. G.) Countable models of theories which are categorical in power \aleph_1 but not in power \aleph_0 . (Russian) *Algebra i Logika* 9 (1970), 559-565. (A. Sochor) 45 #41 02H99
(with Marčuk, G. I.; Kulikov, L. Ja.; Kargapolov, M. I.; Plotkin, B. I.; Kemhadze,
- Š. S.; Andrunakievič, V. A.; Eršov, Ju. L.; Janovskii, R. G.; Širšov, A. I.) F speeches at the opening of the Tenth All-Union Algebra Colloquium dedicated to memory of Academician A. I. Mal'cev. (Russian) *Selected questions of algebra and its collection dedicated to the memory of A. I. Mal'cev* (Russian), pp. 300-314. *Iz "Nauka" Sibirsk. Otdel., Novosibirsk*, 1973. (Editors) 58 #21310 01A70
An example of a semigroup that admits only the discrete topology. (Russian) *Algebra i Logika* 12 (1973), 114-116, 121. (St. Schwarz) 48 #4188 22A15
Certain works connected with descriptive set theory and topology. (Russian) Mathematical logic, theory of algorithms and theory of sets (dedicated to P. S. Novikov on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* 133 (1973), 203-213, 275. (J. G. Ceder) 48 #5037 54H05
The extension of linear operators. (Russian) Mathematical logic, theory of algorithms and theory of sets (dedicated to P. S. Novikov on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* 133 (1973), 214-220, 276. (E. Durak) 48 #6973 47A20
On the elementary theory of topological algebras. (Russian) Collection of articles dedicated to Andrzej Mostowski on the occasion of his sixtieth birthday, IV. *Fund. Math.* 81 (1974), 331-342. (B. Węglorz) 50 #4290 02H05 (02E99, 08A05)
The topologization of commutative semigroups. (Russian) *Mat. Zametki* 17 (1975), no. 5, 745-748. (G. E. Dimitroff) 53 #694 22A15
An algorithmic problem of number theory. (Russian) *Vestnik Akad. Nauk Kazan. Ser. Fiz.-Mat. Nauk* 1976, no. 9, 61-62. (D. V. Čudnovskii) 58 #16249 02G05 (10N05)
Topologizable groups. (Russian) *Sibirsk. Mat. Ž.* 18 (1977), no. 4, 947-948, 949. (W. T. van Est) 58 #6043 22A05
See also Biography: Mal'cev, A. I., (Not reviewed); Mostowski, Andrzej, 49 #10548; Feferman, S., 50 #4435; Sacks, Gerald E., 53 #114; al-Farabi, Abū Nu'aym Muhammad ibn Muhammad ibn Tarkhān, 55 #7711 and Keisler, H. J.; et al., 57 #9519
- Taimurazov, H. I.** A certain mixed boundary value problem for a fourth order nonlinear equation. (Russian) *Applied questions in mathematical analysis* (Russian), pp. 127-141. *Tul'sk. Gos. Ped. Inst., Tula*, 1972. (S. N. Kružkov) 51 #1096 35G30
- Tainir, Melvin** Generating functions on idempotent semigroups. II. Semilattice varieties and independence. *J. Combinatorial Theory Ser. A* 13 (1972), 401-421. (P. Holgate) 47 #4814 05A15 (60C05)
Statistical theory of connectivity. I. Basic definitions and properties. *Discrete Math.* 13 (1975), no. 4, 391-398. (W. T. Tutte) 54 #7324 05C99
A new deterministic network reliability measure. *Networks* 6 (1976), no. 3, 191-201. (G. Chartrand) 55 #2394 94A20 (05C99)
- Taira, Kazuaki** On non-homogeneous boundary value problems for elliptic differential operators. *Kōdai Math. Sem. Rep.* 25 (1973), 337-356. (V. S. Rabinovič) 54 #10843 35J40 (58G15)
Hypoelliptic differential operators with double characteristics. *Proc. Japan Acad.* 51 (1974), 546-548. (L. Boutet de Monvel) 51 #13429 35H05
On some noncoercive boundary value problems for the Laplacian. *Proc. Japan Acad.* 51 (1975), 141-146. (M. H. Protter) 51 #10864 35J25
On some degenerate oblique derivative problems. *J. Fac. Sci. Univ. Tokyo Sect. Math.* 23 (1976), no. 2, 259-287. (Y. I. Kannai) 55 #8542 35J25
On some non-coercive boundary value problems for the Laplacian. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* 23 (1976), no. 2, 343-367. (Y. I. Kannai) 55 #8543 35J25
On a degenerate oblique derivative problem of Ju. V. Egorov and V. A. Kondratiev. (Mat. Sb. (N.S.) 78(120) (1969), 148-176). *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* (1976), no. 2, 383-391. (Y. I. Kannai) 55 #8544 35J25
On a degenerate oblique derivative problem with interior boundary condition. *Proc. Japan Acad.* 52 (1976), no. 9, 484-487. (M. S. Agranovič) 56 #12657 35P10 (35P10)
Sur les problèmes aux limites non-coercifs pour le laplacien. *Séminaire Goulaouic-Schwartz* (1976/1977), *Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 11*, 14 pp. *Centre Math., École Polytech., Palaiseau*, 1977. (Editors) 57 #6817 35J25
Sur l'existence des processus de diffusion satisfaisant aux conditions aux limites Ventscel'. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. A1133-A1136. (Author's summary) 55 #6588 60J60 (35Jxx)
Sur le problème de la dérivée oblique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 23, A1511-A1513. (Author's summary) 56 #845 35J25
- Tairjan, V. I.** (with Hačatrjan, G. G.) On the determination of H -orbits of cyclic FG-coalgebras of arbitrary length. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* (1974), 139-144. (G. M. Tenegol'c) 50 #12444 94A10
(with Oganesjan, S. Š.; Jagdžjan, V. G.) Decomposition of cyclic codes into equal-weight classes. *Problems of Control and Information Theory/Problemy Upravlenija i Teorii Informacii* 3 (1974), no. 2, 13-21, 117-125. (J.-M. Goethals) 55 #2347 94A10
(with Hačatrjan, G. G.; Mhitarjan, A. G.) Determination of the weight spectrum and the coding distance of a class of cyclic codes. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 64 (1977), no. 3, 165-169. (Editors) 58 #15686 94A10
See also *Symposium: Information Theory*, 50 #9416
- Tairjan, V. M.** (with Šahbazjan, K. H.) The construction of a generalized pantograph equation. (Russian. Armenian summary) *Erevan. Gos. Univ. Učen. Zap. Estestv. Nauki* 1976, no. 3(133), 26-33. (Authors' summary) 58 #32194 70.50 (50D15)
- Tairov, M. F.** Distribution of the maximum of an inhomogeneous Poisson process with bounded negative jumps. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap.* 1977, no. 1 *Fiz. i Mat.*, 37-40. (RŽMat 1978 #7 V91) 58 #31449 60K05
- Tairov, Š.** The ratio of the variances of the length of the waiting time. (Russian) *Literature and mathematical statistics* (Russian), pp. 146-149, 190. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1976. (M. A. Fainberg) 55 #13608 60K25
Some remarks on the paper: "Some limit theorems in reliability theory and queueing theory" (Mat. Voprosy Upravlen. Proizvodstvom Vyp. 2 (1970), 179-183) by B. Dimitrovič and E. A. Danieljan. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR. Ser. Fiz.-Mat. Nauk* 1976, no. 4, 29-32, 86. (B. Dimitrov) 56 #1490 60K05 (60K05)
- Tairyan, V. I.** See *Tairjan, V. I.*

- hak, Christian Marinus** ★Division and logos. A theory of equivalent couples and sets of integers propounded by Euclid in the arithmetical books of the *Elements*. With a Danish summary. Doctoral thesis, University of Copenhagen, Copenhagen, 1970. *Acta Historica Scientiarum Naturalium et Medicinalium*, Vol. 25. *Odense University Press*, Odense, 1971. 129 pp. (William C. Waterhouse) **58** #28 01A20 (10-03)
- Posidonius vindicated at all costs? Modern scholarship versus the Stoic earth measurer. *Centaurus* **18** (1973/74), 253-269. (Giulio Cesare Giacobbe) **58** #26712 01A20
- Perfect numbers. A mathematical pun? An analysis of the last theorem in the ninth book of Euclid's *Elements*. *Centaurus* **20** (1976), no. 4, 269-275. (William C. Waterhouse) **56** #8265 01A20
- t, K. E.** Stability properties of discrete-continuous feedback control systems with signal dependent sampling. II. Stability concepts. *Internat. J. Control* (1) **9** (1969), 27-75. (Author's summary) **48** #5699 93D10
- Stability properties of discrete-continuous feedback control systems with signal dependent sampling. III. Stability properties. *Internat. J. Control* (1) **9** (1969), 121-158. (Author's summary) **48** #5700 93D10
- t, W.** (with Macfarlane, A. J.) Tensor formulation of spin-1 and spin-2 fields. *Comm. Math. Phys.* **24** (1972), 211-224. (M. Carmeli) **46** #1259 81.53
- A spectrum generating algebra for meson resonances. *Internat. J. Theoret. Phys.* **6** (1972), 453-466. (Author's summary) **51** #14781 81.22
- (with Fisk, Caroline) Skew-symmetric tensor-spinor formulation of the spin 3/2 field. *J. Phys. A* **6** (1973), 383-392. (Authors' summary) **54** #6764 81.47
- (with Guéret, Ph.; Vigier, Jean-Pierre) A symmetry scheme for hadrons, leptons and intermediate vector bosons. (Italian and Russian summaries) *Nuovo Cimento A* (11) **17** (1973), 663-680. (Nigel B. Backhouse) **52** #4836 81.22
- Okubo second-order mass formula from $SO(6,1)$. *Internat. J. Theoret. Phys.* **7** (1974), 3-7. (Author's summary) **50** #12031 81.22
- (with Charap, John M.) A gauge theory of the Weyl group. *Proc. Roy. Soc. (London) Ser. A* **340** (1974), 249-262. (P. G. Bergmann) **52** #16494 83.53
- t, W. C.** Quantum theory of a basic light-matter interaction. *Phys. Rev. B* (3) **5** (1972), no. 2, 648-661. (Author's summary) **52** #12632 81.47
- t, William W.** Normal form theorem for bar recursive functions of finite type. *Proceedings of the Second Scandinavian Logic Symposium* (Univ. Oslo, Oslo, 1970), pp. 353-367. *Studies in Logic and the Foundations of Mathematics*, Vol. 63, North-Holland, Amsterdam, 1971. (H. Schwichtenberg) **55** #7747 02D99
- A realizability interpretation of the theory of species. *Logic Colloquium* (Boston, Mass., 1972-1973), pp. 240-251. *Lecture Notes in Math.*, Vol. 453, Springer, Berlin, 1975. (G. E. Minc) **52** #5380 02D99 (02C15)
- ibnapis, William D.** A correctness proof of a topology information maintenance protocol for a distributed computer network. *Comm. ACM* **20** (1977), no. 7, 477-485. (Fan R. K. Chung) **58** #4703 94A20
- ima, Kenji** (with Uesaka, Yoshinori) An interpretative of figure segregation. *Systems-Computers-Controls* **7** (1976), no. 1, 1-9 (1977). (Manfred Kochen) **56** #14843 92A25
- ima, Koji** (with Koyama, Shoichi; Miura, Ryoichi) Comments on: "Determination of matrix transfer function in the form of matrix fraction from input-output observations" (IEEE Trans. Automatic Control **AC-20** (1975), 392-396) by K. Furuta and J.-G. Paquet. With a reply by the authors. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 684-685. (Editors) **57** #9180 93B15
- ima, N.** (with Tomimatsu, A.; Horiuchi, R.) Time evolution of the energy spectrum of Alfvén waves due to the non-linear Landau damping. *Astronom. and Astrophys.* **65** (1978), no. 2, 239-243. (Authors' summary) **58** #19750 76.35
- k, S. S.** (with Bansal, J. L.) Laminar plane jet in a gas medium. (German summary) *Z. Angew. Math. Phys.* **29** (1978), no. 5, 742-756. (M. Honda) **58** #25318 76.35
- kaba, Sadao** (with Tamamoto, Hideo) A design of fault-diagnosable cellular arrays. *Systems-Computers-Controls* **7** (1976), no. 5, 105-115 (1977). (From the summary) **58** #4704 94A20
- kabaev, M. K.** The optimization of a certain second order nonlinear system. (Russian) *Differential equations and their application* (Russian), pp. 126-131, 214. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1970. (Author's summary) **58** #30651 49B35
- (with Valëev, Kim G.) Application of optimal control methods to the construction of the Ljapunov function. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1973*, no. 5, 26-31, 93. (R. F. Datko) **51** #1040 34D20 (34H05)
- kabayasi, Takehiko** Detailed wave equation and dual amplitude. Relativistic quantum dynamics of string model of hadrons. *Progr. Theoret. Phys.* **46** (1971), 1528-1548. (K. J. Le Couteur) **46** #8576 81.34
- Detailed wave equation and dual amplitude. II. Relativistic quantum dynamics of string model of hadrons. *Progr. Theoret. Phys.* **46** (1971), 1924-1936. (K. J. Le Couteur) **46** #8577 81.34
- General-covariant approach to relativistic string theory. *Progr. Theoret. Phys.* **52** (1974), 1910-1928. (K. J. Le Couteur) **51** #2543 81.53
- Lagrangian theory of relativistic rotator. *Progr. Theoret. Phys.* **57** (1977), no. 1, 329-331. (Editors) **58** #9082 83.53
- kács, Cs.** Correzione del bilancio d'impulso di mezzi continui basata sulla trasformazione di Ott. (English and Russian summaries) *Nuovo Cimento B* (11) **43** (1978), no. 2, 334-344. (Enrico Massa) **58** #8841 80.35
- kács, D. V.** (with Fáy, G.) Finite geometrical data bank by Galois algorithm. *CL & CL-Comput. Linguist. Comput. Lang.* **10** (1975), 135-148. (K. H. V. Booth) **54** #6595 68A50
- (with Fáy, G.) Galois perceptron: cell assemblies in cellular space. I. *J. Cybernet.* **5** (1975), no. 3, 65-86 (1976). (Jill Humphries) **54** #2254 92A25 (94A20)
- A maximum-selector design in Codd-ICRA cellular automaton. *Acta Cybernet.* **3** (1976/77), no. 2, 107-143. (Hidenosuke Nishio) **58** #9929 94A30
- kács, Lajos** On the comparison of two empirical distribution functions. *Ann. Math. Statist.* **42** (1971), 1157-1166. (Z. Sidák) **45** #1327 62G30
- On the comparison of a theoretical and an empirical distribution function. *J. Appl. Probability* **8** (1971), 321-330. (Z. W. Birnbaum) **45** #1305 62E10
- Discrete queues with one server. *J. Appl. Probability* **8** (1971), 691-707. (S. C. Port) **45** #6098 60K25
- The distribution of the occupation time for single-server queues. *Operations Res.* **19** (1971), 1494-1501. (Author's summary) **47** #1164 60K25
- On a linear transformation in the theory of probability. *Acta Sci. Math. (Szeged)* **33** (1972), 15-24. (J. G. Wendel) **46** #4585 60E05
- On a formula of Pollaczek and Spitzer. *Studia Math.* **41** (1972), 27-34. (A. Fuchs) **46** #4584 60E05
- On an identity of Shih-Chieh Chu. *Acta Sci. Math. (Szeged)* **34** (1973), 383-391. (A. L. Whiteman) **47** #6501 05A10
- On a method of Pollaczek. *Stochastic Processes Appl.* **1** (1973), 1-9. (Jos H. A. de Smit) **51** #2022 60K25
- Occupation time problems in the theory of queues. *Mathematical methods in queueing theory* (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1973), pp. 91-131. *Lecture Notes in Econom. and Math. Systems*, Vol. 98, Springer, Berlin, 1974. (Jos H. A. de Smit) **51** #14317 60K25
- Sojourn time problems. *Ann. Probability* **2** (1974), 420-431. (A. De Hoyos) **50** #11430 60G50
- A single-server queue with limited virtual waiting time. *J. Appl. Probability* **11** (1974), 612-617. (J. G. C. Templeton) **51** #4469 60K25
- On a problem of fluctuations of sums of independent random variables. *Perspectives in probability and statistics (papers in honour of M. S. Bartlett on the occasion of his 65th birthday)*, pp. 29-37. *Applied Probability Trust, Univ. Sheffield, Sheffield*, 1975. (David J. Emery) **53** #9384 60J15
- Combinatorial and analytic methods in the theory of queues. *Advances in Appl. Probability* **7** (1975), no. 3, 607-635. (John P. Lehoczky) **52** #1933 60K25
- A storage process with semi-Markov input. *Advances in Appl. Probability* **7** (1975), no. 4, 830-844. (John P. Lehoczky) **52** #6922 60K30
- On a formula of Harald Cramér. *Scand. Actuar. J.* **1975**, no. 2, 65-72. (H. L. Seal) **51** #11711 60K25 (62P05)
- On the maximal deviation between two empirical distribution functions. *Studia Sci. Math. Hungar.* **10** (1975), no. 1-2, 117-121. (B. R. Handa) **55** #9366 62E15 (62G99)
- On some recurrence equations in a Banach algebra. *Acta Sci. Math. (Szeged)* **38** (1976), no. 3-4, 399-416. (J. G. Wendel) **55** #4414 60K05 (39A40, 60K15)
- On fluctuation problems in the theory of queues. *Advances in Appl. Probability* **8** (1976), no. 3, 548-583. (E. Arjas) **54** #11568 60K25 (60K15)
- Some remarks on a counter process. *J. Appl. Probability* **13** (1976), no. 3, 623-627. (D. N. Shanbhag) **54** #11569 60K25
- On the busy periods of single-server queues with Poisson input and general service times. *Operations Res.* **24** (1976), no. 3, 564-571. (Stig I. Rosenlund) **53** #9430 60K25
- A Banach space of matrix functions and its application in the theory of queues. *Sankhyā Ser. A* **38** (1976), no. 3, 201-211. (Author's summary) **58** #31459 60K25
- ★Combinatorial methods in the theory of stochastic processes. Reprint of the 1967 original. *Robert E. Krieger Publishing Co., Huntington, N. Y.*, 1977. xi + 262 pp. (Editors) **55** #4314 60-02 (60K25)
- On the ordered partial sums of real random variables. *J. Appl. Probability* **14** (1977), no. 1, 75-88. (Jos H. A. de Smit) **55** #4417 60K15
- An identity for ordered partial sums. *J. Combinatorial Theory Ser. A* **23** (1977), no. 3, 364-365. (From the text) **58** #21669 05A99
- A queuing model with feedback. *RAIRO Recherche Opér.* **11** (1977), no. 4, 345-354. (Thomas M. O'Donovan) **57** #1706 60K25
- See also *Jordan, Charles*, **52** #9306
- Takada, Toshio** On potential densities of one-dimensional Lévy processes. *J. Math. Kyoto Univ.* **14** (1974), 371-390. (S. C. Port) **51** #7009 60J30
- Takagahara, Toshihide** (with Hanamura, Eiichi; Kubo, Ryogo) Stochastic models of intermediate state interaction in second order optical processes—transient response. *J. Phys. Soc. Japan* **43** (1977), no. 5, 1522-1532. (Authors' summary) **57** #2209 78.60
- Takagi, Fujio** Bounds on the asymptotic behavior of an elastic scattering amplitude near the forward direction. *Progr. Theoret. Phys.* **46** (1971), 559-576. (D. I. Olive) **46** #6742 81.30
- Takagi, Hitoshi** An example of Riemannian manifolds satisfying $R(X, Y) \cdot R = 0$ but not $\nabla R = 0$. *Tôhoku Math. J. (2)* **24** (1972), 105-108. (M. Kurita) **47** #7655 53C20
- (with Watanabe, Yoshiyuki) On the holonomy groups of Kählerian manifolds with vanishing Bochner curvature tensor. Collection of articles dedicated to Shigeo Sasaki on his sixtieth birthday. *Tôhoku Math. J. (2)* **25** (1973), 185-195. (David Blair) **48** #12434 53C55
- (with Watanabe, Yoshiyuki) Kählerian manifolds with vanishing Bochner curvature tensor satisfying $R(X, Y) \cdot R_1 = 0$. *Hokkaido Math. J.* **3** (1974), 129-132. (T. Suguri) **49** #3736 53B35
- On curvature homogeneity of Riemannian manifolds. *Tôhoku Math. J. (2)* **26** (1974), 581-585. (T. Nagano) **51** #1669 53C20
- Conformally flat Riemannian manifolds admitting a transitive group of isometries. *Tôhoku Math. J. (2)* **27** (1975), no. 1, 103-110. (A. P. Stone) **56** #1228a 53C30
- Conformally flat Riemannian manifolds admitting a transitive group of isometries. II. *Tôhoku Math. J. (2)* **27** (1975), no. 3, 445-451. (A. P. Stone) **56** #1228b 53C30
- Homogeneous Riemannian manifolds covered by $S^m \times S^n$. *Tôhoku Math. J. (2)* **28** (1976), no. 3, 469-477. (O. Kowalski) **58** #2652 53C30
- Takagi, Ryoichi** (with Takahashi, Tsunero) On the principal curvatures of homogeneous hypersurfaces in a sphere. *Differential geometry (in honor of Kentaro Yano)*, pp. 469-481. *Kinokuniya, Tokyo*, 1972. (E. Vinberg) **48** #12413 53C35
- On homogeneous real hypersurfaces in a complex projective space. *Osaka J. Math.* **10** (1973), 495-506. (Koichi Ogue) **49** #1433 53C30 (32M05)
- (with Itoh, Takehiro; Nakagawa, Hisao) On a certain isometric imbedding. (Japanese) *Sûgaku* **26** (1974), no. 2, 156-157. (Y. Katsurada) **54** #6036 53C40
- Real hypersurfaces in a complex projective space with constant principal curvatures. *J. Math. Soc. Japan* **27** (1975), 43-53. (Koichi Ogue) **50** #8380 53C40
- Real hypersurfaces in a complex projective space with constant principal curvatures. II. *J. Math. Soc. Japan* **27** (1975), no. 4, 507-516. (Koichi Ogue) **53** #3955 53C40
- (with Nakagawa, Hisao) Kaehler submanifolds with $RS = 0$ in a complex projective space. *Hokkaido Math. J.* **5** (1976), no. 1, 67-70. (N. Prakash) **52** #9136 53C55
- A class of hypersurfaces with constant principal curvatures in a sphere. *J.*

- Differential Geometry* **11** (1976), no. 2, 225-233. (K. Nomizu) **54** #13798 53C40
(with Nakagawa, Hisao) On locally symmetric Kaehler submanifolds in a complex projective space. *J. Math. Soc. Japan* **28** (1976), no. 4, 638-667. (Bang-ye Chen) **54** #5513 32M15 (53C55)
(with Takeuchi, Masaru) Degree of symmetric Kählerian submanifolds of a complex projective space. *Osaka J. Math.* **14** (1977), no. 3, 501-518. (S. Kaneyuki) **57** #7488 53C55 (32M15)
(with Ozeki, Hideki; Takeuchi, Masaru) On isoparametric hypersurfaces. (Japanese) *Sūgaku* **30** (1978), no. 1, 23-32. (Y. Katsurada) **58** #7502 53C40
- Takagi, Shigeo** Cryptoarithmetic in Japan. (Japanese) *Sūgakushi Kenkyū* No. 53 (1972), 10-30; additions and corrections, *ibid.* No. 54 (1972), 43-45. (S. Hitotumatu) **58** #21036 01A25 (10-03)
The history of the magic square. (Japanese) *Sūgakushi Kenkyū* No. 55 (1972), 51-68. (S. Hitotumatu) **58** #21037 01A25 (05-03)
The *Sansū Kikan* and the *Shō Kokumin*. (Japanese) *Sūgakushi Kenkyū* No. 61 (1974), 28-32. **58** #26768 01A25
Rohan Kōda's *Hōjin Hisetsu*. (Japanese) *Sūgakushi Kenkyū* No. 62 (1974), 10-16. **58** #26769 01A25
- Takagi, Shin** Gibbs-Duhem relation and consistency of Hubbard's approximation. *Progr. Theoret. Phys.* **46** (1971), 1376-1387. (N. L. Balazs) **46** #6765 82.00
- Takagi, Shoji** (with Ito, Tadayu; Suematsu, Yoshikazu; Honda, Akihiro) A study on the vortex oscillator. I. On a mathematical model of a confined vortex oscillator. *Bull. JSME* **20** (1977), no. 147, 1153-1160. (Authors' summary) **56** #14037 76.34
- Takagi, Shunsuke** Integration of $\int_0^\infty F(x)J_0(ax)J_1(bx)dx$. *Transactions of the Twenty-First Conference of Army Mathematicians (White Sands Missile Range, White Sands, N.M., 1975)*, pp. 511-542. *ARO Rep.*, 76-1. U. S. Army Res. Office, Research Triangle Park, N.C., 1976. (From the introduction) **58** #28725 33A40
- Takagi, Takuro** (with Kondo, Toshimi; Kobayashi, Masataka) Torsion of elastic cylinders having cross-sections with curvilinear boundaries. (Russian. English summary) *Res. Rep. Nagaoka Tech. College* **14** (1978), no. 2, 19-32. (Editors) **58** #19521 73.30
- Takagi, Teiji** See *Collected papers: Takagi, Teiji*, **51** #2850; *Honda, Kin-ya*, **52** #10336 and *Algebraic number theory*, **56** #300
- Takagi, Yutaka** Time-reversal property of the so-called Lifshitz invariant. *Phys. Rev. B* (3) **17** (1978), no. 7, 2965-2973. (T. Janssen) **58** #4112 82.20 (20G05)
- Takahara, Yasuhiko** (with Mesarović, Mihajlo D.; Macko, D.) ★Theory of hierarchical, multilevel, systems. *Mathematics in Science and Engineering*, Vol. 68. Academic Press, New York-London, 1970. xiii + 294 pp. (H. Sydow (Zbl 206, 145)) **46** #6862 93A10 (90C05)
(with Mesarović, Mihajlo D.; Macko, D.) Two coordination principles and their application in large scale systems control. (French, German and Russian summaries) *Automatica—J. IFAC* **6** (1970), 261-270. (V. Kudláček) **47** #1485 93A15
(with Mesarović, Mihajlo D.) On a qualitative theory of satisfactory control. *Information Sci.* **4** (1972), 291-313. (R. Liu) **48** #1746 93A99
(with Mesarović, Mihajlo D.) ★General systems theory: mathematical foundations. *Mathematics in Science and Engineering*, Vol. 113. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1975. xii + 268 pp. (I. Mezník) **52** #12862 93-02 (93A10)
(with Mesarović, Mihajlo D.) Realizability and general dynamical systems. *Information Sci.* **8** (1975), 109-121. (B. P. Zeigler) **53** #7549 93A10
On the theory of large scale systems. (Japanese) *Keiei-Kagaku* **19** (1975), no. 5-6, 167-178. (Kimio Kanai) **56** #11132 93A15
See also *Proceedings: International Congress of the International Federation of Automatic Control (IFAC)*, **51** #12360c
- Takahashi, Alonso** ★Conceptos fundamentales de matemática. (Spanish) [Fundamental concepts of mathematics] *Departamento de Matemáticas, Facultad de Ciencias, Universidad Nacional de Colombia, Bogotá*, 1967. v + 124 pp. (Editors) **51** #5230 00A25
Mathematical concepts. I, II, III. (Spanish) *Bol. Mat.* **6** (1972), no. 1, 23-42; *ibid.* **6** (1972), no. 2, 36-51; *ibid.* **6** (1972), no. 4, 33-47. (Josef Wichmann) **51** #5231a 00A25
What is an analytic function? (Spanish) *Bol. Mat.* **6** (1972), no. 3, 1-65. (H. Tornehave) **51** #5899 30-01
Mathematical concepts. IV. (Spanish) *Bol. Mat.* **6** (1972), no. 5, 33-45. (Josef Wichmann) **51** #5231b 00A25
Mathematical concepts. V. (Spanish) *Bol. Mat.* **6** (1972), no. 6, 59-71. (Josef Wichmann) **51** #5231c 00A25
The Cauchy-Schwarz inequality. (Spanish) *Rev. Colombiana Mat.* **7** (1973), 101-107. (J. B. Prolla) **49** #7792 46L05
Mathematical concepts. VI. (Spanish) *Bol. Mat.* **9** (1975), no. 2, 91-128. (P. R. Halmos) **53** #12835 01A65 (00A05)
- Takahashi, Hideo** Degrees of maps and homotopy type. *Kōdai Math. Sem. Rep.* **28** (1976/77), no. 1, 59-62. (Jean-Michel Lemaire) **55** #9077 55D15 (57B10)
- Takahashi, Hirowo** (with Kogiso, Motokazu) Group-theoretical method in the many-beam theory of electron diffraction. *J. Phys. Soc. Japan* **42** (1977), no. 1, 223-229. (P. Pascual) **54** #14595 81.22
- Takahashi, Hideyuki** The maximum invariant set of an automaton system. *Information and Control* **32** (1976), no. 4, 307-354. (Bolesław Mikolajczak) **54** #14893 94A30
Undecidable questions about the maximum invariant set. *Information and Control* **33** (1977), no. 1, 1-34. (W. Wechler) **55** #12368 94A30 (02G05)
Information transmission in one-dimensional cellular space and the maximum invariant set. *Information and Control* **33** (1977), no. 1, 35-55. (W. Wechler) **55** #12369 94A30
- Takahashi, Hiromitsu** (with Ozaki, Hiroshi) Generation of acyclic graphs from an undirected graph. *Systems-Computers-Controls* **2** (1971), no. 2, 34-40 (1972). (I. T. Frisch) **55** #2393 94A20
(with Ishihara, Tadashige) Some mathematical models of the conditioned reflex. *Math. Japon.* **17** (1972), 195-201. (H. D. Block) **49** #10396 92A05
- Takahashi, Hiroyuki** The procedures for the generating failure and repair process. *Bull. Fac. Sci. Engng. Chuo Univ.* **19** (1976), 239-251. (S. K. Srinivasan) **55** #9917 90B25
- Takahashi, Iwano** (with Shinozawa, Shoji) An algorithm for feasible solution to linear programs. *NEC Res. Development No. 11* (1968), 70-75. (A. Ben-Israel) **45** #641 90C05
A construction of 3-designs based on spreads in projective geometry. *Rep. Stat. Appl. Res. Un. Japan. Sci. Engrs.* **22** (1975), no. 1, 34-40. (Damaraju Raghavar) **52** #2921 05B05 (62K10)
- Takahashi, Ken-ichi** Initial value problem of an ordinary differential equation of second order. *Japan-United States Seminar on Ordinary Differential and Functional Equations (Kyoto, 1971)*, pp. 305-309. *Lecture Notes in Math.*, Vol. 243, Springer, Berlin, 1971. (A. D. Ziebur) **54** #631 34A25
Analytic reduction of a system of differential equations to a normal form. *Comment. Math. Univ. St. Paul.* **22** (1973/74), no. 2, 57-94. (C. A. Swanson) **49** #540 34A25
- Takahashi, Koiti** An example of a sequence of frequency functions which converges to a frequency function in the mean of order 1 but nowhere. *J. Japan Statist. Soc.* **1** (1971/72), no. 1, 33-34. (E. H. Lehman) **46** #2714 60E05
(with Sakasegawa, Hirotaka) Effects of repetition and finite population correction in randomized response models. (Japanese. English summary) *Proc. Inst. Statist. Math.* **22** (1974/75), no. 1, 59-67. (Authors' summary) **58** #24648 62D05
(with Suzuki, Tatsuzo; Sakasegawa, Hirotaka) Some notes on randomized response techniques. (Japanese. English summary) *Proc. Inst. Statist. Math.* **24** (1976/77), no. 1-13. (C. Hayashi) **55** #1558 62D05
New representation of gauge operator and off-mass-shell dual amplitude. *Progr. Theoret. Phys.* **56** (1976), no. 1, 231-240. (Masatsugu Minami) **54** #4433 81.47
(with Sakasegawa, Hirotaka) A randomized response technique without making use of any randomizing device. *Ann. Inst. Statist. Math.* **29** (1977), no. 1, 1-8. (Victor K. Tang) **55** #13627 62D05
- Takahashi, Kosei** On a measure of diagnostic goodness. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **20** (1973), no. 1, 39-40. **48** #5231 62F05
- Takahashi, Kunio** Maximum absolute values of Walsh-Rademacher coefficients for application to threshold logic. *Systems-Computers-Controls* **2** (1971), no. 3, 19-22 (1972). (Not reviewed) 94A20
- Takahashi, M.** On the validity of collective variable description of Bose systems. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ. Kyoto, 1975)*, pp. 446-448. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (Editor) **58** #32716 82.60
- Takahashi, Masahiro** An extension of an integral. I, II. *Proc. Japan Acad.* **47** (1971), 257-261; *ibid.* **47** (1971), 262-267. (S. Foglio) **45** #2136 28A45
On measurable functions. I, II. *Proc. Japan Acad.* **49** (1973), 25-28; *ibid.* **49** (1973), 29-32. (Carl M. Pearcy) **50** #4871 28A20
Bounded variation property of a measure. *Proc. Japan Acad.* **49** (1973), 605-608. (V. Reichelderfer) **49** #3075 28A45
Extension of valuations on distributive lattices. *Osaka J. Math.* **15** (1978), no. 193-232. (J. Kist) **58** #16443 06A35 (28A55)
- Takahashi, Masako** (with Joshi, Aravind K.; Levy, Leon S.) A tree generating system. *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 453-466. North-Holland, Amsterdam, 1973. (Derick Wood) **52** #12424 68A30
Primitive transformations of regular sets and recognizable sets. *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 475-480. North-Holland, Amsterdam, 1973. (Etsuro Moriya) **51** #5216 94A30
Generalizations of regular sets and their application to a study of context-free languages. *Information and Control* **27** (1975), 1-36. (A. Ja. Dikovskii) **51** #9587 68A30
(with Joshi, Aravind K.; Levy, Leon S.) Tree adjunct grammars. *J. Comput. System Sci.* **10** (1975), 136-163. (Miroslav Hladký) **50** #15452 68A30
A mathematical approach to the structure of language. On the fundamental concept of a tree. (Japanese) *Sūgaku* **27** (1975), no. 3, 241-252. (Yasuyoshi Inagaki) **58** #2513 68A30
Rational relations of binary trees. *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 524-538. *Lecture Notes in Comput. Sci.*, Vol. 5. Springer, Berlin, 1977. (Max Dauchet) **56** #10180 68A30
- Takahashi, Michihiro** Simplicial mock bundles. *Math. Sem. Notes Kobe Univ.* **4** (1976), no. 2, 135-156. (B. J. Sanderson) **55** #11262 57C50
The ordinary Z_2 -homology theory and singular bordism theories. *J. Math. Soc. Japan* **30** (1978), no. 3, 433-446. (P. S. Landweber) **58** #13001 55B20 (57D90)
- Takahashi, Minoru** Ground state energy of the one-dimensional electron system with short-range interaction. I. *Progr. Theoret. Phys.* **44** (1970), 348-358. (D. B. Fairlie) **46** #10353 82.45
On the exact ground state energy of Lieb and Wu. *Progr. Theoret. Phys.* **45** (1971), 756-760. (F. Calogero) **46** #4894 82.30
- Takahashi, Moto-o** Cut-elimination theorem and Brouwerian-valued models for intuitionistic type theory. *Comment. Math. Univ. St. Paul.* **19** (1971), 55-72. (A. Taut) **48** #1889 02C15 (02D99)
On the existence of Cohen extensions. *Comment. Math. Univ. St. Paul.* **20** (1971/72), 147-159. (A. Lévy) **46** #1591 02K15
 Δ_1 -definability in set theory. *Conference in Mathematical Logic—London '70 (Proc. Conf., Bedford Coll., London, 1970)*, pp. 281-304. *Lecture Notes in Math.*, Vol. 25. Springer, Berlin, 1972. (A. Lévy) **54** #97 02K15
A foundation of finite mathematics. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 577-708. (G. E. Minc) **56** #101 02D99 (02K99)
An abstract form of Gödel's theorem on consistency and Löb's. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 366-382, 233-237 (1977). (Flavio Previale) **57** #5700 02D99
Many-valued logics and their algebras. (Japanese) *Sūgaku* **29** (1977), no. 2, 135-147. (Tatsuo Higuchi) **58** #21449 02C05
Two knots with the same 2-fold branched covering space. *Yokohama Math. J.* **2** (1977), no. 1, 91-99. (J. S. Birman) **57** #1469 55A10 (55A25)
See also *Nishimura, Toshio*, **54** #7217
- Takahashi, Nobuyuki** (with Matsubara, Masakazu; Nishimura, Yoshiyuki) Optimization of periodically controlled systems. (Japanese. English summary) *Systems and Control* **1** (1972), 500-503. (Authors' summary) **47** #1511 93C45

- (with Matsubara, Masakazu; Nishimura, Yoshiyuki) Optimal periodic control of lumped parameter systems. *J. Optimization Theory Appl.* **13** (1974), 13-31. (Takashi Yahagi) **51** #15092 93C60
- ahashi, Reiji** Série discrète pour les groupes de Lorentz $SO_0(2n, 1)$. *Colloque sur les Fonctions Sphériques et la Théorie des Groupes* (Univ. Nancy, Nancy, 1971), Exp. No. 7, 10 pp. *Inst. Élie Cartan, Univ. Nancy, Nancy, 1971.* (Mark E. Novodvorsky) **56** #8757 22E45 (22E43)
- Fonctions sphériques dans les groupes $Sp(n, 1)$. *Théorie du potentiel et analyse harmonique* (Journées Soc. Math. France, Inst. Recherche Math. Avancée, Strasbourg, 1973), pp. 218-228. *Lecture Notes in Math., Vol. 404, Springer, Berlin, 1974.* (R. A. Askey) **51** #1298 43A90 (33A75)
- Fonctions de Jacobi et représentations des groupes de Lie. *Analyse harmonique sur les groupes de Lie* (Sém., Nancy-Strasbourg, 1973-75), pp. 701-710. *Lecture Notes in Math., Vol. 497, Springer, Berlin, 1975.* (Tom Koornwinder) **53** #5968 33A75 (43A90)
- Spherical functions in $Spin_0(1, d)/Spin(d-1)$ for $d=2, 4$ and 8 . *Non-commutative harmonic analysis* (Actes Colloq., Marseille-Luminy, 1976), pp. 226-240. *Lecture Notes in Math., Vol. 587, Springer, Berlin, 1977.* (Jacques Faraut) **56** #12775 43A90 (22E30)
- See also *Analyse harmonique sur les groupes de Lie*, **52** #5843
- kahashi, Rinya** (with Okamoto, Masashi) Bisection method for Monte Carlo integration. *Math. Japon.* **22** (Japan, 1977), no. 3, 403-411. (Siegfried Filippi) **57** #4471 65C05 (65D30)
- kahashi, Shin-ichi** See **Takahashi, Shin-ichi**
- kahashi, Shigeru** On the law of the iterated logarithm for lacunary trigonometric series. Collection of articles dedicated to Gen-ichirō Sunouchi on his sixtieth birthday. *Tōhoku Math. J. (2)* **24** (1972), 319-329. (M. Tomić) **48** #9242 42A44
- A statistical property of the Walsh functions. *Studia Sci. Math. Hungar.* **10** (1975), no. 1-2, 93-98. (F. Móricz) **55** #11356 60F15 (42A56)
- On the law of the iterated logarithm for lacunary trigonometric series. II. *Tōhoku Math. J. (2)* **27** (1975), no. 3, 391-403. (M. Tomić) **55** #13147 42A44 (60F15)
- kahashi, Shin-ichi** (with Ikeda, Makoto) Generalization of exponential and Laguerre-Lee functions. *Electron. Commun. Japan* **56** (1973), no. 10, 34-41. (V. L. Deshpande) **50** #5042 33A10
- (with Hamada, Nozomu) Generalization of Routh Algorithm by Lyapunov's second method. *Electron. Commun. Japan* **57** (1974), no. 3, 55-62. (S. Prusty) **52** #5133 93D05
- (with N.-Nagy, F. L.; Uraz, A.) Generalized exponential functions for system analysis and synthesis. *Internat. J. Systems Sci.* **5** (1974), 655-671. (S. P. Bhattacharyya) **54** #2283 93C20
- (with Sasaki, Yoshinari; Hamada, Nozomu) Some criteria for aperiodic damping systems. *Electron. Commun. Japan* **58** (1975), no. 4, 33-40. (Michel Cotsaftis) **54** #12302 93D05
- (with Ikeda, Makoto) Generalization of Routh's algorithm and stability criterion for non-integer integral system. *Electron. Commun. Japan* **60** (1977), no. 2, 41-50. (L. D. Berkovitz) **58** #15544 93D99
- kahashi, Shōichi** Notes on the law of the iterated logarithm. *Studia Sci. Math. Hungar.* **7** (1972), 21-24. (C.-G. Esseen) **48** #5158 60F15
- On an extension of classical ζ -function. *Bull. Yamagata Univ. Natur. Sci.* **8** (1973), no. 3, 357-359. (P. S. Chiang) **51** #864 30A16
- On the Witt vectors. *Bull. Yamagata Univ. Natur. Sci.* **8** (1973/75), no. 4, 503-507. (T. Kambayashi) **52** #418 14L15 (14G05)
- The number theoretic functions. *Tōhoku Math. J. (2)* **25** (1973), 375-382. (Clifford Queen) **48** #2108 12A05 (10A20)
- Probability limit theorems for trigonometric series. *Limit theorems of probability theory* (Colloq., Keszthely, 1974), pp. 381-397. *Colloq. Math. Soc. János Bolyai, Vol. 11, North-Holland, Amsterdam, 1975.* (F. Schipp) **54** #14055 60F05 (42A20, 42A36, 42A44)
- kahashi, Shuichi** (with Ariaga, Lucio) Reciprocities on groups. *Portugal. Math.* **31** (1972), 85-95. (L. Corwin) **46** #2353 43A05
- A non-standard treatment of infinitely near points. *Number theory, algebraic geometry and commutative algebra, in honor of Yasuaki Akizuki*, pp. 231-241. *Kinokuniya, Tokyo, 1973.* **55** #5632 14E15 (02H25)
- ★Méthodes logiques en géométrie diophantienne. Séminaire de Mathématiques Supérieures, No. 48 (Été, 1970). *Les Presses de l'Université de Montréal, Montréal, Que., 1974.* 178 pp. (George S. Sacerdote) **51** #424 10N15 (02H25, 10-02, 12L15)
- kahashi, Sin-ai** See **Takahasi, Sin-ai**
- kahashi, Tadataka** (with Matsuda, Ryūki) The unique factorization of formal power series. *Bull. Fac. Sci. Ibaraki Univ. Ser. A* No. 3, 1-4 (1971). (F. Dress) **45** #6817 13J05
- kahashi, Takao** On the trajectories of the structure vector fields of the Sasakian three-dimensional spheres. *Sci. Rep. Hiroshima Univ.* **23** (1976), no. 2, 57-60. (I. Vaisman) **55** #4043 53C25
- kahashi, Todayosu** (with Ōhara, Shinnosuke) Approximation of operator semigroups in a Banach space. *Tōhoku Math. J. (2)* **24** (1972), 505-528. (Robert M. Bullock) **50** #7722 34G05 (47D05)
- (with Ōhara, Shinnosuke) A convergence theorem of nonlinear semigroups and its application to first order quasilinear equations. *J. Math. Soc. Japan* **26** (1974), 124-160. (H. Flaschka) **49** #5966 47H15 (35F25)
- (with Kenmochi, Nobuyuki) On the global existence of solutions of differential equations on closed subsets of a Banach space. *Proc. Japan Acad.* **51** (1975), no. 7, 520-525. (J. E. Lagnese) **52** #3685 34G05
- Convergence of difference approximation of nonlinear evolution equations and generation of semigroups. *J. Math. Soc. Japan* **28** (1976), no. 1, 96-113. (G. F. Webb) **53** #3816 47H15
- kahashi, Toshio** (with Tanno, Shūichi) K -contact Riemannian manifolds isometrically immersed in a space of constant curvature. *Tōhoku Math. J. (2)* **23** (1971), 535-539. (D. Blair) **46** #9905 53C25
- A note on Kählerian hypersurfaces of spaces of constant curvature. *Kumamoto J. Sci. (Math.)* **9** (1972), 21-24. (Y. Muto) **46** #813 53B35
- Simple proof of a theorem on transversal hypersurfaces of a certain Sasakian manifold. *Kōdai Math. Sem. Rep.* **25** (1973), 32-33. (Samuel I. Goldberg) **48** #12372 53B35
- Even dimensional K -contact Riemannian manifolds isometrically immersed in a space of constant curvature. *Kumamoto J. Sci. (Math.)* **10** (1973), 59-65. (Y. Katsurada) **48** #9625 53C55
- On hypersurfaces of even dimensional contact Riemannian manifolds. *Kumamoto J. Sci. (Math.)* **10** (1973), no. 1, 25-33. (P. Günther) **49** #6076 53B35
- On the rank of a certain curvature tensor of a Sasakian manifold. *Kumamoto J. Sci. (Math.)* **12** (1976/77), no. 2, 52-55. (J. K. Shahin) **58** #7444 53B20
- (with Sasaki, Shigeo) Almost contact structures on Brieskorn manifolds. *Tōhoku Math. J. (2)* **28** (1976), no. 4, 619-624. (Koichi Ogue) **55** #1365 57D15 (53C15, 57D45, 57C45)
- Sasakian ϕ -symmetric spaces. *Tōhoku Math. J. (2)* **29** (1977), no. 1, 91-113. (M. Okumura) **55** #13347 53C25
- f -symmetric spaces. *Kumamoto J. Sci. (Math.)* **13** (1978/79), no. 1, 15-23. (Huei-Shyong Lue) **58** #12843 53C35 (53C25)
- Takahashi, Toyofumi** Galois cohomology in unramified extensions of algebraic function fields. *Seminar on Modern Methods in Number Theory* (Inst. Statist. Math., Tokyo, 1971), Paper No. 32, 3 pp. *Inst. Statist. Math., Tokyo, 1971.* (Editors) **52** #348 12A90 (12A60)
- Galois cohomology in unramified extensions of algebraic function fields. *Tōhoku Math. J. (2)* **24** (1972), 33-39. (W.-D. Geyer) **48** #3924 12A90 (12A60)
- Takahashi, Tsunero** (with Takagi, Ryoichi) On the principal curvatures of homogeneous hypersurfaces in a sphere. *Differential geometry (in honor of Kentaro Yano)*, pp. 469-481. *Kinokuniya, Tokyo, 1972.* (E. Vinberg) **48** #12413 53C35
- Isometric immersions of homogeneous Riemannian manifolds and related problems. (Japanese) *Sūgaku* **25** (1973), no. 2, 161-171. (Editors) **58** #30925 53C40
- Complex hypersurfaces with $RS=0$ in C^{n+1} . *Tōhoku Math. J. (2)* **25** (1973), 527-533. (Koichi Ogue) **49** #1440 53C40
- (with Ochiai, Takushiro) The group of isometries of a left invariant Riemannian metric on a Lie group. *Math. Ann.* **223** (1976), no. 1, 91-96. (Paul E. Ehrlich) **54** #480 22E99 (53C30)
- See also *Differential geometry (in honor of Kentaro Yano)*, **48** #2941
- Takahashi, Wataru** Invariant functions for amenable semigroups of positive contractions on L^1 . *Kōdai Math. Sem. Rep.* **23** (1971), 131-143. (E. Granirer) **45** #5317 28A65 (60J99, 47D05)
- On fixed points for reversible semigroups of nonexpansive mappings. *Sci. Rep. Yokohama Nat. Univ. Sect. I* No. 19 (1972), 1-4. (W. A. Kirk) **48** #973 47H10
- Ergodic theorems for amenable semigroups of positive contractions on L^1 . *Sci. Rep. Yokohama Nat. Univ. Sect. I* No. 19 (1972), 5-11. (M. M. Day) **48** #2345 28A65
- (with Kijima, Yōichi) Adjoint ergodic theorems for amenable semigroups of operators. *Sci. Rep. Yokohama Nat. Univ. Sect. I* No. 20 (1973), 1-4. (M. M. Day) **52** #1358 47A35
- (with Itoh, Shigeru; Kōrezioğlu, Hauri) Ergodic theorems and averaging operators on measurable functions. *Sci. Rep. Yokohama Nat. Univ. Sect. I* No. 20 (1973), 5-10. (François Aribaud) **51** #13191 28A65 (47A35)
- (with Umegaki, Hisaharu) A generalization of Goebel and Kirk's fixed point theorem. *Sci. Rep. Yokohama Nat. Univ. Sect. I* No. 21 (1974), 1-4. (William E. Fitzgibbon) **51** #13789 47H10
- Nonlinear variational inequalities and fixed point theorems. *J. Math. Soc. Japan* **28** (1976), no. 1, 168-181. (Heinrich Steinlein) **53** #3817 47H15
- The most recent results on fixed point theorems. (Japanese) *Sūgaku* **28** (1976), no. 3, 236-247. (Shigeru Itoh) **58** #23810 47H10
- (with Itoh, Shigeru) Single-valued mappings, multivalued mappings and fixed-point theorems. *J. Math. Anal. Appl.* **59** (1977), no. 3, 514-521. (E. Lami Dozo) **56** #13000 47H10
- (with Itoh, Shigeru; Yanagi, Kenjiro) Variational inequalities and complementarity problems. *J. Math. Soc. Japan* **30** (1978), no. 1, 23-28. (Norihiko Adachi) **58** #2510 47H99
- Nonlinear complementarity problem and systems of convex inequalities. *J. Optim. Theory Appl.* **24** (1978), no. 3, 499-506. (Pierre Loridan) **58** #2515 47H99 (90C25)
- Takahashi, Yasuji** (with Koshi, Shozo) A note on approximate dimension. *Proc. Japan Acad.* **47** (1971), 235-238. (Bor-Luh Lin) **45** #4097 46A05
- A note on Sazonov's theorem. *J. Fac. Sci. Hokkaido Univ. Ser. I* **22** (1972), 126-131. (A. Badrikian) **47** #2025 28A40
- Minlos' lemma and Umemura's lemma. *J. Fac. Sci. Hokkaido Univ. Ser. I* **22** (1972), 150-153. (From the author's introduction) **54** #5427 28A40
- (with Koshi, Shozo) A remark on quasi-invariant measure. *Proc. Japan Acad.* **50** (1974), 428-429. (J. Schmets) **51** #847 28A40
- Quasi-invariant measures on linear topological spaces. *Hokkaido Math. J.* **4** (1975), 59-81. (A. Pietsch) **51** #8364 28A40 (47B10)
- Some remarks on p -absolutely summing operators. *Hokkaido Math. J.* **5** (1976), no. 2, 308-315. (Russell G. Bilyeu) **56** #1114 47B10
- Bochner-Minlos' theorem on infinite dimensional spaces. *Hokkaido Math. J.* **6** (1977), no. 1, 102-129. (Werner Linde) **55** #8296 28A40 (60B05, 47B10)
- On measurable norms and abstract Wiener spaces. *Hokkaido Math. J.* **6** (1977), no. 2, 276-283. (Werner Linde) **56** #15873 28A40 (47B10)
- Takahashi, Yasundo** (with Rabins, Michael J.; Auslander, David M.) ★Control and dynamic systems. *Addison-Wesley Publishing Co., Reading, Mass., 1970.* (Vadim Komkov) **58** #20640a 93-01
- (with Rabins, Michael J.; Auslander, David M.) ★Sterowanie i systemy dynamiczne. (Polish) [Control and dynamic systems] Translated from the English by Henryk Górecki. *Wydawnictwa Naukowo-Techniczne, Warsaw, 1976.* 691 pp. (Vadim Komkov) **58** #20640b 93-01
- Takahashi, Yasushi** (with Umezawa, Hiroomi) Thermo field dynamics. *Collect. Phenom.* **2**, no. 2, 55-80 (1975). (Etang Chen) **52** #9889 81.46 (82.46)
- (with Goto, Tetsuo) General Ward-like relations in canonical field theory. *Progr. Theoret. Phys.* **57** (1977), no. 5, 1732-1748. (Authors' summary) **56** #2076 81.47
- See also **Abe, Ryuzo**, **55** #7224 and **Zav'jalov, O. I.**, **58** #25456
- Takahashi, Yōichirō** Markov semigroups with simple interaction. I, II. *Proc. Japan Acad.* **47** (1971), suppl. II, 974-978; *ibid.* **47** (1971), 1019-1024. (H. P. McKean, Jr.) **48** #3127 60J25 (82.60, 60K35)

- β -transformations and symbolic dynamics. *Proceedings of the Second Japan-USSR Symposium on Probability Theory (Kyoto, 1972)*, pp. 455-464. *Lecture Notes in Math.*, Vol. 330, Springer, Berlin, 1973. (W. Parry) **55** #10643 28A65
- Isomorphisms of β -automorphisms to Markov automorphisms. *Osaka J. Math.* **10** (1973), 175-184. (R. L. Adler) **49** #5304 28A65
- (with Shiga, Tokuzo) Ergodic properties of the equilibrium process associated with infinitely many Markovian particles. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 505-516. (F. L. Spitzer) **53** #6801 60K35 (28A65)
- (with Ito, Shunji) Markov subshifts and realization of β -expansions. *J. Math. Soc. Japan* **26** (1974), 33-55. (W. Parry) **49** #10860 28A65 (10K10, 60J05)
- A class of solutions of Bogolioubov system of equations for classical statistical mechanics of hard core particles. *Sci. Papers College Gen. Ed. Univ. Tokyo* **26** (1976), no. 1, 15-26. (Ju. M. Suhov) **54** #4457 82J35
- Takahashi, Yoshinori** (with Shibata, Fumiaki) Spin coherent state representation in non-equilibrium statistical mechanics. *J. Phys. Soc. Japan* **38** (1975), 656-668. (Authors' summary) **54** #2059 82J47
- (with Shibata, Fumiaki; Hashitsume, Natsuki) A generalized stochastic Liouville equation. Non-Markovian versus memoryless master equations. *J. Statist. Phys.* **17** (1977), no. 4, 171-187. (Nina B. Maslova) **57** #2391 82J60
- Takahashi, Yoshio** The generalized Bogolyubov-Valatin transformation of neutron and proton system. *Progr. Theoret. Phys.* **46** (1971), 1749-1769. (Anthony Joseph) **46** #3011 81J22
- Takahashi, Yukio** On the effects of small deviations in the transition matrix of a finite Markov chain. *J. Operations Res. Soc. Japan* **16** (1973), 104-129. (Paul J. Schweitzer) **50** #5938 60J10
- A sequencing model with an application to speed class sequencing in air traffic control. *J. Operations Res. Soc. Japan* **17** (1974), no. 1, 1-28. (E. V. Bulinskaja) **54** #2180 90B35
- Applications of Markov models, and their principal problems. (Japanese) *Keiei-Kagaku* **18** (1974), no. 5-6, 181-190. (Mamoru Kanda) **55** #1542 60K99
- (with Takami, Yoshinori) A numerical method for the steady-state probabilities of a $G1/G/C$ queueing system in a general class. *J. Operations Res. Soc. Japan* **19** (1976), no. 2, 147-157. (Ralph L. Disney) **53** #9686 65Q05 (60K25)
- An approximation formula for the mean waiting time of an $M/G/c$ queue. *J. Operations Res. Soc. Japan* **20** (1977), no. 3, 150-163. (Author's summary) **58** #31460 60K25
- Takahasi, Hidetosi** (with Mori, Masatake) Error estimation in the numerical integration of analytic functions. *Rep. Comput. Centre Univ. Tokyo* **3** (1970), 41-108. (L. Fox) **45** #4641 65D30
- (with Natori, Makoto) Eigenvalue problem of large sparse matrices. *Rep. Comput. Centre Univ. Tokyo* **4** (1971/72), 129-148. (M. Lotkin) **50** #15309 65F15
- (with Mori, Masatake) Quadrature formulas obtained by variable transformation. *Numer. Math.* **21** (1973/74), 206-219. (D. D. Stancu) **48** #10070 65D30
- (with Mori, Masatake) Double exponential formulas for numerical integration. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 721-741. (Henning Esser) **49** #11781 65D30
- Takahasi, Ken-iti** See **Takahashi, Ken-ichi**
- Takahasi, Sin-ai** A remark on Urysohn's lemma for spectrums of C^* -algebras. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 4*, 33-35 (1972). (T. W. Palmer) **46** #6053 46L05
- On locally inner automorphisms of certain C^* -algebras. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 5* (1973), 41-46. (Mi-Soo Smith) **49** #11268 46L05
- (with Hasumi, Morisuke) An abstract Wiener-Lévy theorem on Fourier transforms. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 5* (1973), 47-52. (K. Yale) **48** #6940 46J10
- A note on the homomorphic images of the center of C^* -algebras. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 6* (1974), 29-32. (H. Halpern) **49** #1135 46L05
- On compact action of Riesz operators. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 6* (1974), 33-39. (Thomas Hoover) **48** #12125 47B05
- On Urysohn's lemma and division of the set of pure states. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 7* (1975), 61-66. (J. W. Bunce) **51** #6436 46L05
- A remark on Archbold's result. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 8* (1976), 23-24. (François Combes) **55** #1082 46L05
- A simple proof of the Stone-Weierstrass theorem for CCR-algebras with Hausdorff spectrum. *Math. Scand.* **38** (1976), no. 2, 304-306. (G. A. Elliott) **54** #13581 46L05
- Remarks on Stone-Weierstrass problem for C^* -algebras. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 9* (1977), 61-63. (William Paschke) **56** #6406 46L05
- A characterization for compact central double centralizers of C^* -algebras. *Pacific J. Math.* **72** (1977), no. 1, 255-259. (R. C. Busby) **58** #17867 46L05
- A converse of the Stone-Weierstrass theorem for CCR-algebras with Hausdorff spectrum. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 10* (1978), 35-37. (R. H. Herman) **58** #17868 46L05
- Takahata, Hiroshi** A remark on duality of Markov processes. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 117-122 (1972). (K. N. Gowrisankaran) **48** #7396 60J45
- Radonifying mappings and functional central limit theorems for ϕ -mixing sequences of random variables. *Bull. Tokyo Gakuuei Univ.* **(4)** **27** (1975), 5-22. (A. Badrikian) **53** #4187 60F05 (60B10)
- A note on functionals for martingale sequences. *Bull. Tokyo Gakuuei Univ.* **(4)** **28** (1976), 17-21. (C. C. Heyde) **55** #9196 60B10 (60G45)
- Limiting behavior of density estimates for stationary asymptotically uncorrelated processes. *Bull. Tokyo Gakuuei Univ.* **(4)** **29** (1977), 1-9. (M. A. Mirzamedov) **57** #14249 62G05
- On recursive density estimators for a class of stationary processes. *Bull. Tokyo Gakuuei Univ.* **(4)** **29** (1977), 10-18. (M. A. Mirzamedov) **57** #14250 62G05
- Takai, Hiroshi** On an algebraic model for von Neumann algebras. I, II. *Proc. Japan Acad.* **46** (1970), 941-943; *ibid.* **46** (1970), 1091-1095. (B. Russo) **45** #9152 46L10
- On an algebraic model for von Neumann algebras. III. *Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci.* **20** (1971), 121-123. (K. Saito) **49** #11272 46L10
- (with Kasahara, Isamu) Approximate propvalues and characters of C^* -algebra. *Proc. Japan Acad.* **48** (1972), 91-93. (Berriore Moore, III) **48** #926 47A70
- (with Yamada, Hiroaki) A note on the dilation theorems. *Proc. Japan Acad.* **48** (1972), 216-220. (S. Anastasio) **47** #2395 47A20 (46L99)
- (with Nakamura, Masahiro) A note on the dilation theorems. II. *Proc. Japan Acad.* **48** (1972), 302-307. (S. Anastasio) **47** #2396 47A20 (46L99)
- (with Nakamura, Masahiro) Nondegeneracy and discrete models. *Proc. J. Acad.* **48** (1972), 566-568. (N. Sankaran) **48** #4745 46L05
- Dualité dans les produits croisés de C^* -algèbres. *C. R. Acad. Sci. Paris Sér. A* (1974), 1041-1043. (M. Takesaki) **49** #5863 46L05
- On a duality for crossed products of C^* -algebras. *J. Functional Analysis* **19** (1975), 25-39. (J. M. G. Fell) **51** #1413 46L05
- On a Fourier expansion in continuous crossed products. *Publ. Res. Inst. Math.* **11** (1975/76), no. 3, 849-880. (Alain Connes) **54** #8309 46L10
- The quasi-orbit space of continuous C^* -dynamical systems. *Trans. Amer. Math. Soc.* **216** (1976), 105-113. (Alain Guichardet) **52** #6444 46L05
- (with Kishimoto, Akitaka) On the invariant $\Gamma(\alpha)$ in C^* -dynamical systems. *Tôhoku Math. J.* **(2)** **30** (1978), no. 1, 83-94. (Ola Bratteli) **58** #2324 46L05 (22D10, 28A05)
- Takaisvili, K. G.** On the solution of integro-differential equations whose kernels satisfy conditions of Effros' theorem. (Russian) *Differential and integral equations, No. (Russian)*, pp. 174-176, 312. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Author's summary) **56** #16301 45J05
- Takaki, Kentaro** Lipeomorphisms close to an Anosov diffeomorphism. *Nagoya Math. J.* (1974), 71-82. (J. W. Robbin) **49** #11566 58F10 (58F15)
- Takaku, Akira** Units of real quadratic fields. *Nagoya Math. J.* **44** (1971), 51-55. (S. Gendler) **45** #222 12A45
- Elementary proof of "the class number of $Q(\sqrt{\ell})$ is odd when ℓ is prime". *Bull. Sci. Engrg. Div. Univ. Ryukyus Math. Natur. Sci. No.* **19** (1975), 27-31. (Yoshio Furuta) **52** #3114 12A50
- Finite part of $L(1, x)$. *Bull. Sci. Engrg. Div. Univ. Ryukyus Math. Natur. Sci. No.* **19** (1975), 1-3. (Matti Jutila) **53** #13138 10H10
- Quadratic non-residues on extended Riemann hypothesis. *Bull. Sci. Engrg. Div. Univ. Ryukyus Math. Natur. Sci. No.* **20** (1975), 5-6. (Matti Jutila) **53** #13139 10H10
- The k -th power free kernels of sequence $a_n^k + 1$. *Bull. Sci. Engrg. Div. Univ. Ryukyus Math. Natur. Sci. No.* **23** (1977), 1-2. (R. Tijdeman) **55** #12632 10B15
- Takamatsu, Kichiro** (with Watanabe, Yoshiyuki) On conformally flat K -spaces. *Differential geometry (in honor of Kentaro Yano)*, pp. 483-488. *Kinokuniya, Tokyo*, 1974. (Koichi Ogiue) **48** #1085 53B35
- (with Watanabe, Yoshiyuki) Classification of a conformally flat K -space. *Tôhoku Math. J.* **(2)** **24** (1972), 435-440. (K. Yano) **47** #5763 53B35
- (with Watanabe, Yoshiyuki) On a K -space of constant holomorphic sectional curvature. *Kôdai Math. Sem. Rep.* **25** (1973), 297-306. (David Blair) **48** #7147 53B35
- (with Sawaki, Sumio) On almost complex hypersurfaces of a K -space. *Tôhoku Math. J.* **(2)** **25** (1973), 569-578. (Koichi Ogiue) **48** #12371 53B35
- (with Sato, Takuji) A K -space of constant holomorphic sectional curvature. *Kôdai Math. Sem. Rep.* **27** (1976), no. 1-2, 116-127. (Hassan Akbar-Zadeh) **53** #9102 53C55
- Takamatsu, Reri** Fourier transform of Banach algebra valued functions on group. *Proc. Japan Acad.* **50** (1974), 350-355. (B. R. Gelbaum) **52** #8799a 43A30
- Fourier transform of Banach algebra valued functions on group. II. *Proc. Japan Acad.* **50** (1974), 426-427. (B. R. Gelbaum) **52** #8799b 43A30
- On polythetic groups. *Proc. Japan Acad.* **52** (1976), no. 1, 17-20. (A. Lakshm) **53** #697 22B05
- Takamatsu, Shigeru** (with Tominaga, Hisao) On normalizers of simple ring extensions. *Proc. Japan Acad.* **49** (1973), 678-680. (S. Elliger) **49** #10734 16A40
- Takamatsu, Shinobu** (with Nishida, Fujio) An efficient retrieval method for a hierarchical fact-retrieval system and its evaluation. *Systems-Computers-Controls* **6** (1975), no. 52-60. (V. Ju. Meitus) **53** #2080 68A50
- Takamatsu, Shunro** (with Kodama, Masanori; Fukuta, Jiro) Mission reliability for a 1-unit system with allowed down-time. *IEEE Trans. Reliab. R-22* (1973), no. 268-270. (R. Subramanian) **53** #15326 90B25
- (with Nakamichi, Hiroshi; Fukuta, Jiro; Kodama, Masanori) Reliability consideration on a repairable multicomponent system with redundancy in parallel. *Operations Res. Soc. Japan* **17** (1974), no. 1, 39-48. (Sami Abdelhamid) **53** #6952 62N05 (62F25)
- (with Fukuta, Jiro; Kodama, Masanori; Nakamichi, Hiroshi) Reliability analysis of a complex system with dissimilar units under preemptive repeat repair discipline. *Operations Res. Soc. Japan* **18** (1975), no. 1-2, 1-15. (A. P. Basu) **52** #12750 90B25 (62N05)
- Takamatsu, Takeichiro** (with Oi, K.; Sayama, H.) Computational schemes of the Davidson-Fletcher-Powell method in infinite-dimensional space. *J. Optimization Theory Appl.* **12** (1973), 447-458. (V. V. Ivanov) **48** #10110 65K05
- See also *Proceedings: IFAC World Congress*, **50** #12338
- Takamatsu, Yuzo** (with Aibara, Tsunehiro; Yano, Jun) Threshold logic with multivalued variable threshold. *Systems-Computers-Controls* **1** (1970), no. 6, 34-41 (1971). (From authors' summary) **49** #12171 94A20
- (with Aihara, Tsunehiro) Complete monotonicity for multivalued logic functions. *Systems-Computers-Controls* **1** (1970), no. 6, 95-96 (1971). (A. Rose) **46** #10497 94A20
- (with Murakami, Kenji; Aibara, Tsunehiro) Isobaricity for a set of multivalued logic functions and its application to the synthesis of multithreshold threshold element. *Systems-Computers-Controls* **5** (1974), no. 5, 28-35 (1975). (J. C. Muzio) **54** #4848 94A20
- (with Kinoshita, Kozo) NOR-AND cellular arrays. *Systems-Computers-Controls* (1976), no. 4, 28-35 (1977). (W. Wechler) **57** #15770 94A20
- Takami, Yoshinori** (with Takahashi, Yukio) A numerical method for the steady-state probabilities of a $G1/G/C$ queueing system in a general class. *J. Operations Res. Soc. Japan* **19** (1976), no. 2, 147-157. (Ralph L. Disney) **53** #9686 65Q05 (60K25)
- Takamoto, Yoshiko** (with Yoshioka, Tsunéo) Quelques groupes d'automorphismes analytiques de C^2 . *Osaka J. Math.* **14** (1977), no. 2, 253-270. (Lawrence Gruma) **56** #8890 32A15 (32M05)
- Takamura, Kiyoshi** (with Hirai, Ito; Yoshimura, Torazo) On a direct eigenvalue analysis

- for locally modified structures. *Internat. J. Numer. Methods Engrg.* **6** (1973), 441-442. (J. Ignaczak) **48** #5478 73.65
- kamuro, Sachio** On approximative dimension. (Japanese) Approximation theory in functional analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 265* (1976), 89-92. (Editors) **58** #7014 46A05
- kanami, Itsuo** (with Honda, Namio) A characterization of Parikh's theorem and the semilinear sets by commutative semigroups with length. *Electron. Commun. Japan* **52** (1969), no. 10, 179-184. (W. Wechler) **50** #9044 68A10 (68A30)
(with Honda, Namio) Semi-definite events and automata.
- Systems-Computers-Controls** **2** (1971), no. 2, 19-24 (1972). (Y. Zalcstein) **46** #10523 94A30
(with Honda, Namio) Automata and transducers on control sets.
- Systems-Computers-Controls** **3** (1972), no. 2, 8-14. (R. N. Goss) **50** #9448 94A30
(with Honda, Namio) Generalization of finite automata.
- Systems-Computers-Controls** **3** (1972), no. 2, 15-22. (H. Jürgensen) **50** #16173 94A30 (20M35)
- Two-way finite automata on control sets. **Systems-Computers-Controls** **4** (1973), no. 3, 44-50. (Author's summary) **55** #13875 68A25 (94A30)
(with Asano, Takao) The length of shortest closed walks passing all transition arcs in machines. **Systems-Computers-Controls** **6** (1975), no. 1, 17-21. (Authors' summary) **56** #15222 94A25 (05C35)
(with Asano, Takao; Shibui, Michiro) General results on tour lengths in machines and digraphs. *SIAM J. Comput.* **5** (1976), no. 4, 629-645. (Bolesław Mikołajczak) **56** #18127 94A20
(with Fujii, Michihisa) On heuristic construction of self-organizing files for sequential searches. **Systems-Comput.-Controls** **8** (1977), no. 1, 53-61 (1978). (From the summary) **58** #14019 68A50
(with Inoue, Katsushi; Nakamura, Akira) A note on two-dimensional finite automata. *Information Processing Lett.* **7** (1978), no. 1, 49-52. (Rani Siromoney) **57** #9357 94A30
- kanano, Kaoru** (with Ichikawa, Yoshi-Hiko; Yajima, Nobuo) Coherent states and the Korteweg-de Vries equation for a system of interacting phonons. *Progr. Theoret. Phys.* **55** (1976), no. 6, 1723-1732. (M. Lawrence Glasser) **56** #2026 81.35
- kanano, Katsuo** On the spectra of Jacobi matrices. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 8* (1976), 9-15. (Daniel P. Maki) **54** #6290 60J15 (47B35)
On Cameron and Storvick's operator valued function space integral. *Pacific J. Math.* **66** (1976), no. 2, 561-591. (Tack-Wang Lee) **56** #571 28A40
An integral equation related to the Cameron-Storvick operator-valued function space integral. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 9* (1977), 81-95. (Author's summary) **58** #28400 28A40 (45N05, 46G10)
Evolution systems related to Gaussian Markov processes and an integral equation. *Indiana Univ. Math. J.* **26** (1977), no. 3, 593-598. (Tack-Wang Lee) **55** #8297 28A40
- An analogous method to Cameron and Storvick's function space integral and evolution systems. *J. London Math. Soc.* (2) **16** (1977), no. 1, 83-95. (Author's introduction) **58** #22454 28A40
Integral transforms and semigroups of linear operators on the W^2 -space. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 10* (1978), 39-54. (K. Yosida) **58** #17956 47D05 (44A25)
- kanano, Katuo** Spectral properties of random walks with a finite number of impurity points. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 37-52 (1971). (M. M. Siddiqui) **46** #8313 60J15
- kanano, Kazuo** (with Imai, Tyuiti) On some types of affine motions in bi-recurrent spaces. *II. Tensor (N.S.)* **23** (1972), 309-313. (Yung-Chow Wong) **48** #12346 53B05
(with Imai, Tyuiti) On some types of affine motions in bi-recurrent spaces. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. I. *Tensor (N.S.)* **24** (1972), 93-100. (Yung-Chow Wong) **48** #12345 53B05
On a special bi-recurrent space. *Tensor (N.S.)* **27** (1973), 240-242. (Yung Chow Wong) **49** #3720 53B05
On a special bi-recurrent space. *II. Tensor (N.S.)* **30** (1976), no. 1, 62-64. (Yung-Chow Wong) **55** #6316 53B05
- kanano, Kyoichi** On a nonlinear difference equation of Briot-Bouquet type. *Japan-United States Seminar on Ordinary Differential and Functional Equations (Kyoto, 1971)*, pp. 262-265. *Lecture Notes in Math.*, Vol. 243, Springer, Berlin, 1971. (Editors) **52** #6229 39A12 (34A20)
Solutions containing arbitrary periodic functions of systems of nonlinear difference equations. *Funkcial. Ekvac.* **16** (1973), 137-164. (B. Crstici) **49** #11079 39A10
On the hypertranscendence of solutions of a difference equation of Kimura. *Funkcial. Ekvac.* **16** (1973), 241-254. (G. Eisenreich) **50** #5074 34A99 (39A10)
On the iteration of holomorphic mappings. *Funkcial. Ekvac.* **17** (1974), 107-156. (J. Matkowski) **51** #8449 32A05 (39A20)
(with Yoshida, Masaaki) Local theory of Fuchsian systems. I. *Proc. Japan Acad.* **51** (1975), no. 4, 219-223. (R. Gérard) **52** #3648 34A25 (14D05, 58A15)
(with Yoshida, Masaaki) Local theory of Fuchsian systems. (Japanese)
Distributions and linear differential equations (Proc. Fourth Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 248* (1975), 199-204. (Hiroshi Haruki) **57** #14013 58A15 (34A20)
(with Bannai, Eiichi) A global study of Jordan-Pochhammer differential equations. *Funkcial. Ekvac.* **19** (1976), no. 1, 85-99. (Wolfgang Bühning) **54** #10720 34A30 (14D05)
(with Yoshida, Masaaki) On a linear system of Pfaffian equations with regular singular points. *Funkcial. Ekvac.* **19** (1976), no. 2, 175-189. (Antoinette Sec) **55** #9137 58A15 (34A25)
Asymptotic solutions of a linear Pfaffian system with irregular singular points. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 2, 381-404. (R. Gérard) **57** #4210 58A15 (32L10, 34A20)
- Takano, Masaru** On a fine capacity related to a symmetric Markov process. *Proc. Japan Acad.* **48** (1972), 599-602. (M. Šur (RZMat 1973 #8 V46)) **51** #14285 60J45
(with Narita, Kiyomasa) On the solutions of stochastic differential equations with jumps from the boundary. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **12**, 174-177 (1974). (H. P. McKean, Jr.) **50** #14958 60J60 (60H20)
- Takano, Seiji** Interaction information and Markov chain. *J. Multivariate Anal.* **3** (1973), 93-101. (P. M. Lee) **48** #13478 94A15 (60J10)
Characterization of regular Markov chains for asymptotically independent variables. *J. Multivariate Anal.* **3** (1973), 490-493. (V. V. Anisimov) **49** #1594 60J10
On some transmission invariant properties and information stability. *Information and Control* **25** (1974), 329-340. (S. Guiaşu) **49** #10449 94A15
On 3-dimensional interaction information. *Proc. Japan Acad.* **50** (1974), 109-113. (C. Mohan) **51** #9968 94A15
On a method of calculating the capacity of a discrete memoryless channel. *Information and Control* **29** (1975), no. 4, 327-336. (M. C. Cheng) **52** #10216 94A05
On a characterization of some class of M -dependent channels with finite memory and finite anticipation. *Information and Control* **30** (1976), no. 3, 295-298. (S. Guiaşu) **53** #7621 94A15
On a strong law in information stability. *IEEE Trans. Information Theory* **IT-23** (1977), no. 5, 623-625. (John C. Kieffer) **56** #15163 94A15
- Takano, Yoshiro** Gravitational field in Finsler spaces. *Lett. Nuovo Cimento* (2) **10** (1974), 747-750. (Editors) **56** #7750 83.53
Variation principle in Finsler spaces. *Lett. Nuovo Cimento* (2) **11** (1974), 486-490. **56** #14352 81.49
On the theory of fields in Finsler spaces. *Proceedings of the International Symposium on Relativity and Unified Field Theory (Calcutta, 1975-1976)*, pp. 17-26. S. N. Bose Inst. Phys. Sci., Calcutta, 1978. (J. D. Zund) **58** #20245 83.53 (53B40)
- Takanuki, Ryuji** (with Morishita, Iwao) Multi-category pattern classification using a nonsupervised learning algorithm. *Pattern recognition and machine learning (Proc. Japan-U.S. Sem. Learning Process in Control Systems, Nagoya, 1970)*, pp. 29-41. Plenum Press, New York, 1971. (Sidney Berkowitz) **56** #7371 68A45
- Takao, Kazuaki** An optimization problem in signal processing by an antenna array. (Japanese) *Systems and Control* **19** (1975), no. 9, 459-465. (K. Nakamura) **57** #19062 94A05
- Takao, Kichiro** (with Baba, Yoriaki) Computer control of linear process with inequality constraints on the control forces. *Mem. Defense Acad.* **13** (1973), 315-326. (Tohru Katayama) **48** #5687 93C05
- Takao, Yasutaro** (with Miyachi, Yoshihiko) On the first-order raising operators for the Hamiltonians in two variables. *Progr. Theoret. Phys.* **55** (1976), no. 3, 935-936. (K. T. Mahanthappa) **53** #10010 81.47
(with Miyachi, Yoshihiko) On first-order ladder operators and the factorization method. *Math. Japon.* **22** (1977), no. 3, 369-378. (Sandro Graffi) **58** #14678 81.47 (34B25)
- Takaoka, Hiroshi** (with Takaoka, Tadao) On the uniqueness of solution of a state-characteristic equation of finite automata. *Systems-Computers-Controls* **2** (1971), no. 4, 10-17. (S. A. Greibach) **48** #10720 94A30
- Takaoka, Tadao** A construction method of fail-safe systems for many-valued logic. *Systems-Computers-Controls* **2** (1971), no. 1, 19-27 (1972). (Author's summary) **46** #3227 94A20
(with Takaoka, Hiroshi) On the uniqueness of solution of a state-characteristic equation of finite automata. *Systems-Computers-Controls* **2** (1971), no. 4, 10-17. (S. A. Greibach) **48** #10720 94A30
(with Ibaraki, Toshihide) N -fail-safe sequential machines. *IEEE Trans. Computers* **C-21** (1972), 1189-1196. (B. P. Zeigler) **49** #12208 94A30
(with Ibaraki, Toshihide) Fail-safe realization of sequential machines. *Information and Control* **22** (1972), 31-55. (Shuzo Yajima) **53** #7646 94A25
(with Noshita, Kohei) On the tree height of context-free languages. *Systems-Computers-Controls* **4** (1973), no. 3, 23-29. (Leon Levy) **49** #4325 68A30
Two measures over language space. *Systems-Computers-Controls* **4** (1973), no. 3, 30-36. (A. L. Rosenberg) **49** #8438 68A30 (02F43)
A note on the ambiguity of context-free grammars. *Information Processing Lett.* **3** (1974/75), 35-36. (Leon Levy) **56** #1832 68A30
(with Amamiya, Makoto) On the ambiguity function of context-free languages. *Systems-Computers-Controls* **6** (1975), no. 1, 31-35. (Ju. G. Karpov) **54** #4204 68A30
- Takasawa, Yoshimitsu** (with Yanai, Hiroshi) An approximate solution of optimal allocation problem by a nomograph. (German summary) *Computing* **14** (1975), no. 1-2, 107-117. (Authors' summary) **56** #1720 65K05 (65S05)
See also **Yanai, Hiroshi**, **56** #10085
- Takashima, Satoshi** (with Kanoh, Hikeaki; Itō, Akira) Recent trends in the study of distributed parameter systems. II. Process dynamics of a distributed system, and its control. (Japanese) *Systems and Control* **18** (1974), no. 11, 605-612. (K. Kanai) **52** #16739 93-02 (93C99)
- Takashima, Yoshinao** (with Hata, Shiroh; Maruoka, Takaharu) An optimal control for a system with time delay. (Japanese. English summary) *Systems and Control* **17** (1973), 515-522. (J. Kato) **52** #5124 93C30 (93C15)
(with Maruoka, Takaharu; Hata, Shiroh) A hybrid computation of optimal feedback gains for time-delay systems. *Bull. Univ. Osaka Prefecture Ser. A* **23** (1974), 7-16. (D. H. Chyung) **52** #7636 93C15
(with Hata, Shiroh; Maruoka, Takaharu) A method of calculating the optimal feedback gains for a control system with time-delay. (Japanese. English summary) *Systems and Control* **18** (1974), 234-240. (Kunihiko Ichikawa) **52** #7625 93C05
- Takasu, Kiyosumi** On the eigenvalues of recurrent potential kernels. *Hiroshima Math. J.* **2** (1972), 19-31. (J. L. Doob) **48** #5193 60J45
- Takasu, S.** Key assertions and backward substitutions. *Proceedings of the Third Symposium on Basic Theory of Programs (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1973) and of the Workshop for Proof Theory about Algorithms (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1974)*. *Sūrikaiseikikenkyūsho Kōkyūroku No. 236* (1975), 190-196. (Editors) **58** #8478 68A10
- Takasu, Tsurusaburo** Various Hamilton's canonical formalisms as non-connection methods for various connection geometries in the large. III. *Yokohama Math. J.* **19** (1971), 49-78. (Y. Muto) **45** #5906 53C05
- Takata, Hitoshi** (with Tsuji, Setsuzo) The modified second-order filter by using the multi-dimensional Hermite expansions. (Japanese. English summary) *Systems and*

- Control* 17 (1973), 698-705. (Tohru Katayama) 49 #10418 93E10
- A modified second order filter for continuous-time nonlinear systems with discrete noisy measurements. (Japanese. English summary) *Systems and Control* 19 (1975), no. 12, 650-656. (Seihaku Higuchi) 53 #10436 93E10
- Takatsu, Shinzo** (with Matsuda, Takehiko) Mathematical framework for organizational research. *J. Operations Res. Soc. Japan* 18 (1975), no. 3-4, 182-210. (From the authors' summary) 56 #14656 90B99
- Takayama, Akira** Devaluation and financial controls in the multi-commodity world. *Resource allocation and division of space (Proc. Internat. Sympos., Tobu, 1975)*, pp. 95-106. *Lecture Notes in Econom. and Math. Systems*, Vol. 147, Springer, Berlin, 1977. (Wolfgang Mayer) 58 #4249 90A15
- Takayama, K. P.** (with Fang, J.) ★Sociology of mathematics and mathematicians. A prolegomenon. *Paideia Studies in the Nature of Modern Mathematics*, No. 15. *Paideia, Hauppauge, N.Y.*, 1975. 364 pp. (H. J. M. Bos) 58 #20961 00A25
- Takayama, Takashi** (with Simaan, Marwan A.) Dynamic duopoly game: differential game theoretic approach. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975)*, Part 1, Paper No. 23.4, 7 pp. *IFAC, Düsseldorf*, 1975. (Authors' summary) 58 #33059 90D40 (90D25)
- (with Simaan, Marwan A.) Optimum monopolist control in a dynamic market. *IEEE Trans. Systems Man Cybernet. SMC-6* (1976), no. 12, 799-807. (George M. Constantinides) 57 #2492 90A15 (93B99)
- Takeda, Eiji** Connectivity in fuzzy graphs. *Tech. Rep. Osaka Univ.* 23 (1973), 343-352. (Author's summary) 55 #10071 92A20 (05C20)
- (with Nakajima, Nobuyuki; Tahara, Akihiko) Fuzzy information in product spaces. *Tech. Rep. Osaka Univ.* 25 (1975), no. 1230-1253, 1-8. (M. Terrenoire) 52 #10239 94A15
- (with Nishida, Toshio) An application of fuzzy graphs to the problem concerning group structure. *J. Operations Res. Soc. Japan* 19 (1976), no. 3, 217-227. (Michio Sugeno) 55 #14271 92A20
- (with Tahara, Akihiko; Nakajima, Nobuyuki) Information content of a fuzzy message. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* 23 (1976), no. 4, 16-20. (K. S. Fu) 56 #8184 94A15
- Takeda, Hidehiro** (with Watanabe, Yoshiyuki) On Riemannian spaces with parallel Weyl's projective curvature tensor. *Kyungpook Math. J.* 12 (1972), 37-41. (K. Yano) 46 #2616 53C55
- Takeda, Hiroshi** (with Azuma, Yoshiyuki; Abe, Kenichi) Information theoretic considerations on estimation processes. (Japanese. English summary) *Systems and Control* 16 (1972), 879-883. (Authors' summary) 47 #3088 94A05
- (with Abe, Kenichi) Finite parameter estimation problems under incomplete information on stochastic matrices. *Electron. Commun. Japan* 56 (1973), no. 8, 11-17. (S. Kotz) 50 #6031 62F10 (62M05)
- Takeda, Kazuaki** On a certain example of orthogonal system. *Mem. Ehime Univ. Natur. Sci. Ser. A* 6, no. 2, 15-18 (1969). (J. L. Ullman) 48 #802 42A64
- Takeda, Shingen** See Kuwabara, Hideo, 58 #26740
- Takeda, Sboichi** (with Bergen, Arthur R.) On instability of feedback systems with a single nonlinear time-varying gain. *IEEE Trans. Automatic Control AC-16* (1971), 462-464. (Authors' summary) 46 #3163 93D15
- (with Bergen, Arthur R.) Instability of feedback systems by orthogonal decomposition of L_2 . *IEEE Trans. Automatic Control AC-18* (1973), 631-636. (A. S. C. Sinha) 54 #7062 93D15
- Takeda, Susumu** (with Mio, Koji; Ogino, Tatsuki; Minami, Kazuo) Modified nonlinear Schrödinger equation for Alfvén waves propagating along the magnetic field in cold plasmas. *J. Phys. Soc. Japan* 41 (1976), no. 1, 265-271. (G. P. Bava) 57 #2116 76.35
- Takeda, Tatsuoki** (with Tsunematsu, Toshihide) A new iterative method for solution of a large-scale general eigenvalue problem. *J. Comput. Phys.* 28 (1978), no. 2, 287-293. (From the text) 58 #19078 65F15
- Takeda, Zirô** (with Haga, Yoshinori) Correspondence between subgroups and subalgebras in a cross product von Neumann algebra. Collection of articles dedicated to Gen-ichi-rô Sunouchi on his sixtieth birthday. *Tôhoku Math. J. (2)* 24 (1972), 167-190. (Horst Behncke) 52 #1339 46L10
- Takehana, Hiroaki** An automorphism on tensor products of operator algebras. *Math. Japon.* 20 (1975), no. 1, 99-100. (J. W. Bunce) 52 #11611 46L05
- (with Enomoto, Masatoshi; Fujii, Masatoshi) On a conjecture of Breuer. *Math. Japon.* 21 (1976), no. 4, 387-389. (Editors) 56 #12910 46L10 (58B05, 58G10)
- (with Fujii, Masatoshi) Convergence theorems for entropies of operators. *Math. Japon.* 22 (1977), no. 2, 227-231. (M. Nakamura) 58 #2344 46L99 (47D99)
- (with Watanabe, Yasuo) On a conjecture of M. Choda. *Math. Japon.* 23 (1978), no. 1, 127-128. (George P. Barker) 58 #2328 46L05
- Takehara, Toshio** Laser oscillation as a weakly nonlinear oscillation system. *Mem. Fac. Lit. Sci. Shimane Univ. Natur. Sci. No.* 10 (1976), 43-48. (G. P. Bava) 55 #5958 34C15 (78.34)
- Forced linear harmonic oscillator in the interaction representation. *Mem. Fac. Lit. Sci. Shimane Univ. Natur. Sci. No.* 11 (1977), 43-48. (M. M. Skraganov) 57 #4885 81.35
- Takekuma, Ryoiti** On two transcendental curves that were not published in Descartes' *Geometry*. (Japanese) *Sûgakushi Kenkyû* 6 (1968), no. 3, 1-12. (M. Kurita) 47 #8225 01A45
- Takemitsu, Nobumasa** On the formula of the higher derivative of the quotient $g(x)/f(x)$ —a method to determine the order and the asymptotic error constant of a given iteration function. *Information Processing in Japan* 17 (1977), 182-186. (Charles W. Groetsch) 58 #3320 65D15
- Takemoto, Fumio** Stable vector bundles on algebraic surfaces. *Nagoya Math. J.* 47 (1972), 29-48. (P. E. Newstead) 49 #2735 14F05
- Stable vector bundles on algebraic surfaces. II. *Nagoya Math. J.* 52 (1973), 173-195. (P. E. Newstead) 49 #2736 14F10 (14H45)
- Takemoto, Hideo** On the C_p -classes in the maximal CCR ideal of a von Neumann algebra. *Tôhoku Math. J. (2)* 23 (1971), 301-311. (H. Halpern) 45 #4166 46L10
- On a characterization of AW^* -modules and a representation of Gelfand type of noncommutative operator algebras. *Michigan Math. J.* 20 (1973), 115-127. (Ole A. Nielsen) 47 #7457 46L10
- (with Tomiyama, Jun) On the topological reduction of finite von Neumann algebras. *Tôhoku Math. J. (2)* 25 (1973), 273-289. (J. Vesterstrøm) 49 #7796 46L
- Decomposable operators in continuous fields of Hilbert spaces. *Tôhoku Math. J. (2)* 27 (1975), no. 3, 413-435. (Edward Azoff) 56 #12922 46L99 (47B99)
- On the weakly continuous constant field of Hilbert space and its application to the reduction theory of von Neumann algebra. *Tôhoku Math. J. (2)* 28 (1976), no. 4, 479-496. (Richard I. Loebl) 54 #5851 46L10
- Takemura, Kiitchi** (with Nakamichi, Maturoh) Simplification of fault detection using power-circuit line control of composite 3-valued systems. *Systems-Computers-Controls* (1975), no. 2, 1-12. (From the authors' summary) 57 #15764 94A20
- Takemura, Yasusi** On the Fourier series with respect to S -integral. (Italian summary) *Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8)* 55 (1973), 662-668 (1974). (K. Kartak) 52 #6296 42A16 (26A39)
- Takemura, Yoshiya** (with Funabashi, Shôichi) On quaternion Kählerian manifolds admitting the axiom of planes. *Kôdai Math. Sem. Rep.* 26 (1974/75), 210-215. (Y. Mutô) 51 #11326 53B35
- On automorphism groups of quaternion Kähler manifolds. *Kôdai Math. Sem. Rep.* 27 (1976), no. 3, 353-361. (Y. Mutô) 53 #9103 53C55
- Takenaga, Roy** (with Schafer, Ray E.) A sequential probability ratio test for availability. *Technometrics* 14 (1972), 123-135. 45 #2864 62L12
- Takenaka, Shigeo** Functional dimension of tensor product. *Proc. Japan Acad.* 47 (1971), 231-234. (H. Buchwalter) 45 #7433 46A05 (46M05)
- On functional dimensions of group representations. II. Case of compact semi-simple Lie groups. *J. Math. Kyoto Univ.* 14 (1974), 215-229. (E. A. Thieleker) 50 #13384 22E45
- On functional dimensions. (Japanese) Invariant differential equations in symmetric spaces (Proc. Sympos. Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sûrikaiseikenkyûsho Kôkyûroku No.* 249 (1975), 31-38. (M. Hasumi) 58 #6082 22E45
- On projective invariance of multi-parameter Brownian motion. *Nagoya Math. J.* 6 (1977), 89-120. (R. A. Minlos) 58 #3076 60J65 (22E45, 28A40, 60G15)
- Takenaka, Toshiharu** (with Okazawa, Noboru) A Phillips-Miyadera type perturbation theorem for cosine functions of operators. *Tôhoku Math. J. (2)* 30 (1978), no. 1, 107-115. (J. A. Goldstein) 57 #10497 47D05
- Takenaka, Yoshiko** Graph theoretic concepts and the incidence matrix. *Keio Engrg. Rep.* 24 (1971), 23-43. (F. Harary) 45 #5013 05C99
- On the existence of a Hamiltonian circuit in a graph. II. *Information and Control* 2 (1972), 480-488. (L. V. Quintas) 48 #10895 05C35
- Takeno, Hyôitirô** (with Kitamura, Shin-ichi) On the Einstein tensors of spherically symmetric space-times. *Progr. Math. (Allahabad)* 3 (1969), no. 1-2, 7-26. (H. Lass) 46 #1278 83.53
- (with Kitamura, Shin-ichi) ★On some special kind of space-times. I. *RRK No.* 71-9. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1971. 12 pp. (Editors) 52 #16517 83.53
- (with Kitamura, Shin-ichi) ★On some special kind of space-times. II. *RRK No.* 71-12. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1971. 28 pp. (Editors) 52 #16518 83.53
- (with Kitamura, Shin-ichi) ★On the characteristic system of the space-time V . *RRK No.* 71-14. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1971. 23 pp. (Editors) 52 #16519 83.53
- (with Kitamura, Shin-ichi) Some studies on spherically symmetric space-times. *Math. Japon.* 16 (1971), 71-80. (C. Gilbert) 46 #6783 83.53
- On n -recurrent H space-times. *Tensor (N.S.)* 22 (1971), 374-378. (Zbl 219 #53024) 58 #30888 53B40
- ★Discrimination of the space-time V . I. *RRK No.* 72-5. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1972. 32 pp. (Editors) 52 #16520 83.53
- ★Discrimination of the space-time V . II. *RRK No.* 72-7. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1972. 20 pp. (Editors) 52 #16521 83.53
- (with Kitamura, Shin-ichi) ★Group of motions in the space-time V . I. *RRK No.* 72-20. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1972. 20 pp. (Editors) 52 #16522 83.53 (53B25)
- (with Kitamura, Shin-ichi) On some special kind of space-times. II. *Hokkaido Math. J.* 1 (1972), 43-62. (R. I. Pimenov) 47 #8072b 83.53
- (with Kitamura, Shin-ichi) On some special kind of space-times. I. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday. *V. I. Tensor (N.S.)* 24 (1972), 266-272. (R. I. Pimenov) 47 #8072a 83.53
- (with Kitamura, Shin-ichi) On the characteristic system of the space-time V . Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday. *V. II. Tensor (N.S.)* 25 (1972), 63-75. (R. I. Pimenov) 48 #13172 83.53
- (with Kitamura, Shin-ichi) ★Group of motions in the space-time V . II. *RRK No.* 73-1. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1973. 19 pp. (Editors) 52 #16523 83.53 (53B25)
- ★On the recurrency of the space-time V . *RRK No.* 73-3. *Research Institute for Theoretical Physics, Hiroshima University, Hiroshima*, 1973. 17 pp. (Editors) 52 #16524 83.53
- Discrimination of the space-time V . I, II. *Hokkaido Math. J.* 2 (1973), 1-23; *ibid.* (1973), 26-39. (N. D. Sengupta) 47 #10025 83.53
- (with Kitamura, Shin-ichi) On the imbedding of the space-time V . *Math. Japon.* 1 (1973), 137-148. (R. I. Pimenov) 50 #3870 83.53 (53B25)
- (with Kitamura, Shin-ichi) Group of motions in the space-time V . I, II, III. *Tensor (N.S.)* 27 (1973), 197-207; *ibid.* (N.S.) 27 (1973), 265-275; *ibid.* (N.S.) 28 (1974), 25-33. (N. D. Sengupta) 49 #6880 83.53
- On the recurrency of the space-time V . *Tensor (N.S.)* 27 (1973), 309-318. (Kotik K. Lee) 50 #3871 83.53
- (with Kitamura, Shin-ichi) Parallel tensors in the space-time V . *Hokkaido Math. J.* 4 (1975), no. 2, 196-204. (R. I. Pimenov) 51 #12281 83.53
- On the classification of the space-time H . *Math. Japon.* 20 (1975), no. 1, 93-98

- (Richard Sigal) **52** #9971 83.53
 (with Kitamura, Shin-ichi) Parallel tensors in the space-time *H. Tensor (N.S.)* **29** (1975), no. 2, 169-178. (R. I. Pimenov) **51** #12282 83.53
 On "the generalized Takeno space-time". *Tensor (N.S.)* **29** (1975), no. 3, 243-248. (P. C. Vaidya) **51** #9746 83.53
 The relation between plane-symmetric space-times and the space-times *P* and *H*. *Math. Japon.* **21** (1976), no. 2, 219-225. (Richard Sigal) **54** #14735 83.53
 (with Kitamura, Shin-ichi) On the spherically symmetric space-times and the space-times *P*, *H* and *V. I. Tensor (N.S.)* **30** (1976), no. 2, 165-168. (H. Rund) **57** #15260a 83.53
 (with Kitamura, Shin-ichi) On the spherically symmetric space-times and the space-times *P*, *H* and *V. II. Tensor (N.S.)* **30** (1976), no. 3, 297-304. (H. Rund) **57** #15260b 83.53
 (with Kitamura, Shin-ichi) On the c.s. method for some kinds of space-times. *Math. Japon.* **22** (1977), no. 1, 151-158. (R. F. Biljalov) **56** #4690 83.53
 Invariant characterization of space-times. C.s. method. *Math. Japon.* **22** (1977), no. 2, 253-265. (Mineo Ikeda) **57** #4981 83.53
 A unified theory of spherically symmetric space-times and plane symmetric space-times. *Tensor (N.S.)* **31** (1977), no. 2, 149-154. (Zbl **341** #53038, Zbl **354** #53047) 83.53
kenouchi, Osamu Outline of Banach algebras. (Japanese) Function algebras and their applications. *Sūgaku* **28** (1976), no. 1, 1-9, 87-95. **58** #30267 46J05 (46H05)
kens, Floris (with Ruelle, D.) Note concerning our paper: "On the nature of turbulence". *Comm. Math. Phys.* **23** (1971), 343-344. (Editors) **45** #1478 76.46
 A note on sufficiency of jets. *Invent. Math.* **13** (1971), 225-231. (E. A. Feldman) **45** #2726 58A20
 A C^1 counterexample to Moser's twist theorem. *Nederl. Akad. Wetensch. Proc. Ser. A* **74** = *Indag. Math.* **33** (1971), 378-386. (H. B. Griffiths) **45** #9357 58F10 (34C35, 54H20)
 Partially hyperbolic fixed points. *Topology* **10** (1971), 133-147. (Z. Nitecki (Zbl **214**, 229)) **46** #6399 58F15
 Homoclinic points in conservative systems. *Invent. Math.* **18** (1972), 267-292. (Clark Robinson) **48** #9768 58F20 (58F10)
 (with Klingenberg, Wilhelm) Generic properties of geodesic flows. *Math. Ann.* **197** (1972), 323-334. (L. A. Santaló) **46** #6402 58F99
 Some remarks on the Böhme-Berger bifurcation theorem. *Math. Z.* **129** (1972), 359-364. (K. Goebel) **47** #4087 47H15
 Singularities of functions and vectorfields. *Nieuw Arch. Wisk.* (3) **20** (1972), 107-130. (Editors) **46** #10009 57D45 (57D25)
 A nonstabilizable jet of a singularity of a vector field. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 583-597. Academic Press, New York, 1973. (C. S. Hartzman) **49** #4025 58C25
 Integral curves near mildly degenerate singular points of vector fields. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 599-617. Academic Press, New York, 1973. (C. S. Hartzman) **48** #12605 58F10
 Normal forms for certain singularities of vectorfields. (French summary) Colloque International sur l'Analyse et la Topologie Différentielle (Colloques Internationaux du Centre National de la Recherche Scientifique, Strasbourg, 1972). *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 2, 163-195. (G. R. Belicij) **51** #1872 58C25
 (with Dumortier, Freddy) Characterization of compactness for symplectic manifolds. *Bol. Soc. Brasil. Mat.* **4** (1973), no. 2, 167-173. (Tudor S. Ratiu) **54** #11392 58F05
 Derivations of vector fields. *Compositio Math.* **26** (1973), 151-158. (J. Stasheff) **47** #4272 57D25 (58F99)
 Unfoldings of certain singularities of vectorfields: generalized Hopf bifurcations. *J. Differential Equations* **14** (1973), 476-493. (Alan Weinstein) **49** #4024 58C25 (34C20)
 ★Introduction to global analysis. Lectures held at Utrecht State University, October-December, 1972. Communications of the Mathematical Institute, Rijksuniversiteit Utrecht, No. 1973-2. *Mathematisch Instituut, Rijksuniversiteit Utrecht, Utrecht, 1974*. iii + 111 pp. (Tudor S. Ratiu) **58** #31212 58F10 (34Cxx)
 Forced oscillations and bifurcations. *Applications of global analysis, I (Sympos., Utrecht State Univ., Utrecht, 1973)*, pp. 1-59. *Comm. Math. Inst. Rijksuniv. Utrecht*, No. 3-1974, *Math. Inst. Rijksuniv. Utrecht, Utrecht, 1974*. (Philip J. Holmes) **57** #17720 58F10 (34C15)
 Singularities of vector fields. *Inst. Hautes Études Sci. Publ. Math. No.* **43** (1974), 47-100. (John Guckenheimer) **49** #4052 58F99 (58C25)
 ★Constrained equations; a study of implicit differential equations and their discontinuous solutions. Report ZW-75-03. *Mathematisch Instituut, Rijksuniversiteit, Groningen, 1975*. i + 91 pp. (Editors) **57** #17721 58F10
 Tolerance stability. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to E. C. Zeeman on his fiftieth birthday)*, pp. 293-304. *Lecture Notes in Math.*, Vol. 468, Springer, Berlin, 1975. (A. Reinfelds (Zbl **321** #54022)) **58** #31232 58F05 (54H20)
 Geometric aspects of non-linear R. L. C. networks. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to E. C. Zeeman on his fiftieth birthday)*, pp. 305-331. *Lecture Notes in Math.*, Vol. 468, Springer, Berlin, 1975. (F. J. Evans (Zbl **335** #34025)) **58** #31255 58F10 (94A20)
 (with Banchoff, Thomas F.) Height functions on surfaces with three critical points. *Illinois J. Math.* **19** (1975), 325-335. (P. T. Church) **51** #14079 57C35 (57D70)
 (with de la Harpe, Pierre) Examples of manifolds which are homogeneous spaces of Lie groups of arbitrarily large dimension. *Manuscripta Math.* **15** (1975), 275-287. (Hideki Omori) **51** #14121 57E20 (22E65)
 Implicit differential equations; some open problems. *Singularités d'applications différentiables (Sém., Plans-sur-Bex, 1975)*, pp. 237-253. *Lecture Notes in Math.*, Vol. 535, Springer, Berlin, 1976. (D. R. J. Chillingworth) **56** #13292 58F99
 Constrained equations; a study of implicit differential equations and their discontinuous solutions. *Structural stability, the theory of catastrophes, and applications in the sciences (Proc. Conf. Battelle Seattle Res. Center, Seattle, Wash., 1975)*, pp. 143-234. *Lecture Notes in Math.*, Vol. 525, Springer, Berlin, 1976. (See Zbl **386** #34003; MR **58** #24311) 58F10 (58C25)
 (with White, Warren) Vector fields with no nonwandering points. *Amer. J. Math.* **98** (1976), no. 2, 415-425. (M. C. Irwin) **54** #6205 58F10
 (with Newhouse, Sheldon E.; Palis, Jacob, Jr.) Stable arcs of diffeomorphisms. *Bull. Amer. Math. Soc.* **82** (1976), no. 3, 499-502. (C. S. Hartzman) **53** #6640 58F99
 Symmetries, conservation laws and variational principles. *Geometry and topology (Proc. III Latin Amer. School of Math., Inst. Mat. Pura Aplicada CNPq, Rio de Janeiro, 1976)*, pp. 581-604. *Lecture Notes in Math.*, Vol. 597, Springer, Berlin, 1977. (Editors) **58** #31233 58F05
 (with Palis, Jacob, Jr.) Topological equivalence of normally hyperbolic dynamical systems. *Topology* **16** (1977), no. 4, 335-345. (C. S. Hartzman) **57** #14049 58F10 (58F15)
 See also **Dynamical systems**, **52** #11994
Takeo, Fukiko On proper spaces of some positive operators with the property (W). *Natur. Sci. Rep. Ochanomizu Univ.* **27** (1976), no. 2, 89-97. (From the introduction) **58** #30478 47B55
 Decomposition of a positive operator in a simplex space to its irreducible components. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 2, 425-432. (Ralph L. James) **58** #2449 47B55
 Some spectral properties of positive, irreducible operators in *R*-space. *Natur. Sci. Rep. Ochanomizu Univ.* **28** (1977), no. 1, 25-28. (Zbl **366** #47014) **58** #30479 47B55
Takesaki, Masamichi One parameter automorphism groups and states of operator algebras. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 2, pp. 427-432. Gauthier-Villars, Paris, 1971. (C. Martin Edwards) **54** #8303 46L05
 Duality and von Neumann algebras. *Bull. Amer. Math. Soc.* **77** (1971), 553-557. (E. Thoma) **46** #4225 46L10 (22D25)
 Duality and von Neumann algebras. *Lectures on operator algebras; Tulane Univ. Ring and Operator Theory Year, 1970-1971, Vol. II; (dedicated to the memory of David M. Topping)*, pp. 665-786. *Lecture Notes in Math.*, Vol. 247, Springer, Berlin, 1972. (E. Thoma) **53** #704 22D35 (46K10, 46L10, 22D10)
 States and automorphism groups of operator algebras. *Mathematical aspects of statistical mechanics (Proc. Sympos. Appl. Math., New York, 1971)*, pp. 77-84. *SIAM-AMS Proceedings, Vol. V, Amer. Math. Soc., Providence, R. I., 1972*. (Mi-Soo Smith) **54** #5842 46K15
 Conditional expectations in von Neumann algebras. *J. Functional Analysis* **9** (1972), 306-321. (S. Sakai) **46** #2445 46L10
 (with Tatsuuma, Nobuhiko) Duality and subgroups. II. *J. Functional Analysis* **11** (1972), 184-190. (Pierre Eymard) **52** #5865 22D25
 (with Pedersen, Gert Kjaergård) The operator equation $THT = K$. *Proc. Amer. Math. Soc.* **36** (1972), 311-312. (S. K. Berberian) **46** #6079 47B15 (47A65)
 (with Pedersen, Gert Kjaergård) The Radon-Nikodym theorem for von Neumann algebras. *Acta Math.* **130** (1973), 53-87. (E. Størmer) **54** #948 46L10 (47C15)
 The structure of a von Neumann algebra with a homogeneous periodic state. *Acta Math.* **131** (1973), 79-121. (E. Størmer) **55** #11067 46L10
 Duality for crossed products and the structure of von Neumann algebras of type III. *Acta Math.* **131** (1973), 249-310. (S. Sakai) **55** #11068 46L10
 Periodic and homogeneous states on a von Neumann algebra. *Bull. Amer. Math. Soc.* **79** (1973), 202-206. (J. W. Bunce) **46** #6057 46L10
 Periodic and homogeneous states on a von Neumann algebra. II, III. *Bull. Amer. Math. Soc.* **79** (1973), 416-420; *ibid.* **79** (1973), 559-563. (J. W. Bunce) **47** #2384 46L10
 Duality in crossed products and von Neumann algebras of type III. *Bull. Amer. Math. Soc.* **79** (1973), 1004-1005. (S. Sakai) **48** #887 46L10
 Dualité dans les produits croisés d'algèbres de von Neumann. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A41-A43. (S. Sakai) **47** #5612 46L10
 Algèbres de von Neumann proprement infinies et produits croisés. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A125-A127. (S. Sakai) **47** #5613 46L10
 (with Winnink, Marinus) Local normality in quantum statistical mechanics. *Comm. Math. Phys.* **30** (1973), 129-152. (Guy Loupas) **53** #2236 82.46
 (with Connes, Alain) Flots des poids sur les facteurs de type III. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 945-948. (József Szűcs) **50** #8099 46L10
 Faithful states on a C^* -algebra. *Pacific J. Math.* **52** (1974), 605-610. (Jun Tomiyama) **50** #8096 46L05
 Duality in properly infinite von Neumann algebras. *International Conference: Mathematical Problems of Quantum Field Theory and Quantum Statistics (Moscow, 1972)*, Part II. *Trudy Mat. Inst. Steklov.* **136** (1975), 251-253, 440. (Ola Bratteli) **58** #2338 46L10
 The structure of a von Neumann algebra of type III and crossed products. *C^* -algebras and their applications to statistical mechanics and quantum field theory (Proc. Internat. School of Physics "Enrico Fermi", Course LX, Varenna, 1973)*, pp. 47-63. North-Holland, Amsterdam, 1976. (Author's introduction) **58** #30320 46L10
 Relative commutant theorem in crossed products and the exact sequence for the automorphism group of a factor of type III. *Symposia Mathematica, Vol. XX (Convegno sulle Algebre C^* e loro Applicazioni in Fisica Teorica, Convegno sulla Teoria degli Operatori Indice e Teoria K, INDAM, Roma, 1975)*, pp. 179-186. Academic Press, London, 1976. (Editors) **58** #23635 46L10
 Factors of type III. *K-theory and operator algebras (Proc. Conf., Univ. Georgia, Athens, Ga., 1975)*, pp. 139-156. *Lecture Notes in Math.*, Vol. 575, Springer, Berlin, 1977. (Alain Connes) **58** #23636 46L10
 (with Herman, Richard H.) The comparability theorem for cyclic projections. *Bull. London Math. Soc.* **9** (1977), no. 2, 186-187. (S. Sakai) **57** #13514 46L10
 (with Araki, Huzihiro; Kastler, Daniel; Haag, Rudolf) Extension of KMS states and chemical potential. *Comm. Math. Phys.* **53** (1977), no. 2, 97-134. (U. Cattaneo) **56** #2042 81.46
Takeshita, Akira An approach to quasiclassical approximation for the Schrödinger equation. *Proc. Japan Acad.* **48** (1972), 365-369. (Teruo Ikebe) **48** #4491 35J10 (35L15)
 A mathematical study of the circular Couette flow. *J. Math. Soc. Japan* **27** (1975), no. 4, 613-627. (Howard Swann) **55** #11803 76.35 (35Q10)

- Taketa, Hiroshige** Note on the rank of f -structure. *Tensor (N.S.)* **23** (1972), 197-198. (K. Yano) **46** #4428 53C10
- Taketa, Kiyosi** Über die monomialen Gruppen. V. *Math. Japon.* **14** (1969), 117-126. (L. Dornhoff) **47** #3506 20C15
- Über die monomialen Gruppen. IV. *Proc. Fac. Sci. Tokai Univ.* **4** (1969), no. 1-2, 1-27. (L. Dornhoff) **47** #8671 20C15
- Über die monomialen Gruppen. VI. *Math. Japon.* **18** (1973), 11-22. (L. Dornhoff) **49** #9074 20D10
- Über die Struktur der metabelschen Gruppen. *Proc. Fac. Sci. Tokai Univ.* **11** (1976), no. 2, 1-55. (Gernot Stroth) **54** #2779 20C99
- Takeuchi, Akihiro** (with Kitahashi, Tadahiho; Tanaka, Kohkichi) Behavior of stochastic automata in random media. *Systems-Computers-Controls* **2** (1971), no. 6, 81-83. (R. G. Buharaev) **54** #7147 94A35
- (with Kitahashi, Tadahiho) Two-person zero-sum games between automata. *Electron. Commun. Japan* **56** (1973), no. 2, 40-45. (K. S. Fu) **52** #12813 90D05 (94A30)
- (with Kitahashi, Tadahiho) Interaction between random media and automata. *Electron. Commun. Japan* **56** (1973), no. 6, 42-46. (K. S. Fu) **52** #13038 94A35
- (with Kitahashi, Tadahiho; Tanaka, Kohkichi) Two-automata games. *Information Sci.* **7** (1974), 81-93. (N. Zierler) **48** #13282 90D05 (94A30)
- Regularity of Nash play strings of circle games. *J. Cybernet.* **4** (1974), no. 2, 33-39. (Author's summary) **56** #14799 90D35
- Nash play strings of symmetric games and their language classes. *J. Cybernet.* **4** (1974), no. 4, 9-15. **56** #11046 90D35 (92A20, 92A25)
- (with Kitahashi, Tadahiho; Tanaka, Kohkichi) On the language classes of strategy strings of homogeneous games at Nash points. *Systems-Computers-Controls* **5** (1974), no. 5, 50-57 (1975). (Y. C. Ho) **52** #12830 90D40 (94A30)
- (with Kitahashi, Tadahiho; Tanaka, Kohkichi) Random environments and automata. *Information Sci.* **8** (1975), 141-154. (R. Theodoreescu) **51** #7761 94A35 (68A25)
- Takeuchi, Hajime** (with Kasami, Tadao; Izawa, Kimio; Fujii, Mamoru) Equivalence problems of serial program schemata. *Systems-Computers-Controls* **1** (1970), no. 6, 46-55 (1971). (H. Taylor) **46** #1506 94A30 (68A05)
- Takeuchi, Ikuo** (with Ino, Yoshiyuki) Numerical calculation of infinite series. *Mem. Defense Acad.* **12** (1972), 221-230. (W. Niehammer) **48** #7528 65B10
- Takeuchi, Jiro** A necessary condition for the well-posedness of the Cauchy problem for a certain class of evolution equations. *Proc. Japan Acad.* **50** (1974), 133-137. (V. S. Rabinović) **51** #3733 35R99 (47F05)
- Takeuchi, Junji** (with Arakawa, Toshiko) On the potential operators associated with Bessel processes. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **40** (1977), no. 1, 83-90. (S. C. Port) **58** #18739 60J35
- Takeuchi, Kei** On location parameter family of distributions with uniformly minimum variance unbiased estimator of location. *Proceedings of the Second Japan-USSR Symposium on Probability Theory* (Kyoto, 1972), pp. 465-477. *Lecture Notes in Math.*, Vol. 330, Springer, Berlin, 1973. (A. L. Rukhin) **55** #11478 62F10 (62E10)
- Statistical methods for Monte Carlo simulation. (Japanese) *Keiei-Kagaku* **17** (1973), 75-87. (Author's summary) **47** #6052 65C05
- A set of Lippmann-Schwinger equations. I. For a three-body scattering theory. *Nuclear Phys.* **A208** (1973), 1-20. (R. G. Newton) **52** #7373 81A5
- A set of Lippmann-Schwinger equations. II. For three-body treatments of deuteron-induced reactions. *Nuclear Phys.* **A208** (1973), 21-45. (R. G. Newton) **52** #7374 81A5
- A set of Lippmann-Schwinger equations. III. Complete continuity of the projected kernel. *Nuclear Phys.* **A208** (1973), 46-54. (R. G. Newton) **52** #7375 81A5
- (with Akahira, Masafumi) Characterizations of prediction sufficiency (adequacy) in terms of risk functions. *Ann. Statist.* **3** (1975), no. 4, 1018-1024. (Christian Hipp) **51** #11737 62B05 (62C07)
- A survey of robust estimation of location: models and procedures, especially in case of measurement of a physical quantity. (French summary) With discussion. *Proceedings of the 40th Session of the International Statistical Institute* (Warsaw, 1975), Vol. 1. Invited papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 1, 336-348, 383-391 (1976). (Rudolph J. Beran) **58** #3191 62G35
- (with Akahira, Masafumi) On the second order asymptotic efficiency of estimators in multiparameter cases. *Rep. Univ. Electro-Commun.* **26** (1975/76), no. 2, 261-269. (A. N. Philippou) **55** #6663 62F20
- (with Akahira, Masafumi) On the second order asymptotic efficiencies of estimators. *Proceedings of the Third Japan-USSR Symposium on Probability Theory* (Tashkent, 1975), pp. 604-638. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (J. K. Ghosh) **55** #11482 62F20
- (with Akahira, Masafumi) On Gram-Charlier-Edgeworth type expansion of the sums of random variables. I. *Rep. Univ. Electro-Commun.* **27** (1976), no. 1, 95-115. (Ju. V. Borovskii) **54** #11622 62E20 (60F05)
- (with Akahira, Masafumi) On Gram-Charlier-Edgeworth type expansion of the sums of random variables. II. *Rep. Univ. Electro-Commun.* **27** (1976), no. 1, 117-123. (Ju. V. Borovskii) **54** #11623 62E20 (60F05)
- (with Akahira, Masafumi) Extension of Edgeworth type expansion of the distribution of the sums of i.i.d. random variables in non-regular cases. *Ann. Inst. Statist. Math.* **29** (1977), no. 3, 397-406. (R. N. Bhattacharya) **57** #4304 60F05 (62E20)
- (with Akahira, Masafumi) On Gram-Charlier-Edgeworth type expansion of the sums of random variables. III. Multivariate cases. *Rep. Univ. Electro-Comm.* **28** (1977/78), no. 2, 259-269. (Authors' summary) **58** #31528 62E20 (60F05)
- (with Akahira, Masafumi) On the asymptotic properties of stochastic estimators. (Japanese) *Sūgaku* **29** (1977), no. 2, 110-123. (Minoru Siotani) **58** #31559 62F20
- Takeuchi, Kisao** A remark on Fuchsian groups. *Seminar on Modern Methods in Number Theory* (Inst. Statist. Math., Tokyo, 1971), Paper No. 33, 4 pp. *Inst. Statist. Math.*, Tokyo, 1971. (Editors) **51** #12714 10D05 (20H10)
- A remark on Fuchsian groups. *Sci. Rep. Saitama Univ. Ser. A* **7**, no. 1, 1-3 (1971). (L. Greenberg) **45** #3587 20H10
- Subgroups of the modular group. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **20** (1973), 171-185. (J. Spilker) **47** #6613 10D05
- A characterization of arithmetic Fuchsian groups. *J. Math. Soc. Japan* **27** (1975), no. 4, 600-612. (Larry J. Goldstein) **53** #2842 10D20 (20H10)
- Commensurability classes of arithmetic triangle groups. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 1, 201-212. (K.-B. Gundlach) **57** #3077 10F10 (20H10)
- Arithmetic triangle groups. *J. Math. Soc. Japan* **29** (1977), no. 1, 91-106. (F. Fuller) **55** #2754 10D05
- Takeuchi, Mamoru** On a theorem of Schmidt. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 7* (1974), 9-16. (C. G. Lekkerkerker) **55** #2773 10F10
- A note on Dyson's theorem. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 7* (1975), 55-59. (R. Tijdeman) **51** #8042 10F10
- An introduction to a paper of C. J. Everett. (Japanese) Characteristics of arithmetic functions (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikenkyūsho Kōkyūroku No. 274* (1976), 178-179. (Editors) **56** #15555 10B15
- A generalization of Schmidt's lemma. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 7* (1977), 51-53. (W. W. Adams) **56** #269 10F25 (10F10)
- Takeuchi, Masaru** A remark on the character ring of a compact Lie group. *J. Math. Soc. Japan* **23** (1971), 662-675. (S. Sankaran) **45** #2090 43A80 (22E45)
- Total absolute curvature of embeddings, and minimal immersions of R -space. (Japanese) *Sūgaku* **23** (1971), no. 4, 261-271. **58** #30926 53C40
- ★Homogeneous Siegel domains. Publications of the Study Group of Geometry. Vol. 7. *Study Group of Geometry, Institute of Mathematics, Yoshida College, Kyoto University, Kyoto*, 1973. iv + 161 pp. (not consecutively paged) (A. L. Oniščik) **53** #11113 32M15 (32M10)
- Polynomial representations associated with symmetric bounded domains. *Osaka J. Math.* **10** (1973), 441-475. (Mitsuo Sugiura) **54** #616 32M15 (22E45)
- On symmetric Siegel domains. *Nagoya Math. J.* **59** (1975), 9-44. (E. Vinberg) **53** #11109 32M15
- (with Ozeki, Hideki) On some types of isoparametric hypersurfaces in spheres. *Tōhoku Math. J. (2)* **27** (1975), no. 4, 515-559. (Dirk Ferus) **56** #13132a 53C40
- (with Ozeki, Hideki) On some types of isoparametric hypersurfaces in spheres. I. *Tōhoku Math. J. (2)* **28** (1976), no. 1, 7-55. (Dirk Ferus) **56** #13132b 53C40
- (with Takagi, Ryoichi) Degree of symmetric Kählerian submanifolds of a complex projective space. *Osaka J. Math.* **14** (1977), no. 3, 501-518. (S. Kaneyuki) **57** #7488 53C55 (32M15)
- (with Ozeki, Hideki; Takagi, Ryoichi) On isoparametric hypersurfaces. (Japanese) *Sūgaku* **30** (1978), no. 1, 23-32. (Y. Katsurada) **58** #7502 53C40
- (with Nishikawa, Seiki) Γ -foliations and semisimple flat homogeneous spaces. *Tōhoku Math. J. (2)* **30** (1978), no. 2, 307-335. (D. B. Fuks) **58** #24293 57D05 (53C30)
- Takeuchi, Mitsuhiro** Free Hopf algebras generated by coalgebras. *J. Math. Soc. Japan* **23** (1971), 561-582. (R. G. Larson) **45** #1958 16A24 (18H15)
- There exists a Hopf algebra whose antipode is not injective. *Sci. Papers College of Gen. Ed. Univ. Tokyo* **21** (1971), 127-130. (Kenneth Newman) **47** #1854 16A24
- On the dimension of the space of integrals of Hopf algebras. *J. Algebra* **21** (1972), 174-177. (K.-T. Chen) **45** #6891 16A24
- A correspondence between Hopf ideals and sub-Hopf algebras. *Manuscripta Math.* **7** (1972), 251-270. (E. J. Taft) **48** #328 16A24
- On a semi-direct product decomposition of affine groups over a field of characteristic 0. *Tōhoku Math. J. (2)* **24** (1972), 453-456. (K.-T. Chen) **47** #6756 16A24
- A note on geometrically reductive groups. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **20** (1973), 387-396. (V. L. Popov) **49** #2770 14L15 (15A72, 20G15)
- (with Kambayashi, Tatsuji; Miyamishi, Masayoshi) ★Unipotent algebraic groups. *Lecture Notes in Mathematics*, Vol. 414. Springer-Verlag, Berlin-New York, 1974. vi + 165 pp. (Lucile Bégueri) **51** #12871 14L15 (14G05, 14M20)
- Tangent coalgebras and hyperalgebras. I. *Japan. J. Math.* **42** (1974), 1-143. (Michiel Hazewinkel) **52** #10725 14B10 (14L15, 16A24)
- On the structure of commutative affine group schemes over a non-perfect field. *Manuscripta Math.* **16** (1975), no. 2, 101-136. (T. Kambayashi) **52** #13864 14L15
- On coverings and hyperalgebras of affine algebraic groups. *Trans. Amer. Math. Soc.* **211** (1975), 249-275. (T. Kambayashi) **55** #2937a 14L15
- On k_s/k -Galois theory for fields. *J. Algebra* **42** (1976), no. 1, 160-172. (William Waterhouse) **55** #2862 12F10 (16A24)
- A characterization of the Galois subalgebras $H_s(K/F)$. *J. Algebra* **42** (1976), no. 2, 315-362. (Hans-Jürgen Schneider) **56** #5513 12F15 (14L15, 18D35)
- On coverings and hyperalgebras of affine algebraic groups. II. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **23** (1976), no. 2, 419-434. (T. Kambayashi) **55** #2937b 14L15
- On extensions of affine groups by μ^4 . *Comm. Algebra* **5** (1977), no. 13, 1401-1433. (Hans-Jürgen Schneider) **58** #16702 14L15 (18D35)
- On extensions of formal groups by μ^4 . *Comm. Algebra* **5** (1977), no. 13, 1439-1483. (Hans-Jürgen Schneider) **58** #16703 14L15 (18D35)
- Formal schemes over fields. *Comm. Algebra* **5** (1977), no. 14, 1483-1528. (David Radford) **58** #16645 14A15 (16A24, 18D35)
- Morita theorems for categories of comodules. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 3, 629-644. (T. Albu) **57** #12646 18E99
- Groups of algebras over $A \otimes A$. *J. Math. Soc. Japan* **29** (1977), no. 3, 459-493. (Author's review) **58** #22151 16A24 (13D15, 14L15, 18G30)
- On Long's H -Azumaya algebra. *Proceedings of the 10th Symposium on Ring Theory* (Shinsu Univ., Matsumoto, 1977), pp. 46-61. *Dept. Math. Okayama Univ., Okayama*, 1978. (Manuel Ojaguren) **58** #765 16A16
- See also Doi, Yukio, **48** #2224
- Takeuchi, Shigeru** On some types of complex homogeneous spaces. *Sci. Rep. Fac. Ed. Gijō Univ. Natur. Sci.* **5**, 190-194 (1974). (A. Morimoto) **53** #13664 32M10
- On completeness of holomorphic principal bundles. *Nagoya Math. J.* **56** (1975), 121-138. (E. Vinberg) **51** #8483 32M05 (32L05, 32E10)
- Cohomological dimension of homogeneous spaces of complex Lie groups. I. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 1, 255-257. (A. L. Oniščik) **54** #7877 32M10 (32F10)

- keuchi, Tetsuo** On the structure of p -class groups of certain number fields. *Sci. Rep. Niigata Univ. Ser. A No. 14* (1977), 25-33. (Yoshiomi Furuta) **56** #2957 12A35 (12A65)
- [On the structure of p -class groups of certain number fields. II. *Sci. Rep. Niigata Univ. Ser. A No. 15* (1978), 35-42. (Yoshiomi Furuta) **57** #16253 12A35
- keuchi, Tsutomu** On direct modules. *Hokkaido Math. J.* **1** (1972), 168-177. (S. Elliger) **48** #346 16A64
- [The endomorphism ring of an indecomposable module with an Artinian projective cover. *Hokkaido Math. J.* **4** (1975), no. 2, 265-267. (Z. Papp) **51** #8170 16A50
- [On cofinite-dimensional modules. *Hokkaido Math. J.* **5** (1976), no. 1, 1-43. (B. J. Müller) **52** #10813 16A64
- keuchi, Yasuhiro** (with Adachi, Norihiko; Tokumaru, Hidekatsu) The stability of generalized Volterra equations. *J. Math. Anal. Appl.* **62** (1978), no. 3, 453-473. (A. F. Izé) **57** #16851 34D05 (92A05)
- keuchi, Yasuji** Correction to: "A note on Galois covering" (Osaka J. Math. **6** (1969), 321-327). *Osaka J. Math.* **10** (1973), 209-210. (Editors) **48** #4051 16A74
- [On strongly radical extensions. *Pacific J. Math.* **55** (1974), 619-627. (A. Rosenberg) **51** #10315 13B05
- [On Galois objects which are strongly radical over its basic ring. *Osaka J. Math.* **12** (1975), 23-31. (S. Yuan) **51** #10396 16A74 (12F15)
- [Finiteness of the injective dimension of a generalized module of dualizing differentials. *J. Algebra* **44** (1977), no. 1, 243-245. (C. M. Knighten) **58** #5635 13D05
- keuchi, Yoshiki** (with Akashi, Hajime) State estimation for linear stochastic systems with Markov chain coefficients. (Japanese. English summary) *Systems and Control* **21** (1977), no. 12, 694-701. (Seihaku Higuchi) **58** #4553 93E10
- keuchi, Yu** Reordering of the rational numbers. (Spanish) *Bol. Mat.* **6** (1972), no. 5, 1-20. (T. A. Botts) **50** #7440 26A03
- [Čebyšev polynomials. (Spanish) *Bol. Mat.* **6** (1972), no. 6, 1-27. (N. Hayek Calil) **50** #13667 33A65
- [Density of Schatten operators in a Hilbert space. (Spanish) *Rev. Colombiana Mat.* **6** (1972), 17-56. (J. Nieto) **46** #9785 47B10
- [Polynomials that assume only one maximum value and only one minimum value. (Spanish) *Bol. Mat.* **7** (1973), 48-61. (N. Hayek Calil) **50** #13668 33A65
- [Number of elements of a set. (Spanish) *Bol. Mat.* **7** (1973), 69-99. (L. Gillman) **50** #12727 04-01
- [Number systems. (Spanish) *Bol. Mat.* **7** (1973), 137-191. (Editors) **52** #10965 26-01
- [Construction of examples of certain rectifiable curves. (Spanish) *Bol. Mat.* **8** (1974), no. 1-6, 122-153. (T. A. Botts) **53** #8344 26A24
- [The domain of convergence of the series $\sum_{n=1}^{\infty} C_n |x - x_n|$. (Spanish) *Bol. Mat.* **9** (1975), no. 3, 129-170. (A. Peyerimhoff) **56** #9129 40A05
- [An idea of decision theory. (Spanish) *Bol. Mat.* **9** (1975), no. 4-6, 189-202. (Editors) **54** #14178 62C05
- [Representation of nonstandard numbers by means of Hermitian operators. (Spanish. English summary) *Rev. Colombiana Mat.* **10** (1976), no. 3, 125-140. (Author's summary) **58** #21588 02H20 (26A98, 46L99)
- [Space with the operator metric. (Spanish) *Rev. Colombiana Mat.* **11** (1977), no. 1-4, 77-108. **58** #30344 47-01 (46-01)
- keuti, Gaisi** A determinate logic. *Nagoya Math. J.* **38** (1970), 113-138. (J. Mycielski) **46** #3266 02B20 (02K15)
- (with Zaring, Wilson M.) ★Introduction to axiomatic set theory. Graduate Texts in Mathematics, Vol. 1. *Springer-Verlag, New York-Berlin*, 1971. vii + 250 pp. (J. B. Paris) **50** #1884 04-02 (02K05, 02K15)
- [Hypotheses on power set. *Axiomatic set theory (Proc. Sympos. Pure Math., Vol. XIII, Part I, Univ. California, Los Angeles, Calif., 1967)*, pp. 439-446. *Amer. Math. Soc., Providence, R.I.*, 1971. (Andreas Blass) **46** #61 02K25 (04-XX)
- [(with Maehara, Shōji) Two interpolation theorems for a Π_1^1 predicate calculus. *J. Symbolic Logic* **36** (1971), 262-270. (A. Tauts) **46** #6991 02B15
- [Modern set theory. (Japanese) *Sūgaku* **23** (1971), no. 1, 18-26. (Hisao Tanaka) **58** #27474 02Kxx (04-01)
- (with Zaring, Wilson M.) ★Axiomatic set theory. With a problem list by Paul E. Cohen. Graduate Texts in Mathematics, Vol. 8. *Springer-Verlag, New York-Berlin*, 1973. vii + 238 pp. (J. Paris) **54** #4977 02K05 (02K15, 02-02)
- (with Yasugi, Mariko) The ordinals of the systems of second order arithmetic with the provably Δ_2^1 -comprehension axiom and with the Δ_2^1 -comprehension axiom respectively. *Japan. J. Math.* **41** (1973), 1-67. (From the introduction) **58** #10344 02D05
- (with Kreisel, Georg) Formally self-referential propositions for cut free classical analysis and related systems. *Dissertationes Math. (Rozprawy Mat.)* **118** (1974), 55 pp. (Horst Luckhardt) **52** #5374 02D99
- ★Proof theory. Studies in Logic and the Foundations of Mathematics, Vol. 81. *North-Holland Publishing Co., Amsterdam-Oxford; American Elsevier Publishing Co., Inc., New York*, 1975. vi + 372 pp. (Zbl 354 #02027) **58** #27366a 02Dxx (02-02)
- [Consistency proofs and ordinals. \models ISILC Proof Theory Symposium (Proc. Internat. Summer Inst. and Logic Colloq., Kiel, 1974), pp. 365-369. *Lecture Notes in Math.*, Vol. 500. *Springer, Berlin*, 1975. (K. J. Wu) **53** #5272 02D05
- (with Yasugi, Mariko) Fundamental sequences of ordinal diagrams. *Comment. Math. Univ. St. Paul* **25** (1976), no. 1, 1-80. (G. E. Mine) **54** #12492 02D05
- (with Burd, Barry) Weaves. *Ann. Japan Assoc. Philos. Sci.* **5**, no. 2, 47-56 (1977). (Editors) **58** #27484 02K30 (90D99)
- (with Henson, C. Ward; Jockusch, Carl G., Jr.; Rubel, Lee A.) First order topology. *Dissertationes Math. (Rozprawy Mat.)* **143** (1977), 40 pp. (Frank Wattenberg) **55** #5434 02H15 (54J05, 54H99)
- (with Greene, Curtis) On the decomposition of Boolean polynomials. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 1, 23-28. (J. A. Kalman) **56** #5384 06A40 (94A20)
- ★Two applications of logic to mathematics. Kanô Memorial Lectures, Vol. 3. Publications of the Mathematical Society of Japan, No. 13. *Iwanami Shoten, Publishers, Tokyo; Princeton University Press, Princeton, N.J.*, 1978. viii + 138 pp.
- ISBN 0-691-08212-X* (L. Lipshitz) **58** #21591 02H25 (02D99, 47A10)
- ★Теория доказательств. (Russian) [Proof theory] Translated from the English by T. K. Sohlev. Edited by S. I. Adjan. *Izdat. "Mir", Moscow*, 1978. 412 pp. (Editors) **58** #27366b 02Dxx (02-02)
- Takeyama, Yoshio** (with Ohta, Mitsuo; Yamaguchi, Shizuma; Hiromitsu, Seijiro; Okita, Tsuyoshi) Theory and digital simulation of a generalized nonstationary random process with arbitrary amplitude distribution and arbitrarily fluctuating mean value. *Theoretical and applied mechanics, Vol. 22 (Proc. 22nd Japan Nat. Congr. Appl. Mech., Tokyo, 1972)*, pp. 457-471. *Univ. Tokyo Press, Tokyo*, 1974. (G. Simboan) **51** #5125 93E10 (60G05)
- Takhar, G. S.** (with Ramachandran, V.; Swamy, M. N. S.) A multivariable transformation and its use in the synthesis of driving-point functions. *IEEE Trans. Circuits and Systems CAS-24* (1977), no. 10, 551-559. (Authors' summary) **58** #26580 94A20
- Takhirov, A.** See Tahir, A.
- Takhtajan, L. A.** See Tahtadžjan, L. A.
- Taki, Yasuo** (with Hatori, Mitsutoshi) Digital communication using Hadamard transformation. *Electron. Commun. Japan* **52** (1969), no. 5, 79-87. (Not reviewed) **94A05**
- (with Namba, Seiichi) On the zero-error capacity of a noisy channel with feedback. *IEEE Trans. Information Theory IT-19* (1973), 557-559. (Authors' summary) **56** #8182 94A15
- Takibaev, Ž. S.** (with Boos, È. G.) The uncertainty principle and the scaling effect. (Russian) *Dokl. Akad. Nauk SSSR* **217** (1974), 804-807. (Editors) **50** #6388 81G0
- [See also al-Fārābī, Abū Naṣr Muḥammad ibn Muḥammad ibn Tarkhān, **55** #7711
- Takida, Takehiko** (with Yamaguchi, Seiichi; Ozawa, Kazuyuki) Geometric interpretation of holomorphically projective transformation in a Kaehlerian manifold. *TRU Math.* **12** (1976), no. 2, 23-30. (P. Stavre) **57** #1329 53B35
- Takiff, S. J.** Invariant polynomials on Lie algebras of inhomogeneous unitary and special orthogonal groups. *Trans. Amer. Math. Soc.* **170** (1972), 221-230. (S. Murakami) **46** #3699 22E60
- Takijima, Kunio** (with Uda, Toshio) Images and inverse images of equivalence relations on analytic spaces. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 208-214 (1972). (E. Gottschling) **49** #5405 32M05 (32C15)
- [Direct limits and inverse limits of equivalence relations on analytic spaces. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 215-220 (1972). (E. Gottschling) **49** #5404 32M05 (32C15)
- (with Umezawa, Toshio) On the univalence and close-to-convexity of a certain integral. *J. Saitama Univ. Fac. Ed. Math. Natur. Sci.* **23** (1974), 3-8. (M. Reade) **54** #13063 30A32
- [On the continuation of equivalence relations on analytic spaces. *J. Saitama Univ. Fac. Ed. Math. Natur. Sci.* **24** (1975), 1-4. (Author's introduction) **58** #17192 32C25
- (with Suzuki, Tetsutaro) On the trivial extension of equivalence relations on analytic spaces. *Trans. Amer. Math. Soc.* **219** (1976), 369-377. (R. Michael Range) **54** #589 32C25 (32C15)
- Takiyama, Ryuzo** A relationship between two types of two-layer threshold-element pattern-recognition networks. *IEEE Trans. Computers C-25* (1976), no. 11, 1136-1139. (Sidney Berkowitz) **55** #1872 68A45
- Takizawa, Kiyoshi** Note on $\{0_n\}$ -bands of groupoids. *Semigroup Forum* **9** (1974/75), no. 2, 155-158. (E. Ja. Gabovič) **52** #3369 20L05 (06A50)
- Takizawa, Masahito** (with Tazaki, Eiichiro; Amagasa, Michio) Structural modeling in a class of systems by fuzzy sets theory. (Japanese. English summary) *J. Operations Res. Soc. Japan* **20** (1977), no. 4, 285-310. (Authors' summary) **56** #17790 90B99 (93A10)
- Taksar, I. M.** See Taksars, I. M.
- Taksar, M. I.** Events connected with the hitting of a set by trajectories of a process. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 1, 143-146. (J. G. Wendel) **53** #6703 60G05
- [A formula for the wanderings of a regular Markov process. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **21** (1976), no. 4, 839-845. (Arthur O. Pittenger) **55** #9293 60J50
- Taksars, I. M.** (with Zapol', B. P.; Kuşins, P. J.) The method of the effective potential for the calculation of quantum systems. II. Nonrelativistic wave functions and eigenvalues. (Russian. English summary) *Latvijas PSR Zinātņu Akad. Vēstis Fiz. Tehn. Zinātņu Sēr.* **1971**, no. 6, 20-25. (Z. Janković) **45** #8168 81.34 (33A60)
- (with Zapol', B. P.; Kuşins, P. J.; Fabrikant, I. I.) The method of the effective potential for the calculation of quantum systems. III. Relativistic wave functions and eigenvalues. (Russian. English summary) *Latvijas PSR Zinātņu Akad. Vēstis Fiz. Tehn. Zinātņu Sēr.* **1972**, no. 1, 3-12. (Z. Janković) **46** #3019 81.35
- Takserman, U.** (with Elata, C.) The viscous flow through channels and tubes with sinusoidal boundaries as a model for porous media. *Israel J. Tech.* **14** (1976), no. 6, 235-240. (J. C. Burns) **56** #10364 76.35
- Takshak, Roshan Lal** See Taxak, R. L.
- Taku, V. D.** (with Sibirskii, K. S.) Algebraic invariants of multidimensional differential systems. (Russian) *Differencial'nye Uravneniya* **12** (1976), no. 2, 281-291, 379. (C. S. Coleman) **55** #13005 34C20 (34A25)
- Ta Kuang Hai** (with Perov, A. I.) The almost periodic solutions of homogeneous differential equations. (Russian) *Differencial'nye Uravneniya* **8** (1972), 453-458. (N. Chafee) **45** #5489 34C25 (47E05)
- (with Perov, A. I.) Stepanov almost periodic solutions of linear inhomogeneous differential equations. (Russian) *Voroněž. Gos. Univ. Trudy Mat. Fak.* **1972**, no. 7, 77-85. (Bolis Basit) **55** #782 34C25
- Tal', A. A.** (with Buevič, V. A.; Kalandarišvili, N. G.) Description of a finite automaton by means of a finite set of input-output sequences. I. *Avtomat. i Telemekh.* **1970**, no. 1, 99-107. (S. Huzino) **46** #1484 94A25
- (with Buevič, V. A.; Kalandarišvili, N. G.) Description of a finite automaton by means of a finite set of input-output sequences. II. *Avtomat. i Telemekh.* **1970**, no. 2, 61-70. (Russian. English summary; translated as *Automat. Remote Control* **1970**, no. 2, 225-231. (S. Huzino) **46** #1485 94A25

- (with Rudnev, V. V.) Application of equivalence relations to the description of events representable by finite automata. *Avtomat. i Telemekh.* 1970, no. 3, 96-101 (Russian. English summary); translated as *Automat. Remote Control* 1970, no. 3, 424-428. (P. Deussen) 46 #1145 68A30
- (with Aizerman, M. A.; Gusev, L. A.; Rozonoër, L. I.; Smirnova, I. M.) ★Logika, avtomaty a algoritmy. (Czech) [Logic, automata and algorithms] Translated from the Russian by Jaroslav Volčik, Miroslav Mleziva and Antonin Mykiska. *Academia* [Nakladatelství Československé Akademie Věd], Prague, 1971. 408 pp. (Editors) 48 #1818 94A30 (02F10)
- (with Rudnev, V. V.) Application of the language of equivalence transformations to describe finite-automata sets. *Avtomat. i Telemekh.* 1971, no. 9, 93-104 (Russian. English summary); translated as *Automat. Remote Control* 33 (1971), no. 9, part 1, 1426-1434. (Authors' summary) 56 #10154 68A25
- (with Mihaïlov, G. I.) A version of the language of equivalent transformations. *Avtomat. i Telemekh.* 1973, no. 8, 62-69 (Russian. English summary); translated as *Automat. Remote Control* 34 (1973), no. 8, part 1, 1254-1260 (1974). (Ronald E. Prather) 52 #16158 68A30 (94A30)
- (with Mihaïlov, G. I.) Sets realized by automata and described in the YaĖP-2 language of equivalent transformations. *Avtomat. i Telemekh.* 1975, no. 8, 100-105 (Russian. English summary); translated as *Automat. Remote Control* 36 (1975), no. 8, part 2, 1297-1302 (1976). (Ronald E. Prather) 54 #6561 68A25 (94A30)
- (with Geisler, Eliezer G.; Garg, Devendra P.) On the a-posteriori error bounds for the solution of ordinary nonlinear differential equations. *Computers and mathematics with applications*, pp. 407-416. Pergamon, Oxford, 1976. (C. Illo) 56 #7205 65L05
- (with Ivanov, N. N.; Mihaïlov, G. I.; Rudnev, V. V.) Generalized-type languages of equivalence transformations. *Avtomat. i Telemekh.* 1976, no. 5, 140-150 (Russian. English summary); translated as *Automat. Remote Control* 37 (1976), no. 5, part 2, 767-776. (Authors' summary) 56 #7345 68A30 (68A25)
- ben-Tal, Aharon** See Ben-Tal, Aharon
- haghighi-Talab, Dariush** See Haghighi-Talab, Dariush
- Talae, S. A.** (with Amosov, N. M.; Kasatkina, A. M.; Kasatkina, L. M.) ★Автоматы и разумное поведение: опыт моделирования. (Russian) [Automata and intelligent behavior: an attempt at simulation] Izdat. "Naukova Dumka", Kiev, 1973. 375 pp. (A. D. Korsunov) 58 #3760 68A45
- Talagrand, Michel** Sommes vectorielles d'ensembles de mesure nulle. *Séminaire Choquet, 14e année (1974/75), Initiation à l'analyse, Exp. No. 12, 2 pp.* Secrétariat Mathématique, Paris, 1975. (Editors) 57 #17119 43A05 (22B05, 22E15)
- Convolution de mesures portées par une surface convexe. *Séminaire Choquet, 14e année (1974/75), Initiation à l'analyse, Exp. No. 16, 13 pp.* Secrétariat Mathématique, Paris, 1975. (Zbl 322 #43002) 57 #17768 60E05 (52A20, 53C45)
- Sur une conjecture de H. H. Corson. *Bull. Sci. Math. (2)* 99 (1975), no. 4, 211-212. (Ehrhard Behrends) 55 #3757 46B05
- Sommes vectorielles d'ensembles de mesure nulle. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 13, A853-A855. (J. P. R. Christensen) 52 #707 28A70
- Solution d'un problème de R. Haydon. *Publ. Dép. Math. (Lyon)* 12 (1975), no. 2, 43-46. (Richard Haydon) 52 #14848 43A10
- Sommes vectorielles d'ensembles de mesure nulle. (English summary) *Ann. Inst. Fourier (Grenoble)* 26 (1976), no. 3, x, 137-172. (J. P. R. Christensen) 54 #10534 28A05
- Quelques exemples de représentation intégrale: valuations, fonctions alternées d'ordre infini. *Bull. Sci. Math. (2)* 100 (1976), no. 4, 321-329. (Thomas E. Armstrong) 57 #3818 46A40 (28A10)
- Moyennes de Banach extrémales. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 23, A1359-A1362. (E. Granier) 54 #8146 43A07
- Extensions aux filtres de la mesure de Lebesgue. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 3, A95-A98. (J. D. Knowles) 55 #3201 28A20 (46E27)
- Solutions d'un problème de A. Ionescu-Tulcea. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 283 (1976), no. 14, A975-A978. (J. D. Knowles) 55 #5831 28A20 (46E27)
- (with Godefroy, Gilles) Filtrés et mesures simplement additives sur N . *Bull. Sci. Math. (2)* 101 (1977), no. 3, 283-286. (J. D. Knowles) 58 #17018 28A05
- Sur la structure borélienne des espaces analytiques. (English summary) *Bull. Sci. Math. (2)* 101 (1977), no. 4, 415-422. (J. Diestel) 58 #17799 46B99 (28A05)
- Capacités invariantes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 9, A481-A484. (Author's summary) 55 #603 28A10 (31C15)
- Capacités invariantes: le cas alterné. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 10, A543-A546. (Author's summary) 55 #604 28A10 (31C15)
- Espaces de Banach faiblement \mathcal{K} -analytiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 13, A745-A748. (Author's summary) 55 #8760 46B05
- Sur les espaces de Banach faiblement K -analytiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 285 (1977), no. 3, A119-A122. (Author's summary) 55 #13217 46B05
- Sélection mesurable de mesures maximales simpliciales. (English summary) *Bull. Sci. Math. (2)* 102 (1978), no. 1, 49-56. (J. P. R. Christensen) 57 #10410 46A99
- Sur un théorème de L. Schwartz. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 5, A265-A267. (Author's summary) 58 #22455 28A40 (46E99)
- Non-existence de certaines sections mesurables et application à la théorie du relèvement. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 24, A1183-A1185. (Author's summary) 58 #22474 28A50 (46G15)
- (with Mathias, A. R. D.; Ostaszewski, A. J.) On the existence of an analytic set meeting each compact set in a Borel set. *Math. Proc. Cambridge Philos. Soc.* 84 (1978), no. 1, 5-10. (Bhambhani V. Rao) 58 #233 02K30 (04A15, 28A05)
- Talagrand, O.** (with Anderson, D.; Ghil, Michael) Éléments de météorologie dynamique. *Fluid dynamics / Dynamique des fluides (École d'Été de Physique Théorique, Les Houches, 1973)*, pp. 641-656. Gordon and Breach, London, 1977. (J. S. Joel) 56 #10352 76.00 (86.35)
- Talalaeva, N. V.** On the periodic solutions to a system of differential equations of the form $dx/dt = A(t)x + F(t, x)$. (Russian) *Differentsial'nye Uravneniya (Ryazan)* No. 5 (1973), 187-196. (See RŽMat 1976 #11 B275) 34C25
- On the periodic solutions of the differential equation $d^2y/dt^2 - a^2y = g(t, y)$. (Russian) *Differentsial'nye Uravneniya (Ryazan)* No. 5 (1975), 197-204. (See RŽMat 1976 #11 B253) 34C25
- Talalai, A. M.** On the comparison of different realizations of gradient and statistical gradient methods. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* 1973, no. 6, 46-48. (V. Ivanov) 49 #8671 90C99
- Comparison of methods of finding partial derivatives under conditions of random disturbances. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 3, 189-194 (Russian. English summary); translated as *Engrg. Cybernetics* 11 (1973), no. 3, 523-528. (Ivar Petersen) 52 #15964 65D25
- (with Adler, Ju. P.) Identification of an object in the case of optimal control with incomplete information. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 6, 214-224 (Russian); translated as *Engrg. Cybernetics* 11 (1973), no. 6, 1046-1050. (Guy Jumar) 50 #6573 93B30
- Talaljan, A. A.** Questions of representation and uniqueness in the theory of orthogonal series. (Russian) *Mathematical analysis, 1970 (Russian)*, pp. 5-64. *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1971. (A. Oleviskii) 51 #6278 42A60
- The convergence of Fourier series in bounded complete orthonormal systems. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 10 (1975), no. 3, 193-206, 289. (W. R. Wade) 52 #3870 42A60
- (with Davtjan, R. S.) The convergence of series in complete orthogonal systems of sets of positive measure. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 10 (1975), no. 4, 342-355, 387. (F. Schipp) 54 #5724 42A60
- (with Aleksandrian, R. A.; Džbrabjan, M. M.; Mergeljan, S. N.) A brief survey of basic mathematical research in Armenia from 1971 to 1975. (Russian) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 11 (1976), no. 1, 3-24. (Editors) 54 #7175 01A65
- See also *Mathematical analysis*, 52 #8
- Talaljan, F. A.** The uniqueness of series with respect to certain orthogonal systems. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 10 (1975), no. 5, 401-418. (F. Schipp) 45 #4050 42A62
- The subsystems of the Haar system. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 55 (1972), 3-6. (J. Németh) 48 #797 42A56
- Rearrangements of series in a Hilbert space. (Russian) *Mat. Zametki* 12 (1973), 275-280. (T. Precupanu) 47 #7398 46C10
- Translates of sets in locally compact groups. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 60 (1975), no. 2, 76-81. (Josef Wichmann) 53 #775 28A70
- Two consequences of the Paley-Zygmund inequality. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* 62 (1976), no. 4, 210-213. (W. R. Wade) 54 #13448 42A56
- The summability of sequences in normed spaces. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 11 (1976), no. 6, 548-564, 571. (Josef Wichmann) 56 #3495 40J05 (46A45, 46B99)
- figà-Talamanca, Alessandro** See Figà-Talamanca, Alessandro
- Talamo, Rodolfo** Condizioni più deboli della compattezza introdotte mediante spazi di prossimità. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* 32 (1973/74), 271-280 (1975). (Author's summary) 55 #4103 54E05
- Spazi pseudocompatti intermedi. (English summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 109 (1975), no. 5-6, 569-574. (Richard A. Alò) 55 #1310 54D10
- Spazi collectionwise normal e weak countably bounded. (English summary) *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 110 (1976), no. 4, 275-280. (Stojan Nedeljković) 54 #8565 54D15
- Pseudocompact spaces and functionally determined uniformities. *Proc. Amer. Math. Soc.* 56 (1976), 318-320. (Michael J. Canfell) 53 #11578 54E15 (54C30)
- Talanov, V. A.** A retelling problem. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. No. 1* (1969), 9-12. (K. Zimmermann) 45 #6403 90B35
- (with Glebskii, Ju. V.; Kogan, D. I.; Liogon'kii, M. I.) Volume and fraction of satisfiability of formulas of the lower predicate calculus. (Russian. English summary) *Kibernetika (Kiev)* 1969, no. 2, 17-27. (Ju. Gurevič) (RŽMat 1969 #9 A7) 46 #42 02G99
- (with Ševčenko, V. N.) A certain problem of a dynamic transport network. (Russian) *Theory of oscillations, applied mathematics and cybernetics. Izv. Vyssh. Učebn. Zaved. Radiofizika* 15 (1972), 1113-1114. (J. Černý) 47 #10038 90B10
- Talanova, Z. P.** (with Trjupina, L. M.) A variant of the proof of a certain theorem of I. Riesz. (Russian) *Sverdlovsk. Gos. Ped. Inst. Učen. Zap. Sb.* 125 Mat. No. 4 (1973), 81-85. (S. Aljančić) 52 #11452 42A24
- Lambert functions and their application to the summability of divergent series. (Russian) *Sverdlovsk. Gos. Ped. Inst. Naučn. Trudy Sb.* 185 Mat. Vyp. 6 (1974), 116-121. (C. Tanaka) 54 #13369 40G05
- Talantova, N. V.** (with Širokov, A. P.) A remark on a certain metric in the tangent bundle. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 6 (157), 143-146. (J. Vilms) 52 #11767 53B15
- (with Širokov, A. P.) Three-step groups of linear fractional substitutions of a dual variable as affine collineations. (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp. 1* (1976), 105-113. (From the text) 58 #30828 53A35
- Talât-Erben, M.** Evaluation of the integral $I(n, a, b) = \int_0^{\infty} r^n e^{-ar} E_i(br) dr$. (Turkish summary) *Istanbul Tek. Üniv. Bül.* 29 (1976), no. 1, 78-82. (From the summary) 58 #1058 26A63 (33A10)
- Talbot, A. W. G. Bickley.** *Bull. London Math. Soc.* 5 (1973), 349-354. (Editors) 48 #1801A70
- The uniform approximation of polynomials by polynomials of lower degree. *Approximation Theory* 17 (1976), no. 3, 254-279. (C. W. Clenshaw) 54 #13386 41A10
- Talbot, Alan** Transformation of positive functions by linear operators. *IEEE Transactions on Circuit Theory* CT-19 (1972), 460-465. (Author's summary) 56 #11628 94A20
- Talbot, C. J.** (with Everson, J.) Morse theory on timelike and causal curves. *General Relativity and Gravitation* 7 (1976), no. 7, 609-621. (Mauro Francaviglia) 58 #28610 (83.58)

- dykin, A. T. ★Системы и ряды элементов. (Russian) [Systems and series of elements] *Izdat. "Nauka", Moscow, 1971. 144 pp. (R. P. Boas, Jr.) 58 #1999 42A60*
- The orthogonal expansion of a function of two arguments, and the solutions of certain equations. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 1111-1116, 1150-1151. (C. Corduneanu) 50 #919 45L05
- Variational methods for solving equations. (Russian) *Differentsial'nye Uravneniya* 10 (1974), 1714-1720, 1735. (L. Janos) 50 #8126 47A50 (65J05)
- Tests for a basis in Hilbert space. (Russian) *Dokl. Akad. Nauk SSSR* 216 (1974), 505-508. (Z. Čanturija) 50 #2885 46C05
- Linear equations. (Russian) *Differentsial'nye Uravneniya* 11 (1975), no. 6, 1118-1127, 1151. (D. Przeworska-Rolewicz) 52 #1364 47A50
- Systems of elements of a space over a space, and the problem of realizing a given trajectory of motion. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 11, 2027-2038, 2109. (C. Olech) 58 #17403 34G05 (49B99)
- The solution of boundary value problems by means of approximations and expansions. (Russian) *Dokl. Akad. Nauk SSSR* 230 (1976), no. 3, 530-533. (Ju. V. Kostarčuk) 54 #10822 35C10 (35J25)
- ★Векторные функции и уравнения (с приложениями к теории управления). (Russian) [Vector functions and equations (with applications to control theory)] *Izdat. Leningrad. Univ., Leningrad, 1977. 351 pp. (Vadim Komkov) 58 #20641 93-01 (46-01)*
- Systems of elements of a space over a space, and variational methods for the solution of equations with variable operators. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 4, 724-732, 774. (Claudia Simionescu) 57 #1880 65J05
- ldykina, M. N. (with Kuznecov, V. A.) Mapping of a space onto a plane by means of a ruled congruence with a singular cone and conic. (Russian) *Current problems in geometry and its applications, No. 2 (Russian), pp. 50-62, 127. Čuvaš. Gos. Univ., Cheboksary, 1976. (Authors' summary) 58 #30718 50C25*
- le-Agha, Ghiath (with Nelson, Richard B.) Method for the optimum design of truss-type structures. *AIAA J.* 14 (1976), no. 4, 436-445. (Authors' summary) 56 #17388 73G65
- lekar, V. L. (with Rawat, S. S.) A unified approach to fields and propagation in compressible lossy magnetoplasma. *Internat. J. Electron.* 26 (1969), 29-39. (T. Kahan) 47 #4541 78.35
- lenti, Giorgio Spectrum of the Laplace operator acting in $L^p(R^n)$. *Symposia Mathematica, Vol. VII (Convegno sulle Problemi di Evoluzione, INDAM, Rome, 1970), pp. 185-232. Academic Press, London, 1971. (E. Müller-Pfeiffer) 49 #9447 35P10*
- (with Pagani, Carlo Domenico) On a forward-backward parabolic equation. *Ann. Mat. Pura Appl.* (4) 90 (1971), 1-57. (A. Elcrat) 47 #2189 35K20
- Equazioni di Wiener-Hopf e problemi misti. *Confer. Sem. Mat. Univ. Bari No. 130 (1972), 36 pp. (Carlo Pagani) 52 #3717 35J05 (45E10)*
- Una disuguaglianza concernente equazioni integrali di Wiener-Hopf a nucleo singolare. (English summary) *Rend. Sem. Mat. Fis. Milano* 42 (1972), 121-141 (1973), (T. G. Gegelia) 48 #9305 45E10
- Équations paraboliques "En avant-en arrière". *Colloq. Internat. C.N.R.S. sur les Équations aux Dérivées Partielles Linéaires (Univ. Paris-Sud, Orsay, 1972), pp. 292-304. Astérisque, 2 et 3, Soc. Math. France, Paris, 1973. (I. Łojczyk-Królikiewicz) 54 #8025 35K10*
- Sulle equazioni integrali di Wiener-Hopf. *Boll. Un. Mat. Ital.* (4) 7 (1973), suppl. no. 1, 18-118. (Carlo Pagani) 49 #3477 45E10
- Una disuguaglianza fra u , u' , u'' . (English summary) Collection of articles dedicated to Giovanni Sansone on the occasion of his eighty-fifth birthday. *Boll. Un. Mat. Ital.* (4) 11 (1975), no. 3, suppl., 375-388. (Hugo Beirão da Veiga) 53 #3229 26A84
- (with Pucci, Carlo) Elliptic (second-order) partial differential equations with measurable coefficients and approximating integral equations. *Advances in Math.* 19 (1976), no. 1, 48-105. (G. Geymonat) 54 #8006 35J20
- Best constant in Sobolev inequality. *Ann. Mat. Pura Appl.* (4) 110 (1976), 353-372. (L. Cattivita) 57 #3846 46E35
- Elliptic equations and rearrangements. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) 3 (1976), no. 4, 697-718. (V. A. Kondrat'ev) 58 #29170 35J35 (35P15)
- (with de Mottoni, Piero; Tesi, Alberto) Stability results for a class of non-linear parabolic equations. *Ann. Mat. Pura Appl.* (4) 115 (1977), 295-310 (1978). (I. Łojczyk-Królikiewicz) 58 #23080 35K55
- aler, Jan Application of the Gauss principle to the approximate solution of differential equations of heat conduction. (Polish. Russian and English summaries) *Rozprawy Inż.* 25 (1977), no. 2, 349-368. (Author's summary) 56 #14193 80.49
- alipova, L. A. (with Botašev, A. I.) Solution of a problem of Ja. V. Bykov in the noncritical case. (Russian) *Studies in integro-differential equations in Kirgizia, No. 8 (Russian), pp. 196-208, 334-335. Izdat. "Ilim", Frunze, 1971. (Authors' summary) 57 #17161 45J05*
- Branching of solutions of a periodic boundary value problem for quasilinear integrodifferential equations. (Russian) *Studies in integro-differential equations in Kirgizia, No. 10 (Russian), pp. 67-76, 288. Izdat. "Ilim", Frunze, 1974. (Author's summary) 57 #13426 45J05*
- (with Botašev, A. I.) Conditions for the existence of periodic solutions of nonlinear systems of Volterra type integro-differential equations in the noncritical case. (Russian) *Izv. Akad. Nauk Kirgiz. SSR* 1974, no. 1, 8-11. (M. Tvrdý) 49 #5752 45J05
- alipova, L. L. On the averaging of a certain class of differential equations. (Russian) *Uzbek summary Dokl. Akad. Nauk UzSSR* 1968, no. 3, 13-15. (M. Bertolino) 52 #14488 34C30
- On the question of averaging in Hilbert space. (Russian) *Voprosy Kibernet. Vyčisl. Mat. No. 23 (1968), 134-142. (C. Corduneanu) 48 #4447 34G05*
- aljuš, M. O. The typical structure of dissipative operators. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1973, 993-996, 1054. (G. Biriuk) 50 #14346 47B44
- aljuš, N. A. (with Ginzburg, Ju. P.) A matrix analogue of a theorem of Heins and the typical spectral structure of contractions. (Russian) *Funkcional. Anal. i Priložen.* 7 (1973), no. 1, 66-67. (N. K. Nikolič) 47 #4034 47A45 (30A44)
- The typical structure of contractive extensions of certain isometric operators. (Russian) *Mat. Issled.* 8 (1973), no. 3(29), 167-172, 184. (E. Durszt) 48 #12120 47A65

- Talkner, P. (with Grabert, H.; Hänggi, P.) Microdynamics and time-evolution of macroscopic non-Markovian systems. *Z. Phys. B* 26 (1977), no. 4, 389-395. (Authors' summary) 56 #4607 82.60
- (with Grabert, H.; Hänggi, P.; Thomas, H.) Microdynamics and time-evolution of macroscopic non-Markovian systems. II. *Z. Phys. B* 29 (1978), no. 3, 273-280. (Authors' summary) 58 #20118 82.60
- Tall, Franklin D. Some set-theoretic consistency results in topology. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971), pp. 419-425. Academia, Prague, 1972. (D. Kurepa) 54 #4987 04A15 (02K05, 54E30, 04A20)*
- A set-theoretic proposition implying the metrizable of normal Moore spaces. *Proc. Amer. Math. Soc.* 33 (1972), 195-198. (J. N. Younglove) 45 #9285 (E 48 #5016) 54E30
- A counterexample in the theories of compactness and of metrization. *Nederl. Akad. Wetensch. Proc. Ser. A* 76 = *Indag. Math.* 35 (1973), 471-474. (J. M. Aarts) 49 #6154 54D30 (54E35)
- Erratum: "A set-theoretic proposition implying the metrizable of normal Moore spaces" (Proc. Amer. Math. Soc. 33 (1972), 195-198). *Proc. Amer. Math. Soc.* 42 (1973), 647. (Editors) 48 #5016 54E30
- Souslin's conjecture revisited. *Topics in topology (Proc. Colloq., Keszthely, 1972), pp. 609-615. Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam, 1974. (Editors) 50 #8409 54A25 (04A15)*
- P-points in $\beta N - N$, normal non-metrizable Moore spaces, and other problems of Hausdorff. *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot), pp. 501-512. Lecture Notes in Math., Vol. 378, Springer, Berlin, 1974. (Editors) 52 #6639 54A25 (54E30)*
- On the existence of normal metacompact Moore spaces which are not metrizable. *Canad. J. Math.* 26 (1974), 1-6. (George M. Reed) 51 #13992 54E30
- On the existence of non-metrizable hereditarily Lindelöf spaces with point-countable bases. *Duke Math. J.* 41 (1974), 299-304. (K. D. Magill, Jr.) 52 #9176 54D20 (54E30)
- (with Przymusiński, Teodor C.) The undecidability of the existence of a non-separable normal Moore space satisfying the countable chain condition. *Fund. Math.* 85 (1974), 291-297. (S. H. Hechler) 51 #4176 54E30 (02K05)
- The countable chain condition versus separability—applications of Martin's axiom. *General Topology and Appl.* 4 (1974), 315-339. (D. Kurepa) 54 #11264 54A25 (54D20, 04A15)
- How separable is a space? That depends on your set theory! *Proc. Amer. Math. Soc.* 46 (1974), 310-314. (A. H. Stone) 50 #14630 54B10 (54E30)
- (with Charlesworth, Arthur; Hodel, R. E.) On a theorem of Jones and Heath concerning separable normal spaces. *Colloq. Math.* 34 (1975/76), no. 1, 33-37. (F. Burton Jones) 53 #9123 54A25 (54D15, 04A10)
- Stalking the Souslin tree—a topological guide. *Canad. Math. Bull.* 19 (1976), no. 3, 337-341. (Editors) 58 #16313 04A20 (54H05)
- The density topology. *Pacific J. Math.* 62 (1976), no. 1, 275-284. (A. Appert) 54 #7727 28A05
- A reduction of the hereditarily separable non-Lindelöf problem. *Set-theoretic topology (Papers Inst. Medicine and Math., Ohio Univ., Athens, Ohio, 1975-1976), pp. 349-351. Academic Press, New York, 1977. (R. Hodel) 56 #1261 54D20*
- First countable spaces with caliber \aleph_1 may or may not be separable. *Set-theoretic topology (Papers, Inst. Medicine and Math., Ohio Univ., Athens, Ohio, 1975-1976), pp. 353-358. Academic Press, New York, 1977. (S. H. Hechler) 58 #18328 54A25*
- Weakly collectionwise Hausdorff spaces. *Topology Proceedings, Vol. I (Conf., Auburn Univ., Auburn, Ala., 1976), pp. 295-304. Math. Dept., Auburn Univ., Auburn, Ala., 1977. (William G. Fleissner) 56 #13157 54D15 (54E30)*
- Set-theoretic consistency results and topological theorems concerning the normal Moore space conjecture and related problems. *Dissertationes Math. (Rozprawy Mat.)* 148 (1977), 53 pp. (Eric K. van Douwen) 56 #13156 54D15 (02K05, 54A25, 54E30)
- (with van Douwen, Eric K.; Weiss, William A. R.) Nonmetrizable hereditarily Lindelöf spaces with point-countable bases from CH. *Proc. Amer. Math. Soc.* 64 (1977), no. 1, 139-145. (Authors' summary) 58 #24187 54D20
- Normal subspaces of the density topology. *Pacific J. Math.* 75 (1978), no. 2, 579-588. (A. Appert) 58 #18346 54D15 (02K05, 28A05)
- See also **Problems: Topology**, 50 #8399
- Tallet, Jorge The class of possibilities. *Logique et Analyse (N.S.)* 19 (1976), no. 74-76, 367-389. (W. S. Hatcher) 58 #16159 02C10
- Talley, S. W. Niceness of the socle and a characterization of groups of bounded order. *Pi Mu Epsilon J.* 5, 497-502 (1974). (E. Toubassi) 49 #9104 20K99
- Tallini, Giuseppe Introduzione alla coomologia a coefficienti in un fascio. (English summary) *Confer. Sem. Mat. Univ. Bari No. 117 (1969), 24 pp. (Csaba Hatvany) 46 #6345 55B30*
- Čech cohomology and cohomology with coefficients in a sheaf. (Spanish) *Math. Notae* 22 (1970/71), 25-47. (M. Laplaza) 48 #7261 55B30
- (with Bruno, Sergis R.) Lobačevskij geometry in a finite space $P_n[GF(q)]$ ($n = 1, 2; q$ odd). (Spanish) *Univ. Nac. Tucumán Rev. Ser. A* 20 (1970), 203-232. (L. A. Santaló) 45 #2561 50C05
- Ruled graphic systems. *Atti del Convegno di Geometria Combinatoria e sue Applicazioni (Univ. Perugia, Perugia, 1970), pp. 403-411. Ist. Mat., Univ. Perugia, Perugia, 1971. (D. Betten) 49 #6025 50D35*
- Strutture di incidenza dotate di polarità. (English summary) *Rend. Sem. Mat. Fis. Milano* 41 (1971), 75-113. (A. Schleiermacher) 46 #9846 50A20
- Topologia associata ad uno spazio grafico. *Ricerche Mat.* 20 (1971), 253-259. (M. E. Shanks) 48 #12283 50D35
- ★Varietà differenziabili e coomologia di de Rham. *Poliedro, No. 19. Cremonese, Rome, 1973. viii + 177 pp. (Editors) 57 #4202 58-01 (58A10)*
- Una dimostrazione del teorema di de Rham. *Confer. Sem. Mat. Univ. Bari No. 139 (1975), 15 pp. (J. S. Joel) 57 #14010 58A10*
- Graphic characterization of algebraic varieties in a Galois space. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973), Tomo II, pp. 153-165.*

- Atti dei Convegni Lincei*, No. 17, *Accad. Naz. Lincei, Rome*, 1976. (Joseph A. Thas) 57 #2950 05B25 (50D30)
- Beniamino Segre (1903-1977). (Italian) *Archimede* 29 (1977), no. 3, 143-145. (Editors) 58 #10226 01A70
- Tallini Scafati, Maria** Graphic curves on a Galois plane. *Atti del Convegno di Geometria Combinatoria e sue Applicazioni* (Univ. Perugia, Perugia, 1970), pp. 413-419. *Ist. Mat., Univ. Perugia, Perugia*, 1971. (D. Gallarati) 49 #11381 50D30
- Calotte di tipo (m, n) in uno spazio di Galois $S_{r,q}$. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 53 (1972), 71-81 (1973). (A. Barlotti) 50 #1930 05B25
- The k -sets of type (m, n) in a Galois space $S_{r,q}$ ($r \geq 2$). (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie* (Rome, 1973), Tomo II, pp. 459-463. *Atti dei Convegni Lincei*, No. 17, *Accad. Naz. Lincei, Rome*, 1976. (E. J. F. Primrose) 57 #152 05B25 (50D30)
- Sui k -insiemi di uno spazio di Galois $S_{r,q}$ a due soli caratteri nella dimensione d . (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 60 (1976), no. 6, 782-788. (Author's summary) 57 #1259 50D30
- Tallis, G. M.** (with Chesson, P. L.) The relationship between a class of asymptotically normal estimators and goodness of fit tests. *Austral. J. Statist.* 18 (1976), no. 1-2, 53-61. (Authors' summary) 58 #24708 62G10 (62E20)
- Tallós, P.** ★A note on the existence of solutions to multivalued differential equations. DM 77-4. *Department of Mathematics, Karl Marx University of Economics, Budapest*, 1977. 12 pp. (From the introduction) 58 #22737 34A99 (49A99)
- Talman, J. D.** (with Bessis, J. D.) Variational approach to the theory of operator Padé approximants. Proceedings of the International Conference on Padé Approximants, Continued Fractions and Related Topics (Univ. of Colorado, Boulder, Colo., 1972). *Rocky Mountain J. Math.* 4 (1974), 151-158. (Editors) 55 #9761 8147
- Talman, Louis A.** A fixed point criterion for compact T_2 -spaces. *Proc. Amer. Math. Soc.* 51 (1975), 91-93. (Chi-Song Wong) 51 #6776 54H25
- Fixed points for condensing multifunctions in metric spaces with convex structure. *Kôdai Math. Sem. Rep.* 29 (1977), no. 1-2, 62-70. (V. V. Obuhovskii) 57 #3923 47H10 (54H25)
- A note on Kellogg's uniqueness theorem for fixed points. *Proc. Amer. Math. Soc.* 69 (1978), no. 2, 248-250. (Jerome Eisenfeld) 57 #7275 47H10
- Talmi, A.** (with Gilat, G.) Method for smooth approximation of data. *J. Computational Phys.* 23 (1977), no. 2, 93-123. (W. Börsch-Supan) 57 #1831 65D10
- Talnikin, E. A.** (with Horoševskii, V. G.) A game-theoretic approach to the problem of the functioning of homogeneous computing systems. (Russian) *Vychisl. Sistemy* No. 51 (1972), 20-37. (V. Spiridonov) 51 #7370 68A05 (90D45)
- Talpaert, Yves** Étude des amas globulaires à l'aide d'une méthode basée sur les transformations de Fourier. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) 61 (1975), no. 11, 952-958. (George Contopoulos) 54 #2122 8544
- Talpalaru, Pavel** Quelques problèmes concernant l'équivalence asymptotique des systèmes différentiels. *Bol. Un. Mat. Ital.* (4) 4 (1971), 164-186. (J. S. W. Wong) 45 #7201 34E10
- Some results concerning the asymptotic equivalence of integro-differential equations. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* 19 (1973), 117-131. (David L. Lovelady) 49 #3480 45J05 (34K15)
- On finite-time stability of difference systems. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* 20 (1974), no. 2, 389-394. (S. Leela) 54 #13692 49E20 (39A10)
- Asymptotic relationship between solutions of two systems of difference equations. (Romanian summary) *Bul. Inst. Politehn. Iaşi (N.S.)* 21(25) (1975), no. 3-4, sect. I, 49-58. (A. Haimovici) 53 #1077 39A10
- On stability of difference systems. *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* 23 (1977), no. 1, 71-76. (G. R. Sell) 56 #16188 39A10
- (with Luca, Nicolae) Stability and asymptotic behaviour of a class of discrete systems. *Ann. Mat. Pura Appl.* (4) 112 (1977), 351-382. (R. K. Miller) 55 #6045 39A10
- On stability of non-linear differential systems. (Romanian summary) *Bul. Inst. Politehn. Iaşi (N.S.)* 23(27) (1977), no. 1-2, sect. I, 43-48. (C. V. Pao) 56 #12441 34D05
- (with Gheorghiu, N.) On an integral equation with operators that generalizes the finite and infinite linear homogeneous differential equations. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* 22(70) (1978), no. 2, 155-159. (James R. Ward) 58 #6962 45D05
- Talpur, M. N. M.** Generalization of a theorem of Hayman to R^n . *Illinois J. Math.* 19 (1975), 412-423. (Frederick T. Brawn) 54 #13099 31B05
- A subharmonic analogue of Iversen's theorem. *Proc. London Math. Soc.* (3) 31 (1975), part 2, 129-148. (Frederick T. Brawn) 51 #13251 31A20
- On the existence of asymptotic paths for subharmonic functions in R^n . *Proc. London Math. Soc.* (3) 32 (1976), no. 1, 181-192. (Frederick T. Brawn) 54 #7811 31B05
- On the growth of subharmonic functions on asymptotic paths. *Proc. London Math. Soc.* (3) 32 (1976), no. 2, 193-198. (D. H. Armitage) 52 #14323 31A05
- Talroze, V. L.** (with Gol'danskii, V. I.; Zel'dovich, Ja. B.; Kožušner, M. A.; Kondrat'ev, V. N.; Lifšic, I. M.; Novožilov, B. V.; Semenov, N. N.; Sokolov, N. D.; Hariton, Ju. B.) Aleksandr Solomonovich Kompaneets (obituary). *Uspehi Fiz. Nauk* 114 (1974), no. 3-4, 687-688 (Russian); translated as *Soviet Physics Uspekhi* 17 (1975), no. 6, 965-966. (Editors) 51 #12464 01A70
- Talukdar, B.** (with Chaudhuri, R. N.; Das, U.; Banerjee, P.) Continuum S state wave functions for the Debye potential by Ecker-Weizel approximations. *J. Math. Phys.* 19 (1978), no. 8, 1654-1655. (Authors' summary) 58 #14567 8134
- Talukder, M. A. H.** On extended complete block designs. *J. Statist. Res.* 9 (1975), no. 2, 57-66. (Author's summary) 58 #8065 62K10
- Response bias and difference estimate in double sampling. *Metrika* 22 (1975), 65-75. (David Bellhouse) 51 #9293 62D05
- An iterative method for the analysis of designs with several non-orthogonal classifications. *Sankhyā Ser. B* 38 (1976), no. 3, 272-279. (Author's summary) 58 #31642 62K10
- Talwalker, Sheila** A characterization of the double Poisson distribution. *Sankhyā Ser. B* 32 (1970), 265-270. 45 #2838 62E10
- A note on characterization by the conditional expectation. *Metrika* 24 (1977), no. 129-136. (Peter Flusser) 56 #16868 62E10 (60E05)
- Talwar, Prem P.** (with Hedayat, A.; Raktoe, B. L.) Examination and analysis of residual a test for detecting a monotonic relation between mean and variance in regression through the origin. *Comm. Statist.—Theory Methods* A6 (1977), no. 6, 497-506. (D. Sprott) 56 #16933 62J05
- Talwar, Sudha** (with Singh, Surjeet) Pure submodules of modules over bounded (hnp)-rings. *Arch. Math. (Basel)* 30 (1978), no. 6, 570-577. (J. K. Luedeman) 58 #11017 16A62 (18E40)
- Talybov, M. A.** The representation of categories with involution by quotient categories the path category. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1975, no. 5, 3-7. (J. R. Isbell) 53 #13318B10
- The representation of small categories with involution by categories of bina relations. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1977, no. 1, 3-6. (Václav Koubek) 56 #12092 18D99 (18B10)
- Talybova, Š. A.** An application of functions with bounded spectrum to the estimation of the errors of methods of numerical solution of differential equations. (Russian) *Iz. Vysš. Učebn. Zaved. Matematika* 1972, no. 7(122), 95-99. (Walter Gautschi) 46 #8465L05
- Talyšev, A. A.** (with Šokin, Ju. I.) Equivalence of difference schemes. (Russian) *Či. Metody Meh. Splošn. Sredy* 6 (1975), no. 2, 120-125. (RŽMat 1976 #3 B1038) 58 #31889 65N10
- Talyzin, V. A.** A gradient method with supermemory in the control space. (Russian) *Trudy Kazan. Aviacion. Inst. No. 135* (1971), 34-42. (Tomas Gal) 47 #929 49D10
- bui the Tam** See **Bui The Tam**
- nguyên nhu Tam** See **Nguyễn Nhu Tâm**
- Tam, Bit Shun** A note on cross-positive matrices. *Linear Algebra and Appl.* 12 (1975), no. 1, 7-9. (Zbl 316 #15011) 58 #22122 15A48 (15A03)
- A note on polyhedral cones. *J. Austral. Math. Soc. Ser. A* 22 (1976), no. 4, 456-466. (George P. Barker) 55 #2962 15A39
- Some results on cross-positive matrices. *Linear Algebra and Appl.* 15 (1976), no. 173-176. (George P. Barker) 56 #8601 15A48
- Some results of polyhedral cones and simplicial cones. *Linear and Multilinear Algebra* 4 (1976/77), no. 4, 281-284. (George P. Barker) 55 #2961 15A39
- Tam, D. S. F.** (with Ariaratnam, S. T.) Moment stability of coupled linear systems under combined harmonic and stochastic excitation. With discussion. *Stochastic problems dynamics (Sympos., Univ. Southampton, Southampton, 1976)*, pp. 90-105. *Pitman, London*, 1977. (Tohru Katayama) 58 #14116 7335 (93E20)
- Tam, K. Kuen** On the asymptotic solution of viscous incompressible flow past a heated paraboloid of revolution. *SIAM J. Appl. Math.* 20 (1971), 714-721. (R. C. Ackerberg) 45 #1459 7634
- On the existence of an exact solution of the Navier-Stokes equation pertaining certain vortex motion. *J. Austral. Math. Soc.* 13 (1972), 456-460. (J. P. Guiraud) 47 #2907 7635
- On the non-uniqueness of jet-like and wake-like solutions of the Falkner-Skan-equation. *Z. Angew. Math. Mech.* 52 (1972), 181-183. (K. Stewartson) 46 #426 34A10
- (with Heinig, Hans P.) On the existence of solution of the Greenspan-Carrié equation. *J. Austral. Math. Soc.* 15 (1973), 373-384. (K. Stewartson) 48 #2478 34B15 (7634)
- A priori bounds for flow past a paraboloid. *Z. Angew. Math. Mech.* 53 (1973), 799-801. (S. H. Lam) 50 #1617 7634
- A note on the similarity solutions for degenerate quasilinear parabolic equations. *Math. Anal. Appl.* 45 (1974), 132-135. (S. I. Rosencrans) 49 #860 35K99
- On the Lagerstrom model for flow at low Reynolds numbers. *J. Math. Anal. Appl.* 49 (1975), 286-294. (D. R. Breach) 50 #15559 7634
- (with Ng, K. Y. K.) Construction of upper and lower solutions for flow past non-uniformly heated plate. *J. Math. Anal. Appl.* 59 (1977), no. 3, 531-549. (V. Kalašnikov) 56 #1932 7635
- Tam, K. W.** Isometries of certain function spaces. *Pacific J. Math.* 31 (1969), 233-241. (Author's summary) 54 #3385 46E30 (46A45, 47B37)
- Tam, Le Dinh Chon** (with Goulet, Roger Y.) On arithmetical shift for Walsh functions. *IEEE Trans. Computers* C-21 (1972), 1451-1452. (J. J. Price) 48 #11889 42A52
- (with Goulet, Roger) Time-sequence-limited signals in finite Walsh transform. *IEEE Trans. Information Theory* IT-20 (1974), 274-276. (P. N. Rathie) 51 #9951 94A05
- Tam, Ping Kwan** On the unitary equivalence of certain classes of non-normal operators. *Canad. J. Math.* 23 (1971), 849-856. (E. Berkson) 45 #7511 47B20
- On an ergodic abelian \mathcal{M} -group. *Proc. Japan Acad.* 47 (1971), 456-457. (Š. Stratiš) 47 #5614 46L10
- On the commutant of certain automorphism groups. *Canad. J. Math.* 25 (1973), 1165-1169. (Ole A. Nielsen) 48 #4754 46L10
- Tam, W. C.** (with Chow, Pao Liu) Periodic and traveling wave solutions to Volterra-Lotka equations with diffusion. *Bull. Math. Biology* 38 (1976), no. 6, 643-658. (J. Smoller) 58 #1654 35K55
- Tam, W. G.** Invariance groups of the Schrödinger equation for the case of uniform magnetic field. III. *Physica* 46 (1970), 469-474. (Author's summary) 45 #3009 8122
- Tamada, Kō** (with Miura, Hiroyuki) Slip flow past a tangential flat plate at low Reynolds numbers. *J. Fluid Mech.* 85 (1978), no. 4, 731-742. (Authors' summary) 58 #19775 7645
- Tamagawa, Tsuneo** Representation theory and the notion of the discriminant. *Algebra number theory (Kyoto Internat. Sympos., Res. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976)*, pp. 219-227. *Japan Soc. Promotion Sci., Tokyo*, 1977. (Stephen Harris) 58 #5620 12A80 (20G35, 22E55)
- On quadratic forms and Pfaffians. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.*

- 977), no. 1, 213-219. (T.-Y. Lam) **58** #5517 10C05
On indefinite quadratic forms. *J. Math. Soc. Japan* **29** (1977), no. 2, 355-361. (V. L. Popov) **56** #5442 10E25 (10E45)
See also **Theory of numbers**, **56** #2953
ki, Itsuo Syllogistic and calculus of classes. *Logique et Analyse (N.S.)* **17** (1974), 91-196. (N. B. Cocchiarella) **51** #2860 02B10
ki, Kazuhiro (with Enomoto, Masatoshi; Fujii, Masatoshi) On normal approximate spectrum. *Proc. Japan Acad.* **48** (1972), 211-215. (J. W. Bunce) **47** #851 47A10 (47B20)
(with Fujii, Masatoshi) On normal approximate spectrum. III. *Proc. Japan Acad.* **48** (1972), 389-393. (J. W. Bunce) **47** #853 47A10 (47B20)
(with Enomoto, Masatoshi) On a theorem of Percy and Ringrose. *Math. Japon.* **18** (1973), 253-256. (J. R. Ringrose) **50** #1009 46L10
(with Kubo, Fumio) Contractive mappings and projections among operator algebras. *Math. Japon.* **19** (1974), no. 3, 247-250. (John B. Conway) **55** #8820 46L15
(with Muroi, Kazumi) On Ringrose's characterization of compact operators. *Math. Japon.* **19** (1974), no. 3, 259-261. (J. P. Williams) **53** #3748 47B05
(with Enomoto, Masatoshi) Freely acting automorphisms of abelian C^* -algebras. *Tsuyaga Math. J.* **56** (1975), 7-11. (Jun Tomiyama) **50** #10830 46L05
ki, Mitsuishi A model of n -person team with a quadratic payoff. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **22** (1975), no. 1, 1-7. (Y. C. Ho) **52** #5058 90D12 (90A05)
ki, R. K. A characterization of compact subsets of E^1 . *Amer. Math. Monthly* **79** (1972), 278-279. (S. P. Singh) **45** #9312 54H25
omoto, Hideo (with Takaba, Sadao) A design of fault-diagnosable cellular arrays. *Systems-Computers-Controls* **7** (1976), no. 5, 105-115 (1977). (From the summary) **8** #4704 94A20
nni, Italo Il problema della capillarità su domini non regolari. *Rend. Sem. Mat. Univ. Padova* **56** (1976), 169-191 (1978). (Editors) **58** #3943 76.35 (49F10)
no, Hisahiro A characterization of paracompactness. *Fund. Math.* **72** (1971), no. 3, 189-201. (C. E. Aull) **45** #5956 54D20
no, Ken-ichi The intersection of topologies. *Proc. Japan Acad. Ser. A Math. Sci.* **54** (1978), no. 6, 155-156. (R. F. Dickman, Jr.) **58** #18369 54E99
ri, Dov Sur quelques problèmes d'associativité. *Ann. Fac. Sci. Univ. Clermont-Ferrand No. 24* (1964), 91-107. (H. A. Thurston) **46** #5524 20N99
Le problème de l'associativité des monoïdes et le problème des mots pour les semi-groupes; algèbres partielles et chaînes élémentaires. *Séminaire P. Dubreil, M.-L. Dubreil-Jacotin, L. Lesieur et C. Pisot (24e année: 1970/71), Algèbre et théorie des ordres, Fasc. 1, Exp. No. 8, 15 pp. Secrétariat Mathématique, Paris, 1972.* (André Lentin) **54** #7665 20M05
(with Huang, Samuel) Problems of associativity: A simple proof for the lattice property of systems ordered by a semi-associative law. *J. Combinatorial Theory Ser. A* **3** (1972), 7-13. (K. A. Baker) **46** #5191 06A20
The associativity problem for monoids and the word problem for semigroups and groups. *Word problems: decision problems and the Burnside problem in group theory Conf., Univ. California, Irvine, Calif., 1969; dedicated to Hanna Neumann*, pp. 591-607. *Studies in Logic and the Foundations of Math., Vol. 71, North-Holland, Amsterdam, 1973.* (Ralph K. Amayo) **52** #14098 20M05 (20F10)
Formulae for well formed formulae and their enumeration. Collection of articles dedicated to the memory of Hanna Neumann, VI. *J. Austral. Math. Soc.* **17** (1974), 54-162. (S. Comer) **50** #131 05A15 (02B99)
(with Bunting, Paul W.; van Leeuwen, Jan) Deciding associativity for partial multiplication tables of order 3. *Math. Comp.* **32** (1978), no. 142, 593-605. (H. Jürgensen) **58** #16914 20L05 (02G05)
ri, Fumikazu (with Hamada, Noboru) Duals of balanced incomplete block designs derived from an affine geometry. *Ann. Statist.* **3** (1975), no. 4, 926-938. (Damaraju Raghavarao) **51** #11863 62K10 (05B05)
(with Yamamoto, Sumiyasu; Ushio, Kazuhiko; Tazawa, Shinsei; Ikeda, Hideto; Hamada, Noboru) Partition of a query set into minimal number of subsets having consecutive retrieval property. *J. Stat. Plann. Inference* **1** (1977), no. 1, 41-51. (K. H. V. Booth) **58** #8586 68A50
as, V. The G -algebras attached to a given algebra. (Romanian. French summary) *An. Sti. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **18** (1972), 23-27. (Y. Lehrer-Ilamed) **47** #6792 17A99
aschke, Olaf ★Projektive Geometrie. I. Vorlesungen an der Universität Tübingen im Sommersemester 1968. B. I. Hochschulschriften, 829/829a*. *Bibliographisches Institut, Mannheim-Vienna-Zurich*, 1969. xiv + 241 pp. (J. W. P. Hirschfeld) **49** #3656a 50A20
★Schur-Ringe. Vorlesungen an der Universität Tübingen im Sommersemester 1969. B. I.-Hochschulschriften, 735a*. *Bibliographisches Institut, Mannheim*, 1970. xiv + 240 pp. (L. Dornhoff) **47** #8668 20C05
★Projektive Geometrie. II. Mit einer Einführung in die affine Geometrie. Vorlesungen an der Universität Tübingen im Sommersemester 1970. B. I. Hochschulschriften, 838/a/b. *Bibliographisches Institut, Mannheim-Vienna-Zurich*, 1972. xiv + 397 pp. (J. W. P. Hirschfeld) **49** #3656b 50A20
assy, Lajos Ottó Varga (1909-1969) in memoriam. *Publ. Math. Debrecen* **17** (1970), 19-26 (1971). (Editors) **46** #1542 01A70
On extension and reduction of non-linear connections. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. I. *Tensor (N.S.)* **24** (1972), 7-13. (T. J. Willmore) **48** #12349 53B15
Zur Metrisierbarkeit der affinzusammenhängenden Räume. Collection of articles dedicated to Stanisław Gołąb on his 70th birthday, II. *Demonstratio Math.* **6** (1973), 851-859 (1974). (E. Siwek) **50** #11059 53B05
(with Gołąb, Stanisław) Über ein Integral. *Publ. Math. Debrecen* **21** (1974), 219-224. (K. Karták) **50** #4856 26A42 (42A92)
(with Nguyen Van Tu) Absolute parallelism in non-linear reducible tensorial connections. *Tensor (N.S.)* **29** (1975), no. 1, 93-97. (T. J. Willmore) **51** #11312 53B15
Metric tensors of areal spaces. *Tensor (N.S.)* **31** (1977), no. 2, 165-174. (J. K. Beem)
- 57** #7441 53B40
On Euclidean osculation of areal spaces. *Period. Math. Hungar.* **9** (1978), no. 1-2, 71-78. (Makoto Matsumoto) **57** #4040 53B40
Tambour, Y. (with Gal-Or, B.) Phenomenological theory of thermodynamic coupling in multicomponent compressible laminar boundary layers. *Phys. Fluids* **19** (1976), no. 2, 219-226. (H. K. Cheng) **55** #4912 76.35
Tambouratzis, D. G. Study of a special $M/M/1$ queue. *J. Appl. Probability* **8** (1971), 630-631. (H. L. Seal) **46** #980 60K25
The modified $M/G/1$ queue. *Bull. Soc. Math. Grèce (N.S.)* **14** (1973), 176-199. (L. Takács) **51** #7049 60K25
(with Shanbhag, D. N.) Erlang's formula and some results on the departure process for a loss system. *J. Appl. Probability* **10** (1973), 233-240. (U. Narayan Bhat) **53** #11804 60K25
Tamburini, Maria Chiara Alcune relazioni fra coniugio e gruppi quozienti abeliani di un gruppo risolubile finito. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **105** (1971), 847-858. (G. Zappa) **46** #5444 20D25
bellani Tamburini, Maria Chiara See **Bellani Tamburini, Maria Chiara**
Tamburino, J. (with Asenjo, F. G.) Logic of antinomies. *Noire Dame J. Formal Logic* **16** (1975), 17-44. (N. C. A. da Costa) **50** #9545 02C99 (02K10)
Tamburro, Michael B. The evolution operator solution of the Cauchy problem for the Hamilton-Jacobi equation. *Israel J. Math.* **26** (1977), no. 3-4, 232-264. (Moshe Marcus) **56** #6087 35F25 (47H15)
Tameike, Seiichi (with Suzuki, Tsuneo; Yamada, Eiji) Some remarks on null-plane quantization. *Progr. Theoret. Phys.* **55** (1976), no. 3, 922-928. (K. T. Mahanthappa) **53** #7296 81.47
Tamesada, Takeomi (with Harada, Naofumi; Shimada, Ryosaku) Sequential logic networks with quasistable state and their logic analysis. *Systems-Computers-Controls* **7** (1976), no. 1, 44-52 (1977). (R. Shirladze) **58** #20891 94A25
(with Harada, Naofumi; Shimada, Ryosaku) Synthesis of sequential circuits having quasistable states. *Systems-Computers-Controls* **7** (1976), no. 2, 69-78 (1977). (Ljudmil Dakovski) **56** #8228 94A25
Tamhane, Ajit C. (with Bechhofer, Robert E.) An iterated integral representation for a multivariate normal integral having block covariance structure. *Biometrika* **61** (1974), 615-619. (Yung L. Tong) **51** #14410 62H10
Multiple comparisons in model I one-way ANOVA with unequal variances. *Comm. Statist.—Theory Methods A6* (1977), no. 1, 15-32. (Emil Spjøtvoll) **56** #9848 62J15
See also **Special issue: Selection and ranking**, **57** #14232
Tamir, Arie On "An efficient algorithm for minimizing barrier and penalty functions". *Math. Programming* **3** (1972), 390-391. (G. Opfer) **47** #6326 90C30
On a characterization of P -matrices. *Math. Programming* **4** (1973), 110-112. (R. W. Cottle) **48** #2154 15A48 (90C05)
Minimality and complementarity properties associated with Z -functions and M -functions. *Math. Programming* **7** (1974), 17-31. (J. J. Moré) **50** #1738 90C99
Line search techniques based on interpolating polynomials using function values only. *Management Sci.* **22** (1975/76), no. 5, 576-586. (Bernard Lemaire) **53** #9647 65K05 (90C30)
An application of Z -matrices to a class of resource allocation problems. *Management Sci.* **23** (1976/77), no. 3, 317-323. (Author's summary) **55** #14195 90C05 (90C50)
On the number of solutions to the linear complementarity problem. *Math. Programming* **10** (1976), no. 3, 347-353. (K. G. Murty) **54** #9668 90C20
On totally unimodular matrices. *Networks* **6** (1976), no. 4, 373-382. (N. K. Bose) **57** #12553 15A21 (15A57)
A further note on market equilibrium with fixed supply. *J. Econom. Theory* **15** (1977), no. 2, 392-393. (Hildegard Dierker) **56** #10846 90A15
Ergodicity and symmetric mathematical programs. *Math. Programming* **13** (1977), no. 1, 81-87. (A. F. Veinott, Jr.) **58** #20458 90C30 (90A15)
Tamm, B. (with Melnikov, I.) A certain method of formalizing data structures. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **23** (1974), 26-32. (Horst Reichel) **50** #3640 68A15
Academician Nikolai Alumäe on the occasion of his sixtieth birthday. (Estonian and Russian) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **24** (1975), no. 3, 361-363. (Editors) **53** #7701 01A70
Tamm, Ebu (with Tuulmets, Leida) Focal pseudocongruences with constant invariants in R_4 . (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **21** (1972), 370-378. (Froim Marcus) **49** #11408 53A35
The quasiconvexity of the probability function and the quantile function. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **25** (1976), no. 2, 141-145. (E. A. Nurminkii) **54** #2199 90C15
On g -concave functions and probability measures. (Estonian and Russian summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **26** (1977), no. 4, 376-379. (A. Prékopa) **57** #16504 26A51 (90C25)
Tamm, I. E. See **Einstein collection**, **51** #4922; **Einstein collection**, **51** #4923 and **Problems of theoretical physics**, **58** #32475
Tamm, M. I. A compromise solution of a linear programming problem with several target functions. (Russian) *Ekonom. i Mat. Metody* **9** (1973), 328-329. (B. Bereanu) **48** #7965 90C05
Tamme, E. E. (with Kaasik, Ü.) An algorithm for the solution of a generalized load problem. (Russian) *Trudy Vychisl. Centra Tartu. Gos. Univ. No. 13* (1968), 3-21. (Ju. Finkel'stein (RZMat 1969 #3 V317)) **46** #1301 90B25
(with Fischer, M.) The application of monotonicity in the study of difference methods for the solution of quasilinear boundary value problems. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No. 277* (1971), 217-224. (S. Burýšek) **52** #2192 65J05 (47H15)
(with Ehasalu, E.) The solution of the Dirichlet problem on a triangular net. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised No. 277* (1971), 224-233. (G. I. Sulhanišvili) **51** #9515 65H10
(with Vallner, T.) Solution of the boundary value problem for a sixth order differential equation by the finite difference method. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No. 281* (1971), 197-200. (R. Kodnár)

46 #8439 65N10

The stability of difference schemes when solving ill-posed problems by the method of quasi-inversion. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 1319-1325, 1366-1367. (C. Ilioi) **47** #9864 65Q05 (47A50)

(with Väinikko, G.) ★Matemaatilise füüsika võrrandid. I. (Estonian) [Equations of mathematical physics. I] *Tartu Riikl. ÜL., Tartu*, 1973. 186 pp. **58** #1496a 35-01 (69.00)

(with Väinikko, G.) ★Matemaatilise füüsika võrrandid. II. (Estonian) [Equations of mathematical physics. II] *Tartu Riikl. ÜL., Tartu*, 1974. 170 pp. **58** #1496b 35-01 (69.00)

(with Onoperev, A.) A difference scheme for the solution of a parabolic equation with a quadratic nonlinearity. (Russian. Estonian and German summaries) *Tartu Riikl. ÜL. Toimetised No. 355* (1975), 236-240. (V. Thomée) **52** #4658 65N05

(with Väinikko, G.) Convergence of the difference method in the problem of periodic solutions of equations of elliptic type. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 3, 652-664, 819-820. (V. Thomée) **54** #4137 65N10

The regular convergence of difference approximations of the Dirichlet problem. (Russian. Estonian and German summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **26** (1977), no. 1, 3-8. (J. Mikliček) **56** #13697 65N25

Tamme, Günter Teilkörper höheren Geschlechts eines algebraischen Funktionenkörpers. *Arch. Math. (Basel)* **23** (1972), 257-259. (Ernst Kunz) **47** #228 14H05 (12A90)

Ein Satz über hyperelliptische Funktionenkörper. *J. Reine Angew. Math.* **257** (1972), 217-220. (M. Miwa) **47** #229 14H05 (12A90)

Tammela, P. P. On the reduction theory of positive quadratic forms. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 1299-1302. (B. Diviš) **48** #240 10C25 (10E25)

The Hermite-Minkowski domain of reduction of positive quadratic forms in six variables. (Russian) Investigations in number theory, 2. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **33** (1973), 72-89. (B. Novák) **49** #2564 10E25

Two remarks on Bravais varieties. (Russian) Investigations in number theory, 2. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **33** (1973), 90-93. (B. Novák) **49** #2548 10C99

On the reduction theory of positive quadratic forms. (Russian) Studies in number theory (LOMI), 3. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **50** (1975), 6-96, 195. (Author's summary) **58** #27812 10E25

The Minkowski reduction domain for positive quadratic forms of seven variables. (Russian) Studies in number theory (LOMI), 4. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **67** (1977), 108-143, 226. (R. A. Rankin) **57** #12410 10E25

Tammelo, Risto (with Unt, Väino) On the transformation of the energy of gravitational field into other forms of energy. (Estonian and Russian summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **24** (1975), no. 3, 285-290. (Kenneth Dunn) **53** #12475 83.53

Quadrupole test particle as a detector of gravitational waves. *General Relativity and Gravitation* **8** (1977), no. 5, 313-319. (A. H. Taub) **55** #14059 83.53

Tammer, Elisabeth-Charlotte Dualitätstheorie für hyperbolische und stückweise lineare konvexe Optimierungsprobleme. (English and Russian summaries) *Math. Operationsforsch. Statist.* **5** (1974), no. 2, 93-108. (Siegfried Schaible) **53** #7458 90C05

Parametrische hyperbolische Optimierungsprobleme mit Parametern in der Zielfunktion. (English and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 2, 207-225. (Wolfgang Wetterling) **57** #5113 90C30

Tammer, Klaus Einige Bemerkungen zur M-Methode der linearen Optimierung. (Czech and English summaries) *Ekonom.-Mat. Obzor* **7** (1971), 419-425. (J. Stoer) **45** #9683 90C05

Die Abhängigkeit eines quadratischen Optimierungsproblems von einem Parameter in der Zielfunktion. (English and Russian summaries) *Math. Operationsforsch. Statist.* **5** (1974), no. 7/8, 573-590. (Author's summary) **55** #1207 49E99

On the solution of the distribution problem of stochastic programming. *Progress in operations research, Vols. I, II (Proc. Sixth Hungarian Conf., Eger, 1974)*, pp. 907-920. *Colloq. Math. Soc. János Bolyai, Vol. 12, North-Holland, Amsterdam*, 1976. (I. M. Stancu-Minasian) **56** #4831 90C15

Notwendige und hinreichende Bedingungen für (strenge) Konvexität, Pseudokonvexität und (strenge) Quasikonvexität einer quadratischen Funktion bezüglich einer konvexen Menge. (Czech and loose Russian summaries) *Apl. Mat.* **21** (1976), no. 2, 97-110. (J. Stoer) **53** #4994 90C30

Über eine Klasse von verallgemeinerten quadratischen Optimierungsproblemen mit nichtkonvexer Zielfunktion, die auf quasi- bzw. pseudokonvexe Probleme zurückführbar sind. (Czech and loose Russian summaries) *Apl. Mat.* **21** (1976), no. 2, 111-119. (Werner Krabs) **53** #4978 90C25 (65K05)

Möglichkeiten zur Anwendung der Erkenntnisse der parametrischen Optimierung für die Lösung indefiniter quadratischer Optimierungsprobleme. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 2, 209-222. (Tomas Gal) **53** #12587 90C20

Tammer, I. Theorems of Tauberian type with a remainder term. (Russian. English summary) Mathematics and theoretical mechanics, VI. *Tallin. Polüteh. Inst. Toimetised Seer. A No. 312* (1971), 27-38. (See RŽMat **1972** #7 B26; MR **53** #2569) **40E05**

Approximation of functions, and theorems of Abelian and Tauberian type with a remainder term. (Russian. English summary) Mathematics and theoretical mechanics, VI. *Tallin. Polüteh. Inst. Toimetised Seer. A No. 312* (1971), 39-53. (From the introduction) **58** #17660 41A25 (40E05)

Tauberian theorems with a remainder term for the Cesàro and Hölder summability methods. (Russian. Estonian and English summaries) *Tartu Riikl. ÜL. Toimetised No. 277* (1971), 161-170. (M. S. Rangachari) **51** #8674a 40E05 (40D25)

Tauberian theorems with a remainder term for the Euler-Knopp summability method. (Russian. Estonian and English summaries) *Tartu Riikl. ÜL. Toimetised No. 277* (1971), 171-182. (M. S. Rangachari) **51** #8674b 40E05 (40D25)

Tammeste, R. A certain generalization of the concept of information. (Russian. Estonian and German summaries) *Tartu Riikl. ÜL. Toimetised No. 253* (1970), 322-335. (P. Vondráček) **45** #3119 94A15

Tammi, Olli (with Schiffer, Menahem M.) A Green's inequality for the power matrix.

Ann. Acad. Sci. Fenn. Ser. A I No. 501 (1971), 15 pp. (W. C. Royster) **45** #53 30A34

(with Ławrynowicz, Julian) On estimating a fifth order functional for bounded univalent functions. *Colloq. Math.* **25** (1972), 307-313, 326. (F. R. Keogh) **48** #42 30A34

On optimizing parameters of the power inequality for a_4 in the class of bounded univalent functions. *Ann. Acad. Sci. Fenn. Ser. A I No. 560* (1973), 24 pp. (L. Aksent'ev) **55** #10662 30A34

On Green's inequalities. *Topics in analysis (Colloq. Math. Anal., Jyväskylä, 1974)*, pp. 370-375. *Lecture Notes in Math., Vol. 419, Springer, Berlin*, 1974. (T. K. 51 #8396 30A34

(with Kortram, Ronald) On the first coefficient regions of bounded univalent functions. *Ann. Acad. Sci. Fenn. Ser. A I Math. No. 592* (1974), 27 pp. (1975). (V. 51 #5914 30A34

(with Kortram, Ronald) On the range of validity of certain inequalities for fourth coefficient of a bounded univalent function. (Polish summary) *Bull. Soc. Lettres Łódź* **24** (1974), no. 1, 6 pp. (1975). (E. Netanyahu) **55** #10657 30A34

(with Kortram, Ronald) On the second coefficient region for bounded univalent functions. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **1** (1975), no. 1, 155-175. (V. L. 52 #8409 30A34 (30A38)

(with Lehto, Olli) Area method and univalent functions with quasiconformal extensions. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **2** (1976), 307-313. (F. W. Gehl 57 #6421 30A60

Use of the Power inequality in connection of coefficient regions for bounded univalent functions. Proceedings of the Sixth Conference on Analytic Functions (Krakow, 1974). *Ann. Polon. Math.* **33** (1976/77), no. 1-2, 117-123. (V. Linis) **57** #16566 30A34 (30A38)

(with Ławrynowicz, Julian) On fourth order Grunsky functionals. (Polish summary) *Bull. Soc. Sci. Lettres Łódź* **26** (1976), no. 7, 6 pp. (D. M. Campbell) **56** #159 30A32

Inequalities for the fifth coefficient for bounded real univalent functions. *J. Anal. Math.* **30** (1976), 481-497. (V. Linis) **55** #8342 30A34

★Extremum problems for bounded univalent functions. *Lecture Notes in Mathematics, Vol. 646. Springer-Verlag, Berlin-New York*, 1978. vii + 313 pp. ISBN 3-540-08756-7 (I. A. Aleksandrov) **58** #11337 30-02 (30A36, 30A38)

Tamoikin, V. V. (with Ryžov, Ju. A.) The radiation and diffusion of electromagnetic waves in randomly inhomogeneous media. (Russian) *Izv. Vysš. Učebn. Zaved. Radiofizika* (1970), 356-387. (A. H. Klotz) **45** #8143 78.60

Tamone, Grazia Su certi ideali massimali degli anelli di polinomi. *Univ. Genova Pubbl. Mat. (2) No. 27* (1972), 22 pp. (Editors) **52** #13806 13B25

Su certi ideali massimali degli anelli di polinomi. (English summary) *Ann. U. Ferrara Sez. VII (N.S.)* **18** (1973), 143-153. (P. Samuel) **50** #298 13B25

Sulla validità delle condizioni di catena in certe estensioni di un anello. *Matematiche (Catania)* **29** (1974), no. 2, 320-330 (1975). (Zbl **342** #13006) **58** #566 13J10 (13J05)

Sulla validità delle condizioni di catena incerte estensioni di un anello. *Univ. Genova Pubbl. Ist. Mat. (2) No. 119* (1974), i + 16 pp. (Editors) **52** #13823 13J05

Su una condizione di fattorialità debole e l'annullamento del gruppo di Picard. (English summary) *Ann. Mat. Pura Appl. (4)* **112** (1977), 285-304. (Ezio Stagnoli) **55** #8021 13F15 (13D15, 14C20)

Sugli incollamenti di ideali primi. (English summary) *Boll. Un. Mat. Ital. B (5)* (1977), no. 3, 810-825. (Paolo Maroscia) **58** #5618 13A15

Tamplin, Arthur R. See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, **52** #9427

Tamrazjan, R. A. (with Azatjan, A. A.) A method for the enumeration of the elements of list of permutations of n different symbols. (Russian. Armenian summary) *Akad. Nauk Armyan. SSR Dokl.* **61** (1975), no. 5, 262-268. (T. C. Brown) **54** #10030 05A15

Tamrazov, P. M. (with Lebedev, N. A.) Inverse approximation theorems on regular compacta of the complex plane. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **34** (1970), 1340-1390. (G. G. Lorentz) **45** #2387 41A50

Change of moduli under circular symmetrization. (Russian) *Mat. Zametki* (1971), 527-532. (E. Reich) **45** #3686 30A30

Contour and solid properties of holomorphic functions in a complex domain. (Russian) *Dokl. Akad. Nauk SSSR* **204** (1972), 565-568. (T. Kubo) **46** #375 30A72

(with Gorbaičuk, V. I.) A contour inverse problem for the approximation of functions for compacta of positive capacity. (Russian) *Ukrain. Mat. Ž.* **24** (1971), 147-160. (Ju. A. Šaškin) **45** #3722 30A82

A solid inverse problem of polynomial approximation of functions on a regular compactum. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **37** (1973), 148-164. (T. C. Brown) **51** #13242 30A82

Contour and solid structural properties of holomorphic functions of a complex variable. (Russian) *Uspehi Mat. Nauk* **28** (1973), no. 1(169), 131-161. (J. Kaczmarc) **53** #13573 30A72

Conformally invariant moduli and circular symmetrization. (Russian) *Metric questions of the theory of functions and mappings, No. V (Russian)*, pp. 127-146. *Izv. "Naukova Dumka", Kiev*, 1974. (H. Renelt) **54** #539 30A44

The divergence of the image of a sequence of points under a conformal mapping. (Russian) *Mat. Zametki* **15** (1974), 543-550. (D. M. Campbell) **50** #4929 30A72

★Гладкости и полиномиальные приближения. (Russian) [Smoothness and polynomial approximations] *Izdat. "Naukova Dumka", Moscow*, 1975. 271 pp. (E. Dyn'kin and V. P. Havin) **58** #22576 30A82 (30-02)

Polynomial approximation and structural properties of functions defined on subsets of the complex plane. *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 259-265. *Reidel, Dordrecht*, 1975. (Wolfgang Luh) **57** #10 30A82

(with Bardzins'kiĭ, V. V.) ★О комплексных конечно-разностных гладкостях полиномиальных приближениях. (Russian) [Complex finite-difference smoothness of polynomial approximations] Preprint IM-76-7. *Akad. Nauk Ukrain. SSR Inst. Math. Kiev*, 1976. 14 pp. (S. V. Hruščev) **57** #13297 41A10 (30A82)

- Tamura, Hideo** The asymptotic eigenvalue distribution for non-smooth elliptic operators. *Proc. Japan Acad.* **50** (1974), 19-22. (Ja. A. Roitberg) **51** #1153 35P20 (47F05)
- The asymptotic distribution of the lower part eigenvalues for elliptic operators. *Proc. Japan Acad.* **50** (1974), 185-187. (J. B. McLeod) **51** #1157 35P20
- The asymptotic distribution of discrete eigenvalues for Dirac operators. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **23** (1976), no. 1, 167-197. (Sandro Graffi) **55** #891 35P20
- The asymptotic distribution of eigenvalues of the Laplace operator in an unbounded domain. *Nagoya Math. J.* **60** (1976), 7-33. (Sandro Graffi) **53** #6119 35P20
- The asymptotic distribution of discrete eigenvalues for Schrödinger operators. *J. Math. Soc. Japan* **29** (1977), no. 2, 189-218. (E. Müller-Pfeiffer) **55** #10871 35P20
- The decay of the local energy for wave equations with discontinuous coefficients. *Nagoya Math. J.* **68** (1977), 35-58. (N. D. Kazarinoff) **57** #6852 35L05
- Tamura, Hiroshi** (with Fujiwara, Chikato; Kasahara, Masao; Namekawa, Toshihiko) Notes on the error detection capability of selected L-ary codes. *Electron. Commun. Japan* **55** (1972), no. 2, 16-22. (From the authors' summary) **49** #12155 94A10
- Tamura, Hiroyuki** Dual algorithm for solving large-scale scheduling systems control problem with hierarchical structure. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 3: Ecology and systems engineering, Large scale sensitivity optimization and adaptation theory, Paper No. 27.5, 6 pp. Internat. Fed. Automat. Control, Düsseldorf, 1971* (1972). (Gerald Hammer) **58** #20430 90C20
- A large-scale production scheduling systems control via duality theorem. (Japanese. English summary) *Systems and Control* **15** (1971), 515-520. (N. Zierler) **46** #1317 90B35
- (with Singh, Madan G.) Modelling and hierarchical optimization for oversaturated urban road traffic networks. *Internat. J. Control* **20** (1974), 913-934. (F. Weinberg) **51** #4967 90B20
- Disciplinary boundaries of optimal control and mathematical programming—theory and computational techniques. (Japanese) *Systems and Control* **20** (1976), no. 2, 59-66. (Kunihiko Ichikawa) **53** #12652 93-02 (90C50)
- (with Kihara, Yasuhiko) Multistage quadratic programming for discrete-time optimal control with state and control constraints. (Japanese. English summary) *Systems and Control* **21** (1977), no. 12, 702-709. (Nobuo Sannomiya) **58** #9257 90C20 (93C55)
- See also **Proceedings: IFAC World Congress, 50** #12338
- Tamura, Hisataka** (with Kiya, Masaru; Arie, Mikio) Turbulent wakes behind two-dimensional bodies in a uniform free flow. *Bull. JSME* **19** (1976), no. 129, 274-282. (P. C. Jain) **54** #11966 76A1
- Tamura, I.** (with Hattori, Akio; Ihara, Yasutaka; Itô, Seizô; Iwahori, Nagayoshi; Shioda, Tetsuji) Mathematical contributions of Professor Yukiyo Kawada. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 1, i-vi. (Editors) **55** #7693 01A70
- Tamura, Itiro** Every odd dimensional homotopy sphere has a foliation of codimension one. *Comment. Math. Helv.* **47** (1972), 164-170. (F. Laudenbach) **47** #5887 57D30 (57D60)
- Foliations of total spaces of sphere bundles over spheres. *J. Math. Soc. Japan* **24** (1972), 698-700. (J. M. Masa) **49** #8034 57D30
- Spinnable structures on differentiable manifolds. *Proc. Japan Acad.* **48** (1972), 293-296. (R. C. Kirby) **47** #7756 57D15
- Foliations and spinnable structures on manifolds. (French summary) *Colloque International sur l'Analyse et la Topologie Différentielle (Colloques Internationaux du Centre National de la Recherche Scientifique, Strasbourg, 1972). Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 2, 197-214. (W. D. Neumann) **50** #14788 57D30 (57C45, 57D15)
- (with Mizutani, Tadayoshi) On the existence of foliated structures. (Japanese) *Sûgaku* **25** (1973), no. 2, 134-147. (Editors) **58** #31108 57D30
- Specially spinnable manifolds. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973), pp. 181-187. Univ. Tokyo Press, Tokyo, 1975.* (Louis H. Kauffman) **52** #6737 57D15 (57C45)
- (with Mizutani, Tadayoshi) Foliations of even dimensional manifolds. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973), pp. 189-194. Univ. Tokyo Press, Tokyo, 1975.* (I. Vaisman) **51** #6845 57D30
- (with Mizutani, Tadayoshi) Null cobordant codimension-one foliation on S^{4n-1} . *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* **24** (1977), no. 1, 93-96. (Ulrich Koschorke) **56** #16650 57D30
- Tamura, Jun-ichi** (with Shiokawa, Iekata; Kaneiwa, Ryûji) A proof of Perron's theorem on Diophantine approximation of complex numbers. *Keio Engrg. Rep.* **28** (1975), no. 12, 131-147. (L. C. Eggan) **55** #2783 10F20
- (with Kaneiwa, Ryûji; Shiokawa, Iekata) Some properties of complex continued fractions. *Comment. Math. Univ. St. Paul.* **25** (1976/77), no. 2, 129-143. (L. C. Eggan) **58** #27722 10A30 (10F20)
- Tamura, Katsutoshi** (with Ichikawa, Kunihiko) Optimal problem with discontinuity. *Bull. JSME* **14** (1971), 1069-1076. (Thomas S. Angell) **50** #8212 49B10
- A method for constructing the polar cone of a polyhedral cone, with applications to linear multicriteria decision problems. *J. Optimization Theory Appl.* **19** (1976), no. 4, 547-564. (W. E. Schmitendorf) **54** #6962 90C50
- (with Nikiforuk, P. N.; Gupta, Madan M.) On multilevel optimization of a combined static and dynamic problem. *Trans. ASME Ser. G. J. Dynamic Systems, Measurement and Control* **98** (1976), no. 3, 260-265. (B. L. Ovsievič) **55** #12232 93C99 (49D10)
- (with Miura, Shinji) On linear vector maximization problems. *J. Operations Res. Soc. Japan* **20** (1977), no. 3, 139-149. (Leon Cooper) **56** #10940 90C05
- Tamura, Norio** (with Ae, Tadashi; Kikuno, Toru) A comparative study of one-counter Janov schemes. *Theoretical computer science (Third GI Conf., Darmstadt, 1977), pp. 83-95. Lecture Notes in Comput. Sci., Vol. 48, Springer, Berlin, 1977.* (Irène Guessarian) **58** #8425 68A05
- Tamura, Ryoji** The estimate procedures after a preliminary multivariate nonparametric two-sample test. *Bull. Shimane Univ. Natur. Sci. No. 16* (1966), 1-11. (Matthew Goldstein) **54** #1466 62G05
- A class of rank tests in the regression model. Collection of articles dedicated to Sadao Kashiwagi. *Collect. Papers Math. Soc. Wakayama Univ. No. 1* (1970), 29-35. (James N. Adichie) **52** #7001 62G10
- On a class of multisample rank tests based on trimmed samples. *Bull. Math. Statist.* **15** (1972/73), no. 1-2, 1-6. (V. P. Bhapkar) **54** #1474 62G10
- Nonparametric selection procedures in two-way layouts. *Bull. Math. Statist.* **16** (1975), no. 3-4, 1-5. (Joachim Krauth) **52** #15838 62G99
- Tamura, Saburo** On distributive sublattices of a lattice. *Proc. Japan Acad.* **47** (1971), 442-446. (R. Balbes) **45** #8591 06A35
- A note on distributive sublattices of a lattice. *Proc. Japan Acad.* **47** (1971), 603-605. (R. Balbes) **48** #5938 06A20
- Two identities for lattices, distributive lattices and modular lattices with a constant. *Notre Dame J. Formal Logic* **16** (1975), 137-140. (M. Kolibiar) **51** #5433 06A20
- Tamura, Shinichi** (with Higuchi, Seihaku; Tanaka, Kohkichi) Pattern classification based on fuzzy relations. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-1** (1971), 61-66. (P. C. Gilmore) **46** #10258 68A45
- (with Tanaka, Kohkichi) Learning of fuzzy formal language. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-3** (1973), 98-102. (T. Rus) **47** #1334 68A30
- (with Tanaka, Kohkichi) Note on analogue memory automata. *Information Sci.* **7** (1974), 73-80. (Forbes D. Lewis) **49** #7041 94A30
- (with Tanaka, Kohkichi) Learning for unknown signal pattern with feedback link. *IEEE Trans. Systems, Man Cybernet.* **SMC-5** (1975), no. 5, 552-557. (James C. Bezdek) **52** #16841 94A05
- (with Tominaga, Shoji; Tanaka, Kohkichi; Higuchi, Seihaku) Uncorrelated minimum-length sequence and its application to parameter estimation. *Information Sci.* **9** (1975), no. 2, 151-168. (S. P. Bingulac) **55** #7496 93B30
- (with Tanaka, Minoru; Tanaka, Kohkichi) Specification of relative positions of subpictures in assembling a complete picture. *Systems-Computers-Controls* **6** (1975), no. 5, 49-57. (V. A. Kovalevskii) **58** #19430 68A45
- (with Tanaka, Minoru; Tanaka, Kohkichi) On assembling subpictures into a mosaic picture. *IEEE Trans. Systems Man Cybernet.* **SMC-7** (1977), no. 1, 42-48. (Arnold Griffith) **56** #4274 68A45
- Tamura, Syuji** (with Yoshinaga, Kyoichi) On a Korovkin theorem of uniform convergence. *Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 23* (1976), 1-9. (J. Milota) **54** #13407 41A35
- Tamura, Takayuki** The study of closets and free contents related to semilattice decomposition of semigroups. *Semigroups (Proc. Sympos., Wayne State Univ., Detroit, Mich., 1968), pp. 221-260. Academic Press, New York, 1969.* (R. P. Sullivan) **46** #5504 20M10
- (with Sasaki, Morio) Positive rational semigroups and commutative power joined cancellative semigroups without idempotent. *Czechoslovak Math. J.* **21(96)** (1971), 567-576. (J. B. Kim) **45** #2062 20M10
- (with Hamilton, Howard B.) Commutative semigroups with greatest group-homomorphism. *Proc. Japan Acad.* **47** (1971), 671-675. (D. B. McAlister) **46** #3661 20M10
- Basic study of general products and homogeneous homomorphisms. I. *Acta Sci. Math. (Szeged)* **33** (1972), 31-44. (T. E. Hall) **47** #1986 20M10 (20L05)
- (with Shafer, John) On exponential semigroups. I. *Proc. Japan Acad.* **48** (1972), 77-80. (H.-J. Hoehnke) **47** #5156 20M10
- (with Nordahl, Thomas E.) On exponential semigroups. II. *Proc. Japan Acad.* **48** (1972), 474-478. (H.-J. Hoehnke) **48** #2285 20M10
- (with Nordahl, Thomas E.) Finiteness of lattice of congruences on commutative semigroups. *Semigroup Forum* **4** (1972), 73-77. (R. McFadden) **47** #384 20M10
- On Putcha's theorem concerning semilattice of archimedean semigroups. *Semigroup Forum* **4** (1972), 83-86. (E.-A. Behrens) **45** #6715 06A50
- (with Hamilton, Howard B.) Is minimal group congruence smallest? *Semigroup Forum* **4** (1972), 173-176. (M. Kolibiar) **45** #3602 20M10
- Note on the greatest semilattice decomposition of semigroups. *Semigroup Forum* **4** (1972), 255-261. (D. J. Foulis) **46** #7105 06A20 (20M10)
- Remark on the smallest semilattice congruence. *Semigroup Forum* **5** (1972/73), 277-282. (T. S. Blyth) **47** #8732 20M10
- (with Hamilton, Howard B.) The study of commutative semigroups with greatest group-homomorphism. *Trans. Amer. Math. Soc.* **173** (1972), 401-419. (H. Jürgensen) **47** #3581 (EA 58) 20M10
- Survey of semilattice congruences on semigroups. *Mini-Conference on Semigroup Theory (József Attila Univ., Szeged, 1972), pp. 47-57. József Attila Univ., Szeged, 1973.* (Howard B. Hamilton) **54** #2853 20M10 (06A50)
- On the exponents of inverse semigroups. *Proceedings of a Symposium on Inverse Semigroups and their Generalisations (Northern Illinois Univ., DeKalb, Ill., 1973), pp. 172-185. Northern Illinois Univ., DeKalb, Ill., 1973.* (Mohan S. Putcha) **52** #8304 20M10
- \mathcal{R} -congruences of \mathcal{R} -semigroups. *J. Algebra* **27** (1973), 11-30. (D. R. La Torre) **48** #6298 20M10
- Semilattice congruences viewed from quasi-orders. *Proc. Amer. Math. Soc.* **41** (1973), 75-79. (O. Steinfield) **48** #11373 20M10
- Finitely generated steady \mathcal{R} -semigroups. *Proc. Amer. Math. Soc.* **41** (1973), 425-430. (D. B. McAlister) **48** #6299 20M10 (06A50)
- (with Higgins, John C.) Finitely generated \mathcal{R} -semigroup and quotient group. *Proc. Japan Acad.* **49** (1973), 323-327. (Joseph Chacron) **49** #2989 20M10
- Note on attainability of identities on bands. *J. Algebra* **28** (1974), 1-9. (M. Yamada) **48** #11363 20M05
- Complementary semigroups and exponent semigroups of order bounded groups. *Math. Nachr.* **59** (1974), 17-34. (R. P. Sullivan) **50** #518 20M10
- Irreducible \mathcal{R} -semigroups. *Math. Nachr.* **63** (1974), 71-88. (J. B. Kim) **51** #3336 20M10
- Basic study of \mathcal{R} -semigroups and their homomorphisms. *Semigroup Forum* **8** (1974), no. 1, 21-50. (J. B. Kim) **51** #10507 20M10
- Quasi-orders, generalized Archimedeaness and semilattice decompositions. *Math. Nachr.* **68** (1975), 201-220. (Mohan S. Putcha) **52** #8305 20M10
- (with Hamilton, Howard B.; Nordahl, Thomas E.) Commutative cancellative semigroups without idempotents. *Pacific J. Math.* **61** (1975), no. 2, 441-456. (W. E. Deskins) **53** #5777 20M10

- Semi-closure mappings and cofinal chains. *Portugal. Math.* **34** (1975), no. 1-2, 111-117. (Hartmut Höft) **52** #7983 06A20
- Basic study of \mathcal{R} -semigroups and their homomorphisms. II. *Semigroup Forum* **10** (1975), no. 3, 250-261. (J. B. Kim) **51** #10508 20M10
- Putcha's problem on maximal cancellative subsemigroups. *Proc. Japan Acad.* **52** (1976), no. 3, 91-94. (S. Lajos) **53** #3167 20M10
- (with Putcha, Mohan S.) Homomorphisms of commutative cancellative semigroups into nonnegative real numbers. *Trans. Amer. Math. Soc.* **221** (1976), no. 1, 147-157. (E.-A. Behrens) **53** #13452 20M15
- Notes on translational hulls of completely 0-simple semigroups. *Proceedings of the First Symposium on Semigroups (Shimane Univ., Matsue, 1977)*, pp. 73-83. Shimane University, Matsue, 1977. (T. Saitō) **57** #16438 20M10
- Commutative Archimedean cancellative idempotent-free semigroups with an infinite cyclic group as structure group. *J. Algebra* **45** (1977), no. 2, 343-390. (J. B. Kim) **55** #12844 20M10
- \mathcal{R} -semigroups and their translation semigroups. *J. Austral. Math. Soc. Ser. A* **24** (1977), no. 2, 184-202. (J. L. Chrislock) **57** #9887 20M10
- (with Kobayashi, Yuji) Quasi-order preserving homomorphisms of commutative semigroups into the non-negative reals. *Math. Japon.* **22** (1977), no. 3, 267-285. (Mohan S. Putcha) **57** #12752 20M30
- (with Trotter, Peter G.) Completely semisimple inverse Δ -semigroups admitting principal series. *Pacific J. Math.* **68** (1977), no. 2, 515-525. (John M. Howie) **57** #6256 20M10
- Commutative subarchimedean semigroups. *Seminar on semigroup theory (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). Sūrikaiseikikenkyūsho Kōkyūroku No. 292* (1977), 98-126. (Author's summary) **57** #9888 20M10
- Tamura, Tatsuo** Singular orbits of prehomogeneous vector spaces and b -functions. (Japanese) Conference on Singular Points of Hypersurfaces and b -Functions (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1973). *Sūrikaiseikikenkyūsho Kōkyūroku No. 225* (1975), 262-291. (T. Ono) **57** #12901 32C40 (14L99, 20G20)
- Tamuž, V. P.** (with Bogdanović, A. E.) Fundamental regularities of parametric oscillations of composite cylindrical shells that contain a viscoelastic filler in the internal cavity. (Russian) *Latvijas PSR Zinātņu Akad. Vēstis* **1978**, no. 1(366), 9-22, 159. (Editors) **57** #14712 73J35
- ho khac Tan** See Ho Khac Tan
- ngo dak Tan** See Ngo Dak Tan
- vo van Tan** See Vo Van Tan
- Tan, Choon Peng** On two-state isolated probabilistic automata. *Information and Control* **21** (1972), 483-495. (K. S. Fu) **48** #3655 (E **50** #16181) 94A35
- Erratum: "On two-state isolated probabilistic automata" (Information and Control **21** (1972), 483-495). *Information and Control* **27** (1975), 100. (K. S. Fu) **50** #16181 94A35
- Tan, Chung-I** (with Saunders, L. M.; Saxton, O. H. N.) Crossed-channel partial-wave expansions and the Bethe-Salpeter equation. *Phys. Rev. D* **3** (3) (1973), 1005-1011. (D. B. Fairlie) **51** #4876 81J22
- Quantum stability in Reggeon field theory: tunneling at zero transverse dimension. *Phys. Rev. D* **3** (3) (1978), no. 8, 3009-3024. (Author's summary) **58** #25543 81J35
- Tan, Eng Tjioe** See Ch'ên, Yung Ch'iu
- Tan, Felipe K.** Optimal policies for a multi-echelon inventory problem with periodic ordering. *Management Sci.* **20** (1973/74), 1104-1111. (F. Gianessi) **49** #6900 90B05
- Tan, H. P.** (with Mrówka, S.) Sequences of disjoint open sets. *Czechoslovak Math. J.* **22**(97) (1972), 517-521. (S. P. Franklin) **46** #9931 54D20
- (with Chew, K. P.) Some remarks on choice topology. *Publ. Inst. Math. (Beograd) (N.S.)* **14**(28) (1972), 19-23. (R. M. Dacić) **53** #9116 54A10 (54D10)
- Bases of smallest cardinality. *Math. Student* **41** (1973), no. 3-4, 337-338 (1974). (O. T. Alas) **51** #11402 54A25
- Countable and uncountable covers. *Publ. Inst. Math. (Beograd) (N.S.)* **15**(29) (1973), 151. (Donald Plank) **49** #6152 54D20
- Strong 0-dimensionality of certain η -compact spaces (preliminary report). *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 513-516. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (Hans-Christian Reichel) **51** #6763 54F45
- Tan, H. S.** (with Cheng, David K.) Solutions to a class of half-plane diffraction problems. *Radio Sci.* **5** (1973), 1191-1196. (A. Ishimaru) **48** #3370 78J35
- Tan, Hao Sheng** Mechanics and its evolution. (Chinese) *Acta Mech. Sinica (Peking)* **1978**, no. 3, 242-250. (J. S. Joel) **58** #15798 01A05 (70J01)
- Tan, Harry H.** (with Yao, Kung) Some comments on the generalized Shannon lower bound for stationary finite-alphabet sources with memory. *IEEE Trans. Information Theory* **IT-19** (1973), 815-817. (P. N. Rathie) **51** #9971 94A15
- (with Yao, Kung) Evaluation of rate-distortion functions for a class of independent identically distributed sources under an absolute-magnitude criterion. *IEEE Trans. Information Theory* **IT-21** (1975), 59-64. (Robert Gray) **51** #9969 94A15
- Convergence of distortion for block coding of symmetric modular sources. *IEEE Trans. Information Theory* **IT-21** (1975), 469-472. (R. N. Goss) **51** #7718 94A10
- An algorithm to compute the resolvent of a stochastic matrix with application to Markov decision processes. *IEEE Trans. Systems, Man Cybernet. SMC-5* (1975), no. 6, 617-620. (Author's summary) **56** #13576 65F30
- (with Yao, Kung) Rate distortion functions of countably infinite alphabet memoryless sources. *Information and Control* **27** (1975), 272-288. (Robert Gray) **51** #2779 94A15
- Block coding for stationary Gaussian sources with memory under a square-error fidelity criterion. *Information and Control* **29** (1975), no. 1, 11-28. (Suguru Arimoto) **51** #15179 94A10
- Tree coding of discrete-time abstract alphabet stationary block-ergodic sources with a fidelity criterion. *IEEE Trans. Information Theory* **IT-22** (1976), no. 6, 671-681. (Robert Gray) **54** #14874 94A15
- (with Yao, Kung) Absolute error rate-distortion functions for sources with constrained magnitudes. *IEEE Trans. Inform. Theory* **24** (1978), no. 4, 499-503. (N. C. Mohanty) **58** #9809 94A15
- Tan, K. C.** (with Hu, T. C.) Path length of binary search trees. *SIAM J. Appl. Math.* (1972), 225-234. (E. M. Reingold) **46** #3355 05C05
- (with Gore, Anil P.) A distribution-free test for two-way layout. *Austral. J. Stat.* **18** (1976), no. 3, 151-157. (J. V. Deshpande) **57** #17937 62G10
- Tan, K. H.** (with Teh, H. H.) On flows in finite weighted graphs. *Nanta Math.* **5** (1972), no. 2, 70-83. (W.-K. Chen) **47** #8087 90B10
- (with Teh, H. H.) On flows in infinite weighted graphs. *Nanta Math.* **5** (1972), no. 2, 90-96. (W.-K. Chen) **47** #8088 90B10
- Tan, K. S.** (with Sirisena, H. R.) Solution of nonlinear two-point boundary-value problem using spline functions. *J. Optimization Theory Appl.* **16** (1975), 245-254. (G. D. Byrne) **51** #11977 65L10
- Tan, Keng Teh** A note on twisted regular group-rings. *Tamkang J. Math.* **3** (1972), 31-34. (Donald S. Passman) **47** #6758 16A26
- On a commutativity theorem of Jacobson. *Tamkang J. Math.* **4** (1973), 53-55. (Raphael) **49** #5104 16A70
- Some torsion-free group rings with nilpotent prime radicals. *J. Austral. Math. Soc.* **18** (1974), 372-375. (D. B. Coleman) **51** #5651 16A26
- Classical rings of quotients of group-rings. *Kyungpook Math. J.* **14** (1974), 119-124. (M. Djabali) **50** #9949 16A26
- Free products of u.p.-groups. *Nanta Math.* **7** (1974), no. 2, 9-10. (B. H. Neuman) **51** #5772 20E30
- Some aspects of prime numbers. *Bull. Malaysian Math. Soc.* **6** (1975), no. 1, 34-35. (Editors) **55** #7894 10-01
- Extensions of some results of Stonehewer and Bovdi. *Proceedings of the Second Symposium Mathematik (Univ. Malaya/Univ. Kebangsaan Malaysia, Kuala Lumpur, 1974)*. *Bull. Malaysian Math. Soc. Special Issue* (1975), 46-50. (Uno Kaljulaid) **54** #5326 20C05
- A note on prime radicals of certain group rings. *J. Austral. Math. Soc. Ser. A* (1975), no. 3, 305-306. (L. R. Verma) **52** #476 16A26
- How many algebraic (finite) extensions over the rationals. *Publ. Inst. Math. (N.S.)* **18**(32) (1975), 193-195. (Pierre Damey) **51** #10295 12A55
- Unique factorization in group-rings. *Publ. Inst. Math. (Beograd) (N.S.)* **21**(26) (1977), 197-200. (Uno Kaljulaid) **58** #5641 13F15 (16A26)
- Tan, Kok Keong** Fixed point theorems for nonexpansive mappings. *Pacific J. Math.* (1972), 829-842. (S. P. Singh) **47** #2454 47H10 (54H25)
- Common fixed point theorems for almost weakly periodic nonexpansive mappings. *Proc. Amer. Math. Soc.* **33** (1972), 355-360. (I. A. Rus) **45** #4237 47H10 (46N05)
- (with Hsieh, Tsu Teh) Remark on almost weakly periodic nonexpansive mappings. *J. Math. Anal. Appl.* **44** (1973), 288-290. (K. Goebel) **48** #7028 47H10
- Remark on contraction mappings. (Italian summary) *Boll. Un. Mat. Ital.* (4) **17**(1974), 23-27. (S. P. Singh) **50** #11209 54H25
- (with Hsieh, Tsu Teh) Periodic points and contractive mappings. *Canad. Math. Bull.* **17** (1974), 209-211. (W. J. Gray) **51** #4198 54H25
- (with Lim, Teck-Cheong) Functional compactness and C-compactness. *J. London Math. Soc.* **2** (9) (1974/75), 371-377. (R. F. Dickman, Jr.) **50** #8441 54D30
- (with Shiau, Chyi; Wong, Chi Song) A class of quasi-nonexpansive multi-valued maps. *Canad. Math. Bull.* **18** (1975), no. 5, 709-714. (Simeon Reich) **53** #11433 47H10 (54H25)
- (with Shiau, Chyi; Wong, Chi Song) Quasi-nonexpansive multi-valued maps selections. *Fund. Math.* **87** (1975), 109-119. (L. Górniewicz) **51** #8899 47H10 (54C65)
- (with Chew, Kim Peu) Remetrization and family of commuting contractive mappings. *Fixed point theory and its applications (Proc. Sem., Dalhousie Univ., Halifax, N.S., 1975)*, pp. 41-50. Academic Press, New York, 1976. (L. Janos) **56** #12843 54H25 (54E35)
- (with Chew, Kim Peu) On the representation of mappings of Tychonov spaces by restrictions of linear transformations. *Canad. Math. Bull.* **19** (1976), no. 1, 53-57. (Swaminathan) **54** #6065 54C10 (54H25)
- (with Wong, Chi Song) On some topological problems arising from mappings of contractive type. *Proc. Amer. Math. Soc.* **62** (1976), no. 1, 167-172 (1977). (J. Dugundji) **55** #1290 54C30 (54H25)
- (with Lee, Cheng Ming) A note on metrically inward mappings. *Comment. Math. Univ. Carolinae* **18** (1977), no. 2, 259-263. (L. Janos) **58** #18395 54H25
- Uniform contractification. *Canad. Math. Bull.* **21** (1978), no. 1, 93-97. (Kim-Chew) **58** #2781 54H25
- Tan, Peter** On Fisher's problem of the Nile in uncertain inference. *Comm. Statist.* (1973), 45-58. (R. J. Buehler) **48** #9902 62A05
- On a paper by Sprott on distributions a posteriori. *Utilitas Math.* **3** (1973), 9-14. (D. A. Sprott) **47** #4379 62F15
- (with Sherif, Aly) An extension and application of Fisher's bivariate exponential model. *Comm. Statist.* **3** (1974), 455-462. (R. J. Buehler) **51** #2116 62F10
- A note on maximum likelihood estimators and nuisance parameters. *Comm. Statist.* **3** (1974), no. 10, 969-977. (J. K. Ghosh) **52** #15752 62A05 (62F10)
- (with Sherif, Aly) Some remarks on structural inference applied to Weibull distribution. *Statist. Hefte (N.F.)* **15** (1974), 335-341. (A. P. Dawid) **53** #6803 62A05
- Four approaches to inference on Weibull parameters. *Utilitas Math.* **6** (1975), 111-120. (I. Guttman) **51** #2115 62F10 (62A99)
- (with Bernholtz, Ben) Applications of the structural method in statistical inference. *Proceeding of the Symposium on Statistics and Related Topics (Carleton Univ., Ottawa, Ont., 1974), Paper No. 17, 14 pp.* Carleton Univ., Ottawa, Ont., 1975. (R. J. Buehler) **51** #7067 62A05
- (with Drossos, Constantin) A property of maximum likelihood estimators for invariant statistical models. *Canad. Math. Bull.* **18** (1975), no. 3, 405-409. (R. J. Buehler) **52** #15753 62A05
- (with Bernholtz, Ben) Applications of the structural method in statistical inference. (French summary) *Internat. Statist. Rev.* **43** (1975), no. 3, 289-300. (A. P. Dawid) **57** #10859a 62A05
- (with Drossos, Constantin) Invariance properties of maximum likelihood estimators

- Math. Mag.* **48** (1975), 37-41. (R. H. Berk) **51** #2044 62A05
(with Bernholtz, Ben) On structural models and a theorem of D. Basu. *Comm. Statist.—Theory Methods* **A5** (1976), no. 13, 1245-1256. (Mir M. Ali) **57** #1717 A99
- (with Bernholtz, Ben) Errata: "Applications of the structural method in statistical inference." (*Internat. Statist. Rev.* **43** (1975), no. 3, 289-300). *Internat. Statist. Rev.* **44** (1976), no. 2, 300. (A. P. Dawid) **57** #10859b 62A05
- S. K. A note on the universal isomorphism theorem of universal algebras. *Nanta Math.* **4** (1970), 117-122. (I. Sussman) **46** #7132 08A25
- (with Chen, C. C.) On prime ideals of finite distributive lattices. *Nanta Math.* **5** (1972), no. 3, 96-100. (R. Balbes) **49** #7189 06A10
- (with Chen, C. C.; Koh, Khee-meng) Frattini sublattices of distributive lattices. *Algebra Universalis* **3** (1973), 294-303. (R. P. Dilworth) **50** #2004 06A35
- (with Chen, C. C.; Koh, Khee-meng) On the Frattini sublattice of a finite distributive lattice. *Algebra Universalis* **5** (1975), 88-97. (R. P. Dilworth) **52** #2990 A35
- (with Koh, Khee-meng) On length- and width-dimensions of finite distributive lattices. *Nanta Math.* **8** (1975), no. 2, 70-75. (Leo Esakia) **53** #13058 06A35
- (with Chen, C. C.) On the order of certain finite distributive lattices. *Nanta Math.* **9** (1976), no. 2, 187-194. (Heinrich Werner) **56** #15518 06A35
- S. T. Closed regular events. *Nanta Math.* **4** (1970), 79-84. (Yasuyoshi Inagaki) **47** #4195 68A25
- (with Lee, H. K.) A mathematical model for narrowing the wage differential between various classes of workers in a developing country. *Southeast Asian Bull. Math.* (1977), no. 1, 28-38. (From the authors' text) **56** #14595 90A15
- Sevim Solution and stability of the damped Mathieu equation by the Wentzel-Kramers-Brillouin approach. *IEEE Trans. Automatic Control* **AC-20** (1975), 277-289. (E. O. Roxin) **55** #10791 34E20
- Comments on: "Extension of characteristic loci techniques" (METU J. Pure Appl. Sci. **7** (1974), no. 2, 211-217) by Özyay Hüseyin. *METU J. Pure Appl. Sci.* **8** (1975), no. 367-371. (N. Harris McClamroch) **56** #11310 93D10
- Sin Leng Characteristic classes of conformally flat manifolds. *Tamkang J. Math.* **7** (1976), no. 1, 105-110. (K. H. Mayer) **54** #8659 57D20 (57D30)
- On nullity distributions. *Trans. Amer. Math. Soc.* **223** (1976), 323-335. (J. L. Ozols) **54** #11372 58A30 (53C05)
- Nullity and generalized characteristic classes of differential manifolds. *Trans. Amer. Math. Soc.* **243** (1978), 75-88. (D. B. Fuks) **58** #24285 57D20
- Soo Tang On the existence and uniqueness of fixed points for a certain class of mappings. *New Zealand Math. Mag.* **13** (1976), no. 2, 69-71. (M. A. Geraghty) **51** #1345 54H25
- T. H. Scattering of elastic waves by elastically transparent obstacles (integral-equation method). *Appl. Sci. Res.* **31** (1975), no. 1, 29-51. (From the summary) **58** #19619 34A5
- Far-field radiation characteristics of elastic waves and the elastodynamic radiation condition. *Appl. Sci. Res.* **31** (1975), no. 5, 363-375. (R. L. Richardson) **53** #15055 33A35
- Diffraction of time-harmonic elastic waves by a cylindrical obstacle. *Appl. Sci. Res.* (1976), no. 2, 97-144. (Morton Lowengrub) **55** #4888 73G5
- Reciprocity relations for scattering of plane, elastic waves. *J. Acoust. Soc. Amer.* **61** (1977), no. 4, 928-931. (A. C. Garibaldi) **58** #32248 73G5
- Wai Yuan Note on an extension of the Gauss-Markov theorems to multivariate linear regression models. *SIAM J. Appl. Math.* **20** (1971), 24-29. (P. Fortunati) **45** #2869 2J05
- On the complex analogue of Bayesian estimation of a multivariate regression model. *Ann. Inst. Statist. Math.* **25** (1973), 135-152. (C. G. Khatri) **48** #7450 62F15 (2H20)
- (with Guttman, Irwin) The use of the disguised Wishart distribution in a Bayesian approach to tolerance region construction. *Ann. Inst. Statist. Math.* **25** (1973), 549-556. (Robert Hultquist) **53** #1827 62F25
- Multivariate studentization and its applications. (French summary) *Canad. J. Statist.* **1** (1973), no. 2, 181-199. (From the author's summary) **54** #1483 62H10
- (with Guttman, Irwin) A Bayesian approach to the comparison of sensitivities of two experiments. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 793-802. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974*. (J. Good) **51** #7122 62F15
- (with Guttman, Irwin) Inconsistencies in the Villegas method of determining a prior distribution. *Ann. Statist.* **2** (1974), 383-386. (D. V. Lindley) **50** #8807 62F10 (2A15)
- On the absorption probabilities and absorption times of finite homogeneous birth-death processes by diffusion approximation. *Metron* **33** (1975), no. 3-4, 389-401 (1978). (Author's summary) **58** #3078 60J70 (60J80, 92A10)
- Some matrix results and extensions of Cochran's theorem. *SIAM J. Appl. Math.* **28** (1975), 547-554. (C. G. Khatri) **51** #2159 (E 53 #14794) 62H10
- On the absorption probabilities and absorption times of finite homogeneous birth-death processes. (French summary) *Biometrics* **32** (1976), no. 4, 745-752. (P. D. Macdonald) **56** #1487 60J80 (92A10)
- On testing correlation between growth curves. (French summary) *Canad. J. Statist.* (1976), no. 1, 13-32. (C. G. Khatri) **56** #7017 62H15
- Errata: "Some matrix results and extensions of Cochran's theorem" (*SIAM J. Appl. Math.* **28** (1975), 547-554). *SIAM J. Appl. Math.* **30** (1976), no. 4, 608-610. (C. G. Khatri) **53** #14794 62H10
- (with Mathai, A. M.) The non-null distribution of the likelihood ratio criterion for testing the hypothesis that the covariance matrix is diagonal. (French summary) *Canad. J. Statist.* **5** (1977), no. 1, 63-74. (Donald R. Jensen) **56** #9814 62H10
- On the distribution of quadratic forms in normal random variables. (French summary) *Canad. J. Statist.* **5** (1977), no. 2, 241-250. (Goro Nagase) **58** #18897 2H10
- (with Wong, S. P.) On the Roy-Tiku approximation to the distribution of sample variances from nonnormal universes. *J. Amer. Statist. Assoc.* **72** (1977), no. 360, part 1, 75-880. (Albert M. Lieberman) **58** #13456 62E15
- (with Tiao, George C.; Chang, Yu Chi) Some aspects of bivariate regression subject to linear constraints. *J. Econometrics* **5** (1977), no. 1, 13-35. (Tom Leonard) **55** #11553 62P20 (62F15)
- (with Wong, S. P.) On distributions of sums of squares in nested random effect models from mixtures of normal distributions. *Sankhyā Ser. B* **39** (1977), no. 3, 245-257. (Authors' summary) **58** #31523 62E15 (62J10)
- (with Wong, S. P.) On the probabilities of obtaining negative estimates of genetic variance components. *Biometrical J.* **20** (1978), no. 1, 69-79. (Susan Wilson) **58** #18931 62J10 (62P10)
- Tan, Wang Seng (with Fischer, Charlotte Froese) Monotone matrices arising from application of finite difference methods to boundary value problems not necessarily of class *M*. *Utilitas Math.* **7** (1975), 59-72. (F. Perrin) **51** #11980 65L10
- (with Lee, Seng Luan) Introduction to spline functions. *Bull. Malaysian Math. Soc.* **7** (1976), no. 1, 8-27. (Marc Attiea) **56** #3512 41A15
- Tanabe, Hiroki (with Maruo, Kenji) On the asymptotic distribution of eigenvalues of operators associated with strongly elliptic sesquilinear forms. *Osaka J. Math.* **8** (1971), 323-345. (Bent E. Petersen) **46** #9565 35P20 (47G05)
- (with Maruo, Kenji) On the asymptotic distribution of eigenvalues of operators associated with strongly elliptic sesquilinear forms. *Proc. Japan Acad.* **47** (1971), 268-270. (J. R. Kuttler) **45** #752 35P20
- On remainder estimates in the asymptotic formula of the distribution of eigenvalues of elliptic operators. *Proc. Japan Acad.* **48** (1972), 377-380. (Y. I. Kannai) **47** #7244 35P20
- On Green's functions of elliptic and parabolic boundary value problems. *Proc. Japan Acad.* **48** (1972), 709-711. (E. Kreyszig) **49** #11043 35J40 (35K35)
- (with Fujie, Yoshitaka) On some parabolic equations of evolution in Hilbert space. *Osaka J. Math.* **10** (1973), 115-130. (S. Kantorovitz) **48** #12143 47D05
- Tanabe, Kenji (with Nariai, Hidekazu) Propagators for a scalar field in a homogeneous expanding universe. I. Case of the Friedmann universes. *Progr. Theoret. Phys.* **55** (1976), no. 4, 1116-1132. (Authors' summary) **57** #4958 83J35
- Tanabe, Kunio Projection method for solving a singular system of linear equations and its applications. *Numer. Math.* **17** (1971), 203-214. (B. Levinger) **45** #2900 65F20
- (with Shinozaki, Nobuo; Sibuya, Masaaki) Numerical algorithms for the Moore-Penrose inverse of a matrix: direct methods. *Ann. Inst. Statist. Math.* **24** (1972), 193-203. (R. P. Tewarson) **48** #3237 65F20
- (with Shinozaki, Nobuo; Sibuya, Masaaki) Numerical algorithms for the Moore-Penrose inverse of a matrix: iterative methods. *Ann. Inst. Statist. Math.* **24** (1972), 621-629. **48** #3239 65F30
- Generalized inverse matrices. (Japanese) *Sūgaku* **25** (1973), no. 2, 176-180. **58** #28021 15A09
- An algorithm for the constrained maximization in nonlinear programming. *J. Operations Res. Soc. Japan* **17** (1974), 184-201. (J. S. Joel) **57** #15467 90C30 (58C15, 65K05)
- Characterization of linear stationary iterative processes for solving a singular system of linear equations. *Numer. Math.* **22** (1974), 349-359. (R. P. Tewarson) **50** #3550 65Fxx
- Neumann-type expansion of reflexive generalized inverses of a matrix and the hyperpower iterative method. *Linear Algebra and Appl.* **10** (1975), 163-175. (W. V. Petryshyn) **54** #4078 65F20
- Conjugate-gradient method for computing the Moore-Penrose inverse and rank of a matrix. *J. Optimization Theory Appl.* **22** (1977), no. 1, 1-23. (Author's summary) **58** #24887 65F20
- Tanabe, Yukio SU(2, 1) symmetry of the Einstein-Maxwell fields. *Progr. Theoret. Phys.* **57** (1977), no. 3, 840-854. (Robert Malhotra) **58** #14873 83J22
- Generation of stationary axisymmetric Einstein-Maxwell fields. *J. Math. Phys.* **19** (1978), no. 9, 1808-1811. (Author's summary) **58** #20178 83J35
- Tanaev, V. S. (with Povarič, M. P.) Synthesis of graph-schemes of algorithms for the computation of composite arithmetic functions. (Russian) *Computer science in mechanical engineering (Russian)*, pp. 16-23. *Akad. Nauk Beloruss. SSR Inst. Tehn. Kibernet., Minsk, 1971* (1972). (R. N. Goss) **51** #7364 68A15
- Interruption in determined queueing systems with parallel identical servers. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1973**, no. 6, 44-48. (Roudolf Iasnogorodski) **48** #13191 90A10
- (with Levin, G. M.) On the theory of decomposition transformations of extremal problems. (Russian) *Dokl. Akad. Nauk BSSR* **18** (1974), 883-885, 954. (V. F. Dem'janov) **50** #15923 90C30
- (with Sotskov, Ju. N.) The enumeration of acyclic digraphs generated by a mixed graph. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1974**, no. 2, 16-21, 137. (A. Rosa) **50** #4407 05C99
- (with Levin, G. M.) Parametric decomposition of extremal problems. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1974**, no. 4, 24-29, 138-139. (Tomas Gal) **50** #8227 49D99
- (with Levin, G. M.) The parametric decomposition of mathematical programming problems. (Russian) *Vychisl. Tehn. v Mashinostroen.* **1974**, no. 1(32), 3-8. (RZhMat **1975** #7 V649) **58** #19133 65K05
- (with Škurba, V. V.) ★Введение в теорию расписаний. (Russian) [Introduction to scheduling theory] Edited by D. B. Judin. *Экономико-Математическая Библиотека. [Library of Mathematical Economics] Izdat. "Nauka", Moscow, 1975. 256 pp. (Z. Khalil)* **58** #32904 90B35
- (with Verina, L. F.) Decomposition approaches to the solution of mathematical programming problems (a survey). (Russian) *Ékonom. i Mat. Metody* **11** (1975), no. 6, 1160-1172. (RZhMat **1976** #4 V619) **57** #11723 90Cxx
- (with Verina, L. F.; Levin, G. M.) Decomposition transformation of extremal problems. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Drogobych, 1974). Numerical methods (Russian)*, pp. 150-157. *Central. Ékonom.-Mat. Inst. Akad. Nauk SSSR, Moscow, 1976*. (Editors) **58** #32976 90C30
- (with Sotskov, Ju. N.) An approach to the enumeration of the directed acyclic graphs that are generated by a mixed graph. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1976**, no. 5, 99-102, 142. (D. Ja. Kesel'man) **55** #12565 05C30
- (with Sotskov, Ju. N.) Chromatic polynomial of a mixed graph. (Russian) *Vesci*

- Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1976**, no. 6, 20-23, 140. (D. Cvetković) **57** #2972 05C15
(with Levin, G. M.) Parametric decomposition of extremal problems. (Russian. English summary insert) *Kibernetika (Kiev)* (**1977**), no. 3, 123-128. (Authors' summary) **56** #9997 65K05 (90C99)
- The optimization of functions that are recursively given on sets of permutations. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 3, 27-30, 141. (RŽMat **1977** #11 V807) **58** #24954 65K05 (90C99)
- Tanahashi, Katsunori** On certain class numbers of real quadratic fields. (Japanese) Characteristics of arithmetic functions (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikenkyūsho Kōkyūroku No. 274* (1976), 108-131. (Akira Takaku) **56** #11953 12A25 (12A50)
- Tanaka, Azuma** (with Shigemoto, Kazuyasu; Taguchi, Yukio; Yamamoto, Kunio) Inevitable surface dependence of some operator products and integrability. *Progr. Theoret. Phys.* **55** (1976), no. 1, 287-296. (Authors' summary) **54** #9462 81A47
(with Taguchi, Yukio; Yamamoto, Kunio) A finite formulation of renormalizable field theory based on improved operator products. *Nuclear Phys. B* **132** (1978), no. 3-4, 333-356. (Authors' summary) **57** #18618 81A47
(with Taguchi, Yukio; Yamamoto, Kunio) A finite formulation of quantum electrodynamics based on improved operator products. *Nuclear Phys. B* **135** (1978), no. 3, 503-528. (Authors' summary) **58** #14695 81A47
- Tanaka, Chiyozō** (with Kanada, Hajime) A formulation of fault diagnosis in logic circuits. *Systems-Computers-Controls* **2** (1971), no. 4, 78-79. (W. K. Chen) **48** #5738 94A25
- Tanaka, Chuji** On the boundary behaviour of the canonical product and the meromorphic function of finite order in the unit disk. *Mem. School Sci. Engrg. Waseda Univ. No. 34* (1970), 137-155. (Fred Gross) **45** #7059 30A72
On the integral of Cauchy-Stieltjes type and I. I. Privalov's fundamental lemma. *Mem. School Sci. Engrg. Waseda Univ. No. 36* (1972), 85-111. (H. T. Mathews) **48** #11526 30A86 (30A72)
On the integral of Cauchy-Stieltjes type and I. I. Privalov's fundamental lemma. I, II. *Proc. Japan Acad.* **48** (1972), 308-310; *ibid.* **48** (1972), 311-314. (D. A. Storvick) **49** #3145 30A72
On the summability of Taylor series of the regular function of bounded type in the unit circle. *Mem. School Sci. Engrg. Waseda Univ. No. 39* (1975), 51-66. (G. Halász) **56** #9131 40C15 (30A10)
On the asymptotic values for regular functions with bounded characteristic. *Kōdai Math. Sem. Rep.* **27** (1976), no. 1-2, 94-115. (E. C. Schlesinger) **53** #3313 30A72
On the summability of Taylor series of the regular function of bounded type in the unit circle. *Proc. Japan Acad.* **52** (1976), no. 6, 286-288. (G. Halász) **54** #783 40E05
- Tanaka, Eiichi** (with Kasai, Tamotsu) A note on the longest path problem. *Bull. Univ. Osaka Prefecture Ser. A* **18** (1969), no. 2, 395-399. **45** #6531 94A20
(with Kasai, Tamotsu; Fujino, Mitsuhiro) A correcting method of garbled languages using language information. *Systems-Computers-Controls* **2** (1971), no. 2, 50-57 (1972). (S. Huzino) **46** #8494 68A45
(with Okuda, Teruo; Kasai, Tamotsu) A method for the correction of garbled words based on the Levenshtein metric. *IEEE Trans. Computers C-25* (1976), no. 2, 172-178. (Arnold Griffith) **52** #16183 68A45
(with Kasai, Tamotsu) Synchronization and substitution error-correcting codes for the Levenshtein metric. *IEEE Trans. Information Theory IT-22* (1976), no. 2, 156-162. (Robert P. Kurshan) **53** #2509 94A05 (94A10)
The Turing machine constructed by trainable threshold elements. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 12, 881-886. (Author's summary) **58** #26616 94A30 (94A20)
(with Fu, King Sun) Error-correcting parsers for formal languages. *IEEE Trans. Comput.* **27** (1978), no. 7, 605-616. (Ju. G. Karpov) **58** #13986 68A30
- Tanaka, Genjiro** On automorphism groups of automata. *Comment. Math. Univ. St. Paul* **25** (1976), no. 1, 89-94. (W. Wechler) **54** #4870 94A30 (20B25)
Finite transformation semigroups and automata. *Comment. Math. Univ. St. Paul* **25** (1976/77), no. 2, 117-124. (István Babcsányi) **55** #14452 94A30
Note on projections in 2×2 matrix rings over finite fields. *Comment. Math. Univ. St. Paul* **26** (1977/78), no. 1, 35-39. (B. R. McDonald) **56** #15678 15A33 (16A42)
- Tanaka, Hatsukazu** (with Nishida, Fujio) A construction of a polynomial code. *Electron. Commun. Japan* **53** (1970), no. 8, 24-31. (R. Alter) **47** #8196 94A10
(with Nishida, Fujio) A decoding procedure for polynomial codes. *Systems-Computers-Controls* **1** (1970), no. 3, 58-59 (1971). (P. Deussen) **46** #10495 94A10
(with Kaneku, Seiko) A fuzzy decoding procedure for error-correcting codes. *Electron. Commun. Japan* **57** (1974), no. 7, 26-31. (Author's summary) **56** #15147 94A10
(with Kaneku, Seiko) High speed processing of cyclic codes using digital computers. *Electron. Commun. Japan* **58** (1975), no. 4, 1-7. (J. J. Stiffler) **56** #11519 94A10
(with Nishida, Fujio; Shiozaki, Akira) Error correction in residue number systems with t -design. *Systems-Computers-Controls* **7** (1976), no. 3, 1-9 (1977). (W. E. Clark) **57** #9302 94A15
- Tanaka, Hidematu** On Wiener functions of order m . *Proc. Japan Acad.* **46** (1970), 1110-1115. (G. Coeuré) **46** #2071 31B30
A remark on Wiener functions for the equation $\Delta u = pu$. *Sci. Rep. Saitama Univ. Ser. A* **7**, no. 3, 15-24 (1973). (Aatos Lahtinen) **49** #9228 31A05
Riquier's boundary value problem of Neumann type. *Sci. Rep. Saitama Univ. Ser. A* **8** no. 1, 19-24 (1974). (D. H. Armitage) **58** #22620 31B30 (35J40)
Boundary value problems of biharmonic functions. *Nagoya Math. J.* **61** (1976), 85-101. (Gottfried Anger) **54** #7816 31B30 (35J40)
The Riquier's problem of an elliptic bi-harmonic space. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **64** (1978), no. 3, 64-79. (D. H. Armitage) **58** #22629 31D05
- Tanaka, Hideo** (with Asai, Kiyoji) Equivalence condition of optimal control problems. *Internat. J. Control* (1) **14** (1971), 781-787. (Author's summary) **47** #940 49E99
Comment on the equivalence condition of optimal control problems. *Internat. J. Control* (1) **18** (1973), 439-441. (V. Komkov) **57** #5263 93B99
(with Okuda, Tetsuji; Asai, Kiyoji) On fuzzy-mathematical programming. *J. Cybernet.* **3** (1973), no. 4, 37-46. (From the authors' introduction) **56** #8023
(with Okuda, Tetsuji; Asai, Kiyoji) Decision-making and information in events. *Bull. Univ. Osaka Prefecture Ser. A* **23** (1974), no. 2, 193-202. (K. S. Fu) **53** #5167 94A15
(with Asai, Kiyoji; Okuda, Tetsuji) Decision-making and its goal in a fuzzy environment. *Fuzzy sets and their applications to cognitive and decision processes U. S.-Japan Sem., Univ. Calif., Berkeley, Calif.*, 1974, pp. 257-277. *Academic Press York*, 1975. (K. S. Fu) **53** #4906 90A05
(with Asai, Kiyoji) Applications of fuzzy sets to decision making and control. (Japanese) Fuzzy sets and their applications. *Systems and Control* **19** (1975), 235-242. (Fujio Nishida) **53** #7551 93A99
(with Okuda, Tetsuji; Asai, Kiyoji) A formulation of fuzzy decision problem and its application to an investment problem. *Kybernetes* **5** (1976), no. 1, 25-30. (Dimitrov) **56** #10772 90A05 (90A15)
(with Okuda, Tetsuji; Asai, Kiyoji) A formulation of fuzzy decision problem and fuzzy information using probability measures of fuzzy events. *Inform. and Control* (1978), no. 2, 135-147. (K. S. Fu) **58** #9799 94A15 (62C99)
- Tanaka, Hiroshi** On Markov process corresponding to Boltzmann's equation of Maxwellian gas. *Proceedings of the Second Japan-USSR Symposium on Probability Theory* (Kyoto, 1972), pp. 478-489. *Lecture Notes in Math.*, Vol. 330, Springer, 1973. (From the introduction) **58** #3074 60J60 (60K35)
Higher order successive expansion of inviscid Burgers turbulence. *J. Phys. Japan* **34** (1973), 1390-1395. (Author's summary) **51** #7482 76G5
An inequality for a functional of probability distributions and its application to Kac's one-dimensional model of a Maxwellian gas. *Z. Wahrscheinlichkeitstheorie Verw. Gebiete* **27** (1973), 47-52. (H. P. McKean, Jr.) **50** #14883 60E05 (82G05)
(with Murata, Hiroshi) An inequality for certain functional of multidimensional probability distributions. *Hiroshima Math. J.* **4** (1974), 75-81. (I. I. Kotlarski) **51** #1908 60E05 (62E10)
(with Tsuchiya, Masaaki; Watanabe, Shinzo) Perturbation of drift-type for processes. *J. Math. Kyoto Univ.* **14** (1974), 73-92. (E. B. Dynkin) **51** #4388 60J30
(with Horie, Masayuki; Inuzuka, Tadataka) Homogenization of certain one-dimensional discontinuous Markov processes. *Hiroshima Math. J.* **7** (1977), 629-641. (A. D. Wentzell (Ventcel')) **58** #7884 60J75
(with Kobayashi, Kusuo; Sirao, Tunekiti) On the growing up problem for semilinear heat equations. *J. Math. Soc. Japan* **29** (1977), no. 3, 407-424. (J. Smolukowski) **56** #9076 35K55
- Tanaka, Hiroshi** On function-theoretic separative conditions on compactifications of hyperbolic Riemann surfaces. *Hiroshima Math. J.* **2** (1972), 33-65. (H. L. Jacobs) **48** #2376 30A50
Notes on the balayaged measure on the Kuramochi boundary. *Hokkaido Math. J.* **2** (1972), 164-167. (K.-N. Chow) **50** #10240 30A50
On Beurling's theorem. *Hokkaido Math. J.* **2** (1973), 84-92. (Y. Kusunoki) **52** #5958 30A50
Analytic functions on some hyperbolic Riemann surfaces. *Hokkaido Math. J.* **2** (1975), 45-52. (M. Nakai) **51** #8407 30A48
Metrics induced by capacities and boundary behaviors of quasiconformal maps on open Riemann surfaces. *Hokkaido Math. J.* **5** (1976), no. 1, 145-154. (T. Fujiwara) **53** #3300 30A60
On Harnack's pseudo-distance. *Hokkaido Math. J.* **6** (1977), no. 2, 302-305. (T. Fujiwara) **57** #16576 30A50 (32H15)
- Tanaka, Hisao** A note on hyperdegrees. *Comment. Math. Univ. St. Paul* **20** (1971), 23-25. (Arnold Oberschelp) **47** #8274 02F35 (02F30)
Analytic well orderings and basis theorems. (Japanese) *Sūgaku* **23** (1971), 177-192. **58** #27412 02F35
Lengths of analytic well-orderings. *Comment. Math. Univ. St. Paul* **21** (1972), no. 2, 7-10. (S. Gottwald (Zbl 273 #02029)) **50** #12693 02F35 (02K30)
II₁ sets of sets, hyperdegrees and related problems. *J. Math. Soc. Japan* **25** (1973), 609-621. (J. E. Fenstad) **49** #2320 02F35 (02K30)
Some analytical rules of inference in the second-order arithmetic. *Comment. Math. Univ. St. Paul* **23** (1974/75), no. 2, 71-81. (W. Marek) **53** #10559 (EA 54) 02F35, 02K30, 02H15
A survey of the axiom of determinacy. (Japanese) *Sūgaku* **29** (1977), no. 1, 5-10. (Y. Kakuda) **58** #5223 02K30
- Tanaka, Jun-ichi** The invariant subspaces corresponding to quotients of cocycles. (Japanese) *Sūgaku* **28** (1976), no. 3, 252-253. (Z. Takeda) **58** #23615 46J15 (46E30)
Real parts of Banach function algebras. *J. Math. Soc. Japan* **29** (1977), 763-769. (T. W. Gamelin) **57** #3862 46J10
On a question concerning the Gleason parts of convolution Banach algebras. (Japanese) *Sūgaku* **29** (1977), no. 1, 69-72. (Kiyoko Nishizawa) **58** #2295 (43A10)
- Tanaka, K.** (with Kitazoe, T.) Cabibbo angle in a six-quark gauge model. *Phys. Rev. D* **18** (1978), no. 9, 3476-3481. (Authors' summary) **58** #25629 81S3
- Tanaka, Kaoru** A distribution function of primes. *Res. Rep. Tokyo Electrical College No. 20* (1972), 17-30. (E. M. Horadam) **47** #8414 10A25 (10A20)
Distribution of zeros of a polynomial over a ring. *Res. Rep. Tokyo Electrical College No. 21* (1973), 91-95. (J. Knopfmacher) **50** #4523 10M05
(with Kobayashi, Tatsuhiro; Ōtake, Shigeo; Ōyama, Makoto; Tanaka, Michio; Hamada, Toshio; Michiwaki, Yoshimasa) On Shuzen Hashimoto, an arithmetic itinerant in the prefecture Gumma. (Japanese) *Sūgakushi Kenkyū No. 70* (1976), 58 #15827 01A25
(with Kobayashi, Tatsuhiro; Iizuka, Masaaki; Ōtake, Shigeo; Ōyama, Makoto; Hamada, Toshio; Tanaka, Mitsuru; Michiwaki, Yoshimasa) *Sansho (Book of Mathematics)* dated 1749. (Japanese) *Sūgakushi Kenkyū No. 75* (1977), 9-20. **58** #26738 01A25
- Tanaka, Kazuo** Electromagnetic fields in a linearly accelerated medium. *Electron. Commun. Japan* **57** (1974), no. 2, 79-85. (N. D. Sengupta) **52** #9946 83J35 (78B05)
(with Kumamoto, Hiromitsu; Inoue, Koichi) Efficient evaluation of system

- liability by Monte Carlo method. *IEEE Trans. Reliab.* **R-26** (1977), no. 5, 311-315. (Authors' summary) **56** #13486 62N05 (94A20, 65C05)
- Tanaka, Kensuke** On the pattern classification by learning. *Bull. Math. Statist.* **14** (1970/71), 13-25. (R. L. Kashyap) **52** #4741 68A45
- On the pattern classification problems by learning. I, II. *Bull. Math. Statist.* **14** (1970), no. 1-2, 31-49; *ibid.* **14** (1970), no. 1-2, 61-73. (L. A. Aroian) **46** #988 62C99 68A45
- On the pattern classification problems by learning. III. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **24** (1970), 249-273. (L. A. Aroian) **46** #989 62C99 (68A45)
- (with Inada, Kōichi) Some extension of the two-armed bandit problem with finite memory. *Sci. Rep. Niigata Univ. Ser. A* No. 10 (1973), 5-14. (K. S. Fu) **52** #2626 90D35 (62L15)
- On the statistical properties related to an algorithm of constructing the probability density functions. *Sci. Rep. Niigata Univ. Ser. A* No. 10 (1973), 15-26. (H. Taylor) **49** #12141 93E10
- (with Inada, Kōichi) Some statistical method with finite memory. *Sci. Rep. Niigata Univ. Ser. A* No. 10 (1973), 27-38. **55** #10171 94A30 (62L10)
- (with Isogai, Eiichi; Iwase, Seiichi) On a sequential procedure with finite memory or testing statistical hypotheses. *Sci. Rep. Niigata Univ. Ser. A* No. 11 (1974), 31-39. (Mayer Alvo) **49** #8243 62L10
- (with Isogai, Eiichi; Iwase, Seiichi) A sequential procedure with finite memory for some statistical problem. *Sci. Rep. Niigata Univ. Ser. A* No. 11 (1974), 41-54. (Mayer Alvo) **49** #8244 62L10
- (with Isogai, Eiichi) A sequential procedure with finite memory for selecting the population with the largest mean from m normal populations. *Tamkang J. Math.* **5** (1974), no. 1, 53-73. (A. F. Ifram) **50** #15203 62L10 (62F07)
- (with Inada, Kōichi; Iwase, Seiichi) Some extensions of the two-armed bandit problem with finite memory. II. *Tamkang J. Math.* **5** (1974), no. 1, 85-101. (K. S. Fu) **52** #2627 90D35 (62L15)
- (with Iwase, Seiichi; Wakuta, Kazuyoshi) On Markov games with the expected average reward criterion. *Sci. Rep. Niigata Univ. Ser. A* No. 13 (1976), 31-41. (Jaap Wessels) **53** #7512 90D15
- (with Wakuta, Kazuyoshi) On Markov games with the expected average reward criterion. II. *Sci. Rep. Niigata Univ. Ser. A* No. 13 (1976), 49-54. (Jaap Wessels) **53** #7513 90D15
- (with Wakuta, Kazuyoshi) On semi-Markov games. *Sci. Rep. Niigata Univ. Ser. A* No. 13 (1976), 55-64. (Jaap Wessels) **53** #7514 90D15
- (with Wakuta, Kazuyoshi) On continuous time Markov games with the expected average reward criterion. *Sci. Rep. Niigata Univ. Ser. A* No. 14 (1977), 15-24. (Jaap Wessels) **58** #9656 93E05
- (with Wakuta, Kazuyoshi) On continuous time Markov games with countable state space. (Japanese summary) *J. Operations Res. Soc. Japan* **21** (1978), no. 1, 17-28. (T. Parthasarathy) **58** #9315 90D05 (90D15)
- Tanaka, Kichinosuke** (with Motoyama, Chikashi) The behaviour of an infinite elliptic bar subjected to impulsive loads. *Bull. JSME* **21** (1978), no. 155, 793-805. (Authors' summary) **58** #19581 73J35
- Tanaka, Kiyoomi** On the relations between the minimal polynomial and sampled data. *Systems-Computers-Controls* **1** (1970), no. 6, 42-43 (1971). **46** #1405 93C15
- On the operational calculus of sampled-data systems. *Systems-Computers-Controls* **1** (1970), no. 6, 89-90 (1971). (G. Doeisch) **45** #9069 44A40 (93E10)
- Tanaka, Kohkichi** (with Mizumoto, Masaharu; Toyoda, Junichi) Fuzzy languages. *Systems-Computers-Controls* **1** (1970), no. 3, 36-43 (1971). (M. A. Harrison) **46** #10249 68A30
- Some studies on pattern recognition with nonsupervised learning procedures. *Pattern recognition and machine learning (Proc. Japan-U.S. Sem. Learning Process in Control Systems, Nagoya, 1970)*, pp. 1-17. Plenum Press, New York, 1971. (James C. Bezdek) **56** #4273 68A45 (93E10)
- (with Tamura, Shinichi; Higuchi, Seihaku) Pattern classification based on fuzzy relations. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-1** (1971), 61-66. (P. C. Gilmore) **46** #10258 68A45
- (with Mizumoto, Masaharu; Toyoda, Junichi) n -fold fuzzy grammars. *Systems-Computers-Controls* **2** (1971), no. 6, 38-40. (W. Wechler) **51** #7380 68A30
- (with Takeuchi, Akihiro; Kitahashi, Tadahiro) Behavior of stochastic automata in random media. *Systems-Computers-Controls* **2** (1971), no. 6, 81-83. (R. G. Buhrarev) **54** #7147 94A35
- (with Fujita, Yoneharu; Kitahashi, Tadahiro) A consideration on compositions of many-valued logical functions. *Electron. Commun. Japan* **55** (1972), no. 5, 46-51. **56** #11565 94A20 (02C05)
- (with Kitahashi, Tadahiro) Orthogonal expansion of many-valued logical functions and its application to their realization with a single-threshold element. *IEEE Trans. Computers* **C-21** (1972), 211-218. (Authors' summary) **53** #15572 94A20
- (with Mizumoto, Masaharu; Toyoda, Junichi) General formulation of formal grammars. *Information Sci.* **4** (1972), 87-100. (Ronald V. Book) **48** #10211 68A30
- (with Abe, Norihiro; Mizumoto, Masaharu; Toyoda, Junichi) Web grammars and several graphs. *Systems-Computers-Controls* **3** (1972), no. 1, 48-59. (Leon Levy) **49** #8428 68A30
- (with Tsuji, Hidekazu; Mizumoto, Masaharu; Toyoda, Junichi) An automaton in the nonstationary random environment. *Systems-Computers-Controls* **3** (1972), no. 1, 68-75. (Authors' summary) **48** #13535 94A35
- (with Ezawa, Yoshinori; Abe, Norihiro; Mizumoto, Masaharu; Toyoda, Junichi) Web grammars and web automata. *Electron. Commun. Japan* **56** (1973), no. 4, 35-42. (Leon Levy) **52** #9695 68A30 (68A25)
- (with Tamura, Shinichi) Learning of fuzzy formal language. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-3** (1973), 98-102. (T. Rus) **47** #1334 68A30
- (with Mizumoto, Masaharu; Toyoda, Junichi) Examples of formal grammars with weights. *Information Processing Lett.* **2** (1973), 74-78. (E. Stockii) **48** #7673 68A30
- (with Mizumoto, Masaharu; Toyoda, Junichi) n -fold fuzzy grammars. *Information Sci.* **5** (1973), 25-43. (K. S. Fu) **47** #9903 68A30
- (with Tsuji, Hidekazu; Mizumoto, Masaharu; Toyoda, Junichi) An automaton in the nonstationary random environment. *Information Sci.* **6** (1973), 123-142. (P. Turakainen) **48** #10733 94A35
- (with Abe, Norihiro; Mizumoto, Masaharu; Toyoda, Junichi) Web grammars and several graphs. *J. Comput. System Sci.* **7** (1973), 37-65. (B. Zelinka) **49** #1830 68A30
- (with Ochimizu, Kohichiro; Mizumoto, Masaharu; Toyoda, Junichi) Quasi-sequential grammars and their parsing algorithms. *Information Processing in Japan* **14** (1974), 75-80. (Not reviewed) 68A30
- (with Tamura, Shinichi) Note on analogue memory automata. *Information Sci.* **7** (1974), 73-80. (Forbes D. Lewis) **49** #7041 94A30
- (with Takeuchi, Akihiro; Kitahashi, Tadahiro) Two-automata games. *Information Sci.* **7** (1974), 81-93. (N. Zierler) **48** #13282 90D05 (94A30)
- (with Mizumoto, Masaharu; Toyoda, Junichi) B -fuzzy grammars. *Internat. J. Comput. Math.* **4** (1974/75), no. 4, 343-368. (K. S. Fu.) **52** #2289 68A30
- (with Tsuji, Hidekazu; Mizumoto, Masaharu; Toyoda, Junichi) On the asymptotically optimal behavior of automata in nonstationary random environments. *Systems-Computers-Controls* **5** (1974), no. 1, 25-34 (1975). (K. D. Günther) **52** #13039 94A35 (68A35)
- (with Abe, Norihiro; Mizumoto, Masaharu; Toyoda, Junichi) The closure property of languages under several new operations. *Systems-Computers-Controls* **5** (1974), no. 2, 79-87 (1975). (S. Ginsburg) **51** #4726 68A30
- (with Ochimizu, Kohichiro; Toyoda, Junichi) On a construction method of systems for detecting logical errors in programs. *Systems-Computers-Controls* **5** (1974), no. 2, 88-96 (1975). (W. D. Maurer) **51** #4706 68A05
- (with Kim, Hyo Heng; Mizumoto, Masaharu; Toyoda, Junichi) Lattice grammars. *Systems-Computers-Controls* **5** (1974), no. 3, 1-9 (1975). (B. Zelinka) **52** #9699 68A30
- (with Takeuchi, Akihiro; Kitahashi, Tadahiro) On the language classes of strategy strings of homogeneous games at Nash points. *Systems-Computers-Controls* **5** (1974), no. 5, 50-57 (1975). (Y. C. Ho) **52** #12830 90D40 (94A30)
- (with Mizumoto, Masaharu) Fuzzy programs and their execution. *Fuzzy sets and their applications to cognitive and decision processes (Proc. U. S.-Japan Sem., Univ. Calif., Berkeley, Calif., 1974)*, pp. 41-76. Academic Press, New York, 1975. (A. D. Booth) **53** #2075 68A45
- (with Nagami, Hitoshi; Kitahashi, Tadahiro; Ae, Tadashi; Yoshida, Noriyoshi) Autonomous behaviors of feedback shift register with single threshold element. *Electron. Comm. Japan* **58** (1975), no. 8, 37-45. (J. C. Muzio) **57** #11953 94A20
- (with Tamura, Shinichi) Learning for unknown signal pattern with feedback link. *IEEE Trans. Systems, Man Cybernet.* **SMC-5** (1975), no. 5, 552-557. (James C. Bezdek) **52** #16841 94A05
- (with Sato, Mutsumi) A proposal of the partition on vocabulary. *Information Processing in Japan* **15** (1975), 113-117. (H. P. Edmundson) **55** #1853 68A30
- (with Kim, Hyo Heng; Mizumoto, Masaharu; Toyoda, Junichi) L -fuzzy grammars. *Information Sci.* **8** (1975), 123-140. (K. S. Fu) **50** #15455 68A30
- (with Takeuchi, Akihiro; Kitahashi, Tadahiro) Random environments and automata. *Information Sci.* **8** (1975), 141-154. (R. Theodorescu) **51** #7761 94A35 (68A25)
- (with Tominaga, Shoji; Tamura, Shinichi; Higuchi, Seihaku) Uncorrelated minimum-length sequence and its application to parameter estimation. *Information Sci.* **9** (1975), no. 2, 151-168. (S. P. Bingulac) **55** #7496 93B30
- (with Mizumoto, Masaharu; Toyoda, Junichi) Various kinds of automata with weights. *J. Comput. System Sci.* **10** (1975), 219-236. (Rani Siromoney) **56** #8236 94A30
- Fuzzy sets and their applications. (Japanese) Fuzzy sets and their applications. *Systems and Control* **19** (1975), no. 5, 227-228. (Y. Kakuda) **53** #7788 04-02
- (with Tanaka, Minoru; Tamura, Shinichi) Specification of relative positions of subpictures in assembling a complete picture. *Systems-Computers-Controls* **6** (1975), no. 5, 49-57. (V. A. Kovalevskii) **58** #19430 68A45
- (with Ezawa, Yoshinori; Mizumoto, Masaharu; Toyoda, Junichi) On interactive generating systems and their languages. *Systems-Computers-Controls* **6** (1975), no. 6, 11-17. (Wilfried Brauer) **57** #11187 68A30
- Learning in fuzzy machines (execution of fuzzy programs). With discussion. *Computer oriented learning processes (Proc. NATO Advanced Study Inst., Bonas, 1974)*, pp. 109-148. *NATO Advanced Study Ser. E: Appl. Sci., No. 14*, Noordhoff, Leyden, 1976. (V. D. Dimitrov) **57** #4697 68A45
- (with Kaneyori, S.; Kitahashi, Tadahiro) On multi-valued perfect codes. *Proceedings of the Sixth International Symposium on Multiple-Valued Logic (Univ. Center, Utah State Univ., Logan, Utah, 1976)*, pp. 169-174. *IEEE Comput. Soc., Long Beach, Calif., 1976*. (Authors' summary) **58** #20787 94A10
- (with Mizumoto, Masaharu) Some properties of fuzzy sets of type 2. *Information and Control* **31** (1976), no. 4, 312-340. (Authors' summary) **56** #8248 94A99 (06A30)
- (with Ezawa, Yoshinori; Mizumoto, Masaharu; Toyoda, Junichi) Interactive languages. *J. Comput. System Sci.* **12** (1976), no. 1, 49-63. (S. A. Greibach) **52** #16146 68A30
- (with Mizumoto, Masaharu) Fuzzy-fuzzy automata. *Kybernetes* **5** (1976), no. 2, 107-112. (K. S. Fu) **53** #14986 68A25 (94A30)
- (with Nagami, Hitoshi; Kitahashi, Tadahiro) Characterization of dynamical behavior associated with a single neural equation. *Math. Biosci.* **32** (1976), no. 3-4, 221-237. (Authors' summary) **58** #33098 92A05
- (with Tsuji, Tatsuo; Toyoda, Junichi) Relational data graphs with uniformities and their several properties. *Systems-Computers-Controls* **7** (1976), no. 1, 90-96. (1977). (Yasuyoshi Inagaki) **56** #10117 68A05
- (with Nagami, Hitoshi; Kitahashi, Tadahiro) Cyclic sequences generated by shift register type threshold logic network. *Systems-Computers-Controls* **7** (1976), no. 3, 10-18 (1977). (Abraham Kandel) **57** #11954 94A20
- (with Mizumoto, Masaharu) The four operations of arithmetic on fuzzy numbers. *Systems-Computers-Controls* **7** (1976), no. 5, 73-81 (1977). (Authors' summary) **57** #16091 04A99
- (with Asano, Tetsuo; Kitahashi, Tadahiro; Horino, Hiroshi; Amano, Nobutaka) A wire-routing scheme based on trunk-division methods. *IEEE Trans. Computers* **C-26**

- (1977), no. 8, 764-772. (András Recski) **56** #15165 94A20
(with Tanaka, Minoru; Tamura, Shinichi) On assembling subpictures into a mosaic picture. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 1, 42-48. (Arnold Griffith) **56** #4274 68A45
(with Tsuji, Tatsuo; Toyoda, Junichi) Relational data graphs and some properties of them. *J. Comput. System Sci.* **15** (1977), no. 1, 17-34. (A. L. Rosenberg) **56** #4283 68A50
(with Asano, Tetsuo) A gate placement algorithm for one-dimensional arrays. Special issue: J. Inform. Process., first issue. *J. Inform. Process.* **1** (1978), no. 1, 47-52. (A. J. Tosser) **58** #9812 94A20
See also **58** fuzzy sets and their applications to cognitive and decision processes. **52** #2264
- Tanaka, Koichi** Induced flow due to wavy motion of a wall. I. The case of small and moderately large Reynolds numbers. *J. Phys. Soc. Japan* **42** (1977), no. 1, 297-305. (A. Ghaffari) **58** #32370 76A1
- Tanaka, Kokichi** See **Tanaka, Kohkichi**
- Tanaka, Makoto** (with Inoue, Toru; Okamoto, Kiyosato) An integral representation of an eigenfunction of invariant differential operators on a symmetric space. *Hiroshima Math. J.* **4** (1974), 413-419. (Kenneth Johnson) **51** #804 22E30 (43A85)
(with Okamoto, Kiyosato; Kibata, Atsuyoshi) On hyperlocalizations of intertwining operators. (Japanese) Invariant differential equations in symmetric spaces (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 249* (1975), 22-26. (S. Murakami) **57** #3313 22E45
(with Minemura, Katsuhiko; Okamoto, Kiyosato) The Dirichlet problem in a symmetric space of rank 1. (Japanese) Invariant differential equations in symmetric spaces (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No. 249* (1975), 27-30. (T. Okubo) **58** #29863 43A85 (32M15)
- Tanaka, Mamoru** (with Hishinuma, Chiaki; Mori, Shinsaku) Symbolic formulation of coefficients of the characteristic polynomial of a restricted class of RCL networks. *IEEE Trans. Circuits and Systems CAS-22* (1975), no. 8, 654-661. (Narsingh Deo) **53** #2545 94A20
- Tanaka, Masatsugu** Quadrature formulas with the error estimating ability. *Information Processing in Japan* **11** (1971), 144-151. (R. D. Riess) **49** #6573 65D30
On the application of pseudo-Runge-Kutta methods. *Rep. Comput. Centre Univ. Tokyo* **4** (1971/72), 119-128. (G. D. Byrne) **48** #10128 65L05
- Tanaka, Minoru** (with Tamura, Shinichi; Tanaka, Kohkichi) Specification of relative positions of subpictures in assembling a complete picture. *Systems-Computers-Controls* **6** (1975), no. 5, 49-57. (V. A. Kovalevskii) **58** #19430 68A45
(with Grove, Karsten) On the number of invariant closed geodesics. *Bull. Amer. Math. Soc.* **82** (1976), no. 3, 497-498. (Midori Goto) **53** #6624 58E10 (53C20)
On invariant closed geodesics under isometries. *Kōdai Math. Sem. Rep.* **28** (1976/77), no. 2-3, 262-277. (I. Vaisman) **56** #9576 58E10 (53C20)
Some results on additive number theory. I. *Proc. Japan Acad.* **52** (1976), no. 4, 177-179. (A. R. Freedman) **53** #5516 10J20
(with Tamura, Shinichi; Tanaka, Kohkichi) On assembling subpictures into a mosaic picture. *IEEE Trans. Systems Man Cybernet. SMC-7* (1977), no. 1, 42-48. (Arnold Griffith) **56** #4274 68A45
Invariant closed geodesics under isometries of prime power order. *Kōdai Math. Sem. Rep.* **29** (1977), no. 1-2, 120-129. (J. S. Joel) **58** #24341 58E10 (53C20)
(with Grove, Karsten) On the number of invariant closed geodesics. *Acta Math.* **140** (1978), no. 1-2, 33-48. (J. R. Vanstone) **56** #16678 58E10
- Tanaka, Mitsuuru** (with Michiwaki, Yoshimasa; Hamada, Toshio; Ōyama, Makoto) On the sandai dedicated to Akagi-san Jōmō. (Japanese) *Sūgakushi Kenkyū No. 62* (1974), 3-9. **58** #26747 01A25
(with Michiwaki, Yoshimasa; Hamada, Toshio; Ōyama, Makoto; Kurosaki, Kiichi) Ptolemy's theorem appeared in wasan (as Shūju Yamaji's "Center"). (Japanese) *Sūgakushi Kenkyū No. 63* (1974), 9-18. **58** #26770 01A25
(with Tanaka, Kaoru; Kobayashi, Tatsuhiko; Ōtake, Shigeo; Ōyama, Makoto; Hamada, Toshio; Michiwaki, Yoshimasa) On Shuzen Hashimoto, an arithmetician itinerant in the prefecture Gumma. (Japanese) *Sūgakushi Kenkyū No. 70* (1976), 1-10. **58** #15827 01A25
(with Kobayashi, Tatsuhiko; Tanaka, Kaoru; Iizuka, Masaaki; Ōtake, Shigeo; Ōyama, Makoto; Hamada, Toshio; Michiwaki, Yoshimasa) *Sansho (Book of Mathematics)* dated 1749. (Japanese) *Sūgakushi Kenkyū No. 75* (1977), 9-20. **58** #26738 01A25
- Tanaka, Noboru** Rigidity for elliptic isometric imbeddings. *Proc. Japan Acad.* **48** (1972), 370-372. (Richard A. Graff) **48** #12422 53C40 (58G99)
Rigidity for elliptic isometric imbeddings. *Nagoya Math. J.* **51** (1973), 137-160. (H. Jacobowitz) **48** #7173 53C40 (58D10)
On strongly pseudo-convex manifolds. *Proc. Japan Acad.* **50** (1974), 416-419. (A. Hirschowitz) **51** #8467 32F15 (32C40)
★A differential geometric study on strongly pseudo-convex manifolds. Lectures in Mathematics, Department of Mathematics, Kyoto University, No. 9. *Kinokuniya Book-Store Co., Ltd., Tokyo*, 1975. iv + 158 pp. (R. O. Wells, Jr.) **53** #3361 32Fxx (53C55)
On non-degenerate real hypersurfaces, graded Lie algebras and Cartan connections. *Japan. J. Math. (N.S.)* **2** (1976), no. 1, 131-190. (Daniel M. Burns, Jr.) **58** #28645 32C05 (53B15)
- Tanaka, Ryuichi** S-types and MU-cohomology-types of stunted complex projective spaces. *TRU Math.* **10** (1974), 19-29. (S. Gitler) **53** #9208 55E50
- Tanaka, Sen-ichiro** On asymptotic solutions of the functional difference equations associated with some nonlinear difference equations. *Publ. Res. Inst. Math. Sci.* **6** (1970), 205-236. (C. E. Billigheimer) **45** #2346 39A10
On asymptotic solutions of some functional difference equations with asymptotic coefficients. *Math. Rep. Toyama Univ.* **1** (1978), 1-17. (V. M. Bhise) **58** #6791 39A10
On the general solutions of the difference equations $y_i(x+1) = \prod_{j=1}^n (y_j(x))^{a_j} f_i(x, y(x))$. *Math. Rep. Toyama Univ.* **1** (1978), 19-36. (Sheldon P. Gordon) **58** #1786 39A10
- Tanaka, Shigeru** (with Nakada, Hitoshi; Ito, Shunji) On the invariant measure for transformations associated with some real continued-fractions. *Keio Engrg. Res.* (1977), no. 13, 159-175. (Gérard Rauzy) **58** #16574 10K10 (28A65)
- Tanaka, Shogo** Synthesis of input signals in parameter identification in static systems. *Internat. J. Systems Sci.* **9** (1978), no. 4, 431-443. (Arunabha Bagchi) **58** #26493E10
- Tanaka, Shōtarō** On axiom systems of ontology. II. *Proc. Japan Acad.* **47** (1971), 177-180. (B. Lercher) **45** #1728 02C99
How to make equivalence closure. *Math. Sem. Notes Kobe Univ.* **2** (1974), no. 2, paper no. XXXII, 5 pp. (W. Taylor) **53** #5425 08A05
A new class of algebra. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 1, paper no. 1. (Bruno Poizat) **54** #7248e 02J05
On \wedge -commutative algebras. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 1, paper no. viii, 6 pp. (Bruno Poizat) **54** #7248g 02J05
Examples of BCK-algebras. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 1, paper no. XI, 8 pp. (Bruno Poizat) **54** #7248i 02J05
A theorem on replicas in algebraic system. *Math. Sem. Notes Kobe Univ.* **3** (1975), no. 2, paper no. XXXII, 3 pp. (W. Taylor) **53** #5434 08A15
(with Iseki, Kiyoshi) Ideal theory of BCK-algebras. *Math. Japon.* **21** (1976), no. 3, 351-366. (S. P. Bandyopadhyay) **56** #210 06A70
(with Yutani, Hiroshi) Remarks on homomorphisms. *Math. Sem. Notes Kobe Univ.* **4** (1976), no. 1, 7-8. (A. Goetz) **54** #10102 08A05
(with Iseki, Kiyoshi) An ideal characterization of a positive implicative algebra. *Math. Sem. Notes Kobe Univ.* **4** (1976), no. 2, 231-232. (Annalisa Marcja) **55** #1251 02J05
On \wedge -commutative algebras. II. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 245-247. (Bruno Poizat) **56** #15417e 02J05 (06A20)
(with Iseki, Kiyoshi) Some topics from Griss type algebras. *Math. Japon.* **23** (1978), no. 1, 105-108. (Joel Berman) **58** #452 08A20
(with Iseki, Kiyoshi) BCK-algebras. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 1, 61-66. (Joel Berman) **58** #453 08A20
- Tanaka, Shuhei** (with Imamura, Tsutomu) The Wiener-Hermite expansion with time-dependent ideal random function. II. The three-mode model. *Progr. Theoret. Phys.* **45** (1971), 1098-1105. (J. Bass) **46** #1200 76.60
- Tanaka, Shinichi** Automorphic forms and the theory of representation. (Japanese) *Sūgakushi Kenkyū No. 61* (1974), 239-251. (J. S. Joel) **52** #13645 10D15 (22E45)
(with Shalika, Joseph A.) On an explicit construction of a certain class of automorphic forms. *Amer. J. Math.* **91** (1969), 1049-1076. (K. G. Ramanathan) **45** #181 10D15
Modified Korteweg-de Vries equation and scattering theory. *Proc. Japan Acad.* **47** (1972), 466-469. (G. L. Lamb, Jr.) **49** #903 35Q99
Analogue of Fourier's method for Korteweg-de Vries equation. *Proc. Japan Acad.* **48** (1972), 647-650. (J.-P. Antoine) **48** #12998 76.35
On the N-tuple wave solutions of the Korteweg-de Vries equation. *Publ. Res. Inst. Math. Sci.* **8** (1972/73), 419-427. (Teruo Ikebe) **48** #6728 35Q99
Some remarks on the modified Korteweg-de Vries equations. *Publ. Res. Inst. Math. Sci.* **8** (1972/73), 429-437. (Teruo Ikebe) **48** #4543 35Q99
Korteweg-de Vries equation: construction of solutions in terms of scattering data. *Osaka J. Math.* **11** (1974), 49-59. (G. L. Lamb, Jr.) **50** #5231 35Q99
Non-linear Schrödinger equation and modified Korteweg-de Vries equation; construction of solutions in terms of scattering data. *Publ. Res. Inst. Math. Sci.* **9** (1974/75), 329-357. (RZMat **1975** #12 B655) **58** #17606 35Q99 (35C99)
Korteweg-de Vries equation; asymptotic behavior of solutions. *Publ. Res. Inst. Math. Sci.* **10** (1974/75), 367-379. (RZMat **1975** #12 B656) **58** #17607 35Q99 (35B40)
On the Fourier transform of second degree characters. *Lie groups and representations (Proc. Summer School, Bolyai János Math. Soc., Budapest, 1971)*, 649-652. Halsted, New York, 1975. (Gerard Schiffmann) **53** #11308 43A25 (10C05)
Eigenvalue problems and the Korteweg-de Vries equation. (Japanese) *Sūgakushi Kenkyū No. 64* (1975), 336-346. (Editors) **58** #29469 35Q99 (58F05)
(with Date, Etsurō) Analogue of inverse scattering theory for the discrete Fokker-Planck equation and exact solutions for the periodic Toda lattice. *Progr. Theoret. Phys.* **56** (1976), no. 2, 457-465. (A. J. O'Connor) **53** #7178 70.35 (81.47, 35Q99)
(with Date, Etsurō) Periodic multi-soliton solutions of Korteweg-de Vries equation and Toda lattice. *Progr. Theoret. Phys. Suppl. No. 59* (1976), 107-125. (A. J. O'Connor) **55** #11303 58F05 (35Q99, 81.34, 34B25)
- Tanaka, Sueo** (with Tahara, Michio) Functional completeness and polychecks in 3-valued logic. *Systems-Computers-Controls* **1** (1970), no. 1, 64-73. (A. Rose) **48** #63 02J05
- Tanaka, Tadashi** A characterization of G_8 graphs. *J. Math. Tokushima Univ.* **5** (1971), 1-10. (P. T. Church) **45** #9300 54C05
- Tanaka, Tatsuji** On the Chow-ring $C(\tilde{X})$ associated to a blowing-up \tilde{X} of a variety X at a point. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 175-185 (1972). (Nakai) **49** #2727 14C05
- Tanaka, Tatsuo** (with Aoki, Kazuo) Diffraction of a plane wave by two parallel conducting plates. *Electron. Comm. Japan* **60** (1977), no. 11, 62-68. (Authors' summary) **58** #3278.44
- Tanaka, Toshio** Discrete subdirect factorizations of algebras whose structure lattices are distributive. *Bull. Fukuoka Univ. Ed. III* **20** (1970), 1-8. (A. C. Choudhury) **46** #16A48 (06A35)
- Tanaka, Toyochi** Dynamics of critical concentration fluctuations in gels. *Phys. Rev. A* **17** (1978), no. 2, 763-766. (Author's summary) **58** #14438 80.44
- Tanaka, Yasuhiro** (with Ibaraki, Toshihide; Hasegawa, Toshiharu) Minimal representations of some finite-state optimization problems. *Systems-Computers-Controls* **5** (1974), no. 3, 39-46 (1975). (Kailash C. Kapur) **52** #16658 90C47 (68A20, 94A20)
- Tanaka, Yoshio** On products of quasi-perfect maps. *Proc. Japan Acad.* **46** (1970), 1070-1073. (N. Noble) **45** #5976 54C10
On quasi-k-spaces. *Proc. Japan Acad.* **46** (1970), 1074-1079. (N. Noble) **45** #54D50
On sequential spaces. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 68-72 (1971). (W. Hall) **46** #6293 54D20

- On local properties of topological spaces. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* 06-116 (1972). (R. Hodel) **48** #1175 54Exx (54D20)
- On open finite-to-one maps. *Bull. Tokyo Gakugei Univ.* (4) **25** (1973), 1-13. (R. el) **49** #11455 54C10
- On symmetric spaces. *Proc. Japan Acad.* **49** (1973), 106-111. (D. J. Lutzer) #7220 54E35
- Note on products of symmetric spaces. *Proc. Japan Acad.* **50** (1974), 152-154. (Liam Lindgren) **51** #1753 54E25
- Products of sequential spaces. *Proc. Amer. Math. Soc.* **54** (1976), 371-375. (S. P. nklin) **53** #1523 54D55
- A characterization for the products of k - and κ_0 -spaces and related results. *Proc. r. Math. Soc.* **59** (1976), no. 1, 149-155. (Frank Siwiec) **54** #3665 54E35
- On closedness of C - and C^* -embeddings. *Pacific J. Math.* **68** (1977), no. 1, 283-292. (T. Alas) **56** #6606 54D50
- On the k -ness for the products of closed images of metric spaces. *Gen. Topology* **9** (1978), no. 2, 175-183. (A. I. Baškirov) **58** #12890 54B10 (54D50)
- On products of pseudo-open maps and some related matters. *General Topology and* **8** (1978), no. 2, 157-164. (W. L. Reddy) **57** #4077 54C10
- B. P.** Topological semigroups with certain types of lattices of closed semigroups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 4(167), 67-73. (I. Kabenjuk) **58** #991 22A15
- Topological semigroups whose subsemigroups are all closed. (Russian) *Ural. Gos. o. Mat. Zap.* **10** (1977), no. 3 *Issled. po Sovremen. Algebre*, 191-196, 219. (Jan alina) **58** #6046 22A15
- V. P.** (with Vasin, V. V.) Approximate solution of operator equations of first kind. (Russian) *Ural. Gos. Univ. Mat. Zap.* **6**, no. 4, 27-37 (1968). (S. Maloň) **45** #4695 05
- Ill-posed problems and geometries of Banach spaces. (Russian) *Dokl. Akad. Nauk SSSR* **193** (1970), 43-45. (S. Swaminathan (Zbl 207, 449)) **57** #3834 46B99
- Approximate solution of operator equations of the first kind and the geometric properties of Banach spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 0, 81-93. (S. Aljančić (Zbl 224 #47005)) **57** #17330 47A50 (46B99)
- Variational methods of solution of operator equations of the first kind. (Russian) *J. Gos. Univ. Mat. Zap.* **8** (1972), no. 2, 108-129, 177. (J. W. Schmidt) **49** #1260 115
- Approximate solution of operator equations of the first kind in locally convex spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 9(136), 70-77. (V. A. rozov) **51** #1446 47A50
- (with Vasin, V. V.) Necessary and sufficient conditions for the convergence of ection methods for linear unstable problems. (Russian) *Dokl. Akad. Nauk SSSR* (1974), 1032-1034. (G. Vainikko) **50** #2960 47A50 (65J05)
- The stability of the method of the solution in the solution of ill-posed problems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 9(148), 75-80. (H. mgärtel) **51** #11149 47A50 (65J05)
- Computation of the values of an unbounded perturbed operator. (Russian) *Ural. Univ. Mat. Zap.* **8**, no. 4, 91-99, 136 (1974). (S. Buryšek) **50** #11771 65J05
- The optimality of methods for the solution of unstable nonlinear problems. (Russian) *Dokl. Akad. Nauk SSSR* **220** (1975), 1035-1037. (S. Fučík) **51** #11221 115
- A certain projection-iteration algorithm for operator equations of the first kind with urbed operator. (Russian) *Dokl. Akad. Nauk SSSR* **224** (1975), no. 5, 1028-1029. (V. Džiskariani) **52** #15060 47A50 (65J05)
- Projection-iteration methods for the solution of operator equations of the first kind. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 5(156), 73-77. (Ulrichhardt) **52** #8974 47A50 (65J05)
- Projection methods and finite-difference approximation of linear ill-posed problems. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 6, 1301-1307, 1372. (Murli M. Gupta) #7025 65J05 (47A50)
- The method of quasisolutions, the solution of an optimal control problem for ting, and a construction of optimal algorithms for ill-posed problems with perturbed ator. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR Vyp. Metody Rešenija Uslovno-korrekt. Zadač.* (1975), 78-89, 143-144. (Author's mmary) **56** #17062 65J05 (47A50, 65K05)
- The structure of classes of uniform regularization in Hilbert space. (Russian) *Ural. r. Univ. Mat. Zap.* **9**, no. 2, 125-131, 146 (1975). (Author's summary) **57** #13545 450 (65J05)
- The β -stability of projection methods in the solution of operator equations of the t kind with a nonlinear operator. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9** no. 2, -138, 147 (1975). (Author's introduction) **58** #23834 47H15
- (with Danilin, A. R.) The convergence of projection methods for the solution of ar ill-posed problems. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9** (1975), no. 4, 3-13, (1976). (J. W. Schmidt) **58** #3403 65J05 (47A50)
- (with Reznik, M. M.) An iterative plane-gradient method. (Russian) *Ural. Gos. r. Mat. Zap.* **9** (1975), no. 4, 78-82, 134 (1976). (Bruce D. Craven) **56** #17820 25
- (with Vasin, V. V.) The stability of projection methods in the solution of ill-posed blems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), 19-29, 274. (V. V. Ivanov) #11150 47A50 (65J05)
- (with Danilin, A. R.) The optimality of regularizing algorithms in the solution of posed problems. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 7, 1323-1326, 14. (Ulrich Eckhardt) **56** #1760 65R05
- A certain optimal algorithm for operator equations of the first kind with perturbed ator. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 6, 1279-1282. (From the t) **58** #17916 47A50 (65J05)
- (with Ivanov, V. K.; Koršunov, V. A.; Rešetova, T. N.) The possibility of ermining the energy spectrum of a Bose system from thermodynamic functions. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 1, 19-22. (M. Martinis) **53** #10095 32.65
- (with Timonov, A. A.) Projection methods for the solution of nonlinear unstable problems. (Russian) *Dokl. Akad. Nauk SSSR* **229** (1976), no. 3, 558-561. (J. W. Schmidt) **54** #11774 65J05 (47H15)
- (with Koršunov, V. A.) Determination of the phonon density of the states from thermodynamic functions of the crystal. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 4, 845-848. (Vladimir Šips) **54** #14666 82.45
- Elements of approximation theory in locally convex topological spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 6 (169), 73-76. (Author's introduction) **57** #17098 41A65 (46A05)
- Optimal algorithms for the solution of nonlinear unstable problems. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 5, 1116-1128, 1198. (C. Ilioi) **55** #4668 65J05 (47H15)
- Order-optimal methods for the solution of nonlinear ill-posed problems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 2, 503-507, 543. (B. Janko) **54** #6497 65J05 (47H15)
- The solution of operator equations of the first kind with multivalued operators, and their application. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 7(182), 87-93. (A. V. Džiskariani) **57** #1164 47A50
- The β -convergence of the projection method for operator equations of the first kind with a nonlinear operator. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 8(183), 79-83. (Author's introduction) **58** #18017 47H15 (65J05)
- The classification of ill-posed problems and optimal methods for their solution. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 11(186), 106-112. (A. V. Džiskariani) **58** #23676 47A50
- The realization of the method of quasisolutions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 12(187), 108-113. (A. V. Džiskariani) **58** #23677 47A50 (65J05)
- Optimal algorithms for operator equations of the first kind with a perturbed operator. (Russian) *Mat. Sb. (N.S.)* **104(146)** (1977), no. 2(10), 314-333, 336. (A. V. Džiskariani) **58** #17917 47A50 (65J05)
- The method that is optimal with respect to order for the solution of operator equations of the first kind with a perturbed operator. (Russian) *Ural. Gos. Univ. Mat. Zap.* **10**, no. 2 *Issled. Sovremen. Mat. Anal.*, 133-141, 218 (1977). (M. Demuth) **57** #14438 65J05 (47A50)
- A projective-iterative algorithm for the solution of ill-posed problems with an approximately given operator. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 1, 15-23, 283. (From the introduction) **58** #8247 65J05 (47A50)
- Optimal methods for the solution of ill-posed problems with an approximately prescribed operator, and error estimates for these methods. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 2, 291-297, 545. (Author's summary) **58** #13697 65J05 (47A50)
- (with Koršunov, V. A.) The principle of minimal residuals. (Russian) *Dokl. Akad. Nauk SSSR* **239** (1978), no. 4, 800-803. (A. V. Džiskariani) **58** #8248 65J05 (47A50)
- Tănase, Vasile V.** (with Budianu, Gheorghe) An integral representation of a conditional mean value with respect to the σ -algebra M_T . (Romanian. Russian, English, French and German summaries) *Bul. Inst. Politehn. București* **34** (1972), no. 1, 37-39. (A. D. Wentzell (Ventcel')) **47** #4340 60J25
- Stationary measures for multitype branching processes. (Romanian. English summary) *Stud. Cerc. Mat.* **25** (1973), 1007-1017. (K. Jacobs) **50** #3379 60J80
- Tănăsescu, Elena** The asymptotic behavior of functions of one variable. (Romanian. Russian, English, French and German summary inserts) *Bul. Inst. Politehn. București* **35** (1973), no. 6, 21-27. (A. Precupanu) **49** #7395 26A12
- Tanasi, Corrado** Probabilità geometriche su superficie di Riemann a curvatura costante positiva. (French summary) *Rend. Circ. Mat. Palermo* (2) **25** (1976), no. 3, 189-201 (1977). (L. A. Santaló) **58** #24462 60D05 (53C65)
- Tănăsuiță, I.** (with Ionescu, D.) Mathematical models of the diagrams that are imposed on the traffic distances of a single track section as a function of the critical distance k . (Romanian. Russian, English, French and German summaries) *Bul. Inst. Politehn. București* **34** (1972), no. 3, 101-130. (Authors' summary) **55** #9915 90B25
- Tanatarov, L. V.** (with Andreev, V. V.; Mihailov, I. F.) The thermal relaxation of a strongly diffused gas. (Russian. English summary) *Ukrain. Fiz. Ž.* **16** (1971), 721-733, 870. (Simona Popp) **45** #1460 76.35
- (with Andreev, V. V.) The stationary state and temperature relaxation of a rarefied gas. (Russian. English summary) *Ukrain. Fiz. Ž.* **16** (1971), 1953-1966. (L. Dragoș) **46** #1185 76.35
- Tanatsugu, Keisuke** (with Arikawa, Setsuo) On characteristic sets and degrees of finite automata. *Res. Inst. Fund. Information Sci. Res. Rep. No. 45* (1974), 15 pp. (B. P. Zeigler) **51** #7758 94A30
- (with Arikawa, Setsuo) On characteristic sets and degrees of finite automata. *Internat. J. Comput. Information Sci.* **6** (1977), no. 1, 83-93. (Ronald E. Prather) **55** #2416 94A30
- Tancredi, Alessandro** Sur les espaces annelés avec groupe d'opérateurs. (English summary) *Rend. Sem. Mat. Univ. Padova* **51** (1974), 97-104 (1975). (C. Bănică) **54** #13153 32M05 (32C15)
- Su alcuni funtori rappresentabili in una categoria di spazi analitici relativi. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **20** (1975), 99-111. (M. Schneider) **52** #3616 32L05 (32C99)
- (with Nardelli, G.) Una formula di Künneth per la coomologia con supporti compatti a valori in un fascio analitico coerente. (English summary) Collection in memory of Enrico Bompiani. *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 3, suppl., 413-422. (L. Kaup) **55** #711 32C35
- Sottospazi totalmente reali di uno spazio analitico complesso. (English summary) *Rend. Mat.* (6) **10** (1977), no. 2-3, 397-407. (A. Tognoli) **58** #11490 32C05
- Tandai, Kwoichi** Riemannian manifolds admitting more than $n-1$ linearly independent solutions of $\nabla^2 p + c^2 pg = 0$. *Hokkaido Math. J.* **1** (1972), 12-15. (P. Günther) **47** #7630 53B20
- On generalized $Sp(m)$ -connection associated with a special Kawaguchi metric. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. III. *Tensor (N.S.)* **26** (1972), 204-210. (S. Watanabe) **48** #12332 53A40
- Tândăreanu, Nicolae** On stochastic languages. *Bull. Math. Soc. Sci. Math. R. S. Roumanie*

- (*N.S.*) 15(63) (1971), no. 3, 379-383 (1973). (H. D. Block) 47 #7967 68A30
On languages k -defined and k -represented in an automaton. (Romanian. English summary) *Stud. Cerc. Mat.* 26 (1974), 129-132. (C. Tartia) 51 #2368 68A30
Functions associated to a partition on state set of a probabilistic automaton. *Information and Control* 28 (1975), no. 4, 304-313. (P. Turakainen) 51 #12445 94A35
- Tandon, P. N.** (with Chandra, Subhash) Boundary layer analysis of surface deposition by reacting visco-elastic fluids flowing over a flat plate. *Acta Ci. Indica* 3, no. 2, 154-159 (1977). (A. C. Srivastava) 58 #19770 76A1
- Tandon, Rajat** The Hecke theory of $GL(2)$ and quadratic forms. *J. Indian Math. Soc. (N.S.)* 40 (1976), no. 1-4, 87-122 (1977). (Stephen Gelbart) 56 #5437 10D15 (10C15)
- Tandori, Károly** Bemerkung über das Maximum der Partialsummen von trigonometrischen Polynomen. *Publ. Math. Debrecen* 17 (1970), 101-103 (1971). (G. Sunouchi) 46 #4080 42A04
Über die absolute Summierbarkeit der Orthogonalreihen. *Acta Math. Acad. Sci. Hungar.* 22 (1971/72), 215-226. (F. Schipp) 47 #7311 42A60
Über die unbedingte Konvergenz der Orthogonalreihen. *Acta Sci. Math. (Szeged)* 32 (1971), 11-40. (S. Izumi) 46 #9637 42A60
Über das Maximum der Summen orthogonaler Funktionen. *Acta Sci. Math. (Szeged)* 32 (1971), 317-326. (S. Izumi) 46 #9632 42A52
Eine Frage über die trigonometrischen Summen. *Acta Math. Acad. Sci. Hungar.* 23 (1972), 207-218. (A. Meir) 47 #2253 42A20
(with Kátai, Imre) Bemerkung zur Konvergenz der Entwicklungen nach vorzeichenartigen orthonormierten Systemen. *Acta Math. Acad. Sci. Hungar.* 23 (1972), 519-529. (A. Peyerimhoff) 48 #799 42A60
Bemerkungen zum Gesetz der großen Zahlen. Collection of articles dedicated to the memory of Alfréd Rényi, I. *Period. Math. Hungar.* 2 (1972), 33-39. (T. Kawata) 49 #4084 60F15 (42A60)
Über den Einfluß der Lebesgueschen Funktionen auf die Konvergenz der Orthogonalreihen. *Publ. Math. Debrecen* 19 (1972), 249-258 (1973). (J. J. Price) 48 #4627 42A60
Über einen Satz von V. F. Gaposchkin. *Studia Sci. Math. Hungar.* 7 (1972), 395-409. (A. E. Danese) 49 #989 42A60
Bemerkung über die Konvergenz der Orthogonalreihen. *Acta Sci. Math. (Szeged)* 34 (1973), 393-399. (J. Musielak) 48 #9250 42A60
Eine Abschätzung des Maximums der Partialsummen von Orthogonalreihen. *Acta Sci. Math. (Szeged)* 35 (1973), 169-180. (R. A. Askey) 48 #6803 42A60
Eine Bemerkung über das Maximum von Summen orthogonaler Funktionen. *Publ. Math. Debrecen* 20 (1973), 89-92. (Gilbert Walter) 48 #4625 42A52
Über die Konvergenz von Funktionenreihen. *Linear operators and approximation, II (Proc. Conf., Oberwolfach Math. Res. Inst., Oberwolfach, 1974), pp. 313-320. Internat. Ser. Numer. Math., Vol. 25, Birkhäuser, Basel, 1974.* (F. Schipp) 53 #1151 42A60
Weitere Bemerkungen über das Maximum von Teilsummen orthogonaler Reihen. *Acta Math. Acad. Sci. Hungar.* 25 (1974), 419-424. (A. Olevskii) 50 #14049 42A60
Report on the situation of research in analysis in Hungary. (Hungarian) *Mat. Lapok* 25 (1974), no. 1-2, 87-104 (1977). (Editors) 55 #7685 01A65
Gewisse Fragen über die Lebesgueschen Funktionen. *Acta Math. Acad. Sci. Hungar.* 26 (1975), no. 3-4, 321-325. (J. J. Price) 52 #6311 42A60
On convergence of function series. (Russian summary) *Anal. Math.* 1 (1975), 75-79. (J. Mitchell) 51 #10993 42A60
A remark on a theorem of G. Alexits and A. Sharma (Acta Sci. Math. (Szeged) 33 (1972), 1-10). (Russian summary) *Anal. Math.* 1 (1975), no. 3, 223-230. (S. Izumi) 53 #1150 42A60
Über die Lebesgueschen Funktionen. *Acta Math. Acad. Sci. Hungar.* 28 (1976), no. 1-2, 103-118. (J. J. Price) 56 #962 42A52
Weitere Bemerkungen über die Konvergenz und Summierbarkeit der Funktionenreihen. *Acta Math. Acad. Sci. Hungar.* 28 (1976), no. 1-2, 119-127. (K. Karták) 55 #917 40A05
Bemerkungen zur Konvergenz der Reihen nach multiplikativen Funktionensystemen. *Acta Sci. Math. (Szeged)* 38 (1976), no. 1-2, 167-170. (A. Peyerimhoff) 54 #8130 42A20
(with Joó, István) A remark on convergence of orthogonal series. *Acta Sci. Math. (Szeged)* 38 (1976), no. 3-4, 305-309. (Harry I. Miller) 55 #8290 28A20 (42A56)
Über die Summierbarkeit von Funktionenreihen. *Period. Math. Hungar.* 7 (1976), no. 2, 161-168. (W. Beekmann) 55 #6106 42A60
Über ein orthonormiertes Funktionensystem von D. E. Menchoff. *Publ. Math. Debrecen* 23 (1976), no. 1-2, 137-140. (R. Liedl) 54 #3282 42A56
Über die Lebesgueschen Funktionen. II. *Acta Math. Acad. Sci. Hungar.* 29 (1977), no. 1-2, 177-184. (J. J. Price) 56 #963 42A52
(with Alexits, György; Joó, István) On summability of orthogonal series. *Acta Math. Acad. Sci. Hungar.* 29 (1977), no. 1-2, 201-205. (F. Móricz) 55 #10957 42A60
Einfacher Beweis eines Satzes von B. S. Kašin. *Acta Sci. Math. (Szeged)* 39 (1977), no. 1-2, 175-178. (Satoru Igari) 56 #9177 42A60
Über beschränkte orthonormierte Systeme. *Acta Math. Acad. Sci. Hungar.* 31 (1978), no. 3-4, 279-285. (A. E. Danese) 58 #1987 42A52
- Tandy, P. C.** (with Bencze, Gy.) Class of integral equations for the N -particle transition operators. *Phys. Rev. C* (3) 16 (1977), no. 2, 564-570. (John Zorbas) 56 #7588 81A5
(with Benoist-Gueutal, P.; L'Huilier, M.; Redish, Edward F.) Proof of the Bencze-Redish-Sloan equations. *Phys. Rev. C* (3) 17 (1978), no. 6, 1924-1928. (Authors' summary) 58 #14639 81A7
- Taneja, Inder Jeet** (with Sharma, Bhu Dev) Functional measures in information theory. *Funkcial. Ekvac.* 17 (1974), 181-191. (Pl. Kannappan) 51 #15199 94A15
(with Sharma, Bhu Dev) On axiomatic characterization of information-theoretic measures. *J. Statist. Phys.* 10 (1974), 337-346. (Pl. Kannappan) 53 #7620 94A15
A joint characterization of directed divergence, inaccuracy, and their generalizations. *J. Statist. Phys.* 11 (1974), 169-176. (P. N. Rathie) 52 #8699 39A15 (94A15)
- (with Gurdial) A modification of Forney's scheme involving distortion. *J. Cybernetics* 5 (1975), no. 4, 89-96 (1976). (R. Ahlswede) 56 #8170 94A10
(with Sharma, Bhu Dev) Entropy of type (α, β) and other generalized measures in information theory. *Metrika* 22 (1975), no. 4, 205-215. (George T. Duncan) 53 #94A15
A generalized functional equation of three variables in information theory. *Funkcial. Ekvac.* 19 (1976), no. 2, 139-147. (Pl. Kannappan) 57 #19104 (39A15)
On axiomatic characterization of information-improvement and its generalization. *J. Combinatorics Information Syst. Sci.* 1 (1976), no. 2, 69-79. (Takeo Yuki) 55 #12313 94A15
(with Gurdial) A modification of Forney's scheme involving distortion. *J. Cybernetics* 6 (1976), no. 3-4, 223-229. (Suguru Arimoto) 56 #5052 94A15
On measures of information and inaccuracy. *J. Statist. Phys.* 14 (1976), 263-270. (Shunsuke Ihara) 53 #7622 94A15
On information-improvement and its generalization. *Metrika* 23 (1976), 249-257. (Pl. Kannappan) 58 #4646 94A15
On the branching property of entropy. *Ann. Polon. Math.* 35 (1977/78), 67-75. (Pl. Kannappan) 58 #17633 39A30 (94A15)
On axiomatic characterization of entropy of type (α, β) . (Czech and loose Russian summaries) *Apl. Mat.* 22 (1977), no. 6, 409-417. (B. D. Sharma) 57 #9309 94A15
(with Sharma, Bhu Dev) Three generalized-additive measures of entropy. (German and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* 13 (1977), no. 419-433. (Authors' summary) 58 #26543 94A15
(with Gupta, H. C.) On generalized measures of relative information and inaccuracy. (Czech and loose Russian summaries) *Apl. Mat.* 23 (1978), no. 5, 317-323. 58 #20823 94A15
- Taneja, V. S.** (with Srivastava, Muni S.) Some sequential procedures for ranking multivariate normal populations. *Ann. Inst. Statist. Math.* 24 (1972), 455-464. (J. A. Yahav) 54 #6411 62L10 (62F07)
(with Gandhi, J. M.) The coefficients of $\cosh x / \cos x$. *Fibonacci Quart.* 10 (1972), no. 4, 349-353. (George E. Andrews) 46 #7140 10A30
- Tang, Ao Chin** (with Jiang, Yuan Sheng) Graph theory of molecular orbitals. *Sci. Sinica* 19 (1976), no. 2, 207-226. (Authors' summary) 56 #2112 82.05
- Tang, C. Y.** On the Frattini subgroups of generalized free products with cyclic amalgamations. *Canad. Math. Bull.* 15 (1972), 569-573. (M. F. Newman) 47 #20E20
On the Frattini subgroups of certain generalized free products of groups. *Amer. Math. Soc.* 37 (1973), 63-68. (R. W. Carter) 46 #9176 20F25
(with Allenby, R. B. J. T.) On the Frattini subgroups of generalized free products. *Bull. Amer. Math. Soc.* 80 (1974), 119-121. (J. S. Birman) 48 #6250 20E20
(with Allenby, R. B. J. T.) On the Frattini subgroup of a residually finite generalized free product. *Proc. Amer. Math. Soc.* 47 (1975), 300-304. (Robert Gregorac) 52 #10892 20E30
(with Allenby, R. B. J. T.) On the Frattini subgroups of generalized free products and the embedding of amalgams. *Trans. Amer. Math. Soc.* 203 (1975), 319-330. (S. Robinson) 50 #10084 20E30
(with Allenby, R. B. J. T.) On the Frattini subgroups of generalized free products. *J. Algebra* 52 (1978), no. 2, 460-474. (A. R. Camina) 58 #911 20F25
- Tang, Chih Tong** Analytic subvarieties in \mathbb{C}^n with given isolated singularities. *Math. Ann.* 229 (1977), no. 1, 47-51. (Antonio Cassa) 57 #699 32C25 (32C40)
- Tang, Chü Fei** On the solution of Wick's equation. *Sci. Sinica* 20 (1977), no. 1, 1-10. (Mayer Humi) 56 #4504 81.35
- Tang, Donald T.** (with Liu, C. N.) Distance-2 cyclic chaining of constant-weight codes. *IEEE Trans. Computers* C-22 (1973), 176-180. (N. J. A. Sloane) 50 #1768 94A15
(with Wong, C. K.) A modified branch-and-bound strategy. *Information Processing Lett.* 2 (1973), 65-69. (M. Dragomirescu) 48 #10114 65K05
(with Wong, C. K.) Dynamic memories with faster random and sequential access. *IBM J. Res. Develop.* 21 (1977), no. 3, 281-288. (I. Kaufmann) 56 #4284 68A15
(with Maruyama, Kiyoshi; Chang, Shi Kuo) A general packing algorithm for multidimensional resource requirements. *Internat. J. Comput. Information Sci.* 6 (1977), no. 2, 131-149. (Fabrizio Luccio) 55 #9598 68A10 (68A50)
(with Woo, Lin S.; Bahl, Lalit R.) Optimization of teleprocessing network concentrators and multiconnected terminals. *IEEE Trans. Comput.* 27 (1978), 594-604. (A. T. Amin) 58 #9887 94A20
- Tang, Hsiung** Convergence of a power series with quasi-monotone coefficients. *Math. 10* (1977), no. 1, 20-25. (G. Sansone) 57 #596 30A10
- Tang, Hwa Tsang** Gauss' lemma. *Proc. Amer. Math. Soc.* 35 (1972), 372-376. (Arnold) 46 #1782 13F20
- Tang, I.** Finding real roots by integration. *Simulation* 19 (1972), no. 1, 28-29. (Author's introduction) 56 #7159 65H05
Finding quadratic factors by integration. *Proceedings of the Ninth Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1974), 334-335. *Western Periodicals, North Hollywood, Calif.*, 1974. (Author's summary) 56 #17050 65H05 (65K05)
Detecting multiple roots of a polynomial. *Z. Angew. Math. Mech.* 55 (1975), no. 449-451. (Ian Gladwell) 52 #2184 65H05
Finding quadratic factors by an analog minimization procedure. *Simulation* 19 (1976), no. 4, 128-129. (Sven-Åke Gustafson) 53 #7016 65H05
Simultaneous determination of quadratic factors by optimization methods. *Comput. Simulation* 19 (1977), no. 1, 57-59. (Frederick N. Fritsch) 57 #1868 65K05
When do polynomials have imaginary roots? *Z. Angew. Math. Mech.* 57 (1977), 1, 53-54. (W. Ledermann) 56 #5512 12D05
- Tang, M. Y.** (with Sinha, Naresh K.) On-line system identification in real time using a minicomputer. *Math. Comput. Simulation* 19 (1977), no. 2, 113-120. (From the summary) 58 #4569 93E10 (93E25)
- Tang, Min Ming** Singular perturbation of some quasilinear elliptic boundary value problems given in divergence form. *J. Math. Anal. Appl.* 39 (1972), 208-222. (Bardos) 47 #2173 35B25

- (with Fife, P. C.) Asymptotic expansions of solutions of quasi-linear elliptic equations with small parameter. *SIAM J. Math. Anal.* **6** (1975), 523-532. (H. Beckert) #10835 35C10 (35J25)
- Singular perturbation of some quasilinear parabolic equations in divergence form. *Research Conference on Singular Perturbations: Theory and applications* northern Arizona Univ., Flagstaff, Ariz., 1975. *Rocky Mountain J. Math.* **6** (1976), no. 725-729. (F. Hoppensteadt) **54** #10818 35B25 (35K20)
- Asymptotic stability of some quasilinear parabolic equations in divergence form L^∞ results. *J. Math. Anal. Appl.* **57** (1977), no. 2, 368-381. (Lu-San Chen) **55** #826 B40 (35K60)
- (with Batra, R. C.) Asymptotic stability of an equilibrium solution of a hyperbolic partial equation. *Z. Angew. Math. Mech.* **57** (1977), no. 10, 615-616. (Paul L. Davis) #907 35L99
- P. Y. (with Naghdi, P. M.) Large deformation possible in every isotropic elastic membrane. *Philos. Trans. Roy. Soc. London Ser. A* **287** (1977), no. 1341, 145-187. (G. Tommaso Ruggeri) **57** #8308 73.35 (53C45)
- Shen Chi An alternative proof of Diophantine equation $x^p - z^2 = i$ with trivial solution $x = i$ and $z = 0$. *Rev. Mat. Hisp.-Amer.* (4) **34** (1974), 260-262. (Richard T. Umby) **50** #9790 10B15
- Victor K. T. (with Sukhatme, B. V.) Use of preliminary test of significance for allocation in stratified sampling. *J. Indian Statist. Assoc.* **10** (1972), 100-114. (U. B. Patil) **51** #2069 62D05
- (with Sukhatme, B. V.) Allocation in stratified sampling subsequent to preliminary test of significance. *J. Amer. Statist. Assoc.* **70** (1975), 175-179. (Chien-Pai Han) #11753 62D05
- Yu-shan (with Yau, Stephen Sik-Sang) An efficient algorithm for generating complete test sets for combinational logic circuits. *IEEE Trans. Computers* **C-20** (1971), 1245-1251. (B. Hazeltine) **46** #10514 94A20
- (with Yau, Stephen Sik-Sang) Transformation of an arbitrary switching function to a totally symmetric function. *IEEE Trans. Computers* **C-20** (1971), 1606-1609. (Authors' introduction) **50** #4144 94A20
- (with Yau, Stephen Sik-Sang) On identification of redundancy and symmetry of switching functions. *IEEE Trans. Computers* **C-20** (1971), 1609-1613. (Authors' summary) **49** #12196 94A20
- E. T. (with Anderson, D.; Faulkner, J.; Wilhelmsson, Hans; Nishikawa, Kyoji) Study of similarity flows of two component laser produced plasmas. *Phys. Scripta* **18** (1978), no. 2, 141-145. (Authors' summary) **58** #19820 78.35
- eman, Richard L. (with Kreiling, Daryl) Lower radicals in nonassociative rings. *J. Austral. Math. Soc.* **14** (1972), 419-423. (E. M. Patterson) **47** #3470 17A99
- Strong heredity in radical classes. *Pacific J. Math.* **42** (1972), 259-265. (E. P. Armendariz) **47** #1893 17A99 (08A25)
- Lower radical constructions in classes of rings. *Ring theory (Proc. Conf., Univ. Oklahoma, Norman, Okla., 1973)*, pp. 173-183. *Lecture Notes in Pure and Appl. Math.*, vol. 7, Dekker, New York, 1974. (W. G. Leavitt) **49** #2817 16A21 (17A99)
- (with Rossa, R. F.) General heredity for radical theory. *Proc. Edinburgh Math. Soc.* **20** (1976/77), no. 4, 333-337. (W. G. Leavitt) **56** #12052 16A21
- (with Leavitt, W. G.) Upper- \ast radicals. *Math. Nachr.* **83** (1978), 83-88. (R. F. Flossa) **58** #22147 16A21
- Jan, A. S. (with Žolkov, S. Ju.) Certain cardinal invariants of products of spaces. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 2, 284-287. (Editors) **58** #7533 54A25 (54B10)
- o, Hiroshi On the behavior of extensions of vector bundles under the Frobenius map. *Nagoya Math. J.* **48** (1972), 73-89. (T. Oda) **47** #3401 14H10 (14F05)
- On $(n-1)$ -dimensional projective spaces contained in the Grassmann variety $Gr(n, 1)$. *J. Math. Kyoto Univ.* **14** (1974), 415-460. (S. L. Kleiman) **51** #8132 14M15 (14N10)
- On a criterion of a projective space. *Bull. Kyoto Univ. Ed. Ser. B No. 47* (1975), 1-11. (Ezio Stagnaro) **53** #8063 14E25 (14M20)
- On the automorphisms of flag manifolds. *Bull. Kyoto Univ. Ed. Ser. B No. 49* (1976), 1-9. (S. L. Kleiman) **54** #7491 14M15
- An example of indecomposable vector bundle of rank $n-1$ on P^n . *J. Math. Kyoto Univ.* **16** (1976), no. 1, 137-141. (S. Ramanan) **53** #5593 14F05
- On morphisms from projective space P^n to the Grassmann variety $Gr(n, d)$. *J. Math. Kyoto Univ.* **16** (1976), no. 1, 201-207. (S. Ramanan) **53** #5614 14M15 (14F05)
- On the Cartan-Burau variety. I. *Bull. Kyoto Univ. Ed. Ser. B No. 50* (1977), 1-15. (W. Burau) **58** #16708a 14M15
- On the Cartan-Burau variety. II. The additive structure of the Chow ring of the Cartan-Burau variety. *Bull. Kyoto Univ. Ed. Ser. B No. 51* (1977), 5-23. (W. Burau) **58** #16708b 14M15
- (with Usui, Sampo) On numerical positivity of ample vector bundles with additional condition. *J. Math. Kyoto Univ.* **17** (1977), no. 1, 151-164. (Samuel A. Ilori) **55** #10460 14F05
- On the Cartan-Burau variety. III. The Chow ring of the Cartan-Burau variety. *Bull. Kyoto Univ. Ed. Ser. B No. 52* (1978), 13-20. (W. Burau) **58** #16708c 14M15
- o, Toshiro Extended block replacement policy with used items. *J. Appl. Probab.* **15** (1978), no. 3, 560-572. (Menachem Dishon) **58** #9198 90B25 (60K10, 62N05)
- ora, Martin C. (with Mosher, Robert E.) ★Когомологические операции и их приложения в теории гомотопий. (Russian) [Cohomology operations and their applications in homotopy theory] Translated from the English by M. M. Postnikov. Izdat. "Mir", Moscow, 1970. 287 pp. (Editors) **52** #15428 55-02
- Some extension questions in the Adams spectral sequence. *Proceedings of the Advanced Study Institute on the Algebraic Topology (Aarhus Univ., Aarhus, 1970)*, vol. III, pp. 578-587. *Various Publ. Ser.*, No. 13, Mat. Inst., Aarhus Univ., Aarhus, 1970. (R. M. F. Moss) **49** #3926 55E45
- (with Margolis, Harvey; Priddy, Stewart B.) Another systematic phenomenon in the cohomology of the Steenrod algebra. *Topology* **10** (1970), 43-46. (W. D. Barcus) **45** #9318 55G10
- Atsui On the first initial-boundary value problem of the generalized Burgers' equation. *Publ. Res. Inst. Math. Sci.* **10** (1974/75), no. 1, 209-233. (Clarence M. Ablow) **52** #1021 35K60
- The existence and uniqueness of the solution of equations describing compressible viscous fluid flow in a domain. *Proc. Japan Acad.* **52** (1976), no. 7, 334-337. (W. Langlois) **54** #9326 76.35
- On the first initial-boundary value problem of compressible viscous fluid motion. *Publ. Res. Inst. Math. Sci.* **13** (1977/78), no. 1, 193-253. (See RZMat **1978** #5 B320) 76.35 (35G30, 35Q99)
- Tani, I. See Vorträge: Wissenschaftliche Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik, **48** #10751
- Tani, K. Non-linear double time Green functions in quantum statistical mechanics. *Phys. Lett.* **37A** (1971), 97-99. (S. Harris) **47** #1411 82.35
- Tani, Smlø Reformulation of the Dirac-Fierz-Pauli equation for spin 3/2. *Phys. Rev. D* (3) **2** (1970), 980-988. (K. Veselić) **47** #9991 81.47
- (with Inokuti, Mitio) Modification of the variation-of-parameters method and integration of the Schrödinger equation. *J. Computational Phys.* **11** (1973), 409-422. (N. Nakanishi) **48** #5544 81.34
- Tani, Tsugio Generalized first countability of inverse images of perfect mappings. *Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci.* **21** (1972), 217-220. (Author's introduction) **58** #24170 54C10
- (with Yasui, Yoshikazu) On the topological spaces with the \mathcal{B} -property. *Proc. Japan Acad.* **48** (1972), 81-85. (R. Hodel) **47** #2549 54D20
- Some generalizations of closed maps, their properties and M -spaces. *Math. Japon.* **20** (1975), no. 3, 237-252. (Thomas E. Gantner) **54** #13837 54C10 (54D50, 54E99)
- Tani Corsi, Gabriella Su una classe di p -gruppi che ammettono un particolare automorfismo d'ordine 2. *Matematiche (Catania)* **25** (1970), 34-49 (1971); correction, *ibid.* **25** (1970), 350 (1971). (H. Lausch) **46** #5440 20D15
- Classificazione dei gruppi finiti, a derivato nilpotente, nei quali i sottogruppi subnormali propri hanno sottogruppo di Frattini identico. *Matematiche (Catania)* **28** (1973), 390-396 (1974). (G. Pic) **54** #7617 20D35
- Tanigawa, Yoshio Selberg trace formula for Picard groups. *Algebraic number theory (Kyoto Internat. Sympos., Res. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976)*, pp. 229-242. *Japan Soc. Promotion Sci., Tokyo*, 1977. (Audrey A. Terras) **57** #12404 10D20
- Taniguchi, Akira (with Matsumura, Hiroshi) Notes on the stability of nonlinear Volterra equation. *Proc. Fac. Sci. Tokai Univ.* **9** (1974), 37-44. (J. M. Cushing) **52** #5089 92A15
- Taniguchi, Hajime (with Hattori, Akio) Smooth S^1 -action and bordism. *J. Math. Soc. Japan* **24** (1972), 701-731. (C. B. Thomas) **46** #8245 57D90 (57E15)
- Taniguchi, Kazuo (with Kumano-go, Hitoshi) Oscillatory integrals of symbols of pseudo-differential operators on R^n and operators of Fredholm type. *Proc. Japan Acad.* **49** (1973), 397-402. (Rémi Vaillancourt) **50** #8167 47G05 (35S05)
- On the hypoellipticity and the global analytic-hypoellipticity of pseudo-differential operators. *Osaka J. Math.* **11** (1974), 221-238. (Rémi Vaillancourt) **50** #5553 47G05 (35H05)
- The generalized form of Poincaré's inequality and its application to hypoellipticity. *Proc. Japan Acad.* **50** (1974), 706-711. (Rémi Vaillancourt) **51** #8611 35H05
- On the hypoellipticity of the operator $a(X, D_x) + g(X)b(X, Y, D_y)$. *Math. Japon.* **20** (1975), no. 4, 301-320 (1976). (Cesare Parenti) **53** #11212 35H05
- Hypoellipticity of differential operators. (Japanese) *Sūgaku* **28** (1976), no. 4, 299-310. (Kazuaki Taira) **58** #11866 35H05
- (with Kumano-go, Hitoshi; Tozaki, Yoshiharu) Multi-products of phase functions for Fourier integral operators with an application. *Comm. Partial Differential Equations* **3** (1978), no. 4, 349-380. (A. S. Dynin) **58** #12049 35S05 (47G05, 58G15)
- An elementary proof of the generalized form of Poincaré's inequality. *J. Math. Soc. Japan* **30** (1978), no. 1, 15-22. (Toader Jucan) **58** #6660 35H05
- Taniguchi, Ken-ichi (with Kasami, Tadao) Macro expansions of context-free languages. *Electron. Commun. Japan* **53** (1970), no. 7, 120-127. (R. Cori) **47** #6145 68A30
- (with Tokura, Nobuki; Kasami, Tadao) A subclass of deterministic context-free languages (the class of Null (M))'s for ϵ -input free deterministic pushdown automata (M). *Systems-Computers-Controls* **1** (1970), no. 3, 10-16 (1971). (Ronald V. Book) **48** #13524 94A30 (68A30)
- (with Yamabe, Naoki; Kasami, Tadao) Minimizing the number of states in a sequential machine with don't care conditions. *J. Cybernet.* **1** (1971), no. 1, 114-116. (A. Paz) **46** #10518 94A25
- (with Kasami, Tadao) Some decision problems for two-dimensional nonwriting automata. *Systems-Computers-Controls* **2** (1971), no. 4, 42-48. (A. L. Rosenberg) **48** #8211 02F10 (68A25, 02G05)
- (with Kasami, Tadao) A linear-time syntax analyzer for context-free grammars. *Electron. Commun. Japan* **55** (1972), no. 7, 131-139. (Eugene S. Santos) **48** #12913 68A30
- (with Kasami, Tadao; Kikuno, Toru) Equivalence and simplification of analyzers. *Systems-Computers-Controls* **4** (1973), no. 4, 37-45. (Armin Cremers) **50** #11840 68A05
- (with Kasami, Tadao; Kikuno, Toru) Lexical analysis using context information. *Systems-Computers-Controls* **5** (1974), no. 2, 97-105 (1975). (Leon Levy) **52** #7192 68A05 (68A30)
- (with Kasami, Tadao) An $O(N)$ algorithm for computing the IN function of D -charts. *Systems-Computers-Controls* **5** (1974), no. 6, 64-72 (1975). (A. L. Rosenberg) **54** #9148 68A10
- (with Kasami, Tadao) A result on the equivalence problem for deterministic pushdown automata. *Proceedings of the Eighth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1975)*, pp. 10-12. *Western Periodicals Co., North Hollywood, Calif.*, 1975. (Kenneth B. Salomon) **56** #4246 68A25
- (with Kasami, Tadao; Sugiyama, Yuji) On the decidability of equivalence for deterministic pushdown automata. *Systems-Computers-Controls* **6** (1975), no. 1, 36-44. (From the summary) **57** #18235 68A25
- (with Kasami, Tadao) A result on the equivalence problem for deterministic pushdown automata. *J. Comput. System Sci.* **13** (1976), no. 1, 38-50. (Kenneth B. Salomon) **53** #15595 94A30 (68A25)
- (with Katsuyama, Yoshiki; Kasami, Tadao) Shortening the length of programs by using subroutines. *Systems-Computers-Controls* **7** (1976), no. 3, 19-26 (1977). (A. V.

- Anisimov) 56 #17182 68A05
(with Katsuyama, Yoshiki; Kasami, Tadao) Merging program modules to localize scopes of effects. *Systems-Computers-Controls* 7 (1976), no. 6, 37-44 (1977). (Authors' summary) 58 #25076 68A05 (05C05)
(with Kasami, Tadao) A result concerning the equivalence problem for monadic recursion schemas. *Systems-Computers-Controls* 7 (1976), no. 6, 45-49 (1977). (Akira Nakamura) 57 #4634 68A25
- Taniguchi, Masahiko** Quadratic functions with closed trajectories on compact Riemann surfaces. *J. Math. Kyoto Univ.* 16 (1976), no. 3, 475-496. (K. Strebel) 55 #10668 30A52
On quadratic differentials with closed trajectories and their applications. *Proc. Japan Acad.* 52 (1976), no. 4, 165-166. (Howard Masur) 56 #5874 30A52
Automorphisms and quadratic differentials on compact Riemann surfaces. *J. Math. Kyoto Univ.* 17 (1977), no. 3, 425-440. (Howard Masur) 57 #16578 30A52
- Taniguchi, Masanobu** On a generalization of a statistical spectrum analysis. *Math. Japon.* 23 (1978), no. 1, 33-44. (P. A. Moretton) 58 #3261 62M15
- Taniguchi, Masaru** A uniqueness theorem for symmetric hyperbolic systems of first order in one space variables. *Proc. Japan Acad.* 47 (1971), 54-58. (M. H. Protter) 45 #720 35L40
Cauchy problem for hyperbolic systems in L^p . *Funkcial. Ekvac.* 15 (1972), 19-22. (Howard A. Levine) 46 #9547 35L45
Mixed problem for hyperbolic systems of first order. *Publ. Res. Inst. Math. Sci.* 8 (1972/73), 471-481. (S. Cincinini) 48 #716 35L40
Mixed problem for hyperbolic systems of first order. II. *Publ. Res. Inst. Math. Sci.* 10 (1974/75), no. 1, 91-100. (S. Cincinini) 52 #3744 35L50
- Taniguchi, Takeshi** On the Euler-characteristic and the signature of G -manifolds. *Proc. Japan Acad.* 49 (1973), 130-133. (Don Zagier) 48 #7263 55C35 (57E30)
- Tanikawa, Masao** (with Fujiwara, Daisuke; Yukita, Shūichi) The spectrum of the Laplacian and boundary perturbation. I. *Proc. Japan Acad. Ser. A Math. Sci.* 54 (1978), no. 4, 87-91. (Akira Asada) 58 #2922 58G99 (35P05)
- Tanimoto, S.** On a class of three-player differential games. *J. Optim. Theory Appl.* 25 (1978), no. 3, 469-473. (G. J. Oldser) 58 #26098 90D25
- Tanimoto, Steven L.** Analysis of biomedical images using maximal matching. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 171-176. *Inst. Electr. Electron. Engrs., New York*, 1976. (Author's summary) 58 #26146 92A05 (05C30)
(with Pavlidis, Theodosios) Graph labelling algorithms for picture analysis. *Proceedings of the Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976)*, pp. 749-752. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Hidemitsu Ogawa) 56 #17247 68A45
An optimal algorithm for computing Fourier texture descriptors. *IEEE Trans. Computers* C-27 (1978), no. 1, 81-84. (Shinichi Tamura) 57 #4698 68A45
- Tanimoto, T.** Optimization by a method of maximum slope in the complex plane and its application to the transportation problem. *Rend. Sem. Mat. Univ. Padova* 48 (1972), 365-376 (1973). (R. L. Graves) 51 #2638 90C05
- Tanimura, Yosikatu** Euclidean algorithm in some quartic field. (Japanese summary) *Sci. Rep. Fac. Ed. Gifu Univ. Natur. Sci.* 5, 1-4 (1972). (loose errata) (J. Knopfmacher) 48 #268 12A30
- Tanino, T.** (with Nakayama, Hirotaka; Sawaragi, Yoshiyazu) Multiplier functions and duality for non-linear programmes having a set constraint. *Internat. J. Systems Sci.* 9 (1978), no. 4, 467-481. (R. N. Kaul) 58 #15192 90C30
- Tanis, Elliot A.** (with Hogg, Robert V.) ★Probability and statistical inference. *Macmillan Publishing Co., New York; Collier Macmillan Publishers, London*, 1977. ix+450 pp. (Editors) 54 #14169 62-01 (60-01)
- Taniuti, Tosiya** (with Nozaki, Kazuhiro) A note on the reductive perturbation method. *J. Phys. Soc. Japan* 40 (1976), no. 2, 573-576. (L. M. Hocking) 53 #12219 76.65
- Tankeev, S. G.** A global theory of moduli for algebraic surfaces of general type. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 36 (1972), 1220-1236. (D. Lieberman) 49 #2754 14J10 (14D20)
Pluricanonical mappings of algebraic surfaces of general type. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 6(186), 184. (Miles Reid) 53 #13234 14J10 (14E25)
The homomorphisms of Abelian schemes. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 40 (1976), no. 4, 774-790, 949. (Michiel Hazewinkel) 56 #12017 14K30
The homomorphisms of abelian schemes. II. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 41 (1977), no. 6, 1231-1251, 1447. (Michiel Hazewinkel) 58 #696 14K05
- Tankelevič, R. L.** See *Mathematical simulation and the theory of electrical circuits*, 48 #3287
- Tankiev, I. A.** (with Israilov, S. V.) Application of the transformation of functions of a complex variable for representations of functions of a real argument and solution of difference-differential equations. (Russian) *Methods of the theory of analytic functions (Russian)*, pp. 33-35, *Severo-Oset. Gos. Univ., Ordzhonikidze*, 1974. (See RŽMat 1975 #7 B119) 34K05
(with Israilov, S. V.) Construction of complete continuous operators for systems of loaded integral equations with fixed singularities by the mapping method. (Russian) *Mapping methods (Russian)*, pp. 81-87. *Čečeno-Inguš. Gos. Univ., Groznyj*, 1976. (N. K. Karapetjan) 58 #12242 45E10
The existence and nonuniqueness of the solutions of a countable system of integral equations of Volterra type with a multipoint singularity. (Russian) *Mapping methods (Russian)*, pp. 100-107. *Čečeno-Inguš. Gos. Univ., Groznyj*, 1976. (Š. Schwabik) 58 #2078 45D05
(with Israilov, S. V.) Ordinary differential equations with a multipoint singularity. (Russian) *Mapping methods (Russian)*, pp. 107-112. *Čečeno-Inguš. Gos. Univ., Groznyj*, 1976. (E. S. Čičkin) 58 #6445 34B10
(with Israilov, S. V.) An integral equation and the solvability of some multipoint boundary value problems. (Russian) *Mapping methods (Russian)*, pp. 112-120. *Čečeno-Inguš. Gos. Univ., Groznyj*, 1976. (Š. Schwabik) 58 #1343 34B10 (44A05)
(with Israilov, S. V.) Theorems on the existence of solutions of the singular Cauchy-Nicoletti problem for a countable system of ordinary differential equations. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* 1976, no. 4, 69-73. 58 #1514 35A99 (34G05)
- Tankó, J.** A simple algorithm to determine the ergodic classes of a Markov chain. *P. in statistics (European Meeting of Statisticians, Budapest, 1972)*, pp. 803-812. *Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam*, 1974. (Editors) 51 #60-04
- Tannaka, T.** See *Theory of numbers*, 56 #2953
- Tanne, Joseph** (with Bajpai, Shyam K.; Whittier, Donald) A decomposition theorem for an analytic function. *J. Math. Anal. Appl.* 48 (1974), 736-742. (L. R. Sons) 50 #30A68
(with Bajpai, Shyam K.) Analogues of entire function inequalities for an analytic function. *Canad. J. Math.* 27 (1975), 286-293. (L. R. Sons) 51 #3407 30A04
- Tannenbaum, Allen** Degenerations of curves in P^3 . *Proc. Amer. Math. Soc.* 68 (1978), 1, 6-10. (A. A. Iarrobino, Jr.) 56 #15653 14H20 (14D15)
- Tannenbaum, Peter** Abelian inverse property neofields. *Proceedings of the Conference Algebraic Aspects of Combinatorics (Univ. Toronto, Toronto, Ont., 1975)*, pp. 279-288. *Congressus Numerantium, No. XIII, Utilitas Math., Winnipeg, Man.*, 1975. (Rodney Angotti) 52 #5842 20N99
Abelian Steiner triple systems. *Canad. J. Math.* 28 (1976), no. 6, 1251-1258. (Rodney Angotti) 54 #10468 20N10 (05B05)
On the nonexistence of certain finite projective planes of Lenz-Barlotti type (Italian summary) *Boll. Un. Mat. Ital. A (5)* 15 (1978), no. 1, 137-139. (C. Balla) 58 #5284 05B25
- Tanner, Judith M.** See *Statistics: a guide to the unknown*, 53 #9442
- Tanner, R. I.** (with Nickell, R. E.; Bilger, R. W.) Finite element methods for the solution of some incompressible non-Newtonian fluid mechanics problems with free surface. *Comput. Methods Appl. Mech. Engrg.* 6 (1975), no. 2, 155-174. (David F. Griffith) 52 #9809 76.65
- Tanner, R. Michael** Some content maximizing properties of the regular simplex. *Pacific J. Math.* 52 (1974), 611-616. (J. B. Wilker) 50 #14500 52A40
Minimizing merging and sorting: an algorithm. *SIAM J. Comput.* 7 (1978), no. 1, 18-38. (Frank K. Hwang) 57 #11166 68A10
- Tanner, Rosalind Cecilia Hildegard** The study of Thomas Harriot's manuscripts. I. Harriot's will. *History of science, Vol. 6*, pp. 1-16. *Heffer, Cambridge*, 1967. (J. S. Hodge) 58 #15909 01A45
Die Youngsche Darstellung der Punktmengenlehre. *NTM Schr. Geschichte Naturwiss. Tech. Medizin* 6 (1969), no. 1, 10-12. (I. Grattan-Guinness) 58 #4901 01A60 (01A55, 01A70)
Henry Stevens and the associates of Thomas Harriot. *Thomas Harriot: Renaissance scientist*, pp. 91-106. (1 plate) *Clarendon Press, Oxford*, 1974. (Editors) 58 #1007 01A45 (01A55, 01A75)
Nathaniel Torporley's *Congestor analyticus* and Thomas Harriot's *De triangulorum rationalium*. *Ann. of Sci.* 34 (1977), no. 4, 393-428. (J. A. Lohne) 55 #1247 01A45 (70.01)
See also *Young, William Henry; et al.*, 57 #16079
- Tannery, Jules** (with Molk, Jules) ★Éléments de la théorie des fonctions elliptiques. Tome I, II. Calcul différentiel. Réimpression en un volume de l'édition de 1893 et 1896. *Chelsea Publishing Co., Bronx, N.Y.*, 1972. *Tome I: x+246 pp.* *Tome II: x+299 pp. (bound as one vol.)* (Editors) 52 #13288 01A75
(with Molk, Jules) ★Éléments de la théorie des fonctions elliptiques. Tome I. Calcul intégral. Première partie. Tome IV. Calcul intégral. Deuxième partie. Avec lettre de Ch. Hermite à Jules Tannery. Réimpression des éditions de 1898 et de 1900. *Chelsea Publishing Co., Bronx, N.Y.*, 1972. *Tome I: viii+267 pp.* *Tome II: ix+303 pp. (bound as one vol.)* (Editors) 52 #13289 01A75
- Tanno, Shūkichi** (with Takahashi, Toshio) K -contact Riemannian manifolds isometrically immersed in a space of constant curvature. *Tōhoku Math. J. (2)* 23 (1971), 535-539. (Blair) 46 #9905 53C25
Curvature tensors and covariant derivatives. *Ann. Mat. Pura Appl. (4)* 96 (1973), 233-241. (H. Osborn) 48 #4962 53C20
Totally geodesic foliations with compact leaves. *Hokkaido Math. J.* 1 (1972), 7-14. (A. Martínez Naveira) 47 #9491 53C40 (57D30)
A formula on some odd-dimensional Riemannian manifolds related to the Gauss-Bonnet formula. *J. Math. Soc. Japan* 24 (1972), 204-212. (T. Banchoff) 46 #53C20
A theorem on totally geodesic foliations and its applications. Commemorating volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. I. *Tensor (N.S.)* 24 (1972), 116-122. (J. R. Vanstone) 54 #8526 53C25
2-dimensional complex submanifolds immersed in complex projective spaces. *Tōhoku Math. J. (2)* 24 (1972), 71-78. (A. Martínez Naveira) 47 #9492 53C40
4-dimensional conformally flat Kähler manifolds. *Tōhoku Math. J. (2)* 24 (1972), 501-504. (K. Yano) 47 #5799 53C55
Compact conformally flat Riemannian manifolds. *J. Differential Geometry* 8 (1973), 71-74. (Y. Katsurada) 50 #11086 53C20
Compact complex submanifolds immersed in complex projective spaces. *J. Differential Geometry* 8 (1973), 629-641. (Koichi Ogue) 49 #3784 53C40
Constancy of holomorphic sectional curvature in almost Hermitian manifolds. *Kōdai Math. Sem. Rep.* 25 (1973), 190-201. (A. Gray) 47 #5800 53C55
An inequality for 4-dimensional Kählerian manifolds. *Proc. Japan Acad.* 49 (1973), 257-261. (K. Yano) 51 #9002 53C55
(with Matsumoto, Masatsune) Kählerian spaces with parallel or vanishing Bochner curvature tensor. *Tensor (N.S.)* 27 (1973), 291-294. (C. I. Ispas) 49 #7943 53C55
Euler-Poincaré characteristics and curvature tensors. *Tōhoku Math. J. (2)* 25 (1973), 33-51. (C. B. Allendoerfer) 47 #5782 53C20
Eigenvalues of the Laplacian of Riemannian manifolds. *Tōhoku Math. J. (2)* 25 (1973), 391-403. (V. K. Patodi) 48 #12405 53C20
Mean curvatures for holomorphic $2p$ -planes in Kählerian manifolds. *Tōhoku Math. J. (2)* 25 (1973), 417-423. (Robert E. Greene) 49 #6110 53C55
3-dimensional Riemannian manifolds satisfying $R(X, Y) \cdot R = 0$. *Hokkaido Math. J.* 3 (1974), 256-261. (K. Yano) 51 #13924 53C20
Riemannian manifolds of nullity index zero and curvature tensor-preserving transformations. *J. Math. Soc. Japan* 26 (1974), 258-271. (G. Vranceanu) 49 #606 53B20

- The spectrum of the Laplacian for 1-forms. *Proc. Amer. Math. Soc.* **45** (1974), 5-129. (Samuel I. Goldberg) **49** #8063 58G15 (53C20)
- Infinitesimal isometries on the tangent bundles with complete lift metric. *Tensor (S.)* **28** (1974), 139-144. (R. L. Bishop) **51** #11381 53C50
- Deformations of Riemannian metrics on 3-dimensional manifolds. *Tôhoku Math. J.* **27** (1975), no. 3, 437-444. (Paul E. Ehrlich) **55** #9157 58E05 (53C25, 58H05)
- Orthonormal frames on 3-dimensional Riemannian manifolds. *J. Differential Geometry* **11** (1976), no. 3, 467-474. (F. Brickell) **56** #6566 53C20
- C^∞ -approximation of continuous ovals of constant width. *J. Math. Soc. Japan* **28** (1976), no. 2, 384-395. (John Bolton) **53** #1489 53C45 (52A10)
- Killing vectors and geodesic flow vectors on tangent bundles. *J. Reine Angew. Math.* **282** (1976), 162-171. (J. R. Vanstone) **53** #9079 53C20
- Some system of differential equations on Riemannian manifolds and its applications to contact structures. *Tôhoku Math. J. (2)* **29** (1977), no. 1, 125-136. (J. R. Vanstone) **55** #9460 53C25
- Yüküchi On the analyticity of the kernel of a class of convolution transform. Collection of articles dedicated to Gen-ichi S. Sunouchi on his sixtieth birthday. *Tôhoku Math. J. (2)* **24** (1972), 331-345. (I. I. Hirschman, Jr.) **48** #808 44A35 (30A16, 4A10, 44A40)
- Tannoudji, G. See Cohen-Tannoudji, G.
- David A zero-one law for stationary sequences. *Z. Wahrscheinlichkeitstheorie und verw. Gebiete* **30** (1974), 139-148. (Norman Kaplan) **51** #11641 60G10 (60J80)
- Limit theorems for branching processes in a random environment. *Ann. Probability* (1977), no. 1, 100-116. (Norman Kaplan) **54** #14135 60J80
- Normalizing constants for branching processes in random environments (B.P.R.E.). *Stochastic Processes Appl.* **6** (1977/78), no. 2, 201-211. (Alan Agresti) **57** #10840 0J80
- A new proof of Kesten's theorem on the growth of the sum of independent and identically distributed random variables. *Z. Wahrscheinlichkeitstheorie und verw. Gebiete* **39** (1977), no. 3, 231-234. (H. H. Stratton) **56** #16749 60F15 (60G50)
- Stephens M. A probabilistic interpretation of Eulerian numbers. *Duke Math. J.* **40** (1973), 717-722. (Bernard Harris) **49** #4802 (E 50 #1907) 05A99 (60C05)
- (with Metropolis, N.; Rota, Gian-Carlo) Significance arithmetic: the carrying algorithm. *J. Combinatorial Theory Ser. A* **14** (1973), 386-421. (R. L. Goodstein) **48** #222 10A30 (02E10)
- On some numbers related to the Bell numbers. *Canad. Math. Bull.* **17** (1974/75), no. 3, 733-738. (R. C. Mullin) **52** #2907 05A10
- (with Zuker, Michael) On a unimodal sequence of binomial coefficients. *Discrete Math.* **9** (1974), 79-89. (Harald Scheid) **50** #12746 05A10
- Corrigenda to: "A probabilistic interpretation of Eulerian numbers" (Duke Math. J. **40** (1973), 717-722). *Duke Math. J.* **41** (1974), 689. (Bernard Harris) **50** #1907 05A99 (60C05)
- An application of a generalization of Terquem's problem. *Canad. Math. Bull.* **18** (1975), no. 5, 769-770. (R. C. Read) **53** #10601 05A15
- Generating functions and generalized alternating subsets. *Discrete Math.* **13** (1975), 1, 55-65. (H. Gupta) **51** #10116 05A15 (10A99)
- On alternating subsets of integers. *Fibonacci Quart.* **13** (1975), no. 4, 325-328. (S. Stein) **52** #3042 10A40 (05B10)
- Permutations and successions. *J. Combinatorial Theory Ser. A* **21** (1976), no. 2, 96-202. (D. P. Roselle) **54** #10034 05A15
- (with Zuker, Michael) On a unimodal sequence of binomial coefficients. II. *J. Combinatorial Information Syst. Sci.* **1** (1976), no. 3-4, 81-91. (Harald Scheid) **56** #142 05A10
- (with Metropolis, N.) Significance arithmetic: the probability of carrying. *Comput. Math. Appl.* **3** (1977), no. 1, 77-81. (Artenio De Matteis) **56** #17046 65G05 (10A30, 5C10)
- ivic-Miller, Naza On the multipliers of Cesàro summable sequences. (Serbo-Croatian summary) *Akad. Nauka i Umjet. Bosne i Hercegov. Rad. No. 45 Odjel. Prirod. Mat. Nauka Kjn.* **12** (1973), 93-104. (W. Beekmann) **49** #9470 40D15 (40G05)
- On multipliers of some sequence spaces. I, II. (Serbo-Croatian summary) *Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjel. Prirod. Mat. Nauka No. 16* (1976), 49-68, 95-101. (Author's summary) **58** #29571 40D15 (46A45, 47B37)
- é, Daniel Compactification of Stone-Cech and triple associé. *Esquisses mathématiques*, No. 16, Exp. No. 2, 29 pp. *Fac. Sci. Univ. Paris VII, Paris*, 1971. (M. Hušek) **50** #5723 54B30 (18C15)
- Sur les T-espaces simples. *Esquisses mathématiques*, No. 18, Exp. No. 2, i+32 pp. *Fac. Sci. Univ. Paris VII, Paris*, (1972). (A. Császár) **50** #8402 54A05
- Sur les T-espaces simples. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A731-A733. (H. Herrlich) **45** #4342 54A05
- Groupes feuilletés. *Esquisses mathématiques*, No. 20, Exp. No. 3, ii+35 pp. *Fac. Sci. Univ. Paris VII, Paris*, 1973. (P. Molino) **52** #1724 57D30
- Topologie localement connexe associée à une topologie quelconque. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A245-A247. (J. R. Isbell) **48** #7194 54B30
- Connexité locale en paratopologie. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A727-A730. (H. Herrlich) **48** #5026 54F05
- Espaces de Kelley et connexité locale. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 915-917. (H. Herrlich) **50** #11121 54B30
- Connexité locale. Conférences du Colloque sur l'Algèbre des Catégories (Amiens, 1973). *II. Cahiers Topologie Géom. Différentielle* **15** (1974), no. 2, 181-212. (M. Hušek) **54** #11272 54D05
- Produits tensoriels topologiques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A77-A79. (J. R. Isbell) **51** #4133 54B10
- Produits tensoriels topologiques. *Math. Balkanica* **5** (1975), 262-272. (J. B. Cooper) **58** #24166 54B10 (46M05, 54C35)
- Espaces fonctionnels et structures syntopogènes. *Categorical topology (Proc. Conf., Mannheim, 1975)*, pp. 624-634. *Lecture Notes in Math.*, Vol. 540, Springer, Berlin, 1976. (A. Császár) **57** #1390 54A15
- an Si See Do Tan Si
- ky, Mumay Switching effect in prey-predator system. *J. Theoret. Biol.* **70** (1978), no. 3, 263-271. (Author's summary) **58** #26175 92A15
- Tansuki, Robumel (with Kawasaki, Hirokichi) Prey-predator stability. (Japanese) Topological models in biology (Proc. Sympos. Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sûrikaiseikenkyûsho Kôkyûroku No. 252* (1975), 40-47. (Hidenosuke Nishio) **58** #26133 92A05 (58F10)
- Tantaratana, Sawasd (with Thomas, John B.) Relative efficiency of the sequential probability ratio test in signal detection. *IEEE Trans. Information Theory* **IT-24** (1978), no. 1, 22-31. (Seihaku Higuchi) **57** #19063 94A05
- Tantasev, M. V. (with Golubickii, B. M.) The boundedness of the dispersion of "local" estimates in the solution of radiation transfer problems by the Monte Carlo method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 249-252. (E. H. Bareiss) **46** #1267 82.60
- (with Golubickii, B. M.) Local estimates in the Monte Carlo method. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 6, 1374-1379, 1625. (Authors' summary) **57** #7935 65C05
- Tanturri, Giuseppe Sistemi lineari di proiettività binarie e loro classificazione. *Atti. Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **106** (1972), 593-603. (J. Yaqub) **48** #4904 50D25
- Rappresentazione delle proiettività tra forme di seconda specie e loro fasci. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **106** (1972), 639-646. (J. Yaqub) **48** #4905 50D25
- Tanušev, Miroslav (with Stojanov, Ćordan; Mirazčički, Ivan; Ignatov, Cvetan) ★Ръководство за упражнения по теория на вероятностите. (Bulgarian) [Exercise manual in probability theory] *Izdat. Nauka i Izkustvo, Sofia*, 1976. 303 pp. (Publisher's description) **58** #18631 60-01
- Tanyi, G. E. Sur les points critiques de la fonctionnelle d'énergie élastique classique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 13, A867-A869. (Author's summary) **58** #24338 58E05
- Tanzi Cattabianchi, Maria Caratterizzazione degli operatori integrali di Fredholm invarianti rispetto a gruppi di congruenze nel piano. (English summary) *Riv. Mat. Univ. Parma (4)* **3** (1977), 233-245 (1978). (Author's summary) **58** #30445 47B30
- hoang van Tao See Hoang Van Tao
- T'ao, Jên Chi Invertible linear finite automata. *Sci. Sinica* **16** (1973), 564-581. (I. M. Havel) **55** #12370 94A30
- Tao, L. C. (with Dutt, J. E.; Lin, T. K.) New approximations to familiar functions. *Math. Comp.* **27** (1973), 939-942. (Authors' summary) **48** #3223 65D15
- Tao, L. N. (with Huilgol, Raja R.) Stokes' paradox in second-order fluids. *Phys. Fluids* **17** (1974), 1468. (E. A. Boyd) **50** #11976 76.35
- Tapaswi, P. K. (with Roy, A. B.) Mathematical simulation of RNA and protein synthesis rhythm during embryogenesis based on a simplified mathematical model. *Cybernetica* **21** (1978), no. 2, 141-154. (H. A. DeKleine) **58** #26147 92A05
- Tapfer, J. Solution of a completion model of a production system. (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ. No. 23* (1971), 3-17. (M. Mañás) **45** #9670 90B30
- Tapia, M. (with Bollman, Dorothy) On the recursive unsolvability of the provability of the deduction theorem in partial propositional calculi. *Notre Dame J. Formal Logic* **13** (1972), 124-128. (J. Corcoran) **46** #3288 02G05 (02B05)
- Tapia, Richard A. (with Golomb, Michael) The metric gradient in normed linear spaces. *Numer. Math.* **20** (1972/73), 115-124. (A. Buraczewski) **48** #2758 65G05
- (with McCormick, Garth P.) The gradient projection method under mild differentiability conditions. *SIAM J. Control* **10** (1972), 93-98. (J. Cullum) **47** #8121 90C30
- A characterization of inner product spaces. *Bull. Amer. Math. Soc.* **79** (1973), 530-531. (T. T. Long) **47** #3964 46C05
- A characterization of inner product spaces. *Proc. Amer. Math. Soc.* **41** (1973), 569-574. (John R. Giles) **49** #5791 46C05 (46B05)
- (with Goldstein, Allen) Kantorovich estimates for some convex programs. *SIAM J. Control* **11** (1973), 375-377. (S. Zlobec) **48** #1004 49D45 (46N05)
- A general approach to Newton's method for Banach space problems with equality constraints. *Bull. Amer. Math. Soc.* **80** (1974), 355-360. (G. H. Meyer) **50** #3571 65K05
- A stable approach to Newton's method for general mathematical programming problems in R^n . Collection of articles dedicated to Magnus R. Hestenes. *J. Optimization Theory Appl.* **14** (1974), 453-476. (J. E. Dennis, Jr.) **50** #3572 (E 54 #1606) 65K05 (90C05)
- (with Gragg, William B.) Optimal error bounds for the Newton-Kantorovich theorem. *SIAM J. Numer. Anal.* **11** (1974), 10-13. (J. E. Dennis, Jr.) **49** #8334 65J05
- Newton's method for problems with equality constraints. *SIAM J. Numer. Anal.* **11** (1974), 174-196. (J. J. Moré) **50** #1087 49D15 (65J05)
- Newton's method for optimization problems with equality constraints. *SIAM J. Numer. Anal.* **11** (1974), 874-886. (K. Swarup) **51** #9488 65K05
- (with de Montricher, G. F.; Thompson, James R.) Nonparametric maximum likelihood estimation of probability densities by penalty function methods. *Ann. Statist.* **3** (1975), no. 6, 1329-1348. (Wolfgang Wertz) **52** #4516 62G05
- Errata: "A stable approach to Newton's method for general mathematical programming problems in R^n " (J. Optimization Theory Appl. **14** (1974), 453-476). *J. Optimization Theory Appl.* **16** (1975), nos. 5-6, 571. (Author's summary) **54** #1606 65K05
- (with Byrd, R. H.) An extension of Curry's theorem to steepest descent in normed linear spaces. *Math. Programming* **9** (1975), no. 2, 247-254. (I. Marušciac) **52** #6536 49D10 (46G05)
- (with McCarthy, Mary Anne) Computable a posteriori L_∞ -error bounds for the approximate solution of two-point boundary value problems. *SIAM J. Numer. Anal.* **12** (1975), no. 6, 919-937. (R. Manohar) **54** #4117 65L10
- (with Scott, David W.; Thompson, James R.) Kernel density estimation revisited. *Nonlinear Anal.* **1** (1976/77), no. 4, 339-372. (Wolfgang Wertz) **58** #24698 62G05
- Diagonalized multiplier methods and quasi-Newton methods for constrained optimization. *J. Optimization Theory Appl.* **22** (1977), no. 2, 135-194. (Marco Gaviano) **56** #17833 90C30
- Tapiero, Charles S. Optimal simultaneous replacement and maintenance of a machine with process discontinuities. (Loose French summary) *Rev. Française Informat. Recherche*

- Opérationnelle* 5 (1971), no. V-2, 79-86. (D. F. Lawden) 48 #7943 90B25
Optimal capacity expansion with storage output. *Cahiers Centre Études Recherche Opér.* 14 (1972), 159-168. (Ion Dobre) 49 #2068 90B30
(with Soliman, M. A.) Multi-commodities transportation schedules over time. *Networks* 2 (1972), 311-327. (W.-K. Chen) 47 #4611 90B05
K-class assignments. (Loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle* 6 (1972), no. V-3, 41-44. (Editors) 48 #3816 05C99 (90B05)
Optimum price switching. *Internat. J. Systems Sci.* 5 (1974), 83-96. (Charles R. Johnson) 48 #10436 90A05
(with Bensoussan, A.; Nissen, Georges) Optimum inventory and product quality control with deterministic and stochastic deterioration—an application of distributed parameters control systems. *IEEE Trans. Automatic Control* AC-20 (1975), 407-412. (Andrew P. Sage) 55 #2087 90B05
(with Starr, Martin K.) Linear breakeven analysis under risk. *Operational Res. Quart.* 26 (1975), no. 4, part 2, 847-856. (Hans Bühlmann) 54 #6926 90B30
On-line and adaptive optimum advertising control by a diffusion approximation. *Operations Res.* 23 (1975), no. 5, 890-907. (Leonard J. Mirman) 55 #10131 93E10 (90A15)
Optimization of information measurement with inventory applications. (French summary) *INFOR—Canad. J. Operational Res. and Information Processing* 15 (1977), no. 1, 50-61. (Author's summary) 56 #8148 93E20 (90B05)
Optimum advertising and goodwill under uncertainty. *Operations Res.* 26 (1978), no. 3, 450-463. (From the summary) 57 #18800 90B99 (93E20)
See also *Proceedings: International Meeting of the Institute of Management Sciences*, 54 #2161 and *Applied optimal control*, 58 #20281
- Tapiero, R.** (with Bourgeat, A.) Calcul de correcteurs pour un problème de couche limite provenant de la physique du plasma. *Singular perturbations and boundary layer theory (Proc. Conf., École Centrale, Lyon, 1976)*, pp. 39-49. *Lecture Notes in Math.*, Vol. 594, Springer, Berlin, 1977. (G. Papanicolaou) 57 #18663 82.35 (35B25)
- Tapley, B.** See *Control in space*, 48 #8041
- Tapley, Byron D.** (with Williamson, W. E.) A modified perturbation method for solving optimal control problems with state variable inequality constraints. *AIAA J.* 9 (1971), 2222-2228. (K. P. Dabke) 47 #1288 65K05
(with Choe, Chul Y.) New method for propagating the square root covariance matrix in triangular form. *AIAA J.* 13 (1975), 681-683. (Stephen Barnett) 51 #9917 93E10
(with Inaba, Hiroshi) Generalized random processes: a theory and the white Gaussian process. *SIAM J. Control* 13 (1975), 719-735. (R. Jajte) 51 #11646 60G20
(with Choe, Chul Y.) An algorithm for propagating the square-root covariance matrix in triangular form. *IEEE Trans. Automatic Control* AC-21 (1976), no. 1, 122-123. (V. N. Igolkin) 52 #16807 93E10
(with Hull, D. G.) Square-root variable-metric methods for minimization. *J. Optimization Theory Appl.* 21 (1977), no. 3, 251-259. (Nobuo Sannomiya) 56 #10978 90C30
See also *Long-time predictions in dynamics*, 54 #7157
- Tappe, Jürgen** Zur modularen Darstellungstheorie von Krantzprodukten. *Mitt. Math. Sem. Giessen* No. 112 (1974), 1-18. (L. Dornhoff) 50 #4723 20C15
(with Reimers, Ratje) Autoclinisms and automorphisms of finite groups. *Bull. Austral. Math. Soc.* 13 (1975), no. 3, 439-449. (Richard Davitt) 53 #3109 20D45
Blocks and defect groups of monomial groups. *Manuscripta Math.* 17 (1975), no. 3, 227-252. (Ronald C. King) 52 #10865 20C20
(with Meier, Nils) Ein neuer Beweis der Nakayama-Vermutung über die Blockstruktur symmetrischer Gruppen. *Bull. London Math. Soc.* 8 (1976), no. 1, 34-37. (H. K. Farahat) 53 #10907 20C30
(with Kerber, Adalbert) On permutation characters of wreath products. *Discrete Math.* 15 (1976), no. 2, 151-161. (Ronald C. King) 53 #13373 20C15
Brauer correspondence and characters of height zero of monomial groups. *Manuscripta Math.* 18 (1976), no. 4, 399-416. (J. L. Alperin) 53 #8221 20C20
On isoclinic groups. *Math. Z.* 148 (1976), no. 2, 147-153. (Thomas Laffey) 54 #5348 20D99
Über die Charaktere und die Zerlegungszahlen der Weyl-Gruppen B_n und D_n . *Mitt. Math. Sem. Giessen Heft* 121 (1976), 39-57. (P. Fong) 57 #12673 20C30
On the blocks of certain subgroups of monomial groups. *Arch. Math. (Basel)* 28 (1977), no. 1, 25-33. (G. D. James) 55 #3054 20C15
Irreducible projective representations of finite groups. *Manuscripta Math.* 22 (1977), no. 1, 33-45. (A. O. Morris) 57 #6172 20C25
- Tappert, Frederick** Diffractive ray tracing of laser beams. *J. Opt. Soc. Amer.* 66 (1976), no. 12, 1368-1373. (Kishin Mariwalla) 56 #17523 78.35
The parabolic approximation method. *Wave propagation and underwater acoustics (Workshop, Mystic, Conn., 1974)*, pp. 224-287. *Lecture Notes in Phys.*, Vol. 70, Springer, Berlin, 1977. (From the text) 57 #14891 76.41 (86.41)
See also *Nonlinear wave motion*, 49 #790
- Taqqu, Murad S.** Weak convergence to fractional Brownian motion and to the Rosenblatt process. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 31 (1974/75), 287-302. (G. K. Eagleson) 53 #4164 60B10
Law of the iterated logarithm for sums of non-linear functions of Gaussian variables that exhibit a long range dependence. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 40 (1977), no. 3, 203-238. (W. L. Steiger) 57 #10786 60F15 (82.60)
- Taqvi, Z. A.** (with Bhatnagar, K. B.) Periodic orbits of collision in the three-dimensional circular restricted problem of four bodies. *Jñānabha Sect. A* 6 (1976), 33-44. (Editors) 58 #32164a 70.34
(with Bhatnagar, K. B.) Periodic orbits of collision in the three-dimensional restricted problem of three bodies. *Jñānabha Sect. A* 6 (1976), 81-93. (Editors) 58 #32164b 70.34
- de Tar, C. E.** The perturbative Reggeon calculus: building Reggeon cuts from Reggeon tree graphs. *Structural analysis of collision amplitudes/Analyse structurale des amplitudes de collision (Lectures, École d'Été Phys. Théor., Les Houches, 1975)*, pp. 565-592. North-Holland, Amsterdam, 1976. (P. Achuthan) 57 #14999 81.30
- Tar, M. M.** Certain sufficient conditions for the analyticity of functions of a complex variable. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk URSR Ser. A* 1971, 212-215, 284. (R. Kühnau) 45 #510 30A02
Conditions for the analyticity of functions of a complex variable. (Russian) *Ukr. Mat. Ž.* 25 (1973), 73-80, 142. (K. Szilárd) 47 #3642 30A02
- Tarafdar, E.** (with Chaudhuri, A. K.) On the absolute frontier of a certain class of n -dimensional spaces and generalised Rolle's theorem. *Indian J. Mech. Math.* 6 (1974), 69-76. (R. F. Dickman, Jr.) 49 #7981 54D30
Improjective operators and ideals in a category of Banach spaces. *J. Austral. Math. Soc.* 14 (1972), 274-292. (S. Goldberg) 47 #4045 47B05 (46M10, 47A99)
On further properties of improjective operators. *J. Austral. Math. Soc.* 14 (1972), 352-363. (S. Goldberg) 47 #4046 47B05 (46M10, 47A99)
A note on the bounded linear operators on the spaces l^p and L_p . *J. Math. Anal. Appl.* 40 (1972), 683-686. (P. Saphar) 47 #7512 47B37 (46A45)
An approach to fixed-point theorems on uniform spaces. *Trans. Amer. Math. Soc.* 191 (1974), 209-225. (S. Swaminathan) 50 #14725 54H25 (47H10)
(with Vybörny, R.) Fixed point theorems for condensing multivalued mappings on a locally convex topological space. *Bull. Austral. Math. Soc.* 12 (1975), 161-170. (S. Swaminathan) 52 #4048 47H10
Some fixed-point theorems on locally convex linear topological spaces. *Bull. Austral. Math. Soc.* 13 (1975), no. 2, 241-254. (Kok-Keong Tan) 53 #8979 47H10
On a fixed-point theorem on locally convex linear topological spaces. *Math. Z.* 82 (1976), no. 4, 341-344. (R. C. O'Brien) 55 #1163 47H10
Extensions of almost diffuse, countably almost diffuse and c_0 -operators. *Math. Debrecen* 23 (1976), no. 1-2, 115-117. (Egert Briem) 55 #8877 47B37
On nonlinear variational inequalities. *Proc. Amer. Math. Soc.* 67 (1977), no. 1, 95-98. (William E. Fitzgibbon) 57 #7267 47H05 (47H10)
(with Husain, Taqdir) Duality in fixed point theory of multivalued mappings and applications. *J. Math. Anal. Appl.* 63 (1978), no. 2, 371-376. (Bal Kishan Mishra) 58 #7244 47H10
- Tarakanov, A. N.** Real and complex "boost" transformations in arbitrary pseudo-Euclidean spaces. (Russian. English summary) *Teoret. Mat. Fiz.* 28 (1976), no. 3, 352-359. (Author's summary) 58 #7516 53C50 (81.53)
Green's functions for $(p+q)$ -dimensional equations of Klein-Gordon type. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1976, no. 5, 85-91. (Author's summary) 58 #14895 83.35
- Tarakanov, V. E.** The maximal depth of arbitrary classes of $(0, 1)$ -matrices and some applications. (Russian) *Mat. Sb. (N.S.)* 92(134) (1973), 472-490, 504. (A. Lee) 49 #2425 05B20
(with Čistjakov, V. P.) The cycle structure of random permutations. (Russian) *Sb. (N.S.)* 96(138) (1975), no. 4, 594-600, 646. (G. O. H. Katona) 52 #1823 60A15 (05A15)
(with Bolotnikov, Ju. V.; Sačkov, V. N.) Asymptotic normality of certain quantities that are related to the cyclic structure of random permutations. (Russian) *Mat. Sb. (N.S.)* 99(141) (1976), no. 1, 121-133, 136. (T. C. Brown) 54 #3793 60C05 (05A15)
(with Bolotnikov, Ju. V.) Limit distributions in problems on the cycles of random permutations. (Russian) *Combinatorial and asymptotic analysis*, No. 2 (Russian), 62-68. *Krasnojarsk. Gos. Univ., Krasnojarsk*, 1977. (Editors) 58 #31337 60C05 (05Axx)
- See also *Grossman, I.; et al.*, 50 #4711 and *Kaufmann, A.*, 51 #10110
- Taran, M. D.** (with Favorskii, A. P.) Numerical modeling of the two-dimensional diffusion of a magnetic field in a medium with inhomogeneous electrical conduction. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No.* 51 (1978), 1-10. (Authors' summary) 58 #25418 78.65
- Taran, V. A.** (with Emel'janov, S. V.; Bermant, M. A.; Kostyleva, N. E.; Utkin, V. I.) Design principles in variable structure systems for control of non-stationary plants. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automat. Control (IFAC), London, 1966)*, Vol. 1, p. 76, Paper 40C, 7 pp. *Inst. Mech. Eng. London*, 1967. (Authors' summary) 51 #9899 93C50
(with Emel'janov, S. V.; Utkin, V. I.; Kostyleva, N. E.; Šubladze, A. M.; Ezdovskii, V. B.; Dubrovskii, E. N.) Теория систем с переменной структурой. (Russian) [Theory of systems with variable structure] Edited by S. V. Emel'janov. *Izdat. "Nauka" Moscow*, 1970. 592 pp. (J. Erschler) 45 #3106 93C05
Conditions for the existence and uniqueness of an optimal linear model of dynamic objects. *Automat. i. Telemekh.* 1970, no. 11, 105-115. (Russian. English summary translated as *Automatic Remote Control* 1970, no. 11, 1811-1820 (1971). (Author's summary) 46 #1383 93A15
(with Rusanov, A. M.) The parameter identification problem. (Russian) *Mate. Sem. Kibernet. Vyp.* 49 (1972), 22-32, 39. (From the authors' text) 57 #11893C15 (93B30)
(with Kubincev, G. M.) The problem of automatic matching of plane images. *Automat. i. Telemekh.* 1974, no. 1, 82-89. (Russian); translated as *Automatic Remote Control* 1974, no. 1, part 1, 74-83. (Authors' summary) 58 #3768a 68A45
(with Kubincev, G. M.) The problem of automatic matching of plane images. *Automat. i. Telemekh.* 1974, no. 2, 37-45. (Russian); translated as *Automatic Remote Control* 1974, no. 2, part 1, 203-210. (Authors' summary) 58 #3768b 68A45
(with Volkov, G. M.; Rusanov, A. M.) The sensitivity and stability of an econometric model. (Russian) *Ekonom. i. Mat. Metody* 11 (1975), no. 5, 994-998. (Editors) 57 #90A15
(with Kakabadze, D. P.) A modification of a random search algorithm. (Russian. Georgian and English summaries) *Sakharth. SSR Mecl. Akad. Moambe* 88 (1977), 2, 321-324. (V. D. Dimitrov) 58 #20746 93E25
See also *Proceedings: International Congress of the International Federation of Automatic Control (IFAC)*, 51 #12360c
- Taran, V. D.** See *Proceedings: International Conference on Nonlinear Oscillations*, 47 #8968
- Tarancenko, E. G.** A queueing system with a constraint on the sojourn time of arrival. (Russian) *Adapt. Sistemy Avtomat. Upravlenija Vyp.* 2 (1974), 115-120, 153. (Author's summary) 55 #4430 60K25
- Tarancev, B. I.** See *Cybernetics and diagnostics*, 49 #12115

- R. G. (with Elderkin, R. H.; Berkowitz, D. P.; Farris, F. A.; Gunn, C. F.; Kernell, F. J.; Kass, S. N.; Mansfield, F. I.) On the steady state or an age dependent model for malaria. *Nonlinear systems and applications (Proc. Internat. Conf., Rio. Texas, Arlington, Tex., 1976)*, pp. 491-512. Academic Press, New York, 1977. (H. I. Freedman) **58** #4446 92A15
- u, A. Ju. (with Razumov, A. V.) Scattering on a nonrelativistic particle in strong coupling theory. (Russian. English summary) *Teoret. Mat. Fiz.* **35** (1978), no. 3, 2-321. (Authors' summary) **58** #20023 81.47
- u, N. A. (with Umbetžanov, D. U.) On the question of the reducibility of a certain system of partial differential equations with identical right hand side. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1972**, no. 3, 76-80. (L. Pintér) #622 35F20
- (with Umbetžanov, D. U.) A certain system of partial differential equations, all with the same principal part. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1973**, no. 1, 67-72, 94. (A. Haimovici) **52** #980 35F05
- ov, V. B. (with Emec, Ju. P.) Group properties and invariant solutions of the electric field equations in the case of nonlinear Ohm laws. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1972**, no. 3, 28-36. (N. D. Kazarinoff) **46** #10303 78.35 (35A30)
- rtini, A. (with Locatelli, Arturo) Trajectory insensitivity conditions under parameter dependence of the initial state. *Systems Sci.* **3** (1977), no. 3, 315-320. (Authors' summary) **58** #15414 93B35
- on, A. G. See *Studies in the theory of functions of a complex variable and its applications*, **48** #5481 and *Mixed boundary value problems and questions of mathematical simulation*, **53** #2570
- ov, I. E. (with Borisenko, A. I.) ★ Векторный анализ и начала тензорного исчисления. (Russian) [Vector analysis and the elements of the tensor calculus] Fourth edition. Izdat. Har'kov. Univ., Kharkov, 1972. 255 pp. (Editors) **53** #1452 53A45 (26-01)
- Stability of the dividing surface between conducting magnetizable media. (Russian) *Radromeh. (Kiev) Vyp.* **30** (1974), 79-86, 96. (From the author's text) **56** #17443 6.35
- oščenko, N. S. (with Stepan'janc, G. A.) Structure of control rules ensuring asymptotic stability of control systems with an unstable object. *Dokl. Akad. Nauk SSSR* **193** (1970), 774-776 (Russian); translated as *Soviet Physics Dokl.* **15** (1970/71), 17-1718. (I. H. Mufti (Zbl **215**, 599)) **50** #14435 49E20
- enko, F. L. (with Dmitriev, Ju. G.; Koškin, G. M.; Simahin, V. A.; Šulenin, V. P.) ★ Непараметрическое оценивание функционалов по стационарным выборкам. (Russian) [Nonparametric estimation of functionals from stationary samples] Izdat. Tomsk. Gos. Univ., Tomsk, 1974. 91 pp. (errata insert) (Š. A. Hašimov) **58** #8005 2G05
- enko, F. P. (with Medvedev, G. A.) Certain criteria of optimal quantization of continuous signals. (Russian) *Trudy Sibirsk. Fiz.-Tehn. Inst. No. 47* (1965), 155-162. (Authors' summary) **45** #4883 94A05
- (with Dmitriev, Ju. G.) The estimation of functionals of a probability density and its derivatives. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **18** (1973), 62-668. (E. Nadaraja) **50** #11612 62G05
- (with Dmitriev, Ju. G.) A class of nonparametric estimators for nonlinear functionals of a density. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **19** (1974), 404-409. (E. Nadaraja) **50** #11613 62G05
- On interpretation of statistics as estimates of functionals. *Proceedings of the IEEE-USSR Joint Workshop on Information Theory (Moscow, 1975)*, pp. 212-215. Inst. Electr. Electron. Engrs., New York, 1976. (E. Nadaraja) **57** #1755 62G05
- enko, G. S. (with Stojancev, V. T.) Certain aspects of the construction of search algorithms that are optimal with respect to accuracy. (Russian) *Problems of random search*, **2** (Russian), pp. 167-173, 222. Izdat. "Zinatne", Riga, 1973. (V. F. Dem'janov) **1** #15000 90C30
- Convergence of an adaptive algorithm for random search. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 88-90. (Author's summary) **58** #15592 93E10 (90B40)
- Convergence of relaxation algorithms of a random search of the type "with account". (Russian) *Problemy Slučajn. Poiska No. 6 Zadači Optimizacii* (1978), 130-146, 32. (Author's summary) **58** #26497 93E25
- See also *Questions of the reliability of discrete automata*, **47** #6136
- enko, Ju. S. (with Zenkin, O. V.; Mezenceva, T. V.; Bugrov, L. M.) A calculation of the critical frequencies for the wave E_{11} in strip lines with the use of R-functions. (Russian) *Differential equations and their applications (Russian)*, pp. 55-59, 154. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1971. **49** #4436 78.33
- enko, L. N. (with Daniljuk, I. I.) A certain method for the numerical solution of axially symmetric flows with free boundary. (Russian) *Ukrain. Mat. Ž.* **23** (1971), 723-732. (I. O. Bohachevsky) **46** #1060 65E05 (76.30)
- enko, N. V. On the problem of minimizing the norm of the final state of an object in nonlinear control system. (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 109-116. (N. N. Petrov) **47** #2458 49A10 (34H05, 93C15)
- (with Gabasov, R. F.) Necessary high-order conditions of optimality for discrete systems. *Automat. i Telemekh.* **1971**, no. 1, 58-65 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 1, part 1, 50-57. (Constantin Vîrsan) **46** #6882 93C55
- (with Gabasov, R. F.; Kirillova, F. M.; Sročko, V. A.) Conditions for high-order optimality. I. Derivation of singular controls (review). *Automat. i Telemekh.* **1971**, no. 5-21 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 5, part 1, 689-704. (Editors) **46** #767a 49C05
- (with Gabasov, R. F.; Kirillova, F. M.; Sročko, V. A.) Conditions of high-order optimality. II. Necessary conditions of high-order optimality (review). *Automat. i Telemekh.* **1971**, no. 6, 5-24 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 6, part 1, 857-875. (Editors) **46** #767b 49C05
- (with Gabasov, R. F.; Kirillova, F. M.; Sročko, V. A.) Conditions for high-order optimality. III. Sufficient conditions for high-order optimality discrete systems (review). *Automat. i Telemekh.* **1971**, no. 7, 5-34 (Russian. English summary); translated as *Automat. Remote Control* **32** (1971), no. 7, part 1, 1013-1040. (Editors) **46** #767c 49C05
- (with Gorohovik, S. Ja.) On transversality conditions in the problem of optimization with singular control. (Russian) *Differencial'nye Uravnenija* **8** (1972), 2244-2247. (J. Kučera) **47** #4101 49B10 (34H05)
- (with Aščepkov, L. T.) On the conditions for second order optimality in discrete and continuous systems and connections between them. (Russian) *Upravljajemye Sistemy No. 16* (1977), 11-19, 81. (Authors' summary) **58** #33331 93C55
- Tarasenko, V. P. (with Korneičuk, V. I.; Teslenko, A. K.) Synthesis of combination schemes in a certain class of multivalued algebras. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* **1972**, no. 5, 9-13. (I. M. Havel) **47** #8202 94A20
- (with Korneičuk, V. I.; Žabin, V. I.) A method for the fast multiplication of numbers that are represented by a sequential code. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* **1975**, no. 5, 82-86. (Authors' summary) **58** #8471 68A10
- (with Žabin, V. I.; Korneičuk, V. I.) A method for the division of numbers in a redundant representation. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* **1977**, no. 3, 81-85, 95. (Costică Cazacu) **57** #18231 68A20
- (with Korneičuk, V. I.; Teslenko, A. K.) A study of the complexity of the realization of functions on a one-dimensional cascade of modules. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* **1977**, no. 5, 5-11, 92. (Authors' summary) **58** #9850 94A20
- (with Korneičuk, V. I.; Teslenko, A. K.) A method for the construction of combinational circuits on modules of the same type. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 2, 30-34. (Authors' summary) **58** #9849 94A20
- See also *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)
- Tarasenko-Zelenaja, L. I. See *Mathematical simulation and the theory of electrical circuits*, **48** #3287
- Tarasnik, A. F. Estimation of the parameters of the transfer of a diffusion process. (Russian) *Cybernetics (Proc. Sem., Donetsk, 1969)*, No. 1 (Russian), pp. 66-77. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (A. Dorogovcev (RŽMat **1970** #6 V217)) **45** #9388 60J60
- The asymptotic normality of stochastic integrals and estimates of the coefficient of diffusion process transfer. (Russian) *Mathematical physics*, No. 8 (Russian), pp. 149-163. *Naukova Dumka, Kiev*, 1970. (A. Ja. Dorogovcev) **45** #4523 60H05
- Statistical problems for a certain class of stochastic differential equations. (Russian) *Mathematical physics*, No. 10 (Russian), pp. 91-99. *Naukova Dumka, Kiev*, 1971. (Petr Mandl) **46** #6461 60H10 (62M99)
- An estimate of the parameters of a certain stationary process by the maximal likelihood method. (Russian) *Mathematical physics*, No. 9 (Russian), pp. 123-131. *Naukova Dumka, Kiev*, 1971. (A. Ja. Dorogovcev) **45** #4567 62M10
- Certain limit theorems for stochastic integrals. (Russian) *Theory of random processes*, No. 1, (Russian), pp. 119-133, 140. Izdat. "Naukova Dumka", Kiev, 1973. (D. Kannan) **51** #4382 60H05 (60F05)
- See also *Theory of stochastic processes*, **50** #3286
- Tarasov, B. P. (with Kuliš, E. N.; Sinica, M. A.) Optimization of the accuracy and reliability of the functional elements of automated control systems. (Russian) *Točn. i Nadežn. Kibernet. Sistem No. 1* (1973), 104-107, 136. **50** #4049 93C99
- Tarasov, B. V. On a class of inert semigroup rings. (Russian) *Mat. Zametki* **22** (1977), no. 3, 453-463. (I. S. Ponizovskii) **58** #965 20M25
- Tarasov, G. P. (with Kočnev, V. L.) Construction of suboptimal scheduling plans by the use of directed search. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 4, 46-49. (Marcel Rădulescu) **47** #6296 90B35
- Transformations of Markov random processes and the modification of a Monte Carlo method for the solution of a radiation transport equation. (Russian) *Izv. Tomsk. Politehn. Inst.* **277** (1977), 32-38, 199. (Author's summary) **58** #32723 82.65 (65C05)
- Tarasov, Ju. A. See *Methods and models of control*, **50** #12536
- Tarasov, Ju. I. (with Anisimov, V. I.) Finding determinants with the aid of forming network sets. (Russian. English summary) *Teoret. Elektrotehn. No. 20* (1976), 3-14, 159. (Authors' summary) **58** #31765 65F05
- Tarasov, O. V. (with Kalluš, R. E.; Tjutin, I. V.) One-loop finiteness of quantum gravity off mass shell. *Nuclear Phys. B* **137** (1978), no. 1-2, 145-163. (Authors' summary) **57** #18714 83.53
- Tarasov, R. P. (with Varava, V. P.; Eršov, E. I.) A certain equation for the trajectories in light guides with variable refractive index. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 4, 943-955, 1085. (A. S. Alekseev) **54** #14568 78.34
- Ray equations for arbitrarily curved cylinders with refractive index varying according to the cross-section, and some cases of their integration. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 6, 1539-1550, 1628. (S. Kaliski) **56** #7494 78.35
- A method for the numerical solution of a class of operator equations of the first kind. (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 10, 1804-1814, 1907. (From the author's text) **57** #1881 65J05
- (with Bakaev, N. Ju.) Semigroups, and a method for the stable solution of the Abel equation. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 1, 3-9, 236. (W. Timmermann) **57** #7252 47D05 (45E10)
- Tarasov, V. A. A priori estimates of the first derivatives of the solutions of the exterior Dirichlet problem for quasilinear parabolic equations. (Russian) Questions of modern mathematics and methods of teaching it at institutions of higher learning. *Leningrad. Gos. Ped. Inst. Učen. Zap.* **404** (1971), 470-480. (From the author's introduction) **55** #10853 35K20
- (with Oskolkov, A. P.) A priori estimates of weighted first derivatives for certain classes of nonuniformly elliptic quasilinear equations in an unbounded domain. (Russian) Boundary value problems of mathematical physics, **7**. *Trudy Mat. Inst. Steklov.* **116** (1971), 152-161, 237. (A. Haimovici) **50** #10530 35J15
- (with Nikiforova, A. V.; Troščev, V. E.) The solution of kinetic equations by the divergence method of characteristics. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 1041-1048, 1087. (R. Zezula) **48** #1635 82.65
- (with Oskolkov, A. P.) The solvability of the Dirichlet problem for certain classes of linear elliptic systems in unbounded domains. (Russian) *Differencial'nye Uravnenija (Rjazan') Vyp.* **8** (1976), 145-161. (Ju. V. Kostarčuk) **57** #871 35J55 (35B45)
- See also *Boundary value problems of mathematical physics*, **50** #2656
- Tarasov, V. F. (with Čanyšev, S. M.) A generalized hypergeometric differential equation and its connection with the Schrödinger and Whittaker equations. (Russian. Kazakh

- summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1970**, no. 6, 50-54. (R. F. Matlak) **45** #5424 33A30
- (with Čanyšev, S. M.) The symmetry of Appell's function. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1970**, no. 6, 55-59. (R. F. Matlak) **45** #5425 33A30
- (with Čanyšev, S. M.) The deduction of Balmer's formula from a generalized hypergeometric differential equation. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1970**, no. 6, 59-62. (R. F. Matlak) **45** #7121 33A30 (81.34)
- (with Naurzbaev, Ž.) Physical integrals with Kummer functions, and the symmetry of Appell functions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1974**, no. 4, 29-36, 86-87. (Z. Janković) **50** #6343 81.33
- (with Naurzbaev, Ž.) Computation of certain relativistic radial integrals by means of Appell functions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1974**, no. 6, 1-9, 89. (Z. Janković) **52** #9874 81.33
- Tarasov, V. G.** A scattering problem for the transport equation. (Russian) *Udrain. Mat. Ž.* **28** (1976), no. 3, 421-425, 432. (Hans Kaper) **54** #4475 82.47
- (with Nižnik, L. P.) The inverse nonstationary scattering problem for a hyperbolic system of equations. (Russian) *Dokl. Akad. Nauk SSSR* **233** (1977), no. 3, 300-303. (J. R. Schulenberg) **56** #12656 35P25 (35L40)
- (with Ostapenko, P. V.) Unicellularity of the integration operator in certain function spaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp* **27** (1977), 121-128, 3. (D. A. Herrero) **57** #1158 47A15
- Tarasov, V. N.** A dynamical model of a production complex with a discontinuous character for the production. (Bulgarian. Russian and English summaries) *Actomat. i Izčisl. Tehn.* **7** (1973), no. 4, 12-20, 2, 3. (D. Obradović) **50** #12213 90B30
- (with Kazeeva, N. I.) A study of the stability of systems of difference equations in the critical case. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9** (1975), no. 4, 27-38, 131-132 (1976). (B. Crstici) **56** #9125 39A10
- Acceleration of convergence in the solution of nonlinear minimax problems. (Russian. English summary) *Vestnik Leningrad. Univ.* **1977**, no. 19 *Mat. Meh. Astronom. vyp.* **4**, 76-79, 148. (Jan Žitko) **57** #14451 65K05
- Tarasov, V. V.** Certain properties of the essential function of k -valued logic. (Russian) *Diskret. Analiz. No.* **20** (1972), 66-78. (A. Salomaa) **47** #8246 (E **50** #12655) 02C05
- Letter to the editors (Diskret. Analiz **20** (1972), 66-78). (Russian) *Diskret. Analiz No.* **21** (1972), 98. (A. Salomaa) **50** #12655 02C05
- On the problem of completeness for systems of functions of the algebra of logic with unreliable realization. (Russian) *Mat. Sb. (N.S.)* **98(140)** (1975), no. 3(11), 378-394, 495. (I. G. Rosenberg) **55** #12340 94A20
- A test for the completeness of not everywhere defined functions of the algebra of logic. (Russian) *Problemy Kibernet. No.* **30** (1975), 319-325. (János Demetrovics) **52** #2819 02C05 (94A20)
- On the synthesis of reliable circuits from unreliable elements. (Russian) *Mat. Zametki* **20** (1976), no. 3, 391-400. (Ju. D. Burtin) **54** #14886 94A20
- Simulation of not everywhere defined functions of the algebra of logic with unreliable realization. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 33-37. (A. Salomaa) **58** #9888 94A20
- Tarasova, L. I.** A theorem on the representation of a certain class of functions. (Russian) *Izv. Vyss. Učebn. Zaved. Matematika* **1977**, no. 3 (178), 113-115. (Wiesław Pleśniak) **57** #3695 41A10
- Tarasova, T. A.** An iterative method for the solution of infinite systems of convex inequalities. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naūn. Centr Akad. Nauk SSSR Vyp. 18 Metody Feier. Tipa v Vypukl. Programirovanii* (1975), 58-61, 99. (J. Abrahm) **58** #8259 65K05
- An iterative method for the solution of a convex programming problem with an infinite system of constraints. (Russian) *Ural. Gos. Univ. Mat. Zap.* **10**, no. 2 *Issled. Sovremen. Mat. Anal.*, 142-151, 218 (1977). (E. G. Gol'shtein) **57** #15457 90C25
- Tarasova, V. P.** Optimal strategies for the search for an approximate global extremum for a certain class of functions. (Russian) *Vychisl. Sistemy No. 67 Ėmpir. Predkazanie i Raspoznavanie Obrazov* (1976), 77-86, 166. (Ja. I. Al'ber) **58** #3452 65K05 (90C30)
- Taratorin, Ju. I.** See **Optimization, Operations research, Bionics**, **48** #1846
- Taratuta, A. S.** (with Gihman, I. I.; Jadrénko, M. I.) Certain models of random fluctuations. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No.* **14** (1971), 36-47. (József Pergel) **46** #10152 62M15
- Taraviras, S.** (with Underhill, J.) Weyl quantisation on a sphere. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 210-216. *Lecture Notes in Phys.*, Vol. **50**, Springer, Berlin, 1976. (From the introduction) **58** #4027 81.22 (58F05)
- Tarazaga, P.** (with Marchi, Ezio) The minimax theorem for continuous games using an elimination procedure. *Internat. J. Game Theory* **6** (1977), no. 2, 115-121. (Guy Cohen) **56** #14763 90D05
- el Tarazi, Mouhamed Mabih See **El Tarazi, Mouhamed Mabih**
- Târcolea, Constantin** Some properties of characteristic functions. (Romanian. French summary) *Stud. Cerc. Mat.* **26** (1974), 763-773. (G. Simboan) **51** #4348 60E05
- Distributions of type L_m . (Romanian. French summary) *Stud. Cerc. Mat.* **27** (1975), no. 1, 115-120. (M. Iosifescu) **52** #1830 60E05
- Some properties of distributions of lattice type. (Romanian. French summary) *Bul. Inst. Politehn. Bucureşti* **38** (1976), no. 1, i, 13-16. (A. Spătaru) **55** #4342 60E05
- Characteristic functionals in linear spaces. (Romanian. French summary) *Bul. Inst. Politehn. Bucureşti* **38** (1976), no. 3, i, 9-14. (A. Spătaru) **55** #6523 60E05
- Some properties of distributions of type L_m . (Romanian. French summary) *Stud. Cerc. Mat.* **28** (1976), no. 2, 251-255. (H. J. Godwin) **53** #11699 60E05
- Properties of characteristic functions in R and of functionals of Hincin type in R^n . (Romanian. French summary) *Bul. Inst. Politehn. Bucureşti Ser. Mec.* **39** (1977), no. 2, 9-12. (Author's summary) **58** #2974 60E05
- Tardieu, J. M.** See **Bouroche, Jean-Marie**, **55** #7298
- Tardiff, Robert M.** Topologies for probabilistic metric spaces. *Pacific J. Math.* **65** (1976), no. 1, 233-251. (H. Sherwood) **54** #11294 54E99
- Tareev, V. P.** (with Andronova-Leontovič, E. A.) On the question of the generation of integral curves from the separatrix cone of a two-dimensional complex dynamical system. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 1277-1280. (E. Le) **47** #7149 34C35
- The generation of complex limit cylinders. (Russian) *Dokl. Akad. Nauk SSSR* (1973), 305-308. (L. Reizišs) **49** #3275 34C35 (34C05)
- Tareeva, E. E.** The C^* -algebra approach to polymorphic phase transitions. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1974), 571-573. (M. E. Mayer) **53** #2237 82.4
- Phase transition with broken space symmetry as the bifurcation of the solution of nonlinear integral equation. (Russian. English summary) *Teoret. Mat. Fiz.* **21** (1973), 343-353. (Author's summary) **58** #8995 82.45
- Tarenjaë, A. H.** (with Kipper, E. Ja.) Estimation of indices of the dynamics of effectiveness of capital investments. (Russian) *Ėkonom. i Mat. Metody* **13** (1977), 1212-1218. (A. A. Piontkovskii) **58** #20304 90A15
- Targhetta, Maria Luisa** (with Castoldi, Luigi; Dolci, Alba) Un criterio "modificato" di MacLaurin e connessi algoritmi di approssimazione numerica su serie. (French summary) *Rend. Sem. Fac. Sci. Univ. Cagliari* **42** (1972), 239-249 (1973). (L. Bal) **51** #765B10
- (with Dolci, Alba) Funzione zeta di Riemann e connesse distribuzioni di probabilità. (English summary) *Rend. Sem. Fac. Sci. Univ. Cagliari* **42** (1972), 25 (1973). (E. Lukacs) **49** #8079 60E05
- (with Cubeddu, C.) Una condizione sufficiente per il teorema di Markov. *Rend. Sem. Fac. Sci. Univ. Cagliari* **45** (1975), no. 3-4, 117-118. (M. Iosifescu) **52** #60F99
- (with Castoldi, Luigi) Una equazione di Volterra in un problema di equilibrio "produzione", "consumi", "giacenze"; ed altre questioni. *Rend. Sem. Fac. Sci. Univ. Cagliari* **45** (1975), no. 3-4, 157-162. (Authors' summary) **55** #9850 90A15
- Sulla stima dei parametri in un miscuglio di distribuzioni. *Rend. Sem. Fac. Sci. Univ. Cagliari* **46** (1976), no. 1-2, 65-70. (J. Tiago de Oliveira) **57** #7854 62F
- (with Castoldi, Luigi; Dolci Raga, A.) Determinazione a posteriori di probabilità delle ipotesi in una classe di problemi di Bayes. (English summary) *Rend. Sem. Fac. Sci. Univ. Cagliari* **46** (1976), no. 1-2, 77-80. (Authors' summary) **57** #17902 62A
- Targönski, György I.** Über die lineare Funktionalgleichung erster Ordnung. *Jber. Dtsch. Math.-Verein.* **73** (1971/72), no. 1, 101-110. (See *RZMat* **1972** #1 B11) 39A1
- Charakterisierung von Operatoren durch Funktionalgleichungen. *Collectanea Mathematica* dedicated to Stanisław Gołb on his 70th birthday, II. *Demonstratio Mathematica* (1973), 861-870 (1974). (Genowefa Majcher) **50** #13952 39A40
- An iteration theoretical approach to the concept of time. (French summary) discussion. *Transformations ponctuelles et leurs applications (Colloq. Internat. CNRS)* **229**, Toulouse, 1973, pp. 259-267, 271. *Éditions Centre Nat. Recherche Sci., Paris*, (Karol Baron) **57** #13278 39A20
- Orbit properties of functions and "pre-Abel" equations. *Ann. Polon. Math.* (1976/77), no. 3, 247-253. (Hiroshi Haruki) **55** #916 39A40
- Einige Anwendungen des Orbitbegriffs von Kuratowski. *Iterationsprobleme* (1977). *Ber. No.* **83**, 16 pp. *Math.-Statist. Sektion, Forschungszentrum Graz, Graz*, (A. Climescu) **58** #23209 39-02
- Targosz, Karolina** Unity of science and art in the work of Johannes Hevelius. (Hungarian. Russian and German summaries) *Kwart. Hist. Nauki i Tech.* **21** (1976), no. 4, 625-635. (Editors) **58** #10071 01A45
- Johann Hevelius et ses démarches pour trouver des mécènes en France. (English summary) *Rev. Histoire Sci. Appl.* **30** (1977), no. 1, 25-41. (M. Kline) **56** #201A45
- Tarieladze, V. I.** (with Čobanjan, S. A.) The complete continuity of the covariance operator. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Moambe* **70** (1973), 273-276. (D. A. Darling) **50** #5881 60B05
- A characterization of the class of covariance operators. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **72** (1973), 529-532. (Schuchat) **49** #7773 46G10 (60B05)
- (with Weron, Aleksander) Gaussian random elements with values in the sequence spaces $l_{(p_n)}$, $0 < p_n < 1$. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Astronom. Phys.* **22** (1974), 1053-1056. (Albert Tortrat) **51** #14241 60G15
- Equivalence of Gaussian measures in Banach spaces. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **73** (1974), 529-532. (Buldigin) **50** #11353 60B05 (60G30)
- (with Gorgadze, Z. G.) Gaussian measures in Orlicz spaces. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **74** (1974), 557-559. (Klimko) **51** #1897 60B05 (28A40)
- (with Muhiĭ Ėl'-Din, M. M.) The convergence of sums of independent random elements in a Fréchet space. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **76** (1974), 33-36. (V. V. Buldigin) **51** #1900 60B10
- (with Čobanjan, S. A.) The characteristic functional of a Gaussian measure. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 6, 1283-1286. (R. M. D) **53** #6713 60G15
- (with Tortrat, A.; Vahanija, N. N.) Prolongements d'une dualité (X, Y) entre espaces vectoriels en une dualité de type (L^q, L^p) . (English summary) *C. R. Acad. Paris Sér. A-B* **284** (1977), no. 24, A1561-A1564. (Authors' summary) **55** #1360B05 (28A40)
- (with Chevet, Simone; Čobanjan, S. A.; Linde, Werner) Caractérisation de certaines classes d'espaces de Banach par les mesures gaussiennes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 12, A793-A796. (Authors' summary) **57** #1587 60B05 (28A40, 46B05)
- (with Čobanjan, S. A.) Gaussian characterizations of certain Banach spaces. *Multivariate Anal.* **7** (1977), no. 1, 183-203. (Werner Linde) **55** #6545 60G15 (60B05, 28A40)
- (with Nguen Zuĭ Tien; Čobanjan, S. A.) On the compactness of families of stochastic order measures in Banach spaces. (Russian. English summary) *Teor. Veroyatn. i Primenen.* **22** (1977), no. 4, 823-828. (W. A. Woyczyński) **57** #7721 60B10
- (with Vahanija, N. N.) Covariance operators of probability measures in linear convex spaces. (Russian. English summary) *Teor. Veroyatn. i Primenen.* **23** (1978), 1, 3-26. (A. Weron) **58** #24442 60B05 (28A40, 60G15)
- Tarină, Marian** Sur le groupe homogène d'holonomie des espaces projectivement euclidiens. *An. Univ. Bucureşti Mat.-Mec.* **19** (1970), no. 2, 153-159. (Y. Mutô)

- 5 #1067 53C05
(with Artin, Constantin D.) Observations relative to the classification of the spaces with projective connection without torsion. (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 109-116. (E. Vamanu) **46** #8092 53B10
- Correspondances partiellement projectives et tenseurs affines associés. (Romanian and Russian summaries) *Studia Univ. Babeş-Bolyai Ser. Math.-Mech.* **17** (1972), no. 2, 1-36. (E. Heil) **48** #12347 53B05
- Connexions sous-projectives et connexions de Tzitzéica généralisées. "Gheorghe Ţiţica and Dimitrie Pompeiu" Symposium on Geometry and Global Analysis (Bucharest, 1973) (Romanian), pp. 191-197. Editura Acad. R.S.R., Bucharest, 1976. (Author's introduction) **58** #24105 53C05
- g, Nessim (with Tupper, B. O. J.) The uniqueness of the Bertotti-Robinson electromagnetic universe. *J. Mathematical Phys.* **15** (1974), 2232-2235. (M. Sachs) **50** #9286 83.35
- (with Tupper, B. O. J.) On a coupling theorem in Einstein-Maxwell theory. *Tensor (N.S.)* **28** (1974), 83-90. (N. D. Sengupta) **50** #12133 83.53
- (with Tupper, B. O. J.) A class of algebraically general solutions of the Einstein-Maxwell equations for non-null electromagnetic fields. *General Relativity and Gravitation* **6** (1975), no. 4, 345-360. (George Debney) **53** #15283 83.53
- (with McLenaghan, Raymond G.; Tupper, B. O. J.) Conformally flat solutions of the Einstein-Maxwell equations for null electromagnetic fields. *J. Mathematical Phys.* **16** (1975), 829-831. (D. K. Sen) **51** #12275 83.53
- (with McLenaghan, Raymond G.) A new solution of the Einstein-Maxwell equations. *J. Mathematical Phys.* **16** (1975), no. 11, 2306-2312. (J. D. Zund) **52** #7455 83.53
- (with Tupper, B. O. J.) Einstein-Maxwell metrics admitting a dual interpretation. *J. Mathematical Phys.* **17** (1976), no. 3, 292-296. (Elisa Udeschini Brinis) **52** #16525 83.53
- (with McLenaghan, Raymond G.) On a solution of the Einstein-Maxwell equations admitting a nonsingular electromagnetic field. *J. Mathematical Phys.* **17** (1976), no. 12, 2192-2197. (J. D. Zund) **54** #14706 83.35
- (with Tupper, B. O. J.) Curvature collineations in Einstein-Maxwell space-times and in Einstein spaces. *Tensor (N.S.)* **31** (1977), no. 1, 42-48. (J. D. Zund) **57** #2448 83.53
- (with McLenaghan, Raymond G.) Note on the Bertotti-Robinson electromagnetic universe. *J. Mathematical Phys.* **19** (1978), no. 2, 349-351. (J. D. Zund) **57** #2449 83.53
- ian, R. E. See Tarjan, Robert Endre
- án, Rezső John von Neumann and the theory of automata. (Hungarian. Russian and English summaries) *Informác.-Elektron.* **7** (1972), 83-88. **46** #1444 94-03
- ian, Robert Endre Determining whether a groupoid is a group. *Information Processing Lett.* **1** (1971/72), 120-124. (R. L. Kruse) **45** #3621 20N99 (68A15)
- (with Hopcroft, John E.) Isomorphism of planar graphs. *Complexity of computer computations* (Proc. Sympos., IBM Thomas J. Watson Res. Center, Yorktown Heights, N. Y., 1972), pp. 131-152, 187-212. Plenum, New York, 1972. (P. E. O'Neil) **53** #7114 68A10 (05C10)
- (with Hopcroft, John E.) Planarity testing in $V \log V$ steps: extended abstract. *Information processing 71* (Proc. IFIP Congress, Ljubljana, 1971), Vol. 1: Foundations and systems, pp. 85-90. North-Holland, Amsterdam, 1972. (A. T. Amin) **53** #7113 68A10
- Sorting using networks of queues and stacks. *J. Assoc. Comput. Mach.* **19** (1972), 341-346. (T. L. Saaty) **45** #7852 60K25
- Depth-first search and linear graph algorithms. *SIAM J. Comput.* **1** (1972), no. 2, 146-160. (John Mylopoulos) **46** #3313 05-04
- Testing flow graph reducibility. *Fifth Annual ACM Symposium on Theory of Computing* (Austin, Tex., 1973), pp. 96-107. Assoc. Comput. Mach., New York, 1973. (Editors) **56** #10115 68A05 (94A20)
- A note on finding the bridges of a graph. *Information Processing Lett.* **2** (1973/74), 160-161. (Alon Itai) **50** #1976 05C35
- (with Hopcroft, John E.) A $V \log V$ algorithm for isomorphism of triconnected planar graphs. *J. Comput. System Sci.* **7** (1973), 323-331. (Ivan Havel) **49** #10178 68A10 (05C99)
- (with Blum, Manuel; Pratt, Vaughan R.; Floyd, Robert W.; Rivest, Ronald L.) Time bounds for selection. Fourth Annual ACM Symposium on the Theory of Computing (Denver, Colo., 1972). *J. Comput. System Sci.* **7** (1973), 448-461. (Ian Munro) **48** #8256 05A99
- (with Hopcroft, John E.) Dividing a graph into triconnected components. *SIAM J. Comput.* **2** (1973), 135-158. (W.-K. Chen) **48** #5733 94A20 (68A10)
- Enumeration of the elementary circuits of a directed graph. *SIAM J. Comput.* **2** (1973), 211-216. (Author's summary) **48** #3795 05C30
- Testing graph connectivity. *Sixth Annual ACM Symposium on Theory of Computing* (Seattle, Wash., 1974), pp. 185-193. Assoc. Comput. Mach., New York, 1974. (Kenji Onaga) **56** #11858 05C99 (68A10, 68A20)
- A good algorithm for edge-disjoint branching. *Information Processing Lett.* **3** (1974/75), 51-53. (E. M. Reingold) **51** #12021 68A10 (05C20)
- (with Hopcroft, John E.) Efficient planarity testing. *J. Assoc. Comput. Mach.* **21** (1974), 549-568. (D. G. Corneil) **50** #11841 68A10 (05C99)
- Testing flow graph reducibility. Fifth Annual ACM Symposium on the Theory of Computing (Austin, Tex., 1973). *J. Comput. System Sci.* **9** (1974), 355-365. (P. E. O'Neil) **55** #11691 68A10 (68A20)
- Finding dominators in directed graphs. *SIAM J. Comput.* **3** (1974), 62-89. (D. G. Corneil) **51** #9567 68A10 (05C20)
- Finding edge-disjoint spanning trees. *Proceedings of the Eighth Hawaii International Conference* (Univ. Hawaii, Honolulu, Hawaii, 1975), pp. 251-252. Western Periodicals Co., North Hollywood, Calif., 1975. (Narsingh Deo) **51** #225 05C05 (94A20)
- (with Even, Shimon) A combinatorial problem which is complete in polynomial space. *Seventh Annual ACM Symposium on Theory of Computing* (Albuquerque, N.M., 1975), pp. 66-71. Assoc. Comput. Mach., New York, 1975. (Y. Yesha) **56** #10134 68A20 (05C99)
- (with Rose, Donald J.) Algorithmic aspects of vertex elimination. *Seventh Annual ACM Symposium on Theory of Computing* (Albuquerque, N. M., 1975), pp. 245-254. Assoc. Comput. Mach., New York, 1975. (Authors' summary) **56** #7320 68A20 (65F05)
- Efficiency of a good but not linear set union algorithm. *J. Assoc. Comput. Mach.* **22** (1975), 215-225. (R. E. Stearns) **56** #17194 68A10
- (with Read, Ronald C.) Bounds on backtrack algorithms for listing cycles, paths, and spanning trees. *Networks* **5** (1975), no. 3, 237-252. (M. Aigner) **53** #5313 05-04
- (with Even, Shimon) Network flow and testing graph connectivity. *SIAM J. Comput.* **4** (1975), no. 4, 507-518. (Authors' summary) **55** #9898 90B10
- Iterative algorithms for global flow analysis. *Algorithms and complexity* (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1976), pp. 71-101. Academic Press, New York, 1976. (Raymond Ford) **57** #4610 68A10 (90B10)
- (with Paul, Wolfgang J.; Celoni, James R.) Space bounds for a game on graphs. *Eighth Annual ACM Symposium on Theory of Computing* (Hershey, Pa., 1976), pp. 149-160. Assoc. Comput. Mach., New York, 1976. (Authors' summary) **56** #4239 68A20
- Edge-disjoint spanning trees and depth-first search. *Acta Informat.* **6** (1976), no. 2, 171-185. (Takao Ozawa) **54** #12557 05C05 (68A10)
- (with Markowsky, George) Lower bounds on the lengths of node sequences in directed graphs. *Discrete Math.* **16** (1976), no. 4, 329-337. (Authors' summary) **57** #18784 90B10 (05C20, 68A20)
- (with Even, Shimon) A combinatorial problem which is complete in polynomial space. *J. Assoc. Comput. Mach.* **23** (1976), no. 4, 710-719. (Jaroslav Nešetřil) **55** #9600 68A20
- (with Ehrlich, Gideon; Even, Shimon) Intersection graphs of curves in the plane. *J. Combinatorial Theory Ser. B* **21** (1976), no. 1, 8-20. (Jerald A. Kabell) **58** #21842 05C99 (68A20)
- (with Goodman, Seymour E.; Hedetniemi, Stephen T.) b -matchings in trees. *SIAM J. Comput.* **5** (1976), no. 1, 104-108. (Herbert J. Bernstein) **53** #12067 68A10 (05C35)
- (with Rose, Donald J.; Lueker, George S.) Algorithmic aspects of vertex elimination on graphs. *SIAM J. Comput.* **5** (1976), no. 2, 266-283. (G. Berman) **53** #12077 68A20 (94A20, 05C99)
- (with Eswaran, Kalpal P.) Augmentation problems. *SIAM J. Comput.* **5** (1976), no. 4, 653-665. (Chul E. Kim) **56** #7316 68A20
- (with Garey, Michael R.; Johnson, David Stifler) The planar Hamiltonian circuit problem is NP-complete. *SIAM J. Comput.* **5** (1976), no. 4, 704-714. (Andreas Blass) **56** #2867 05C35 (02G05)
- (with Cheriton, David) Finding minimum spanning trees. *SIAM J. Comput.* **5** (1976), no. 4, 724-742. (Narsingh Deo) **56** #4783 90B10
- (with Even, Shimon) Computing an st -numbering. *Theoret. Comput. Sci.* **2** (1976), no. 3, 339-344. (M. M. Syslo) **54** #2508 (E 55 #13872) 05C10 (68A20)
- (with Lipton, Richard J.) Applications of a planar separator theorem. *18th Annual Symposium on Foundations of Computer Science* (Providence, R.I., 1977), pp. 162-170. *IEEE Comput. Soc., Long Beach, Calif.*, 1977. (See RZMat **1978** #12 V1624; MR **57** #18173) 68A20 (05C99)
- (with Paul, Wolfgang J.) Time-space trade-offs in a pebble game. *Automata, languages and programming* (Fourth Colloq., Univ. Turku, Turku, 1977), pp. 365-369. *Lecture Notes in Comput. Sci.*, Vol. 52, Springer, Berlin, 1977. (Authors' summary) **58** #25116 68A20 (05C99, 90D05)
- Reference machines require non-linear time to maintain disjoint sets. *Conference Record of the Ninth Annual ACM Symposium on Theory of Computing* (Boulder, Colo., 1977), pp. 18-29. Assoc. Comput. Mach., New York, 1977. (E. M. Reingold) **58** #3662 68A10
- Finding optimum branchings. *Networks* **7** (1977), no. 1, 25-35. (A. C. Shershin) **58** #3661 68A10 (05C20)
- (with Trojanowski, Anthony E.) Finding a maximum independent set. *SIAM J. Comput.* **6** (1977), no. 3, 537-546. (Torrence D. Parsons) **57** #2999 05C35 (68A10)
- (with Even, Shimon) Corrigendum: "Computing an st -numbering" (Theoret. Comput. Sci. **2** (1976), 339-344). *Theoret. Comput. Sci.* **4** (1977), no. 1, 123. (Editors) **55** #13872 68A20 (05C10)
- (with Lipton, Richard J.) A separator theorem for planar graphs. *Proceedings of a Conference on Theoretical Computer Science* (Univ. Waterloo, Waterloo, Ont., 1977), pp. 1-10. *Comput. Sci. Dept., Univ. Waterloo, Waterloo, Ont.*, 1978. (D. Ja. Keselman) **58** #21852 05C99 (05C35)
- (with Garey, Michael R.; Johnson, David Stifler; Preparata, Franco P.) Triangulating a simple polygon. *Inform. Processing Lett.* **7** (1978), no. 4, 175-179. (G. Berman) **58** #271 05A99 (52A25, 57C15, 68A10)
- (with Rose, Donald J.) Algorithmic aspects of vertex elimination on directed graphs. *SIAM J. Appl. Math.* **34** (1978), no. 1, 176-197. (D. J. Kleitman) **58** #8476 68A10 (05C20)
- Complexity of combinatorial algorithms. *SIAM Rev.* **20** (1978), no. 3, 457-491. (D. R. Morrison) **58** #3688 68A20
- See also Deo, Narsingh, **52** #7194 and Cybernetics collection, **52** #16086
- Tarján, T. See Problems: Graph theory, **52** #2932
- Tarján, T. G. On complexity of switching circuits. (Russian summary) *Problems of Control and Information Theory / Problemy Upravleniya i Teorii Informacii* **3** (1974), no. 3, 183-196. (A. Ádám) **53** #12787 94A20
- Complexity of lattice-configurations. *Studia Sci. Math. Hungar.* **10** (1975), no. 1-2, 203-211. (D. J. Kleitman) **56** #167 05B40
- Tarján, Tamás (with Tényi, György) An experiment in modeling the capital investment process. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* **10** (1977), no. 1-2, 11-24. (Peter Bod) **58** #4250 90A15
- Tarlinskii, S. I. Approximation of optimal game strategies by continuous functions. *Prikl. Mat. Meh.* **35** (1971), 558-565 (Russian); translated as *J. Appl. Math. Mech.* **35** (1971), 509-517, (1972). (J. Fichet) **50** #6538 90D25
- A certain positional guidance problem. (Russian) *Dokl. Akad. Nauk SSSR* **207** (1972), 37-40. (F. M. Kirillova) **47** #8134 90D25
- A certain linear differential approach game. (Russian) *Dokl. Akad. Nauk SSSR* **209** (1973), 1303-1306. (I. V. Beiko) **51** #2669 90D25

- On a differential game of guiding in a class of mixed strategies. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 4, 64-70 (Russian); translated as *Engrg. Cybernetics* 11 (1973), no. 4, 599-605. (J. H. Case) 52 #7573b 90D25
- On a regular class of differential games. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1973, no. 6, 49-55 (Russian); translated as *Engrg. Cybernetics* 11 (1973), no. 6, 926-933. (A. Blaquière) 51 #12351 90D25
- On a linear differential game of encounter. *Prikl. Mat. Meh.* 37 (1973), 14-22 (Russian); translated as *J. Appl. Math. Mech.* 37 (1973), 11-18. (J. H. Case) 52 #7573a 90D25
- On a sufficient encounter condition in a differential game. *Prikl. Mat. Meh.* 37 (1973), 787-793 (Russian); translated as *J. Appl. Math. Mech.* 37 (1973), 747-753 (1974). (J. H. Case) 50 #12307 90D25
- A differential guidance game. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 8 Ekstremal. Strategii v Pozicion. Differencial. Igrah* (1974), 224-251, 277. (RŽMat 1974 #10 B505) 58 #33049 90D25
- Some positional approach and evasion problems. (Russian) Differential games and control problems. *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 15* (1975), 236-243, 267. (See RŽMat 1976 #11 B665; MR 56 #9347) 90D25
- A certain linear differential game of approach of several controllable objects. (Russian) *Dokl. Akad. Nauk SSSR* 230 (1976), no. 3, 534-537. (N. N. Petrov) 55 #7447 90D25
- Tärlung, Sten-Åke** (with Hansson, Åke) Zig-zag procedures for memory allocation and retrieval of dense equilateral arrays of dynamically varying order. *Nordisk Tidskr. Informationsbehandling (BIT)* 16 (1976), no. 3, 269-274. (Authors' summary) 54 #11878 68A50
- Tarn, Tzyh Jong** (with Zaborsky, John) A linear filter for discrete systems with correlated measurement noise. *Pattern recognition and machine learning (Proc. Japan-U. S. Sem. Learning Process in Control Systems, Nagoya, 1970)*, pp. 138-149. Plenum Press, New York, 1971. (Lennart Ljung) 55 #5291 93E10
- Extended separation theorem and exact analytical solution of stochastic control. (French, German and Russian summaries) *Automatica—J. IFAC* 7 (1971), 343-350. (D. D. Sworder) 47 #10122 93E20
- (with Rao, Sudhakara Kumblekere; Zaborsky, John) Singular control of linear-discrete systems. *IEEE Trans. Automatic Control AC-16* (1971), 401-410. (Authors' summary) 45 #8360 93C45
- Singular control of bilinear discrete systems. *Information and Control* 21 (1972), 211-234. (B. W. Stuck) 48 #985 49A99
- (with Goka, T.; Zaborsky, John) On the controllability of a class of discrete bilinear systems. (French, German and Russian summaries) *Automatica—J. IFAC* 9 (1973), 615-622. (Shinzo Kitamura) 57 #15596 93B05
- (with Elliott, David L.; Goka, T.) Controllability of discrete bilinear systems with bounded control. *IEEE Trans. Automatic Control AC-18* (1973), no. 3, 298-301. (Authors' summary) 55 #14289 93B05
- (with Kou, Shaoying, R.; Elliott, David L.) Observability of nonlinear systems. *Information and Control* 22 (1973), 89-99. (S. F. Moon) 48 #3541 93B05
- (with Rasis, Yona) Observers for nonlinear stochastic systems. *Proceedings of the IEEE Conference on Decision and Control including the 14th Symposium on Adaptive Processes (Houston, Tex., 1975)*, pp. 780-788. *Inst. Electr. Electron. Engrs., New York*, 1975. (R. S. Bucy) 56 #11406 93E10
- (with Cheng, G.-S. J.; Elliott, David L.) Controllability of bilinear systems. *Variable structure systems with application to economics and biology (Proc. Second U.S.-Italy Sem., 1974)*, pp. 83-100. *Lecture Notes in Econom. and Math. Systems*, Vol. 111, Springer, Berlin, 1975. (J. Kučera) 57 #5227 93B05 (93C15, 93C55)
- (with Kou, Shaoying, R.; Elliott, David L.) Exponential observers for nonlinear dynamic systems. *Information and Control* 29 (1975), no. 3, 204-216. (S. P. Bingulac) 52 #5104 93B05
- (with Nonoyama, Shigeki) Realization of discrete-time internally bilinear systems. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 125-133. *Inst. Electr. Electron. Engrs., New York*, 1976. (From the summary) 57 #18937 93B30
- (with Nonoyama, Shigeki; Oei, L. S.) Algebraic structure of discrete-time polynomial systems. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 826-835. *Inst. Electr. Electron. Engrs., New York*, 1976. (Authors' summary) 56 #17955 93B05 (93B15)
- (with Rasis, Yona) Observers for nonlinear stochastic systems. *IEEE Trans. Automatic Control AC-21* (1976), no. 4, 441-448. (R. S. Bucy) 53 #15522 93E10
- (with Zaborsky, John; Subramanian, A. K.; Lu, Keh Ming) A new state space for emergency control in the interconnected power system. *IEEE Trans. Automatic Control AC-22* (1977), no. 4, 505-517. (B. D. Doney) 57 #2655 93A15
- Tarnai, T.** Spherical grids of triangular network. (German and Russian summaries) *Acta Tech. Acad. Sci. Hungar.* 76 (1974), 307-336. (A. Florian) 51 #4055 52A25
- Tarnavskii, A. A.** (with Golovačev, Ju. G.; Marennikova, O. N.) Stability of stratified flows. I. Inviscid two-layer flow. (Russian) *Izv. Sibsk. Otdel. Akad. Nauk SSSR Ser. Tehn. Nauk* 1977, no. 8, 54-65, 158. (J. W. Thomas) 58 #19701 7635 (35B35)
- Tarm, Ming Y.** (with Nardizzi, Louis R.) The maximum principle and the ϵ -technique for systems described by partial-difference equations. *Information Sci.* 5 (1973), 127-148. (Jan C. Willems) 48 #3556 93C30
- (with Nardizzi, Louis R.) A computational technique for the control of systems described by partial difference equations. *Internat. J. Control* (1) 17 (1973), 1189-1199. (P. Nelson) 49 #1294 49D30
- (with Nardizzi, Louis R.) The discrete maximum principle and the ϵ -technique. *J. Optimization Theory Appl.* 12 (1973), 391-407. (S.-C. Huang) 48 #9508 49B35
- Tärnlund, Sten-Åke** (with Clark, Keith L.) A first order theory of data and programs. *Information processing 77 (Proc. IFIP Congr., Toronto, Ont., 1977)*, pp. 939-944. *IFIP Congr. Ser., Vol. 7, North-Holland, Amsterdam*, 1977. (Gianfranco Prini) 58 #19292 68A05
- Horn clause computability. *Nordisk Tidskr. Informationsbehandling (BIT)* 17 (1977), no. 2, 215-226. (Author's summary) 58 #10383 02F43 (02E10, 68A05)
- Tarnogrodzki, A.** See *Fluid dynamics transactions*, 55 #13936
- Tarnopolska-Weiss, Marysia** A remark on a result of McKean. *Proc. Amer. Math. Soc.* (1976), 337-338. (Troels Jørgensen) 53 #10718 10D05 (22E40, 20H10)
- Tarnopolskii, Ju. A.** (with Golenko, D. I.; Blanter, A. F.; Borisov, A. S.; Kesler, S.) Stationary strategy for resource allocation in a production system. (Russian) *Num. analysis, and statistical models of complex systems. Part II (Russian)*, pp. 153. *Moskov. Ekonom.-Statist. Inst., Moscow*, 1974. (Editors) 56 #2314 90B30
- Tarnopol'skii, V. G.** The scattering problem for a difference equation with open coefficients. (Russian) *Ukrain. Mat. Ž.* 28 (1976), no. 3, 342-351, 429. (Boris Pavlov) 54 #10908 39A10 (47A40, 47B45)
- Tarnove, Irvin** See *Boltjanskii, V. G.*, 50 #5567
- Tarokh, M.** (with Seraji, H.) Proportional-plus-multiple derivative output feedback. A multivariable controller for pole placement. *Internat. J. Control* 25 (1977), no. 2, 293-302. (S. P. Bhattacharyya) 58 #26348 93C45
- (with Seraji, H.) Design of PID controllers for multivariable systems. *Internat. J. Control* 26 (1977), no. 1, 75-83. (S. P. Bhattacharyya) 57 #5247 93B25
- Tarone, Robert E.** (with Gruenhage, Gary) A note on the uniqueness of roots of likelihood equations for vector-valued parameters. *J. Amer. Statist. Assoc.* 70 (1975), 352, 903-904. (Herbert T. David) 52 #12189 62F10
- Simultaneous confidence ellipsoids in the general linear model. *Technometrics* (1976), no. 1, 85-87. (Stanley L. Sclove) 53 #6912 62J15 (62F25)
- (with Ware, James H.) On distribution-free tests for equality of survival distributions. *Biometrika* 64 (1977), no. 1, 156-160. (A. P. Basu) 57 #1814 62G10
- Taroni, A.** (with Cenacchi, G.; Sestero, Arrigo) Numerical solution of the MHD equilibrium equation for an axially symmetric free-boundary plasma in a torus arbitrary cross-section. (Italian and Russian summaries) *Nuovo Cimento B* (11) (1975), 279-294. (J. N. Kapur) 51 #7478 7665
- (with Sestero, Arrigo) Large aspect ratio expansion of toroidal magnetofluid equilibria with anisotropic pressure. *Lett. Nuovo Cimento* (2) 20 (1977), no. 15, 537-56. #14147 7835
- Tarozzi, G.** (with Sella, F.) Is nondistributivity for microsystems empirically founded? (Italian and Russian summaries) *Nuovo Cimento B* (11) 43 (1978), no. 1, 31-40. (Gudder) 57 #8526 8102
- Tarpošan, G. G.** Expansion in eigenfunctions of the moment-free problem in the case of axially symmetric oscillations of a thin shell. (Russian) *Funkcional. Anal. i Prilozhen.* (1977), no. 1, 83-84. (Editors) 58 #19531 7334
- Tarpy, Marilyn A.** (with Yang, Chao Chih) An algorithm for deriving all pairs of compatible states by closure classes. *IEEE Trans. Computers C-25* (1976), no. 202-207. (Michael Anshel) 55 #7629 94A25
- Tarr, David G.** On the stability of oligopoly with nondogmatic conjectures. *Metroeconomica* 27 (1975), no. 2-3, 184-190. (Andrew Schotter) 58 #15073 90A01
- Distributed lags, Morishima matrices, and the stability of economic models. *Econometrica* 44 (1976), no. 3, 597-600. (Charles R. Johnson) 54 #4603 90A01 (93D99)
- Tarrés Freixenet, Juan** (with Revilla Ramos, Miguel Ángel) Isomorphisms of topological groups on the real line. (Spanish) *Gac. Mat. (Madrid)* (1) 29 (1977), no. 3-4, 79-83. (Friedberg) 57 #9901 22A05
- A necessary and sufficient condition for globality for abstract dynamical systems. (Spanish) *Rev. Mat. Hisp.-Amer.* (4) 37 (1977), no. 6, 297-300. (U. D'Ambrosio) 58 #31016 54H20
- Tarsi, A.** See *Temi di esame di analisi matematica*, 50 #5063
- Tarsia, A.** (with Campanato, Sergio; Sacchetti, D.) Risultati di regolarità per la soluzione del problema di Cauchy in spazi di Hilbert. (English summary) *Boll. Un. Mat. Ital.* 12 (1975), no. 1-2, 56-65. (Sadakazu Aizawa) 53 #960 34G05
- Tarsi Santolini, Adelina** Sull'estensione della teoria di Carathéodory ai sistemi differenziali multivochi. *Ist. Lombardo Accad. Sci. Lett. Rend. A* 105 (1971), 563-570. (N. H. Calil) 46 #2127 34A10
- Sull'estensione della teoria di Carathéodory ai sistemi differenziali multivochi, condizioni ai limiti non lineari. *Ist. Lombardo Accad. Sci. Lett. Rend. A* 106 (1972), 326-341. (A. F. Izé) 48 #9053 34K99
- Soluzioni quasi-periodiche, o limitate, di un sistema differenziale discontinuo rispetto all'incognita. *Ist. Lombardo Accad. Sci. Lett. Rend. A* 109 (1975), no. 1, 3-10. (K. Schmitt) 53 #3431 34C25
- Tarski, Alfred** (with Henkin, Leon; Monk, J. Donald) ★Cylindric algebras. Part I. V. an introductory chapter: General theory of algebras. *Studies in Logic and the Foundations of Mathematics*, Vol. 64. North-Holland Publishing Co., Amsterdam-London, 1971. vi + 508 pp. (A. Preller) 47 #3171 02J15 (02-01)
- ★Introduction à la logique. Traduit de l'anglais par J. Tremblay. Troisième édition. *Collection de "Logique Mathématique"*, Série A, No. 16. Gauthier-Villars Éditeur, Paris, 1971. xiv + 246 pp. (Editors) 49 #10512 02-01
- An interpolation theorem for irredundant bases of closure structures. *Discrete Math.* 12 (1975), 185-192. (E. W. Chapin, Jr.) 53 #2806 08A25
- ★Einführung in die mathematische Logik. Übersetzung in deutsche Sprache von Erhard Scheibe basiert auf der dritten englischen Ausgabe. Fünfte Auflage. Mit einem Beitrag "Wahrheit und Beweis", übersetzt von Rainer Stuhlmann-Laeisz. *Mod. Mathematik in Elementarer Darstellung*, Band 5. Vandenhoeck & Ruprecht, Göttingen, 1977. 285 pp. (Editors) 55 #7716 02-01
- See also *Proceedings: Tarski Symposium*, 50 #1829; *Students of Alfred Tarski*, 50 #9513 and *Bibliography: Tarski, Alfred*, 50 #9514
- Tarski, Jan** Intégrale d'"histoire" pour le champ quantifié libre scalaire. (English summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* 15 (1971), 107-140. (S. Newberger) 48 #3418 8147
- Description fonctionnelle de certaines théories non relativistes de champs. (English summary) (With an erratum to Part I. *Ann. Inst. H. Poincaré Sect. A (N.S.)* (1972), 171-194. (Editors) 58 #25608 8147
- Mesures généralisées invariantes. (English summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* 17 (1972), 313-324. (Mi Soo Smith) 49 #4494 8160
- (with Dahmen, H. D.; Jona-Lasinio, Giovanni) The method of characteristics for functional-derivative equations. (Italian and Russian summaries) *Nuovo Cimento A* 10A (1972), 513-520. (L. S. Schulman) 47 #2942 8135

- Quantum field theory: an unusual discipline. *Proceedings of the Tarski Symposium* (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971), pp. 7-463. Amer. Math. Soc., Providence, R. I., 1974. (M. Seetharaman) **55** #7206 47
- Model of linearized deviations in the quantum theory of gravity. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **20** (1974), 95-111. (M. Carmeli) **50** #3872 53
- Definitions and selected applications of Feynman-type integrals. *Functional integration and its applications* (Proc. Internat. Conf., London, 1974), pp. 169-180. Academic Press, Oxford, 1975. (Aubrey Truman) **58** #4062 81.46 (58D99)
- Analytic functions in quantum field theory. *Complex analysis and its applications* (Lectures, Internat. Sem., Trieste, 1975), Vol. III, pp. 181-192. Internat. Atomic Energy Agency, Vienna, 1976. (Masatsugu Minami) **58** #4033 81.32 (32-02)
- Recent results on Feynman-type integrals. *Complex analysis and its applications* (Lectures, Internat. Sem., Trieste, 1975), Vol. III, pp. 193-208. Internat. Atomic Energy Agency, Vienna, 1976. (Gerhard C. Hegerfeldt) **57** #14989 81.28 (81.60)
- Feynman-type integrals for spin and the functional approach to quantum field theory. *Acta Phys. Austriaca* **44** (1976), no. 1-2, 89-118. (Tetz Yoshimura) **54** #4434 1.47 (81.58)
- Phase spaces for spin and their applicability. *Acta Phys. Austriaca* **45** (1976), no. 4, 337-344. (Author's summary) **54** #9403 81.32
- (with Buchholz, Detlev) Integrable cylinder functionals for an integral of Feynman-type. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **24** (1976), no. 3, 323-328. (Günter Brauns) **53** #11009 28A40
- Log-concave functions and convex interaction terms for quantised fields. *J. Phys. A* **9** (1977), no. 6, L105-L109. (M. A. Rashid) **58** #4063 81.46
- (with Blanchard, Ph.) Renormalizable interactions in two dimensions and sharp-time fields. *Acta Phys. Austriaca* **49** (1978), no. 2, 129-152. (Authors' summary) **58** #19991 81.47 (02H25)
- See also Fischer, Arthur Elliot; et al., **56** #6710; Simms, David J., **58** #2883 and Chernoff, Paul R.; et al., **58** #18559
- Michael, with Berman, Abraham) On Tucker's key theorem. *Internat. J. Math. Math. Sci.* **1** (1978), no. 1, 63-67. (Jacques Dubois) **57** #9048 90C05 (52A20, 52A40)
- Richard B. Orders in separable algebras. *Proc. Amer. Math. Soc.* **49** (1975), 43-46. (J. A. Wehlen) **51** #588 16A16
- Anglia, Niccolò See Demidov, S. S., **58** #26837
- Skoff, David S. On the regularity of non-unique solutions of degenerate elliptic-parabolic systems of partial differential equations. *Comm. Pure Appl. Math.* **24** (1971), 763-788. (J. Unterberger) **45** #5543 35D10
- Regularity of solutions to boundary value problems for first order systems. *Indiana Univ. Math. J.* **21** (1971/72), 1113-1129. (From the author's introduction) **55** #13061 35F15
- (with Sarason, Leonard) Boundary value problems for non-elliptic first order systems of pseudo-differential operators. *Comm. Pure Appl. Math.* **25** (1972), 533-567. (R. D. Moyer) **58** #1779 35S15
- Gevey hypoellipticity for subelliptic boundary value problems. *Comm. Pure Appl. Math.* **26** (1973), 251-312. (Ju. V. Egorov) **49** #7586 35H05 (35N15)
- Gevey hypoellipticity for subelliptic boundary value problems. *Global analysis and its applications*, Vol. III (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972), pp. 185-193. Internat. Atomic Energy Agency, Vienna, 1974. (Makhlouf Derridj) **55** #10824 35H05
- Sur la régularité locale des solutions de l'équation $\square_b u = f$. *Séminaire Goulaouic-Schwartz 1975/1976; Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 9, 8 pp. Centre Math., École Polytech., Palaiseau, 1976. (Makhlouf Derridj) **57** #3597 35D10 (58G05)
- (with Derridj, Makhlouf) Régularité analytique globale des solutions du problème de Neumann pour l'opérateur $\bar{\partial}$. *Séminaire Goulaouic-Schwartz 1975/1976; Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 4, 12 pp. Centre Math., École Polytech., Palaiseau, 1976. (Akira Asada) **57** #3662 35N15 (32F15, 58G05, 35H05)
- Local Gevey and quasi-analytic hypoellipticity for \square_b . *Bull. Amer. Math. Soc.* **82** (1976), no. 5, 740-742. (Makhlouf Derridj) **53** #14553 58G05 (32F10, 35H05)
- On the global real analyticity of solutions to \square_b on compact manifolds. *Comm. Partial Differential Equations* **1** (1976), no. 4, 283-311. (Makhlouf Derridj) **53** #14552 58G05 (35H05, 32F15)
- (with Derridj, Makhlouf) On the global real analyticity of solutions to the $\bar{\partial}$ -Neumann problem. *Comm. Partial Differential Equations* **1** (1976), no. 5, 401-435. (Akira Asada) **54** #1312 58G05 (35N15, 32F15, 35D10)
- (with Derridj, Makhlouf) Sur la régularité locale des solutions du problème de Neumann pour $\bar{\partial}$. *Journées sur les Fonctions Analytiques* (Toulouse, 1976), pp. 207-216. *Lecture Notes in Math.*, Vol. 578, Springer, Berlin, 1977. (Akira Asada) **56** #12648 35N15 (58G05, 32F15)
- On the global real analyticity of solutions to \square_b on compact manifolds. *Several complex variables* (Proc. Sympos. Pure Math., Vol. XXX, Part 1, Williams Coll., Williamstown, Mass., 1975), pp. 205-211. Amer. Math. Soc., Providence, R. I., 1977. (Makhlouf Derridj) **55** #12953 32F15 (58G05, 35H05)
- On the local Gevey and Quasi-analytic hypoellipticity of \square_b . *Comm. Partial Differential Equations* **2** (1977), no. 7, 699-712. (L. Cattabriga) **57** #3608 35H05 (58G05)
- akovskii, G. P. (with Repin, V. G.) Effectiveness of the algorithm for distinguishing signals with unknown parameters. (Russian) *Problemy Peredači Informacii* **7** (1971), no. 2, 47-57. (Author's summary) **51** #15155 94A05
- (with Repin, V. G.) ★Статистический синтез при априорной неопределенности и адаптации информационных систем. (Russian) [Statistical synthesis with a priori uncertainty, and adaptation of information systems] *Izdat. "Sovetskoe Radio", Moscow*, 1977. 432 pp. (V. N. Igolkin) **58** #31476 62-01 (68A45, 93E99, 94A05)
- akovskii, Ja. I. (with Kiča, L. I.; Litvak, E. I.) A certain criterion for the isomorphism of homogeneous graphs. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 1(181), 237-238. (W. Dörfler) **53** #2754 05C99
- akovskii, V. A. (with Bazilevič, I. E.; Lebedev, N. A.; Milin, I. M.; Petrašen', G. I.; Smirnov, V. I.) Jurii Evgen'evič Alenicyyn (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 5(167), 265-270 (1 plate). (Editors) **52** #5288 01A70
- Tartar, Hroje See *Proceedings: International Symposium on Geometry and Algebra at the Beginning of the 17th Century*, **57** #15875
- Tartar, J. (with Neufeld, G. A.) Graph coloring conditions for the existence of solutions to the timetable problem. *Comm. ACM* **17** (1974), 450-453. (Ethan D. Bolker) **52** #16594 90B35
- (with Neufeld, G. A.) Generalized graph colorations. *SIAM J. Appl. Math.* **29** (1975), 91-98. (D. P. Geller) **53** #184 05C15
- Tartar, John (with Dasgupta, Subrata) On the minimization of control memories. *Information Processing Lett.* **3** (1974/75), 71-74. (Andrzej Blikle) **52** #4687 68A05 (68A50)
- Optimization strategies for computer resource allocation. *Proceedings of the Fifth Manitoba Conference on Numerical Mathematics* (Univ. Manitoba, Winnipeg, Man., 1975), pp. 109-136. *Congressus Numerantium*, No. XVI, Utilitas Math. Publ., Winnipeg, Man., 1976. (Jacek Błażewicz) **56** #10116 68A05
- (with Dasgupta, Subrata) The identification of maximal parallelism in straight-line microprograms. Special section on microprogramming (Papers, Micro-7 and Micro-8 Workshops, 1974-1975). *IEEE Trans. Computers* **C-25** (1976), no. 10, 986-992. (T. C. Wesselkamper) **58** #31998 68A05
- Tartar, Luc Une nouvelle caractérisation des M matrices. (Loose English summary) *Rev. Française Inform. Recherche Opérationnelle* **5** (1971), Sér. R-3, 127-128. (A. R. Amir-Moéz) **46** #7272 15A48
- Interpolation non linéaire. *Actes du Colloque d'Analyse Fonctionnelle* (Univ. de Bordeaux, Bordeaux, 1971), pp. 375-380. *Bull. Soc. Math. France*, Mém. No. 31-32, Soc. Math. France, Paris, 1972. (Author's introduction) **54** #11076 46M35 (47H99)
- Interpolation non linéaire et régularité. *J. Functional Analysis* **9** (1972), 469-489. (C. Goulaouic) **46** #9717 46E35
- (with Bardos, Claude) Sur l'unicité rétrograde des équations paraboliques et quelques questions voisines. *Arch. Rational Mech. Anal.* **50** (1973), 10-25. (R. Kannan) **49** #3281 34G05
- Sur l'étude directe d'équations non linéaires intervenant en théorie du contrôle optimal. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1493-A1496. (W. T. Reid) **48** #666 34G05
- Équation de Riccati. *Séminaire Goulaouic-Schwartz 1973-1974; Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 10, 11 pp. Centre de Math., École Polytech., Paris, 1974. (S. Rolewicz) **55** #3463 34G05 (34H05)
- Inéquations quasi variationnelles abstraites. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 1193-1196. (L. von Wolfersdorf) **49** #9703 49A25
- Sur l'étude directe d'équations non linéaires intervenant en théorie du contrôle optimal. *J. Functional Analysis* **17** (1974), 1-47. (G. Da Prato) **50** #14406 47H15
- Problèmes de contrôle des coefficients dans des équations aux dérivées partielles. *Control theory, numerical methods and computer systems modelling* (Internat. Sympos., IRIA LABORIA, Rocquencourt, 1974), pp. 420-426. *Lecture Notes in Econom. and Math. Systems*, Vol. 107, Springer, Berlin, 1975. (Claudia Simionescu) **55** #1193 49B25
- Evolution equations in infinite dimensions. *Dynamical systems* (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974), Vol. I, pp. 167-177. Academic Press, New York, 1976. (Editors) **58** #30576 47H15 (35R99)
- Existence globale pour un système hyperbolique semi linéaire de la théorie cinétique des gaz. *Séminaire Goulaouic-Schwartz 1975/1976; Équations aux dérivées partielles et analyse fonctionnelle*, Exp. No. 1, 11 pp. Centre Math., École Polytech., Palaiseau, 1976. (Ronald DiPerna) **57** #6865 35L60
- Homogénéisation en hydrodynamique. *Singular perturbations and boundary layer theory* (Proc. Conf., École Centrale, Lyon, 1976), pp. 474-481. *Lecture Notes in Math.*, Vol. 594, Springer, Berlin, 1977. (Author's introduction) **57** #11330 76.41
- (with Crandall, Michael G.; Rabinowitz, Paul H.) On a Dirichlet problem with a singular nonlinearity. *Comm. Partial Differential Equations* **2** (1977), no. 2, 193-222. (Michael Wiegner) **55** #856 35J65
- Tartara, Guido On the application of algorithmic information theory to decision problems. *Information Sci.* **6** (1973), 85-96. (A. D. Wyner) **48** #3608 94A10
- See also *Symposium: Information Theory*, **48** #1787
- Tarter, Michael E. (with Raman, S.) A systematic approach to graphical methods in biometry. *Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability* (Univ. California, Berkeley, Calif., 1970/1971), Vol. IV: Biology and health, pp. 199-222. Univ. California Press, Berkeley, Calif., 1972. (Maxwell W. Layard) **53** #14782 62G05 (62P10)
- See also *Perspectives in biometrics*, **58** #31689
- Tartiko, S. A. History of the development of graphic methods for the computation of flywheels in the twentieth century. (Ukrainian) *Narisi Istori. Prirodozn. i Tehn. Vyp.* **19** (1974), 60-65, 134. (Editors) **58** #10136 01A60
- From the history of the development of graphical statics. (Ukrainian) *Narisi Istori. Prirodozn. i Tehn. Vyp.* **21** (1975), 53-61, 111. (Editors) **58** #21238 01A55 (50-03, 70.01)
- (with Bogoljubov, O. M.) From the history of the development of the graphic methods of calculation. (Russian. English summary) *Voprosy Istori. Estestvozn. i Tehn.* **1976**, no. 2(55), 27-30, 83. (Editors) **58** #15912 01A50 (01A55)
- Tarumi, Tomoyuki Estimation of the direction of a bivariate normal mean with finite memory. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **26** (1972), no. 2, 351-359. **55** #6661 62F10
- (with Kudô, Akio) An algorithm related to all possible regression and discriminant analysis. *J. Japan Statist. Soc.* **4** (1973/74), no. 2, 47-56. (Authors' summary) **49** #6502 62H30
- Tarunin, E. L. Optimization of implicit schemes for the Navier-Stokes equations in variables of flow function and vorticity. (Russian) *Proceedings of the Fifth All-Union Seminar on Numerical Methods in the Mechanics of a Viscous Fluid* (Kiev, 1974), Part I (Russian), 3-26. *Vyisl. Centr. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1975. (Ja. Alihashin (RZMat 1976 #7 B1095)) **58** #32402 76.65
- Taruškina, L. T. See *Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics*, **47** #4666 (EA 47)

- Tarwater, J. Dalton** (with Walker, Elbert A.) Decompositions of direct sums of cyclic p -groups. *Rocky Mountain J. Math.* 2 (1972), no. 2, 275-282. (P. Hill) 45 #8733 20D15
- (with Whitmore, Roy W.) k -path Euler graphs. *Czechoslovak Math. J.* 23(98) (1973), 413-418. (D. R. Lick) 47 #4852 05C35
- See also Visiting scholars' lectures, 50 #4198 and Bicentennial tribute to American mathematics, 58 #15771
- Tasaka, Masao** Successive multiple decision procedures for ordered parameters. *Bull. Math. Statist.* 15 (1972/73) no. 3-4, 1-20. (D. R. Truax) 52 #4497 62F07
- Sometimes-pool test procedures in linear hypothesis model. *Tech. Rep. Osaka Univ.* 22 (1972), 315-334. (S. John) 49 #8233 62J10
- Tasaka, Takashi** Remarks on the validity of Hasse's norm theorem. *J. Math. Soc. Japan.* 22 (1970), 330-341. (T. Ono) 45 #223 12A45
- On the Galois cohomology of algebraic tori defined over algebraic number fields. *Seminar on Modern Methods in Number Theory (Inst. Statist. Math., Tokyo, 1971), Paper No. 34*, 3 pp. *Inst. Statist. Math., Tokyo*, 1971. (T. Ono) 52 #343 12A60 (20G10)
- On the structure of spinor groups with positive index. *Sci. Papers College Gen. Ed. Univ. Tokyo* 25 (1975), no. 1, 7-14. (D. G. James) 51 #8033 10C30 (20G15)
- Spinor groups for isotropic quadratic forms and their representations. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* 24 (1977), no. 1, 55-60. (D. G. James) 55 #12825 20G05 (10C30)
- Tasbaev, V. H.** An estimate of a certain improper integral. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadzhik. SSR* 16 (1973), no. 9, 10-13. (András Sárközi) 49 #2622 10J10
- An additive problem. *Mathematics and the methodology of its teaching, Part II (Russian)*, pp. 91-112. *Tadzhik. Gos. Univ., Dushanbe*, 1974. (E. Podsypanin (RŽMat 1975 #4 A152)) 58 #27870 10J25
- Tasche, Frank** Sprache und Empirismus. Eine Untersuchung zu Francis Bacons Methodenlehre und ihrem Verhältnis zur Mathematik. (English summary) *Sudhoffs Arch.* 56 (1972), 61-75. (D. J. Struik) 57 #2829 01A40 (02A05)
- Tasche, Manfred** (with Bögel, Karl) ★Analysis in normierten Räumen. Herausgegeben und mit einem Vorwort von L. Berg und I. Fenyő. Mathematische Lehrbücher und Monographien, I., Abteilung: Mathematische Lehrbücher, Band 25. *Akademie-Verlag, Berlin*, 1974. xii + 383 pp. (W. Gähler) 58 #17835 46Gxx (26A96, 32A30)
- Abstrakte Differentialgleichungen mit algebraischen Operatoren. (Russian, English and French summaries) *Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe* 24 (1975), no. 10, 1231-1236. (A. Szép) 55 #8846 47A50 (34G05)
- Operatorenrechnung in einer Algebra. *Beiträge Anal. Heft* 9 (1976), 125-130. (I. Fenyő) 57 #13401 44A40 (46J99, 47A50)
- Abstrakte lineare Differentialgleichungen mit stationären Operatoren. *Math. Nachr.* 78 (1977), 21-36. (I. Fenyő) 58 #2381 47A50 (34G05)
- Randprojektoren und Greensche Operatoren von abstrakten Randwertproblemen und deren Anwendung. (English and Russian summaries) *Z. Angew. Math. Mech.* 57 (1977), no. 10, 579-589. (I. Fenyő) 57 #3888 47A50
- Taschner, Rudolf J.** Probleme der numerischen analytischen Fortsetzung. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* 185 (1976), no. 8-10, 459-484 (1977). (Author's summary) 58 #24880 65E05 (10F40)
- See also Niven, Ivan; et al., 52 #10554 and Brisley, Warren, 55 #5653
- Taşçınar, G. M.** The spectral asymptotic behavior of elliptic boundary value problems with weak degeneracy. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Drogobych, 1973), Functional analysis and its applications (Russian)*, pp. 277-293. *Akad. Nauk SSSR Central. Ekonom.-Mat. Inst., Moscow*, 1975. (D. M. Eids) 58 #1739 35P20
- The distribution of the eigenvalues of an elliptic Dirichlet problem. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. Vyp.* 2 (1975), 58-62. (H. Triebel) 52 #1051 35P20
- Taşçilin, A. V.** (with Matafonov, G. K.) Solution of a kinetic equation for the free expansion of a gas in a vacuum. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 51-56, 297. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (From the summary) 58 #32353 76J35
- Tascone, Thomas F.** Plane-symmetric polytropic functions. *Astrophys. J. Suppl. Ser.* 24 (1972), no. 212, 479-491. (Author's summary) 47 #2776 65A05
- Tascón, Ricardo** (with Kálnay, Andrés J.) Poincaré canonical momenta and Nambu mechanics. *Internat. J. Theoret. Phys.* 16 (1977), no. 9, 635-648. (From the summary) 58 #20007 81A7
- Taşev, Spas P.** (with Andreev, Andrei S.) The Gibbs phenomenon in cubic spline interpolation. (Bulgarian. Russian and German summaries) *Mathematics and mathematical education (Proc. Second Spring Conf. Bulgarian Math. Soc., Vidin, 1973) (Bulgarian)*, pp. 47-52. *Izdat. B'lgar. Akad. Nauk., Sofia*, 1974. (Wiesław Pleśniak) 50 #5281 41A15
- Approximation of bounded sets in the plane in the Hausdorff metric. (Russian) *C. R. Acad. Bulgare Sci.* 29 (1976), no. 4, 465-468. (A. B. Németh) 55 #3610 41A10
- (with Petruşev, Penčo P.) Some inverse theorems in the Hausdorff metric. (Russian) *C. R. Acad. Bulgare Sci.* 29 (1976), no. 12, 1721-1724. (V. N. Malozemov) 56 #6228 41A50
- Taşeva, Bistra** (with Zlatev, Minčo) A functional linearization method. A simplified construction. (Bulgarian. Russian and English summaries) *Problemi Tehn. Kibernet.* 4 (1976), 93-102. (M. M. Cvetanov) 58 #19143 65K05
- Tashiro, Yoshiaki** (with Ozaki, Shigeo; Fukui, Seiichi) Mapping functions onto the normal domain and geodesic surfaces. Collection of articles dedicated to Sadao Kashiwagi. *Collect. Papers Math. Soc. Wakayama Univ.* No. 1 (1970), 15-20. (I. I. Bavrin) 52 #6039 32H05
- (with Ozaki, Shigeo; Masuda, Toyotaka) Mapping functions onto the canonical domain and geodesic surfaces. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* 11, 10-15 (1971). (K. T. Hahn) 47 #3705 32C10 (32F99, 32H99)
- Tashiro, Yoshihiro** On a conformal diffeomorphism of reducible Riemannian manifolds. *Differential geometry (in honor of Kenjiaro Yano)*, pp. 489-499. *Kinokuniya, Tokyo*, 1972. (F. Brickell) 51 #11352 53C20
- On a contact structure of the tangent sphere bundle of variable radius. *Chinese J. Math.* 1 (1973), no. 2, 131-141. (Raymond Couty) 56 #6561 53C15
- On conformal diffeomorphisms of 4-dimensional Riemannian manifolds. *Kyôto Math. Sem. Rep.* 27 (1976), no. 4, 436-444. (T. J. Willmore) 54 #6028 53C20
- On methods for generating uniform random points on the surface of a sphere. *Aust. Inst. Statist. Math.* 29 (1977), no. 2, 295-300. (George Marsaglia) 58 #8144 65C05
- Tashjian, Gloria J.** Cartesian-closed coreflective subcategories of *Unif.* *General topology and its relations to modern analysis and algebra, IV (Proc. Fourth Prague Topology Sympos., Prague, 1976), Part B*, pp. 454-460. *Soc. Czechoslovak Mathematicians and Physicists, Prague*, 1977. (A. Pultr) 57 #3213 18A40 (54E15)
- Cozero and Baire maps on products of uniform spaces. *Fund. Math.* 94 (1977), 3, 177-189. (M. Hušek) 55 #9037 54E15
- Tasi, J.** (with Musgrave, M. J. P.) Shock waves in diatomic chains. I. Linear analysis. *Mech. Phys. Solids* 24 (1976), no. 1, 19-42. (J. E. Lowther) 54 #1777 73.34 (82A45)
- (with Musgrave, M. J. P.) Shock waves in diatomic chains. II. Nonlinear analysis. *J. Mech. Phys. Solids* 24 (1976), no. 1, 43-66. (J. E. Lowther) 54 #1778 73.34 (82A45)
- Tasković, Milan R.** On parameter convergence and convergence in larger sense. *Mat. Vesnik* 8(23) (1971), 55-59. (A. Meir) 45 #4001 40D15
- Remark on some results of S. Prešić and S. Zervos. *Publ. Inst. Math. (Beograd) (N.S.)* 11(25) (1971), 121-122. (Editors) 48 #4248 26A87
- Generalized f_λ -contractions and fixed point theorems. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţea in connection with their centenary of their birth. *Math. Balkanica* 3 (1973), 538-544. (R. Kannan) 50 #11210 54H25
- Banach's mappings and some generalizations. *Publ. Inst. Math. (Beograd) (N.S.)* 16(30) (1973), 169-175. (Kok-keong Tan) 52 #11888 54H25 (47H10)
- Une classe de conditions suffisantes pour qu'une application soit celle de Banach. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 587-589. (R. Kannan) 51 #11472 54H25
- Monotonic mappings on ordered sets, a class of inequalities with finite difference and fixed points. *Publ. Inst. Math. (Beograd) (N.S.)* 17(31) (1974), 163-172. (R. Kannan) 50 #8180 47H10 (39A05)
- On a family of contractive maps. *Bull. Austral. Math. Soc.* 13 (1975), no. 301-308. (B. F. Bryant) 53 #6526 54H25
- Einige Abbildungen vom β -Typus (der Fixpunkt). *Publ. Inst. Math. (Beograd) (N.S.)* 18(32) (1975), 197-206. (R. Kannan) 51 #9043 54H25
- Some results in the fixed point theory. *Publ. Inst. Math. (Beograd) (N.S.)* 20(33) (1976), 231-242. (Author's summary) 58 #24232 54H25
- Reflexive Banach space and fixed point theorems. *Publ. Inst. Math. (Beograd) (N.S.)* 20(34) (1976), 243-247. (L. P. Belluce) 57 #10521 47H10
- On the convergence of certain sequences and some applications. *Mat. Vesnik* 1(14)(29) (1977), no. 3, 237-242. (S. M. Mazhar) 58 #18399a 54H25 (54E35)
- On the convergence of certain sequences and some applications. II. *Publ. Inst. Math. (Beograd) (N.S.)* 22(36) (1977), 271-281. (S. M. Mazhar) 58 #18399b 54H25 (54E35)
- On contractive mappings in metric spaces. *Comment. Math. Univ. Carolin.* 19(78), no. 2, 409-413. (Kok-Keong Tan) 58 #7593 54H25
- Taslakjan, A. K.** The expandability of functions in Fourier series of Legendre quasipolynomials in the interval (0, 1). (Russian. Armenian summary) *Molod. Nauka i Tekhnika* 2(14) (1971), 29-47. (F. Móríc) 57 #13362 42A56
- Coefficient estimation and absolute convergence of generalized Legendre series. Remainder estimation. (Russian. Armenian summary) *Akad. Nauk Armyan. SSR Dokl.* 55 (1972), 75-82. (J. Németh) 48 #798 42A56
- Tasmambetov, Ž. N.** (with Tereščenko, M. Ī) The rank of a system of second order partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1972, no. 5, 72-78, 95. (Genowefa Majcher) 50 #10501 35A20
- (with Tereščenko, M. Ī) Some remarks on the normal solutions of systems of second order partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1974, no. 3, 65-70, 93. (A. Haimovici) 50 #10502 35A20
- (with Tereščenko, M. Ī) Normally regular solutions of partial differential systems. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations (Russian)*, pp. 157-163. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Editors) 53 #13814 35G05 (35C99)
- Taşmanov, H. T.** The moments of the distribution for a busy period and for the number of calls handled during a busy period in the system $M/G/1$. (Russian) *Random processes and statistical inference*, No. II (Russian), pp. 89-92, 96. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1972. (Roudolf Iasnogorodski) 49 #11667 60K25
- (with Azlarov, T. A.) The simultaneous distributions of the characteristics of the queueing system $M/G/1/N$. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 17 (1973), no. 2, 54-55. (H.-J. Rossberg) 48 #3136 60K25
- Transient phenomena in the simplest queueing system with a constraint. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 17 (1973), no. 4, 46-49. (T. Rolski) 54 #14161 60K25
- (with Azlarov, T. A.) Two-dimensional distributions in the queueing system $M/G/1/N$. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 14-25, 209. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (Z. Khalil) 52 #1919 60K25
- Uniform estimates in local limit theorems for an $M/M/1/N$ queueing system. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 173-177, 211. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (František Zitek) 51 #14318 60K25
- Asymptotic analysis of an $M/M/1/N$ queueing system. (Russian) *Limit theorems and mathematical statistics (Russian)*, pp. 149-154, 190. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1976. (B. Dimitrov) 56 #1506 60K25
- Taşmatov, I. Ju.** See Cybernetics and computer technology, 48 #1735 and Man-machine control systems, 49 #8696
- Taşmetov, U.** The connectedness of hyperspaces. (Russian) *Dokl. Akad. Nauk SSSR* 236 (1974), 286-288. (J. Mioduszewski) 49 #6126 54B20
- Connectedness and local connectedness of certain hyperspaces. (Russian) *Sibirsk. Mat. Ž.* 15 (1974), 1115-1130, 1182. (R. Telgarsky) 51 #4135 54B20 (54C55)
- Shapes of hyperspaces. (Russian. Uzbek summary) *Dokl. Akad. UzSSR* 1975, no. 5-6. (K. Kuperberg) 52 #6655 54C56 (54B20)

- Shapes of hyperspaces. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), no. 4, 869-872, 887. (Maria Moszyńska) **52** #4215 54B20
- mirzaev, Ju. U. (with Salahitdinov, M. S.) A boundary value problem for an equation of mixed type with two lines of degeneracy. (Russian) *Partial differential equations and their applications* (Russian), pp. 3-14, 181. (errata insert) Izdat. "Fan" Uzbek. SSR, Tashkent, 1977. (From the summary) **58** #23142 35M05
- nowski-De Ryck, L. See *Négation*, **48** #3692
- muratov, S. S. Deformation of a polygon into a polyhedron with a given boundary. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 1338-1347, 1431. (A. V. Pogorelov) **50** #14604 53C45
- sa, Uzi (with Fraenkel, Aviezri S.) Strategy for a class of games with dynamic ties. *Comput. Math. Appl.* **1** (1975), no. 2 237-254. (R. K. Guy) **54** #2220 90D05
- (with Fraenkel, Aviezri S.; Yesha, Yaacov) Three annihilation games. *Math. Mag.* **51** (1978), no. 1, 13-17. (Stanisław Zdrzałka) **58** #15272 90D99
- so, H. (with Gräff, P.; Steuerwald, J.) An exact 2-point distribution for Burger's turbulence. *Z. Naturforsch.* **28a** (1973), 690-692. (Alain Brissaud) **53** #7215 76.60
- (with Caldas, I. L.) Stability of a dissipative gravitating two-fluid plasma at rest. *Astrophys. J.* **226** (1978), no. 3, part 1, 1115-1119. (Authors' summary) **58** #25352 76.35
- to, Manfred (with Wintz, Paul A.) A bound on the rate-distortion function and application to images. *IEEE Trans. Information Theory* **IT-18** (1972), 150-159. (Gabriel E. Lowitz) **53** #2510 94A05 (68A45)
- a, M. N. (with Hamedani, G. G.) On the determination of the bivariate normal distribution from distributions of linear combinations of the variables. *Amer. Math. Monthly* **82** (1975), no. 9, 913-915. (Steven Arnold) **52** #4523 62H05
- ar, D. (with Belea, C.) Nonlinear optimal synthesis of certain automatic control systems with linear objects. (Romanian. French summary) *An. Univ. Craiova Ser. a IV-a* **1** (1970), 191-201. (M. M. Konstantinov) **48** #7091 49E30
- ara, Iwona Second order sensitivity. (Polish. English, French, German and Russian summaries) *Rozprawy Elektrotech.* **24** (1978), no. 1, 43-54. (T. Kaczorek) **57** #9190 93B35
- arenko, G. M. The formulation of a certain approximation problem, and its connection with mathematical programming. (Russian) *Software of electronic digital computers* (Proc. Sem. Numer. Anal., Kiev, 1971) (Russian), pp. 327-333. *Akad. Nauk Ukrain SSR Inst. Kibernet., Kiev, 1971.* (Editors) **52** #16663 90C50 (41A50)
- Algorithms for conditional and unconditional optimization. (Russian) *Optimization methods and operations research, applied mathematics* (Russian), pp. 182-185, 192. *Akad. Nauk SSSR Sibirsk. Otdel. Sibirsk. Energet. Inst., Irkutsk, 1976.* (L. Mikolajczyk) **57** #17467 49D30
- (with Sadovnikov, Ju. Ju.) Recurrent schemes for the interpolation of functions of several variables. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 4, 308-311. (A. Lupas) **57** #957 41A05
- (with Sadovnikov, Ju. Ju.) Interpolation of functions of several variables by the method of undetermined coefficients. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 12, 1075-1077, 1150. (C. de Boor) **57** #13327 41A63 41A05
- (with Sadovnikov, Ju. Ju.) Recurrent schemes of discrete mean square approximation. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 6, 497-498, 572. (Authors' summary) **58** #24855 65D10
- ăriin, Mihaela Monte Carlo methods in the study of stochastic processes. *Proceedings of the Fourth Conference on Probability Theory* (Braşov, 1971), pp. 209-215. *Editura Acad. R.S.R., Bucharest, 1973.* (James E. Gentle) **57** #14328 65C05
- arinov, Ja. V. On the investigation of the phase topology of compact configurations with symmetry. (Russian. French summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **28** (1973), no. 5, 70-77. (Zbigniew Nitecki) **50** #1292 58F99 (70.58)
- Portraits of the classical integrals of the problem of the rotation of a rigid body about a fixed point. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **29** (1974), no. 6, 99-105. (Zbigniew Nitecki) **52** #4772 70.58
- tarkiewicz, Krzysztof Sur la notion de l'équivalence des liaisons. (Polish and Russian summaries) *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **21** (1967), 27-45 (1972). (Q. K. Ghori) **48** #5458 70.53
- Une généralisation des équations de Jacobi. *Demonstratio Math.* **3** (1971), 179-194. (L. Berković (RŽMat 1972 #10 B192)) **51** #4774 70.34
- Les potentiels généralisés. *Demonstratio Math.* **3** (1971), 113-129. (Editors) **57** #4724 70.31
- Les intégrales premières des forces vives généralisées. *Demonstratio Math.* **3** (1971), 131-144. (O. Bottema (Zbl 245 #70012)) **57** #2026 70.34
- Un cas de stabilité conditionnelle. *Demonstratio Math.* **7** (1974), 225-239. (J. O. C. Ezeilo) **50** #7694 34D05
- Remarques sur les équations linéaires avec seconds membres, stables conditionnellement. *Demonstratio Math.* **7** (1974), 241-256. (J. O. C. Ezeilo) **50** #7695 34D05
- Comportement asymptotique des solutions des équations différentielles linéaires appartenant aux cas-limites. *Demonstratio Math.* **7** (1974), 313-325. (J. O. C. Ezeilo) **51** #6061 34D05
- Quelques exemples concernant le comportement asymptotique. *Demonstratio Math.* **7** (1974), 427-436. (J. O. C. Ezeilo) **51** #1032 34D05
- Sur les équations non oscillantes nonlinéaires. *Demonstratio Math.* **7** (1974), 471-482. (J. O. C. Ezeilo) **51** #1014 34C10
- Sur les solutions bornées de certaines équations ordinaires du second ordre. *Demonstratio Math.* **8** (1975), no. 2, 227-234. (M. Bertolino) **58** #22777 34C10
- Sur les distances des zéros de certaines équations différentielles du second ordre. *Demonstratio Math.* **9** (1976), no. 4, 763-773. (Noel G. Lloyd) **55** #3425 34C10
- Sur certaines familles de courbes. *Demonstratio Math.* **11** (1978), no. 1, 7-21. (C. S. Hartzman) **58** #13211 58F99 (34C99, 54H20)
- atarskii, V. I. (with Kljackin, V. I.) The diffusion of rays in a medium with random inhomogeneities. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **14** (1971), 706-717. (J. E. Rosenthal) **46** #1208 78.35
- The probability distribution of rays in a medium with random inhomogeneities. (Russian) *Izv. Vysš. Učebn. Zaved. Radiofizika* **14** (1971), 960-962. (J. E. Rosenthal) **46** #3000 78.60
- (with Kljackin, V. I.) A new method of successive approximations in the problem of wave propagation in a medium with random large scale inhomogeneities. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **14** (1971), 1400-1415. (J. E. Rosenthal) **46** #1209 78.35
- (with Kljackin, V. I.) Statistical theory of light propagation in a turbulent medium. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **15** (1972), no. 10, 1433-1455. (From the authors' text) **57** #14940 78.60
- (with Nalbandjan, O. G.) Spatial correlation of a wave field in a randomly inhomogeneous medium. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **20** (1977), no. 2, 232-239. (Authors' summary) **56** #13997 73.60
- (with Nalbandjan, O. G.) A comparison of diagram and analytic methods for the approximate solution of linear stochastic equations. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **20** (1977), no. 4, 549-561. (Authors' summary) **57** #8736 81.60
- (with Kljackin, V. I.) On the statistical theory of wave propagation in random stratified media. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **20** (1977), no. 7, 1040-1053. (Authors' summary) **58** #25708 82.60
- See also *Collection: Oscillations and waves in nonlinear media*, **49** #4705
- Tătaru, Liviu (with Saliu, Lucian) The Dashen's theorems in a classical approach. *An. Univ. Craiova Ser. a V-a* **No. 2**, 145-147 (1974). (Authors' summary) **58** #19936 81.22
- (with Uliu, Florea) A new method for solving the Källen-Pauli equation. *An. Univ. Craiova Ser. a V-a* **No. 2**, 161-167 (1974). (S. Aramaki) **55** #11835 81.30
- Tătaru, Petre (with Lupu, Gheorghe) Correlationless relativistic plasma with time-dependent background state. (French summary) *Rev. Roumaine Phys.* **16** (1971), 105-114. (Authors' summary) **47** #2956 82.62
- Tataru-Mihai, P. I. On the Koba-Nielsen-Olesen scaling behaviour for the high-energy multiplicity distributions. *Helv. Phys. Acta* **50** (1977), no. 1, 123-129. (Author's summary) **56** #4568 81.60
- Tate, A. A new approach to the theory of plastic deformation. *Internat. J. Solids and Structures* **14** (1978), no. 6, 475-497. (Author's summary) **58** #14218 73.53
- Tate, J. Rigid analytic spaces. (Russian) *Mathematics: periodical collection of translations of foreign articles*, Vol. 13, No. 3 (Russian), pp. 3-37. Izdat. "Mir", Moscow, 1969. (O. Stănăşilă) **46** #5324 14A20 (13J10, 32K10)
- Symbols in arithmetic. *Actes du Congrès International des Mathématiciens* (Nice, 1970), Tome 1, pp. 201-211. *Gauthier-Villars, Paris, 1971.* (Alan Candiotti) **54** #10204 12A60
- Rigid analytic spaces. *Invent. Math.* **12** (1971), 257-289. (M. Nagata) **46** #5323 14A20 (13J10, 32K10)
- (with Bass, Hyman) The Milnor ring of a global field. *Algebraic K-theory, II: "Classical" algebraic K-theory and connections with arithmetic* (Proc. Conf., Seattle, Wash., Battelle Memorial Inst., 1972), pp. 349-446. *Lecture Notes in Math.*, Vol. 342, Springer, Berlin, 1973. (T.-Y. Lam) **56** #449 18F25 (12F05, 12A65)
- Letter from Tate to Iwasawa on a relation between K_2 and Galois cohomology. *Algebraic K-theory, II: "Classical" algebraic K-theory and connections with arithmetic* (Proc. Conf., Seattle Res. Center, Battelle Memorial Inst., 1972), pp. 524-527. *Lecture Notes in Math.*, Vol. 342, Springer, Berlin, 1973. (Alan Candiotti) **55** #2846 12A60 (12A65)
- (with Mazur, Barry C.) Points of order 13 on elliptic curves. *Invent. Math.* **22** (1973/74), 41-49. (F. Oort) **50** #327 14G05 (14H40, 14K15)
- The arithmetic of elliptic curves. *Invent. Math.* **23** (1974), 179-206. (A. P. Ogg) **54** #7380 10D05 (14G25, 14K15)
- The 1974 Fields medals. I. An algebraic geometer. *Science* **186** (1974), no. 4158, 39-40. (Editors) **53** #60 01A70
- Algorithm for determining the type of a singular fiber in an elliptic pencil. *Modular functions of one variable, IV* (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972), pp. 33-52. *Lecture Notes in Math.*, Vol. 476, Springer, Berlin, 1975. (J. S. Milne) **52** #13850 14G25 (14K15)
- The work of David Mumford. *Proceedings of the International Congress of Mathematicians* (Vancouver, B. C., 1974), Vol. 1, pp. 11-15. *Canad. Math. Congress, Montreal, Que., 1975.* (Editors) **54** #2393 01A70 (14-03)
- (with Almgren, Frederick J., Jr.; Montgomery, Hugh L.) The 1974 Fields medals. (Bulgarian) Translated from the English *Science* **186** (1974), no. 4158, 39-40; *ibid.* **186** (1974), no. 4159, 130-131. *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* **18(51)** (1975), no. 1, 68-72. (Editors) **53** #62 01A70
- Problem 9: The general reciprocity law. *Mathematical developments arising from Hilbert problems* (Proc. Sympos. Pure Math., Northern Illinois Univ., De Kalb, Ill., 1974), pp. 311-322. *Proc. Sympos. Pure Math.*, Vol. XXVIII, Amer. Math. Soc., Providence, R. I., 1976. (Jacques Martinet) **55** #2849 12A65
- Relations between K_2 and Galois cohomology. *Invent. Math.* **36** (1976), 257-274. (Alan Candiotti) **55** #2847 12A60 (12A65)
- Local constants. Prepared in collaboration with C. J. Bushnell and M. J. Taylor. *Algebraic number fields: L-functions and Galois properties* (Proc. Sympos., Univ. Durham, Durham, 1975), pp. 89-131. *Academic Press, London, 1977.* (G. Whaples) **56** #15613 12A70 (10D15)
- On the torsion in K_2 of fields. *Algebraic number theory* (Kyoto Internat. Sympos., Res. Inst. Math. Sci., Univ. Kyoto, Kyoto, 1976), pp. 243-261. *Japan Soc. Promotion Sci., Tokyo, 1977.* (Alan Candiotti) **57** #3104 12B25
- See also *Mathematics: Periodical collection of translations of foreign articles*, **49** #4722; *Mathematics: Periodical collection of translations of foreign articles*, **50** #12531 (EA 58); *Serre, Jean-Pierre*, **53** #8030 and *Lang, Serge*, **53** #13117
- Tatebayashi, Makoto (with Kasahara, Masao; Namekawa, Toshihiko) Characteristics of decoding error in discrete-memory channel. *Electron. Commun. Japan* **58** (1975), no. 4, 16-24. (Ezio M. Biglieri) **55** #14399 94A05
- Tatevskii, V. M. (with Koptev, G. S.) ★Элементарная теория линейных неравенств и их приложения. (Russian) [Elementary theory of linear inequalities and their applications] Edited by N. P. Židkov. *Izdat. Moskov. Univ., Moscow, 1973.* 159 pp. (errata insert) (George P. Barker) **50** #1489 65F99 (15A39)
- Tatham, Ronad L. (with Sweeney, Dennis J.) An improved long-run model for multiple

- warehouse location. *Management Sci.* **22** (1975/76), no. 7, 748-758. (T. Salia) **53** #12549 90B05 (90C50)
- Tatjewski, Piotr** A penalty function method in two-level static optimization, and conditions for its applicability. (Polish. English and Russian summaries) *Podstawy Sterowania* **4** (1974), 191-205. (J. S. Kowalik) **50** #6502 90C30
- Dual methods of multilevel optimization. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **25** (1977), no. 3, 247-254. (W. E. Schmitendorf) **56** #9416 49D30 (65K05)
- (with Findeisen, Władisław; Brdyś, Mieczysław; Malinowski, Krzysztof B.; Woźniak, Adam) On-line hierarchical control for steady-state systems. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 2, 189-209. (Authors' summary) **57** #15638 93C30
- Taton, René** Madame du Châtelet, traductrice de Newton. *Arch. Internat. Histoire Sci.* **22** (1969), no. 88-89, 185-210. (See Zbl 213, 6) **01A50**
- Sur les relations scientifiques d'Augustin Cauchy et d'Evariste Galois. *Rev. Histoire Sci. Appl.* **24** (1971), no. 2, 123-148. (J. S. Joel) **58** #15978 **01A55**
- Sur quelques ouvrages récents concernant l'histoire de la science française. (English summary) *Rev. Histoire Sci. Appl.* **26** (1973), no. 1, 69-90. (J. S. Joel) **56** #8289 **01A50**
- Bernard Rochot (1900-1971). *Arch. Internat. Hist. Sci.* **24** (1974), no. 94, 144-146. (Editors) **56** #66 **01A70**
- Inventaire chronologique de l'oeuvre de Lagrange. (English summary) *Rev. Hist. Sci.* **27** (1974), 3-36. (Editors) **58** #21344 **01A75**
- (with Cazenave, Maylis) Contribution à l'étude de la diffusion du *De revolutionibus* de Copernic. Inventaire des exemplaires des deux premières éditions conservés en France. (English summary) *Rev. Hist. Sci.* **27** (1974), 307-328. (Editors) **58** #21099 **01A40** (70.01)
- Quelques remarques sur la périodisation en histoire des sciences et sur le concept de XVIII^e siècle. La catégorie de XVIII^e siècle: philosophies et sciences (Journée, Centre Hist. Sci. Doctrines, Paris, 1975). *Rev. Internat. Philos.* **29** (1975), no. 4, 406-419. (Editors) **58** #21148 **01A45**
- A chronological description of the works of A. Clairaut. (Russian) Translated from the French by S. S. Petrova. *Istor.-Mat. Issled. Vyp.* **21** (1976), 240-260, 355. (Author's summary) **58** #21345 **01A75** (01A50)
- À propos des *Opera omnia* d'Euler. (English summary) *Rev. Histoire Sci. Appl.* **29** (1976), no. 1, 73-77. (Editors) **57** #9447 **01A75**
- Inventaire chronologique de l'oeuvre d'Alexis-Claude Clairaut (1713-1765). (English summary) *Rev. Histoire Sci. Appl.* **29** (1976), no. 2, 97-122. (J. S. Joel) **57** #15882 **01A50** (01A70)
- Les origines et les débuts de l'Observatoire de Paris. The origins, achievement and influence of the Royal Observatory, Greenwich: 1675-1975 (Proc. 4th Joint Sympos. Internat. Astronom. Union and Union Internat. Histoire et Philos. Sci., Greenwich, 1975). *Vistas Astronom.* **20** (1976), no. 1-2, 65-71. (Editors) **58** #10072 **01A45**
- See also Kepler, Johannes, **56** #15293; Pont, Jean-Claude, **57** #12075 and Oeuvres: Cauchy, Augustin Louis, **57** #12151
- Tatsumi, Tomomasa** (with Gotoh, Kanefusa) The structure of the damping disturbances in the stability of unbounded laminar flows. *Instability of continuous systems (IUTAM Sympos., Herrenalb, 1969)*, pp. 368-375. Springer, Berlin, 1971. (T. Yao-tsu Wu) **51** #12123 76.35
- (with Tokunaga, Hiroshi) One-dimensional shock turbulence in a compressible fluid. *J. Fluid Mech.* **65** (1974), 581-601. (W. O. Criminale, Jr.) **49** #10253 76.35
- (with Tokunaga, Hiroshi) Interaction of plane nonlinear waves in a compressible fluid and two-dimensional shock turbulence. *J. Phys. Soc. Japan* **38** (1975), 1167-1179. (M. Sichel) **52** #7302 76.35
- (with Kida, Shigeo; Mizushima, Jiro) The multiple-scale cumulant expansion for isotropic turbulence. *J. Fluid Mech.* **85** (1978), no. 1, 97-142. (J. D. Atkinson) **57** #14907 76.60
- Tatsuuma, Nobuhiko** Prime ideals in the dual objects of locally compact groups. *Proc. Japan Acad.* **47** (1971), 249-251. (L. Corwin) **45** #3631 22B05
- Invariance of Plancherel measure under the operation of Kronecker product. *Proc. Japan Acad.* **47** (1971), 252-256. (G. A. Reid) **46** #3686 22D10
- Uniqueness of the Plancherel measure as an invariant measure over the dual objects of compact groups. *Proc. Japan Acad.* **47** (1971), 346-347. (G. A. Reid) **47** #6939 22D10 (22C05)
- (with Takesaki, Masamichi) Duality and subgroups. II. *J. Functional Analysis* **11** (1972), 184-190. (Pierre Eymard) **52** #5865 22D25
- Plancherel formula for non-unimodular locally compact groups. *J. Math. Kyoto Univ.* **12** (1972), 179-261. (G. A. Reid) **45** #8777 22D05 (28A70)
- Formal degree and Clebsch-Gordan coefficient. *J. Math. Kyoto Univ.* **18** (1978), no. 1, 131-135. (L. Corwin) **58** #1000 22D10
- Tattersall, J. J.** On the intersection of maximal m -convex subsets. *Israel J. Math.* **16** (1973), 300-305. (Benno Fuchssteiner) **49** #1067 46A99 (52A05)
- Tatum, Liston** See *Origins of digital computers*, **50** #6760
- Tatzawa, Tikaō** Number theory and analytic methods. (Japanese) *Sūgaku* **22** (1970), no. 3, 190-203. **58** #27844 **10H15**
- On the Waring problem in an algebraic number field. *Seminar on Modern Methods in Number Theory (Inst. Statist. Math., Tokyo, 1971)*, Paper No. 35, 8 pp. *Inst. Statist. Math., Tokyo*, 1971. (Editors) **51** #12700 **10B35** (10J10)
- On a theorem in the theory of Fourier integrals. *Sci. Papers College Gen. Ed. Univ. Tokyo* **22** (1972), 113-115. (G. Doetsch) **47** #9157 42A68
- On Waring's problem in algebraic number fields. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday, I. *Acta Arith.* **24** (1973), 37-60. (errata insert) (Henri Joris) **50** #7025 **10B35** (10J10)
- On the conductor discriminant formula. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday. *J. Reine Angew. Math.* **262/263** (1973), 436-440. (Paul Hartung) **49** #2666 **12A65**
- On the number of integral ideals in algebraic number fields, whose norms not exceeding x . *Sci. Papers College Gen. Ed. Univ. Tokyo* **23** (1973), 73-86. (K. Lakkis) **48** #11035 **12A05** (10H15, 10H25, 12A65)
- On the extended Hecke theta-formula. (Russian summary) Proceedings of the International Conference on Number Theory (Moscow, 1971). *Trudy Mat. Inst. Stek.* **132** (1973), 206-210, 266. (Paul Hartung) **49** #2669 **12A70**
- Fourier analysis used in analytic number theory. *Acta Arith.* **28** (1975/76), no. 263-272. (E. Grosswald) **52** #11465 **42A92** (10G05, 10J10)
- The Chevalley-Azumaya theorem. (Japanese) Characteristics of arithmetic functions (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). *Sūrikaiseikikenkyūsho Kōkyūroku No.* **274** (1976), 98-102. (Yoshiomi Furuta) **58** #5612 **12C15**
- On the number of integral ideals whose norms belonging to some norm residue class mod q . *Sci. Papers College Gen. Ed. Univ. Tokyo* **27** (1977), no. 1, 1-8. (E. Grosswald) **56** #5501 **12A65** (10H20)
- On Weber's theorem and some resulting problems. (Japanese) Research on the σ of numbers (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1977). *Sūrikaiseikikenkyūsho Kōkyūroku No.* **294** (1977), 145-180. (S. Ikehara) **57** #5957 **12A65**
- See also *Proceedings: International Conference on Number Theory*, **51** #5463
- Taub, A. H.** Stability of fluid motions and variational principles. *Hyperbolic equations and waves (Rencontres, Battelle Res. Inst., Seattle, Wash., 1968)*, pp. 24-37. Springer, Berlin, 1970. (Editors) **58** #32382 76.49
- Relativistic hydrodynamics. *Hyperbolic equations and waves (Rencontres, Battelle Res. Inst., Seattle, Wash., 1968)*, pp. 370-393. Springer, Berlin, 1970. (Editors) **58** #32743 83.35
- Relativistic hydrodynamics. *Studies in applied mathematics*, pp. 150-180. *MAA Studies in Math., Vol. 7*, Math. Assoc. Amer. (distributed by Prentice-Hall, Englewood Cliffs, N.J.), 1971. (A. Raychaudhuri) **49** #11952 76.53 (83.53)
- Plane-symmetric similarity solutions for self-gravitating fluids. *General relativity (papers in honour of J. L. Synge)*, pp. 133-150. Clarendon Press, Oxford, 1972. (From the introduction) **58** #20159 83.22
- On variational principles in general relativity. (Russian summary) *Gravitation problems, prospects (dedicated to the memory of A. Z. Petrov) (Russian)*, pp. 276-287, 358. *Izdat. "Naukova Dumka", Kiev*, 1972. (J. D. Logan) **49** #8581 83.49
- (with MacCallum, M. A. H.) Variational principles and spatially-homogeneous universes, including rotation. *Comm. Math. Phys.* **25** (1972), 173-189. (J. D. Logan) **45** #8212 83.49
- (with Tabensky, Romualdo) Plane symmetric self-gravitating fluids with pressure equal to energy density. *Comm. Math. Phys.* **29** (1973), 61-77. (P. Havas) **47** #10022 83.53
- General relativistic shock waves in fluids for which pressure equals energy density. *Comm. Math. Phys.* **29** (1973), 79-88. (P. Havas) **47** #10023 83.53
- (with MacCallum, M. A. H.) The averaged Lagrangian and high-frequency gravitational waves. *Comm. Math. Phys.* **30** (1973), 153-169. (J. D. Logan) **48** #1313 83.49
- Variational methods and gravitational waves. (French summary) *Avec discussion Ondes et radiations gravitationnelles (Colloq. Internat. Centre Nat. Recherche Sci., No. 220, Paris, 1973)*, pp. 57-71. Centre Nat. Recherche Sci., Paris, 1974. (N. V. Micevich) **58** #25756 83.49
- Gravitational waves and averaged Lagrangians. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973)*, Part 2, pp. 415-423. Amer. Math. Soc., Providence, R.I., 1975. (M. A. H. MacCallum) **52** #4917 83.53
- Lanczos' splitting of the Riemann tensor. *Computers and mathematics with applications*, pp. 377-380. Pergamon, Oxford, 1976. (Alan Barnes) **56** #4689 83.53
- Curvature invariants, characteristic classes, and the Petrov classification of space-times. *Differential geometry and relativity*, pp. 277-289. *Mathematical Phys. and Appl. Math., Vol. 3*, Reidel, Dordrecht, 1976. (F. J. Flaherty) **56** #3778 53C50
- High frequency gravitational radiation in Kerr-Schild space-times. *Comm. Math. Phys.* **47** (1976), no. 2, 185-196. (P. C. Vaidya) **57** #11638 83.53
- (with Choquet-Bruhat, Y.) High-frequency, self-gravitating, charged scalar fields. *General Relativity and Gravitation* **8** (1977), no. 8, 561-571. (From the authors' introduction) **57** #11586 83.35
- See also *Studies in applied mathematics*, **48** #10748 and *Hyperbolic equations and waves*, **58** #20940
- Taube-Netto, Miguel** Two queues in tandem attended by a single server. *Operations Research* **25** (1977), no. 1, 140-147. (Takehisa Fujisawa) **55** #6621 60K25
- Tauber, Gerald E.** Electrodynamics in an expanding universe. *General Relativity and Gravitation* **3** (1972), 17-27. (P. C. Vaidya) **52** #16479 83.35
- The Sugawara model in general relativity. I. The case for three current vectors (SU(2)). *Internat. J. Theoret. Phys.* **11** (1974), 175-185. (Author's summary) **54** #958 83.53
- Tauber, Isolf** Über die Flexibilitätsgleichung. (Russian and Romanian summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **15(29)** (1970), no. 1, 47-50. (Pl. Kannappan) **49** #5629 39A40
- Eine neue Klasse von Lösungen einer Funktionalgleichung. (Romanian and Russian summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **16(30)** (1971), no. 2, 193-199. (R. Kodnár) **48** #11831 39A15
- Über die Lösungen einer von A. D. Alexandrov Verallgemeinerten Cauchyschen Funktionalgleichung. (Romanian summary) *An. Univ. Timişoara Ser. Şti. Mat.* **1** (1973), 175-182. (Wazir Hasan Abdi) **52** #14724 39A20
- Eine spezielle Klasse von schwachen Loops. I. (Russian and Romanian summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **19(33)** (1974), no. 1, 33-37. (R. Artzy) **51** #779 20N05
- Eine spezielle Klasse von schwachen Loops. II. (Russian and Romanian summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara Ser. Mat. Fiz. Mec. Teoret. Apl.* **19(33)** (1974), no. 2, 145-148. (R. Artzy) **53** #3179 20N05
- (with Neuhaus, N.) Monotone Lösungen zweier Komplexfunktionalgleichungen dargestellt aus der Jensenfunktionalgleichung hervorgehen. *Rev. Roumaine Math. Pures Appl.* **2** (1978), no. 2, 299-307. (A. Climescu) **58** #12059 39A15
- (with Neuhaus, N.) Über die monotonen Lösungen der auf Mengen verallgemeinerten Jensenfunktionalgleichung. *Rev. Roumaine Math. Pures Appl.* **2** (1978), no. 2, 309-312. (A. Climescu) **58** #12060 39A15

- r, Selmo** An embedding theorem for functional equations. *J. Math. Anal. Appl.* **38** (1972), 668-671. (I. Stamate) **47** #7257 39A15
- n-Fibonacci products. *Fibonacci Quart.* **11** (1973), no. 2, 153-156. (L. K. Durst) **1** #10968 10A35**
- On K -numbers. *Fibonacci Quart.* **11** (1973), no. 2, 179-183. (H. W. Gould) **3** #257 05A10
- Combinatorial numbers in C^n . *Fibonacci Quart.* **14** (1976), no. 2, 101-110. (Joseph rkin) **53** #7795 05A10
- An application of the Hadamard product to air pollution. *Appl. Math. Comput.* **4** (1978), no. 2, 167-176. (H. W. Vayo) **58** #4457 92A15 (15A48, 35G30)
- ert, K.** Differenzverfahren für Schwingungen mit trockener und zäher Reibung und ihr Regelungs-systeme. (English summary) *Numer. Math.* **26** (1976), no. 4, 379-395. (W. i. Loud) **55** #9545 65L05
- ert, Klaus** Differenzverfahren für gewöhnliche Anfangswertaufgaben mit unstetiger rechter Seite. *Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen* (Tagung, Math. Forschungsinst., Oberwolfach, 1973), pp. 137-148. *Lecture Notes in Math.*, Vol. 395, Springer, Berlin, 1974. (W. S. Loud) **50** #3580 55L05
- Zusammenhänge zwischen Eindeigkeitssätzen und Näherungsverfahren für gewöhnliche Anfangswertaufgaben. (English summary) *Numerische Behandlung von Differentialgleichungen, Band 2* (Tagung, Math. Forschungsinst., Oberwolfach, 1975), pp. 233-240. *Internat. Ser. Numer. Math.*, Vol. 31, Birkhäuser, Basel, 1976. (Author's summary) **58** #24966 65L05
- Eine Erweiterung der Theorie von G. Dahlquist. (English summary) *Computing* **17** (1976), no. 2, 177-185. (Matti Mäkelä) **55** #6865 65L05
- chert, T. R.** A review: quasistatic thermal stresses in anisotropic elastic bodies, with applications to composite materials. (German summary) *Acta Mech.* **23** (1975), no. 1-2, 113-135. (Editors) **52** #7268 7335
- er, Jaroslav** See Nový, Luboš, **56** #2742
- fer, Jiří** A certain generalized multistep method. (Russian) *Application of functional methods to the boundary value problems of mathematical physics* (Proc. Third Soviet-Czechoslovak Conf., Novosibirsk, 1971) (Russian), pp. 245-251. *Inst. Mat. Akad. Nauk SSSR Sibsk. Otdel., Novosibirsk*, 1972. (I. Šelihova (RŽMat 1973 #2 B1000)) **54** #9090 65L05
- (with Hrubec, Ivo) Comparison of the factorization method and the method of combination of solutions. (Czech summary) *Apl. Mat.* **17** (1972), 209-224. (F. Perrin) **45** #4650 65L10
- (with Práger, Milan; Vitásek, Emil) Some new methods for numerical solution of initial value problems. *Proceedings of Equadiff III* (Third Czechoslovak Conf. Differential Equations and their Appl., Brno, 1972), pp. 247-253. *Folia Fac. Sci. Natur. Univ. Purkynianae Brunensis, Ser. Monograph, Tomus 1, Purkyně Univ., Brno*, 1973. (J. D. Lambert) **50** #3579 65L05
- (with Práger, Milan; Vitásek, Emil) Overimplicit multistep methods. (Czech summary) *Apl. Mat.* **18** (1973), 399-421. (M. Rama Mohana Rao) **51** #2292 65L05
- Lösung der Randwertprobleme für Systeme von linearen Differentialgleichungen. *Rozprawy Československé Akad. Věd Řada Mat. Přírod. Věd* **83** (1973), no. 5, 134 pp. (Not reviewed) **34B05**
- (with Práger, Milan; Vitásek, Emil) Overimplicit methods for the solution of evolution problems. Proceedings of the Third Conference on Basic Problems of Numerical Mathematics (Prague, 1973). *Acta Univ. Carolinae—Math. et Phys.* **15** (1974), no. 1-2, 125-133. (L. Collatz) **52** #12336 65L05
- Numerical solution of boundary value problems by stable methods based on the transfer of conditions. *Numerical solutions of boundary value problems for ordinary differential equations* (Proc. Sympos., Univ. Maryland, Baltimore, Md., 1974), pp. 317-330. *Academic Press, New York*, 1975. (Francesco G. Lerda) **53** #9664 65L10
- (with Vitásek, Emil) Numerical solution of evolution problems in Banach spaces. *Topics in numerical analysis, II* (Proc. Roy. Irish Acad. Conf., Univ. College, Dublin, 1974), pp. 243-251. *Academic Press, London*, 1975. (Pietro Marzulli) **53** #9657 65L05 (34G05)
- ifk, M. S.** Semisimple subalgebras of certain simple real Lie algebras. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 4(184), 261-262. (G. P. Kukin) **53** #3042 17B20
- iglih, G. L.** A polynomial weight code that corrects multiple group errors. (Russian) *Problemy Peredači Informacii* **8** (1972), no. 2, 15-20. (Siegmar Gerber) **49** #7012 94A10
- (with Tenengol'c, G. M.; Davydov, A. A.) A code that corrects packets of errors, and its use in information exchange between computers. (Russian) *Problemy Peredači Informacii* **8** (1972), no. 3, 27-37. (Jørn Justesen) **53** #15556 94A10
- (with Fain, S. B.) Some questions on the structure of residue class systems in quadratic fields. (Russian) Problems of applied mathematics—Mushelishvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothvl. Centr. Šrom.* **11** (1972), no. 1, 157-171. (Editors) **57** #3098 12A05 (12A25, 68A15)
- (with Fain, S. B.) Correction of group errors in binary-remainder codes. (Russian) Problems of applied mathematics—Mushelishvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothvl. Centr. Šrom.* **11** (1972), no. 1, 172-185. (Editors) **57** #11920 94A10
- (with Tenengol'c, G. M.) Codes that correct error bursts in the transmission of information and in the execution of arithmetic operations. (Russian) *Problemy Peredači Informacii* **10** (1974), no. 1, 33-38. (R. N. Goss) **49** #4656 94A10
- (with Tenengol'c, G. M.) Bahl-Chien burst-error-correcting codes. (Russian) *Problemy Peredači Informacii* **11** (1975), no. 1, 43-56. (Authors' summary) **58** #26525a (E 58 #26525b) 94A10
- (with Tenengol'c, G. M.) Letter to the editors: "Bahl-Chien burst-error-correcting codes". (Russian) *Problemy Peredači Informacii* **12** (1976), no. 1, 119. (Authors' summary) **58** #26525b 94A10
- A cyclic code that corrects double bursts of arithmetic errors. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 4, 55-62. (T. Nemetz) **58** #15687 94A10
- nia-Taulera, A.** See Somia-Taulera, A.
- uman, Yair** (with Neyman, Abraham) The existence of nondiagonal axiomatic values. *Math. Oper. Res.* **1** (1976), no. 3, 246-250. (Authors' introduction) **57** #11810 90D30
- Taureck, Bernhard** ★ Mathematische und transzendente Identität. Philosophische Untersuchungen über den Identitätsbegriff der mathematischen Logik sowie bei Schelling und Hegel. Überlieferung und Aufgabe, No. XI. R. Oldenbourg Verlag, Vienna-Munich, 1973. 182 pp. (Editors) **58** #16109 02A05
- Taurinskas, M. V.** (with Vanagas, V. V.) The relation of structural constants of classical algebras with Clebsch-Gordan coefficients. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **15** (1975), no. 3, 329-340, 481. (Authors' summary) **58** #28325 22E70
- (with Kalinauskas, R. K.; Vanagas, V. V.) Differential operators in the collective and internal variables of the nucleus. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **16** (1976), no. 2, 177-199. (Z. Janković) **54** #6716 81.22
- (with Vanagas, V. V.) Explicit expressions for the structure constants of the symplectic and orthogonal group algebras. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **16** (1976), no. 3, 341-357, 475. (Authors' summary) **56** #14236 81.22
- (with Vanagas, V. V.) Coefficients for the SU_3 -irreducible decomposition of operators and the properties of fundamental interactions. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **17** (1977), no. 6, 709-716, 805. (Authors' summary) **58** #14530 81.22
- (with Vanagas, V. V.) Computation of the spin-isospin part of the matrix of the microscopic collective Hamiltonian for the nucleus. (Russian. Lithuanian and English summaries) *Litovsk. Fiz. Sb.* **17** (1977), no. 6, 717-727, 805. (Authors' summary) **58** #14531 81.22
- Tauritz, Joseph L.** A useful graphical representation in the theory of loaded scatterers. *IEEE Trans. Antennas and Propagation AP-18* (1970), 826-829. (J. S. Colonias) **46** #10310 78.65
- Taussky, Olga** (1, 2, 4, 8)-sums of squares and Hadamard matrices. *Combinatorics* (Proc. Sympos. Pure Math., Vol. XIX, Univ. California, Los Angeles, Calif., 1968), pp. 229-233. *Amer. Math. Soc., Providence, R.I.*, 1971. (J. Spencer) **47** #3204 05B20
- Hilbert's theorem 94. *Computers in number theory* (Proc. Sci. Res. Council Atlas Sympos. No. 2, Oxford, 1969), pp. 65-71. *Academic Press, London*, 1971. (J. Browkin) **48** #11053 12A65
- Automorphs of quadratic forms as positive operators. *Inequalities, III* (Proc. Third Sympos., Univ. California, Los Angeles, Calif., 1969; dedicated to the memory of Theodore S. Motzkin), pp. 341-345. *Academic Press, New York*, 1972. (H. S. Butts) **49** #2805 15A63
- The factorization of an integral matrix into two integral symmetric matrices. II. *Proceedings of the Number Theory Conference* (Univ. Colorado, Boulder, Colo., 1972), pp. 238-240. *Univ. Colorado, Boulder, Colo.*, 1972. (A. D. Porter) **51** #5624 15A36 (10M20)
- The role of symmetric matrices in the study of general matrices. *Linear Algebra and Appl.* **5** (1972), 147-154. (A. Lee) **46** #1818 15A57
- The factorization of an integral matrix into a product of two integral symmetric matrices. I. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday. II. *Acta Arith.* **24** (1973), 151-156. (A. D. Porter) **49** #332 15A36
- The factorization of an integral matrix into a product of two integral symmetric matrices. *Bull. Amer. Math. Soc.* **79** (1973), 956-958. (B. Levinger) **47** #6737 15A36
- The factorization of an integral matrix into a product of two integral symmetric matrices. II. The general case $n=2$. Collection of articles dedicated to Wilhelm Magnus. *Comm. Pure Appl. Math.* **26** (1973), 847-854. (B. Levinger) **49** #9013 15A36
- Hilbert's theorem 90 in matrix rings. *Linear and Multilinear Algebra* **1** (1973), no. 1, 5-8. (Ion Enescu) **47** #6760 16A28 (15A30)
- Additive commutators between 2×2 integral matrix representations of orders in identical or different quadratic number fields. *Bull. Amer. Math. Soc.* **80** (1974), 885-887. (S. I. Gendler) **52** #332 10M20
- A result concerning classes of matrices. *J. Number Theory* **6** (1974), 64-71. (K. W. Roggenkamp) **48** #11156 15A36 (16A18)
- Some results concerning the transition from the L- to the P-property for pairs of finite matrices. II. *Linear and Multilinear Algebra* **2** (1974/75), 195-202. (R. Merris) **51** #10367 15A18
- Additive commutators of rational 2×2 matrices. *Linear Algebra and Appl.* **12** (1975), no. 1, 1-6. (Edward A. Bender) **52** #333 10M20
- Two facts concerning rational 2×2 matrices leading to integral ternary forms representing zero. *Selected topics on ternary forms and norms* (Sem. Number Theory, California Inst. Tech., Pasadena, Calif., 1974/75), Paper No. 1, 15 pp. *California Inst. Tech., Pasadena, Calif.*, 1976. (Ezra Brown) **55** #7992 12A45 (10C05, 10B35)
- Norms in quadratic fields and their relations to non commuting 2×2 matrices. I. *Monatsh. Math.* **82** (1976), no. 3, 253-255. (S. I. Gendler) **54** #5178 12A25 (15A36)
- Olga Taussky-Todd. *Number theory and algebra*, pp. xxiv-xlvi. (1 plate) *Academic Press, New York*, 1977. (Editors) **58** #10227 01A70
- Norms from quadratic fields and their relations to non commuting 2×2 matrices. II. The principal genus. *Houston J. Math.* **3** (1977), no. 4, 543-547. (S. I. Gendler) **57** #16194 10C05 (12A25, 15A36)
- Norms from quadratic fields and their relation to noncommuting 2×2 matrices. III. A link between the 4-rank of the ideal class groups in $\mathbb{Q}(\sqrt{m})$ and in $\mathbb{Q}(\sqrt{-m})$. *Math. Z.* **154** (1977), no. 2, 91-95. (From the introduction) **58** #22014 12A25
- See also Collection: Taussky, Olga, **52** #5245; Collection: Taussky, Olga, **52** #5246; Topics on ternary forms and norms, **55** #262; van der Waerden, B. L., **55** #7915; Number theory and algebra, **56** #11675 and Schneider, Hans, **57** #39
- Tauts, A.** A connection between generalized Beth models and topological pseudo-Boolean algebras. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* **305** (1972), 3-8. (Igor Lavrov) **51** #7862 02H10 (02J05)
- A semantic interpretation of formulas in generalized Beth models and in pseudo-Boolean algebras. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* **305** (1972), 9-20. (Igor Lavrov) **51** #7863 02H10 (02J05)
- A formal deduction of tautological formulas in pseudo-Boolean algebras. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* **336** (1974), 3-30.

- (Igor Lavrov) **51** #7864 02H10 (02G10, 02J05)
 A game for the construction of a propositional semantics in generalized Beth models. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* 342 (1974), 13-28. (Igor Lavrov) **51** #7865 02H10
 A semantic model for infinite formulas. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* 355 (1975), 7-19. (Igor Lavrov) **52** #7846 02B25 (02C15, 02H10, 02J05)
 Search for deduction by means of a semantic model. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* 390 (1976), 3-28. (From the introduction) **58** #5076 02C15
 Strong tautology and construction of a countermodel for nonderivable propositions. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* 390 (1976), 29-42. (Author's summary) **57** #16049 02H10 (02C15)
- Täutu, Petre** (with Iosifescu, Marius) ★Stochastic processes and applications in biology and medicine. I: Theory. Biomathematics, Vol. 3. *Editura Academiei RSR, Bucharest; Springer-Verlag, Berlin-New York*, 1973. 331 pp. (Editors) **50** #3347 60Jxx (92-XX) (with Iosifescu, Marius) ★Stochastic processes and applications in biology and medicine. II: Models. Biomathematics, Vol. 4. *Editura Academiei, Bucharest; Springer-Verlag, Berlin-New York*, 1973. 337 pp. (Editors) **50** #3348 60Jxx (92-XX)
 A stochastic automaton model for interacting systems. *Perspectives in probability and statistics*, pp. 403-415. *Applied Probability Trust, Univ. Sheffield, Sheffield*, 1975. (Author's summary) **55** #9336 60K35 (94A35)
 (with Schürger, K.) Markov configuration processes on a lattice. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 2, 233-244. (John G. Basterfield) **54** #6333 60K35
 On random systems of biological interacting objects. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 6, 795-802. (Charles J. Mode) **54** #12244 92A05
 The evolution of epidemics as random graphs. (French summary) *Proceedings of the Fifth Conference on Probability Theory (Braşov, 1974)*, pp. 287-291. *Editura Acad. R.S.R., Bucharest*, 1977. (D. Ludwig) **57** #5193 92A15
 Blakening a d -dimensional lattice. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 1, 141-152. (R. Fischler) **58** #4429 92A05 (60K99)
 See also **Proceedings: Conference on Probability Theory**, **52** #9308
- Tautz, Heinz** ★Wärmeleitung und Temperaturausgleich. Die mathematische Behandlung instationärer Wärmeleitungsprobleme mit Hilfe von Laplace-Transformationen. *Akademie Verlag, Berlin*, 1971. xiv + 374 pp. (F. Chorlton) **53** #8624 35-02
- Tauvel, Patrice** Sur les représentations des algèbres de Lie nilpotentes. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 977-979. (Robert E. Beck) **50** #4676 17B10
 Polarisations et représentations induites des algèbres de Lie résolubles. *Bull. Sci. Math. (2)* **100** (1976), no. 1, 33-44. (E. W. Wallace) **56** #8644 17B10
 Stabilisateurs. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 6, A11, A287-A288. (E. W. Wallace) **54** #7566 17B35
- Tauzović, Branka** See **Biography: Tauzović, Branka**, **53** #7705
- Tavade, A. D.** Pronilpotent groups. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **79** (1975), no. 2, 301-304. (D. I. Zaicev) **53** #616 20E15
 Projective pronilpotent W -groups. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **84** (1976), no. 2, 273-276. (L. G. Kovács) **55** #3083 20E10
 Periodic pronilpotent groups. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **88** (1977), no. 2, 289-291. (Author's summary) **58** #28189 20F15
- Tavade, G. U.** (with Mdzinarišvili, V. V.) Estimate of the decomposition coefficients of the a priori probability density of nonlinear stochastic control systems. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **90** (1978), no. 1, 137-140. (Authors' summary) **58** #26445 93E10
- Tavakoli, R. K.** (with Roxburgh, I. W.) Conventionalism and general relativity. *Found. Phys.* **8** (1978), no. 3-4, 229-237. (L. K. Patel) **57** #8925 83.53
- Ta Văn Đình** Sur les formules asymptotiques multiples de l'erreur en méthode aux différences finies. *Acta Sci. Vietnam. 9/10* (1974), 41-52. (A. O. Garder, Jr.) **53** #7056 (E **54** #11798) 65M15
 Erratum: "Sur les formules asymptotiques multiples de l'erreur en méthode aux différences finies" (*Acta Sci. Vietnam. 9/10* (1974), 41-52). *Acta Math. Vietnam.* **1** (1976), no. 1, 127. (Editors) **54** #11798 65M10
 Formulas for the asymptotic expansion of the error in finite difference methods. (Russian) *Acta Math. Vietnam.* **2** (1977), no. 1, 116-140. (B. A. Bondarenko) **58** #3527 65N15
- Tavanez, P. V.** (with Smirnov, Vladimir A.) The interrelations of symbolic logic and philosophy. (Russian) *Philosophy and logic (Russian)*, pp. 5-34. *Nauka, Moscow*, 1974. (Editors) **58** #27273 02A05
 See also **Studies in systems of logic**, **47** #6426; **Nonclassical logic**, **47** #6450 and **Philosophy and logic**, **58** #21368
- Tavanez, V. P.** Classical and nonclassical logic. (Russian) *Nonclassical logic (Russian)*, pp. 3-12. *Izdat. "Nauka", Moscow*, 1970. (J. Joel) **49** #2228 01A65 (02A05)
- Tavantzis, John** Topological methods for finding nontrivial solutions of elliptic boundary value problems. *Nonlinear Anal.* **1** (1976/77), no. 6, 633-649. (A. Ramm) **58** #29212 35J65 (58E05)
 (with Reiss, Edward L.; Matkowsky, Bernard J.) On the smooth transition to convection. *SIAM J. Appl. Math.* **34** (1978), no. 2, 322-337. (Authors' summary) **58** #19751 76.35
- Tavard, Claude** (with Royer, François) Sur la détermination de l'anisotropie de texture des solides polycristallins. *C. R. Acad. Sci. Paris Sér. B* **278** (1974), 81-84. (J.-L. Calais) **50** #12089 82.33 (82.20)
 (with Royer, François) Détermination de l'anisotropie de texture des solides polycristallins à l'aide de figures de pôles incomplètes. *C. R. Acad. Sci. Paris Sér. B* **278** (1974), 173-176. (J.-L. Calais) **50** #12090 82.33
- Tavares, L. Valadares** ★On extreme values of stationary stochastic processes with exponential covariance functions. *Instituto Gulbenkian de Ciência, Centro de Cálculo Científico, Oeiras*, 1972. 59 + xxi pp. (errata insert) (From the author's introduction) **48** #3112 60G10
 The exact distribution of extremes of a non-Gaussian process. *Stochastic Processes*
- Appl.* **5** (1977), no. 2, 151-156. (Holger Rootzén) **56** #6819 60G10
- Tavares, Stafford E.** (with Allard, P. E.; Shiva, Sajjan G.) A note on the decomposition of cyclic codes into cyclic classes. *Information and Control* **22** (1973), 100-106. (R. McEliece) **48** #8096 94A10
 (with Shiva, Sajjan G.) On binary majority-logic decodable codes. *IEEE Trans. Information Theory* **IT-20** (1974), 131-133. (G. M. Tenengol'c) **51** #2773 94A10
 (with Bhargava, Vijay K.; Shiva, Sajjan G.) Some rate- $p/(p+1)$ quasi-cyclic codes. *IEEE Trans. Information Theory* **IT-20** (1974), 133-135. (F. J. MacWilliams) **53** #79410
 (with Bhargava, Vijay K.; Shiva, Sajjan G.) Difference sets of the Hadamard type and quasi-cyclic codes. *Information and Control* **26** (1974), no. 4, 341-350. (Vera Ples) **52** #7697 94A10
 (with Karlin, Maurice; Bhargava, Vijay K.) A note on extended quaternary quadratic residue codes and their binary images. *Inform. and Control* **38** (1978), no. 148-153. (F. J. MacWilliams) **58** #9767 94A10
- Tavares dos Santos, Geovan** Classification of generic quadratic vector fields with no limit cycles. *Geometry and topology (Proc. III Latin Amer. School of Math., Inst. Mat. Pura Aplicada CNPq, Rio de Janeiro, 1976)*, pp. 605-640. *Lecture Notes in Math.*, Vol. 57. *Springer, Berlin*, 1977. (Akides Lins Neto) **56** #13287 58F10
- Tavast, R.** Estimation of the admissible set in programming problems with stochastic constraints. (Russian) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **20** (1971), 478-480. (E. G. Gol'shtein) **46** #6834 90C15
 The factorization of a block matrix. (Russian) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* **21** (1972), 313-316. (A. Lee) **48** #6129 15A12
- Tavathia, B. S.** Certain theorems in operational calculus involving integrals containing hyperbolic functions. *Portugal. Math.* **30** (1971), 21-28. (B. M. Agrawal) **46** #4120 44A45 (33A10)
- Tavdišvili, E. V.** See **Bibliography: Institute of Applied Mathematics, Tbilisi State University**, **51** #21
- Tavel, M. A.** Milestones in mathematical physics: Noether's theorem. *Transport Theoret. Statist. Phys.* **1** (1971), no. 3, 183-185. (Editors) **53** #10537 01A75 (49-03, 83.01)
 Application of Noether's theorem to the transport equation. *Transport Theoret. Statist. Phys.* **1** (1971), no. 4, 271-285. (Nicolae Angelescu) **56** #14462 82.49
- Tavernier, Jean** Classical and quantum descriptions of the Kac ring model. *J. Statistical Phys.* **14** (1976), no. 2, 101-128. (V. P. Kalašnikov) **57** #8802 82.47
- Tavernini, Lucio** One-step methods for the numerical solution of Volterra functional differential equations. *SIAM J. Numer. Anal.* **8** (1971), 786-795. (W. S. Loud) **45** #4683 65Q05
 (with Cryer, Colin W.) The numerical solution of Volterra functional differential equations by Euler's method. *SIAM J. Numer. Anal.* **9** (1972), 105-129. (I. K. Marek) **47** #1311 65Q05
 Linear multistep methods for the numerical solution of Volterra functional differential equations. *Applicable Anal.* **3** (1973), 169-185. (Gene A. Kemper) **53** #1965Q05
 Finite difference approximations for a class of semilinear Volterra evolution problems. *SIAM J. Numer. Anal.* **14** (1977), no. 5, 931-949. (J. R. Cannon) **56** #9965J05 (34G05)
- Tavhelidze, A. N.** (with Bogoljubov, N. N.; Vladimirov, V. S.) Self-similar asymptotics in quantum field theory. I. (Russian. English summary) *Teoret. Mat. Fiz.* **12** (1972), no. 3-17. (Authors' summary) **57** #15020 81.35
 (with Bogoljubov, N. N.; Vladimirov, V. S.) Self-similar asymptotics in quantum field theory. II. (Russian. English summary) *Teoret. Mat. Fiz.* **12** (1972), no. 3, 305-333. (Authors' summary) **57** #15021 81.35
 (with Bogoljubov, N. N.; Mešerjakov, V. A.) Application of N. I. Mushelišvili's methods in the theory of elementary particles. (Russian) *Proceedings of the Symposium on Continuum Mechanics and Related Problems of Analysis (Tbilisi, 1971)*, Vol. (Russian), pp. 5-11. *Izdat. "Mecniereba", Tbilisi*, 1973. (J. Lawrynowicz) **52** #2454 81.45
 (with Kulešov, S. P.; Matveev, V. A.; Sisakjan, A. N.; Smondyrev, M. A.) Straight-line path approximation in quantum field theory. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* **5** (1974), 3-62. (Authors' summary) **57** #2298 81.46
 (with Kulešov, S. P.; Matveev, V. A.; Sisakjan, A. N.; Smondyrev, M. A.) Methods of straight-line paths and the eikonal problem. (Russian. English summary) *Teoret. Mat. Fiz.* **18** (1974), 147-160. (Authors' summary) **57** #8640 81.41
 (with Wiecezorek, E.; Matveev, V. A.; Robaschik, D.) Similarity solutions for matrix elements of currents in conformal-invariant theories. (Russian. English summary) *Teoret. Mat. Fiz.* **22** (1975), no. 1, 3-19. (Authors' summary) **58** #14698 81.47B50
 (with Bogoljubov, N. N.; Vladimirov, V. S.) On automodel asymptotic in quantum field theory. (Russian summary) With a discussion. International Conference on the Mathematical Problems of Quantum Field Theory and Quantum Statistics. Part Axiomatic Quantum Field Theory. *Trudy Mat. Inst. Steklov.* **135** (1975), 26-53, 25 (From the authors' introduction) **56** #10662 82.47
 (with Wiecezorek, E.; Geyer, B.; Gornitz, Th.; Matveev, V. A.; Robaschik, D.) Automodel asymptotic behavior for the fixed angle scattering amplitude in the framework of the Dyson-Jost-Lehmann representation. (Russian. English summary) *Teoret. Mat. Fiz.* **28** (1976), no. 2, 157-171. (Authors' summary) **56** #7583 81.35
 (with Kvinihidze, A. N.; Sisakjan, A. N.; Slepčenko, L. A.) Inclusive processes with large-scale transverse impulses in the treatment of composite particles. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* **8** (1977), no. 3, 478-544. (Authors' summary) **58** #8937 81.47
- Tavhelidze, I. N.** Liouville theorems for second order elliptic and parabolic equations. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **31** (1976), no. 28-35. (H. Marcinkowska) **55** #3497 35B40
- Tavkelidze, A. N.** See **Tavhelidze, A. N.**
- Tavora, Carlos J.** A geometrical analysis of the Lyapunov operator. *Internat. J. Control* **13** (1971), 97-105. (Claude E. Lobry) **53** #15490 93D05
- Tavrizov, G. A.** (with Azarov, V. L.; Lupičev, L. N.) ★Математические методы исследования сложных физических систем (линейные системы). (Russian)

[Mathematical methods for the study of complex physical systems (linear systems)]
Izdat. "Nauka", Moscow, 1975. 342 pp. (errata insert) (V. Komkov) 56 #14925
 93A05

(with Azarov, V. L.; Lupičev, L. N.) A certain theorem on the theory of perturbations of linear operators, and its applications to the theory of linear dynamical systems. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 1, 56-59. (H. Flaschka) **52** #8975 47A55 (93C05)

(with Azarov, V. L.; Lupičev, L. N.) The factorized perturbation method in the study of complex physical systems. (Russian) *Control in space (Proc. Sixth Internat. Sympos. IFAC Automat. Control in Space, Tsakhkabsor, 1974), Vol. 1 (Russian), pp. 128-140, 313-314. Izdat. "Nauka", Moscow, 1976. (Authors' summary) 58 #9468*
 93A99

x, Robert E. On the intuitionistic equivalential calculus. *Notre Dame J. Formal Logic* **14** (1973), 448-456. (D. Nelson) **48** #8206 02C15 (02B05)

yak, R. L. Fourier series for Fox's H -function. *Univ. Lisboa Revista Fac. Ci. A* (2) **13**, 115-123 (1969/70). (B. C. Carlson) **46** #7585 33A35

Some results involving Fox's H -function and associated Legendre functions. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **13** (1970), 161-168. (R. K. Saxena) **46** #2113 33A35

A contour integral involving Fox's H -function and Whittaker function. *An. Fac. Ci. Univ. Porto* **54** (1971), 353-362. (V. M. Bhise) **46** #412 33A30

Integration of some H -functions with respect to their parameters. *Defence Sci. J.* **21** (1971), 111-118. (U. C. Jain) **45** #7130 33A35

Some integrals involving Bessel's functions and Fox's H -function. *Defence Sci. J.* **22** (1972), 15-20. (R. K. Saxena) **46** #3855 33A35

Associated Legendre functions and cooling of a heated cylinder. *Defence Sci. J.* **22** (1972), 159-162. (D. T. Haimo) **47** #521 33A45

Some series for the Fox's H -function. *Defence Sci. J.* **23** (1973), 33-36. (R. G. Buschman) **48** #6495 33A35

Some integrals involving the product of the H -function and Gauss's hypergeometric function. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* **16** (1973), 21-26. (P. Anandani) **48** #4367 33A35

y, M. L. See Tai, M. L.

y, S. H. (with Ling, Kiong Doong) Prediction distributions for the exponential distributions. (Chinese summary) *Nanyang Univ. J. Part III* **7** (1973), 56-63. (R. J. Buehler) **51** #11794 62F25 (62A05)

ya, M. (with Nemat-Nasser, Siavouche) Model studies of ductile fracture. I. Formulation. Basis of the finite element method. *J. Franklin Inst.* **302** (1976), no. 5-6, 463-472. (Radu Bădescu) **57** #2076 73.65

yama, Norio (with Masuda, Jiro; Sato, Risaburo) Proposal for a symmetric ternary logic system. *Systems-Computers-Controls* **7** (1976), no. 2, 52-59 (1977). (C. Moraga) **56** #8221 94A20

ylar, A. B. (with Fox, L.; Mayers, D. F.; Ockendon, J. R.) On a functional differential equation. *J. Inst. Math. Appl.* **8** (1971), 271-307. (K. Zima) **46** #488 34K99 (65Q05)

(with Ockendon, H.) ★ Inviscid fluid flows. *Mathematical Institute, Oxford University, Oxford, 1972. 146 pp. (Alan Jeffrey) 54 #9286 76.00*

ylor, Alan D. A canonical partition relation for finite subsets of ω . *J. Combinatorial Theory Ser. A* **21** (1976), no. 2, 137-146. (N. Hindman) **54** #12530 04A20

(with Baumgartner, James E.; Wagon, Stanley) On splitting stationary subsets of large cardinals. *J. Symbolic Logic* **42** (1977), no. 2, 203-214. (Keith Devlin) **58** #21619 02K35

Partitions of pairs of reals. *Fund. Math.* **99** (1978), no. 1, 51-59. (Thomas J. Jech) **57** #5759 04A20

(with Baumgartner, James E.) Partition theorems and ultrafilters. *Trans. Amer. Math. Soc.* **241** (1978), 283-309. (Anne K. Steiner) **58** #10458 04A20

ylor, Allison J. (with Emanuel, David C.; Harrison, J. Michael) A diffusion approximation for the ruin function of a risk process with compounding assets. *Scand. Actuar. J.* **1975**, no. 4, 240-247. (Hans U. Gerber) **52** #15929 62P05

(with Harrison, J. Michael) Optimal control of a Brownian storage system. *Stochastic Processes Appl.* **6** (1977/78), no. 2, 179-194. (H. Taylor) **57** #9253 93E20 (60J99, 90B05)

ylor, Angus E. Historical notes on analyticity as a concept in functional analysis. *Problems in analysis (Sympos. Salomon Bochner, Princeton Univ., Princeton, N.J., 1969), pp. 325-343. Princeton Univ. Press, Princeton, N.J., 1970. 58 #21239 01A55*

Addendum to: "The uses of analyticity in operator theory". *Amer. Math. Monthly* **78** (1971), 1104. (Editors) **45** #4183 47A60

The differential: nineteenth and twentieth century developments. *Arch. History Exact Sci.* **12** (1974), 355-383. (I. Grattan-Guinness) **58** #15979 01A55 (01A60, 26-03)

ylor, B. Alan Some locally convex spaces of entire functions. *Entire Functions and Related Parts of Analysis (Proc. Sympos. Pure Math., La Jolla, Calif., 1966), pp. 431-467. Amer. Math. Soc., Providence, R.I., 1968. (See Zbl 181, 133) 46E10*

Analytically uniform spaces of infinitely differentiable functions. *Comm. Pure Appl. Math.* **24** (1971), 39-51. (From the author's introduction) **54** #5481 30A98

(with Kelleher, James J.) Finitely generated ideals in rings of analytic functions. *Math. Ann.* **193** (1971), 225-237. (R. O. Kujala) **46** #2077 32B05

(with Alexander, Herbert; Ullman, J. L.) Areas of projections of analytic sets. *Invent. Math.* **16** (1972), 335-341. (J. J. Hirschfelder) **46** #2078 32B15

(with Kelleher, James J.) Closed ideals in locally convex algebras of analytic functions. *J. Reine Angew. Math.* **255** (1972), 190-209. (E. L. Stout) **46** #6046 46J20 (30A98, 32E25)

(with Kelleher, James J.) The entire functions separate βC . *Proc. Amer. Math. Soc.* **33** (1972), 505-506. (N. L. Alling) **45** #5344 30A46

(with Williams, David L.) Interpolation of l^q sequences by H^p functions. *Proc. Amer. Math. Soc.* **34** (1972), 181-186. (J. A. Cima) **45** #3720 30A78

(with Williams, David L.) Boundary zero sets of A^∞ functions satisfying growth conditions. *Proc. Amer. Math. Soc.* **35** (1972), 155-160. (Ian Richards) **46** #9354 30A72

(with Rubel, Lee A.; Shields, Allen L.) Mergelyan sets and the modulus of

continuity. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973), pp. 457-460. Academic Press, New York, 1973. (R. Vermes) 50 #7545 30A82*
 (with Brown, Léon; Schreiber, Bertram M.) Spectral synthesis and the Pompeiu problem. (French summary) *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 3, 125-154. (L. Zalcman) **50** #4979 30A98 (46J15)

(with Rubel, Lee A.; Shields, Allen L.) Mergelyan sets and the modulus of continuity of analytic functions. *J. Approximation Theory* **15** (1975), no. 1, 23-40. (Arne Stray) **54** #521 30A04

Components of zero sets of analytic functions in C^2 in the unit ball or polydisc. *Pacific J. Math.* **59** (1975), no. 1, 253-265. (E. L. Stout) **52** #6009 32A10

(with Berenstein, Carlos A.) The "three-squares" theorem for continuous functions. *Arch. Rational Mech. Anal.* **63** (1976), no. 3, 253-259 (1977). (Szymon Sznajder) **56** #3335 32A30 (46F10, 31A20)

(with Bedford, Eric) The Dirichlet problem for a complex Monge-Ampère equation. *Bull. Amer. Math. Soc.* **82** (1976), no. 1, 102-104. (Lawrence Gruman) **52** #14383 32F15 (35F15)

(with Baernstein, Albert, II) Spherical rearrangements, subharmonic functions, and \ast -functions in n -space. *Duke Math. J.* **43** (1976), no. 2, 245-268. (W. H. J. Fuchs) **53** #5906 31B05

(with Bedford, Eric) The Dirichlet problem for a complex Monge-Ampère equation. *Invent. Math.* **37** (1976), no. 1, 1-44. (Jacques Vauthier) **56** #3351 32F05

(with Bedford, Eric) The Dirichlet problem for a complex Monge-Ampère equation. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Williams Coll., Williamstown, Mass., 1975), Part 1, pp. 109-113. Amer. Math. Soc., Providence, R.I., 1977. (Editors) 56 #15979 32D05 (32F05, 35D05)*

(with Murray, J. D.) Effect of the rate of oxygen consumption on muscle respiration. *J. Math. Biol.* **4** (1977), no. 1, 1-20. (L. I. Rubinstein) **56** #11073 92A05

(with Rauch, Jeffrey B.) The Dirichlet problem for the multidimensional Monge-Ampère equation. *Rocky Mountain J. Math.* **7** (1977), no. 2, 345-364. (B. Hellwig) **56** #12582 35J40 (32F99)

Taylor, B. J. (with Bentley, H. L.) Wallman rings. *Pacific J. Math.* **58** (1975), no. 1, 15-35. (Richard A. Alò) **55** #1307 54D35

(with Bentley, H. L.) On generalizations of C^* -embedding for Wallman rings. *J. Austral. Math. Soc. Ser. A* **25** (1978), no. 2, 215-229. (V. I. Malyhin) **58** #12905a 54C45 (54C40, 54C50)

(with Bentley, H. L.) The Stone-Weierstrass theorem for Wallman rings. *J. Austral. Math. Soc. Ser. A* **25** (1978), no. 2, 230-240. (V. I. Malyhin) **58** #12905b 54C45 (54C30, 54C40)

Taylor, C. (with Hood, P.) A numerical solution of the Navier-Stokes equations using the finite element technique. *Internat. J. Comput. & Fluids* **1** (1973), no. 1, 73-100. (Nima Geffen) **49** #4435 76.65

(with Davis, J.) Tidal and long wave propagation—a finite element approach. *Internat. J. Comput. & Fluids* **3** (1975), 125-148. (Jiří Nedoma) **55** #2057 86.65

See also *Numerical methods in laminar and turbulent flow*, **58** #19672

Taylor, C. C. (with Durbin, J.; Knott, M.) Components of Cramér-von Mises statistics. II. *J. Roy. Statist. Soc. Ser. B* **37** (1975), 216-237. (D. R. Truax) **52** #6994 (E 57 #10906) 62G10

(with Durbin, J.; Knott, M.) Corrigendum: "Components of Cramér-von Mises statistics. II" (*J. Roy. Statist. Soc. Ser. B* 37 (1975), 216-237). *J. Roy. Statist. Soc. Ser. B* **39** (1977), no. 3, 394. (Editors) **57** #10906 62G10

See also *Perspectives in biometrics*, **58** #31689

Taylor, Carol A. The precautionary demand for money: a utility maximization approach. *J. Econom. Theory* **13** (1976), no. 1, 67-81. (Richard Kihlstrom) **55** #9842 90A10

Taylor, Clayborne D. See *Analytic methods in mathematical physics*, **48** #5746

Taylor, D. B. See *Software for numerical mathematics*, **50** #6095

Taylor, D. E. Monomial representations and strong graphs. *Proceedings of the First Australian Conference on Combinatorial Mathematics (Univ. Newcastle, Newcastle, 1972), pp. 197-201. Univ. of Newcastle Res. Associates, Newcastle, 1972. (J. J. Seidel) 52 #177*
 05C25

Graphs and block designs associated with the three-dimensional unitary groups. *Combinatorial mathematics (Proc. Second Australian Conf., Univ. Melbourne, Melbourne, 1973), pp. 128-131. Lecture Notes in Math., Vol. 403, Springer, Berlin, 1974. (J. J. Seidel) 51 #12596 05C25*

Some classical theorems on division rings. *Enseignement Math.* (2) **20** (1974), 293-298. (H. Tominaga) **50** #13134 16A40

Unitary block designs. *J. Combinatorial Theory Ser. A* **16** (1974), 51-56. (W. M. Kantor) **48** #12270 50D30 (05B05)

(with Livingston, Richard) The theorem of Marggraff on primitive permutation groups which contain a cycle. *Bull. Austral. Math. Soc.* **15** (1976), no. 1, 125-128. (Peter M. Neumann) **54** #12870 20B20

(with Pearson, K. R.) Groups subnormal in the units of their modular group rings. *Proc. London Math. Soc.* (3) **33** (1976), no. 2, 313-328. (J. E. Adney) **55** #5726 20C05

Groups whose modular group rings have soluble unit groups. *Group theory (Proc. Miniconf., Australian Nat. Univ., Canberra, 1975), pp. 112-117. Lecture Notes in Math., Vol. 573, Springer, Berlin, 1977. (L. R. Verma) 56 #15746 20C05*

Regular 2-graphs. *Proc. London Math. Soc.* (3) **35** (1977), no. 2, 257-274. (J. J. Seidel) **57** #16147 05C99

Taylor, D. L. (with Kane, T. R.) Multiparameter quadratic eigenproblems. *Trans. ASME Ser. E. J. Appl. Mech.* **42** (1975), 478-483. (Richard C. Allen, Jr.) **54** #11794 65L15 (15A18)

Taylor, D. P. (with Beshai, M. E.) Comparison of the Kryloff-Bogoliuboff method and the refined elliptic function method. *Internat. J. Control* (1) **18** (1973), 633-639. (D. Schmidt) **49** #3258 34A45

(with Hetrakul, Priya) The effects of transponder nonlinearity on binary CPSK signal transmission. *IEEE Trans. Comm.* **COM-24** (1976), no. 5, 546-553. (Authors' summary) **56** #15119 94A05

Taylor, Daniel (with L'Esperance, Wilford L.) The power of various tests of autocorrelation in the linear regression model: a simulation study. *Proceedings of the*

- Annual Meeting of the American Statistical Association, Business and Economic Statistics Section* (New York, 1973), pp. 463-468. *Amer. Statist. Assoc., Washington, D.C.*, 1974. (Peter M. Robinson) **50** #15221 62M10
- (with L'Esperance, Wilford L.) The power of four tests of autocorrelation in the linear regression model. *J. Econometrics* **3** (1975), no. 1, 1-21. (A. L. Nagar) **55** #6646a 62F05 (62J99, 62H20)
- (with L'Esperance, Wilford L.) Erratum: "The power of four tests of autocorrelation in the linear regression model" (*J. Econometrics* **3** (1975), no. 1, 1-21). *J. Econometrics* **3** (1975), no. 4, 405. (A. L. Nagar) **55** #6646b 62F05 (62J99, 62H20)
- Taylor, Donald Curtis** (with Lazar, Aldo J.) Double centralizers of Pedersen's ideal of a C^* -algebra. *Bull. Amer. Math. Soc.* **78** (1972), 992-997. (R. C. Busby) **48** #6952 46L05
- Interpolation in algebras of operator fields. *J. Functional Analysis* **10** (1972), 159-190. (W. B. Arveson) **51** #13700 46L05
- A general Phillips theorem for C^* -algebras and some applications. *Pacific J. Math.* **40** (1972), 477-488. (J. W. Bunce) **46** #7913 46L05
- (with Lazar, Aldo J.) Double centralizers of Pedersen's ideal of a C^* -algebra. II. *Bull. Amer. Math. Soc.* **79** (1973), 361-366. (R. C. Busby) **48** #6953 46L05
- (with DeFacio, Brian) Commutativity and causal independence. *Phys. Rev. D* (3) **8** (1973), 2729-2731. (Authors' summary) **50** #15693 8146
- (with Lazar, Aldo J.) A Dauns-Hofmann theorem for $\Gamma(K)$. *Recent advances in the representation theory of rings and C^* -algebras by continuous sections* (Sem., Tulane Univ., New Orleans, La., 1973), pp. 135-144. *Mem. Amer. Math. Soc.*, No. 148, *Amer. Math. Soc., Providence, R. I.*, 1974. (From the author's introduction) **55** #11060 46L05
- (with Henry, Jackson N.) The β topology for W^* -algebras. *Pacific J. Math.* **60** (1975), no. 1, 123-139. (Ole A. Nielsen) **52** #11614 46L10
- A general Hoffman-Wermer theorem for algebras of operator fields. *Proc. Amer. Math. Soc.* **52** (1975), 212-216. (J. M. G. Fell) **52** #6455 46L99
- (with Lazar, Aldo J.) Multipliers of Pedersen's ideal. *Mem. Amer. Math. Soc.* **5** (1976), no. 169, iii+111 pp. (G. A. Elliott) **54** #944 46L05
- (with Gillette, R. M.) A characterization of the Pedersen ideal of $CD(T, B_0(H))$ and a counter-example. *Proc. Amer. Math. Soc.* **68** (1978), no. 1, 59-63. (J. W. Bunce) **57** #1141 46L05
- Taylor, Douglas H.** (with Brooks, Robin B. S.; Brown, Robert F.; Pak, Jing Yal) Nielsen numbers of maps of tori. *Proc. Amer. Math. Soc.* **52** (1975), 398-400. (L. Górniewicz) **51** #11483 55C20
- Taylor, Elizabeth M.** Euclid's algorithm in cubic fields with complex conjugates. *J. London Math. Soc.* (2) **14** (1976), no. 1, 49-54. (E. S. Barnes) **54** #7420 12A05 (12A40)
- Taylor, Fred J.** An exact fundamental and covariance algorithm. *Proc. IEEE* **60** (1972), 337-338. (D. H. Chyung) **50** #4088 93E25
- Sequential least-squares Fourier estimation with fading memory. *IEEE Trans. Acoust. Speech Signal Processing* **ASSP-22** (1974), no. 4, 300-303. (Tohru Katayama) **52** #16842 94A05
- A novel inversion of $(sI - A)$. *Internat. J. Systems Sci.* **5** (1974), 153-160. (C. G. Cullen) **49** #8301 65F05
- On discrete transition matrices. *Proc. IEEE* **62** (1974), 1294-1295. (O. Pokorný) **51** #4641 65F05 (93A05)
- Finite fading memory filtering. *IEEE Trans. Systems Man Cybernet.* **SMC-5** (1975), no. 1, 134-137. (Vladimir Katkovnik) **54** #9806 93E10
- On stochastic phase-lock loop solutions. *IEEE Trans. Comm.* **COM-24** (1976), no. 1, 138-139. (N. U. Ahmed) **55** #2323 93E20
- Transient response analysis of linear differential systems on minicomputers. *Simulation* **28** (1977), no. 1, 17-21. (David K. Kahaner) **55** #6866 65L05
- Taylor, Fritz** Foraging behavior of ants: theoretical considerations. *J. Theoret. Biol.* **71** (1978), no. 4, 541-565. (Brian D. Sleeman) **57** #11825 92A05
- Taylor, G. C.** Moments in Markovian systems with lumped states. *J. Appl. Probability* **8** (1971), 599-605. (J. Hachigian) **45** #7827 60J10
- Credibility for time-heterogeneous loss ratios. *Credibility: theory and applications* (Proc. Berkeley Actuar. Res. Conf., Univ. California, Berkeley, Calif., 1974; dedicated to Edward A. Lew), pp. 363-389, 409-414. *Academic Press, New York*, 1975. (Jacques Janssen) **54** #14294 62P05
- Credibility under conditions of imperfect persistency. *Credibility: theory and applications* (Proc. Berkeley Actuar. Res. Conf., Univ. California, Berkeley, Calif., 1974; dedicated to Edward A. Lew), pp. 391-400, 409-414. *Academic Press, New York*, 1975. (M. J. Goovaerts) **54** #6435 62P05
- In search of a general parameter-free credibility formula. *Credibility: theory and applications* (Proc. Berkeley Actuar. Res. Conf., Univ. California, Berkeley, Calif., 1974; dedicated to Edward A. Lew), pp. 401-408. *Academic Press, New York*, 1975. (Hans Bühlmann) **54** #1525 62P05
- On the radius of convergence of an inverted Taylor series with particular reference to the solution of characteristic equations. *Scand. Actuar. J.* **1975**, 11-20. (Jacques Janssen) **51** #6917 60E05
- Use of differential and integral inequalities to bound ruin and queuing probabilities. *Scand. Actuar. J.* **1976**, no. 4, 197-208. (H. L. Seal) **54** #11570 60K25 (62P05)
- Inhomogeneous products of cyclic irreducible nonnegative matrices. *J. Austral. Math. Soc. Ser. A* **24** (1977), no. 4, 409-416. (George P. Barker) **57** #9726 15A48 (15A51)
- Upper bounds on stop-loss premiums under constraints on claim size distribution. *Scand. Actuar. J.* **1977**, no. 2, 94-105. (Erwin Straub) **56** #4097 62P05
- Representation and explicit calculation of finite-time ruin probabilities. *Scand. Actuar. J.* **1978**, no. 1, 1-18. (Erwin Straub) **57** #18007 62P05
- Stability in recurrence systems whose recurrence relations possess a certain positivity property. *SIAM J. Appl. Math.* **35** (1978), no. 1, 48-67. (E. Seneta) **58** #9424 92A15
- Taylor, Geoffrey Ingram** ★Scientific papers. Vol. IV: Mechanics of fluids: Miscellaneous papers. Edited by G. K. Batchelor. *Cambridge University Press, London-New York*, 1971. x+579 pp. (53 plates) (J. V. Wehausen) **45** #4937 01A75 (76.00)
- Memories of von Kármán. Twentieth anniversary of the Society for Industrial and Applied Mathematics (Special lectures, Philadelphia, Pa., 1972), *SIAM Rev.* **15** (1973), 447-452. (Editors) **52** #13237 01A70
- Aeronautics before 1919. *Bull. Inst. Math. Appl.* **10** (1974), no. 9-10, 363-364. (Editors) **58** #27084 01A60 (01A70)
- See also *Applied mechanics*, **50** #11914; *Roy, Maurice*, **52** #25; *Obituary: Taylor, Geoffrey Ingram*, **52** #26; *Fontaine, Maurice*, **55** #47; *Batchelor, G. K.*, **58** #74 and *Batchelor, G. K.*, **58** #25192b
- Taylor, Gerald D.** (with Roulier, John A.) Uniform approximation by polynomials having bounded coefficients. Collection of articles dedicated to Lothar Collatz on his sixtieth birthday. *Abh. Math. Sem. Univ. Hamburg* **36** (1971), 126-135. (F. Perrin) **49** #953 41A50
- Hardy-Littlewood estimates for H^p functions. *Inequalities, III* (Proc. Third Sympos., Univ. California, Los Angeles, Calif., 1969; dedicated to the memory of Theodor S. Motzkin), pp. 347-352. *Academic Press, New York*, 1972. (J. A. Cima) **48** #11511 30A78
- (with Marsden, Martin J.) Numerical evaluation of Fourier integrals. *Numerische Methoden der Approximationstheorie, Band 1* (Tagung, Oberwolfach, 1971), pp. 61-76. *Internat. Schriftenreihe Numer. Math., Band 16, Birkhäuser, Basel* 1972. (Bo Einarsson) **52** #7092 65D30
- An improved Newton iteration for calculating roots which is optimal. *Numerische Methoden der Approximationstheorie, Band 1* (Tagung, Oberwolfach, 1971), pp. 209-227. *Internat. Schriftenreihe Numer. Math., Band 16, Birkhäuser, Basel*, 1972. (D. L. Phillips) **52** #12314 65H05
- On minimal H -sets. Collection of articles dedicated to J. L. Walsh on his 75th birthday. II. *J. Approximation Theory* **5** (1972), 113-117. (H. L. Loeb) **51** #1234 41A63
- (with Roulier, John A.) Approximation by polynomials with restricted ranges of their derivatives. Collection of articles dedicated to J. L. Walsh on his 75th birthday. III. *J. Approximation Theory* **5** (1972), 216-227. (C. W. Clenshaw) **50** #5307 41A50
- (with Meinardus, Günter; Reddy, A. R.; Varga, Richard S.) Converse theorem and extensions in Chebyshev rational approximation to certain entire functions in $[0, +\infty)$. *Trans. Amer. Math. Soc.* **170** (1972), 171-185. (J. R. Rice) **46** #9603 (E 4) #4581 41A20 (26A93)
- Uniform approximation with side conditions. *Approximation theory* (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973), pp. 495-503. *Academic Press, New York*, 1973. (F. Deutsch) **49** #954 41A50
- (with Anselone, P. M.) The optimal exchange algorithm and comparisons with the generalized Remes algorithm. Collection of articles dedicated to Eberhard Hopf on the occasion of this 70th birthday. *Applicable Anal.* **3** (1973), 7-27. (Geneva G. Belford) **52** #14770 41A50 (65D15)
- (with Meinardus, Günter) Optimal starting approximations for iterative schemes. *J. Approximation Theory* **9** (1973), 1-19. (A. Bacopoulos) **54** #10948 41A50
- (with Roulier, J. A.) Rational Chebyshev approximation on $[0, +\infty)$. *J. Approximation Theory* **11** (1974), 208-215. (A. Magnus) **55** #3621 41A20
- (with Williams, Jack) Existence questions for the problem of Chebyshev approximation by interpolating rationals. *Math. Comp.* **28** (1974), 1097-1103. (C. W. Clenshaw) **50** #7909 41A50
- (with Cimoca, Gh.) On Rivlin's conjecture for unisolvant families. *Rev. Anal. Numér. Théorie Approximation* **3** (1974), no. 4, 27-32. (T. J. Rivlin) **53** #3559 41A50
- (with Kaufman, Edwin H., Jr.) An application of linear programming to rational approximation. Proceedings of the International Conference on Padé Approximation, Continued Fractions and Related Topics (Univ. Colorado, Boulder, Colo., 1972; dedicated to the memory of H. S. Wall). *Rocky Mountain J. Math.* **4** (1974), 371-375. (D. C. Gilles) **49** #4213 65D15
- (with Chalmers, Bruce L.; Johnson, D. J.; Metcalf, Frederic T.) Remarks on the rank of Hermite-Birkhoff interpolation. *SIAM J. Numer. Anal.* **11** (1974), 254-255. (John Todd) **50** #1464 65D05
- (with Kaufman, Edwin H., Jr.) Uniform rational approximation of functions of several variables. *Internat. J. Numer. Methods Engrg.* **9** (1975), no. 2, 297-323. (Author's summary) **56** #12711 41A20 (65D15)
- (with Bacopoulos, A.; Shisha, Oved) Relative approximation. *J. Approximation Theory* **15** (1975), no. 4, 356-365. (B. N. Sahney and P. Goyalaya) **52** #14752 41A10
- (with Roger, Richard A.) A numerical method for directly solving second order functional delay equations. *Differential equations* (Third Mexico-U.S. Sympos., Mexico City, 1975) (Spanish), pp. 329-344. *Math. Notes and Sympos., Vol. 2, Fondo de Cultura Económ., Mexico City*, 1976. (R. Leonard Brown) **56** #10020 65L05
- (with Kaufman, Edwin H., Jr.) An application of a restricted range version of the differential correction algorithm to the design of digital systems. *Numerische Methoden der Approximationstheorie, Band 3* (Tagung, Math. Forschungsinst., Oberwolfach, 1975), pp. 207-232. *Internat. Ser. Numer. Math., Vol. 30, Birkhäuser, Basel*, 1976. (Author's summary) **58** #24879 65D99 (90C50)
- (with Brink, D.) Chebyshev approximation by reciprocals of polynomials on $[0, \infty)$. *J. Approximation Theory* **16** (1976), no. 2, 142-149. (Hans-Peter Blatt) **53** #1112 41A20
- (with Meinardus, Günter) Lower estimates for the error of best uniform approximation. *J. Approximation Theory* **16** (1976), no. 2, 150-161. (A. K. Varma) **53** #3562 41A50
- (with Davis, Joel) On Bernstein's inequality. *J. Approximation Theory* **16** (1976), no. 3, 287-288. (Masako Izumi) **53** #11289 42A04
- (with Kaufman, Edwin H., Jr.) Best rational approximations with negative poles to e^{-x} on $[0, \infty)$. *Padé and rational approximation* (Proc. Internat. Sympos., Univ. South Florida, Tampa, Fla., 1976), pp. 413-425. *Academic Press, New York*, 1977. (Hans-Peter Blatt) **57** #6972 41A20 (65D15)
- (with Passow, Eli) An alternation theory for copositive approximation. *J. Approximation Theory* **19** (1977), no. 2, 123-134. (John A. Roulier) **55** #933 41A10
- (with Leeming, David J.) Approximation with reciprocals of polynomials on compact sets. *J. Approximation Theory* **21** (1977), no. 3, 269-280. (H. Kramér) **57** #3701 41A20
- (with Kaufman, Edwin H., Jr.; Leeming, David J.) A combined Remes-differential correction algorithm for rational approximation. *Math. Comp.* **32** (1978), no. 14, 233-242. (Geneva G. Belford) **57** #977 41A50
- Taylor, Herbert** (with Baumert, Leonard; McEliece, Robert J.; Rodemich, Eugene R.

- umsey, Howard C., Jr.; Stanley, Richard P.) A combinatorial packing problem. *Computers in algebra and number theory (Proc. SIAM-AMS Sympos. Appl. Math., New York, 1970)*, pp. 97-108. *SIAM-AMS Proc., Vol. IV, Amer. Math. Soc., Providence, R.I.*, 1971. (W. Moser) **49** #2437 05B40
- (with Erdős, Paul; McEliece, Robert J.) Ramsey bounds for graph products. *Pacific J. Math.* **37** (1971), 45-46. (M. Aigner) **46** #3376 05C99
- Rearrangements of incidence tables. *J. Combinatorial Theory Ser. A* **14** (1973), 10-36. (Melvin Tainiter) **47** #8322 05A10 (60G17)
- (with McEliece, Robert J.) Covering tori with squares. *J. Combinatorial Theory Ser. A* **14** (1973), 119-124. (A. Florian) **47** #4149 52A45 (05B40)
- or, Howard M. (with Costello, W. G.) Deterministic population growth models. *Amer. Math. Monthly* **78** (1971), 841-855. (R. Fischler) **45** #1293 60K10 (92A15)
- Bounds for stopped partial sums. *Ann. Math. Statist.* **43** (1972), 733-747. (D. Siegmund) **46** #4602 60G40
- (with Darling, D. A.; Liggett, Thomas M.) Optimal stopping for partial sums. *Ann. Math. Statist.* **43** (1972), 1363-1368. (M. E. Thompson) **47** #1121 60G40 (62L15)
- (with Cherniavsky, Ellen A.) Control of a general lethal growth process. *Math. Biosci.* **13** (1972), 235-252. (P. Warren) **46** #4973 92A15
- (with Phoenix, S. Leigh) The asymptotic strength distribution of a general fiber bundle. *Advances in Appl. Probability* **5** (1973), 200-216. (P. K. Sen) **49** #1563 60F05
- (with Gourley, Robert S.; Lawrence, Charles E.; Kaplan, Robert S.) Natural selection of life history attributes: an analytical approach. *Theoret. Population Biology* **5** (1974), 104-122. (Colin W. Clark) **48** #13308 92A05
- (with Karlin, Samuel) ★A first course in stochastic processes. Second edition. *Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London*, 1975. xvii + 557 pp. (Editors) **50** #8668 60Gxx (60Jxx, 60Kxx)
- A stopped Brownian motion formula. *Ann. Probability* **3** (1975), 234-246. (P. J. Brockwell) **51** #11678 60J65
- Optimal replacement under additive damage and other failure models. *Naval Res. Logist. Quart.* **22** (1975), 1-18. (Author's summary) **55** #9918 90B25
- A Laurent series for the resolvent of a strongly continuous stochastic semi-group. Stochastic systems: modeling, identification and optimization, II (Proc. Sympos., Univ. Kentucky, Lexington, Ky., 1975). *Math. Programming Stud.* No. 6 (1976), 258-263. (Robert Kertz) **57** #14159 60J35 (90Cxx, 93E20)
- (with Macken, Catherine A.) On deviations from the maximum in a stochastic process. *SIAM J. Appl. Math.* **32** (1977), no. 1, 96-104. (John P. Lehoczky) **54** #14111 60J25 (60K25, 62L15)
- lor, I. S. (with Green, D. H.) Restriction on nonbinary comma-free codes. *Electron. Lett.* **9** (1973), 60-61. (R. A. Scholtz) **52** #7710 94A10
- (with Green, D. H.) Modular representation of multiple-valued logic systems. *Proc. Inst. Elec. Engrs.* **121** (1974), 409-418. (H. Rohleder) **54** #2343 94A20
- (with Green, D. H.) Irreducible polynomials over composite Galois fields and their applications in coding techniques. *Proc. Inst. Elec. Engrs.* **121** (1974), 935-939. (Authors' summary) **55** #7576 94A10
- (with Green, D. H.) Multiple-valued switching circuit design by means of generalised Reed-Muller expansions. (French and German summaries) *Digital Process.* **2** (1976), no. 1, 63-81. (Krzysztof Sapiecha) **53** #12764 94A20
- lor, J. B. (with Stefan, Peter) A remark on a paper of D. L. Elliott. *J. Differential Equations* **15** (1974), 210-211. (Clark Robinson) **49** #1301 49E15 (93B05)
- (with Connor, J. W.; Hastie, R. J.) Shear, periodicity, and plasma ballooning modes. *Phys. Rev. Lett.* **40** (1978), no. 6, 396-399. (Authors' summary) **56** #14048 76.35
- lor, J.-C. See Taylor, John C.
- lor, J. C. Ward identities and charge renormalization of the Yang-Mills field. *Nuclear Phys.* **B33** (1971), 436-444. (S. Aramaki) **47** #2938 81.30
- ★Gauge theories of weak interactions. Cambridge Monographs on Mathematical Physics, No. 3. Cambridge University Press, Cambridge-New York-Melbourne, 1976. xv + 167 pp. (From the author's introduction) **57** #8576 81.22
- lor, J. E. See Collection: Prager, William, **50** #3723
- lor, J. G. See Taylor, John G.
- lor, J. H. (with Viswanadham, N.) On various types of decoupling for time-varying systems. *Internat. J. Control* (1) **17** (1973), 869-880. (J. M. Skowronski) **48** #5683 93B15
- lor, J. M. (with Veevers, A.) On optimal block designs. *Recent developments in statistics (Proc. European Meeting Statisticians, Grenoble, 1976)*, pp. 619-621. North-Holland, Amsterdam, 1977. (Valery Fedorov) **58** #18935 62K05
- lor, J. R. See Taylor, John R.
- lor, J. V. See Conference: Applications of Numerical Analysis, **48** #10031
- lor, James G. Comments on a multiplier condition for problems with state variable inequality constraints. *IEEE Trans. Automatic Control* **AC-17** (1972), no. 5, 743-744. (Author's summary) **55** #13320 49B99
- On the Isbell and Marlow fire programming problem. *Naval Res. Logist. Quart.* **19** (1972), 539-556. (Vijendra P. Singh) **48** #1677 90B05
- On continuous time, deterministic inventory models with linear production rate costs. *Cahiers Centre Études Recherche Opér.* **15** (1973), 475-486. (O. Opitz) **53** #7404 90B05
- A squared-variable transformation approach to nonlinear programming optimality conditions. *Naval Res. Logist. Quart.* **20** (1973), 25-39. (Author's summary) **53** #15377 90C30
- Target selection in Lanchester combat: linear-law attrition process. *Naval Res. Logist. Quart.* **20** (1973), 673-697. (Y. C. Ho) **48** #5661 90D45 (49C05)
- (with Raïke, William M.) Comments on the 'classical' derivation by Taha and Curry of optimality conditions in linear programming. With rejoinder by H. A. Taha and G. L. Curry. Mathematical programming and its applications. *Operations Res.* **21** (1973), 371-372. (A. G. Azpeitia) **51** #2637 90C05
- Lanchester-type models of warfare and optimal control. *Naval Res. Logist. Quart.* **21** (1974), 79-106. (Harvey Smith) **50** #3954 90C50
- Target selection in Lanchester combat: heterogeneous forces and time-dependent attrition-rate coefficients. *Naval Res. Logist. Quart.* **21** (1974), 683-704. (Harvey Smith)
- 51** #14948 90B99
- Some differential games of tactical interest. *Operations Res.* **22** (1974), no. 2, 304-317. (Olavi Hellman) **55** #7448 90D25
- Necessary conditions of optimality for a differential game with bounded state variables. *IEEE Trans. Automatic Control* **AC-20** (1975), no. 6, 807-808. (Ronald J. Stern) **53** #2407 90D25
- On the treatment of force-level constraints in time-sequential combat problems. *Naval Res. Logist. Quart.* **22** (1975), no. 4, 617-650. (K. Zimmermann) **53** #10322 90C47
- (with Parry, Samuel H.) Force-ratio considerations for some Lanchester-type models of warfare. *Operations Res.* **23** (1975), no. 3, 522-533. (Suresh Chandra) **56** #14804 90D99
- On the relationship between the force ratio and the instantaneous casualty-exchange ratio for some Lanchester-type models of warfare. *Naval Res. Logist. Quart.* **23** (1976), no. 2, 345-352. (Kåre M. Mjelde) **56** #4884 90D25
- (with Brown, Gerald G.) Canonical methods in the solution of variable-coefficient Lanchester-type equations of modern warfare. *Operations Res.* **24** (1976), no. 1, 44-69. (Harvey A. Smith) **55** #736 33A40 (90D25)
- (with Comstock, Craig) Force-annihilation conditions for variable-coefficient Lanchester-type equations of modern warfare. *Naval Res. Logist. Quart.* **24** (1977), no. 2, 349-371. (Olavi Hellman) **56** #14791 90D25
- Determining the class of payoffs that yield force-level-independent optimal fire-support strategies. *Operations Res.* **25** (1977), no. 3, 506-516. (Olavi Hellman) **58** #4389 90D25 (93C05)
- Predicting battle outcome with Liouville's normal form for Lanchester-type equations of modern warfare. *Opsearch* **14** (1977), no. 3, 185-203. (Kåre M. Mjelde) **56** #14792 90D25
- Approximate solution (with error bounds) to a nonlinear, nonautonomous second-order differential equation. *J. Franklin Inst.* **306** (1978), no. 2, 195-208. (Author's summary) **58** #19168 65L10
- Taylor, James H. (with Narendra, Kumpati S.) ★Frequency domain criteria for absolute stability. Electrical Science: A Series of Monographs and Texts. *Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London*, 1973. xviii + 246 pp. (Jan C. Willems) **48** #8051 93D10
- Random-input describing functions for multi-input non-linearities. *Internat. J. Control* **23** (1976), no. 2, 277-281. (Steven I. Marcus) **54** #9824 93E99
- Taylor, James R. (with Elesh, David) Regression models for the combination of two "incomplete" data sets in secondary analysis. *Proceedings of the Annual Meeting of the American Statistical Association, Social Statistics Section (St. Louis, Mo., 1974)*, pp. 281-284. *Amer. Statist. Assoc., Washington, D. C.*, 1975. (T. A. Bancroft and Chien-Pai Han) **55** #1639 62J05
- Taylor, Jean E. Singularities in soap-bubble-like and soap-film-like surfaces. *Geometric measure theory and minimal surfaces (Centro Internaz. Mat. Estivo (C.I.M.E.), III Ciclo, Varenna, 1972)*, pp. 155-171. Edizioni Cremonese, Rome, 1973. (William K. Allard) **53** #9014 49F25
- Regularity of the singular sets of two-dimensional area-minimizing flat chains modulo 3 in R^3 . *Invent. Math.* **22** (1973), 119-159. (J. E. Brothers) **48** #12225 49F22
- Singularities in "soap bubbles" and "soap films". *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. II, pp. 271-280. *Internat. Atomic Energy Agency, Vienna*, 1974. (Editors) **55** #6287 49F22 (58E99)
- Existence and structure of solutions to a class of nonelliptic variational problems. *Symposia Mathematica, Vol. XIV (Convegno di Teoria Geometrica dell'Integrazione e Varietà Minimali, INDAM, Roma, Maggio 1973)*, pp. 499-508. *Academic Press, London*, 1974. (Klaus Steffen) **54** #8421 49F22
- Isochrons and phaseless sets. *J. Math. Biol.* **1** (1974/75), no. 3, 259-273. (Nils Andreas Baas) **53** #14549 58F99 (92A05)
- Unique structure of solutions to a class of nonelliptic variational problems. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973)*, Part I, pp. 419-427. *Amer. Math. Soc., Providence, R.I.*, 1975. (William K. Allard) **52** #9062 49F22
- The structure of singularities in area-related variational problems with constraints. *Bull. Amer. Math. Soc.* **81** (1975), no. 6, 1093-1095. (U. D'Ambrosio) **52** #9060 49F10 (53A10)
- The structure of singularities in soap-bubble-like and soap-film-like minimal surfaces. *Ann. of Math.* (2) **103** (1976), no. 3, 489-539. (Klaus Steffen) **55** #12084 49F22 (58A99)
- The structure of singularities in solutions to ellipsoidal variational problems with constraints in R^3 . *Ann. of Math.* (2) **103** (1976), no. 3, 541-546. (Klaus Steffen) **55** #1208b 49F22 (58A99)
- Boundary regularity for solutions to various capillarity and free boundary problems. *Comm. Partial Differential Equations* **2** (1977), no. 4, 323-357. (E. Pehkonen (Zbl 357 #35010)) **58** #7336 49F22
- Crystalline variational problems. *Bull. Amer. Math. Soc.* **84** (1978), no. 4, 568-588. (V. V. Obuhovskii) **58** #12649 49F22 (58E15)
- Taylor, John B. Asymptotic properties of multiperiod control rules in the linear regression model. *Internat. Econom. Rev.* **15** (1974), 472-484. (G. Tintner) **50** #15244 62P20
- (with Anderson, T. W.) Strong consistency of least squares estimates in normal linear regression. *Ann. Statist.* **4** (1976), no. 4, 788-790. (Prem K. Goel) **54** #3977 62J05 (62E20)
- (with Dhrymes, Phoebus J.) On an efficient two-step estimator for dynamic simultaneous equations models with autoregressive errors. *Internat. Econom. Rev.* **17** (1976), no. 2, 362-376. (Jacob Paroush) **54** #6438 62P20
- Conditions for unique solutions in stochastic macroeconomic models with rational expectations. *Econometrica* **45** (1977), no. 6, 1377-1385. (Amos Kats) **58** #15074 90A15
- Taylor, John C. The Martin compactification in axiomatic potential theory. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971)*, pp. 427-436. *Academia, Prague*, 1972. (B. Walsh) **50** #13582 31D05 (60J50)

- Duality and the Martin compactification. (French summary) *Ann. Inst. Fourier (Grenoble)* **22** (1972), no. 3, 95-130. (E. M. J. Bertin) **49** #10900 31D05 (60J50)
- Potential kernels of Hunt processes. *Indiana Univ. Math. J.* **22** (1972/73), 1091-1102. (M. Fukushima) **51** #11672 60J40
- Strict potentials and Hunt processes. *Invent. Math.* **16** (1972), 249-259. (J. Walsh) **45** #9389 60J40
- On the existence of sub-Markovian resolvents. *Invent. Math.* **17** (1972), 85-93. (J. L. Doob) **49** #9961 60J45
- A generalization of Hunt's theorem. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **25** (1972/73), 261-267. (J. Walsh) **48** #7397 60J45
- On the existence of resolvents. *Séminaire de Probabilités, VII (Univ. Strasbourg, année universitaire 1971/1972)*, pp. 291-300. *Lecture Notes in Math.*, Vol. 321, Springer, Berlin, 1973. (N. C. Jain) **51** #14280 60J35 (60J45)
- Le compactifié de Martin d'un domaine lipschitzien borné dans R^n . *Séminaire de Théorie du Potentiel (15e année: 1972)*, Exp. No. 27, 3 pp. *Secrétariat Math.*, Paris, 1973. (M. Brelot) **54** #2999 31C99
- Balayage de fonctions excessives. *Séminaire de Théorie du Potentiel (14e année: 1970/71)*, Exp. No. 2, 11 pp. *Secrétariat Math.*, Paris, 1973. (Hélène Airault) **54** #8892 60J45 (31D05)
- Ray processes on locally compact spaces. *Math. Ann.* **208** (1974), 233-248. (E. B. Dynkin) **51** #4424 60J40
- On Deny's characterization of the potential kernel for a convolution Feller semi-group. (French summary) Collection of articles dedicated to Marcel Brelot on the occasion of his 70th birthday. *Ann. Inst. Fourier (Grenoble)* **25** (1975), no. 3-4, xviii, 519-537. (Jacques Faraut) **53** #5912 31C15 (60J45)
- A characterization of the kernel $\lim_{\lambda \rightarrow 0} V_\lambda$ for sub-Markovian resolvents (V_λ). *Ann. Probability* **3** (1975), 355-357. (Francis Hirsch) **51** #9227 60J35
- On the Martin compactification of a bounded Lipschitz domain in a Riemannian manifold. (French summary) *Ann. Inst. Fourier (Grenoble)* **28** (1978), no. 2, v, 25-52. (G. Wildenhain) **58** #6302 31C99
- The harmonic space associated with a "reasonable" standard process. *Math. Ann.* **233** (1978), no. 1, 89-96. (Klaus Janssen) **57** #16646 31D05 (60J45)
- See also **Conference: Applications of Numerical Analysis**, **48** #10031
- Taylor, John G.** (with Keck, B. W.) On the equivalence theorem for S-matrix elements. *J. Phys. A* **4** (1971), 291-297. (A. Corciovei) **50** #3816 81A7
- (with Keck, B. W.) Renormalization of nonpolynomial Lagrangians. *J. Phys. A* **4** (1971), 441-455. (D. I. Olive) **53** #7264 81J2
- (with Constantinescu, Florin) Equivalence between non-localizable and local fields. *Comm. Math. Phys.* **30** (1973), 211-227. (Aubrey Truman) **55** #5033 81A6
- Perturbation theory for nonderivative nonpolynomial Lagrangians. *J. Mathematical Phys.* **14** (1973), 68-78. (K. Chadan) **48** #13043 81J30
- Neural networks and the brain. *Physics and mathematics of the nervous system (Proc. Summer School, Internat. Centre Theoret. Phys., Trieste, 1973)*, pp. 230-253. *Lecture Notes in Biomath.*, Vol. 4, Springer, Berlin, 1974. (Uwe an der Heiden) **56** #17902 92A05
- (with Constantinescu, Florin) Causality and nonlocalizable fields. *J. Mathematical Phys.* **15** (1974), 824-830. (W. Gütinger) **49** #10283 81A6
- Quantum field theory for non-polynomial chiral Lagrangians. *J. Phys. A* **7** (1974), 12-23. (Authors' summary) **53** #9980 81A6
- ★Special relativity. *Oxford Physics Series*, No. 10. Clarendon Press, Oxford, 1975. vi+107 pp. (Mary L. Boas) **54** #14704 83.00
- Problems in quantum gravity. *Functional integration and its applications (Proc. Internat. Conf., London, 1974)*, pp. 181-187. Clarendon Press, Oxford, 1975. (A. Raychaudhuri) **57** #15261 83J3
- (with Downes-Martin, S. G.) A review of super Riemannian space-time using differential forms. *Nuclear Phys. B* **126** (1977), no. 1, 97-108. (Authors' summary) **58** #14914 83J3
- Solitons as infinite-constituent bound states. *Ann. Physics* **115** (1978), no. 1, 153-171. (T. W. Barrett) **58** #25544 81J35
- See also **Nonpolynomial Lagrangians, renormalisation and gravity**, **52** #9853
- Taylor, John R.** (with Goodmanson, David) Reduction of l -waves to s -waves for central potentials. *Nuclear Phys. A* **210** (1973), 211-220. (R. G. Newton) **53** #9941 81J34
- (with Campesino-Romeo, Enrique) Cross sections in quantum mechanics. *J. Math. Phys.* **16** (1975), 1227-1230. (W. O. Amrein) **52** #7362 81J35
- (with Semon, Mark D.) Scattering by potentials with Coulomb tails. (Italian and Russian summaries) *Nuovo Cimento A* (11) **26** (1975), 48-58. (John D. Dollard) **54** #6746 81J35
- (with Semon, Mark D.) Cross sections for screened potentials. *J. Mathematical Phys.* **17** (1976), no. 8, 1366-1370. (John Zorbas) **53** #12302 81J35
- (with Semon, Mark D.) Table errata: *Confluent hypergeometric functions* (Cambridge Univ. Press, New York, 1960) by L. J. Slater; *Formulas and theorems for the special functions of mathematical physics* (Springer-Verlag, New York, 1966) by W. Magnus, F. Oberhettinger and R. P. Soni. *Math. Comp.* **30** (1976), no. 135, 677-678. (Editors) **53** #5960 33A30
- (with Potapov, V. S.) Three-particle scattering rates and singularities of the T matrix. I. *Phys. Rev. A* (3) **16** (1977), no. 6, 2264-2275. (Koichiro Matsuno) **57** #4925a 81J60
- (with Potapov, V. S.) Three-particle scattering rates and singularities of the T matrix. II. *Phys. Rev. A* (3) **16** (1977), no. 6, 2276-2287. (Koichiro Matsuno) **57** #4925b 81J60
- Taylor, Joseph L.** The cohomology of the spectrum of a measure algebra. *Acta Math.* **126** (1971), 195-225. (K. H. Hofmann) **53** #14013 43A10 (55B05, 46J10, 42A72)
- (with Douglas, Ronald G.) Wiener-Hopf operators with measure kernels. *Hilbert space operators and operator algebras (Proc. Internat. Conf., Tihany, 1970)*, pp. 135-141. *Colloq. Math. Soc. János Bolyai*, 5, North-Holland, Amsterdam, 1972. (Kevin Clancey) **51** #13747 47B35 (47G05)
- Homology and cohomology for topological algebras. *Advances in Math.* **9**, 137-182 (1972). (B. E. Johnson) **48** #6966 46M20
- A general framework for a multi-operator functional calculus. *Advances in Math.* **9**, 183-252 (1972). (B. E. Johnson) **48** #6967 46M20
- Inverses, logarithms, and idempotents in $M(G)$. *Rocky Mountain J. Math.* **2** (1972), no. 2, 183-206. (K. A. Ross) **45** #5669 43A10 (46J99)
- ★Measure algebras. Expository lectures from the CBMS Regional Conference held at the University of Montana, Missoula, Mont., June 1972. Conference Board of the Mathematical Sciences Regional Conference Series in Mathematics, No. 16. Published for the Conference Board of the Mathematical Sciences by the American Mathematical Society, Providence, R. I., 1973. viii+108 pp. (K. H. Hofman and Michal Mislove) **55** #979 43A10
- Functions of several noncommuting variables. *Bull. Amer. Math. Soc.* **79** (1973), 1-34. (B. E. Johnson) **47** #3995 46H05 (46M05, 47A60)
- On the spectrum of a measure. *Advances in Math.* **12** (1974), 451-463. (Chung L. Shieh) **50** #10687 43A10
- Banach algebras and topology. *Algebras in analysis (Proc. Instructional Conf., NATO Advanced Study Inst., Birmingham, 1973)*, pp. 118-186. Academic Press, London, 1975. (R. Arens) **54** #5837 46J05 (46M20)
- Homotopy invariants for Banach algebras. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 2, pp. 115-119. *Canad. Math. Congress Montreal, Que.*, 1975. (R. G. Douglas) **55** #8830 46M20 (46J05, 55C15)
- A counterexample in shape theory. *Bull. Amer. Math. Soc.* **81** (1975), 629-632. (R. Gordh, Jr.) **51** #11523 57A20 (54C56)
- Topological invariants of the maximal ideal space of a Banach algebra. *Advances in Math.* **19** (1976), no. 2, 149-206. (E. L. Stout) **53** #14134 46J05 (46M99)
- Twisted products of Banach algebras and third Čech cohomology. *K-theory and operator algebras (Proc. Conf., Univ. Georgia, Athens, Ga., 1975)*, pp. 157-174. *Lecture Notes in Math.*, Vol. 575, Springer, Berlin, 1977. (B. E. Johnson) **58** #30335 46M05
- (with Rossi, H.) On algebras of holomorphic functions on finite pseudoconvex manifolds. *J. Functional Analysis* **24** (1977), no. 1, 11-31. (E. L. Stout) **58** #6345 32E25 (46J15)
- (with Raeburn, Iain) Hochschild cohomology and perturbations of Banach algebras. *J. Functional Analysis* **25** (1977), no. 3, 258-266. (From the text) **58** #30334 46M20 (46L05)
- Taylor, Judy** (with Schellenberg, Paul J.) On a conjecture concerning generalized Riemann squares. *Ars Combinatoria* **4** (1977), 59-68. (Mikhail Deza) **57** #16109 05B30
- Taylor, K.** A transformation of the acoustic equation with implications for wind-tunnel at low-speed flight tests. *Proc. Roy. Soc. London Ser. A* **363** (1978), no. 1713, 271-281. (J. M. Jami) **58** #25353 76J35
- Taylor, Keith F.** The type structure of the regular representation of a locally compact group. *Math. Ann.* **222** (1976), no. 3, 211-224. (E. Thoma) **54** #12965 22D25
- (with Baggett, Larry) Riemann-Lebesgue subsets of R^n and representations which vanish at infinity. *J. Functional Analysis* **28** (1978), no. 2, 168-181. (G. W. Mackey) **57** #16462 22D10
- Taylor, L. R.** (with Cohen, Frederick R.) Configuration spaces: applications to Gelfand-Fuks cohomology. *Bull. Amer. Math. Soc.* **84** (1978), no. 1, 134-136. (T. Tsujishita) **57** #1507 57D25
- Taylor, Laird E.** The tangent space to a C^k manifold. *Bull. Amer. Math. Soc.* **79** (1973), 746. (W. S. Piper) **47** #5894 58A05
- Taylor, Larry** See **Taylor, Laurence R.**
- Taylor, Larry** (with Shanks, Daniel) An observation on Fibonacci primitive roots. *Fibonacci Quart.* **11** (1973), no. 2, 159-160. (T. M. Apostol) **47** #3304 10A35
- The general law of quadratic reciprocity. *Fibonacci Quart.* **13** (1975), no. 4, 318, 319, 324, 328, 330, 333, 336, 339, 342, 344, 349, 384. (R. Steiner) **52** #3029 10A15
- Taylor, Laurence R.** Surgery groups and inner automorphisms. *Algebraic K-theory, I. Hermitian K-theory and geometric applications (Proc. Conf. Battelle Memorial Inst., Seattle, Wash., 1972)*, pp. 471-477. *Lecture Notes in Math.*, Vol. 343, Springer, Berlin, 1973. (A. A. Ranicki) **53** #9253 57D65 (18F25)
- (with Farrell, F. Thomas; Wagoner, John B.) The Whitehead theorem in the pro category. *Compositio Math.* **27** (1973), 1-23. (S. S. Cairns) **48** #12545 57C05 (55D10)
- 2-local cobordism theories. *J. London Math. Soc.* (2) **14** (1976), no. 2, 303-308. (L. Liulevicius) **55** #4144 55B20
- (with Kauffman, Louis H.) Signature of links. *Trans. Amer. Math. Soc.* **216** (1976), 351-365. (Wilbur Whitten) **52** #9210 55A25
- (with Ray, Nigel; Switzer, Robert M.) Normal structures and bordism theory, with applications to $M\mathcal{S}p$. *Mem. Amer. Math. Soc.* **12** (1977), no. 193, ix+66 pp. (Edgar Brown, Jr.) **57** #1505 57D15 (57D90)
- Stiefel-Whitney homology classes. *Quart. J. Math. Oxford Ser. (2)* **28** (1977), no. 112, 381-387. (Joel M. Cohen) **58** #24286 57D20
- Taylor, Lawrence** (with Freedman, Michael H.) Λ -splitting 4-manifolds. *Topology* **16** (1977), no. 2, 181-184. (Norman Levitt) **56** #1329 57D65 (57B10)
- Taylor, Lawrence W., Jr.** See **Conference: Optimization Techniques**, **48** #5758
- Taylor, Lester D.** ★Probability and mathematical statistics. *Harper & Row, Publishers*, New York-London, 1974. xiv+346 pp. (M. S. Bingham) **51** #6896 60-01 (62-01)
- Taylor, M. A.** Classical, Cartesian and solution nets. *Mathematica (Cluj)* **13** (1977), 151-166. (A. C. Choudhury) **46** #7063 05B20 (53A99)
- The generalized equations of bisymmetry associativity and transitivity on quasigroups. *Canad. Math. Bull.* **15** (1972), 119-124. (Pl. Kannappan) **51** #8317 20N05 (39A40)
- Relational systems with a Thomsen or Reidemeister cancellation condition. *Mathematical Psychology* **9** (1972), 456-458. (A. D. Booth) **47** #4665 92A25
- Certain functional equations of groupoids weaker than quasigroups. *Aequationes Math.* **9** (1973), 23-29. (M. Hosszu) **51** #13507 39A40 (20L99)
- Cartesian nets and groupoids. *Canad. Math. Bull.* **16** (1973), 347-362. (V. Havlicek) **49** #444 20L05
- Closure conditions derived from iterated functions. *Studia Univ. Babeş-Bolyai S. Math.-Mech.* **19** (1974), no. 2, 51-55. (M. Hosszu) **52** #3413 20N10
- R - and T -groupoids: a generalization of groups. *Aequationes Math.* **12** (1975), no. 2-3, 242-248. (S. C. Althoen) **51** #13083 20L10
- (with Kannappan, Pl.) On closure conditions. *Canad. Math. Bull.* **19** (1976), no.

- 91-296. (Miklós Csikós) **55** #5767 20L05
On the generalised equations of associativity and bisymmetry. *Aequationes Math.* **17** (1978), no. 2-3, 154-163. (Pl. Kannappan) **58** #931 20L99 (39A40)
- Tate, M. J.** Galois module structure of classgroups and units. *Mathematika* **22** (1975), no. 2, 156-160. (Jacques Martinet) **52** #8090 12A65
On the self-duality of a ring of integers as a Galois module. *Invent. Math.* **46** (1978), no. 2, 173-177. (Yasumasa Akagawa) **57** #12460 12A55
Locally free classgroups of groups of prime power order. *J. Algebra* **50** (1978), no. 2, 453-487. (M. E. Keating) **57** #3193 16A54 (20C05, 12A85)
- Tate, M. E.** See **Tate, J.** **56** #15613
- Tate, J.** See **Tate, J.** **56** #15613
- Tate, J.** Computer construction of cyclic balanced incomplete block designs. *J. Statist. Comp. and Simulation* **1** (1972), no. 1, 65-70. (E. Seiden) **45** #6224 68A10 (2K10)
- Taylor, Michael** See **Taylor, Michael E.**
- Taylor, Michael D.** (with Rosen, Harvey) An equality for 2-sided surfaces with a finite number of wild points. *Trans. Amer. Math. Soc.* **167** (1972), 347-358. (R. J. Daverman) **5** #4383 57A10
(with Anthony, J. M.; Sherwood, Howard) Sequential convergence and probabilistic metric spaces. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 1177-1187. (B. Schweizer) **52** #4209 54A20
(with Sherwood, Howard) Some PM structures on the set of distribution functions. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 1251-1260. (B. Schweizer) **52** #1819 0B99
- Taylor, Michael E.** Gelfand theory of pseudo differential operators and hypoelliptic operators. *Trans. Amer. Math. Soc.* **153** (1971), 495-510. (Author's summary) **4** #3517 47G05 (35H05)
(with Rauch, Jeffrey B.) Penetrations into shadow regions and unique continuation properties in hyperbolic mixed problems. *Indiana Univ. Math. J.* **22** (1972/73), 77-285. (Stanly L. Steinberg) **46** #2240 35L10 (47D05)
Vector-valued analytic functions. *Michigan Math. J.* **19** (1972), 353-356. (V. Barbu) **7** #815 46E40
(with Smoller, Joel A.) Wave front sets and the viscosity method. *Bull. Amer. Math. Soc.* **79** (1973), 431-436. (M. H. Protter) **50** #780 35L45
(with Rauch, Jeffrey B.) Essential self-adjointness of powers of generators of hyperbolic mixed problems. *J. Functional Analysis* **12** (1973), 491-493. (P. R. Chernoff) **0** #782 35L50 (47F05)
★Pseudo differential operators. Lecture Notes in Mathematics, Vol. 416. Springer-Verlag, Berlin-New York, 1974. iv + 155 pp. (Rémi Vaillancourt) **56** #905 55S05 (47G05)
(with Rauch, Jeffrey B.) Exponential decay of solutions to hyperbolic equations in bounded domains. *Indiana Univ. Math. J.* **24** (1974), 79-86. (Philip Brenner) **0** #13906 35L99
Reflection of singularities of solutions to systems of differential equations. *Comm. Pure Appl. Math.* **28** (1975), no. 4, 457-478. (D. Ciurmasu (Zbl 332 #35058)) **58** #22994 35F05 (35S05)
(with Rauch, Jeffrey B.) Decay of solutions to nondissipative hyperbolic systems on compact manifolds. *Comm. Pure Appl. Math.* **28** (1975), no. 4, 501-523. (Luigi Cerofolini) **53** #1044a (E 53 #1044b) 35L40 (58G15)
(with Rauch, Jeffrey B.) Erratum: "Decay of solutions to nondissipative hyperbolic systems on compact manifolds" (Comm. Pure Appl. Math. **28** (1975), no. 4, 501-523). *Comm. Pure Appl. Math.* **28** (1975), no. 5, 677. (Luigi Cerofolini) **53** #1044b 35L40 (58G15)
(with Rauch, Jeffrey B.) Potential and scattering theory on wildly perturbed domains. *J. Funct. Anal.* **18** (1975), 27-59. (Jean-Claude Guillot) **51** #13476 35P25 (47A40)
(with Rauch, Jeffrey B.) Electrostatic screening. *J. Mathematical Phys.* **16** (1975), 84-288. (Authors' summary) **52** #3716 35J05 (78.35)
Grazing rays and reflection of singularities of solutions to wave equations. *Comm. Pure Appl. Math.* **29** (1976), no. 1, 1-38. (Genowefa Majcher) **53** #1035 35L05 (58G15)
Grazing rays and reflection of singularities of solutions to wave equations. II. *Comm. Pure Appl. Math.* **29** (1976), no. 5, 463-481. (Genowefa Majcher) **5** #869 35L05 (58C25)
Scattering length and perturbations of $-D$ by positive potentials. *J. Math. Anal. Appl.* **53** (1976), no. 2, 291-312. (Author's introduction) **57** #17028 35P25
(with Rauch, Jeffrey B.) Decaying states of perturbed wave equations. *J. Math. Anal. Appl.* **54** (1976), no. 1, 279-285. (Alan Jeffrey) **55** #8564 35L05
(with Majda, Andrew J.) Inverse scattering problems for transparent obstacles, electromagnetic waves, and hyperbolic systems. *Comm. Partial Differential Equations* **2** (1977), no. 4, 395-438. (Ernest G. Kalnins) **55** #10867 35L99 (35P25, 78.35)
(with Majda, Andrew J.) The asymptotic behavior of the diffraction peak in classical scattering. *Comm. Pure Appl. Math.* **30** (1977), no. 5, 639-669. (M. S. Agmon) **56** #9103 35P25 (78.35, 35S05)
Tor, N. W. (with Marsh, L. Mcl.) Relativistic motion in two space-like dimensions. *J. Proc. Roy. Soc. New South Wales* **103** (1970), no. 3-4, 119-122 (1971). (Edward N. Glass) **53** #2285 83.53
Tor, P. J. (with Phillips, George M.) ★Theory and applications of numerical analysis. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], London-New York, 1973. x + 380 pp. (D. Greenspan) **49** #8264 65-01
(with Duncan, John) Norm inequalities for C^* -algebras. *Proc. Roy. Soc. Edinburgh Sect. A* **75** (1975/76), no. 2, 119-129. (Jun Tomiyama) **56** #12896 46L05
(with Holyhead, P. A. W.; McKee, S.) Multistep methods for solving linear Volterra integral equations of the first kind. *SIAM J. Numer. Anal.* **12** (1975), no. 5, 598-711. (G. F. Miller) **54** #1678 65R05
The solution of Volterra integral equations of the first kind using inverted differentiation formulae. *Nordisk Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 4, 416-425. (Gene A. Kemper) **55** #6900 65R05
Tor, P. T. Resolution of a paradox: mini-max rehabilitated. *Management Sci.* **19** (1972/73), 466-467. (Editors) **52** #16669 (E 52 #16670) 90D05
See also **Maschler, Michael; et al.** **52** #16670
- Taylor, Peter D.** A characterization of G -spaces. *Israel J. Math.* **10** (1971), 131-134. (E. G. Effros) **46** #7873 46B99
The extension property for compact convex sets. *Israel J. Math.* **11** (1972), 159-163. (W. Wils) **45** #9094 46A05
Selection of representing measures for inner parts. *Proc. Amer. Math. Soc.* **36** (1972), 537-542. (A. Dinghas) **47** #758 46A05 (46J10)
A Banach space characterization of the space of affine continuous functions on a compact convex set. *Amer. Math. Monthly* **80** (1973), 911-915. (D. J. H. Garling) **48** #2733 46B05
(with Shapiro, Joel H.) Compact, nuclear, and Hilbert-Schmidt composition operators on H^2 . *Indiana Univ. Math. J.* **23** (1973/74), 471-496. (Paul S. Muhly) **48** #4816 47B37
Subgradients of a convex function obtained from a directional derivative. *Pacific J. Math.* **44** (1973), 739-747. (K. Sundaresan) **48** #2759 46G05
Some open sets for which the heat equation is simplicial. *Canad. J. Math.* **26** (1974), 455-472. (Thomas Armstrong) **49** #620 31D05 (35K05, 46A40)
Inverse limits of compact convex sets and direct limits of spaces of continuous affine functions. *Studia Math.* **51** (1974), 7-10. (Benno Fuchssteiner) **50** #2888 46E10 (46A99)
(with Jamison, Robert E.; O'Brien, Richard C.) On embedding a compact convex set into a locally convex topological vector space. *Pacific J. Math.* **64** (1976), no. 1, 193-205. (D. R. Henney) **54** #13532 46A99
(with Norman, Richard F.; Robertson, Raleigh J.) Stable equilibrium strategies and penalty functions in a game of attrition. *J. Theoret. Biol.* **65** (1977), no. 3, 571-578. (Charles J. Mode) **56** #8079 92A10 (90D45)
(with Jonker, Leo B.) Evolutionarily stable strategies and game dynamics. *Math. Biosci.* **40** (1978), no. 1-2, 145-156. (Daniel P. Maki) **58** #9351 90D45 (58F10, 92A15)
- Taylor, Randolph J.** Interpolation using the cubic spline function. *Pi Mu Epsilon J.* **6**, no. 7, 387-393 (1977). (Derek W. Arthur) **57** #13295 41A05 (41A15, 65D05)
- Taylor, Robert Lee** Weak laws of large numbers in normed linear spaces. *Ann. Math. Statist.* **43** (1972), 1267-1274. (A. Mukherjee) **46** #10042 60F05 (60B05)
(with Padgett, W. J.) ★Laws of large numbers for normed linear spaces and certain Fréchet spaces. Lecture Notes in Mathematics, Vol. 360. Springer-Verlag, Berlin-New York, 1973. vi + 111 pp. (V. M. Kruglov) **54** #14060 60F15 (60B10)
(with Goudreau, G. L.) Evaluation of numerical integration methods in elastodynamics. *Comput. Methods Appl. Mech. Engrg.* **2** (1973), 69-97. (B. A. Bondarenko) **54** #14537 73.65
(with Padgett, W. J.) Convergence of weighted sums of random elements in Banach spaces and Fréchet spaces. Collection of articles in celebration of the sixtieth birthday of Ky Fan. *Bull. Inst. Math. Acad. Sinica* **2** (1974), 389-400. (Eberhard Siebert) **50** #11360 60B10
(with Padgett, W. J.) Some laws of large numbers for normed linear spaces. *Sankhyā Ser. A* **36** (1974), no. 4, 359-368. (P. Warren) **52** #6845 60F15
Convergence of elements in random normed spaces. *Bull. Austral. Math. Soc.* **12** (1975), 31-47. (J. G. Wendel) **51** #1901 60B10
(with Padgett, W. J.) Stochastic convergence of weighted sums in normed linear spaces. *J. Multivariate Anal.* **5** (1975), no. 4, 434-450. (V. M. Kruglov) **52** #12031 60B10
(with Padgett, W. J.) Almost sure convergence of weighted sums of random elements in Banach spaces. *Probability in Banach spaces (Proc. First Internat. Conf., Oberwolfach, 1975)*, pp. 187-202. *Lecture Notes in Math.*, Vol. 526, Springer, Berlin, 1976. (A. Weron) **56** #13305 60B99
(with Padgett, W. J.) Weak laws of large numbers in Banach spaces and their extensions. *Probability in Banach spaces (Proc. First Internat. Conf., Oberwolfach, 1975)*, pp. 227-242. *Lecture Notes in Math.*, Vol. 526, Springer, Berlin, 1976. (A. Weron) **56** #9621 60B99
(with Hughes, Thomas J. R.; Kanoknukulchai, Worsak) A finite element method for large displacement contact and impact problems. *Formulations and computational algorithms in finite element analysis (U.S.-Germany Sympos., Mass. Inst. Tech., Cambridge, Mass., 1976)*, pp. 468-495. *M.I.T. Press, Cambridge, Mass.*, 1977. (Authors' summary) **57** #14814 73.65
(with Wei, Duan) Geometrical consideration of weighted sums convergence and random weighting. *Bull. Inst. Math. Acad. Sinica* **6** (1978), no. 1, 49-59. (W. A. Woyczynski) **58** #18645 60B10
(with Wei, Duan) Convergence of weighted sums of tight random elements. *J. Multivariate Anal.* **8** (1978), no. 2, 282-294. (Gilles Pisier) **58** #7763 60B05 (60F15)
- Taylor, Russell W.** (with Phillips, Ronald L.; Jelsma, Lawrence F.; Tweed, Edward W.) Boundary conditions for the four vector potential. *IEEE Trans. Microwave Theory Tech.* **18** (1970), 648-649. (E. Pinney) **53** #7227 78.35
- Taylor, Samuel James** Exact asymptotic estimates of Brownian path variation. *Duke Math. J.* **39** (1972), 219-241. (J. A. Beekman) **45** #4500 60J65
Sample path properties of processes with stationary independent increments. *Stochastic analysis (a tribute to the memory of Rollo Davidson)*, pp. 387-414. *Wiley, London*, 1973. (W. E. Pruitt) **52** #15692 60J30
(with Jain, Naresh C.) Local asymptotic laws for Brownian motion. *Ann. Probability* **1** (1973), 527-549. (O. P. Stackelberg) **51** #1984 60J65
(with Fristedt, Bert E.) Strong variation for the sample functions of a stable process. *Duke Math. J.* **40** (1973), 259-278. (J. B. Robertson) **47** #5968 60J30 (60G17)
Regularity of irregularities on a Brownian path. (French summary) *Colloque International sur les Processus Gaussiens et les Distributions Aléatoires (Colloque Internat. du CNRS, No. 222, Strasbourg, 1973)*. *Ann. Inst. Fourier (Grenoble)* **24** (1974), no. 2, vii, 195-203. (N. C. Jain) **53** #14699 60J65
(with Orey, Steven) How often on a Brownian path does the law of iterated logarithm fail? *Proc. London Math. Soc.* (3) **28** (1974), 174-192. (P. W. Millar) **50** #11486 60J65 (60G17)
Abram Samoilovitch Besicovitch. *Bull. London Math. Soc.* **7** (1975), 191-210. (I. plate) (Editors) **52** #5326 01A70
Paul Lévy. *Bull. London Math. Soc.* **7** (1975), no. 3, 300-320. (Editors) **52** #2801A70 (60-03)

- (with Kingman, J. F. C.; Hawkes, Alan G.; Walker, A. M.; Cox, D. R.; Smith, Adrian; Hill, Bruce M.; Burville, P. J.; Leonard, Tom) Random discrete distribution. With a discussion by S. J. Taylor, A. G. Hawkes, A. M. Walker, D. R. Cox, A. F. M. Smith, B. M. Hill, P. J. Burville, T. Leonard and a reply by the author. *J. Roy. Statist. Soc. Ser. B* 37 (1975), 1-22. (Mir Ali) 51 #4505 62E99
- (with Pruitt, William E.) Some sample path properties of the asymmetric Cauchy processes. *Probability (Proc. Sympos. Pure Math., Vol. XXXI, Univ. Illinois, Urbana, Ill., 1976)*, pp. 111-123. *Amer. Math. Soc., Providence, R. I.*, 1977. (P. W. Millar) 56 #1475 60J30 (60G17)
- (with Pruitt, William E.) Hausdorff measure properties of the asymmetric Cauchy processes. *Ann. Probability* 5 (1977), no. 4, 608-615. (J. Hawkes) 56 #1476 60J30
- Thomas Muirhead Flett. *Bull. London Math. Soc.* 9 (1977), no. 3, 330-339. (Editors) 58 #21324 01A70
- The regularity of randomness. *Math. Gaz.* 62 (1978), no. 419, 1-8. (Richard Isaac) 57 #10747 60-01
- Taylor, T. D.** An evaluation of cell type finite difference methods for solving viscous flow problems. *Internat. J. Comput. & Fluids* 1 (1973), no. 1, 3-18. (S. A. Berger) 49 #10259 76.65
- Taylor, T. T.** ★Mechanics: classical and quantum. International Series in Natural Philosophy, Vol. 82. Pergamon Press, Oxford-New York-Toronto, Ont., 1976. xi + 399 pp. (Editors) 52 #12563 81.00 (70.00)
- Taylor, Thomas** See Dictionary: Educational cybernetics, 53 #7671
- Taylor, W. W.** Fixed-point theorems for nonexpansive mappings in linear topological spaces. *J. Math. Anal. Appl.* 40 (1972), 164-173. (A. T.-M. Lau) 48 #974 47H10
- Taylor, Walter** Some constructions of compact algebras. *Ann. Math. Logic* 3 (1971), no. 4, 395-435. (J. M. Plotkin) 45 #47 02H13
- Atomic compactness and elementary equivalence. *Fund. Math.* 71 (1971), no. 2, 103-112. (B. Węglorz) 45 #8598 08A25 (05C15, 54C15)
- Residually small varieties. *Algebra Universalis* 2 (1972), 33-53. (V. Căzănescu) 47 #3278 08A15
- Fixed points of endomorphisms. *Algebra Universalis* 2 (1972), 74-76. (V. Căzănescu) 46 #5217 08A25
- (with Bulman-Fleming, Sydney) On a question of G. H. Wenzel. *Algebra Universalis* 2 (1972), 142-145. (M. Gould) 47 #8397 08A20
- Note on pure-essential extensions. *Algebra Universalis* 2 (1972), 234-237. (Terence P. Speed) 46 #8936 08A05
- On the coloration of cubes. *Discrete Math.* 2 (1972), 187-190. (B. Manvel) 45 #6684 05C15
- On equationally compact semigroups. *Semigroup Forum* 5 (1972), 81-88. (B. Węglorz) 47 #1606 02H15 (02H05, 20M99)
- Characterizing Mal'cev conditions. *Algebra Universalis* 3 (1973), 351-397. (A. Shafaat) 50 #2030 08A15
- Products of absolute retracts. *Algebra Universalis* 3 (1973), 400-401. (J. Karásek) 50 #2031 08A15
- A heterogeneous interpolant. *Nagoya Math. J.* 52 (1973), 31-33. (J. A. Makowsky) 48 #10759 02B25 (02D99)
- (with Bulman-Fleming, Sydney; Day, Alan) Regularity and modularity of congruences. *Algebra Universalis* 4 (1974), 58-60. (Alden Pixley) 52 #3006 08A05
- Pure-irreducible mono-unary algebras. *Algebra Universalis* 4 (1974), 235-243. (A. Yaqub) 50 #6982 08A15
- Uniformity of congruences. *Algebra Universalis* 4 (1974), 342-360. (A. Shafaat) 51 #12658 08A15
- Note on defining arc length. *Elem. Math.* 29 (1974), 68-69. (M. Skalsky) 49 #7405 26A63
- The fine spectrum of a variety. *Algebra Universalis* 5 (1975), no. 2, 263-303. (Stanley N. Burris) 52 #10547 08A15
- Continuum many Mal'cev conditions. *Algebra Universalis* 5 (1975), no. 3, 333-335. (A. Shafaat) 52 #13583 08A15
- (with McNulty, George F.) Combinatory interpolation theorems. *Discrete Math.* 12 (1975), 193-200. (N. S. Mendelsohn) 52 #6580 52A40 (04A20)
- (with Mycielski, Jan) A compactification of the algebra of terms. *Algebra Universalis* 6 (1976), no. 2, 159-163. (B. Węglorz) 55 #7886 08A05
- Pure compactifications in quasi-primal varieties. *Canad. J. Math.* 28 (1976), no. 1, 50-62. (Alden Pixley) 53 #5435 08A15
- (with Bulman-Fleming, Sydney) Union-indecomposable varieties. *Colloq. Math.* 35 (1976), no. 2, 189-199. (M. Gould) 53 #7905 08A15
- Remarks on compactifying semigroups. *Semigroup Forum* 12 (1976), no. 3, 215-219. (M. Friedberg) 53 #10971 22A15
- Equational logic. *Contributions to universal algebra (Colloq., József Attila Univ., Szeged, 1975)*, pp. 465-501. *Colloq. Math. Soc. János Bolyai, Vol. 17, North-Holland, Amsterdam, 1977.* (H. Lausch) 57 #12341 08A15 (02F47)
- Varieties obeying homotopy laws. *Canad. J. Math.* 29 (1977), no. 3, 498-527. (James B. Nation) 55 #7891 08A25
- Varieties of topological algebras. *J. Austral. Math. Soc. Ser. A* 23 (1977), no. 2, 207-241. (L. Corwin) 56 #5392 08A15
- Baker's finite basis theorem. *Algebra Universalis* 8 (1978), no. 2, 191-196. (Evelyn Nelson) 57 #16166 08A15 (08A25)
- Taylor, William E.** Smoothness priors and stochastic prior restrictions in distributed lag estimation. *Internat. Econom. Rev.* 15 (1974), 803-804. (Peter M. Robinson) 50 #15245 62P20
- Prior information on the coefficients when the disturbance covariance matrix is unknown. *Econometrica* 44 (1976), no. 4, 725-739. (Takeshi Amemiya) 57 #17971 62J05 (62P20)
- Small sample properties of a class of two stage Aitken estimators. *Econometrica* 45 (1977), no. 2, 497-508. (V. K. Srivastava) 56 #16939 62J05 (62P20)
- The heteroscedastic linear model exact finite sample results. *Econometrica* 46 (1978), no. 3, 663-675. (G. Tintner) 57 #14311 62P20
- Taylor, William F.** See Proceedings: Berkeley Symposium on Mathematical Statistics and Probability, 52 #9425
- Taylor, William J.** Inverse Gaussian transforms: general properties and application to Slater-type orbitals with noninteger and integer n in the coordinate and momentum representations. *J. Mathematical Phys.* 19 (1978), no. 1, 52-58. (C. Tanaka) 56 #16244A10 (44A15)
- Taylor, Willie E., Jr.** On the solutions of certain non-self-adjoint differential equations fourth order. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 58 (1975), no. 851-860. (Marvin S. Keener) 55 #10775 34C10
- On the solutions of certain fourth order quasilinear differential equations. *Mathematical and Physical Sci.* 9 (1975), no. 6, 551-559. (Jerry Ridenhour) 52 #8564 34C10
- (with Etgen, Garret J.) On the oscillation of a class of fourth order differential equations. *Rocky Mountain J. Math.* 6 (1976), no. 1, 71-84. (S. Ahmad) 52 #14464 34C10
- On the oscillatory and asymptotic behavior of solutions of a certain fourth order linear differential equation. *Hiroshima Math. J.* 7 (1977), no. 3, 667-674. (J. S. W. Wong) 57 #788 34C10 (34D05)
- (with Etgen, Garret J.) The essential uniqueness of bounded nonoscillatory solutions of certain even order differential equations. *Pacific J. Math.* 68 (1977), no. 339-346. (S. Rankin) 57 #6621 34C10
- Asymptotic behavior of solutions of a fourth order nonlinear differential equation. *Proc. Amer. Math. Soc.* 65 (1977), no. 1, 70-72. (V. B. Headley) 56 #3408 34C10
- Taylor-MacGibbon, Brenda** See MacGibbon, Brenda
- Tayoshi, Takao** On the spectrum of the Laplace-Beltrami operator on a non-compact surface. *Proc. Japan Acad.* 47 (1971), 187-189. (Bent E. Petersen) 45 #4219 47F05 (58G99)
- The asymptotic behavior of the solutions of $(\Delta + \lambda)u = 0$ in a domain with the unbounded boundary. *Publ. Res. Inst. Math. Sci.* 8 (1972), 375-391. (J. B. McLeod) 48 #11742 35B40 (34J05)
- A remark on the limiting absorption principle for elliptic equations. *Rep. Univ. Electro-Comm.* 25 (1975), 197-202. (G. Albinus) 51 #6129 35J25
- Tazabekov, R.** (with Imanaliev, M. I.) Averaging in systems of nonlinear integro-differential equations of Fredholm type. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk* No. 7 (1970), 72-77. (See RZMat 1970 #12 B432) 45J05
- (with Kakišov, K. B.) Justification of the averaging method for systems of integro-differential equations with retarded argument. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk* No. 7 (1970), 83-87. (See RZMat 1970 #12 B433) 45J05
- (with Beisenkulov, A.) A variant of averaging for systems of nonlinear integro-differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk* No. (1974), 101-111. (See RZMat 1974 #9 B1210) 45J05
- Tazaki, Ataru** Changes in the solutions of the problems published in the *Reikan Sampō*. I. (Japanese) *Sūgakushi Kenkyū* No. 46, (1970), 12-22. 58 #21038 01A25
- Tazaki, Eiichi** (with Shindo, A.; Umeda, T.) Decentralized optimization of a chemical process by a feasible method. (French, German and Russian summaries) *Automatica—J. IFAC* 8 (1972), 543-554. (E. J. Haug, Jr.) 48 #13376 93C30
- (with Amagasa, Michio; Takizawa, Masahito) Structural modeling in a class of systems by fuzzy sets theory. (Japanese. English summary) *J. Operations Res. Soc. Japan* 20 (1977), no. 4, 285-310. (Authors' summary) 56 #17790 90B99 (93A10)
- Tazawa, Shinsei** (with Yamamoto, Sumiyasu; Ushio, Kazuhiko; Ikeda, Hideto; Tamaru, Fumikazu; Hamada, Noboru) Partition of a query set into minimal number of subsets having consecutive retrieval property. *J. Stat. Plann. Inference* 1 (1977), no. 1, 41-51. (K. H. V. Booth) 58 #8586 68A50
- Tazawa, Yoshihiko** Surfaces with vanishing normal curvature. *Hokkaido Math. J.* 1 (1972), 262-274. (Bang-yen Chen) 47 #5798 53C45
- Tazimuratov, I.** (with Šakibaliyev, R. Š.) The existence of periodic solutions of a certain system of partial differential equations. (Russian) *Collection of scientific works of postgraduates, No. XI: Mathematics and physics (Russian)*, pp. 67-72. *Univ. Družba Narodov, Moscow, 1972.* (O. Vejvodica) 48 #11741 35B10
- Tazzi Cantalupi, Gabriella** (with Ricetti Zucchetti, Bianca) Singrammi triangolati sferici. *Ist. Lombardo Accad. Sci. Lett. Rend. A* 106 (1972), 697-703. (R. C. Read) 48 #8287 05C10
- Singrammi triangolati tracciabili sul piano proiettivo. *Ist. Lombardo Accad. Sci. Lett. Rend. A* 107 (1973), 543-549. (A. Barlotti) 51 #12588 05C10
- (with Bernardi, Marco) Fibrizioni generalizzate di uno spazio proiettivo complesso. *Ist. Lombardo Accad. Sci. Lett. Rend. A* 108 (1974), 50-58. (J. Verdina) 50 #13064 14N05
- (with Ricetti Zucchetti, Bianca) Questioni di realtà per le curve algebriche reali e un modello algebrico di superficie topologica connessa non orientabile di ordine di connessione tre. (English summary) *Boll. Un. Mat. Ital. A (5)* 14 (1977), no. 2, 304-311. (A. H. Wallace) 56 #5568 14H99
- Toimanyan, B. E.** Boloracs of astronomical character. (Armenian. Russian summary) *Istor. Estestvozn. Tehn. Armen. No. 6* (1976), 100-121. (Author's summary) 58 #26825 01A35
- T'youlyan, H.** See Step'anyan, M. M., 58 #27048
- Tcha, Dong Wan** (with Pliska, Stanley R.) Optimal control of single-server queueing networks and multi-class $M/G/1$ queues with feedback. *Operations Res.* 25 (1977), no. 2, 248-258. (Ralph L. Disney) 55 #11441 60K25 (93E20)
- Tchakhtaouri, A. I.** See Čahtauri, A. I.
- Tchen, C. M.** Gravity turbulence connected with interfaces. (Russian summary) *Tellus* 2 (1974), no. 5, 565-578. (Author's summary) 55 #7109 76.60
- Tcheremissine, F. G.** Methods of integration of the Boltzmann kinetic equation. *Topics in numerical analysis, III (Proc. Roy. Irish Acad. Conf., Trinity Coll., Dublin, 1976)*, pp. 417-428. *Academic Press, London, 1977.* (John Crank) 58 #32717 82.60
- Tchobanov, Georg I.** See Čobanov, Georgi I.
- Tchobanov, Ivan** See Čobanov, Ivan
- Tcholakov, V. D.** See Čolakov, V. D.
- adamska-Tchoń, Jadwiga** * See Adamska-Tchoń, Jadwiga
- Tchoń, Krzysztof** (with Jacak, Witold) Events and systems. (Russian summary) *System Sci.* 1 (1975), no. 2, 77-88 (1976). (J. Heidema) 54 #7011 93A05
- (with Jacak, Witold; Sierocki, Ireneusz) A plan to define time in systems theory. (Polish. English and Russian summaries) Selected problems in the foundations of systems theory. *Prace Nauk. Inst. Cybernet. Techn. Politechn. Wrocław. No. 25 Ser. Stu.*

- Materiaty No. 17** (1976), 39-61. (Authors' summary) **56** #17939 93A10
(with Jacak, Witold) A proposal for defining a system by means of the space of
vents. (Polish. English and Russian summaries) Selected problems in the foundations
of systems theory. *Prace Nauk. Inst. Cybernet. Techn. Politechn. Wroclaw. No. 25 Ser.*
Stud. i Materiaty No. 17 (1976), 63-80. (Authors' summary) **56** #15372 02C99
93A05
(with Adamska-Tchoń, Jadwiga; Jacak, Witold) A formal description and
algorithmization of a certain transport problem. (Polish. English and Russian summaries)
Selected problems in the foundations of systems theory. *Prace Nauk. Inst. Cybernet.*
Techn. Politechn. Wroclaw. No. 25 Ser. Stud. i Materiaty No. 17 (1976), 181-208.
(Authors' summary) **56** #17761 90B10
(with Jacak, Witold) On goal-oriented eventistic systems. *Systems Sci.* **3** (1977), no.
3, 307-313. (From the introduction) **58** #20647 93A10
- akian, D. H.** On the application of higher rank spinors in general relativity. *General*
Relativity and Gravitation **5** (1974), no. 3, 331-343. (Author's summary) **53** #12495
83.53
A formulation of linearised gravity. *General Relativity and Gravitation* **5** (1974), no.
4, 379-386. (Author's summary) **54** #2114 83.53
"Electric" and "magnetic" gravitational fields in vacuum. *General Relativity and*
Gravitation **6** (1975), no. 2, 151-156. (A. Crumeyrolle) **53** #15254 83.35
(with O'Sullivan, P.) On unique mass, definite parity Joos-Weinberg field equations.
Acta Phys. Austriaca **45** (1976), no. 3-4, 291-295. (Jorge André Swieca) **54** #2019
81.53
(with Hogan, P. A.) Initial-value problem for Maxwell and linearized Einstein
fields. *J. Phys. A* **10** (1977), no. 6, 899-908. (Shin-ichi Kitamura) **57** #15185 83.35
- etanov, Ilija P.** See **Cvetanov, Ilija P.**
- en dan Te** See **Nguen Dan Te**
- guôc-Tê** See **Trân-Quôc-Tê**
- gue, T. K.** On the Engel margin. *Pacific J. Math.* **50** (1974), 205-214. (H. Heineken)
51 #720 20F10
(with Cox, C. L.) Completions of groups. *Amer. Math. Monthly* **82** (1975), 282-283.
(Peter J. Cameron) **51** #8267 20F25
- he, Dennis L.** A nearest neighbors spectrum of the Bayes risk function. *Proceedings of*
The Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976),
pp. 253-254. *IEEE Comput. Soc., Long Beach, Calif., 1976.* (W. Greblicki) **57** #14649
68A45 (62C10)
- oul, Michel** Perturbations dans un univers de Gödel. *C. R. Acad. Sci. Paris Sér. A-B*
273 (1971), A1335-A1338. (C. W. Kilmister) **45** #6368 83.53
- yrécé, E. I.** The decomposition into an intersection of simple elements in multiplicative
semilattices. (Russian) *Mat. Issled.* **7** (1972), no. 3(25), 176-193, 273. (J. Jakubik)
47 #3271 06A50 (06A20)
- The Boolean nature of the lattice of torsions in modules. (Russian) *Mat. Issled.* **8**
(1973), no. 3(29), 92-105, 181. (L. A. Skornjakov) **48** #6181 16A64 (06A35)
(with Rjabuhin, Ju. M.) Torsions and prime ideals of rings with a chain condition.
(Russian) *Mat. Issled.* **9** (1974), no. 4(34), 109-120, 176. (W. G. Leavitt) **51** #5570
3A10
- The lattice of torsions in modules. (Russian) *Mat. Issled.* **10** (1975), no. 1(35),
225-235, 300-301. (L. A. Koifman) **54** #2714 16A21 (13A10)
- (with Andrunakievič, V. A.; Rjabuhin, Ju. M.; Kračilov, K. K.) *Erbliche Radikale*
von Algebren (Torsionen von Algebren). Universale Algebren und Theorie der Radikale,
pp. 1-8. *Studien zur Algebra und ihre Anwendungen, Band 1, Akademie-Verlag, Berlin*,
1976. (H.-J. Hoehnke) **58** #769 16A21
- Prime torsions of the category of modules. (Russian) *Topological structures and*
algebraic systems. Mat. Issled. Yyp. **44** (1977), 104-108, 180. (E. Enochs) **57** #9799
18E40
- eschli, Bruno** Necrologio: Luigi Lordi. *Giorn. Ist. Ital. Attuari* **33** (1970), 30-37.
(Editors) **46** #5094 01A70
- lone, O.** (with Iazeolla, Giuseppe G.; Martinelli, Enzo) Analysis and simulation of
queueing systems with setup classes. *RAIRO Informat.* **11** (1977), no. 2, 185-200. (Ralph
L. Disney) **56** #9729 60K25
- e, Garry J.** Simple analytic expressions for primes, and for prime pairs. *New Zealand*
Math. Mag. **9** (1972), 32-44. (I. Niven) **45** #8601 10A25
- A refinement of Mills' prime-generating function. *New Zealand Math. Mag.* **11**
(1974), 9-11. (L. Carlitz) **49** #7203 10A20
- Sof'ya Vasil'yevna Koyalevskaya. *Math. Chronicle* **5** (1976/77), no. 3, 113-139.
(Phillip S. Jones) **56** #2761 01A70
- ekens, R.** ★Prediction methods in multiplicative models. Foreword by J. Koerts.
Rotterdam University Press, Rotterdam, 1972. viii + 121 pp. (A. L. Nagar) **49** #6538
62P20 (90A15)
- (with Koerts, J.; Louter, A. S.) On the robustness of an estimator of the mean of
the dependent variable in a multiplicative model. *Statistica Neerlandica* **27** (1973),
171-179. (D. S. Tracy) **50** #8812 62F10
- ese, R. B.** (with Böhm, Arno) Spectrum generating group of the symmetric top
molecule. *J. Mathematical Phys.* **17** (1976), no. 1, 94-108. (L. O'Riarteagaigh)
52 #12567 81.22
- ffo, J. L.** (with Houard, J. C.) The Efimov-Fradkin formalism for nonpolynomial
interactions of a harmonic oscillator. (Italian and Russian summaries) *Nuovo Cimento*
A (11) **16** (1973), 1-36. (K. Chadani) **52** #9868 81.30
- fova, E. L.** Analytic calculation of the coordinates of lines under a skew mapping in P_4 .
(Russian) *Algebra and number theory, No. 1 (Russian)*, pp. 83-86. *Kabardino-Balkarsk.*
Gos. Univ., Nalchik, 1973. (B. Orban) **55** #2945 14N05 (14E05)
- fteller, Steve C.** Concerning solutions of third order self-adjoint differential equations.
Ann. Mat. Pura Appl. (4) **96** (1972), 185-192. (Z. Nehari) **48** #11672 34C10
(with Etgen, Garret J.) Second order differential equations with general boundary
conditions. *SIAM J. Math. Anal.* **3** (1972), 512-519. (J. S. Bradley) **47** #538 34B10
- Oscillation of a class of self-adjoint differential equations. (Italian summary) *Atti*
Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) **57** (1974), no. 5, 324-327. (Bhagat
Singh) **53** #949 34C10
- A two-point boundary problem for nonhomogeneous second order differential
equations. *Pacific J. Math.* **53** (1974), 635-642. (G. J. Eigen) **51** #8521 34B05
- A polar coordinate transformation for nonhomogeneous differential systems.
Portugal. Math. **34** (1975), no. 3-4, 219-223. (N. Hayek Calil) **54** #645 34C10
- Boundary value problems for second order nonhomogeneous differential systems.
Proc. Amer. Math. Soc. **52** (1975), no. 196, 271-278. (M. Švec) **53** #5977 34B05
- Oscillation of second order nonhomogeneous linear differential equations. *SIAM J.*
Appl. Math. **31** (1976), no. 3, 461-467. (J. S. Bradley) **56** #8974 34C10
(with Sitter, R. E.) Oscillation of a fourth-order nonhomogeneous differential
equation. *J. Math. Anal. Appl.* **59** (1977), no. 1, 93-104. (R. E. Fennell) **56** #753
34C10
- Teghem, J., Jr.** Processus de décision Markovien: Tactiques "bias-optimal". *Cahiers*
Centre Études Recherche Opér. **13** (1971), 124-140. (I. V. Romanovskii) **47** #4601
90A05
- Properties of $(0, k)$ policy in a $M/G/1$ queue and optimal joining rules in a $M/M/1$
queue with removable server. (French summary) *Operational research '75 (Proc. Seventh*
IFORS Internat. Conf., Tokyo/Kyoto, 1975), pp. 229-259. *North-Holland, Amsterdam*,
1976. (Ralph L. Disney) **54** #11571 60K25
- loris-Teghem, Jacqueline** See **Loris-Teghem, Jacqueline**
- Teghem, Jean** Les lois des grands nombres. Avec le rappel de quelques notions
fondamentales de la théorie des probabilités. Exposés faits au cours international
post-universitaire, Gand, 1968. *Bull. Soc. Math. Belg.* **24** (1972), 78-87. (Editors)
52 #15606 60Fxx
- Teglas, R.** (with Lathrop, John D.) Dynamics in the Gödel universe. (Italian and Russian
summaries) *Nuovo Cimento B* (11) **43** (1978), no. 1, 162-172. (Kotik K. Lee) **57** #11616
83.53
- Teh, H. H.** On envelope graphs. *Nanta Math.* **4** (1970), 22-28. (C. St. J. A. Nash-Williams)
45 #6671 05C99
- An algebraic representation theorem of point-symmetric graphs. *Nanta Math.* **4**
(1970), 29-46. (M. Behzad) **46** #92 05C25
(with Chen, C. C.) On the automorphism groups of interchanged graphs. *Nanta*
Math. **4** (1970), 72-78. (L. V. Quintas) **47** #1668 05C25
(with Chen, C. C.) Point symmetric ranks of undirected graphs. *Nanta Math.* **4**
(1970), 85-100. (D. J. A. Welsh) **47** #3258 05C99
(with Chen, C. C.) Point symmetric ranks of directed graphs. *Nanta Math.* **4** (1970),
101-112. (E. C. Milner) **47** #3231 05C20
- Concrete representations of multiple-edge graphs. *Nanyang Univ. J. Part I* **4** (1970),
1-3. (W. Dörfler) **45** #6672 05C99
- A universal isomorphism theorem of graphs. *Nanyang Univ. J. Part I* **4** (1970),
4-19. (Author's introduction) **45** #8569 05C99
(with Gan, H. W.) A note on free product of rooted graphs. *Nanyang Univ. J. Part*
I **4** (1970), 20-23. (M. R. Garey) **45** #5014 05C99
(with Wang, Y. P.) On the limit of a net of graphs. *Nanyang Univ. J. Part I* **4**
(1970), 24-38. (J. Turner) **46** #100 05C99
(with Shee, S. C.) On homogeneous quasigroup graphs and right associative subsets
of a quasigroup. *Nanyang Univ. J. Part I* **4** (1970), 67-75. (From the introduction)
45 #6696 05C25 (20N99)
- (with Tan, K. H.) On flows in finite weighted graphs. *Nanta Math.* **5** (1972), no. 2,
70-83. (W.-K. Chen) **47** #8087 90B10
(with Tan, K. H.) On flows in infinite weighted graphs. *Nanta Math.* **5** (1972), no.
2, 90-96. (W.-K. Chen) **47** #8088 90B10
(with Loh, Hooi Tong) On distance-symmetric graphs. *Nanta Math.* **5** (1972), no. 3,
87-92. (R. L. Hemminger) **49** #4866 05C99
(with Koh, Khee-meng) On directed postman problem. (Chinese summary)
Nanyang Univ. J. Part III **8/9** (1974/75), 14-26. (Narsingh Deo) **54** #12569
05C35 (68A10)
- (with Shee, S. C.) ★Algebraic theory of graphs. *Lee Kong Chian Institute of*
Mathematics and Computer Science, Nanyang University, Singapore, 1976. vi + 168 pp. (A.
T. White) **55** #7836 05C25
(with Chen, C. C.) On the number of automorphisms of an algebra. *Nanta Math.* **9**
(1976), no. 2, 178-186. (William T. Trotter, Jr.) **57** #9636 08A25 (05C05)
- Tehrani, A.** Un algorithme de coloration. Colloque sur la Théorie des Graphes (Paris,
1974). *Cahiers Centre Études Recherche Opér.* **17** (1975), no. 2-4, 395-398. (François
Jaeger) **56** #5350 05C15
- Teicher, Henry** On interchangeable random variables. *Studi di probabilità, statistica e*
ricerca operativa in onore di Giuseppe Pompili, pp. 141-148. *Edizioni Oderisi, Gubbio*,
1971. (J. R. Blum) **51** #4356 60F05
- Completion of a dominated ergodic theorem. *Ann. Math. Statist.* **42** (1971),
2156-2158. (Michael Lin) **45** #9373 60E05
- A classical limit theorem without invariance or reflection. *Ann. Probability* **1** (1973),
702-704. (D. Siegmund) **50** #3310 60F05
- (with Chow, Y. S.) Iterated logarithm laws for weighted averages. *Z.*
Wahrscheinlichkeitstheorie und Verw. Gebiete **26** (1973), 87-94. (C. C. Heyde) **48** #9821
60F15
- On the law of the iterated logarithm. *Ann. Probability* **2** (1974), 714-728. (R. J.
Tomkins) **51** #6941 60F15
- A necessary condition for the iterated logarithm law. *Z. Wahrscheinlichkeitstheorie*
und Verw. Gebiete **31** (1974/75), 343-349. (R. J. Tomkins) **52** #4389 60F15
(with Klass, Michael J.) Iterated logarithm laws for asymmetric random variables
barely with or without finite mean. *Ann. Probability* **5** (1977), no. 6, 861-874. (R. J.
Tomkins) **56** #3925 60F15
- Teichert-Gaida, Alina** On some compound non-linear boundary value problem.
Demonstratio Math. **9** (1976), no. 3, 409-421. (G. Wildenhain) **55** #5872 30A88
- Teichmann, G.** (with Schumann, W.) Some remarks concerning the linear theory of
heterogeneous orthotropic shells. *Acta Mech.* **25** (1976/77), no. 3-4, 291-299. (V. P.
Madani) **56** #7444 73.53
- Teichmann, Jürgen** Zur Entwicklung von Grundbegriffen der Elektrizitätslehre,
insbesondere des elektrischen Stromes bis 1820. (English summary) *RETE* **2**, no. 1,
63-91, (1973). (M. Kline) **57** #33 01A50
- Die Copernicus-Ausstellung im Deutschen Museum—Didaktik und Geschichte.
Nicolaus Copernicus. *Deutsches Museum—Abh. und Ber.* **42** (1974), no. 2, 47-52. (Not
reviewed) **01A40** (01A65)

- Teiman, A. I.** Certain problems of the control of complexes of operations under indeterminacy conditions. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics* (Tbilisi, 1968), Vol. 5: Control of production (Russian), pp. 53–61, 354. Izdat. "Nauka", Moscow, 1972. (Editors) **48** #8029 93A15
- See also **Busacker, Robert G.; et al.**, **49** #10585
- Teirlinck, Luc** On the maximum number of disjoint Steiner triple systems. *Discrete Math.* **6** (1973), 299–300. (R. E. Greenwood) **48** #5885 05B05
- The existence of reverse Steiner triple systems. *Discrete Math.* **6** (1973), 301–302. (R. E. Greenwood) **48** #8263 05B05
- A simplification of the proof of the existence of reverse Steiner triple systems of order congruent to 1 modulo 24. *Discrete Math.* **13** (1975), no. 3, 297–298. (Charles C. Lindner) **51** #12562 05B05
- On linear spaces in which every plane is either projective or affine. *Geometriae Dedicata* **4** (1975), no. 1, 39–44. (Joseph A. Thas) **52** #5441 05B05 (50D35)
- On the maximum number of disjoint triple systems. *J. Geom.* **6** (1975), 93–96. (E. F. Assmus, Jr.) **51** #5333 05B05
- (with Ganter, Bernhard; Pelikán, József) Small sprawling systems of equicardinal sets. *Ars Combinatoria* **4** (1977), 133–142. (A. Astromoff) **57** #9553 05A05
- Planes and hyperplanes of 2-coverings. *Bull. Soc. Math. Belg.* **29** (1977), no. 1, 73–81. (Francis Buekenhout) **58** #5285 05B25 (50B35)
- On making two Steiner triple systems disjoint. *J. Combinatorial Theory Ser. A* **23** (1977), no. 3, 349–350. (J. Spencer) **56** #8394 05B05
- (with Ganter, Bernhard) A combinatorial lemma. *Math. Z.* **154** (1977), no. 2, 153–156. (Charles C. Lindner) **55** #7809 05B20
- Teissier, Bernard** (with Lejeune-Jalabert, Monique) ★ Quelques calculs utiles pour la résolution des singularités. Rédigés par Lê Dũng Tráng et J. J. Risler. Exposés faits au Centre de Mathématiques de l'École Polytechnique. No. M72.1171. Centre de Mathématiques, École Polytechnique, Paris, 1971. v + 256 + x pp. (J. S. Joel) **57** #16678 32C45
- ★ Contribution à l'étude des singularités du point de vue du polygone de Newton. Cycles évanouissants, plis évanouissants et conditions de Whitney. Thèse présentée à l'Université Paris VII pour obtenir le grade de Docteur ès-Sciences Mathématiques. Partiellement en collaboration avec Monique Lejeune-Jalabert. Université de Paris VII, Paris, 1973. x + 8 + iii + 5 + i + 288 + i + 49 + i + 52 + i pp. (3 loose errata) (Joseph Lipman) **52** #800b 32C45 (32G10, 32C40)
- (with Lejeune-Jalabert, Monique) Transversalité, polygone de Newton, et installations. Notes prises par Margherita Galbiati. Singularités à Cargèse (*Rencontre Singularités Géom. Anal., Inst. Études Sci. de Cargèse*, 1972), pp. 75–119. *Astérisque*, Nos. 7 et 8, Soc. Math. France, Paris, 1973. (Tomás Sánchez Giralda) **53** #13224 32C45 (14E15)
- Cycles évanescents, sections planes et conditions de Whitney. *Singularités à Cargèse* (*Rencontre Singularités Géom. Anal., Inst. Études Sci., Cargèse*, 1972), pp. 285–362. *Astérisque*, Nos. 7 et 8, Soc. Math. France, Paris, 1973. (J. A. Morrow) **51** #10682 32C40
- (with Hironaka, Heisuke; Lejeune-Jalabert, Monique) Platicateur local em géométrie analytique et aplatissement local. *Singularités à Cargèse* (*Rencontre Singularités Géom. Anal., Inst. Études Sci. de Cargèse*, 1972), pp. 441–463. *Astérisque*, Nos. 7 et 8, Soc. Math. France, Paris, 1973. (Tomás Sánchez Giralda) **53** #13636 32C45 (14E20)
- Cycles évanouissants et conditions de Whitney. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1051–A1054. (E. Brieskorn) **48** #8840 32C40 (14B05, 14D05, 32G10)
- Déformations à type topologique constant. *Quelques problèmes de modules* (*Sém. de Géométrie Analytique, École Norm. Sup., Paris*, 1971–1972), pp. 215–249. *Astérisque*, No. 16, Soc. Math. France, Paris, 1974. (Jonathan M. Wahl) **54** #3023 32C40 (14B05)
- (with Lejeune-Jalabert, Monique) Normal cones and sheaves of relative jets. *Compositio Math.* **28** (1974), 305–331. (Editors) **52** #801 32C45 (14E15)
- Introduction to equisingularity problems. *Algebraic geometry* (*Proc. Sympos. Pure Math.*, Vol. 29, *Humboldt State Univ., Arcata, Calif.*, 1974), pp. 593–632. *Amer. Math. Soc., Providence, R.I.*, 1975. (Joseph Lipman) **54** #10247 14B05 (14D05, 32C40)
- (with Henry, Jean-Pierre Georges) Suffisance des familles de jets et équisingularité. *Fonctions de plusieurs variables complexes, II* (*Sém. François Norguet, Janvier 1974–Juin 1975*), pp. 351–357. *Lecture Notes in Math.*, Vol. 482, Springer, Berlin, 1975. (Joseph Lipman) **54** #5496 32C40
- Théorèmes de finitude en géométrie analytique (d'après Heisuke Hironaka). *Séminaire Bourbaki, 26e année* (1973/1974), Exp. No. 451, pp. 295–317. *Lecture Notes in Math.*, Vol. 431, Springer, Berlin, 1975. (J. S. Joel) **57** #16663 32B20
- The hunting of invariants in the geometry of discriminants. *Real and complex singularities* (*Proc. Ninth Nordic Summer School/NAVF Sympos. Math.*, Oslo, 1976), pp. 565–678. *Sijthoff and Noordhoff, Alphen aan den Rijn*, 1977. (Jonathan M. Wahl) **58** #27964 14B05
- Variétés polaires. I. Invariants polaires des singularités d'hypersurfaces. *Invent. Math.* **40** (1977), no. 3, 267–292. (Richard Randell) **57** #10004 32C40 (14B05)
- See also **Lejeune-Jalabert, Monique**, **52** #800a; **Zariski, O.**, **54** #2662; **Eisenbud, David; et al.**, **57** #7651 and **Pham, Frédéric**, **58** #28655
- guillemot-Teissier, Marianne** See **Guillemot-Teissier, Marianne**
- daguenet-Teissier, Maryvonne** See **Daguenet-Teissier, Maryvonne**
- Teit, Dž.** See **Tate, J.**
- Teitelbaum, Ray** Context-free error analysis by evaluation of algebraic power series. *Fifth Annual ACM Symposium on Theory of Computing* (Austin, Tex., 1973), pp. 196–199. *Assoc. Comput. Mach., New York*, 1973. (Author's summary) **55** #6930 68A05
- Teitelboim, Claudio** (with Moncrief, Vincent) Momentum constraints as integrability conditions for the Hamiltonian constraint in general relativity. *Phys. Rev. D* (3) **6** (1972), 966–969. (Authors' summary) **51** #9730 83.35
- (with Regge, Tullio) Role of surface integrals in the Hamiltonian formulation of general relativity. *Ann. Physics* **88** (1974), 286–318. (J. D. Logan) **50** #12115 83.49
- (with Hojman, Sergio A.; Kuchař, Karel) Geometroynamics regained. *Ann. Physics* **96** (1976), no. 1, 88–135. (D. Lovelock) **54** #4535 83.53
- (with Cordero, Patricio) Hamiltonian treatment of the spherically symmetric Einstein-Yang-Mills system. *Ann. Physics* **100** (1976), no. 1-2, 607–631. (John Madore)
- 54** #12128 83.53
- (with Deser, Stanley) Duality transformations of Abelian and non-Abelian gauge fields. *Phys. Rev. D* (3) **13** (1976), no. 6, 1592–1597. (Authors' summary) **57** #4918 81.53
- Surface integrals as symmetry generators in supergravity theory. *Phys. Lett. B* **6** (1977), no. 2, 240–244. (Author's summary) **57** #2329 81.49
- (with Tabensky, Romualdo) The square root of general relativity. *Phys. Lett. B* **6** (1977), no. 4, 453–456. (Authors' summary) **57** #15259 83.53
- Supergravity and square roots of constraints. *Phys. Rev. Lett.* **38** (1977), no. 20, 1106–1110. (Author's summary) **55** #5066 81.53
- Teitler, Rony** (with Ronse, Christian) Groupes dans lesquels l'élévation à une puissance entière est un endomorphisme. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **62** (1976), no. 7, 539–564. (A. H. M. Hoare) **55** #5742 20D99
- Teixeira, A. F. da F.** (with Oliveira, Colber G.; Arbex, N.) Spinor solutions to the Schwarzschild metric. (Italian and Russian summaries) *Nuovo Cimento B* (11) **6** (1971), 214–224. (M. Sachs) **46** #6782 83.53
- (with Wolk, Idel; Som, M. M.) Generalized static electromagnetic fields in relativity. *J. Mathematical Phys.* **15** (1974), 1756–1759. (W. B. Bonnor) **54** #2081 83.35
- (with Som, M. M.; Wolk, Idel) Axially symmetric fields in general relativity. *Acta Phys. Austriaca* **43** (1975), no. 1-2, 15–20. (Shin-ichi Kitamura) **53** #12456 83.35
- (with Souza, J. A.) Einstein gravitation from scalar nonsingular sources alone. *Internat. J. Theoret. Phys.* **16** (1977), no. 8, 585–590. (A. H. Taub) **57** #11636 83.53
- (with Wolk, Idel; Som, M. M.) Exact relativistic solution of disordered radiation with planar symmetry. *J. Phys. A* **10** (1977), no. 10, 1679–1685. (George Debnay) **57** #15262 83.53
- gomes Teixeira, F.** See **Gomes Teixeira, F.**
- Teixeira, Marco Antonio** Generic bifurcation in manifolds with boundary. *J. Differential Equations* **25** (1977), no. 1, 65–89. (Zbigniew Nitecki) **56** #1369 58F10 (34D30)
- Teixeira de Queiroz, F.** ★ Manual para manipulação de formulas. (Portuguese) [A manual for formula manipulation] Centro de Cálculo Científico, Instituto Gulbenkian de Ciência, Fundação Calouste Gulbenkian, Oeiras, 1976. 63 pp. **57** #8143 68A15
- Teixido Riera, Enrique** The four color map: conjecture or theorem? (Spanish) *Trabajos Estadist. Investigación Oper.* **26** (1975), no. 1-3, 331–359. (F. Harary) **58** #343 05C15
- vinuesa Tejedor, Jaime** See **Vinuesa Tejedor, Jaime**
- Tejerina, A. F.** (with Garrido, Julio; Pellicer, J.) Thermodynamics and Padé approximants. I. Elementary mathematical properties of Padé approximants. (Spanish) *Rev. Real Acad. Ci. Exact. Fis. Natur. Madrid* **69** (1975), no. 4, 775–794. (Editors) **57** #8504a 80.41
- (with Garrido, Julio; Pellicer, J.) Thermodynamics and Padé approximants. II. (Spanish) *Rev. Real Acad. Ci. Exact. Fis. Natur. Madrid* **71** (1977), no. 1, 147–163. (Editors) **57** #8504b 80.41
- Tejsingh** (with Bajpai, L. P.) Application of $[N, P_n]_k$ method. *J. of M. A. C. T.* **4** (1971), 103–112. (A. Meir) **48** #4610 42A28
- (with Bajpai, L. P.) Necessary and sufficient condition for $[N, P_n]_k$ summability of Fourier series. *Vikram* **15** (1971), no. 1-3, 51–65. **56** #9171 42A28
- Tejumola, Haroon O.** (with Ezeilo, J. O. C.) A boundedness theorem for a certain fourth order differential equation. *Ann. Mat. Pura Appl.* (4) **88** (1971), 207–216. (T. A. Burton) **46** #9438 34C10 (34D20)
- (with Ezeilo, J. O. C.) Boundedness theorems for some fourth order differential equations. *Ann. Mat. Pura Appl.* (4) **89** (1971), 259–275. (T. A. Burton) **46** #9439 34C10 (34D20)
- Boundedness criteria for solutions of some second-order differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **50** (1971), 432–437. (J. O. C. Ezeilo) **46** #5741 34C10 (34D20)
- Boundedness theorems for some systems of two differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 472–476. (1972). (J. O. C. Ezeilo) **48** #6588 34D20
- A note on the boundedness and the stability of solutions of certain third-order differential equations. *Ann. Mat. Pura Appl.* (4) **92** (1972), 65–75. (T. A. Burton) **47** #7162 34D20
- Convergence of solutions of certain ordinary third order differential equations. *Ann. Mat. Pura Appl.* (4) **94** (1972), 247–256. (Joseph C. Wilson) **47** #3763 34C10
- Further results on the boundedness and the stability of certain fourth order differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 16–23. (J. O. C. Ezeilo) **48** #6589 34D20
- (with Ezeilo, J. O. C.) On the boundedness and the stability properties of solutions of certain fourth order differential equations. *Ann. Mat. Pura Appl.* (4) **95** (1973), 131–145. (R. Grimmer) **54** #13232 34D20
- A boundedness theorem for some non-linear differential equations of the fourth order. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 18–24 (1974). (J. O. C. Ezeilo) **51** #6044 34C10
- (with Ezeilo, J. O. C.) Boundedness theorems for certain third order differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 194–201 (1974). (K. E. Swick) **51** #10000 34D20
- (with Ezeilo, J. O. C.) Periodic solutions of certain fifth order differential equations. (Polish and Russian summaries) *Nonlinear vibration problems*, No. 15 (*Proc. Sixth Internat. Conf. Nonlinear Oscillations, Poznań, 1972, Part II*), pp. 75–84. PWN—Polish Sci. Publ., Warsaw, 1974. (Authors' summary) **56** #16060 34C25
- Remarks on some boundedness theorems of Ezeilo and Tejumola. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), 164–167. (J. O. C. Ezeilo) **51** #13360 34C10
- Periodic solutions of certain fourth order differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 5, 328–336 (1975). (Noel G. Lloyd) **53** #3432 34C25
- On the existence of periodic solutions of certain fourth order differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 6, 530–533 (1975). (J. A. Marlin) **54** #13221 34C25
- An extension of a boundedness theorem of Ezeilo. (Italian summary) *Boll. Un.*

- Ital.* (4) **10** (1974), 569-576. (J. O. C. Ezeilo) **51** #6045 34C10
On a certain nonlinear fourth order ordinary differential equation. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **58** (1975), no. 2, 1-142. (L. Erbe) **54** #13215 34C10
(with Ezeilo, J. O. C.) Further results for a system of third order differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) (1975), no. 2, 143-151. (L. Erbe) **54** #13218 34C25
(with Ezeilo, J. O. C.) Further remarks on the existence of periodic solutions of certain fifth order non-linear differential equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **58** (1975), no. 3, 323-327. (L. Pintér) #13219 34C25
Periodic solutions of certain systems of non-linear second order differential equations. *Rend. Circ. Mat. Palermo* (2) **24** (1975), no. 1-2, 140-150. (N. Chafee) #8479 34C25
On a Liénard type matrix differential equation. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **60** (1976), no. 2, 100-107. (M. Rama Mohana Rao) **57** #13012 34C10 (34C25)
L. G. Polylinear uniform approximation of a point set. (Russian) *Gor'kov. Gos. Univ. Učen. Zap.* No. 166 *Teoriya Koblebaniy, Prikl. Mat. i Kibernet.* (1973), 76-89. (R. N. Ross) **50** #11879 68A45
Malla, A. R. (with Raghavacharyulu, I. V. V.) Solution of the difference equations of generalized Lucas polynomials. *J. Mathematical Phys.* **13** (1972), 321-324. (M. Kuczma) #7115 39A10 (10A40)
(with Santhanam, T. S.) Trace of products of Clifford elements. *Matrix Tensor Mart.* **23** (1972/73), 99-105. (A. O. Morris) #76743 15A66
(with Santhanam, T. S.) On a new spin 1/2 field. *Progr. Theoret. Phys.* **50** (1973), 2-1005. (R. Delbourgo) **49** #4462 81.22
(with Santhanam, T. S.) Unitary Foldy-Wouthuysen transformations for particles of arbitrary spin. *Lett. Nuovo Cimento* (2) **10** (1974), 737-740. **56** #14340 81.47
A class of transformations on the Dirac Hamiltonian. *Physica* **78** (1974), 191-197. (K. Kato) **51** #9712 81.47
D. N. (with Silverman, Herb) Spiral functions and related classes with fixed second coefficient. *Rocky Mountain J. Math.* **7** (1977), no. 1, 111-116. (R. J. Libera) **56** #3273 30A32
(with Silverman, Herb) Extremal properties of a subclass of close-to-convex functions. *Rocky Mountain J. Math.* **7** (1977), no. 2, 371-376. (Louis Brickman) #3274 30A32
Józef Joachim Covariant derivative of product tensors. *Ann. Polon. Math.* **27** (1972/73), 67-72. (Makoto Matsumoto) **48** #12336 53A45
On some generalizations of shifter spaces. Collection of articles dedicated to Stanisław Gołab on his 70th birthday. *I. Demonstratio Math.* **6** (1973), 373-385. (Makoto Matsumoto) **49** #6058 53A45
On covariant derivative of product scalars and (H, \bar{H}) -product tensors. (Polish summary) *Uniw. Ślęski w Katowicach—Prace Mat.* **3** (1973), 87-96. (Makoto Matsumoto) **47** #5750 53A45
On the limit analysis and certain variational principle for rigid plastic solids. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **22** (1974), 421-426. (B. R. Mith) **49** #10234 73.49
The divergence of a product tensor density. (Polish. Russian and English summaries) *Zeszyty Nauk. Politech. Ślęsk. Mat.-Fiz. Zeszyt* **25** (1974), 159-168. (Michał Jurek) **55** #3996 53A45
Shifter spaces and spaces with teleparallelism. Shifter in Riemannian spaces. (Polish summary) *Uniw. Ślęski w Katowicach Prace Naukowe No. 87 Prace Mat. No. 6* (1975), 1-15. (Makoto Matsumoto) **53** #9060 53B20
An operator approach to the formulation of variational principles for plastic media. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* **14** (1976), no. 4, 557-570. (From the author's summary) **56** #10319 73.49
On affine geometric product objects. *Ann. Polon. Math.* **34** (1977), no. 2, 197-200. (M. Kucharszewski) **58** #18212 53A55
Variational principles for an incompressible, perfectly plastic material with non-associated flow law. *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **25** (1977), no. 11, 77-983. (Author's summary) **57** #14799 73.49
On plane plastic flow of compressible solids. (German and Russian summaries) *Z. angew. Math. Mech.* **58** (1978), no. 3, 133-142. (P. D. S. Verma) **58** #3873 73.35
Lin, V. I. A difference scheme for Vlasov's equation. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 5, 1191-1197, 1372. (H. G. Hopkins) **57** #15282 85.65 (78.65)
Man, Kostake Généralisation d'un théorème de G. Tzitzéica. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 7, 941-946. (Dov Avishalom) **54** #11181 53A05
(with Ta, Man) Généralisation des suites spectrales. *Enseignement Math.* (2) **23** (1977), no. 1-2, 111-116. (A. V. Zarelua) **57** #1494 55H05
Man, Nicolae Two homology functors. (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 1231-1236. (C. Niță) **49** #9052 18H10
Fiber bundles and cohomology of Lie algebras. *Symposia Mathematica, Vol. X Convegno di Geometria Differenziale, INdAM, Rome, 1971*, pp. 173-197. *Academic Press, London*, 1972. (D. B. Fuks) **50** #14847 58G05 (57D25)
A characteristic ring of a Lie algebra extension. I, II. (Italian summaries) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 498-506; *ibid.* (8) **52** (1972), 708-711. (H. Wu) **49** #6251 57D20 (17B65, 55F40)
Fiber bundle with involution and characteristic classes. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 49-56. (R. E. Stong) #3223 55F40
A variant construction of Stiefel-Whitney classes of a topological manifold. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 426-433 (1974). (K. Lamotke) **50** #11259 57D20
Cohomology of Lie algebras. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 95-202. *Internat. Atomic Energy Agency, Vienna*, 1974. (A. Verona) **55** #9112 57D20
Characteristic classes of fiber bundle with involution. (Italian summary) *Ann. Mat. Pura Appl.* (4) **101** (1974), 65-90. (R. E. Stong) **50** #8547 57D20 (55F40)
Characteristic classes of S^1 -pseudo-actions in fiber bundles. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 4, 550-555. (R. E. Stong) **52** #9247 57D20
Characteristic classes of S^1 -pseudo-actions in fiber bundles. II. Chern classes. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 6, 611-618 (1975). (R. E. Stong) **54** #6152 57D20
Alexander-Spanier cohomology of higher order. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **58** (1975), no. 3, 360-369. (A. Dold) **55** #4135 55B05
Cohomology of the Lie algebra of $(0, 1)$ -type tangent fields on complex manifolds. *Complex analysis and its applications (Lectures, Internat. Sem., Trieste, 1975)*, Vol. III, pp. 209-211. *Internat. Atomic Energy Agency, Vienna*, 1976. (A. Verona) **58** #13070 57D25 (58H05)
See also Vranceanu, Gheorghe, **51** #37
Teleman, Silviu La représentation des algèbres de von Neumann finies par faisceaux. *Rev. Roumaine Math. Pures Appl.* **15** (1970), 143-151. (K. H. Hofmann) **45** #9153 46L10 (18H99)
Theory of harmonic algebras with applications to von Neumann algebras and cohomology of locally compact spaces (de Rham's theorem). *Lectures on the applications of sheaves to ring theory (Tulane Univ. Ring and Operator Theory Year, 1970-1971, Vol. III)*, pp. 99-315. *Lecture Notes in Math.*, Vol. 248, Springer, Berlin, 1971. (K. H. Hofmann) **50** #13165 16A64 (46L10, 55B30)
La représentation par faisceaux des modules sur les algèbres harmoniques. *Rev. Roumaine Math. Pures Appl.* **16** (1971), 1247-1284. (K. H. Hofmann) **45** #8677 16A64 (55B30)
Representations of von Neumann algebras by sheaves. *Hilbert space operators and operator algebras (Proc. Internat. Conf., Tihany, 1970)*, pp. 519-538. *Colloq. Math. Soc. János Bolyai, No. 5, North-Holland, Amsterdam*, 1972. (S. Sakai) **51** #6440 46L10
The theorem of de Rham for harmonic algebras. *J. Algebra* **23** (1972), 271-290. (K. H. Hofmann) **46** #3600 18H15 (16A62, 58A10)
On algebraic reduction theory. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 287-307. (S. Sakai) **46** #7920 46L10
Algebraic reduction and dimension theory. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1265-1281. (S. Sakai) **51** #6441 46L10
The commutation theorem in the algebraic reduction theory. Collection of articles dedicated to G. Călugăreanu on his seventieth birthday. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 1451-1472. (S. Sakai) **48** #6959 46L10
Aperçu sur le développement de l'analyse fonctionnelle en Roumanie. (English summary) *Noesis, I (Travaux Colloq. Comité Roumain d'Histoire Philos. Sci., Bucharest, 1972)*, pp. 261-271. *Acad. R.S.R., Bucharest*, 1973. (Editors) **58** #4915 01A60
Extended von Neumann algebras and their representation by sheaves. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 727-760. (K. H. Hofmann) **49** #1143 46L10
Sur la réduction des algèbres de von Neumann. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 24, A1685-A1688. (G. K. Pedersen) **52** #8952 46L10 (22D25)
Sur la réduction des algèbres de von Neumann. *Rev. Roumaine Math. Pures Appl.* **20** (1975), no. 6, 693-742. (S. Sankaran) **52** #15034 46L10
On reduction theory. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 4, 465-486. (Christopher Lance) **54** #950 46L10
On the Baire probability measures which are pseudoconcentrated on the pure states set of a C^* -algebra. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 10, 1497-1505. (Author's summary) **58** #23626 46L05
Teleman, M. M. On solving the traveling-salesman problem. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1972**, no. 6, 94-100 (Russian); translated as *Engrg. Cybernetics* **10** (1972), no. 6, 1023-1029. (G. Berman) **52** #2603 90C35
Enumeration of Hamiltonian cycles in graphs. (Russian) *Èkonom. i Mat. Metody* **10** (1974), 367-368. (W. Mader) **54** #147 05C30
Optimality condition for a Hamiltonian cycle. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. Nat.* **1977**, no. 3, 67-70, 94. (Author's summary) **58** #21823 05C35 (90B10)
Telešev, V. E. (with Sin'kov, M. V.; Gubareni, N. M.) A system of remainder classes in the four-dimensional domain of biquaternions. (Russian) *Èlektronika i Modelirovanie Vyp.* **10** (1975), 82-84, 147. (From the text) **58** #16480 10A10 (68A15)
Telgarsky, Rastislav C-scattered and paracompact spaces. *Fund. Math.* **73** (1971/72), no. 1, 59-74. (C. E. Aull) **45** #4361 54D20
(with Kok, H.) The space of rationals is not absolutely paracompact. *Fund. Math.* **73** (1971/72), no. 1, 75-78. (C. E. Aull) **45** #2662 54D20
Covering properties and product spaces. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971)*, pp. 437-439. *Academia, Prague*, 1972. (C. E. Aull) **50** #14661 54D20
Concerning product of paracompact spaces. *Fund. Math.* **74** (1972), no. 2, 153-159. (R. Hodel) **45** #7672 54D20
On topological properties defined by games. *Topics in topology (Proc. Colloq., Keszthely, 1972)*, pp. 617-624. *Colloq. Math. Soc. János Bolyai, Vol. 8, North-Holland, Amsterdam*, 1974. (M. R. Krom) **52** #1604 54A99 (04A15, 54D20)
Closure-preserving covers. *Fund. Math.* **85** (1974), no. 2, 165-175. (George M. Reed) **50** #3188 54D20
Spaces defined by topological games. *Fund. Math.* **88** (1975), no. 3, 193-223. (M. R. Krom) **52** #1605 54A99 (54D20)
A characterization of P -spaces. *Proc. Japan Acad.* **51** (1975), suppl., 802-807. (M. R. Krom) **53** #3977 54B10 (54G10)
Concerning two covering properties. *Colloq. Math.* **36** (1976), no. 1, 57-61. (James C. Smith) **55** #6359 54D20
On some topological games. *General topology and its relations to modern analysis and algebra, IV (Proc. Fourth Prague Topological Sympos., Prague, 1976)*, Part B, pp. 461-472. *Soc. Czechoslovak Mathematicians and Physicists, Prague*, 1977. (J. C. Oxtoby) **57** #4141 54H05
Scattered compactifications and points of extremal disconnectedness. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 2, 155-159. (M. Rajagopalan) **57** #1426 54D35

- Subspaces $N \cup \{p\}$ of βN with no scattered compactifications. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 4, 387-389. (Anthony D'Aristotle) **57** #1427 54D35
- Topological games and analytic sets. *Houston J. Math.* **3** (1977), no. 4, 549-553. (M. R. Krom) **58** #24215 54H05 (02K30, 90D99)
- (with Ryll-Nardzewski, Czesław) The nonexistence of universal invariant measures. *Proc. Amer. Math. Soc.* **69** (1978), no. 2, 240-242. (Richard D. Mauldin) **57** #6372 28A70
- See also **Problems: Topology**, **50** #8399
- Teli, M. T.** (with Sutar, V. K.) Subluminal and superluminal causal transformations through transformations of metrics. *Lett. Nuovo Cimento* (2) **21** (1978), no. 4, 127-136. (From the text) **58** #20246 83.53
- Telonis, Demetri P.** (with Tsokos, Chris P.) Stochastic particle trajectories in turbulent flow. *J. Mathematical Phys.* **14** (1973), 757-758. (J. L. Lumley) **48** #7780 76.60 (60H20)
- (with Stasiak, Wojciech B.; Besieris, Ioannis M.) A quasilinear-approximation model for turbulent shear flow. *AIAA J.* **15** (1977), no. 4, 567-573. (Authors' summary) **57** #2158 76.60
- Teljakovskii, S. A.** (with Oskolkov, K. I.) On the estimates of P. L. Ul'janov for integral moduli of continuity. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **6** (1971), no. 5, 406-411. (James R. McLaughlin) **45** #8782 26A15
- An estimate of the norm of a function by its Fourier coefficients that is suitable in problems of approximation theory. (Russian) *Trudy Mat. Inst. Steklov.* **109** (1971), 65-97. (V. Veselinov) **48** #11877 42A16 (42A08)
- Integrability of the majorant of the partial sums of a trigonometric series with quasiconvex coefficients. (Russian) *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory)* (Budapest, 1969), pp. 477-502. *Akadémiai Kiadó, Budapest*, 1972. (Yung-ming Chen) **53** #3580 42A32
- Integrability of trigonometric series. Estimation of the integral modulus of continuity. (Russian) *Mat. Sb. (N.S.)* **91(133)** (1973), 537-553, 630. (S. Aljančić) **48** #9225 42A16
- A certain sufficient condition of Sidon for the integrability of trigonometric series. (Russian) *Mat. Zametki* **14** (1973), 317-328. (S. Baron) **48** #6798 42A32
- (with Fomin, G. A.) Convergence in the L metric of Fourier series with quasimonotone coefficients. (Russian) Theory of functions and its applications (Collection of articles dedicated to Sergei Mihaïlovič Nikol'skii on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **134** (1975), 310-313. (S. Baron) **52** #14819 42A32
- (with Balašov, L. A.) Some properties of lacunary series and the integrability of trigonometric series. (Russian) Analytic number theory, mathematical analysis and their applications (dedicated to I. M. Vinogradov on his 85th birthday). *Trudy Mat. Inst. Steklov.* **143** (1977), 32-41, 209. (O. D. Gabisonija) **58** #12168 42A44
- See also **Approximation of periodic functions**, **49** #5665 and **Theory of the approximation of functions**, **58** #29582
- Telksnys, Laimutis** Two-stage optimal identifying systems. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 2, 89-92. (Author's summary) **45** #8331 93B30
- Determination of changes in the properties and recognition of random processes with a complicated structure. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 4: Education, feedback, regulators, linear and non-linear systems; Identification, differential games, discrete and stochastic systems, Paper No. 41.2, 7 pp.* *Internat. Fed. Automat. Control, Düsseldorf*, 1971 (1972). (Author's summary) **56** #11407 93E10
- (with Černiauskas, V.) Determination of changes in the properties of random signals. (Russian. English summary) *Statist. Problemy Upravljenija—Trudy Sem. No. 1* (1971), 9-30. (Authors' summary) **51** #2734 93E10
- A way of representing the determinants of a certain class of higher order matrices. (Russian. English summary) *Statist. Problemy Upravljenija—Trudy Sem. No. 1* (1971), 31-41. (Author's summary) **50** #11755 65F30
- Suboptimal determination of changes in the properties of and identification of random signals. (Russian. English summary) *Statist. Problemy Upravljenija—Trudy Sem. No. 1* (1971), 76-86. (R. Lipcer (RZMat 1972 #4 V219)) **50** #12406 93E10
- Determination of changes in the properties of random processes in the case of incomplete a priori data. (Russian. English and Lithuanian summaries) *Statist. Problemy Upravljenija—Trudy Sem. Processy Optimal. Upravljenija V Sekcija Vyp.* **12** (1975), 9-26. (Józef Pergel) **54** #9012b 62M10
- Recognition of random processes that are described by autoregressive equations when there is incomplete a priori data. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravljenija—Trudy Sem. Processy Optimal. Upravljenija V Sekcija Vyp.* **19** (1977), 41-57, 125. (Author's summary) **57** #1774 62H30 (62M10)
- Determination of the most probable changes in the properties of multivariate dynamical systems with unknown parameters. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravljenija—Trudy Sem. Processy Optimal. Upravljenija V Sekcija Vyp.* **24** (1977), 9-26, 91. (Author's summary) **58** #9736 93E99
- See also **Proceedings: All-Union Symposium on Statistical Problems in Engineering Cybernetics**, **47** #4666 (EA 47); **Methods for the representation and machine analysis of random processes and fields**, **55** #9464a; **Methods for the representation and machine analysis of random processes and fields**, **55** #9464b; **Methods for the representation and machine analysis of random processes and fields**, **55** #9464c and **Methods for the representation and machine analysis of random processes and fields**, **55** #9464d
- Telle, V.** Some planning processes based on the decomposition method. (Russian) *Mathematical methods for the solution of economic problems*, No. 7 (Suppl. to *Ekonom. i Mat. Metody*) (Russian), pp. 11-21. *Izdat. "Nauka", Moscow*, 1977. (E. Vilkas) **58** #20285 90A05 (90B99)
- Block programming and modified Lagrange functions. (Russian. German and English summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 4, 455-469. (J. Abraham) **57** #5103 90C25
- Tellenbach, U.** Berechnung der Zustandsdichte einer ungeordneten linearen Kette. *Helv. Phys. Acta* **48** (1975), 131-135. (Ludwig Arnold) **55** #5126 82.62
- Korrelationsfunktion eines klassischen Heisenberg Ferromagneten in der paramagnetischen Phase. *Helv. Phys. Acta* **48** (1975), no. 2, 213-217. (Author's summary) **57** #15141 82.47
- Ein neues Extremalprinzip für wechselwirkende, relativistische Teilchen. *Helv. Phys. Acta* **49** (1976), no. 3, 359-366. (H. S. P. Grasser) **54** #2009 81.49
- Teller, Ariela** (with Beja, Avraham) Relevant policies for Markovian queueing systems with many types of service. *Management Sci.* **21** (1974/75), no. 9, 1049-1054. (Author's summary) **55** #11422 60K25
- Teller, J. Roger** (with Conrad, Paul F.) Abelian pseudo lattice ordered groups. *Math. Debrecen* **17** (1970), 223-241 (1971). (J. A. H. Shepperd) **48** #2017 06A30
- (with Byrd, Richard D.; Lloyd, Justin T.; Mena, Roberto A.) The lattice of p - α -subgroups of a retractable group. *Symposia Mathematica, Vol. XXI (Convegno. Misure su Gruppi e su Spazi Vettoriali, Convegno sui Gruppi e Anelli Ordinati, INdaga. Mat., Rome, 1975)*, pp. 515-524. *Academic Press, London*, 1977. (Editors) **58** #22288 20D30 (06A20)
- (with Byrd, Richard D.; Lloyd, Justin T.; Mena, Roberto A.) Retractable groups. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 3-4, 219-233. (V. S. Krishnan) **56** #3505 06A55
- (with Byrd, Richard D.; Lloyd, Justin T.; Mena, Roberto A.) The lattice of σ -subgroups of a retractable group. *Czechoslovak Math. J.* **28(103)** (1978), no. 189-199. (Klaus Keimel) **58** #429 06A55 (20N99)
- Teller, Joan W.** See **Bakel'man, I. Ja.**, **51** #11261
- Teller, Paul** (with Fine, Arthur) A characterization of conditional probability. *Math. Ann.* **48** (1975), no. 5, 267-270. (T. Robertson) **53** #4157 60A10
- Conditionalization, observation, and change of preference. With a discussion by author, R. D. Rozenkrantz, D. V. Lindley, W. L. Harper and H. E. Kyburg. *Foundations of probability theory, statistical inference, and statistical theories of science (Proc. Internat. Res. Colloq., Univ. Western Ontario, London, Ont., 1973), Vol. I*, pp. 205-259. *Univ. Western Ontario Ser. Philos. Sci., Vol. 6, Reidel, Dordrecht*, 1976. (Editors) **58** #18806 62A15
- On the problem of hidden variables for quantum mechanical observables and continuous spectra. *Philos. Sci.* **44** (1977), no. 3, 475-477. (M. J. Maczyński) **57** #18523 81.02
- (with Fine, Arthur) Algebraic constraints on hidden variables. *Found. Phys.* (1978), no. 7-8, 629-636. (S. Gudder) **58** #4067 81.47
- See also **Suppes, Patrick**, **58** #18807
- sotomayor Tello, J.** See **Sotomayor Tello, J.**
- Tel'ner, K.** Certain properties of transformers defined by double operator integrals. (Russian) *Problems of Math. Anal., No. 2: Linear Operators and Operator Equations* (Russian), pp. 79-99. *Izdat. Leningrad. Univ., Leningrad*, 1969. (Editors) **54** #34647A60 (47B15)
- Double operator integrals in an energy space. (Russian. English summary) *Vestnik Leningrad. Univ.* **25** (1970), no. 13, 69-82. (S. Kurepa) **45** #5799 47B99 (28C99)
- Telschow, Gerhard** Die Methode der Straffunktionale und ihre Anwendung auf Probleme der optimalen Steuerung. *Beiträge Anal. Heft 9* (1976), 131-134. (William Boylston) **57** #1240 49D30
- (with Kluge, Reinhard) On the convergence and speed of convergence of some iteration methods for variational inequalities. II. *Math. Nachr.* **75** (1976), 73-89. (Jeggle (Zbl 387 #49037)) **58** #30557 47H15 (65J05)
- (with Kluge, Reinhard) On the convergence and speed of convergence of some iteration methods for variational inequalities. I. *Theory of nonlinear operators (Fourth Internat. Summer School, Acad. Sci., Berlin, 1975)*, pp. 135-163. *Abh. Akad. Wiss. DDR Abt. Math.-Natur.-Tech., Jahrgang 1977, 1, Akademie-Verlag, Berlin*, 1977. (V. Vasin) **58** #18056 49D30
- Weak and strong convergence results in approximation-penalty-iteration methods. *Beitr. Anal. No. 10* (1977), 141-148. (From the introduction) **58** #13698 65D99 (90C99)
- Telser, Lester G.** (with Graves, Robert L.) ★Functional analysis in mathematical economics. Optimization over infinite horizons. *The University of Chicago Press, Chicago-London*, 1972. vii + 152 pp. (A. C. Williams) **51** #4952 90A15
- An extreme application of core theory. *Mathematical economics and game theory*, pp. 173-180. *Lecture Notes in Econ. and Math. Systems*, Vol. 141, *Springer, Berlin*, 1978. (Ivar Ekeland) **56** #10847 90A15
- Telste, John** (with Klopfenstein, Kenneth F.) Visualizing uniform continuity of functions of several variables. *Amer. Math. Monthly* **81** (1974), 623-625. (T. A. Botts) **49** #526A54
- Teltscher, Helga-Beate** Verwandte Strukturen im Systemdenken von Cusanus und Leibniz. *Akten des II. Internationalen Leibniz-Kongresses (Hannover, 1972), Band I: Begrüßungsansprachen, Gesamtinterpretationen, Geschichte-Recht-Gesellschaftstheorie, historische Wirkung, Berichte*, pp. 149-164. *Studia Leibnitiana Suppl., Vol. XII, Steiner, Wiesbaden*, 1973. (Mary J. Sirridge) **56** #11697 01A45 (02-03)
- Temam, R.** See **Computing methods in applied sciences and engineering**, **49** #4198
- Temam, Roger** (with Bensoussan, A.; Lions, Jacques-Louis) Methods of decomposition, decentralization and coordination, and their applications. (Russian) *Methods of numerical mathematics (Russian)*, pp. 144-274, 279. *Izdat. "Nauka", Novosibirsk*, 1965. (Editors) **58** #31840 65K05 (90C99)
- (with Lions, Jacques-Louis) Éclatement et décentralisation en calcul des variations. *Symposium on Optimization (Nice, 1969)*, pp. 196-217. *Lecture Notes in Math.*, Vol. 19, *Springer, Berlin*, 1970. (Editors) **57** #7325 49D05
- Quelques méthodes de décomposition en analyse numérique. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 3*, pp. 311-319. *Gauthier-Villars, Paris*, 1971. (Mogens Esrom Larsen) **55** #4592 65-02
- Équations aux dérivées partielles stochastiques. *Problems in non-linear analysis (Centro Internaz. Mat. Estivo (C.I.M.E.), IV Ciclo, Varenna, 1970)*, pp. 431-441. *Edizioni Cremonese, Rome*, 1971. (Vo-Khac Khoan) **45** #1002 47H15 (35Q99, 60H15)
- Solutions généralisées de certaines équations du type hypersurfaces minima. *Rational Mech. Anal.* **44** (1971/72), 121-156. (Denise Huet) **49** #3647 49F10 (35J20)
- Existence et unité de solutions pour des problèmes de Neumann coercifs dans

- ices non réflexifs. *C. R. Acad. Sci. Paris Sér. A-B* 273 (1971), A609-A611. (J.-P. seze) 45 #3907 35A15 (47F05)
- (with Fortin, Michel; Peyret, Roger) Résolution numérique des équations de Navier-Stokes pour un fluide incompressible. (English summary) *J. Mécanique* 10 (1971), 357-390. (J. Gillis) 54 #9343 76.65
- (with Bensoussan, A.; Lions, Jacques-Louis) Sur les méthodes de décomposition de centralisation et de coordination et applications. *Méthodes numériques d'analyse de problèmes*, Tome 2, pp. 5-189. *IRIA Cahier*, No. 11, *Inst. Recherche Informat. Automat., Levallois-Perret*, 1972. (S. G. Tzafestas (Zbl 275 #90042)) 57 #1884 65K05 (90C99)
- Étude d'un problème non linéaire lié aux équations de Maxwell. *Symposia Mathematica*, Vol. X (Convegno di Analisi Numerica, INDAM, Rome, 1972), pp. 1-429. *Academic Press, London*, 1972. (Clarence M. Ablow) 51 #4861 78.49
- (with Bensoussan, A.) Équations aux dérivées partielles stochastiques non linéaires. *Israel J. Math.* 11 (1972), 95-129. (Authors' summary) 56 #6867 60H15 (47H15)
- ★Numerical analysis. Translated from the French by J. W. Nienhuys. *D. Reidel Publishing Co., Dordrecht-Boston, Mass.*, 1973. viii + 167 pp. (Editors) 49 #11819 Mxx (65Nxx)
- (with Bensoussan, A.) Équations stochastiques du type Navier-Stokes. (English summary) *J. Functional Analysis* 13 (1973), 195-222. (J. A. Goldstein) 50 #1336 60H15 (35Q10)
- (with Ekeland, Ivar) ★Analyse convexe et problèmes variationnels. Collection *Études Mathématiques*. *Dunod; Gauthier-Villars, Paris-Brussels-Montreal, Que.*, 1974. ix + 340 pp. (Editors) 57 #3931a 49-02 (90C25, 49A20, 49A50, 49B25)
- (with Baranger, Jacques) Problèmes d'optimisation non convexe dépendants d'un paramètre. II. *Analyse convexe et ses applications (Comptes Rendus Conf., Saint Pierre de Chartreuse, 1974)*, pp. 41-48. *Lecture Notes in Econom. and Math. Systems*, Vol. 102, *Springer, Berlin*, 1974. (Editors) 58 #2529 49A50
- Nouvelles applications de la dualité au calcul des variations. *Analyse convexe et ses applications (Comptes Rendus Conf., Saint Pierre de Chartreuse, 1974)*, pp. 188-202. *Lecture Notes in Econom. and Math. Systems*, Vol. 102, *Springer, Berlin*, 1974. (Editors) 58 #2535 49A50
- (with Brauner, Claude-Michel; Penel, Patrick) Sur une équation d'évolution non linéaire liée à la théorie de la turbulence. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 5-68. (Howard A. Levine) 50 #764 35K15
- (with Brauner, Claude-Michel; Penel, Patrick) Sur une équation d'évolution non linéaire liée à la théorie de la turbulence sans viscosité. *C. R. Acad. Sci. Paris Sér. A* 279 (1974), 115-118. (Howard A. Levine) 50 #765 35K15
- (with Thomasset, François) Solution of the Navier-Stokes equations by finite element methods. *Proceedings of the Fourth International Conference on Numerical Methods in Fluid Dynamics (Univ. Colorado, Boulder, Colo., 1974)*, pp. 392-396. *Lecture Notes in Phys.*, Vol. 35, *Springer, Berlin*, 1975. (Editors) 57 #18485 76.65 (65N30)
- On the Euler equations of incompressible perfect fluids. *Séminaire Goulaouic-Lions-Schwartz (1974-1975), Équations aux dérivées partielles linéaires et non linéaires*, Exp. No. 10, 15 pp. *Centre Math., École Polytech., Paris*, 1975. (D. L. Colton) 52 #14705 35Q99
- (with Boujot, Jacqueline; Morera, J. P.) An optimal control problem related to the equilibrium of a plasma in a cavity. *Appl. Math. Optim.* 2 (1975), no. 2, 97-129. (P. K. C. Wang) 52 #9028 49A20
- A non-linear eigenvalue problem: the shape at equilibrium of a confined plasma. *Arch. Rational Mech. Anal.* 60 (1975/76), no. 1, 51-73. (Howard A. Levine) 54 #759 59P99
- (with Foias, C.; Frisch, Uriel) Existence de solutions C^∞ des équations d'Euler. *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A505-A508. (D. E. Edmunds) 52 #11373 50Q10
- (with Foias, C.) Sur certaines propriétés génériques des équations de Navier-Stokes. *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A563-A565. (J. E. Marsden) 51 #6185 50Q10
- Configuration d'équilibre d'un plasma: un problème de valeur propre non linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 7, A419-A421. (Hans Kaper) 53 #4729 76.35 (35Q99)
- On the Euler equations of incompressible perfect fluids. *J. Functional Analysis* 20 (1975), no. 1, 32-43. (W. F. Ames) 55 #3573 35Q99
- (with Baranger, Jacques) Nonconvex optimization problems depending on a parameter. *SIAM J. Control* 13 (1975), 146-152. (W. W. Breckner) 55 #3906 49A25
- (with Ekeland, Ivar) ★Convex analysis and variational problems. Translated from the French. *Studies in Mathematics and its Applications*, Vol. 1. *North-Holland Publishing Co., Amsterdam-Oxford; American Elsevier Publishing Co., Inc., New York*, 1976. ix + 402 pp. (A. D. Ioffe) 57 #3931b 49-02 (49A20, 49A50, 49B25, 90C25)
- Détermination de la configuration d'équilibre d'un plasma. *Applications of methods of functional analysis to problems in mechanics (Joint Sympos., IUTAM/IMU, Marseille, 1975)*, pp. 511-520. *Lecture Notes in Math.*, 503. *Springer, Berlin*, 1976. (Gérard A. Maugin) 58 #32422 78.46
- (with Laminie, J.) Détermination numérique de la configuration d'équilibre du plasma dans un Tokamak. *Computing methods in applied sciences (Second Internat. Sympos., Versailles, 1975)*, pp. 497-509. *Lecture Notes in Phys.*, Vol. 58, *Springer, Berlin*, 1976. (Joseph Olinger) 55 #13953 76.65
- Applications de l'analyse convexe au calcul des variations. *Nonlinear operators and the calculus of variations (Summer School, Univ. Libre Bruxelles, Brussels, 1975)*, pp. 208-237. *Lecture Notes in Math.*, Vol. 543, *Springer, Berlin*, 1976. (From the summary) 58 #30617 49A50 (35J67)
- (with Foias, C.) A generic property of the set of stationary solutions of Navier-Stokes equations. *Turbulence and Navier-Stokes equations (Proc. Conf., Univ. Paris-Sud, Orsay, 1975)*, pp. 24-28. *Lecture Notes in Math.*, Vol. 565, *Springer, Berlin*, 1976. (J. S. Jøel) 56 #6151 35Q10 (58D15)
- Local existence of C^∞ solutions of the Euler equations of incompressible perfect fluids. *Turbulence and Navier-Stokes equations (Proc. Conf., Univ. Paris-Sud, Orsay, 1975)*, pp. 184-194. *Lecture Notes in Math.*, Vol. 565, *Springer, Berlin*, 1976. (T. Kato) 57 #6902 35Q10 (58D05, 76.35)
- (with Saut, Jean-Claude) Remarks on the Korteweg-de Vries equation. *Israel J. Math.* 24 (1976), no. 1, 78-87. (Authors' summary) 56 #12676 35Q99
- ★Navier-Stokes equations. Theory and numerical analysis. *Studies in Mathematics and its Applications*, Vol. 2. *North-Holland Publishing Co., Amsterdam-New York-Oxford*, 1977. x + 500 pp. ISBN 0-7204-2840-8 (Marjorie McCracken) 58 #29439 35Q10 (65P05, 76.35)
- (with Mossino, Jacqueline) Certains problèmes non linéaires de la physique des plasmas. *Mathematical aspects of finite element methods (Proc. Conf., Consiglio Naz. delle Ricerche (C.N.R.), Rome, 1975)*, pp. 237-260. *Lecture Notes in Math.*, Vol. 606, *Springer, Berlin*, 1977. (G. Papanicolaou) 58 #11899 35J60 (65N30, 82.65)
- (with Brauner, Claude-Michel; Penel, Patrick) Sur une équation d'évolution non linéaire liée à la théorie de la turbulence. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) 4 (1977), no. 1, 101-128. (A. Corduneanu) 57 #6847 35K55
- (with Lichnerowicz, Alain) Surfaces minimales d'évolution: le concept de pseudo-solution. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 15, A853-A856. (Authors' summary) 55 #6285 49F10
- (with Saut, Jean-Claude) Propriétés de l'ensemble des solutions stationnaires ou périodiques des équations de Navier-Stokes: genericité par rapport aux données aux limites. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 285 (1977), no. 10, A673-A676. (Author's summary) 57 #921 35Q10 (58D99)
- Remarks on a free boundary value problem arising in plasma physics. *Comm. Partial Differential Equations* 2 (1977), no. 6, 563-585. (Pierre-Louis Lions) 58 #29213 35J65 (82.35)
- (with Foias, C.) Structure of the set of stationary solutions of the Navier-Stokes equations. *Comm. Pure Appl. Math.* 30 (1977), no. 2, 149-164. (D. E. Edmunds) 55 #8584 35Q10
- (with Foias, C.) Remarques sur les équations de Navier-Stokes stationnaires et les phénomènes successifs de bifurcation. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) 5 (1978), no. 1, 28-63. (Piero Bassanini) 58 #1749 35Q10
- See also **Proceedings: International Conference on Numerical Methods in Fluid Mechanics**, 55 #1945; **Proceedings: International Conference on Numerical Methods in Fluid Mechanics**, 55 #1946 and **Turbulence and Navier-Stokes equations**, 55 #11791
- Tembe, Shantanu V.** (with Wolff, Ronald W.) The optimal order of service in tandem queues. *Operations Res.* 22 (1974), no. 4, 824-832. (Donald C. McNickle) 55 #4431 60K25
- Tembhare, D. J.** (with Sachdeva, S. K.) A note on the two-point tensors in a generalized Finsler space. *Math. Education* 5 (1971), A49-A51. (S. Golab) 46 #4423 53B40
- Temčenko, M. E.** (with Mitropol'skii, Ju. O.; Košljakov, V. M.; Boičuk, O. P.; Kalinovič, V. M.; Storozhenko, V. O.) Works on the theory of gyroscopes at the Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 747-760, 860. (I. N. Veselovskii) 49 #7071 01A60 (70.01)
- Temčin, A. N.** The Dirac equation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1973, no. 12, 96-100. (Author's summary) 58 #25545 81.35
- Some properties of the distribution function of Maxwell gas particles. *Inž.-Fiz. Ž.* 19 (1970), 335-337. (Russian); translated as *J. Engrg. Phys.* 19 (1973), 1033-1035. (Carlo Cercignani) 53 #4848 82.45
- Temelt, Wolfgang** Duality of infinite dimensional linear programming problems and certain mixed questions. (Russian. English summary insert) *Kibernetika (Kiev)* 1969, no. 4, 80-87. (Author's summary) 46 #1326 90C05
- Temes, Gabor C.** The prolate filter: An ideal lowpass filter with optimum step-response. *J. Franklin Inst.* 293 (1972), 77-103. (Author's summary) 47 #3093 94A05
- (with Marshall, F. C.) Generalized linear minimax approximation of system functions with constraints. *IEEE Trans. Circuit Theory* CT-20 (1973), no. 4, 429-432. (Authors' summary) 56 #9362 49A40 (49D99)
- Temesvári, Ágota** On the extremum of power sums of distances. (Hungarian. German summary) *Mat. Lapok* 25 (1974), no. 3-4, 329-342 (1977). (Author's summary) 58 #24013 52A40
- The minimum of the sum of the n th powers of the sides of n -gons inscribed in a circle. (Russian) *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 18 (1975), 135-141. (E. Jucović) 54 #13729 52A40
- Über das Minimum der n -Potenzsumme der Seiten solcher n -Ecke, die in einen gegebenen Kreis eingeschrieben sind. II. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 20 (1977), 131-142. (E. Jucović) 57 #17512 52A40 (50B05)
- Temirbaev, K. T.** (with Vostrov, V. K.; Džoldošev, O. D.) The stability of the solutions of nonlinear differential equations of parabolic type with retarded argument. (Russian) *Collection of candidates' works of Kirgiz State University (physico-mathematical and natural sciences)*, No. III (Russian), pp. 9-12. *Kirgiz. Gos. Univ., Frunze*, 1969. (Editors) 54 #695 35B35 (35R10)
- Certain questions of the qualitative theory of partial integrodifferential equations. (Russian) *Collection of candidates' works of Kirgiz State University (physico-mathematical and natural sciences)*, No. III (Russian), pp. 40-46. *Kirgiz. Gos. Univ., Frunze*, 1969. (See RŽMat 1970 #5 B396; MR 52 #13065) 45K05
- (with Džoldošev, O. D.) Stability of the solutions of integro-partial differential equations. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk* No. 7 (1970), 149-155. (See RŽMat 1971 #1 B484) 45K05
- Position of the integral curves for a stochastic integro-differential equation with deviating arguments in the neighborhood of a singular point. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk* No. 12 (1976), 109-111. (Not reviewed) 60H20
- Temirbulatov, S. I.** ★Условно-корректные задачи математической физики. (Russian) [Conditionally well-posed problems of mathematical physics] *Kazah. Gos. Univ., Alma-Ata*, 1975. 55 pp. (G. I. Sulhiani) 57 #8094 65P05
- ★Обратные задачи для эллиптических уравнений. (Russian) [Inverse problems for elliptic equations] *Kazah. Gos. Univ., Alma-Ata*, 1975. 72 pp. (M. A. Atahodžev) 57 #17047 35R30 (35J99)
- Some three-dimensional ill-posed problems for an equation of composite type. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1977, no. 3, 83-84, 92. (A. Džuraev) 57 #6882 35M05 (35R25)
- Temirgaliev, N.** The connection of imbedding theorems with the uniform convergence of multiple Fourier series. (Russian) *Mat. Zametki* 12 (1972), 139-148. (W. C. Connett) 48 #4636 42A92
- A certain embedding theorem. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973,

- no. 7(134), 103-111. (J. Albrycht) **49** #7756 46E35
Conditions for higher derivatives to belong to the classes $\phi(L)$. (Russian) *Mat. Zametki* **14** (1973), 479-486. (J. Albrycht) **48** #12038 46E35
(with Ul'janov, P. L.) The integral modulus of continuity. (Russian) *Acta Sci. Math. (Szeged)* **36** (1974), 173-180. (J. Mařík) **50** #557 26A15
The multidimensional modulus of continuity. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1975**, no. 5, 89-90, 95. (J. Marshall Ash) **52** #14186 26A15 (42A92)
Some relations between best approximations. (Russian) *Collection of questions on mathematics and mechanics*, No. 8 (Russian), pp. 66-67. *Izdatie Kazah. Gos. Univ., Alma-Ata*, 1976. (Author's summary) **58** #23316 42A08
The imbedding of certain classes of functions. (Russian) *Mat. Zametki* **20** (1976), no. 6, 835-841. (J. T. Scheick) **56** #952 42A08
- Temirov, Č.** The asymptotic distribution of the first passage time over a high level for a class of Markov processes. (Russian) *Limit theorems and mathematical statistics* (Russian), pp. 154-163, 190, *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1976. (M. Iosifescu) **55** #6591 60J75
A queueing system of mixed type with an inhomogeneous input flow. (Russian) *Taškent. Gos. Univ. Naučn. Trudy Vyp.* **490 Voprosy Matematiki** (1976), 189-196, 270. (Author's summary) **58** #3125 60K25
- Temirov, N.** See **Abstracts: Conference of the Faculties on Advances in Research**, **48** #3665
- Temirov, T.** Riemannian spaces with a torse-forming distribution. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.)* No. 296 (1976), 105-109, 178. (Author's summary) **58** #24089 53B20
- Temkin, D. E.** One-dimensional random walks in a two-component chain. (Russian) *Dokl. Akad. Nauk SSSR* **206** (1972), 27-30. (K. Jacobs) **47** #2671 60J15
- Temkin, L. A.** (with Temkina, V. S.; Ščerbina, G. V.) Solution of the problem on the flow of a fluid in an infinite T-shaped domain by means of the Fredholm equation of the first kind. (Russian) *Vychisl. Mat. i Vychisl. Tehn. (Kharkov)* **1971**, no. 2, 37-44, 158. (See RŽMat **1972** #2 B861) 76A5
(with Temkina, V. S.; Ščerbina, G. V.) The calculation of the free surface of a capillary fluid in a vessel. (Russian) *Numerical mathematics and computer technology*, No. V (Russian), pp. 81-86, 166. *Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkih Temperatur, Kharkov*, 1974. (Authors' summary) **56** #14128 76A5
The approximation of integral operators with a weak singularity. (Russian) *Numerical mathematics and computer technology*, No. V (Russian), pp. 87-93, 166. *Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkih Temperatur, Kharkov*, 1974. (Author's summary) **56** #10081 65R05
- Temkin, V. L.** A simple conditional adjustment experiment with an automaton. (Russian) *Differentsial'nye Uravneniya i Vychisl. Mat. Vyp.* **3** (1973), 131-141, 173. (From the author's introduction) **55** #2417 94A30
Simple conditions for diagnostic experiments with an automaton. (Russian) *Automata*, No. 1 (Russian), pp. 26-28, 106. *Izdat. Saratov. Univ., Saratov*, 1974. (Aleksander Albicki) **57** #11972 94A30
- Temkina, V. S.** (with Temkin, L. A.; Ščerbina, G. V.) Solution of the problem on the flow of a fluid in an infinite T-shaped domain by means of the Fredholm equation of the first kind. (Russian) *Vychisl. Mat. i Vychisl. Tehn. (Kharkov)* **1971**, no. 2, 37-44, 158. (See RŽMat **1972** #2 B861) 76A5
(with Temkin, L. A.; Ščerbina, G. V.) The calculation of the free surface of a capillary fluid in a vessel. (Russian) *Numerical mathematics and computer technology*, No. V (Russian), pp. 81-86, 166. *Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkih Temperatur, Kharkov*, 1974. (Authors' summary) **56** #14128 76A5
- Temko, K. V.** (with Temko, S. V.) The stability problem. (Russian. English summary) *Trudy Univ. Družby Narod.* **44** (1969), no. 4, 70-78. (M. A. Atahodžaeu) **52** #2440 81J31
(with Kuz'min, K. S.; Temko, S. V.) A theorem of Gauss. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 1036-1047. (M. A. Atahodžaeu) **46** #373 31B15
- Temko, S. V.** (with Temko, K. V.) The stability problem. (Russian. English summary) *Trudy Univ. Družby Narod.* **44** (1969), no. 4, 70-78. (M. A. Atahodžaeu) **52** #2440 81J31
(with Kuz'min, K. S.; Temko, K. V.) A theorem of Gauss. (Russian) *Differentsial'nye Uravneniya* **8** (1972), 1036-1047. (M. A. Atahodžaeu) **46** #373 31B15
- Temljakov, A. A.** Harmonic functions of three variables. (Russian) *Moskov. Oblast. Ped. Inst. Učen. Zap.* **225**, 3-6 (1969). (Vojislav Marić) **46** #5652 31A05
- Temljakov, V. N.** The uniqueness of the polynomial of the best approximation of the function $\cos kx$ by trigonometric polynomials in the metric of L . (Russian) *Mat. Zametki* **15** (1974), 729-737. (V. Veselinov) **50** #7924 42A08
Best approximations of functions of two variables. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 5, 1079-1082. (V. Veselinov) **53** #6225 42A92 (42A08)
On best approximation of functions of two variables. (Russian summary) *Anal. Math.* **2** (1976), no. 3, 231-234. (Darell J. Johnson) **57** #994 42A08
The asymptotic behavior of best approximations of continuous functions. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 2, 318-321. (V. Veselinov) **54** #13434 42A08
The localization of approximations of functions by trigonometric polynomials. (Russian. English summary) *Anal. Math.* **3** (1977), no. 2, 151-169. (W. R. Madych) **56** #12744 42A08
Asymptotic behavior of the best approximations of continuous functions. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 3, 587-606, 717. (V. Veselinov) **57** #995 42A08
The order of growth of the powers of a polynomial basis in the space of continuous functions. (Russian) *Mat. Zametki* **22** (1977), no. 5, 711-728. (Z. Čanturija) **58** #12323 46E15
- Temme, N. M.** Analytical methods for a singular perturbation problem in a sector. *SIAM J. Math. Anal.* **5** (1974), 876-887. (Shawky Shamma) **51** #6105 35B40
On the numerical evaluation of the modified Bessel function of the third kind. *J. Computational Phys.* **19** (1975), no. 3, 324-337. (Carl C. Grosjean) **53** #4488 65D20 (33A40)
- Numerical evaluation of functions arising from transformations of formal series. *Math. Anal. Appl.* **51** (1975), no. 3, 678-694. (Walter Gautschi) **53** #9593 65D20
Uniform asymptotic expansions of the incomplete gamma functions and the incomplete beta function. *Math. Comp.* **29** (1975), no. 132, 1109-1114. (Author's summary) **52** #8513 33A15
On the numerical evaluation of the ordinary Bessel function of the second kind. *Computational Phys.* **21** (1976), no. 3, 343-350. (H. E. Fettis) **54** #1548 65D20
Remarks on a paper of A. Erdélyi: "Asymptotic evaluation of integrals involving fractional derivative" (SIAM J. Math. Anal. **5** (1974), 159-171). *SIAM J. Math. Anal.* (1976), no. 5, 767-770. (H. A. Lauwerier) **55** #6090 41A60
★The numerical computation of special functions by use of quadrature rules for saddle point integrals. I. Trapezoidal integration rules. Mathematisch Centrum, Afdeling Toegepaste Wiskunde, No. TW 164/77. [Mathematical Center, Department of Applied Mathematics, No. TW 164/77] *Mathematisch Centrum, Amsterdam*, 1977. iii + 44 pp. (Walter Gautschi) **57** #4483 65D20
See also **Nonlinear analysis**, **58** #12531a and **Nonlinear analysis**, **58** #12531b
- Temmoku, Kenji** (with Akashi, Hajime; Imai, Hiroyuki) A suboptimal control strategy for linear control systems that have an imperfect memory of a certain kind. (Japanese. English summary) *Systems and Control* **18** (1974), no. 12, 693-702. (Katsutoshi Tamura) **53** #15482 93C55
- Temov, V. L.** See **Theory of languages and methods of construction of programming systems**, **48** #7682
- Tempel', F. G.** A method of solving Abel and Riccati equations. (Russian) *Differentsial'nye Uravneniya* **12** (1976), no. 2, 369-371, 383. (J. D. Kečkić) **54** #3066 34A45
- Tempel, K. H.** See **Operations Research-Verfahren**, **48** #3447
- Tempelmanas, A.** (with Senkienė, Elvyra) Hilbert spaces with operator-valued reproducing kernels. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **12** (1972), no. 4, 207-217, 241. (E. Gerlach) **58** #23558 46E40 (46E20, 47D15, 60G99)
A generalization of a certain ergodic theorem of Hopf. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **17** (1972), 380-383. (E. M. Klimko) **46** #327 28A60
Ergodic theorems for general dynamical systems. (Russian) *Trudy Moskov. Mat. Obšč.* **26** (1972), 95-132. (R. K. Thomas) **51** #10588 28A65
On linear regression estimates. *Second International Symposium on Information Theory (Tahkadsor, 1971)*, pp. 329-354. *Akadémiai Kiadó, Budapest*, 1973. (Editor's summary) **58** #3227 62J05 (62M05)
(with Senkienė, Elvyra) Hilbert spaces of operator-valued functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 4, 197-204, 225. (E. Gerlach) **58** #23559 46E40 (46E20, 47D15)
The ergodicity of Gaussian homogeneous random fields on homogeneous spaces. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 177-180. (R. C. Laha) **47** #5947 60G15
Random walks and admissible estimators of a multivariate shift. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 1038-1040. (A. M. Kagan) **51** #9285 62C15 (60J1)
On the general theory of linear estimators of the mean value. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1974), 1028-1031. (József Pergel) **56** #1638 62M99
An ergodic theorem for amplitude modulated homogeneous random fields. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **14** (1974), no. 221-229, 243. (K. Jacobs) **53** #1709 60G10
See also **Transactions of the Moscow Mathematical Society**, **50** #9477
- Temperanskii, V. A.** See **Linguistic questions of the design and the information analysis of automated information systems**, **56** #4286 and **Automation of information systems design**, **56** #5031
- Temperley, D. J.** Magnetohydrodynamic flow in a rectangular duct under a uniform transverse magnetic field at high Hartmann number. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **28** (1976), no. 5-6, 947-968. (L. Dragos) **55** #9703 76A41
(with Todd, L.) Some remarks on a class of plane, linear boundary value problems. *J. Inst. Math. Appl.* **18** (1976), no. 3, 309-324. (Clarence M. Ablow) **56** #3441 35C10 (76.35)
Alternative approaches to the asymptotic solution of $\epsilon \nabla^2 u = \partial u / \partial y$, $0 < \epsilon \ll 1$, over a rectangle. (German and Russian summaries) *Z. Angew. Math. Mech.* **56** (1976), no. 1, 461-468. (Murli M. Gupta) **55** #4930 76A65
- Temperley, H. N. V.** (with Lieb, Elliott H.) Relations between the "percolation" and "colouring" problem and other graph-theoretical problems associated with regular planar lattices: some exact results for the "percolation" problem. *Proc. Roy. Soc. London Ser. A* **322** (1971), no. 1549, 251-280. (Authors' summary) **58** #16425 05C99 (82.05)
The enumeration of graphs on large periodic lattices. *Combinatorics (Proc. Combinatorial Math., Math. Inst., Oxford, 1972)*, pp. 285-294. *Inst. Math. Appl., Southend-on-Sea*, 1972. (P. K. Stockmeyer) **50** #1901 05A15
Enumeration of graphs on a large periodic lattice. *Combinatorics (Proc. British Combinatorial Conf., Univ. Coll. Wales, Aberystwyth, 1973)*, pp. 155-159. *London Math. Soc. Lecture Note Ser.*, No. 13, Cambridge Univ. Press, London, 1974. (F. Harary) **50** #119 05-02
Transformation of graph-theoretical problems into one another. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 585-588. *Congressus Numerantium*, No. XV, Utilitas Math., Winnipeg, Man., 1976. (R. C. Entringer) **52** #13465 05C15
On the possible transition of the Gaussian model of an imperfect gas. *Proc. Roy. Soc. London Ser. A* **357** (1977), no. 1690, 345-353. (F. C. Auluck) **56** #17658 82C01
(with Baxter, Rodney J.; Ashley, S. E.) Triangular Potts model at its transition temperature, and related models. *Proc. Roy. Soc. London Ser. A* **358** (1978), no. 1690, 535-559. (Authors' summary) **58** #20108 82G60
See also **Problems: Combinatorial mathematics**, **51** #172
- Temperley, Nicholas** (with Jerrard, Richard) Almost perfect numbers. *Math. Mag.* (1973), 84-87. (H. L. Abbott) **51** #12686 10A40
- Temperton, Clive** Algorithms for the solution of cyclic tridiagonal systems. *J. Computational Phys.* **19** (1975), no. 3, 317-323. (S. F. McCormick) **52** #15981 65F05
- Temperville, André** Sur l'existence d'une solution formelle du problème du clapotis en er

- u profonde. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A588-A590. (J. V. chausen) **45** #2977 7635
- h, Džordž See Temple, George
- ple, Duane W. See De Temple, Duane W.
- e, G. ★The structure of Lebesgue integration theory. *Clarendon Press, Oxford*, 1971. 184 pp. (From the author's preface) **55** #8283 28-01
- e, George Noah's theorem. (Bulgarian) *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* **14**(47) (1971), 322-331. (Editors) **58** #31081 57-01
- Inference without axiom or paradoxes. *Logic Colloquium 76 (Oxford, 1976)*, pp. 1-233. *Studies in Logic and Foundations of Math.*, Vol. 87, North-Holland, Amsterdam, 1977. (From the introduction and text) **58** #21420 02B05 (02A05)
- e, M. G. (with Duris, Charles S.) A finite step algorithm for determining the "strict" Lebesgue solution to $Ax=b$. *SIAM J. Numer. Anal.* **10** (1973), 690-699. (N. N. Abdelmalek) **48** #7574 65F20
- e, W. B. (with Haydock, Roger) Self-avoiding paths on a generalized Cayley tree. *J. Phys. A* **8** (1975), 697-709. (F. Harary) **51** #7914 05C05
- eman, Andrew See Optimization and design, **48** #3456
- eton, Alan R. (with Rothman, Edward D.; Sing, Charles F.) A model for analysis of population structure. *Genetics* **78** (1974), no. 3, 943-960. (Klaus Hinkelmann) #2417 92A10 (92A15)
- (with Rothman, Edward D.) Evolution in fine-grained environments. I. Environmental runs and the evolution of homeostasis. *Theoret. Population Biol.* **13** (1978), no. 3, 340-355. (W. S. C. Gurney) **58** #4458 92A15
- eton, J. G. C. (with Bagchi, Tapan P.) ★Numerical methods in Markov chains and link queues. Lecture Notes in Economics and Mathematical Systems, Vol. 72. Springer-Verlag, Berlin-New York, 1972. xi+89 pp. (J. F. C. Kingman) **49** #9976 K25
- (with Chaudhry, M. L.) The theory of bulk-arrival bulk-service queues. *Opsearch* **9** (1972), 103-121. (J. F. C. Kingman) **48** #5204 60K25
- (with Chaudhry, M. L.) Bounds for the least positive root of a characteristic equation in the theory of queues. *INFOR—Canad. J. Operational Res. and Information Processing* **11** (1973), 177-179. (J. F. C. Kingman) **48** #7412 60K25
- (with Bagchi, Tapan P.) A note on the $M^X/G^1/1, K$ bulk queueing system. *J. Appl. Probability* **10** (1973), 901-906. (M. L. Chaudhry) **50** #14983 60K25
- (with Bagchi, Tapan P.) Finite waiting space bulk queueing systems. *J. Engrg. Math.* **7** (1973), 313-317. (Z. Khalil) **51** #11697 60K25
- (with Chaudhry, M. L.) A note on the distribution of a busy period for $M/M/C$ queueing system. (German and French summaries) *Math. Operationsforsch. Statist.* **4** (1973), no. 1, 75-79. (Jacqueline Loris-Teghem) **54** #6318 60K25
- (with Bagchi, Tapan P.) Some finite waiting space bulk queueing systems. *Mathematical methods in queueing theory (Proc. Conf., Western Michigan Univ., Ann Arbor, Mich., 1973)*, pp.133-137. *Lecture Notes in Econom. and Math. Systems*, Vol. 124, Springer, Berlin, 1974. (Jos. H. A. de Smit) **51** #14305 60K25
- (with Hoq, A. K. M. S.; Ali, Mir M.) Estimation of parameters of a generalized life testing model. *J. Statist. Res.* **8** (1974), no. 2, 67-79. (Lai K. Chan) **53** #4429 N05
- u, V. Infinitesimal bendings of a hyperbolic paraboloid. (Russian. English summary) *Dokl. Akad. Nauk SSSR* **235** (1978), no. 1, 43-48. (A. V. Pogorelov) **53** #4200 53C45
- V. D. (with Beidar, K. I.) On the local finiteness of some PI-algebras. (Russian) *Dokl. Akad. Nauk SSSR* **235** (1978), no. 4, 934-938, 959. (V. N. Latyšev) **56** #12055 16A38 16A28
- V. S. Bipositive projections in a partially ordered vector space. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 277-279. (Rosalind Reichard) **45** #4115 46A40
- Bipositive projection operators in a partially ordered vector space (density, and extremal properties). (Russian) *Ukrain. Mat. Ž.* **25** (1973), 693-695, 718. (E. Strzelecki) **50** #14349 47B55 (46A40)
- Bipositive projection operators in a partially ordered vector space ((c)-density and lineal). (Russian) *Ukrain. Mat. Ž.* **25** (1973), 841-843, 863. (E. Strzelecki) **50** #14350 47B55 (46A40)
- Ayuso, Juan Points rationnels d'ordre 15 sur une courbe elliptique. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A1760-A1763. (M. Eichler) **46** #179 14G05 (10B10, 11D15)
- (with Joly, Jean-René) Sous-groupes rationnels et points rationnels d'ordre fini sur certaines courbes elliptiques. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A241-A243. (A. Basarab) **47** #1811 14G05 (14K15)
- (with Joly, Jean-René) Rationalité des points paraboliques de $\Gamma_0(N)$. Application aux courbes elliptiques sur \mathbb{Q} . *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A487-A490. (A. Basarab) **47** #1812 14G05 (14K15)
- Euclidean subrings of real quadratic fields. (Spanish) *Rev. Mat. Hisp.-Amer.* (4) **37** (1977), no. 1-2, 43-50. (Author's summary) **58** #10815 12A25 (12A75)
- erge, Jos M. F. See ten Berge, Jos M. F.
- rinke, Gerrit See ten Brinke, Gerrit
- h, R. N. (with Moran, L. E.) Normal complements in mod p -envelopes. *Israel J. Math.* **27** (1977), no. 3-4, 331-338. (C. R. Leedham-Green) **56** #5715 20D15
- Yair (with Epstein, Marcelo; Sheinman, Izhak) A generalization of Potters' method. *Computers & Structures* **4** (1974), 1099-1103. (R. P. Tewarson) **50** #1477 65F05
- etzi, Demosthenis (with Sandell, Nils R., Jr.) Perturbation methods in decentralized stochastic control. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 1, pp. 37-42. Hemisphere, Washington, D.C., 1977. (Arild Thowson) **58** #4585 93E20
- (with Sandell, Nils R., Jr.) Linear regulator design for stochastic systems by a multiple time-scales method. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 4, 615-621. (Authors' summary) **56** #15100 93E20
- abau, Gérard Une fonction arithmétique liée aux sommes de deux carrés. *Séminaire de Théorie des Nombres, 1975-1976 (Univ. Bordeaux I, Talence)*, Exp. No. 2, 3 pp. *Lab. Théorie des Nombres, Centre Nat. Recherche Sci., Talence*, 1976. (O. H. Körner) **55** #8515 10J05
- Sur deux fonctions de diviseurs. *J. London Math. Soc.*(2) **14** (1976), no. 3, 521-526. (Ernst Heppner) **55** #5557 (E **58** #10798) 10H25
- Sur la répartition des diviseurs. *Séminaire Delange-Pisot-Poitou, 17e année (1975/76), Théorie des nombres: Fasc. 2, Exp. No. G14, 5 pp. Secrétariat Math., Paris*, 1977. (Jean-Marc Deshouillers) **58** #22009 10L10
- Corrigendum: "Sur deux fonctions de diviseurs" (J. London Math. Soc. (2) **14** (1976), 521-526). *J. London Math. Soc.* (2) **17** (1978), no. 2, 212. (Ernst Heppner) **58** #10798 10H25
- Tenenbein, Aaron Distribution of minimum path. *J. Appl. Probability* **12** (1975), 164-166. (Benjamin Epstein) **51** #9352 62G30
- See also Proceedings: Session of the International Statistical Institute, **49** #8144
- Tenenblat, Ketí On isometric immersions of Riemannian manifolds. *Bol. Soc. Brasil. Mat.* **2** (1971), no. 2, 23-36. (H. Wu) **48** #7174 53C40
- An estimate for the length of closed geodesics on a Riemannian manifold. *Arch. Math. (Basel)* **24** (1973), 317-319. (F. Brickell) **48** #12406 53C20
- On the Rauch comparison theorem for volumes. *Bol. Soc. Brasil. Mat.* **4** (1973), no. 1, 31-39. (G. D. Chakerian) **50** #11087 53C20
- On Klingenberg's theorem. *Bol. Soc. Brasil. Mat.* **4** (1973), no. 2, 139-146. (Midori Goto) **54** #8521 53C20
- Tenengol'e, G. M. (with Dyn'kin, V. N.) A class of cyclic codes with a majority decoding scheme. *Problemy Peredači Informacii* **5** (1969), no. 1, 3-15 (Russian); translated as *Problems of Information Transmission* **5** (1969), no. 1, 1-11. (C. Reischer) **46** #6917 94A10
- (with Dyn'kin, V. N.) Cyclic codes that correct arithmetical errors. (Russian) *Problemy Peredači Informacii* **6** (1970), no. 3, 38-42. (Heinrich Seidel) **47** #3100 94A10
- (with Arakelov, V. A.) Certain properties of recurrent periodic sequences. (Russian. Armenian summary) *Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn.* **6** (1970), 18-28. (R. N. Goss) **46** #6916 94A10
- (with Arakelov, V. A.) Certain classes of correcting codes. (Russian. Armenian summary) *Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn.* **6** (1970), 64-77. (R. N. Goss) **46** #5032 94A10
- Codes that correct errors in the interchange of information between computers in information retrieval systems. (Russian) *Use of redundancy in information systems (Proc. Sem. Cybernet., No. 38) (Russian)*, pp. 26-33, 40 Izdat. "Štintsa", Kishinev, 1971. (R. N. Goss) **51** #7719 94A10 (68A50)
- (with Davydov, A. A.) On a class of codes correcting errors in information exchanged between computers. *Information processing 71 (Proc. IFIP Congress, Ljubljana, 1971)*, Vol. 1: Foundations and systems, pp. 697-703. North-Holland, Amsterdam, 1972. (A. T. Amin) **53** #7599 94A10
- (with Davydov, A. A.; Taugli, G. L.) A code that corrects packets of errors, and its use in information exchange between computers. (Russian) *Problemy Peredači Informacii* **8** (1972), no. 3, 27-37. (Jörn Justesen) **53** #15556 94A10
- (with Habelšvilii, G. I.) An algorithm for determining the distance between cyclic codes that correct arithmetical errors. (Russian. Georgian summary) *Tbilis. Sahelmc. Univ. Gamqeneb. Math. Inst. Šrom.* **3** (1972), 285-300. (From the authors' text) **56** #11520 94A10
- (with Taugli, G. L.) Codes that correct error bursts in the transmission of information and in the execution of arithmetic operations. (Russian) *Problemy Peredači Informacii* **10** (1974), no. 1, 33-38. (R. N. Goss) **49** #4656 94A10
- (with Maksimov, E. M.) A class of codes correcting the loss of one or two adjacent symbols and an error in the preceding symbol. *Avtomat. i Telemekh.* **1975**, no. 9, 180-188 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 9, part 2, 1544-1552 (1976). (I. M. Chakravarti) **54** #7110 94A10
- (with Taugli, G. L.) Bahl-Chien burst-error-correcting codes. (Russian) *Problemy Peredači Informacii* **11** (1975), no. 1, 43-56. (Authors' summary) **58** #26525a (E **58** #26525b) 94A10
- Class of codes correcting bit loss and errors in the preceding bit. *Avtomat. i Telemekh.* **1976**, no. 5, 174-179 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 5, part 2, 797-802. (Author's summary) **56** #8174 94A10
- (with Taugli, G. L.) Letter to the editors: "Bahl-Chien burst-error-correcting codes". (Russian) *Problemy Peredači Informacii* **12** (1976), no. 1, 119. (Authors' summary) **58** #26525b 94A10
- Tenenhaus, Michel (with Donio, Jean; Hayat, Eric) Le Problème bayésien: application des modèles bayésiens séquentiels au problème de l'aide à l'action médicale. (English, German, Italian and Spanish summaries) *Metra* **9** (1970), 237-259, 320, 324, 328, 332. (Jana Zvárová) **50** #3512 62P10
- (with Bourroche, Jean-Marie) Some segmentation methods. (French, German, Italian and Spanish summaries) *Metra* **9** (1970), 407-418, 429, 437, 441, 445. (R. M. Cormack) **50** #1459 62P99
- (with Bourroche, Jean-Marie) Quelques méthodes de segmentation. (Loose English summary) *Rev. Française Informat. Recherche Opérationnelle* **4** (1970), Sér. V-2, 29-42. (E. H. Lehman) **46** #4659 62K15
- L'analyse de la variance et de la covariance. (English, German, Italian and Spanish summaries) *Metra* **13** (1974), 373-393, 407-409. (P. Fortunati) **50** #11651 62J10
- (with Prietret, Bernard) Analyse des séries chronologiques multidimensionnelles. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Verte* **8** (1974), no. V-2, 5-16. (P. J. Huber) **50** #15166 62H25
- Analyse en composantes principales d'un ensemble de variables nominales ou numériques. *Rev. Statist. Appl.* **25** (1977), no. 2, 39-56. (Alain Pousse) **58** #3208 62H25
- See also Bourroche, Jean-Marie, **55** #7298
- Ten Eyck, James H. (with Rohrlach, F.) Equivalence of null-plane and conventional quantum electrodynamics. *Phys. Rev. D* (3) **9** (1974), 2237-2245. (Authors' summary) **53** #12326 81A6
- Teng, Chin Ts'ai (with Teng, Y-Hsiung) A note on the game Nim_k. *Tamkang J. Math.* **3** (1972), 115-122. (Editors) **55** #12138 90D10
- (with Hwang, Frank Kwangming) A matrix algorithm for larger knapsack problems. *Bull. Inst. Math. Acad. Sinica* **6** (1978), no. 1, 197-201. (K. G. Murty) **58** #15151 90C10

- Teng, Ching Hua** A class of analytic functions whose surfaces of the real and imaginary parts are non-isometric. (Chinese summary) *Tamkang J. No. 5* (1966), 191-202. (M. Haimovici) **45** #2588 53A05 (30A08)
(with Chen, Bang-yen) Flatness of normal connections of totally quasiluminal submanifolds and its application. (Chinese summary) Collection of articles in commemoration of the 75th anniversary of the founding of Soochow University. *Soochow J. Math. Natur. Sci.* **1** (1975), 9-16. (David Blair) **53** #6468 53C40
See also Collection: Teng, Ching Hua, **49** #2217 and Chen, Bang-yen; et al., **49** #7077
- Teng, James** (with Klotz, Jerome H.) One-way layout for counts and the exact enumeration of the Kruskal-Wallis H distribution with ties. *J. Amer. Statist. Assoc.* **72** (1977), no. 357, 165-169. (From the summary) **58** #31520 62E15
- Teng, Jinn Tsair** See Teng, Chin Ts'ai
- Teng, Tsing Houa** See Teng, Ching Hua
- Teng, Y-Hsiung** (with Teng, Chin Ts'ai) A note on the game Nim_k. *Tamkang J. Math.* **3** (1972), 115-122. (Editors) **55** #12138 90D10
- Tengström, E.** See Proceedings: International Symposium on Geodesy and Physics of the Earth, **58** #32828a and Proceedings: International Symposium on Geodesy and Physics of the Earth, **58** #32828b
- Tenisberg, Ju. D.** Some models of collective behavior in dynamic processes of market price formation. *Automat. i Telemekh.* **1969**, no. 7, 137-147. (Russian. English summary); translated as *Automat. Remote Control* **1969**, no. 7, 1140-1148. **56** #10848 90A15
(with Mališevskii, A. V.) One class of games connected with models of collective behavior. *Automat. i Telemekh.* **1969**, no. 11, 128-137. (Russian. English summary); translated as *Automat. Remote Control* **1969**, no. 11, 1828-1837. **56** #14767 90D12 (90D40)
- Ten Kate, A.** See ten Kate, A.
- Tenkku, Jussi** See Essays: Oiva Ketonen on his sixtieth birthday, **49** #10521
- Ten Men Jan** An approximate solution of two-dimensional integral Volterra equations of the first kind by the cubature sums method. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 194-211, 303. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (From the introduction) **58** #31976 65R05
(with Aparcin, A. S.) The well-posedness of multidimensional Volterra integral equations of the first kind. (Russian) *Questions in applied mathematics* (Russian), pp. 120-126. *Sibirsk. Énerget. Inst. Akad. Nauk SSSR Sibirsk. Otdel., Irkutsk*, 1975. (Gheorghe Micula) **58** #2071 45D05
Approximate solution of Volterra integral equations of the first kind with a logarithmic singularity. (Russian) *Questions in applied mathematics* (Russian), pp. 167-175. *Sibirsk. Énerget. Inst. Akad. Nauk SSSR Sibirsk. Otdel., Irkutsk*, 1975. (Editors) **58** #23403 45D05
- Tennant, N.** Continuity and identity. *J. Philos. Logic* **6** (1977), no. 2, 223-231. (Editors) **58** #10323 02C10
- Tennekes, H.** (with Chawla, T. C.) Turbulent boundary layers with negligible wall stress: a singular-perturbation theory. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **11** (1973), no. 1, 45-64. (Authors' summary) **58** #25359 76.41
- Tennenbaum, Gérald** See Tenenbaum, Gérald
- Tennenbaum, Jonathan** On the function $\sum_{n=0}^{\infty} \{ (n+2)/n! \} x^n$. *Math. Scand.* **41** (1977), no. 2, 242-248. (K. S. Williams) **57** #9967 30A66 (10H05)
- Tennenbaum, S.** (with Solovay, Robert M.) Iterated Cohen extensions and Souslin's problem. *Ann. of Math.* (2) **94** (1971), 201-245. (Thomas J. Jech) **45** #3212 04A15
- Tennent, R. D.** The denotational semantics of programming languages. *Comm. ACM* **19** (1976), no. 8, 437-453. (Gianni Aguzzi) **55** #1791 68A05
Language design methods based on semantic principles. *Acta Informat.* **8** (1977), no. 2, 97-112. (Gilles Kahn) **56** #1783 68A05
On a new approach to representation independent data classes. *Acta Informat.* **8** (1977), no. 4, 315-324. (Leon Levy) **57** #8129 68A05
- Tenneriello, Catello** (with Gambardella, Lucia) On a theorem of N. Rouche. (Italian summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) **38** (1971), 145-150. (H. Hochstadt) **49** #753 34D20
- Tenney, Richard L.** Second-order Ehrenfeucht games and the decidability of the second-order theory of an equivalence relation. *J. Austral. Math. Soc. Ser. A* **20** (1975), no. 3, 323-331. (M. R. Krom) **52** #2861 02G05 (02B15)
(with Foster, Caxton C.) Non-transitive dominance. *Math. Mag.* **49** (1976), no. 3, 115-120. (J. E. Rubin) **54** #101 04A20
(with Sacerdote, George S.) The decidability of the reachability problem for vector addition systems (preliminary version). *Conference Record of the Ninth Annual ACM Symposium on Theory of Computing* (Boulder, Colo., 1977), pp. 61-76. *Assoc. Comput. Mach., New York*, 1977. (L. H. Landweber) **58** #8477 68A10 (94A30)
- Ha Ten Ngoan** See Ha Ten Ngoan
- Tennison, B. R.** On the quartic threefold. *Proc. London Math. Soc.* (3) **29** (1974), 714-734. (Miles Reid) **54** #7474 14G13 (14M10)
★Sheaf theory. London Mathematical Society Lecture Note Series, No. 20. Cambridge University Press, Cambridge, England-New York-Melbourne, 1975. vii + 164 pp. (L. Kaup) **53** #8192 18F20 (55B30)
- Tenti, G.** (with McCourt, F. R.) Renormalized theory of the time-dependent pair distribution function. I. General formulation. *J. Statist. Phys.* **15** (1976), no. 1, 59-71. (P. Caldirola) **54** #6834 82.62
(with Hui, W. H.) Some classes of exact solutions of the nonlinear Boltzmann equation. *J. Mathematical Phys.* **19** (1978), no. 4, 774-779. (Authors' summary) **57** #4933 82.35
- Tényi, György** Consumption models. (Hungarian) *Szigma—Mat.-Közgazdasági Folyóirat* **5** (1972), 291-305. (Tomas Gal) **48** #10447 90A15
(with Tarján, Tamás) An experiment in modeling the capital investment process. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* **10** (1977), no. 1-2, 11-24. (Peter Bod) **58** #4250 90A15
- Teo, K. C.** (with Lee, King Tak) Equilibrium points of a class of many-person games. *J. Optimization Theory Appl.* **23** (1977), no. 2, 285-303. (J. J. Buckley) **58** #9316 90D10
- Teo, K. L.** (with Ahmed, Nasiruddin) On the stability of a class of nonlinear stochastic systems. *Information and Control* **20** (1972), 276-293. (D. D. Sworder) **48** #8061 93E15
(with Moody, Robert V.) Tits' systems with crystallographic Weyl groups. *Algebra* **21** (1972), 178-190. (E. M. Luks) **47** #8705 20F40 (22E60)
(with Ahmed, Nasiruddin) On the almost sure and almost uniform $L_p(p > 1)$ stability. *Internat. J. Systems Sci.* **4** (1973), 803-808. (Authors' summary) **56** #11416 93E15
(with Ahmed, Nasiruddin) Stochastic bang-bang control. *IEEE Trans. Automatic Control* **AC-19** (1974), 73-75; correction, *ibid.* **AC-19** (1974), 460. (V. N. Igolkin) **50** #16049 93E20
(with Ahmed, Nasiruddin; Wong, H. W.) On optimal parameter selection for parabolic differential systems. *IEEE Trans. Automatic Control* **AC-19** (1974), 286-289. (P. K. C. Wang) **53** #1369 49B25
(with Ahmed, Nasiruddin) Weak compactness of conditional probability measures and its application to stochastic linear control problems. *Internat. J. Systems Sci.* (1974), 67-71. (Tohru Katayama) **49** #10424 93E20
(with Ahmed, Nasiruddin) Optimal feedback control for a class of stochastic systems. *Internat. J. Systems Sci.* **5** (1974), 357-365. (Bojan Popović) **49** #6991 93E20
(with Ahmed, Nasiruddin) Optimal feedback control of stochastic McShane differential systems. *J. Appl. Probability* **11** (1974), 302-309. (W. J. Padgett) **51** #2737 93E20
(with Ahmed, Nasiruddin) An existence theorem on optimal control of partially observable diffusions. *SIAM J. Control* **12** (1974), 351-355. (F. S. Van Vleck) **51** #12401 93E20
(with Ahmed, Nasiruddin) Optimal control of stochastic Itô differential systems with fixed terminal time. *Advances in Appl. Probability* **7** (1975), 154-178. (D. L. Sworder) **51** #2737 93E20
On the existence and uniqueness of solutions of parabolic equations. *Bull. Austral. Math. Soc.* **13** (1975), no. 3, 451-456. (K. Hawlitschek) **52** #14657 35K20
(with Ahmed, Nasiruddin) On optimal parameter selection for stochastic Itô differential systems. *Internat. J. Systems Sci.* **6** (1975), no. 8, 749-754. (Lennart Ljung) **54** #9814 93E20
(with Ahmed, Nasiruddin) Necessary conditions for optimality of Cauchy problems for parabolic partial differential systems. *SIAM J. Control* **13** (1975), no. 5, 981-993. (K. C. Wang) **53** #11456 49B25
Optimal control of systems governed by stochastic McShane differential equations with fixed terminal time. *Internat. J. Systems Sci.* **7** (1976), no. 1, 107-119. (H. Engelbert) **53** #6396 49B99 (93E20)
(with Ahmed, Nasiruddin) Comments on a selector theorem in Banach spaces. Existence theorem issue. *J. Optimization Theory Appl.* **19** (1976), no. 1, 117-119. (Authors' summary) **55** #3911 49A99
(with Lin, G. C. I.; Yeo, L. T.) On the optimal control of a manufacturing firm. *Bull. Austral. Math. Soc.* **16** (1977), no. 1, 111-123. (R. Petrović) **55** #7328 90A05 (93C05)
Simple quotients of the three tiered Euclidean Lie algebra. *Bull. London Math. Soc.* **9** (1977), no. 3, 299-304. (B. N. Allison) **58** #5817 17B65 (20G15)
(with Reid, D. W.) Optimal feedback control of a class of stochastic systems permitting jumps in the diffusion processes. *Internat. J. Systems Sci.* **8** (1977), no. 4, 497-511. (N. U. Ahmed) **56** #2617 93E99
(with Nababan, S.) An existence theorem for optimal controls of non-linear vector delay-differential equations with time-lag controls. *Internat. J. Systems Sci.* **8** (1977), no. 10, 1163-1172. (S.-C. Huang) **57** #13616 49A10 (34K99)
(with Murray, J. M.) On a computational algorithm for a class of optimal control problems involving discrete time delayed arguments. *J. Austral. Math. Soc. Ser. B* (1977/78), no. 3, 315-343. (Authors' summary) **58** #26357 93C55 (90B30)
(with Ahmed, Nasiruddin) On the optimal control of systems governed by quasilinear integro-partial differential equations of parabolic type. *J. Math. Anal. Appl.* **59** (1977), no. 1, 33-59. (Eleanor M. James) **55** #8922 49A20
(with Moore, E. J.) Necessary conditions for optimality for control problems with time delays appearing in both state and control variables. *J. Optimization Theory Appl.* **23** (1977), no. 3, 413-428. (Authors' summary) **57** #17459 49B35 (93C10)
Second order linear partial differential equations of parabolic type with delay arguments. *Nanta Math.* **10** (1977), no. 2, 119-130. (M. Biroli) **58** #29475 35R05 (35K15)
- Teodorik, K. F.** (with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šaripov, D. S.; Šatalov, A. S.; Solodovnikov, V. V.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 1. Математическое описание, анализ устойчивости и качества систем автоматического регулирования. (Russian) [Theory of automatic control. Book 1: Mathematical description, analysis of stability and quality of automatic control systems] Edited by V. Solodovnikov. Izdat. "Mašinostroenie", Moscow, 1967. 768 pp. (Editors) **50** #6557 93-02
(with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šaripov, D. S.; Šatalov, A. S.; Solodovnikov, V. V.; Topčeev, Ju. I.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. Band 1. Stetige lineare Systeme. Gesamtdredaktion der Originalausgabe von W. W. Solodovnikov. Aus dem Russischen übersetzt von Klaus Biener, Klaus Franke, Manfred Krauß, Helmuth Otto, Edmund Suschke und Bernd Weber. Deutsche Bearbeitung unter Manfred Peschel. VEB Verlag Technik, Berlin, 1971. 744 pp. (3 foldouts) (W. Oppelt (Zbl 249.93002)) **50** #6558 93-02
- Teodorescu, Alexandru** (with Sicoe, Corneliu) Intelligence artificielle: programmation d'un jeu de cartes. *Logique, automatique, informatique*, pp. 425-456. (10 foldouts; errata inserted) *Éditions Acad. R.S.R., Bucharest*, 1971. (Editors) **50** #1574 68A45
(with Catona, I.; Popescu, C.) ★Sistemul FELIX C-256. Limbajul ASSIRIS. (Romanian) [The system FELIX C-256. The language ASSIRIS] Editura Academiei Republicii Socialiste România, Bucharest, 1974. 447 pp. (R. N. Goss) **53** #9693 68-02

- Bănescu, Dan** Synthese nichtlinearer Regelungssysteme mittels Transformationen in der Lattribe Ebene. I, II, III, IV. (English summary) *Regelungstech.* **22** (1974), no. 11, 55-361; *ibid.* **22** (1974), no. 12, 394-398; *ibid.* **23** (1975), no. 1, 26-28; *ibid.* **25** (1975), no. 2, 62-64. (Dahsoong Yü) **55** #12217 93C10
- Abstaktvektoren—neue Mittel zum Entwurf optimierter Regelungssysteme. (English summary) *Regelungstech.* **23** (1975), no. 12, 414-422. (A. Halanay) **52** #16776 3C99 (90C50)
- Message operators: a new expression of the information. *Biol. Cybernet.* **24** (1976), no. 4, 199-209. (From the summary) **58** #9396 92A05 (94A15)
- Matrix-plane concept and non-linear control system synthesis. *Internat. J. Control* **4** (1976), no. 1, 109-127. (Bradley W. Dickinson) **57** #5273 93C10 (93D15)
- Cybernetical actions—constraints and orderliness in biological populations. *Biol. Cybernet.* **26** (1977), no. 2, 63-72. (Michael Conrad) **58** #26176 92A15
- Learning and optimization in biological systems. A model of sequential actions. *Biol. Cybernet.* **28** (1977/78), no. 2, 83-93. (From the summary) **58** #33102 92A05
- Bănescu, Ion D.** (with Nediță, Nicolae I.; Nicolescu, Liviu) Locally Euclidian spaces A_2 with parallel rectilinear characteristics of species two. (Romanian. Russian and French summaries) *An. Univ. București Mat.-Mec.* **19** (1970), no. 2, 117-127. (C. Simionescu) **45** #4314 53B05
- Les espaces A_2 à connexion affine avec les caractéristiques droites. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **14**(62) (1970), no. 4, 467-486 (1972). (S. Takizawa) **40** #5658 53B05
- (with Nediță, Nicolae I.) On recurrent spaces. (Romanian. French summary) *Lucrări Ști. Inst. Ped. Galați* **4** (1970), 19-25. (M. Stoka) **46** #8091 53B05
- On the characteristic curves of a surface. (Romanian. French summary) *Lucrări Ști. Inst. Ped. Galați* **5** (1970), 13-25. (N. Mihăileanu) **46** #8054 53A05
- The characteristic curves of a surface. (Romanian. French summary) *Stud. Cerc. Mat.* **22** (1970), 1513-1520. (R. Rosca) **48** #12323 53A05
- Sur un théorème de L. Ph. Eisenhart. *Math. Nachr.* **49** (1971), 343-350. (Virgil Obădeanu) **46** #6203 53B05
- Sur les espaces $A_2(x, y)$ à connexion affine. *Math. Nachr.* **52** (1972), 343-353. (H. Osborn) **47** #9456 53B05
- (with Nediță, Nicolae I.; Nicolescu, Liviu) Correspondences between affine spaces A_2 with polynomial connection. (Romanian. French summary) *An. Univ. București Mat.-Mec.* **22** (1973), no. 2, 141-153. (P. Stavre) **50** #3131 53B15
- (with Nicolescu, Liviu) Des champs caractéristiques non isotropes sur une variété conforme. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **20**(68) (1976), no. 3-4, 307-312 (1977). (Bernard Rouxel) **57** #17535 53B20
- (with Nicolescu, Liviu) Les espaces de Riemann ayant la forme de Ricci à courbure constante. *An. Univ. București Mat.* **26** (1977), 133-141. (From the text) **58** #30857 53B20
- (with Nicolescu, Liviu) Sur l'algèbre de déformation associée à un espace de Riemann. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **21**(69) (1977), no. 3-4, 363-374. (R. Behari) **58** #24119 53C20
- Bănescu, Nicolae Victor** Simion Stoilow. *Gaz. Mat. Ser. A* **76** (1971), 286-294. (Editors) **58** #1539c 01A70
- The extension of a theorem concerning recurrent spaces. (Romanian. French summary) *Stud. Cerc. Mat.* **23** (1971), 627-642. (G. Vranceanu) **48** #12357 53B20
- (with Bănescu, Gr.) Systems of inequalities. (Romanian. English summary) *Stud. Cerc. Mat.* **23** (1971), 1073-1082. (Editors) **48** #2974 54C05
- (with Văduva, I.) Les principales étapes dans l'évolution de l'informatique en Roumanie. (English summary) *Noesis, I (Travaux Colloq. Comité Romain d'Histoire Philos. Sci., Bucharest, 1972)*, pp. 311-321. *Acad. R.S.R., Bucharest, 1973.* (Editors) **58** #4928 01A65
- Alexandru Froda. (Romanian) *Gaz. Mat. Ser. A* **79** (1974), 81-52. (Editors) **56** #8305 01A70
- Dimitrie Pompeiu and his work. (Romanian) "Gheorghe Țițeica and Dimitrie Pompeiu" *Symposium on Geometry and Global Analysis (Bucharest, 1973)* (Romanian), pp. 41-48. *Editura Acad. R.S.R., Bucharest, 1976.* (Editors) **58** #10228 01A70
- (with Ciucu, George; Andreian, Cabiria; Onicescu, Octav; Galbură, Gheorghe; Popescu, Dorin) Professor Ion Bucur (1930-1976). (Romanian) *An. Univ. București Mat.* **26** (1977), 143-149. (Editors) **58** #10165 01A70
- Professor Gabriel Sudan. (Romanian) *Gaz. Mat. Publ. Lunară Pentru Tineret* **82** (1977), no. 9, 345-346. (Editors) **58** #10229 01A70
- See also **Birthday: Teodorescu, Nicolae Victor**, **58** #21329
- Bănescu, P. P.** Considerations relative to the use of potential functions in the theory of elasticity. (Romanian. French summary) *Lucrări Ști. Inst. Ped. Galați* **5** (1970), 27-35. (Author's summary) **46** #6676 73.31
- (with Kecs, Wilhelm) On the plane problem of an elastic body acted upon by dynamic loads. I. General results. *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **19** (1971), 47-55. (R. J. Knops) **48** #7730 73.35
- (with Kecs, Wilhelm) On the plane problem of an elastic body acted upon by dynamic loads. II. Applications. *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **19** (1971), 57-62. (R. J. Knops) **50** #1605 73.45
- (with Kecs, Wilhelm) Sur le calcul variationnel en distributions. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **15**(63) (1971), no. 4, 443-455 (1973). (L. Artega) **48** #865 46F10
- ★Dinamica corpurilor liniar elastice. (Romanian) [Dynamics of linear elastic bodies] In an English table of contents. *Editura Academiei Republicii Socialiste România, Bucharest, 1972.* 391 pp. (Editors) **52** #12488 73.35
- Sur la représentation de Șandru dans le cas des corps du type de Cosserat. *An. Univ. București Mat.-Mec.* **22** (1973), no. 2, 155-158. (E. Pinney) **50** #2722 35Q99 (73.35)
- Sur l'état de déplacement et de rotation dans le cas des corps du type de Cosserat. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **17**(65) (1973), 309-314 (1975). (D. Ieșan) **54** #4258 73.35
- (with Soós, Eugen) Un modèle continu, lorentzien, nonlinéaire et nonlocal du diélectrique hyperélastique. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **17**(65) (1973), no. 4, 417-443 (1975). (From the authors' introduction) **57** #8483 78.49 (73.49)
- (with Soós, Eugen) Discrete, quasi-continuous models of elastic solids. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Ljubljana, 1972). *Z. Angew. Math. Mech.* **53** (1973), T33-T43. (H. R. Aggarwal) **49** #11905 73.00
- (with Kecs, Wilhelm) ★Applications of the theory of distributions in mechanics. With a preface by Miron Nicolescu. Revised and enlarged translation from the Romanian by Radu Georgescu, edited by John Hammel. *Editura Academiei Române, Bucharest; Abacus Press, Tunbridge Wells, 1974.* 493 pp. (Editors) **52** #12497 73.46 (46Fxx, 70.46)
- ★Dynamics of linear elastic bodies. Revised and enlarged translation from the Romanian by Emil Geles, edited by John Hammel. *Editura Academiei Republicii Socialiste România, Bucharest; Abacus Press, Tunbridge Wells, 1975.* 411 pp. (Editors) **52** #12489 73.35
- (with Beju, Iulian; Soós, Eugen) ★Tehnici de calcul vectorial cu aplicații. (Romanian) [Techniques of vector calculus with applications] Seria Matematici Moderne Aplicate. [Modern Applied Mathematics Series] *Editura Tehnică, Bucharest, 1976.* 287 pp. (Editors) **58** #28015 15-01 (26-01, 53-01, 69.00)
- (with Kecs, Wilhelm) Sur la représentation des charges périodiques et quelques de ses applications. *Ann. Mat. Pura Appl.* (4) **108** (1976), 179-188. (See Zbl **368** #73019) 73.46
- On continuity equations and Cesàro type formulae in case of Cosserat type solids. *Mech. Res. Comm.* **4** (1977), no. 1, 63-68. (From the conclusion) **58** #32290 73.53
- Sur une solution en tensions de l'élastodynamique linéaire. *An. Univ. București Mat.* **27** (1978), 91-95. **58** #25267 73.35
- See also **Papers: Balkan Mathematical Congress**, **51** #2824 and **Contemporary problems in solid mechanics**, **56** #17311
- Teodorescu, Radu I.** Sur les décompositions directes $C_0 - C_{11}$ des contractions. *Acta Sci. Math. (Szeged)* **36** (1974), 181-187. (D. N. Clark) **49** #7824 47A65
- Direct sums of maximal spectral subspaces of certain operators of class C_0 . (Romanian. French summary) *Bul. Univ. Brașov Ser. C Mat. Fiz. Chim. Ști. Natur.* **16** (1974), 73-78. (R. G. Bartle) **51** #11141 47A45
- Décomposition $C_0 - C_{11}$ directe de certaines contractions faibles. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 507-510. (Lawrence Fialkow) **50** #2953 47A45
- Sur la décomposition $C_0 - C_{11}$ directe des contractions. II. *Rev. Roumaine Math. Pures Appl.* **19** (1974), 945-948. (D. N. Clark) **50** #14292 47A45
- Sur les décompositions directes des contractions de l'espace de Hilbert. *J. Functional Analysis* **18** (1975), 414-428. (L. de Branges) **50** #14293 47A45 (47A15)
- Fonctions caractéristiques constantes. *Acta Sci. Math. (Szeged)* **38** (1976), no. 1-2, 183-185. (J. Rovnyak) **56** #1101 47A45
- The direct decompositions of contractions. (Romanian. French summary) *Stud. Cerc. Mat.* **29** (1977), no. 1, 57-84. (B. Sz. Nagy) **57** #3882 47A15
- antohi-Teodorescu, Veronica** See **Antohi-Teodorescu, Veronica**
- Teodorova, Sv.** (with Dečev, G. V.; Koltchev, V.) Basic characteristics of the cell as an optimal selfregulating system. (French summary) *Rev. Bio-Math. (N.S.)* **7** (1969), no. 4, 23-31. (E. Ar) **45** #8306 92A05
- Teodorschiik, K. F.** See **Teodorčik, K. F.**
- Teodoru, Georgeta** The Darboux problem for a hyperbolic partial differential equation of second order. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **19**(23) (1973), no. 3-4, sect. I, 87-91. (Genowefa Majcher) **49** #7609 35L20
- (with Grădinaru, N.) On certain numerical methods for the Goursat problem. (Romanian. English summary) *Bul. Inst. Politehn. Iași (N.S.)* **20** (24) (1974), no. 3-4, sect. I, 43-46. (F. M. Pascal) **53** #7057 65M99
- The approximation of the solution of a generalized Goursat problem. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **21** (25) (1975), no. 1-2, sect. I, 41-47. (W. Watzlawek) **53** #4562 65M20
- Teodoru, I.** (with Polak, Elijah) Newton derived methods for nonlinear equations and inequalities. *Nonlinear programming, 2 (Proc. Sympos. Special Interest Group on Math. Programming, Univ. Wisconsin, Madison, Wis., 1974)*, pp. 255-271. *Academic Press, New York, 1974.* (J. W. Schmidt) **52** #4612 65H10
- Teodosiu, C.** ★Modele elastice ale defectelor cristaline. (Romanian) [Elastic models of crystal defects] Probleme Actuale in Mecanica Solidelor, Vol. II. (Romanian) [Present Problems in the Mechanics of Solids, Vol. II] *Editura Academiei Republicii Socialiste România, Bucharest, 1977.* 322 pp. (V. Gheorghită) **58** #3836 73.00
- Teodosiu, Cristian** (with Dincă, Florea) ★Vibrații neliniare și aleatoare. (Romanian) [Nonlinear and random vibrations] *Editura Academiei Republicii Socialiste România, Bucharest, 1969.* 462 pp. (G. Bojădžiev) **57** #11225a 70.00 (34C15)
- (with Dincă, Florea) ★Nonlinear and random vibrations. Translated from the Romanian by Christian Teodosiu. *Editura Academiei Republicii Socialiste România, Bucharest; Academic Press, Inc. [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1973.* 413 pp. (G. Bojădžiev) **57** #11225b 70.00 (34C15)
- Teoh, C. K.** (with Ling, Kiong Doong) Structural distribution for ratio of scale parameters. III. Generalised gamma distribution. (Chinese summary) *Nanyang Univ. J. Part III* **7** (1973), 49-55. (D. A. Sprott) **52** #1977 62E15
- Teolis, A. G.** (with Bove, Antonio; Fano, Guido; Turchetti, G.) Functional integration, Padé approximants, and the Schrödinger equation. *J. Mathematical Phys.* **16** (1975), 268-270. (K. Kumar) **52** #7380 81.47
- (with Bove, Antonio; Fano, Guido; Turchetti, G.) Functional-integration methods for the Schrödinger equation. (Italian and Russian summaries) *Nuovo Cimento B* (11) **28** (1975), no. 2, 363-376. (Ian P. Grant) **52** #16415 81.65
- Teorey, Toby J.** General equations for idealized CPU-I/O overlap configurations. *Comm. ACM* **21** (1978), no. 6, 500-507. (A. D. Booth) **58** #3643 68A05
- Tepl, J. W.** (with Hofmann, H. M.; Richert, J.; Weidenmüller, Hans A.) Direct reactions and Hauser-Feshbach theory. *Ann. Phys. (New York)* **90** (1975), 403-437. (Authors' summary) **54** #9501 81.65
- Teplikin, B. G.** (with Bektasov, A. Ž.) On the question of the radii of graphs. (Russian) *Optimization and simulation of complex systems (Russian)*, pp. 150-155, 170. *Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1976.* (Cristina Zamfirescu) **58** #21792 05C30 (82.05)
- Teplickii, M. G.** Controllable semi-Markovian processes with finite numbers of states and of controls. *Automat. i Telemekh.* **1969**, no. 10, 45-53 (Russian. English summary);

- translated as *Automat. Remote Control* 1969, no. 10, 1582-1589. 56 #11447 93E20 (90C40)
- Stochastic service by unreliable devices with a queue for the elimination of inaccuracies. (Russian) *Avtomat. i Vychisl. Tehn.* 1969, no. 2, 81-89. (errata insert) (Author's summary) 45 #9671 60K25
- The method of dynamic planning. (Russian) *Mathematical methods for the solution of economic problems (Suppl. to Ekonom. i Mat. Metody)*, No. 3 (Russian), pp. 76-83. Izdat. "Nauka", Moscow, 1972. (Editors) 51 #14950 90B99
- On controlled semi-Markov processes with several target functions. *Avtomat. i Telemekh.* 1973, no. 3, 38-44. (Russian. English summary); translated as *Automat. Remote Control* 34 (1973), no. 3, part 1, 371-376. (Ulrich Rieder) 54 #9680 90C45
- Controllable periodic semi-Markov processes. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* 1973, no. 5, 56-61. (G. N. Mil'shtein) 51 #5143 93E99
- The choice of parameters in the method of dynamic planning. *Mathematical methods of solution of economic problems (Suppl. to Ekonom. i Mat. Metody)*, No. 5 (Russian), pp. 113-120. Izdat. "Nauka", Moscow, 1974. (Editors) 51 #14949 90B99
- A possible means for decomposing the optimization procedure for controlled semi-Markov processes. *Avtomat. i Telemekh.* 1974, no. 6, 14-22. (Russian); translated as *Automat. Remote Control* 1974, no. 6, part 1, 883-890. (H. Taylor) 53 #10320 90C45
- A branch-and-bound method for solving certain discrete optimal control problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 5, 38-47. (Russian); translated as *Engrg. Cybernetics* 13 (1975), no. 5, 33-41. (See RZMat 1976 #3 V782) 90C10
- Certain possibilities of stochastic approximation for optimization of discrete systems. *Avtomat. i Telemekh.* 1976, no. 3, 83-89. (Russian. English summary); translated as *Automat. Remote Control* 37 (1976), no. 3, part 1, 387-392. (Tamer Basar) 55 #2324 93E20
- Control optimization in stochastic discrete systems by stochastic approximation. *Avtomat. i Telemekh.* 1977, no. 12, 65-71. (Russian. English summary); translated as *Automat. Remote Control* 38 (1977), no. 12, part 1, 1797-1802 (1978). (Author's summary) 58 #33467 93E20
- A problem of optimal control of a Markov chain from incomplete data. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1977, no. 2, 89-94, 221. (Russian); translated as *Engrg. Cybernet.* 15 (1977), no. 2, 68-74 (1978). (Tsuneo Yoshikawa) 58 #15624 93E20
- Teplii, M. L.** (with Panasjuk, V. V.) ★Деякі контактні задачі теорії пружності. (Ukrainian) [Some contact problems of elasticity theory] *Vidavn. "Naukova Dumka", Kiev*, 1975. 195 pp. (Not reviewed) 73.65
- Teplinskii, Ju. V.** The existence of an invariant toroidal manifold for a countable system of differential equations. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations (Russian)*, pp. 164-170. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1975. (E. Leimanis) 54 #3099 34C30
- The reduction principle in the theory of the stability of semi-invariant sets of countable systems of differential equations. (Russian) *Mat. Fiz. Vyp.* 18 (1975), 32-35, 164. (C. S. Coleman) 56 #6033 34D20 (34G05)
- The existence and smoothness of an invariant toroidal manifold of a nonlinear countable system of differential equations. (Russian) *Ukrain. Mat. Zh.* 27 (1975), no. 6, 847-851, 864. (E. Leimanis) 54 #3100 34C30 (34G05)
- The reducibility of a linear countable system of differential equations with quasiperiodic coefficients. (Russian) *Approximate methods for the study of nonlinear systems (Russian)*, pp. 172-181. *Izdanie Inst. Mat. Akad. Nauk SSR, Kiev*, 1976. (M. Ráb) 58 #6435 34A35 (34C20)
- Reducibility of countable systems of differential equations. (Russian) *Mat. Fiz. Vyp.* 22 (1977), 47-54, 124. (M. Bertolino) 57 #13016 34C20 (34G05)
- The existence of an invariant toroidal manifold for a countable system of differential equations with instantaneous change. (Russian) *Ukrain. Mat. Zh.* 29 (1977), no. 6, 835-841, 855. (Russell C. Thompson) 58 #17344 34C30 (34G05)
- The smoothness of an invariant toroidal manifold of a countable system of differential equations. (Russian) *Mat. Fiz. Vyp.* 23 (1978), 32-39, 113. (A. I. Kir'janen) 58 #11682 34C30
- Teplinskii, M. G.** See **Teplickii, M. G.**
- Tepljakova, E. P.** (with Alekperov, V. P.; Andrievskii, V. R.; Bahanov, L. G.; Bykov, V. P.; Zubkov, M. Ja.; Ivanenko, V. G.; Modjaev, A. D.; Potemkin, V. G.; Topčeev, Ju. I.; Fedorov, S. M.; Hlypalo, E. I.; Černikov, S. A.; Čudov, M. A.; Šipilov, A. I.; Šumilov, B. F.; Šerbakov, V. A.) ★Нелинейные корректирующие устройства в системах автоматического управления. (Russian) [Nonlinear correcting devices in automatic control systems] Edited by Ju. I. Topčeev. *Nonlinear Automatic Control Systems*, Vol. 2. Izdat. "Mašinstroenie", Moscow, 1971. 466 pp. (Bojan Popović) 50 #4005 93-06
- Tepljakova, A. S.** (with Bogoljubov, O. M.; Matveeva, L. V.; Sologub, V. S.) Iosip Zaharovič Štokalo (on the occasion of his eightieth birthday). (Ukrainian) *Narisi Istor. Prirodoznav. i Tehn. (No. 23)* 1977, 109-111. (Editors) 58 #21291 01A70
- Tepliov, F. S.** K. A. Timirjazev and the Petersburg University. (Russian. English summary) *Voprosy Istor. Estestvoznani. i Tehn.* 1974, no. 1(46), 88-93, 125, 136. (Editors) 58 #27049 01A55
- Tepliov, S. V.** (with Ganželo, A. N.) Elementary equations of two-phase flow. Translated from the Russian (Sb. Trudov. Energet. Inst. im. M. G. Kržizanovskogo Vyp. 25 Issled. Meh. Teploobmen. Dvuhfaz. Sred. (1974), 34-54). *Fluid Mech.-Soviet Res.* 4 (1975), no. 4, 1-17. (R. K. Gupta) 53 #2126 76.35
- Tepliy, Mark L.** On non-commutative splitting rings. *J. London Math. Soc.* (2) 4 (1971), 157-164. (R. B. Warfield, Jr.) 45 #3466 (E 47 #3448) 16A64
- The torsion submodule of a cyclic module splits off. *Canad. J. Math.* 24 (1972), 450-464. (B. L. Osofsky) 45 #8647 13C10
- (with Fuelberth, John D.) The singular submodule of a finitely generated module splits off. *Pacific J. Math.* 40 (1972), 73-82. (R. B. Warfield, Jr.) 46 #5392 16A64
- (with Fuelberth, John D.) A splitting ring of global dimension two. *Proc. Amer. Math. Soc.* 35 (1972), 317-324. (B. L. Osofsky) 46 #5390 16A60
- (with Golan, Jonathan S.) Torsion-free covers. *Israel J. Math.* 15 (1973), 237-256. (B. Stenström) 48 #4034 16A50
- Corrigendum: "On non-commutative splitting rings". *J. London Math. Soc.* (2) 6 (1973), 267-268. (R. B. Warfield, Jr.) 47 #3448 16A48
- (with Golan, Jonathan S.) Finiteness conditions on filters of left ideals. *J. Pure Appl. Algebra* 3 (1973), 251-259. (B. Stenström) 48 #4036 16A52
- (with Bronowitz, Richard) Torsion theories of simple type. *J. Pure Appl. Algebra* (1973), 329-336. (V. Diab) 50 #13102 16A08
- A class of divisible modules. *Pacific J. Math.* 45 (1973), 653-668. (T. Cheatham) 47 #6755 16A21
- Codivisible and projective covers. *Comm. Algebra* 1 (1974), 23-38. (J. D. Fuelberth) 49 #5101 16A64
- Generalizations of the simple torsion class and the splitting properties. *Canad. Math. Z.* 27 (1975), no. 5, 1056-1074 (1976). (J. D. Fuelberth) 52 #5735 16A48
- Semiprime rings with the singular splitting property. *Pacific J. Math.* 57 (1975), no. 2, 575-579. (V. C. Cateforis) 52 #464 16A12
- Pseudo-injective modules which are not quasi-injective. *Proc. Amer. Math. Soc.* (1975), 305-310. (Edward T. Wong) 51 #3222 16A52
- Prime singular-splitting rings with finiteness conditions. *Noncommutative ring theory (Internat. Conf., Kent State Univ., Kent, Ohio, 1975), 173-194. Lecture Notes in Math. Vol. 545, Springer, Berlin*, 1976. (K. R. Goodearl) 55 #8102 16A48
- Torsion-free covers. II. *Israel J. Math.* 23 (1976), no. 2, 132-136. (B. Stenström) 54 #5302 16A64
- (with Krause, Günter) The transfer of the Krull dimension and the Gabriel dimension to subidealizers. *Canad. J. Math.* 29 (1977), no. 4, 874-888. (J. C. Robson) 56 #8616 16A46
- On the transfer of properties to subidealizer rings. *Comm. Algebra* 5 (1977), no. 7, 743-758. (G. Krause) 55 #10526 16A56 (16A48)
- (with Gilmer, Robert) Units of semigroup rings. *Comm. Algebra* 5 (1977), no. 1, 1275-1303. (T. S. Shores) 58 #6020 20M25 (16A26)
- (with Gilmer, Robert) Idempotents of commutative semigroup rings. *Houston J. Math.* 3 (1977), no. 3, 369-385. (J. Kuzmanovich) 57 #6086 16A32 (20M25)
- (with Krause, Günter) Erratum: "The transfer of the Krull dimension and the Gabriel dimension to subidealizers" (*Canad. J. Math.* 29 (1977), no. 4, 874-888). *Canad. J. Math.* 30 (1978), no. 3, 672. (Editors) 57 #6096 16A46
- Teşou, Iosif** Considerations on the fundamental equations of analytical mechanics and the various generalizations of them. (Romanian. English summary) *Stud. Cerc. Mat.* 29 (1974), 289-310. (Gh. Silas) 51 #7419 70.35
- A nonlinear theory of the central motions in a resisting medium. (Romanian. English summary) *Stud. Cerc. Mat.* 29 (1977), no. 3, 261-318. (Gh. Silas) 58 #14068 70.34
- Teppati, Giancarlo** (with Benedetti, A.) The decision problem for mathematical structure of quantum theory. *Lett. Nuovo Cimento* (2) 2 (1971), 695-696. (R. Piziak) 50 #9193 81.06
- (with Ascoli, Renato) Equivalence and unitary equivalence of finite-dimension representations. (Italian summary) *Rend. Mat.* (6) 5 (1972), 633-639. (L. M. Chawla) 49 #338 15A63
- (with Ascoli, Renato) Equivalence and unitary equivalence of finite-dimension representations. II. *Rend. Mat.* (6) 6 (1973), 607-618 (1974). (L. M. Chawla) 50 #1308 15A21
- On the existence of congruences in general algebras. (Italian summary) *Riv. Mat. Univ. Parma* (3) 3 (1974), 343-348. (R. W. Quackenbush) 55 #238 08A05
- (with Ascoli, Renato; Garola, Claudio; Solombrino, Luigi) Vector spaces over fields with a conjugation and linear-antilinear commutants. (Italian summary) *Rend. Mat.* (6) 10 (1977), no. 1, 129-148. (Marvin Marcus) 57 #6055 15A27
- A set-theoretical approach to Lebesgue-Stieltjes measure. *Riv. Mat. Univ. Parma* (4) 3 (1977), 141-149 (1978). (Ivan Dobrakov) 58 #11309 28A10
- Tepper, David E.** (with McCarty, Carl P.) A note on the 2/3 conjecture for starlike functions. *Proc. Amer. Math. Soc.* 34 (1972), 417-421. (Y. Komatu) 46 #3764 30A32
- A theorem in conformal mapping. *Arch. Rational Mech. Anal.* 52 (1973), 193-199. (W. C. Royster) 49 #10865 30A30
- Free boundary problem. *SIAM J. Math. Anal.* 5 (1974), 841-846. (Gottfried Anger) 50 #13578 31B20
- (with Raymon, Louis) Star center points of starlike functions. *J. Austral. Math. Soc.* 19 (1975), no. 4, 505-510. (F. Holland) 52 #3503 30A32
- On a free boundary problem, the starlike case. *SIAM J. Math. Anal.* 6 (1975), 503-505. (Gottfried Anger) 51 #3479 31A25
- (with Neuirth, J. H.) A covering property for H^p functions. *Complex analysis (Proc. S.U.N.Y. Conf., Brookport, N.Y., 1976), pp. 95-97. Lecture Notes in Pure and Appl. Math., Vol. 36, Dekker, New York*, 1978. (D. Protas) 57 #16604 30A78
- Tepper, Myron** Combinations and sums of powers. *Fibonacci Quart.* 12 (1974), 196-199. (R. Finkelstein) 50 #4472 10A40
- Sums of combination products. *Fibonacci Quart.* 14 (1976), no. 3, 265-271. (Louis Comtet) 55 #7796 05A10
- Tepping, Benjamin J.** (with Hansen, Morris H.) Variance estimation for a specified multiple-frame survey design. *Contributions to survey sampling and applied statistics*, pp. 57-68. Academic Press, New York, 1978. (Mankal N. Murthy) 58 #18821 62D05
- See also **Proceedings: Session of the International Statistical Institute**, 49 #814 and **Mahalanobis, Prasanta Chandra**, 51 #2066
- Teptin, A. L.** The stability of multipoint boundary value problems for difference equation (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 6(145), 74-79. (Raïco Lazarov) 50 #5242 39A12
- A two-sided numerical method of solving the boundary value problem $y''' = f(t, y, y(a), y(b))$, $c(i=1, 2, 3)$. (Russian) *Differentsial'nye Uravnenija* 12 (1976), no. 9, 1705-1711 (1977). (E. S. Čičkin) 56 #17105 65L10
- Terada, Fumiaki** A principal ideal theorem in the genus field. *Tōhoku Math. J.* (2) 27 (1971), 697-718. (G. Whaples) 46 #5285 12A65
- Terada, Toshiaki** Analyticité relatives à chaque variable. Analogies du théorème de Hartogs. *J. Math. Kyoto Univ.* 12 (1972), 263-296. (Walter Hengartner) 46 #3830 32D05
- Problème de Riemann et fonctions automorphes provenant des fonctions hypergéométriques de plusieurs variables. *J. Math. Kyoto Univ.* 13 (1973), 557-578. (F. Gérard) 58 #1299 33A30 (10D20, 14D05)

- Toshiji** On the dimension of the remainder of Stone-Čech compactifications. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **12**, 218-221 (1974). (W. W. Comfort) **51** #6736 240
- Note on z -, C^* -, and C -embedding. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 365, 129-132 (1975). (Richard A. Alò) **52** #11827 54C45
- On countable discrete compactifications. *General Topology and Appl.* **7** (1977), no. 3, -327. (Author's summary) **58** #18354 54D35
- New topological extension properties. *Proc. Amer. Math. Soc.* **67** (1977), no. 1, 1-166. (R. Engelking) **56** #16571 54D30
- I. Minoru** (with Ojika, Takeo; Izumoto, Yoshiro; Kasue, Yasuo) A computational algorithm for nonlinear two-point boundary-value problems. *Mem. Osaka Kyoiku Univ. Natur. Sci. Appl. Sci.* **25** (1976), no. 1, 31-49. (R. S. Anderssen) **56** #17101 510
- Ido, Ryuiti** Construction of constant resistance networks using the properties of n -dimensional regions with antisymmetry. *IEEE Trans. Circuits and Systems* **CAS-25** (78), no. 2, 109-111. (B. R. Myers) **57** #5486 94A20
- Popov, A. K.** Fast response optimization of discrete transformers with respect to omata composition. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 27-31. (Editors) **57** #19189 94A30
- oto, Takeaki** (with Yamamoto, Sumiyasu; Futagami, Kahoru) Design of a balanced multiple-valued filing scheme of order two based on cyclically generated spread in finite projective geometry. *Information and Control* **21** (1972), 72-91. (G. Berman) **50** #11887 58A50
- ka, Katsumi** (with Ibaraki, Toshihide; Hasegawa, Toshiharu; Iwase, Jiro) The multiple-choice knapsack problem. (Japanese summary) *J. Operations Res. Soc. Japan* (1978), no. 1, 59-95. (Csaba Fabian) **58** #4315 90C10
- T.** (with Sugeno, Michio) Conditional fuzzy measures and their applications. *Fuzzy sets and their applications to cognitive and decision processes (Proc. U. S.-Japan Conf., Univ. Calif., Berkeley, Calif., 1974)*, pp. 151-170. Academic Press, New York, 1975. (I. Petunin) **53** #5835 28A99
- (with Sugeno, Michio) Analytical representation of fuzzy systems. *Fuzzy automata and decision processes*, pp. 177-189. North-Holland, New York, 1977. (A. K. Vjatkin) #26217 93A10
- Yoshio** See Sensitivity, adaptivity and optimality, **49** #8697
- Yutaka** (with Kera, Kazuo; Kitsunozaki, Naoki) A generalization of the closed path theorem. *Proc. Japan Acad.* **49** (1973), 812-815. (J. W. Baker) **51** #1331 530
- Yoshinobu** Bounded insurance contracts. *Rep. Statist. Appl. Res. Un. Japan. Sci. Expts.* **19** (1972), no. 3, 26-31. (W. F. Tyndall) **48** #10437 90A10
- Noisy duel with uncertain existence of the shot. *Internat. J. Game Theory* **5** (1976), 4, 239-249. (D. Marc Kilgour) **56** #4863 90D05
- wa, Jun** On the zero-dimensionality of some non-normal product spaces. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 167-174 (1972). (J. Dugundji) **46** #9948 54F45
- A note on M. Mandelker's realcompactification. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **12**, 89-91 (1973). (M. Mandelker) **49** #6163 54D60
- Spaces $N \cup R$ need not be strongly 0-dimensional. (Russian summary) *Bull. Acad. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 3, 279-281. (Gary Gruenhage) #9501 54F45
- ima, Motoaki** (with Goto, Eiichi) Genetic order and compactifying garbage collectors. *Information Processing Lett.* **7** (1978), no. 1, 27-32. (Stephen Soule) #2011 68A50
- irta, Timo** A note on predicting with seemingly unrelated regression equations. (German and French summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 5, 99-711. (Prem K. Goel) **52** #12234 62J05 (62P20)
- Effect of feedback on the distribution of the portmanteau test statistic. *Scand. J. Statist.* **4** (1977), no. 1, 20-24. (Tata Subba Rao) **58** #3263 62M99 (93E20)
- The invertibility of sums of discrete MA and ARMA processes. *Scand. J. Statist.* **4** (1977), no. 4, 165-170. (Raúl Pedro Mentz) **58** #18978 62M10
- lov, I. G.** Methods of reducing continuous nonlinear problems in the mechanics of formed solids to discrete problems. *Izv. Akad. Nauk SSSR Meh. Tverd. Tela* **1972**, 2-27 (Russian); translated as *Mechanics of Solids* **7** (1972), no. 5, 18-23 (1973). (S. J. Cckett) **48** #10289 73.65 (73.49)
- An orthotropic semi-infinite plate with rectilinear boundary under the action of concentrated forces and moments that are applied at an interior point of the plate. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 6(157), 147-154. (J. Kazumdar) **53** #9815 73.44
- n, A. P.** Integral constructive properties of periodic functions of bounded variation. (Russian) *Works of young scientists: mathematics and mechanics*, No. 2 (Russian), pp. 131-135. Izdat. Saratov. Univ., Saratov, 1969. (J. Musielak) **50** #10659 A08
- Mixed smoothness properties of periodic functions of several variables, and approximation by mixed trigonometric polynomials. (Russian) *Studies in differential equations and the theory of functions*, No. 3 (Russian), pp. 66-114. Izdat. Saratov. Univ., Saratov, 1971. (J. Musielak) **58** #1951 42A08
- ★Лекции по теории функций действительного переменного. (Russian) [Lectures on the theory of functions of a real variable] Izdat. Saratov. Univ., Saratov, 1972. 214 (Not reviewed) 26-01
- Functions of bounded q -integral p -variation, and embedding theorems. (Russian) *Sb. (N.S.)* **88(130)** (1972), 277-286. (J. Albrycht) **46** #2421 46E35 (26A45)
- Functions of bounded p -variation with modulus of p -continuity of prescribed order. (Russian) *Mat. Zametki* **12** (1972), 523-530. (J. Musielak) **47** #6963 26A45
- Multidimensional q -integral p -variation, and generalized Sobolev differentiability in L_q of functions from L_q . (Russian) *Sibirsk. Mat. Ž.* **13** (1972), 1358-1373, 1421. (J. Rál) **48** #11414 26A45 (46E30)
- Semigroups of operators, and mixed properties of elements of a Banach space. (Russian) *Mat. Zametki* **16** (1974), 107-115. (Ju. M. Vuvunikan) **51** #3963 47D05
- A bounded group of operators, and best approximation. (Russian) *Differencial'nye uravnenija i Vyčisl. Mat. Vyp.* **2** (1975), 3-28, 177. (W. W. Breckner) **55** #3650 A65 (47D10)
- A multiparameter semigroup of operators, mixed moduli, and approximation. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **39** (1975), no. 4, 937-960. (Ju. M. Vuvunikan) **52** #8761 41A65
- Terehin, M. T.** The ep -solutions of a first order differential equation. (Russian) A collection of articles on the qualitative theory of differential equations. *Rjazan. Gos. Ped. Inst. Učen. Zap.* **102** (1971), 90-108. (Author's introduction) **57** #16871 34E05
- The motion of limit cycles under a change in the parameter. (Russian) A collection of articles on the qualitative theory of differential equations. *Rjazan. Gos. Ped. Inst. Učen. Zap.* **102** (1971), 109-116. (Editors) **57** #16805 34C05
- Controllable limit cycles. (Russian) A collection of articles on the qualitative theory of differential equations. *Rjazan. Gos. Ped. Inst. Učen. Zap.* **102** (1971), 117-122. (Editors) **57** #16806 34C05
- Integral transforms, and periodic solutions. (Russian) A collection of articles on the qualitative theory of differential equations. *Rjazan. Gos. Ped. Inst. Učen. Zap.* **102** (1971), 123-127. (Editors) **57** #16833 34C25
- On a definition of the concept of solution for a system of differential equations with discontinuous right-hand side. (Russian) *Differencial'nye Uravnenija (Ryazan) No. 5* (1975), 205-217. (See RŽMat **1976** #11 B242) 34A99
- Upper and lower solutions for a differential equation with a discontinuous right-hand side. (Russian) *Differencial'nye Uravnenija (Ryazan) No. 5* (1975), 218-228. (See RŽMat **1976** #11 B243) 34A99
- Some methods for proving the existence of periodic solutions for systems of ordinary differential equations. (Russian) *Differencial'nye Uravnenija (Rjazan) Vyp.* **9** (1977), 135-151. (C. Corduneanu) **57** #6647 34C25
- See also Collection: Qualitative theory of differential equations, **52** #11189
- Terehina, A. Ju.** See Optimization, Operations research, Bionics, **48** #1846
- Terehov, N. E.** (with Červonyi, A. A.; Čobanjan, V. A.; Švarc, V. A.; Frolov, A. I.; Kozlovcev, A. P.) ★Методы определения и контроля надежности больших систем. (Russian) [Methods for the determination and control of the reliability of large-scale systems] Izdat. "Energiya", Moscow, 1976. 264 pp. (Publisher's description) **55** #7475 93A15 (90B15)
- Terehov, V. A.** (with Antonov, V. N.; Vavilov, A. A.; Jakovlev, V. B.) Sensitivity and invariance of nonlinear sampled-data automatic systems. (Russian) *Voprosy Teor. Sistem Avtomat. Upravlenija Vyp.* **3** (1977), 3-13, 112. (Andrzej Gościński) **58** #9643 93D99 (93B35)
- Terentov, V. I.** The accuracy of algorithms for the computation of estimates for tables that are generated by monotone Boolean functions. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 1620-1625, 1640. (J. Demetronics) **50** #1575 68A45
- The accuracy of algorithms for calculating estimates on a certain class of tables. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 3, 27-31. (V. V. Ivanov) **52** #16186 68A45
- Terent'ev, A. G.** (with Rahmatullina, L. F.) On the question of the regularization of linear boundary value problems. (Russian) *Differencial'nye Uravnenija* **9** (1973), 868-873, 976. (C. Corduneanu) **47** #8955 34B05
- (with Šišova, T. Ja.) Certain methods of investigating equations with deviating argument. (Russian) *Differencial'nye Uravnenija* **9** (1973), 1275-1280, 1357. (Leo F. Boron) **47** #7176 34K05
- Boundary value problems of the linear theory of jets. (Russian) *Proceedings of the Symposium on Continuum Mechanics and Related Problems of Analysis (Tbilisi, 1971)*, Vol. 2 (Russian), pp. 255-268. Izdat. "Mecniereba", Tbilisi, 1974. **56** #14035 76.30
- See also Questions of applied mathematics and mechanics, **57** #9384; Questions of applied mathematics and mechanics, **58** #25194 and Questions of applied mathematics and mechanics, **58** #26655
- Terent'ev, E. D.** On integrals of equations of unstable nearly self-similar flows. *Prikl. Mat. Meh.* **39** (1975), no. 6, 1060-1067 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 6, 1017-1023 (1976). (Author's summary) **57** #8406 76.35
- (with Šmyglevskii, Ju. D.) A complete system of equations in divergence form for the dynamics of an ideal gas. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 6, 1535-1544, 1626. (S. K. Aslanov) **56** #10389 76.35
- (with Šmyglevskii, Ju. D.) A complete system of equations in divergence form for the electromagnetic dynamics of a perfect gas. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 3, 725-737, 821. (S. K. Aslanov) **56** #10390 76.35
- Hypersonic axisymmetric flow with constant angular momentum. *Prikl. Mat. Meh.* **41** (1977), no. 1, 65-71 (Russian); translated as *J. Appl. Math. Mech.* **41** (1977), no. 1, 58-64. (M. Honda) **58** #3944 76.35
- Terent'ev, I. A.** (with Leble, S. B.) A model of elementary particle theory in a space with a non-Euclidean metric. (Russian) *Kaliningrad. Gos. Univ. Trudy Kaf. Teoret. i Eksper. Fiz. No. 3* (1970), 69-78. (Miklós Huszár) **52** #16401 81.53
- (with Leble, S. B.) Second order equations of motion for particles with arbitrary spin in a certain model of elementary particle theory. (Russian) *Kaliningrad. Gos. Univ. Trudy Kaf. Teoret. i Eksper. Fiz. No. 3* (1970), 79-87. (Miklós Huszár) **52** #16402 81.53
- (with Leble, S. B.) A model of the theory of elementary particles in a space with curvature. (Russian. English summary) *Teoret. Mat. Fiz.* **16** (1973), 291-302. (Authors' summary) **57** #8727 81.53
- (with Leble, S. B.) A theory of elementary particles in a six-dimensional space with a fixed metric. (Russian. English summary) *Vestnik Leningrad. Univ. No. 10 Fiz. Him. Vyp.* **2** (1974), 7-13, 154. (Authors' summary) **56** #17579 81.35
- Terent'eva, E. I.** Invariant framing of an $(n-2)$ -dimensional regular hyperband Γ_{n-2} of the projective space P_n . (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogobraz. Figur. Vyp.* **3** (1973), 133-142. (Vladislav Goldberg) **58** #7432 53A20
- Terent'eva, V. N.** Convergence of the finite element method for the problem of the bending of a plate when a curvilinear net is used. (Russian) *Metody Vyčisl.* **9** (1974), 60-67, 182. (A. D. Ljaško) **53** #2121 73.65
- (with Korneev, V. G.) The connection between difference approximations of derivatives of order $2k$ and quadratures. (Russian. English summary) *Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Vyp.* **4** (1974), 42-50, 171. (R. Kodnár) **51** #11976 65L10
- A certain way of constructing difference schemes for a fourth order elliptic equation. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. Vyp.* **2** (1975), 63-69, 171. (T. Styš) **52** #4664 65N10

- (with Korneev, V. G.) The construction of splitting difference schemes for higher order elliptic equations. (Russian) *Čisl. Metody Meh. Splošn. Sredy* 7 (1976), no. 5, 83-106. (C. Kalik) 57 #8058 65N05
- Terenzi, Paolo** Integrazione delle funzioni quasi periodiche di due variabili reali, a valori in uno spazio di Banach. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* 107 (1973), 3-33. (S. Foglio) 48 #11903 42A84
- Sul problema della base negli spazi di Banach. (English summary) *Boll. Un. Mat. Ital.* (4) 11 (1975), no. 2, 224-229. (Author's summary) 56 #12852 46B15
- Ordered sequences in Banach spaces. (Italian summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* 109 (1975), no. 2, 249-261. (Russell G. Bilyeu) 54 #8246 46B15
- Markushevich bases and basic sequences in Banach spaces. (Italian summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* 110 (1976), no. 1, 24-38. (V. Zizler) 58 #2182 46B15
- Tereshchenko, M. I.** (with Latyševa, K. Ja.) ★Лекции по аналитической теории дифференциальных уравнений и их приложения (метод Фробениуса-Латышевой). (Russian) [Lectures on the analytic theory of differential equations and their applications (Frobenius-Latyševa method)] *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. 393 pp. (RŽMat 1971 #2 B256 K) 58 #22725 34A25
- (with Sikors'kii, Ju. G.) A certain method of finding particular solutions of nonhomogeneous Bessel and Legendre equations. (Russian) *Mathematical physics*, No. 9 (Russian), pp. 177-181. *Naukova Dumka, Kiev*, 1971. (B. A. Bondarenko) 45 #3802 33A45
- (with Sikors'kii, Ju. G.) The construction of particular solutions of linear inhomogeneous differential equations with vicinity of an irregular singular point. (Russian) *Ukrain. Mat. Ž.* 23 (1971), 807-812. (M. Bertolino) 45 #3845 34C05
- (with Sikors'kii, Ju. G.) Nonhomogeneous linear differential equations in the regular case. (Russian) *Mathematical physics*, No. 11 (Russian), pp. 133-137. *Naukova Dumka, Kiev*, 1972. (J. W. Macki) 46 #7613 34A25 (34E20)
- (with Tasmambetov, Ž. N.) The rank of a system of second order partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1972, no. 5, 72-78, 95. (Genowefa Majcher) 50 #10501 35A20
- (with Rizin, V. I.) Asymptotic integration of nonautonomous systems of differential equations. (Russian) *Methods of approximate solution of differential and integral equations* (Russian), pp. 243-250. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) 58 #1436 34E05
- (with Sikors'kii, Ju. G.) Conditions for the existence of closed solutions to a linear inhomogeneous differential equation with polynomial coefficients. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 558-563, 576. (J. Rausen) 52 #14424 34A05
- (with Tasmambetov, Ž. N.) Some remarks on the normal solutions of systems of second order partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1974, no. 3, 65-70, 93. (A. Haimovici) 50 #10502 35A20
- (with Tasmambetov, Ž. N.) Normally regular solutions of partial differential systems. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations* (Russian), pp. 157-163. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1975. (Editors) 53 #13814 35G05 (35C99)
- Normal and normal-regular solutions of systems of partial differential equations. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 19* (1977), 62-66, 151. (Author's summary) 58 #29051 35A30
- Tereshchenko, N. V.** (with Ljance, È. V.) Problems of systems theory. (Russian) *Mathematical economics models and methods in industrial planning and control* (Russian), pp. 66-69. *Akad. Nauk Ukrain. SSR Inst. Ekonom., Kiev*, 1975. (Editors) 58 #20650 93A15
- Tereshchenko, S. D.** (with Bojarčuk, O. K.; Didenko, V. I.; Le Trong Vinh) Homogeneous difference schemes for the solution of rain water infiltration problems. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) Vyp.* 28 (1976), 140-146, 156. (Editors) 56 #4413 76.65
- (with Bojarčuk, O. K.; Le Trong Vinh) Homogeneous difference schemes for the solution of an ordinary differential equation with discontinuous coefficients. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) Vyp.* 31 (1977), 67-72, 157. (Authors' summary) 58 #8289 65L10
- (with Bojarčuk, O. K.; Le Trong Vinh) The accuracy of difference schemes for a nonlinear diffusion equation with irregular conjugation conditions. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) Vyp.* 33 (1977), 18-23, 158. (From the introduction) 58 #8337 65N15
- Tereshchenko, V. Ja.** Generalization of the Trefftz method to spatial problems of elasticity theory, and minimization of Trefftz functionals by the variational difference method. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 11 (174), 71-79. (R. Kodnár) 56 #4363 73.49
- Generalization of the Trefftz method for three-dimensional problems of elasticity theory. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 4, 996-1005, 1086. (V. Gheorghită) 54 #11927 73.49
- Terny, Jean** (with Roy, Bernard; Benayoun, Raphaël) From S.E.P. procedure to the mixed OPHÉLIE program. *Integer and nonlinear programming*, pp. 419-436. North-Holland, Amsterdam, 1970. (Editors) 55 #9968 90C10 (90C30)
- (with Benayoun, Raphaël) Mathematical programming with multi-objective functions: a solution by P.O.P. (Progressive Orientation Procedure). (French, German, Italian and Spanish summaries) *Meira* 9 (1970), 279-299, 317, 325, 329, 333. (W. F. Tyndall) 50 #1710 90C05
- Programmation linéaire mixte: conditions de validité dans les méthodes arborescentes. *Rev. Française Informat. Recherche Opérationnelle* 5 (1971), no. V-1, 11-21. (Author's summary) 52 #4994 90C05
- Une méthode de partitionnement pour la résolution des programmes linéaires. (English, German, Italian and Spanish summaries) *Meira* 11 (1972), 153-167, 193. (Author's summary) 55 #9951 90C05
- Ter-Grigor'janc, G. K.** On the occurrence of doubly periodic convection in a horizontal layer. *Prikl. Mat. Meh.* 37 (1973), 177-184 (Russian); translated as *J. Appl. Math. Mech.* 37 (1973), 166-173. (R. Ballabh) 50 #3756 76.35
- A case of branching of stationary states of convection in a layer. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* 1975, no. 4, 39-43, 117. (N. D. Kopačevskii) 58 #19752 76.35
- Ter Haar, D.** See **ter Haar, D.**
- Ter Horst, M. Frans** See **ter Horst, M. Frans**
- Te Riele, H. J. J.** See **te Riele, H. J. J.**
- Terina, G. A.** A certain pair of commutative affinor structures. (Russian) *Proceedings of the Seminar of the Department of Geometry, No. VI* (Russian), pp. 77-88. *Izdat. Kazan. Univ., Kazan*, 1971. (J. Vanžura) 51 #6649 53C15
- Ter-Israelijan, L. A.** A meromorphic function of zero order with a non-asymptotic de value. (Russian) *Mat. Zametki* 13 (1973), 195-206. (I. N. Baker) 47 #7034 30C15
- Uniform approximation by rational functions. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 9 (1974), no. 3, 236-241, 250. (Sarason) 51 #1216 41A20 (30A82)
- Best rational approximation on osculating sets. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* 12 (1977), no. 2, 157-167. (Anthony G. O'Farrell) 56 #629 30A82
- Terjaev, E. D.** (with Mihaïlov, F. A.; Bulekov, V. P.; Salikov, L. M.; Dikanova, L. M.) ★Динамика непрерывных линейных систем с детерминированными и случайными параметрами. (Russian) [Dynamics of continuous linear systems with deterministic random parameters] *Izdat. "Nauka", Moscow*, 1971. 561 pp. (errata insert) (K. Mag) 47 #4681 93C05
- (with Petrov, B. N.; Šamrikov, B. M.) Conditions for the parametric identification of control objects in closed automatic systems. (Russian) *Dokl. Akad. Nauk SSSR* (1977), no. 6, 1281-1284. (Not reviewed) 93B30
- (with Petrov, B. N.; Šamrikov, B. M.) Conditions for parametric identification of controllable objects in open-loop and closed-loop automatic systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1977, no. 2, 160-175, 223 (Russian); translated as *Engrg. Cybernet.* 15 (1977), no. 2, 137-152 (1978). (Agostino Villa) 58 #20677 93B30 (93E10)
- Terjanian, Guy** Propriété C_1 revue et généralisée. *Séminaire Delange-Pisot-Poitou, année (1970/71), Théorie des nombres, Exp. No. 23*, 3 pp. Secrétariat Mathématique, Paris, 1972. (Editors) 58 #5593 12A55
- Dimension arithmétique d'un corps. *J. Algebra* 22 (1972), 517-545. (M. J. Greenberg) 47 #6660 12E05 (10C99)
- L'équation $x^n + y^n = z^n$ pour $n=5$ et $n=14$. *Séminaire de Théorie des Nombres* 1973-1974 (Univ. Bordeaux I, Talence), Exp. No. 5, 6 pp. Lab. Théorie des Nombres, Centre Nat. Recherche Sci., Talence, 1974. (Ezra Brown) 53 #2828 10B15
- L'équation $x^{14} + y^{14} = z^{14}$ en nombres entiers. *Bull. Sci. Math. (2)* 98 (1974), no. 91-95. (R. Steiner) 55 #259 10B15
- Sur la dimension diophantienne des corps p -adiques. *Acta Arith.* 34 (1977/78), no. 2, 127-130. (R. Jacobowitz) 57 #12389 10C20
- Sur l'équation $x^{2p} + y^{2p} = z^{2p}$. (English summary) *C. R. Acad. Sci. Paris Sér. Math.* 285 (1977), no. 16, A973-A975. (Author's summary) 58 #16498 10B15
- Terjeki, J.** On the existence of the solutions of functional-differential equations. *Differential equations* (Colloq., Keszthely, 1974), pp. 373-377. *Colloq. Math. Soc. J. Bolyai, Vol. 15*, North-Holland, Amsterdam, 1977. (Hans-Otto Walther) 57 #1303 34K05
- Terjung, R. C.** (with Lasdon, Leon S.) An efficient algorithm for multi-item scheduling. *Operations Res.* 19 (1971), 946-969. (R. B. Potts) 46 #1314 90B35
- Terkelsen, Frode** Some minimax theorems. *Math. Scand.* 31 (1972), 405-413 (1973) (Dubuc) 48 #4226 26A51
- Boundedness properties for semigroups of operators. *Proc. Amer. Math. Soc.* 45 (1973), 107-111. (G. Da Prato) 48 #4829 47D05
- A short proof of Fan's fixed point theorem. *Proc. Amer. Math. Soc.* 42 (1974), 643-644. (Ky Fan) 48 #12179 47H10
- The fundamental theorem of algebra. *Amer. Math. Monthly* 83 (1976), no. 8, (Thomas McCoy) 54 #2931 30A06 (12D05)
- Ter-Krikorov, A. M.** Certain linear problems of optimal control theory with phase constraints. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 15 (1975), 55-66, 275. (A. B. Pervinskii) 51 #8923 49B30
- Convex programming in a space conjugate to a Banach space, and convex optimal control problems with phase constraints. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 2, 351-358, 540. (Author's summary) 58 #12634 49D45
- The discrete Pontrjagin maximum principle for linear and convex problems on an infinite time interval. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 3, 597-618. (Author's summary) 57 #17462 49B99 (90Cxx)
- ★Оптимальное управление в математической экономике. (Russian) [Optimal control and mathematical economics] [Monographs in Optimization and Operational Research] *Оптимизация и Исследование Операций. Izdat. "Nauka", Moscow*, 1976. 216 pp. (Editors) 57 #2460 90-01
- Frankowska-Terlecka, Małgorzata** See **Frankowska-Terlecka, Małgorzata**
- Terleckii, A. Ja.** Exact solutions of nonlinear field equations in the form of circularly polarized waves. (Russian) *Dokl. Akad. Nauk SSSR* 226 (1976), no. 2, 292-294. (Kazimierz Sobczyk) 54 #11985 78.35
- Terleckii, Ja. P.** Certain general theorems on nonequilibrium statistical mechanics. (Russian. English summary) *Trudy Univ. Družby Narod.* 44 (1969), no. 4, 3-8. (Pokrovskii (RŽFiz 1970 #4 B150)) 45 #8193 82.00
- ★Statistical physics. Translated from the Russian by Nanny Fröman. North-Holland Publishing Co., Amsterdam-London; American Elsevier, New York, 1970. xv + 279 pp. ISBN 0-7204-0221-2 (Editors) 58 #32718 82.60
- (with Gucunae, C. I.; Kazačkov, V. D.) Certain questions on electrodynamics of arbitrary space-time coordinate systems. (Russian) *Izv. Vysš. Učebn. Zaved. Fiz.* 1976, no. 12, 29-34. (Authors' summary) 58 #25745 83.35
- (with Gucunae, C. I.; Kazačkov, V. D.) Die Anwendung relativistisch bewerteter Bezugssysteme in der Elektrodynamik. (English summary) *Ann. Physik (7)* 33 (1976), no. 1, 55-69. (Edward N. Glass) 54 #2094 83.53
- (with Gucunae, C. I.; Ermolaev, Ju. G.) A connection between the singularity of the metric of a noninertial reference frame and radiation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1976, no. 5, 151-154. (R. Salia) 57 #2424 85.53
- (with Gucunae, C. I.; Ermolaev, Ju. G.) Generalization of the Liénard-Wiechert formulas to the case of a noninertial reference frame. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1976, no. 5, 154-155. (R. Salia) 57 #2425 85.53

- (with Kuryškin, V. V.) Perspectives in the development of quantum mechanics with negative quantum distribution function. (Russian) *Trudy Univ. Družby Narod.* **80** (1976), no. 9 *Problemy Statist. Fiz. i Teor. Polja*, 70-96. (Authors' summary) **58** #25565 1.46
- String-like solutions of the nonlinear Klein-Gordon equation. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 4, 828-829. (Editors) **57** #4886 81.35
- Škil', V. V. Asymptotic solution of a system of linear differential equations with slowly varying coefficients in the complex domain. (Ukrainian. English and Russian summaries) *Dopovidy Akad. Nauk Ukrain. RSR Ser. A* **1972**, 900-903, 958. (V. L. Ukarov) **47** #7166 34E05
- (with Škil', M. I.) The boundary value problem for a system of ordinary differential equations with a complex parameter. (Russian) *Differentsial'nye Uravneniya* **9** (1973), 668-783. (A. Elbert) **48** #8933 34B05
- The application of asymptotic methods to the solution of eigenvalue problems. (Ukrainian. English and Russian summaries) *Dopovidy Akad. Nauk Ukrain. RSR Ser. A* **1973**, 513-516, 573. (M. Bertolino) **48** #2482 34B25
- Asymptotic representation of the eigenvalues of a boundary value problem with continuous coefficients. (Ukrainian. English and Russian summaries) *Dopovidy Akad. Nauk Ukrain. RSR Ser. A* **1974**, 412-415, 477. (Leo F. Boron) **50** #673 34B05
- (with Škil', M. I.) The asymptotic solution of a boundary value problem for a system of ordinary differential equations. (Ukrainian. English and Russian summaries) *Trudy Kuv. Univ. Ser. Mat. Meh. No. 17* (1975), 38-49, 177. (V. A. Plotnikov) **12994** 34B25 (34E05)
- Škil', Ya. P. See Terleckii, Ja. P.
- Świątkowska-Osłowska, Barbara (with Niewieczarz, Dorota) A note on alternative multiprime rings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 265-268. (Armin Thedy) **47** #1901 17D05
- (with Krempa, Jan) Theory of radicals in self-dual categories. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 367-373. (R. J. Legendt) **49** #10756 18E40 (16A21)
- Category with a self-dual set of axioms. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 12, 1207-1214. (Syed A. Huq) **58** #5833 18B99
- Štarič, Z. G. (with Ahpatelov, D. M.; Šalimov, G. E.) Stress state in semi-infinite regions subject to volume and surface forces. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Meh.* **30** (1977), no. 4, 34-43. (Authors' summary) **58** #14183 73A45
- Štarič, D. (with Pelecu, Chr.; Manafi, N.; Cononovici, S.) The general synthesis of plane mechanisms by the method of successive approximations assisted by a computer. (Romanian) *Stud. Cerc. Mec. Apl.* **35** (1976), no. 4, 469-484. (Authors' summary) **4495** 93B15 (93C10)
- Štarič, D. (with Ricca, Giuseppe) Una procedura interamente automatica per la generazione di tutti i blocks designs incompleti bilanciati ciclici di dati parametri, con v e b multiplo intero di v . (English summary) *Atti Accad. Peloritana Pericolanti Cl. Fis. Mat. Natur.* **54** (1974), 235-249. (Giuseppe Pellegrino) **53** #7810 05B05
- Štarič, D. (with Fradkin, E. S.; Esposito, U.) Functional techniques in physics. *Nuovo Cimento* (1) **2** (1970), 498-560. (L. S. Schulman) **46** #10327 81.46
- (with De Luca, Aldo) A definition of a nonprobabilistic entropy in the setting of fuzzy sets theory. *Information and Control* **20** (1972), 301-312. (A. Paz) **48** #5725 A15
- (with De Luca, Aldo) Algebraic properties of fuzzy sets. *J. Math. Anal. Appl.* **40** (1972), 373-386. (Constantin Milici) **48** #5930 06A20 (93A99)
- (with Restivo, Antonio) An algorithm for deciding whether a strictly locally testable monoid is free. *Comptes Rendus des Journées Mathématiques de la Société Mathématique de France (Univ. Sci. Tech. Languedoc, Montpellier, 1974)*, pp. 299-303. *Revue Math. Montpellier, No. 3, U.E.R. de Math., Univ. Sci. Tech. Languedoc, Montpellier, 1974.* (Hale F. Trotter) **52** #16131 68A25 (20M35)
- (with De Luca, Aldo) Entropy of L-fuzzy sets. *Information and Control* **24** (1974), 1-73. (A. Paz) **48** #13471 94A15
- Štarič, G. See Vygodskii, M. Ja., **49** #10485; Gnedenko, B. V.; et al., **50** #5972
- Štarič, G. See Pontrjagin, L. S., **53** #8530
- Štarič, H. G. See ter Morsche, H. G.
- Chuu Lian (with Palais, Richard S.) Natural bundles have finite order. *Topology* **19** (1977), no. 3, 271-277. (D. B. A. Epstein) **57** #7639 58A20
- Johannes Algorithmen für das klassische Maschinenbelegungsproblem. (English and Russian summaries) *Math. Operationsforsch. Statist.* **3** (1972), no. 3, 195-201. (A. Höpfert) **49** #6910 90B35
- (with Ullrich, Matthias) Dynamische Optimierung bei Reihenfolgeproblemen. *Wiss. Z. Techn. Univ. Dresden* **22** (1973), 495-498. (K. Zimmermann) **48** #7953 90B35
- (with Jerke, Wolfgang; Schiebel, Wolfgang; Unger, Gerhard) Ein Beitrag zur Behandlung der Entartung beim Simplexverfahren. (English summary) *Beiträge Numer. Math.* **4** (1975), 105-114. (Csaba Fabian) **56** #14681 90C10
- (with Gierth, Gertraude; Wagner, Helga) Die Bestimmung des kürzesten Weges mittels dynamischer Optimierung. *Wiss. Z. Techn. Univ. Dresden* **24** (1975), no. 6, 1375-1380. (Rainer Burkard) **54** #14790 90C35
- Kov-Ternovskii, I. F. See Kraskov-Ternovskii, I. F.
- Terol, Procopio See Zoroa Terol, Procopio
- Terol, Eric Le rang d'une matrice carrée se promène pas à pas avec la diagonale. *Linear Algebra and Appl.* **8** (1974), no. 6, 539-545. (W. Ledermann) **56** #5589 5A03 (62H25)
- Terol, Frank The Bourbaki integral as maximal integral. *Colloq. Math.* **23** (1971), 101-108. (Chr. Y. Pauc) **46** #1996 28A30
- Zur Existenz maximaler translationsgleicher Integrale. *Theory of sets and topology in honour of Felix Hausdorff, 1868-1942*, pp. 495-502. *VEB Deutscher Verlag Wissenschaften, Berlin*, 1972. (J. C. Oxtoby) **49** #10861 28A70
- (with Flachsmeier, Jürgen) On the space of bounded vector valued maps. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* (1974), 211-217. (Harold H. McFaden) **51** #11098 46E40
- (with Flachsmeier, Jürgen) Über die gegenseitigen Beziehungen der Banachschen Abbildungssätze. *Wiss. Z. Ernst-Moritz-Arndt-Univ. Greifswald Math.-Natur. Reihe* **23** (1974), 19-28. (V. Pták) **51** #6349 46A30
- (with Flachsmeier, Jürgen) A certain aspect of compactification theory and measure theory in summability problems. (Russian) *Dokl. Akad. Nauk SSSR* **227** (1976), no. 2, 302-305. (Josef Wichmann) **53** #3545 40J05
- (with Flachsmeier, Jürgen) On summation on locally compact spaces. *Math. Nachr.* **75** (1976), 255-270. (Jan Pachl) **54** #10923 40H05 (28A32)
- (with Flachsmeier, Jürgen) On convergence in the space of summations. *General topology and its relations to modern analysis and algebra, IV (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B, pp. 119-124. Soc. Czechoslovak Mathematicians and Physicists, Prague, 1977.* (A. Császár) **58** #7530 54A20 (28A25)
- (with Flachsmeier, Jürgen) Some applications of extension theory for topological spaces and of measure theory. (Russian) Translated from the German by Ju. M. Smirnov. *Uspehi Mat. Nauk* **32** (1977), no. 5(197), 125-162, 239. (M. P. Eršov) **57** #17595 54D35 (28A10, 46N05)
- Terpugov, A. F. Optimal forms of impulses of a radio location system. (Russian) *Trudy Sibirsk. Fiz.-Tehn. Inst. No. 47* (1965), 163-170. (S. Gerasimov (RZMat 1966 #5 V142)) **45** #4885 94A05
- (with Vodolazskii, V. I.) Optimal antennae of monoimpulse radio location systems. (Russian) *Trudy Sibirsk. Fiz.-Tehn. Inst. No. 47* (1965), 171-206. **45** #4886 94A05
- (with Dolinin, N. A.) Certain suboptimal devices for the detection of fluctuating Poisson signals. *Problemy Peredači Informacii* **5** (1969), no. 1, 56-70. (Russian); translated as *Problems of Information Transmission* **5** (1969), no. 1, 46-58. (S. Orlovskii (RZMat 1969 #8 V115)) **46** #5023 94A05
- (with Livšic, K. I.) Identification of linear systems by biorthogonal systems of functions. *Automat. i Telemekh.* **1974**, no. 9, 174-177. (Russian. English summary); translated as *Automat. Remote Control* **35** (1974), no. 9, part 2, 1528-1531 (1975). (D. H. Chyng) **52** #7615 93B30
- (with Livšic, K. I.) Choice of signals for least squares identification of linear systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 5, 205-210. (Russian); translated as *Engrg. Cybernetics* **12** (1974), no. 5, 163-169. (Stuart Schwartz) **52** #12926 93E10
- (with Nazarov, A. A.) A servicing discipline with choice from a large queue. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 2, 103-105. (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 2, 77-79. (P. R. Milch) **53** #6791 60K25
- (with Nazarov, A. A.) Optimal dynamical priorities in the case of indirect observations. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 20* (1975), 76-78. (See RZMat 1976 #7 V82) 60K25
- (with Nazarov, A. A.) Adaptation in controlled queueing systems. *Automat. i Telemekh.* **1976**, no. 7, 76-79. (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 7, part 1, 1039-1042. (Andor Dobó) **55** #7512 93C40 (60K25)
- Terra, A. I. Questions on the axiomatization of n -dimensional order. (Russian) *Geometry collection, No. 15. Trudy Tomsk. Gos. Univ.* **258** (1975), 205-232, 239-240. (J. Karásek) **54** #10090 06A10
- Terracher, Pierre H. Fonctions à variation bornées, familles sommables, et applications à la nucléarité. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 17, A987-A990. (E. Dubinsky) **55** #6174 46A99 (26A45)
- Fonctions à variation bornée et représentation d'opérateurs. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 3, A103-A105. (E. Dubinsky) **54** #8289 46G99
- Terragni, F. (with Guidorzi, Roberto) Zeros determination in large-scale multivariable systems. *Internat. J. Control* (1) **17** (1973), 747-752. (J. Casti) **48** #3538 93A15
- Terras, Audrey A. Bessel series expansions of the Epstein zeta function and the functional equation. *Trans. Amer. Math. Soc.* **183** (1973), 477-486. (K. Thanigasalam) **48** #2091 10H10
- Fourier coefficients of Eisenstein series of one complex variable for the special linear group. *Trans. Amer. Math. Soc.* **205** (1975), 97-114. (Jürgen Elstrodt) **51** #5502 10D20 (10H10)
- Some formulas for the Riemann zeta function at odd integer argument resulting from Fourier expansions of the Epstein zeta function. *Acta Arith.* **29** (1976), no. 2, 181-189. (Bruce C. Berndt) **53** #299 10H05
- The Fourier expansion of Epstein's zeta function for totally real algebraic number fields and some consequences for Dedekind's zeta function. *Acta Arith.* **30** (1976), no. 2, 187-197. (E. Grosswald) **54** #5192 12A70 (10H10, 12A95)
- A relation between $\zeta_K(s)$ and $\zeta_K(s-1)$ for any algebraic number field K . *Algebraic number fields: L-functions and Galois properties (Proc. Sympos., Univ. Durham, Durham, 1975)*, pp. 475-483. *Academic Press, London*, 1977. (E. Grosswald) **57** #278 12A70 (10H10)
- The Fourier expansion of Epstein's zeta function over an algebraic number field and its consequences for algebraic number theory. *Acta Arith.* **32** (1977), no. 1, 37-53. (Larry J. Goldstein) **55** #8004 12A70 (10H10, 10D05)
- Terras, Ribo Almost automorphic functions on topological groups. *Indiana Univ. Math. J.* **21** (1971/72), 759-773. (W. Maak) **45** #5665 43A60 (46E99)
- On almost periodic and almost automorphic differences of functions. *Duke Math. J.* **40** (1973), 81-91. (W. Maak) **47** #719 43A60
- A stopping time problem on the positive integers. *Acta Arith.* **30** (1976), no. 3, 241-252. (Editors) **58** #27879 10K20
- Terray, John (with Lancaster, Peter) A boundary value problem from the study of heat transfer. *Numerische Behandlung von Differentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1974)*, pp. 303-308. *Internat. Schriftenreihe Numer. Math., Band 27, Birkhäuser, Basel*, 1975. (John Crank) **53** #4757 80.47 (65N25)
- (with Lancaster, Peter) On the numerical calculation of eigenvalues and eigenvectors of operator polynomials. *J. Math. Anal. Appl.* **60** (1977), no. 2, 370-378. (Z. V. Kovarik) **58** #24928 65J05 (47A70)
- Terrell, P. M. (with Rayner, P. J. W.) Improved algorithm for low-order digital convolution. *Electron. Lett.* **9** (1973), 618-619. (Authors' summary) **56** #15129 94A05
- Terrell, R. D. (with Hannan, Edward James) Time series regression with linear constraints. *Internat. Econom. Rev.* **13** (1972), 189-200. (E. Parzen) **48** #10014 62M10
- (with Hannan, Edward James) Multiple equation systems with stationary errors.

- Econometrica* **41** (1973), 299-320. (P. C. B. Phillips) **53** #4420 (E 55 #13689) 62M10
- (with Hannan, Edward James) Erratum: "Multiple equation systems with stationary errors" (*Econometrica* **41** (1973), 299-320). *Econometrica* **41** (1973), 996. (Editors) **55** #13689 62M20 (90A20)
- (with Nicholls, D. F.; Pagan, Adrian) The estimation and use of models with moving average disturbance terms: a survey. *Internat. Econom. Rev.* **16** (1975), 113-134. (G. Tintner) **53** #1898 62P20
- Terrell, Thomas R.** A ratio ergodic theorem for operator semigroups. (Italian summary) *Boll. Un. Mat. Ital.* (4) **6** (1972), 175-180. (M. A. Kocoglu) **48** #903 47A35
- The local ergodic theorem and semigroups of nonpositive operators. *J. Functional Analysis* **10** (1972), 424-429. (U. Krengel) **50** #1026 47A35 (47D05)
- Terrenoire, Michel** Méthodes de programmation linéaire appliquées à un problème discret d'approximation au sens de Tchebycheff. *Actes du Cinquième Congrès de l'AFIRO* (Lille, 1966), pp. 117-120. *Assoc. Française Informat. Recherches Opérationnelles [AFIRO], Paris, 1966.* (Editors) **46** #3070 90C05
- (with Chenais, Denise) Détermination de la réalisation d'un processus aléatoire à l'aide de pseudoquestionnaires. *Combinatorial theory and its applications, I* (Proc. Colloq., Balatonfüred, 1969), pp. 217-237. North-Holland, Amsterdam, 1970. (C. F. Picard) **49** #12167 94A15
- (with Chenais, Denise) Pseudoquestionnaires. *Rev. Française Informat. Recherche Opérationnelle* **5** (1971), Sér. R-2, 43-54. (S. Guiaşu) **47** #3102 94A15
- (with Chenais, Denise) Application des pseudoquestionnaires à un problème de codage. *Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes* (Technical Univ., Prague, 1971; dedicated to the memory of Antonín Špaček), pp. 137-142. *Academia, Prague, 1973.* (I. M. Chakravarti) **55** #14401 94A10
- (with Tounissoux, Daniel) Convergence de pseudo-questionnaires particuliers. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 1135-1137. (S. Guiaşu) **49** #8741 94A15
- Convergence d'heuristiques pour des processus d'interrogation. *Symposia Mathematica, Vol. XV (Convegno di Informatica Teorica, INDAM, Rome, 1973), pp. 11-20.* Academic Press, London, 1975. (S. Guiaşu) **52** #7721 94A15
- Étude de diverses heuristiques pour des processus d'interrogation. With discussion. *Computer oriented learning processes* (Proc. NATO Advanced Study Inst., Bonas, 1974), pp. 279-286. *NATO Advanced Study Ser. E: Appl. Sci., No. 14.* Noordhoff, Leiden, 1976. (Eberhard Lüdde) **57** #11934 94A15 (68A45)
- (with Tounissoux, D.) Inequalities using Bhattacharyya coefficient and application to decision process. *Proceedings of the Third International Joint Conference on Pattern Recognition* (Coronado, Calif., 1976), pp. 249-252. *IEEE Comput. Soc., Long Beach, Calif., 1976.* (Manabu Ichino) **57** #2001 68A45
- (with Emptoz, Hubert) Utilisation de l'information utile de type β dans les pseudoquestionnaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 17, A1027-A1029. (Authors' summary) **56** #5050 94A15
- Terrier, Jean-Marc** On the covariant differential of an almost hermitian structure. *Comment. Math. Helv.* **50** (1975), 137-143. (A. Gray) **51** #6639 53B35
- Linear connections and almost complex structures. *Proc. Amer. Math. Soc.* **49** (1975), 59-65. (R. S. Millman) **52** #1561 53C15
- Terrine, G.** Coordinate grammars and parsers. *Comput. J.* **16** (1973), 232-244. (J. A. Schatz) **50** #6225 68A30
- Terry, Raymond D.** (with Wong, Pui Kei) Oscillatory properties of a fourth-order delay differential equation. *Funkcial. Ekvac.* **15** (1972), 209-221. (J. S. Bradley) **48** #9045 34K15
- Oscillatory properties of a fourth-order delay differential equation. II. *Funkcial. Ekvac.* **16** (1973), 213-224. (J. S. Bradley) **50** #730 34K15
- Oscillatory properties of a delay differential equation of even order. *Pacific J. Math.* **52** (1974), 269-282. (J. S. Bradley) **51** #1073 34K15
- Oscillatory and asymptotic properties of homogeneous and nonhomogeneous delay differential equations of fourth order. *Funkcial. Ekvac.* **18** (1975), no. 3, 207-218. (N. Onuchic) **53** #8613 34K15
- Delay differential equations of odd order satisfying property P_k . *J. Austral. Math. Soc. Ser. A* **20** (1975), no. 4, 451-467. (Curtis C. Travis) **52** #6147 34K15
- Some oscillation criteria for delay-differential equations of even order. *SIAM J. Appl. Math.* **28** (1975), 319-334. (V. Staikos) **50** #13822 34K15
- Oscillatory and asymptotic properties of homogeneous and nonhomogeneous delay differential equations of even order. *J. Austral. Math. Soc. Ser. A* **22** (1976), no. 3, 282-304. (K. Kreith) **55** #812 34K15
- Positive solutions of $D^n[r(t)D^m y(t)] = p(t)y(t - \tau(t))$. *Funkcial. Ekvac.* **20** (1977), no. 1, 49-60. (J. S. W. Wong) **56** #12508 34K15
- Iterative criteria for bounds on the growth of positive solutions of a delay differential equation. *J. Austral. Math. Soc. Ser. A* **25** (1978), no. 2, 195-200. (Abbas I. Abdel Karim) **58** #6616 34K15
- An application of Lyapunov's direct method to the study of oscillations of a delay differential equation of even order. *J. Austral. Math. Soc. Ser. A* **25** (1978), no. 2, 201-209. (Abbas I. Abdel Karim) **58** #6617 34K15
- Terry, W. R.** (with Krishnan, K. S.; Gupta, Shiv K.) Multi-warehouse inventory model with constraints. *J. Math. Sci.* **6** (1971), 67-82 (1974). (Authors' summary) **57** #15364 90B05 (90C50)
- Terry, Wesley E.** Conditions for a TVS to be homeomorphic with its countable product. *Trans. Amer. Math. Soc.* **190** (1974), 233-242. (C. Bessaga) **49** #3489 46A15 (58B05)
- Any infinite-dimensional Fréchet space homeomorphic with its countable product is topologically a Hilbert space. *Trans. Amer. Math. Soc.* **196** (1974), 93-104. (C. Bessaga) **50** #8536 57A20 (46A05)
- F -spaces universal with respect to linear codimension. *Proc. Amer. Math. Soc.* **63** (1977), no. 1, 59-65. (C. Bessaga) **56** #1008 46A15
- Ter-Saakjanc, G. L.** (with Valëev, Kim G.) A numerical method for solving problems of optimal control theory. (Russian) *Mat. Fiz. Vyp.* **17** (1975), 12-18, 188. (B. T. Poljak) **56** #16496 49D10
- Ter-Saakov, A. P.** (with Sergievskii, G. M.) Factor experiments in many-dimensional stochastic approximation of an extremum. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1970**, no. 5, 134-139 (Russian); translated as *Engrg. Cybernetics* **8** (1970), no. 5, 949-996. (Authors' summary) **46** #3099 90C40
- Tersenov, S. A.** The singular Cauchy problem for a certain system of equations hyperbolic type. (Russian) *Dokl. Akad. Nauk SSSR* **205** (1972), 1046-1049. (A. Pelczar) **46** #9570 35R99
- ★ Введение в теорию уравнений, вырождающихся на границе. (Russian) [Introduction to the theory of equations that are degenerate on the boundary] Special course for mathematics students at Novosibirsk University. *Novosibirsk. Gosudarstvenn. Univ., Novosibirsk, 1973.* 144 pp. **58** #23054 35J70
- The singular Cauchy problem. (Russian) *Boundary value problems for differential equations, 3* (Russian), pp. 32-44, 184. *Izdat. "Fan" Uzbek. SSR, Tashkent, 1973.* (A. Nahuşev) **52** #1027 35L15
- A certain boundary value problem for a degenerate parabolic equation. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 1300-1302. (O. Horáček) **48** #9114 35K20
- A certain boundary value problem for a system of equations of parabolic type that is degenerate on the boundary. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 557-560. (V. V. Kovrizkin) **58** #29263 35K50 (35K20)
- The first boundary value problem for a degenerate parabolic equation. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 6, 1292-1295. (V.-V. Olariu) **52** #3736 35K20
- A boundary value problem for an equation of parabolic type that is degenerate on the interior of a region. (Russian) *Dinamika Splošn. Sredy Vyp. 24 Dinamika Židk. i Svobod. Granicami* (1976), 74-96, 170. (I. Lojczyk-Królikiewicz) **58** #1646 35K20
- The analyticity of the solutions of a certain class of differential equations that degenerate on the boundary. (Russian) *Dokl. Akad. Nauk SSSR* **228** (1976), no. 1294-1297. (A. Borzymowski) **54** #729 35J70
- The first boundary value problem for an equation of elliptic type with singular coefficients inside the domain. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 543-546. (Editors) **58** #23055 35J70
- The first boundary value problem for a certain elliptic-parabolic equation. (Russian) *Dokl. Akad. Nauk SSSR* **234** (1977), no. 6, 1269-1272. (K. Hardenberg) (Zbl 31 #35036) **58** #23144 35M05 (35J70)
- Certain properties of the solutions of an equation of elliptic type on surfaces of degeneracy. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 1, 39-40. (Meguro Saigo) **57** #6835 35J70 (35M05)
- Terstov, A. H.** (with Zavolzenskii, M. V.) The zeros of the cylindrical functions K_n . (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **17** (1977), no. 3, 759-762, 806. (V. L. Makarov) **57** #10026 33A40
- (with Zavolzenskii, M. V.) The flow around cylinders with a movable surface by the flow of a viscous fluid. (Russian) *Prikl. Meh.* **14** (1978), no. 2, 101-107, 143. (Authors' summary) **58** #25354 76.35 (35Q99)
- Teruškin, A. G.** (with Figurinov, È. B.) Determination of the optimal start-up batch taking into account the forms of motion of the processed object. (Russian) *Ékonom. i Mat. Metody* **5** (1969), 228-239. (From the authors' introduction) **47** #2996 90B30
- A model of plan calculations on the basis of integrated accounts of material and investment. (Russian) *Ékonom. i Mat. Metody* **6** (1970), 871-886. **46** #1292 90A15
- A model of the price mechanism for satisfying consumer demand on the social market. (Russian) *Ékonom. i Mat. Metody* **9** (1973), 861-876. (Editors) **50** #9319 90A15
- Terwiel, R. H.** Projection operator method applied to stochastic linear differential equations. *Physica* **74** (1974), 248-265. (A. N. V. Rao) **54** #1379 60H10
- Teryayev, Ye. D.** See Terjaev, E. D.
- Ter-Zaharjan, N. P.** Some entropy properties of algorithmic languages. (Russian) *Studies in the theory of algorithms and mathematical logic, Vol. 1* (Russian), pp. 178-204. *Vychisl. Centr Akad. Nauk SSSR, Moscow, 1973.* (G. Wechsung) **48** #10780 02E10 (68A20)
- The language of multiple recursive functions. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), 541-542. (Igor Lavrov) **47** #8276 02F50 (02F43, 68A30)
- Quantitative characteristics of the language of multiple recursive functions. (Russian. Armenian summary) *Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn.* **8** (1975), 9-35. (loose erratum) (Editors) **58** #27415 02F50 (02F43, 68A30)
- Some nonoptimal languages of recursive functions. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **11** (1976), no. 3, 256-262, 281. (Max I. Kanovič) **55** #5408 02E15 (68A10)
- Terzi, D. G.** On a conjecture by Erdős-Straus. *Nordisk Tidskr. Informationsbehandling (BIT)* **11** (1971), 212-216. (R. Güting) **45** #6755 10B99
- An iteration process for the approximate solution of problems with Boolean variables. (Russian) *Optimizacija* No. 10(27) (1973), 159-170, 173. (E. Ja. Gabov) **48** #10115 65K05
- The aggregation of equations. (Russian) *Prikl. Mat. i Programirovanie* No. 1 (1974), 95-98, 131. (G. Bär) **49** #4564 90C10
- A singularity of certain algorithms for linear integer programming. (Russian) *Upravljajemye Sistemy* No. 12 (1974), 68-72, 88. (See RŽMat **1974** #10 V591) 90C
- Terzian, Richard C.** Comments on "Expected value and variance of failure time of redundant systems" (IEEE Trans. Reliab. **R-22** (1973), no. 2, 103-105) by E. J. Muth. With a reply by Muth. *IEEE Trans. Reliab.* **R-22** (1973), no. 4, 244. (R. Subramania) **53** #7419 90B25
- Terzioğlu, A. Nazim** See Müsa ibn Şakir, (Not reviewed) and Kahramaner, Suzana, **58** #84
- Terzioğlu, Tosun** Nuclear and strongly nuclear sequence spaces. (Turkish summary) *İstanbul Üniv. Fen Fak. Mecm. Ser. A* **34** (1969), 1-5 (1971). (Alexia B. Latimer) **46** #4163 46A45
- On compact and infinite-nuclear mappings. *Bull. Math. Soc. Sci. Math. R. Roumanie (N.S.)* **14**(62) (1970), 93-99 (1971). (H. Hogbe-Nlend) **49** #1189 47B05
- A characterization of compact linear mappings. *Arch. Math. (Basel)* **22** (1974), 76-78. (A. Pietsch) **45** #954 47B05
- Approximation property of co-nuclear spaces. *Math. Ann.* **191** (1971), 35-37. (Loustanaunau) **45** #2443 46A05
- (with Orhon, Mehmet) Diagonal operators on spaces of measurable functions. *Actes du Colloque d'Analyse Fonctionnelle* (Univ. Bordeaux, Bordeaux, 1971), pp.

270. *Bull. Soc. Math. France, Mém. No. 31-32, Soc. Math. France, Paris, 1972.* (Robin Harte) **51** #11180 47B37
- Linear operators on nuclear spaces and their extension properties. (Turkish summary) *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **37** (1972), 1-21 (1974). (A. Pietsch) #10737 46A05 (47A05)
- Symmetric bases of nuclear spaces. *J. Reine Angew. Math.* **252** (1972), 200-204. (D. H. Garling) **45** #849 46A35
- (with Orhon, Mehmet) Diagonal operators on spaces of measurable functions. *J. Reine Angew. Math.* **256** (1972), 138-152. (S. Hecksher) **48** #937 47B37
- Remarks on compact and infinite-nuclear mappings. *Math. Balkanica* **2** (1972), 1-255. (J. R. Holub) **48** #2813 47B10
- Linear operators on smooth sequence spaces. (Turkish summary) *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **38** (1973), 1-3 (1975). (G. Silverman) **52** #11532 46A45
- On the diametral dimension of the projective tensor products. (Turkish summary) *Istanbul Üniv. Fen Fak. Mecm. Ser. A* **38** (1973), 5-10 (1975). (E. Dubinsky) **53** #6281 46A45
- Smooth sequence spaces and associated nuclearity. *Proc. Amer. Math. Soc.* **37** (1973), 497-504. (Gokulananda Das) **48** #2724 46A45
- Smooth sequence spaces. *Proceedings of the Symposium on Functional Analysis* (Istanbul, 1973), pp. 31-41. *Publ. Math. Res. Inst.-Istanbul, No. 1, Math. Res. Inst., Istanbul, 1974.* (William Robinson) **54** #8231 46A45
- Remarks on (p, q) -factorable operators. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 2, 165-168. (E. Dubinsky) **56** #16423 7B10
- Stability of smooth sequence spaces. *J. Reine Angew. Math.* **276** (1975), 184-189. (M. S. Ramanujan) **52** #11533 46A45
- On the Gelfand numbers of $\text{Hom}(S, T)$. *Math. Balkanica* **5** (1975), 273-275. (I. Stephani) **58** #30332 46M15 (47B99)
- (with Ramanujan, Melapalayam S.) Power series spaces $\Lambda_k(\alpha)$ of finite type and related nuclearities. *Studia Math.* **53** (1975), no. 1, 1-13. (E. Dubinsky) **52** #3923 46A45
- (with Ramanujan, M. S.) Diametral dimensions of Cartesian products, stability of smooth sequence spaces and applications. *J. Reine Angew. Math.* **280** (1976), 163-171. (D. J. Randtke) **53** #8856 46A45
- Reine, Helmut ★ Die Dirichletsche Aussage aufgabe zu elliptischen Differentialgleichungen vierter Ordnung und das Prinzip der eindeutigen Fortsetzbarkeit. Inaugural-Dissertation zum Erlangung des Doktorgrades der Hohen Math.-Natur. Fakultät der Rheinischen Friedrich-Wilhelms-Universität zu Bonn. Bonn. Math. Schr. No. 62 (1973). *Mathematisches Institut der Universität, Bonn, 1973.* iv+80 p. (M. H. Protter) **56** #6108 35J40
- Reine, Lothar Zum Zentrum eines Krantzprodukts. *Wiss. Z. Martin-Luther-Universität-Wittenberg Math.-Natur. Reihe* **22** (1973), no. 3, 35-36. (Peter M. Neumann) **52** #586 20F25
- Über einige Eigenschaften der Zentralreihe der p -Sylowgruppe der symmetrischen Gruppe vom Grade p^n . Beiträge zur Algebra und Geometrie, 3. *Wiss. Beitr. Martin-Luther-Universität-Wittenberg Reihe M Math.* **5** (1974), 131-137. (Mark P. Hale, Jr.) **52** #14038 20D20
- Über die Untergruppen der elementarabelschen Gruppen. *Wiss. Beitr. Martin-Luther-Universität-Wittenberg M 6 Beitr. Algebra Geom.* **4** (1975), 9-14. (K. Honda) **56** #3153 20K99
- Die Normalteiler der p -Sylowgruppe der symmetrischen Gruppe vom Grade p^3 . *Wiss. Z. Martin-Luther-Universität-Wittenberg Math.-Natur. Reihe* **24** (1975), no. 1, 7-42. (David Finkel) **50** #13266 20D20
- Reine, W. Zur Instabilität konservativer Systeme mit gyroskopischen Kräften. *Z. Angew. Math. Mech.* **57** (1977), no. 5, T92-T94. (Robert E. Roberson) **57** #14684 0.34
- Zu einem Instabilitätskriterium für Gleichgewichtslagen konservativer Systeme. *Z. Angew. Math. Mech.* **58** (1978), no. 6, 178-179. (Author's summary) **58** #17351 34D05
- Reine, Alberto (with de Mottoni, Piero) On the relationship between the field equation and the Hamiltonian approach. *Lett. Nuovo Cimento* **2** (5) (1972), 341-345. (Editors) **58** #8939 81.47
- On the equivalence between Gibbs and Markov processes. *Lett. Nuovo Cimento* (2) (1973), 544-546. (Not reviewed) 82.62
- (with de Mottoni, Piero) On the solutions of Thirring's equations for unbounded field operators. (Italian and Russian summaries) *Nuovo Cimento A* (11) **15** (1973), 536-542. (A. C. Manoharan) **52** #2476 81.47
- (with de Mottoni, Piero) Sur l'équation de Klein-Gordon non linéaire pour distributions tempérées. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **23** (1975), no. 2, 137-145. (W. O. Amrein) **52** #12593 81.35
- On some nonlinear evolution equations in quantum field theory. *J. Mathematical Phys.* **16** (1975), 140-146. (G. P. Bava) **50** #12048 81.35 (35Q99)
- (with de Mottoni, Piero) An explicit model for the renormalization of field equations. *J. Mathematical Phys.* **16** (1975), 1148-1149. (W. O. Amrein) **51** #12206 81.47
- (with Schiaffino, Andrea) On the operator equation $AX - XA = iB$. (Italian summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) **42** (1975), 18-31. (Authors' summary) **56** #12941 47A60 (47B25)
- Asymptotic stability results for a system of diffusion equations. *Numerik und Anwendungen von Eigenwertaufgaben und Verzweigungsproblemen* (Tagung, Math. Forschungsinst., Oberwolfach, 1976), pp. 167-174. *Internat. Schriftenreihe zur Numer. Math., Vol. 38, Birkhäuser, Basel, 1977.* (P. C. Fife) **58** #11835 35B35 (35K55)
- (with de Mottoni, Piero; Talenti, Giorgio) Stability results for a class of non-linear parabolic equations. *Ann. Mat. Pura Appl.* (4) **115** (1977), 295-310 (1978). (I. Łojczyk-Krölikiewicz) **58** #23080 35K55
- (with de Mottoni, Piero) On a class of nonlinear eigenvalue problems. (Italian summary) *Boll. Un. Mat. Ital. B* (5) **14** (1977), no. 1, 172-189. (N. Chafee) **56** #730 34B15
- (with de Mottoni, Piero) On distribution solutions for nonlinear differential equations: nontriviality conditions. *J. Differential Equations* **24** (1977), no. 3, 355-364. (Jean-Pierre Eckmann) **55** #5942 34A45 (81.34)
- Tešev, R. M. The absence of limit cycles in a certain system of differential equations. (Russian) Collection of articles dedicated to the memory of Mazit Ifatović Al'muhamedov. *Volž. Math. Sb. No. 16* (1973), 281-285. (L. Reizings) **50** #10430 34C05
- Testafson, Leigh A new approach to filtering and adaptive control: optimality results. *J. Cybernet.* **7** (1977), no. 1-2, 133-146. (Tamer Basar) **56** #2596 93E10
- (with Hildreth, Clifford) A note on dependence between a venture and a current prospect. *J. Econom. Theory* **15** (1977), no. 2, 381-391. (Andor Dobó) **56** #7018 62H20 (62P20)
- A new approach to filtering and adaptive control: stability results. *Appl. Math. Comput.* **4** (1978), no. 1, 27-44. (Vladimir Katkovnik) **58** #15594 93E10
- (with Kalaba, Robert E.) Two solution techniques for adaptive reinvestment: a small sample comparison. *J. Cybernet.* **8** (1978), no. 1, 101-111. (Tamer Başar) **57** #11886 93C40
- A new approach to filtering and adaptive control. *J. Optim. Theory Appl.* **25** (1978), no. 2, 247-261. (Author's summary) **58** #15593 93E10
- Testukov, V. M. See Tešukov, V. M.
- Tešitelová, Marie See Prague studies in mathematical linguistics, **54** #11870; Prague studies in mathematical linguistics, **54** #11871; Prague studies in mathematical linguistics, **54** #11872; Prague studies in mathematical linguistics, **57** #4679a and Prague studies in mathematical linguistics, **57** #4679b
- Testin, O. I. (with Sudakov, R. S.; Filippov, V. A.) A method of determining the requirements for reliability of the elements of a system when a lower confidence limit is given for the probability of a faultless performance of the system. (Russian) *Nadežn. i Kontrol' Kačestva* **1974**, no. 3, 50-56, 79. (Z. Khalil) **50** #15887 90B25
- Testlenko, A. K. (with Korneičuk, V. I.; Tarasenko, V. P.) Synthesis of combination schemes in a certain class of multivalued algebras. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1972**, no. 5, 9-13. (I. M. Havel) **47** #8202 94A20
- (with Korneičuk, V. I.; Tarasenko, V. P.) A study of the complexity of the realization of functions on a one-dimensional cascade of modules. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1977**, no. 5, 5-11, 92. (Authors' summary) **58** #9850 94A20
- (with Korneičuk, V. I.; Tarasenko, V. P.) A method for the construction of combinational circuits on modules of the same type. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 2, 30-34. (Authors' summary) **58** #9849 94A20
- Testlenko, L. S. Theorems of Tauberian type for a generalized semicontinuous logarithmic method of summability of series. (Russian) *Approximation methods of mathematical analysis* (Russian), pp. 108-119. *Kiev. Gos. Ped. Inst., Kiev, 1976.* (G. Halász) **58** #29567 40E05
- Two theorems of Tauberian type for Cesàro methods of summability of series. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 28* (1977), 95-102, iii. (M. S. Rangachari) **58** #17651 40E05
- (with Mihailin, G. O.) A property of a class of (\bar{R}, p_n, α) summability methods for series, and theorems of Tauberian type. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 2, 194-203, 285. (M. S. Rangachari) **58** #17649 40E05
- Testler, G. S. The approximation of elementary functions by means of polynomials of degree zero and one. (Russian) *Mathematical provision of electronic digital computers and effective organization of the computing process* (Proc. Sem., Kiev, 1969), No. 2 (Russian), pp. 75-88. *Akad. Nauk Ukrain. SSR, Kiev, 1969.* (I. Šelihova) *RŽMat* **1970** #4 B937) **45** #4600 65D15
- (with Sergienko, I. V.) Methods for fast division based on iteration processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1974**, no. 6, 21-25. (From the authors' introduction) **57** #14322 65B99 (65-04, 68A20)
- (with Blagoveščenskii, Ju. V.; Popov, B. A.) Methods for the computation of mutually inverse functions. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 2, 69-72. (Walter Gautschi) **54** #1545 65D20
- Testler, M. H. (with Eichmann, G.) Non-spectral field representations in dielectric fibre guides. *J. Inst. Math. Appl.* **21** (1978), no. 3, 315-330. (Authors' summary) **58** #14359 78.34
- Tessarowicz, M. Saddle point search in optimal control problems. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* **55** (1975), no. 4, T282-T284. (Editors) **58** #26376 93C99 (49D10)
- Tesserau, Harold (with Peterson, G. E.) A note on $L-C$ kernels. *Bull. London Math. Soc.* **3** (1971), 318-320. (S. P. Singh) **45** #822 44A05
- Tessier, R. (with Singh, M. P.) Some estimators for domain totals. *Proceeding of the Symposium on Statistics and Related Topics* (Carleton Univ., Ottawa, Ont., 1974), Paper No. 28, 17 pp. *Carleton Univ., Ottawa, Ont., 1975.* (Kenneth R. W. Brewer) **54** #1433 62D05
- Tessler, Lawrence (with Eisenberg, Lawrence) A new algorithm for factoring polynomials. *Proc. IEEE* **60** (1972), 737-738. (S. F. McCormick) **50** #1495 65H05
- Tessun, Franz Die Automorphismengruppe des Gruppenrings $K[F_n]$. *Mitt. Math. Gesellsch. Hamburg* **10**, no. 3, 219-221 (1974). (Gerald O. Losey) **54** #2823 20F55
- (with Rosenberger, Gerhard) Eine Bemerkung zu den Nilpotenz-Transformationen. *Monatsh. Math.* **83** (1977), no. 1, 43-52. (F. Levin) **56** #484 20F05
- Testa, Frank J. The maximum principle and bounds on solutions to semilinear parabolic equations. *J. Differential Equations* **19** (1975), no. 1, 134-141. (D. Ramakrishna Rao) **52** #11334 35K60
- Congruence diagonalization and Lie groups. *SIAM J. Appl. Math.* **28** (1975), 54-59. (G. I. Lehrer) **51** #8140 15A21 (22E70)
- Bounds on solutions to certain nonlinear reaction-diffusion equations. *SIAM J. Appl. Math.* **28** (1975), 362-366. (Z. Janković) **50** #15769 82.35
- (with Coronas, James P.) Pseudopotentials and their applications. *Bäcklund transformations, the inverse scattering method, solitons, and their applications* (Workshop Contact Transformations, Vanderbilt Univ., Nashville, Tenn., 1974), pp. 184-198. *Lecture Notes in Math., Vol. 515, Springer, Berlin, 1976.* (David J. Kaup) **58** #29450 35Q99 (58A15)
- Bounds on solutions to the boundary-free incompressible Navier-Stokes initial value problem. *J. Math. Anal. Appl.* **55** (1976), no. 3, 537-548. (Clarence M. Ablow) **55** #6040 35Q10

- (with McDaniel, T. J.; Thangam Babu, P. V.) Solution bounds for transient vibration problems. *Trans. ASME Ser. E J. Appl. Mech.* **44** (1977), no. 1, 159-164. (S. Leela) **57** #4734 70.65
- Testa, Stefano** Sui sottouniversi normali di un universo di dispositivi lineari su un corpo. (English summary) *Rend. Sem. Mat. Univ. Padova* **56** (1976), 193-204 (1978). (Author's summary) **58** #5849 18D99
- Testard, D.** (with Manuceau, J.; Sirugue, M.; Verbeure, A.) The smallest C^* -algebra for canonical commutations relations. *Comm. Math. Phys.* **32** (1973), 231-243. (R. H. Herman) **49** #4473 81.46 (82.46)
- (with Ghez, P.; Lima, R.) Une extension d'un théorème de A. Connes sur les facteurs constructibles. *Comm. Math. Phys.* **32** (1973), 305-311. (A. Corciovei) **50** #3808 81.46
- Asymptotic ratio set of von Neumann algebras generated by temperature states in statistical mechanics. *Rep. Mathematical Phys.* **12** (1977), no. 1, 115-118. (D. A. Dubin) **57** #8771 82.46 (46L10)
- Testov, V. A.** Monoassociative division algebras. (Russian) *Modern algebra, No. 4* (Russian), pp. 148-154. Leningrad. Gos. Ped. Inst., Leningrad, 1976. (Jaroslav Ježek) **56** #8640 17A05
- Tešukov, V. M.** A certain plane nonstationary flow of gas with a strong discontinuity. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1971**, no. 3, 45-50. (L. Dragoș) **45** #1473 76.35
- A boundary value problem for equations of mixed type. (Russian) *Dinamika Splošn. Sredy Vyp.* **10** (1972), 239-245, 250. (From the author's text) **56** #16160 35M05 (76.35)
- The Goursat problem for the equation of plane potential conical gas flows. (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 2, 303-306. (Simona Popp) **53** #4730 76.35
- Some problems of the theory of conical gas flows. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **28** (1976), no. 5-6, 781-786. (Author's summary) **57** #11321 76.35
- The three-dimensional problem of the spread of contact fracture in an ideal gas. (Russian) *Dinamika Splošn. Sredy No. 32* (1977), 82-94, 163-164. (From the text) **58** #32366 76.35 (35Q99)
- Teter, William** Rings which are a factor of a Gorenstein ring by its socle. *Invent. Math.* **23** (1974), 153-162. (W. Vogel) **51** #3157 13H10
- Teterev, A. G.** Optimization of a concave function by the method of imbedded intervals. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 12(187), 114-117. (Rolf Klötzler) **58** #26020 90C30
- Teterin, G. P.** See **Computer science in mechanical engineering**, **50** #6713 and **Mathematical methods in economic research**, **52** #16531
- Teterina, N. I.** (with Dalec'kii, Ju. L.) Multiplicative stochastic integrals. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 2(164), 167-168. (N. N. Vahanija Vakhania) **53** #1731 60H05
- Multiplicative stochastic integrals with operator coefficients. (Russian) *Ukrain. Mat. Ž.* **25** (1973), 419-423, 432. (P. Neumann) **57** #17822 60H05
- Tether, A. J.** See **Godbole, S. S.**, **50** #4017
- Tetrušvili, M. R.** A realization of the Magnus algorithm on a Turing machine, and an upper bound of the complexity of the computations. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **70** (1973), 541-544. (Max I. Kanovič) **50** #6816 02F47 (02F15, 20F20)
- The complexity of Turing computations in terms of Magnus's algorithm. (Russian. Georgian summary) *Studies in mathematical logic and the theory of algorithms* (Russian), pp. 111-123. Izdat. Tbilis. Univ., Tbilisi, 1975. (M. Greendlinger) **57** #464 20F10 (02F47)
- Estimation of the complexity of a certain reduction. (Russian. Georgian summary) *Studies in mathematical logic and the theory of algorithms* (Russian), pp. 125-134. Izdat. Tbilis. Univ., Tbilisi, 1975. (L. Bokut') **56** #2811 02F47 (20M05)
- Invariant measure, and the symmetry of the group. (Russian. Georgian summary) *Tbilis. Sahelme, Univ. Gamoqeneb. Math. Inst. Šrom.* **4** (1975), 9-21. (R. G. Laha) **53** #13523 28A70
- Tettamanti, K.** See **Pethő, Árpád**, **51** #7022
- Teufel, Hugo, Jr.** Second order nonlinear oscillation—deviating arguments. *Monatsh. Math. 75* (1971), 341-345. (K. Schmitt) **46** #3951 34K15
- Forced second order nonlinear oscillation. *J. Math. Anal. Appl.* **40** (1972), 148-152. (T. G. Proctor) **47** #2137 34C15
- A note on second order differential inequalities and functional differential equations. *Pacific J. Math.* **41** (1972), 537-541. (A. F. Izé) **46** #5802 34K99
- On the behavior of solutions of sublinear second order differential equations. *Proc. Amer. Math. Soc.* **32** (1972), 445-451. (G. J. Butler) **45** #3841 34C99
- Second order almost linear functional differential equations—oscillation. *Proc. Amer. Math. Soc.* **35** (1972), 117-119. (D. K. Hughes) **46** #2192 34K15
- The stability of solutions of generalized Emden-Fowler equations. *Canad. Math. Bull.* **17** (1974), no. 3, 397-401. (D. Hinton) **51** #10763 34C10
- Teugels, Jozef L.** Probability density functions which are their own characteristic functions. *Bull. Soc. Math. Belg.* **23** (1971), 236-262. (S. M. Samuels) **46** #6415 60E05
- A note on Poisson-subordination. *Ann. Math. Statist.* **43** (1972), 676-680. **45** #7814 60J99
- An example on geometric ergodicity of a finite Markov chain. *J. Appl. Probability* **9** (1972), 466-469. (B. Kronfeld) **49** #9953 60J10
- (with Cheong, Choong K.) General solidarity theorems for semi-Markov processes. *J. Appl. Probability* **9** (1972), 789-802. (E. Arjas) **49** #11650 60K15
- (with Cheong, Choong K.) On a semi-Markov generalization of the random walk. *Stochastic Processes Appl.* **1** (1973), 53-66. (E. Arjas) **51** #4448 60K15 (60J15)
- On Markov success chains. *Mathematical programs for activity analysis* (Rep. Belgo-Israeli Colloq. Operations Res., Pope Hadrian VI College, Univ. Louvain, Louvain, 1972), pp. 251-264. North-Holland, Amsterdam, 1974. (Arthur O. Pittenger) **53** #9381 60J10
- The sub-exponential class of probability distributions. (Russian summary) *Teor. Veroyatnost. i Primenen.* **19** (1974), 854-855. (Herman Callaert) **50** #14884 60E05 (60K05)
- (with Veraverbeke, N.) Regular speed of convergence for the maximum of a random walk. *Limit theorems of probability theory* (Colloq., Keszthely, 1974), pp. 399-406. *Colloq. Math. Soc. János Bolyai, Vol. 11, North-Holland, Amsterdam, 1974* (David J. Emery) **52** #15689 60J15
- The class of subexponential distributions. *Ann. Probability* **3** (1975), no. 6, 1000-1011. (N. H. Bingham) **52** #12043 60E05 (60K05, 60J80)
- (with Veraverbeke, N.) The exponential rate of convergence of the distribution of the maximum of a random walk. *J. Appl. Probability* **12** (1975), 279-288. (D. J. Emery) **51** #9219 60J15 (60F05, 60G50)
- (with Bingham, N. H.) Duality for regularly varying functions. *Quart. J. Math. Oxford Ser. (2)* **26** (1975), no. 103, 333-353. (J. Galambos) **52** #5896 26A12 (60E05)
- (with Veraverbeke, N.) The exponential rate of convergence of the distribution of the maximum of a random walk. II. *J. Appl. Probability* **13** (1976), no. 4, 733-740. (Authors' summary) **55** #13576 60J15
- A bibliography on semi-Markov processes. *J. Comput. Appl. Math.* **2** (1976), no. 1, 125-144. (Editors) **53** #9413 60K15
- On the rate of convergence of the maximum of a compound Poisson process. *Bull. Soc. Math. Belg.* **29** (1977), no. 2, 205-216. (F. B. Knight) **57** #14158 60J30 (60K05)
- Teukolsky, Saul A.** (with Press, William H.) On the evolution of the secularly unstable viscous Maclaurin spheroids. *Astrophys. J.* **181** (1973), 513-517. (H. A. Buchdahl) **47** #6269 85.35
- (with Lightman, Alan P.; Press, William H.; Price, Richard H.) ★Problem book in relativity and gravitation. Princeton University Press, Princeton, N.J., 1975. xiv + 599 pp. (Kotik K. Lee) **54** #6847 83.00
- (with Marcus, Philip S.; Press, William H.) Stablest shapes for an axisymmetric body of gravitating, incompressible fluid. *Astrophys. J.* **214** (1977), no. 2, part 2, 584-597. (Authors' summary) **56** #7758 85.65
- Teut, O. M.** A problem for a linear system of partial differential equations of mixed type. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **7** (1970), 256-261. (Zbl) **235** #3505 58 #17579 35M05
- A problem with boundary conditions on two characteristics for a certain system of mixed type. I, II. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 8(135), 89-100; *ibid.* **1973**, no. 9, 78-86. (N. N. Janenko) **49** #3343 35M05
- Teutsch, Ralph J.** (with Jamieson, Dale W.) Hockett on effective computability. *Found. Language* **11** (1974), 287-293. (Ju. V. Matijasevič) **57** #9467 02A05 (02E10)
- Tėvelis, V.** (with Naftalevičius, A.) The asymptotic periods of a meromorphic function. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 161-172, 235. (J. Rausen) **49** #3137 30A70
- Țevy, Ionel** On a theorem of Florin Vasilescu. (Romanian. French summary) *Stud. Cerc. Mat.* **21** (1969), 1173-1180. (S. Marcus) **46** #5539 26A15
- (with Bruteanu, Cristian) On almost continuous functions in the sense of I. Blumberg and V. Ptak. (Romanian. French summary) *Stud. Cerc. Mat.* **23** (1971), 17-26. (J. G. Ceder) **47** #8776 26A15
- Topologies engendrées par des idéaux. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 443-450. (S. A. Naimpally) **48** #486 28A05
- (with Bruteanu, Cristian) On some continuity notions. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 121-135. (A. M. Bruckner) **48** #471 26A15
- Une définition de l'intégrale de Lebesgue à l'aide des fonctions primitives. *Rev. Roumaine Math. Pure Appl.* **19** (1974), 1159-1163. (D. Preiss) **51** #829 26A42
- Tevezdze, G. N.** The determination of the surface in projective space that is given by Weyl connection $W(f_{ij}, q_i)$ and the tensor of an asymptotic net. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **64** (1971), 263-266. (Froim Marcus) **45** #5900 53A20
- Integrability conditions for the fundamental equations of a normalized surface. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* (1972), 29-33. (Froim Marcus) **45** #5901 53A20
- A certain class of surfaces and conjugate nets. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **67** (1972), 281-284. (C. Simionescu) **49** #3709 53A25
- Projectively equivalent surfaces under a Laplace transformation. (Russian. Georgian summary) Collection of articles dedicated to Academician N. I. Mushelišvili on the occasion of his eightieth birthday. *Tbilis. Univ. Šrom. A* **4(146)** (1972), 39-53. (Decuyper) **50** #1137 53A20
- A certain closed Laplace sequence of line congruences. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* **5(147)** (1972), 7-16. (Josef Vala) **53** #1447 53A25
- P surfaces of projective space. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **74** (1974), 549-552. (C. Simionescu) **51** #8966 53A20
- The realization of a conformal Norden pair on a family of surfaces in the space E_3 . (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* (1974), 25-28. (C. Simionescu) **49** #3707 53A20
- Conformal Norden pairs of conjugate affine connections, and some questions of projective differential geometry. (Russian. English summary) *Sakharth. SSR Mecn. Akad. Math. Inst. Šrom.* **54** (1976), 128 pp. (loose errata) (M. Decuyper) **57** #1302 53A20
- Tevezdze, N. R.** The convergence of the double Fourier series at a square summable function. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **58** (1970), 277-279. (W. C. Connett) **45** #7390 42A92
- $C_{\alpha\beta}$ -summability of a double lacunary Fourier series. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* **1(137)** (1971), 63-69. (S. Baron) **48** #6814 42A92 (42A44)
- Convergence of the iterated series and of lacunary sequences of the partial sums of the double Fourier series of a square summable function. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* **1(137)** (1971), 71-75. (L. Gogoladze) **48** #11909 42A92
- Convergence of a double Fourier series (for certain partial sums). (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **67** (1972), 541-544. (R. L. Cooke) **48** #11910 42A92
- Improper double integrals. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* **5(147)** (1972), 17-29. (B. Crstici) **53** #1085 40A10 (26-01)
- Convergence of the spherical partial sums of a double Fourier series. (Russian

- Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 70 (1973), 1-280. (R. L. Cooke) 51 #8735 42A92
- Certain questions on the convergence of double series. (Russian. Georgian summary) Collection of articles dedicated to Academician V. D. Kupradze on the occasion of his 70th birthday. *Tbilis. Univ. Šrom. A* 8(153) (1974), 25-37. (V. G. Ildze) 53 #8712 40B05
- Ildze, T. D. On the question of determining the optimal trajectory of the motion of an object in phase space. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 63 (1971), 673-675. (F. M. Kirillova) 45 #4870 49D25
- Ildze, T. Š. Certain classes of functions, and Fourier series. (Russian. English and Georgian summaries) *Sakharth. SSR Mecn. Akad. Moambe* 70 (1973), 285-288. (F. Ildze) 52 #1135 42A16
- Certain classes of functions, and Fourier series. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* 6-7(149-150) (1973), 51-64. (R. P. Boas, Jr.) 49 #11129 4A32
- Ildze, V. I. The convergence of a Fourier series at a point. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 84 (1976), no. 2, 289-292. (S. Ildze) 56 #955 (EA 57) 42A20
- Ildze, B. M. L. (with Singh, S. L.) On common fixed points and commuting mappings. *Math. Sem. Notes Kobe Univ.* 5 (1977), no. 3, 361-366. (I. A. Rus) 57 #13906 H25
- Ildze, K. (with Choudhary, S. C.) On strictly semi-simple near rings. *Abh. Math. Sem. Univ. Hamburg* 40 (1974), 256-264. (R. Gorton) 49 #5105 16A76
- (with Seth, V.) On injective near-ring modules. *Canad. Math. Bull.* 17 (1974), 7-141. (J. J. Malone) 50 #4670 16A76
- Ildze, S. N. An upper bound on the error in approximate eigenfunctions. *Phys. Lett.* 34B (1971), 366-368. (H. Primas) 49 #1973 81.35
- Ildze, U. Harmonic synthesis of Kronecker sets. *Thin sets in harmonic analysis (Sem. Mittag-Leffler, Univ. Stockholm, 1969-1970)*, pp. 29-40, 177-180. *Lecture Notes in Pure and Appl. Math., Vol. 2*, Dekker, New York, 1971. (C. McGehee) 55 #13163 4A45 (43A46)
- Ildze, U. B. Sets of synthesis and sets of interpolation for weighted Fourier algebras. *Ark. Mat.* 9, 205-210 (1971). (C. McGehee) 47 #9177 43A45
- Isomorphisms of some convolution algebras and their multiplier algebras. *Bull. Austral. Math. Soc.* 7 (1972), 321-335. (R. Larsen) 47 #9175 43A22
- (with Gupta, A. K.) The algebra of functions with Fourier transforms in a given function space. *Bull. Austral. Math. Soc.* 9 (1973), 73-82. (M. Hasumi) 48 #6819 4A22
- Subinvariant integrals and means on topological semigroups. *J. Math. Anal. Appl.* (1973), 328-332. (J. W. Baker) 47 #9169 43A05
- Multipliers of Segal algebras. *Proc. Amer. Math. Soc.* 54 (1976), 157-161. (Harald Krogstad) 56 #6286 43A22
- (with Gupta, A. K.) Multipliers between some function spaces on groups. *Bull. Austral. Math. Soc.* 18 (1978), no. 1, 1-11. (John F. Price) 58 #6931 43A22
- (with Dutta, Mahadev) On multipliers of Segal algebras. *Proc. Amer. Math. Soc.* 72 (1978), no. 1, 121-124. (Harald E. Krogstad) 58 #12197 43A22
- Ildze, Vinod K. (with Ullah, Aman) On the moments of concentration ratio. *Sankhyā Ser. B* 34 (1972), 405-408. (E. J. Williams) 48 #7436 (E 52 #12171) 62E20
- See also Raghavachari, M., 52 #12171
- Ildze, R. P. (with Narain, Prem) Solution of linear equations resulting from satellite remote soundings. *J. Math. Anal. Appl.* 47 (1974), 1-14. (R. H. Bartels) 52 #15995 5F30
- Ildze, Reginald P. Computations with sparse matrices. *SIAM Rev.* 12 (1970), 527-543. (N. Gastinel) 45 #7959 65F30
- Sorting and ordering sparse linear systems. *Large sparse set of linear equations Proc. Conf., St. Catherine's Coll., Oxford, 1970*, pp. 151-167. *Academic Press, London*, 1971. (L. W. Ehrlich) 49 #4224 65F05
- On two direct methods for computing generalized inverses. (German summary) *Computing (Arch. Elektron. Rechnen)* 7 (1971), 236-239. (V. Pereyra) 45 #2901 5F20
- An iterative method for computing generalized inverses. *Internat. J. Comput. Math.* 65-74 (1971). (Author's summary) 45 #7960 65F20
- On minimax solutions of linear equations. *Comput. J.* 15 (1972), 277-279. (Author's summary) 47 #9817 65F20
- On the Gaussian elimination method for inverting sparse matrices. (German summary) *Computing (Arch. Elektron. Rechnen)* 9 (1972), 1-7. (Author's summary) 5 #1061 65F05
- (with Chen, Y. T.) On the fill-in when sparse vectors are orthonormalized. (German summary) *Computing (Arch. Elektron. Rechnen)* 9 (1972), 53-56. (L. W. Ehrlich) 5 #2838 65F25
- (with Chen, Y. T.) On the optimal choice of pivots for the Gaussian elimination. (German summary) *Computing (Arch. Elektron. Rechnen)* 9 (1972), 245-250. (L. W. Ehrlich) 47 #9811 65F05
- Solution of linear equations in remote sensing and picture reconstruction. (German summary) *Computing (Arch. Elektron. Rechnen)* 10 (1972), 221-230. (N. Gastinel) 1 #12049 68A45
- (with Joshi, V. N.) On solving ill-conditioned systems of linear equations. *Trans. New York Acad. Sci.* (2) 34 (1972), 565-571. (N. Gastinel) 51 #12882 15A12
- ★ Sparse matrices. Mathematics in Science and Engineering, Vol. 99. *Academic Press, New York-London*, 1973. xv + 160 pp. (J. Vandergraft) 50 #15313 65F30
- (with Cheng, K. Y.) A desirable form for sparse matrices when computing their inverse in factored forms. (German summary) *Computing (Arch. Elektron. Rechnen)* 11 (1973), no. 1, 31-38. (David R. Kincaid) 52 #2175 65F30
- (with Narain, Prem) Generalized inverses and resolution in the solution of linear equations. (German summary) *Computing (Arch. Elektron. Rechnen)* 13 (1974), no. 1, 1-88. (Colette Lebaud) 52 #15989 65F20
- (with Kydes, A. S.) An iterative method for solving partitioned linear equations. (German summary) *Computing* 15 (1975), no. 4, 357-363. (Jan Zitko) 53 #6996 5F10
- ★ Разреженные матрицы. (Russian) [Sparse matrices] Translated from the English by È. M. Peisahovich. Edited by H. D. Ikramov. *Izdat. "Mir", Moscow*, 1977. 189 pp. (Editors) 56 #17019 65F30
- (with Kydes, A. S.) Householder modification for damped least squares solutions. *J. Inst. Math. Appl.* 19 (1977), no. 4, 407-423. (Peter Lancaster) 57 #1853 65F20
- Use of smoothing and damping techniques in the solution of nonlinear equations. *SIAM Rev.* 19 (1977), no. 1, 35-45. (W. M. Kincaid) 56 #9967 65H10
- (with Stephenson, J. L.; Jaung, L. L.) A note on solution of large sparse systems of nonlinear equations. *J. Math. Anal. Appl.* 63 (1978), no. 2, 439-445. (W. Börsch-Supan) 58 #3397 65H10
- Textorius, Björn. Minimaxprinzip zur Bestimmung der Eigenwerte J -nichtnegativer Operatoren. *Math. Scand.* 35 (1974), 105-114. (J. Bognár) 51 #6486 47B50
- Über Störungen kanonischer Differentialgleichungen mit operatorwertigen Koeffizienten und definierbarem Monodromieoperator. *Math. Z.* 137 (1974), 311-342. (J. Bognár) 51 #3639 34G05 (47B50)
- A remark on Schwarz's inequality. (Swedish. English summary) *Nordisk Mat. Tidskr.* 22 (1974), 63-65, 84. (Editors) 50 #5438 46D05
- (with Langer, Heinz) On generalized resolvents and Q -functions of symmetric linear relations (subspaces) in Hilbert space. *Pacific J. Math.* 72 (1977), no. 1, 135-165. (J. A. Erdos) 57 #3902 47B25
- Tey, Tan. On transferable distributive lattices. *Nanta Math.* 8 (1975), no. 2, 50-60. (R. Balbes) 53 #13060 06A35
- Teymur, M. (with Jeffrey, Alan) Formation of shock waves in hyperelastic solids. (German summary) *Acta Mech.* 20 (1974), 133-149. (D. R. Bland) 50 #9113 73.35
- (with Şuhubi, Erdoğan S.) Wave propagation in dissipative or dispersive non-linear media. *J. Inst. Math. Appl.* 21 (1978), no. 1, 25-40. (I. M. Longman) 57 #8318 73.41
- Tezcan, Cevdet. Variational applications in the kinetic theory of gases. (Turkish summary) *METU J. Pure Appl. Sci.* 9 (1976), no. 3, 279-286. (Kolumban Hutter) 57 #8805 82.49
- Tezin, A. M. The convergence of improper integrals and numerical series. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* 9 (1968), 15-24. (Jaroslav Smítal) 45 #6989 26A39 (40A99)
- A certain property of the inverse function and its application in the qualitative investigation of differential equations. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* 9 (1968), 25-35. (Leo F. Boron) 46 #3919 34C99
- The supporting derivative of a function of one variable and its properties. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* 9 (1968), 36-47. (Jaroslav Smítal) 45 #6988 26A24
- An application of the supporting derivative in the qualitative investigation of first order differential equations. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* 9 (1968), 48-56. (Å. Elbert) 46 #2128 34A10
- Critical branches and their application in the qualitative investigation of differential equations. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* 9 (1968), 57-62. (Å. Elbert) 46 #2129 34A10
- Orders of smallness in the neighborhood of a singular point of integral curves. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* 9 (1968), 63-68. (Å. Elbert) 46 #2130 34A10
- A qualitative investigation of a generalized homogeneous differential equation by the method of contacts. (Russian) *Barnaul. Gos. Ped. Inst. Učen. Zap.* 9 (1968), 69-72. (Å. Elbert) 46 #2131 34A10
- The problem of the center and focus in the plane of a pičkirjasa. (Russian) *Kirov. Gos. Ped. Inst. Učen. Zap. No. 39 Matematika* (1970), 65-68. (C. E. Langenhop) 50 #10431 34C05
- Qualitative location of the roots of equations and limit cycles. (Russian) *Kirov. Gos. Ped. Inst. Učen. Zap. No. 39 Matematika* (1970), 69-71. (L. Reizigš) 50 #10432 34C05
- Nontopological mapping of the phase plane in the qualitative theory of first order differential equations. (Russian) *Differencial'nye Uravnenija* 8 (1972), 556-558. (I. Muntean) 46 #445 34C05
- Critical branches and Frommer's distinguishing problem. (Russian) *Proceedings of a Seminar on Differential Equations, No. 1 (Russian)*, pp. 52-66, 154. *Kuibyshev. Gos. Univ., Kuibyshev*, 1975. (Author's summary) 58 #6490 34C05 (58E05)
- Tezuka, Yoshikazu (with Kitahashi, Tadahi; Kasahara, Yoshiro) The orthogonal expansion of multi-valued functions and its application to realization with threshold elements. *Electron. Commun. Japan* 52 (1969), no. 9, 108-116. (Not reviewed) 94A05 (65D20)
- (with Kitahashi, Tadahi; Kasahara, Yoshiro; Nomura, Hirosato) Monotonicity of ternary logical functions and its applications to the analysis of ternary threshold functions. *Systems-Computers-Controls* 1 (1970), no. 1, 55-63. (A. Rose) 48 #56 02C05
- (with Kitahashi, Tadahi; Kasahara, Yoshiro; Nomura, Hirosato) Complete monotonicity as the necessary and sufficient condition for a ternary logical function to be a threshold function. *Systems-Computers-Controls* 1 (1970), no. 4, 34-40 (1971). (B. Hazeltine) 46 #6949 94A20
- (with Uchinami, Seiichi; Kasahara, Yoshiro) A model of linguistic information algebra. *Tech. Rep. Osaka Univ.* 20 (1970), 711-723. (R. N. Goss) 48 #10217 68A30
- (with Ling, Shun Tong; Furuno, Kiyokazu) Optimal path in networks with time-varying traverse time and expenses branches. *Tech. Rep. Osaka Univ.* 22 (1972), 335-343. (Izhak Rubin) 49 #10341 90B10 (94A20)
- (with Kajiri, Kenji; Uchinami, Seiichi; Seno, Takonori) Methods of constructing weak precedence functions by postponement of error detection. *Systems-Computers-Controls* 7 (1976), no. 6, 19-26 (1977). (Miroslav Hladky) 58 #8469 68A10
- (with Kajiri, Kenji; Uchinami, Seiichi) Methods of realizing precedence functions with error detecting capabilities. *Systems-Computers-Controls* 7 (1976), no. 6, 27-36 (1977). (From the summary) 57 #18250 68A30
- (with Kajiri, Kenji; Uchinami, Seiichi) Extended precedence parsing method and its error detection. *Tech. Rep. Osaka Univ.* 26 (1976), no. 1276-1307, 13-34. (Authors' summary) 56 #1774 68A05

- (with Komatsu, Masaharu; Ouchi, Yasuhiro; Nakanishi, Hikaru; Sanada, Hidehiko) Optimum route assignment theorem and its application to adaptive routing procedure in message switching networks. *Electron. Comm. Japan* **60** (1977), no. 12, 78-86. (From the summary) **58** #32905 90B35 (90B10)
- Thābit ibn Qurra al-Harrānī** See **Sabra, A. I.**, (Not reviewed); **Borbo, Walter**, **47** #1732; **Moesgaard, Kristian Peder**, **56** #2735; **Karpova, Ludmila**; et al., **58** #15844 and **Jaouiche, Khalil**, **58** #26787
- Thacher, Henry C., Jr.** (with Cody, W. J.; Hillstrom, K. E.) Chebyshev approximations for the Riemann zeta function. *Math. Comp.* **25** (1971), 537-547. (Authors' summary) **45** #4601 65D20
- Series solutions to differential equations by backward recurrence. *Information processing 71 (Proc. IFIP Congress, Ljubljana, 1971), Vol. 2: Applications*, pp. 1287-1291. North-Holland, Amsterdam, 1972. (Author's summary) **57** #1905 65L05 (34A25)
- (with Cody, W. J.; Strecok, Anthony J.) Chebyshev approximations for the psi function. *Math. Comp.* **27** (1973), 123-127. (Authors' summary) **48** #5328 65D15
- Numerical application of the generalized Euler transformation. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974)*, pp. 627-631. North-Holland, Amsterdam, 1974. (Sven-Åke Gustafson) **53** #11960 65B10
- Thackray, Arnold** See **Historical and philosophical perspectives of science**, **50** #6717
- Thaer, Clemens** See **Euclid**, **50** #6769
- Thaheem, A. B.** (with Ahsan, Javed) On ideals in BCK-algebras. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 167-172. (Bruno Poizat) **56** #15417a 02J05 (06A20)
- (with Ahsan, Javed) Chain conditions in BCK-algebras. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 179-184. (Bruno Poizat) **56** #15417b 02J05 (06A20)
- A note on states of von Neumann algebras. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 189-190. (William L. Green) **57** #3871 46L10
- (with Ahsan, Javed) A note on prime ideals in Tanaka algebras. *Math. Sem. Notes Kobe Univ.* **5** (1977), no. 2, 223-226. (Annalisa Marcja) **57** #5747 02J05 (08A05)
- Construction of a left Hilbert algebra associated to a von Neumann algebra. *Simon Stevin* **51** (1977/78), no. 3, 113-121. (François Combes) **57** #7202 46L10
- do minh Thai** See **Do Minh Thai**
- fam hong Thai** See **Fam Hong Thai**
- nguen min Thai** See **Nguen Min Thai**
- Thai Quang** (with Kukanov, A. B.) A certain singular solution of the Klein-Gordon equation in the presence of parallel, constant, and homogeneous fields. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **26** (1971), no. 6, 739-741. **45** #8170 81.35
- A certain singular solution of the Schrödinger equation in an electric and a magnetic field that are homogeneous and constant. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* **27** (1972), no. 2, 256-259. (J. Wiesner) **46** #6749 81.35
- A certain general method of integration of the Schrödinger equation with a singular right hand side in a homogeneous and constant electromagnetic field. (Russian) *Ž. Vyčisl. Mat. i Mei. Fiz.* **12** (1972), 489-491. (J. Wiesner) **46** #6750 81.35
- Thakare, Nimbakrishna** The expansion of x^k in terms of ultra-spherical polynomials without using the orthogonal property. *J. Shivaji Univ.* **4** (1971), no. 8 (Science), 69-71. (P. Anandani) **50** #10367 33A45
- A note on the application of Schwarz's lemma. *J. Shivaji Univ.* **4** (1971), no. 8 (Science), 109. (Author's introduction) **50** #4931 30A42
- Remarks on dual series equations involving orthogonal polynomials. *J. Shivaji Univ.* **5** (1972), no. 10 (Science), 67-72. (K. N. Srivastava) **48** #2699 45F10
- (with Karande, B. K.) Some properties of orthogonal polynomials related to Hermite polynomials. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **17**(65) (1973), no. 1, 57-69 (1974). (S. K. Chatterjea) **50** #13669 33A65
- Generalisation of Sheffer A -type classification. *J. Shivaji Univ.* **6** (1973), no. 11-12, 33-37. (Not reviewed) **33A65**
- (with Karande, B. K.) Some results for orthogonal polynomials related to ultraspherical polynomials. *J. Shivaji Univ.* **6** (1973), no. 11-12, 39-43. (Not reviewed) **33A45**
- (with Karande, B. K.) Remarks on the operational formulas for orthogonal polynomials. *Mat. Vesnik* **10**(25) (1973), 139-144. (W. A. Al-Salam) **48** #8900 33A65 (44A45)
- On the polynomials generated by $A(t)\psi\{xH(t) + \exp(xt)\}$. *Math. Student* **41** (1973), no. 3-4, 391-394 (1974). (I. M. Sheffer) **51** #13315 33A70
- Generalised Rainville polynomials. *Bull. Calcutta Math. Soc.* **66** (1974), no. 3, 145-148. (W. A. Al-Salam) **58** #1312 33A70
- (with Karande, B. K.) Generating function in the unified form for the classical orthogonal polynomials by using Lagrange's theorem. *J. Shivaji Univ. (Sci.)* **7** (1974), no. 14, 63-66. (From the summary) **50** #16744 33A65
- (with Phadke, S. V.) When an s.i.p. space is a Hilbert space. *Math. Student* **42** (1974), 193-194 (1975). (R. H. Cox) **52** #14946 46C05
- (with Bhonsle, B. R.) On orthogonal polynomials related to the ultraspherical polynomials. *Proc. Nat. Acad. Sci. India Sect. A* **44** (1974), 129-136. (S. Saran) **51** #3582 33A65
- (with Karande, B. K.) Generating functions and modified polynomial sets. *Proc. Nat. Acad. Sci. India Sect. A* **44** (1974), no. 3, 231-236. (R. A. Askey) **52** #8537 33A70
- Some dual series equations involving Jacobi polynomials. *Z. Angew. Math. Mech.* **54** (1974), 283-284. (K. N. Srivastava) **49** #9562 45F10
- (with Karande, B. K.) On the unification of Bernoulli and Euler polynomials. *Indian J. Pure Appl. Math.* **6** (1975), no. 1, 98-107. (K. N. Srivastava) **54** #110 10A15 (33A70)
- (with Karande, B. K.) Results involving generalized hypergeometric polynomials and orthogonal polynomials related to Hermite polynomials. *Indian J. Pure Appl. Math.* **6** (1975), no. 6, 637-647. (S. K. Chatterjea) **56** #16005 33A30
- (with Karande, B. K.) Note on the generating function for generalized hypergeometric polynomials. *Indian J. Pure Appl. Math.* **6** (1975), no. 10, 1185-1187. (Authors' summary) **57** #12925 33A30
- (with Karande, B. K.) On polynomials related to Konhauser-biorthogonal polynomials. *Math. Student* **43** (1975), 67-72 (1976). (Y. L. Luke) **56** #709 33A65
- (with Khasbardar, Sunanda K.) On vectorial paranorms. *Indian J. Pure Appl. Math.* **7** (1976), no. 1, 38-48. (E. Deutsch) **56** #8590 15A03
- (with Karande, B. K.) Some results for Konhauser-biorthogonal polynomials and dual series equations. *Indian J. Pure Appl. Math.* **7** (1976), no. 6, 635-646. (Author's summary) **58** #23413 45F10
- (with Bhonsle, B. R.; Prasad, R. D.) A unified presentation of integral transform with classical orthogonal polynomials as kernels. *Indian J. Pure Appl. Math.* **7** (1976), no. 7, 717-727. (E. J. Scott) **58** #23370 44A15
- (with Karande, B. K.) On certain q -orthogonal polynomials. *Indian J. Pure Appl. Math.* **7** (1976), no. 7, 728-736. (L. Carlitz) **58** #22706 33A70 (40B05)
- (with Pawar, Y. S.) pm-lattices. *Algebra Universalis* **7** (1977), no. 2, 259-263. (Johnny A. Johnson) **55** #7874 06A35
- (with Patil, K. R.) Some generating functions in unified form for the classical orthogonal polynomials and Bessel polynomials. *Indian J. Pure Appl. Math.* **8** (1977), no. 1, 94-102. (H. L. Manocha) **57** #12941 33A65
- (with Phadke, S. V.; Khasbardar, Sunanda K.) On QU-operators. *Indian J. Pure Appl. Math.* **8** (1977), no. 3, 335-343. (Teishirō Saitō) **57** #3899 47B20
- (with Patil, K. R.) Bilateral generating function for a function defined by generalized Rodrigues' formula. *Indian J. Pure Appl. Math.* **8** (1977), no. 4, 425-429. (R. N. Jain) **57** #3480 33A65
- (with Phadke, S. V.) M -hyponormal operators: invariant subspaces and spectral localization. *Indian J. Pure Appl. Math.* **8** (1977), no. 4, 487-496. (S. K. Berberian) **57** #3900 47B20
- (with Pethe, Prakash) Applications of the projection theorem and some results. *Indian J. Pure Appl. Math.* **8** (1977), no. 8, 898-902. (T. Rolf Turner) **58** #23518 46B99
- (with Pethe, Prakash) DP property, RNP and semiseparability. *Kyungpook Math. J.* **17** (1977), no. 1, 109-115. (Barbara T. Faires) **58** #17798 46B99
- (with Khasbardar, Sunanda K.) Spectraloid operators, similarity and related results. *Indian J. Pure Appl. Math.* **9** (1978), no. 5, 494-500. (J. A. Van Casteren) **57** #17375 47B40 (47A10, 47B20)
- (with Pethe, Prakash) Note on Dunford-Pettis property and Schur property. *Indiana Univ. Math. J.* **27** (1978), no. 1, 91-92. (William B. Johnson) **56** #16326 46B05
- (with Phadke, S. V.) On the generalized numerical ranges of operators. *Math. Japon.* **23** (1978), no. 1, 139-140. (C. C. White) **58** #12465 47A65
- Thakkar, Ajit J.** A technique for increasing the utility of the Wigner-Kirkwood expansion for the second virial coefficient. *Molecular Phys.* **36** (1978), no. 3, 887-892. (Author's summary) **58** #25724 82.65 (65B99)
- Thakur, Ajit K.** (with Rescigno, Aldo; Schafer, D. E.) On the stochastic theory of compartments. I. A single-compartment system. *Bull. Math. Biophys.* **34** (1972), no. 1, 53-63. (Authors' summary) **53** #12636 92A05
- (with Rescigno, Aldo; Schafer, D. E.) On the stochastic theory of compartments. II. Multi-compartment systems. *Bull. Math. Biology* **35** (1973), no. 1/2, 263-271. (Authors' summary) **53** #12637 92A05
- (with Rescigno, Aldo) On the stochastic theory of compartments. III. General time-dependent reversible systems. *Bull. Math. Biology* **40** (1978), no. 2, 237-246. (F. T. Lindstrom) **57** #7816 60K99 (92A05)
- Thakur, Anuj** A résumé of mathematical theories on decision theory. *Pure Appl. Math. Sci.* **4** (1976), no. 1-2, 173-182. (Author's summary) **55** #7453 90D35 (90A05)
- Thakur, L. B.** Asymptotic behaviour of solutions of perturbed difference equations. *Indian J. Pure Appl. Math.* **9** (1978), no. 5, 490-493. (B. M. Agrawal) **58** #1787 39A10
- Thaleimer, Willi** (with Constantinescu, Florin) Euclidean Green's functions for Jaffe fields. *Comm. Math. Phys.* **38** (1974), 299-316. (H. Araki) **50** #15692 (EA 53) 81.46
- Thaler, George J.** See **Automatic control: classical linear theory**, **52** #16755
- Thaler, Maximilian** Über eine Topologie auf σ -Subalgebren. (English summary) *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **186** (1977), no. 1-3, 139-152. (B. Weiss) **58** #6171 28A65
- (with Österreichischer, Ferdinand) The fundamental Neyman-Pearson lemma and the Radon-Nikodym theorem from a common statistical point of view. *Internat. J. Math. Ed. Sci. Tech.* **9** (1978), no. 2, 163-176. (Detlef Plachky) **58** #3140 62A10 (28A15)
- Thaler, R. M.** (with Ernst, D. J.; Londergan, J. T.; Miller, Gerald A.) Correlation expansion of the optical potential. *Phys. Rev. C* **(3)** **16** (1977), no. 2, 537-555. (Authors' summary) **56** #17592 81.47
- Thalheimer, W.** (with Constantinescu, Florin) Remark on generalized Markov processes. *J. Functional Analysis* **23** (1976), no. 1, 33-38. (Robin Hudson) **54** #8880 60J2 (81.60)
- Thall, Peter F.** (with Kullback, S.) An information theoretic proof of the integral representation theorem. *J. Combinatorics Information Syst. Sci.* **2** (1977), no. 2-3, 97-103. (I. Vajda) **57** #2743 94A15
- (with Ammann, Larry P.) On the structure of regular infinitely divisible point processes. *Stochastic Processes Appl.* **6** (1977/78), no. 1, 87-94. (Mark Westcott) **58** #18709 60G55
- (with Ammann, Larry P.) Random measures with aftereffects. *Ann. Probability* (1978), no. 2, 216-230. (Alan F. Karr) **57** #14129 60G55
- din' bat Tham** See **Din' Bat Tham**
- Tham, Quang C.** Minimal polynomial from the Markov parameters of a system. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 1, 133-134. (Seihaku Higuchi) **52** #16747 93B15
- Thämetl, Wolfgang** Eine Verallgemeinerung des Lemmas von Neyman-Pearson. (English and Russian summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 6, 933-937. (J. Zowe) **53** #9007 49D30
- Über Lösbarkeitseigenschaften homogener linearer Ungleichungen in halbgeordneten Räumen. (English and Russian summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 2, 281-294. (Werner Krabs) **54** #339 15A39 (90C05)
- Einige Bemerkungen zur natürlichen Halbnorm von linearen Optimalproblemen. (English and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* (1977), no. 4, 485-493. (Author's summary) **57** #18102 65K05 (90C05)
- Zum Satz von Ljapunov in Vektorverbänden. (English and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optim.* **9** (1978), no. 1, 79-87. (Author's summary) **58** #23503 46A99 (46G10, 47B55)

- es, Howard D., Jr. (with Elster, Allen D.) Equilibrium states and oscillations for localized two-enzyme kinetics: a model for circadian rhythms. *J. Theoret. Biol.* **59** (1976), no. 2, 415-427. (Brian D. Sleeman) **55** #10059 92A05 (80.35)
- (with Aronson, D. G.) Oscillation in a non-linear parabolic model of separated, cooperatively coupled enzymes. *Nonlinear systems and applications* (Proc. Internat. Conf., Univ. Texas, Arlington, Tex., 1976), pp. 687-693. Academic Press, New York, 1977. Kuang-Ho Chen) **57** #11826 92A05 (35K60)
- ipuram, D. V. Bitopological spaces and quasiregularities. *Kyungpook Math. J.* **10** (1970), 149-160. (M. G. Murdeshwar) **45** #1111 54E55
- Bitopological spaces and hypometries. *Ricerche Mat.* **19** (1970), 161-165. (E. Talpaz) **46** #8171 54D15 (54E55)
- Regular relations and regularities. (Italian summary) *Boll. Un. Mat. Ital.* (4) **4** (1971), 351-353. (M. G. Murdeshwar) **45** #4354 54E05
- Regular spaces and functional separation. *Kyungpook Math. J.* **11** (1971), 37-39. (E. J. Rozycki) **46** #9927 54D10
- Normal neighborhood spaces. *Rend. Sem. Mat. Univ. Padova* **45** (1971), 95-97. (Mary Powderly) **47** #4192 54A05 (54D15)
- Quasiuniform spaces and functional separation. *Rev. Roumaine Math. Pures Appl.* **6** (1971), 1285-1289. (T. L. Hicks) **46** #6306 54E15
- Syntopogenous structures and complete regularity. *Publ. Math. Debrecen* **19** (1972), 15-119 (1973). (Mary Powderly) **53** #9118 54A15 (54D15, 54A10)
- Regularity for bitopological spaces. *Publ. Math. Debrecen* **20** (1973), 41-44. (Mary Powderly) **51** #1760 54E55
- Neighborhood spaces and convergence. *Portugal. Math.* **33** (1974), 43-49. (W. S. Mahavier) **51** #6686 54A05
- On completely regular spaces. *Portugal. Math.* **33** (1974), 203-208. (H. Buchwalter) **50** #8456 54E25
- tu Than' See Nguen Tu Than'
- van Than See Nguyen Van Than
- han' Fong See Ngo Than' Fong
- ngok Thang See Nguen Ngok Thang
- am Babu, P. V. (with McDaniel, T. J.; Testa, Frank J.) Solution bounds for transient vibration problems. *Trans. ASME Ser. E J. Appl. Mech.* **44** (1977), no. 1, 59-164. (S. Leela) **57** #4734 70.65
- ng Thanh See Le Cong Thanh
- h, H. H. See Control in space, **48** #8040
- h Thanh Bang See Nguyễn Thanh Bang
- hanh Liem See Vo Thanh Liem
- en Thanh Van See Nguyen Thanh Van
- igalam, K. A Waring-Goldbach problem. *Norske Vid. Selsk. Skr. (Trondheim)* **1971**, no. 3, 4 pp. (O. H. Körner) **45** #1862 10J05
- Congruence properties of certain restricted partitions. *Math. Mag.* **47** (1974), 54-156. (S. A. Burr) **50** #4477 10A45
- Notes on Waring's problem. *Portugal. Math.* **33** (1974), 163-165. (W. A. Webb) **53** #10747 10J10
- On certain sequences of integers. *Trans. Amer. Math. Soc.* **200** (1974), 199-205. (S. L. G. Choi) **50** #7083 10L10 (10J10)
- os, C. (with Ancillotti, P.; Fusani, M.; Lijtmaer, N.) Deadlock conditions in well structured modular systems. *Vierde Jahrestagung der Gesellschaft für Informatik (Berlin, 1974)*, pp. 289-298. *Lecture Notes in Comput. Sci.*, Vol. 26, Springer, Berlin, 1975. Andrzej Blikle) **53** #1997 68A05
- Pe (with Singh, Naunihal) A test for interaction terms in a split-plot design. *Biometrical J.* **19** (1977), no. 8, 653-663. (H. L. Harter) **57** #10939 62K10 (62J10)
- (with Singh, Naunihal) Corrigendum to: "A test for interaction terms in a split plot design" (Biometrical J. **19** (1977), no. 8, 653-663). *Biometrical J.* **20** (1978), no. 2, (loose errata). (Editors) **58** #18942 62K10 (62J10)
- ngok Thao See Fam Ngok Thao
- ang Thao See Vo Dang Thao
- amaratnam, Velupillai Division d.g. near-rings. *J. London Math. Soc.* (2) **14** (1976), no. 1, 135-147. (G. Betsch) **56** #8636 16A76
- p, Leslie H. A quasi-intuitionistic set theory. *J. Symbolic Logic* **36** (1971), 456-460. Lawrence Pozsgay) **45** #6617 02K10
- The characterization of monadic logic. *J. Symbolic Logic* **38** (1973), 481-488. (J. A. Makowsky) **49** #2250 02B20
- Continuity and elementary logic. *J. Symbolic Logic* **39** (1974), 700-716. (M. Yasuhara) **51** #49 02B20 (02H05)
- Which logic is the right logic? *Synthese* **31** (1975), no. 1, 1-21. (From the author's introduction) **57** #5665 02A05 (02B10)
- Charles A characteristic property of totally developable manifolds. (Dutch. English summary) *Simon Stevin* **49** (1975/76), no. 4, 177-184. (T. Banchoff) **54** #3603 53A20
- Parameters of distribution of $(n+1)$ -dimensional monosystems in the Euclidean space \mathbb{R}^{2n+1} . *Czechoslovak Math. J.* **28(103)** (1978), no. 1, 13-24. (M. A. Akivis) **58** #12748 53A15
- Joseph Adolphe On the θ -normals of a conic section. (Dutch) *Simon Stevin* **40** (1966/67), 107-112. (A. Eyvatar) **45** #7574 50B10
- On the θ -normals of a parabola. (Dutch) *Simon Stevin* **42** (1968/69), 51-64. (A. Eyvatar) **46** #172 14A25
- Connection between the n -dimensional affine space $A_{n,q}$ and the curve C , with equation $y=x^q$, of the affine plane $A_{2,q,n}$. (Italian summary) *Rend. Ist. Mat. Univ. Trieste* **2** (1970), 146-151. (H. Lüneburg) **45** #7587 50D05
- An equivalent to Pappus' theorem in the affine plane $A_2(k)$ over a corpus K with characteristic different from two. *Simon Stevin* **44** (1970/71), 186-187. (E. Morgantini) **45** #1027 50D05
- (with Bottema, Oene) A generalization to $(3m-1)$ -dimensional space of a theorem on two triangles reciprocally polar with respect to a conic. (Dutch summary) *Med. Konink. Vlaamse Acad. Wetensch. Lett. Schone Kunst. België Kl. Wetensch.* **33** (1971), no. 3, 11 pp. (J. F. Rigby) **46** #2539 50D20
- The m -dimensional projective space $S_m(M_n(\text{GF}(q)))$ over the total matrix algebra $M_n(\text{GF}(q))$ of the $n \times n$ -matrices with elements in the Galois field $\text{GF}(q)$. *Rend. Mat.* (6) **4** (1971), 459-532. (H. Salzmann) **47** #4134 50D35
- Ovoidal translation planes. *Arch. Math. (Basel)* **23** (1972), 110-112. (T. G. Ostrom) **46** #4358 50D30
- 4-gonal subconfigurations of a given 4-gonal configuration. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **53** (1972), 520-530 (1973). (A. Barlotti) **52** #5450 05B30
- Deduction of properties, valid in the projective space $S_{3n-1}(K)$, using the projective plane over the total matrix algebra $M_n(K)$. *Simon Stevin* **46** (1972/73), 3-16. (H. Brauner) **47** #7584 50D30
- Construction of partial geometries. *Simon Stevin* **46** (1972/73), 95-98. (E. Seiden) **47** #6517 05B25
- Flocks of finite egglike inversive planes. *Finite geometric structures and their applications* (C.I.M.E., II Ciclo, Bressanone, 1972), pp. 189-191. Edizioni Cremonese, Rome, 1973. (Stanley E. Payne) **50** #9627 05B25
- 4-gonal configurations. *Finite geometric structures and their applications* (C.I.M.E., II Ciclo, Bressanone, 1972), pp. 249-263. Edizioni Cremonese, Rome, 1973. (M. J. Kallaher) **49** #7905 50D20
- A combinatorial problem. *Geometriae Dedicata* **1** (1973), no. 2, 236-240. (C. Ballester Pereyra) **47** #2484 50D30
- On 4-gonal configurations. *Geometriae Dedicata* **2** (1973), 317-326. (R. Artzy) **48** #12271 50D30
- Geometric characterization of the $[n-1]$ -ovaloids of the projective space $\text{PG}(4n-1, q)$. *Simon Stevin* **47** (1973/74), 97-106. (Peter Brückmann) **50** #3103 50D30
- On polarities of symmetric partial geometries. *Arch. Math. (Basel)* **25** (1974), 394-399. (Jane W. Di Paola) **52** #10454 05B25
- Translation 4-gonal configurations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 3, 303-314. (Stanley E. Payne) **51** #7908 05B25
- Construction of maximal arcs and partial geometries. *Geometriae Dedicata* **3** (1974), 61-64. (A. Barlotti) **50** #1931 05B25
- On semi ovals and semi ovoids. *Geometriae Dedicata* **3** (1974), 229-231. (B. B. Phadke) **50** #3104 50D30
- On 4-gonal configurations with parameters $r=q^2+1$ and $k=q+1$. I. *Geometriae Dedicata* **3** (1974), 365-375. (Stanley E. Payne) **53** #5335 05B25 (50D30)
- A remark concerning the restriction on the parameters of a 4-gonal subconfiguration. *Simon Stevin* **48** (1974/75), no. III-IV, 65-68. (Paul de Witte) **58** #302 05B25
- Flocks of non-singular ruled quadrics in $\text{PG}(3, q)$. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 1-2, 83-85 (1976). (Author's summary) **58** #7377 50D30
- (with De Clerck, Frank) Some applications of the fundamental characterization theorem of R. C. Bose to partial geometries. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 1-2, 86-90 (1976). (Authors' summary) **58** #7385 50D35
- (with Bruen, Aiden A.) Flocks, chains and configurations in finite geometries. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 6, 744-748 (1976). (R. Artzy) **58** #7376 50D30 (05B25)
- 4-gonal configurations with parameters $r=q^2+1$ and $k=q+1$. II. *Geometriae Dedicata* **4** (1975), no. 1, 51-59. (Stanley E. Payne) **53** #5336 05B25 (50D30)
- Some results concerning $\{(q+1)(n-1); n\}$ -arcs and $\{(q+1)(n-1)+1; n\}$ -arcs in finite projective planes of order q . *J. Combinatorial Theory Ser. A* **19** (1975), no. 2, 228-232. (W. M. Kantor) **51** #13851 50D30
- (with Payne, Stanley E.) Generalized quadrangles with symmetry. *Simon Stevin* **49** (1975/76), no. 1/2, 3-32. (D. Betten) **54** #7290a 05B25 (50D35)
- (with Payne, Stanley E.) Generalized quadrangles with symmetry. II. *Simon Stevin* **49** (1975/76), no. 3, 81-103. (D. Betten) **54** #7290b 05B25 (50D35)
- (with Payne, Stanley E.) Classical finite generalized quadrangles: a combinatorial study. *Ars Combinatoria* **2** (1976), 57-110. (Francis Buekenhout) **55** #140 05B25
- On generalized quadrangles with parameters $s=q^2$ and $t=q^2$. *Geometriae Dedicata* **5** (1976), no. 4, 485-496. (Jean-Claude Petit) **57** #7371 50D35
- (with Cameron, Peter J.; Payne, Stanley E.) Polarities of generalized hexagons and perfect codes. *Geometriae Dedicata* **5** (1976), no. 4, 525-528. (Norman Biggs) **58** #5289 05B30 (94A10)
- A restriction on the parameters of a subhexagon. *J. Combinatorial Theory Ser. A* **21** (1976), no. 1, 115-117. (Stanley E. Payne) **53** #10616 05B25
- (with Bruen, Aiden A.) Partial spreads, packings and Hermitian manifolds in $\text{PG}(3, q)$. *Math. Z.* **151** (1976), no. 3, 207-214. (E. J. F. Primrose) **54** #11168 50D35
- (with Debroey, Ingrid) On polarities of symmetric semipartial geometries. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **62** (1977), no. 5, 606-612. (Peter J. Cameron) **58** #10511 05B25
- (with Bruen, Aiden A.) Blocking sets. *Geometriae Dedicata* **6** (1977), no. 2, 193-203. (J. C. Fisher) **57** #1256 50D30 (05B25)
- Combinatorial characterizations of the classical generalized quadrangles. *Geometriae Dedicata* **6** (1977), no. 3, 339-351. (Author's review) **58** #21704 05B25 (50D30)
- Two infinite classes of perfect codes in metrically regular graphs. *J. Combinatorial Theory Ser. B* **23** (1977), no. 2-3, 236-238. (Norman Biggs) **57** #5838 05C99 (05B25, 94A10)
- (with De Winne, Paul) Generalized quadrangles in finite projective spaces. *J. Geometry* **10** (1977), no. 1-2, 126-137. (Francis Buekenhout) **58** #10523 05B25 (50D30)
- (with De Clerck, Frank) Partial geometries satisfying the axiom of Pasch. *Simon Stevin* **51** (1977/78), no. 3, 123-137. (Francis Buekenhout) **57** #5790 05B25 (50D35)
- (with Debroey, Ingrid) Semi partial geometries in $\text{AG}(2, q)$ and $\text{AG}(3, q)$. *Simon Stevin* **51** (1977/78), no. 4, 195-209. (Francis Buekenhout) **58** #12692 50D10
- (with De Clerck, Frank) Partial geometries in finite projective spaces. *Arch. Math. (Basel)* **30** (1978), no. 5, 537-540. (Francis Buekenhout) **58** #10512 05B25 (50A20, 50D30)

- Combinatorial characterizations of generalized quadrangles with parameters $s = q$ and $t = q^2$. *Geom. Dedicata* 7 (1978), no. 2, 223-232. (Stanley E. Payne) 58 #5286 05B25 (50D35)
- Partial geometries in finite affine spaces. *Math. Z.* 158 (1978), no. 1, 1-13. (Stanley E. Payne) 58 #303 05B25 (50D35)
- tuong ton That** See **Tuong Ton That**
- Thatcher, A. R.** See **Studies in the history of statistics and probability**, 51 #1889
- Thatcher, Henry C., Jr.** (with Lackey, Jackson B.) Errata: *Handbook of mathematical functions with formulas, graphs, and mathematical tables* (Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 1964) by Milton Abramowitz and Irene A. Stegun. *Math. Comp.* 31 (1977), no. 138, 614. (Editors) 55 #1697 65A05
- Thatcher, James W.** Generalized 2 sequential machine maps. *J. Comput. System Sci.* 4 (1970), 339-367. (S. Huzino) 46 #1488 94A25
- Tree automata: an informal survey. *Currents in the theory of computing*, pp. 143-172. *Series in Automatic Computation*, Prentice-Hall, Englewood Cliffs, N. J., 1973. (Itsoo Takanashi) 54 #14445 68A25 (68A30)
- (with Goguen, Joseph A., Jr.) Initial algebra semantics. *15th Annual Symposium on Switching and Automata Theory* (1974), pp. 63-77. *IEEE Comput. Soc., Long Beach, Calif.*, 1974. (D. Vaida) 54 #4168 68A05
- (with Burstall, R. M.) The algebraic theory of recursive program schemes. *Category theory applied to computation and control* (Proc. First Internat. Sympos., San Francisco, Calif., 1974), pp. 126-131. *Lecture Notes in Comput. Sci.*, Vol. 25, Springer, Berlin, 1975. (Giorgio Germano) 52 #2268 68A05 (68A30)
- (with Rosenberg, Arnold L.) What is a multilevel array? *IBM J. Res. Develop.* 19 (1975), 163-169. (W. D. Maurer) 51 #14627 68A05
- (with Wright, Jesse B.; Wagner, Eric G.; Goguen, Joseph A., Jr.) Rational algebraic theories and fixed-point solutions. *17th Annual Symposium on Foundations of Computer Science* (Houston, Tex., 1976), pp. 147-158. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Horst Reichel) 57 #18202 68A05 (18C10)
- (with Goguen, Joseph A., Jr.; Wagner, Eric G.; Wright, Jesse B.) Parallel realization of systems, using factorizations and quotients in categories. *J. Franklin Inst.* 301 (1976), no. 6, 541-558. (E. G. Manes) 54 #10373 18B20 (93A10)
- (with Wright, Jesse B.; Wagner, Eric G.) A uniform approach to inductive posets and inductive closure. *Mathematical foundations of computer science* (Proc. Sixth Sympos., Tatranská Lomnica, 1977), pp. 192-212. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (Claude Benzaken) 58 #10632 06A10 (68A05)
- (with Goguen, Joseph A., Jr.; Wagner, Eric G.; Wright, Jesse B.) Initial algebra semantics and continuous algebras. *J. Assoc. Comput. Mach.* 24 (1977), no. 1, 68-95. (Authors' summary) 58 #25071 68A05 (68A30)
- (with Wright, Jesse B.; Wagner, Eric G.) A uniform approach to inductive posets and inductive closure. *Theoret. Comput. Sci.* 7 (1978), no. 1, 57-77. (Henner Kröger) 58 #404 06A10 (68A05)
- See also **Cybernetics collection**, 51 #2326 and **Complexity of computer computations**, 51 #9575
- Thatcher, R. W.** Singularities in the solution of Laplace's equation in two dimensions. *J. Inst. Math. Appl.* 16 (1975), no. 3, 303-319. (R. E. Barnhill) 54 #4147 65N30
- The use of infinite grid refinements at singularities in the solution of Laplace's equation. *Numer. Math.* 25 (1975/76), no. 2, 163-178. (G. T. Symm) 53 #4578 65N30
- On the finite element method for unbounded regions. *SIAM J. Numer. Anal.* 15 (1978), no. 3, 466-477. (William W. Hager) 57 #11112 65N30
- Thatcher, Richard M.** ★Optimal single channel service policies for stochastic arrivals. Report No. ORC 68-16. *Operations Research Center, University of California, Berkeley, Calif.*, 1968. iv+110 pp. (not consecutively paged) (John C. Gittins) 52 #16561 90B05 (60K30)
- Thathachar, M. A. L.** Stability of systems with power-law non-linearities. (French, German and Russian summaries) *Automatica J. IFAC* 6 (1970), 721-730. (I. H. Mufti (Zbl 223 #93028)) 46 #5005 93D10
- (with Ranganath, H. S.) On-line identification of linear systems. *Internat. J. Systems Sci.* 2 (1971/72), 205-211. (P. J. Nicholson) 46 #6874 93B30
- (with Sundareshan, Malur K.) Allowable regions for stability multiplier characteristics. *AIAA J.* 10 (1972), 1246-1248. (V. M. Popov) 47 #3079 93D99
- (with Sundareshan, Malur K.) L_2 -stability of linear time-varying systems—conditions involving noncausal multipliers. *IEEE Trans. Automatic Control* AC-17 (1972), no. 4, 504-510. (G. Zames) 58 #33401 93D99
- (with Lakshmivarahan, S.) Optimal non-linear reinforcement schemes for stochastic automata. *Information Sci.* 4 (1972), 121-128. (P. Turakainen) 53 #7658 94A35
- (with Ramarajan, S.) L_2 -stability of time-varying systems with global conditions on the time-varying gain. *Internat. J. Systems Sci.* 3 (1972), 385-394. (K. Magnus) 48 #10587 93D05
- (with Sundareshan, Malur K.) Improved conditions for the L_2 -stability of nonstationary feedback systems. *IEEE Trans. Automatic Control* AC-18 (1973), 674-675. (N. Harris McClamroch) 56 #8136 93D99
- (with Sundareshan, Malur K.) Time-domain criteria for the L_2 -stability of nonstationary feedback systems. *IEEE Trans. Automatic Control* AC-18 (1973), no. 1, 80-81. (Authors' summary) 56 #4990 93D15
- (with Sundareshan, Malur K.) Generalized factorizability conditions for stability multipliers. *IEEE Trans. Automatic Control* AC-18 (1973), no. 2, 183-184. (V. M. Popov) 56 #8134 93D15
- (with Sundareshan, Malur K.) Time-varying system stability-interchangeability of the bounds on the logarithmic variation of gain. *IEEE Trans. Automatic Control* AC-18 (1973), no. 4, 405-407. (Authors' summary) 56 #11345 93D99
- (with Lakshmivarahan, S.) Absolutely expedient learning algorithms for stochastic automata. *IEEE Trans. Systems, Man, and Cybernet.* SMC-3 (1973), 281-286. (A. D. Koršunov) 50 #6687 94A35
- (with Sundareshan, Malur K.) Extended time-frequency conditions for the L_2 -stability of a class of non-linear time-varying systems. *Internat. J. Systems Sci.* 4 (1973), 517-526. (W. D. Collins) 49 #4625 93D99
- (with Sundareshan, Malur K.) On the L_2 -stability of a class of nonlinear systems. *J. Math. Anal. Appl.* 42 (1973), 674-683. (Edward J. Davison) 48 #13391 93D10
- (with Ramarajan, S.) Construction of stability multipliers with prescribed phase characteristics: an improved value for σ . *SIAM J. Control* 11 (1973), 94-99. (B. J. Leon) 47 #10108 93D10
- (with Sundareshan, Malur K.) L_2 -stability of nonstationary feedback systems: frequency-domain criteria. *IEEE Trans. Automatic Control* AC-19 (1974), 217-224. (Authors' summary) 54 #12307 93D99
- (with Sundareshan, Malur K.) Average variation L_2 -stability criteria for time-varying feedback systems—a unified approach. *IEEE Trans. Automatic Control* AC-19 (1974), 427-429. (V. M. Popov) 57 #2700 93D99
- (with Narendra, Kumpati S.) Learning automata—a survey. *IEEE Trans. Systems, Man Cybernet.* SMC-4 (1974), 323-334. (J. S. Joel) 57 #9368 94A35 (93C40)
- (with Sundareshan, Malur K.) L_2 -stability of a class of nonstationary feedback systems with dynamical nonlinear subsystems. *IEEE Trans. Automatic Control* AC-20 (1975), 412-415. (Luciano Pandolfi) 55 #10119 93D15
- (with Lakshmivarahan, S.) Bounds on the convergence probabilities of learning automata. *IEEE Trans. Systems Man Cybernet.* SMC-6 (1976), no. 11, 756-763. (R. Theodorescu) 56 #8246 94A35 (68A35)
- (with Lakshmivarahan, S.) Absolute expediency of Q- and S-model learning algorithms. *IEEE Trans. Systems, Man Cybernet.* SMC-6 (1976), no. 3, 222-226. (R. Theodorescu) 52 #16180 68A45
- (with Sundareshan, Malur K.) On the positivity and stability of non-stationary systems. *J. Franklin Inst.* 302 (1976), no. 4, 319-330. (Authors' summary) 56 #15009 93D99
- (with Gajendran, F.) Convergence problems in a class of model reference adaptive control systems. *Proceedings of the 1977 IEEE Conference on Decision and Control* (New Orleans, La., 1977), Vol. 1, pp. 1036-1041. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) 58 #20704 93C40
- (with Vidyasagar, Mathukumalli) A note on feedback stability and instability in the Marcinkiewicz space M_2 . *IEEE Trans. Circuits and Systems* CAS-24 (1977), no. 3, 127-131. (A. S. C. Sinha) 56 #15010 93D99
- See also **DeSantis, Romano M.** (Not reviewed)
- ton-Thât Long** See **Tôn-Thât Long**
- Thatte, Satish M.** (with Nair, Ravindra; Abraham, Jacob A.) Efficient algorithms for testing semiconductor random-access memories. Special issue on fault-tolerant computing. *IEEE Trans. Comput.* 27 (1978), no. 6, 572-576. (Authors' summary) 58 #20864 94A20
- Thau, Fred E.** Optimum nonlinear control of a class of randomly excited systems. *Trans. ASME Ser. G J. Dynamic Systems, Measurement and Control* 93 (1971), 41-44. (Author's summary) 56 #11448 93E20
- (with Park, Chanbin; Kranc, George M.) On the least time suboptimal control of nonlinear processes. *J. Franklin Inst.* 300 (1975), no. 5/6, 377-389. 56 #11223 93C10
- Thau, Stephen A.** See **Nonlinear waves**, 50 #7759
- Thayer, Dorothy T.** (with Novick, Melvin R.; Jackson, Paul H.) Bayesian inference and the classical test theory model: Reliability and true scores. *Psychometrika* 36 (1971), 261-288. (A. D. McLaren) 47 #1189 62F15
- (with Jennrich, Robert I.) A note on Lawley's formulas for standard errors in maximum likelihood factor analysis. *Psychometrika* 38 (1973), 571-580. (C. Hayashi) 49 #10064 62H25 (62P15)
- Thayer F., F. Javier** The Weyl-von Neumann theorem for approximately finite C^* -algebras. *Indiana Univ. Math. J.* 24 (1974/75), 875-877. (Claude Schochet) 56 #6407 46L05 (47A65)
- Obstructions to lifting $*$ -morphisms into the Calkin algebra. *Illinois J. Math.* 20 (1976), no. 2, 322-328. (P. A. Fillmore) 53 #8915 46L05
- Lifting positive elements. *Bol. Soc. Brasil. Mat.* 8 (1977), no. 1, 79-85. (From the introduction) 58 #30340 46M99 (46A99, 46L99)
- Quasi-diagonal C^* -algebras. *J. Functional Analysis* 25 (1977), no. 1, 50-57. (Ole A. Nielsen) 56 #6408 46L05
- Almost periodic operators of inner automorphism groups. *Proc. Amer. Math. Soc.* 63 (1977), no. 1, 119-124. (L. N. Argabright) 56 #3575 43A65
- Thayse, André** Transient analysis of logical networks applied to hazard detection. *Philips Res. Rep.* 25 (1970), 261-336. (B. Hazeltine) 54 #4849 94A20
- A fast algorithm for the proper decomposition of Boolean functions. *Philips Res. Rep.* 27 (1972), 140-150. (W.-K. Chen) 48 #13525 94A30
- (with Davio, Marc; Bioul, G.) Symbolic computation of Fourier transforms of Boolean functions. *Philips Res. Rep.* 27 (1972), 386-403. (J. Kuntzmann) 47 #4722 94A20
- (with Davio, Marc) Boolean differential calculus and its application to switching theory. *IEEE Trans. Computers* C-22 (1973), 409-420. (B. Hazeltine) 50 #12475 94A20
- Disjunctive and conjunctive operators for Boolean functions. *Philips Res. Rep.* 28 (1973), 1-16. (B. Hazeltine) 49 #12191 94A20
- (with Davio, Marc) Representation of fuzzy functions. *Philips Res. Rep.* 28 (1973), 93-106. (F. Gécseg) 48 #10666 94A15
- On some iteration properties of Boolean functions. *Philips Res. Rep.* 28 (1973), 107-119. (W.-K. Chen) 48 #8127 94A20
- (with Deschamps, Jean-Pierre) On a theory of discrete functions. I. The lattice structure of discrete functions. *Philips Res. Rep.* 28 (1973), 397-423. (F. Lapschier) 53 #7884 06A40 (94A20)
- (with Deschamps, Jean-Pierre) On a theory of discrete functions. II. The ring and field structures of discrete functions. *Philips Res. Rep.* 28 (1973), 424-465. (F. Lapschier) 53 #7885 06A40 (94A20)
- (with Deschamps, Jean-Pierre) Applications of discrete functions. I. Transient analysis of combinational networks. *Philips Res. Rep.* 28 (1973), 497-529. (J. C. Muzio) 51 #2787 94A20
- New method for obtaining the optimal Taylor expansions of a Boolean function. *Electron. Lett.* 10 (1974), 543-544. (Not reviewed) 94A20
- Applications of discrete functions. II. Transient analysis of asynchronous switching networks. *Philips Res. Rep.* 29 (1974), 155-192. (J. C. Muzio) 51 #2788 94A20
- On a theory of discrete functions. IV. Discrete functions of functions. *Philips Res.*

- ep. 29 (1974), 305-329. (F. Lapscher) 53 #7887 06A40 (94A20)
Applications of discrete functions. III. The use of functions of functions in switching circuits. *Philips Res. Rep.* 29 (1974), 429-452. (J. C. Muzio) 53 #10508 94A20
Differential calculus for functions from $(GF(p))^n$ into $GF(p)$. *Philips Res. Rep.* 29 (1974), 560-586. (Bostwick F. Wyman) 51 #15229 94A20
(with Deschamps, Jean-Pierre) Representation of discrete functions. *Proceedings of the 1975 International Symposium on Multiple-Valued Logic* (Indiana Univ., Bloomington, Ind., 1975), pp. 99-111. *IEEE Comput. Soc., Long Beach, Calif.*, 1975. (Authors' summary) 58 #9826 94A20
La détection des aléas dans les circuits logiques au moyen du calcul différentiel booléen. (English and German summaries) *Digital Process.* 1 (1975), no. 2, 141-169. (Authors' summary) 56 #15216 94A20
(with Deschamps, Jean-Pierre) Logic properties of unate and of symmetric discrete functions. *Proceedings of the Sixth International Symposium on Multiple-Valued Logic* (Univ. Center, Utah State Univ., Logan, Utah, 1976), pp. 79-87. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Authors' introduction) 58 #20914 94A30
Difference operators and extended truth vectors for discrete functions. *Discrete Math.* 14 (1976), no. 2, 171-202. (F. Lapscher) 56 #18168 94A20
(with Deschamps, Jean-Pierre) The module structure of discrete functions. *Proceedings of the Seventh International Symposium on Multiple-Valued Logic* (Charlotte, N.C., 1977), pp. 14-19. *IEEE Comput. Soc., Long Beach, Calif.*, 1977. (Korolian Gilezan) 58 #9827 94A20
Static-hazard detection in switching circuits by prime-implicant examination in fuzzy functions. *Electron. Lett.* 13 (1977), no. 4, 94-96. (B. Hazeltine) 58 #4705 94A20 (02J99)
(with Deschamps, Jean-Pierre) Logic properties of unate discrete and switching functions. *IEEE Trans. Computers* C-26 (1977), no. 12, 1202-1212. (Authors' summary) 58 #33582 94A20
(with Davio, Marc; Deschamps, Jean-Pierre) ★Discrete and switching functions. With a foreword by Raymond T. Yeh. *Georgi Publishing Co., St.-Saphorin; McGraw-Hill International Book Co., New York-Auckland-Beirut*, 1978. xx+729 pp. ISBN 0-07-015509-7 (I. E. Strazdiņš) 58 #15709 94A20 (02C05, 02J05, 68-02)
Meet and join derivatives and their use in switching theory. *IEEE Trans. Comput.* 27 (1978), no. 8, 713-720. (B. Hazeltine) 58 #4706 94A20
(with Davio, Marc) Optimization of multivalued decision algorithms. *Philips J. Res.* 33 (1978), no. 1-2, 31-65. (I. E. Strazdiņš) 58 #20886 94A25
Jean, Jean La place du nombre dans la dialectique hégélienne et la dialectique amelinienne. *Dialogue* 13 (1974), 733-761. (Author's introduction) 58 #27050 1A55 (00A25)
La logique et la pensée. *Dialogue* 16 (1977), no. 1, 68-103. (Editors) 58 #16110 2A05
an, Laurențiu See *Recherches sur la philosophie des sciences*, 52 #7764
ault, Roland A propos d'un théorème de D. Quillen. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A977-A979. (I. Stewart) 48 #11340 20F40 (16A26)
kedath, K. K. (with Kapoor, S. F.) Highly traceable graphs. *Sankhyā Ser. A* 33 (1971), 211-216. (M. Aigner) 47 #3254 05C99
y, Armin On rings with commutators in the nuclei. *Math. Z.* 119 (1971), 213-218. (Timon Anderson) 45 #5179 17A30
On rings satisfying $[(a, b, c), d] = 0$. *Proc. Amer. Math. Soc.* 29 (1971), 250-254. (T. S. Ravisankar) 45 #3502 17A30
Right alternative rings. *J. Algebra* 37 (1975), no. 1, 1-43. (M. F. Smiley) 52 #5758 17D05
Right alternative rings with Peirce decomposition. *J. Algebra* 37 (1975), no. 1, 44-63. (A. M. Slin'ko) 52 #8210 17D05
(with Coughlin, Raymond; Rich, Michael) Algebras satisfying congruence relations. *Proc. Amer. Math. Soc.* 51 (1975), 263-269. (D. Rodabaugh) 51 #10400 17Axx
Nil-semisimple right alternative algebras. *J. Algebra* 48 (1977), no. 2, 390-400. (Irvin Roy Hentzel) 56 #15722 17D05
Right alternative rings with minimal condition. *Math. Z.* 155 (1977), no. 3, 277-286. (Authors' introduction) 58 #11052 17D05
See also Artin, Emil; et al., 49 #11492
ss, Michael Über die Stützfunktion unbeschränkter konvexer Mengen. *Arch. Math. (Basel)* 29 (1977), no. 6, 666-669. (J. Bokowski) 57 #17507 52A20
en The Hoàn See Nguyen The Hoàn
en The Hoc See Nguyen The Hoc
he Hyu See Vu The Hyu
I, D. S. Densities in a mixed tensor calculus. (Romanian, Russian, English, French and German summaries) *Bul. Inst. Politehn. București* 33 (1971), no. 6, 31-35. (H. A. Eliopoulos) 50 #1144 53A45
I, Henri A new index number formula. *Rev. Econom. Statist.* 55 (1973), 498-502. (A. L. Nagar) 51 #4953 90A15
More on log-change index numbers. *Rev. Econom. Statist.* 56 (1974), 552-554. (A. L. Nagar) 51 #4955 90A15
Disutility as a probability: a reconsideration of the symmetry approach to the committee decision problem. *Management Sci.* 23 (1976/77), no. 2, 109-116. (Authors' summary) 56 #2217 90A05 (90A10)
The independent inputs of production. *Econometrica* 45 (1977), no. 6, 1303-1327. (Authors' summary) 56 #10901 90B30 (90A15)
See also Friedman, Benjamin M., 58 #19000
ller, G. (with Tóvissi, L.) Limit laws for extreme values, Weibull distribution and some statistical problems of control global analysis. (French and Russian summaries) *Econom. Comp. Econ. Cybernet. Stud. Res.* 1976, no. 4, 39-61. (Authors' summary) 56 #6801 60F05 (62G30)
(with Tóvissi, L.) Initial distributions for limit laws of extreme values. (French and Russian summaries) *Econom. Comp. Econ. Cybernet. Stud. Res.* 1977, no. 1, 25-49. (Sidney I. Resnick) 56 #6802 60F05
ss, Edward Foundations of statistical inference and their relations to inductive logic, statistical decision theory and econometrics. (French summary) *Proceedings of the 39th Session of the International Statistical Institute* (Vienna, 1973), Vol. 2. *Bull. Inst. Internat. Statist.* 45 (1973), no. 2, 498-505. (D. A. Sprott) 52 #1954 62A99
phan The Lai See Pham The Lai
Thele, R. L. A theorem on the structure of fixed point sets of certain mappings in topological vector spaces. (Italian summary) *Boll. Un. Mat. Ital.* (4) 10 (1974), 307-311. (T. C. Lim) 51 #13788 47H10
(with Goebel, Kasimierz; Kirk, William A.) Uniformly Lipschitzian families of transformations in Banach spaces. *Canad. J. Math.* 26 (1974), 1245-1256. (Kok Keong Tan) 50 #10919 47H10
Iterative techniques for approximation of fixed points of certain nonlinear mappings in Banach spaces. *Pacific J. Math.* 53 (1974), 259-266. (Kok-keong Tan) 52 #11672 47H10
Some results on the radial projection in Banach spaces. *Proc. Amer. Math. Soc.* 42 (1974), 483-486. (D. E. Wulbert) 48 #6892 46B05
colliot-Thélène, Jean-Louis See Colliot-Thélène, Jean-Louis
Thelidze, M. G. Solution of the Dirichlet problem for a nonlinear equation on the intersection of two regions. (Russian, Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 58 (1970), 525-528. (B. A. Fleishman) 46 #2220 35J60
The Schwarz method for the solution of the Dirichlet problem for a certain system of second order differential equations of a particular form. (Russian, Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 63 (1971), 545-548. (Z. Rubinstein) 45 #3926 35J15 (30A24)
A numerical analogue of the Schwarz method for schemes of increased accuracy for the solution of the Dirichlet problem. (Russian) Problems of applied mathematics—Mushelišvili eightieth birthday collection. *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 11 (1972), no. 1, 135-138. (I. Aganovic) 49 #11826 65N05
A certain generalization of the Biczadze-Samarskii problem. (Russian, Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 66 (1972), 17-19. (V. V. Kovrižkin) 52 #6184 35J70 (35M05)
A certain analogue of the Biczadze-Samarskii problem. (Russian) Questions of computational mathematics (A collection dedicated to the memory of M. B. Gagua). *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 12 (1973), no. 1, 70-73. (I. Aganovic) 50 #2687 35J25
The application of the Schwarz method to the solution of certain boundary value problems for a particular form of system of elliptic differential equations. (Russian) Questions of computational mathematics (A collection dedicated to the memory of M. B. Gagua). *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 12 (1973), no. 1, 74-80. (Editors) 58 #1604 35J55
(with Madzagua, Z. K.) The approximate solution of certain definite integrals. (Russian, Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 70 (1973), 21-24. (J. Kofroň) 50 #3547 65D30
Schwarz's method for a strong solution of the first boundary value problem for linear equations of parabolic type. (Russian) *Works of Young Scientists at Tbilisi State University, Physics, Mathematics and Natural Science Series*, (Russian), pp. 52-56. *Izdat. Tbilis. Univ., Tbilisi*, 1974. (Piero Bassanini) 57 #881 35K20
(with Madzagua, Z. K.) A way of determining the unknowns in certain systems of first order inhomogeneous linear differential equations. (Russian) Questions on numerical mathematics and programming. *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 13/14 (1974/75), no. 2, 56-60. (E. L. Albasing) 54 #632 34A30 (65L05)
Schwarz's method for the "weak solution" of the first boundary value problem for linear parabolic equations. (Russian, Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 74 (1974), 529-532. (V.-V. Olariu) 51 #10878 35K20
de Thelin, François Un théorème de convergence dominée pour des applications à valeurs dans un ensemble de fonctions convexes. *C. R. Acad. Sci. Paris Sér. A-B* 275 (1972), A193-A196. (J. J. Moreau) 46 #7880 46E30
(with Joly, Jean-Luc) Convergence of convex integrals in \mathbb{R}^p spaces. *J. Math. Anal. Appl.* 54 (1976), no. 1, 230-244. (J. Lukeš) 54 #1049 49A50
Régularité intérieure de la solution d'un problème de Dirichlet fortement non linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 10, A443-A445. (Authors' summary) 58 #17508 35J65 (46E35)
Thellier, M. (with Lassalles, J. P.) Discussion on the symmetry of macroscopic coefficients in the formulation of the cellular fluxes: possible application to a "symmetry criterion" for the study of active and passive transports. *J. Theoret. Biol.* 68 (1977), no. 1, 53-63. (Authors' summary) 56 #11066 92A05
Thelliez, Sylvain See Balmer, L.; et al., 53 #2428
nguen The Long See Nguen The Long
dinh The Luc See Dinh The Luc
monteiro freire Themudo, Marília Alda de Lima See Monteiro Freire Themudo, Marília Alda de Lima
Theobald, C. M. Generalizations of mean square error applied to ridge regression. *J. Roy. Statist. Soc. Ser. B* 36 (1974), 103-106. (A. L. Nagar) 51 #4569 62J05
An inequality with application to multivariate analysis. *Biometrika* 62 (1975), no. 2, 461-466. (I. Olkin) 52 #12212 (E 54 #11654) 62H10
An inequality for the trace of the product of two symmetric matrices. *Math. Proc. Cambridge Philos. Soc.* 77 (1975), 265-267. (L. Mirsky) 54 #2694 15A45
Correction: "An inequality with application to multivariate analysis" (*Biometrika* 62 (1975), no. 2, 461-466). *Biometrika* 63 (1976), no. 3, 685. (Editors) 54 #11654 62H10
Theocaris, Pericles S. Stress and displacement singularities near corners. (German summary) *Z. Angew. Math. Phys.* 26 (1975), no. 1, 77-98. (Authors' summary) 53 #15058 73A41
Partly unbonded interfaces between dissimilar materials under normal and shear loading. (German summary) *Acta. Mech.* 24 (1976), no. 1-2, 99-115. (Radu Bădescu) 54 #9237 73A30
(with Tsamasphyros, G. J.) Résolution du deuxième problème aux limites. (English and Russian summaries) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* 24 (1976), no. 12, 919-926. (Authors' summary) 58 #29894 45B05
(with Tsamasphyros, G. J.) Le premier problème aux limites pour un coin infini. (English summary) *J. Mécanique* 15 (1976), no. 4, 615-630. (René Hayart) 55 #1911 73J35
(with Tsamasphyros, G. J.) Numerical inversion of Mellin transforms. *Nordisk*

- Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 3, 313-321. (Authors' summary) **54** #11737 65D20
- On the numerical solution of Cauchy-type singular integral equations. *Serdica* **2** (1976), no. 3, 252-275. (Author's summary) **56** #7273 65R05
- (with Ioakimidis, Nikolaos I.) Array of periodic curvilinear cracks in an infinite isotropic medium. (German summary) *Acta Mech.* **28** (1977), no. 1-4, 239-254. (R. L. Richardson) **57** #4746 73.30
- (with Ioakimidis, Nikolaos I.) The Gauss-Hermite numerical integration method for the solution of the plane elastic problem of semi-infinite periodic cracks. *Internat. J. Engrg. Sci.* **15** (1977), no. 4, 271-280. (S. P. Gavelja) **58** #14230 73.65
- (with Ioakimidis, Nikolaos I.) The problem of the simple smooth crack in an infinite anisotropic elastic medium. *Internat. J. Solids and Structures* **13** (1977), no. 4, 269-278. (A. Corduneanu) **55** #9666 73.45
- (with Chrysakis, A. C.) Numerical inversion of the Mellin transform. *J. Inst. Math. Appl.* **20** (1977), no. 1, 73-83. (Authors' summary) **56** #13536 65D20
- (with Ioakimidis, Nikolaos I.) On the numerical solution of a class of singular integral equations. *J. Mathematical and Physical Sci.* **11** (1977), no. 3, 219-235. (Frank G. Hagin) **58** #3582 65R05
- (with Tsamasphyros, G. J.) On the convergence of a Gauss quadrature rule for evaluation of Cauchy type singular integrals. *Nordisk Tidskr. Informationsbehandling (BIT)* **17** (1977), no. 4, 458-464. (Thomas A. Atchison) **57** #7959 65D30 (41A55)
- (with Ioakimidis, Nikolaos I.) Numerical integration methods for the solution of singular integral equations. *Quart. Appl. Math.* **35** (1977/78), no. 1, 173-187. (Sean McKee) **56** #4206 65R05
- (with Ioakimidis, Nikolaos I.) The inclusion problem in plane elasticity. *Quart. J. Mech. Appl. Math.* **30** (1977), no. 4, 437-448. (Authors' summary) **56** #13890 73.30
- (with Ioakimidis, Nikolaos I.) On the numerical evaluation of Cauchy principal value integrals. *Rev. Roumaine Sci. Tech. Sér. Méc. Appl.* **22** (1977), no. 6, 803-818. (H. Brunner) **58** #3334 65D30
- (with Ioakimidis, Nikolaos I.) Numerical solution of Cauchy type singular integral equations. (Greek summary) *Trans. Acad. Athens* **40** (1977), no. 1, 7-39. (Zbl **385** #65060) **58** #31969 65R05
- (with Ioakimidis, Nikolaos I.) On the numerical solution of Cauchy type singular integral equations and the determination of stress intensity factors in case of complex singularities. (French summary) *Z. Angew. Math. Phys.* **28** (1977), no. 6, 1085-1098. (R. C. MacCamy) **57** #4550 65R05
- (with Tsamasphyros, G. J.) Sur une méthode de résolution du deuxième problème aux limites. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **30** (1978), no. 1, 3-15. (P. Villaggio) **57** #18396 73.45 (45E05)
- Theodore, Chris A.** ★Applied mathematics: an introduction. Mathematical analysis for management. Third edition. Irwin Series in Quantitative Analysis for Business. *Richard D. Irwin, Inc., Homewood, Ill.-London-Georgetown, Ont.*, 1975. xv+611 pp. (Editors) **51** #9594 69.00
- Theodorescu, A.** Énergie informationnelle et notions apparentées. *Trabajos Estadist. Investigación Oper.* **28** (1977), no. 2-3, 183-206. **58** #26548 94A15
- Theodorescu, Radu** (with Iosifescu, Marius) ★Random processes and learning. Die Grundlehren der mathematischen Wissenschaften, Band 150. Springer-Verlag, New York, 1969. x+304 pp. (P. Suppes) **45** #2781 60G05 (92A25)
- (with Hengartner, Walter) Concentration functions. I. *Symposia Mathematica, Vol. IX (Convegno di Calcolo delle Probabilità, INDAM, Rome 1971)*, pp. 79-106. Academic Press, London, 1972. (G. Simboan) **49** #1555 60E05
- (with Hengartner, Walter) Concentration functions. II. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 346-349. (Authors' summary) **54** #11446 60E05
- Random programs. (German and French summaries) *Math. Operationsforsch. Statist.* **3** (1972), no. 1, 19-47. (G. Tintner) **48** #3493 90C15
- (with Hengartner, Walter) ★Concentration functions. Probability and Mathematical Statistics, No. 20. Academic Press [A Subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1973. xii+139 pp. (H. Bergström) **48** #9781 60E05 (60Bxx, 60Fxx)
- (with Le Calvé, Georges) Systèmes aléatoires généralisés à liaisons complètes à temps continu. I, II. (Italian summaries) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 434-440 (1974); *ibid.* (8) **54** (1973), 577-583 (1974). (P. M. Lee) **51** #1957 60G99
- (with Andrieu, Colette) Sur les probabilités absolues stationnaires pour des processus de Markov à temps continu. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 892-897 (1974). (E. M. Klimko) **51** #4395 60J10
- (with Le Calvé, Georges) Systèmes aléatoires généralisés à liaisons complètes à temps continu. III. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 898-901 (1974). (Authors' summary) **58** #31388 60G99
- (with Hengartner, Walter) Concentration and information. *Théories de l'information (Colloq. Information et Questionnaires, Marseille-Luminy, 1973)*, pp. 99-110. *Lecture Notes in Math.*, Vol. 398, Springer, Berlin, 1974. (I. Csizsár) **51** #9147 60E05 (94A15)
- (with Bui Trong Liêu) Estimateurs du quasi-maximum de vraisemblance pour des systèmes aléatoires généralisés à liaisons complètes. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 901-903. (Harry I. Cohn) **52** #2103 62M99
- (with Capérea, Philippe; Côté, Robert) Modèle à plusieurs aléas pour certaines chroniques. (English summary) *Trabajos Estadist. Investigación Oper.* **26** (1975), no. 1-3, 377-390. (P. A. Moretton) **58** #13563 62M10 (62M20)
- (with Pruscha, Helmut) Functions of event variables of a random system with complete connections. *J. Multivariate Anal.* **7** (1977), no. 2, 336-362. (M. Iosifescu) **55** #13616 60K99
- (with Henze, Ernst; Massé, Jean-Claude) On multiple Markov chains. *J. Multivariate Anal.* **7** (1977), no. 4, 589-593. (M. Iosifescu) **57** #1661 60J25
- See also Selected translations in mathematical statistics and probability, **49** #4728
- Theodosiou, C. E.** (with Fano, U.; Dehmer, J. L.) Electron-optical properties of atomic fields. *Rev. Modern Phys.* **48** (1976), no. 1, 49-68. (P. Pascual) **58** #4036 81.34
- Theodosopulu, M.** (with Grecos, A. P.) Transformation theory for a lattice model in a uniform field. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **61** (1975), no. 7, 734-750. (Ricardo Lima) **53** #2241 82.47
- (with Grecos, A. P.) The collision operator for a lattice model in a uniform field. *Phys. Lett. A* **54** (1975), no. 3, 231-232. (Authors' summary) **53** #15229 82.47
- (with Grecos, A. P.) On the theory of dissipative processes in quantum systems. *Acta Phys. Polon.* **50** (1976), no. 6, 749-765. (Nicolae Angelescu) **55** #9788 82.47
- Theon of Alexandria** See **Tihon, Anne**, **58** #9998
- Théra, Michel** (with Malivert, Christian; Penot, Jean-Paul) Un prolongement du théorème de Hahn-Banach. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 3, A165-A168. (Authors' summary) **57** #7115 46A99
- Therianos, S.** (with Thompson, Robert C.) The eigenvalues and singular values of matrix sums and product. VIII. Displacement of indices. *Aequationes Math.* **7** (1971), 219-241. (A.R. Amir-Moëz) **49** #2783 15A18
- (with Thompson, Robert C.) Inequalities connecting the eigenvalues of a Hermitian matrix with the eigenvalues of complementary principal submatrices. *Bull. Austral. Math. Soc.* **6** (1972), 117-132. (M. F. Smiley) **48** #6137 15A42
- (with Thompson, Robert C.) The eigenvalues of complementary principal submatrices of a positive definite matrix. *Canad. J. Math.* **24** (1972), 658-667. (A. R. Amir-Moëz) **45** #3445 15A48
- (with Thompson, Robert C.) The eigenvalues and singular values of matrix sums and products. VII. *Canad. Math. Bull.* **16** (1973), 561-569. (Marvin Marcus) **50** #4629 15A42
- (with Thompson, Robert C.) On a construction of B. P. Zwahlen. *Linear and Multilinear Algebra* **1** (1973/74), 309-325. (J. de Pillis) **49** #5044 15A42
- (with Thompson, Robert C.) On the singular values of matrix products. I. *Scripta Math.* **29** 99-110 (1973). (Marvin Marcus) **49** #2799 15A42
- (with Thompson, Robert C.) On the singular values of matrix products. III. *Scripta Math.* **29**, 115-123 (1973). (Marvin Marcus) **49** #2801 15A42
- Thérond, Jean-Daniel** Le groupe des extensions quadratiques séparables libres de l'anneau des entiers de $\mathbb{Q}(\sqrt{d})$. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 22, A939-A942. (J. V. Armitage) **53** #13159 12A25 (15A63)
- (with Micali, Artibano) Sur les groupes $A(n)$. Colloque sur les Formes Quadratiques (Montpellier, 1975). *Bull. Soc. Math. France Suppl. Mem. No. 48* (1976), 75-87. (Maurice Flamant) **58** #11078 18H10 (13D99, 15A66)
- Sur deux conjectures de Small. Colloque sur les Formes Quadratiques (Montpellier, 1975). *Bull. Soc. Math. France Suppl. Mem. No. 48* (1976), 117-122. (A. Rosenberg) **58** #5621 13A99 (13A20, 15A63)
- Inégalités sur les coordonnées des unités de $\mathbb{Z}[\sqrt{d}]$. *Bull. Sci. Math.* (2) **101** (1977), no. 3, 249-253. (Charles J. Parry) **58** #10818 12A45
- Therrien, C. W.** Eigenvalue properties of projection operators and their application to the subspace method of feature extraction. *IEEE Trans. Computers* **C-24** (1975), no. 9, 944-948. (M. Z. Nashed) **52** #4742 68A45
- Therstappen, Norbert** (with Neffke, H.) Anwendung des Zeitmengenprozesses in der Lagerhaltung. *Operations Research Verfahren, Band XX*, pp. 77-94. Hain, Meisenheim am Glan, 1975. (Knut Richter) **56** #7911 90B15 (90C35)
- Ein stochastisches Mehrebenenlagersystem mit Sicherheitslager. *Forschungsberichte des Landes Nordrhein-Westfalen, No. 2605*, pp. 7-30. Westdeutscher Verlag, Opladen, 1976. (A. Prékopa) **56** #17760 90B05
- On cumulative semi-martingales. *Recent developments in statistics (Proc. European Meeting Statisticians, Grenoble, 1976)*, pp. 609-612. North-Holland, Amsterdam, 1977. (Dominique Lepingle) **57** #1637 60G45
- Thesen, Arne** A recursive branch and bound algorithm for the multidimensional knapsack problem. *Naval Res. Logist. Quart.* **22** (1975), no. 2, 341-353. (Neal Glassman) **51** #14960 90C10
- Measures of the restrictiveness of project networks. *Networks* **7** (1977), no. 3, 193-208. (Knut Richter) **57** #9079 90C35
- ★Computer methods in operations research. *Operations Research and Industrial Engineering*. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1978. xiii+268 pp. ISBN 0-12-686150-1 (P. Jambor) **56** #17754 90-01 (90Bxx)
- bui The Tam** See **Bui The Tam**
- Theumann, Alba** Preservation of sum rules for the lp-Green function in Luttinger model. *Phys. Lett. A* **59** (1976), no. 2, 99-101. (Author's summary) **54** #6747 81.35
- Theune, J. A.** Comparison of power for the D'Agostino and the Wilk-Shapiro test of normality for small and moderate samples. *Statistica Neerlandica* **27** (1973), 163-169. (W. E. Strawderman) **50** #1387 62F05
- dao cong Thi** See **Dao Cong Thi**
- nguyen kuok Thi** See **Nguyen Kuok Thi**
- Thiagarajan, P. S.** (with Jump, J. Roberts) On the equivalence of asynchronous control structures. *SIAM J. Comput.* **2** (1973), 67-87. (D. H. Chyng) **49** #2154 93B99
- (with Jump, J. Roberts) On the interconnection of asynchronous control structures. *J. Assoc. Comput. Mach.* **22** (1975), no. 4, 596-612. (Edward T. Lee) **52** #16886 94A20 (93C99)
- Thiam, Doudou-Saxir** Applications à l'intégration multivoque de l'intégrale de Daniell à valeurs dans un monoïde ordonné. *Intégration vectorielle et multivoque (Colloq., Univ. Caen, Caen, 1975)*, Exp. No. 7, 35 pp. *Dép. Math., U. E. R. Sci., Univ. Caen, Caen*, 1975. (Erik G. F. Thomas) **53** #757 28A45 (46G10)
- Multimesures positives. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A1, A993-A995. (Author's summary) **56** #5830 28A45
- Intégrale de Daniell à valeurs dans un semi-groupe ordonné. *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 5-8, A215-A218. (Tim Traynor) **55** #10635 28A45 (28A30)
- Applications, à l'intégration multivoque, de l'intégrale de Daniell à valeurs dans un semi-groupe ordonné. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 22, A1, A955-A958. (Tim Traynor) **55** #10636 28A45
- Intégrales multivoques monotones. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 5, A1, A263-A265. (Igor Klavánek) **53** #754 28A45 (46G10, 28A30)
- Thibault, Lionel** Quelques propriétés des sous-différentiels de fonctions localement lipschitziennes. *Travaux du Séminaire d'Analyse Convexe, Vol. V, Exp. No. 16*, 32 pp. *U.E.R. Math., Univ. Sci. Tech. Languedoc, Montpellier*, 1975. (Editors) **58** #23599 46G99 (26A16)

- Quelques propriétés des sous-différentiels de fonctions réelles localement schitzziennes définies sur un espace de Banach séparable. (English summary) *C. R. ad. Sci. Paris Sér. A-B* **282** (1976), no. 10, A507-A510. (Jean-Paul Penot) #1378 58C20 (46G05)
- Problème de Bolza dans un espace de Banach séparable. (English summary) *C. R. ad. Sci. Paris Sér. A-B* **282** (1976), no. 22, A1303-A1306. (A. D. Ioffe) **55** #8931 49B30
- stun, Thomas (with Hilden, Hugh M.; Montesinos Amilibia, José Maria) Closed oriented 3-manifolds as 3-fold branched coverings of S^3 of special type. *Pacific J. Math.* **65** (1976), no. 1, 65-76. (L. Neuwirth) **54** #8635 57A10 (55A10)
- Taming and the Poincaré conjecture. *Trans. Amer. Math. Soc.* **238** (1978), 385-396. (Jack Weinstein) **58** #2822 57A10 (55A40, 57C30)
- stun, W. R. A system of particles equivalent to solitons. *J. Math. Anal. Appl.* **55** (1976), no. 2, 335-1346. (D. A. Dubin) **54** #12029 81J35
- Boundary layer flow for a moving belt. (Arabic summary) *Arabian J. Sci. Engrg.* **3** (1977), no. 1, 39-43. (Author's summary) **56** #17444 76J35
- aux, H. Jean Minimum variances estimation of coefficient matrices in a dependent system. *Biometrika* **61** (1974), 87-90. (I. Olkin) **52** #2055 62J05 (62H99)
- aux, M. L. Integrodifferential equation for passive scalar diffusion in nonuniform random velocity fields. *Phys. Fluids* **16** (1973), 1395-1402. (R. K. Gupta) **48** #13004 64J45
- On the application of quasi-Lagrangian coordinates to random shear flows. *J. Mathematical Phys.* **15** (1974), 613-618. (G. Papanicolaou) **51** #7476 76J60
- berger, R. (with Friedman, M.; Rosenfeld, Y.; Rabinovitch, A.) Finite element method for solving the two-dimensional Schrödinger equation. *J. Computational Phys.* **6** (1978), no. 2, 169-180. (Authors' summary) **57** #4926 81J65
- fine, F. Hidden models and logical structures in quantum theory. (Italian summary) *Nuovo Cimento B* (11) **44** (1978), no. 1, 167-182. (S. Gudder) **57** #18525 81J02
- Christian Zur Beurteilung der intensionalen Logik bei Leibniz und Castillon. *Akten des II. Internationalen Leibniz-Kongresses (Hannover, 1972), Band IV: Logik, Erkenntnistheorie, Methodologie, Sprachphilosophie*, pp. 27-37. *Studia Leibnitiana Suppl., Vol. XV*, Steiner, Wiesbaden, 1975. (Editors) **58** #26890 01A55 (01A45)
- Leben und Werk Leopold Löwenheims (1878-1957). *Jber. Deutsch. Math.-Verein.* **7** (1975), no. 1, 1-9. (1 plate) (Editors) **58** #10230 01A70 (02-03)
- Gottlob Frege: die Abstraktion. *Studien zu Frege, Band I*, pp. 243-264. *Problemata*, no. 42, Frommann-Holzboog, Stuttgart, 1976. (Editors) **58** #27274 02A05
- Wahrheitswert und Wertverlauf. Zu Freges Argumentation im §10 der *Grundgesetze der Arithmetik*. *Studien zu Frege, Band I*, pp. 287-299. *Problemata*, no. 42, Frommann-Holzboog, Stuttgart, 1976. (Editors) **58** #21410 02A05 (01A55, 02-03)
- Constructive tendencies in the work of Frege. (Spanish) *Teorema* **6** (1976), no. 1, 47-160. (N. C. A. da Costa) **55** #10223 02A05
- Leopold Löwenheim: life, work, and early influence. *Logic Colloquium 76 (Oxford, 1976)*, pp. 235-252. *Studies in Logic and Found. Math., Vol. 87, North-Holland, Amsterdam, 1977*. (Editors) **58** #16043 01A70 (02-03)
- What does "constructivism" mean? (Spanish) *Teorema* **7** (1977), no. 1, 5-21. (N. C. A. da Costa) **55** #10224 02A05 (02E05)
- Duality lost? Transforming Gentzen derivations into winning-strategies for dialogue games. *Teorema* **8** (1978), no. 1, 57-66. (B. H. Mayoh) **58** #133 02B05 (02D99)
- See also Frege, Gottlob, **58** #27146
- Reiner ★Mathematik—Sprache—Dialektik. *Akademie-Verlag, Berlin*, 1975. 302 pp. (Manfred Kochen) **57** #9391 00A25
- cke, Helmut Verarbeitung von logischen ausdrücken in der Digitalgraphik. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **9** (1973), 569-578. (P. C. Gilmore) **52** #2302 68A45
- Einschlusskriterien für Lösungen gewöhnlicher Differentialgleichungssysteme. *Math. Nachr.* **57** (1973), 219-225. (D. Willett) **49** #727 34C10
- Ein neuer Konvergenzbeweis zum Relaxationsverfahren für symmetrische und positiv definite Gleichungssysteme. (Russian, English and French summaries) *Wiss. Z. Univ. Rostock Math.-Naturwiss. Reihe* **24** (1975), no. 10, 1251-1252. (W. Börsch-Supan) **55** #4618 65Fxx
- Einschlussung der Lösungen von Differentialgleichungssystemen. *Z. Angew. Math. Mech.* **55** (1975), no. 10, 611-613. (J. M. Cushing) **53** #11206 35F20
- Numerische Ermittlung des Trägheitsellipsoids eines starren Körpers (Massepunktsystem). *Rostock. Math. Kolloq. No. 4* (1977), 55-61. (From the text) **57** #18354 70J65
- Approximation von Punktmengen durch implizite Funktionen. *Z. Angew. Math. Mech.* **58** (1978), no. 5, 301-302. (M. I. Nagnibida) **58** #19031 65D10
- See also Beiträge: Digitalgraphik, **52** #10270
- le, F. Accurate numerical solutions of boundary layer flows by the finite-difference method of Hermitian type. *J. Computational Phys.* **27** (1978), no. 1, 138-159. (Author's summary) **58** #19811 76J65
- le, H. (with Starke, Peter H.) Über asynchrone stochastische Automaten. *Automatentheorie und formale Sprachen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 129-142. *Bibliographisches Inst., Mannheim*, 1970. (P. Turakainen) **48** #8150 94A35
- (with Starke, Peter H.) The experiment sets of nondeterministic automata. (Russian) *Automat. i Vychisl. Tehn.* (Riga) **1973**, no. 6, 7-13. (W. Wechler) **49** #7043 94A35
- Zur Glättung von Beobachtungsreihen mit Spline-Funktionen. (English summary) *Biometrische Z.* **17** (1975), no. 7, 415-430. (Wolfgang Welterling) **53** #9586 65D10
- See also Symposium: Diskrete Mathematik und Anwendungen in der Mathematischen Kybernetik, **53** #5202 and Sitzungsberichte: Plenums und der Klasse der Akademie der Wissenschaften der DDR, **55** #2447
- le, Helmut (with Bernhardt, Lutz; Lindner, Rolf) Über sequentiell berechenbare reelle Abbildungen. (English and Russian summaries) *Elektron. Informationsverarbeitung. Kybernetik* **7** (1971), 317-329. (N. Zierler) **48** #1894 02E15
- (with Bachmann, Karl-Heinz; Beyer, Otfried; Boseck, Helmut; Göhler, Wilhelm; Heinrich, Winfried; Junge, Heinz; Lorenz, Günter; Oberländer, Siegfried; Pietzsch, Günter; Steger, Arndt; Walsch, Werner; Wussing, H.; Berthold, Günter; Bock, Hans; Dück, Werner; Görke, Lilly; Hellwich, Manfred; Kästner, Herbert; Neigenfind, Fritz; Peschel, Manfred; Rossberg, H.-J.; Sulanke, Rolf; Vahle, Hans; Wussing, Gerlinde)
- ★Handbuch der Mathematik Mit einer Einleitung von Hans Reichardt. *Buch und Zeit Verlagsgesellschaft M.B.H., Cologne*, 1972. 739 pp. (From the publisher's foreword) **56** #5108 00A20
- Ein graphentheoretisches Modell zur Beschreibung von Klassifizierungsprozessen bei nichtdisjunkten Systemen von Klassen. *Algorithmische Komplexität, Lern- und Erkennungsprozesse (Zweites Internat. Sympos., Friedrich-Schiller-Universität, Jena, 1976)*, pp. 93-107. *Friedrich-Schiller-Universität, Jena*, 1976. (Eberhard Lüdde) **56** #10220 68A50
- See also Algebraische Theorie abstrakter Automaten, formaler Sprachen und Halbgruppen, **49** #10487 and Turski, Wladyslaw M., **53** #12050
- Thiele, Joachim Aus der Korrespondenz Ernst Machs: Briefe deutscher und englischer Naturwissenschaftler. *NTM Schr. Geschichte Naturwiss. Tech. Medizin* **7** (1970), no. 1, 66-75. (Editors) **57** #15900 01A55
- Briefe Albert Einsteins an Joseph Petzoldt. *NTM Schr. Geschichte Naturwiss. Tech. Medizin* **8** (1971), no. 1, 70-74. (Editors) **58** #27128 01A70
- Thieleker, Ernest A. On the irreducibility of nonunitary induced representations of certain semidirect products. *Trans. Amer. Math. Soc.* **164** (1972), 353-369. (A. Kleppner) **45** #2097 22E45
- On the quasi-simple irreducible representations of the Lorentz groups. *Trans. Amer. Math. Soc.* **179** (1973), 465-505. (H. Leptin) **48** #4202 22E43
- The unitary representations of the generalized Lorentz groups. *Trans. Amer. Math. Soc.* **199** (1974), 327-367. (Kenneth Johnson) **52** #659 22E43
- On the integrable and square-integrable representations of $\text{Spin}(1, 2m)$. *Trans. Amer. Math. Soc.* **230** (1977), 1-40. (A. U. Klimyk) **56** #12178 22E43
- Thieler, P. Eine Anwendung des Brouwerschen Fixpunktsatzes in der Intervallarithmetik der Matrizen. (English summary) *Computing* **14** (1975), no. 1-2, 141-147. (G. Alefeld) **53** #7011 65G05
- On componentwise error estimates for inverse matrices. (German summary) *Computing* **19** (1977/78), no. 4, 303-312. (H. Ratschek) **58** #3349 65F05
- Thieler-Mevissen, Gerda ★Zur Beschreibbarkeit der hyperarithmetischen reellen Zahlen mit analytiskomformen Mitteln. Inaugural-Dissertation zur Erlangung des Doktorgrades der Hohen Mathem.-Naturw. Fakultät der Rheinischen Friedrich-Wilhelms-Universität, Bonn, 1974. *Bonner Mathematische Schriften*, No. 75. *Mathematisches Institut, Universität Bonn, Bonn*, 1974. 41 pp. (N. N. Nepeivoda) **56** #11772 02F35
- Thielheim, K. O. (with Blöcker, W.) Two-group neutron transport theory for plane and spherical geometry. *Z. Naturforsch.* **25a** (1970), 1370-1374. (S. Ueno) **45** #1531 82A45
- lê van Thiêm See Lê Văn Thiêm
- Thiemann, J. G. F. (with Nienhuys, J. W.) On the existence of entire functions mapping countable dense sets onto each other. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), no. 4, 331-334. (T. Kövari) **57** #631 30A66
- Thieme, Horst R. A model for the spatial spread of an epidemic. *J. Math. Biol.* **4** (1977), no. 4, 337-351. (H. W. Hethcote) **56** #14830 92A15
- The asymptotic behaviour of solutions of nonlinear integral equations. *Math. Z.* **157** (1977), no. 2, 141-154. (H. Amann) **57** #13418 45G99 (92A15)
- Thien Vo Dai (with Derome, J.-R.) Correlation between eigenvalues of random matrices. (Italian and Russian summaries) *Nuovo Cimento B* (11) **30** (1975), no. 2, 239-253. (H. Primas) **52** #16412 81J60
- Thierrin, G. Irreducible automata. *Proceedings of the Twenty-Fifth Summer Meeting of the Canadian Mathematical Congress (Lakehead Univ., Thunder Bay, Ont., 1971)*, pp. 245-262. *Lakehead Univ., Thunder Bay, Ont.*, 1971. (Richard Tenney) **50** #4173 94A30
- Idéaux à droite maximaux d'un anneau. *Acta Math. Acad. Sci. Hungar.* **22** (1971/72), 321-323. (J. C. Robson) **45** #3467 16A20
- (with Chacron, M.) σ -reflexive semigroups and rings. *Canad. Math. Bull.* **15** (1972), 185-188. (H.-J. Hoehnke) **46** #5487 20M10 (16A38)
- (with Baird, G.) On semigroups in which every Rees one-sided congruence is a congruence. *Semigroup Forum* **4** (1972), 215-223. (H.-J. Hoehnke) **45** #6959 20M10
- Finiteness conditions for finitely generated monoids. *Semigroup Forum* **4** (1972), 252-254. (W. E. Deskins) **45** #6956 20M05
- Decomposition of locally transitive semiautomata. *Utilitas Math.* **2** (1972), 25-32. (Sheila A. Greibach) **46** #10524 94A30
- Convex languages. *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 481-492. *North Holland, Amsterdam*, 1973. (Leon Levy) **51** #12041 68A30
- The syntactic monoid of a hypercode. *Semigroup Forum* **6** (1973), no. 3, 227-231. (D. Simovici) **51** #13110 20M35
- Some conditions for the existence of an optimal solution of a linear program. (French summary) *INFOR—Canad. J. Operational Res. and Information Processing* **12** (1974), 109-111. (W. F. Tyndall) **50** #1714 90C05
- (with Shih, Hui Jan) Hypercodes. *Information and Control* **24** (1974), 45-54. (P. Deussen) **49** #10443 94A10
- (with Shih, Hui Jan) Power-separating regular languages. *Math. Systems Theory* **8** (1974), no. 1, 90-95. (S. Ginsburg) **52** #2293 68A30
- (with Shih, Hui Jan) Ordered automata and associated languages. *Tamkang J. Math.* **5** (1974), no. 1, 9-20. (B. P. Zeigler) **51** #2810 94A30
- (with Shih, Hui Jan) Left-noncounting languages. *Internat. J. Comput. Information Sci.* **4** (1975), 95-102. (G. E. Ceitlin) **57** #1983 68A30
- A mode of decomposition of regular languages. *Semigroup Forum* **10** (1975/76), no. 1, 32-38. (André Lentin) **52** #7222 68A30 (20M35)
- (with Shih, Hui Jan) Some properties of the (n, k) -languages. *Tamkang J. Math.* **6** (1975), no. 2, 281-284. (André Lentin) **54** #9184 68A30
- (with Shih, Hui Jan) Preorder relations associated with developmental systems and languages. *Automata, languages, development*, pp. 301-311. *North-Holland, Amsterdam*, 1976. (Juhani Karhumäki) **57** #4670 68A30
- (with Chacron, M.) An algebraic dependence over the quasi-center. *Ann. Mat. Pura Appl.* (4) **110** (1976), 1-14. (L. C. A. Leeuwen) **54** #10341 16A66
- A characterization of the commutator subgroup of a group. *Canad. Math. Bull.* **19** (1976), no. 1, 93-94. (John M. Howie) **54** #7677 20M10

- Regular prefix codes and right power-bounded languages. *Semigroup Forum* 13 (1976/77), no. 1, 77-83. (Author's summary) 56 #12161 20M35 (68A30)
- (with Shih, Hui Jan) Disjunctive languages and codes. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kölnik, 1977)*, pp. 171-176. *Lecture Notes in Comput. Sci., Vol. 56, Springer, Berlin, 1977*. (P. Dömös) 57 #18267 68A30
- (with Shih, Hui Jan) Codes and binary relations. *Séminaire d'Algèbre Paul Dubreil, 29ème année (Paris, 1975-1976)*, pp. 180-188. *Lecture Notes in Math., 586, Springer, Berlin, 1977*. (Dorothy Bollman) 58 #33507 94A10 (68A30)
- (with Rankin, S. A.; Reis, C. M.) Right local semigroups. *J. Algebra* 46 (1977), no. 1, 134-147. (P. G. Trotter) 56 #5756 20M10
- (with Shih, Hui Jan) Codes, languages and $\bar{M}\bar{O}\bar{L}$ schemes. (French summary) *RAIRO Informat. Théor.* 11 (1977), no. 4, 293-301, i. (Sorin Istrail) 58 #3751 68A30 (92A05)
- (with Thomas, Gomer) η -simple reflective semigroups. *Semigroup Forum* 14 (1977), no. 4, 283-294. (John W. Hogan) 57 #499 20M10
- (with Kuan, L. Y.) π -independent languages. *Tamkang J. Math.* 8 (1977), no. 1, 87-97. (I. F. Blake (Zbl 365 #94071)) 58 #25143 68A30 (20M35)
- (with Rankin, S. A.; Reis, C. M.) α -recognizable semigroups. *Proc. Amer. Math. Soc.* 70 (1978), no. 2, 93-99. (B. M. Schein (Šain)) 58 #11192 20M35 (94A30)
- Chan Yu Thieu** See **Chan Yu Thieu**
- Thigpen, Charles C.** (with Paulson, Albert S.) A multiple range test for analysis of covariance. *Biometrika* 61 (1974), 479-484. (Vedula N. Murty) 51 #9387 62J10
- Thimm, D.** Kombination von sackgassenfreier Topdown- und Bottomup- syntaxanalyse. *Fünfte Jahrestagung der Gesellschaft für Informatik (Dortmund, 1975)*, pp. 397-408. *Lecture Notes in Comput. Sci., Vol. 34, Springer, Berlin, 1975*. (W. D. Maurer) 55 #1855 68A30
- Thimm, W.** Sur les décompositions primaires des faisceaux analytiques cohérents. *Séminaire Pierre Lelong (Analyse) (année 1975/76)*, pp. 3-13. *Lecture Notes in Math., Vol. 578, Springer, Berlin, 1977*. (Alessandro Silva) 58 #17195 32C35
- Thimm, Werner** (with Schuch, Hans-Jürgen) Kleine Copernicus-Bibliographie. *Nicolaus Copernicus zum 500. Geburtstag*, pp. 265-270. *Böhlau, Cologne, 1973*. (Editors) 50 #9487 01A40
- See also *Jahresfeier: Geburt von Nicolaus Copernicus*, 48 #29
- Thinvalle, V. G.** (with Karumidze, G. V.) Solution of a certain class of stochastic programming problems. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 67 (1972), 565-568. (B. Bereanu) 49 #8656 90C15
- Thionet, P. D.** See **Giraull, Maurice**, 53 #2340
- Thionet, Pierre** Quelques problèmes de tirages sans remise dans l'urne. *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompili*, pp. 394-412. *Edizioni Oderisi, Gubbio, 1971*. (I. M. Chakravarti) 50 #15051 62D05
- Note technique sur l'article de G. Marion: "Colinéarité et interaction dans l'analyse de modèles linéaires: un modèle et un exemple" (Rev. Statist. Appl. 20 (1972), no. 3, 57-66). *Rev. Statist. Appl.* 20 (1972), no. 3, 67-70. (D. V. Chopra) 53 #14805 62J10
- Note sur: "Comparaison entre la distribution binomiale symétrique et la distribution normale discontinue" (Rev. Statist. Appl. 20 (1972), no. 3, 85-86) par J. H. C. Lisman. *Rev. Statist. Appl.* 20 (1972), no. 3, 87-88. 53 #11838 62E10
- Sur l'acquisition des biens durables des ménages. *Publ. Économétriques* 6 (1973), 23-44. (From the author's introduction) 55 #14151 90A15
- Contribution à l'étude de "jouez le gagnant" (play the winner). Procédure séquentielle de sélection. (English summary) Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* 46 (1975), no. 4, 392-395 (1976). (Author's summary) 57 #4444 62L05
- Construction et reconstruction de tableaux statistiques. (English and Italian summaries) *Ann. I. N. S. E. E. No.* 22-23 (1976), 5-27. (Gordon Cook) 56 #9811 62G99
- Théorie de l'analyse des rangs. (English summary) *Publ. Économétriques* 9 (1976), no. 1, 65-79, 105. (Author's introduction) 58 #8040 62H25
- Sur un problème de Lucien Feraud concernant des tableaux de marges données. *Tableaux de Fréchet. Rev. Statist. Appl.* 25 (1977), no. 3, 75-82. (From the author's introduction) 57 #7867 62H05
- See also *Proceedings: Session of the International Statistical Institute*, 49 #8145
- Thioum, Mumm** (with Lochak, Georges) Sur une méthode générale de perturbation en mécanique ondulatoire et son utilisation dans les problèmes de résonance. (English summary) *J. Physique* 30 (1969), 482-496. (Authors' summary) 52 #2448 81J35
- Thiran, Jean-Pierre** Recursive digital filters with maximally flat group delay. *IEEE Trans. Circuit Theory* CT-18 (1971), 659-664. (T. N. Bhargava) 46 #10488 94A05
- Polynomial recursive digital filters approximating the ideal low-pass characteristic. *Network theory (Proc. Second NATO Advanced Inst., Knokke, 1969)*, pp. 519-537. *Gordon and Breach, New York, 1972*. (G. D. Taylor) 52 #10217 94A05 (65D15)
- (with Kamp, Yves G.) Maximally flat nonrecursive two-dimensional digital filters. *IEEE Trans. Circuits and Systems* CAS-21 (1974), 437-449. (Authors' summary) 56 #5034 94A05
- (with Kamp, Yves G.) Chebyshev approximation for two-dimensional nonrecursive digital filters. *IEEE Trans. Circuits and Systems* CAS-22 (1975), 208-218. (N. S. Kambo) 53 #10494 94A20
- Thiring, Hans** See **Urban, Paul**; et al., 53 #7702
- Thiring, Walter E.** Solved and unsolved problems in mathematical physics. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 203-207. *Internat. Atomic Energy Agency, Vienna, 1974*. (J. E. Marsden) 56 #1966 81.00
- (with Grosse, H.; Grüm, Hans-Richard; Narnhofer, Heide) Algebraic theory of Coulomb scattering. *Acta Phys. Austriaca* 40 (1974), 97-103. (J. Dollard) 51 #4899 81.47
- Exact results on the structure of matter. With discussions. *Laws of hadronic matter (Internat. School Subnuclear Phys., Erice, 1973)*, pp. 2-29. *Subnuclear Series, Vol. 11, Academic Press, New York, 1975*. (A. Corciovei) 58 #14830 82.47
- (with Narnhofer, Heide) Convexity properties for Coulomb systems. Collection of articles dedicated to Paul Urban on the occasion of his seventieth birthday, I. *Acta Phys. Austriaca* 41 (1975), 281-297. (Editors) 55 #9765 81.47
- Stability of matter. *Current problems in elementary particle and mathematical physics (Proc. XV. Internat. Universitätswochen für Kernphysik 1976, Univ. Graz, Schludm. 1976)*, pp. 337-354. *Acta Phys. Austriaca, Suppl. XV, Springer, Vienna, 1977*. (Author's introduction) 58 #25689 82.47
- (with Lieb, Elliott H.) A lower bound for level spacings. *Ann. Physics* 103 (1977), no. 1, 88-96. (T. Sasakawa) 54 #14638 81.47
- (with Grosse, H.; Hertel, P.) Lower bounds to the energy levels of atomic and molecular systems. *Acta Phys. Austriaca* 49 (1978), no. 2, 89-112. (Authors' summary) 58 #20004 81.47
- (with Hoffmann-Ostenhof, Maria; Hoffmann-Ostenhof, Thomas) Simple bounds the atomic one-electron density at the nucleus and to expectation values of one-electron operators. *J. Phys. B* 11 (1978), no. 19, L571-L575. (Authors' summary) 58 #25667 82.35
- (with Narnhofer, Heide) The taming of the dipole ghost. *Phys. Lett. B* 76 (1978), no. 4, 428-432. (K. J. Le Couteur) 58 #4043 81.35
- See also *Concepts in hadron physics*, 48 #1596; *Elementary particle physics: multiparticle aspects*, 48 #1597; *Studies in mathematical physics*, 52 #16313; *Klauder, John R.*, 55 #7199 and *Boltzmann equation: theory and applications*, 56 #14397
- Thirunamachandran, T.** (with Babiker, M.; Power, E. A.) On a generalization of the Power-Zienau-Woolley transformation in quantum electrodynamics and atomic field equations. *Proc. Roy. Soc. London Ser. A* 338 (1974), 235-249. (P. J. Roberts) 49 #10277 81.35
- (with Power, E. A.) On the nature of the Hamiltonian for the interaction of radiation with atoms and molecules: $(e/mc)\mathbf{p} \cdot \mathbf{A}$, $-\mu \cdot \mathbf{E}$, and all that. *Amer. J. Phys.* 46 (1978), no. 4, 370-378. (Authors' summary) 57 #4884 81.35
- Thiruvengadam, K.** (with Batra, D. P.) Alternate servers with set up times. *Defence Sci. J.* 25 (1975), no. 1, 35-40. (F. G. Foster) 54 #8915 60K25
- Thisyakorn, C.** (with Howze, J. W.; Cavin, Ralph K., III) Model following using partial state feedback. *IEEE Trans. Automatic Control* AC-21 (1976), no. 6, 844-846. (Peter J. Moylan) 54 #9748 93B25
- ho-van Thi-Si** See **Ho-Van Thi-Si**
- vo van Tho** See **Vo Van Tho**
- nguen van Thoa** See **Nguyen Van Thoa**
- godet-Thobie, Christiane** See **Godet-Thobie, Christiane**
- ho Tho Cao** See **Ho Tho Cao**
- Thode, Thomas** (with Kerner, Otto) Primary rings and related radical. *Arch. Math. (Basel)* 27 (1976), no. 4, 372-377. (B. J. Müller) 56 #5626a 16A21 (16A48)
- (with Kerner, Otto) Primary rings and related radical. II. *Comm. Algebra* 4 (1976), no. 11, 1029-1044. (B. J. Müller) 56 #5626b 16A21 (16A48)
- (with Schmähling, Reiner) Optimale Approximation—ein Zugang zur Analysis. *Math.-Phys. Semesterber.* 24 (1977), no. 2, 220-248. (P. D. Morris) 58 #6844 41A30
- Thoe, Dale W.** (with Shenk, Norman) Eigenfunction expansions and scattering theory for perturbations of $-\Delta$. *J. Math. Anal. Appl.* 36 (1971), 313-351. (J. B. McLeod) 45 #3973 35P25 (47A70)
- (with Shenk, Norman) Resonant states and poles of the scattering matrix for perturbations of $-\Delta$. *J. Math. Anal. Appl.* 37 (1972), 467-491. (J. S. Howland) 46 #7730 35P25 (47A40)
- (with Zachmanoglou, E. C.) ★ Introduction to partial differential equations with applications. *The Williams & Wilkins Co., Baltimore, Md., 1976*. x+405 pp. (From the authors' preface) 57 #3568 35-01
- See also *Analytic methods in mathematical physics*, 48 #5746
- Tholen, Walter** (with Pumplin, Dieter) Vollständigkeit vollständiger Kategorien. (English summary) *Manuscripta Math.* 11 (1974), 127-140. (A. Pultr) 49 #2879 18A35
- Adjungierte Dreiecke, Colimites und Kan-Erweiterungen. *Math. Ann.* 217 (1975), no. 2, 121-129. (H.-B. Brinkmann) 52 #13982 18A40
- (with Greve, Georg) Adjoint co-triangles. *Math. Colloq. Univ. Cape Town* 1 (1975/76), 81-92. (Syed A. Huq) 56 #8654 18C15
- M-functors. *Nordwestdeutsches Kategoriensymposium (Tagung, Bremen, 1976)*, pp. 178-185. *Math.-Arbeitspapiere, No. 7, Teil A: Math. Forschungspapiere, Univ. Bremen, Bremen, 1976*. (Timothy Porter) 58 #5825 18A40
- (with Börger, Reinhard) Abschwächungen des Adjunktionsbegriffs. (English summary) *Manuscripta Math.* 19 (1976), no. 1, 19-45. (H.-B. Brinkmann) 55 #5711 18A40
- Factorizations of cones along a functor. Proceedings of the Second Symposium on Categorical Topology (Univ. Cape Town, Cape Town, 1976). *Questiones Math.* (1977/78), no. 1-3, 335-353. (D. Pumplin) 58 #22224 18A40
- On Wyler's taut lift theorem. *General Topology and Appl.* 8 (1978), no. 2, 197-200. (R. Fritsch) 58 #825 18A40
- (with Börger, Reinhard) Cantors Diagonalprinzip für Kategorien. *Math. Z.* 166 (1978), no. 2, 135-138. (J. Lambek) 58 #16819 18A20
- Thom, A. S.** See **Thom, Archibald S.**
- Thom, Alexander** (with Thom, Archibald S.) The astronomical significance of the large Carnac menhirs. *J. Hist. Astronom.* 2 (1971), no. 3, 147-160. (C. R. Fletcher) 57 #12017 01A15
- (with Thom, Archibald S.) The Carnac alignments. *J. Hist. Astronom.* 3 (1972), no. 1, 11-26. (Editors) 58 #20992 01A10
- (with Thom, Archibald S.) The uses of the alignments at Le Menec Carnac. *J. Hist. Astronom.* 3 (1972), no. 3, 151-164. (C. R. Fletcher) 58 #26 01A15
- (with Thom, Archibald S.) A megalithic lunar observatory in Orkney: the Ring of Brogar and its cairns. *J. Hist. Astronom.* 4 (1973), no. 2, 111-123. (C. R. Fletcher) 58 #27 01A15
- (with Thom, Archibald S.; Foord, T. R.) Avebury. I. A new assessment of the geometry and metrology of the ring. *J. Hist. Astronom.* 7 (1976), no. 3, 183-192. (C. R. Fletcher) 58 #4782a 01A15
- (with Thom, Alexander Strang) Avebury. II. The West Kennet Avenue. *J. Hist. Astronom.* 7 (1976), no. 3, 193-197. (C. R. Fletcher) 58 #4782b 01A15
- Thom, Alexander Strang** (with Thom, Alexander) Avebury. II. The West Kennet Avenue. *J. Hist. Astronom.* 7 (1976), no. 3, 193-197. (C. R. Fletcher) 58 #4782b 01A15
- Thom, Archibald S.** (with Thom, Alexander) The astronomical significance of the large

- mac menhirs. *J. Hist. Astronom.* 2 (1971), no. 3, 147-160. (C. R. Fletcher)
#12017 01A15
- (with Thom, Alexander) The Carnac alignments. *J. Hist. Astronom.* 3 (1972), no. 1, 26. (Editors) 58 #20992 01A10
- (with Thom, Alexander) The uses of the alignments at Le Menec Carnac. *J. Hist. Astronom.* 3 (1972), no. 3, 151-164. (C. R. Fletcher) 58 #26 01A15
- (with Thom, Alexander) A megalithic lunar observatory in Orkney: the Ring of Bar and its cairns. *J. Hist. Astronom.* 4 (1973), no. 2, 111-123. (C. R. Fletcher)
#27 01A15
- (with Thom, Alexander; Foord, T. R.) Avebury. I. A new assessment of the geometry and metrology of the ring. *J. Hist. Astronom.* 7 (1976), no. 3, 183-192. (C. R. Fletcher) 58 #4782a 01A15
- See also Place of astronomy in the ancient world, 57 #15838
- H. (with Krebs, V.) Parameter-Identifizierung nach der Methode der kleinsten Quadrate—ein Überblick. (English summary) *Regelungstech. Prozess-Datenverarbeitung* 22 (1974), no. 1, 1-10. (Editors) 55 #10100 93B30 (93E10)
- Paul, Etchesis. *Logique et Analyse (N.S.)* 19 (1976), no. 74-76, 299-310. (Douglas Walton) 56 #8312 02-03 (01A20)
- René Topologie et linguistique. *Essays on topology and related topics (Mémoires dédiés à Georges de Rham)*, pp. 226-248. Springer, New York, 1970. (C. P. Bruter)
#3 #13987a 68A30 (58C25)
- Les mathématiques "modernes": une erreur pédagogique et philosophique? *Âge Sci.* 3 (1970), 225-236. (Editors) 53 #16 00A25
- ★Modèles mathématiques de la morphogénèse. Lezioni Fermiane, Classe di Scienze. *Accademia Nazionale dei Lincei; Scuola Normale Superiore di Pisa, Pisa*, 1971. 1 pp. (Editors) 57 #7655 58C25 (92A05)
- Structure locale des morphismes analytiques. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 2, pp. 257-265. Gauthier-Villars, Paris, 1971. (André Mal'gou) 55 #3299 32B10 (58C25)
- "Modern" mathematics: an educational and philosophic error? Translated from the French (*Âge Sci.* 3 (1970), 225-236). *Amer. Sci.* 59 (1971), 695-699. (Editors) 53 #17 00A25
- (with Sebastiani, Marcos) Un résultat sur la monodromie. *Invent. Math.* 13 (1971), 10-96. (A. Hirschowitz) 45 #2201 32C35
- Le degré brouwerien en topologie différentielle moderne. "Brouwer Memorial Lecture" donnée le 25e août 1970 à Amsterdam. *Nieuw Arch. Wisk.* (3) 19 (1971), 10-16. 46 #10002 57Dxx (57-03)
- ★Stabilité structurelle et morphogénèse. Essai d'une théorie générale des modèles. Mathematical Physics Monograph Series. *W. A. Benjamin, Inc., Reading, Mass.*, 1972. 62 pp. (loose errata) (D. R. J. Chillingworth) 58 #7722a 58F10 (00A25, 34C35, 2A05)
- Sur les équations différentielles multiformes et leurs intégrales singulières. *Bol. Soc. Brasil. Mat.* 3 (1972), no. 1, 1-11. (V. Guillemin) 49 #8053 58C25 (58F99)
- "Modern" mathematics: an educational or philosophical error? (Bulgarian) Translated from the French (*Âge Sci.* 3 (1970), 225-236). *Fiz.-Mat. Spis. B'lgar. Akad. Nauk.* 15(48) (1972), 151-161. (Editors) 53 #18 00A25
- Sur le cut-locus d'une variété plongée. Collection of articles dedicated to S. S. Chern and D. C. Spencer on their sixtieth birthdays. *J. Differential Geometry* 6 (1972), 77-586. (Alan Weinstein) 52 #11953 57D70 (57D40, 58C25)
- "Modern" mathematics: an educational and philosophical error? (Slovenian) Translated from the French. *Obzornik Mat. Fiz.* 19 (1972), no. 4, 161-168. (Editors) 5 #12402 00A25
- The bifurcation subset of a space of maps. (Russian) Translated from the English *Manifolds—Amsterdam 1970* (Proc. Nuffic Summer School), pp. 202-208. Lecture Notes in Math. Vol. 197, Springer, Berlin, 1971 by A. G. Hovanskii. A series of articles in the theory of singularities of smooth mappings. *Uspehi Mat. Nauk* 27 (1972), no. (167), 51-57. (Editors) 52 #6781 58D15
- Langage et catastrophes: éléments pour une sémantique topologique. *Dynamical Systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 619-654. Academic Press, New York, 1973. (Editors) 58 #32118 68A30 (58C25, 58F10)
- La théorie des catastrophes: état présent et perspectives. Report on catastrophes, Part I. *Manifold* 14 (1973), 16-23. (Editors) 58 #7690 58C25 (92A05)
- L'évolution temporelle des catastrophes. *Applications of global analysis, I (Sympos., Utrecht State Univ., Utrecht, 1973)*, pp. 61-69. *Comm. Math. Inst. Rijksuniv. Utrecht*, No. 1974, Math. Inst., Rijksuniv. Utrecht, Utrecht, 1974. (Shigehiro Ushiki) 58 #18587 58F10 (92A05)
- L'optimisation simultanée et la théorie des jeux en topologie différentielle. *Comptes Rendus des Journées Mathématiques de la Société Mathématique de France (Univ. Sci. Tech. Languedoc, Montpellier, 1974)*, pp. 63-70. *Cahiers Math. Montpellier*, No. 3, U.E.R. de Math., Univ. Sci. Tech. Languedoc, Montpellier, 1974. (Ivar Ekeland) 51 #9846 00D12 (58F99)
- Sur la propagation des fronts d'onde et l'optique géométrique. *Proceedings of the C. Théodory International Symposium (Athens, 1973)*, pp. 580-585. *Greek Math. Soc.*, Athens, 1974. (J. S. Joel) 58 #18537 58C25 (58F10, 58G99)
- La théorie des catastrophes et la morphogénèse. *Proceedings of the International Conference on Prospects in Mathematics (Taniguchi Internat. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1973)*, pp. 43-53. *Res. Inst. Math. Sci., Kyoto Univ.*, Kyoto, 1974. (Editors) 58 #9975 00A25 (58C25, 92A05)
- Gradients in biology, in mathematics, and simultaneous optimization. *Some mathematical questions in biology, V (Proc. Seventh Sympos., Mathematical Biology, Mexico City, 1973)*, pp. 1-13. (loose errata) *Lectures on Math. in the Life Sciences*, Vol. 6, *Amer. Math. Soc., Providence, R.I.*, 1974. (Carl P. Simon) 56 #17903 92A05
- "Modern" mathematics: a pedagogical and philosophical error? (Polish) Translated from the French (*Âge Sci.* 3 (1970), no. 3, 225-236). *Wiadom. Mat.* (2) 18 (1974), 13-129. (See *RZMat* 1975 #9 A42) 01A65 (00A05)
- Does modern mathematics exist? (Polish) Translated from the English *Development in mathematical education* (Proc. Second Internat. Congr. Math. Education), pp. 94-209. Cambridge Univ. Press, London, 1973. *Wiadom. Mat.* (2) 18 (1974), 130-142. (See *Zbl* 297 #00001) 01A65 (00A05)
- Les mathématiques et l'intelligible. (English and German summaries) *Actes du Colloque sur les Mathématiques et la Réalité (Centre Univ. Luxembourg, Luxembourg, 1974)*, pp. 71-80. *Centre Univ. Luxembourg, Luxembourg*, 1975. (Editors) 52 #13111 00A25 (92A05)
- La théorie des catastrophes: état présent et perspectives [Manifold 14 (1973), 16-23]. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to E. C. Zeeman on his fiftieth birthday)*, pp. 366-372. *Lecture Notes in Math.*, Vol. 468, Springer, Berlin, 1975. (Th. Bröcker (Zbl 307 #58009)) 58 #31213a 58Fxx
- Answer to Christopher Zeeman's reply [Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to E. C. Zeeman on his fiftieth birthday), pp. 373-383. *Lecture Notes in Math.*, Vol. 468, Springer, Berlin, 1975]. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to E. C. Zeeman on his fiftieth birthday)*, pp. 384-389. *Lecture Notes in Math.*, Vol. 468, Springer, Berlin, 1975. (Th. Bröcker (Zbl 307 #58009)) 58 #31213c 58Fxx
- On singularities of foliations. *Manifolds—Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973)*, pp. 171-173. *Univ. Tokyo Press, Tokyo*, 1975. (M. L. Gromov) 51 #6871 58C25 (57D30)
- Temporal evolution of catastrophes. *Topology and its applications (Proc. Conf., Memorial Univ. Newfoundland, St. John's, Nfld., 1973)*, pp. 27-74. *Lecture Notes in Pure and Appl. Math.*, Vol. 12, Dekker, New York, 1975. (Nils Andreas Baas) 51 #9129 58F10 (92A05)
- D'un modèle de la science à une science des modèles. Mathematical methods of the social sciences. *Synthese* 31 (1975), no. 2, 359-374. (Editors) 58 #20974 00A25
- Topology and linguistics. (Russian) Translated from the French by Ju. I. Manin (Essays on topology and related topics (Mémoires dédiés à Georges de Rham), pp. 226-248. Springer, New York, 1970). *Uspehi Mat. Nauk* 30 (1975), no. 1(181), 199-221. (C. P. Bruter) 58 #13987b 68A30 (58C25)
- ★Structural stability and morphogenesis. An outline of a general theory of models. Translated from the French by D. H. Fowler. With a foreword by C. H. Waddington. Second printing. *W. A. Benjamin, Inc., Reading, Mass.—London—Amsterdam*, 1976. xxv+348 pp. (D. R. J. Chillingworth) 58 #7722b 58F10 (00A25, 34C35, 92A05)
- The two-fold way of catastrophe theory. *Structural stability, the theory of catastrophes, and applications in the sciences (Proc. Conf. Battelle Seattle Res. Center, Seattle, Wash., 1975)*, pp. 235-252. *Lecture Notes in Math.*, Vol. 525, Springer, Berlin, 1976. (See *Zbl* 356 #58005; MR 58 #24311) 58F10 (58C25)
- Introduction à la dynamique qualitative. *Trois études en dynamique qualitative*, pp. 3-13. *Astérisque*, No. 31, Soc. Math. France, Paris, 1976. (J. S. Joel) 58 #18553 58Fxx (00A05, 34Cxx)
- What is catastrophe theory about? *Synergetics (Proc. Internat. Workshop, Garmisch-Partenkirchen, 1977)*, pp. 26-32. Springer, Berlin, 1977. (J. S. Joel) 58 #18536 58C25
- Structural stability, catastrophe theory, and applied mathematics. *SIAM Rev.* 19 (1977), no. 2, 189-201. (I. Stewart and T. Poston) 56 #9571 58C25 (69.00)
- See also Freudenthal, H., 46 #10001; Some mathematical questions in biology, 48 #1732; Statistical mechanics: new concepts, new problems, new applications, 49 #8558 (EA 50); Géométrie différentielle, 50 #5641; Mathematiker über die Mathematik, 51 #2831; Zeeman, Christopher, 58 #7691 and Bruter, Claude Paul, 58 #31209a
- Thoma, Elmar Characters of the group $GL(\infty, q)$. *Conference on Harmonic Analysis (Univ. Maryland, College Park, Md., 1971)*, pp. 321-323. *Lecture Notes in Math.*, Vol. 266, Springer, Berlin, 1972. (R. Steinberg) 53 #8218 20C15 (22E99)
- Thoma, M. (with Pohl, W.) Recent developments in control theory in Austria, Switzerland, and Western Germany. *Trans. ASME Ser. G. J. Dynamic Systems, Measurement and Control* 96 (1974), 383-387. (Editors) 50 #6564 93-02
- A. M. Letov. *Regelungstech.* 23 (1975), 69. (Editors) 52 #2796 01A70
- Thomae, S. (with Grossmann, S.) Invariant distributions and stationary correlation functions of one-dimensional discrete processes. *Z. Naturforsch.* 32a (1977), no. 12, 1353-1363. (F. Hoppensteadt) 58 #18602 58F20 (92A05)
- Thomas, A. Dimension de Hausdorff. Travail fait en commun avec J. M. Dumont. *Journées Arithmétiques (Grenoble, 1973)*, pp. 161-167. *Bull. Soc. Math. France Mém.*, No. 37, Soc. Math. France, Paris, 1974. (M. Mendès France) 51 #407 10K05 (10K10)
- (with Dupain, Yves) Sous-suites équiréparties d'une suite donnée. *Acta Arith.* 26 (1974/75), no. 3, 285-292. (L. Kuipers) 51 #10267 10K05
- Thomas, Alan Counting almost complex structures on products of lens spaces. *J. London Math. Soc.* (2) 7 (1974), 761-768. (J. F. Adams) 48 #12552 57D15
- Almost complex structures on complex projective spaces. *Trans. Amer. Math. Soc.* 193 (1974), 123-132. (G. D. Ludden) 50 #5681 53C15
- A relation between K-theory and cohomology. *Trans. Amer. Math. Soc.* 193 (1974), 133-142. (D. W. Anderson) 51 #6811 55G25
- Thomas, Alan D. ★Zeta-functions: an introduction to algebraic geometry. *Research Notes in Mathematics*, No. 12. Pitman Publishing, London-San Francisco, Calif.-Melbourne, 1977. viii+230 pp. (paperbound) (Loren D. Olson) 56 #365 14G10 (14-01)
- Thomas, Barbara V. Smith (with Franklin, Stanley P.) Another topological equivalent of the axiom of choice. *Amer. Math. Monthly* 78 (1971), 1109-1110. (Andreas Blass) 45 #3195 02K20 (04A25)
- Free topological groups. *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 517-524. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (S. A. Morris) 50 #13361 22A05
- Free topological groups. *General Topology and Appl.* 4 (1974), 51-72. (S. A. Morris) 49 #7385 22A05 (54D15)
- (with Franklin, Stanley P.) On the metrizable of k_ω -spaces. *Pacific J. Math.* 72 (1977), no. 2, 399-402. (V. J. Mancuso) 57 #1397 54B99 (54E99)
- Categories of topological groups. *Proceedings of the Second Symposium on Categorical Topology (Univ. Cape Town, Cape Town, 1976)*. *Quaestiones Math.* 2 (1977/78), no. 1-3, 355-377. (Eric Nummela) 57 #12760 22A05
- (with Franklin, Stanley P.; Lutzer, David J.) On subcategories of TOP. *Trans.*

- Amer. Math. Soc.* **225** (1977), 267-278. (V. Kannan) **54** #13844 54D15 (54B30)
See also *Topology*, **54** #9918
- Thomas, Brian K. (with Franco, Victor) Glauber approximation for the excitation of hydrogenlike ions by structureless charged particles. I. *Phys. Rev. A* (3) **13** (1976), no. 6, 2004-2022. (P. J. Roberts) **53** #9934 81.33
- Thomas, C. L. See *Software for numerical mathematics*, **50** #6095 and *Discussion: Sparse matrices*, **50** #15317
- Thomas, Charles Obstructions chirurgicales et réciprocity de Frobenius. *Comptes Rendus du Deuxième K-Colloque (Univ. Sci. Tech. Languedoc, Montpellier, 1970)*, pp. 75-82. *Univ. des Sci. et Tech. Languedoc, Montpellier*, 1971. (Editors) **48** #11172 15A63 (57D65)
(with Wall, C. T. C.) The topological spherical space form problem. I. *Compositio Math.* **23** (1971), 101-114. (L. Taylor) **51** #9098 57E25 (57D65)
Chern classes and metacyclic p -groups. *Mathematika* **18** (1971), 196-200. (C. S. Hoo) **45** #8747 20C05 (14F20, 57D20)
Structures on manifolds defined by cross-sections. *Math. Ann.* **196** (1972), 163-170. (J. A. Wolf) **45** #9355 55G35
(with Lee, Ronnie) Free finite group actions on S^3 . *Bull. Amer. Math. Soc.* **79** (1973), 211-215. (F. Laudenbach) **47** #4265 57A10 (57E25)
Riemann-Roch formulae for group representations. *Mathematika* **20** (1973), 253-262. (J. P. May) **50** #448 18H10
The integral cohomology ring of \mathbb{S}_n . *Mathematika* **21** (1974), 228-232. (Pierre J. Malraison, Jr.) **51** #3265 18H10
A model for the classifying space of an extra special p -group. *Mathematika* **22** (1975), no. 2, 182-187. (C. S. Hoo) **52** #9225 55F35
Almost regular contact manifolds. *J. Differential Geometry* **11** (1976), no. 4, 521-533. (David Blair) **57** #4195 57D30 (53C15)
(with Madsen, Ib; Wall, C. T. C.) The topological spherical space form problem. II. Existence of free actions. *Topology* **15** (1976), no. 4, 375-382. (Laurence R. Taylor) **54** #13952 57E25
On Poincaré 3-complexes with binary polyhedral fundamental group. *Math. Ann.* **226** (1977), no. 3, 207-221. (J. P. E. Hodgson) **56** #13230 57D55
Contact forms on 1-connected 5-manifolds. *Mathematika* **24** (1977), no. 2, 237-240. (R. E. Stong) **57** #7450 53C15 (57D15)
An integral Riemann-Roch formula for flat line bundles. *Proc. London Math. Soc.* (3) **34** (1977), no. 1, 87-101. (M. F. Atiyah) **55** #5722 18H10 (14F05, 55F50)
- Thomas, Charles R. The standard linear model in the stability and mass optimization of nonconservative Euler beams. *Transactions of the Twenty-First Conference of Army Mathematicians (White Sands Missile Range, White Sands, N.M., 1975)*, pp. 27-78. *ARO Rep.*, 76-1. *U. S. Army Res. Office, Research Triangle Park, N.C.*, 1976. (Author's summary) **58** #32286 73.49
See also *Transactions: Conference of Army Mathematicians*, **49** #4735;
Transactions: Conference of Army Mathematicians, **49** #4736 and *Transactions: Conference of Army Mathematicians*, **49** #4737
- Thomas, Clement S. See *Game theory as a theory of conflict resolution*, **49** #4579
- Thomas, D. H. Pseudospline interpolation for space curves. *Math. Comput.* **30** (1976), no. 133, 58-67. (Gerhard Merz) **53** #4482 65D10
- Thomas, D. K. (with Noonan, James W.) On successive coefficients of functions of bounded boundary rotation. *J. London Math. Soc.* (2) **5** (1972), 656-662. (S. D. Bernardi) **47** #448 30A32
On the coefficients of functions with bounded boundary rotation. *Proc. Amer. Math. Soc.* **36** (1972), 123-129. (J. W. Noonan) **46** #7498 30A34
(with Noonan, James W.) On the Hankel determinants of areally mean p -valent functions. *Proc. London Math. Soc.* (3) **25** (1972), 503-524. (B. G. Eke) **46** #5605 30A36
(with Noonan, James W.) The integral means of regular functions. *J. London Math. Soc.* (2) **9** (1974/75), 557-560. (T. H. MacGregor) **51** #879 30A36
On the coefficients of meromorphic univalent functions. *Proc. Amer. Math. Soc.* **47** (1975), 161-166. (J. Clunie) **50** #10233 30A34
(with Noonan, R. R.) An asymptotic formula for an integral in starlike function theory. *Trans. Amer. Math. Soc.* **215** (1976), 393-406. (Carl P. McCarty) **52** #8403 30A32
(with Noonan, James W.) On the second Hankel determinant of areally mean p -valent functions. *Trans. Amer. Math. Soc.* **223** (1976), 337-346. (Albert E. Livingston) **54** #10593 30A36
- Thomas, D. L. On limiting distributions of a random number of dependent random variables. *Ann. Math. Statist.* **43** (1972), 1719-1726. (Z. W. Birnbaum) **50** #14897 60F05
(with Gelfand, Alan E.) Confidence coefficients for approximate binomial interval estimates under hypergeometric models. *Amer. Statist.* **28** (1974), 52-54. (K. S. Fu) **50** #3440 62F25
(with Koehn, Uwe) On statistics independent of a sufficient statistic: Basu's lemma. *Amer. Statist.* **29** (1975), 40-42. (Reinhard Michel) **51** #7069 62B05
Reciprocal moments of linear combinations of exponential variates. *J. Amer. Statist. Assoc.* **71** (1976), no. 354, 506-512. **53** #6828 62E15
- Thomas, Daniel (with Kernevez, Jean-Pierre) Numerical analysis and control of some biochemical systems. (French summary) *Appl. Math. Optim.* **1** (1974/75), no. 3, 222-285. (R. N. P. Singh) **53** #7527 92A05
(with Kernevez, Jean-Pierre; Bunow, Barry; Duban, Marie-Claude; Joly, Ghyslaine) Structuration en espace spontanée à l'intérieur d'une membrane monoenzymatique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 3, A195-A198. (Authors' summary) **55** #14259 92A05
- Thomas, David R. (with Ferguson, Nancy Lo) Some tests for independence. *Austral. J. Statist.* **16** (1974), 11-19. (Rose Ray) **51** #2098 62F05
(with Grunkemeier, Gary L.) Confidence interval estimation of survival probabilities for censored data. *J. Amer. Statist. Assoc.* **70** (1975), no. 352, 865-871. (H. L. Harter) **53** #9558 62N05 (62F10)
See also *Perspectives in biometrics*, **58** #31689
- Thomas, Donald G. (with Gart, John J.) Numerical results on approximate confidence limits for the odds ratio. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 441-447. (M. Csorgo) **50** #3439 62F25
- Thomas, Donald H. (with Meyer, W. Weston) Variations on a theme by Schoenberg. *Approximation Theory* **18** (1976), no. 1, 39-49. (P. Lipow) **54** #10942 41A15
A natural tensor product interpolation formula and the pseudoinverse of a matrix. *Linear Algebra and Appl.* **13** (1976), no. 3, 239-250. (M. Lotkin) **53** #2989 15A01
- Thomas, Doreen A. On general matrix measures. *Quart. J. Math. Oxford Ser. (2)* **27** (1976), no. 105, 95-104. (A. Appert) **53** #1247 46E30
- Thomas, E. See *Thomas, Emery*
- Thomas, Edward S., Jr. Flows on 2-manifolds. *Proceedings of the Auburn Topology Conference (Auburn Univ., Auburn, Ala., 1969; dedicated to F. Burton Jones on occasion of his 60th birthday)*, pp. 115-117. *Auburn Univ., Auburn, Ala.*, 1969. (Editors) **51** #6771 54H20 (34C35)
(with Hornblower, R. J. M.) The access theorem for subharmonic functions. *Trans. Amer. Math. Soc.* **172** (1972), 287-297. (H. L. Jackson) **46** #7534 31A20
One-dimensional minimal sets. *Topology* **12** (1973), 233-242. (Zbigniew Nitecki) **48** #5123 58F20
(with Allaud, Guy) Almost periodic minimal sets. *J. Differential Equations* (1974), 158-171. (T.-S. Wu) **49** #4049 58F99 (54H20)
(with Montgomery, John T.; Sine, Robert) Weakly almost periodic systems. *Sti Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **23** (1977), no. 1, 93-95. (Hemmingsen) **57** #10692 54H20
(with Churchill, Richard C.; Jurenka, Henry) A note on isoenergetic stability. *Internat. J. Non-Linear Mech.* **12** (1977), no. 1, 37-43. (D. Schmidt) **56** #7387 70.00
(with Brickman, Louis) Conformal equivalence of analytic flows. *J. Differential Equations* **25** (1977), no. 3, 310-324. (T. Ura) **56** #5984 34A20 (34C05)
(with Pecelli, Giampiero) An example of elliptic stability with large parameter. Lamé's equation and the Arnold-Moser-Rüssmann criterion. *Quart. Appl. Math.* (1978/79), no. 2, 129-140. (Robert Faure) **58** #19486 70.34 (34D20)
- Thomas, Eifion A generalization of Clifford algebras. *Glasgow Math. J.* **15** (1974), 74-77. (F. D. Veldkamp) **50** #13093 15A66
- Thomas, Emery (with Larmore, Lawrence L.) Group extensions and principal fibrations. *Math. Scand.* **30** (1972), 227-248. (T. tom Dieck) **48** #7277 55G36 (55F05)
(with Larmore, Lawrence L.) Mappings into loop spaces and central group extensions. *Math. Z.* **128** (1972), 277-296. (Brayton Gray) **47** #5865 55D35
Secondary obstructions to integrability. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 655-661. *Academic Press, New York*, 1973. (Ph. Tondeur) **49** #8035 57D30
(with Wood, John W.) On signatures associated with ramified coverings and embedding problems. (French summary) *Colloque International sur l'Analyse et la Topologie Différentielle (Colloques Internationaux du Centre National de la Recherche Scientifique, Strasbourg, 1972)*. *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 2, 229-235. (Don Zagier) **49** #3964 57D20
(with Larmore, Lawrence L.) Group extensions and twisted cohomology theories. *Illinois J. Math.* **17** (1973), 397-410. (J. C. Becker) **49** #1517 55E05
(with Hartshorne, Robin; Rees, Elmer) Nonsmoothing of algebraic cycles on Grassmann varieties. *Bull. Amer. Math. Soc.* **80** (1974), 847-851. (W. Barth) **50** #9870 14E15 (14C10, 57D95)
(with Wood, John W.) On manifolds representing homology classes in codimension 2. *Invent. Math.* **25** (1974), 63-89. (Don Zagier) **52** #4319 57D95
(with Zahler, Raphael S.) Nontriviality of the stable homotopy element γ_1 . *J. Pure Appl. Algebra* **4** (1974), 189-203. (R. M. F. Moss) **50** #8520 55E45
(with Zahler, Raphael S.) Generalized higher order cohomology operations and stable homotopy groups of spheres. *Advances in Math.* **20** (1976), no. 3, 287-328. (M. Mimura) **54** #11330 55E45
Integrality relations on smooth manifolds. *Math. Scand.* **39** (1976), no. 2, 195-231. (Karlheinz Knapp) **56** #1308 55F45 (57D20)
Embedding manifolds in Euclidean space. *Osaka J. Math.* **13** (1976), no. 1, 163-186. (Duane Randall) **57** #13978 57D40
(with Rees, Elmer) On the divisibility of certain Chern numbers. *Quart. J. Math. Oxford Ser. (2)* **28** (1977), no. 112, 389-401. (J. F. Adams) **57** #7623 57D50
(with Rees, Elmer) Cobordism obstructions to deforming isolated singularities. *Math. Ann.* **232** (1978), no. 1, 33-53. (John W. Wood) **58** #18475 57D10 (14E15, 32C40)
See also *Proceedings: Advanced Study Institute on Algebraic Topology*, **48** #7248
- Thomas, Erik G. F. L'intégration par rapport à une mesure de Radon vectorielle. (English summary) *Ann. Inst. Fourier (Grenoble)* **20** (1970), no. 2, 55-191 (1971). (S. Foglio) **57** #3348 28A45
★The Lebesgue-Nikodym theorem for vector valued Radon measures. *Memoirs of the American Mathematical Society*, No. 139. *American Mathematical Society, Providence, R.I.*, 1974. ii+101 pp. (See Zbl **282** #28004) 28A45 (46G10)
Sur les applications linéaires l -sommantes et nikodymisesantes. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 253-255. (S. Simons) **49** #9672 47B10 (46B05)
Integration of functions with values in locally convex Suslin spaces. *Trans. Amer. Math. Soc.* **212** (1975), 61-81. (J. Diestel) **52** #5937 28A45
Totally summable functions with values in locally convex spaces. *Measure theory (Proc. Conf., Oberwolfach, 1975)*, pp. 117-131. *Lecture Notes in Math.*, Vol. 541, Springer, Berlin, 1976. (J. Diestel) **56** #8799 28A45 (46G10)
- Thomas, Ewart A. C. (with Myers, Jerome L.) Implications of latency data for threshold and nonthreshold models of signal detection. *J. Mathematical Psychology* **9** (1972), 253-285. (A. D. Booth) **49** #2135 92A25
On a class of additive learning models: error-correcting and probability matching. *J. Mathematical Psychology* **10** (1973), 241-264. (A. Rapoport) **50** #15981 92A25
On technological implications of the wage-profit frontier. *J. Econom. Theory* **11** (1975), no. 2, 263-282. (Author's summary) **55** #9886 90A15
A note on the sequential probability ratio test. *Psychometrika* **40** (1975), 107-111. (Nanak Chand) **53** #11929 62P15 (62L10)
- Thomas, G. Erik F. See *Thomas, Erik G. F.*
- Thomas, G. L. See *Čerkašova, M. P.*, **50** #8905
- Thomas, G. N. (with Adolphson, Donald L.) A linear time algorithm for a $2 \times n$ transportation problem. *SIAM J. Comput.* **6** (1977), no. 3, 481-486. (Klaus Ecker)

- 58 #32887 90B10
mas, George Minimum distance and rate-distortion capabilities of linear block source codes. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 2, pp. 581-584. Hemisphere, Washington, D.C., 1977. (Author's summary) 58 #15702 94A15
- mas, George B., Jr.** Density properties of primes, squares, and sums of squares. *Advances in Math.* 10, 383-386 (1973). (S. A. Burr) 50 #12904 10A40
- mas, Glänfrwd P.** Introducing Baxter sequences. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975)*, pp. 591-603. *Congressus Numerantium*, No. XV, *Utilitas Math.*, Winnipeg, Man., 1976. (Ronald C. King) 52 #13414 05A15
- A generalization of a construction due to Robinson. *Canad. J. Math.* 28 (1976), no. 3, 665-672. (G. de B. Robinson) 53 #5709 20B05
- A combinatorial interpretation of the wreath product of Schur functions. *Canad. J. Math.* 28 (1976), no. 4, 879-884. (H. Gupta) 54 #108 05A10
- Further results on Baxter sequences and generalized Schur functions. *Combinatoire et représentation du groupe symétrique (Actes Table Ronde CNRS, Univ. Louis-Pasteur Strasbourg, Strasbourg, 1976)*, pp. 155-167. *Lecture Notes in Math.*, Vol. 579, Springer, Berlin, 1977. (Curtis Greene) 57 #12243 05A15
- Frames, Young tableaux, and Baxter sequences. *Advances in Math.* 26 (1977), no. 3, 275-289. (George Hutchinson) 58 #264 05A15
- On a construction of Schützenberger. *Discrete Math.* 17 (1977), no. 1, 107-118. (David B. Surowski) 56 #8383 05A17 (20C15)
- (with Jonsson, I. G.; Brink-Kjaer, O.) Wave action and set-down for waves on a shear current. *J. Fluid Mech.* 87 (1978), no. 3, 401-416. (From the introduction) 58 #19710 76J35
- mas, Gomer** An improved characterization of the groups $F_4(2^n)$, $n > 2$. *J. Algebra* 34 (1975), 1-13. (James F. Hurley) 51 #687 20D05
- (with Thierrin, G.) η -simple reflective semigroups. *Semigroup Forum* 14 (1977), no. 4, 283-294. (John W. Hogan) 57 #499 20M10
- mas, H.** (with Hänggi, P.) Linear response and fluctuation theorems for nonstationary stochastic processes. *Z. Phys. B* 22 (1975), no. 3, 295-300. (Authors' summary) 56 #10623 8160
- (with Hänggi, P.) Time evolution, correlations, and linear response of non-Markov processes. *Z. Phys. B* 26 (1977), no. 1, 85-92. (Authors' summary) 54 #12095 8260
- (with Grabert, H.; Talkner, P.; Hänggi, P.) Microdynamics and time-evolution of macroscopic non-Markovian systems. II. *Z. Phys. B* 29 (1978), no. 3, 273-280. (Authors' summary) 58 #20118 8260
- See also **Role and effectiveness of theories of decision in practice**, 56 #10776
- mas, Henry E., Jr.** Waring's problem for twenty-two biquadrates. *Trans. Amer. Math. Soc.* 193 (1974), 427-430. (K. Thanigasalam) 49 #7224 10J10 (10J05)
- mas, Ivo** Decision for K4. *Note Dame J. Formal Logic* 8 (1967), 337-338. (J. Bacon) 45 #1739 02C10
- A proof of a theorem of Łukasiewicz. *Note Dame J. Formal Logic* 12 (1971), 507-508. 45 #4942 02B05
- Unusual feature of S_3^* . *Note Dame J. Formal Logic* 14 (1973), 276. 48 #1886 02C10
- Further extensions of S_3^* . *Note Dame J. Formal Logic* 14 (1973), 423-424. (M. J. Cresswell) 51 #10036 02C10
- On a passage of Aristotle. *Note Dame J. Formal Logic* 15 (1974), 347-348. (Douglas Walton) 50 #1828 02-03
- On Meredith's sole positive axiom. *Note Dame J. Formal Logic* 15 (1974), 477. (Editors) 50 #1833 02B05
- Simple implicational development. *Note Dame J. Formal Logic* 16 (1975), 268. (K. Inoue) 52 #2811 02B05
- Shorter development of an axiom. *Note Dame J. Formal Logic* 16 (1975), 378. (Constantin Milici) 52 #7842 02B05
- Nice implicational axioms. *Note Dame J. Formal Logic* 16 (1975), no. 4, 507-508. (K. Inoue) 54 #9974 02B05
- Axiom sets equivalent to syllogism and Peirce. *Note Dame J. Formal Logic* 17 (1976), no. 2, 248. (James McLelland) 57 #9488 02C10
- One dimension in PS and PSL. *Note Dame J. Formal Logic* 17 (1976), no. 3, 421-423. (Merrie Bergmann) 55 #12461 02B05
- See also **Contributions to logic and methodology in honor of J. M. Bocheński**, 47 #6424; **Bird, Otto**, 54 #12446 and **La Porte, Deirdre**, 54 #12447
- mas, J.** See **Thomas, Johannes**
- scott-Thomas, J. F.** See **Scott-Thomas, J. F.**
- thomas, J. M.** See **Thomas, Jean-Marie**
- thomas, J. Pelham** Maximal connected Hausdorff spaces. *Pacific J. Math.* 57 (1975), no. 2, 581-583. (Mary Powderly) 53 #14408 54D05
- thomas, J. W.** (with O'Neil, T.) The calculation of the topological degree by quadrature. *SIAM J. Numer. Anal.* 12 (1975), no. 5, 673-680. (Manfred Feilmeier) 53 #14873 65D30
- thomas, James W.** A note on the fixed point theorem due to Furi and Vignoli. *Boll. Un. Mat. Ital.* (4) 4 (1971), 45-46. (Kok-koeng Tan) 48 #1205 54H25
- ϕ -coherent multifunctions. *Boll. Un. Mat. Ital.* (4) 4 (1971), 232-238. (S. Swaminathan) 45 #2690 54C60 (47H10, 54H25)
- (with O'Neil, T.) On the equivalence of multiplicity and the generalized topological degree. *Trans. Amer. Math. Soc.* 167 (1972), 333-345. (R. Nussbaum) 45 #7555 47H10 (58E05)
- The multiplicity of an operator is a special case of the topological degree for k -set contractions. *Duke Math. J.* 40 (1973), 233-240. (Norman Dancer) 47 #4081 47H10 (54H25)
- On the Liapounov type fixed point theorem. *Fund. Math.* 78 (1973), no. 2, 141-143. (F. S. Van Vleck) 49 #3883 54H25
- (with Conway, William E.) Free streamline problems and the Milne-Thomson integral equation. *L. M. Milne-Thomson anniversary issue, II. J. Mathematical and Physical Sci.* 8 (1973), 67-92. (L. A. Mysak) 49 #6773 7645
- A bifurcation theorem for k -set contractions. *Pacific J. Math.* 44 (1973), 749-756. (Norman Dancer) 47 #9375 47H10
- Upper and lower bounds for the number of solutions of functional equations involving k -set contractions. Collection of articles on fixed point theory. *Rocky Mountain J. Math.* 4 (1974), 89-93. (P. M. Fitzpatrick) 48 #12180 47H10
- (with Zachmann, David W.) A nonlinear three-point boundary value problem. *J. Math. Anal. Appl.* 58 (1977), no. 3, 647-652. (F. M. Arscott) 55 #8455 34B15
- See also **Bibliography: Fixed point theory**, 48 #975
- Thomas, Jean-Claude** Les morphismes d'Élie Cartan. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A285-A287. (M. Craioveanu) 47 #7773 58H05
- (with So, Alfred; Watkiss, Christopher) Sur la multiplicité de l'homomorphisme de Chern-Weil local. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), no. 6, A369-A371. (Ph. Tondeur) 52 #9246 57D20 (57D30)
- Thomas, Jean-Marie** (with Crouzeix, Michel) Résolution numérique par des méthodes d'éléments finis de problèmes elliptiques dégénérés. *C. R. Acad. Sci. Paris Sér. A-B* 275 (1972), A1115-A1118. (J. R. Cannon) 46 #8448 65P05
- Discretisation des conditions aux limites dans les schémas saute-mouton. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle* 6 (1972), Sér. R-2, 31-44. (B. Kellogg) 52 #16048 65M10
- (with Crouzeix, Michel) Éléments finis et problèmes elliptiques dégénérés. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge* 7 (1973), no. R-3, 77-104. (J. G. Herriot) 49 #11829 65N30
- (with Raviart, Pierre-Arnaud) A mixed finite element method for 2nd order elliptic problems. *Mathematical aspects of finite element methods (Proc. Conf., Consiglio Naz. delle Ricerche (C.N.R.), Rome, 1975)*, pp. 292-315. *Lecture Notes in Math.*, Vol. 606, Springer, Berlin, 1977. (Jan Bochenek) 58 #3547 65N30
- (with Raviart, Pierre-Arnaud) Primal hybrid finite element methods for 2nd order elliptic equations. *Math. Comp.* 31 (1977), no. 138, 391-413. (William W. Hager) 55 #4747 65N30
- (with Amara, Mohamed) Approximation par éléments finis équilibre du système de l'élasticité linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 286 (1978), no. 23, A1147-A1150. (Authors' summary) 58 #14226 7365
- Thomas, Johannes** Einschliessungsbereiche von Sattelpunktsrennkurven. *Math. Nachr.* 54 (1972), 127-139. (H. A. Antosiewicz) 48 #8983 34C30
- Einschliessungsbereiche von Sattelpunktsrennkurven. *Beiträge Numer. Math.* 1 (1974), 167-179. (C. E. Langenhop) 54 #13207 34C05
- Thomas, John B.** (with Ephremides, Anthony) On the multiplicity of a class of multivariate random processes. *Ann. Math. Statist.* 43 (1972), 2083-2089. (G. Della Riccia) 52 #4405 60G99
- (with Ephremides, Anthony) Multiplicity considerations in linear least mean-square estimation. *SIAM J. Appl. Math.* 22 (1972), 162-172. (Toby Berger) 47 #3081 93E10 (94A05)
- (with Ephremides, Anthony) On random processes linearly equivalent to white noise. *Information Sci.* 7 (1974), 133-156. (R. S. Bucy) 49 #4627 93E10
- (with Gilchrist, James H.) A shot process with burst properties. *Advances in Appl. Probability* 7 (1975), no. 3, 527-541. (S. K. Srinivasan) 52 #6928 60K99
- (with Gilchrist, James H.) Power spectral densities of modulated error-correcting coded sequences. *IEEE Trans. Comm.* COM-23 (1975), no. 11, 1207-1214. (Authors' summary) 57 #15726 94A05 (94A10)
- (with Tjøstheim, Dag) Some properties and examples of random processes that are almost wide sense stationary. *IEEE Trans. Information Theory* IT-21 (1975), 257-262. (M. Rabindranathan) 52 #6863 60G35
- (with Kassam, Saleem A.) A class of nonparametric detectors for dependent input data. *IEEE Trans. Information Theory* IT-21 (1975), 431-437. (S. Csibi) 56 #2625 94A05
- (with Wise, Gary L.) A characterization of Markov sequences. *J. Franklin Inst.* 229 (1975), 269-278. (Authors' summary) 54 #14105 60J05
- (with Tyan, Shu Gwei) Characterization of a class of bivariate distribution functions. *J. Multivariate Anal.* 5 (1975), 227-235. (M. B. Rao) 51 #11816 62H05
- (with Wise, Gary L.) On a completeness property of series expansions of bivariate densities. *J. Multivariate Anal.* 5 (1975), 243-247. (M. B. Rao) 51 #11817 (EA 52) 62H05 (60G10)
- (with Tyan, Shu Gwei; Derin, Haluk) Two necessary conditions on the representation of bivariate distributions by polynomials. *Ann. Statist.* 4 (1976), no. 1, 216-222. (Donald R. Jensen) 52 #12205 62H05
- (with Kassam, Saleem A.) Asymptotically robust detection of a known signal in contaminated non-Gaussian noise. *IEEE Trans. Information Theory* IT-22 (1976), no. 1, 22-26. (James C. Bezdek) 52 #12953 94A05
- (with Gilchrist, James H.) Synthesis of spectral shaping block codes for PAM. *IEEE Trans. Information Theory* IT-22 (1976), no. 5, 546-551. (J. J. Stiffler) 55 #2339 94A10
- (with Tjøstheim, Dag) Linear time-invariant transformations of some nonstationary random processes. *Quart. Appl. Math.* 34 (1976/77), no. 1, 113-117. (Tata Subba Rao) 56 #6857 60G99
- (with Wise, Gary L.; Traganitis, Aposotolos P.) The effect of a memoryless nonlinearity on the spectrum of a random process. *IEEE Trans. Information Theory* IT-23 (1977), no. 1, 84-89. (Mike Sablatash) 57 #15733 94A05
- (with Wise, Gary L.; Traganitis, Aposotolos P.) The estimation of a probability density function from measurements corrupted by Poisson noise. *IEEE Trans. Information Theory* IT-23 (1977), no. 6, 764-766. (Luc P. Devroye) 57 #17932 62G05
- (with Kassam, Saleem A.) Nonparametric weighted-signs tests for location. *SIAM J. Appl. Math.* 32 (1977), no. 3, 649-652. (G. E. Noether) 55 #4503 62G10
- Representation of bivariate distributions with applications. *Communication systems and random process theory (Proc. 2nd NATO Advanced Study Inst., Darlington, 1977)*, pp. 541-560. *NATO Advanced Study Inst. Ser., Ser. E: Appl. Sci.*, No. 25, *Sijthoff & Noordhoff, Alphen aan den Rijn*, 1978. (K. S. Miller) 58 #4605 94A05
- (with Tantarata, Sawasd) Relative efficiency of the sequential probability ratio test in signal detection. *IEEE Trans. Information Theory* IT-24 (1978), no. 1, 22-31. (Seihaku Higuchi) 57 #19063 94A05
- (with Poor, H. Vincent) Asymptotically robust quantization for detection. *IEEE Trans. Information Theory* IT-24 (1978), no. 2, 222-229. (K. S. Miller) 58 #9683 93E10 (94A05)

- (with Poor, H. Vincent) Locally optimum detection of discrete-time stochastic signals in non-Gaussian noise. *J. Acoust. Soc. Amer.* **63** (1978), no. 1, 75-80. (Authors' summary) **58** #20769 94A05
- See also *Random processes*, **51** #9135
- Thomas, John D.** (with Bahaudin, Mohammed) The homology of uniform spaces. *Canad. J. Math.* **25** (1973), 449-455. (M. Hušek) **47** #7727 55B05
- (with Lewis, H. Ralph; Melendez, K. J.) Computation of Fourier integrals of exponentials of truncated Fourier series. *J. Computational Phys.* **12** (1973), 462-470. (R. P. Brent) **48** #5349 65D30
- Thomas, John G., Jr.** (with Debnath, Lokenath) On finite Laplace transformation with applications. *Z. Angew. Math. Mech.* **56** (1976), no. 12, 559-563. (K. C. Gupta) **55** #6132 44A10
- Thomas, Joseph C.** On filters generated by sequences of ideals. *Comm. Algebra* **6** (1978), no. 6, 551-581. (L. Bican) **58** #11028 16A66 (18A40)
- Thomas, K. E.** Regarding a question about the least element map. *Colloq. Math.* **27** (1973), 39-40. (D. R. Brown) **49** #3863 54F05
- Thomas, K. S.** On the approximate solution of operator equations. *Numer. Math.* **23** (1974/75), 231-239. (Charles W. Groetsch) **51** #9475 65J05 (47A50)
- Thomas, L. A.** Ordered Desarguesian affine Hjelmslev planes. *Canad. Math. Bull.* **21** (1978), no. 2, 229-235. (B. Artmann) **58** #18100 50D05 (50D35)
- Thomas, L. C.** A note on quantising Kolmogorov systems. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **21** (1974), 77-79. (J. E. Marsden) **51** #9713 81.47 (58F15)
- On the eventual absorption of a quantum particle. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **21** (1974), 81-87. (P. Caldirola) **51** #12220 81.60
- (with Lewis, J. T.) A characterization of regular solutions of a linear stochastic differential equation. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **30** (1974), 45-55. (J. A. Goldstein) **52** #1885 60H10 (47A40)
- (with Lewis, J. T.) How to make a heat bath. *Functional integration and its applications (Proc. Internat. Conf., London, 1974)*, pp. 97-123. Clarendon Press, Oxford, 1975. (Werner Kohler) **58** #7880 60J65
- (with Lewis, J. T.) On the existence of a class of stationary quantum stochastic processes. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **22** (1975), no. 3, 241-248. (Koichiro Matsuno) **55** #5074 81.60
- See also *Operations research and reliability*, **49** #10337
- Thomas, L. E.** See *Thomas, Lawrence E.*
- Thomas, L. Joseph** (with McClain, John O.) Response-variance tradeoffs in adaptive forecasting. *Operations Res.* **21** (1973), 554-568. (D. Hochstädter) **50** #12404 93E10 (93C40)
- Thomas, Larry E.** On the existence of periodic and unbounded solutions of linear differential equations with non-negative damping. *Amer. Math. Monthly* **79** (1972), 1107-1111. (G. Ladas) **47** #7131 34C10
- (with Boyce, William E.) The behavior of a self-excited system acted upon by a sequence of random impulses. *J. Differential Equations* **12** (1972), 438-454. (P. Brock) **49** #7544 34F05 (60H10)
- Thomas, Lawrence E.** On the spectral properties of some one-particle Schrödinger Hamiltonians. *Helv. Phys. Acta* **45** (1972/73), 1057-1065. (W. O. Amrein) **51** #12209 81.47
- Time dependent approach to scattering from impurities in a crystal. *Comm. Math. Phys.* **33** (1973), 335-343. (S. Newberger) **48** #13084 81.47
- (with Combes, J. M.) Asymptotic behaviour of eigenfunctions for multiparticle Schrödinger operators. *Comm. Math. Phys.* **34** (1973), 251-270. (Georges Bessis) **52** #12611 81.47
- On the algebraic theory of scattering. *J. Functional Analysis* **15** (1974), 364-377. (G. W. Mackey) **54** #6783 81.47 (35P25)
- Asymptotic completeness in three-particle quantum mechanical scattering. *International Symposium on Mathematical Problems in Theoretical Physics (Kyoto Univ., Kyoto, 1975)*, pp. 483-485. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (From the text) **58** #32605 81.47
- Asymptotic completeness in two- and three-particle quantum mechanical scattering. *Ann. Physics* **90** (1975), 127-165. (Author's summary) **54** #12050 81.47
- (with Eckmann, Jean-Pierre) On the ionization of crystals. *Comm. Math. Phys.* **41** (1975), 175-189. (Jean-Claude Guillot) **51** #7549 82.47
- (with Babbitt, Donald G.) Ground state representation of the infinite one-dimensional Heisenberg ferromagnet. II. An explicit Plancherel formula. *Comm. Math. Phys.* **54** (1977), no. 3, 255-278. (Klaus-Jürgen Eckardt) **56** #2038b 81.35
- Ground state representation of the infinite one-dimensional Heisenberg ferromagnet. I. *J. Math. Anal. Appl.* **59** (1977), no. 2, 392-414. (Klaus-Jürgen Eckardt) **56** #2038a 81.35
- (with Babbitt, Donald G.) Explicit Plancherel theorem for ground state representation of the Heisenberg chain. *Proc. Nat. Acad. Sci. U.S.A.* **74** (1977), no. 3, 816-817. (J. E. Lowther) **55** #5004 81.35
- (with Babbitt, Donald G.) Ground state representation of the infinite one-dimensional Heisenberg ferromagnet. III. Scattering theory. *J. Math. Phys.* **19** (1978), no. 8, 1699-1704. (Authors' summary) **58** #14636 81.47
- Thomas, M. E.** (with Grunspan, M.) Hyperbolic integer programming. *Naval Res. Logist. Quart.* **20** (1973), 341-356. (Csaba Fabian) **47** #6311 90C10
- A survey of the state of the art in dynamic programming. *AIIE Trans.* **8** (1976), no. 1, 59-69. (Santosh Kumar) **53** #2389 90C47
- Thomas, Marc P.** Automatic continuity for linear functions intertwining continuous linear operators on Fréchet spaces. *Canad. J. Math.* **30** (1978), no. 3, 518-530. (A. M. Sinclair) **58** #2398 47A99
- Thomas, Marlin A.** (with Crigler, John R.) Tolerance limits for the p -dimensional radial error distribution. *Comm. Statist.* **3** (1974), 477-483. (S. John) **50** #15115 62F25
- Thomas, Marlin U.** Some mean first-passage time approximations for the Ornstein-Uhlenbeck process. *J. Appl. Probability* **12** (1975), no. 3, 600-604. (Adhir K. Basu) **52** #9394 60J60
- (with Barr, Donald R.) An approximate test of Markov chain lumpability. *J. Amer. Statist. Assoc.* **72** (1977), no. 357, 175-179. (G. S. Davies) **56** #1469 60J20 (62M05)
- (with Barr, Donald R.) An eigenvector condition for Markov chain lumpability. *Operations Res.* **25** (1977), no. 6, 1028-1031. (Roy V. Erickson) **57** #17838 60J10
- Thomas, Paul R.** (with Stone, Michael) Condensed monopoles and Abelian confinement. *Phys. Rev. Lett.* **41** (1978), no. 6, 351-353. (Authors' summary) **58** #14527 81.23
- Thomas, R. E.** On optimum path problems. *Networks* **6** (1976), no. 4, 287-305. (K. Onaga) **56** #7905 90B10
- Thomas, R. K.** Metric properties of transformations of G -spaces. *Trans. Amer. Math. Soc.* **160** (1971), 103-117. (Michael Weiss) **45** #2142 28A65
- The addition theorem for the entropy of transformations of G -spaces. *Trans. Am. Math. Soc.* **160** (1971), 119-130. (Michael Weiss) **45** #2143 28A65
- On affine transformations of locally compact groups. *J. London Math. Soc.* (2) **46** (1972), 599-610. (A. C. M. van Rooij) **46** #5586 28A65 (22D05)
- Thomas, R. S. D.** (with James, Lee O.; Luginbuhl, E.) On notations for non-permuting braids. *Proceedings of the Twenty-Fifth Summer Meeting of the Canadian Mathematical Congress (Lakehead Univ., Thunder Bay, Ont., 1971)*, pp. 457-470. Lakehead Univ., Thunder Bay, Ont., 1971. (J. S. Birman) **51** #9044 55A25 (20F05)
- Computed topological equivalence of partially closed braids. *Proceedings of the Twenty-Fifth Summer Meeting of the Canadian Mathematical Congress (Lakehead Univ., Thunder Bay, Ont., 1971)*, pp. 564-584. Lakehead Univ., Thunder Bay, Ont., 1971. (J. L. McPherson) **49** #3887 55A25 (55-04)
- An algorithm for combing braids. *Proceedings Second Louisiana Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1971)*, pp. 517-532. Louisiana State Univ., Baton Rouge, La., 1971. (Wilbur Whitten) **50** #5780 55A25
- Parallelizability in topological dynamics. (Afrikaans summary) *Tydskr. Naturwetenskap* **11** (1971), 1-10. (J. D. Baum) **45** #5986 54H20
- Closed and partially closed braids. *Proceedings of the Third Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1972)*, pp. 447-450. Florida Atlantic Univ., Boca Raton, Fla., 1972. (R. J. Daverman) **49** #11496 55A25
- (with Murasugi, Kunio) Isotopic closed nonconjugate braids. *Proc. Amer. Math. Soc.* **33** (1972), 137-139. (Wilbur Whitten) **45** #1149 55A25
- (with Luginbuhl, E.) A table of knots as closed braids. *Proceedings of the Fourth Southeastern Conference on Combinatorics, Graph Theory, and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1973)*, pp. 423-444. *Utilitas Math.*, Winnipeg, Man., 1973. (Wilbur Whitten) **50** #5776 55A25
- Partially closed braids. *Canad. Math. Bull.* **17** (1974), 99-107. (J. Martin) **51** #4213 55A25
- (with Paley, B. T.) Garside's braid-conjugacy solution implemented. *Utilitas Math.* **6** (1974), 321-335. (Hale F. Trotter) **50** #13208 20-04
- The structure of the fundamental braids. *Quart. J. Math. Oxford Ser. (2)* **26** (1975), no. 103, 283-288. (L. Neuwirth) **52** #1664 55A25
- See also *Proceedings: Louisiana Conference on Combinatorics, Graph Theory and Computing*, **47** #4750; *Proceedings: Summer Meeting of the Canadian Mathematical Congress*, **48** #5776; *Proceedings: Manitoba Conference on Numerical Mathematics*, **48** #7525; *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, **48** #8247; *Proceedings: Manitoba Conference on Numerical Mathematics*, **48** #10034; *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, **48** #10747; *Proceedings: Manitoba Conference on Numerical Mathematics*, **50** #3517; *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, **50** #4315 and *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, **52** #5432
- Thomas, Ralph H.** See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, **52** #9427
- Thomas, Robert J.** On the control of transient modes in large electric power systems. *Proceedings of the Eighth Annual Southeastern Symposium on System Theory (Univ. Tennessee, Knoxville, Tenn., 1976)*, pp. 197-202. *Inst. Electr. Electron. Engrs.*, New York, 1976. (Author's summary) **58** #4549 93D99
- Thomas, Stefan** (with Scholz, Siegfried; Bräuer, Klaus) Ein A -stabiles einstufiges Rosenbrock-Verfahren dritter Ordnung. *Beiträge Numer. Math.* **5** (1976), 191-199. (Zbl) **356** #65067 **58** #19154 65L05
- Thomas, William J.** Doubts about some standard arguments for Church's thesis. *Logic, language, and probability (Selected Papers, Fourth Internat. Congress Logic, Methodology, and Philos. Sci., Bucharest, 1971)*, pp. 55-62. *Synthese Library*, Vol. 51, Reidel, Dordrecht, 1973. (John P. Helm) **57** #2869 02A05 (02E15)
- Consistency of n -order logics. *Notre Dame J. Formal Logic* **17** (1976), no. 2, 257-262. (Zbl) **258** #02019 **58** #21424 02B15
- Thomas, Wolfgang** A note on undecidable extensions of monadic second order successor arithmetic. *Arch. Math. Logik Grundlagenforsch.* **17** (1975), no. 1-2, 43-44. (From the author's introduction) **56** #110 02G05 (02F10)
- Thomas, Y.** (with Kagiwada, Harriet H.; Kalaba, Robert E.) Exact solution of Pontryagin's equations of optimal control. I. *Ann. École Nat. Sup. Méc. Nantes* **1969**, deuxième semestre, 151-160. (Editors) **46** #6119 49A10 (93C15)
- (with Sarlat, D.) Obtention à l'aide de l'invariant imbedding d'une commande optimale contrainte. *Ann. École Nat. Sup. Méc. Nantes* **1970**, premier semestre, 137-147. (Editors) **46** #6121 49A10 (93C15)
- (with de Larminat, Philippe; Sarlat, D.) Invariant imbedding et filtrage critère à horizon mobile. *Ann. École Nat. Sup. Méc. Nantes* **1973**, premier semestre, 25-38. (Bojan Popović) **52** #5149 93E10
- (with Barraud, Alain) Commande optimale à horizon fuyant. *Ann. École Nat. Sup. Méc. Nantes* **1973**, deuxième semestre, 91-104. (Not reviewed) **65K05** (93C99)
- (with Barraud, Alain) Commande optimale à horizon fuyant. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* **8** (1974), no. J-1, 126-140. (L. Mikołajczyk) **50** #8229 49E05
- Thomasian, A. J.** See *Key papers in the development of information theory*, **52** #5177
- Thomasian, A. G.** (with Bollobás, Béla) Uniquely partitionable graphs. *J. London Math. Soc.* (2) **16** (1977), no. 3, 403-410. (D. R. Lick) **58** #10586 05C35
- Thomason, Michael G.** Errors in regular languages. *IEEE Trans. Computers* **C-23** (1974), no. 6, 597-602. (R. G. Buharaev) **52** #12411 68A25 (94A35)
- (with Marinos, Peter N.) Deterministic acceptors of regular fuzzy languages. *IEEE Trans. Systems, Man Cybernet.* **SMC-4** (1974), 228-230. (Authors' summary) **56** #4247 68A25 (68A30)

- Fuzzy syntax-directed translations. *J. Cybernet.* 4 (1974), no. 1, 87-94. (Author's summary) 56 #17232 68A30
(with Gonzalez, Rafael C.) Syntactic recognition of imperfectly specified patterns. *IEEE Trans. Computers* C-24 (1975), no. 1, 93-95. (K. S. Fu) 53 #15015 68A45
Stochastic syntax-directed translation schemata for correction of errors in context-free languages. *IEEE Trans. Computers* C-24 (1975), no. 12, 1211-1216. (Leon Levy) 52 #7223 68A30
(with Page, Edward W.) Boolean difference techniques in fault tree analysis. *Internat. J. Comput. Information Sci.* 5 (1976), no. 1, 81-88. (J. J. Stiffler) 53 #10509 94A20
Convergence of powers of a fuzzy matrix. *J. Math. Anal. Appl.* 57 (1977), no. 2, 476-480. (Shinichi Tamura) 55 #376 15A45
(with Gonzalez, Rafael C.) ★Syntactic pattern recognition. An introduction. *Applied Mathematics and Computation*. No. 14. Addison-Wesley Publishing Co., Reading, Mass.-London-Amsterdam, 1978. xix + 283 pp. (loose errata) ISBN 0-201-02930-8-(02931-6) (K. S. Fu) 58 #13999 68A45
omason, R. W. A note on spaces with normal product with some compact space. *Proc. Amer. Math. Soc.* 44 (1974), 509-510. (J. E. Keesling) 51 #4165 54D15
omason, Richmond H. (with Stalnaker, Robert C.) Abstraction in first-order modal logic. *Theoria* 34 (1968), 203-207. (J. Michael Dunn) 49 #2269 02C10
A Fitch-style formulation of conditional logic. *Logique et Analyse (N.S.)* 13 (1970), 397-412. (N. B. Cocchiarella) 45 #3158 02C99
Indeterminist time and truth-value gaps. *Theoria* 36 (1970), 264-281. (R. I. Goldblatt) 47 #19 02C10
A semantic theory of sortal incorrectness. *J. Philos. Logic* 1 (1972), no. 2, 209-258. (Zbl 248 #02029) 58 #16127 02B10
Philosophy and formal semantics. *Truth, syntax and modality (Proc. Conf. Alternative Semantics, Temple Univ., Philadelphia, Pa., 1970)*, pp. 294-307. *Studies in Logic and the Foundations of Math.*, Vol. 68, North-Holland, Amsterdam, 1973. (Alex Blum) 53 #5243 02A05
omason, Steven K. Sublattices of the recursively enumerable degrees. *Z. Math. Logik Grundlagen Math.* 17 (1971), 273-280. (J. L. Gersting) 45 #8523 02F25
Semantic analysis of tense logics. *J. Symbolic Logic* 37 (1972), 150-158. (David Makinson) 47 #4766 02C10 (02H10)
Noncompactness in propositional modal logic. *J. Symbolic Logic* 37 (1972), 716-720. (I. Ruzsa) 47 #4767 02C10
A new representation of S_5 . *Notre Dame J. Formal Logic* 14 (1973), 281-284. (R. I. Goldblatt) 48 #5825 02C10
Reduction of tense logic to modal logic. I. *J. Symbolic Logic* 39 (1974), 549-551. (K. J. G. Wu) 50 #12669 02C10
An incompleteness theorem in modal logic. *Theoria* 40 (1974), no. 2, 30-34. (From the text) 58 #27349 02C10
(with Goldblatt, R. I.) Axiomatic classes in propositional modal logic. *Algebra and logic (Fourteenth Summer Res. Inst., Austral. Math. Soc., Monash Univ., Clayton, 1974)*, pp. 163-173. *Lecture Notes in Math.*, Vol. 450, Springer, Berlin, 1975. (David Makinson) 52 #5360 02C10 (02H05, 08A20)
Categories of frames for modal logic. *J. Symbolic Logic* 40 (1975), no. 3 439-442. (A. Tauts) 52 #2829 02C10 (02J05)
Reduction of tense logic to modal logic. II. *Theoria* 41 (1975), no. 3, 154-169. (From the introduction) 58 #21484 02C10
The logical consequence relation of propositional tense logic. *Z. Math. Logik Grundlagen Math.* 21 (1975), 29-40. (B. H. Mayoh) 51 #67 02C10
Reduction of second-order logic to modal logic. *Z. Math. Logik Grundlagen Math.* 21 (1975), 107-114. (N. B. Cocchiarella) 51 #10037 02C10
Possible worlds and many truth values. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 6 (1977), no. 3, 107-111. (Editors) 58 #16160 02C10 (02C05)
Thomasse, A. H. Practical recipes to solve the Behrens-Fisher problem. *Statistica Neerlandica* 28 (1974), 127-138. (E. J. Williams) 50 #1398 62F25
Thomassen, Carsten On randomly Hamiltonian graphs. *Math. Ann.* 200 (1973), 195-208. (G. Chartrand) 48 #3803 05C35
Antidirected Hamilton circuits and paths in tournaments. *Math. Ann.* 201 (1973), 231-238. (L. S. Mel'nikov) 50 #1960 05C20
(with Dirac, Gabriel) Graphs in which every finite path is contained in a circuit. *Math. Ann.* 203 (1973), 65-75. (H. V. Kronk) 49 #134 05C35
A minimal condition implying a special K_4 -subdivision in a graph. *Arch. Math. (Basel)* 25 (1974), 210-215. (R. L. Hemminger) 50 #12811 05C35
Hypohamiltonian and hypotraceable graphs. *Discrete Math.* 9 (1974), 91-96. (L. V. Quintas) 50 #184 05C35
On hypohamiltonian graphs. *Discrete Math.* 10 (1974), 383-390. (F. Harary) 50 #9694 05C35
(with Sørensen, Bo Aagaard) On k -rails in graphs. *J. Combinatorial Theory Ser. B* 17 (1974), 143-159. (W. Mader) 51 #12623 05C99
Graphs in which every path is contained in a Hamilton path. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, II. *J. Reine Angew. Math.* 268/269 (1974), 271-282. (H. V. Kronk) 50 #1977 05C35
Some homeomorphism properties of graphs. *Math. Nachr.* 64 (1974), 119-133. (Frank W. Owens) 51 #288 05C99
(with Dirac, Gabriel) On the existence of certain subgraphs in infinite graphs. *Nederl. Akad. Wetensch. Proc. Ser. A 77 = Indag. Math.* 36 (1974), 406-410. (C. St. J. A. Nash-Williams) 50 #9697 05C99
Transversals of circuits in the lexicographic product of directed graphs. (French summary) *Math. Sci. Humaines No. 51* (1975), 43-45, 87 (Jean-Claude Bermond) 52 #13476 05C20
Homeomorphism properties of graphs. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973)*, *Tomo II*, pp. 269-277. *Atti dei Convegni Lincei*, No. 17, Accad. Naz. Lincei, Rome, 1976. (W. Mader) 58 #27634 05C35
Planar and infinite hypohamiltonian and hypotraceable graphs. *Discrete Math.* 14 (1976), no. 4, 377-389. (Brian Alspach) 54 #10078 05C35
(with Reid, K. B., Jr.) Edge sets contained in circuits. *Israel J. Math.* 24 (1976), no. 3-4, 305-319. (Brian Alspach) 55 #2648 05C35
(with Häggkvist, Roland) On pancyclic digraphs. *J. Combinatorial Theory Ser. B* 20 (1976), no. 1, 20-40. (F. Harary) 52 #10481 05C20
(with Harary, Frank) Anticircular graphs. *Math. Proc. Cambridge Philos. Soc.* 79 (1976), no. 1, 11-18. (L. W. Beineke) 54 #2541 05C99
(with Reid, K. B., Jr.) Strongly self-complementary and hereditarily isomorphic tournaments. *Monatsh. Math.* 81 (1976), no. 4, 291-304. (L. W. Beineke) 55 #2640 05C20
An Ore-type condition implying a digraph to be pancyclic. *Discrete Math.* 19 (1977), no. 1, 85-92. (F. Harary) 58 #21776 05C20
(with Bondy, John Adrian) A short proof of Meyniel's theorem. *Discrete Math.* 19 (1977), no. 2, 195-197. (R. C. Entringer) 57 #5811 05C20
Counterexamples to the edge reconstruction conjecture for infinite graphs. *Discrete Math.* 19 (1977), no. 3, 293-295. (R. L. Hemminger) 57 #3009 05C99
Note on circuits containing specified edges. *J. Combinatorial Theory Ser. B* 22 (1977), no. 3, 279-280. (Author's summary) 58 #5384 05C35
(with Chvátal, Václav) Distances in orientations of graphs. *J. Combinatorial Theory Ser. B* 24 (1978), no. 1, 61-75. (László Lovász) 58 #10589 05C35 (68A20)
Thomasset, François (with Temam, Roger) Solution of the Navier-Stokes equations by finite element methods. *Proceedings of the Fourth International Conference on Numerical Methods in Fluid Dynamics (Univ. Colorado, Boulder, Colo., 1974)*, pp. 392-396. *Lecture Notes in Phys.*, Vol. 35, Springer, Berlin, 1975. (Editors) 57 #18485 76.65 (65N30)
Thomason, R. L. (with Kapadia, C. H.) On estimating the parameter of a truncated geometric distribution by the method of moments. *Ann. Inst. Statist. Math.* 27 (1975), no. 2, 269-272. (Divakar Sharma) 52 #15800 62F10
Thomblison, William Stewart (with Archie, Lee C.; Hurdle, B. G., Jr.) A note on the truth-table for "if p then q ". *Notre Dame J. Formal Logic* 18 (1977), no. 4, 596-598. (K. Inoue) 58 #115 02A05 (02B05)
Thomchick, John (with Papadopoulos, G. J.) On a path integral having application in polymer physics. *J. Phys. A* 10 (1977), no. 7, 1115-1121. (Authors' summary) 58 #25713 82.60
Thomé, Vidar Convergence estimates in discrete initial value problems. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 3, pp. 321-329. Gauthier-Villars, Paris, 1971. (A. O. Garder, Jr.) 55 #4707 65M10
(with Brenner, Philip) Contractive difference schemes for symmetric hyperbolic systems. *Math. Comp.* 25 (1971), 205-217. (R. Ansorge) 45 #6209 65N05
(with Brenner, Philip) Estimates near discontinuities for some difference schemes. *Math. Scand.* 28 (1971), 329-340. (Gilbert Strang) 46 #4743 65M10
Convergence near plane boundaries of some elliptic difference schemes. *Numer. Math.* 17 (1971), 45-53. (J. H. Bramble) 45 #4670 65N05
Some convergence results in elliptic difference equations. A discussion on numerical analysis of partial differential equations (1970). *Proc. Roy. Soc. London Ser. A* 323 (1971), 191-199. (Author's summary) 58 #19193 65N10 (65N30)
Spline approximation and difference schemes for the heat equation. *The mathematical foundations of the finite element method with applications to partial differential equations (Proc. Sympos., Univ. Maryland, Baltimore, Md., 1972)*, pp. 711-746. Academic Press, New York, 1972. (O. Widlund) 53 #7077 65N30
(with Bramble, James H.) Semidiscrete least-squares methods for a parabolic boundary value problem. *Math. Comp.* 26 (1972), 633-648. (J. L. Morris) 50 #1532 65N10
(with Bramble, James H.; Dupont, Todd) Projection methods for Dirichlet's problem in approximating polygonal domains with boundary-value corrections. *Math. Comp.* 26 (1972), 869-879. (Stephen Hilbert) 49 #8397 65N30
Convergence estimates for semi-discrete Galerkin methods for initial-value problems. *Numerische, insbesondere approximativtheoretische Behandlung von Funktionalgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1972)*, pp. 243-262. *Lecture Notes in Math.*, Vol. 333, Springer, Berlin, 1973. (Todd Dupont) 56 #17147 65N30
Approximate solution of Dirichlet's problem using approximating polygonal domains. *Topics in numerical analysis (Proc. Roy. Irish Acad. Conf., University Coll., Dublin, 1972)*, pp. 311-328. Academic Press, London, 1973. (P. G. Ciarlet) 50 #1528 65N05
Polygonal domain approximation in Dirichlet's problem. *J. Inst. Math. Appl.* 11 (1973), 33-44. (Stephen Hilbert) 50 #1538 65N15
Spline-Galerkin methods for initial-value problems with constant coefficients. *Conference on the Numerical Solution of Differential Equations (Univ. of Dundee, Dundee, 1973)*, pp. 164-175. *Lecture Notes in Math.*, Vol. 363, Springer, Berlin, 1974. (Ralph A. Willoughby) 54 #14393 65M10
Some convergence results for Galerkin methods for parabolic boundary value problems. *Mathematical aspects of finite elements in partial differential equations (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1974)*, pp. 55-88. *Publication No. 33*, Math. Res. Center, Univ. of Wisconsin-Madison, Academic Press, New York, 1974. (Editors) 58 #31890 65N10
Convergence analysis of a finite difference scheme for a simple semi-linear hyperbolic equation. *Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1973)*, pp. 149-166. *Lecture Notes in Math.*, Vol. 395, Springer, Berlin, 1974. (Nima Geffen) 50 #9001 65M10
(with Bramble, James H.) Discrete time Galerkin methods for a parabolic boundary value problem. *Ann. Mat. Pura Appl. (4)* 101 (1974), 115-152. (G. C. Barozzi) 52 #9639 65N30
(with Wahlbin, Lars B.) Convergence rates of parabolic difference schemes for non-smooth data. *Math. Comp.* 28 (1974), 1-13. (M. R. Occorsio) 49 #6635 65M10
(with Bramble, James H.) Interior maximum norm estimates for some simple finite element methods. (loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge* 8 (1974), no. R-2, 5-18. (J. R. Kuttler) 50 #11808 65N30
(with Wendroff, Burton) Convergence estimates for Galerkin methods for variable coefficient initial value problems. *SIAM J. Numer. Anal.* 11 (1974), 1059-1068. (Murli M. Gupta) 51 #7309 65M15
(with Brenner, Philip; Wahlbin, Lars B.) ★Besov spaces and applications to difference methods for initial value problems. *Lecture Notes in Mathematics*, Vol. 434.

- Springer-Verlag, Berlin-New York, 1975. ii+ 154pp. (H. Jeggle (Zbl 294 #35002)) 57 #1106 46E35 (65Mxx, 46M35)
- (with Johnson, Claes) Error estimates for a finite element approximation of a minimal surface. *Math. Comp.* 29 (1975), 343-349. (Ju. K. Dem'janovič) 53 #4571 65N15
- (with Wahlbin, Lars B.) On Galerkin methods in semilinear parabolic problems. *SIAM J. Numer. Anal.* 12 (1975), 378-389. (S. V. Parter) 52 #16066 65N30
- (with Löfström, J.) Convergence analysis of finite difference schemes for semi-linear initial-value problems. (Loose French summary) *Rev. Française Automat. Informat. Recherche Operationnelle Sér. Rouge Anal. Numér.* 10 (1976), no. R-2, 61-86. (Authors' summary) 58 #8323 65M10
- Some error estimates in Galerkin methods for parabolic equations. *Mathematical aspects of finite element methods* (Proc. Conf., Consiglio Naz. delle Ricerche (C.N.R.), Rome, 1975), pp. 343-352. *Lecture Notes in Math.*, Vol. 606, Springer, Berlin, 1977. (From the text) 58 #31928 65N30
- High order local approximations to derivatives in the finite element method. *Math. Comp.* 31 (1977), no. 139, 652-660. (William W. Hager) 55 #11572 65D25 (65L10)
- (with Baker, Garth A.; Bramble, James H.) Single step Galerkin approximations for parabolic problems. *Math. Comp.* 31 (1977), no. 140, 818-847. (T. Styš) 56 #7252 65N30
- (with Bramble, James H.; Schatz, Alfred H.; Wahlbin, Lars B.) Some convergence estimates for semidiscrete Galerkin type approximations for parabolic equations. *SIAM J. Numer. Anal.* 14 (1977), no. 2, 218-241. (G. C. Barozzi) 56 #7231 65M10
- See also **Symposium: Theory of Numerical Analysis**, 51 #2242
- Thomeier, S.** Whitehead products and homotopy groups of spheres. *Proceedings of the Thirteenth Biennial Seminar of the Canadian Mathematical Congress, (Dalhousie Univ., Halifax, N. S., 1971), Vol. 2, pp. 144-155. Canad. Math. Congr., Montreal, Que., 1972.* (John R. Harper) 53 #4057 55E40
- See also **Topology and its applications**, 50 #6736
- Thompson, A. C.** (with Swaminathan, Srinivasa) Sizes of sets and some fixed point theorems. *Comment. Math. Univ. Carolinae* 12 (1971), 537-549. (J. Daneš) 45 #4236 47H10 (54H25)
- (with Edelstein, Michael) Some results on nearest points and support properties of convex sets in C_0 . *Pacific J. Math.* 40 (1972), 553-560. (R. H. Lohman) 46 #7855 46B05
- (with Vijayakumar, M. S.) An order-preserving representation theorem for complex Banach algebras and some examples. *Glasgow Math. J.* 14 (1973), 128-135. (P. Civin) 49 #1119 46H15
- (with Bonsall, Frank F.) Banach algebra elements whose spectra intersect \mathbb{R}^+ . *Proc. Edinburgh Math. Soc.* (2) 19 (1974/75), 59-69. (B. Yood) 49 #9630 46H05
- An equiperimetric property of Minkowski circles. *Bull. London Math. Soc.* 7 (1975), no. 3, 271-272. (G. D. Chakerian) 52 #4138 52A40
- (with Betts, J. R.) Three remarks on the measurement of unit spheres. *Canad. Math. Bull.* 18 (1975), no. 4, 485-488. (K. Sundaresan) 54 #5802 46B05
- Isometric embedding in Hilbert space. *Nieuw Arch. Wisk.* (3) 25 (1977), no. 2, 161-168. (T. Figiel) 58 #7047 46C10
- Thompson, A. H.** On conformally symmetric 2-Ricci-recurrent spaces. I. II. *Univ. Nac. Tucumán Rev. Ser. A* 21 (1971), 161-165; *ibid* 21 (1971), 207-210. (J. T. Willmore) 50 #8344 53B20
- (with McLenaghan, Raymond G.) Détermination des espaces-temps récurrents de second ordre. *Acad. Roy. Belg. Bull. Cl. Sci.* (5) 58 (1972), 1099-1111. (M. Sachs) 47 #6259 83.53
- (with McLenaghan, Raymond G.) Second-order recurrent space-times in general relativity. *Lett. Nuovo Cimento* (2) 5 (1972), 563-564. (Not reviewed) 83.53
- Geometrically degenerate solutions of the Kilmister-Yang equations. *Phys. Rev. Lett.* 35 (1975), no. 5, 320-322. (J. Blackman) 52 #12707 83.53
- See also **Methods of local and global differential geometry in general relativity**, 53 #2259
- Thompson, Alan** (with Porter, John R.) Some topological considerations in general relativity. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 51 (1971), 191-198. (K. K. Lee) 46 #10367 83.53
- Thompson, B. W.** Accuracy and approximation in applied mathematics. *Error, approximation, and accuracy* (Proc. Sem., Austral. Nat. Univ., Canberra, 1972), pp. 4-17. *Univ. Queensland Press, St. Lucia, 1973.* (V. V. Ivanov) 55 #14347 65G05
- Calculations on the hypersonic Rayleigh problem. *Proceedings of the Fourth International Conference on Numerical Methods in Fluid Dynamics* (Univ. Colorado, Boulder, Colo., 1974), pp. 397-402. *Lecture Notes in Phys.*, Vol. 35, Springer, Berlin, 1975. (Authors' summary) 56 #17491 76.65
- Thompson, C.** (with Meyer, Albert R.) Remarks on algebraic decomposition of automata. *Math. Systems Theory* 3 (1969), 110-118. (I. Peák) 45 #6539 94A30
- Thompson, C. D.** (with Kung, H. T.) Sorting on a mesh-connected parallel computer. *Eighth Annual ACM Symposium on Theory of Computing* (Hershey, Pa., 1976), pp. 58-64. *Assoc. Comput. Mach., New York, 1976.* (Jozsef Miklósko) 55 #11692 68A10
- (with Kung, H. T.) Sorting on a mesh-connected parallel computer. *Comm. ACM* 20 (1977), no. 4, 263-271. (Jo Ann Howell) 55 #11693 68A10 (68A20)
- Thompson, Colin J.** Inequalities and partial orders on matrix spaces. *Indiana Univ. Math. J.* 21 (1971/72), 469-480. (Marvin Marcus) 45 #3442 15A45
- (with Sherman, Seymour) Equivalences on eigenvalues. *Indiana Univ. Math. J.* 21 (1971/72), 807-814. (Marvin Marcus) 45 #5146 15A18
- (with Kac, Mark) Spherical model and the infinite spin dimensionality limit. *Phys. Norveg.* 5 (1971), no. 3-4, 163-168. (Ta-You Wu) 56 #4608 82.60
- ★Mathematical statistical mechanics. A Series of Books in Applied Mathematics. *The Macmillan Co., New York; Collier-Macmillan Ltd., London, 1972.* x+278 pp. (A. K. Rajagopal (Zbl 244 #60082)) 57 #8821 82.60
- (with Silver, Howard) The classical limit of n -vector spin models. *Comm. Math. Phys.* 33 (1973), 53-60. (T. Arai) 49 #6847 82.00
- Ising model in the high density limit. *Comm. Math. Phys.* 36 (1974), 255-262. (Richmond B. McQuistan) 53 #7314 82.06
- (with McBride, John L.) On Eigen's theory of the self-organization of matter and the evolution of biological macromolecules. *Math. Biosci.* 21 (1974), 127-142. (J. D.
- Cowan) 51 #2672 92A05
- (with Pearce, Paul A.) The anisotropic Heisenberg model in the long-range interaction limit. *Comm. Math. Phys.* 41 (1975), 191-201. (B. Souillard) 53 #2248 82.47
- (with Gates, D. J.) Correlation functions for spin systems of high spatial dimensionality. *J. Statist. Phys.* 13 (1975), no. 3, 219-230. (Authors' summary) 56 #14420 82.33
- (with Stevenson, Duncan R.) Fairy ring kinetics. *J. Theoret. Biol.* 58 (1976), no. 143-163. (Daniel M. Dubois) 56 #2464 92A05
- (with Lakshmanan, M.; Ruijgrok, Th. W.) On the dynamics of a continuum system. *Phys. A* 84 (1976), no. 3, 577-590. (Authors' summary) 56 #7567 81.35
- (with Kac, Mark) Correlation functions in the spherical and mean spherical model. *J. Mathematical Phys.* 18 (1977), no. 8, 1650-1653. (Burton H. Voorhees) 56 #2157 82.60
- (with Kim, D.) Critical behaviour of a modified spherical model. *J. Phys. A* (1977), no. 7, 1167-1174. (Ole J. Heilmann) 56 #7724 82.65
- (with Kim, D.) Critical properties of Dyson's hierarchical model. *J. Phys. A* (1977), no. 9, 1579-1598. (Authors' summary) 56 #10470 80.60
- (with Pearce, Paul A.) The spherical limit for n -vector correlations. *J. Statist. Phys.* 17 (1977), no. 4, 189-196. (Shigetoshi Katsura) 57 #11571 82.62
- (with Pearce, Paul A.) The high density limit for lattice spin models. *Comm. Math. Phys.* 58 (1978), no. 2, 131-138. (Ole J. Heilmann) 58 #25657 82.05
- Thompson, D. D.** (with Volz, Richard A.) The linear quadratic cost problem with linear state constraints and the nonsymmetric Riccati equation. *SIAM J. Control* 13 (1975), 110-145. (S. Cruceanu) 51 #5093 93C05
- Thompson, D. E.** Some theorems on a Volterra equation of the second kind. *Canad. Math. Bull.* 14 (1971), 585-589. (S. I. Grossman) 47 #733 45D05
- Thompson, D. V.** Discontinuity conditions on transformation groups. *Canad. Math. Bull.* 15 (1972), 417-419. (R. W. Bagley) 47 #1039 54H15
- Thompson, David** (with McKenzie, Ralph; Mycielski, Jan) On Boolean functions and connected sets. *Math. Systems Theory* 5 (1971), 259-270. (W. W. Armstrong) 54 #11876 68A45
- Thompson, David B.** Subrecursiveness: Machine-independent notions of computability in restricted time and storage. *Math. Systems Theory* 6 (1972), 3-15. (A. L. Rosenberg) 46 #4782 68A20
- Thompson, Donald L.** (with Suzukawa, Henry H., Jr.; Cheng, Vera B.; Wolfsberg, Max) Empirical testing of the suitability of a nonrandom integration method for classical trajectory calculations: comparisons with Monte Carlo techniques. *J. Chem. Phys.* 59 (1973), 4000-4008. (Authors' summary) 50 #15293 65D30 (65C05)
- Thompson, E. A.** The method of minimum evolution. *Ann. Human Genetics* 36 (1972/73), no. 3, 333-340. (P. Holgate) 55 #14262 92A10
- The estimation of pairwise relationships. *Ann. Human Genetics* 39 (1975/76), no. 2, 173-188. (Susan Wilson) 53 #10359 92A10 (62P10)
- A restriction on the space of genetic relationships. *Ann. Human Genetics* 40 (1976/77), no. 2, 201-204. (Author's summary) 56 #11082 92A10
- Estimation of the characteristics of rare variants. *Measuring selection in natural populations* (Proc. Sympos., Southern Jutland, 1976), pp. 531-543. *Lecture Notes in Biomath.*, Vol. 19, Springer, Berlin, 1977. (Ju. I. Ljubič) 58 #9406 92A10 (92A15)
- (with Cannings, C.; Skolnick, M. H.) Probability functions on complex pedigrees. *Advances in Appl. Probability* 10 (1978), no. 1, 26-61. (Jon Stene) 58 #9399 92A10
- See also **Barndorff-Nielsen, Ole**, 55 #1546
- Thompson, E. H.** ★An introduction to the algebra of matrices with some applications. *The University of Toronto Press, Toronto, Ont., 1969.* x+229 pp. (Editors) 51 #8133 15-01
- Thompson, Erik G.** (with Mack, Lawrence R.) Perturbation method for slow viscous flow with a free surface. *Quart. J. Mech. Appl. Math.* 25 (1972), 105-123. (D. R. Breach) 47 #2904 76.35
- Thompson, Gerald E.** ★Linear programming. An elementary introduction. *The Macmillan Co., New York; Collier-Macmillan Ltd., London, 1971.* vii+384 pp. (Editors) 51 #2599 90-01
- (with Hare, William R.) Tverberg-type theorems in convex product structures. *The geometry of metric and linear spaces* (Proc. Conf., Michigan State Univ., East Lansing, Mich., 1974), pp. 212-217. *Lecture Notes in Math.*, Vol. 490, Springer, Berlin, 1975. (Marilyn Breen) 53 #1416 52A35
- Thompson, Gerald L.** (with Kemeny, John G.; Schleifer, Arthur, Jr.; Snell, J. Laurie) ★Mathematik für die Wirtschaftspraxis. Übersetzung aus dem englischen von Hans-Jürgen Zimmermann. *Walter de Gruyter, Berlin-New York, 1966.* xv+492 pp. (Editors) 50 #12501 00A05
- (with Kemeny, John G.; Snell, J. Laurie) ★Úvod do finitní matematiky. (Czech [Introduction to finite mathematics]) Translated from the English by Jaroslav Růžička, Karel Prokop, Štefan Chochol and Jan Chlumský. *SNTL—Nakladatelství Technické Literatury, Prague; Nakladatel'stvo Alfa, Bratislava, 1971.* 470 pp. (Editors) 50 #1249 00A05
- (with Morgenstern, Oskar) Further consideration of "An open expanding economy model". *Contributions to the von Neumann growth model* (Proc. Conf., Inst. Advanced Studies, Vienna, 1970), pp. 23-30. *Zeitschrift für Nationalökonomie, Supplementum 1, Springer, New York, 1971.* (A. C. Williams) 48 #13199 90A15
- (with Weil, Roman L.) von Neumann model solutions are generalized eigensystems. *Contributions to the von Neumann growth model* (Proc. Conf., Inst. Advanced Studies, Vienna, 1970), pp. 139-154. *Zeitschrift für Nationalökonomie, Supplementum 1, Springer, New York, 1971.* (Georg Bol) 52 #7495 90A15
- Simplification of games in extensive form. *Internat. J. Game Theory* 1 (1971/72), 147-159. (Constantin Vîrsan) 47 #8136 90D99
- (with Kemeny, John G.; Schleifer, Arthur, Jr.; Snell, J. Laurie) ★Finite mathematics with business applications. Second edition. *Prentice-Hall, Inc., Englewood Cliffs, N.J., 1972.* xiii+529 pp. (Editors) 50 #12500 00A05
- (with Kemeny, John G.; Schleifer, Arthur, Jr.; Snell, J. Laurie) ★Mathematik für die Wirtschaftspraxis. Übersetzung aus dem englischen von Hans-Jürgen Zimmermann. Zweite verbesserte Auflage. *Walter de Gruyter, Berlin-New York, 1972.* xv+492 pp. (Editors) 50 #12502 00A05

- (with Weil, Roman L.) The roots of matrix pencils ($Ay = \lambda By$): Existence, calculations, and relations to game theory. *Linear Algebra and Appl.* 5 (1972), 207-226. (F. Szidarovsky) 46 #9058 15A06 (90D40)
- (with Srinivasan, V.) An operator theory of parametric programming for the transportation problem. I. II. *Naval Res. Logist. Quart.* 19 (1972), 205-225; *ibid.* 19 (1972), 227-252. (E. S. Boylan) 47 #10058 90C05
- (with Morgenstern, Oskar) A note on: "An open expanding economy model". *Naval Res. Logist. Quart.* 19 (1972), 557-559. (Colin W. Clark) 47 #10029 90A15
- (with Srinivasan, V.) Determining optimal growth paths in logistics operations. *Naval Res. Logist. Quart.* 19 (1972), 575-599. (Authors' summary) 47 #2989 90B05
- (with Srinivasan, V.) Solving scheduling problems by applying cost operators to assignment models. Incorporating the results of discussion by Mohamed I. Dessouky and Salah E. Elmaghraby. *Symposium on the Theory of Scheduling and its Applications* (North Carolina State Univ., Raleigh, N. C., 1972), pp. 399-425. *Lecture Notes in Economics and Mathematical Systems*, Vol. 86, Springer, Berlin, 1973. (Kailash C. Kapur) 53 #2360 90C05 (90B35)
- (with Srinivasan, V.) Alternate formulations for static multi-attribute assignment models. *Management Sci.* 20 (1973), 154-158. (I. M. Stancu-Minasian) 48 #13235 90B35
- (with Kemeny, John G.; Snell, J. Laurie) ★Introduction to finite mathematics. Third edition. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1974. xi + 484 pp. (Editors) 50 #12498 00A05
- (with Kemeny, John G.; Snell, J. Laurie) ★Einführung in die endliche Mathematik. Übersetzt aus dem Englischen von Ferdinand Lipowsky und Luitgard Sieber. Wirtschaftswissenschaft der Gegenwart, No. III. Mathematische Hilfsmittel. Erster Band. *Fachverlag für Wirtschaftstheorie und Ökonometrie, Ludwigshafen am Rhein*, 1974. vii + 386 pp. (Editors) 55 #7644 00A05 (90-01)
- (with Morgenstern, Oskar) Long term planning with models of static and dynamic open expanding economies. *Mathematical models in economics* (Proc. Sympos. and Conf. von Neumann Models, Warsaw, 1972), pp. 127-138. North-Holland, Amsterdam, 1974. (A. C. Williams) 52 #2543 90A15
- (with Sethi, Suresh P.) A maximum principle for stochastic networks. *Proceedings of the XXth International Meeting of the Institute of Management Sciences* (Tel Aviv, 1973), Vol. I, pp. 244-248. Jerusalem Academic Press, Jerusalem, 1975. (Authors' summary) 56 #10889 90B15
- (with Kleindorfer, Paul R.; Kriebel, Charles H.; Kleindorfer, George B.) Discrete optimal control of production plans. *Management Sci.* 22 (1975), no. 3, 261-273. (D. Hochstädter) 53 #12556 90B30
- (with Balachandran, V.) An operator theory of parametric programming for the generalized transportation problem. I. Basic theory. *Naval Res. Logist. Quart.* 22 (1975), 79-100. (Jürgen Guddat) 52 #2595 90C35 (90B10)
- (with Balachandran, V.) An operator theory of parametric programming for the generalized transportation problem. II. Rim, cost and bound operators. *Naval Res. Logist. Quart.* 22 (1975), 101-125. (Jürgen Guddat) 52 #2596 90C35 (90B10)
- (with Balachandran, V.) An operator theory of parametric programming for the generalized transportation problem. III. Weight operators. *Naval Res. Logist. Quart.* 22 (1975), no. 2, 297-315. (Jürgen Guddat) 52 #2597 90C35 (90B10)
- (with Balachandran, V.) An operator theory of parametric programming for the generalized transportation problem. IV. Global operators. *Naval Res. Logist. Quart.* 22 (1975), no. 2, 317-339. (Jürgen Guddat) 52 #2598 90C35 (90B10)
- (with Srinivasan, V.) Algorithms for minimizing total cost, bottleneck time and bottleneck shipment in transportation problems. *Naval Res. Logist. Quart.* 23 (1976), no. 4, 567-595. (Authors' summary) 56 #4808 90B99 (90-04, 90C05)
- (with Smith, T. H. C.) A LIFO implicit enumeration search algorithm for the symmetric traveling salesman problem using Helf and Karp's 1-tree relaxation. *Studies in integer programming* (Proc. Workshop, Bonn, 1975), pp. 479-493. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (R. L. Graves) 56 #14733 90C35
- (with Smith, T. H. C.; Srinivasan, V.) Computational performance of three subtour elimination algorithms for solving asymmetric traveling salesman problems. *Studies in integer programming* (Proc. Workshop, Bonn, 1975), pp. 495-506. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (See Zbl 363 #90081; MR 56 #2376) 90C10
- (with Srinivasan, V.) Cost operator algorithms for the transportation problem. *Math. Programming* 12 (1977), no. 3, 372-391. (J. A. Tomlin) 56 #10012 65K05 (90C10)
- (with Shaflet, Timothy L.) A simplex-like algorithm for the continuous modular design problem. *Operations Res.* 25 (1977), no. 5, 788-807. (Werner Krabs) 57 #5074 90C05
- (with Sethi, Suresh P.) Christmas toy manufacturer's problem: an application of the stochastic maximum principle. *Opsearch* 14 (1977), no. 3, 161-173. (M. Kadosch) 57 #2512 90B15
- See also **Mathematical programming and its applications**, 49 #10355 and **Kapur, Kailash C.**, 52 #16661
- Thompson, H. B.** (with Morris, Sidney A.) Invariant metrics on free topological groups. *Bull. Austral. Math. Soc.* 9 (1973), 83-88. (Bernard L. Madison) 48 #2296 22A05
- (with Morris, Sidney A.; Ordman, Edward T.) The topology of free products of topological groups. *Proceedings of the Second International Conference on the Theory of Groups* (Australian Nat. Univ., Canberra, 1973), pp. 504-515. *Lecture Notes in Math.*, Vol. 372, Springer, Berlin, 1974. (I. Gy. Maurer) 50 #13359 22A05
- A remark on free topological groups with no small subgroups. *J. Austral. Math. Soc.* 18 (1974), 482-484. (Edward T. Ordman) 51 #13116 22A05
- (with Morris, Sidney A.) Free topological groups with no small subgroups. *Proc. Amer. Math. Soc.* 46 (1974), 431-437. (Edward T. Ordman) 50 #4805 22A05 (20E05)
- (with Hardy, J. P. L.; Morris, Sidney A.) Applications of the Stone-Čech compactification to free topological groups. *Proc. Amer. Math. Soc.* 55 (1976), no. 1, 160-164. (Charles Joiner) 54 #12952 22A05 (54D35)
- Thompson, H. E.** (with Johnson, G. D.) Optimality of myopic inventory policies for certain dependent demand processes. *Management Sci.* 21 (1974/75), no. 11, 1303-1307. (C. W. J. Granger) 52 #16558 90B05
- Thompson, H. R.** A survey of the work of the Applied Mathematics Division D.S.I.R. *Math. Chronicle* 5 (1976), no. 1-2, 46-64. (Editors) 54 #7152 00A10
- Thompson, J. E. S.** See **Place of astronomy in the ancient world**, 57 #15838
- Thompson, J. G.** See **Thompson, John G.**
- Thompson, J. R.** Examples of non-convergence of conjugate descent algorithms with exact line-searches. *Math. Programming* 12 (1977), no. 3, 356-360. (Albert Buckley) 56 #7195 65K05
- Thompson, J. W.** (with Mardia, K. V.) Unified treatment of moment-formulae. *Sankhyā Ser. A* 34 (1972), 121-132. (James T. Wong) 50 #1411 62H10
- A note on the Lévy distance. *J. Appl. Probability* 12 (1975), 412-414. (Gary G. Makowski) 51 #14203 60E05
- (with Osei, G. K.) The supersession of one rumour by another. *J. Appl. Probability* 14 (1977), no. 1, 127-134. (Andrew D. Barbour) 55 #1491 60J20
- See also **Mardia, K. V.**, 53 #6811
- Thompson, James R.** (with Alam, Khursheed) A selection procedure based on ranks. *Ann. Inst. Statist. Math.* 23 (1971), 253-262. (G. C. McDonald) 47 #2726 62F07
- (with Alam, Khursheed; Seo, Kenzo) A sequential sampling rule for selecting the most probable multinomial event. *Ann. Inst. Statist. Math.* 23 (1971), 365-374. (I. Guttman) 47 #2763 62L15
- (with Alam, Khursheed) On selecting the least probable multinomial event. *Ann. Math. Statist.* 43 (1972), 1981-1990. (E. H. Lehman) 50 #3422 62F07
- (with Alam, Khursheed) Some biased estimates of the mean of the normal distribution. *Ann. Inst. Statist. Math.* 25 (1973), 57-64. (R. H. Farrell) 49 #10017 62F10
- (with Alam, Khursheed) A problem of ranking and estimation with Poisson processes. *Technometrics* 15 (1973), 801-808. (S. Panchapakesan) 49 #10012 62F07 (62M99)
- (with Alam, Khursheed) A modified estimate of the mean of a multivariate normal distribution. *Trabajos Estadist.* 24 (1973), no. 1-2, 55-61. (M. S. Srivastava) 51 #14383 62F15 (62C15)
- (with de Montricher, G. F.; Tapia, Richard A.) Nonparametric maximum likelihood estimation of probability densities by penalty function methods. *Ann. Statist.* 3 (1975), no. 6, 1329-1348. (Wolfgang Wertz) 52 #4516 62G05
- (with Scott, David W.; Tapia, Richard A.) Kernel density estimation revisited. *Nonlinear Anal.* 1 (1976/77), no. 4, 339-372. (Wolfgang Wertz) 58 #24698 62G05
- Thompson, Joe F.** (with Mastin, C. Wayne) Transformation of three-dimensional regions onto rectangular regions by elliptic systems. *Numer. Math.* 29 (1977/78), no. 4, 397-407. (Luciano Biasini) 57 #14491 65N05
- (with Mastin, C. Wayne) Discrete quasiconformal mappings. (German summary) *Z. Angew. Math. Phys.* 29 (1978), no. 1, 1-11. (T. Kubo) 57 #9948 30A28
- Thompson, John G.** Quadratic pairs. *Actes du Congrès International des Mathématiciens* (Nice, 1970), Tome 1, pp. 375-376. Gauthier-Villars, Paris, 1971. (Michael J. Collins) 55 #3051 20C05 (22E99)
- Nonsolvable finite groups all of whose local subgroups are solvable. III. *Pacific J. Math.* 39 (1971), 483-534. (D. K. Friesen) 47 #1933 (EA 58) 20D05
- (with MacWilliams, F. Jessie; Sloane, Neil J. A.) Good self dual codes exist. *Discrete Math.* 3 (1972), 153-162. (E. L. Cohen) 46 #6919 94A10
- Toward a characterization of $E_2^*(q)$. II. *J. Algebra* 20 (1972), 610-621. (W. Feit) 47 #1932 20D05
- Isomorphisms induced by automorphisms. Collection of articles dedicated to the memory of Hanna Neumann. *I. J. Austral. Math. Soc.* 16 (1973), 16-17. (H. Kurzweil) 48 #8630 20D45
- (with MacWilliams, F. Jessie; Sloane, Neil J. A.) On the existence of a projective plane of order 10. *J. Combinatorial Theory Ser. A* 14 (1973), 66-78. (C. Ballester Pereyra) 47 #1644 05B25
- Nonsolvable finite groups all of whose local subgroups are solvable. IV, V, VI. *Pacific J. Math.* 48 (1973), 511-592, *ibid.* 50 (1974), 215-297; *ibid.* 51 (1974), 573-630. (I. D. MacDonald) 51 #5745 20D05
- Weighted averages associated to some codes. Collection of articles dedicated to the memory of Abraham Adrian Albert. *Scripta Math.* 29, no. 3-4, 449-452 (1973). (Philippe Piret) 53 #7803 05A99 (94A10)
- Simple 3'-groups. *Symposia Mathematica, Vol. XIII (Convegno di Gruppi e loro Rappresentazioni, INDAM, Rome, 1972)*, pp. 517-530. Academic Press, London, 1974. (Ulrich Dempwolff) 50 #13249 20D05
- Finite groups and even lattices. *J. Algebra* 38 (1976), no. 2, 523-524. (A. R. Camina) 53 #3108 20D30
- A conjugacy theorem for E_8 . *J. Algebra* 38 (1976), no. 2, 525-530. (Ulrich Dempwolff) 53 #3044 17B25 (20D05)
- Toward a characterization of $F_2^*(q)$. III. *J. Algebra* 49 (1977), no. 1, 162-166. (W. Feit) 56 #12111 20D05
- See also **Brauer, Richard Dagobert**, 54 #2384
- Thompson, John M. T.** (with Hunt, Giles W.) ★A general theory of elastic stability. Wiley-Interscience [John Wiley & Sons], London-New York-Sydney, 1973. xii + 322 pp. (Editors) 53 #4698 73A9
- (with Hunt, Giles W.) Towards a unified bifurcation theory. (German summary) *Z. Angew. Math. Phys.* 26 (1975), no. 5, 581-603. (B. V. Loginov) 52 #9277 58C25 (73A9, 92A05, 93A10)
- (with Gáspár, Z.) A buckling model for the set of umbilic catastrophes. *Math. Proc. Cambridge Philos. Soc.* 82 (1977), no. 3, 497-507. (M. J. Sewell) 57 #1551 58C25 (58F10)
- (with Hunt, Giles W.) A bifurcation theory for the instabilities of optimization and design. Mathematical methods of the social sciences. *Synthese* 36 (1977), no. 3, 315-351. (M. J. Sewell) 57 #18420 73.58 (58C25)
- See also **Instability of continuous systems**, 49 #10495
- Thompson, Jon H.** Closed solutions for wedge diffraction. *SIAM J. Appl. Math.* 22 (1972), 300-306. (G. L. Lamb, Jr.) 46 #4863 78.35
- Thompson, Keris** (with Larimer, James) A sufficient condition for conditional expectation to be monotonically related to distribution parameters. *J. Mathematical Psychology* 10 (1973), 223-231. (B. P. Zeigler) 47 #10094 92A25
- Thompson, Manley** Quine and the inscrutability of reference. *Americana. Rev. Internat.*

- Philos.* 26 (1972), no. 1-2, 42-62. (Editors) 58 #27275 02A05
- Thompson, Mark** Eigenfunction expansions and scattering theory for perturbed elliptic partial differential equations. *Comm. Pure Appl. Math.* 25 (1972), 499-532. (Boris Pavlov) 46 #9556 35P10 (47F05)
- Eigenfunction expansions and the associated scattering theory for potential perturbations of the Dirac equation. *Quart. J. Math. Oxford Ser. (2)* 23 (1972), 17-55. (Robert D. Brown) 46 #4016 35P25 (8135)
- (with Eastham, M. S. P.) On the limit-point, limit-circle classification of second-order ordinary differential equations. *Quart. J. Math. Oxford Ser. (2)* 24 (1973), 531-535. (Editors) 54 #5531 34B20
- The essential self-adjointness of certain second-order elliptic operators. *J. London Math. Soc. (2)* 9 (1974/75), 205-211. (C. A. Swanson) 50 #13913 35P05
- The spectrum of a hypoelliptic operator with a potential perturbation. *Bull. London Math. Soc.* 7 (1975), 77-80. (V. Barbu) 51 #1150 35P05
- Spectral manifolds for the perturbed Schrödinger operator in $L^p(\mathbb{R}^n)$. *Math. Proc. Cambridge Philos. Soc.* 77 (1975), 369-383. (J. Wiesner) 51 #1149 35P05 (47F05)
- Scattering for perturbations of uniformly propagative symmetric hyperbolic systems. *Proc. London Math. Soc. (3)* 30 (1975), no. 4, 405-429. (D. Ramakrishna Rao) 53 #6109 35L40 (35P25)
- Spectral manifolds for constant coefficient elliptic operators in $L^p(\mathbb{R}^n)$. *Proc. Roy. Soc. Edinburgh Sect. A* 72 no. 4, 359-369 (1975). (E. Müller-Pfeiffer) 52 #6207 35P05
- The absence of embedded eigenvalues in the continuous spectrum for perturbed Dirac operators. (Italian summary) *Boll. Un. Mat. Ital. A (5)* 13 (1976), no. 3, 576-585. (Woodford W. Zachary) 55 #890 35P05 (8147)
- The resolvent set for a non-linear Klein-Gordon equation. (Italian summary) *Boll. Un. Mat. Ital. A (5)* 14 (1977), no. 3, 450-459. (J. W. Neuberger) 58 #12029 35Q99 (47H99)
- (with Moscatelli, Vincenzo Bruno) Distribution asymptotique des valeurs propres d'opérateurs pseudo-différentiels sur des variétés compactes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 284 (1977), no. 6, A373-A375. (Authors' summary) 55 #13502 58G15 (35P20)
- The spectral theory of perturbed hypoelliptic operators. *Proc. London Math. Soc. (3)* 34 (1977), no. 3, 421-437. (H. Kumano-go) 58 #1728 35P05 (35H05)
- Thompson, Mary E.** (with Godambe, V. P.) The specification of prior knowledge by classes of prior distributions in survey sampling estimation. With comments by D. J. Bartholomew, D. R. Cox, J. D. Kalbfleisch, D. V. Lindley and J. Neyman and a reply by the authors. *Foundations of statistical inference (Proc. Sympos., Univ. Waterloo, Waterloo, Ont., 1970)*, pp. 243-258. *Holt, Rinehart and Winston of Canada, Toronto, Ont.*, 1971. (J. N. K. Rao) 53 #6818 62D05 (62F15)
- (with Basu, A. K.; Owen, W. L.) On the existence of the optimal stopping rule in the S_n/n problem when the second moment is infinite. *Ann. Math. Statist.* 42 (1971), 1936-1942. (D. Siegmund) 45 #9417 62L15
- (with Godambe, V. P.) Bayes, fiducial and frequency aspects of statistical inference in regression analysis in survey-sampling. With discussion by G. A. Barnard, M. Stone, A. W. F. Edwards, D. J. Bartholomew, G. N. Wilkinson, D. A. Sprott, E. F. Harding and V. M. Joshi. *J. Roy. Statist. Soc. Ser. B* 33 (1971), 361-390. (J. N. K. Rao) 50 #15043 62D05 (62A15, 62F15, 62J05)
- Continuous parameter optimal stopping problems. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 19 (1971), 302-318. (H. P. McKean, Jr.) 47 #2660 60G40
- (with Owen, W. L.) The structure of the optimal stopping rule in the S_n/n problem. *Ann. Math. Statist.* 43 (1972), 1110-1121. (D. Siegmund) 48 #3117 60G40
- (with Godambe, V. P.) Estimation in sampling theory with exchangeable prior distributions. *Ann. Statist.* 1 (1973), 1212-1221. (A. Hedayat) 49 #11683 62D05
- (with Godambe, V. P.) Estimating equations in the presence of a nuisance parameter. Collection of articles dedicated to Jerzy Neyman on his 80th birthday. *Ann. Statist.* 2 (1974), 568-571. (R. H. Rodine) 50 #8805 62F10
- (with Godambe, V. P.) Likelihood ratio vs. most powerful rank test: a two-sample problem in hazard analysis. *Sankhyā Ser. A* 86 (1974), no. 1, 13-40. (I. R. Savage) 52 #4521 62G10 (62N05)
- (with Sekkappan, Rm.) On a class of uniformly admissible estimators for finite populations. *Ann. Statist.* 3 (1975), 492-499. (V. P. Godambe) 50 #11569 62C15
- (with Godambe, V. P.) Philosophy of survey-sampling practice. With a discussion by the first author, D. V. Lindley and I. J. Good. *Foundations of probability theory, statistical inference, and statistical theories of science (Proc. Internat. Res. Colloq., Univ. Western Ontario, London, Ont., 1973)*, Vol. II, pp. 103-123. *Univ. Western Ontario Ser. Philos. Sci., Vol. 6, Reidel, Dordrecht, 1977.* (Claes-M. Cassel) 57 #17907 62D05
- (with Bellhouse, D. R.; Godambe, V. P.) Two-stage sampling with exchangeable prior distributions. *Biometrika* 64 (1977), no. 1, 97-103. (I. Guttman) 56 #9763 62D05
- See also Kish, Leslie; et al., 51 #2064 and Rao, C. Radhakrishna, 52 #4482
- Thompson, Maynard** Interpolation to continuous data on curves with corners. Collection of articles dedicated to J. L. Walsh on his 75th birthday. *II. J. Approximation Theory* 5 (1972), 199-211. (J. H. Curtiss) 51 #904 30A80
- Interpolation to analytic data on unbounded curves. *Trans. Amer. Math. Soc.* 167 (1972), 309-318. (E. B. Saff) 45 #7079 30A80
- (with Mäki, Daniel P.) ★Mathematical models and applications. With emphasis on the social, life, and management sciences. *Prentice-Hall, Inc., Englewood Cliffs, N.J.*, 1973. xv + 492 pp. (A. Bensoussan) 51 #2606 90Bxx
- Thompson, Philip Duncan** The integral invariants of two-dimensional inviscid flow and their role in the theory of two-dimensional turbulence. *J. Atmospheric Sci.* 31 (1974), 1453-1457. (R. Nardini) 50 #15579 7635
- Thompson, R. C.** See Thompson, Robert C.
- Thompson, R. L.** See Wollan, G. N., 45 #1
- Thompson, Richard A.** (with Booth, Taylor L.) Encoding of probabilistic context-free languages. *Theory of machines and computations (Proc. Internat. Sympos., Technion, Haifa, 1971)*, pp. 169-186. *Academic Press, New York, 1971.* (H. P. Edmundson) 53 #7656 94A30 (68A30)
- (with Booth, Taylor L.) Applying probability measures to abstract languages. *IEEE Trans. Computers* C-22 (1973), 442-450. (Stephen Soule) 50 #9057 68A30
- (with Gray, F. Gail) Reconfiguration for repair in a class of universal logic modules. *IEEE Trans. Computers* C-23 (1974), 1185-1194. (B. Hazeltine) 51 #2795 94A20
- Determination of probabilistic grammars for functionally specified probability-measure languages. *IEEE Trans. Computers* C-23 (1974), no. 6, 603-611. (Etsuro Moriwa) 54 #14463 68A30
- (with Walters, S. M.; Gray, F. Gail) Pattern synthesis in one-dimensional tessellation automata. *Proceedings of the Eighth Annual Southeastern Symposium on System Theory (Univ. Tennessee, Knoxville, Tenn., 1976)*, pp. 11-12. *Inst. Electr. Electron. Engrs., New York, 1976.* (Authors' summary) 57 #19190 94A30
- (with Shih, Lionel; Gray, F. Gail) Fault location in modular trees. *Proceedings of the Eighth Annual Southeastern Symposium on System Theory (Univ. Tennessee, Knoxville, Tenn., 1976)*, pp. 238-243. *Inst. Electr. Electron. Engrs., New York, 1976.* (Authors' summary) 58 #4695 94A20
- Language correction using probabilistic grammars. *IEEE Trans. Computers* C-23 (1976), no. 3, 275-286. (Gianni Aguzzi) 53 #4650 68A30 (94A15)
- (with Greer, Charles R.) Combinational logic design with decoders. *IEEE Trans. Comput.* 27 (1978), no. 9, 869-875. (B. Hazeltine) 58 #20842 94A20
- (with Gray, F. Gail) Fault detection in bilateral arrays of combinational cells. *IEEE Trans. Comput.* 27 (1978), no. 12, 1206-1213. (Authors' summary) 58 #26563 94A20
- Thompson, Richard B.** A metatheorem for fixed point theories. *Comment. Math. Univ. Carolinae* 11 (1970), 813-815. (A. Dold) 46 #879 54H25 (55C20)
- Weak semicomplexes and the fixed point theory of tree-like continua. *Duke Math. J.* 38 (1971), 211-219. (E. Fadell) 45 #5993 55C20
- Fixed point indices in locally convex spaces. *Advances in Math.* 14 (1974), 73-91. (S. S. Cairns) 49 #9693 47H10 (58E05)
- Fixed point theory via semicomplexes. Collection of articles on fixed point theory. *Rocky Mountain J. Math.* 4 (1974), 15-29. (T. R. Brahana) 48 #5057 55C20 (54H25)
- See also Bibliography: Fixed point theory, 48 #975 and Collection: Fixed point theory, 48 #976
- Thompson, Richard J.** (with McKenzie, Ralph) An elementary construction of unsolvable word problems in group theory. *Word problems: decision problems and the Burnside problem in group theory (Conf., Univ. California, Irvine, Calif. 1969; dedicated to Hanna Neumann)*, pp. 457-478. *Studies in Logic and the Foundations of Math., Vol. 71, North-Holland, Amsterdam, 1973.* (George Hutchinson) 53 #629 20F10 (02F47)
- Thompson, Richard Leslie** ★Equilibrium states on thin energy shells. *Memoirs of the American Mathematical Society*, No. 150. *American Mathematical Society, Providence, R.I.*, 1974. vi + 110 pp. (A. O'Connor) 51 #12249 8260
- Thompson, Robert C.** (with Garbanati, Linda Freede) On the eigenvalues of sums of Hermitian matrices. II. *Aequationes Math.* 5 (1970), 103-115. (A. R. Amir-Moéz) 45 #1948 15A18
- (with Therianos, S.) The eigenvalues and singular values of matrix sums and product. VIII. Displacement of indices. *Aequationes Math.* 7 (1971), 219-242. (A. R. Amir-Moéz) 49 #2783 15A18
- (with Garbanati, Linda Freede) Eigenvalues of sums of Hermitian matrices. III. *J. Res. Nat. Bur. Standards Sect. B* 75B (1971), 115-120. (A. R. Amir-Moéz) 46 #9079 15A57
- (with Therianos, S.) Inequalities connecting the eigenvalues of a Hermitian matrix with the eigenvalues of complementary principal submatrices. *Bull. Austral. Math. Soc.* 6 (1972), 117-132. (M. F. Smiley) 48 #6137 15A42
- (with Therianos, S.) The eigenvalues of complementary principal submatrices of a positive definite matrix. *Canad. J. Math.* 24 (1972), 658-667. (A. R. Amir-Moéz) 45 #3445 15A48
- (with Garbanati, Dennis A.) Skew circulant quadratic forms. *J. Number Theory* 4 (1972), 557-572. (Ron Brown) 47 #1835 15A63 (10C05)
- Principal submatrices. IX. Interlacing inequalities for singular values of submatrices. *Linear Algebra and Appl.* 5 (1972), 1-12. (E. Deutsch) 45 #6843 15A42
- (with Garbanati, Dennis A.) Classes of unimodular abelian group matrices. *Pacific J. Math.* 43 (1972), 633-646. (W. Ledermann) 47 #5120 20E35
- Principal submatrices. VIII. Principal sections of a pair of forms. *Rocky Mountain J. Math.* 2 (1972), no. 1, 97-110. (Marvin Marcus) 45 #3432 15A18
- (with Therianos, S.) The eigenvalues and singular values of matrix sums and products. VII. *Canad. Math. Bull.* 16 (1973), 561-569. (Marvin Marcus) 50 #4629 15A42
- Inertial properties of eigenvalues. *J. Math. Anal. Appl.* 41 (1973), 192-198. (B. N. Moys) 53 #485 15A42
- (with Therianos, S.) On a construction of B. P. Zwaalen. *Linear and Multilinear Algebra* 1 (1973/74), 309-325. (J. de Pillis) 49 #5044 15A42
- (with Therianos, S.) On the singular values of matrix products. I. *Scripta Math.* 29 (1973), 99-110. (Marvin Marcus) 49 #2799 15A42
- On the singular values of matrix products. II. *Scripta Math.* 29, 111-114 (1973) (Marvin Marcus) 49 #2800 15A42
- (with Therianos, S.) On the singular values of matrix products. III. *Scripta Math.* 29, 115-123 (1973). (Marvin Marcus) 49 #2801 15A42
- The eigenvalues of a partitioned Hermitian matrix involving a parameter. *Linear Algebra and Appl.* 9 (1974), 243-260. (B. N. Moys) 50 #4613 15A18
- On the eigenvalues of a product of unitary matrices. I. *Linear and multilinear Algebra* 2 (1974), 13-24. (B. N. Moys) 50 #4614 15A18
- The singular value range of a matrix sum or product. *Bull. Inst. Math. Acad. Sinica* 3 (1975), no. 2, 275-281. (D. J. Hartfiel) 52 #3196 15A42
- Dissipative matrices and the matrix $A^{-1}A$. *Houston J. Math.* 1 (1975), no. 1, 137-147. (B. Levinger) 52 #443 15A42
- Dissipative matrices and related results. *Linear Algebra and Appl.* 11 (1975), no. 2, 155-169. (Donald Kershaw) 52 #444 15A42
- Singular value inequalities for matrix sums and minors. *Linear Algebra and Appl.* 11 (1975), no. 3, 251-269. (M. F. Smiley) 53 #2987 15A42
- Extreme determinants on the convex hull of matrices with prescribed singular values. Collection of articles dedicated to Olga Taussky-Todd. *Linear and Multilinear Algebra* 3 (1975/76), no. 1/2, 15-17. (M. Shafqat Ali) 54 #2682 15A15

- The intersection of the convex hulls of proper and improper real matrices with prescribed singular values. Collection of articles dedicated to Olga Taussky-Todd. *Linear and Multilinear Algebra* 3 (1975/76), no. 1/2, 155-160. (M. Shafqat Ali) 54 #12804 15A18
- A matrix inequality. *Comment. Math. Univ. Carolinae* 17 (1976), no. 2, 393-397. (D. London) 54 #7503 15A45
- (with Gordon, Z.) Sections of matrix pairs: the second interlacing principle. *Houston J. Math.* 2 (1976), no. 3, 427-437. (Robert J. Wernick) 55 #375 15A42
- On Iohvidov's proofs of the Fischer-Frobenius theorem. *J. Res. Nat. Bur. Standards Sect. B* 80B (1976), no. 2, 269-272. (D. J. Hartfiel) 56 #388 15A30
- The behavior of eigenvalues and singular values under perturbations of restricted rank. Collection of articles dedicated to Olga Taussky Todd. *Linear Algebra and Appl.* 13 (1976), no. 1/2, 69-78. (George P. H. Styan) 53 #10834 15A42
- The characteristic polynomial of a principal subpencil of a Hermitian matrix pencil. *Linear Algebra and Appl.* 14 (1976), no. 2, 135-177. (Author's summary) 57 #16335 15A57 (15A18)
- The bilinear field of values. *Monatsh. Math.* 81 (1976), no. 2, 153-167. (L. M. Chawla) 53 #8098 15A42
- Convex and concave functions of singular values of matrix sums. *Pacific J. Math.* 66 (1976), no. 1, 285-290. (Harald K. Wimmer) 55 #8066 15A45
- Inertial properties of eigenvalues. II. *J. Math. Anal. Appl.* 58 (1977), no. 3, 572-577. (B. N. Moysls) 56 #3035 15A42
- (with Ishaq, Mohammad) The convex hull of signed rearrangements with prescribed sign parity. *Linear and Multilinear Algebra* 5 (1977/78), no. 3, 235-241. (J. G. Horne) 57 #4004 52A20
- Matrix type metric inequalities. *Linear and Multilinear Algebra* 5 (1977/78), no. 4, 303-319. (E. Deutsch) 58 #16725 15A45
- Singular values, diagonal elements, and convexity. *SIAM J. Appl. Math.* 32 (1977), no. 1, 39-63. (L. Mirsky) 54 #12805 15A18 (65F15)
- See also Collection: Taussky, Olga, 52 #5245
- Thompson, Robert J. Difference approximations for some functional differential equations. *Numerische, insbesondere approximativtheoretische Behandlung von Funktionalgleichungen (Tagung, Math. Forschungsinst., Oberwolfach, 1972)*, pp. 263-273. *Lecture Notes in Math.*, Vol. 333, Springer, Berlin, 1973. (Gene A. Kemper) 55 #4688 65L05
- Thompson, Robin (with Patterson, H. D.) Recovery of inter-block information when block sizes are unequal. *Biometrika* 58 (1971), 545-554. (M. J. Karson) 47 #7869 62K10
- The maximum likelihood approach to the estimate of liability. *Ann. Human Genetics* 36 (1972/73), no. 2, 221-231. (Klaus Hinkelmann) 54 #14812 92A15
- The estimation of variance and covariance components with an application when records are subject to culling. *Biometrics* 29 (1973), 527-550. (D. A. Sprott) 50 #8853 62J10 (62P10)
- A note on the W transformation. *Technometrics* 17 (1975), no. 4, 511-512. (J. N. K. Rao) 52 #12237 62J10
- Design of experiments to estimate heritability when observations are available on parents and offspring. (French summary) *Biometrics* 32 (1976), no. 2, 283-304. (D. V. Chopra) 55 #1689 62P10 (62K05)
- The estimation of heritability with unbalanced data. I. Observations available on parents and offspring. (French summary) *Biometrics* 33 (1977), no. 3, 485-495. (E. A. Thompson) 58 #4440a 92A10 (62J10)
- The estimation of heritability with unbalanced data. II. Data available on more than two generations. (French summary) *Biometrics* 33 (1977), no. 3, 497-504. (E. A. Thompson) 58 #4440b 92A10 (62J10)
- (with Cooper, D. M.) A note on the estimation of the parameters of the autoregressive-moving average process. *Biometrika* 64 (1977), no. 3, 625-628. (Authors' summary) 58 #8085 62M10
- See also Lindley, Dennis V.; et al., 54 #3939
- Thompson, Rory O. R. Y. Generation of stochastic processes with given spectrum. *Utilitas Math.* 3 (1973), 127-137. (E. Parzen) 48 #3206 62M15
- See also Russell, W.; et al., 53 #4497
- Thompson, Rosemary (with Gibson, William G.) Powers of nonsymmetric stochastic matrices: comment on: "Absence of bounds of products of normalized eigenvector components of nonsymmetric probability matrices" (Math. Biosci. 32 (1976), no. 1-2, 107-110) by W. A. Little, K. O. Ng and G. L. Shaw. *Math. Biosci.* 42 (1978), no. 1-2, 37-41. (Authors' summary) 58 #28044b 15A51 (60J10)
- Thompson, Russell C. Differential inequalities for infinite second order systems and an application to the method of lines. *J. Differential Equations* 17 (1975), 421-434. (David L. Lovelady) 50 #13789 34G05
- (with Schmitt, Klaus) Boundary value problems for infinite systems of second-order differential equations. *J. Differential Equations* 18 (1975), no. 2, 277-295. (William E. Fitzgibbon) 51 #10794 34G05 (34B15)
- Convergence and error estimates for the method of lines for certain nonlinear elliptic and elliptic-parabolic equations. *SIAM J. Numer. Anal.* 13 (1976), no. 1, 27-43. (Wolfgang L. Walter) 55 #4728 65N10
- An invariance property of solutions to second order differential inequalities in ordered Banach spaces. *SIAM J. Math. Anal.* 8 (1977), no. 4, 592-603. (K. Schmitt) 56 #6050 34G05
- Thompson, Russell G. (with Hocking, R. R.; George, Melvin D.) A nonconvex control problem for the competitive firm. *Econometrica* 39 (1971), 767-772. (Nancy L. Schwartz) 53 #4934 90A15
- Thompson, S. L. (with Herrmann, W.; Bertholf, L. D.) Computational methods for stress wave propagation in nonlinear solid mechanics. *Computational mechanics (Internat. Conf. on Computational Methods in Nonlinear Mech., Austin, Tex., 1974)*, pp. 91-127. *Lecture Notes in Math.*, Vol. 461, Springer, Berlin, 1975. (I. M. Longman) 54 #11940 73.65
- Thompson, Skip (with Rodabaugh, David J.) Corrector methods with increased ranges of stability. *Comput. Math. Appl.* 3 (1977), no. 3, 197-201. (J. Mikliček) 57 #4524 65L05
- Thompson, Travis Characterizing certain sets with functions having closed graphs. (Italian summary) *Boll. Un. Mat. Ital.* (4) 12 (1975), no. 3, 327-329. (O. T. Alas) 53 #9130 54C10
- S -closed spaces. *Proc. Amer. Math. Soc.* 60 (1976), 335-338 (1977). (James C. Smith) 54 #13849 54D20 (54C05)
- Concerning certain subsets of non-Hausdorff topological spaces. (Italian summary) *Boll. Un. Mat. Ital. A* (5) 14 (1977), no. 1, 34-37. (F. Burton Jones) 55 #6344 54A20
- Characterizations of nearly compact spaces. *Kyungpook Math. J.* 17 (1977), no. 1, 37-41. (S. P. Arya) 57 #4097 54D30
- Semicontinuous and irresolute images of S -closed spaces. *Proc. Amer. Math. Soc.* 66 (1977), no. 2, 359-362. (E. Halfar) 56 #9480 54C10
- Thompson, W. A., Jr. (with McDonald, B. J.) Corrections and amendments: "Rank sum multiple comparisons in one- and two-way classifications" (*Biometrika* 54 (1967), 487-497). *Biometrika* 59 (1972), 699. (Editors) 48 #12718 62G10
- (with Brindley, E. C., Jr.) Dependence and aging aspects of multivariate survival. *J. Amer. Statist. Assoc.* 67 (1972), 822-830. (Benjamin Epstein) 54 #1515 62N05
- (with Dykstra, Richard L.; Hewett, John E.) Events which are almost independent. *Ann. Statist.* 1 (1973), 674-681. (Edward D. Rothman) 53 #1671 60A10
- (with Parke, Darrel W.) Some properties of generalized concave functions. Mathematical programming and its applications. *Operations Res.* 21 (1973), 305-313. (V. F. Dem'janov) 50 #12257 90C25
- Bayes, Hilbert, and least squares. *A survey of statistical design and linear models (Proc. Internat. Sympos., Colorado State Univ. Ft. Collins, Colo., 1973)*, pp. 541-545. North-Holland, Amsterdam, 1975. (Adrian F. M. Smith) 51 #11854 62J99
- Fisherman's luck. (French summary) *Biometrics* 32 (1976), no. 2, 265-271. (P. D. M. Macdonald) 55 #2201 92A99 (62P10)
- (with Lee, Larry) Failure rate—a unified approach. *J. Appl. Probability* 13 (1976), no. 1, 176-182. (Authors' summary) 58 #24812 62N05
- On the treatment of grouped observations in life studies. (French summary) *Biometrics* 33 (1977), no. 3, 463-470. (Bruce W. Turnbull) 57 #10966 62N05 (62G05, 62P10)
- See also Reliability and biometry: statistical analysis of lifelength, 49 #1630
- Thompson, Wiley E. (with Koenig, Herman E.) Stability of a class of interconnected systems. *Internat. J. Control* (1) 15 (1972), 751-763. (Authors' summary) 47 #1518 93D05
- (with Claassen, Judith G.) Recursive matrix inversion for application to system identification. *Proceedings of the 1977 IEEE Conference on Decision and Control (New Orleans, La., 1977)*, Vol. 1, pp. 1140-1145. *Inst. Electrical Electron. Engrs.*, New York, 1977. (Authors' summary) 58 #20673 93B30
- Thompson, William B. The self-consistent test-particle approach to relativistic kinetic theory. *General relativity (papers in honour of J. L. Synge)*, pp. 243-254. Clarendon Press, Oxford, 1972. (From the introduction) 58 #14833 82J3
- Thompson, William E. (with Chang, Eugene Y.) Bayes confidence limits for reliability of redundant systems. *Technometrics* 17 (1975), 89-93. (H. Taylor) 51 #7215 62N05
- (with Chang, Eugene Y.) Bayes analysis of reliability for complex systems. *Operations Res.* 24 (1976), no. 1, 156-168. (Johannes S. Maritz) 54 #1516 62N05
- Thomsen, Ib. Testing hypotheses in unbalanced variance components models for two-way layouts. *Ann. Statist.* 3 (1975), 257-265. (M. Atiqullah) 50 #15185 62J10
- Evaluating the efficiency of two weighting procedures to reduce non-response bias: an application of Cochran's non-response stratum approach. (French summary) *Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975)*, Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* 46 (1975), no. 4, 396-401 (1976). (Victor K. T. Tang) 57 #10871 62D05
- A comparison of approximately optimal stratification given proportional allocation with other methods of stratification and allocation. *Metrika* 23 (1976), no. 1, 15-25. (C. Hayashi) 54 #3903 62D05
- On the effect of stratification when two stratifying variables are used. *J. Amer. Statist. Assoc.* 72 (1977), no. 357, 149-153. (Victor K. T. Tang) 56 #6957 62D05
- Thomson, B. S. On the Henstock strong variational integral. *Canad. Math. Bull.* 14 (1971), 87-99. (A. de Korvin) 45 #8799 28A45 (26A39)
- Covering systems and derivatives in Henstock division spaces. *J. London Math. Soc.* (2) 4 (1971), 103-108. (S. J. Taylor) 45 #3664 28A15
- A theory of integration. *Duke Math. J.* 39 (1972), 503-509. (A. Mukherjea) 46 #3736 28A25
- On McShane's vector-valued integral. *Duke Math. J.* 39 (1972), 511-519. (A. Mukherjea) 46 #3742 28A45
- Covering systems and derivatives in Henstock division spaces. II. *J. London Math. Soc.* (2) 10 (1975), 125-128. (S. J. Taylor) 51 #840 28A15
- Construction of measures in metric spaces. *J. London Math. Soc.* (2) 14 (1976), no. 1, 21-24. (A. Appert) 54 #10537 28A10
- Measures generated by a differentiation basis. *Bull. London Math. Soc.* 9 (1977), no. 3, 279-282. (M. de Guzmán) 57 #16524 28A15
- A characterization of the Lebesgue integral. *Canad. Math. Bull.* 20 (1977), no. 3, 353-357. (Ralph Henstock) 57 #3332 26A42 (28A25)
- Thomson, Glenys J. (with Feldman, Marcus W.; Franklin, Ian R.) Selection in complex genetic systems. I. The symmetric equilibria of the three-locus symmetric viability model. *Genetics* 76 (1974), no. 1, 135-162. (Not reviewed) 92A05
- (with Ewens, Warren J.) Properties of equilibria in multi-locus genetic systems. *Genetics* 87 (1977), no. 4, 807-819. (R. G. Stanton) 58 #33112 92A10
- See also Problems: Population genetics, 56 #17911
- Thomson, I. G. (with Fallside, F.) The solution of linear "minimum peak amplitude" control problems by a dual space method. *Internat. J. Control* 22 (1975), no. 2, 191-195. (H. O. Fattorini) 55 #2249 93C25
- Thomson, J. A. L. (with Meng, J. C. S.) Numerical studies of some nonlinear hydrodynamic problems by discrete vortex element methods. *J. Fluid Mech.* 84 (1978), no. 3, 433-453. (David F. Griffiths) 57 #11309 76.35
- Thomson, J. J. (with Benford, Gregory) Green's function for Markovian systems. *J. Mathematical Phys.* 14 (1973), 531-536. (C. J. Eliezer) 49 #2013 82.60
- (with Benford, Gregory) Convergence of strong turbulence theory. *Phys. Fluids* 16 (1973), 1505-1507. (Francois Rondoy) 48 #7779 76.60
- (with Max, Claire Ellen; Manheimer, Wallace M.) Enhanced transport across laser generated magnetic fields. *Phys. Fluids* 21 (1978), no. 1, 128-139. (Authors' summary)

- 56 #14144 78.35
- Thomson, James E.** (with Cima, Joseph A.) On strong extreme points in H^p . *Duke Math. J.* **40** (1973), 529-532. (S. Fisher) **47** #7440 46J15 (30A78)
- The commutant of analytic Toeplitz operators. *Bull. Amer. Math. Soc.* **80** (1974), 915-916. (D. Sarason) **51** #1472 47B35
- (with Cima, Joseph A.; Wogen, Warren R.) On some properties of composition operators. *Indiana Univ. Math. J.* **24** (1974/75), 215-220. (Eric Nordgren) **50** #2979 47B37
- Uniform algebras containing the real and imaginary parts of the identity function. *Michigan Math. J.* **21** (1974), 337-339. (S. J. Sidney) **51** #3908 46J10
- Intersections of commutants of analytic Toeplitz operators. *Proc. Amer. Math. Soc.* **52** (1975), 305-310. (Tin Kin Wong) **53** #3765 47B35 (30A78)
- The commutant of a class of analytic Toeplitz operators. II. *Indiana Univ. Math. J.* **25** (1976), no. 8, 793-800. (D. Sarason) **54** #5891 47B35
- The commutants of certain analytic Toeplitz operators. *Proc. Amer. Math. Soc.* **54** (1976), 165-169. (M. B. Abrahamse) **52** #8993 47B35
- The commutant of a class of analytic Toeplitz operators. *Amer. J. Math.* **99** (1977), no. 3, 522-529. (D. Sarason) **57** #1181 47B35 (30A76)
- (with Olin, Robert F.) The spectrum of a normal operator and the problem of filling in holes. *Indiana Univ. Math. J.* **26** (1977), no. 3, 541-544. (John B. Conway) **55** #8867 47B20
- (with Olin, Robert F.) Limaçons, normal operators and polar factorizations. *J. Reine Angew. Math.* **291** (1977), 133-144. (D. Sarason) **56** #1116 47B15
- (with Ball, Joseph A.; Olin, Robert F.) Weakly closed algebras of subnormal operators. *Illinois J. Math.* **22** (1978), no. 2, 315-326. (D. Sarason) **57** #17355 47B20
- milne-Thomson, L. M.** See **Milne-Thomson, L. M.**
- Thomson, Michael W.** Subgroups of finitely presented solvable linear groups. *Trans. Amer. Math. Soc.* **231** (1977), no. 1, 133-142. (Leo P. Comerford, Jr.) **56** #5727 20F05
- Thomson, P. J.** (with Hannan, Edward James) The estimation of coherence and group delay. *Biometrika* **58** (1971), 469-481. (M. M. Siddiqui) **48** #1407 62M15
- (with Hannan, Edward James) Estimating group delay. *Biometrika* **60** (1973), 241-253. (J. L. Lumley) **48** #1408 62M15
- (with Hannan, Edward James) Estimating echo times. *Technometrics* **16** (1974), 77-84. (J. L. Lumley) **49** #1717 (EA 49) 62M15
- (with Wilkinson, Keith M.) A note on Harris's condition for recurrence in random walk processes. *J. Appl. Probability* **12** (1975), no. 3, 633-634. (V. K. Rohatgi) **51** #11664 60J15
- Thomson, Ron B.** Jordanus de Nemore and the University of Toulouse. *British J. Hist. Sci.* **7** (1974), part 2, no. 26, 163-165. (H. L. L. Busard) **58** #26823 01A35
- nguyen zui Thong** See **Nguyen Zui Thong**
- nguyen-quang-do Thong** See **Nguyen-Quang-Do Thong**
- trần-Thông** See **Trần-Thông**
- Thong, Tran** (with Liu, Bede) Accumulation of roundoff errors in floating point FFT. *IEEE Trans. Circuits and Systems* **24** (1977), no. 3, 132-143. (Sven-Ake Gustafson) **55** #1722 65G05
- Thöni, Hanspeter** See **Proceedings: Session of the International Statistical Institute**, 49 #8145
- Thorbergsson, Gudlaugur** Vierscheitelsatz auf Flächen nichtpositiver Krümmung. *Math. Z.* **149** (1976), no. 1, 47-56. (J. D. Zund) **54** #1137 53C40
- ★Geschlossene Geodätische auf nichtkompakten Riemannschen Mannigfaltigkeiten. Inaugural-Dissertation zur Erlangung des Doktorgrades der Hohen Mathematisch.-Naturwissenschaftlichen Fakultät der Rheinischen Friedrich-Wilhelms-Universität, Bonn. Bonner Mathematische Schriften, No. 101. *Mathematisches Institut, Universität Bonn, Bonn*, 1977. 51 pp. (Y. Mutó) **58** #18548 58E10 (53C20)
- Closed geodesics on non-compact Riemannian manifolds. *Math. Z.* **159** (1978), no. 3, 249-258. (Y. Mutó) **58** #12833 53C20 (58E10)
- Thorburn, Daniel** Some asymptotic properties of jackknife statistics. *Biometrika* **63** (1976), no. 2, 305-313. (B. Ja. Levit) **55** #4473 62E20
- A local limit theorem for the Wilcoxon rank sum. *Ann. Probability* **5** (1977), no. 6, 926-939. (M. Hušková) **57** #1760 62G10 (62E20, 60F05)
- On the asymptotic normality of the jackknife. *Scand. J. Statist.* **4** (1977), no. 3, 113-118. (Maxwell W. Layard) **56** #16877 62E20 (62G99)
- Thorelli, Lars-Erik** Marking algorithms. *Nordisk Tidskr. Informationsbehandling (BIT)* **12** (1972), 555-568. (Narsingh Deo) **49** #122 05C20
- A fast compactifying garbage collector. *Nordisk Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 4, 426-441. (Author's summary) **58** #8463 68A05
- Thoren, Victor E.** An "unpublished" version of Tycho Brahe's lunar theory. *Centaurus* **16** (1971/72), no. 3, 203-230. (Editors) **58** #26856 01A40
- Anaxagoras, Eudoxus, and the regression of the lunar nodes. *J. Hist. Astronom.* **2** (1971), no. 1, 23-28. (Editors) **58** #26713 01A20
- (with Gow, Charles; Honeycutt, Kent) An early view of galactic rotation. *Centaurus* **18** (1973/74), 301-314. (Peeter Müürsepp) **58** #27051 01A55
- Tycho Brahe: past and future research. *Hist. of Sci.* **11** (1973), 270-282. (Editors) **56** #15289 01A45
- New light on Tycho's instruments. *J. Hist. Astronom.* **4** (1973), no. 1, 25-45. (Author's review) **58** #26861 01A40
- Kepler's second law in England. *British J. Hist. Sci.* **7** (1974), 243-258. (Editors) **58** #10073 01A45
- Thorgeirson, Gordon W.** See **Proceedings: Manitoba Conference on Numerical Mathematics**, 48 #10034
- Thorhauer, P.** See **Piskunov, N. S.**, 50 #4831
- Thorin, Olof** An outline of a generalization—started by E. Sparre Andersen—of the classical ruin theory. *Astin Bull.* **6** (1971/72), 108-115. (N. U. Prabhu) **46** #6496 60K20 (90B99)
- Further remarks on the ruin problem in case the epochs of claims form a renewal process. I, II. *Skand. Aktuarietidskr.* **1971**, 14-38 (1972); *ibid.* **1971**, 121-142 (1972). (F. Brooks) **50** #1351 60K05 (62P05)
- The ruin problem in case the tail of the claim distribution is completely monotone. *Skand. Aktuarietidskr.* **1973**, 100-119. (Y.-K. Chan) **52** #2115 62P05
- Some comments on the Sparre Andersen model in the risk theory. *Astin Bull.* (1974), 104-125. (G. Tintner) **50** #3511 62P05
- On the asymptotic behavior of the ruin probability for an infinite period when the epochs of claims form a renewal process. *Scand. Actuar. J.* **1974**, 81-99. (H. L. Seal) **55** #9471 62P05
- Stationarity aspects of the Sparre Andersen risk process and the corresponding ruin probabilities. *Scand. Actuar. J.* **1975**, no. 2, 87-98. (H. L. Seal) **55** #9472 62P05
- On the infinite divisibility of the Pareto distribution. *Scand. Actuar. J.* **1977**, no. 1, 31-40. (E. Lukacs) **55** #4334 60E05
- Thorn, C. B.** (with Brower, R. C.) Eliminating spurious states from the dual resonance model. *Nuclear Phys.* **B31** (1971), 163-182. (K. T. Mahanthappa) **48** #1606 81J3
- (with Goddard, Peter; Rebbi, C.) Lorentz covariance and the physical states in dual-resonance models. (Italian and Russian summaries) *Nuovo Cimento A* (11) **13** (1972), 425-441. (A. O. Barut) **48** #13030 81J22
- (with Chodos, Alan; Jaffe, R. L.; Johnson, K.; Weisskopf, V. F.) New extended model of hadrons. *Phys. Rev. D* (3) **9** (1974), no. 12, 3471-3495. (Authors' summary) **57** #11452 81J35
- Thornber, K. K.** Treatment of microscopic fluctuations in noise theory. *Bell System Tech. J.* **53** (1974), 1041-1078. (Carl W. Helstrom) **53** #2254 82J62
- Thornburg, James L.** (with Schrader, Keith W.) Sufficient conditions for the existence of convergent subsequences. *Pacific J. Math.* **57** (1975), no. 1, 301-306. (K. Kutzler) **51** #11056 46A40
- Convergent subsequences from sequences of functions. *Trans. Amer. Math. Soc.* **208** (1975), 171-192. (B. K. Lahiri) **51** #8667 40A05 (26A45, 46A40)
- Thorne, Charles L.** (with Bruckner, Andrew M.) Density covers. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 97-104. (T. A. Botts) **54** #5443 28A75
- Thorne, J. P.** See **Logic, methodology and philosophy of science**, 55 #7657
- Thorne, Kip S.** Relativistic stars, black holes and gravitational waves (including an in-depth review of the theory of rotating, relativistic stars). *General relativity and cosmology (Proc. Internat. School of Physics "Enrico Fermi", Italian Phys. Soc., Varenna, 1969)*, pp. 237-283. Academic Press, New York, 1971. (A. Raychaudhuri) **50** #3873 83J53
- (with Misner, Charles W.; Wheeler, John Archibald) ★Gravitation. *W. H. Freeman and Co., San Francisco, Calif.*, 1973. ii + xxvi + 1279 + iupp. (Barry Aronson) **54** #6869 83J53
- (with Kovács, Sándor J., Jr.) The generation of gravitational waves. I. Weak-field sources. *Astrophys. J.* **200** (1975), no. 2, part 1, 245-262. (W. Israel) **52** #2507 83J35
- A toroidal solution of the vacuum Einstein field equations. *J. Mathematical Phys.* **16** (1975), no. 9, 1860-1865. (Author's summary) **51** #14859 83J35
- (with Misner, Charles W.; Wheeler, John Archibald) ★Гравитация. Том 1. (Russian) [Gravitation. Vol. 1] Translated from the English by M. M. Basko. Edited by V. B. Braginskii and I. D. Novikov. *Izdat. "Mir", Moscow*, 1977. 474 pp. (Editors) **57** #8914a 83J53
- (with Misner, Charles W.; Wheeler, John Archibald) ★Гравитация. Том 2. (Russian) [Gravitation. Vol. 2] Translated from the English by A. A. Ruzmaikin. Edited by V. B. Braginskii and I. D. Novikov. *Izdat. "Mir", Moscow*, 1977. 525 pp. (Editors) **57** #8914b 83J53
- (with Misner, Charles W.; Wheeler, John Archibald) ★Гравитация. Том 3. (Russian) [Gravitation. Vol. 3] Translated from the English by A. G. Polnarev. Edited by V. B. Braginskii and I. D. Novikov. *Izdat. "Mir", Moscow*, 1977. 510 pp. (Editors) **57** #8914c 83J53
- (with Crowley, Ronald J.) The generation of gravitational waves. II. The postlinear formalism revisited. *Astrophys. J.* **215** (1977), no. 2, part 1, 624-635. (W. Israel) **57** #4951a 83J35
- (with Kovács, Sándor J., Jr.) The generation of gravitational waves. III. Derivation of bremsstrahlung formulae. *Astrophys. J.* **217** (1977), no. 1, part 1, 252-280. (W. Israel) **57** #4951b 83J35
- See also **Relativity**, 49 #4510
- Thornett, M. L.** Minimum mean square error unbiased estimation. *Austral. J. Statist.* **16** (1974), no. 2, 106-107. (Christian Hipp) **51** #11782 62F10
- Models of topographic variation. *Studies in probability and statistics (papers in honour of Edwin J. G. Pitman)*, pp. 59-71. North-Holland, Amsterdam, 1976. (Steffen Lauritzen) **54** #14257 62K99 (60G10)
- Thornton, Catherine L.** (with Bierman, Gerald J.) Gram-Schmidt algorithms for covariance propagation. *Proceedings of the IEEE Conference on Decision and Control including the 14th Symposium on Adaptive Processes (Houston, Tex., 1975)*, pp. 489-498. *Inst. Electr. Electron. Engrs., New York*, 1975. (T. Tobias) **57** #5350 93E10
- (with Bierman, Gerald J.) Givens transformation techniques for Kalman filtering. *Acta Astronaut.* **4** (1977), no. 7-8, 847-863. (Arunabha Bagchi) **58** #26498 93E25 (93E10)
- (with Bierman, Gerald J.) Numerical comparison of Kalman filter algorithms: orbit determination case study. *Automatica-J. IFAC* **13** (1977), no. 1, 23-35. (Anders Lindquist) **55** #14359 93E10
- Thornton, J. C.** (with Paulson, Albert S.) A new approach to goodness of fit and outliers. *Modeling and simulation Vol. 6, Part 1, (Proc. Sixth Annual Pittsburgh Conf., Univ. Pittsburgh, Pittsburgh, Pa., 1975)*, pp. 459-461. *Instrument Soc. Amer., Pittsburgh, Pa.*, 1975. (I. Guttman) **57** #4418 62G10
- (with Paulson, Albert S.) Asymptotic distribution of characteristic function-based estimators for the stable laws. *Sankhyā Ser. A* **39** (1977), no. 4, 341-354. (B. W. Stuck) **57** #14238 62F10 (62E20)
- Thornton, Melvin C.** Torsion topological groups with minimal open sets. *Bull. Austral. Math. Soc.* **5** (1971), 55-59. (K. H. Hofmann) **45** #443a 22A05
- Spaces with given homeomorphism groups. *Proc. Amer. Math. Soc.* **33** (1972), 127-131. (R. W. Bagley) **45** #1142 57E05
- Semirings of functions determining finite T_0 topologies. *Proc. Amer. Math. Soc.* **34** (1972), 307-310. (S. K. Kaul) **45** #1107 54A10 (54C40)
- Characterizing topologies by functions. *Proc. Amer. Math. Soc.* **36** (1972), 613-614. (L. Gillman) **46** #8166 54C40
- Topological spaces and lattices of lower semicontinuous functions. *Trans. Amer.*

- Math. Soc.* **181** (1973), 495-506. (R. F. Dickman, Jr.) **47** #9527 54C30
Total spaces of circle bundles over lens spaces. *Portugal. Math.* **33** (1974), 171-176.
Raymond Barre) **51** #1819 55F25
Semigroups of isotone selfmaps on partially ordered sets. *J. London Math. Soc.* (2) **4** (1976), no. 3, 545-553. (K. D. Magill, Jr.) **55** #10593 20M20
Dmitrii See **Primer for the Fibonacci numbers**, **50** #12906
B. L. D. The Riesz representation theorem and integral norms. *J. London Math. Soc.* **43** (1968), 177-182. (See Zbl **193**, 92) 28A45
On the equivalence of certain notions of bounded variation. *J. London Math. Soc.* **3** (1968), 247-252. (See Zbl **157**, 210) 26A45
Edward O. (with Walden, William E.) A computer assisted study of Go on $M \times N$ boards. *Information Sci.* **4** (1972), 1-33. (I. V. Beiko) **46** #8684 90D99
(with Walden, William E.) The fundamental theorem of card counting with applications to trente-et-quarante and baccarat. *Internat. J. Game Theory* **2** (1973), 109-119. (R. E. Stearns) **47** #10091 90D45 (93E05)
(with Whitley, Robert) Concave utilities are distinguished by their optimal strategies. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 13-830. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974.* John C. Gittins) **51** #4940 90A10
James S. (with Lewine, Robert N.) Computation of time-optimal controls using a second-variation descent search. *IEEE Trans. Automatic Control* **AC-15** (1970), 58-362. (Authors' summary) **49** #1774 65K05 (93C45)
(with Scott, Peter D.) A descent algorithm for linear continuous Chebyshev approximation. Collection of articles dedicated to J. L. Walsh on his 75th birthday, VII. *Approximation Theory 6* (1972), 231-241. (H. L. Loeb) **50** #3535 65D15 (41A50)
The singular pencil of a linear dynamical system. *Internat. J. Control* (1) **18** (1973), 77-596. (Edward J. Davison) **49** #6975 93C45
(with Barmish, Bobby Ross; Fleming, John A.; Dunn, Joseph C.) The transferability of bounded initial regions by feedback compensation. *Internat. J. Control* **10** (1974), 801-810. (Takashi Yahagi) **50** #12370 93C45
(with Barmish, Bobby Ross; Fleming, John A.) A minimax theorem for guaranteed terminal error. *IEEE Trans. Automatic Control* **AC-20** (1975), no. 6, 797-799. (Authors' summary) **58** #15606 93E20 (93C99)
Brian (with Kuttner, Brian) On strong Nörlund summability fields. *Canad. J. Math.* **24** (1972), 390-399. (W. Beckmann) **45** #5618 40D20
An inclusion theorem and consistency of real regular Nörlund methods of summability. *J. London Math. Soc.* (2) **5** (1972), 519-525. (Gokulananda Das) **7** #5482 40D25
(with Kuttner, Brian) Matrix transformations of strongly summable series. *J. London Math. Soc.* (2) **11** (1975), no. 2, 195-206. (I. J. Maddox) **52** #14736 40G05
Nörlund summability of Jacobi and Laguerre series. *J. Reine Angew. Math.* **276** (1975), 137-141. (S. Baron) **52** #1088 40G05 (42A56)
John A. On the curvature tensor of a positively curved 4-manifold. *Proceedings of the Thirtieth Biennial Seminar of the Canadian Mathematical Congress (Dalhousie Univ., Halifax, N.S., 1971)*, Vol. 2, pp. 156-159. *Canad. Math. Congr., Montreal, Que., 1972.* (T. Suguri) **51** #11353 53C20
(with Heymann, Michael) A note on minimal polynomials. *Linear Algebra and Appl.* **7** (1973), 279-280. (R. Merris) **48** #2153 15A03
Gravitational collapse. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Part 2, Stanford Univ., Stanford, Calif., 1973)*, pp. 425-429. *Amer. Math. Soc., Providence, R.I., 1975.* (Michael P. Ryan, Jr.) **52** #2522 83.53
(with Singer, I. M.) ★Lecture notes on elementary topology and geometry. Reprint of the 1967 edition. Undergraduate Texts in Mathematics. *Springer-Verlag, New York-Heidelberg, 1976.* viii + 232 pp. (Editors) **54** #1273 58-01 (53-01)
Erratum: "The zeroes of nonnegative curvature operators" (*J. Differential Geometry* **5** (1971), 113-125). *J. Differential Geometry* **11** (1976), no. 2, 315.
Yung-Chow Wong) **54** #8522 53C20
Curvature invariants and space-time singularities. *J. Mathematical Phys.* **18** (1977), no. 5, 960-964. (F. J. Flaherty) **56** #6579 53C50 (83.53)
Stuart J. (with Wendell, Richard E.) Some generalizations of social decisions under majority rule. *Econometrica* **42** (1974), 893-912. (Authors' summary) **55** #14094 90A05 (92A20)
(with Stever, John) Classes of models for selected axiomatic theories of choice. *J. Mathematical Psychology* **11** (1974), 15-32. (A. Rapoport) **49** #4601 92A25
Walter R. (with Newman, William I.) Rapid numerical solution of the one-dimensional Schrödinger equation. (French summary) *Canad. J. Phys.* **50** (1972), 3997-3022. (Authors' summary) **52** #7359 81.34 (81.65)
Comment on: "Rapid numerical solution of the one dimensional Schrödinger equation" (*Canad. J. Phys.* **52** (1974), 664-665) by J. G. Wills. (French summary) *Canad. J. Phys.* **52** (1974), 2509-2510. (Author's summary) **55** #5080 81.65
Anders (with Foxby, Hans-Bjørn) Minimal injective resolutions under flat base change. *Proc. Amer. Math. Soc.* **67** (1977), no. 1, 27-31. (L. Bican) **56** #11984 13D99 (18G15)
D. J. (with Jones, Raymond C.; Kosterlitz, J. M.) The eigenvalue spectrum of a large symmetric random matrix with a finite mean. *J. Phys. A* **11** (1978), no. 3, L45-L48. (Ludwig Arnold) **58** #14747 81.60
Jean-Paul Convergence en moyenne de l'information pour l'action de Z^2 . *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **24** (1972), 135-137. **47** #10145 94A15
(with Brunel, Antoine; Dang Ngoc Nghiem) Un problème d'existence de mesure invariante. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **10** (1974), 211-227. (J. C. Oxtoby) **51** #3402 28A70
(with Shields, Paul C.) Entropy zero \times Bernoulli processes are closed in the \bar{d} -metric. *Ann. Probability* **3** (1975), no. 4, 732-736. (Nathaniel Friedman) **52** #5942 28A65
(with Shields, Paul C.) Une remarque sur les isomorphismes de schémas de Bernoulli que préservent certains facteurs. (English summary) Conference on Ergodic Theory and Topological Dynamics (Kibbutz Lavi, 1974). *Israel J. Math.* **21** (1975), no. 2-3, 173-176. (U. Krengel) **53** #3262 28A65
Quelques propriétés des systèmes dynamiques qui se décomposent en un produit de deux systèmes dont l'un est un schéma de Bernoulli. (English summary) Conference on Ergodic Theory and Topological Dynamics (Kibbutz Lavi, 1974). *Israel J. Math.* **21** (1975), no. 2-3, 177-207. (U. Krengel) **53** #3263 28A65
Une classe de systèmes pour lesquels la conjecture de Pinsker est vraie. (English summary) Conference on Ergodic Theory and Topological Dynamics (Kibbutz Lavi, 1974). *Israel J. Math.* **21** (1975), no. 2-3, 208-214. (Paul C. Shields) **52** #3484 28A65
Remarques sur les systèmes dynamiques donnés avec plusieurs facteurs. (English summary) Conference on Ergodic Theory and Topological Dynamics (Kibbutz Lavi, 1974). *Israel J. Math.* **21** (1975), no. 2-3, 215-232. (U. Krengel) **53** #3264 28A65
On the stability of the weak Pinsker property. *Israel J. Math.* **27** (1977), no. 2, 150-162. (Alan Saleski) **56** #12233 28A65
(with Lind, D. A.) Measure-preserving homeomorphisms of the torus represent all finite entropy ergodic transformations. *Math. Systems Theory* **11** (1977/78), no. 3, 275-282. (V. Drobot) **58** #28434 28A65
See also Guichardet, Alain, **50** #5483
Thouvenot, S. Résolution en nombres entiers de l'équation diophantienne $n(n+1) = 2n'(n'+1)$. *Enseignement Math.* (2) **16** (1970), 203-217 (1971). (H. London) **45** #3319 10B05
Thowsen, Arild (with Perkins, William R.) Optimal discrete-time feedback control of mixed distributed and lumped parameter systems. *Internat. J. Control* (1) **18** (1973), 657-665; corrigenda, *ibid.* (1) **20** (1974), 352. (R. N. P. Singh) **48** #13382 93C55
(with Perkins, William R.) Sampled-data linear-quadratic regulator for systems with generalized transportation lags. *Internat. J. Control* **21** (1975), 49-65. (Peter Stavroulakis) **50** #16005 93C05
Series solution for linear dynamic systems with multiple delays. *Automatic Control Theory Appl.* **4** (1976), no. 3, 50-56. (R. Leonard Brown) **56** #4959 93C05 (93C45)
(with Perkins, William R.) Observability conditions for a class of mixed distributed and lumped parameter systems. *Automatica—J. IFAC* **12** (1976), no. 3, 273-275. (P. K. C. Wang) **53** #15444 93B05 (93C20)
Function space null controllability by augmented delay feedback control. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 2, 298-299. (V. M. Popov) **53** #12663 93B05
(with Perkins, William R.) On the controllability of linear time-delay systems with piecewise constant inputs. *Internat. J. Systems Sci.* **7** (1976), no. 3, 347-360. (Stephen H. Saperstone) **56** #4943 93B05
On pointwise degeneracy, controllability and minimal time control of linear dynamical systems with delays. *Internat. J. Control* **25** (1977), no. 3, 345-360. (Kunihiko Ichikawa) **56** #4944 93B05
Identifiability of dynamic systems. *Internat. J. Systems Sci.* **9** (1978), no. 7, 813-825. (F. J. Beutler) **58** #15410 93B30 (93E10)
Thowsen, Gunnar T. A dynamic, nonstationary inventory problem for a price/quantity setting firm. *Naval Res. Logist. Quart.* **22** (1975), no. 3, 461-476. (D. Hochstädter) **53** #2330 90B05
Thrall, Robert M. (with Spivey, W. Allen) ★Linear optimization. *Holt, Rinehart and Winston, Inc., New York-Montreal, Que.-London, 1970.* xii + 530 pp. (M. Mañas) **52** #4940 90-01
Thrimurthy, P. (with Vaidya, A. M.) The countability of the set of rationals. *Vidya B* **19** (1976), no. 2, 91-94. (Editors) **57** #16181 10A20
On certain characteristic functions over some integer sets. *Vidya B* **19** (1976), no. 2, 263-270. (From the introduction) **58** #479 10A20
On certain arithmetic convolutions. *Vidya B **20** (1977), no. 1, 72-78. (Kenneth Yocom) **58** #478 10A20
Thrivikraman, T. On local compactifications of Tychonoff spaces. *Kyungpook Math. J.* **11** (1971), 151-153. (K. D. Magill, Jr.) **46** #8179 54D35
On the lattices of compactifications. *J. London Math. Soc.* (2) **4** (1972), 711-717. (S. A. Naimpally) **45** #5961 54D35
On Hausdorff quotients of spaces and Magill's theorem. *Monatsh. Math.* **76** (1972), 345-355. (K. D. Magill, Jr.) **47** #5823 54D35
On compactifications of Tychonoff spaces. *Yokohama Math. J.* **20** (1972), 99-105. (Richard A. Alò) **46** #4481 54D35
Topological reflections and nets. *J. Indian Math. Soc. (N.S.)* **38** (1974), no. 1-4, 191-199 (1975). (H. Herrlich) **52** #15343 54B30
Lattice structure of general topological extensions. *Kyungpook Math. J.* **14** (1974), 71-77. (G. E. Strecker) **50** #3190 54D35
E-extensions of topological spaces. II. *Monatsh. Math.* **79** (1975), 151-155. (H. Herrlich) **53** #4007 54D35
(with Kannan, V.) Lattices of Hausdorff compactifications of a locally compact space. *Pacific J. Math.* **57** (1975), no. 2, 441-444. (K. D. Magill, Jr.) **52** #9183 54D35
A net characterisation of Herrlich's k -compactness. *Yokohama Math. J.* **25** (1977), no. 1, 31-33. (J. Mack) **57** #1421 54D30
Thron, C. D. Structure and kinetic behavior of linear multicompartment systems. *Bull. Math. Biophys.* **34** (1972), 277-291. (J. D. Cowan) **46** #8687 92A05
Thron, W. J. (with Callas, Nicholas P.) Singular points of certain functions represented by C -fractions. *J. Indian Math. Soc. (N.S.)* **32** (1968), suppl. I, 325-353 (1970). (E. P. Merkes) **45** #512 30A22 (30A68)
(with Jones, William B.) A posteriori bounds for the truncation error of continued fractions. *SIAM J. Numer. Anal.* **8** (1971), 693-705. (Y. L. Luke) **45** #4602 65D99
(with Callas, Nicholas P.) Singularities of a class of meromorphic functions. *Proc. Amer. Math. Soc.* **33** (1972), 445-454. (E. P. Merkes) **45** #513 30A22 (30A68)
(with Larson, Roland E.) Covering relations in the lattice of T_1 -topologies. *Trans. Amer. Math. Soc.* **168** (1972), 101-111. (Anne K. Steiner) **45** #5942 54A10 (06A20)
Proximity structures and grills. *Math. Ann.* **206** (1973), 35-62. (S. A. Naimpally) **49** #1483 54E05
(with Warren, Richard H.) On the lattice of proximities of Čech compatible with a given closure space. *Pacific J. Math.* **49** (1973), 519-535. (O. Frink) **50** #8451 54E05
On a problem of F. Riesz concerning proximity structures. *Proc. Amer. Math. Soc.* **40** (1973), 323-326. (M. G. Murdeshwar) **48** #1179 54E05
(with Malitz, Jerome; Mycielski, Jan) A remark on filters, ultrafilters and*

- topologies. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 47-48. (J. D. Baum) **49** #6118 54A10
- (with Warren, Richard H.) The family of Lodato proximities compatible with a given topological space. *Canad. J. Math.* **26** (1974), 388-404. (S. A. Naimpally) **49** #6165 54E05
- (with Valent, Richard) An embedding theorem for the lattice of T_1 -topologies and some related cardinality results. *J. London Math. Soc.* (2) **9** (1974/75), 418-422. (P. S. Schnare) **52** #9144 54A10 (54A25)
- (with Jones, William B.) Numerical stability in evaluating continued fractions. *Math. Comp.* **28** (1974), 795-810. (N. N. Abdelmalek) **51** #9465 65G05
- A survey of recent convergence results for continued fractions. *Proceedings of the International Conference on Padé Approximants. Continued Fractions and Related Topics* (Univ. Colorado, Boulder, Colo., 1972; dedicated to the memory of H. S. Wall). *Rocky Mountain J. Math.* **4** (1974), 273-282. (H.-J. Runckel) **50** #2467 30A22
- (with Ori, Ramesh) Bounded families and their relations to largest members of certain classes of proximities. *Math. Student* **43** (1975), 73-83 (1976). (C. R. Borges) **57** #17598 54I:05
- (with Jones, William B.) On convergence of Padé approximants. *SIAM J. Math. Anal.* **6** (1975), 9-16. (A. Edrei) **51** #10641 30A82
- (with Gagrati, M. S.) Nearness structures and proximity extensions. *Trans. Amer. Math. Soc.* **208** (1975), 103-125. (Hans-Christian Reichel) **52** #6667 54E05
- (with Jones, William B.) Truncation error analysis by means of approximant systems and inclusion regions. *Numer. Math.* **26** (1976), no. 2, 117-154. (N. N. Abdelmalek) **55** #9500 65D99
- (with Chattopadhyay, K. C.) Extensions of closure spaces and applications to proximity and contiguity structures. *General topology and its relations to modern analysis and algebra, IV* (Proc. Fourth Prague Topological Sympos., Prague, 1976), Part B, pp. 77-82. *Soc. Czechoslovak Mathematicians and Physicists, Prague, 1977*. (Ju. M. Smirnov) **58** #18357 54I:15
- Two-point Padé tables, T -fractions and sequences of Schur. *Padé and rational approximation* (Proc. Internat. Sympos., Univ. South Florida, Tampa, Fla., 1976), pp. 215-226. Academic Press, New York, 1977. (Editors) **58** #22577 30A82 (41A20)
- (with Jones, William B.) Two-point Padé tables and T -fractions. *Bull. Amer. Math. Soc.* **83** (1977), no. 3, 388-390. (B. D. Donevski) **56** #5853 30A22
- (with Chattopadhyay, K. C.) Extensions of closure spaces. *Canad. J. Math.* **29** (1977), no. 6, 1277-1286. (M. G. Murdeshwar) **57** #1387 54A05
- See also *Proceedings: International Conference on Padé Approximants, Continued Fractions and Related Topics*, **48** #5775
- Thrum, R. Optimal prediction of a stochastic process by a finite number of observations. *Math. Operationsforsch. Statist. Ser. Statist.* **8** (1977), no. 4, 457-458. (H. Toutenburg) **58** #18981 62M20 (60G25)
- nguyen van Thu See Nguyen Van Thu
- nguyên Thu'a Ho'p See Nguyễn Thu'a Ho'p
- ho ba Thuan See Ho Ba Thuan
- hò Thuân See Hồ Thuân
- nguyen Thuc Loan See Nguyen Thuc Loan
- Thue, Axel ★Selected mathematical papers. With an introduction by Carl Ludwig Siegel and a biography by Viggo Brun. Edited by Trygve Nagell, Atle Selberg, Sigmund Selberg, and Knut Thälberg. *Universitetsforlaget, Oslo, 1977*. lix + 592 pp. ISBN 82-00-01649-8 (Editors) **57** #46 01A75 (10-03)
- Thuel, J. (with David, René) Propriétés des réseaux logiques en présence de pannes multiples. Applications à la détection. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* **9** (1975), no. J-1, 71-102. (Jan Grabowski) **57** #5487 94A20
- Thullier, Henri Un théorème sur les fonctions additives de deux entiers >0 . *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A1027-A1029. (H.-E. Richert) **47** #162 10H25
- nguen Thuk Loan See Nguyen Thuk Loan
- mai-Thuk-Ngoi See Mai-Thuk-Ngoi
- Thulasiraman, K. (with Murti, V. G. K.) Modified cut-set matrix of an n -port network. *Proc. Inst. Elec. Engrs.* **115** (1968), 1263-1268. (I. T. Frisch) **46** #10513 94A20
- (with Swamy, M. N. S.) Relationship between cutset and node-pair transformation matrices. *Electron. Lett.* **7** (1971), 276-277. (From the authors' summary) **47** #8210 94A20
- (with Swamy, M. N. S.) On a theorem in graph theory. *Matrix Tensor Quart.* **22** (1971/72), 31-32. (Editors) **47** #3259 05C99
- (with Swamy, M. N. S.) Unimodular property of fundamental cut-set and circuit matrices. *Matrix Tensor Quart.* **22** (1971/72), 65-67. (R. A. Brualdi) **46** #5181 05C99
- (with Swamy, M. N. S.; Bhushan, Champa) Sensitivity invariants for active lumped/distributed networks. *Electron. Lett.* **8** (1972), 26-27. (Authors' summary) **50** #4142 94A20
- (with Reddy, P. Subbarami) Synthesis of $(n+2)$ -node resistive n -port networks. *IEEE Trans. Circuit Theory* **CT-19** (1972), 20-25. (George E. Trapp) **52** #16895 94A20
- (with Swamy, M. N. S.) A sufficient condition for the synthesis of the K -matrix of n -port networks. *IEEE Trans. Circuit Theory* **CT-19** (1972), 378-380. (Israel Cederbaum) **51** #9980 94A20
- (with Swamy, M. N. S.) Realization of the A -matrix of RLC networks. *IEEE Trans. Circuit Theory* **CT-19** (1972), 515-518. (W.-K. Chen) **51** #12435 94A20
- (with Karivaratharajan, P.) K -sets of a graph and vulnerability of communication nets. *Matrix Tensor Quart.* **25** (1974/75), 63-66. (Takao Ozawa) **54** #7317a 05C99 (94A20)
- (with Karivaratharajan, P.) K -sets of a graph and vulnerability of communication nets. II. *Matrix Tensor Quart.* **25** (1974/75), 77-86. (Takao Ozawa) **54** #7317b 05C99 (94A20)
- (with Naidu, M. G. Govindarajulu; Swamy, M. N. S.) The n -port resistive network synthesis from prescribed sensitivity coefficients. *IEEE Trans. Circuits and Systems* **CAS-22** (1975), 482-485. (S. Bhargava) **53** #5179 94A20
- (with Naidu, M. G. Govindarajulu; Reddy, P. Subbarami) Synthesis of resistive networks from third-order paramount matrices. *IEEE Trans. Circuits and Systems* **CAS-22** (1975), no. 12, 937-943. (Authors' summary) **55** #10153 (E 58 #20870b) #20870a 94A20
- (with Reddy, P. Subbarami) Analysis and synthesis of the K - and Y -matrix resistive n -port networks. (German summary) *Z. Elek. Informations- und Energietechnik* (1975), no. 2, 81-96. (Zdeněk Ertinger) **53** #7635 94A20
- (with Naidu, M. G. Govindarajulu; Reddy, P. Subbarami) $(n+2)$ -node resistive n -port realizability of Y -matrices. *IEEE Trans. Circuits and Systems* **CAS-23** (1976), 5, 254-261. (Authors' summary) **57** #19134 94A20
- (with Reddy, P. Subbarami) Synthesis of the K -matrix of $(n+3)$ -node resistive n -port networks. (Loose German summary) *Z. Elek. Informations- und Energietechnik* (1978), no. 1, 86-92. (Authors' summary) **57** #19139 94A20
- See also *Prigozy, Stephen*, **58** #20870a (E 58 #20870b)
- Thürmer, Klaus Spaltengenerierung bei Zuschnittproblemen. *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* **16** (1974), 475-489. (F. Weinberg) **50** #15874 90B05
- Thürmer, R. Ein Verfahren zur Auswahl von Teilnetzen bei der Bestimmung kürzester Wege in Verkehrsnetzen. (English summary) *Z. Operations Res. Ser. A-B* **19** (1975), 6, B149-B153. (D. W. Walkup) **52** #16577 90B10
- Thun, H. J. Asymptotic behaviour at exceptional momenta. (Italian and Russian summaries) *Nuovo Cimento A* (11) **26** (1975), 329-359. (Tetz Yoshimura) **54** #1461 81J35
- (with Coleman, Sidney) On the prosaic origin of the double poles in the sine-Gordon S -matrix. *Comm. Math. Phys.* **61** (1978), no. 1, 31-39. (J. Ławrynowicz) **58** #14540 81J30
- pham Thuong Cat See Pham Thuong Cat
- tran Thuong Hung See Tran Thuong Hung
- nguyen Thuong Ngo See Nguyen Thuong Ngo
- nguyen Thuong Uen See Nguyen Thuong Uen
- Thurber, Edward G. On addition chains $l(mn) < l(n) - b$ and lower bounds for $c(r)$. *Duke Math. J.* **40** (1973), 907-913. (P. Brock) **48** #8429 10L05
- The Scholz-Brauer problem on addition chains. *Pacific J. Math.* **49** (1973), 229-242. (N. G. de Bruijn) **49** #7233 10L15
- Addition chains and solutions of $l(2n) = l(n)$ and $l(2^n - 1) = n + l(n) - 1$. *Discrete Math.* **16** (1976), no. 3, 279-289. (Donald L. Goldsmith) **55** #5570 10L10
- Thurber, James K. (with Katz, Jose) Applications of fractional powers of delta functions. *Victoria Symposium on Nonstandard Analysis* (Univ. Victoria, Victoria, B.C., 1972), pp. 272-302. *Lecture Notes in Math.*, Vol. 369, Springer, Berlin, 1974. (Woodford W. Zachary) **58** #4005 81O2 (02H25)
- (with Nicolaenko, Basil) Weak shock and bifurcating solutions of the non-linear Boltzmann equation. (French summary) *J. Mécanique* **14** (1975), no. 2, ii, 305-338. (P. Guiraud) **52** #4813 76J7
- Thurgur, M. C. (with Hoskins, W. D.) Determinants and norms for the inverses of a set of band matrices. *Utilitas Math.* **3** (1973), 33-47. (J. Legras) **47** #6512 05B20 (15A04)
- Thüring, B. See Ralston, Anthony; et al., **48** #1423
- Thüring, Bernd (with Kühnau, Reiner) Berechnung einer quasikonformen Extremalfunktion. *Math. Nachr.* **79** (1977), 99-113. (Jukka Sarvas) **57** #6420 30A60
- Thurling, Robert See *Methods in computational physics*, **58** #9109
- Thurston, G. A. Floquet theory and Newton's method. *Trans. ASME Ser. E. J. Appl. Mech.* **40** (1973), 1091-1096. (T. K. Caughey) **50** #15517 73.34 (65L99)
- Thurston, Hugh A property of Mal'cev's biquaternary variety. *J. Algebra* **23** (1972), 493-501. (V. Artamonov (RŽMat 1973 #5 A315)) **50** #9747 08A15
- Thurston, Louis H. (with Wong, James S. W.) On global asymptotic stability of certain second order differential equations with integrable forcing terms. *SIAM J. Appl. Math.* **24** (1973), 50-61. (J. Kato) **52** #925 34D05
- Thurston, William P. Noncobordant foliations of S^3 . *Bull. Amer. Math. Soc.* **78** (1972), 511-514. (F. J. Echarte Reula) **45** #7741 57D30
- (with Plante, Joseph F.) Anosov flows and the fundamental group. *Topology* **12** (1972), 147-150. (J. Franks) **45** #4455 58F10
- (with Rosenberg, Harold) Some remarks on foliations. *Dynamical systems (Proc. Sympos., Univ. Bahia, Salvador, 1971)*, pp. 463-478. Academic Press, New York, 1972. (Bruce L. Reinhart) **49** #3974 57D30 (58F99)
- Foliations and groups of diffeomorphisms. *Bull. Amer. Math. Soc.* **80** (1974), 304-307. (M. Craioveanu) **49** #4027 58D05 (57D30)
- The theory of foliations of codimension greater than one. *Comment. Math. Helv.* **49** (1974), 214-231. (John W. Wood) **51** #6846 57D30
- A generation of the Reeb stability theorem. *Topology* **13** (1974), 347-352. (Robert Roussarie) **50** #8558 57D30 (57A35)
- A local construction of foliations for three-manifolds. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973), Part 1*, pp. 315-319. *Amer. Math. Soc., Providence, R.I.*, 1975. (John W. Wood) **52** #1725 57D30
- The theory of foliations of codimension greater than one. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973), Part 2*, pp. 321. *Amer. Math. Soc., Providence, R.I.*, 1975. (Editors) **51** #11540 57D30
- On the construction and classification of foliations. *Proceedings of the International Congress of Mathematicians (Vancouver, B.C., 1974), Vol. 1*, pp. 547-549. *Canad. Math. Congress, Montreal, Que.*, 1975. (Editors) **58** #7658 57D30
- (with Hirsch, Morris W.) Foliated bundles, invariant measures and flat manifolds. *Ann. Math.* (2) **101** (1975), 369-390. (D. B. Fuks) **51** #6842 57D30
- (with Winkelkemper, H. E.) On the existence of contact forms. *Proc. Amer. Math. Soc.* **52** (1975), 345-347. (H. B. Griffiths) **51** #11561 58A10 (57D30)
- Existence of codimension-one foliations. *Ann. of Math.* (2) **104** (1976), no. 2, 249-268. (D. B. Fuks) **54** #13934 57D30
- (with Plante, Joseph F.) Polynomial growth in holonomy groups of foliations. *Comment. Math. Helv.* **51** (1976), no. 4, 567-584. (Robert Roussarie) **55** #9117 57D30 (58D05)
- Some simple examples of symplectic manifolds. *Proc. Amer. Math. Soc.* **55** (1976), no. 2, 467-468. (Edgar H. Brown, Jr.) **53** #6578 57D15
- (with Kan, Daniel M.) Every connected space has the homology of a $K(\pi, 1)$. *Topology* **15** (1976), no. 3, 253-258. (J. P. May) **54** #1210 55D20

- (with Almgren, Frederick J., Jr.) Examples of unknotted curves which bound only surfaces of high genus within their convex hulls. *Ann. of Math.* (2) **105** (1977), no. 3, 27-538. (H. Blaine Lawson) **56** #1209 53A10 (49F22, 57D80)
- (with Milnor, John W.) Characteristic numbers of 3-manifolds. *Enseignement Math.* (2) **23** (1977), no. 3-4, 249-254. (R. C. Kirby) **58** #18462 57A10 (57D20)
- Stone, L. L. See **Multivariate statistical methods: within-groups covariation**, **52** #2028
- Thuy, See **Le Dinh Thuy**
- Stites, G. N. The abelian p -subgroups of $GL(n, p)$ of maximal rank. *Bull. London Math. Soc.* **4** (1972), 313-320. (T. M. Gagen) **47** #6866 20E20
- A characterization of M_{12} by centralizer of involution. *Quart. J. Math. Oxford Ser.* (2) **24** (1973), 537-557. (Mark P. Hale, Jr.) **48** #11280 20D05
- A theorem of strong-embedding type. *J. London Math. Soc.* (2) **7** (1974), 547-552. (Thomas Laffey) **49** #2932 20D25
- Finite groups with centralizer of an involution isomorphic to $Z_2 \times Sz(q)$. *Quart. J. Math. Oxford Ser.* (2) **25** (1974), 451-462. (Thomas Laffey) **51** #13024 20D05
- (with Powell, M. B.) On the non-existence of certain types of subgroups in simple groups. *Quart. J. Math. Oxford Ser.* (2) **26** (1975), no. 102, 243-256. (Editors) **56** #466 20D05
- Steng, Henry W. (with Heerema, Nickolas) Fields of constants of integral derivations on a p -adic field. *Trans. Amer. Math. Soc.* **195** (1974), 277-290. (James K. Deveney) **52** #8102 12F15
- Sagaraja, A. A non-linear differential equation. *J. Mathematical and Physical Sci.* **8** (1974), 429-438. (J. F. Heyda) **50** #13851 35B99
- An integral invariant in inviscid fluid flow. *J. Mathematical and Physical Sci.* **9** (1975), 161-164. (R. Ballabh) **51** #2452 76J35
- Proturbulent motions in dissipative model systems. *Math. Proc. Cambridge Philos. Soc.* **80** (1976), no. 1, 153-163. (Uriel Frisch) **53** #12213 76J60
- The analogon: a mathematical model of a living organism. *J. Mathematical and Physical Sci.* **11** (1977), no. 2, 133-150. (From the author's summary) **56** #17904 92A05
- Stegen, Inge See **Operational Research**, **49** #12059
- Engel, Poul Bayesian single sampling acceptance plans for life-testing. *Progress in Statistics (European Meeting Statisticians, Budapest, 1972), Vol II*, pp. 831-841. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974.* (A. K. Gayen) **52** #7061 62N10
- Bayesian single sampling acceptance plans for finite lot sizes. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 305-319. (W. Uhlmann) **50** #15235 62N10
- (with Froberg, Leif) Bayesian single sampling acceptance plans with two-sided acceptance criterion. Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 3. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 3, 272-278 (1976). (W. Uhlmann) **57** #4459 62N10
- Bayesian single sampling plans for life-testing with truncation of the number of failures. *Scand. J. Statist.* **2** (1975), no. 2, 61-70. (Benjamin Epstein) **52** #4561 62N05
- See also **Proceedings: Session of the International Statistical Institute**, **49** #8145
- Stien, P. Détermination élémentaire de la probabilité de ruine en k parties exactement. (Dutch summary) *Assoc. Roy. Actuarii, Belges Bull. No. 68* (1973), 110-119. (Author's summary) **50** #1313 60C05
- Stien, Paul Extension of the collective risk theory. Filip Lundberg Symposium on Risk Theory (Stockholm, 1968). *Skand. Aktuarietidskr.* **1969**, suppl. 3-4, 84-98 (1971). (D. J. Eustice) **50** #3411 60K99 (62P05)
- de Oliveira, J. Extremal processes: Definition and properties. *Publ. Inst. Statist. Univ. Paris* **17** (1968), no. 2, 25-36. (J. Pickands, III) **47** #5949 60G99 (60J75)
- A new model of bivariate extremes: statistical decision. *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompili*, pp. 437-449. Edizioni Oderisi, Gubbio, 1971. (Benjamin Epstein) **50** #15093 62F05
- An extreme-Markovian stationary process. *Proceedings of the Fourth Conference on Probability Theory (Braşov, 1971)*, pp. 217-225. Editura Acad. R. S. R., Bucharest, 1973. (J. Pickands, III) **55** #4392 60J25 (62G30)
- Regression in the nondifferentiable bivariate extreme models. *J. Amer. Statist. Assoc.* **69** (1974), 816-818. (G. Manijah) **51** #9383 62J05
- Bivariate extremes; extensions. (French summary) With discussion. Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 2, Invited papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 2, 241-252, 253-254 (1976). (K. C. Chanda) **58** #18886 62G30 (60F05)
- Introduction to stochastic processes. (Portuguese) *Gaz. Mat. (Lisbon)* **36-37** (1975/76), no. 133-136, 1-11. (P. Holgate) **57** #7712 60-01
- Statistical decision for extremes. *Trabajos Estadist. Investigación Oper.* **26** (1975), no. 1-3, 433-471. (J. Pickands, III) **57** #7847 62F05 (62F10, 62N05)
- Asymptotic behaviour of maxima with periodic disturbances. *Ann. Inst. Statist. Math.* **28** (1976), no. 1, 19-23. (K. C. Chanda) **55** #11348 60F05
- (with Littauer, Sebastian B.) Mean square invariant forecasters for the Weibull distribution. *Naval Res. Logist. Quart.* **23** (1976), no. 3, 487-511. (C. W. J. Granger) **56** #1641 62N05 (62F10)
- Asymptotic distributions of univariate and bivariate m -th extremes. *Recent developments in statistics (Proc. European Meeting Statisticians, Grenoble, 1976)*, pp. 613-617. North-Holland, Amsterdam, 1977. (W. Dziubdziela) **57** #4305 60F05 (62G30)
- Estimation for the Gumbel bivariate model. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 8, 1141-1145. (G. K. Bhattacharyya) **57** #4410 62F10 (62G05)
- See also **Discriminant analysis and applications**, **57** #17959
- Stur, Kenneth J. (with Schwaller, Richard L.) A method of constrained randomization for $p_1^{n_1} p_2^{n_2} \dots p_k^{n_k}$ factorials. *Ann. Statist.* **3** (1975), no. 5, 1135-1148. (Damaraju Raghavarao) **51** #11867 62K15
- Feng, (with Zhu, Yong Jin; Ma, Chung Fan; Cai, Mao Cheng) On the characterization of an extreme flow in a two-commodity network flow problem. *Sci. Sinica* **17** (1974), no. 6, 729-736. (B. L. Ovsievich) **55** #14160 90B10
- Zi Xian (with Qi, Dong Xu; Zhang, Yu Xin; Feng, Jia Bin) A numerical smoothing method of curve fitting. (Chinese) *Acta Math. Sinica* **18** (1975), no. 3, 172-184. (Not reviewed) **65D10**
- Tiao, George C. (with Ali, Mukhtar M.) Effect of non-normality on inferences about variance components. *Technometrics* **13** (1971), 635-650. **45** #2870 62J10
- Asymptotic behaviour of temporal aggregates of time series. *Biometrika* **59** (1972), 525-531. (E. Parzen) **49** #10105 62M10
- (with Box, George E. P.) ★ Bayesian inference in statistical analysis. Addison-Wesley Series in Behavioral Science: Quantitative Methods. Addison-Wesley Publishing Co., Reading, Mass.-London-Don Mills, Ont., 1973. xviii + 588 pp. (Anthony O'Hagan) **54** #6362 62F15 (62A15, 62J05)
- (with Box, George E. P.) Some comments on "Bayes" estimators. *Amer. Statist.* **27** (1973), 12-14. (J. W. Pratt) **52** #2013 62F15
- (with Box, George E. P.) Intervention analysis with applications to economic and environmental problems. *J. Amer. Statist. Assoc.* **70** (1975), 70-79. (T. Pitcher) **51** #2209 62M10
- (with Afonja, Biyi) Some Bayesian considerations of the choice of design for ranking, selection and estimation. *Ann. Inst. Statist. Math.* **28** (1976), no. 2, 167-185. (I. Guttman) **54** #14214 62F15 (62K10)
- (with Wei, W. S.) Effect of temporal aggregation on the dynamic relationship of two time series variables. *Biometrika* **63** (1976), no. 3, 513-523. (Andrew Harvey) **56** #7072 62M10
- (with Cleveland, W. P.) Decomposition of seasonal time series: a model for the Census X-11 program. *J. Amer. Statist. Assoc.* **71** (1976), no. 355, 581-587. (Peter M. Robinson) **54** #14276 62M10
- (with Box, George E. P.) A canonical analysis of multiple time series. *Biometrika* **64** (1977), no. 2, 355-365. (Authors' summary) **58** #24792 62M10
- (with Tan, Wai Yuan; Chang, Yu Chi) Some aspects of bivariate regression subject to linear constraints. *J. Econometrics* **5** (1977), no. 1, 13-35. (Tom Leonard) **55** #11553 62P20 (62F15)
- See also **Stone, Mervyn**, **54** #3944
- Tiba, Dan Subdifferentials of composed functions and applications in optimal control. *An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **23** (1977), no. 2, 381-386. (S. Kutateladze) **57** #13642 49B99 (47H05)
- Nonlinear boundary value problems for second order differential equations. *Funkcial. Ekvac.* **20** (1977), no. 3, 213-221. (Walter G. Kelley) **58** #6453 34B15
- Tibaldi, M. (with Bertoni, Gianni; Beghelli, Sergio; Capitani, Gloria) ★ Teoria e tecnica della regolazione automatica. Seconda edizione. Piaggia Editrice, Bologna, 1973. xvi + 622 pp. (J. E. Rubio) **58** #9440 93-02
- (with Bertoni, Gianni; Beghelli, Sergio; Capitani, Gloria) Comments on "Observer design for a linear functional of the state vector" (IEEE Trans. Automatic Control **AC-18** (1973), no. 3, 308-310) by P. Murdoch. *IEEE Trans. Automatic Control* **AC-19** (1974), 169-170. (Editors) **56** #11137 93B05
- Tiberio, Umberto Su una classe di p -gruppi finiti dotati di un elemento autocentralizzante. *Matematiche (Catania)* **27** (1972), 360-372 (1973). (N. Ito) **49** #5166 20D15
- Tiberio Bianchini, Rosa Maria Un teorema di punti fissi in uno spazio metrico completo. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **48** (1970), 581-583. (C. Racine (Zbl 214, 215)) **47** #9595 54H25
- Su un problema di S. Reich riguardante la teoria dei punti fissi. (English summary) *Boll. Un. Mat. Ital.* (4) **5** (1972), 103-108. (E. Lami Dozo) **46** #7987 47H10 (54H25)
- Un teorema di esistenza di soluzioni di una classe di problemi ai limiti non lineari. *Matematiche (Catania)* **28** (1973), 305-315 (1974). (Jean Mawhin) **50** #8181 47H15
- marchionna Tibiletti, Cesarina See **Marchionna Tibiletti, Cesarina**
- Tibor, Gyires An algebraic and a probabilistic model of the virtual memory. (Hungarian. English and Russian summaries) *Közlemények—MTA Számítástechn. Automat. Kutató Int. Budapest No. 15* (1975), 111-120. (István Babcsányi) **57** #11167 68A10
- Tibrewala, R. K. (with Klein, M.) Finding negative cycles. *INFOR—Canad. J. Operational Res. and Information Processing* **11** (1973), 59-65. (A. Jaeger) **48** #8292 05C20
- Tichatschke, Rainer (with Beer, Klaus; Schwartz, Bernd) Mehrfache Zerlegung linearer Optimierungsaufgaben. (English and Russian summaries) *Math. Operationsforsch. Statist.* **2** (1971), no. 2, 95-115. (H. Weber) **49** #6915 90C05
- (with Schwartz, Bernd) Über eine Zerlegungsmethode zur Lösung gross dimensionierter linearer Optimierungsaufgaben. (English and Russian summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 1, 15-31. (Siegfried Schaible) **53** #9643 65K05 (90C05)
- Ein Dekompositionsverfahren zur Lösung grossdimensionierter quadratischer Optimierungsprobleme. *Wiss. Z. Techn. Hochsch. Karl-Marx-Stadt* **18** (1976), no. 4, 403-406. (Jürgen Guddat) **55** #2152 90C30
- Tichenor, D. M. (with Higgins, James J.) Window estimates of location and scale with applications to the Cauchy distribution. *Appl. Math. Comput.* **3** (1977), no. 2, 113-126. (Richard A. Johnson) **55** #4493 62G05
- Tichý, Pavel Intension in terms of Turing machines. (Polish and Russian summaries) *Studia Logica* **24** (1969), 7-25. (J. Michael Dunn) **45** #4950 02C99
- Synthetic components of infinite classes of postulates. *Arch. Math. Logik Grundlagenforsch.* **14** (1971), 167-178. (J. van Heijenoort) **49** #2242 02A05
- On the vicious circle in definitions. (Polish and Russian summaries) *Studia Logica* **28** (1971), 19-40. (P. Materna (Zbl 255 #02054)) **50** #12642 02B10
- On de dicto modalities in quantified S5. *J. Philos. Logic* **2** (1973), no. 3, 387-392. (Jerzy Kotas) **55** #2506 02C10
- What do we talk about? *Philos. Sci.* **42** (1975), no. 1, 80-93. (Editors) **58** #128 02A05 (02C10)
- Verisimilitude redefined. *British J. Philos. Sci.* **27** (1976), no. 1, 25-42. (Editors) **58** #21569 02G99 (00A25)
- A new theory of subjunctive conditionals. *Synthese* **37** (1978), no. 3, 433-457. (Editors) **58** #16161 02C10 (02A05)
- Tichý, Tomáš (with Vinárek, Jiří) On the algebraic characterization of systems of 1-1 partial mappings. *Comment. Math. Univ. Carolinae* **13** (1972), 711-720. (H. Jürgensen) **47** #3284 08A25 (20M99)
- (with Kastl, Jan) Die Darstellung von partiellen K -stelligen Operationen. *Comment. Math. Univ. Carolinae* **17** (1976), no. 1, 167-178. (G. Pollák) **53** #8312 20N15
- Tideman, T. N. (with Good, Irving John) From individual to collective ordering through

- multidimensional attribute space. *Proc. Roy. Soc. London Ser. A* **347** (1976), no. 1650, 371-385. (James B. MacQueen) **52** #16736 92A99
- (with Good, Irving John) Stirling numbers and a geometric structure from voting theory. *J. Combinatorial Theory Ser. A* **23** (1977), no. 1, 34-45. (Authors' summary) **58** #21647 05A15
- (with Good, Irving John) Integration over a simplex, truncated cubes, and Eulerian numbers. *Numer. Math.* **30** (1978), no. 4, 355-367. (Authors' summary) **58** #24872 65D30
- Tidten, Michael** Vektorwertige Funktionalkalküle. *J. Reine Angew. Math.* **278/279** (1975), 425-436. (Dieter Lutz) **52** #4000 47A60
- Eine Charakterisierung der Boole'schen Algebra zu einer c_0 -direkten Zerlegung. (English summary) *Manuscripta Math.* **17** (1975), no. 3, 253-266. (J. Diestel) **55** #8734 46A05 (47B99)
- nguen zui Tien** See **Nguyen Zui Tien**
- trần quý Tiên** See **Trần Quý Tiên**
- tran minh Tien** See **Tran Minh Tien**
- Tien, B. N.** (with Hu, T. C.) Generating permutations with nondistinct items. *Amer. Math. Monthly* **83** (1976), no. 8, 629-631. (Roger C. Grimson) **55** #2595 05A99
- (with Hu, T. C.) Error bounds and the applicability of the greedy solution to the coin-changing problem. *Operations Res.* **25** (1977), no. 3, 404-418. (Leon Cooper) **56** #2412 90C50 (90C10)
- Tien, Feng** See **Tian, Feng**
- Tienari, Juha** On the numerical calculation of eigenvalues. *Acta Univ. Oulu. Ser. A Sci. Rerum Natur. No. 11 Math. No. 3* (1973), 26 pp. (L. Collatz) **56** #7225 65L15 (65R05)
- On the effect of discontinuity in numerical eigenvalue problems. *Acta Univ. Oulu. Ser. A Sci. Rerum Natur. No. 22 Math. No. 7* (1974), 22 pp. (L. Collatz) **56** #1761 65R05
- Tienari, Martti** On some topological properties of numerical algorithms. *Nordisk Tidskr. Informationsbehandling (BIT)* **12** (1972), 409-433. (R. P. Brent) **48** #12901 68A25
- le Tien Vuong** See **Le Tien Vuong**
- Tier, Charles** (with Keller, Joseph B.) Asymptotic analysis of diffusion equations in population genetics. *SIAM J. Appl. Math.* **34** (1978), no. 3, 549-576. (Rodney D. Gentry) **58** #4441 92A10 (35C99)
- Tiernan, James C.** A dual multiple-resource assignment algorithm. *Proceedings of the Seventh Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1974)*, pp. 118-120. *Western Periodicals, North Hollywood, Calif.*, 1974. (Masafumi Sasaki) **56** #10941 90C05 (90B10)
- (with Schalkwijk, J. Pieter M.) An upper bound to the capacity of the band-limited Gaussian autoregressive channel with noiseless feedback. *IEEE Trans. Information Theory* **IT-20** (1974), 311-316. (A. D. Wyner) **52** #12957 94A05
- Tierney, David E.** (with Draper, Norman R.) Regions of positive and unimodal series expansion of the Edgeworth and Gram-Charlier approximations. *Biometrika* **59** (1972), 463-465. **48** #9913 62E10
- (with Draper, Norman R.) Exact formulas for additional terms in some important series expansions. *Comm. Statist.* **1** (1973), 495-524. (M. M. Siddiqui) **48** #3154 (E 51 #14339) 62E10
- (with Draper, Norman R.) Corrections and amendments: "Exact formulas for additional terms in some important series expansions" (Comm. Statist. **1** (1973), 495-524). *Comm. Statist.* **4** (1975), 593. (M. M. Siddiqui) **51** #14339 62E10
- Tierney, Myles** Sheaf theory and the continuum hypothesis. *Toposes, algebraic geometry and logic (Conf., Dalhousie Univ., Halifax, N.S., 1971)*, pp. 13-42. *Lecture Notes in Math.*, Vol. 274, Springer, Berlin, 1972. (Andreas Blass) **51** #10088 02K05 (18B05)
- Axiomatic sheaf theory: some constructions and applications. *Categories and commutative algebra (C.I.M.E., III Ciclo, Varenna, 1971)*, pp. 249-326. Edizioni Cremonese, Rome, 1973. (M. L. Laplaza) **50** #7277 18A15 (02K15)
- On the spectrum of a ringed topos. *Algebra, topology, and category theory (a collection of papers in honor of Samuel Eilenberg)*, pp. 189-210. Academic Press, New York, 1976. (Gavin Wraith) **53** #13356 18F20 (14F20)
- Forcing topologies and classifying topoi. *Algebra, topology, and category theory (a collection of papers in honor of Samuel Eilenberg)*, pp. 211-219. Academic Press, New York, 1976. (Gavin Wraith) **53** #13357 18F20 (02H15)
- See also **Algebra, topology, and category theory**, **53** #12817
- Tiersten, H. F.** (with Jahanmir, M.) A theory of composites modeled as interpenetrating solid continua. *Arch. Rational Mech. Anal.* **65** (1977), no. 2, 153-192. (M. Biermann (Zbl 377 #73007)) **58** #25268 73J35
- (with McCarthy, Matthew F.) On integral forms of the balance laws for deformable semiconductors. *Arch. Rational Mech. Anal.* **68** (1978), no. 1, 27-36. (Peter J. Chen) **58** #8823 78A7
- Tietäväinen, Aimo** Note on Waring's problem (mod p). *Ann. Acad. Sci. Fenn. Ser. A I No.* **554** (1973), 7 pp. (F. Dress) **52** #8012 10J05 (12C15)
- On the nonexistence of perfect codes over finite fields. *SIAM J. Appl. Math.* **24** (1973), 88-96. (N. J. A. Sloane) **48** #3609 94A10
- A short proof for the nonexistence of unknown perfect codes over $GF(q)$, $q > 2$. *Ann. Acad. Sci. Fenn. Ser. A I No.* **580** (1974), 6 pp. (E. R. Berlekamp) **49** #10444 94A10
- Proof of a conjecture of S. Chowla. *J. Number Theory* **7** (1975), no. 3, 353-356. (F. Dress) **54** #12610 10A10
- (with Dodson, M. M.) A note on Waring's problem in $GF(p)$. *Acta Arith.* **30** (1976), no. 2, 159-167. (S. D. Cohen) **54** #5147 10J05 (12C15)
- Nonexistence of nontrivial perfect codes in case $q = p^e$, $e > 3$. *Discrete Math.* **17** (1977), no. 2, 199-205. (N. J. A. Sloane) **56** #15148 94A10
- See also **Key papers in the development of coding theory**, **52** #5176
- Tietjen, G. L.** (with Beckman, R. J.) Upper 10% and 25% points of the maximum F ratio. *Biometrika* **60** (1973), 213-214. **48** #9916 62E15
- Tietz, Horst** ★Lineare Geometrie. Zweite überarbeitete und erweiterte Auflage. *Studia mathematica/Mathematische Lehrbücher, Taschenbuch 2. Uni-Taschenbücher*, No. 248. Vandenhoeck & Ruprecht, Göttingen, 1973. viii+218 pp. (Editors) **49** #10709 15-01
- Tetraeder mit berührenden Inkreisen. *Math.-Phys. Semesterber.* **21** (1974), 143-144.
- (J. F. Rigby) **50** #8264 50B10
- (with Behnke, Heinrich; Remmert, Reinhold; Steiner, Hans-Georg)
- ★Mathematik. I. Nachdruck der Auflage von 1964. *Das Fischer Lexikon*, No. 29. Fischer Taschenbuch Verlag, Frankfurt am Main, 1976. 384 pp. (Editors) **56** #2718 00A20 (00A05)
- (with Behnke, Heinrich) ★Mathematik. II. Nachdruck der Auflage von 1966. Fischer Lexikon, No. 29/2. Fischer Taschenbuch Verlag, Frankfurt am Main, 1976. 3 pp. (Editors) **56** #2719 00A20 (00A05)
- See also **Fundamentals of mathematics**, **49** #8788
- Tietz, Hubert** Zur absoluten Konvergenz von Fourierreihen. *Arch. Math. (Basel)* (1971), 628-630. (S. Izumi) **46** #595 42A28
- Negative Resultate über Tauber-Bedingungen. *Monatsh. Math.* **75** (1971), 69-78. (Ikehara) **45** #2370 40E05
- Permanenz- und Taubersätze bei p -V-Summierung. *J. Reine Angew. Math.* **2** (1973), 151-177. (S. Ikehara) **48** #754 40E05
- (with Stieglitz, Michael) Matrixtransformationen in den Raum der quasikonvexen Folgen. *Arch. Math. (Basel)* **28** (1977), no. 5, 498-502. (Kazuo Ishiguro) **56** #9135 40H05 (46A45)
- (with Stieglitz, Michael) Matrixtransformationen quasikonvexer Folgen. *Hokkaido Math. J.* **6** (1977), no. 1, 10-15. (J. P. King) **56** #917 40H05
- (with Stieglitz, Michael) Matrixtransformationen von Folgenräumen. Eine Ergebnisübersicht. *Math. Z.* **154** (1977), no. 1, 1-16. (From the authors' introduction) **56** #5109 00A20 (40C05, 46A45)
- Tietz, J. L.** (with Miele, Angelo; Levy, A. V.) Summary and comparison of gradient-restoration algorithms of optimal control problems. *J. Optimization Theory Appl.* **10** (1972), 381-403. (David F. Griffiths) **48** #12832 65K05
- (with Miele, Angelo; Well, K. H.) Multipoint approach to the two-point boundary value problem. *J. Math. Anal. Appl.* **44** (1973), 625-642. (T. E. Hull) **48** #12848 65L10
- (with Miele, Angelo; Damoulakis, J. N.; Cloutier, J. R.) Sequential gradient-restoration algorithm for optimal control problems with nondifferential constraints. *J. Optimization Theory Appl.* **13** (1974), 218-255. (Paul Binding) **50** #5849D10 (65K05)
- (with Miele, Angelo; Cloutier, J. R.) A hybrid approach to optimal control problems with bounded state. *Comput. Math. Appl.* **1** (1975), no. 2, 175-194. (S. E. Dreyfus) **53** #9640 65K05
- Tietze, Uwe-Peter** Zur Theorie quadratischer Formen über Hensel-Körpern. *Arch. Math. (Basel)* **25** (1974), 144-150. (Horst Pfeuffer) **51** #3055 10C05
- Zur Theorie quadratischer Formen über Körpern der Charakteristik 2. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, II. *J. Reine Angew. Math.* **268/269** (1974), 388-390. (Joel Cunningham) **50** #7029 10C05 (15A63)
- Tietze, Walter** Das Problem der Dreiercliquen. Ein Beitrag zur Graphentheorie. *Elem. Math.* **33** (1978), no. 4, 81-90. (M. E. Watkins) **58** #16426 05C99 (05C15)
- Țigan, Ștefan** Sur une méthode de décomposition pour le problème de programmation monotone. *Mathematica (Cluj)* **13**(36) (1971), 347-354. (Torrence D. Parsons) **48** #7991 90C30
- On a certain problem of nonlinear fractional programming. (Romanian. French summary) *Rev. Anal. Numer. Teoria Aproximației* **1** (1972), 215-226. (A. I. Șchiop) **53** #4995 90C30
- On the generalized Lagrange functions in problems of optimization with constraints. (Romanian. French summary) *Rev. Anal. Numer. Teoria Aproximației* **2** (1973), 211-222. (M. Stoica) **54** #9677 90C30
- Sur une méthode pour la résolution d'un problème d'optimisation fractionnaire par segments. *Rev. Anal. Numer. Théor. Approx.* **4** (1975), no. 1, 87-97. (From the introduction) **58** #32974 90C30
- Sur le problème de la programmation vectorielle fractionnaire. *Rev. Anal. Numer. Théor. Approx.* **4** (1975), no. 1, 99-103. (From the introduction) **58** #32975 90C30
- Sur un problème de programmation mathématique nonlinéaire avec contraintes de type inclusion. *Rev. Anal. Numer. Théorie Approximation* **5** (1976), no. 2, 219-222. (1977). (Jean-Baptiste Hiriart-Urruty) **58** #20459 90C30
- Sur quelques propriétés de stabilité concernant les problèmes d'optimisation avec contraintes. *Anal. Numer. Théor. Approx.* **6** (1977), no. 2, 203-225. (RŽMat **1979** #B669) **58** #32920 90C05 (65K05)
- Tigano, Orazio** Renato Calapso. *Boll. Un. Mat. Ital. A* (5) **14** (1977), no. 3, 635-638. (Editors) **57** #12136 01A70
- Tignol, Jean-Pierre** Sur les corps à involution de degré 8. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 21, A1349-A1352. (Author's summary) **56** #3054 16A40 (16A28)
- ★Décomposition et descente de produits tensoriels d'algèbres de quaternions Séminaire de Mathématique Pure, Rapport No. 76. *Institut de Mathématique Pure et Appliquée, Université Catholique de Louvain, Louvain-La-Neuve*, 1978. 24 pp. (Robert Brown) **58** #16617 12E99 (13A20)
- Sur les classes de similitude de corps à involution de degré 8. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 20, A875-A876. (Author's summary) **58** #16605 12A80
- Tihanyi, A.** (with Uhrin, B.) About the generalized polynomials with prescribed signs of discrete sets. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **19** (1976), 165-169. (1977) **363** #41003 **58** #28369 26A75 (41A10)
- Tihenko, A. Ju.** (with Dedikov, È. A.; Panišev, A. V.) Formulation of the problem of ordering the structure of an information model of data processing. (Russian) *Generalized systems theory (Russian)*, pp. 37-42. *Akad. Nauk Ukrain. SSR Inst. Kibernet.*, Kiev, 1977. (P. Vondráček) **51** #7395 68A50
- Tihomirov, A. N.** The rate of convergence in the central limit theorem for weakly dependent variables. (Russian. English summary) *Vestnik Leningrad. Univ.* **1976**, no. 1. *Mat. Meh. Astronom. vyp.* **2**, 158-159, 166. (G. K. Eagleson) **56** #9651 60F05
- Tihomirov, A. S.** Modelling of a four-dimensional projective space on the plane by means of five associated lines. (Russian) *Geometry and topology*, No. 2 (Russian), pp. 155-162. Leningrad. Gos. Ped. Inst., Leningrad, 1974. (E. J. F. Primrose) **56** #6544 50D25
- Tihomirov, N. B.** Approximation of the derivatives of functions by linear operators. (Russian) *Proceedings of the Central Regional Association of Mathematics Department.*

- 2: *Functional analysis and the theory of functions* (Russian), pp. 162-176. Kalinin. s. Ped. Inst., Kalinin, 1971. **55** #3631 41A35
- A certain property of S. N. Bernstein's polynomials. (Russian) *A collection of articles on the constructive theory of functions and the extremal problems of functional analysis* (Russian), pp. 130-138. Kalinin. Gos. Univ., Kalinin, 1972. (Bl. Sendov) #6248 41A10
- The approximation of continuous functions by piece-wise polynomial interpolation operators. (Russian) *A collection of articles on the constructive theory of functions and the extremal problems of functional analysis* (Russian), pp. 138-150. Kalinin. Gos. Univ., Kalinin, 1972. (V. Veselinov) **53** #6154 41A05
- ★ Специальные вопросы теории интерполирования функций. (Russian) [Special problems in the theory of the interpolation of functions] Lecture notes. Kalinin. Gos. Univ., Kalinin, 1973. 108 pp. (Not reviewed) 41A05
- The probabilistic analogues of a theorem of P. P. Korovkin. (Russian) *Application of functional analysis in approximation theory*, No. 1 (Russian), pp. 132-146. Kalinin. Gos. Univ., Kalinin, 1973. (Bl. Sendov) **49** #9911 60F05
- See also *Application of functional analysis in approximation theory*, **58** #1825
- irov, N. P. (with Makarov, G. I.) The dynamics of the eigenvalues in the problem of the diffraction of radiowaves by an impedance sphere. (Russian) *Problems in the diffraction and propagation of waves*, No. 15 (Russian), pp. 29-43, 138. Izdat. Leningrad. Univ., Leningrad, 1977. (From the introduction) **58** #19839 78A1
- irov, O. K. Philosophical-psychological problems of "artificial intelligence". (Russian) *Voprosy Filos.* **1975**, no. 1, 97-109. (Not reviewed) 68A45
- irov, V. M. Certain problems in approximation theory. (Russian) *Mat. Zametki* **9** (1971), 593-607. (Editors) **45** #7366 41A65
- (with Tumarkin, L. A.) The Uryson diameters of the Euclidean n -sphere. (Russian) *General topology and its relations to modern analysis and algebra, III* (Proc. Third Prague topological Sympos., 1971), pp. 441-442. Academia, Prague, 1972. (W. Kuperberg) #11179 54E45
- (with Kolmogorov, A. N.; Fomin, S. V.) ★ *Eléments de la théorie des fonctions et l'analyse fonctionnelle. Avec un complément sur les algèbres de Banach*, par V. M. Kholomir. Traduit du russe par Michel Dragnev. Éditions Mir, Moscow, 1974. 536 pp. (Editors) **51** #3840 46-01 (28-01)
- (with Ioffe, A. D.) ★ Теория экстремальных задач. (Russian) [Theory of extremal problems] Серия "Нелинейный Анализ и его Приложения". [Series in Nonlinear analysis and its Applications] Izdat. "Nauka", Moscow, 1974. 479 pp. (Claudia Miulescu) **53** #14251 49-02
- ★ Некоторые вопросы теории приближений. (Russian) [Some questions in approximation theory] Izdat. Moskov. Univ., Moscow, 1976. 304 pp. (G. G. Lorentz) #6822 41-02
- A comment on A. N. Kolmogorov's theorem on the superposition of functions. (Russian) *Serdica* **2** (1976), no. 2, 168-170. (Torbjörn Hedberg) **56** #556 26A72
- (with Aleksandrov, P. S.; Gelfand, I. M.; Kolmogorov, A. N.; Maikov, E. V.; Maslov, V. P.; Oleinik, O. A.; Sinai, G. G.; Smoljanov, O. G.) In memory of Sergei Maslov. (Russian) *Uspehi Mat. Nauk* **31** (1976), no. 4(190), 199-212. (1 plate) (Editors) **54** #29 01A70
- See also Kolmogorov, A. N.; et al., **51** #13616
- irov, V. S. (with Nysanbaev, A. N.; Osmanov, N. O.) Toward a philosophical assessment of group-theoretic and space-time representations in contemporary physics. (Russian. Kazakh summary) *Vestnik Akad. Nauk Kazah. SSR* **1977**, no. 6, 23-32. (Adim Komkov) **58** #25489 81.22
- irov, V. V. (with Savelova, T. I.) The solution of convolution type integral equations the first kind in the multi-dimensional case. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **13** (1973), 555-563, 810. (L. B. Rall) **48** #10173 65R05 (45E10)
- (with Halitov, M. N.) The application of S. N. Bernstein's polynomials in problems the approximation of a function and its derivative. (Russian) *Avtometrija* **1974**, no. 2, 9-31. (Bl. Sendov) **50** #13984 41A10 (65Dxx)
- On the question of the expandability of functions in an absolutely and uniformly convergent series of eigenfunctions of the Laplace operator. (Russian) *Differentsial'nye Uravnenija* **11** (1975), no. 10, 1879-1887, 1911. (H. Triebel) **52** #8675 35P10
- The functional form of combined approximation of a function and its derivative. (Russian) *Collection of papers by graduate students. Exact sciences: mathematics, mechanics* (Russian), pp. 56-67. Izdat. Kazan. Univ., Kazan, 1976. (See RŽMat **1977** #6 78; MR **56** #11672) 41A30
- On the question of the polynomial form of the combined approximation of a function and its derivative. (Russian) *Collection of papers by graduate students. Exact sciences: mathematics, mechanics* (Russian), pp. 67-78. Izdat. Kazan. Univ., Kazan, 1976. (See RŽMat **1977** #6 B77; MR **56** #11672) 41A10
- The Riesz means of expansions in trigonometric Fourier series and in the eigenfunctions of an M. V. Keldyš pencil of ordinary nonselfadjoint differential operators. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 5, 1015-1017. (Author's view (RŽMat **1976** #6 B658)) **58** #6474 34B25 (47E05)
- The approximation of functions with a given rate of convergence. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 10(173), 113-115. (V. Veselinov) **56** #3508 41A10
- A nonregular boundary value problem. (Russian) *Dokl. Akad. Nauk SSSR* **232** (1977), no. 5, 1026-1027. (H. I. Freedman) **55** #752 34B05
- Riesz means of expansions in the eigen- and associated functions of a nonselfadjoint differential operator. (Russian) *Mat. Sb. (N.S.)* **102(144)** (1977), no. 1, 33-55. (A. Aleksander Alenicyan) **58** #17964 47E05 (34B25)
- irova, E. S. (with Efremovič, V. A.; Loginov, È. A.) Equimorphisms of Riemannian manifolds. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 523-533. (A. Urban) **55** #828 53C20
- irova, I. G. (with Bakut, P. A.) Detection of random appearing signals of random duration. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 2, 137-141, 222 (Russian); translated as *Engng. Cybernet.* **15** (1977), no. 2, 114-118 (1978). (Authors' summary) **53** #20776 94A05
- irova, L. V. (with Prizva, G. I.) A class of functionals for Markov renewal processes. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 8* (1973), 138-144, 188. (A. K. Aleškevičienė) **55** #6602 60K15
- (with Prizva, G. I.) The distribution of the first passage time for Markov processes with discrete intervention of chance. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp.* **12** (1975), 123-128, 174. (A. Spătaru) **53** #6749 (EA **54**) 60J25
- Tihomirova, V. S. (with Efremovič, V. A.) Volumes and capacities in proximity geometry. (Russian) *Dokl. Akad. Nauk SSSR* **214** (1974), 29-32. (Gr. Stanilov) **50** #3167 53C70
- Tihon, Anne Notes sur l'astronomie grecque au Ve siècle de notre ère (Marinus de Naplouse—un commentaire au Petit commentaire de Théon). *Janus* **63** (1976), no. 1-3, 167-184. (G. J. Toomer) **58** #9998 01A20 (01A35)
- Un traité astronomique chypriote du XIV^e siècle. *Janus* **64** (1977), 279-308. (Editors) **58** #21073 01A35
- Tihončuk, S. T. (with Gutenmaher, L. I.; Timošenko, Ju. A.) A dynamical method for simulating certain ill-posed systems. (Russian) *Elektronika i Modelirovanie Vyp.* **11** (1976), 102-103, 132. (Authors' summary) **57** #18050 65F10
- (with Gutenmaher, L. I.; Timošenko, Ju. A.) A dynamic method for the solution of ill-posed systems of linear algebraic equations. (Russian) *Elektronika i Modelirovanie No. 13* (1976), 73-74, 122. (See RŽMat **1977** #9 B968) 65F10
- (with Gutenmaher, L. I.; Timošenko, Ju. A.) A dynamic method for modeling certain ill-posed problems. (Russian) *Dokl. Akad. Nauk SSSR* **237** (1977), no. 4, 776-778. (Gh. Adam) **56** #17044 65F99 (65L10)
- Tihončuk, T. A. (with Polonnikov, R. I.) A certain method for the identification of dynamic objects. (Russian) *Applied mechanics*, No. 1 (Russian), pp. 166-178, 192. Izdat. Leningrad. Univ., Leningrad, 1974. (Editors) **50** #12354 93B30
- Tihonenko, L. Ja. A plane mixed heat conduction problem for a wedge. (Russian) *Differentsial'nye Uravnenija* **9** (1973), 1915-1918, 1928. (L. Jentsch) **48** #10325 80.30
- (with Popov, G. Ja.) Two-dimensional problem of the contact between a semi-infinite beam and an elastic wedge. *Prikl. Mat. Meh.* **38** (1974), 312-320 (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 284-292. (From the authors' summary) **54** #6632 73A5
- (with Popov, G. Ja.) Exact solution of plane problems on the contact between semi-infinite beams and an elastic wedge. *Prikl. Mat. Meh.* **39** (1975), no. 6, 1100-1109 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 6, 1054-1063 (1976). (R. Subramanian) **57** #14747 73.35
- Tihonenko, M. Ja. On the approximate solution of the exceptional case of the Riemann problem in the theory of analytic functions. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 10 (1970), 27-35. (S. Gogonea) **45** #7082 (EA **45**) 30A88
- The approximate solution in generalized functions of integral and integro-differential equations with difference kernels. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* **1972**, 536-539, 574. (M. Tvrdý) **46** #5970 45L05 (65R05)
- An approximate solution of the Hasemann problem. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 842-845, 864. (N. K. Karapetjanc) **50** #10719 45E05 (30A88, 65R05)
- The approximate solution of singular integral equations and of boundary value problems with shift. (Russian) *Dokl. Akad. Nauk SSSR* **230** (1976), no. 2, 291-294. (N. K. Karapetjanc) **57** #3775 45E05
- On the approximate solution of certain boundary value problems with shift. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 1(164), 120-123. (N. K. Karapetjanc) **55** #3268 30A88
- The method of approximate factorization. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 4(167), 74-86. (S. G. Samko) **56** #10082 65R05 (45E10)
- Approximate solution of two-element boundary value problems with shift. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 1, 77-88, 142. (G. S. Litvinčuk) **56** #3313 30A88
- On the approximate solution of certain singular integral equations with shift. (Russian) *Differentsial'nye Uravnenija* **14** (1978), no. 3, 522-526, 574. (G. S. Litvinčuk) **58** #12258 45L05
- On the approximate solution of singular integral equations and certain boundary value problems with shift. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev)* No. 34 (1978), 3-14, 164. (V. B. Dybin) **58** #8413 65R05
- Tihonenko, O. M. (with Novikov, S. V.) Optimization of branched training programs. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1975**, no. 1, 68-70, 91. **51** #4754 68A45
- Properties of linear Boolean functions. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1975**, no. 2, 19-23, 99. (W. Wechler) **51** #15230 94A20
- (with Apanasovič, V. V.) On the question of the automatic control of theorem proving. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1976**, no. 2, 15-18, 80. (See RŽMat **1976** #12 V1141) 68A40
- Tihonov, A. A. (with Mel'nikov, G. I.) Method of determining the periodic motion of interacting automatic systems. *Avtomat. i Telemekh.* **1970**, no. 7, 5-14 (Russian. English summary); translated as *Automat. Remote Control* **1970**, no. 7, 1035-1043. (See Zbl **227** #34004) 93C15
- The transformation of certain nonautonomous systems of the differential equations of perturbed motion. (Russian. English summary) *Vestnik Leningrad. Univ. No. 1 Mat. Meh. Astronom. Vyp.* **1** (1973), 113-121, 156. (K. R. Schneider) **50** #13728 34C20
- Estimates of perturbed motions of certain nonlinear nonautonomous systems. (Russian) *Applied mechanics*, No. 1 (Russian), pp. 3-10, 183. Izdat. Leningrad. Univ., Leningrad, 1974. (C. Olech) **51** #1035 34D10
- (with Mel'nikov, G. I.) The application of Čaplygin's theorem in problems of the stability of motion. (Russian) *Applied mechanics*, No. 1 (Russian), pp. 11-19, 183. Izdat. Leningrad. Univ., Leningrad, 1974. (C. Olech) **51** #1034 34D10
- (with Mel'nikov, G. I.) Estimation of the error of approximate solutions by means of differential inequalities. (Russian) *Problems in analytical mechanics, stability and control theories* (Second Četaev Conf., Kazan, 1973) (Russian), pp. 206-211, 340. Izdat. "Nauka", Moscow, 1975. (E. L. Albasiny) **58** #8319 65L99 (34A40)
- Estimates of perturbed motions in some singular cases or in nearby cases. (Russian. English summary) *Vestnik Leningrad. Univ.* **1977**, no. 1 *Mat. Meh. Astronom. vyp.* **1**, 106-113, 167. (Wolfgang Hahn) **57** #3530 34D10
- Tihonov, A. I. (with Martjušov, K. I.; Zaicev, Ju. V.) Design of precision resistors with nonlinear functional characteristics. (Russian) *Trudy Moskov. Orden. Lenin. Energet. Inst. Vyp.* **272** (1975), 122-126. (From the authors' text) **56** #13631 65K05

- Tihonov, A. N.** (with Svešnikov, A. G.) ★Теория функций комплексной переменной. (Russian) [Theory of functions of a complex variable] A course in higher mathematics and mathematical physics, No. 4. Izdat. "Nauka", Moscow, 1967. 304 pp. (Editors) 50 #2452 30-01
- (with Dmitriev, V. I.) The methods of solution of the inverse problem in the theory of antennas. (Russian) *Computing methods and programming, XIII (Russian)*, pp. 209-214. Izdat. Moskov. Univ., Moscow, 1969. (B. A. Mišustin (RŽFiz 1970 #1 Ž226)) 45 #9598 78.45
- (with Svešnikov, A. G.) ★Теория функций комплексной переменной. (Russian) [Theory of functions of a complex variable] Second, unrevised edition. A course in higher mathematics and mathematical physics, No. 4. Izdat. "Nauka", Moscow, 1970. 304 pp. (Editors) 50 #2453 30-01
- (with Vasil'eva, A. B.; Volosov, V. M.) Ordinary differential equations. *Mathematics Applied to Physics*, pp. 162-228. Springer, New York, 1970. (Editors) 54 #628 34-01
- (with Ivanov, V. K.; Lavrent'ev, M. M.) Ill-posed problems. (Russian) *Partial differential equations (Proc. Sympos.) (Russian)*, pp. 224-238. Izdat. "Nauka", Moscow, 1970. (S. Burýšek) 47 #5679 47H99 (65J05)
- (with Svešnikov, A. G.) ★The theory of functions of a complex variable. Translated from the Russian by George Yankovsky. Mir Publishers, Moscow, 1971. 311 pp. (Editors) 50 #2454 30-01
- (with Budak, B. M.; Samarskii, A. A.) ★Сборник задач по математической физике. (Russian) [A collection of problems in mathematical physics] Second edition, corrected. Izdat. "Nauka", Moscow, 1972. 687 pp. (Editors) 49 #9376 35-01 (69.00)
- (with Samarskii, A. A.) ★Уравнения математической физики. (Russian) [The equations of mathematical physics] Fourth edition, corrected. Izdat. "Nauka", Moscow, 1972. 735 pp. (Editors) 49 #9377 35-01 (69.00)
- (with Samarskii, A. A.; Arsen'ev, A. A.) A certain method of asymptotic integral estimations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1972), 1005-1012, 1086. (E. Riekstiņš) 47 #3891 41A60
- (with Svešnikov, A. G.) ★The theory of functions of a complex variable. Translated from the Russian by George Yankovsky. Mir Publishers, Moscow, 1973. 311 pp. (Editors) 50 #2455 30-01
- (with Kondrat'ev, K. Ja.; Smirnov, V. I.; Sretenskii, L. N.) Jurii Aleksandrovich Surinov (on the occasion of his sixtieth birthday). (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 6(174), 231-232. (Editors) 52 #7806 01A70
- (with Samarskii, A. A.; Svešnikov, A. G.; Berezin, I. S.; Vasil'ev, F. P.; Uspenskii, A. B.; Sretenskii, L. N.) In memoriam Boris Mihaïlovič Budak. (Russian) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 28 (1973), no. 4, 106-112. (Editors) 48 #1865 01A70
- (with Svešnikov, A. G.) ★Теория функций комплексной переменной. (Russian) [Theory of functions of a complex variable] Third, augmented edition. A course in higher mathematics and mathematical physics, No. 4. Izdat. "Nauka", Moscow, 1974. 319 pp. (Editors) 50 #4910 30-01
- (with Arsenin, V. Ja.) ★Методы решения некорректных задач. (Russian) [Methods for the solution of ill-posed problems] Izdat. "Nauka", Moscow, 1974. 223 pp. (Editors) 56 #13605a 65J05 (65R05)
- On the problem of the stabilization of a rigid body. (Russian) *Applied mechanics*, No. 1 (Russian), pp. 79-87, 186-187. Izdat. Leningrad. Univ., Leningrad, 1974. (Author's summary) 53 #15034 70.34
- (with Glasko, V. B.; Tihonravov, A. V.) The synthesis of multilayer coverings. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 135-144, 268. (S. Kaliski) 48 #13014 78.65
- A uniqueness theorem for a certain partial differential equation of fractional order. (Russian) *Beiträge Numer. Math.* 4 (1975), 237-244. (J. Chrastina) 56 #3435 35A99 (35K05, 45K05)
- (with Samarskii, A. A.; Il'inskii, A. S.) Aleksei Georgievich Svešnikov (on the occasion of his fiftieth birthday). (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 5, 942-945. (Editors) 51 #12469 01A70
- (with Arsenin, V. Ja.) ★Méthodes de résolution de problèmes mal posés. Traduit du russe par Vladimir Kotliar. Éditions Mir, Moscow, 1976. 202 pp. (Editors) 56 #13605b 65J05 (65R05)
- (with Bol'shev, L. N.; Il'in, V. A.; Krasovskii, N. N.; Prohorov, Ju. V.; Sotskov, B. S.) Petr Ivanovič Kuznecov (on the fortieth anniversary of his scientific activity). (Russian) *Differentsial'nye Uravnenija* 12 (1976), no. 3, 567-570. (Editors) 53 #2588 01A70
- (with Erugin, N. P.; Il'in, V. A.) Andrei Vasil'evič Bicaдзе (on the occasion of his sixtieth birthday). (Russian) *Differentsial'nye Uravnenija* 12 (1976), no. 5, 947-954. (Editors) 53 #12840 01A70 (35-03)
- (with Arsenin, V. Ja.) ★Solutions of ill-posed problems. Translated from the Russian. Preface by translation editor Fritz John. Scripta Series in Mathematics. V. H. Winston & Sons, Washington, D.C.; John Wiley & Sons, New York-Toronto, Ont.-London, 1977. xiii+258 pp. (M. Z. Nashed) 56 #13604 65J05 (65R05, 65Nxx)
- (with Bicaдзе, A. V.; Vladimirov, V. S.; Erugin, N. P.; Nikol'skii, S. M.; Samarskii, A. A.) Vladimir Aleksandrovich Il'in (on the occasion of his fiftieth birthday). (Russian) *Differentsial'nye Uravnenija* 14 (1978), no. 5, 947-954. (Editors) 58 #16013 01A70
- (with Allahverdiev, Dž. Ė.; Babaev, A. A.; Vekua, N. P.; Kupradze, V. D.; Maksudov, F. G.) Ašraf Iskenderovič Guseinov (on the occasion of his seventieth birthday). (Russian) *Uspehi Mat. Nauk* 33 (1978), no. 1(199), 235-238. (Editors) 58 #16010 01A70
- See also Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, 48 #8022; Bicaдзе, A. V.; et al., 54 #9929; Birthday: Tihonov, A. N., 54 #12460; Sadovskii, M. A.; et al., 55 #5364; Birthday: Tihonov, A. N., 56 #5179; Aleksandrov, P. S., 56 #6584; Alimov, S. A., 56 #8952; Bicaдзе, A. V.; et al., 57 #9429 and Problems in mathematical physics and computational mathematics, 58 #26648
- Tihonov, Ju. L.** (with Mihaïlenko, V. M.) The search for an extremum under conditions of uncertainty for a certain class of network systems. (Russian) *Theory of optimal decisions (Russian)*, pp. 51-58. Akad. Nauk. Ukrain. SSR Inst. Kibernet., Kiev, 1976. (P. Vondráček) 58 #15093 90B10
- Tihonov, N. A.** Travelling waves in a nonlinear medium and the determination from the properties of the medium. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 144-151. (M. Yanowitch) 46 #2996 78.35
- Harmonic beats in a nonlinear dispersive medium, and the determination from the properties of the medium. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 1476-1481. (M. Yanowitch) 46 #2979 76.35
- The determination of certain nonlinear characteristics of an anisotropic medium. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1972), 1478-1488, 1629. (S. Kaliski) 47 #9978 78.42
- The determination of nonlinear action. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1973), 241-247, 272. (Djordje Djukic) 47 #4505 70.45
- The stability of a certain solution of a nonlinear oscillation equation. (Russian) *Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 6, 1519-1525, 1628. (V. M. Babič) 56 #9093 35L60
- Tihonov, O. N.** A generalization of Newton's method for computing the roots of algebraic polynomials. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 6 (169), 122-123. (A. S. Householder) 56 #4147 65H05
- Tihonov, V. A.** Infinitesimal p -bendings. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1971, no. 7(110), 94-98. (A. Urban) 45 #4290 53A05
- Graduated Čebyšev nets on multidimensional surfaces of an affine space. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogoobraz. Figur Vyp. 7* (1976), 119-129, 154. (M. C. Chaki) 58 #18183 53A15
- Nets that are determined by hyperdistributions in an affine space and their generalizations. (Russian) *Problems in geometry, Vol. 8 (Russian)*, pp. 197-223, 281 (errata insert) *Akad. Nauk SSSR Vsesojuz. Inst. Nauch. i Tehn. Informacii, Moscow* 1977. (H. Kilp) 58 #12749 53A15
- Tihonov, V. I.** ★Выбросы случайных процессов. (Russian) [Up-crossings of random processes] Izdat. "Nauka", Moscow, 1970. 392 pp. (K. Jacobs) 46 #2738 60G99
- (with Andreev, N. I.; Dostupov, B. G.; Kazakov, I. E.; Kozlov, Ju. M.; Kočetkov, V. T.; Pocoluev, A. V.; Sajutin, Ju. V.; Smirnov, V. I.; Sotskii, N. M.; Černeckii, V. I.) ★Статистические методы в проектировании нелинейных систем автоматического управления. (Russian) [Statistical methods in the design of nonlinear automatic control systems] Edited by B. G. Dostupov. Nonlinear Automatic Control Systems, Vol. 1. Izdat. "Mašinostroenie", Moscow, 1970. 407 pp. (errata insert) (V. N. Igolkin) 50 #9409 93E20
- Tihonravov, A. V.** (with Glasko, V. B.; Tihonov, A. N.) The synthesis of multilayer coverings. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 135-144, 268. (S. Kaliski) 48 #13014 78.65
- Tibov, M. S.** Optimal sequential estimation plans under nonquadratic loss function. (Russian. English summary) *Teor. Verojatnost. i Primenen.* 23 (1978), no. 1, 137-141. (W. Hoeffding) 57 #10948 62L12 (62L15)
- Tiit, E.** Reservation without renewal. (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ.* 13 (1968), 22-38. 45 #8253 90B99
- Tiit, Ė. A.** A family of statistical methods of classification (of pattern recognition). (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ.* No. 25 (1972), 3-38. (Jana Zvárová) 48 #10229 68A45
- A certain modification of a correlation graph. (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ.* No. 26 (1972), 19-34. (Jana Zvárová) 50 #1421 62H30
- Markov processes, with parameters that depend on a certain subspace, as models for demographic prediction. (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ.* No. 27 (1973), 47-62. (P. Jagers) 49 #6367 60J20
- The generalized concept of attribute-vector. (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ. Vyp. 32* (1975), 3-30. (Author's introduction) 55 #6703 62H99
- Universe and sample. (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ. Vyp. 32* (1975), 31-55. (Author's introduction) 55 #6704 62H99
- The problem of statistical data processing. (Russian) *Trudy Vyčisl. Centra Tartu. Gos. Univ. Vyp. 32* (1975), 56-91. (From the author's introduction) 55 #6705 62H99
- Tijdeman, Robert** On the algebraic independence of certain numbers. *Nederl. Akad. Wetensch. Proc. Ser. A 74=Indag. Math.* 33 (1971), 146-162. (R. Wallisser) 45 #3331 10F35
- On a telephone problem. *Nieuw Arch. Wisk.* (3) 19 (1971), 188-192. (R. L. Graham) 49 #7151 05A05
- On the maximal distance of numbers with a large prime factor. *J. London Math. Soc.* (2) 5 (1972), 313-320. (J. Knopfmacher) 47 #1762 10H15
- Old and new in number theory. *Nieuw Arch. Wisk.* (3) 20 (1972), 20-30. (Editorial) 46 #143 10F25 (10H30)
- (with Cijssouw, Pieter Leendert) Distinct prime factors of consecutive integers. *Diophantine approximation and its applications (Proc. Conf., Washington, D.C., 1972)*, p. 59-76. Academic Press, New York, 1973. (P. Bundschuh) 50 #7047 10F35 (10H15)
- (with Cijssouw, Pieter Leendert) On the transcendence of certain power series algebraic numbers. *Acta Arith.* 23 (1973), 301-305. (K. Mahler) 47 #6619 10F35
- (with Balkema, A. A.) Some estimates in the theory of exponential sums. *Acta Math. Acad. Sci. Hungar.* 24 (1973), 115-133. (K. S. Williams) 47 #153 10G05
- On integers with many small prime factors. *Compositio Math.* 26 (1973), 319-331. (W. W. Adams) 48 #3896 10H15
- On a distribution problem in finite and countable sets. *J. Combinatorial Theory Ser. A* 15 (1973), 129-137. (Stephen Tanny) 47 #8318 05A05
- An auxiliary result in the theory of transcendental numbers. *J. Number Theory* 1 (1973), 80-94. (K. Mahler) 47 #4942 10F35
- On the maximal distance between integers composed of small primes. *Compositio Math.* 28 (1974), 159-162. (I. Niven) 49 #10646 10H20
- (with Meijer, H. G.) On additive functions. *Compositio Math.* 29 (1974), 265-271. (R. Wallisser) 51 #378 10F35
- (with Meijer, H. G.) On integers generated by a finite number of fixed prime factors. *Compositio Math.* 29 (1974), 273-286. (R. Wallisser) 51 #377 10F35
- (with Leenman, H.) Bounds for the maximum modulus of the first k power sums. *Nederl. Akad. Wetensch. Proc. Ser. A 77=Indag. Math.* 36 (1974), 387-391. (M. Wunderlich) 52 #10643 10J05

- Some applications of Baker's sharpened bounds to Diophantine equations. *Séminaire Delange-Pisot-Poitou* (16e année: 1974/75), *Théorie des nombres, Fasc. 2, Exp. no. 24*, 7 pp. Secrétariat Mathématique, Paris, 1975. (Grigoriĭ V. Čudnovskii) **53** #7940 10B30 (10F35)
- (with Cijssouw, Pieter Leendert) An auxiliary result in the theory of transcendental numbers. II. *Duke Math. J.* **42** (1975), 239-247. (K. Mahler) **52** #5584 10F35
- (with Van der Poorten, Alfred J.) On common zeros of exponential polynomials. *Enseignement Math.* (2) **21** (1975), no. 1, 57-67. (H. J. Landau) **52** #292 10F10
- (with Ramachandra, K.; Shorey, T. N.) On Grimm's problem relating to factorisation of a block of consecutive integers. *J. Reine Angew. Math.* **273** (1975), 109-124. (P. Bundschuh) **51** #384 10H15 (10F35)
- (with Voorhoeve, Marc; Van der Poorten, Alfred J.) On the number of zeros of certain functions. *Nederl. Akad. Wetensch. Proc. Ser. A78 = Indag. Math.* **37** (1975), no. 4, 407-416. (H.-J. Runckel) **53** #3274 30A08 (10F99)
- Hilbert's seventh problem: on the Gelfond-Baker method and its applications. *Mathematical developments arising from Hilbert problems* (Proc. Sympos. Pure Math., Northern Illinois Univ., De Kalb, Ill., 1974), pp. 241-268. Amer. Math. Soc., Providence, R. I., 1976. (D. W. Masser) **55** #7936 10F35 (10B99)
- Applications of the Gelfond-Baker method to rational number theory. *Topics in number theory* (Proc. Colloq., Debrecen, 1974), pp. 399-416. Colloq. Math. Soc. János Bolyai, Vol. 13, North-Holland, Amsterdam, 1976. (Editors) **58** #27753 10B30
- On the equation of Catalan. *Acta Arith.* **29** (1976), no. 2, 197-209. (Grigoriĭ V. Čudnovskii) **53** #7941 10B30 (10F35)
- (with Schinzel, Andrzej) On the equation $y^m = P(x)$. *Acta Arith.* **31** (1976), no. 2, 99-204. (David Lee Hilliker) **54** #10142 10B30
- (with Shorey, T. N.) On the greatest prime factors of polynomials at integer points. *Compositio Math.* **33** (1976), no. 2, 187-195. (S. V. Kotov) **54** #12640 10B99 (10F35)
- (with Ramachandra, K.; Shorey, T. N.) On Grimm's problem relating to factorisation of a block of consecutive integers. II. *J. Reine Angew. Math.* **288** (1976), 92-201. (P. Bundschuh) **55** #287 10H15
- (with Shorey, T. N.) New applications of Diophantine approximations to Diophantine equations. *Math. Scand.* **39** (1976), no. 1, 5-18. (A. J. van der Poorten) **56** #5425 10B25 (10F35)
- (with Shorey, T. N.; Van der Poorten, Alfred J.; Schinzel, Andrzej) Applications of the Gelfond-Baker method to Diophantine equations. *Transcendence theory: advances and applications* (Proc. Conf., Univ. Cambridge, Cambridge, 1976), pp. 59-77. Academic Press, London, 1977. (John H. Loxton) **57** #12383 10B45
- See also Mignotte, Maurice, **53** #7971 and Lang, Serge, **58** #27752
- Henk Some results for the dynamic (s, S) inventory model. *Statistica Neerlandica* **25** (1971), 211-226. (M. F. Neuts) **46** #984 60K30
- ★Analysis of (s, S) inventory models. Mathematical Centre Tracts, No. 40. *Mathematisch Centrum, Amsterdam*, 1972. v + 149 pp. (loose errata and addenda) (E. S. Boylan) **51** #4963 90B05 (60K10, 90C45)
- (with Hordijk, Arie) A counterexample in discounted dynamic programming. *J. Math. Anal. Appl.* **39** (1972), 455-457. (D. Hochstädter) **46** #6786 90A05
- (with Hordijk, Arie) ★Convergence results and approximations for optimal (s, S) policies. *Mathematisch Centrum, Afdeling Mathematische Besliskunde*, No. BW 22/73. Mathematical Center, Decision Theory Section, No. BW 22/73] *Mathematisch Centrum, Amsterdam*, 1973. ii + 14 pp. (Editors) **52** #16557 90B05
- ★An iterative method for approximating average cost optimal (s, S) inventory policies. *Mathematisch Centrum, Afdeling Mathematische Besliskunde*, No. BW 23/73. Mathematical Center, Decision Theory Section, No. BW 23/73] *Mathematisch Centrum, Amsterdam*, 1973. ii + 16 pp. (Editors) **52** #16562 90B05
- (with Hordijk, Arie) ★A modified form of the iterative method of undiscounted dynamic programming. *Mathematisch Centrum, Afdeling Mathematische Besliskunde*, No. BW 21/73. [Mathematical Center, Decision Theory Section, No. BW 21/73] *Mathematisch Centrum, Amsterdam*, 1973. iii + 9 pp. (Editors) **52** #16652 90C40
- (with Hordijk, Arie) Convergence results and approximations for optimal (s, S) policies. *Management Sci.* **20** (1973/74), 1432-1438. (D. L. Iglehart) **51** #2609 90B05
- ★An alternative proof of the formula for the average workload cost for the D -policy in the $M/G/1$ queue. *Mathematisch Centrum, Afdeling Mathematische Besliskunde*, BW 31/74. *Mathematisch Centrum, Amsterdam*, 1974. iii + 7 pp. (Richard F. Serfozo) **53** #9431 60K25
- (with Balachandran, K. R.) On the D -policy for the $M/G/1$ queue. *Management Sci.* **21** (1974/75), no. 9, 1073-1076. (Ralph L. Disney) **53** #4282b 60K25 (90B35)
- (with Hordijk, Arie) On a conjecture of Iglehart. *Management Sci.* **21** (1974/75), no. 11, 1342-1345. (Stratton C. Jaquette) **55** #11998 90B05
- (with Hordijk, Arie) The method of successive approximations and Markovian decision problems. *Operations Res.* **22** (1974), no. 3, 519-521. (Yvo M. I. Dirickx) **56** #2208 90A05 (60J20)
- A control policy for a priority queue with removable server. *Operations Res.* **22** (1974), no. 4, 833-837. (Micha Yadin) **55** #13610 60K25
- An iterative method for approximating average cost optimal (s, S) inventory policies. *Z. Operations Res. Ser. A-B* **18** (1974), A215-A223. (R. Salia) **50** #12185 90B05
- (with Hordijk, Arie) A modified form of the iterative method of dynamic programming. *Ann. Statist.* **3** (1975), 203-208. (I. V. Romanovskii) **51** #15003 90C40
- (with Hordijk, Arie; Schweitzer, Paul J.) The asymptotic behaviour of the minimal total expected cost for the denumerable state Markov decision model. *J. Appl. Probability* **12** (1975), 298-305. (H. Taylor) **51** #15004 90C40
- Optimal control of the workload in an $M/G/1$ queueing system with removable server. (German and French summaries) *Math. Operationsforsch. Statist.* **7** (1976), no. 6, 933-943. (Micha Yadin) **55** #13609 60K25
- (with Hordijk, Arie) A simple proof of the equivalence of the limiting distributions of the continuous-time and the embedded process of the queue size in the $M/G/1$ queue. *Statistica Neerlandica* **30** (1976), no. 2, 97-100. (T. Kawata) **54** #14151 60K25
- (with de Leve, G.; Federgrün, A.) A general Markov decision method. I. Model and techniques. *Advances in Appl. Probability* **9** (1977), no. 2, 296-315. (H. Taylor) **56** #4735 90A05
- (with de Leve, G.; Federgrün, A.) A general Markov decision method. II. Applications. *Advances in Appl. Probability* **9** (1977), no. 2, 316-335. (H. Taylor) **56** #4736 90A05
- (with Anthonisse, Jac. M.) Exponential convergence of products of stochastic matrices. *J. Math. Anal. Appl.* **59** (1977), no. 2, 360-364. (E. Seneta) **56** #1465 60J10 (15A51)
- (with van der Duyn Schouten, F. A.) Inventory control with two switch-over levels for a class of $M/G/1$ queueing systems with variable arrival and service rate. *Stochastic Processes Appl.* **6** (1977/78), no. 2, 213-222. (John P. Lehoczky) **57** #1707 60K25
- On a switch-over policy for controlling the workload in a queueing system with two constant service rates and fixed switch-over costs. (German summary) *Z. Operations Res. Ser. A-B* **21** (1977), no. 1, A19-A32. (Richard F. Serfozo) **56** #3974 60K25
- (with Federgrün, A.) The optimality equation in average cost denumerable state semi-Markov decision problems: recurrence conditions and algorithms. *J. Appl. Probability* **15** (1978), no. 2, 356-373. (Paul J. Schweitzer) **57** #15477 90C40 (90C45, 90C50)
- See also Markov decision theory, **56** #14660
- Tijs, S. H. On S -equivalence and isomorphism of games in characteristic function form. *Internat. J. Game Theory* **5** (1976), no. 4, 209-210. (James W. Friedman) **57** #2598 90D12
- Tikekar, R. S. On the gravitational invariant $S = R^{h_{ij}} R_{h_{ij}}$. *Indian J. Pure Appl. Math.* **3** (1972), no. 5, 783-790. (A. Raychaudhuri) **48** #5598 83.53
- A note on perfect fluid spherical distributions in the curvature coordinate system. *Indian J. Pure Appl. Math.* **5** (1974), no. 5, 470-477. (H. A. Buchdahl) **53** #10151 83.53
- Tikekar, V. G. On some integral properties of hypergeometric functions. *Proc. Indian Acad. Sci. Sect. A* **74** (1971), 189-194. (R. N. Jain) **45** #7122 33A30
- On the solution of a two-point boundary-value problem of a linear ordinary differential equation with a parameter. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 120-124 (1974). (C. Avramescu) **53** #13702 34B10
- Tikheyeva, A. M. (with Smirnov, V. I.) The connection between the Bayesian risk and the Kolmogorov distance and a modification of it in recognition problems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1977**, no. 6, 189-192 (Russian); translated as *Engrg. Cybernetics* **15** (1977), no. 6, 147-150 (1978). (Authors' summary) **58** #25169 68A45 (94A05)
- Tikhomirova, I. G. See Tihomirova, I. G.
- Tikhonenko, L. Ia. See Tihonenko, L. Ja.
- Tikhonov, A. A. See Tihonov, A. A.
- Tikhonov, Andrey N. See Tihonov, A. N.
- Tikochinsky, Yoel Exact propagators for quadratic Hamiltonians. *J. Mathematical Phys.* **19** (1978), no. 4, 888-891. (M. J. Goovaerts) **57** #8608 81.34
- al-Tikriti, M. N. See Al-Tikriti, M. N.
- Tiktopoulos, George Veneziano amplitudes as a consequence of meromorphy and Regge behavior. *Phys. Lett.* **31B** (1970), 138-140. (H. Ezawa) **45** #8177 81.46
- (with Treiman, S.) Validity of the relativistic eikonal approximation. *Phys. Rev. D* (3) **2** (1970), 805-810. (M. J. Westwater) **48** #1614 81.41
- Tiku, M. L. A note on the distribution of the doubly non-central F distribution. *Austral. J. Statist.* **14** (1972), 37-40. (Benjamin Epstein) **50** #15070 62E15
- Doubly noncentral F distribution—tables and applications. *Selected tables in mathematical statistics, Vol. II*, pp. 139-176. Amer. Math. Soc., Providence, R. I., 1974. (Author's summary) **53** #11945 62Q05
- A new statistic for testing for normality. *Comm. Statist.* **3** (1974), 223-232. (I. Vincze) **51** #4507 62F05
- (with Rai, Kamta; Mead, E. R.) A new statistic for testing exponentiality. *Comm. Statist.* **3** (1974), 485-493. (M. Knott) **51** #7139 62G10
- Testing normality and exponentiality in multi-sample situations. *Comm. Statist.* **3** (1974), 777-794. (M. M. Siddiqui) **51** #2099 62F05
- A new statistic for testing suspected outliers in single and multi sample situations. *Proceedings of the Symposium on Statistics and Related Topics* (Carleton Univ., Ottawa, Ont., 1974), Paper No. 13, 19 pp. Carleton Univ., Ottawa, Ont., 1975. (V. P. Bhapkar) **52** #1989 62F05
- A new statistic for testing suspected outliers. *Comm. Statist.* **4** (1975), no. 8, 737-752. (Anthony O'Hagan) **52** #9460 (E 55 #11467) 62F05
- (with Stewart, D. E.) Estimating and testing group effects from type I censored normal samples in experimental design. *Comm. Statist.—Theory Methods* **A6** (1977), no. 15, 1485-1501. (A. C. Cohen) **58** #3164 62F10 (62K10)
- See also Applied statistics, **52** #1944 and Hawkins, Douglas M., **55** #11467
- Tikunov, E. L. On the theory of the controllability of linear systems. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1970**, no. 3, 14-19, 92. (F. M. Kirillova) **48** #13336 93B05
- van Tilborg, Henricus Carolus Adrianus ★On weights in codes. Department of Mathematics, Technological University Eindhoven, T. H.-Report 71-WSK-03. *Onderafdeling der Wiskunde, Technische Hogeschool Eindhoven, Eindhoven*, 1971. 76 pp. (H. F. Mattson, Jr.) **48** #10659 94A10
- (with Cameron, Peter J.; Hall, J. I.; van Lint, Jacobus H.; Springer, Tonny Albert) Translates of subgroups of the multiplicative group of a finite field. *Nederl. Akad. Wetensch. Proc. Ser. A* **78** = *Indag. Math.* **37** (1975), no. 4, 285-289. (Robert M. McConnel) **53** #2907 12C30
- (with Goethals, Jean-Marie) Uniformly packed codes. *Philips Res. Rep.* **30** (1975), 9-36. (R. J. McEliece) **51** #12409 94A10
- ★Uniformly packed codes. With a Dutch summary. Doctoral dissertation, University of Technology Eindhoven. *Technische Hogeschool Eindhoven, Eindhoven*, 1976. 76 pp. (F. J. MacWilliams) **54** #2329 94A10
- A lower bound for v in a $t-(v, k, \lambda)$ design. *Discrete Math.* **14** (1976), no. 4, 399-402. (Joseph A. Thas) **53** #164 05B05
- What are t -designs? (Dutch) Discrete mathematics. *Nieuw Tijdschr. Wisk.* **63** (1976), no. 4, 237-244. (Joseph A. Thas) **54** #10044 05B05

- (with van Lint, Jacobus H.; Wiekema, J. R.) Block design with $v=10, k=5, \lambda=4$. *J. Combinatorial Theory Ser. A* **23** (1977), no. 1, 105-115. (Sanpei Kageyama) 55 #12540 05B05
- On quasi-cyclic codes with rate $1/m$. *IEEE Trans. Inform. Theory* **24** (1978), no. 5, 628-630. (Author's summary) 58 #20802 94A10
- An upper bound for codes in a two-access binary erasure channel. *IEEE Trans. Information Theory* **IT-24** (1978), no. 1, 112-116. (S. W. Golomb) 58 #9783 94A10
- (with Berlekamp, Elwyn R.; McEliece, Robert J.) On the inherent intractability of certain coding problems. *IEEE Trans. Information Theory* **IT-24** (1978), no. 3, 384-386. (A. T. Amin) 58 #13912 68A20 (94A10)
- See also van Lint, Jacobus H., 50 #4311
- Tile, H.** See Thiele, H.
- Tilgner, Hans** Symmetric Lie algebras of non-linear transformations of conformal type in quantum mechanics. *Internat. J. Theoret. Phys.* **7** (1973), 379-388. (Author's summary) 50 #15649 81.22
- Algebraical comparison of classical and quantum polynomial observables. *Internat. J. Theoret. Phys.* **7** (1974), 67-75. (Author's summary) 50 #12032 81.22
- On nonlinear transformations in vector spaces. Colineation and conformal groups. *J. Mathematical Phys.* **15** (1974), 360-366. (Jiri Patera) 52 #12581 81.22
- On the use of globally symmetric pseudo-Riemannian spaces in cosmology. *Rep. Mathematical Phys.* **5** (1974), no. 1, 51-64. (O. Loos) 52 #12708 83.53
- A graded generalization of Lie triples. *J. Algebra* **47** (1977), no. 1, 190-196. (Armin Thedy) 56 #15719 17B60
- Extensions of Lie-graded algebras. *J. Mathematical Phys.* **18** (1977), no. 10, 1987-1991. (L. S. Wollenberg) 56 #17539 81.17
- Graded generalizations of Weyland- and Clifford algebras. *J. Pure Appl. Algebra* **10** (1977/78), no. 2, 163-168. (L. Corwin) 56 #15720 17B60
- Generalized representations for groups and symmetric spaces of matrices. *Linear and Multilinear Algebra* **5** (1977/78), no. 1, 27-31. (Author's summary) 57 #435 20C15 (20G05)
- The group structure of pseudo-Riemannian curvature spaces. *J. Mathematical Phys.* **19** (1978), no. 5, 1118-1125. (Author's summary) 57 #18716 83.53 (53C50)
- See also Concepts in hadron physics, 48 #1596
- Tilidetzke, Robert** On semigroups in which either $a^k=0$ or $a \in Sa^kS$ for any element. *Math. Japon.* **23** (1978/79), no. 1, 45-48. (H. D'Alarcao) 58 #16922 20M10
- van Till, J. W. J.** Comments on "On the definition and generation of Walsh functions" (IEEE Trans. Computers **C-21** (1972), 187-189) by A. C. Davies. *IEEE Trans. Computers* **C-22** (1973), 702-703. (A. E. Danese) 50 #5060 33A65
- Tillekeratne, K.** Spatial numerical range of an operator. *Proc. Cambridge Philos. Soc.* **76** (1974), 515-520. (Mary R. Embry) 49 #11281 47A10
- Tiller, G.** (with Lal, Mohan; Summers, T.) Unitary sociable numbers. *Proceedings of the Second Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1972)*, pp. 211-216. *Congressus Numerantium, No. VII, Utilitas Math., Winnipeg, Man., 1973*. (Kenneth Yocum) 50 #4471 10A40 (10A20)
- (with Lal, Mohan; Wareham, H.) A note on Hirschhorn numbers. *Proceedings of the Third Manitoba Conference on Numerical Mathematics (Winnipeg, Man., 1973)*, pp. 271-276. *Utilitas Math., Winnipeg, Man., 1974*. (Authors' summary) 49 #210 10A40
- Tiller, John** Unions in $E-M$ categories and coreflective subcategories. *Comment. Math. Univ. Carolinae* **15** (1974), 173-187. (H. Herrlich) 49 #2880 18A40
- Tiller, Wayne** P -commutative Banach $*$ -algebras. *Trans. Amer. Math. Soc.* **180** (1973), 327-336. (J. W. M. Ford) 48 #877 46K05
- Tillett, J. P. K.** Axial and transverse Stokes flow past slender axisymmetric bodies. *J. Fluid Mech.* **44** (1970), 401-417. (K. B. Ranger (Zbl 216, 523)) 46 #4853 76.45
- Tilley, D. E.** (with Hongoh, M.; Sharp, Robert T.) Explicit $O(5)$ Wigner coefficients. *J. Mathematical Phys.* **15** (1974), 782-788. (A. Hartkämper) 51 #2504 81.22
- Tilley, K. W.** See Leadership and management appraisal, 48 #13203
- Tillier, André** Sur les idempotents primitifs d'une algèbre de Jordan formelle réelle. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A767-A769. (Michel L. Racine) 51 #3250 17C35
- Tilling, Laura** (with Gray, J. J.) Johann Heinrich Lambert, mathematician and scientist, 1728-1777. (French summary) *Historia Math.* **5** (1978), no. 1, 13-41. (M. Kline) 56 #15325 01A70 (01A50)
- See also Correspondence: Isaac Newton, 58 #15936 and Correspondence: Isaac Newton, 58 #21348
- Tillman, C. C.** See Papers: System performance evaluation, 50 #15416
- Tillman, Frank A.** (with Hwang, Ching Lai; Kuo, Way) Optimization techniques for system reliability with redundancy—a review. *IEEE Trans. Reliab.* **R-26** (1977), no. 3, 148-155. (D. Hochstädter) 57 #11708 90B25
- Tillman, John A.** The power of the Durbin-Watson test. *Econometrica* **43** (1975), no. 5-6, 959-974. (Author's summary) 55 #13638 62F05 (62P20)
- Tillman, Stephen J.** Binary integral quadratic forms over a certain class of function fields. *J. Number Theory* **4** (1972), 248-260. (K. G. Ramanathan) 49 #2543 10C05
- Tilquin, C.** (with Cléroux, R.) The block replacement model with inactivity periods and general cost structure. *Canad. J. Statist.* **2** (1974), no. 2, 197-213. (Henry W. Block) 53 #11923 62N05
- (with Cléroux, R.) Periodic replacement with minimal repair at failure and general cost function. *J. Statist. Comput. and Simulation* **4** (1975), no. 1, 63-77. (Peter Bod) 57 #9031 90B25
- (with Cléroux, R.) Periodic replacement with minimal repair at failure and adjustment costs. *Naval Res. Logist. Quart.* **22** (1975), no. 2, 243-254. (C. Mohan) 52 #2561 90B25
- (with Cléroux, R.) Block replacement policies with general cost structures. *Technometrics* **17** (1975), no. 3, 291-298. (Takehisa Fujisawa) 52 #10005 90B25
- Tilson, Bret R.** Decomposition and complexity of finite semigroups. *Semigroup Forum* **3** (1971/72), no. 3, 189-250. (W. R. Nico) 45 #5262 20M10
- (with Rhodes, John L.) Improved lower bounds for the complexity of finite semigroups. *J. Pure Appl. Algebra* **2** (1972), 13-71. (G. J. Lallement) 45 #8756 20M10
- The intersection of free submonoids of a free monoid is free. *Semigroup Forum* **4** (1972), 345-350. (H.-J. Hoehnke) 47 #369 20M05
- On the complexity of finite semigroups. *J. Pure Appl. Algebra* **5** (1974), 187-200. (G. J. Lallement) 51 #771 20M20
- (with Rhodes, John L.) A reduction theorem for complexity of finite semigroups. *Semigroup Forum* **10** (1975), no. 2, 96-114. (André Lentini) 52 #5837 20M10
- (with Rhodes, John L.) Local complexity of finite semigroups. *Algebra, Topology, and category theory (collection of papers in honor of Samuel Eilenberg)*, pp. 149-166. Academic Press, New York, 1976. (Heinrich Seidel) 55 #5775 20M20 (68A20)
- See also Algebraische Theorie abstrakter Automaten, formaler Sprachen und Halbgruppen, 49 #10487; Global structure theories for finite semigroups, 58 #950 and Eilenberg, Samuel, 58 #26604b
- Tilt, Borge** (with Cooper, Robert B.) On the relationship between the distribution of maximal queue length in the $M/G/1$ queue and the mean busy period in the $M/G/1/n$ queue. *J. Appl. Probability* **13** (1976), no. 1, 195-199. (Sig I. Rosenlund) 52 #15728 (EA 53) 60K25
- Timan, A. F.** (with Trofimov, V. M.) ★Введение в теорию гармонических функций (Russian) [Introduction to the theory of harmonic functions] *Izdat. "Nauka", Moscow* 1968. 207 pp. (A. Borzymowski) 47 #3691 31-02
- The e -entropy of Arzelà compacta. (Russian) *Funkcional. Anal. i Priložen.* **5** (1971), no. 3, 104-105. (W. Sznleń) 45 #9308 54H20
- Realization of certain ultrametric spaces, and the inverse problem for e -entropy in h_p -spaces. (Russian) *Dokl. Akad. Nauk SSSR* **218** (1974), 525-527. (B. Bojanov) 50 #10634 (E 52) #3827 41A45
- Letter to the editors: "Realization of certain ultrametric spaces, and the inverse problem for e -entropy in L_p -spaces" (Dokl. Akad. Nauk SSSR **218** (1974), 525-527) (Russian) *Dokl. Akad. Nauk SSSR* **223** (1975), no. 1, 10. (B. Bojanov) 52 #3827 41A45
- Two examples for S. V. Uspenskii's lemma. (Russian) *Sibirsk. Mat. Ž.* **16** (1975), 189-190, 198. (H. Triebel) 51 #3890 46E35
- The isometric mapping of certain ultrametric spaces into the L_p spaces. (Russian) Theory of functions and its applications (Collection of articles dedicated to Sergei Mihailovič Nikol'skii on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **134** (1975), 314-326, 411. (J. Peetre) 52 #11443 41A65 (46C30)
- (with Trofimov, V. M.) The exact constants in certain inverse theorems for approximations by trigonometric polynomials. (Russian) Presented at the International Conference on the Theory of Approximation of Functions (Kaluga, 1975). *Mat. Zametki* **20** (1976), no. 5, 787-792. (W. R. Madych) 56 #9166 42A08
- The exact order of increase of e -entropy and e -capacity of Arzelà compacta of any degree of massiveness. (Russian) *Metric questions of the theory of functions and mappings* (Russian), pp. 131-142, 168. *Naukova Dumka, Kiev*, 1977. (Author's summary) 58 #29667 41A45
- (with Strukov, L. I.) Mathematical expectation of continuous functions of random variables, smoothness, and variance. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 3, 658-664, 719. (S. A. Book) 56 #12722 41A30
- Timan, M. F.** Certain theorems on the embedding of L_p -classes of functions. (Russian) *Dokl. Akad. Nauk SSSR* **193** (1970), 1251-1254. (M. Cîrnu) 51 #1377 46E35
- Best approximation of periodic functions by trigonometric polynomials and transformations of convolution type. (Russian) *Dokl. Akad. Nauk SSSR* **198** (1971), 776-778. (F. Schipp) 45 #4041 42A08
- (with Gaimazarov, G.) Deviations of periodic functions of two variables from certain polynomials. (Russian) Tajiki summary *Dokl. Akad. Nauk Tadžik. SSR* **15** (1972) no. 5, 6-8. (T. Bojanov) 47 #708 42A92 (41A50)
- The imbedding of the $L_p^{(k)}$ classes of functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 10(149), 61-74. (J. Albrycht) 51 #1378 46E35
- (with Ponomarenko, V. G.) The approximation of periodic functions of two variables by sums of Marcinkiewicz type. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1975**, no. 9(160), 59-67. (O. D. Gabisonija) 56 #12745 42A08
- A sharpening of the Hardy-Littlewood-Paley theorem, and some imbedding theorems. (Russian) *Imbedding theorems and their applications (Proc. All-Union Sympos. Alma-Ata, 1973)* (Russian), pp. 155-159, 194-195. *Izdat. "Nauka" Kazah. SSR, Alma-Ata*, 1976. (Author's summary) 57 #17270 46E35 (41A10)
- The behavior near the boundary of the derivatives of the solution of a certain boundary value problem. (Russian) *Differential'nye Uravnenija* **13** (1977), no. 3, 538-543, 574. (Ja. A. Roitberg) 57 #10217 35J40
- Orthonormal systems satisfying an inequality of S. M. Nikol'skii. (Russian summary) *Anal. Math.* **4** (1978), no. 1, 75-82. (R. A. Askey) 57 #10351 42A06 (41A50, 42A08)
- Timan, O. A.** The Brauer bounds for characteristic roots of indecomposable stochastic matrices. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 192-198. (A. S. Householder) 45 #6845 15A51
- Some nondegeneracy tests for irreducible matrices. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 209-214, 270. (O. Pokorná) 52 #9583 65F15
- Timann, V.** (with Kigel', V. R.) A generalized method-3 for relative concessions, and an algorithm for solving linear two-criterion problems. (Russian. English summary) *Issled. Operacii i ASU Vyp.* **9** (1977), 42-50, 121. (Authors' summary) 57 #2586 90C50
- Timasov, A. A.** See Cybernetics and computer technology, 48 #1517
- Timbeau, Jean** Structure spinorielle sur une variété presque-symplectique. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 273-276. (J. P. Wilson) 50 #8365 53C15
- (with Crumeyrolle, Albert) Quantification des systèmes classiques sur les variétés pseudo-riemanniennes à structure spinorielle. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 22, Aiii, A1535-A1538. (J. P. Wilson) 51 #11582 58F05 (53C50)
- (with Crumeyrolle, Albert) Gradient symplectique réduit et condition de Klein-Gordon. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 1, Aii, A49-A52. (Kotik K. Lee) 52 #11978 58A30 (58F05)
- La signification spinorielle de la condition d'intégralité. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 16, Aiii, A887-A889. (J. P. Wilson) 53 #9233 57D15 (58F05)
- Timčenko, A. A.** (with Žuk, K. D.; Dolenko, T. I.) ★Исследование структур и моделирование логико-динамических систем. (Russian) [A study of the structures and

- odeling of logical-dynamical systems] *Izdat. "Naukova Dumka", Kiev, 1975. 199 pp.*
 (adim Komkov) **58** #26378 93C99
- enko, B. D. (with Maïorov, S. A.; Novikov, G. I.; Aliev, T. I.; Maharev, È. I.;
 ovogii, P. S.) ★ Основы теории вычислительных систем. (Russian) [Foundations
 of the theory of computer systems] *Izdat. "Vyss. Skola", Moscow, 1978. 408 pp.*
 Publisher's description) **58** #19302 68A05 (93A99)
- enko, L. P. (with Kulikov, È. L.; Kinikstul', E. I.) Estimate of error in the solution of
 anterior problems of microwave electrodynamics. *Radiotekh. i Elektron. 17* (1972),
 1793-1798 (Russian); translated as *Radio Engrg. Electron. Phys. 17* (1972), 1427-1431.
 A. Nikodémusz) **51** #4860 78.49
- enko, N. A. (with Derguzov, V. I.; Melan'ina, T. M.) Application of the methods of
 perturbation theory to linear differential equations with periodic coefficients. (Russian)
 problems of mathematical analysis, No. 5: *Linear and nonlinear differential equations,*
differential operators (Russian), pp. 47-66. *Izdat. Leningrad. Univ., Leningrad, 1975.*
 Björn Textorius) **54** #3117 34G05 (47A55)
- enko, L. P. See Timchenko, L. P.
- en, I. V. Class of dual control problems. *Avtomat. i Telemekh. 1972*, no. 6, 33-42
 (Russian); translated as *Automat. Remote Control 1972*, no. 6, part 1, 914-922.
 Jean-Michel Bismut) **53** #2494 93E20
- en, (with Kleibanov, S. B.; Prival'skii, V. B.) Stabilization of coefficients in a discrete
 Kalman filter. *Avtomat. i Telemekh. 1974*, no. 3, 76-82 (Russian); translated as *Automat. Remote Control 35* (1974), no. 3, part 1, 410-416. (Editors) **56** #11381 93E10
- en, (with Kleibanov, S. B.; Prival'skii, V. B.) Stability of stationary Kalman corrector
 for discrete-time communication channel. *Avtomat. i Telemekh. 1975*, no. 12, 104-107
 (Russian. English summary); translated as *Automat. Remote Control 36* (1975), no. 12,
 part 2, 2023-2026. (Seihaku Higuchi) **55** #7545 93E15 (94A05)
- en, Suboptimal principles in the theory of dual control. *Avtomat. i Telemekh. 1976*, no. 2,
 7-71 (Russian. English summary); translated as *Automat. Remote Control 37* (1976), no.
 part 1, 181-184. (D. D. Sworder) **55** #2325 93E20
- en, (with Kleibanov, S. B.; Prival'skii, V. B.; Rožnov, A. V.) Limits of applicability of
 an adaptive algorithm of adjustment of a digital linear filter. *Avtomat. i Telemekh. 1977*,
 no. 5, 61-65 (Russian. English summary); translated as *Automat. Remote Control 38*
 (1977), no. 5, part 1, 664-667. (Authors' summary) **56** #11487 94A05
- en, R. M. Symmetric solutions of the inverse problem of hydromechanics.
 (Russian) *Trudy Sem. Kraev. Zadacham Vyp. 13* (1976), 239-245. (From the text)
8 #19675 76.33
- ending, H. E. See Festschrift: Weber, Heinrich, **50** #12626
- enz, K. A. See Teplov, F. S., **58** #27049
- enl, Werner (with Dörninger, Dietmar; Nöbauer, Wilfried) ★ Lineare Optimierung
 und Anwendungen. Beiträge zur Lehrerfortbildung, Band 18. Österreichischer
 Bundesverlag für Unterricht, Wissenschaft und Kunst, Vienna, 1977. 200 pp. (J. Abraham)
5 #9941 90C05 (90-01)
- en, Beschreibung und Analyse biologischer Vorgänge mit Hilfe mathematischer
 Methoden. Steiermärkisches Mathematisches Symposium, 9. (Graz, 1977). *Ber.*
Math.-Statist. Sekt. Forschungszentrum Graz No. 74-79 (1977), 38 pp. (Uwe an der
 Heiden) **57** #5194 92A15
- enke, W. P. (with Bosarge, W. E., Jr.; Johnson, Olin; McKnight, R. S.) The
 Fitz-Galerkin procedure for nonlinear control problems. *SIAM J. Numer. Anal. 10*
 (1973), 94-111. (Paul Binding) **47** #9827 49G10
- en, J. On regular algebras. *Contributions to universal algebra (Colloq., József Attila*
Univ., Szeged, 1975), pp. 503-514. Colloq. Math. Soc. János Bolyai, Vol. 17,
North-Holland, Amsterdam, 1977. (Heinrich Werner) 58 #10674 08A25
- en, Jürgen Zur gruppentheoretischen Beschreibung n -stelliger Strukturen. *Publ. Math.*
Debrecen 17 (1970), 183-192 (1971). (V. Havel) **46** #7432 20N15
- en, Zur Theorie der Fastringkonstruktionen. II. Collection of articles dedicated to
 Arthur Collatz on his sixtieth birthday. *Abh. Math. Sem. Univ. Hamburg 36* (1971),
 16-32. (J. J. Malone, Jr.) **48** #6187 16A76
- en, (with Heise, Werner) κ -finite Räume. (English summary) *Manuscripta Math. 4*
 (1971), 31-37. (F. Bachmann) **45** #4251 50A15
- en, (with Misfeld, Jürgen) Topologische Dickson'sche Fastkörper. *Abh. Math. Sem.*
Univ. Hamburg 37 (1972), 60-67. (H. J. Weinert) **46** #1768 12K05 (16A80)
- en, (with Crombez, Gilbert) On (n, m) -quotient rings. *Abh. Math. Sem. Univ. Hamburg*
37 (1972), 200-203. (R. Gorton) **46** #7323 16A78
- en, Verbandstheoretische Behandlung n -stelliger Gruppen. *Abh. Math. Sem. Univ.*
Hamburg 37 (1972), 218-224. (V. Havel) **46** #7433 20N15
- en, Neil H. ★ Multivariate analysis with applications in education and psychology.
Brooks/Cole Publishing Co., [Wadsworth Publishing Co., Inc.], Monterey, Calif., 1975.
 xi + 689 pp. (J. N. K. Rao) **56** #1586 62Hxx (62P15)
- en, (with Carlson, James E.) Part and bipartial canonical correlation analysis.
Psychometrika 41 (1976), no. 2, 159-176. (Authors' summary) **58** #3204 62H20
- en, Reinier See Obituary: Timman, Reinier, **52** #2801; Obituary: Timman, Reinier,
52 #7832 and Symposium: Applied Mathematics, **57** #2082
- en, Steffen Ein elementargeometrisches Problem mit Anwendungen in den
 Wirtschaftswissenschaften. *Math.-Phys. Semesterber. 20* (1973), 10-19. (M. Rössler)
1 #12320 90B99
- en, Einbettungen endlicher Riemannscher Flächen. *Math. Ann. 217* (1975), no. 1,
 1-85. (H. H. Martens) **52** #11033 30A46 (32G15)
- en, (with Köditz, Helmut) Randschlichte meromorphe Funktionen auf endlichen
 Riemannschen Flächen. *Math. Ann. 217* (1975), no. 2, 157-159. (H. H. Martens)
5 #10665 30A46
- en, A bound for the number of automorphisms of a finite Riemann surface. *Ködoi*
Math. Sem. Rep. 28 (1976), no. 1, 104-109. (C. MacLachlan) **55** #655 30A46
- en, (with Doppel, Karl; Köditz, Helmut) Bemerkungen über Fixpunktmen-
 gen schlichter Funktionen. (Italian and English summary) *Rend. Ist. Mat. Univ. Trieste 8*
 (1976), no. 2, 162-166 (1977). (R. A. Horn) **57** #3375 30A36
- en, Kathleen M. Subgroups of groups of central type. *Trans. Amer. Math. Soc. 189*
 (1974), 133-161. (J. F. Humphreys) **50** #10042 20C15
- en, Hermann, B. (with Laßner, Gerd) The strong topology on the algebra of polynomials.
Rep. Mathematical Phys. 11 (1977), no. 1, 81-87. (J. W. M. Ford) **58** #2341 46L15
- en, Hermann, Horst Koordinatenfreie Kennzeichnung von Projektionen in projektiven
- Räumen. *Mitt. Math. Gesellsch. Hamburg 10*, no. 2, 88-103 (1973). (W. R. Heise)
49 #6019 50D20
- en, Hyperebenenewebe und elliptische Kurven. *Beiträge zur geometrischen Algebra*
(Proc. Sympos., Duisburg, 1976), pp. 317-325. Lehrbücher u. Monographien aus dem
Gebiete der Exakt. Wiss., Math. Reihe, Band 21, Birkhäuser, Basel, 1977. (Fabrizio
Catanese) 58 #10945 14N05 (53A20)
- en, Descrizioni geometriche sintetiche di geometrie proiettive con caratteristica $p > 0$.
Ann. Mat. Pura Appl. (4) 114 (1977), 121-139. (Author's summary) **58** #30731
 50D30
- en, Eine Bemerkung über den speziellen Bézoutschen Satz. (English summary) *J.*
Geometry 9 (1977), no. 1-2, 83-108. (A. Evyatar) **57** #344 14N05
- en, Timmermann, W. (with Laßner, Gerd) Normal states on algebras of unbounded operators.
Rep. Mathematical Phys. 3 (1972), no. 4, 295-305. (Horst Behncke) **54** #11073
 46L15
- en, (with Laßner, Gerd) Classification of domains of closed operators. *Rep.*
Mathematical Phys. 9 (1976), no. 2, 157-170. (From the introduction) **58** #7167
 47A99
- en, (with Laßner, Gerd) Classification of domains of operator algebras. *Rep.*
Mathematical Phys. 9 (1976), no. 2, 205-217. (From the text) **58** #7168 47A99
 (46L99)
- en, Remarks on the operator of second quantization. *Rep. Mathematical Phys. 12*
 (1977), no. 1, 105-114. (L. S. Wollenberg) **57** #2323 81.47
- en, Timmermans, C. A. Modulus of continuity for periodic functions. *Delft Progress Rep. Ser.*
F 1 (1974), no. 1, 19-22. (Author's summary) **56** #9167 42A08
- en, A generalization of a theorem of Mamedov. *Rev. Anal. Numér. Théor. Approx. 4*
 (1975), no. 1, 79-86. (From the introduction) **58** #29660 41A35
- en, Timmermans, J. H. See van Lint, Jacobus H., **50** #4311
- en, Timmers, J. M. W. (with Broer, L. J. F.; van Groesen, E. W. C.) Stable model equations
 for long wave waves. *Appl. Sci. Res. 32* (1976), no. 6, 619-636. (N. D. Kopačevskii)
56 #1921 76.35
- en, Timmesfeld, Franz Georg A characterization of the Chevalley- and Steinberg-groups over
 F_2 . *Geometriae Dedicata 1* (1973), no. 3, 269-321. (T. O. Hawkes) **48** #8616 20D05
- en, Groups generated by root-involutions. I, II. *J. Algebra 33* (1975), 75-134; *ibid.* **35**
 (1975), 367-441. (M. Aschbacher) **51** #8236 20D05
- en, Groups with weakly closed TI-subgroups. *Math. Z. 143* (1975), no. 3, 243-278. (A.
 R. Camina) **53** #10926 20D20
- en, On elementary abelian TI-subgroups. *J. Algebra 44* (1977), no. 2, 457-476. (A. R.
 Camina) **55** #487 20D05
- en, Timofeenko, G. V. R -varieties of groupoids. (Russian) *Modern algebra, No. 5 (Russian), pp.*
114-126. Leningrad. Gos. Ped. Inst. im. Gercena, Leningrad, 1976. (V. N. Salii) 58 #450
 08A15
- en, Timofeev, A. V. Systems of invariant recognition and their realization by methods of
 coherent and incoherent optics. *Izv. Akad. Nauk SSSR Tehn. Kibernet. 1971*, no. 6,
 155-164 (Russian); translated as *Engrg. Cybernetics 9* (1971), no. 6, 1105-1113 (1972).
 (W. Grebicki) **50** #9082 68A45
- en, A certain class of polynomial separating functions in problems of identification and
 diagnosis. (Russian) *Metody Vychisl. No. 7* (1971), 106-121. (V. Mineev (RŽMat 1972
 #6 V569)) **51** #14502 62P15
- en, (with Udovičenko, S. P.; Haričev, V. V.; Šmidt, A. A.) Complete and continuous
 systems of invariants in a problem of pattern recognition. (Russian. English summary)
Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Vyp. 4 (1972), 143-144, 149. (A.
 Morimoto) **50** #10151 22D40 (68A45)
- en, Finitely convergent recursion algorithms for adaptive identification of discrete
 dynamic objects. *Izv. Akad. Nauk SSSR Tehn. Kibernet. 1973*, no. 6, 206-213
 (Russian); translated as *Engrg. Cybernetics 11* (1973), no. 6, 1038-1045. (Author's
 summary) **57** #19018 93E10
- en, (with Pšibihov, V. H.) Complete systems of logical hashing functions, and optimal
 recognition graphs. (Russian) *Metody Vychisl. 9* (1974), 115-133, 183. (Costică Cazacu)
53 #9751 68A45
- en, (with Jakubovič, V. A.) A class of adaptive human-operator models in control
 systems. *Automatika 1974*, no. 1, 52-65 (Ukrainian); translated as *Soviet Automat.*
Control 7 (1974), no. 1, 43-54. (Authors' summary) **56** #11265 93C40
- en, Finitely convergent locally optimal algorithms for solving target inequalities that
 arise in problems of synthesizing adaptive systems. *Izv. Akad. Nauk SSSR Tehn.*
Kibernet. 1975, no. 4, 9-20 (Russian); translated as *Engrg. Cybernetics 13* (1975), no. 4,
 1-12. (Author's summary) **58** #15467 93C40
- en, Designing programmed motions and control of robot manipulator taking into
 account its kinematic redundancy and dynamics. *Automatika 1976*, no. 1, 71-81
 (Ukrainian); translated as *Soviet Automat. Control 9* (1975), no. 1, 57-65 (1976).
 (Author's summary) **56** #14960 93C40
- en, (with Petrov, I. P.) Finitely convergent recurrence algorithms for the solution of
 objective inequalities in the presence of constraints. (Russian) *Ž. Vychisl. Mat. i Mat.*
Fiz. 15 (1975), no. 6, 1582-1588, 1626. (B. T. Poljak) **55** #1732 65K05
- en, See also Computer technology and questions of cybernetics, **47** #9874
- en, Timofeev, B. B. (with Litvinov, V. A.; Sapožnikov, A. S.) Optimization of the Markov
 process of calls to memory with successive access. (Russian. English summary insert)
Kibernetika (Kiev) 1972, no. 2, 30-36. (V. N. Igolkina) **46** #6651 68A20
- en, (with Litvinov, V. A.; Sapožnikov, A. S.) The problem of optimizing the hierarchy
 of memory systems of an automatic control system. (Russian. English summary insert)
Kibernetika (Kiev) 1973, no. 3, 14-20. (Editors) **58** #25079 68A05
- en, (with Kozlik, G. A.; Kulakov, A. F.; Mart'janov, A. J.) ★ Algorithmierung in
 automatisierten Leitungssystemen. Herausgegeben von Hartmut Schultze. Übersetzt aus
 dem Russischen von W. Heidrich. Elektronisches Rechnen und Regeln, Sonderband 22.
Akademie-Verlag, Berlin, 1976. x + 248 pp. (Editors) 57 #11848 93-04
- en, (with Roik, E. M.; Fridständ, V. D.) Design of control algorithms that are
 suboptimal in speed of response. *Automatika 1976*, no. 4, 63-68 (Ukrainian. Russian and
 English summaries); translated as *Soviet Automat. Control 9* (1976), no. 4, 52-56. (Kimio
 Kanai) **56** #11246 93C15
- en, See also Mathematics and progress in science and technology, **48** #8170;
 Cybernetics encyclopedia, **54** #9919 and Cybernetics encyclopedia, **54** #9920

- Timofeev, B. P.** See **Ramachandran, B.**, 51 #14192
- Timofeev, D. V.** (with Židkov, N. P.; Ilyševa, N. P.) Certain numerical methods for the calculation of electrical networks. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 1317-1323, 1366. (Jan Žitko) 50 #15301 65F05 (94A20)
- Timofeev, E. A.** (with Kazarin, L. S.; Kopylov, G. N.) The chromatic number of a special class of graphs. (Russian) *Vestnik Jaroslav. Univ. Vyp.* 9 (1975), 37-46. (Author's review) 58 #21758 05C15
(with Kazarin, L. S.; L'vov, G. N.) A heuristic algorithm for constructing a time-table. (Russian) *Vestnik Jaroslav. Univ. Vyp.* 9 (1975), 47-51. (From the authors' text) 57 #2518 90B30
Some algorithms for the solution of the travelling salesman problem on the plane with a large number of cities. (Russian) *Vestnik Jaroslav. Univ. Vyp.* 9 (1975), 115-118. (From the author's text) 57 #2511 90B10 (90C10)
A lower bound for the traveling salesman problem. (Russian) *Heuristic optimization algorithms* (Russian), pp. 177-184. *Jaroslav. Gos. Univ., Yaroslavl*, 1976. (Editors) 58 #32921 90C05 (65K05)
The construction of an edge-wise m -connected skeletal subgraph with minimal length of the maximal edge. (Russian) *Dokl. Akad. Nauk SSSR* 233 (1977), no. 6, 1053-1055. (Author's introduction) 58 #10601 05C35 (68A20)
(with Kopylov, G. N.) Centers and radii of graphs. (Russian) *Uspehi Mat. Nauk* 32 (1977), no. 6(198), 226. (W. Dörfler) 57 #9608 05C99 (05C30)
- Timofeev, E. K.** Noether theorems for a certain class of boundary value problems with non-Carleman shift. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* 1975, no. 4, 87-89, 119. (G. S. Litvinčuk) 56 #12282 30A88
On the theory of boundary value problems for analytic functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 2(153), 133-135. (V. Micić) 52 #5987 30A88
A boundary value problem of linear conjugation with shift. (Russian) *Sibirsk. Mat. Ž.* 17 (1976), no. 2, 392-401, 480. (N. K. Karapetjan) 53 #13592 30A88
A general boundary value problem of linear conjugacy. (Russian) *Izv. Severo-Kavkaz. Nauch. Centra Vysš. Školy Ser. Estestv. Nauk.* 1977, no. 1, 12-14, 116. (Author's summary) 58 #6275 30A88
- Timofeev, G. N.** (with Norden, A. P.) Invariant interpretations for special compositions of multidimensional spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 8(123), 81-89. (V. Oproiu) 47 #5771 53C15
Conformal mappings of a product space. (Russian) *Current problems in geometry and its applications*, No. 2 (Russian), pp. 79-88, 128. *Čuvaš. Gos. Univ., Cheboksary*, 1976. (Author's summary) 58 #30841 53B05
Invariant criteria for special compositions in Weyl spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 1(164), 87-99. (L. Tamássy) 55 #8982 53B15
Orthogonal compositions in Weyl spaces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 3(166), 73-85. (V. V. Gol'dberg) 54 #13760 53B20
- Timofeev, Ju. L.** The linearization of a differential equation of order four. (Russian) *Taškent. Inst. Inž. Železnodorož. Transporta Trudy* No. 56 (1968), 106-111. (See RŽMat 1969 #5 B366) 35A22
- Timofeev, L. L.** (with Žilinskas, Antanas; Mockus, Jonas) A Bayesian method of extremal search with restricted memory. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1972, no. 6, 37-42. (M. E. Thompson) 47 #10064 90C15
- Timofeev, M. T.** (with Burman, S. I.) Questions of methods for the electronic digital computer realization of rigid deformable body problems by the method of finite elements written in matrix form, and the creation of adequate means of automating the programming for these methods. (Russian) *Numerical methods in problems of technology and economics* (Russian), pp. 122-130. *Izdat. Kazan. Univ., Kazan*, 1971. 55 #1917 73.65
- Timofeev, N. M.** (with Levin, B. V.) An analytic method in probabilistic number theory. (Russian) *Vladimir. Gos. Ped. Inst. Učen. Zap.* 38 (1971), 57-150. (D. Ugrin-Šparac) 46 #1740 10K20
Application of the analytic method to the summation of multiplicative functions. (Russian) *Vladimir. Gos. Ped. Inst. Učen. Zap.* 38 (1971), 204-249. (D. Ugrin-Šparac) 46 #1733 10H25
(with Levin, B. V.; Tuljaganov, S. T.) Distribution of values of multiplicative functions. (Russian) *Vladimir. Gos. Ped. Inst. Učen. Zap.* 38 (1971), 282-288. (A. Fainleib (RŽMat 1972 #3 A103)) 52 #13706 10K20 (60F05)
(with Levin, B. V.; Tuljaganov, S. T.) Distribution of the values of multiplicative functions. (Russian) Lithuanian and English summaries) *Litoxsk. Mat. Sb.* 13 (1973), no. 1, 87-100, 232. (J. B. Roberts) 47 #3340 10K20
(with Levin, B. V.) Distribution of values of additive functions. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 1(169), 243-244. (J. Galambos) 55 #7978 10K20
(with Levin, B. V.) On the distribution of values of additive functions. *Acta Arith.* 26 (1974/75), no. 4, 333-364. (P. D. T. A. Elliott) 52 #3099 10K20
(with Levin, B. V.) An analogue of the law of large numbers for additive functions on sparse sets. (Russian) *Mat. Zametki* 18 (1975), no. 5, 687-698. (J. Galambos) 53 #2879 10K20 (10H30)
(with Levin, B. V.) Several integral limit theorems for additive functions. (Russian) Lithuanian and English summaries) *Litoxsk. Mat. Sb.* 16 (1976), no. 4, 133-147, 254. (J. Galambos) 54 #12701 10K20
(with Levin, B. V.) Distribution of values of additive functions. II. (Russian) *Acta Arith.* 33 (1977), no. 4, 327-351. (P. D. T. A. Elliott) 56 #11946 10K20
Polynomials with small prime divisors. (Russian) *Taškent. Gos. Univ. Nauch. Trudy* No. 548 *Voprosy Mat.* (1977), 87-91, 145. (Editors) 58 #27845 10H15
- Timofeev, V. A.** See **Cybernetic methods in diagnostics**, 48 #8018 and **Cybernetics and diagnostics**, 49 #12115
- Timofeev, V. I.** The optimality principle in the mean for stochastic systems with retarded argument. (Russian) *Trudy Kazan. Aviacion. Inst. No.* 130 (1971), 79-82. (A. Halanay) 45 #8372 93E20
- Timofeeva, L. A.** (with Neiman, Ju. M.) Series expansion of the regularized solution of Molodenskii's problem. (Russian) *Izv. Vysš. Učebn. Zaved. Geod. i Aërofot.* 1976, no. 6, 23-26, 151. (Authors' summary) 56 #4706 86.35
- Timofeyev, A. V.** See **Timofeev, A. V.**
- Timofeyev, B. B.** See **Timofeev, B. B.**
- Timohin, S. G.** A decomposition approach to the solution of a large-scale linear programming problem. (Russian) *Ekonom. i Mat. Metody* 13 (1977), no. 2, 330-34. (Ulrich Eckhardt) 58 #32922 90C05
- Timohina, A. O.** (with Olzoeva, L. F.) The proof of a generalized formula. (Russian) *Solution and investigation of ordinary differential equations on the basis of functions with flexible structure* (Russian), pp. 172-175. *Moskoo. Tehnolog. Inst. Pišč. Promyšl., Mosco* 1974. 58 #22716 34A05
- Timohina, E. V.** See **Questions in applied mathematics**, 48 #5448
- Timophov, A. V.** A certain theorem on economic equilibrium. (Russian) *Mathematical programming and related questions* (Proc. Seventh Winter School, Drogobych, 1976) *Convex programming* (Russian), pp. 130-138. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1976. (A. A. Piontkovskii) 56 #2265 90A15
- Timohovič, V. L.** Absolutely closed mappings of topological spaces. (Russian) Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 63 (1971), 33-36. (I. Halfar) 47 #4204 54C10
Spaces with ω -systems. (Russian) *Dokl. Akad. Nauk SSSR* 207 (1972), 1060-1064. (W. M. Fleischman) 48 #7209 54D99
The absolute, and H -closed extensions. I. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1972, no. 4, 47-57, 140. (Ludwik Rudolf) 47 #2542 54C60
The absolute, and H -closed extensions in the proof of certain theorems. II. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1972, no. 5, 58-64, 139. (M. Katětov) 52 #9181 54D25
A certain generalization of completeness in the sense of Čech. (Russian) English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 27 (1972), no. 1, 16-20. (Z. Frolik) 46 #8175 54D20
A certain class of mappings. (Russian) *Dokl. Akad. Nauk BSSR* 17 (1973), 9-12. (I. Halfar) 49 #9796 54C10
The coabsoluteness of topological spaces. (Russian) *Dokl. Akad. Nauk BSSR* 17 (1973), 301-302, 382. (J. Mioduszewski) 49 #6124 54B17
 k -pinnate spaces. (Russian) *Dokl. Akad. Nauk BSSR* 17 (1973), 695-698, 775. (J. G. Ceder) 50 #5751 54E10
Localization of certain properties of topological spaces. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1973, no. 1, 28-33, 135. (J. Mioduszewski) 53 #6499 54D20
Bicompactly k -fine systems. (Russian) *Dokl. Akad. Nauk BSSR* 18 (1974), 489-490. (I. Halfar) 50 #5752 54E10 (54E35)
Multivalued extensions of closed mappings. (Russian) *Dokl. Akad. Nauk BSSR* 19 (1975), 14-16, 89. (J. Mioduszewski) 51 #13975 54C20
(with Goldovt, I. Ju.) Saturations of topological spaces, and Morita's problem. (Russian) *Dokl. Akad. Nauk BSSR* 21 (1977), no. 9, 777-780, 859. (T. Maćkowiak) 57 #4101 54D35
- Timonen, L. S.** (with Verzakov, G. F.) The construction of minimal diagnostic texts. (Russian) *Automatic control and methods of electrical measurement* (Proc. Sixth Conf. Novosibirsk, 1964), Vol. I: *Theory of measurement information systems* (Russian), pp. 135-146. (errata insert) *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk*, 1966. (J. Kuntzmann) 49 #12194 94A20
Application of graph theory to the analysis of objects in technical diagnostics. (Russian) *Automatic control and methods of electrical measurement* (Proc. Seventh All-Union Conf., Novosibirsk, 1965) (Russian), pp. 68-75. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk*, 1971. (J. Kuntzmann) 49 #2206 94A20
The construction of optimal programs for the restoration of efficient performance in complex technical systems. (Russian) *Automatic control and methods of electrical measurement* (Proc. Seventh All-Union Conf., Novosibirsk, 1965) (Russian), pp. 90-98. *Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk*, 1971. (D. Obradović) 48 #13224 90B21
- Timoney, Richard M.** A necessary and sufficient condition for Bloch functions. *Proc. Amer. Math. Soc.* 71 (1978), no. 2, 263-266. (Ch. Pommerenke) 58 #1159 30A74
- Timonov, A. A.** (with Tanana, V. P.) Projection methods for the solution of nonlinear unstable problems. (Russian) *Dokl. Akad. Nauk SSSR* 229 (1976), no. 3, 558-561. (J. W. Schmidt) 54 #11774 65J05 (47H15)
The approximate solution of operator equations of the first kind with a multivalued operator by the residual method. (Russian) *Ural. Gos. Univ. Mat. Zap.* 10, no. 2 *Issled. Sovremen. Mat. Anal.*, 152-160, 219 (1977). (A. V. Džiškariani) 57 #18084 65J01
- Timošenko, A. G.** (with Alojan, G. S.) A method of constructing a series of additively distinguishing numbers. (Russian) English summary insert) *Kibernetika (Kiev)* 1969, no. 6, 12-16. (Authors' summary) 46 #3194 94A10
- Timošenko, B. V.** See **Timošenko, V. V.**
- Timošenko, E. I.** On the question of the elementary equivalence of groups. (Russian) *Algebra*, No. 1 (Russian), pp. 92-96. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (Author's introduction) 56 #11781 02H15
Certain algorithmic questions for metabelian groups. (Russian) *Algebra i Logika* 1 (1973), 232-240, 245. (Author's summary) 54 #10426 20F10
Center of a group with one defining relation in the variety of 2-solvable groups. (Russian) *Sibirsk. Mat. Ž.* 14 (1973), 1351-1355, 1368. (I. M. S. Dey) 50 #7346 20E10
- Timošenko, Ju. A.** (with Gutenmaher, L. I.; Tihončuk, S. T.) A dynamical method for simulating certain ill-posed systems. (Russian) *Elektronika i Modelirovanie Vyp.* 1 (1976), 102-103, 132. (Authors' summary) 57 #18050 65F10
(with Gutenmaher, L. I.; Tihončuk, S. T.) A dynamic method for the solution of ill-posed systems of linear algebraic equations. (Russian) *Elektronika i Modelirovanie* No. 13 (1976), 73-74, 122. (See RŽMat 1977 #9 B968) 65F10
(with Gutenmaher, L. I.; Tihončuk, S. T.) A dynamic method for modeling certain ill-posed problems. (Russian) *Dokl. Akad. Nauk SSSR* 237 (1977), no. 4, 776-778. (G. Adam) 56 #17044 65F99 (65L10)
- Timošenko, N. P.** See **Mathematical simulation and the theory of electrical circuits**, 48 #3287
- Timošenko, S. P.** ★Устойчивость стержней, пластин и оболочек. (Russian) [Stability of rods, plates and shells] Selected papers, edited by È. I. Grigoljuk. With an introduction and an appendix on the life and work of Timošenko, by È. I. Grigoljuk. *Izdat. "Nauka" Moscow*, 1971. 807 pp. (1 plate) (From the author's summary) 54 #12466 01A7 (73.01)

- ★Статистические и динамические проблемы теории упругости. (Russian) [Statistical and dynamical problems of elasticity theory] Edited by È. I. Grigoljuk. With an introduction, a biography, discussion and bibliography of the works of S. P. Mošenko by È. I. Grigoljuk. Izdat. "Naukova Dumka", Kiev, 1975. 563 pp. (1 plate) from the author's summary) **54** #12467 01A75 (73.01)
- Mošenko, V. V. Three-webs over commutative associative algebras. (Russian) *Izv. Vysš. Šebn. Zaved. Matematika* **1975**, no. 11(162), 109-112. (M. A. Aklivis) **54** #8460 3A05
- Three-webs over commutative associative algebras. (Russian) *Ukrain. Geometr. Sb.* **1975**, 136-151, v. (P. Ver Eecke) **54** #8516 53C15
- Three-webs over an algebra whose curvature is a zero divisor. (Russian) *Izv. Vysš. Šebn. Zaved. Matematika* **1977**, no. 3 (178), 116-118. (V. V. Gol'dberg) **57** #17527 3A35
- Mošenko, Stephen P. See Roy, Maurice, **47** #8227
- Moškova, E. I. (with Holševnikov, K. V.) Construction of an analytic theory of the motion of an artificial satellite in a non-central gravity field. (Russian) *Leningrad. Gos. Univ. Učen. Zap. Ser. Mat. Nauk* **47** (1971), 97-118. (K. Magnus) **45** #3046 35.35
- Mošuk, V. V. (with Fil'c, R. V.; Kozl', B. I.) Calculation of D -partition boundary in the plane of two parameters that occur nonlinearly in the coefficients of the characteristic equation. *Automatika* **1971**, no. 2, 70-73 (Ukrainian); translated as *Soviet Automat. Control* **4** (1971), no. 2, 61-63. (I. A. Stegun) **47** #2818 93-04
- Mozyk, W. (with Byczkowska, H.; Byczkowski, T.) Some properties of variance on compact group. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 945-947. (R. M. Dudley) **47** #1093 60B15
- Mozyk, Wacław A characterization of Gaussian processes that are Markovian. *Colloq. Math.* **30** (1974), 157-167. (H. P. McKean, Jr.) **49** #11607 60G15
- Možin, A. I. (with Rădulet, R.; Baciuc-Țugulea, Aurora) A structural field theory of a class of linear systems. *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* **17** (1972), 301-335. (R. N. P. Singh) **48** #13365 93C05
- (with Baciuc-Țugulea, Aurora; Vasiliu, M.) Uniqueness and superposition of the periodic solutions of the electromagnetism field equations. (French and German summary) Collection of articles dedicated to Remus Rădulet on his 70th birthday, II. *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* **20** (1975), 3-11. (A. Ishimaru) **53** #2147 78.35
- Možin, Dan On Riemann-Stieltjes integrability. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 291-293. (W. D. L. Appling) **48** #2325 26A42
- (with Bercovici, Hari; Gologan, Radu Nicolae) Generalizations of a certain function defined on $L(H)$. (Romanian) *Stud. Cerc. Mat.* **27** (1975), no. 2, 131-156. (F. H. Szafrański) **52** #6472 47A65
- Mourian, J. G. (with Church, Philip T.) Differentiable maps with 0-dimensional critical set. I. *Pacific J. Math.* **41** (1972), 615-630. (Roger Fenn) **47** #4281 57D70
- (with Church, Philip T.) Continuous maps with 0-dimensional branch set. *Indiana Univ. Math. J.* **23** (1973/74), 949-958. (Roger Fenn) **49** #1521 57A65 (55A10)
- (with Church, Philip T.) Differentiable open maps of $(p+1)$ -manifold to p -manifold. *Pacific J. Math.* **48** (1973), 35-45. (W. L. Reddy) **48** #5096 57D35
- (with Church, Philip T.) Differentiable maps with 0-dimensional critical set. II. *Indiana Univ. Math. J.* **24** (1974), 17-28. (Roger Fenn) **50** #3248 57D70 (54C10, 57D35)
- (with Church, Philip T.) Real analytic open maps. *Pacific J. Math.* **50** (1974), 37-42. (A. Tognoli) **52** #6750 57D35 (32C05)
- (with Church, Philip T.) Maps with 0-dimensional critical set. *Pacific J. Math.* **57** (1975), no. 1, 59-66. (Roger Fenn) **52** #6751 57D35 (57D70)
- (with Hsu, Agnes Chi Ling) Monotone real analytic maps which are not homeomorphisms. *Proc. Amer. Math. Soc.* **51** (1975), 231-236. (M. L. Gromov) **51** #6850 57D45 (54C10)
- The invariance of Milnor's number implies topological triviality. *Amer. J. Math.* **99** (1977), no. 2, 437-446. (I. N. Iomdin) **55** #8404 32C40
- Mos, S. R. (with Tyrrell, J. A.) Approximate evaluation of Euler's constant. *Math. Gaz.* **55** (1971), no. 391, 65-67. (Editors) **58** #10710 10A40
- See also Scott, D. Bernard, **46** #1541
- Mu, G. I. The construction of certain schemes for the approximate solution of the equations of the dynamics of a viscous incompressible fluid. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* **3** (1972), no. 2, 77-95. (J. P. Guiraud) **50** #6316 76.65
- Mu, van Tin' See Nguen Van Tin'
- Pyke (with Phatarfod, R. M.) On infinite dams with inputs forming a stationary process. *J. Appl. Probability* **11** (1974), 553-561. (Terence P. Speed) **50** #11533 60K30
- (with Phatarfod, R. M.) Some exact results for dams with Markovian inputs. *J. Appl. Probability* **13** (1976), no. 2, 329-337. (Emlyn Lloyd) **53** #4298 60K30
- Saw (with Jeffrey, Alan) Waves over obstacles on a shallow seabed. *Proc. Roy. Soc. Edinburgh Sect. A* **71**, part 3, 181-192 (1973). (F. Ursell) **49** #6769 76.35
- Scaglia, Calogero Riferimenti intrinseci di una trasformazione puntuale fra tre piani proiettivi in un caso particolare notevole. *Atti Accad. Sci. Ist. Bologna Cl. Sci. Fis. Rend.* (12) **10** (1972/73), no. 1, 145-153. (K. Strubecker) **49** #9759 53A20
- Alcune osservazioni sulle trasformazioni puntuali fra tre piani proiettivi. (English summary) *Boll. Un. Mat. Ital.* (4) **6** (1972), 248-255. (E. Morgantini) **50** #10986 50A20
- Determinazione dei riferimenti proiettivi intrinseci di una trasformazione puntuale fra tre piani proiettivi a direzioni caratteristiche tutte di terzo tipo. (English summary) *Boll. Un. Mat. Ital.* (4) **7** (1973), 56-66. (L. A. Rosati) **49** #1345 53A20
- Scarielli Urgeletti, Giulia ★Elementi di teoria delle code. Quaderni dell'Istituto di Matematica Finanziaria dell'Università degli Studi di Parma, Serie Didattica, No. 3. "Studium Parmense"-Società Cooperativa Editrice Libreria, Parma, 1971. 94 pp. (Editors) **52** #15733 60K25
- Scu, G. On an iterative procedure for solving algebraic equations with all real roots. (Romanian. French summary) *An. Univ. Timișoara Ser. Ști. Mat.* **13** (1975), no. 1, 65-70 (1977). (A. S. Householder) **57** #1869 65H05
- Seid, Jørgen Blocking and antiblocking sets. *Math. Programming* **6** (1974), 157-166. (D. R. Fulkerson) **50** #1722 90C25
- On antiblocking sets and polyhedra. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 507-515. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (See Zbl 372 #90069; MR **56** #2376) **52A45** (90C10)
- Tindall, John B. (with Jarvis, John J.) Minimal disconnecting sets in directed multi-commodity networks. *Naval Res. Logist. Quart.* **19** (1972), 681-690. (J. Fichet) **48** #1679 90B10
- Tindall, John E. (with Schori, Thomas R.) Multiple discriminant analysis: a repeated measures design. *Virginia J. Sci.* **23** (1972), 62-63. (C. Hayashi) **48** #1388 62H30
- Tindell, R. (with Boesch, Francis T.; Suffel, Charles L.) The spanning subgraphs of Eulerian graphs. *J. Graph Theory* **1** (1977), no. 1, 79-84. (Linda Lesniak-Foster) **56** #8425 05C35
- Tindemans, P. A. J. (with Capel, H. W.) An inequality for the trace of matrix products. *Rep. Mathematical Physics* **6** (1974), no. 2, 225-235. (Ky Fan) **51** #12894 15A45
- (with den Ouden, L. W. J.; Capel, H. W.; Perk, J. H. H.) Systems with separable many-particle interactions. I. *Phys. A* **85** (1976), no. 1, 51-70. (Authors' summary) **54** #4474 82.47
- Tineo, Antonio R. ★K-teoría algebraica y geométrica. (Spanish) [Algebraic and geometric K-theory] Notas de Matemática, No. 4. [Mathematical Notes, No. 4] Departamento de Matemática, Facultad de Ciencias, Universidad de Los Andes, Mérida, 1976. iii + 41 pp. (S. Gitler) **54** #8610 55B15 (18F25)
- (with Manasevich, Raul F.) ★On the first conjugate point of a quasidifferential equation of order n . Notas de Matemática, No. 7. [Mathematical Notes, No. 7] Departamento de Matemática, Facultad de Ciencias, Universidad de Los Andes, Mérida, 1976. iii + 14 pp. (Authors' summary) **58** #22778 34C10
- ★Grupos finitamente generados. (Spanish) [Finitely generated groups] Primer Congreso Venezolano de Matemáticas. [First Venezuelan Congress of Mathematicians] Universidad de Los Andes, Mérida, 1977. i + 14 pp. (R. Mines) **56** #8718 20K05
- (with Manasevich, Raul F.) Oscillatory properties of solutions of a class of third-order quasi-differential equations. *J. Math. Anal. Appl.* **63** (1978), no. 1, 23-32. (Gary D. Jones) **58** #11645 34C10
- Tinfavičius, E. On the reduced stochastic equations for non-linear filtering of random processes. (Russian. Lithuanian and English summaries) *Lietuvsk. Mat. Sb.* **17** (1977), no. 3, 53-72, 212. (R. Š. Lipcer) **56** #9674 60G35 (60H10)
- Ting, A. C. On the convergence of a class of derivative-free minimization algorithms. *J. Optimization Theory Appl.* **22** (1977), no. 4, 487-508. (S. P. Aggarwal) **57** #18103 65K05
- Ting, Benjamin S. (with Kuh, Ernest S.; Shirakawa, Isao) The multilayer routing problem: algorithms and necessary and sufficient conditions for the single-row single-layer case. Special issue on large-scale networks and systems. *IEEE Trans. Circuits and Systems CAS-23* (1976), no. 12, 768-778. (Authors' summary) **57** #5488 94A20
- Ting, Bing Yuan (with Luke, Yudell L.; Kemp, Marilyn J.) On generalized Gaussian quadrature. *Math. Comp.* **29** (1975), no. 132, 1083-1093. (Henning Esser) **52** #9574 65D30
- Ting, E. C. A method of analysis for compressible viscoelastic solids. *Appl. Sci. Res.* **26** (1972), 93-104. (J. P. Guiraud) **47** #2893 73.45
- Ting, Lu Spherical means of solutions of partial differential equations in a conical region. *SIAM J. Appl. Math.* **29** (1975), no. 4, 597-623. (Clarence M. Ablow) **52** #8634 35C15
- (with Gunzburger, M.; Liu, C. H.; Maestrello, L.) Mathematical formulation for the propagation of sound through a turbulent jet. *J. Engrg. Math.* **10** (1976), no. 3, 219-230. (S. H. Lam) **53** #9847 76.35
- Periodic solutions of nonlinear wave equations in n -dimensional space. *SIAM J. Appl. Math.* **34** (1978), no. 3, 504-514. (Author's summary) **58** #17448 35B10 (35L05)
- (with Callegari, Andrew J.) Motion of a curved vortex filament with decaying vortical core and axial velocity. *SIAM J. Appl. Math.* **35** (1978), no. 1, 148-175. (Authors' summary) **58** #14257 76.35
- Ting, Peter D. (with Silverman, Dennis) Regge trajectories and the pomeron slope in the ABFT multiperipheral model. *Nuclear Phys. B35* (1971), 445-465. (Virendra Singh) **46** #1236 81.30
- Ting, T. C. T. A unified theory on elastic-plastic wave propagation of combined stress. *Foundations of plasticity (Papers, Internat. Sympos., Warsaw, 1972)*, pp. 301-316. Noordhoff, Leiden, 1973. (G. Eason) **56** #7421 73.35
- Nonlinear effects on the propagation of discontinuities of all orders in viscoelastic media. With discussions. *Mechanics of visco-elastic media and bodies (Proc. IUTAM Sympos., Chalmers Univ. Tech., Göteborg, 1974)*, pp. 84-95. Springer, Berlin, 1975. (D. R. Bland) **56** #13945 73.41
- (with Cizek, J. C.) Reflection of acceleration waves in an elastic-plastic medium. *Trans. ASME Ser. E. J. Appl. Mech.* **45** (1978), no. 1, 51-59. (Authors' summary) **58** #19545 73.35
- Ting, Tsuan Wu (with Showalter, Ralph E.) Pseudoparabolic partial differential equations. *SIAM J. Math. Anal.* **1** (1970), 1-26. (Editors) **55** #10857 35K99
- (with Showalter, Ralph E.) Asymptotic behavior of solutions of pseudo-parabolic partial differential equations. *Ann. Mat. Pura Appl.* (4) **90** (1971), 241-258. (Howard A. Levine) **47** #5414 35B40
- (with Gopala Rao, V. R.) Solutions of pseudo-heat equations in the whole space. *Arch. Rational Mech. Anal.* **49** (1972/73), 57-78. (J. E. Lagnese) **48** #9111 35K15
- Generalized Korn's inequalities. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. II. *Tensor (N.S.)* **25** (1972), 295-302. (John M. Ball) **48** #10278 73.46
- Solved and unsolved problems in elastic-plastic torsion of solid bars. *Foundations of plasticity (Papers, Internat. Sympos., Warsaw, 1972)*, pp. 25-35. Noordhoff, Leyden, 1973. (Cornelius O. Horgan) **56** #10296 73.35
- (with Gopala Rao, V. R.) Initial-value problems for pseudo-parabolic partial differential equations. *Indiana Univ. Math. J.* **23** (1973/74), 131-153. (M. Jodeit, Jr.) **50** #13893 35K99
- (with Ford, William H.) Stability and convergence of difference approximations to pseudo-parabolic partial differential equations. *Math. Comp.* **27** (1973), 737-743. (J. L. Morris) **51** #2303 65M10
- Torsional rigidities in the elastic-plastic torsion of simply connected cylindrical bars.

- Pacific J. Math.* **46** (1973), 257-267. (I. Tadjbakhsh) **48** #5473 73.49
- Torsional rigidities for bars under fully plastic torsion. *SIAM J. Appl. Math.* **25** (1973), 54-68. (G. Tiwari) **47** #7991 73.49
- A cooling process according to two-temperature theory of heat conduction. *J. Math. Anal. Appl.* **45** (1974), 23-31. (Howard A. Levine) **48** #9108 35K05
- (with Ford, William H.) Uniform error estimates for difference approximations to nonlinear pseudo-parabolic partial differential equations. *SIAM J. Numer. Anal.* **11** (1974), 155-169. (J. R. Cannon) **54** #11807 65N15
- St. Venant's compatibility conditions. *Tensor (N.S.)* **28** (1974), 5-12. (J. P. Wilson) **50** #8335 53A45
- (with Potter, R. M.) The problem of forced fittings. I. The loading process. *Arch. Rational Mech. Anal.* **58** (1975), no. 1, 77-94. (A. J. M. Spencer) **52** #2339 73.35
- Elastic-plastic torsion of cylindrical pipes. *Applications of methods of functional analysis to problems in mechanics (Joint Sympos., IUTAM/IMU, Marseille, 1975)*, pp. 521-531. *Lecture Notes in Math.*, 503. Springer, Berlin, 1976. (B. A. Bondarenko) **58** #32273 73.46
- The unloading problem for severely twisted bars. *Pacific J. Math.* **64** (1976), no. 2, 559-582. (Hélène Lanchon) **56** #10297 73.35
- Elastic-plastic torsion problem over multiply connected domains. *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* **4** (1977), no. 2, 291-312. (Hélène Lanchon) **56** #1893 73.35
- Problem of compatibility and orthogonal decomposition of second-order symmetric tensors in a compact Riemannian manifold with boundary. *Arch. Rational Mech. Anal.* **64** (1977), no. 3, 221-243. (C.-C. Wang) **58** #8781 76.53
- (with Rao, V. R. Gopala) Pointwise solutions of pseudoparabolic equations in the whole space. *J. Differential Equations* **23** (1977), no. 1, 125-161. (Genowefa Majcher) **55** #3514 35G10
- St. Venant's compatibility conditions and basic problems in elasticity. *Rocky Mountain J. Math.* **7** (1977), no. 1, 47-52. **56** #1907 73.53
- See also *Advances in differential and integral equations*, **50** #10389
- Ting, Wei-lung On higher order nonsingular immersions of Dold manifolds. *Proc. Amer. Math. Soc.* **39** (1973), 195-200. (H. Suzuki) **51** #14103 57D40
- Tingleff, O. See *Wilkinson, J. H.* **50** #15318
- Tingley, D. J. See *Tables: Elliptic curves*, **52** #10557
- Tingley, Daryl Monochromatic lines in the plane. *Math. Mag.* **48** (1975), no. 5, 271-274. (N. Hindman) **53** #9115 54-01
- Tinhofer, Gottfried Mehrdimensionale Zuordnungsprobleme und Netzwerkflüsse mit vorgegebenen Wertemengen. (English summary) *Computing (Arch. Elektron. Rechnen)* **8** (1971), 113-120. (G. Opfer) **45** #3058 90B35
- Über die Bestimmung von Kernen in endlichen Graphen. (English summary) *Computing (Arch. Elektron. Rechnen)* **9** (1972), 139-147. (F. Harary) **52** #10513 05C99
- Der Out-of-Kilter-Algorithmus für antisymmetrische Netzwerke. (English summary) *Computing (Arch. Elektron. Rechnen)* **11** (1973), no. 1, 45-50. (Author's summary) **51** #14918 90B10
- Über eine Anwendung der Lagrangeschen Reihe. *Math. Nachr.* **58** (1973), 201-213. (H. W. Gould) **50** #6881 05A19 (26A06)
- Eine strenge Begründung dynamischer Programme und die Bestimmung ausgezeichneter Knoten- oder Kantennengen in endlichen Graphen. *Monatsh. Math.* **77** (1973), 148-155. (D. Hochstädter) **47** #9394 49C99
- Zur Bestimmung der Automorphismen eines endlichen Graphen. (English summary) *Computing* **15** (1975), no. 2, 147-156. (M. E. Watkins) **54** #2516 05C20
- Der Konvergenzbereich einer Reihendarstellung für Polynomwurzeln. *Math. Nachr.* **65** (1975), 7-17. (L. Leindler) **51** #917 32A05
- ★Methoden der angewandten Graphentheorie. Springer-Verlag, Vienna-New York 1976. x+236 pp. (H. Rohleder) **55** #9905 90B10 (05Cxx)
- Zum algorithmischen Nachweis der Isomorphie von endlichen Graphen. *Graphen, Algorithmen, Datenstrukturen (Zweite Fachtagung Graphentheoret. Konzepte Informatik, Göttingen, 1976)*, pp. 169-182. *Appl. Comput. Sci.*, Vol. 4. Hanser, Munich, 1976. (D. R. Morrison) **57** #2988 05C30 (05C20)
- (with Hinteregger, J.) Zerlegung der Knotennengen von Graphen zum Nachweis der Isomorphie. (English summary) *Computing* **18** (1977), no. 4, 351-359. (R. C. Read) **57** #3007 05C99
- On the simultaneous isomorphism of special relations (isomorphism of automata). *Datenstrukturen, Graphen, Algorithmen (3. Fachtagung Graphentheoret. Konzepte Informatik, Linz, 1977)*, pp. 205-213. *Appl. Comp. Sci.*, Vol. 8. Carl Hanser, Munich, 1978. (István Babcsányi) **58** #20915 94A30
- See also *Fil'čakov, P. F.*, **56** #13501
- Tinn, K. A. (with Tyugu, È. H.) Nonlinear programming with random constraints. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 1, 54-62. (Authors' summary) **45** #8269 90C15
- Tinney, W. F. (with Erisman, A. M.) On computing certain elements of the inverse of a sparse matrix. *Comm. ACM* **18** (1975), 177-179. (L. Hageman) **51** #14540 65F05
- Tinsley, J. D. See *Computers in higher education*, **56** #6a and *Computers in higher education*, **56** #6b
- Tintner, Gerhard (with Jimbo, Ichiro) An equilibrium model of economic growth. *Metroecon.* **22** (1970), 1-15. **45** #8233 90A15
- (with Sengupta, Jati K.) ★Stochastic economics. Stochastic processes, control, and programming. *Academic Press, New York-London*, 1972. xi+315 pp. (Peter Kall) **53** #7374 90-02 (93E99)
- Some aspects of stochastic economics. *Stochastics* **1** (1973), no. 1, 71-86. (Author's summary) **48** #7921 90A15
- (with Afriat, Sydney; Rama Sastry, M. V.) ★Studies in correlation. Multivariate analysis and econometrics. *Angewandte Statistik und Ökonometrie. Vandenhoeck & Ruprecht, Göttingen*, 1975. 149 pp. (A. L. Nagar) **54** #6379 62H20 (62P20)
- Multicollinearity. *Appl. Math. Comput.* **1** (1975), no. 3, 233-242. (P. Fortunati) **52** #2040 62H15
- Some aspects of stochastic economics. (Spanish) Translated from the English (Stochastics **1** (1973), no. 1, 71-86) by Guillermo M. Gómez M. *Bol. Mat.* **9** (1975), no. 4.5.6, 230-255. (Editors) **54** #9635 90A99
- Quelques chapitres de l'analyse statistique des séries temporelles économiques (English summary) *Publ. Économétriques* **8** (1975), no. 2, 44-68, 120. (H. Toutenbut) **53** #15313 90A20
- (with Sondermann, A.) Statistical aspects of economic aggregation. *Mathematical economics and game theory*, pp. 516-535. *Lecture Notes in Econ. and Math. Systems*, Vol. 141. Springer, Berlin, 1977. (A. L. Nagar) **55** #11554 62P20 (90A15)
- (with Rao, J. N. K.; Strecker, Heinrich) ★New results in the variate difference method. With German and French summaries. *Angewandte Statistik und Ökonometrie. Heft 11. Vandenhoeck & Ruprecht, Göttingen*, 1978. 102 pp. ISBN 3-525-11242-4 (E. Hannan) **58** #8097 62M10
- Tiomno, J. Equivalence of Lorentz transformations and Foldy-Wouthuysen transformations for free spinor fields. *Physica* **53** (1971), 581-601. (Pavel Winternitz) **53** #15151 81.22
- (with Breuer, Reinhard A.; Vishveshwara, C. V.) Polarization of gravitational geodesic synchrotron radiation. *Nuovo Cimento B (11)* **25** (1975), 851-870. (Author's summary) **52** #4919 83.53
- Tip, A. Transport equations for dilute gases with internal degrees of freedom. *Physica* **53** (1971), 493-522. (F. C. Auluck) **51** #14835 82.45
- (with Prugovečki, Eduard) On ergodic limits of normal states in quantum statistical mechanics. *J. Mathematical Phys.* **15** (1974), 275-282. (Gérard G. Emch) **53** #2207 81.47 (82.47)
- (with Prugovečki, Eduard) Scattering theory in a time-dependent external field. General theory. *J. Phys. A* **7** (1974), 572-585. (James S. Howland) **53** #2208 81.47
- (with Prugovečki, Eduard) Scattering theory in a time-dependent external field. Applications. *J. Phys. A* **7** (1974), 586-596. (James S. Howland) **53** #2209 81.47
- (with Prugovečki, Eduard) Semi-groups of rank-preserving transformers on minime norm ideals in $\mathfrak{B}(\mathfrak{H})$. *Compositio Math.* **30** (1975), 113-136. (J. D. Gray) **51** #11193 47D05 (46L15)
- (with Blaauw, H. J.) L_p -space techniques in potential scattering. *J. Mathematical Phys.* **17** (1976), no. 4, 530-534. (B. Misra) **53** #2192 81.47
- (with Prugovečki, Eduard) On two-atom scattering in a quantized radiation field. *J. Phys. A* **9** (1976), no. 2, 225-228. (G. Costa) **55** #1988 81.47
- Tipler, Frank J. Rotating cylinders and the possibility of global causality violation. *Phys. Rev. D (3)* **9** (1974), 2203-2206. (Author's summary) **53** #12496 83.53
- The beginning and the end of a black hole. *Phys. Lett. A* **59** (1976), no. 2, 107-108. (Author's summary) **54** #6878 83.53
- Causality violation in asymptotically flat space-times. *Phys. Rev. Lett.* **37** (1976), no. 14, 879-882. (Author's summary) **56** #14518 83.53
- Singularities and causality violation. *Ann. Physics* **108** (1977), no. 1, 1-36. (R. F. Biljalov) **57** #11642 83.58
- Causally symmetric spacetimes. *J. Mathematical Phys.* **18** (1977), no. 8, 1568-1573. (S. Deser) **56** #14519 83.53
- Singularities in conformally flat spacetimes. *Phys. Lett. A* **64** (1977), no. 1, 8-10. (Author's summary) **58** #20247 83.53
- On the nature of singularities in general relativity. *Phys. Rev. D (3)* **15** (1977), no. 4, 942-945. (J. S. Joel) **57** #8947 83.58 (53C50, 58E10)
- Energy conditions and space-time singularities. *Phys. Rev. D (3)* **17** (1978), no. 10, 2521-2528. (Mauro Francaviglia) **58** #4188 83.58
- Tiplitz, Charles I. Convergence of the bounded fixed charge programming problem. *Naval Res. Logist. Quart.* **20** (1973), 367-375. (G. Berman) **47** #8111 90C10
- Tipol't, A. N. See *Soviet statistics in half a century (1917-1967)*, **50** #15017
- Tippe, Jürgen See *Willers, Friedrich Adolf*, **49** #11755
- Tippenhauer, Ulrich Dualitätsbetrachtungen zur optimalen Approximation von Sardinien. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 595-600. (E. W. Cheney) **53** #6195 41A65
- (with Schempp, Walter) Reprokerne zu Spline-Grundräumen. *Math. Z.* **136** (1974), 357-369. (E. Gerlach) **58** #6867 41A65 (41A15, 46E20)
- Zur Bestimmung von Spline-Funktionen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Bochum, 1974). *Z. Angew. Math. Mech.* **55** (1975), no. 4, T264-T265. (W. J. Kotzé) **54** #5684 41A15
- Über eine Klasse von L-Spline-Funktionen. *Acta Math. Acad. Sci. Hungar.* **28** (1976), no. 3-4, 241-246. (L. L. Schumaker) **54** #13396 41A15
- Methoden zur Bestimmung von Reprokernen. (English summary) *J. Approximation Theory* **21** (1977), no. 4, 394-410. (Hans-Peter Blatt) **57** #7135 46E20 (46E35)
- Spline-Projektoren in Banachräumen. (English summary) *Math. Nachr.* **80** (1977), 245-251. (Walter Schempp) **58** #1930 41A65 (41A15)
- Tippett, James An existence-uniqueness theorem for two-point boundary value problems. *SIAM J. Math. Anal.* **5** (1974), 153-157. (T. L. Sherman) **49** #3260 34B15
- Tipple, D. A. A note on the metastable homotopy groups of torsion spheres. *Bull. London Math. Soc.* **3** (1971), 303-306. (M. Mimura) **45** #7711 55E45
- Tipton, A. R. (with Milnes, Harold Willis) Least squares solution of linear equations. *Indust. Math.* **22** (1972), 11-16. (H. Brunner) **46** #10189 65F20
- Tirani, Romeo (with Gnocchi, Giuseppe) Metodi Monte Carlo nel calcolo di integrali multipli riguardanti lo studio delle molecole poliatomiche. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **106** (1972), 676-684. (E. H. Bareiss) **48** #3217 65C05 (82.35)
- Su di un metodo statistico per il calcolo di integrali semplici. *Atti. Sem. Mat. Fis. Univ. Modena* **22** (1973), no. 2, 431-445 (1974). (I. Văduva) **51** #14513 65C05
- Un metodo statistico per il calcolo degli integrali multipli. *Atti Sem. Mat. Fis. Univ. Modena* **23** (1974), no. 1, 405-412 (1975). (I. Văduva) **53** #4480 65C05
- Tirao, Juan A. Square integrable representations of semisimple Lie groups. *Trans. Amer. Math. Soc.* **190** (1974), 57-75. (E. A. Thieleker) **49** #3036 22E45 (32L05, 32M15)
- Spherical functions. *Rev. Un. Mat. Argentina* **28** (1976/77), no. 2, 75-98. (A. Derighetti) **57** #13386 43A90 (22E30)
- (with Kostant, Bertram) On the structure of certain subalgebras of a universal enveloping algebra. *Trans. Amer. Math. Soc.* **218** (1976), 133-154. (Bernard Kolman) **53** #8169 17B35
- The classifying ring of $SL(2, C)$. *Geometry and topology (Proc. III Latin Amer. School of Math., Inst. Pura Aplicada CNPq, Rio de Janeiro, 1976)*, pp. 641-678. *Lecture Notes in Math.*, Vol. 597. Springer, Berlin, 1977. (S. I. Gel'fand) **56** #15840 22E45

- upa, Yupaorn** (with Hardy, Darel W.) Semilattices of proper inverse semigroups. *Semigroup Forum* **13** (1976), no. 1, 29-36. (D. B. McAlister) **54** #5376 20M10
- izi, R. H.** (with Salemi, B. A.) On generating sets of integers. *Punjab Univ. J. Math. Lahore* **4** (1971), 7-12. (A. Peluso) **46** #3329 05A99
- (with Salemi, B. A.) On the number of generating sets. *Punjab Univ. J. Math. Lahore* **4** (1971), 13-19. (A. Peluso) **46** #3330 05A99
- (with Salemi, B. A.) An elementary approach to partition theory. *Punjab Univ. J. Math. (Lahore)* **4** (1971), 21-36. (George E. Andrews) **46** #3439 10A45
- oveanu, Mircea** Sur un système logistique déontique modal semi-constructif. C. R. Travaux Colloq. sur la Modalité du Jugement chez Aristote et dans la Logique Moderne Braşov, 1969). *An. Univ. Bucureşti Acta Logica* **12** (1969), 275-293. (F. Vandamme) **46** #1560 02C10
- On some properties of the transfinite assertoric-deontic logic systems S_{ad}^{210} , S_{ad}^{2n0} . (Romanian) *Problems of logic, Vol. V (Romanian)*, pp. 31-90. Editura Acad. R.S.R., Bucharest, 1973. (Editors) **58** #27350 02C10
- On some syntactic properties of transfinite assertoric-deontic-modal logical systems of the form S_{adm}^{210} , S_{adm}^{2n0} . (Romanian. French summary) *Problems of logic, Vol. VI (Romanian)*, pp. 35-66. Editura Acad. R.S.R., Bucharest, 1975. (David Makinson) **58** #154 02C10
- Some metalogical properties of transfinite assertoric, modal, deontic logic systems of order zero. (Romanian. French summary) *Problems of logic, Vol. VII (Romanian)*, pp. 75-94. Ed. Acad. RS România, Bucharest, 1977. (Author's summary) **58** #27351 02C10
- On the logical-mathematical modeling of a general axiological system. (Romanian) *Problems of logic, Vol. VII (Romanian)*, pp. 201-213. Ed. Acad. RS România, Bucharest, 1977. (From the text) **58** #27365 02C99 (93A05)
- occi, B.** (with Minasjan, V. B.) Evolution of one-dimensional classical systems of hard rods. (Russian) *Uspehi Mat. Nauk* **33** (1978), no. 2(200), 199-200. (R. A. Minlos) **58** #14856 82.60
- oni, Gino** (with Isler, Romano) On some problems of local approximability in compact spaces. *General topology and its relations to modern analysis and algebra, III (Proc. Third Prague Topological Sympos., 1971)*, pp. 443-446. Academia, Prague, 1972. (M. Rajagopalan) **50** #14672 54D55 (54A25)
- Alcune osservazioni sul prodotto di due spazi topologici aventi una proprietà di Lindelöf. (English summary) *Rend. Ist. Mat. Univ. Trieste* **5** (1973), 174-179. (G. Chogoshvili) **50** #8412 54A25
- (with Isler, Romano) Su alcune invarianti cardinali in spazi topologici. (English summary) *Rend. Ist. Mat. Univ. Trieste* **7** (1975), no. 2, 149-155. (O. T. Alas) **54** #3640 54A25
- Sul prodotto cartesiano di spazi topologici aventi proprietà del tipo della paracompattezza. (English summary) *Rend. Sem. Mat. Univ. Padova* **56** (1976), 91-100 (1978). (Marco Barnardo) **58** #12915 54D20
- ozzi, Brunello** (with Pulvirenti, Mario) Time evolution of a quantum lattice system. *Comm. Math. Phys.* **30** (1973), 83-98. (S. Gudder) **48** #1619 81.46
- (with Pulvirenti, Mario; Salusti, Ettore) On Eckart's approach to the hydrodynamic evolution of oceans and atmosphere. (Italian summary) *Nuovo Cimento B* (11) **25** (1975), 295-307. (Radu Bădescu) **51** #4841 76.35
- (with Presutti, Errico; Pulvirenti, Mario) Time evolution of infinite classical systems with singular, long range, two body interactions. *Comm. Math. Phys.* **47** (1976), no. 1, 81-95. (B. M. Gurevič) **53** #10081 82.47
- (with Dobrušin, R. L.) The central limit theorem and the problem of equivalence of ensembles. *Comm. Math. Phys.* **54** (1977), no. 2, 173-192. (Hans-Otto Georgii) **56** #3977 60K35 (82.60)
- sklii, G. A.** (with Suslov, O. N.) Definition, properties, and calculation of effective ambipolar diffusion coefficients in a laminar multicomponent ionized boundary layer. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* **1970**, no. 4, 60-72. (From the summary) **45** #1485 80.35
- (with Razumėiko, B. G.; Trenogin, V. A.) Existence and uniqueness theorems and asymptotic solutions for a self-similar boundary value problem of a viscous hypersonic shock layer. (Russian) *Dokl. Akad. Nauk SSSR* **219** (1974), 825-828. (J. F. Heyda) **52** #7290 76.34
- (with Kazeikin, S. N.; Ševelev, Ju. D.) A three-dimensional boundary layer with equilibrium reactions of dissociation and ionization. (Russian) *Cisl. Metody Meh. Splošn. Sredy* **8** (1977), no. 7, 53-65. (From the text) **58** #32337 76.35
- toprodjo, S.** Generalisation of theorem by Mitra and Hurgit on positive real functions. *Electron. Lett.* **7** (1971), 211-212. (J. Gregor) **48** #6426 30A76
- Synthesis by continued-fraction expansion. *Electron. Lett.* **7** (1971), 631-632. (Author's summary) **47** #8212 94A20
- tenko, A. G.** (with Nikolaev, I. A.; Fradkin, B. G.) An approach to the solution of certain ill-posed problems by the quasi-inverse method. (Russian) *Elektronika i Modelirovanie* No. 15 (1977), 105-108, 126. (Editors) **58** #25027 65P05
- tenko, A. V.** Weakly special and special radicals in semigroups. (Russian) *Mat. Sb. (N.S.)* **94(136)** (1974), 551-566, 655. (G. Pollák) **51** #3337 20M10
- On the Brown-McCoy radical in semigroups. *Math. Nachr.* **63** (1974), 401-411. (T. Tamura) **51** #764 20M10
- Strongly semisimple semigroups. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 2(182), 218. (B. Pondělíček) **53** #5785 20M10
- Special and weakly special radicals in semigroups. *U-semisimple semigroups with some minimum condition. Universale Algebren und Theorie der Radikale*, pp. 71-75. *Studien zur Algebra und ihre Anwendungen, Band 1*, Akademie-Verlag, Berlin, 1976. (H.-J. Hoehnke) **58** #11183 20M10
- tenko, S. V.** (with Zubarev, D. N.) Nonlocal hydrodynamics with memory. *Physica* **59** (1972), 285-304. (K. K. Sen) **51** #4914 82.45
- Direct proof of the equivalence of two forms of the nonequilibrium statistical operator. (Russian. English summary) *Teoret. Mat. Fiz.* **25** (1975), no. 3, 407-409. (Author's summary) **58** #14831 82.47
- tenko, V. A.** (with Melihov, A. N.; Kurečik, V. M.; Celjankin, V. V.) The number of intersections of edges of an arbitrary graph. (Russian) *Vychisl. Sistemy* No. 41 (1971), 13-24. (W. Imrich) **46** #3372 05C35
- (with Melihov, A. N.; Kurečik, V. M.) Minimization of the number of intersections of the edges of a graph. (Russian) *Vychisl. Sistemy* No. 47 (1971), 32-40. (W. Imrich) **47** #8359 05C99 (68A10)
- (with Hestanon, R. H.) Diffraction of a field with light-shadow boundary by a half-plane. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 842-845. (A. Nikodémusz) **49** #8510 78.35
- Tiščenko, V. N.** A model of the selection of nomenclature for heterogeneous production. (Russian) *Ekonom. i Mat. Metody* **12** (1976), no. 5, 899-909. (B. L. Ovsievich) **57** #15404 90B99
- (with Petrov, V. N.) A boundary value problem of matching potential and vortex flows. (Russian) *Gidromeh. (Kiev) Vyp.* **36** (1977), 14-18, 121. (N. N. Janenko) **57** #4807 76.35
- Tiščenko, V. V.** (with Djubko, G. F.) On the question of the basis for a mathematical model for the adaptation of a skin analyzer to vibrational sensitivity. (Russian) *Cybernetics and computer technology. No. 21: Biological and medical cybernetics* (Russian), pp. 34-42, 122. "Naukova Dumka", Kiev, 1973. (Ju. I. Petunin) **49** #10394 92A05
- Tischel, Gerhard** ★Lineare Algebra. II. Lehrgang und Aufgaben Studienbücher Mathematik. Diesterweg-Salle, Frankfurt am Main; Verlag Sauerländer, Aarau-Frankfurt am Main, 1977. vii + 148 pp. ISBN 3-425-05375-2 (George P. Barker) **57** #6044 15-01
- Tischer, Jürgen** (with Wittmer, Hans) Invarianz gewisser Operatorenklassen unter nichtkommutativen ergodischen Mitteln. (English summary) *Manuscripta Math.* **13** (1974), 73-81. (Paul S. Muhly) **50** #1015 46L15 (47A35)
- Tischer, Karl Wilhelm** (with Ehrig, Hartmut) Graph grammars and applications to specialization and evolution in biology. Collection of papers on cellular automata and developmental systems (Conf. Biologically Motivated Automata Theory, MacLean, Va., 1974). *J. Comput. System Sci.* **11** (1975), no. 2, 212-236. (E. G. Manes) **52** #2286 68A30 (92A05)
- Tischer, Wilhelm** (with Ehrig, Hartmut) Derivations of stochastic graphs. *Proceedings of the International Symposium on Uniformly Structured Automata and Logic (Internat. Inst. Advanced Study Soc. Informat. Sci., Tokyo, 1975)*, pp. 1-6. IEEE Computer Soc., New York, 1975. (K. S. Fu) **58** #8517 68A30
- Tischler, David** (with Joubert, Gérard; Moussu, Robert) Sur les classes caractéristiques des feuilletages produits. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A171-A174. (J. M. Boardman) **50** #5817 57D30
- (with Tischler, R.) Topological conjugacy of locally free R^{n-1} actions on n -manifolds. (French summary) *Ann. Inst. Fourier (Grenoble)* **24** (1974), no. 4, vii, 213-227 (1975). (Robert Roussarie) **52** #1726 (E 54 #8672) 57D30 (58F99)
- Locally free actions of R^{n-1} on M^n without compact orbits. *Topology* **13** (1974), 215-217. (Robert Roussarie) **50** #1264 57D30
- (with Tischler, R.) Erratum: "Topological conjugacy of locally free R^{n-1} actions on n -manifolds" (Ann. Inst. Fourier (Grenoble) **24** (1974), no. 4, 213-227). *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 2, 301. (Robert Roussarie) **54** #8672 57D30
- (with Golubitsky, M.) An example of moduli for singular symplectic forms. *Invent. Math.* **38** (1976/77), no. 3, 219-225. (Robert Roussarie) **55** #9131 58A10 (58C25, 57D25)
- (with Shulman, Herbert) Leaf invariants for foliations and the Van Est isomorphism. *J. Differential Geometry* **11** (1976), no. 4, 535-546. (D. B. Fuks) **56** #9549 57D30
- (with Golubitsky, M.) The nonexistence of globally stable forms. *Proc. Amer. Math. Soc.* **58** (1976), 296-300. (Robert Roussarie) **54** #3736 58A10
- (with Golubitsky, M.) On the local stability of differential forms. *Trans. Amer. Math. Soc.* **223** (1976), 205-221. (J. M. Boardman) **55** #4244 58A10 (58C25)
- Closed 2-forms and an embedding theorem for symplectic manifolds. *J. Differential Geometry* **12** (1977), no. 2, 229-235. (S. Ramanan) **58** #7677 58A10 (53C05, 58F05)
- (with Epstein, D. B. A.; Millett, Kenneth C.) Leaves without holonomy. *J. London Math. Soc.* (2) **16** (1977), no. 3, 548-552. (Elmar Vogt) **57** #4193 57D30
- Tischler, R.** (with Tischler, David) Topological conjugacy of locally free R^{n-1} actions on n -manifolds. (French summary) *Ann. Inst. Fourier (Grenoble)* **24** (1974), no. 4, vii, 213-227 (1975). (Robert Roussarie) **52** #1726 (E 54 #8672) 57D30 (58F99)
- (with Tischler, David) Erratum: "Topological conjugacy of locally free R^{n-1} actions on n -manifolds" (Ann. Inst. Fourier (Grenoble) **24** (1974), no. 4, 213-227). *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 2, 301. (Robert Roussarie) **54** #8672 57D30
- Tisdell, Clem** Coalitions and clubs-aspects of their formation and economic efficiency. *Mathematical economics and game theory*, pp. 446-456. *Lecture Notes in Econ. and Math. Systems*, Vol. 141, Springer, Berlin, 1977. (B. G. Mirkin) **56** #2447 90D35
- Tishchenko, A. V.** See **Tiščenko, A. V.**
- Tishchenko, S. V.** See **Tiščenko, S. V.**
- Tiskin, A. I.** (with Sovetov, B. Ja.) Dominant distributions in certain problems of scheduling theory. (Russian) *Automation of production, No. 2 (Russian)*, pp. 110-114. *Izdat. Leningrad. Univ., Leningrad*, 1976. (G. Serkšnyš) **56** #17786 90B35
- Tiskin, V. F.** (with Goloviznin, V. M.; Favorskii, A. P.) ★Вариационный подход к построению разностных схем для уравнений гидродинамики в сферических координатах. (Russian) [A variational approach to the construction of difference schemes for the equations of hydrodynamics in spherical coordinates] Preprint No. 16 (1977). *Inst. Prikl. Mat. Akad. Nauk. SSSR, Moscow*, 1977. 45 pp. (Not reviewed) 65P05 (76.65)
- (with Gasilov, V. A.; Goloviznin, V. M.; Favorskii, A. P.) Numerical solution of a model problem on Rayleigh-Taylor instability. (Russian) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint* No. 119 (1977), 23 pp. (Authors' summary) **58** #14348 76.65
- (with Goloviznin, V. M.; Koršija, T. K.; Favorskii, A. P.) Some properties of variational-difference equations of magnetohydrodynamics and artificial dissipative processes of "pseudoviscosity" type. (Russian. English summary) *Akad. Nauk SSSR Inst. Prikl. Mat. Preprint* No. 25 (1978), 69 pp. (From the summary) **58** #25381 76.65 (65P05)
- Tiskin, V. L.** Solution of polynomial games by the method of cut-offs. (Russian. English summary) *Advances in game theory (Proc. Second All-Union Conf., Vilnius, 1971)* (Russian), pp. 69-72. *Izdat. "Mintis", Vilnius*, 1973. (Author's summary) **50** #6519 90D05
- The solution of a certain problem of parametric optimization. (Russian. English

- summary insert) *Kibernetika (Kiev)* 1974, no. 1, 131-134. (B. Bereanu) 50 #1715 90C05
- A method of solving a certain game problem with conditions depending on a parameter. (Russian. English summary) *Vestnik Leningrad. Univ. No. 7 Mat. Meh. Astronom. vyp. 2* (1974), 163-165, 174. (E. G. Gol'shtein) 50 #12309 90D99
- The solution of a certain game problem with conditions that depend on a parameter. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Droboych, 1974), Convex programming (Russian)*, pp. 139-144. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1976. (O. N. Bondareva) 56 #8061 90D99
- Tisseron, Claude** Sur deux classes d'anneaux. *C. R. Acad. Sci. Paris Sér. A-B* 277 (1973), A413-A415. (C. Lemaire) 49 #9030 16A52
- Sur deux classes d'anneaux. Colloque d'Algèbre non Commutative (Lyon, 1973). *Publ. Dép. Math. (Lyon)* 10 (1973), no. 1, 47-61. (See Zbl 309 #16020; MR 48 #4007) 16A02
- Sur les anneaux tels que tout produit de copies d'un module quasi-injectif soit un module quasi-injectif. *Ann. Mat. Pura Appl. (4)* 105 (1975), 37-71. (G. Renault) 53 #5666 16A52
- Sur les anneaux tels que tout produit de copies d'un module quasi-injectif soit un module quasi injectif. II. *Ann. Mat. Pura Appl. (4)* 110 (1976), 15-28. (G. Renault) 55 #8104 16A52
- See also Séminaire: Algèbre Non Commutative, 48 #5785
- Tissier, Gilles** Approximation d'une fonction définie sur une sphère dans une base de fonctions sphériques de Legendre. (Loose English summary) *Rev. Française Informat. Recherche Opérationnelle* 5 (1971), Sér. R-3, 9-28. (Gilbert Walter) 46 #2346 42A56 (33A45)
- Interpolation à plusieurs variables sur la sphère. (English summary) *Numer. Math.* 19 (1972), 136-145. (H. L. Loebe) 47 #1240 65D05
- Quasi-analyticité et approximation sur la frontière d'un ouvert non relativement compact dans la théorie axiomatique des fonctions harmoniques. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), Aii, A89-A91. (I. Netuka) 51 #5954 31D05
- Quasi-analyticité et approximation sur la frontière d'un ouvert quelconque, dans la théorie axiomatique des fonctions harmoniques. (English summary) *Bull. Soc. Math. France* 104 (1976), no. 2, 165-174. (Klaus Janssen) 54 #7828 31D05
- Tită, Nicolae** ω -bases in Banach spaces. (Romanian. French summary) *Stud. Cerc. Mat.* 21 (1969), 1135-1139. (I. Suciu) 45 #5721 46B15
- On dissipative operators with completely continuous imaginary component. (Romanian. French summary) *Stud. Cerc. Mat.* 21 (1969), 1435-1439. (V. Istrătescu) 47 #5633 47A65 (47B44)
- On bases of proper vectors for contraction operators. (Romanian. French summary) *Bul. Inst. Politehn. Braşov Ser. A Mec.* 13 (1971), 31-33. (G. Arsene) 46 #7961 47B99 (46B15)
- Operators of class \mathcal{S}_p in non-Hilbert spaces. (Romanian. French summary) *Stud. Cerc. Mat.* 23 (1971), 467-487. (E. Gerlach) 49 #11299 47B10 (46L20)
- A condition for the completeness of the root vectors of dissipative operators with nuclear imaginary component. (Romanian. French summary) *Stud. Cerc. Mat.* 23 (1971), 995-1000. (V. Istrătescu) 49 #5899 47A65
- The study of certain classes of operators with the aid of n -diameters. (Romanian. French summary) *Stud. Cerc. Mat.* 23 (1971), 1579-1585. (F. Smithies) 49 #11300 47B10
- Considerations in connection with the tensor product of operators. (Romanian. French summary) *Bul. Univ. Braşov Ser. C Mat. Fiz. Chim. Şti. Natur.* 14 (1972), 13-15. (F. H. Szafraniec) 52 #3987 47A10
- Considerations on some classes of linear operators. (Romanian. French summary) *An. Univ. Bucureşti Mat.-Mec.* 22 (1973), no. 1, 113-115. (B. Crstici) 50 #2975 47B10
- Observations on certain classes of operators. (Romanian. French summary) *Univ. Braşov Lucrari Ştiinţ.* 18 (1976), 59-62. (A. I. Şchiop) 58 #2399 47B05
- Titani, Satoko** A proof of the cut-elimination theorem in simple type theory. *J. Symbolic Logic* 38 (1973), 215-226. (A. Kino) 48 #10777 02D99
- Titarenko, B. P.** A variational method for constructing minimum variance estimates under conditions of "contamination". (Russian) *Proceedings of the Fourth Winter School on Mathematical Programming and Related Questions (Droboych, 1971), No. 2 (Russian)*, pp. 180-196. *Moskov. Inzh.-Stroitel. Inst., Moscow*, 1971. (See RZMat 1972 #5 V111; MR 56 #18) 62F10
- (with Smoljak, S. A.) The robust estimation of the parameter of a distribution function. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions (Droboych, 1973) (Russian)*, pp. 198-208. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1975. (I. Volodin (RZMat 1976 #1 V248)) 56 #16895 62F10 (62G35, 60K25)
- (with Smoljak, S. A.) A generalization of Huber's model for arbitrary contamination. (Russian) *Mathematical programming and related questions (Proc. Seventh Winter School, Droboych, 1974), Convex programming (Russian)*, pp. 103-109. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1976. (Jana Jurečková) 57 #7864 62G35
- See also Mathematical programming and related questions, 55 #14 and Mathematical programming and related questions, 55 #15
- Titarenko, Ju. V.** Bonnet's theorem for surfaces in Hilbert space. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 26 (1971), no. 5, 45-49. (M. Craioveanu) 45 #1090 53C45 (46C05, 52A50, 58B20)
- Systems of Pfaffian equations with nonanalytic coefficients. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 1(181), 265-266. (P. Ver Eecke) 54 #8689 58A15
- The Cauchy problem for nonanalytic Pfaffian systems. (Russian) *Uspehi Mat. Nauk* 30 (1975), no. 6(186), 189-190. (P. Ver Eecke) 54 #8690 58A15
- Nonanalytic Pfaffian systems. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 30 (1975), no. 4, 66-71. (P. Ver Eecke) 52 #11972 58A15
- Titarenko, L. N.** The complexity of recognizing functional properties of normal algorithms. (Russian) *Numerical analysis (Russian)*, pp. 60-63. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1973. (Editors) 57 #16004 02E10
- Titarenko, V. V.** An application of the method of matched asymptotic expansions to study of the influence of small perturbations on a homogeneous flow behind a shock wave. (Russian) *Differentsial'nye Uravneniya i Vyčisl. Mat. Vyp. 4* (1974), 88-100. (Author's summary) 55 #9704 76A1
- An application of the method of deformed coordinates to the study of certain self-similar problems on the interaction of shock waves. (Russian) *Differentsial'nye Uravneniya i Vyčisl. Mat. Vyp. 5* (1975), part 2, 131-141, 147. (Author's summary) 58 #8767 76A1
- An application of matched asymptotic expansions to the study of certain self-similar problems on the interaction of shock waves. (Russian) *Differentsial'nye Uravneniya i Vyčisl. Mat. Vyp. 6* (1976), part 1, 148-170, 180. (Author's summary) 58 #8767 76A1
- Nonlinear analysis of a flow that is induced by a sudden motion of a wedge. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* 1976, no. 3, 37-47. 56 #17445 76B35
- Titchmarsh, E. C.** See Collected papers: Hardy, Godfrey Harold, 58 #16072 and Collected papers: Hardy, Godfrey Harold, 58 #16073
- Țițeica, Gabriela** From the notebooks of Professor Gheorghe Țițeica. (Romanian) "Gheorghe Țițeica and Dimitrie Pompeiu" Symposium on Geometry and Global Analysis (Bucharest, 1973) (Romanian), pp. 93-97. *Editura Acad. R.S.R., Bucharest*, 1976. (Editors) 58 #10231 01A70
- Țițeica, Gheorghe** See Collection: Carathéodory, Constantin; Plemelj, Josip; Pompeiu, Dimitrie and Țițeica, Gheorghe, 50 #5; Ostianu, N. M., 52 #2795; Symposium: "Gheorghe Țițeica and Dimitrie Pompeiu", Geometry and Global Analysis, 55 #242; Onicescu, Octav, 57 #5635; Cămpan, Florica T., 57 #12106; Roman, Eliza, 57 #12107; Calapso, Renato, 58 #10163; Gheorghe, Georgi Iv., et al., 58 #10172; Gheorghiu, Gh. Th., 58 #10173; Mihăileanu, N. N., 58 #10197; Onicescu, Octav, 58 #10204; Popa, Ilie, 58 #10212; Țițeica, Gabriela, 58 #10231 and Correspondence: Gheorghe Țițeica, 58 #10244
- Titenkov, Léonid** See Lifšic, E. M.; et al., 52 #9851
- Titenkii, M. E.** (with Sobolevskii, P. O.) Stability of the Bubnov-Galerkin method for one-dimensional parabolic equation. (Russian) *Numerical analysis and mathematical physics, No. 2 (Russian)*, pp. 113-123. *Moskov. Gos. Ped. Inst. im. Lenina, Moscow*, 1971. (See RZMat 1976 #12 B1105; MR 56 #1654) 65N30
- On the question of the stability of the Bubnov-Galerkin method for a nonlinear parabolic equation. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU Vyp. 19* (1975), 145-147. (Janusz Mika) 57 #8081 65N30
- Titenkii, M. N.** The stability of the Bubnov-Galerkin method for a one-dimensional parabolic equation. (Russian) *Differentsial'nye Uravneniya i Vyčisl. Mat. Vyp. 5* (1975), part 2, 49-60, 144. (Author's summary) 57 #18147 65N30
- Titiev, Robert J.** Measurement structures in classes that are not universally axiomatizable. *J. Mathematical Psychology* 9 (1972), 200-205. (R. D. Luce) 47 #6347 92A05 (06A75)
- Multidimensional measurement and universal axiomatizability. *Theoria* 38 (1972), 82-88. (John T. Baldwin) 47 #6468 02G10 (02H99)
- Sentences, semantics, stimuli, and Quip. *Theoria* 41 (1975), no. 1, 1-10. (From the text) 58 #27276 02A05
- Titko, A. I.** (with Sčastlivii, G. G.) A problem of determining the characteristics of an electromagnetic field in a conducting rail with an air window. (Russian) *Izv. Sibirsk. Otdel. Akad. Nauk SSSR Ser. Tehn. Nauk* 1977, no. 8, 132-139, 160. (From the text) 58 #14384 78B35
- Titkova, S. O.** See Mathematics and mechanics, 50 #6724
- Titli, André** Stabilité d'un algorithme coordinateur de type gradient dans la méthode de coordination par le modèle, utilisée en présence de couplages non linéaires entre les sous-systèmes. *C. R. Acad. Sci. Paris Sér. A-B* 272 (1971), A1030-A1032. (Author's summary) 47 #4685 93D05
- (with Grateloup, G.) Commande optimale à plusieurs niveaux pour systèmes complexes. (Polish and Russian summaries) *Podstawy Sterowania* 1 (1971), 11-29. (A. Bensoussan) 46 #6124 49A30
- ★ Commande hiérarchisée et optimisation des processus complexes. *Dunod Automatique. Dunod, Paris*, 1975. xiv+257 pp. ISBN 2-04-005206-X (E. O. Roxin) 58 #33212 93A15
- (with Pradin, B.) Methods of decomposition-coordination for the optimisation of interconnected, distributed parameter systems. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 15.3, 9 pp.* IFAC, Düsseldorf, 1975. (Authors' summary) 58 #33319 93C20
- (with Grateloup, G.) Two-level dynamic optimization methods. *J. Optimization Theory Appl.* 15 (1975), 533-547. (A. B. Pevnyi) 51 #1557 49D99
- (with Galy, Jean; Singh, Madan G.) Méthodes de décomposition-coordination et calcul des variations et couplage par variables d'état. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Jaune* 10 (1976), no. J-19-29. (Guy Jumarie) 57 #18908 93A15
- (with Singh, Madan G.) Hierarchical feedback control for large dynamical systems. *Internat. J. Systems Sci.* 8 (1977), no. 1, 31-47. (David N. Burghes) 58 #33211 93A15 (65K05)
- (with Hassan, Mohammed F.; Salut, Gérard; Singh, Madan G.) A decentralized computational algorithm for the global Kalman filter. *IEEE Trans. Automatic Control* AC-23 (1978), no. 2, 262-268. (Authors' summary) 58 #15566 93E10 (93A15, 93E25)
- See also Drouin, M., 58 #9618 and Yvinec, B.; et al., 58 #15354
- Titov, A. I.** (with Amirhanov, I. V.; Grečko, V. E.) Faddeev's equations in a coordinate representation. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 26 (1971), no. 5, 579-585. (Z. Janković) 45 #9611 81B35
- Titov, G. I.** (with Kagar, V. G.) An analysis of the structure of the optimal controls in systems with bounded coordinates. (Russian) *Avtometrija* 1974, no. 5, 64-72, 112. (Author's summary) 50 #15993 93B10
- Titov, N. P.** A graph-scheme of the coherence problem. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1978, no. 2(189), 105-108. (V. A. Artamonov) 58 #11068 18D99 (05C99)
- Titov, O. V.** Minimal hypersurfaces that are stretched over soft obstructions. (Russian) *Dokl. Akad. Nauk SSSR* 211 (1973), 293-296. (J. Kačur) 50 #1093 49F10 (35J20)

- Minimal hypersurfaces over soft obstacles. (Russian) *Izv. Akad. Nauk. SSSR Ser. Mat.* **38** (1974), 374-417. (L. C. Young) **50** #1094 49F10
- S. S. The representation of the solutions of linear partial differential equations in the form of finite sums. (Russian) *Mat. Zametki* **20** (1976), no. 3, 359-363. (Genowefa Tajcher) **55** #3499 35C10
- Solutions of nonlinear partial differential equations in the form of polynomials in one of the variables. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **8** (1977), no. 1 *Mat. Modelirovanie*, 144-149. (From the author's introduction) **56** #12538 35C05 (5P05)
- V. A. (with Emel'janov, K. V.; Il'in, A. M.; Kaljakin, Léonid A.; Šiškin, G. I.) Solution of differential equations with small parameters multiplying the highest derivatives. (Russian) *Proceedings of the Fifth All-Union Seminar on Numerical Methods in the Mechanics of a Viscous Fluid* (Kaciveli, 1974), Part I (Russian), 37-47. *Vychisl. Centr. Akad. Nauk SSSR Sibirsk. Otdel., Novosibirsk*, 1975. (Editors) **58** #29073 5B25 (65N99)
- (with Šiškin, G. I.) A difference scheme for a differential equation with two small parameters at the derivatives. (Russian) *Čisl. Metody Meh. Splošn. Sredy* **7** (1976), no. 2, 145-155. (From the authors' text) **56** #13665 65L10
- (with Šiškin, G. I.) A numerical solution of a parabolic equation with small parameters multiplying the derivatives with respect to the space variables. (Russian) *Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR Vyp. 21 Raznost. Metody Rešenija Kraev. Zadač s Malym Parametrom i Razryv. Uslovijami* (1976), 38-43, 60. (errata insert) (K. Moszyński) **58** #3526 65N10
- V. V. K. Nonseparable networks and graphs. (Russian) *Cybernetics—in the service of Communism*, Vol. 4 (Russian), pp. 18-26. Izdat. "Énergija", Moscow, 1967. (H. Sachs) **50** #12823 05C99 (94A20)
- V. V. P. Method of determining the statistical characteristics of search time. *Radiotekhn. i Elektron.* **16** (1971), 1068-1071 (Russian); translated as *Radio Engrg. Electron. Phys.* **16** (1971), 1045-1048. (J. P. M. Schalkwijk) **49** #8729 94A05
- V. V. V. Determination of the optimal size of parties for launching components into production. (Russian) *Optimal. Planirovanie* No. 16 (1970), 69-76. **46** #1307 90B30
- Minimization of backlogs on single flow lines. (Russian) *Optimal. Planirovanie* No. 16 (1970), 77-84. **46** #1308 90B30
- (with Makarov, V. L.; Šeĭhetov, B. M.) A model for the formation of the production program of an industrial enterprise. (Russian) *Optimizacija* No. 7(24) (1972), 61-70, 146. **48** #3465 90A15
- André Some investigations about a unified approach to quadratically convergent algorithms for function minimization. *J. Optimization Theory Appl.* **20** (1976), no. 4, 489-496. (Author's summary) **58** #24955 65K05 (90C20)
- (with Gazon, Jules) A structural approach to stability in linear systems. A sufficient condition. *Internat. J. Systems Sci.* **9** (1978), no. 6, 681-694. (Authors' summary) **58** #20721 93D10 (90A15)
- Jacques Sur le groupe des automorphismes d'un arbre. *Essays on topology and related topics (Mémoires dédiés à Georges de Rham)*, pp. 188-211. Springer, New York, 1970. (A. Mowshowitz) **45** #8582 05C25
- Homomorphismes et automorphismes "abstraits" de groupes algébriques et arithmétiques. *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 2, pp. 349-355. Gauthier-Villars, Paris, 1971. (J. Dieudonné) **55** #5760 20G15
- Non-existence of certaines extensions transitives. I. Groupes projectifs à une dimension. Collection of articles honoring P. Burniat, Th. Lepage and P. Libois. *Bull. Soc. Math. Belg.* **23** (1971), 481-492. (H. Yanagihara) **47** #6818 20B10 (20G15)
- (with Borel, Armand) Éléments inoponants et sous-groupes paraboliques de groupes réductifs. I. *Invent. Math.* **12** (1971), 95-104. (E. J. Taft) **51** #3419 20G15
- (with Bruhat, François) Groupes réductifs sur un corps local. *Inst. Hautes Études Sci. Publ. Math.* No. 41 (1972), 5-251. (M. Krusemeyer) **48** #6265 20G25 (22E20)
- (with Borel, Armand) Compléments à l'article: "Groupes réductifs". *Inst. Hautes Études Sci. Publ. Math.* No. 41 (1972), 253-276. (F. D. Veldkamp) **47** #3556 20G15 (14L15, 22E20)
- (with Borel, Armand) Homomorphismes "abstraits" de groupes algébriques simples. *Ann. of Math.* (2) **97** (1973), 499-571. (J. Dieudonné) **47** #5134 20G15 (10C30, 14L15, 20F55)
- ★Buildings of spherical type and finite BN-pairs. Lecture Notes in Mathematics, Vol. 386. Springer-Verlag, Berlin-New York, 1974. x+299 pp. (Bruce Cooperstein) **57** #9866 20G15 (50A20)
- Homomorphismes "abstraits" de groupes de Lie. *Symposia Mathematica*, Vol. XIII (Convegno di Gruppi e loro Rappresentazioni, INDAM, Rome, 1972), pp. 479-499. Academic Press, London, 1974. (H. Freudenthal) **52** #654 22E15
- (with Koppelberg, Sabine) Une propriété des produits directs infinis de groupes finis isomorphes. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 583-585. (F. Levin) **51** #13058 20F25 (20H05)
- On buildings and their applications. *Proceedings of the International Congress of Mathematicians (Vancouver, B. C., 1974)*, Vol. 1, pp. 209-220. *Canad. Math. Congress, Montreal, Que.*, 1975. (J. E. Humphreys) **55** #12826 20G15
- Sur certains groupes dont l'ordre est divisible par 23. *Bull. Soc. Math. Belg.* **27** (1975), no. 4, 325-332. (Philip J. Greenberg) **58** #22273 20D05
- Classification of buildings of spherical type and Moufang polygons: a survey. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Roma, 1973)*, Tomo I, pp. 229-246. *Atti dei Convegni Lincei*, No. 17, Accad. Naz. Lincei, Rome, 1976. (J. C. Fisher) **56** #3140 20G15 (50A20, 14M15)
- Systèmes générateurs de groupes de congruence. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 9, A693-A695. (J. E. Humphreys) **54** #12924 20H05 (20G30)
- Non-existence of certains polygones généralisés. I. *Invent. Math.* **36** (1976), 275-284. (Bruce Cooperstein) **55** #8208 20G40
- Two properties of Coxeter complexes. Appendix to "A Mackey formula in the group ring of a Coxeter group" (J. Algebra **41** (1976), no. 2, 255-264) by Louis Solomon. *J. Algebra* **41** (1976), no. 2, 265-268. (Gerald O. Losey) **56** #3105 20C05
- A "theorem of Lie-Kolchin" for trees. *Contributions to algebra (collection of papers dedicated to Ellis Kolchin)*, pp. 377-388. Academic Press, New York, 1977. (Editors)
- 58** #28205 20G15 (54H15)
- Travaux de Margulis sur les sous-groupes discrets de groupes de Lie. *Séminaire Bourbaki, 28ème année (1975/76)*, Exp. No. 482, pp. 174-190. *Lecture Notes in Math.*, Vol. 567, Springer, Berlin, 1977. (Editors) **58** #11227 22E40
- Endliche Spiegelungsgruppen, die als Weylgruppen auftreten. *Invent. Math.* **43** (1977), no. 3, 283-295. (J. E. Humphreys) **57** #478 20H15
- (with Borel, Armand) Théorèmes de structure et de conjugaison pour les groupes algébriques linéaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **287** (1978), no. 2, A55-A57. (Authors' summary) **58** #11155 20G15
- (with Feit, Walter) Projective representations of minimum degree of group extensions. *Canad. J. Math.* **30** (1978), no. 5, 1092-1102. (Mark Benard) **58** #16861 20C25
- See also Dixmier, Jacques, **48** #2307; Mathematics: Periodical collection of translations of foreign articles, **50** #12532 and Automorphisms of the classical groups, **55** #267
- Tittel, B. See Operationsforschung, **57** #4990c
- Titterton, D. M. (with Silvey, S. D.) A geometric approach to optimal design theory. *Biometrika* **60** (1973), 21-32. (J. Wolfowitz) **48** #12747 62K05
- A method of extremum adaptation. *J. Inst. Math. Appl.* **11** (1973), 297-315. (D. V. Lindley) **49** #4635 93E20
- (with Silvey, S. D.) A Lagrangian approach to optimal design. *Biometrika* **61** (1974), 299-302. (R. H. Farrell) **51** #9389 62K05
- An example of a perturbation-type extremum controller. *J. Appl. Probability* **11** (1974), 513-520. (R. S. Bucy) **50** #12407 93E10
- Optimal design: some geometrical aspects of D-optimality. *Biometrika* **62** (1975), no. 2, 313-320. (Valery Fedorov) **54** #6396 62K05
- (with Morgan, Byron J. T.) A comparison of iterative methods for obtaining maximum likelihood estimates in contingency tables with a missing diagonal. *Biometrika* **64** (1977), no. 2, 265-269. (Rolf Sundberg) **58** #7986 62F10
- Analysis of incomplete multivariate binary data by the kernel method. *Biometrika* **64** (1977), no. 3, 455-460. (Bradford R. Crain) **58** #3211 62H99
- See also Atkinson, A. C.; et al., **50** #15192
- Titterton, G. C. An algorithm to select a near-minimal spanning set of vectors. *Bull. Inst. Math. Appl.* **13** (1977), no. 2, 59-60. (Author's introduction) **58** #32939 90C10
- Titulaer, U. M. Ergodic features of harmonic-oscillator systems. I. *Physica* **70** (1973), 257-275. (Stanley Aks) **52** #7415 82.47
- Ergodic features of harmonic-oscillator systems. II. Asymptotic ergodicity. *Physica* **70** (1973), 276-296. (Stanley Aks) **52** #7416 82.47
- Ergodic features of harmonic-oscillator systems. III. Asymptotic dynamics of large systems. *Physica* **70** (1973), 456-474. (Stanley Aks) **52** #7417 82.47
- Marcinkiewicz's theorem and approximation schemes for many-particle correlation functions: Comment on a paper (Phys. Rev. A(3) **10** (1974), 1852-1857) by Rajagopal and Suharsan. *Phys. Rev. A(3)* **11** (1975), 2204-2208. (Author's summary) **54** #6831 82.60
- A systematic solution procedure for the Fokker-Planck equation of a Brownian particle in the high-friction case. *Phys. A* **91** (1978), no. 3-4, 321-344. (G. V. Ramanathan) **58** #14794 82.35
- Titus, Charles J. A proof of a conjecture of Loewner and of the Carathéodory conjecture concerning umbilic points. *Proceedings of Liverpool Singularities Symposium, II* (1969/1970), pp. 114-117. *Lecture Notes in Math.*, Vol. 209, Springer, Berlin, 1971. (George Francis) **54** #6166a 57D45
- A proof of a conjecture of Loewner and of the conjecture of Carathéodory on umbilic points. *Acta Math.* **131** (1973), 43-77. (J. Eells) **54** #3628 53C20 (57D35, 57D25)
- Extensions through codimension one to sense preserving mappings. (French summary) Colloque International sur l'Analyse et la Topologie Différentielle (Colloques Internationaux du Centre National de la Recherche Scientifique, Strasbourg, 1972), *Ann. Inst. Fourier (Grenoble)* **23** (1973), no. 2, 215-227. (M. L. Marx) **50** #1265 57D40
- (with Simon, Carl P.) Removing index-zero singularities with C¹-small perturbations. *Dynamical systems—Warwick 1974 (Proc. Sympos. Appl. Topology and Dynamical Systems, Univ. Warwick, Coventry, 1973/1974; presented to E. C. Zeeman on his fiftieth birthday)*, pp. 278-286. *Lecture Notes in Math.*, Vol. 468, Springer, Berlin, 1975. (E. Looijenga (Zbl 332 #34046)) **58** #31254 58F10
- (with Simon, Carl P.) The fixed point index of symplectic maps. (French summary) With a question by W. Klingenberg and an answer by Simon. *Géométrie symplectique et physique mathématique (Colloq. Internat. C.N.R.S., Aix-en-Provence, 1974)*, pp. 19-28. *Éditions Centre Nat. Recherche Sci.*, Paris, 1975. (Donald G. Saari) **57** #1550 58C25
- (with Simon, Carl P.) Characterization of optima in smooth Pareto economic systems. Papers presented at the Colloquium on Mathematical Economics (Univ. California, Berkeley, Calif., 1974). *J. Math. Econom.* **2** (1975), no. 2, 297-330. (Yieh Hei Wan) **53** #2317 90A15 (58E15)
- Titus, Harold A. See Conference: Asilomar, Circuits, Systems, and Computers, **54** #9825
- Tiučik, M. F. (with Sobolevs'kii, P. O.) The difference method of approximate solution for elliptic equations. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 4* (1970), 117-127. (G. W. Hedstrom) **55** #6883 65N15 (35B45)
- (with Sobolevs'kii, P. O.) The angle between parabolic operators. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 5* (1971), 103-113. (Todor G. Genčev) **53** #11229 35K10
- (with Sobolevs'kii, P. O.) Remark on the paper "The difference method of approximate solution of boundary value problems for quasilinear elliptic and parabolic equations" (Voronež. Gos. Univ. Trudy Mat. Fak. No. 2 (1970), 82-106). (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. No. 5* (1971), 121-122. (Not reviewed) **65N10**
- (with Zarubin, A. G.) Approximate solutions of a certain class of nonlinear nonstationary equations. (Russian) *Differencial'nye Uravnenija* **9** (1973), 1966-1974, 2114. (A. Szép) **49** #5508 34G05 (35K55)
- (with Zarubin, A. G.) A scheme for studying nonlinear difference equations. (Russian) *Collection of articles on applications of functional analysis (Russian)*, pp. 53-62. *Voronež. Tehnolog. Inst., Voronezh*, 1975. (From the author's introduction) **56** #17163 65Q05 (65N10, 39A10)
- (with Zarubin, A. G.) Solvability of a boundary value problem for a certain class of

- nonlinear ordinary differential equations. (Russian) *Differencial'nye Uravneniya* **12** (1976), no. 3, 558-560, 575-576. (Authors' summary) **58** #6455 34B15
(with Zarubin, A. G.) Approximate methods for the solution of a certain class of nonlinear operator equations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 3, 567-576, 818. (A. V. Džiskariani) **55** #6840 65J05 (47H15, 65H05)
- Tiuryn, Jerzy** ★Algebraiczne podstawy teorii maszyn. (Polish) [Algebraic foundations of the theory of machines] With English and Russian summaries. *Państwowe Wydawnictwo Naukowe, Warsaw*, 1975. 74 pp. (Editors) **57** #5520 94A30 (20M35)
Algebraic treatment of computer cooperation. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 12, 1137-1144. (R. N. Goss) **55** #6959 68A25
Fixed-points and algebras with infinitely long expressions. II. *Fundamentals of computation theory (Proc. Internat. Conf., Poznań-Kórnik, 1977)*, pp. 332-339. *Lecture Notes in Comput. Sci.*, Vol. 56, Springer, Berlin, 1977. (Giorgio Germano) **58** #3644b 68A05
Fixed-points and algebras with infinitely long expressions. I. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 513-522. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (Giorgio Germano) **58** #3644a 68A05
M-groupoid as a tool for investigating mathematical models of computers. *Fundam. Inf.* (4) **1** (1977), no. 1, 71-91. (V. Ju. Meitus) **57** #1973 68A25
- Tiwari, B. M. L.** Convergence theorems for a generalisation of two-dimensional Laplace transform. *Ranchi Univ. Math. J.* **2** (1971), 19-28. (G. Doetsch) **46** #7812 44A30 (44A10)
Real inversion and representation theorem for a generalised Laplace transform. *Ranchi Univ. Math. J.* **4** (1973), 30-36. (V. M. Bhise) **49** #7710 44A15
- Tivončuk, V. I.** (with Tukalevs'ka, N. I.) A certain approximate method of solution of linear integral equations in the space L_p . (Russian) *Mathematical provisioning of electronic digital computers and effective organization of the computing process (Proc. Sem., Kiev, 1969)*, No. 1 (Russian), pp. 61-69. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (I. Šelihova (RŽMat 1970 #4 B914)) **45** #4694 65R05
The solution in the space L_2 of nonlinear integral equations with variable limits. (Russian) *Mathematical physics*, No. 8 (Russian), pp. 163-167. *Naukova Dumka, Kiev*, 1970. (J. Kolomyj) **45** #5690 45G99
The solution of two-dimensional linear integral equations with variable limits by the method of averaging functional corrections. (Russian) *Approximate and qualitative methods of the theory of differential and integral equations (Russian)*, pp. 142-155. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (S. Burýšek) **51** #2320 65R05
Solution of linear Volterra-Fredholm integral equations by the method of averaging functional corrections. (Russian) *Methods of approximate solution of differential and integral equations (Russian)*, pp. 310-319. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (Editors) **58** #2079 45D05
(with Kurpel', M. S.) A certain two-sided method for the approximate solution of the Cauchy problem for ordinary differential equations. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 4, 528-534, 575. (J. W. Schmidt) **52** #16032 65L05
(with Kurpel', M. S.) The construction of monotone successive approximation processes by means of modifications of M. Picone's algorithm. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 6(181), 126-130. (Authors' introduction) **58** #8235 65J05 (65R05)
- Tiwari, R. P.** Absolute summability of a Fourier series by Nörlund means. *J. Math. (Jabalpur) (N.S.)* **1** (1973), 59-66. (S. Izumi) **52** #14817 42A28
- Tiwari, Ramji** ★Einstein's generalized theory of gravitation. *Benaras Hindu University, Varanasi*, 1969. x + 108 pp. (J. Charles-Renaudie) **50** #15849 83.53
(with Pant, D. N.) Axially symmetric approximate solutions in Einstein's unified field theory. *J. Sci. Res. Benaras Hindu Univ.* **21** (1970/71), no. 1-2, 89-102. (Authors' summary) **55** #5145 83.35
Riemannian fourfolds of class one. *General Relativity and Gravitation* **2** (1971), 211-214. (George Debnay) **53** #15284 83.53
(with Pant, D. N.) Non existence of isolated charge distribution in Bonnor's unified field theory. *Phys. Lett.* **36A** (1971), 145-146. (Robert Malthiot) **53** #7346 83.35
(with Kashyap, J. N. S.) A spatially flat space-time in Einstein's unified field theory. *Indian J. Pure Appl. Math.* **3** (1972), no. 3, 455-459. (M. Sachs) **46** #4908 83.53
(with Kashyap, J. N. S.) A composite field exhibiting plane symmetry in Einstein's unified field theory. *Indian J. Pure Appl. Math.* **3** (1972), no. 6, 1250-1255. (M. Sachs) **49** #10322 83.53
(with Pant, D. N.) Nonexistence of isolated charged monopoles in unified field theories. *J. Phys. A* **5** (1972), 394-400. (Authors' summary) **54** #6856 83.35
(with Rao, J. R.) Passage from the fundamental tensor $g_{\mu\nu}$ of the gravitational theory to the field structure $g_{\mu\nu}$ of the unified theories. *Acta Phys. Polon. B* **5** (1974), 593-603. **53** #12491 83.53
(with Rao, J. R.; Bhamra, K. S.) Cylindrically symmetric Brans-Dicke fields. I, II. *Ann. Physics* **87** (1974), 470-479; *ibid.* **87** (1974), 480-497. (Stere Ianus) **50** #9285 83.35
(with Srivastava, Virender Kumar) The second order moment matrix of generalized double k -class estimators. *Comm. Statist.* **4** (1975), 575-589. (A. L. Nagar) **51** #9421 62P20 (62J05)
(with Srivastava, Virender Kumar) Two-stage and three-stage least squares estimation of dispersion matrix of disturbances in simultaneous equations. *Ann. Inst. Statist. Math.* **28** (1976), no. 3, 411-428. (Andrew Harvey) **55** #4588 62P20
(with Nayak, B. K.) Plane symmetric vacuum solutions in the Brans-Dicke theory of gravitation. *J. Phys. A* **9** (1976), no. 3, 369-375. (A. H. Taub) **57** #11597 83.35
(with Nayak, B. K.) Class of exact plane-symmetric interior solutions to the Brans-Dicke field equations. *Phys. Rev. D* (3) **14** (1976), no. 2, 395-398. (Authors' summary) **56** #4639 83.35
(with Nayak, B. K.) Class of the Brans-Dicke Maxwell fields. *Phys. Rev. D* (3) **14** (1976), no. 10, 2502-2504. (Authors' summary) **57** #8858 83.35
(with Srivastava, Virender Kumar) Evaluation of expectations of products of stochastic matrices. *Scand. J. Statist.* **3** (1976), no. 3, 135-138. (Authors' summary) **58** #24729 62H10
(with Nayak, B. K.) Axisymmetric stationary Brans-Dicke vacuum fields. *J. Mathematical Phys.* **18** (1977), no. 2, 289-291. (Authors' summary) **54** #12115 83.35
(with Rao, J. R.; Bhamra, K. S.) Physical behaviour of some cylindrically symmetric Brans-Dicke fields. *Indian J. Pure Appl. Math.* **9** (1978), no. 5, 426-4. (Stere Ianus) **58** #14893 83.35
- Tiwari, S.** (with Jaiswal, M. P.) On characterization of the spectrum associated with matrix differential operator. *J. Indian Inst. Sci.* **59** (1977), no. 2, 16-24. (R. R. Kemp) **56** #12400 34B25
On the theory of transforms associated with eigenvectors. I. *J. Indian Inst. Sci.* (1977), no. 11, 501-524. (Alexander Alenicyan) **58** #11621a 34B25
On the theory of transforms associated with eigenvectors. II. *J. Indian Inst. Sci.* (1978), no. 6, 85-97. (Alexander Alenicyan) **58** #11621b 34B25
- Tiwari, S. K.** On the absolute Nörlund summability of a factored Laplace series. *Ganita* (1975), no. 1, 29-40. (Joaquin Bustoz) **55** #6057 40G05
- Tiwari, A. K.** Injective modules under change of basis. *Progr. Math. (Allahabad)* **4** (1976), no. 2, 15-18. (T. Cheatham) **46** #3504 13C10
(with Pandey, B. M.) On poly simple and quasi poly simple modules. *Progr. Math. (Allahabad)* **5** (1971), no. 1-2, 49-61. (R. B. Warfield, Jr.) **47** #6779 16A64
(with Pandey, B. M.) On non-singular rings. *Indian J. Pure Appl. Math.* **6** (1975), no. 3, 276-281. (M. Teply) **56** #413 16A48
(with Pandey, B. M.) Rings over which every module is quasipolysimple. *Progr. Math. (Allahabad)* **9** (1975), no. 1, 1-6. (V. C. Cateforis) **52** #10814 16A64
(with Paramhans, S. A.) On injective cogenerators. *Ann. Fac. Sci. Univ. Nat. Zair (Kinshasa) Sect. Math.-Phys.* **2** (1976), no. 2, 197-203. (Javed Ahsan) **55** #12771 16A52
(with Paramhans, S. A.) On pc -rings. *Kyungpook Math. J.* **17** (1977), no. 2, 153-155. (K. R. Goodearl) **56** #15702 16A52 (16A48)
(with Pandey, B. M.) Pseudo projective and pseudo injective modules. *Indian J. Pure Appl. Math.* **9** (1978), no. 9, 941-949. (T. Albu) **58** #11014 16A50 (16A52)
- Tjablikov, S. V.** ★Methods in the quantum theory of magnetism. Translated from the Russian by Albin Tybulewicz. With a foreword by Daniel C. Mattis. *Plenum Press, New York*, 1967. xvi + 354 pp. (Editors) **53** #2242 82.47
★Quantentheoretische Methoden des Magnetismus. Übersetzung aus dem Russischen von K. Kaschlik. Wissenschaftliche Redaktion von E. Jäger. *Teubner, Leipzig*, 1968. 328 pp. (Editors) **53** #2243 82.47
★Методы квантовой теории магнетизма. (Russian) [Methods of the quantum theory of magnetism] Second edition, revised and augmented. With a supplement by Ju. G. Rudoi, Ju. A. Cerkovnikov, V. I. Lymar' and N. M. Plakida. Edited by D. N. Zubarev and Ju. G. Rudoi. *Izdat. "Nauka", Moscow*, 1975. 527 pp. (Editors) **53** #2244 82.47
See also **Statistical physics and quantum field theory**, **52** #16312
- Tjaden, Garold S.** (with Flynn, Michael J.) Representation of concurrency with ordering matrices. *IEEE Trans. Computers* **C-22** (1973), 752-761. (Forbes D. Lewis) **50** #15434 68A20
- Tjagunov, L. I.** (with Mazurov, V. D.) Several methods of finding a committee in pattern recognition and their utilization as an informal block of computing methods. (Russian) *Optimal. Planirovanie* No. 15 (1970), 48-57. (S. Zlobec) **46** #6660 68A45
- Tjaht, M.** See **Täht, M.**
- Tjaht, R.** (with Kaasik, Ü.) A method of solution of a certain Boolean problem of linear programming. (Russian) *Trudy Vyčisl. Centra Tartu Gos. Univ.* No. 22 (1971), 35-40. (S. Krčevinač) **46** #3064 90C05
- Tjaht, T.** See **Täht, T.**
- Tjan, Ju. D.** Curves of rotation. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. No.* 105 (1969), 52-54. (N. Mihăileanu) **45** #4291 53A05
(with Otrokov, N. F.) The dependence of the parameters of a dynamical system on the coefficients of a point transformation. (Russian) *Differencial'nye Uravneniya* **12** (1976), no. 12, 2201-2213, 2300. (A. A. Reinfelds) **55** #10777 34C20
- semenov-Tjan-Šanskii, M. A.** See **Semenov-Tjan-Šanskii, M. A.**
- Tjapkin, A. A.** On the statistical theory of the cluster generation of hadrons. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* **8** (1977), no. 3, 544-579. (Author's summary) **58** #9029 82.62
- Tjatjuskii, A. I.** (with Vasil'ev, O. V.) On the numerical solution of linear time-optimality problems. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 57-69, 307. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Authors' summary) **57** #8017 65K05 (49D30)
(with Vasil'ev, O. V.) An iterative search procedure for optimal control in a linear system. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 218-229, 303-304. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Authors' summary) **58** #33287 93C05 (65K05)
On optimal control in Goursat-Darboux systems that are linear relative to the state. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 265-275, 305-306. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Author's summary) **58** #30645 49B20 (93C20)
(with Vasil'ev, O. V.) A certain problem of optimal control in a linear system of hyperbolic type. (Russian) *Optimal processes (Proc. Third All-Union Conf. Problems of Theoretical Cybernetics, Novosibirsk, 1974)*. *Upravljajemye Sistemy Vyp.* **14** (1975), 11-23, 75. (Authors' summary) **58** #12603 49B20 (93C20)
(with Vasil'ev, O. V.) On the computation of the optimal programmed control in a certain problem with distributed parameters. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **15** (1975), no. 4, 1047-1053, 1091. (V. Komkov) **52** #4628 65K05 (49A20)
- Tjong, B. L.** (with Marić, Vojislav) On an integral operator. *Indian J. Math.* **12** (1970), 163-168. (S. Delache) **46** #2203 35C15
- Tjong, Bwee Lan** Operators generating solutions of $\Delta_3 \tilde{\Psi}(x, y, z) + \tilde{F}(x, y, z) \tilde{\Psi}(x, y, z) = 0$ and their properties. *Analytic methods in mathematical physics (Sympos., Indiana Univ. Bloomington, Ind., 1968)*, pp. 547-552. *Gordon and Breach, New York*, 1970. (D. L. Colton) **49** #810 45C15
- Tjøstheim, Dag** (with Thomas, John B.) Some properties and examples of random processes that are almost wide sense stationary. *IEEE Trans. Information Theory* **IT-21** (1975), 257-262. (M. Rabindranathan) **52** #6863 60G35
A note on the unified Dirac-von Neumann formulation of quantum mechanics. *J. Mathematical Phys.* **16** (1975), 766-767. (J.-P. Antoine) **51** #12210 81.47
Multiplicity theory for multivariate wide sense stationary generalized processes. *J. Multivariate Anal.* **5** (1975), no. 3, 314-321. (G. Y. H. Chi) **52** #9358 60G20

- On random processes that are almost strict sense stationary. *Advances in Appl. Probability* **8** (1976), no. 4, 820-830. (Hannu Niemi) **54** #11496 60G99 (60G10)
- Spectral generating operators for non-stationary processes. *Advances in Appl. Probability* **8** (1976), no. 4, 831-846. (Hannu Niemi) **54** #11497 60G99 (60G35)
- Commutation relations for generalized random fields which are homogeneous and purely non-deterministic. (French summary) Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 402-407 (1976). (R. Jajte) **57** #1625 60G10 (60G20)
- (with Thomas, John B.) Linear time-invariant transformations of some nonstationary random processes. *Quart. Appl. Math.* **34** (1976/77), no. 1, 113-117. (Tata Subba Rao) **56** #6857 60G99
- A commutation relation for wide sense stationary processes. *SIAM J. Appl. Math.* **30** (1976), no. 1, 115-135. (J. B. Robertson) **53** #1715 60G25
- Spectral representations and density operators for infinite-dimensional homogeneous random fields. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **35** (1976), no. 4, 323-336. (A. Weron) **53** #11723 60G10
- Statistical spatial series modelling. *Advances in Appl. Probability* **10** (1978), no. 1, 130-154. (J. K. Ord) **57** #10961 62M99
- Tjotta, Jacqueline** See Naze Tjotta, Jacqueline
- Tarson, R.** See Tewarson, Reginald P.
- Tjutin, V. S.** See Cybernetics—in the service of Communism, **48** #10432
- Tina, I. A.** d'Alembert's principle, its premises and prehistory. (Russian) *Problems in the history of mathematics and mechanics* (Russian), pp. 14-23, 130. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Author's summary) **58** #26979 01A50
- The geometric statics of P. Varignon. (Russian. English summary) *Voprosy Istor. Estestvozn. i Tehn.* **1977**, no. 3-4(56-57), 40-43, 161. (Editors) **58** #4868 01A50
- See also History and methodology of the natural sciences, **50** #1807 and History of mechanics from the end of the eighteenth century to the middle of the twentieth century, **58** #21246
- Teneva, E. M.** Relative motion of nonholonomic systems of variable mass. (Russian) *Tashkent. Gos. Univ. Naučn. Trudy No. 316 Voprosy Meh. i Mat.* (1968), 157-177. (Q. K. Ghorji) **50** #11911 70J53
- Tevcov, A. D.** (with Kopačev'skii, N. D.; Myškis, A. D.) Oscillations of a fluid under conditions of complete or partial weightlessness. (Russian) *Mat. Fiz. i Funkcional. Anal. Vyp.* **1** (1969), 5-23, 256. (RZMat **1970** #8 B393) **58** #32338 76J35
- (with Slobozanin, L. A.) A characteristic parameter for the stability of an axially symmetric equilibrium surface of a capillary fluid. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1974**, no. 4, 74-84. **56** #17488 76J65
- (with Bab'skii, V. G.; Kopačev'skii, N. D.; Myškis, A. D.; Slobozanin, L. A.) Approximate methods in the hydromechanics of weightlessness. (Russian) *Questions on mathematical physics and functional analysis* (Proc. Res. Sem. Inst. Low Temp. Phys. Engrg., Kharkov) (Russian), pp. 83-92, 173. "Naukova Dumka", Kiev, 1976. (Authors' summary) **58** #14247 76J35
- Tikin, Ju. S.** (with Lihačev, V. N.; Švarc, A. S.) An adiabatic theorem in quantum field theory. (Russian. English summary) *Teoret. Mat. Fiz.* **10** (1972), no. 1, 63-84. (Authors' summary) **57** #15073 81J47
- Adiabatic definition of the scattering matrix in the formalism of L -functionals. (Russian. English summary) *Teoret. Mat. Fiz.* **16** (1973), no. 2, 169-177. (Author's summary) **58** #14696 81J47
- (with Fateev, V. A.; Švarc, A. S.) The classical limit of the scattering matrix in quantum field theory. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 1, 70-73. (Yu. S. Sayasov) **51** #14809 81J47
- (with Belavin, A. A.; Poljakov, A. M.; Švarc, A. S.) Pseudoparticle solutions of the Yang-Mills equations. *Phys. Lett. B* **59** (1975), no. 1, 85-87. (P. P. Divakaran) **55** #7152 81J22
- (with Fateev, V. A.; Švarc, A. S.) Connection between particle-like solutions of classical equations and quantum particles. *Jadernaja Fiz.* **22** (1975), no. 3, 622-631 (Russian); translated as *Soviet J. Nuclear Phys.* **22** (1975), no. 3, 321-325. (Mayer Humi) **53** #9962 81J35
- (with Fateev, V. A.; Švarc, A. S.) Particle-like solutions of the equations of gauge field theories. (Russian. English summary) *Teoret. Mat. Fiz.* **26** (1976), no. 3, 397-402. (Authors' summary) **56** #7541 81J22
- (with Romanov, V. N.; Švarc, A. S.) On spherically symmetric fields in gauge theories. *Nuclear Phys. B* **130** (1977), no. 2, 209-220. (L. O'Riartaigh) **58** #14736 81J57 (58G10)
- Tjue, ★** On the mathematical foundations of probability. Lecture Notes, No. 1. *Institute of Mathematical Statistics, University of Copenhagen, Copenhagen*, 1972. vii + 183 pp. (S. J. Taylor) **56** #1387 60A05 (60G05)
- ★ Conditional probability distributions. Lecture Notes, No. 2. *Institute of Mathematical Statistics, University of Copenhagen, Copenhagen*, 1974. iv + 370 pp. (M. M. Rao) **49** #9890 60A10 (28A35)
- Trenkov, V. A.** Certain algorithms of constructing a shortest chain. (Russian) *Vychisl. Sistemy No. 34* (1969), 51-63. (I. Sigal (RZMat **1970** #3 V312)) **45** #9822 94A20
- Trifonov, E. V.** Hilbert's boundary value problem for generalized analytic functions with a discontinuous coefficient in the boundary condition. (Russian) *Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk.* **1975**, no. 4, 104-106, 120. (V. G. Kravčenko) **58** #1180 30A88
- (with Fomenko, V. T.) The bending of surfaces with boundary, of genus $p > 0$, in a space of constant curvature, under external constraints. (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 1, 43-45. (A. V. Pogorelov) **58** #7508 53C45
- The rigidity of surfaces of genus $p > 1$ with a boundary that lies in Lobačevskii space. (Russian) *Sibirsk. Mat. Ž.* **17** (1976), no. 5 1129-1140, 1199. (A. V. Pogorelov) **54** #13806 53C45
- (with Fomenko, V. T.) A study of the fundamental equations of the theory of surfaces of positive extrinsic curvature that lie in the space of constant curvature. (Russian) *Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk.* **1977**, no. 3, 3-7, 115. (Authors' summary) **58** #18295 53C45
- Boundary value problems of the theory of infinitesimal bendings of surfaces of positive curvature with a piecewise smooth boundary. (Russian) *Mat. Sb. (N.S.)* **103(145)** (1977), no. 3, 445-462, 464. (V. T. Fomenko) **57** #17574 53C45
- Tjurin, A. N.** The set of singularities of the Poincaré divisor of the Picard variety of the Fano surface of a nonsingular cubic. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **36** (1972), 947-956. (J. Čizmar) **48** #8509 14J05 (14J15, 14J25)
- Five lectures on three-dimensional varieties. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 5, (167), 3-50. (Miles Reid) **54** #323 (EA 54) 14J10 (14K30)
- Geometry of moduli of vector bundles. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 6(180), 59-88. (P. E. Newstead) **53** #8064 14F05 (14D20)
- An invariant of a net of quadrics. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **39** (1975), 23-27, 239. (M. Reid) **51** #12867 14H40
- The geometry of the Poincaré divisor of a Prym variety. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **39** (1975), no. 5, 1003-1043, 1219. (P. E. Newstead) **54** #2664 (E 57 #16314) 14H40 (14K25, 14H30)
- The intersection of quadrics. (Russian) *Uspehi Mat. Nauk* **30** (1975), no. 6(186), 51-99. (Miles Reid) **54** #12791 14K30 (14M10, 14N05)
- Finite-dimensional bundles on infinite varieties. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 6, 1248-1268, 1439. (Gerhard Pfister) **56** #12004 14F05 (14M15)
- Periods and principal parts of quadratic differentials on a rigged Riemann surface. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 6, 1425-1442, 1448. (Gerhard Pfister) **58** #27996 14H15 (30A46)
- Corrections to the paper: "The geometry of the Poincaré divisor of a Prym variety" (Izv. Akad. Nauk SSSR Ser. Mat. **39** (1975), no. 5, 1003-1043). (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **42** (1978), no. 2, 468. (P. E. Newstead) **57** #16314 14H30 (14K25)
- See also Lefschetz, Solomon, **45** #19; Cartan, H., **49** #8775 and Bourbaki, Nicolas, **50** #7404
- Tjurin, A. V.** A solution of the test-analysis problem. *Avtomat. i Telemekh.* **1975**, no. 10, 159-164 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 10, part 2, 1714-1718 (1976). (W.-K. Chen) **53** #10510 94A20
- Tjurin, G. A.** The convergence of the method of orthogonal polynomials for the solution of the single-speed radiation transfer equation. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **16** (1976), no. 4, 978-986, 1085. (Hans Kaper) **54** #14671 82J45
- Tjurin, Ju. N.** (with Dubson, M. S.; Sorokina, S. G.) The best selection of factors in a prediction problem. (Russian) *Mathematical methods for the solution of economic problems* (Suppl. to *Ekonom. i Mat. Metody*), No. 3 (Russian), pp. 152-157. *Izdat. "Nauka", Moscow*, 1972. (H. Toutenburg) **52** #4533 62J05
- Testing the hypothesis of normality of a multidimensional sample of large size. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **18** (1973), 651-655. (M. Hušková) **48** #5274 62H15
- (with Krivjakova, È. N.; Martynov, G. V.) The distribution of the ω^2 statistic in the multidimensional case. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **22** (1977), no. 2, 415-420. (Sándor Csörgö) **55** #13655 62G10 (62E15)
- (with Nesenenko, G. O.) Asymptotic behavior of the Kolmogorov statistic for a parametric family. (Russian) *Dokl. Akad. Nauk SSSR* **239** (1978), no. 6, 1292-1294. (L. B. Klebanov) **57** #17935 62G10 (62E20)
- Tjurin, N. E.** A certain sufficient condition for the existence of the mean value of a multiplicative function. (Russian) *Gor'koo. Gos. Univ. Učen. Zap. No. 158 (Ser. Mat.)* (1972), 35-36. (W. H. Simons) **49** #2639 10K20
- Lower bounds for the U -matrix. (Russian. English summary) *Teoret. Mat. Fiz.* **24** (1975), no. 1, 62-70. (Author's summary) **58** #14546 81J30
- (with Savrin, V. I.; Hrustalev, O. A.) The \mathcal{U} -matrix method in the theory of strong interactions. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* **7** (1976), no. 1, 21-54. (Authors' summary) **57** #11498 81J47
- Tjurin, V. M.** The regularity of linear differential operators with almost periodic coefficients. (Russian) *Functional analysis, No. 1 (Russian)*, pp. 130-140. *Ul'janovsk. Gos. Ped. Inst., Ul'janovsk*, 1973. (Editors) **58** #1462 34G05
- Perturbation of a regular differential operator with almost periodic coefficients. (Russian) *Differential equations and their applications, No. 2 (Russian)*, pp. 133-136, 178. *Kuibyshev. Gos. Ped. Inst., Kuibyshev*, 1975. (Author's summary) **58** #30501 47E05 (34G05)
- On Taylor's theorem. (Russian) *Proceedings of a Seminar on Differential Equations, No. 1 (Russian)*, pp. 33-35, 152. *Kuibyshev. Gos. Univ., Kuibyshev*, 1975. (Author's summary) **58** #7157 47A60 (34A99, 46G05)
- The regularity of linear differential operators with periodic coefficients. (Russian) *Proceedings of a Seminar on Differential Equations, No. 1 (Russian)*, pp. 146-150, 158. *Kuibyshev. Gos. Univ., Kuibyshev*, 1975. (Author's summary) **58** #7212 47E05
- Admissibility of certain function spaces and dichotomy of the solutions for equations with constant coefficients. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 8, 1526-1528, 1535. (Leo F. Boron) **51** #13395 34G05 (34D05)
- (with Žikov, V. V.) The invertibility of the operator $d/dt + A(t)$ in the space of bounded functions. (Russian) *Mat. Zametki* **19** (1976), no. 1, 99-104. (Editors) **58** #7149 47A50 (34G05)
- Tjurin, V. V.** (with Pogojan, I. A.) A certain model of an external computer memory. (Russian) *Software of electronic digital computers* (Proc. Sem. Operational Systems and Relation of Man to Computer, Kiev, 1970/1971) (Russian), pp. 163-169. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (From the authors' introduction) **51** #14652 68A25 (60K30)
- See also Software of electronic digital computers, **50** #11832
- Tjurnpu, H.** See Tjurnpu, H.
- Tjutin, A. A.** (with Borkovskii, B. A.; Vollerner, A. N.; Katkov, A. F.; Kulik, M. N.; Romancov, V. P.) ★ Моделирующие математические машины с переменной структурой. (Russian) [Simulating mathematical machines with variable structure] Edited by G. È. Puhov. *Izdat. "Naukova Dumka", Kiev*, 1970. 248 pp. (Table of contents) **47** #4501 68A55
- Tjutin, I. V.** (with Fradkin, E. S.) S matrix for Yang-Mills and gravitational fields. *Phys. Rev. D* **3** (2) (1970), 2841-2857. (A. O. Barut) **47** #8022 81J22
- (with Fradkin, E. S.) Contribution to the theory of Yang-Mills fields. *Jadernaja Fiz.* **13** (1971), 433-440 (Russian); translated as *Soviet J. Nuclear Phys.* **13** (1971), 244-247. (Authors' summary) **48** #3391 81J30

- (with Kolloš, R. E.) The equivalence theorem and gauge invariance in renormalizable theories. *Jadernaja Fiz.* 17 (1973), 190-209 (Russian); translated as *Soviet J. Nuclear Phys.* 17 (1973), 98-106. (Authors' summary) 50 #15696 81.46
- (with Fradkin, E. S.) Renormalizable theory of massive vector particles. *Riv. Nuovo Cimento* (2) 4 (1974), 1-78. (R. Delbourgo) 54 #14593 81.22
- (with Iofa, M. Z.) Gauge invariance of spontaneously broken nonabelian theories in the Bogoljubov-Parasjuk-Hepp-Zimmermann method. (Russian. English summary) *Teoret. Mat. Fiz.* 27 (1976), no. 1, 38-47. (Authors' summary) 56 #7597 81.46
- (with Kolloš, R. E.; Tarasov, O. V.) One-loop finiteness of quantum gravity off mass shell. *Nuclear Phys. B* 137 (1978), no. 1-2, 145-163. (Authors' summary) 57 #18714 83.53
- Tjutjaev, V. E.** See **Adaptive systems**, 49 #2208
- Tjutjukin, V. K.** (with Kuzin, B. I.) The generalized "traveling salesman problem", its algorithm and application to the determination of the starting order of commodities on lines with variable flows. (Russian) *Primenen. Mat. Ekonom. No. 5* (1969), 56-67. 45 #6393 90B35
- An optimal two-operation plan for products with different production schedules. (Russian) *Primenen. Mat. Ekonom. No. 7* (1972), 81-88. (M. Mañás) 46 #3063 90B35
- A locally optimal plan in the problem of processing products with the same production routine. (Russian) *Primenen. Mat. Ekonom. No. 8* (1973), 3-20. (I. Gh. Ciobanu) 48 #5636 90B35
- Optimal two-operation scheduling in the case of parallel-serial production motion. (Russian) *Primenen. Mat. Ekonom. No. 11* (1976), 60-69, 140. (József Grabowski) 58 #4289 90B35
- Tjutjunnik, L. I.** The selfadjoint operator that is connected with the elliptic problem with a spectral parameter in the boundary conditions. (Russian) *Ukrain. Mat. Ž* 24 (1972), 846-851, 864. (Boris Pavlov) 47 #4067 47F05 (35P05)
- Tkač, B. P.** The construction of periodic solutions of systems of partial differential equations with deviating argument of retarded type. (Russian. English summary) *Proceedings of the Fifth International Conference of Nonlinear Oscillations (Kiev, 1969), Vol. 1: Analytic methods in the theory of nonlinear oscillations (Russian)*, pp. 544-550. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1970.* (L. E. Bobisud) 47 #7247 35R10 (35B10)
- The periodic solutions of a certain class of systems of higher order partial differential equations of neutral type. (Russian) *Differential-difference equations (Russian)*, pp. 152-162. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971.* (L. E. Bobisud) 51 #13491 35R10
- The construction of periodic solutions of systems of partial differential equations of higher orders with deviating argument of retarded type. (Russian) *Mathematical physics, No. 9 (Russian)*, pp. 132-141. *Naukova Dumka, Kiev, 1971.* (O. Vejvoda) 45 #2341 35R10
- The periodic solutions of a certain class of partial differential equations with variable lag. (Russian) *The method of integral manifolds in nonlinear differential equations (Russian)*, pp. 280-302. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1973.* (Russell C. Thompson) 51 #8657 35R10 (35B10)
- (with Tkač, G. V.) Some tests for the periodicity of systems of two ordinary differential equations with a variable lag that depends on a parameter. (Russian) *Approximate methods for the study of nonlinear systems (Russian)*, pp. 182-205. *Izdanie Inst. Mat. Akad. Nauk SSR, Kiev, 1976.* (From the text) 58 #6618 34K15
- Periodic solutions of systems of two-dimensional partial differential equations with variable lag. (Russian) *Mat. Fiz. Vyp. 19* (1976), 115-120, 124. (O. Vejvoda) 56 #6165 35R10 (35B10)
- An approach to the determination of the periodic solutions of higher order partial differential equations with lag. (Russian) *Analytic methods in the theory of differential equations (Russian)*, pp. 168-177. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1977.* (From the text) 58 #23188 35R10 (35B10)
- On finding the periodic solutions of mixed partial differential equations of neutral type. (Russian) *Qualitative methods in the theory of differential equations with deviating argument (Russian)*, pp. 130-140. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1977.* (From the introduction) 58 #17610 35R10
- Periodic solutions of some nonlinear systems of equations with mixed partial derivatives of higher orders with retardation. (Russian) *Mat. Fiz. Vyp. 21* (1977), 105-110, 120. (O. Vejvoda) 57 #13121 35B10 (35R10)
- Tkač, G. P.** A certain class of induced stratifiable pairs of congruences of figures in A_3 . (Russian) *Trudy Kaliningrad. Gos. Univ. Differencial'naja Geometr. Mnogoobraz. Figur No. 1* (1970), 78-85. (K. Radziszewski) 47 #5738 53A15
- Pairs of congruences of parabolas in equiaffine space. (Russian) *Trudy Kaliningrad. Gos. Univ. Differencial'naja Geometr. Mnogoobraz. Figur No. 2* (1971), 83-90. (K. Radziszewski) 47 #5739 53A15
- Some classes of affinely stratifiable pairs of congruences of figures in three-dimensional equiaffine space. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp. 3* (1973), 143-152. (Josef Vala) 58 #7420 53A15
- Stratifiable pairs of congruences of figures generated by a parabola and a point. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp. 5* (1974), 171-183. (V. V. Gol'dberg) 57 #4016 53A15
- Affinely stratifiable pairs of congruences of parabolas. (Russian) *Trudy Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp. 4* (1974), 175-185. (V. V. Gol'dberg) 54 #13746 53A20
- A class of manifolds of pairs of figures in A_3 . (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Vyp. 8* (1977), 97-109, 156. (Leo Botčok) 58 #24040 53A15
- Tkač, G. V.** (with Tkač, B. P.) Some tests for the periodicity of systems of two ordinary differential equations with a variable lag that depends on a parameter. (Russian) *Approximate methods for the study of nonlinear systems (Russian)*, pp. 182-205. *Izdanie Inst. Mat. Akad. Nauk SSR, Kiev, 1976.* (From the text) 58 #6618 34K15
- Tkač, Miloslav** See **Conference: Mathematical Methods in Economics**, 49 #6886
- Tkač, V. I.** (with Volkov, D. V.; Geršun, V. D.) Current structure of phenomenological Lagrangians. (Russian. English summary) *Teoret. Mat. Fiz.* 5 (1970), no. 3, 321-329. (Authors' summary) 57 #11420 81.22
- (with Volkov, D. V.) Gauge fields for the $ISL(6, C)$ symmetry group. (Russian. English summary) *Teoret. Mat. Fiz.* 20 (1974), 160-169. (Authors' summary) 57 #81.22
- Tkačenko, A. I.** See **Tkačenko, O. I.**
- Tkačenko, A. S.** See **Nomography collection**, 48 #7641
- Tkačenko, A. V.** See **Computer science in mechanical engineering**, 50 #6713
- Tkačenko, G. G.** A system of partial differential equations for the value function of survival game with dependent motions. (Russian. English summary) *Advances in game theory (Proc. Second All-Union Conf., Vilnius, 1971) (Russian)*, pp. 236-240. *Izd. "Mintis", Vilnius, 1973.* (A. Friedman) 50 #9365 90D25
- Tkačenko, G. P.** (with Žuravov'skii, V. O.) Averaging with respect to a parameter standard systems of differential equations. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1972, 439-442, 478. (D. Bainov) 46 #5749 34C30
- A class of affinely stratifiable pairs of figures generated by a parabola and a straight line. (Russian) *Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur No. 1* (1975), 182-193. (Author's introduction) 58 #30819 53A15
- Tkačenko, L. S.** See **Computer science in mechanical engineering**, 50 #6713
- Tkačenko, M. G.** Chains and cardinals. (Russian) *Dokl. Akad. Nauk SSSR* 239 (1978), no. 3, 546-549. (V. V. Miškin) 58 #18329 54A25
- Tkačenko, N. E.** (with Tkalič, V. S.) Construction of the solution of the Liouville equation on the basis of the complete integral of the Hamilton-Jacobi equation. (Russian) *Problems in analytical mechanics, stability and control theories (Second Četaev Conf. Kazan, 1973) (Russian)*, pp. 308-313, 342. *Izd. "Nauka", Moscow, 1975.* (B. Vujanović) 56 #10257 70.49
- Tkačenko, N. M.** Solution of the heat equation when the boundary has an angular point. (Russian) *Vestnik Har'kov. Politehn. Inst. No. 2(50)* (1965), 30-37. (A. Göpfert) 45 #9013 35K05
- Tkačenko, N. V.** A certain method of approximate integration of a system of differential equations. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 14* (1971), 136-147. (M. Stojanović) 46 #6602 65L05
- (with Ostapenko, V. M.) On a certain method of solving the Cauchy problem for systems of differential equations with rational coefficients. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1972, 432-436, 478. (J. Moravčík) 46 #7612 34A25
- Estimation of the solution of nonhomogeneous systems with polynomial coefficients. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 16* (1972), 104-109. (M. Urabe) 50 #6159 65L05
- Estimation of the solutions of certain classes of systems of difference equations with variable coefficients. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev) No. 15* (1973), 89-98, 158. (R. Kodnár) 48 #742 39A10
- An estimate of the solution of a certain system of linear inhomogeneous difference equations with variable coefficients. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1974, 229-233, 286. (B. Crstici) 49 #11834 65Q05
- The solution of inhomogeneous differential equations with rational coefficients. (Russian) *Approximate methods of mathematical analysis (Russian)*, pp. 120-126. *Kiev. Gos. Ped. Inst., Kiev, 1976.* (G. Bojadžiev) 57 #16773 34A30
- Tkačenko, O. I.** Control of the orientations of a solid body. (Russian) *Cybernetics and computer technology, No. 1: Complex control systems (Russian)*, pp. 167-174. *Naukova Dumka, Kiev, 1969.* 45 #9768 93C99
- A gyroscopic integrator of linear accelerations with a retarded correction moment. (Russian) *Differential-difference equations (Russian)*, pp. 163-170. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev, 1971.* (Editors) 51 #12060 70.34
- "Reversing" methods of integration of systems of linear ordinary differential equations. (Russian) *Ukrain. Mat. Ž.* 25 (1973), 843-846, 864. (H. Shintani) 48 #12846 65L05
- Increasing the accuracy of integration of a certain system of differential equations. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 15 (1975), no. 2, 509-512, 543. (H. Shintani) 52 #2218 65L05
- Transformation of oblique coordinates in determining of the parameters of motion. (Russian) *Kibernet. i Vychisl. Tehn. Vyp. 31* (1976), 64-71, 104. (Author's summary) 55 #13914 70.53
- On the determination of the orientation of instrumental frames attitude of an instrument trihedron. (Russian) *Prikl. Meh.* 12 (1976), no. 10, 87-92, 142. 56 #13864 70.34
- The possibility of compensating for errors in determining the attitude of a moving object that are caused by the quantization of information. (Russian) *Kibernet. i Vychisl. Tehn. Vyp. 37* (1977), 55-59, 119. (D. P. Rašković) 57 #18347 70.49 (65D30)
- See also **Cybernetics and computer technology**, 48 #1736 and **Cybernetics and computer technology**, 50 #12334
- Tkačenko, V. A.** See **Tkačenko, V. O.**
- Tkačenko, V. A.** The growth of the solutions of a linear differential equation with polynomial coefficients. (Russian. English summary) *Mat. Fiz. i Funkcional. Anal. Vyp. 3* (1972), 71-76, 108-109. (Author's summary) 58 #1327 34A20
- The expansion of an entire function of finite order in the root functions of a certain differential operator. (Russian) *Mat. Sb. (N.S.)* 89(131) (1972), 558-568, 671. (Petr Russev) 48 #11498 30A62
- (with Ljubič, Ju. I.) The abstract quasianalyticity problem. (Russian) *Teor. Funkts. Funkcional. Anal. i Priložen. No. 16* (1972), 18-29, 216. (J. Friberg) 50 #5512 47A65 (26A93)
- The uniqueness of the expansion in root functions of a certain differential operator. (Russian) *Mat. Sb. (N.S.)* 92(134) (1973), 461-471, 504. (Boris Pavlov) 49 #7846 47E05 (30A66, 34B25)
- Spectral decompositions in spaces of analytic functionals. (Russian) *Dokl. Akad. Nauk SSSR* 217 (1974), 1017-1020. (S. Kutateladze) 54 #3478 47B37 (46F15)
- Operators of convolution type in spaces of analytic functionals. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), 555-557. (Z. Zieležny) 52 #3956 46F15
- Spectral synthesis in spaces of analytic functionals. (Russian) *Dokl. Akad. Nauk SSSR* 223 (1975), no. 2, 307-309. (M. Dostál) 52 #6412 46F15

- The transformation operator in a space of entire functions of finite order. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. No. 22* (1975), 154-159, 164. (M. I. Nagnibida) **52** #14960 46E10 (30A98)
- Some spaces of analytic functionals. (Russian. English summary) *Questions on mathematical physics and functional analysis* (Proc. Res. Sem. Inst. Low Temp. Phys. Engrg., Kharkov) (Russian), pp. 20-32, 171. "Naukova Dumka", Kiev, 1976. (Author's summary) **58** #11480 32A15 (46E15)
- Equations of convolution type in spaces of analytic functionals. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **41** (1977), no. 2, 378-392, 478. (Z. Zielesny) **58** #7078 46F15 (30A98)
- Operators that commute with generalized differentiation in spaces of analytic functionals with a prescribed growth indicator. (Russian) *Mat. Sb. (N.S.)* **102**(144) (1977), no. 3, 435-456. (M. I. Nagnibida) **56** #1120 47B37 (46F15)
- Invariant subspaces and unicellularity of operators of generalized integration in spaces of analytic functionals. (Russian) *Mat. Zametki* **22** (1977), no. 2, 221-230. (Author's summary) **58** #30460 47B37 (46E99, 46F15)
- Čenko, V. F. The numerical and analytical solution to the problem of the motion of a viscous flowing fluid in a running magnetic field. (Russian) *Distributed control of processes in continuous media* (Proc. Sem., Kiev, 1968/1969), No. 1 (Russian), pp. 72-86. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. **46** #1195 7635
- Čenko, V. K. The problem of two magnons in a Bethe chain. (Russian. English summary) *Teoret. Mat. Fiz.* **24** (1975), no. 2, 283-287. (Author's summary) **57** #8803 82.47
- The Schrödinger equation for the helium atom. (Russian. English summary) *Teoret. Mat. Fiz.* **34** (1978), no. 1, 142-144. (Author's summary) **57** #15036 81.35
- Čenko, V. O. (with Dmitrenko, O. G.) A method of computing the dynamical characteristics of helical magneto-hydrodynamic oscillations of a plasma with finite conductivity. (Russian. English summary) *Ukrain. Fiz. Ž.* **22** (1977), no. 9, 1434-1440, 1575. (Authors' summary) **57** #2185 78.35
- Čuk, G. I. (with Kas'janjuk, S. A.) A certain class of extremal problems of the mathematical theory of elasticity. (Russian) *Prikladna. Meh.* **7** (1971), no. 9, 57-63. (L. Janos) **46** #4833 73.45
- Application of mathematical programming to the solution of extremal problems of plane elasticity theory. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1972**, 843-845, 862. (Author's summary) **46** #6822 90C05 (73.49)
- (with Kas'janjuk, S. A.) A certain class of extremal problems for a circular disc that is subjected to the action of concentrated forces. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1974**, no. 4 (143), 32-38. (Editors) **57** #18366 73.30 (30A40)
- Čuk, G. P. Infinitesimal "sliding" deformations of surfaces of revolution with curvature of variable sign and with parabolic parallels of type two. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1972**, 144-147, 189. (R. I. Pimenov) **46** #2566 53A05
- The existence of a continuous solution of the Cauchy problem for systems of differential equations with integrated coefficients. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 15* (1973), 68-71, 144. (M. Ráb) **50** #7628 34A10
- Infinitesimal bendings of surfaces of revolution with sign-variable curvature when there are conical sleeve couplings. (Ukrainian. English and Russian summaries) *Visnik Kiiv. Univ. Ser. Mat. Meh. No. 16* (1974), 113-117, 176. (R. I. Pimenov) **57** #7478 53C45
- Čuk, K. N. See *Studies in the theory of functions of a complex variable and its applications*, **48** #5481
- Čuk, S. G. Local limit theorems, allowing for large deviations, in the case of stable limit laws. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **17** (1973), no. 2, 30-33, 70. (V. S. Koroljuk) **51** #4357 60F10
- (with Nagaev, A. V.) Conditions under which the ladder epoch belongs to the domain of attraction of a stable law. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 118-123, 212. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (J. G. Wendel) **51** #11662 60J15 (60G50)
- A theorem on large deviations in R^1 in case of a stable limit law. (Russian) *Random processes and statistical inference*, No. 4 (Russian), pp. 178-184, 213. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (V. Fabian) **53** #6692 60F10
- Theorems on large deviations in the case of distributions with regularly varying tails. (Russian) *Random processes and statistical inference*, No. 5 (Russian), pp. 164-174, 204-205. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1975. (S. A. Book) **53** #4192 60F10
- An integral limit theorem for the number of renewals. (Russian) *Taškent. Gos. Univ. Naučn. Trudy Vyp. 490 Voprosy Matematiki* (1976), 185-188, 270. (Author's summary) **57** #14114 60F05 (60K05)
- alič, E. F. (with Saltanov, M. V.; Tkalič, V. S.) On a Lorentz-invariant model of multi-component magnetohydrodynamics. (Russian) *Analytic and qualitative methods of the theory of differential equations* (Russian), pp. 247-257. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1972. (Yu. S. Sayasov) **51** #2451 76.35
- (with Tkalič, V. S.) An algorithm for the synthesis of the optimal control of a one-dimensional system. (Russian) *Certain questions on simulation and systems control* (Russian), pp. 106-117. *Izdat. "Naukova Dumka", Kiev*, 1973. (Authors' introduction) **54** #2281 93C15
- (with Tkalič, V. S.) An intrinsic gradient method. (Russian) *Certain questions on simulation and systems control* (Russian), pp. 118-128. *Izdat. "Naukova Dumka", Kiev*, 1973. (V. N. Malozemov) **54** #9678 90C30
- An algorithm for the synthesis of optimal control of a system in the presence of constraints of integral type. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) No. 25* (1975), 83-89, 145. (Zdeněk Ertinger) **52** #7643 93C30
- A synthesis of the optimal control of a nonlinear system with a constraint on the phase coordinate. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) No. 27* (1975), 14-19, 152. (Zdeněk Ertinger) **52** #7632 93C10
- (with Tkalič, V. S.) An algorithm for the synthesis of the optimal control of a one-dimensional system on the basis of the total integral. (Russian) *Problems of analytical mechanics, stability and control theories* (Proc. Second Četaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 312-319, 415. *Kazan. Aviacion. Inst., Kazan*, 1976. (Authors' summary) **58** #7312 49C99
- The group properties of some control systems. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev) Vyp. 33* (1977), 151-157, 163. (Editors) **57** #7322 49C05 (22E05, 58F05)
- See also *Questions in applied mathematics*, **48** #5448
- Tkalič, V. S. ★Теоретические основы оптимальных взаимодействий. II. (Russian) [Theoretical foundations of optimal interactions. I.]. Аналитическая динамика. [Analytical dynamics] *Izdat. "Naukova Dumka", Kiev*, 1971. 114 pp. (Editors) **54** #4220 70.00
- (with Saltanov, M. V.) Certain integrals of electromagnetic hydrodynamics. (Russian) *Mathematical physics, No. 9* (Russian), pp. 95-100. *Naukova Dumka, Kiev*, 1971. (L. Dragoš) **46** #1193 76.35
- (with Bojadžiev, Todor L.; Dolapčiev, Blagovest Ivanov) Variational principles for equations in quasivariables, in analytical dynamics. (Russian. German summary) *Annuaire Univ. Sofia Fac. Math.* **66** (1971/72), 93-105 (1974). (Đorđe Đukic) **53** #2095 70.49
- (with Saltanov, M. V.; Tkalič, E. F.) On a Lorentz-invariant model of multi-component magnetohydrodynamics. (Russian) *Analytic and qualitative methods of the theory of differential equations* (Russian), pp. 247-257. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1972. (Yu. S. Sayasov) **51** #2451 76.35
- (with Tkalič, E. F.) An algorithm for the synthesis of the optimal control of a one-dimensional system. (Russian) *Certain questions on simulation and systems control* (Russian), pp. 106-117. *Izdat. "Naukova Dumka", Kiev*, 1973. (Authors' introduction) **54** #2281 93C15
- (with Tkalič, E. F.) An intrinsic gradient method. (Russian) *Certain questions on simulation and systems control* (Russian), pp. 118-128. *Izdat. "Naukova Dumka", Kiev*, 1973. (V. N. Malozemov) **54** #9678 90C30
- ★Теоретические основы оптимальных взаимодействий. Часть вторая: Квантовая динамика. (Russian) [Theoretical foundations of optimal interactions. Part II: Quantum dynamics] *Izdat. "Naukova Dumka", Kiev*, 1974. 179 pp. (Editors) **55** #7210 81.49
- Some questions on the asymptotic calculus of variations. (Russian) *Asymptotic methods in systems theory*, No. 7 (Russian), pp. 26-41. *Irkutsk. Gos. Univ., Irkutsk*, 1974. (Editors) **57** #13643 49B99
- (with Saltanov, M. V.) Canonical programming in differential game theory. (Russian) *Asymptotic methods in systems theory*, No. 7 (Russian), pp. 162-167. *Irkutsk. Gos. Univ., Irkutsk*, 1974. (Editors) **57** #15520 90D25 (90C50)
- (with Tkačenko, N. E.) Construction of the solution of the Liouville equation on the basis of the complete integral of the Hamilton-Jacobi equation. (Russian) *Problems in analytical mechanics, stability and control theories* (Second Četaev Conf., Kazan, 1973) (Russian), pp. 308-313, 342. *Izdat. "Nauka", Moscow*, 1975. (B. Vujanović) **56** #10257 70.49
- (with Bojadžiev, Todor L.) Conservation laws of nonholonomic mechanics in terms of quasi-variables. (Russian) *Problems of analytical mechanics, stability and control theories* (Proc. Second Četaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 63-71, 401. *Kazan. Aviacion. Inst., Kazan*, 1976. (Authors' summary) **58** #14076 70.49 (49B99)
- (with Tkalič, E. F.) An algorithm for the synthesis of the optimal control of a one-dimensional system on the basis of the total integral. (Russian) *Problems of analytical mechanics, stability and control theories* (Proc. Second Četaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 312-319, 415. *Kazan. Aviacion. Inst., Kazan*, 1976. (Authors' summary) **58** #7312 49C99
- See also *Questions in applied mathematics*, **48** #5448 and *Pańcenkov, A. M.*, **55** #1920
- Tkebuchava, G. E. Polynomial bases in the spaces $L^p(0, 1)$. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **68** (1972), 29-32. (P. Wojtaszczyk) **49** #9612 46E30
- Series in the Haar system. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **69** (1973), 277-280. (F. Schipp) **51** #10992 42A56
- The order of growth of the degrees of a lacunary algebraic basis in the spaces $L^p(0, 1)$, $p \in (1, \infty)$. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **69** (1973), 529-531. (P. Wojtaszczyk) **49** #9613 46E30
- The properties of certain bases. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **71** (1973), 53-56. (N. K. Nikol'skii) **52** #3944 46E15
- (with Čanturija, Z. A.) The norms of linear operators in the space L . (Russian. Georgian summary) *Tbilis. Sahelmc. Univ. Gamoqneb. Math. Inst. Šrom.* **4** (1975), 23-28. (A. Kufner) **53** #8762 42A04
- Bases of certain nonreflexive function spaces. (Russian) *Mat. Zametki* **19** (1976), no. 4, 549-560. (M. I. Kadec) **53** #8877 46E30
- Properties of some function spaces and Ciesielski systems. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 5, 457-460. (Z. Čanturija) **57** #1104 46E30 (46B15)
- On the order of the growth of powers of lacunary algebraic basis in the space $C^m(I^d)$. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 5, 461-464. (Z. Čanturija) **57** #1097 46E15 (46B15)
- Ciesielski's interpolation splines. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **86** (1977), no. 2, 285-287. (Author's summary) **56** #16206 41A05
- Tkebuchava, R. S. A certain method for finding the boundary in an optimal stopping problem. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **75** (1974), 33-36. (H.-J. Engelbert) **54** #14088 60G40
- The problem of finding the optimal stopping boundary in the case of a one-parameter correction. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **76** (1974), 17-19. (M. E. Thompson) **51** #7691 93E20 (62L15)
- Tkebuchava, V. V. (with Strahov, V. N.) The analytic continuation of two-dimensional potential fields in sectorial domains. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **74** (1974), 589-592. (C. Tanaka) **50** #4981 31A10 (86.31)
- Tkebuchava, Georg E. See *Tkebuchava, G. E.*

- Tkemaladze, N. T.** A method of introducing quantitative characteristic for the estimation of signs. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 66 (1972), 557-560. (I. Văduva) 46 #6662 68A45
 See also **Problems of pattern recognition and graph theory**, 48 #3318
- Tlegenov, K. B.** (with Kalčae, K. K.; Zapletin, P. P.) ★Методы математического программирования. (Russian) [Methods of mathematical programming] Izdat. "Nauka" Kazah. SSR, Alma-Ata, 1975. 247 pp. (1 fold out) (V. D. Dimitrov) 53 #7372 90-01
- Tlehugov, H. T.** (with Kveselava, D. A.) The Dini-Schwarz formula for a circular annulus. (Russian) Questions of computational mathematics (A collection dedicated to the memory of M. B. Gagua). *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 12 (1973), no. 1, 214-217. (R. Kühnau) 49 #3155 30A86
 The Cisotti formula for annuli. (Russian) Questions of computational mathematics (A collection dedicated to the memory of M. B. Gagua). *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 12 (1973), no. 1, 218-222. (P. Caraman) 48 #11459 30A24
 An application of Cisotti's formula to approximate conformal mapping. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 73 (1974), 537-540. (J. Siciak) 50 #2468 30A28
 Approximate conformal mapping by the expansion method. (Russian. Azerbaijani and English summaries) *Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk* 1977, no. 5, 37-40. (I. N. Baker) 57 #3368 30A30
 (with Kveselava, D. A.) Cisotti's formula for multiply connected circular domains. (Russian) *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 17 (1977), no. 1, Vyčisl. Mat. i Programirovanie, 256-260. (L. A. Akse'tev) 58 #6273 30A88
 The Dini-Schwarz formula for multiply connected circular domains. (Russian) *Sakharth. SSR Mecn. Akad. Gamothol. Centr. Šrom.* 17 (1977), no. 1, Vyčisl. Mat. i Programirovanie, 261-264. 58 #11441 30A88
- Tleuberdiev, S.** An extension of the concept of number in the encyclopedia of the "Brethren of Purity". (Russian) *Collection of Reports of the Algebraic Seminar of the Faculty of Algebra and Number Theory*, No. 1 (Russian), pp. 72-79. Kazah. Gos. Ped. Inst., Alma-Ata, 1972. (G. P. Matvievskaia) 51 #23 01A30
- Tleubergenov, M. I.** Investigation of the stability of the solutions of systems of difference-differential equations of neutral type. (Russian) *Theoretical and applied problems in mathematics and mechanics* (Russian), pp. 279-287, 316-317. Nauka Kazah. SSR, Alma-Ata, 1977. (Author's summary) 58 #29025 34K20
- Tlijsten, V. Š.** The solvability of the uniform halting problem in the class of two-state Post machines. (Russian. English summary insert) *Kibernetika* (Kiev) 1978, no. 1, 24-30. (S. Ju. Maslov) 58 #5112 02F10
- Tlišev, H.** Certain mathematical and astronomical manuscripts of Nasir ad-Din at-Tūsī in the collection of the Institute of Oriental Studies of the Academy of Sciences of the Uzbek SSR. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 16 (1972), no. 4, 63-65. (E. S. Kennedy) 48 #28 01A30
 (with Matvievskaia, G. P.) On the question of the mathematics in Central Asia in the thirteenth and fourteenth centuries. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 18 (1974), no. 2, 19-22, 92. (Editors) 52 #13135 01A35 (01A30)
 (with Matvievskaia, G. P.) Abū Naṣr ibn 'Irāq and his treatment of Menelaus' Spherics. (Russian) *Mathematics and astronomy in the works of scientists of the medieval East* (Russian), pp. 81-89, 139. Izdat. "Fan" Uzbek. SSR, Tashkent, 1977. (E. S. Kennedy) 58 #27100 01A35
 (with Ramazanov, S. A.) The treatises of Abū Naṣr ibn 'Irāq on the astrolabe. (Russian) *Mathematics and astronomy in the works of scientists of the medieval East* (Russian), pp. 89-97, 139. Izdat. "Fan" Uzbek. SSR, Tashkent, 1977. (Authors' summary) 58 #26824 01A35
 (with Matvievskaia, G. P.) The scientific heritage of the 10th-11th century astronomer Abū Naṣr ibn 'Irāq. (Russian) *Istor.-Astronom. Issled. Vyp.* 13 (1977), 219-232. (E. S. Kennedy) 58 #26793 01A30 (85.01)
 See also **History of the exact sciences in the medieval Near and Middle East**, 57 #5579
- To, Kilin** Fault folding for irredundant and redundant combinational circuits. *IEEE Trans. Computers* C-22 (1973), 1008-1015. (B. Hazeltine) 50 #6664 (E 52 #10263) 94A20
 See also **Ng, Y. W.; et al.**, 52 #10263
- To, Ting-On** The equivalence of the least upper bound property and the Hahn-Banach extension property in ordered linear spaces. *Proc. Amer. Math. Soc.* 30 (1971), 287-295. (Author's summary) 54 #5794 46A40
 (with Yip, Kai Wing) A generalized Jensen's inequality. *Pacific J. Math.* 58 (1975), no. 1, 255-259. (M. M. Rao) 51 #14233 60G05 (28A45)
 (with Petersen, Gordon M.) An extension of metric density. *Quart. J. Math. Oxford Ser. (2)* 27 (1976), no. 108, 463-466. (N. F. G. Martin) 54 #10538 28A15
- Toader, Gh.** Remarques sur la distance entre les ensembles. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* 17(21) (1971), no. 3-4, part I, 103-105. (A. Appert) 46 #8187 54E35
 A universal dynamical system. *Rev. Anal. Numer. Teoria Aproximației* 3 (1974), no. 2, 215-223 (1975). (G. Niculescu) 51 #14010 34C35 (54H20)
 Time-entire dynamical systems. *Rev. Anal. Numer. Théor. Approx.* 4 (1975), no. 2, 213-218 (1976). (From the text) 58 #31017 54H20
 A metric of Pompeiu-Hausdorff type for the set of continuous functions. *Rev. Anal. Numer. Théorie Approximation* 5 (1976), no. 2, 213-217 (1977). (B. L. Brechner) 58 #7564 54E35
- Toader, M.** (with Silas, Giorgio) On the stability of certain dynamical systems. (Romanian. French summary) *Bul. Univ. Brașov Ser. A Mec. Apl.* 16 (1974), no. 1, 11-18. (Authors' summary) 57 #6672 34D20
- Toader, Silvia** On the Hamiltonian property for product graphs. (Romanian. English summary) *Rev. Anal. Numer. Teoria Aproximației* 1 (1972), 211-214. (R. C. Read) 53 #202 05C35
- nguyên cánh Toàn** See **Nguyễn Cánh Toàn**
tran-ngoc-Toan See **Tran-Ngoc-Toan**
- Toan, Ha Huy** A remark on models of Box-Jenkins type. (Czech and loose Russian summaries) *Časopis Pěst. Mat.* 103 (1978), no. 1, 27-35, 97. (E. J. Hannan) 57 #14123 60G25
- Tobe, Hiroyuki** (with Kusano, Takashi; Onose, Hiroshi) On the oscillation of second order nonlinear ordinary differential equations. *Hiroshima Math. J.* 4 (1974), 491-499. (G. Butler) 51 #13356 34C10
- Tobey, M. D.** (with Holzmman, Carlos A.; Norton, P. G.) A graphical representation of matroids. *SIAM J. Appl. Math.* 25 (1973), 618-627. (J. A. Bondy) 52 #10458 05B35
 (with Donald, John D.; Holzmman, Carlos A.) A characterization of complete matroid base graphs. *J. Combinatorial Theory Ser. B* 22 (1977), no. 2, 139-158. (J. M. Simões-Pereira) 58 #377 05C99 (05B35)
- Tobias, T.** The problem of finding the stopping domain for a Wiener process. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* (1970), 259-264. (I. Cuculescu) 45 #1259 60J60
 The optimal stopping of a diffusion process on a finite time interval. (Russian) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 20 (1971), 357-359. (V. M. Dočvirii) 47 #432 60G40 (60J60)
 Optimal stopping of diffusion processes, and parabolic variational inequalities. (Russian) *Differentsial'nye Uravnenija* 9 (1973), 702-708, 784. (V. S. Koroljuk) 48 #3132 60J60 (35K99)
 The optimal stopping of diffusion processes with a degenerate diffusion matrix. (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 23 (1974), 199-202. (A. D. Wentzell (Ventcel')) 50 #11481 60J60 (93E20)
- Tobin, Norman** See **Operational Research**, 49 #12059
- Tobin, R. L.** Minimal complete matchings and negative cycles. *Networks* 5 (1975), no. 4, 371-387. (Rainer Burkard) 52 #16578 90B10 (05C35)
- Tobin, Robert M.** (with Yao, Kung) Moment space upper and lower error bounds for digital systems with intersymbol interference. *IEEE Trans. Information Theory* IT-23 (1976), no. 1, 65-74. (B. W. Stuck) 57 #9271 94A05
- Tobin, S.** On groups with exponent four. *Proc. Roy. Irish Acad. Sect. A* 75 (1975), no. 12, 115-120. (F. G. Grunewald) 52 #572 20E15
- Tobol'cev, A. M.** On the theory of generalized diffusion equations. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 28 (1973), no. 5, 597-602. (L. I. Rubinstein) 54 #763 35Q99 (35R10)
 Certain exact solutions of the generalized diffusion equations. (Russian) *Vestnik Moskov. Univ. Ser. III Fiz. Astronom.* 28 (1973), no. 6, 699-705. (L. I. Rubinstein) 54 #764 35Q99 (35R10)
- Țoca, Aurelia** Generalized monoids of fractions. *Studia Univ. Babeș-Bolyai Math.* 22 (1977), no. 1, 12-13. (J. L. Chrislock) 57 #500 20M10
- Tocaci, Emil** The extension of Hamilton's variational principle to percussed material systems. (Romanian. Russian and French summaries) *Bul. Ști. Tehn. Inst. Politehn. Timișoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* 16(30) (1971), no. 2, 241-252. (Radu Bădescu) 49 #11899 70A9
 (with Constantinescu, Ilie N.; Noaghi, Tr.) Extension des relations de Frenet aux courbes à points irréguliers. *Ann. Polon. Math.* 28 (1973), 285-289. (L. M. Kelly) 49 #6041 53A05
 (with Constantinescu, Ilie N.) Erweiterung des Hamiltonischen Variationsprinzips für perkutierten materiellen Systeme. (Bulgarian, Russian and English summaries) *Teoret. i Prilož. Meh.* 5 (1974), no. 2, 3, 4, 6, 29-39. (F. V. Pohle) 50 #15508 70A9
 The quasi-Dirac function and its use in mechanics. (Romanian) *Stud. Cerc. Mec. Apl.* 34 (1975), no. 2, 167-177. (Author's summary) 52 #11502 44A45
- Tocancipá, Alfonso** Control theory. (Spanish) *Bol. Mat.* 10 (1976), no. 1-6, 28-47. (J. E. Rubio) 55 #11121 49-01
- Tocenkov, V. G.** (with Vavilov, E. M.) A method for checking discrete automata. *Avtomatika* 1969, no. 3, 89-94 (Ukrainian); translated as *Soviet Automat. Control—Ukrain. J. Automat.* 1969, no. 3, 63-67. (Z. Bavel) 46 #1490 94A25
 A method of constructing checking tests for discrete devices with memory. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1974, no. 2, 29-34. (Author's summary) 50 #16143 94A20
 (with Šarišev, O. O.) An upper bound for the number of states of a Moore automaton with finite memory. *Avtomatika* 1974, no. 1, 79-81 (Ukrainian); translated as *Soviet Automat. Control* 7 (1974), no. 1, 66-68. (Editors) 50 #12483 94A30
 Method of determination of memory depth of finite automata. *Avtomatika* 1974, no. 6, 72-74 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 7 (1974), no. 6, 61-63. (K. Vairavan) 52 #2779 94A30 (68A25)
 (with Zelenevskaja, E. A.) Test control of complex discrete devices with memory elements. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1975, no. 5, 29-33. (Authors' summary) 58 #9889 94A20
 Design method for checking tests of arbitrary finite automata. *Avtomat. i Telemekh.* 1976, no. 11, 183-192 (Russian. English summary); translated as *Avtomat. Remote Control* 37 (1976), no. 11, part 2, 1780-1787 (1977). (Siegmar Gerber) 56 #2702 94A30 (94A20)
 (with Zelenevskaja, E. A.; Kiselev, I. M.) Extension of an automaton to an automaton that translates a given input sequence. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* 1977, no. 6, 15-18, 92. (J. Černý) 57 #15794 94A30
- Tocher, K. D.** Error-protected codes. *Operational Res. Quart.* 17 (1966), 139-159. (Author's summary) 45 #1666 94A10
- Točkov, G. I.** A certain variational problem with variable endpoints in the multidimensional case. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 6 (1970), no. 1, 87-92 (1972). (M. M. Cvetanov) 48 #992 49B10
- Toczyłowski, Eugeniusz** Properties of transformations of equations in the computation of complex systems. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* 20 (1975), no. 3, 391-398. (Author's summary) 56 #17943 93A15
- Tod, K. P.** (with Perjés, Zoltán) Two examples of massive scattering using twistor Hamiltonians. *General Relativity and Gravitation* 7 (1976), no. 11, 903-913. (J. G. Taylor) 58 #4159 83J35
 (with Ko, M. K. W.; Newman, Ezra T.) \mathcal{K} -space and null infinity. *Asymptotic structure of space-time* (Proc. Sympos., Univ. Cincinnati, Cincinnati, Ohio, 1976), pp. 227-271. Plenum, New York, 1977. (Garry Ludwig) 58 #4172 83J53
 (with Newman, Ezra T.) Approximate H spaces. *General Relativity and Gravitation*

- 8 (1977), no. 8, 679-687. (R. F. Biljalov) **57** #8917 83.53
(with Anandan, J.) Invariants and classification of gauge fields. *Phys. Rev. D* (3) **18** (1978), no. 4, 1144-1151. (A. Rouet) **58** #14632 81.47
- a, Hiroshi** Realizing an exterior part of Steenrod algebra. *Proceedings of the Advanced Study Institute on Algebraic Topology* (Aarhus Univ., Aarhus, 1970), Vol. III, pp. 599-611. *Various Publ. Ser., No. 13, Mat. Inst., Aarhus Univ., Aarhus, 1970.* (Donald M. Davis) **51** #1822 55G10
On spectra $V(n)$. *Algebraic topology* (Proc. Sympos. Pure Math., Vol. XXII, Univ. Wisconsin, Madison, Wis., 1970), pp. 273-278. *Amer. Math. Soc., Providence, R.I., 1971.* (D. W. Anderson) **47** #4258 55E10
Algebra of stable homotopy of Z_p -spaces and applications. *J. Math. Kyoto Univ.* **11** (1971), 197-251. (A. Liulevicius) **45** #2708 55E10
(with Mimura, Mamoru; Nishida, Gorō) Localization of CW-complexes and its applications. *J. Math. Soc. Japan* **23** (1971), 593-624. (D. W. Anderson) **45** #4413 55E50
(with Mimura, Mamoru; O'Neill, Ronald C.) On p -equivalence in the sense of Serre. *Japan. J. Math.* **40** (1971), 1-10. (H. Scheerer) **46** #4529 55D45
On mod 3 characteristic classes for F_4 -bundles. *Geometry of manifolds* (Proc. Sympos., R.I.M.S., Kyoto Univ., Kyoto, 1972), pp. 70-77. *R.I.M.S. Sem. Rep. No. 158, Res. Inst. Math. Sci. Kyoto Univ., Kyoto, 1972.* (M. Mimura) **52** #15458 55F40
A survey of homotopy theory. *Advances in Math.* **10**, 417-455 (1973). (Ronald Brown) **48** #5045 55-02
Cohomology mod 3 of the classifying space BF_4 of the exceptional group F_4 . *J. Math. Kyoto Univ.* **13** (1973), 97-115. (M. Mimura) **47** #9619 55F40
(with Mimura, Mamoru; Nishida, Gorō) On the classification of H -spaces of rank 2. *J. Math. Kyoto Univ.* **13** (1973), 611-627. (S. Gitler) **48** #12514 55D45
(with Watanabe, Takashi) The integral cohomology ring of F_4/T and E_6/T . *J. Math. Kyoto Univ.* **14** (1974), 257-286. (H. Scheerer) **50** #11306 57F15
Cohomology of the classifying space of exceptional Lie groups. *Manifolds—Tokyo 1973* (Proc. Internat. Conf., Tokyo, 1973), pp. 265-271. *Univ. Tokyo Press, Tokyo, 1975.* (S. Gitler) **51** #4301 57F35 (55F40)
(with Oka, Shichirō) Non-triviality of an element in the stable homotopy groups of spheres. *Hiroshima Math. J.* **5** (1975), 115-125. (R. M. F. Moss) **52** #1689 55E45
(with Oka, Shichirō) 3-primary β -family in stable homotopy. *Hiroshima Math. J.* **5** (1975), no. 3, 447-460. (Raphael Zahler) **52** #6712 55E45
On the cohomology ring of some homogeneous spaces. *J. Math. Kyoto Univ.* **15** (1975), 185-199. (J. F. Adams) **52** #1753 57F15 (55F20)
A note on compact semi-simple Lie groups. *Japan. J. Math. (N.S.)* **2** (1976), no. 2, 355-360. (C. Teleman) **57** #17676 57F20
(with Oka, Shichirō) On the stable homotopy groups of spheres. (Japanese) *Sūgaku* **28** (1976), no. 3, 226-235. (M. Mimura) **58** #18437 55E45
(with Mimura, Mamoru; Nishida, Gorō) Mod p decomposition of compact Lie groups. *Publ. Res. Inst. Math. Sci.* **13** (1977/78), no. 3, 627-680. (M. I. Kabenjuk) **57** #17675 57F15
See also Number theory, algebraic geometry and commutative algebra, in honor of Yasuo Akizuki, **48** #10743
- Ja, Hiroshi** (with Mimura, Mamoru) A representation and the quasi p -regularity of the compact Lie group. *Japan. J. Math. (N.S.)* **1** (1975/76), no. 1, 101-109. (C. Teleman) **53** #4108 57F20 (55G20)
(with Ishitoya, Kiminao; Kono, Akira) Hopf algebra structure of mod 2 cohomology of simple Lie groups. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 1, 141-167. (J. F. Adams) **54** #3731 57F10
(with Ishitoya, Kiminao) On the cohomology of irreducible symmetric spaces of exceptional type. *J. Math. Kyoto Univ.* **17** (1977), no. 2, 225-243. (J. F. Adams) **56** #1333 57F15
- Ja, Mitsuhiko** (with Aoki, Masanao) Parameter adaptive resource allocation problem for a decentralized dynamic system. *IEEE Trans. Automatic Control* **AC-20** (1975), 192-200. (Authors' summary) **56** #4935 93A15 (93E20)
(with Aoki, Masanao) Second-guessing technique for stochastic linear regulator problems with delayed information sharing. *IEEE Trans. Automatic Control* **AC-20** (1975), 260-262. (Morton I. Kamien) **55** #5278 93E05
(with Patel, R. V.; Sridhar, Banavar) Robustness of linear quadratic state feedback designs in the presence of system uncertainty. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 6, 945-949. (Authors' summary) **58** #15536 93D15
(with Patel, R. V.) On norm bounds for algebraic Riccati and Lyapunov equations. *IEEE Trans. Automatic Control* **AC-23** (1978), no. 1, 87-88. (B. P. Molinari) **58** #9546 93C05 (15A24)
- Ja, Morikazu** Instability of trajectories of the lattice with cubic nonlinearity. *Phys. Lett.* **48A** (1974), no. 5, 335-336. (Author's summary) **53** #7316 82.34
Wave propagation in a non-linear lattice. *International Symposium on Mathematical Problems in Theoretical Physics* (Kyoto Univ., Kyoto, 1975), pp. 387-393. *Lecture Notes in Phys.*, 39. Springer, Berlin, 1975. (Editors) **58** #32659 82.35
(with Wadati, Miki) Bäcklund transformation for the exponential lattice. *J. Phys. Soc. Japan* **39** (1975), no. 5, 1196-1203. (Piero de Mottani) **54** #4452 82.34 (34K05, 58A15)
(with Wadati, Miki) A canonical transformation for the exponential lattice. *J. Phys. Soc. Japan* **39** (1975), no. 5, 1204-1211. (Piero de Mottani) **54** #4453 82.34 (34K05, 58A15)
Studies of a non-linear lattice. *Phys. Rep.* **18C** (1975), no. 1, 1-123. (J. S. Joel) **58** #8610 70.34 (35Q99, 82.35)
Problems in nonlinear dynamics. Conference on the Theory and Application of Solitons (Tucson, Ariz., 1976). *Rocky Mountain J. Math.* **8** (1978), no. 1-2, 197-209. (Kotik K. Lee) **58** #1511 35A30 (58F05, 70.35)
- Ja, Nobushige** Quelques applications du défaut modifié au théorème de Picard-Borel. *J. Math. Soc. Japan* **23** (1971), 583-592. (D. F. Shea) **45** #2173 30A70
On the α -deficiency of meromorphic functions under change of origin. *Proc. Japan Acad.* **47** (1971), 275-278. (J. Winkler) **45** #2174 30A70
Sur quelques combinaisons linéaires exceptionnelles au sens de Nevanlinna. *Tōhoku Math. J. (2)* **23** (1971), 67-95. (A. Dinghas) **45** #7060 30A70
On the functional equation $\sum_{j=0}^n \alpha_j f_j^n = 1$. *Tōhoku Math. J. (2)* **23** (1971), 289-299. (Fred Gross) **45** #551 30A66 (30A20)
Le défaut modifié de systèmes et ses applications. *Tōhoku Math. J. (2)* **23** (1971), 491-524. (D. F. Shea) **47** #469 30A70
Direction de Julia de systèmes et somme de fonctions normales. *Nagoya Math. J.* **47** (1972), 145-154. (L. R. Sons) **47** #7035 30A70
Surrounding algebroid functions. (Japanese) *Sūgaku* **24** (1972), no. 3, 200-209. (Editors) **58** #28506 30A70
Sur quelques combinaisons linéaires exceptionnelles au sens de Nevanlinna. II. *J. Math. Soc. Japan* **25** (1973), 158-167. (A. Dinghas) **47** #3680 30A70
(with Furuta, Masayoshi) On exceptional values of meromorphic functions of divergence class. *J. Math. Soc. Japan* **25** (1973), 667-679. (S. Hellerstein) **48** #4313 30A40
Le nombre de combinaisons linéaires exceptionnelles au sens de Nevanlinna et ses applications. *Nagoya Math. J.* **49** (1973), 91-100. (From the author's introduction) **54** #7783 30A70
(with Suzuki, Junji) Some notes on Picard constant. *Kōdai Math. Sem. Rep.* **26** (1974/75), 69-74. (H. Aogai) **51** #10613 30A48
Sur quelques combinaisons linéaires exceptionnelles au sens de Nevanlinna. III. *Kōdai Math. Sem. Rep.* **26** (1974/75), 294-303. (I. N. Baker) **56** #613 30A70
Sur quelques combinaisons linéaires exceptionnelles au sens de Nevanlinna. IV. *Nagoya Math. J.* **59** (1975), 77-86. (I. N. Baker) **56** #614 30A70
(with Katō, Masakimi) The degeneracy of systems and the exceptional linear combinations of entire functions. *J. Math. Soc. Japan* **29** (1977), no. 2, 341-353. (S. Hellerstein) **56** #8849 30A66
Sur quelques combinaisons linéaires exceptionnelles au sens de Nevanlinna. V. *Nagoya Math. J.* **66** (1977), 37-52. (I. N. Baker) **56** #15928 30A70
- Todd, A.** (with Freeman, E. A.) Sub-optimal control for multivariable systems based on an orthogonal decomposition technique. *Internat. J. Control* (1) **13** (1971), 737-761. (J. Cullum) **47** #7559 49B35
- Todd, Aaron R.** (with Saxon, Stephen A.) A property of locally convex Baire spaces. *Math. Ann.* **206** (1973), 23-34. (J. Diestel) **48** #6865 46A05
(with Hajek, Darrell W.) Lightly compact spaces and infra H -closed spaces. *Proc. Amer. Math. Soc.* **48** (1975), 479-482. (Jack R. Porter) **51** #6726 54D30
Continuous linear images of pseudo-complete linear topological spaces. *Pacific J. Math.* **63** (1976), no. 1, 281-292. (J. M. Aarts) **56** #1013 46A30 (54E99)
Pseudo-completeness in linear metrizable spaces. *Fund. Math.* **94** (1977), no. 2, 93-96. (M. Valdivia) **55** #3733 46A30
See also Notes and comments from Math. Mag., **54** #12422
- Todd, Christopher** On the compactification of products. *Canad. Math. Bull.* **14** (1971), 591-592. (S. P. Franklin) **46** #9935 54D35
The product of certain measurable spaces. *Fund. Math.* **74** (1972), no. 1, 29-33. (E. O. Elliott) **45** #2130 28A35
- Todd, D. C.** (with Roux, J. A.; Smith, A. M.) Radiative transfer with anisotropic scattering and arbitrary temperature for plane geometry. *AIAA J.* **13** (1975), no. 9, 1203-1211. (M. Drăganu) **52** #12560 80.45
- Todd, H. David** (with Kay, Kenneth G.; Silverstone, Harris J.) Dirac delta functions in the Laplace-type expansion of $r^m Y_l^m(\theta, \phi)$. *J. Chem. Phys.* **51** (1969), 2359-2362. (R. C. Varma) **50** #10381 33A70
(with Kay, Kenneth G.; Silverstone, Harris J.) Bipolar expansion for $r_l^n Y_l^m(\theta_{12}, \phi_{12})$. *J. Chem. Phys.* **51** (1969), 2363-2367. (R. C. Varma) **50** #10380 33A70
- Todd, J. A.** As it might have been. *Bull. London Math. Soc.* **2** (1970), no. 4, 1-4. (Editors) **52** #3353 20G40
- Todd, John** Table erratum: "Sechsstellige Tafel der Cauer-Parameter" (Bayer. Akad. Wiss. Math.-Natur. Kl. Abh. (N.F.) Heft 67 (1955)) by Ernst Glowatzki. *Math. Comp.* **24** (1970), no. 112, 999. (Editors) **53** #4471 65A05 (94A20)
(with Liang, Joseph J.) The Stieltjes constants. *J. Res. Nat. Bur. Standards Sect. B* **76B** (1972), 161-178. (F. Götte) **48** #5316 65B15 (10H05)
(with Hwang, W. G.) A recurrence relation for the square root. *J. Approximation Theory* **9** (1973), 299-306. (L. Fox) **51** #9470 65H05
John von Neumann and the national accounting machine. *SIAM Rev.* **16** (1974), 526-530. (M. Kline) **50** #4208 01A60 (68-03)
Thelemniscate constants. Collection of articles honoring Alston S. Householder. *Comm. ACM* **18** (1975), 14-19; corrigendum, *ibid.* **18** (1975), no. 8, 462. (L. Fox) **51** #11935 65D20
Numerical analysis at the National Bureau of Standards. *SIAM Rev.* **17** (1975), 361-370. (Editors) **50** #15251 65-03 (01-XX)
(with Kreyszig, Erwin) QR in two dimensions. *Elem. Math.* **31** (1976), no. 5, 109-114. (K. Najzar) **54** #14335 65F15
★Basic numerical mathematics. Vol. 2. Numerical algebra. International Series of Numerical Mathematics, Vol. 22. Birkhäuser Verlag, Basel-Stuttgart, 1977. 216 pp. ISBN 3-7643-0811-7 (A. S. Householder) **57** #1839 65Fxx
★Basic numerical mathematics. Vol. 2. Numerical algebra. International Series of Numerical Mathematics, Vol. 22. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, Birkhäuser Verlag, Basel-Stuttgart, 1977. 216 pp. ISBN 0-12-692402-3 (Editors) **58** #3289 65-01
The many limits of mixed means. I. *General inequalities* (Proc. First Internat. Conf., Math. Res. Inst., Oberwolfach, 1976), 1, pp. 5-22. Birkhäuser, Basel, 1978. (A. McD. Mercer) **58** #12070 40A05
- Todd, L.** (with Temperley, D. J.) Some remarks on a class of plane, linear boundary value problems. *J. Inst. Math. Appl.* **18** (1976), no. 3, 309-324. (Clarence M. Ablow) **56** #3441 35C10 (76.35)
- Todd, Michael J.** (with Duguay, Claude; Wagner, Harvey M.) Linear programming with relative bounded variables. *Management Sci.* **19** (1972/73), 751-759. (G. Owen) **49** #2079 90C05
A generalized complementary pivoting algorithm. *Math. Programming* **6** (1974), 243-263. (R. W. Cottle) **52** #12771 90C05
★The computation of fixed points and applications. Lecture Notes in Economics and Mathematical Systems, Vol. 124. Springer-Verlag, Berlin-New York, 1976. vii + 129 pp. (Ramesh Saigal) **53** #14478 55C20 (90C30)

- Characterizing binary simplicial matroids. *Discrete Math.* **16** (1976), no. 1, 61-70. (J. Sheehan) **54** #7299 05B35
- A combinatorial generalization of polytopes. *J. Combinatorial Theory Ser. B* **20** (1976), no. 3, 229-242. (Ethan D. Bolker) **53** #10592 05A05 (52A25)
- Extensions of Lemke's algorithm for the linear complementarity problem. *J. Optimization Theory Appl.* **20** (1976), no. 4, 397-416. (Leon Cooper) **56** #2399 90C30
- Orientation in complementary pivot algorithms. *Math. Oper. Res.* **1** (1976), no. 1, 54-66. (Author's summary) **57** #2591 90C99
- Comments on a note by V. Aggarwal: "On the generation of all equilibrium points for bimatrix games through the Lemke-Howson algorithm" (*Math. Programming* **4** (1973), 223-234). *Math. Programming* **10** (1976), no. 1, 130-133. (Suresh Chandra) **54** #6965 90D05
- On triangulations for computing fixed points. *Math. Programming* **10** (1976), no. 3, 322-346. (Murat R. Sertel) **55** #9538 65K05 (90C30)
- Union Jack triangulations. *Fixed points: algorithms and applications (Proc. First Internat. Conf., Clemson Univ., Clemson, S. C., 1974)*, pp. 315-336. Academic Press, New York, 1977. (R. W. Cottle) **56** #3821 54H25 (65K05)
- On the Jacobian of a function at a zero computed by a fixed point algorithm. *Math. Oper. Res.* **3** (1978), no. 2, 126-132. (John J. Dinkel) **58** #13005 55C20 (65H05)
- Improving the convergence of fixed-point algorithms. Complementarity and fixed point problems. *Math. Programming Stud.* No. 7 (1978), 151-169. (Author's summary) **57** #14452 65K05 (55C20)
- Optimal dissection of simplices. *SIAM J. Appl. Math.* **34** (1978), no. 4, 792-803. (Haskell Cohen) **58** #20460 90C30 (54H25)
- Todhunter, Isaac** See **Kendall, Maurice G.** **47** #2697
- Todor, Liviu** (with Ionescu, Constantin) The "cascade" method or the method of "fractional distillation". (German summary) *Proceedings of the Fourth Conference on Probability Theory (Braşov, 1971)*, pp. 533-540. Editura Acad. R.S.R., Bucharest, 1973. (Jeremy F. Shapiro) **52** #16608 90C10
- See also **Ionescu, Bucur B.** **57** #5630
- Todoran, Ioan** ★Tratarea matematică a datelor experimentale. (Romanian) [The mathematical treatment of experimental data] Funcții empirice. [Empirical functions] With an English summary and table of contents. Editura Academiei Republicii Socialiste România, Bucharest, 1976. 325 pp. (S. Mărușter) **57** #14335 65D10
- Todorinov, S. A.** Directed groups. (Russian) *Algebra i Logika* **10** (1971), 558-560. (F. Šik) **46** #1674 06A55
- (with D'rižanova, P. I.) Partially ordered operator groups. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 4, 89-95 (1973). (J. Jakubík) **53** #5415 06A55
- (with Georgieva, P. I.) Groups that admit a unique maximal ω -order. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 2, 406-411, 480. (J. Jakubík) **57** #12334 06A55
- Todoroi, D. N.** (with Gonca, M. G.; Maričuk, M. N.) An algorithm for the syntactic control and analysis of languages that can be defined by recursively complete grammars. (Russian) *Prikl. Mat. i Programirovanie* No. 2 (1970), 23-36, 95. (Armin Cremers) **48** #10206 68A30
- See also **System and theoretical programming**, **57** #8132
- Todorov, A. N.** (with Avramov, Luchezar L.; Stroganov, S. S.) Gorenstein modules. (Russian) *Uspehi Mat. Nauk* **27** (1972), no. 4(166), 199-200. (Chr. U. Jensen) **53** #5575 13H10
- Surfaces of general type with a geometric genus 2 and $c_2^2(X)=1$. (Russian) *Mat. Zametki* **16** (1974), 623-632. (Miles Reid) **52** #10752 14J25 (32J15)
- Conditions for the finiteness of the monodromy for a family of curves and surfaces. (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* **40** (1976), no. 4, 791-805, 949. (I. N. Iomdin) **54** #10259 14D05 (14B05, 32C40)
- Todorov, I. T.** (with Bogoljubov, N. N.; Logunov, A. A.) ★Основы аксиоматического подхода в квантовой теории поля. (Russian) [Fundamentals of the axiomatic approach in quantum field theory]. Izdat. "Nauka", Moscow, 1969. 424 pp. (Editors) **56** #10557a 81.46
- Derivation and solution of an infinite-component wave equation for the relativistic Coulomb problem. *Group representations in mathematics and physics (Rencontres, Battelle Res. Inst., Seattle, 1969)*, pp. 254-278. *Lecture Notes in Physics*, Vol. 6, Springer, Berlin, 1970. (Gerald Rosen) **49** #4463 81.22
- (with Oksak, A. I.) Two-point functions for local infinite-component fields. (Russian. English summary) *Teoret. Mat. Fiz.* **7** (1971), no. 2, 153-182. (Authors' summary) **57** #14980 81.22
- Conformal expansion for Euclidean Green functions. *Group theoretical methods in physics (Proc. Third Internat. Colloq., Centre Phys. Théor., Marseille, 1974)*, Vol. 1, pp. 160-170. Centre Nat. Recherche Sci., Centre Phys. Théor., Marseille, 1974. (Charles A. Nelson) **57** #8557 81.22
- (with Krapčev, V. B.; Rizov, V. A.) A quasipotential approach to the electromagnetic interaction of scalar charged particles. (Russian. English summary) *Bulgar. J. Phys.* **1** (1974), no. 2, 115-137. (Authors' summary) **54** #12045b 81.47
- (with Krapčev, V. B.; Rizov, V. A.) Errata to "A quasipotential approach to the electromagnetic interaction of scalar charged particles" (*Bulgar. J. Phys.* **1** (1974), no. 2, 115-137). *Bulgar. J. Phys.* **1** (1974), no. 3, 316. (Authors' summary) **54** #12045b 81.47
- (with Bogoljubov, N. N.; Logunov, A. A.) ★Introduction to axiomatic quantum field theory. Translated from the Russian by Stephen A. Fulling and Ludmila G. Popova. Edited by Stephen A. Fulling. Mathematical Physics Monograph Series, No. 18. W. A. Benjamin, Inc., Reading, Mass.-London-Amsterdam, 1975. xxvi + 707 pp. (Editors) **56** #10557b 81.46
- (with Rizov, V. A.) A quasipotential approach to the problem of bound states in quantum electrodynamics. (Russian. English summary) *Fiz. Elementar. Častic i Atom. Jadra* **6** (1975), no. 3, 669-742. (Authors' summary) **57** #15032 81.35
- (with Oksak, A. I.) General properties of physical region spinor amplitudes. *Rep. Mathematical Phys.* **7** (1975), no. 3, 417-448. (P. Pascual) **54** #14618 81.46
- Conformal invariant Euclidean quantum field theory. With a discussion in English and Russian. International Conference: Mathematical Problems of Quantum Field Theory and Quantum Statistics (Moscow, 1972), Part II. *Trudy Mat. Inst. Steklov.* **134** (1975), 254-294, 440. (Editors) **58** #4080 81.47
- The duality hypothesis in quantum field theory. (Russian) *Nonlocal, nonlinear and nonrenormalizable field theories (Proc. Fourth Internat. Sympos. on Nonlocal Field Theories, Alushta, 1976)* (Russian), pp. 303-316. Ob"ed. Inst. Jadern. Issled., Dubna, 1976. (Not reviewed) 81.58
- (with Dobrev, V. K.; Mack, Gerhard; Petkova, V. B.; Petrova, S. G.) ★Harmonic analysis on the n -dimensional Lorentz group and its application to conformal quantum field theory. *Lecture Notes in Physics*, Vol. 63. Springer-Verlag, Berlin-New York, 1977. x + 280 pp. (Not reviewed) 81.22
- (with Bargmann, Valentine) Spaces of analytic functions on a complex cone as carriers for the symmetric tensor representations of $SO(n)$. *J. Mathematical Phys.* **18** (1977), no. 6, 1141-1148. (I. K. Marek) **58** #6085 22E70 (33A75, 46E15)
- Sur la quantification d'un système mécanique avec des contraintes de deuxième classe. (English summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **28** (1978), no. 2, 207-223. (Tudor S. Rațiu) **58** #4100 81.58 (58F05)
- See also **New developments in relativistic quantum field theory and its applications**, **49** #11977 and **Lectures in theoretical physics**, **52** #16311
- Todorov, K.** Über einige Eigenschaften der Kommutatoren der symmetrischen Halbgruppe. (English summary) *Semigroup Forum* **15** (1977/78), no. 1, 61-85. (J. Denes) **57** #12746 20M15
- Todorov, K. Ž.** Relations that define an order for semigroups of transformations of a set with a finite chain. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* **65** (1970/71), 225-234 (1972). (errata insert) (R. P. Sullivan) **48** #198 06A15
- Ordered semigroups and groups of the second and third kind. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* **65** (1970/71), 249-264 (1972). (errata insert) (F. Šik) **48** #5951 06A55
- Aggregates that topologically determine an order. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* **464** (1971), no. 2, 127-143. (E. Gedeonová) **45** #5045 06A45
- Relations that determine the order in ordered semigroups. (Russian) *Leningrad. Gos. Ped. Inst. Učen. Zap.* **464** (1971), no. 2, 144-172. (John Ellis) **45** #6716 06A50
- Subsemigroups of idempotents of the semigroup of almost identity transformations, and their orders. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* **67** (1972/73), 321-325 (1976). (G. Pollák) **54** #12939 20M20
- The subsemigroups of the transformation semigroup of a finite set, and their orders. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* **67** (1972/73), 327-331 (1976). (G. Pollák) **54** #12940 20M20
- Ordered semigroups of the second and third kind. (Russian) *C. R. Acad. Bulgare Sci.* **25** (1972), 873-875. (T. Saitō) **47** #8383 06A50
- Orders of the second kind in cyclic semigroups. (Russian. Bulgarian and English summaries) *B'lgar. Akad. Nauk. Izv. Mat. Inst.* **15** (1974), 333-341. (F. Šik) **51** #3019 06A50
- The subsemigroups of the symmetric semigroup with a fixed range of values, and their ordinal numbers. (Russian) *C. R. Acad. Bulgare Sci.* **29** (1976), no. 3, 299-301. (S. Lajos) **53** #8307 20M20
- The idempotents of a symmetric semigroup and its structure. (Russian) *C. R. Acad. Bulgare Sci.* **29** (1976), no. 4, 457-459. (G. Pollák) **56** #513 20M20
- The bands of a finite symmetric semigroup. *Serdica* **2** (1976), no. 1, 35-41. (K. S. S. Nambooripad) **53** #13456 20M20
- See also **Hercen Lectures**, **47** #4749
- Todorov, P. M.** A theorem on equivalent inversion with reversible ladder quadrupoles. (Russian) *C. R. Acad. Bulgare Sci.* **29** (1976), no. 6, 853-856. (Not reviewed) 94A20
- Todorov, Pavel G.** The theory of analytic positive and schlicht conformal mappings by means of generalized entire and meromorphic functions with a finite number of zeros and poles. (Russian) *Publ. Inst. Math. (Beograd) (N.S.)* **11(25)** (1971), 5-15. (T. Kubo) **46** #2028 30A32
- Zur Theorie der schlichten Abbildungen. *Publ. Inst. Math. (Beograd) (N.S.)* **11(25)** (1971), 17-18. (T. Kubo) **46** #2031 30A36
- (with Vasilev, T. A.) Mathematical theory of the magnetic field of two linear isodirectional direct currents. (Russian. German summary) *Visš. Ped. Inst. Plovdiv. Naučn. Trud.* **9** (1971), no. 1, 45-54. (J. E. Rosenthal) **45** #8134 78.30
- Maximal univalent mappings with bounded rotation that can be realized by a class of integrals of Schwarz-Christoffel type. (Russian) *Mathematica (Cluj)* **15(38)** (1973), 307-329. (K. W. Lucas (Zbl 292, 30006)) **54** #5450 30A30
- Maximal domains of univalence for certain classes of meromorphic functions. (Russian) *Aequationes Math.* **11** (1974), 177-188. (T. Kubo) **49** #10871 30A32
- Maximal univalent mappings with bounded rotation that are realized by the class of integrals of Schwarz-Christoffel type. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Naučn. Trud.* **12** (1974), no. 1, 49-58. (I. P. Ramadanov) **53** #13549 30A36
- On certain univalent conformal mappings that are realized by Gauss's hypergeometric function. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Naučn. Trud.* **12** (1974), no. 1, 59-64. (P. T. Mocanu) **53** #11034 30A30 (33A25)
- Application of maximal univalence domains of classes of rational functions with simple poles and positive residues to the uncovering of the structure of magnetic fields of systems of equally directed direct currents. (Russian. French summary) *Plovdiv. Univ. Naučn. Trud.* **13** (1975), no. 1, 317-321 (1977). (Author's summary) **58** #22529 30A36 (78.30)
- An identity for the Vandermonde determinant. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Naučn. Trud.* **13** (1975), no. 1, 323-325 (1977). (Author's summary) **58** #21649 05A15
- Une nouvelle représentation explicite des nombres d'Euler. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 19, A807-A809. (Editors) **58** #27737 10A40 (05A10)
- See also **Goodman, A. W.**, **45** #7037
- Todorov, T.** (with Ivanov, D.) Analytic synthesis of optimal regulators. (Bulgarian. Russian and English summaries) *Automat. i Izčisl. Tehn.* **7** (1973), no. 1, 5-10, 2, 3. (J. M. Skowroński) **50** #1759 93C99
- Todorov, T. G.** The passage to the limit under the sign of the double Stieltjes operator integral. (Russian. Bulgarian and English summaries) *Godišnik Visš. Tehn. Učebn.*

- reed. Mat.* 7 (1971), no. 1, 33-44 (1973). (H. Langer) 49 #9661 47A55
The smoothness of the generalized solutions of higher order quasilinear elliptic stems. (Russian. English summary) *Vestnik Leningrad. Univ. No. 19 Mat. Meh. Astronom. Vyp.* 4 (1974), 164-167, 175. (S. N. Kružkov) 51 #10844 35D10
The smoothness of generalized solutions of higher order quasilinear elliptic systems. (Russian) *Problems of mathematical analysis*, No. 5: *Linear and nonlinear differential equations, Differential operators* (Russian), pp. 180-191. *Izdat. Leningrad. Univ., Leningrad*, 1975. (Ja. A. Roitberg) 53 #13832 35J65 (35D10)
The continuity of bounded generalized solutions of higher order quasilinear elliptic equations. (Russian. English summary) *Vestnik Leningrad. Univ.* 1975, no. 19 *Mat. Meh. Astronom. Vyp.* 4, 56-63, 168. (Ė. M. Saak) 53 #6071 35D10 (35J60)
rov, Todor D. (with Hristov, Hristo Ja.) Asymptotic numbers—a generalization of the notion of number. (Bulgarian and Russian summaries) *B"lgar. Akad. Nauk. Izv. Fiz. Inst. s Aneb* 24 (1973), 221-231. (L. D. Kugler) 49 #10657 10N15 (02H25, 46F99)
(with Hristov, Hristo Ja.) Asymptotic numbers—algebraic operations with them. *Periodica* 2 (1976), no. 1, 87-102. (W. A. J. Luxemburg) 54 #5702 41A60 (02H25)
rov, Todor Stefanov The complete collection of commuting observables. (Russian. Bulgarian and English summaries) *B"lgar. Akad. Nauk. Oidel. Mat. Fiz. Nauk. Izv. Fiz. Inst. s Aneb* 22 (1972), 119-128. (V. N. Suško (RŽMat 1973 #8B193)) 53 #15199 31.47
On the uniqueness of the vacuum vector in axiomatic quantum field theory. *C. R. Acad. Bulgare Sci.* 25 (1972), 453-454. (Walter Wyss) 46 #6764 81.47
Some theorems in axiomatic quantum theory. (Russian) *C. R. Acad. Bulgare Sci.* 26 (1972), 1309-1310. (S. Kurepa) 48 #10384 81.47
Superselection rules in quantum theory. (Bulgarian. English summary) *Annuaire Univ. Sofia Fac. Phys.* 66 (1974/75), 49-52 (1978). (Author's summary) 58 #19988 31.46
The structure of superselection rules for observables defined by unbounded operators. (Bulgarian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Tehn. Fiz.* 12 (1975), no. 1, 43-48 (1977). (Author's summary) 58 #30325 46L99 (81.46)
The commutant, and reducibility of sets of unbounded operators in Hilbert space. (Bulgarian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Tehn. Fiz.* 12 (1975), no. 1, 49-52 (1977). (Author's summary) 58 #30421 47A99 (47B47)
A remark on the definition of superselection rules in terms of unbounded operators. *Internat. J. Theoret. Phys.* 14 (1975), no. 5, 295-298. (Charles L. Hammer) 53 #12374 81.47
(with Denčev, Račo; Puškarov, C. I.) On a quantum mechanical example connected with compatibility of observables. *Acta Phys. Austriaca* 45 (1976), no. 3-4, 255-259. (Evangelos Ifantis) 54 #1978 81.47
Discussion of a theorem of R. T. Powers. (Russian summary) *Bulgar. J. Phys.* 3 (1976), no. 3, 266-269. (S. Gudder) 56 #1090 46L15 (46K10)
On the definition of invariant subspaces of unbounded operators in Hilbert space. (Russian) *C. R. Acad. Bulgare Sci.* 29 (1976), no. 6, 783-785. (Editors) 58 #23665 47A15
The algebraic approach in the axiomatics of relativistic quantum theory. (Russian. English summary) *Fiz. Elementar. Častic. i Atom. Jadra* 7 (1976), no. 1, 249-300. (M. E. Mayer) 58 #14469 81.17
Quantization postulate in quantum mechanics. *Internat. J. Theoret. Phys.* 16 (1977), no. 3, 161-165. (S. Gudder) 56 #7636 81.47
orov, Vladimir T. Nonexpansive mappings. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Réc.* 68 (1973/74), 257-262 (1977). (A. I. Baškirov) 58 #30962 54C60
orova, Grozdena Hr. Formal group laws of elliptic curves over a local field. (Russian) *Dokl. Akad. Nauk SSSR* 216 (1974), 1229-1232. (Michiel Hazewinkel) 51 #3182 14L05 (14K15)
Formal group laws of elliptic curves over a local field. (Bulgarian. Russian and English summaries) *Mathematics and mathematical education* (Proc. Third Spring Conf. *Bulgar. Math. Soc., Burgas*, 1974) (Bulgarian), pp. 272-275, *B"lgar. Akad. Nauk, Sofia*, 1976. (See Zbl 352 #14020) 14L05
na, N. N. (with Vasil'ev, V. I.; Galic'kii, V. K.) Estimation of the parameters of an object from incomplete data. (Russian) *Cybernetics and computer technology*, No. 21: *Biological and medical cybernetics* (Russian), pp. 82-88, 123. "Naukova Dumka", Kiev, 1973. (H. Toutenbarg) 50 #15111 62F10
plitz, O. (with Rademacher, H.) ★ За числата и фигурите. (Bulgarian) [On numbers and figures] Translated from the German by Marija Kr'steva. *Nauka i Izkustvo, Sofia*, 1969. 246 pp. (J. Burlak) 46 #8792 00A05
ws, H. (with Chandna, O. P.) Plane magnetofluidynamic flows with constantly inclined magnetic and velocity fields. *Canad. J. Phys.* 52 (1974), 753-758. 53 #12201 76.35
(with Chandna, O. P.) Steady transverse plane magnetogasdynamic flows. *Tensor (N.S.)* 28 (1974), 184-188. (S. I. Pai) 50 #6323 76.35
(with Chandna, O. P.) Plane constantly-inclined MHD flow with isometric geometry. *Quart. Appl. Math.* 34 (1976/77), no. 4, 331-337. (Giulio Mattei) 56 #7479 76.53
an-Tofan, Doina See Șerban-Tofan, Doina
an, Ioan (with Vescan, Robert T.) Interior systems and interior operators. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* 19 (1973), no. 2, 311-319. (D. J. Foulis) 55 #207 06A15
(with Nistor, S.) Sur les groupes linéarisables. *An. Ști. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.)* 23 (1977), no. 1, 17-20. (P. F. Conrad) 57 #16160 06A55
falori, Carlo Alcune proprietà di teorie di campi con un sottocampo privilegiato. (English summary) *Boll. Un. Mat. Ital. B* (5) 14 (1977), no. 1, 254-266. (M. Armbrust (Zbl 362 #02047)) 58 #16272 02H15 (12L99)
Eliminazione dei quantificatori per certe teorie di coppie di campi (Teoria dei modelli). (English summary) *Boll. Un. Mat. Ital. A* (5) 15 (1978), no. 1, 159-166. (Gabriel Lolli) 58 #213 02H15
fin, Philippe Conditions suffisantes d'équipartition modulo 1. Problème de Waring-Golbach pour $f(x) = x^c$, c non entier. *Séminaire de Théorie des Nombres*, 1974-1975 (Univ. Bordeaux I, Talence), Exp. No. 21, 8 pp. *Lab. Théorie des Nombres*, Centre Nat. Recherche Sci., Talence, 1975. (Jean-Marc Deshouillers) 53 #321 10K05 (10J10, 10B35)
Conditions suffisantes d'équipartition modulo 1. Problème de Waring-Golbach pour $f(x) = x^c$, c non entier. *Séminaire Delange-Pisot-Poitou* (16e année: 1974/75), *Théorie des nombres*, Fasc. 1, Exp. No. 15, pp. 6 pp. *Secrétariat Mathématique, Paris*, 1975. (F. Dress) 54 #12694 10J05 (10J15)
Problème de Waring-Golbach pour la fonction x^c où c réel non entier supérieur à 12. *Bull. Sci. Math.* (2) 99 (1975), no. 4, 177-199. (M. I. Israilov) 55 #2814 10J15 (10J05)
Conditions suffisantes pour qu'une suite réelle soit équipartie modulo 1. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975) A1, A693-A696. (H. G. Meijer) 51 #3073 10F40
Problème de Waring-Golbach pour la fonction $f(x) = x^c$ lorsque $c > 12$, c non entier. *C. R. Acad. Sci. Paris Sér. A-B* 280 (1975), A1, A755-A757. (Jean-Marc Deshouillers) 51 #3096 10J20 (10J05)
Conditions suffisantes d'équipartition modulo 1 de suites $(f(n))_{n \in \mathbb{N}}$ et $(f(p_n))_{n \in \mathbb{N}}$. *Acta Arith.* 32 (1977), no. 4, 365-385. (Harald Niederreiter) 56 #5452 10F40
Tofoli, T. See Conference: Optimization Techniques, 48 #5759
Tofoli, Tommaso Computation and construction universality of reversible cellular automata. *J. Comput. System Sci.* 15 (1977), no. 2, 213-231. (Roland Vollmar) 57 #2789 94A30
Toft, Bjarne On separating sets of edges in contraction-critical graphs. *Math. Ann.* 196 (1972), 129-147. (F. Harary) 45 #5028 05C15
Two theorems on critical 4-chromatic graphs. *Studia Sci. Math. Hungar.* 7 (1972), 83-89. (F. Bernhart) 47 #4842 05C15
On critical subgraphs of colour-critical graphs. *Discrete Math.* 7 (1974), 377-392. (M. Behzad) 49 #117 05C15
Color-critical graphs and hypergraphs. *J. Combinatorial Theory Ser. B* 16 (1974), 145-161. (Torrence D. Parsons) 49 #116 05C15
(with Escalante, F.) On clique-critical graphs. *J. Combinatorial Theory Ser. B* 17 (1974), 170-182. (A. Astromoff) 51 #5408 05C99
(with Dirac, Gabriel; Sørensen, Bo Aagaard) An extremal result for graphs with an application to their colourings. Collection of articles dedicated to Helmut Hasse on his seventy-fifth birthday, II. *J. Reine Angew. Math.* 268/269 (1974), 216-221. (P. K. Stockmeyer) 50 #156 05C15
On colour-critical hypergraphs. *Infinite and finite sets* (Colloq., Keszthely, 1973; dedicated to P. Erdős on his 60th birthday), Vol. III, pp. 1445-1457. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (László Lovász) 51 #10151 05C15
(with Nielsen, Frank) On a class of planar 4-chromatic graphs due to T. Gallai. *Recent advances in graph theory* (Proc. Second Czechoslovak Sympos., Prague, 1974), pp. 425-430. *Academia, Prague*, 1975. (Paul C. Kainen) 53 #5356 05C15
See also Problems: Combinatorial theory, 46 #8855 and Problems: Graph theory, 52 #2932
Togasi, Akira (with Huzino, Seiti) Syntax-directed translation scheme of M-S translation in a list processing language lisp. *Mem. Fac. Sci. Kyushu Univ. Ser. A* 25 (1971), 6-9. (P. Deussen) 46 #8480 68A30
The structure of flow charts of simple type, and their classification. (Japanese. English summary) *Rep. Fac. Sci. Kagoshima Univ. No. 7* (1974), 3-10. (Kenji Onaga) 55 #1792 68A05
(with Huzino, Seiti) On information retrieval based on list processing techniques. (Japanese. English summary) *Rep. Fac. Sci. Kagoshima Univ. No. 7* (1974), 11-19. (Kenji Onaga) 55 #1883 68A50
(with Huzino, Seiti) On an application of structural diagrams of languages. (Japanese. English summary) *Rep. Fac. Sci. Kagoshima Univ. No. 8* (1975), 1-16. (Tadao Takaoka) 57 #8179 68A30 (94A30)
(with Huzino, Seiti) On minimal solutions of some structural equations of languages. (Japanese. English summary) *Rep. Fac. Sci. Kagoshima Univ. No. 8* (1975), 17-21. (Tadao Takaoka) 57 #8199 68A30
(with Huzino, Seiti) On relation between languages by derivative-mapping. (Japanese. English summary) *Rep. Fac. Sci. Kagoshima Univ. No. 9* (1976), 15-17. (Tadao Takaoka) 57 #8180 68A30
Togawa, Akihiko (with Shirakawa, Isao; Ozaki, Hiroshi) Network decomposition for block-pivoted condensations on impedance matrices. *Electron. Commun. Japan* 54 (1971), no. 7, 8-13. (Authors' summary) 49 #11793 65F99 (94A20)
Togawa, Yoshio Generic Morse-Smale diffeomorphisms have only trivial symmetries. *Proc. Amer. Math. Soc.* 65 (1977), no. 1, 145-149. (Zbigniew Nitecki) 56 #6755 58F99
Centralizers of C^1 -diffeomorphisms. *Proc. Amer. Math. Soc.* 71 (1978), no. 2, 289-293. (C. S. Hartzman) 58 #13212 58F99
Toger, A. V. ϵ -entropy of compact sets of functions with values in a Banach space. (Russian) *Metric questions of the theory of functions and mappings*, No. IV (Russian), pp. 148-164. *Izdat. "Naukova Dumka", Kiev*, 1973. (J. Peetre) 50 #14208 46E40
The complexity of compacta of continuous functions. (Russian) *Proceedings of the Sixth Winter School on Mathematical Programming and Related Questions* (Drogobych, 1973), *Functional analysis and its applications* (Russian), pp. 294-306. *Akad. Nauk SSSR Central. Ekonom.-Mat. Inst., Moscow*, 1975. (Editors) 58 #9806 94A15 (68A20)
Asymptotic behavior of the complexity of the approximate computation of functions that satisfy a Lipschitz condition. (Russian) *Mathematical programming and related questions* (Proc. Seventh Winter School, Drogobych, 1974), *Theory of functions and functional analysis* (Russian), pp. 141-149. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR, Moscow*, 1976. (Editors) 58 #16213 02E15 (68A20)
The ϵ -entropy of a compact set of smooth functions. Presented at the International Conference on the Theory of Approximation of Functions (Kaluza, 1975). *Mat. Zametki* 22 (1977), no. 6, 915-920. (H. Triebel) 57 #6980 41A45 (46E35)
Togliatti, Eugenio ★ Oscar Chisini. Discorso commemorativo pronunciato nella seduta ordinaria del 19 aprile 1969. *Accademia Nazionale dei Lincei, Celebrazioni Lince*, No. 26. *Accademia Nazionale dei Lincei, Rome*, 1969. 16 pp. (1 plate) (Editors) 50 #4219 01A70
Matematici in Liguria. *Atti Accad. Ligure Sci. Lett.* 29 (1973), 27-36. (Editors)

- 50 #1813 01A45 (01A05)
Giuseppe Burnengo. *Atti Accad. Ligure Sci. Lett.* **30** (1973), 45-49 (1974). (Editors)
49 #8802 01A70
- Tognetti, Keith P.** The two stage integral population model. *Math. Biosci.* **24** (1975), 61-70. (N. Keyfitz) **51** #7653 92A15
The two stage stochastic population model. *Math. Biosci.* **25** (1975), no. 3/4, 195-204. (R. Fischler) **54** #2253 92A15 (60J85)
(with Hill, James M.) The autocorrelation function of the queue length process for the two-server Poisson queue. *J. Appl. Probability* **15** (1978), no. 2, 447-451. (Brian Conolly) **58** #3106 60K25
- Tognetti, Mario** Sulle matrici che possono ridursi a forma canonica (di Jordan) con la stessa sostituzione lineare. I, II. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **105** (1971), 553-560; *ibid.* **105** (1971), 593-599. (C. F. Moppert) **46** #1812 15A21
Sulla caratteristica di un polinomio di matrice. (English summary) *Boll. Un. Mat. Ital.* (4) **5** (1972), 48-51. (A. Lee) **47** #241 15A15
- Tognoli, Alberto** (with Lazzeri, Fulvio) Alcune proprietà degli spazi algebrici. *Ann. Scuola Norm. Sup. Pisa* (3) **24** (1970), 597-632. (F. Gherardelli) **45** #1909 14A20 (32B99)
Teoremi di approssimazione per gli spazi analitici reali coerenti non immergibili in \mathbb{R}^n . *Ann. Scuola Norm. Sup. Pisa* (3) **25** (1971), 509-518. (E. J. Akutowicz) **47** #8901 32C05
(with Galbiati, Margherita) Alcune proprietà delle varietà algebriche reali. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **51** (1971), 41-43. (A. H. Wallace) **46** #5325 14A99 (32C05)
(with Milani, M.) Alcune osservazioni sui cicli algebrici del toro. (English summary) *Boll. Un. Mat. Ital.* (4) **5** (1972), 116-122. (F. Gherardelli) **48** #2429 32J25 (14F25)
Su una congettura di Nash. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 167-185. (A. H. Wallace) **53** #434 14E25 (32C05, 57D15)
(with Galbiati, Margherita) Alcune proprietà delle varietà algebriche reali. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 359-404 (1974). (G. A. Efrogmson) **51** #493 14A10 (14E15, 32C05)
Un teorema di approssimazione relativo. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 496-502 (1974). (R. Michael Range) **50** #10311 32C05 (26A93, 32B05)
(with Acquistapace, Francesca; Broglia, Fabrizio) Sull'insieme di non coerenza di un insieme analitico reale. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 42-45 (1974). (G. A. Efrogmson) **52** #14351 32C05 (32B10)
(with Acquistapace, Francesca; Broglia, Fabrizio) Sulla non validità di un teorema di approssimazione. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 207-209 (1974). (G. A. Efrogmson) **52** #14352 32C05 (32C25)
Recenti progressi in geometria algebrica. *Boll. Un. Mat. Ital.* (4) **7** (1973), suppl. no. 1, 119-138. (J. S. Joel) **48** #6104 14-02
Una caratterizzazione dei moduli delle sezioni globali di un fascio coerente su uno spazio di Stein. (English summary) *Boll. Un. Mat. Ital.* (4) **8** (1973), 181-197. (Gerd Fischer) **50** #5022 32E10 (32C05, 32C35)
Approximation theorems and Nash conjecture. *Journées de géométrie analytique (Univ. Poitiers, Poitiers, 1972)*, pp. 53-68. *Bull. Soc. Math. France Suppl. Mém.*, No. 38, Soc. Math. France, Paris, 1974. (A. H. Wallace) **53** #436 14E25 (32C05, 57D15)
(with Acquistapace, Francesca; Broglia, Fabrizio) Sull'irriducibilità di uno spazio analitico reale. (English summary) *Boll. Un. Mat. Ital.* (4) **9** (1974), 44-50. (A. H. Wallace) **51** #3501 32C05
(with Lazzeri, Fulvio; Stănăşilă, Octavian) Some remarks on q -flat C^∞ functions. (Italian summary) *Boll. Un. Mat. Ital.* (4) **9** (1974), 402-415. (O. Riemenschneider) **50** #320 14B20 (14F10, 32C35, 32K15)
(with Acquistapace, Francesca; Broglia, Fabrizio) Questioni di immergibilità ed equazioni globali. (English summary) *Boll. Un. Mat. Ital.* (4) **9** (1974), 749-756. (A. H. Wallace) **53** #852 32C05
About the set of non coherence of a real analytic variety. *Singularities of analytic spaces (Centro Internaz. Mat. Estivo, II Ciclo, Bressanone, 1974)*, pp. 145-161. Edizioni Cremonese, Rome, 1975. (S. Łojasiewicz) **54** #3012 32C05
Pathology and imbedding problems for real analytic spaces. *Singularities of analytic spaces (Centro Internaz. Mat. Estivo, II Ciclo, Bressanone, 1974)*, pp. 162-180. Edizioni Cremonese, Rome, 1975. (A. H. Wallace) **54** #10653 32C05 (32C40)
(with Acquistapace, Francesca; Broglia, Fabrizio) A relative embedding theorem for Stein spaces. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **2** (1975), no. 4, 507-522. (Alessandro Silva) **53** #870 32E10 (58D10)
(with Giannico, Nicoletta) Un teorema dell'intorno tubolare dipendente da parametro. (English summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 1, 191-197. (Alessandro Silva) **54** #10652 32C05
Sugli spazi metrici numerabili. (English summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 2, 366-369. (Frank Siewicz) **51** #14006 54F65
(with Acquistapace, Francesca; Broglia, Fabrizio) Sulla normalizzazione degli spazi analitici reali. (English summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 1-2, 26-36. (Tomás Sánchez Giralda) **53** #853 32C05 (32C45)
(with D'Aprile, M.) A C^∞ approximation theorem for real analytic varieties. (Italian summary) *Boll. Un. Mat. Ital.* (4) **12** (1975), no. 1-2, 171-180. (Margherita Galbiati) **53** #893 32K15 (32C05)
A desingularisation theorem for real analytic varieties. *Séminaire Pierre Lelong (Analyse, Année 1974/75)*, pp. 156-162. *Lecture Notes in Math.*, Vol. 524, Springer, Berlin, 1976. (A. H. Wallace) **54** #10654 32C05 (32C45)
(with Beretta Bernardi, Luciaserena) Some basic facts in algebraic geometry on a non algebraically closed field. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **3** (1976), no. 2, 341-359. (A. H. Wallace) **55** #2911 14F10
A desingularisation theorem for real analytic varieties. (Italian summary) *Boll. Un. Mat. Ital.* (4) **5** (1976), no. 3, 623-628. (Jean-Jacques Risler) **55** #5889 32C05 (32C45)
(with Benedetti, Riccardo) Teoremi di approssimazione in topologia differenziale. I. (English summary) *Boll. Un. Mat. Ital. B.* (5) **14** (1977), no. 3, 866-887. (A. H. Wallace) **58** #6324 32C05 (57D15)
See also *Singularities of analytic spaces*, **52** #8475
- Tognoli Dalla Vedova, Elvira** See *Dalla Vedova, Elvira* **Tognoli**
- Tôgô, Shigeaki** (with Maruo, Osamu) Nonimbedding theorems of algebras. *Hiroshima Math. J.* **1** (1971), 5-16. (C. Y. Chao) **47** #1894 17B05
Radicals of infinite dimensional Lie algebras. *Hiroshima Math. J.* **2** (1972), 179-203. (I. Stewart) **48** #359 17B65
(with Kawamoto, Naoki) Ascendantly coalescent classes and radicals of Lie algebras. *Hiroshima Math. J.* **2** (1972), 253-261. (I. Stewart) **48** #360 17B65
Characterizations of radicals of infinite dimensional Lie algebras. *Hiroshima Math. J.* **3** (1973), 25-36. (I. Stewart) **48** #1235 17B65
(with Kawamoto, Naoki) Locally coalescent classes of Lie algebras. *Hiroshima Math. J.* **4** (1974), 509-520. (I. Stewart) **50** #9998 17B65
(with Kawamoto, Naoki) Locally ascendantly coalescent classes of Lie algebras. *Hiroshima Math. J.* **6** (1976), no. 1, 159-170. (Ralph K. Amayo) **53** #571 17B65
The minimal condition for ascendant subalgebras of Lie algebras. *Hiroshima Math. J.* **7** (1977), no. 3, 683-687. (I. Stewart) **57** #395 17B65
(with Miyamoto, Haruo) Lie algebras in which every ascendant subalgebra is a subideal. *Hiroshima Math. J.* **8** (1978), no. 3, 491-498. (Ralph K. Amayo) **58** #22193 17B05
- Togonidze, V. A.** (with Dyn'kin, V. N.) Cyclic codes that correct multiple nonsymmetric errors. (Russian. Georgian and English summaries) *Sakharth. SSSR Mecn. Akad. Moambe* **73** (1974), 33-35. (Authors' summary) **48** #10639 94A10
(with Dyn'kin, V. N.) The synthesis of codes with unequal protection of symbols. (Russian. Georgian summary) Collection of articles dedicated to Academician V. D. Kupradze on the occasion of his 70th birthday. *Tbilisi. Univ. Šrom. A* **8**(153) (1974), 93-96. (See RŽMat **1975** #1 V683; MR **52** #10302) 94A10
(with Dyn'kin, V. N.) Codes that correct asymmetric errors. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **77** (1975), no. 3, 561-564. (Jørn Justesen) **52** #12961 94A10
(with Dyn'kin, V. N.) Cyclic unequal error protection codes. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 1, 24-28. (Authors' summary) **55** #5305 94A10
- Toguleva, T. P.** (with Aminova, A. V.) Projective and affine motions defined by concircular vector fields. (Russian) *Gravitacija i Teor. Otositel'nosti* No. 10-11 (1975), 139-153. (RŽMat **1977** #11 A649) **58** #30863 53B30
- Toh, K. H.** Groups with normal subgroups possessing subnormal complements. *Proc. Amer. Math. Soc.* **41** (1973), 378-380. (J. Wiegold) **48** #4133 20F30
(with Phang, S. W.) Groups with systems of complemented abelian subgroups. *Nanta Math.* **7** (1974), no. 1, 93-100. (G. S. Mikaeljan) **50** #4763 20F30
- Tohma, Yoshihiro** (with Ohyama, Yasuyoshi; Sakai, Ryozo) Realization of fail-safe sequential machines by using a k -out-of- n code. *IEEE Trans. Computers* **C-20** (1971), 1270-1275. (Authors' summary) **54** #7139 94A25
Design technique of fail-safe sequential circuits using flip-flops for internal memory. *IEEE Trans. Computers* **C-23** (1974), 1149-1154. (Krzysztof Sapiecha) **54** #4850 94A20
(with Mukai, Yuzo) A method for the realization of fail-safe asynchronous sequential circuits. *IEEE Trans. Computers* **C-23** (1974), no. 7, 736-739. (Shuzo Yajima) **54** #9874 94A20
(with Mukai, Yuzo) A realization of fail-safe masked-fault-free asynchronous sequential circuits. *Systems-Computers-Controls* **7** (1976), no. 3, 42-49 (1977). (Krzysztof Sapiecha) **56** #18150 94A20
- Toida, Shunichi** (with Kameda, Tsunehiko) Efficient algorithms for determining an extremal tree of a graph (extended abstract). *14th Annual IEEE Symposium on Switching and Automata Theory (Univ. Iowa, Iowa City, Iowa, 1973)*, pp. 12-15. *IEEE Comput. Soc., Northridge, Calif.*, 1973. (Narsingh Deo) **56** #5341 05C05 (90B10, 68A10)
Topological formulas for networks with ideal transformers. *IEEE Trans. Circuit Theory* **CT-20** (1973), no. 4, 425-426. (Jean H. Bevis) **53** #7643 94A20
Generation of all cutsets of a bipath network. *IEEE Trans. Comm.* **COM-21** (1973), 1414-1417. (G. Laman) **48** #10698 94A20
Properties of a planar cubic graph. *J. Franklin Inst.* **295** (1973), 165-174. (Rudolf Halin) **51** #238 05C15
Properties of a Euler graph. *J. Franklin Inst.* **295** (1973), 343-345. (T. L. Saaty) **48** #10906 05C99
Construction of quartic graphs. *J. Combinatorial Theory Ser. B* **16** (1974), 124-133. (G. Chartrand) **50** #195 05C99
(with Allan, F. J.; Kameda, Tsunehiko) An approach to the diagnosability analysis of a system. *IEEE Trans. Computers* **C-24** (1975), no. 10, 1040-1042. (S. L. Hakimi) **54** #12374 94A20
(with Kameda, Tsunehiko; Allan, F. J.) A diagnosing algorithm for networks. *Information and Control* **29** (1975), no. 2, 141-148. (S. L. Hakimi) **54** #12387 94A20
System diagnosis and redundant tests. *IEEE Trans. Computers* **C-25** (1976), no. 11, 1167-1170. (G. Saucier) **57** #5489 94A20
A note on Ádám's conjecture. *J. Combinatorial Theory Ser. B* **23** (1977), no. 2-3, 239-246. (A. Ádám) **57** #2978 05C20
- Toikka, Richard S.** The welfare implications of Becker's discrimination coefficient. *J. Econom. Theory* **13** (1976), no. 3, 472-477. (Wolfgang Mayer) **56** #17749 90A15 (92A20)
- Toint, Ph. L.** An extension of a McCormick and Ritter's theorem on the rate of convergence of conjugate directions methods to the multistep case with inexact line searches. *Ann. Soc. Sci. Bruxelles Sér. I* **91** (1977), no. 1, 19-26. (V. F. Dem'janov) **56** #1721 65K05 (90B40)
(with Callier, Frank M.) On the uniform nonsingularity of matrices of search directions and the rate of convergence in minimization algorithms. *J. Optimization Theory Appl.* **23** (1977), no. 4, 511-529. (S. F. McCormick) **57** #8013 65K05
(with Callier, Frank M.) On the accelerating property of an algorithm for function minimization without calculating derivatives. *J. Optimization Theory Appl.* **23** (1977), no. 4, 531-547. (Gerard G. L. Meyer) **58** #24956 65K05
On sparse and symmetric matrix updating subject to a linear equation. *Math. Comp.* **31** (1977), no. 140, 954-961. (S. F. McCormick) **56** #13577 65F30
Some numerical results using a sparse matrix updating formula in unconstrained optimization. *Math. Comp.* **32** (1978), no. 143, 839-851. (S. Zlobec) **58** #3453 65K05

ih, H. I. (with Bratčikov, I. L.) The formalization of certain context conditions for programming languages. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 14 (1974), 1004-1015, 1077. (Horst Reichel) 50 #3647 68A30

ov, Š. M. Certain properties of mappings in topological vector spaces. (Russian) *Dokl. Akad. Nauk Tadžik. SSR* 18 (1975), no. 3, 8-10. (Ju. A. Abramovič) 53 #6387 47H99 (47B55, 58C25)

Plasterable cones in locally convex spaces. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 18 (1975), no. 4, 8-11. (A. V. Buhvalov) 52 #3918 46A40

On the geometry of partially ordered topological vector spaces. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 18 (1975), no. 8, 6-9. (Ju. A. Abramovič) 53 #3639 46A40

Some classes of cones in locally convex spaces. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 19 (1976), no. 9, 3-6. (Ju. A. Abramovič) 55 #1034 46A40

rov, Š. M. Certain properties of positive operators in topological vector spaces. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* 17 (1974), no. 3, 13-15. (Ana Istrătescu) 50 #14351 47B55

ad, Yilmaz (with Zeren, Toğan) On the terminal solvability of RLCT networks. (Turkish summary) *METU J. Pure Appl. Sci.* 4 (1971), no. 3, 349-374. (Authors' summary) 57 #2775 46A40

(with Abdullah, Khaldun) On the existence of mathematical models for multiterminal RCT networks. *IEEE Trans. Circuit Theory* CT-19 (1972), 419-424. (I. T. Frisch) 50 #16119 94A20

(with Abdullah, Khaldun; Zeren, Toğan) A new approach for the terminal solvability of multiterminal RLCT networks. *IEEE Trans. Circuit Theory* CT-19 (1972), 496-499. (Authors' summary) 55 #14414 94A20

(with Ceyhun, Y.) On the concept of auxiliary networks. (Turkish summary) *METU J. Pure Appl. Sci.* 5 (1972), no. 3, 421-437. (Authors' summary) 56 #11549 94A20

kar, E. N. See **Control in space**, 48 #13319

kar, L. M. (with Gabelev, F. Ja.; Gaitler, B. Ja.) Unification of strategies and states in controlled Markov chains with rewards. (Russian) *Gor'kov. Gos. Univ. Učen. Zap. No. 166 Teorija Kolebanij, Prikl. Mat. i Kibernet.* (1973), 125-132. (G. N. Mil'shtein) 50 #12397 93E05

kar, S. S. Analytic properties of the T -matrix for two Yukawa potentials. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* 1975, no. 9, 54-58. (Author's summary) 58 #25609 81.47

karenko, A. I. Locally finitely stable groups of automorphisms. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 9 (Russian), pp. 221-223. *Izdat. "Zinatne", Riga*, 1971. (A. I. Moskalenko) 47 #6867 20E25 (20D15)

(with Levičs, E.; Plotkin, B. I.) The Riga algebra seminar during the last 10 years. (Russian. English summary) *Latvian mathematical yearbook*, 13 (Russian), pp. 3-18. *"Zinatne", Riga*, 1973. (See RZMat 1974 #2 A203; MR 48 #1843) 01A65 (20-00)

(with Sokolovskaja, I. N.) Locally finitely stable groups of automorphisms.

Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 13 (Russian), pp. 82-88. *Izdat. "Zinatne", Riga*, 1973. (L. G. Kovács) 49 #5182 20E25

Two "large" radicals in linear groups. (Russian. Latvian and English summaries) *Latvian mathematical yearbook*, 13 (Russian), pp. 115-118. *Izdat. "Zinatne", Riga*, 1973. (Andrzej Białynicki-Birula) 49 #2971 20G15

Locally algebraic elements in linear groups and Lie algebras. (Russian) *Latvian mathematical yearbook*, 17 (Russian), pp. 243-249, 280. *Izdat. "Zinatne", Riga*, 1976. (E. Vinberg) 55 #431 17B05 (20E25)

karenko, A. M. On the history of the reproduction of plane algebraic curves by articulated mechanisms. (Russian) *Problems in the history of mathematics and mechanics* (Russian), pp. 48-57, 131. *Inst. Mat., Akad. Nauk Ukrain. SSR, Kiev*, 1977. (Author's summary) 58 #27052 01A45 (01A55, 01A60, 14-03)

karenko, A. V. (with Kravčenko, V. F.) Solution of a mixed boundary-value problem by the Bubnov-Galerkin method. *Inž.-Fiz. Ž.* 23 (1972), 732-736 (Russian); translated as *J. Engrg. Phys.* 23 (1974), 1319-1322. (Stephen Hilbert) 52 #2249 65N30

karov, Dimit'r (with Bojadžiev, Aleksand'r) A certain algorithm for the solution of a transport problem. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 4 (1967), no. 1, 87-93. (1971). (V. Spiridonov) 45 #8257 90C05

(with Pirgov, Dimit'r) Certain theorems on irreducibility of integer polynomials over the field of rational numbers. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 4 (1967), no. 2, 11-19 (1970). (R. Finkelstein) 45 #5116 12A20

(with Bojadžiev, Aleksand'r) Elimination of incompatibility in the linear constraints of linear programming problems. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 4 (1967), no. 2, 147-152 (1970). (V. Spiridonov) 45 #9677 90C05

(with Pirgov, Dimit'r) Two classes of irreducible integer-valued polynomials over the field of rational numbers. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 2, 21-29 (1971). (W. Narkiewicz) 46 #7204 12D05 (12A20)

(with Pirgov, Dimit'r) A certain class of irreducible polynomials. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 5 (1968/69), no. 2, 31-36 (1971). (W. Narkiewicz) 46 #7205 12D05

(with Petrov, I. I.) Boundary control of a certain class of objects with distributed parameters. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), no. 4, 71-87 (1973). (Authors' summary) 56 #9356 49A20

karov, E. V. A certain question of Lindenstrauss and Phelps. (Russian) *Funkcional. Anal. i Priložen.* 7 (1973), no. 3, 96. (A. J. Lazar) 48 #6893 46B05

The linear dimension of certain Banach sequence spaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 19 (1974), 90-101, 160. (A. Alexiewicz) 52 #6379 46A45 (46B05)

(with Kadec', M. I.) Conjugate Banach spaces with a countable set of extreme points on the unit sphere. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 4(155), 98-99. (G. J. O. Jameson) 52 #11548 46B10

Subspaces of certain symmetric spaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* Vyp. 24 (1975), 156-161. iv. (Author's summary) 58 #30126 (E 58 #30127) 46E30 (46B05)

Letter to the editors: "Subspaces of certain symmetric spaces" (*Teor. Funkcii Funkcional. Anal. i Priložen.* Vyp. 24 (1975), 156-161). (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp.* 28 (1977), 127-128. (Editors) 58 #30127 46E30 (46B05)

Tokarev, O. B. Dynamical loading of a nonlinearly viscoelastic hollow cylinder with variable inner radius. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 25 (1970), no. 4, 100-107. (C. I. Bors) 45 #1448 73.45

Tokarev, S. P. Smooth conjugacy of systems of differential equations in the neighborhood of an asymptotically stable complex singular point. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 4, 766-769, 776. (A. D. Brjuno) 57 #14052 58F10 (34C35)

Smooth equivalence of systems of differential equations on the plane in the case of a structurally unstable focus. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 5, 892-897, 966. (A. D. Brjuno) 57 #14053 58F10 (34C35)

The normal form of an analytic system of differential equations in the case of a structurally unstable focus. (Russian) *Differencial'nye Uravnenija* 13 (1977), no. 6, 1142-1144, 1160. (Author's summary) 58 #11660 34C20

Tokarev, V. A. (with Sesekin, N. F.) The Frattini subgroup of almost polycyclic groups. (Russian) *Ural. Gos. Univ. Mat. Zap.* 8 (1972), no. 3, 100-103, 142 (1973). (J. Wiegold) 48 #4118 20D25

Tokarz, Marek (with Wójcicki, Ryszard) The problem of reconstructibility of propositional calculi. (Polish and Russian summaries) *Studia Logica* 28 (1971), 119-129. (H. B. Curry) 45 #8497 02B05

On invariant systems and structural completeness of Łukasiewicz's logics. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972), no. 1, 63-68. (Editors) 50 #12660 02C05 (02G20)

Connections between some notions of completeness of structural propositional calculi. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972), no. 2, 17-19. (Editors) 50 #12701 02G20

Invariant systems of Łukasiewicz calculi. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 1 (1972), no. 3, 44-48. (Editors) 50 #12661 02C05

On structural completeness of Łukasiewicz's logics. (Polish and Russian summaries) *Studia Logica* 30 (1972), 53-61. (David C. Rine) 47 #4764 02C05

On mutual non-reconstructibility of the Łukasiewicz calculi and their dual counterparts. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 2 (1973), no. 1, 51-53. (Editors) 52 #13324 02C05

Connections between some notions of completeness of structural propositional calculi. (Polish and Russian summaries) *Studia Logica* 32 (1973), 77-91. (David Makinson) 49 #8850 (EA 54) 02G20

Binary functions definable in implicational Goedel algebras. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 3 (1974), no. 1, 22-24. (Michael Beeson) 53 #2628 02C05

A method of axiomatization of Łukasiewicz logics. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 3 (1974), no. 2, 21-24. (J. A. Kalman) 52 #13325 02C05

A new proof of "topographic" theorem on Łukasiewicz logics. *Rep. Math. Logic* No. 3 (1974), 63-66. (A. Tauts) 51 #58 02C05

A method of axiomatization of Łukasiewicz logics. *Studia Logica* 33 (1974), 333-338. (Alasdair Urquhart) 51 #7822 02C05 (02G10)

Invariant systems of Łukasiewicz calculi. *Z. Math. Logik Grundlagen Math.* 20 (1974), 221-228. (A. Tauts) 51 #7823 02C05

Functions definable in some fragments of Sugihara algebras. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 4 (1975), 15-18. (Annalisa Marcja) 53 #7777 02J99

Definability criterion for functions in Sugihara algebras. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 4 (1975), no. 4, 134-135. (Author's summary) 54 #10012 02J05

Functions definable in Sugihara algebras and their fragments. I. *Studia Logica* 34 (1975), no. 4, 295-304. (Franco Montagna) 56 #97a 02C99 (02J99, 06A35)

A strongly finite logic with infinite degree of maximality. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 5 (1976), no. 2, 50-53. (Flavio Previale) 55 #2485 02B05 (02G20)

Definitions by context in propositional logics. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 5 (1976), no. 2, 54-56. (Daniel Ponasse) 55 #7733 02B05

Functions definable in Sugihara algebras and their fragments. II. *Studia Logica* 35 (1976), no. 3, 279-283. (Franco Montagna) 56 #97b 02C99 (02J99, 06A35)

A strongly finite logic with infinite degree of maximality. *Studia Logica* 35 (1976), no. 4, 447-451. (Stephen L. Bloom) 55 #10236 02C05

A method of axiomatization of Łukasiewicz logics. *Selected papers on Łukasiewicz sentential calculi*, pp. 113-117. *Zakład Narod. im. Ossoliń., Wydawn. Polsk. Akad. Nauk, Wrocław*, 1977. (Editors) 58 #21450 02C05 (02G10)

Degrees of completeness of Łukasiewicz logics. *Selected papers on Łukasiewicz sentential calculi*, pp. 127-134. *Zakład Narod. im. Ossoliń., Wydawn. Polsk. Akad. Nauk, Wrocław*, 1977. (Author's summary) 58 #21451 02C05

On structural completeness of Łukasiewicz logics. *Selected papers on Łukasiewicz sentential calculi*, pp. 171-173. *Zakład Narod. im. Ossoliń., Wydawn. Polsk. Akad. Nauk, Wrocław*, 1977. (Editors) 58 #21452 02C05

Deduction theorems for RM and its extensions. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 6 (1977), no. 2, 67-69. (Editors) 58 #21421 02B05

A remark on maximal matrix consequences. *Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic* 6 (1977), no. 4, 190-192. (S. J. Surma) 58 #16280 02J05 (02B05)

(with Hawranek, Jacek) Matrices for predicate logics. *Rep. Math. Logic* No. 9 (1977), 27-30. (Wiesław Dziobiak) 58 #27306 02C05 (02B99)

Definitions by context in propositional logics. *Studia Logica* 37 (1978), no. 2, 135-137. (Daniel Leivant) 58 #5077 02C15 (02B05)

Tokarzewski, Jerzy Controllability of nonlinear stationary dynamical systems: sufficient conditions. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* 21 (1976), no. 2, 179-192. (Author's summary) 57 #4238 58E99 (49E15, 57D25, 93B05)

Controllability in arbitrary time of a certain class of nonlinear stationary dynamical systems. (Polish. Russian and English summaries) *Arch. Automat. i Telemekh.* 21 (1976), no. 3, 277-282. (Author's summary) 56 #17956 93B05 (57D25, 58E15)

Local controllability properties of nonlinear dynamical systems. (Polish and Russian

- summaries) *Arch. Automat. i Telemekh.* **22** (1977), no. 3, 175-199. (Claude E. Lobry) **58** #2870 58E15 (49E15, 57D25, 93B05)
- Tokarzewski, Stanisław** Estimation of the dynamic properties of viscoelastic anisotropic composite materials. (Polish) *Prace IPPT/IFTR Rep.* **1975**, no. 56, 99 pp. **58** #25269 73.35
- Tokatly, V. I.** (with Kinber, B. E.) Shortwave asymptotics of axisymmetric wave packets. (Russian. English summary) *Izv. Vysš. Učebn. Zaved. Radiofizika* **14** (1971), 761-767. (O. Vejvoda) **46** #526 35L05 (78.35)
- Toke, Arun Narayan** (with Vairavan, K.) Some memory characteristics of incompletely specified sequential machines. *Information and Control* **28** (1975), 54-64. (J. Černý) **52** #2775 94A25
- Tokibetov, Ž. A.** The Cauchy and Pompeiu formulas for generalized analytic functions. (Russian) *Mat. Zametki* **12** (1972), 263-268. (G. Wildenhain) **52** #3551 30A93
- Tokioka, Hidekazu** (with Kuriyama, Sennosuke; Shimosakon, Takio; Nose, Toyokazu) An application of dynamic programming to obtain an optimal inventory transportation system for seasonal goods (an N -station inventory transshipment model). (Japanese. English summary) *Mem. Osaka Inst. Tech. Ser. A* **20** (1975/76), no. 2, 191-220. (Authors' summary) **56** #14617 90B05 (90C40)
- Tokis, J. N.** Angular momentum and kinetic energy of rotating deformable bodies. *Astrophys. and Space Sci.* **36** (1975), no. 2, 427-438. (Radu Bădescu) **52** #9768 73.35
- (with Geroyannis, V. S.) Rotational dynamics of a deformable medium. *Astrophys. and Space Sci.* **51** (1977), no. 2, 409-427. (Authors' summary) **56** #13978 73.53
- Tokita, Takesi** Exponential decay of solutions for the wave equation in the exterior domain with spherical boundary. *J. Math. Kyoto Univ.* **12** (1972), 413-430. (Joseph J. Roseman) **46** #2238 35L05
- Toklikisvili, S. K.** Certain singular integral equations. (Russian. Georgian summary) *V. I. Lenin. Sakharth. Politekh. Inst. Šrom.* **1970**, no. 3(138), 14-25. (S. G. Samko) **46** #624 45E05
- The solution of a characteristic singular integral equation in the case of functions of several complex variables. (Russian. Georgian summary) *V. I. Lenin. Sakharth. Politekh. Inst. Šrom.* **1970**, no. 3(138), 26-35. (S. G. Samko) **46** #625 45E05
- Certain boundary value problems of the theory of holomorphic functions of several complex variables. (Russian. Georgian summary) *V. I. Lenin. Sakharth. Politekh. Inst. Samecn. Šrom.* **1975**, no. 3(176) *Math., Mekh.*, 76-92. (A. I. Heific) **53** #13627 32A30
- Tokranova, I. V.** (with Voronina, N. V.) The approximate solution of integral equations with distributed lag. (Russian) *Perm. Gos. Univ. Učen. Zap. No. 309 Mat.—Problemy Nelinein. Anal.* (1974), 56-58. (Š. Schwabik) **51** #12012 65R05
- Tokuda, Naoki** (with Yamamoto, Yoshiyuki) A note on convergence of finite element solutions. *Internat. J. Numer. Methods Engrg.* **3** (1971), 485-493. (Authors' summary) **45** #1408 65N10 (73.65)
- Tokuda, Naoyuki** Uniformly convergent series solution for unsteady stagnation flows. *Fluid dynamics transactions (9th Symposium. Advanced Problems and Methods in Fluid Mech., Kazimierz, 1969), Vol. 5, Part II, pp. 175-191.* Państw. Wydawn. Nauk., Warsaw, 1971. (W. Langlois) **56** #10436 76.35
- Tokuda, Satoshi** (with Kon, Masahiro) A note on minimal submanifolds with certain Ricci tensor. *Tensor (N.S.)* **28** (1974), 280-282. (A. Martínez Naveira) **51** #8999 53C40
- Tokumaru, Hidekatsu** (with Adachi, Norihiko) On the controllability of non-linear systems. (French, German and Russian summaries) *Automatica—J. IFAC* **6** (1970), 715-720. (Authors' summary) **46** #4986 93B05
- (with Iwai, Z.) Non-interacting control of non-linear multivariable systems. *Internat. J. Control* (1) **16** (1972), 945-958. (W. M. Wonham) **48** #13371 93C10
- (with Adachi, Norihiko; Gono, Tetsuro) On the conjugate directions methods for unconstrained optimization problems. (Japanese. English summary) *Systems and Control* **17** (1973), 573-583. (Kenji Onaga) **50** #1513 65K05
- (with Adachi, Norihiko; Amemiya, Takashi) Input-output stability of composite systems. (Japanese) *Systems and Control* **18** (1974), 112-118. (Authors' summary) **49** #2182 93D10 (93B99)
- (with Adachi, Norihiko; Amemiya, Takashi) Macroscopic stability of interconnected systems. With discussions by Anthony N. Michel and G. S. Ladde and a reply by the author. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 44.4, 7 pp., A42-A43.* IFAC, Düsseldorf, 1975. (Authors' summary) **58** #33213 93A15
- (with Takeuchi, Yasuhiro; Adachi, Norihiko) The stability of generalized Volterra equations. *J. Math. Anal. Appl.* **62** (1978), no. 3, 453-473. (A. F. Izé) **57** #16851 34D05 (92A05)
- Tokunaga, Hiroshi** (with Tatsumi, Tomomasa) One-dimensional shock turbulence in a compressible fluid. *J. Fluid Mech.* **65** (1974), 581-601. (W. O. Criminale, Jr.) **49** #10253 76.35
- (with Tatsumi, Tomomasa) Interaction of plane nonlinear waves in a compressible fluid and two-dimensional shock turbulence. *J. Phys. Soc. Japan* **38** (1975), 1167-1179. (M. Sichel) **52** #7302 76.35
- Tokuoka, Tatsuo** Yield conditions and flow rules derived from hypo-elasticity. *Arch. Rational Mech. Anal.* **42** (1971), 239-252. (Miloš Kojić) **49** #8487 73.53
- Thermo-hypo-elasticity and derived fracture and yield conditions. *Arch. Rational Mech. Anal.* **46** (1972), 114-130. (Miloš Kojić) **49** #10237 73.53
- Hypo-elastic dielectrics. I. Constitutive equations. *J. Phys. Soc. Japan* **32** (1972), 1641-1646. (H. R. Aggarwal) **49** #1875 73.35
- Hypo-elastic dielectrics. II. Birefringence in simple shear. *J. Phys. Soc. Japan* **32** (1972), 1647-1654. (H. R. Aggarwal) **49** #1876 73.35
- Fracture and yield of isotropic elastic material. (German summary) *Acta Mech.* **17** (1973), 43-54. (C.-C. Wang) **48** #7735 73.35
- Gravitational waves in a space-time of any dimension. *Arch. Rational Mech. Anal.* **51** (1973), 285-294. (M. Carmeli) **48** #13173 83.53
- Gravitational waves for a vector-metric field in a space-time of any dimension. *Arch. Rational Mech. Anal.* **56** (1974/75), 279-286. (M. Carmeli) **50** #6420 83.53
- Interaction and transformation of electromagnetic and gravitational waves in Einstein-Maxwell field. *J. Mathematical Phys.* **15** (1974), 1972-1976. (N. D. Sengupta) **50** #6419 83.53
- A generalized hypo-elasticity and derived failure condition. (German and Russian summaries) *Z. Angew. Math. Mech.* **54** (1974), 601-607. (M. Mişicu) **50** #6275 73.46
- Interaction of electromagnetic and gravitational waves in the weak and short wave limit. *Progr. Theoret. Phys.* **54** (1975), no. 5, 1309-1317. (Helmuth K. Urbantke) **52** #16480 83.35
- Hypo-elasticity with internal variables and derived failure condition. (German and Russian summaries) *Z. Angew. Math. Mech.* **57** (1977), no. 2, 107-111. (Authors' summary) **56** #10328 73.53
- Rate type plastic material with general work-hardening. (German and Russian summaries) *Z. Angew. Math. Mech.* **58** (1978), no. 1, 1-7. (P. D. S. Verma) **57** #18361 73.00
- Tokura, Nobuki** (with Taniguchi, Ken-ichi; Kasami, Tadao) A subclass of deterministic context-free languages (the class of Null (M)'s for ϵ -input free deterministic pushdown automata M). *Systems-Computers-Controls* **1** (1970), no. 3, 10-16 (1971). (Ronald V. Book) **48** #13524 94A30 (68A30)
- (with Nakamura, Keijiro; Kasami, Tadao) Minimal decomposition of a logical function into monotonic functions. *Systems-Computers-Controls* **2** (1971), no. 1, 1-10 (1972). (Authors' summary) **46** #3219 94A20
- (with Kasami, Tadao) Equivalence problem of programs without loops. *Systems-Computers-Controls* **2** (1971), no. 4, 83-84. (H. R. Strong) **48** #3715 02F20 (68A15)
- (with Nakamura, Keijiro; Kasami, Tadao) Minimal negative gate networks. *IEEE Trans. Computers* **C-21** (1972), 5-11. (Authors' summary) **47** #3119 94A20
- (with Peterson, W. Wesley; Kasami, Tadao) On the capabilities of while, repeat, and exit statements. *Comm. ACM* **16** (1973), 503-512. (J. E. L. Peck) **51** #4707 68A05
- (with Kasami, Tadao; Furuta, Shukichi) Ianov schemas augmented by a pushdown memory. *15th Annual Symposium on Switching and Automata Theory (Univ. New Orleans, New Orleans, La., 1974), pp. 84-94.* IEEE Comput. Soc., Long Beach, Calif., 1974. (Klaus Indermark) **58** #3645 68A05
- (with Kasami, Tadao) Automata with labeled tree inputs. *Systems-Computers-Controls* **5** (1974), no. 3, 88-95 (1975). (Authors' summary) **57** #14609 68A25
- (with Kasami, Tadao) Some program schemas operating on tree data structures. *Systems-Computers-Controls* **5** (1974), no. 4, 81-89 (1975). (Stephen Soule) **52** #12388 68A05
- (with Kasami, Tadao) Program schemas with tree data structures. Proceedings of the Third Symposium on Basic Theory of Programs (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1973) and of the Workshop for Proof Theory about Algorithms (Res. Inst. Math. Studies, Kyoto Univ., Kyoto, 1974). *Širikaiseikenkyūsho Kōkyūroku No. 236* (1975), 197-203. (From the introduction) **58** #8461 68A05
- (with Kasami, Tadao; Azumi, Saburo) On the weight enumeration of weights less than 2.5d of Reed-Muller codes. *Information and Control* **30** (1976), no. 4, 380-395. (Vera Pless) **53** #5153 94A10
- Tokuyama, Michio** (with Mori, Hazime) Statistical-mechanical theory of random frequency modulations and generalized Brownian motions. *Progr. Theoret. Phys.* **55** (1976), no. 2, 411-429. (Koichiro Matsuno) **54** #9547 82.60
- (with Mori, Hazime) Kinetic equations and fluctuations in μ space of one-component dilute plasmas. *Progr. Theoret. Phys.* **58** (1977), no. 1, 92-112. (Authors' summary) **57** #2293 81.45
- (with Morita, Terumitsu; Mori, Hazime) A scaling method for deriving kinetic equations from the BBGKY hierarchy. *J. Statist. Phys.* **18** (1978), no. 2, 137-153. (Authors' summary) **57** #8756 82.35
- (with Morita, Terumitsu; Mori, Hazime) Kinetic equations of dilute electron plasmas in the coherent region. *Progr. Theoret. Phys.* **59** (1978), no. 5, 1493-1510. (Pekka Silvennoinen) **58** #14805 82.45
- Tolan, Edwin K.** See Gabriel Kron and systems theory, **52** #7830
- Toland, John F.** (with Stuart, Charles A.) The fixed point index of a linear k -set contraction. *J. London Math. Soc.* (2) **6** (1973), 317-320. (P. M. Fitzpatrick) **47** #2453 47H10 (47A50)
- Asymptotic linearity and nonlinear eigenvalue problems. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 241-250. (Norman Dancer) **48** #12188 47H15
- Asymptotic linearity and a class of nonlinear Sturm-Liouville problems on the half-line. *Ordinary and partial differential equations (Proc. Conf., Univ. Dundee, Dundee, 1974), pp. 429-433.* Lecture Notes in Math., Vol. 415, Springer, Berlin, 1974. (J. V. Baxley) **55** #3896 47H15
- (with Stuart, Charles A.) A global result applicable to nonlinear Steklov problems. *J. Differential Equations* **15** (1974), 247-268. (J. W. Thomas) **50** #1072 47H15
- Bifurcation and asymptotic bifurcation for non-compact non-symmetric gradient operators. *Proc. Roy. Soc. Edinburgh Sect. A* **73** (1975), 137-147. (Norman Dancer) **52** #6518 (E 56 #1151) 47H15
- Global bifurcation theory via Galerkin's method. With an appendix by J. R. L. Webb. *Nonlinear Anal.* **1** (1976/77), no. 3, 305-317. (A. Vanderbauwhede) **58** #24339 58E05 (47H15)
- Global bifurcation for k -set contractions without multiplicity assumptions. *Quart. J. Math. Oxford Ser. (2)* **27** (1976), no. 106, 199-216. (Norman Dancer) **53** #8986 (E 56 #13012) 47H15 (58E99)
- Asymptotic linearity and nonlinear eigenvalue problems. II. *Proc. Roy. Irish Acad. Sect. A* **77** (1977), no. 1, 1-12. (Norman Dancer) **55** #12989 34B15 (47H15)
- Corrigendum: "Global bifurcation for k -set contractions without multiplicity assumptions" (Quart. J. Math. Oxford Ser. (2) **27** (1976), 199-216). *Quart. J. Math. Oxford Ser. (2)* **28** (1977), no. 110, 255. (Editors) **56** #13012 47H15 (58E05)
- See also Dias, João-Paulo; et al., **56** #1151
- Tolar, J.** (with Doebner, H. D.) A multiplicity theorem for representations of inhomogeneous compact groups. *Comm. Math. Phys.* **21** (1971), 284-290. (L. Corwin) **46** #9236 22E45
- (with Niederle, J.) Hilbert's sixth problem. (Czech) *Pokroky Mat. Fyz. Astronom.* **17** (1972), 135-146. (Editors) **58** #14453 81.00
- (with Niederle, J.) Partial wave analysis of dilatation-invariant relativistic S-matrix.

- Two-body scattering matrix. *Czechoslovak J. Phys.* **23B** (1973), 871-883. (Nigel B. Backhouse) **52** #4837 81.22
- Partial wave analysis of dilatation-invariant relativistic S-matrix. New developments in relativistic quantum field theory, Vol. 1 (Tenth Winter School Theoret. Phys., Karpacz, 1973). *Acta Univ. Wratislaviensis*. No. 207 (1974), 335-364. (Editors) **5** #10607 81.47
- (with Niederle, J.) Partial-wave analysis of the dilatation-invariant relativistic S-matrix. I. Clebsch-Gordan coefficients for the Weyl group. *Rep. Mathematical Phys.* **6** (1974), no. 2, 183-197. (Nigel B. Backhouse) **51** #14777 81.22
- (with Doeblner, H. D.) Quantum mechanics on homogeneous spaces. *J. Mathematical Phys.* **16** (1975), 975-984. (A. O. Barut) **51** #4907 81.58
- See also **Developments in high energy physics**, **48** #3376
- Nov, B. A. (with Borevič, Z. I.) Net normal subgroups of the general linear group. (Russian) Rings and modules. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. LOMI* **64** (1976), 49-54, 159-160. (J. C. Fisher) **56** #5741 20H05
- The number of normal subgroups of the triangular group that are contained in the anti-triangular subgroup. (Russian) *Algebra and number theory*, No. 2 (Russian), pp. 122-126. *Kabardino-Balkarsk. Gos. Univ., Nalchik*, 1977. (G. Karpilovsky) **57** #12715 20H25
- ast, B. B. The construction of threshold devices on typical majorant elements. (Russian. English summary) *US i M—Upravljajuschie Sistemy i Mashiny* **1978**, no. 5(37), 91-92, 149-150. (Author's summary) **58** #26588 94A20
- an, A. Ja. Numerical growth processes on graphs. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 1, 95-103. (András Reszski) **54** #4851 94A20
- (with Veklerov, E. B.; Duhovnyi, I. M.) A queueing system with time-limited category priority. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 1, 104-111. (A. M. Zaharin) **55** #9332 60K30
- hin, Stephen (with Rosenberg, Leonard) Variational methods for many-body problems. *Phys. Rev. A* (3) **8** (1973), 1702-1709. (Authors' summary) **50** #15738 81.49
- z-Toledo, Alejandro A. See Lopez-Toledo, Alejandro A.
- do, Domingo (with Halperin, Stephen) Stiefel-Whitney homology classes. *Ann. of Math.* (2) **96** (1972), 511-525. (J. P. Levine) **47** #1072 57D20
- On the Atiyah-Bott formula for isolated fixed points. *J. Differential Geometry* **8** (1973), 401-436. (V. K. Patodi) **49** #1539 58G10
- (with Tong, Yue Lin L.) The holomorphic Lefschetz formula. *Bull. Amer. Math. Soc.* **81** (1975), no. 6, 1133-1135. (M. F. Atiyah) **53** #8477 32C10 (14F25)
- (with Halperin, Stephen) The product formula for Stiefel-Whitney homology classes. *Proc. Amer. Math. Soc.* **48** (1975), 239-244. (R. H. Rosen) **51** #1836 57C25 (57D20)
- (with Tong, Yue Lin L.) A parametrix for $\bar{\partial}$ and Riemann-Roch in Čech theory. *Topology* **15** (1976), no. 4, 273-301. (M. F. Atiyah) **55** #11314 58G05 (32L05)
- do, Sue ★Tableau systems for first order number theory and certain higher order theories. *Lecture Notes in Mathematics*, Vol. 447. Springer-Verlag, Berlin-New York, 1975. iii + 339 pp. (Bruno Scarpellini) **52** #10378 02D99
- Toledo Piza, A. F. R. (with de Passos, E. J. V.; Galetti, D.; Nemes, M. C.; Watanabe, M. M.) Properties of Griffin-Hill-Wheeler spaces. *Phys. Rev. C* (3) **15** (1977), no. 4, 1477-1482. (Not reviewed) 83.46
- (with de Passos, E. J. V.) The kinematics of generator co-ordinates. (Italian and Russian summaries) *Nuovo Cimento B* (11) **45** (1978), no. 1, 1-30. (Authors' summary) **58** #4081 81.47
- enov, Ž. (with Fainleib, A. S.) A refinement of a certain limit theorem for additive functions defined on the set of values of a polynomial of certain sequences. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **11** (1971), 367-382. (B. Volkman) **45** #1861 10H25
- ev, B. D. (with Hristov, N. N.) Some cubature formulas for double integrals with integral domain on a regular polygon. (Bulgarian. Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 4, 63-72 (1977). (M. I. Levin) **58** #31747 65D30
- hoek, H. A. A non-relativistic wave equation of second order in time for scalar fields. *Phys. A* **81** (1975), no. 4, 535-564. (S. Malin) **54** #6748 81.35
- (with Meuwese, A. J.; Jansen, H. J. F.) Wave propagation according to higher order field equations. I. *Phys. A* **82** (1975), no. 1, 72-96 (1976). (Brian DeFacio) **53** #7277 81.35
- Higher order field equations. II. Limit properties of Green's functions. *Phys. A* **86** (1977), no. 2, 278-302. (Brian DeFacio) **55** #7185 81.35
- imieri, Richard Structure of solvable Lie groups. *J. Algebra* **16** (1970), 597-625. (D. Alekseevskii (RŽMat 1971 #7 A494)) **45** #3634 22E25
- On the Selberg condition for subgroups of solvable Lie groups. *Bull. Amer. Math. Soc.* **77** (1971), 584-586. (R. W. Richardson, Jr.) **45** #448 22E25
- ★Theory of nilpotent groups. *Department of Mathematics, Yale University, New Haven, Conn.*, 1972. iii + 63 pp. (not consecutively pagged) (F. Pickel) **54** #2878 22E25 (20E15, 20F40)
- Homogeneous space with finite invariant measure. *Geometriae Dedicata* **1** (1972), no. 1, 1-5. (Y. Matsushima) **47** #3600 22E15
- (with Auslander, Louis) ★Abelian harmonic analysis, theta functions and function algebras on a nilmanifold. *Lecture Notes in Mathematics*, Vol. 436. Springer-Verlag, Berlin-New York, 1975. iv + 99 pp. (Leonard F. Richardson) **54** #2877 22E25 (14K25, 43A85, 10D05)
- Solvable groups and quadratic forms. *Trans. Amer. Math. Soc.* **201** (1975), 329-345. (V. L. Popov) **50** #7030 10C05 (12A45, 22E45)
- (with Auslander, Louis; Kolb, B.) A non-Abelian view of Abelian varieties. *Transformation groups (Proc. Conf., Univ. Newcastle upon Tyne, Newcastle upon Tyne, 1976)*, pp. 259-266. *London Math. Soc. Lecture Note Series*, No. 26. Cambridge Univ. Press, Cambridge, 1977. (J. S. Joel) **57** #16466 22E25 (14K99)
- The multiplicity problem for 4-dimensional solvmanifolds. *Bull. Amer. Math. Soc.* **83** (1977), no. 3, 365-366. (R. Penney) **57** #16468 22E25
- The theta transform and the Heisenberg group. *J. Functional Analysis* **24** (1977), no. 4, 353-363. (Leonard F. Richardson) **55** #5795 22E25 (43A85, 32M10)
- Analysis on the Heisenberg manifold. *Trans. Amer. Math. Soc.* **288** (1977), 329-343. (Kenneth Johnson) **56** #5785 22E25
- Tolipov, A. (with Salakhitdinov, M. S.) Certain boundary value problems for equations of mixed type with one and two curves of degeneracy. (Russian) *Differencial'nye Uravnenija* **8** (1972), 134-142. (S. A. Tersenov) **45** #7297 35M05
- (with Salakhitdinov, M. S.) Certain boundary value problems for equations of mixed type with one or two lines of degeneracy. (Russian) *Boundary value problems for differential equations*, 3 (Russian), pp. 3-17, 184. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1973. (S. A. Tersenov) **52** #11351 35M05
- (with Salakhitdinov, M. S.) Certain boundary value problems for a certain class of equations of mixed type. (Russian) All-Union Symposium on Selected Questions of Partial Differential Equations (Priklbrus, 1972). *Differencial'nye Uravnenija* **9** (1973), 142-148, 197. (J. F. Heyda) **49** #881 35M05
- A certain boundary value problem for a mixed type equation with two lines of degeneracy. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **17** (1973), no. 3, 20-25, 107. (Megumi Saigo) **51** #6174 35M05
- (with Salakhitdinov, M. S.) On the theory of boundary value problems for an equation of mixed elliptic-hyperbolic-parabolic type. (Russian) *Boundary value problems for differential equations*, 4 (Russian), pp. 3-22, 190. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. (Authors' summary) **57** #13232 35M05
- (with Salakhitdinov, M. S.) On the problem of mixed type equations with two perpendicular curves of degeneracy. (Russian) *Boundary value problems for differential equations*, 5 (Russian), pp. 3-18, 183. *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1975. (Authors' summary) **58** #23141 35M05
- Tolkačeva, N. M. (with Efimov, A. B.; Malyi, V. I.) The contact problem for an elastic body with thin coating. *Izv. Akad. Nauk SSSR Meh. Tver. Tela* **1969**, 166-171 (Russian); translated as *Mechanics of Solids* **4** (1969), no. 1, 155-159. (D. Ieşan) **46** #8507 73.35
- Tolkacir, E. M. (with Fedorenko, Ju. D.) A certain principle for the solution of nonlinear equations in normed spaces. (Russian. English summary) *Vyšisl. Prikl. Mat. (Kiev)* **No. 17** (1972), 107-114. (V. V. Vasin) **46** #10200 65J05
- Tölke, Jürgen Spezielle Bewegungsvorgänge. III. $\Theta^{(m)}$ -Drehvorgänge auf der Sphäre. *Arch. Math. (Basel)* **21** (1970/71), 650-659. (J. Hoschek) **50** #14514 53A05
- Eine Kennzeichnung der sphärischen Trochoidenbewegung. *Elem. Math.* **27** (1972), 57-59. (O. Bottema) **48** #12324 53A05 (70.53)
- Flächenläufige sphärische Drehvorgänge. *Monatsh. Math.* **76** (1972), 455-465. (H. R. Müller) **47** #5734 53A05
- Oskulierende sphärische Hüllkurvenpaare. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **181** (1973), 71-75. (O. Bottema) **48** #12325 53A05 (70.53)
- Kennzeichnungen der sphärischen Bahnscheitel. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **181** (1973), 253-259. (J. Hoschek) **48** #12950 70.53
- Kennzeichnungen der sphärischen symmetrischen Rollung. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **181** (1973), 261-267. (O. Bottema) **48** #12326 53A05 (70.53)
- Eine charakteristische Eigenschaft der D-Linien. *Anz. Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **1974**, no. 9, 142-148. (F. Şemin) **52** #11744 53A05
- (with Lang, W.) Eine Krümmungstheorie in der räumlichen affinen Kinematik. *Arch. Math. (Basel)* **25** (1974), 99-106. (P. Drăgăla) **50** #8319 53A15
- Eine Deutung der γ -Hauptkreise im projektiven Modell der Möbius Geometrie. *Arch. Math. (Basel)* **25** (1974), 426-430. (K. Strubecker) **50** #5624 50D45
- Kinematik der hyperbolischen Ebene. I. *J. Reine Angew. Math.* **265** (1974), 145-153. (J. Hoschek) **48** #9574 53A35
- Kinematik der hyperbolischen Ebene. II. *J. Reine Angew. Math.* **267** (1974), 143-150. (J. Hoschek) **49** #9760 53A35
- Ebene projektive Kinematik. I, II. *Math. Nachr.* **63** (1974), 167-185; *ibid.* **63** (1974), 187-196. (H. R. Müller) **51** #1628 50A20
- Zur Strahlkinematik. I. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **182** (1974), 177-202. (J. Hoschek) **49** #9750 53A05 (70.53)
- Ein sphärisches Analogon der Affinnormalen. *Österreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **183** (1974), 39-49. (H. R. Müller) **50** #8314 53A05
- Projektive kinematische Geometrie. 7. *Steiermärkisches Mathematisches Symposium (Graz, 1975)*, Ber. No. 39, 52 pp. *Ber. Math.-Statist. Sektion, Forschungszentrum Graz*, No. 38-45, *Math.-Statist. Sektion, Forschungszentrum Graz*, Graz, 1975. (Wendelin Degen) **53** #14326 53A20
- Ein Problem der sphärischen Kinematik. *Abh. Math. Sem. Univ. Hamburg* **43** (1975), 229-233. (H. R. Müller) **51** #13886 53A35
- Kinematik der hyperbolischen Ebene. III. *J. Reine Angew. Math.* **273** (1975), 99-108. (J. Hoschek) **51** #6617 53A35
- Elementare Kennzeichnungen der symmetrischen Schrotung. (English summary) *Manuscripta Math.* **15** (1975), no. 4, 309-321. (O. Giering) **51** #11305 53A25
- Ebene projektive Kinematik. III. *Math. Nachr.* **68** (1975), 221-237. (H. R. Müller) **52** #9088 53A05
- Zur Konstruktion des Krümmungsmittelpunktes einer sphärischen Bahnkurve. (English summary) *Monatsh. Math.* **80** (1975), no. 1, 61-65. (H. R. Müller) **51** #11294 53A05
- Orthogonale Doppelverhältnisscharen auf Regelflächen. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **184** (1975), no. 1-4, 99-115. (P. Scherk) **54** #13749 53A25
- Zum sphärischen Analogon der Ellipsenbewegung. *Österreich. Akad. Wiss. Math.-Naturwiss. Kl. S.-B. II* **184** (1975), no. 8-10, 403-425. (O. Bottema) **55** #6315 53A35
- Eine geometrische Deutung der Fundamentalinvariante des Frankschen Kegelschnittnetzes. *Abh. Braunschweig. Wiss. Gesellsch.* **26** (1976), 123-126. (O. Bottema) **55** #6312 53A20
- Eine Bemerkung zum Achsenraum in der Bewegungsgeometrie des R_n . *Anz. Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **1976**, no. 4, 29-32. (H. R. Müller) **54** #14489 70.50
- Eine affine Kennzeichnung der Ellipsenbewegung. *Anz. Österreich. Akad. Wiss. Math.-Naturwiss. Kl.* **1976**, no. 12, 193-197. (P. Drăgăla) **58** #24041 53A15
- Die Bedeutung der Fokalachsen für die symmetrische Rollung. *Časopis Pěst. Mat.* **101** (1976), no. 1, 53-59. (O. Bottema) **57** #13721 53A15

- Zum Integrationsproblem sphärischer Hüllkurvenpaare. *Manuscripta Math.* **19** (1976), no. 2, 189-194. (H. W. Guggenheimer) **53** #1431 53A05 (70.35)
- Eine äquifforme Charakterisierung der euklidischen Bewegungen vermöge einander oskulierender Hüllkurvenpaare. *Arch. Math. (Basel)* **28** (1977), no. 5, 544-549. (H. R. Müller) **56** #13117 53A05 (70.53)
- Tolla, Pierre** (with Faure, Robert; Roucairol, Catherine) ★Chemins et flots, ordonnancements. Recherche Opérationnelle Appliquée, No. 1. Collection "Programmation". Gauthier-Villars, Paris, 1976. viii + 233 pp. (Michel Chein) **56** #7765 90-01 (90C35)
- Contrôle et amélioration de la précision numérique des codes de programmation linéaire continue. (English summary) *RAIRO Recherche Opér.* **11** (1977), no. 1, 109-121, iv. (Jacques Dubois) **56** #7196 65K05 (90C05)
- Tolle, Henning** ★Optimierungsverfahren für Variationsaufgaben mit gewöhnlichen Differentialgleichungen als Nebenbedingungen. Ingenieurwissenschaftliche Bibliothek. Springer-Verlag, Berlin-New York, 1971. xii + 291 pp. (M. Q. Jacobs) **51** #4004 49Dxx
- Tolle, Jon W.** (with Gould, F. J.) A necessary and sufficient qualification for constrained optimization. *SIAM J. Appl. Math.* **20** (1971), 164-172. (J. Falk) **46** #3090 90C30 (with Gould, F. J.) Geometry of optimality conditions and constraint qualifications. *Math. Programming* **2** (1972), no. 1, 1-18. (R. W. Cottle) **45** #6415 90C05 (with Evans, John P.; Gould, F. J.) Exact penalty functions in nonlinear programming. *Math. Programming* **4** (1973), 72-97. (Norman P. Coleman, Jr.) **47** #8118 90C30 (with Gould, F. J.) A unified approach to complementarity in optimization. *Discrete Math.* **7** (1974), 225-271. (Ramesh Saigal) **48** #13244 90Cxx (with Gould, F. J.) Optimality conditions and constraint qualifications in Banach space. *J. Optimization Theory Appl.* **15** (1975), 667-684. (Norihiko Adachi) **56** #13624 65K05 (90C99) (with Fisher, Marshall L.; Gould, F. J.) A simplicial approximation algorithm for solving systems of nonlinear equations. *Symposia Mathematica, Vol. XIX (Convegno sulla Programmazione Matematica e sue Applicazioni, INDAM, Roma, 1974)*, pp. 73-90. Academic Press, London, 1976. (Nimrod Megiddo) **55** #9518 65H10 (with Gould, F. J.) An existence theorem for solutions to $f(x)=0$. *Math. Programming* **11** (1976/77), no. 3, 252-262. (C. B. Garcia) **56** #7157 65H05 (58C15) (with Fisher, Marshall L.; Gould, F. J.) A new simplicial approximation algorithm with restarts: relations between convergence and labelings. *Fixed points: algorithms and applications (Proc. First Internat. Conf., Clemson Univ., Clemson, S. C., 1974)*, pp. 41-58. Academic Press, New York, 1977. (Eugene Allgower) **56** #7167 65H10 (90C30) (with Gauvin, Jacques) Differential stability in nonlinear programming. *SIAM J. Control Optimization* **15** (1977), no. 2, 294-311. (Werner Krabs) **55** #14215 90C30 (with Fisher, Marshall L.) The nonlinear complementarity problem: existence and determination of solutions. *SIAM J. Control Optimization* **15** (1977), no. 4, 612-624. (C. B. Garcia) **56** #8001 90C30
- Tollefson, Jeffrey L.** (with Rogers, James T., Jr.) Maps between weak solenoidal spaces. *Colloq. Math.* **23** (1971), 245-249. (J. Segal) **46** #8157 54B25 (with Rogers, James T., Jr.) Involutions on solenoidal spaces. *Fund. Math.* **73** (1971/72), no. 1, 11-19. (J. Segal) **45** #5982 57A15 (with Rogers, James T., Jr.) Homeomorphisms homotopic to induced homeomorphisms of weak solenoidal spaces. *Colloq. Math.* **25** (1972), 81-87. (P. T. Church) **46** #845 54B25 (with Tondra, Richard J.) Seifert spaces and extensions of groups with centre. *Quart. J. Math. Oxford Ser. (2)* **23** (1972), 401-416. (Wolfgang H. Heil) **52** #1701 57A10
- Homotopically trivial periodic homeomorphisms on 3-manifolds. *Ann. of Math. (2)* **97** (1973), 14-26. (K. W. Kwun) **46** #8216 55C35 (57A10) (with Kwun, Kyung Whan) Uniqueness of orientation preserving PL involutions of 3-space. *Bull. Amer. Math. Soc.* **79** (1973), 761-762. (H. W. Lambert) **47** #5876 57A10
- Involutions on $S^1 \times S^2$ and other 3-manifolds. *Trans. Amer. Math. Soc.* **183** (1973), 139-152. (C. D. Feustel) **48** #5081 57A10 (55A10)
- A 3-manifold admitting a unique periodic PL map. *Michigan Math. J.* **21** (1974), 7-12. (P. J. Kahn) **50** #3232 57A10 (57E25)
- The compact 3-manifolds covered by $S^2 \times R^1$. *Proc. Amer. Math. Soc.* **45** (1974), 461-462. (Benny Evans) **49** #11516 57A10 (57E25) (with Kwun, Kyung Whan) PL involutions of $S^1 \times S^1 \times S^1$. *Trans. Amer. Math. Soc.* **203** (1975), 97-106. (L. S. Husch) **51** #6861 57E25 (with Kwun, Kyung Whan) Involutions of 3-manifolds with almost tame fixed point sets are PL. *Houston J. Math.* **2** (1976), no. 3, 381-386. (Allan Edmonds) **54** #6150 57C99 (57E15) (with Raymond, Frank) Closed 3-manifolds with no periodic maps. *Trans. Amer. Math. Soc.* **221** (1976), no. 2, 403-418. (Allan Edmonds) **54** #3703 57A10 (57E10) Periodic homeomorphisms of 3-manifolds fibered over S^1 . *Trans. Amer. Math. Soc.* **223** (1976), 223-234. (Gerhard X. Ritter) **55** #4179 (E **58** #24272) 57A10 (55A10) (with Kwun, Kyung Whan) Extending a PL involution of the interior of a compact manifold. *Amer. J. Math.* **99** (1977), no. 5, 995-1001. (S. Y. Hussein) **57** #10709 57C99
- (with Kim, Paik Kee) PL involutions of fibered 3-manifolds. *Trans. Amer. Math. Soc.* **232** (1977), 221-237. (K. W. Kwun) **56** #13223 57A10 (55C35)
- Involutions of Seifert fiber spaces. *Pacific J. Math.* **74** (1978), no. 2, 519-529. (S. Gitler) **58** #31092 57A10
- Erratum to: "Periodic homeomorphisms of 3-manifolds fibered over S^1 " (Trans. Amer. Math. Soc. **223** (1976), 223-234). *Trans. Amer. Math. Soc.* **243** (1978), 309-310. (Gerhard X. Ritter) **58** #24272 57A10 (55C35, 57E25)
- Toller, M.** On some properties of the multi-particle amplitude expressed as a function of group-theoretical variables. (Italian and Russian summaries) *Nuovo Cimento A* (10) **62** (1969), 341-371. (A. O. Barut) **51** #12170 81.22 (with Bassetto, A.; Sertorio, L.) Multiperipheral dynamics beyond models. (Italian and Russian summaries) *Nuovo Cimento A* (11) **11** (1972), no. 2, 447-475. (Authors' summary) **53** #7281 81.47 (with Bassetto, A.) Harmonic analysis on the one-sheet hyperboloid and multiperipheral inclusive distributions. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **18** (1973), 1-38. (S. Newberger) **48** #7839 81.47 (with Sertorio, L.) Eigenphases of the S-matrix at high energy. (Italian and Russian summaries) *Nuovo Cimento A* (11) **14** (1973), 21-51. (A. O. Barut) **50** #9276 82.6; (with Soliani, G.) A semigroup contained in SL_{2R} and complex angular momentum (Italian and Russian summaries) *Nuovo Cimento A* (11) **15** (1973), 430-448. (P. Pascual) **53** #15149 81.22
- A general scheme for microscopic theories. *Internat. J. Theoret. Phys.* **12** (1975), no. 6, 349-381. (Author's summary) **57** #4854 81.00 (with Bassetto, A.; Soldati, R.; Zerbini, S.) The second virial coefficient from the scattering operator in classical mechanics. *Lett. Math. Phys.* **1** (1975/77), no. 5, 401-405. (Etang Chen) **56** #2135 82.47
- Classical field theory in the space of reference frames. (Italian and Russian summaries) *Nuovo Cimento B* (11) **44** (1978), no. 1, 67-98. (Author's summary) **58** #14704 81.49 (58A25)
- Tolley, M. D.** Torsion des barres polygonales. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* **63** (1977), no. 11, 902-912. (loose errata) (Hélène Lanchon) **58** #8715 73.65 (65N30)
- Tollison, Robert D.** See **Justice and utility, including a symposium on Rawls**, **49** #12112
- Töllner, K.** See **Linear operators and operator equations**, **49** #4718
- Tolmačev, V. P.** A mathematical model of the interaction of ground water and channel flows. (Russian. English summary) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1978**, no. 3, 55-59, 139. (Author's summary) **58** #19753 76.35
- Tolmačev, V. V.** (with Borodin, K. S.; Krošilin, A. E.) Quasiclassical asymptotic behavior for Wigner's 3j-symbols. (Russian. English summary) *Teoret. Mat. Fiz.* **34** (1978), no. 1, 110-121. (R. F. Biljalov) **57** #18551 81.22 (22E70)
- Tolmačeva, A. Ju.** (with Ilzinja, I. G.; Friconović, G. F.) Finding the maximal cliques of a graph. (Russian) *Avtomat. i Vyčisl. Tehn.* **1970**, no. 3, 93-96. (B. Zelinka) **45** #1791 05C35 (94A20)
- The isolation of the totality of essential variables for a system of incompletely defined functions of the algebra of logic. (Russian) *Avtomat. i Vyčisl. Tehn.* **1971**, no. 6, 10-14. (A. Salomaa) **46** #1479 94A20
- A comparative estimate of the efficiency of algorithms for structural synthesis. (Russian) *Theory of finite automata and its applications*, No. 2 (Russian), pp. 53-59, 80. *Izdat. "Zinatne", Riga, 1973.* (V. N. Agafonov) **51** #14648 68A20
- Recognition of algorithms for the structural synthesis of discrete devices. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1974**, no. 6, 8-10. (Miroslav Hladký) **55** #6940 68A10 (94A30)
- Efficiency of design algorithms for digital devices. *Avtomat. i Telemekh.* **1976**, no. 9, 168-176. (Russian. English summary; translated as *Automat. Remote Control* **37** (1976), no. 9, part 2, 1437-1444 (1977). (Sudhakar M. Reddy) **56** #11629 94A20
- Tolman, L. K.** (with Entringer, Roger C.) Characterizations of graphs having orientations satisfying local degree restrictions. (Loose Russian summary) *Czechoslovak Math. J.* **28(103)** (1978), no. 1, 108-119. (David M. Berman) **58** #10606 05C99
- Tolman, Richard C.** ★Относительность, термодинамика и космология. (Russian) [Relativity, thermodynamics and cosmology] Translated from the English [Clarendon Press, Oxford, 1934] by V. M. Dubovik and V. K. Ignatovič. Edited by Ja. A. Smorodinskii. *Izdat. "Nauka", Moscow, 1974.* 520 pp. (errata insert) (Editors) **51** #9728 83.00
- Tolčanov, S. V.** The stability of a certain nonlinear system of two differential equations. (Russian) *Trudy Ržan. Radiotehn. Inst. Vyp. 53 Differencial'nye Uravnenija* (1974), 83-84, 187. (Author's summary) **58** #28917 34D20
- Tolčko, M. E.** The solvability of the Riemann boundary value problem with infinite index for a half-plane. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1971**, no. 3, 31-38. (See RŽMat **1971** #11 B529) 30A88
- The homogeneous Riemann problem with infinite index for the half-plane. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1972**, no. 5, 34-41, 138. (S. A. Tersenov) **48** #8813 30A88
- The solvability of the homogeneous Riemann boundary value problem for an infinitely connected domain. (Russian) *Dokl. Akad. Nauk BSSR* **18** (1974), 685-688, 763. (N. K. Karapetjan) **50** #4971 30A88 (with Kuharčuk, G. V.) A theorem of Phragmén-Lindelöf type for a certain class of infinitely connected domains. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 1, 50-54, 141. (H.-J. Rossberg) **56** #600 30A42 (with Rogozin, S. V.) A homogeneous Riemann boundary value problem with an infinite index for a half-plane in the exceptional case. (Russian. English summary) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Navuk* **1978**, no. 3, 5-10, 137. (Pet'r Rusev) **58** #22589 30A88
- Tolokjanenko, V. O.** (with Boičuk, L. M.) Kalman filters (survey). *Avtomatika* **1971**, no. 4, 85-91 (Ukrainian); translated as *Soviet Automat. Control* **4** (1971), no. 4, 76-83 (1972). (Authors' summary) **46** #1446 94A05 (with Ivahnenko, O. G.) Control with prediction optimization in simple continuous plant models. *Avtomatika* **1973**, no. 2, 64-72 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* **6** (1973), no. 2, 48-55. (Authors' summary) **51** #12378 93C50 (with Ivahnenko, O. G.; Jaremenko, O. G.) Control with prediction optimization using discrete linear prediction models of the plant. *Avtomatika* **1974**, no. 1, 28-38 (Ukrainian); translated as *Soviet Automat. Control* **7** (1974), no. 1, 22-31. (Bojan Popović) **51** #12379 (E **51** #12380) 93C50
- An algorithm for design of a control with prediction optimization. *Avtomatika* **1974**, no. 3, 58-70 (Ukrainian); translated as *Soviet Automat. Control* **7** (1974), no. 3, 47-57. (Nagata Furukawa) **52** #12906 93C45 (with Ivahnenko, O. G.; Jaremenko, O. G.) Answer to: "On the stability of discrete control systems with prediction optimization" (Soviet Automat. Control **7** (1974), no. 3, 71-73). *Avtomatika* **1974**, no. 3, 90 (Ukrainian); translated as *Soviet Automat. Control* **7** (1974), no. 3, 74. (Editors) **51** #12381 93C50
- Toloknov, V. I.** (with Ževnin, A. A.; Ševjakov, O. V.) Shuttle vehicle safety assurance in unpowered landing through adaptive control. *J. Astronaut. Sci.* **25** (1977), no. 2, 143-149. (Lennart Ljung) **57** #18977 93C40 (93C10)
- See also **Control in space**, **48** #8041
- Toloknovskii, V. R.** The calculation of the values of quadratic functions in digital

- analogues. (Russian) *Avtometrija* 1977, no. 6, 44-49, 101. (Author's summary) #31740 65D15 (65-04)
- omnikov, L. A. (with Coi, P. I.) The diffraction of plane acoustic waves from an oscillating spheroid. (Russian) *Applied mathematics*, No. 2 (Russian), pp. 14-18, 154. *Tul'sk. Politehn. Inst., Tula*, 1975. (Authors' summary) 58 #32324 76.35
- The scattering of a plane acoustic wave from a moving spheroid. (Russian) *Applied mathematics*, No. 2 (Russian), pp. 50-53, 157. *Tul'sk. Politehn. Inst., Tula*, 1975. (Author's summary) 58 #32367 76.35
- See also *Studies in the theory of plates and shells*, 48 #3343
- a, H. See also Tolosa, J.
- a, H. (with Rožkov, V. I.) The periodic solutions of linear equations of neutral type. (Russian) *Collection of scientific works of graduates, No. VI: Mathematics, mechanics, physics* (Russian), pp. 56-66. *Univ. Družby Narodov, Moscow*, 1969. (M. Švec) 45 #2264 34C25 (34K15)
- a, J. (with Gómez, G.) Differential equations with piecewise continuous right hand side with lag. (Russian. English summary) *Trudy Sem. Teor. Differentsial. Uravnenii s Izklon. Argumentom Univ. Družby Narodov Patrisa Lumumbi* 8 (1972), 193-199. (K. Mitalová) 50 #2646 34K15
- a, Juan José See Petrovskii, I. G., 55 #6139
- olosa, Juan Ramón See Ruiz Tolosa, Juan Ramón
- a, Marín On some analogies between the linear and the nonlinear case in the theory of subgroups of contractions. (Romanian. French summary) *Stud. Cerc. Mat.* 26 (1974), 907-1021. (J. W. Neuberger) 50 #10916 47H05
- kin, S. Z. See *Anwendung der Mathematik bei ökonomischen Untersuchungen*, 3 #10434
- go, A. K. The cohomology of parabolic Lie algebras. (Russian) *Mat. Zametki* 12 (1972), 251-255. (W. T. van Est) 48 #4067 17B30 (17B10, 22E25)
- Nonabelian two-dimensional cohomology. (Russian) *Uspehi Mat. Nauk* 27 (1972), 5 (167), 251-252. (C. Niță) 53 #8193 18F20 (14F20)
- The universality of nonabelian cohomology. (Russian) *Mat. Sb. (N.S.)* 91(133) (1973), 267-278, 288. (W. Vogel) 49 #7337 18H10
- aja, T. S. Cogenerator rings. (Russian) *Mat. Zametki* 10 (1971), 689-700. (D.-M. Popescu) 45 #5167 16A48
- On co-generating rings. (Russian) *Uspehi Mat. Nauk* 26 (1971), no. 3(159), 209-210. (E. Enochs) 46 #3505 13C10
- Quasi-Frobenius rings and their generalization. (Russian) *Modules, II* (Russian), pp. 2-48. *Inst. Mat. Sibirsk. Otdel. Akad. Nauk SSSR, Novosibirsk*, 1973. (J. S. Joel) 5 #15692 16A36
- See also Faith, Carl, 58 #10983
- ev, V. P. Parallel algorithms for matrix multiplication. (Russian) *Optimizacija* No. 6 (1972), 94-103, 136. (Author's summary) 48 #7657 68A10
- kov, A. V. Application of fields generated by Gauss periods to the study of cyclic diophantine equations. (Russian) *Studies in number theory (LOMI)*, 4. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 67 (1977), 201-222, 227. (T. Metsänkylä) 56 #2913 10B15 (12A35)
- A remark on Fermat's last theorem. (Russian) *Studies in number theory (LOMI)*, 4. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 67 (1977), 223-224, 228. (R. Steiner) 56 #8490 10B15
- obrova, N. I. (with Večeslavov, V. V.) Parameters for the conformal transformation of symmetric doubly connected polygonal domains. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 13 (1973), 1409-1416, 1635. (R. Kühnau) 54 #1567 65E05 (30A28)
- (with Večeslavov, V. V.) Analysis of plane electrostatic fields in doubly connected polygonal domains using conformal mappings. *J. Computational Phys.* 24 (1977), no. 2, 133-140. (E. Pinney) 55 #13955 78.30
- oi, V. N. (with Ašerova, R. M.; Smirnov, Ju. F.) Projection operators for simple Lie groups. (Russian. English summary) *Teoret. Mat. Fiz.* 8 (1971), no. 2, 255-271. (Authors' summary) 57 #14967 81.22 (22E70)
- (with Sviridov, D. T.; Smirnov, Ju. F.) The construction of the wave functions of quantum systems with the symmetry of G_2 . (Russian) *Dokl. Akad. Nauk SSSR* 206 (1972), 1317-1320. (A. J. Coleman) 47 #6217 81.22
- (with Smirnov, Ju. F.) A new projected basis in the theory of five-dimensional quasi-spin. *Rep. Mathematical Phys.* 4 (1973), 97-111. (G. R. Allcock) 49 #1957 1.22
- (with Ašerova, R. M.; Smirnov, Ju. F.) Projection operators for simple Lie groups. (Russian) *General scheme for the construction of lowering operators. The case of the groups $U(n)$* . (Russian. English summary) *Teoret. Mat. Fiz.* 15 (1973), no. 1, 107-119. (Authors' summary) 57 #14968 81.22 (22E70)
- (with Ašerova, R. M.; Knyr, V. A.; Smirnov, Ju. F.) Some group theoretical aspects of the method of generalized hyperspherical functions. *Jadernaja Fiz.* 21 (1975), no. 5, 1126-1134 (Russian); translated as *Soviet J. Nuclear Phys.* 21 (1975), no. 5, 880-584. (Daniel A. Akyeampong) 53 #2164 81.22
- oluzskii, V. P. Computation of the matrix elements of the Jacobian matrices associated with certain problems of the dynamics of a crystal lattice. (Russian) *Numerical mathematics and computer technology, No. V* (Russian), pp. 71-80, 166. *Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkikh Temperatur, Kharkov*, 1974. (Author's summary) 56 #13578 65F30
- onogov, A. A. The properties of the maximum function with constraints. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 10 (1970), 597-606. (Nicolae Luca) 46 #310 26A69
- The maximum principle for differential inclusions. (Russian) *Differentsial'nye Uravnenija* 11 (1975), no. 10, 1838-1842, 1909. (N. N. Petrov) 53 #9001 49B10
- On the Radon-Nikodým and A. A. Ljapunov theorems for a multivalued measure. (Russian) *Dokl. Akad. Nauk SSSR* 225 (1975), no. 5, 1023-1026. (Igor Kluvánek) 3 #752 28A45 (46G10)
- Subdifferentials of sequences and series of convex functionals. (Russian) *Optimizacija Vyp.* 16(33) (1975), 157-179, 181. (J. Daneš) 53 #14121 46G05
- Topological structure of continuous set-valued mappings. (Russian) *Sibirsk. Mat. Ž.* 16 (1975), no. 4, 837-852, 886. (Ju. G. Borisovič) 52 #4228 54C65
- (with Linke, Ju. Ė.) Representation of sublinear operators by many-valued mappings. (Russian) *Dokl. Akad. Nauk SSSR* 234 (1977), no. 2, 294-297. (S. Kutateladze) 56 #3698 47H99
- The support functions of convex compact sets. (Russian) *Mat. Zametki* 22 (1977), no. 2, 203-213. (Alexander M. Rubinov) 58 #30062 46A99
- Some properties of spaces of sublinear functionals. (Russian) *Sibirsk. Mat. Ž.* 18 (1977), no. 2, 429-443, 480. (C. Mustăța (Zbl 363 #46010)) 58 #30012 46A20
- Tolstov, G. P. ★Элементы математического анализа. Том I. (Russian) [Elements of mathematical analysis. Vol. I] Second, unrevised edition. *Izdat. "Nauka", Moscow*, 1974. 520 pp. (Editors) 50 #7438 26-01
- ★Элементы математического анализа. Том II. (Russian) [Elements of mathematical analysis. Vol. II] Second, unrevised edition. *Izdat. "Nauka", Moscow*, 1974. 471 pp. (Editors) 50 #10163 26-01
- ★Fourier series. Second English translation. Translated from the Russian and with a preface by Richard A. Silverman. *Dover Publications, Inc., New York*, 1976. x + 336 pp. (Editors) 54 #13429 42-01
- ★Мера и интеграл. (Russian) [Measure and integral] *Izdat. "Nauka", Moscow*, 1976. 392 pp. (Editors) 58 #17015 28-01
- See also Verčenko, I. Ja.; et al., 52 #5327
- Tolstova, G. D. An analogue of Bianchi's problem in the equiaffine theory of congruences of conics. (Russian) *Geometry collection, No. 13. Trudy Tomsk. Gos. Univ.* 246 (1973), 143-159. (Froim Marcus) 51 #6611 53A20
- An analogue of the Bianchi problem in the equiaffine theory of conic congruences. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp.* 9 (1974), 174-186. 58 #24042 53A15
- Complexes of conics in three-dimensional equiaffine space. (Russian) *Geometry collection, No. 15. Trudy Tomsk. Gos. Univ.* 258 (1975), 152-172, 238. (K. Radziszewski) 54 #13741 53A15
- Tolstova, G. V. See Jahnke, E.; et al., 56 #3366
- Tolstova, Ju. N. Letter to the editors. (Russian) *Problemy Kibernet.* No. 22 (1970), 293-295. (G. Bär) 45 #1733 02C05
- A certain weakening of intuitionistic logic. (Russian. English summary) *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 20 (1971), 208-219, 288. (A. Tauts) 45 #4951 (E 48 #5808) 02C15
- Tolstoy, I. Remarks on the linearization of differential equations. *J. Inst. Math. Appl.* 20 (1977), no. 1, 53-60. (Clarence M. Ablow) 56 #5990 34A25 (35A25)
- Tolstoy, V. N. See Tolstoi, V. N.
- Tolstyh, A. I. Implicit difference schemes of third order accuracy for multidimensional problems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 5, 1182-1190, 1371. (Author's summary) 57 #18133 65N05
- Condensation of the nodes of the difference networks in the solution process, and the application of schemes of improved accuracy in the numerical study of viscous gas flows. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 18 (1978), no. 1, 139-153, 269. (Author's summary) 57 #11350 76.65
- Tołwiński, Bolesław Application of the adaptive precision conjugate-gradient method to nonlinear planning models of national economy. (Polish and Russian summaries) *Control Cybernet.* 4 (1975), no. 1, 39-50. (J. S. Kowalik) 53 #7492 90C30 (65K05, 90A15)
- Numerical solution of N -person non-zero-sum differential games. (Polish and Russian summaries) *Control Cybernet.* 7 (1978), no. 1, 37-50. (Author's summary) 57 #15523 90D25
- Tom, Alvan F. W. (with Sinha, Naresh K.) Adaptive state estimation for systems with coloured observation noise. *Internat. J. Systems Sci.* 9 (1978), no. 1, 31-43. (Tohru Katayama) 57 #5349 93E10
- el Tom, M. E. A. See El Tom, M. E. A.
- el-Tom, M. E. A. Application of spline functions to Volterra integral equations. *J. Inst. Math. Appl.* 8 (1971), 354-357. (P. M. Anselone) 45 #9532 65R05
- On ignoring the singularity in approximate integration. *SIAM J. Numer. Anal.* 8 (1971), 412-424. (J. G. Herriot) 45 #2928 65D30
- Numerical solution of Volterra integral equations by spline functions. *Nordisk Tidskr. Informationsbehandling (BIT)* 13 (1973), 1-7. (G. F. Miller) 48 #10174 65R05
- On the approximate calculation of improper multiple integrals. *Utilitas Math.* 3 (1973), 19-32. (D. F. Mayers) 48 #3231 65D30
- Spline function approximations to the solution of singular Volterra integral equations of the second kind. *J. Inst. Math. Appl.* 14 (1974), 303-309. (See Zbl 292 #65066) 65R05
- On the numerical stability of spline function approximations to solutions of Volterra integral equations of the second kind. *Nordisk Tidskr. Informationsbehandling (BIT)* 14 (1974), 136-143. (Frank G. Hagin) 58 #3594 65R05
- On spline function approximations to the solution of Volterra integral equations of the first kind. *Nordisk Tidskr. Informationsbehandling (BIT)* 14 (1974), 288-297. (John M. Bowns) 53 #7086 65R05 (45D05)
- Efficient algorithms for Volterra integral equations of the second kind. (German summary) *Computing* 14 (1975), no. 1-2, 153-166. (P. Linz) 53 #7087 65R05
- Tom, René See Thom, René
- Toma, Ileana On the uniqueness of the solutions of some boundary value problems for a class of nonlinear functional equations. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* 15(63) (1971), no. 2, 247-251 (1972). (A. Avantaggiati) 51 #3691 35J65
- Sufficient conditions of uniqueness for the regular solution of a special class of nonlinear boundary value problems. *Numerische Methoden bei Differentialgleichungen und mit funktionalanalytischen Hilfsmitteln (Tagungen, Clausthal-Zellerfeld und Oberwolfach, 1972)*, pp. 203-211. *Internat. Schriftenreihe Numer. Math., Band 19, Birkhäuser, Basel*, 1974. (Brian D. Sleeman) 53 #3486 35G30
- Tomanek, Robert L. Sequential system identification by multiple hypothesis testing. *Proceedings of the Ninth Hawaii International Conference on System Sciences (Univ. Hawaii, Honolulu, Hawaii, 1976)*, pp. 134-136. *Western Periodicals, North Hollywood, Calif.*, 1974. (Authors' summary) 56 #18060 93E10
- Tomaras, Alexander On the solution of the differential system $(\sum_{k=1}^n A_k \cdot t^k) \cdot d\psi/dt = (\sum_{k=0}^n B_k \cdot t^k) \cdot \psi$. *Bull. Soc. Math. Grèce (N.S.)* 12 (1971), no. 1, 154-157. (R. K. Rathy) 47 #3733 34A30
- Oscillations of an equation relevant to an industrial problem. *Bull. Austral. Math.*

- Soc.* 12 (1975), no. 3, 425-431. (G. S. Ladde) 52 #3695 34K15
Oscillatory behaviour of an equation arising from an industrial problem. *Bull. Austral. Math. Soc.* 13 (1975), no. 2, 255-260. (Curtis C. Travis) 52 #14545 34K15
Oscillations of higher-order retarded differential equations caused by delays. *Rev. Roumaine Math. Pures Appl.* 20 (1975), no. 10, 1163-1172. (Melvin Heard) 53 #8614 34K15
Oscillations of a first order functional differential equation. *Bull. Austral. Math. Soc.* 17 (1977), no. 1, 91-95. (G. Ladas) 56 #12509 34K15
- Tomaru, Tadashi** Bloch's theorem for some algebraic manifolds. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* 13, no. 366-382, 181-187 (1977). (Michael J. Cowen) 57 #12913 32H25
- Tomaru, Takao** An algorithm for the expansion of partial fractions using tables. *IEEE Trans. Automatic Control* AC-19 (1974), 443-446. (Zbl 294 #65028) 58 #8158 65D20
- Tomás, Francisco** On locally determined ideals. (Spanish) *Bol. Soc. Mat. Mexicana* (2) 11 (1966), 14-21. (Editors) 58 #18538 58C25 (32B05)
An analogue of the direct sum for systems of normal subgroups. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 13 (1973), 161-186. (M. J. Wonenburger) 52 #5817 20F25 (12F10)
On the normalized groups among the decomposition groups. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 13 (1973), 187-208. (G. Whaples) 52 #13743 12A65
(with Díaz Barriga Casales, Alejandro Javier; Ramírez, Ana Irene) ★Teoría de números algebraicos. (Spanish) [Theory of algebraic numbers] Monografías del Instituto de Matemáticas, No. 2. [Monographs of the Institute of Mathematics, No. 2] Instituto de Matemáticas, Universidad Nacional Autónoma de México, Mexico City, 1975. iii+231 pp. (H. W. Brinkmann) 53 #2888 12-01
A test for consistency and its application to recursive arithmetic. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 15 (1975), no. 2, 133-190. (B. van Rootselaar) 54 #7238 02F99 (02F43)
(with Paredes, Patricio) The intersections of normal subgroups generated by unions of Sylow subgroups. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 17 (1977), no. 1, 87-93. (D. Bollman) 58 #5916 20D20
An open formalism for general recursive arithmetic. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 17 (1977), no. 2, 165-204. (B. van Rootselaar) 58 #10384 02F43
- Tomas, Peter A.** A restriction theorem for the Fourier transform. *Bull. Amer. Math. Soc.* 81 (1975), 477-478. (P. G. Rooney) 50 #10681 42A92
(with Stanton, Robert J.) Convergence of Fourier series on compact Lie groups. *Bull. Amer. Math. Soc.* 82 (1976), no. 1, 61-62. (Pierre Eymard) 53 #6241 43A50 (22C05)
(with Stanton, Robert J.) Expansions for spherical functions on noncompact symmetric spaces. *Acta Math.* 140 (1978), no. 3-4, 251-276. (Kenneth Johnson) 58 #23365 43A90 (22E30)
(with Stanton, Robert J.) Polyhedral summability of Fourier series on compact Lie groups. *Amer. J. Math.* 100 (1978), no. 3, 477-493. (Norman J. Weiss) 58 #29855 43A50 (22E30)
(with Stanton, Robert J.) A note on the Kunze-Stein phenomenon. *J. Funct. Anal.* 29 (1978), no. 2, 151-159. (Pierre Eymard) 58 #28278 22E30 (22E45)
- Tomašev, Stanislav** Concerning the Banach-Stone theorem. *Comment. Math. Univ. Carolinae* 10 (1969), 307-314. (P. R. Meyer (Zbl 177, 415)) 57 #1130 46J10
Projectively generated topologies on tensor products. *Comment. Math. Univ. Carolinae* 11 (1970), 745-768. (J. Gil de Lamadrid) 45 #7434 46A15 (46M05)
Weak compactness in locally convex g -spaces and related questions. *Math. Ann.* 192 (1971), 304-312. (Peter Kessler) 45 #2444 46A05 (54D99)
- Tomaševs, V. M.** (with Zaičenko, Ju. P.; Pečurin, M. K.) The generalized assignment problem and its solution algorithm. *Avtomatika* 1975, no. 2, 45-48 (Ukrainian. Russian and English summaries); translated as *Soviet Automat. Control* 8 (1975), no. 2, 37-40. (W. T. Rasmussen) 53 #5004 90C50 (90B99)
- Tomašić, Vesna** Geraden Spiegelungen in projektiven Ebenen. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* 6(26) (1971), 121-128. (M. J. Kallaher) 45 #7591 50D05
(with Kamenarović, L.) Generalized Möbius m -structure. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* 4 (1974), 605-608. (Robert L. Wilson, Jr.) 53 #5340 05B30
- Tomasik, J.** On the number of elementary theories of some hierarchies of sets. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 19 (1971), 271-274. (P. Acel) 45 #4977 02F35
On products of neat structures. *Colloq. Math.* 36 (1976), no. 1, 13-16. (S. R. Kogalovskii) 55 #10270 02H05
- Tomasin, A.** See Conference: Optimization Techniques, 48 #5759
- Tomasin, E.** (with Giannessi, Franco) Nonconvex quadratic programs, linear complementarity problems, and integer linear programs. *Fifth Conference on Optimization Techniques (Rome, 1973), Part I*, pp. 437-449. *Lecture Notes in Comput. Sci., Vol. 3*, Springer, Berlin, 1973. (Authors' summary) 56 #10960 90C20 (90C10)
(with Giannessi, Franco) Nonconvex quadratic programs, linear complementarity problems, and integer linear programs. *Mathematical programming in theory and practice (Proc. NATO Adv. Study Inst., Figueira da Foz, 1972)*, pp. 161-199. North-Holland, Amsterdam, 1974. (S. P. Aggarwal) 57 #15448 90C20
- Tomasini, Messia, Maria Grazia** (with Chiappini Santi, Elisabetta) A functional equation in complex field. (Italian summary) *Boll. Un. Mat. Ital. A* (5) 13 (1976), no. 2, 373-378. (Hiroshi Haruki) 54 #10582 30A20
- Tomassini, Giuseppe** Involuppo d'olomorfia e spazi pseudoconvexi. *Ann. Mat. Pura Appl.* (4) 87 (1970), 59-86. (A. Aepli) 45 #7102 32D10
On some finiteness properties of topological algebras. *Symposia Mathematica, Vol. XI (Convegno di Geometria, INDAM, Rome, 1972)*, pp. 305-311. Academic Press, London, 1973. (B. M. Weinstock) 48 #6936 46H20
Teoremi di rappresentazione in geometria analitica. (English summary) *Rend. Sem. Mat. Fis. Milano* 44 (1974), 91-94 (1975). (Alessandro Silva) 52 #14350 32B05
Modifications des espaces complexes. I. (Italian summary) *Ann. Mat. Pura Appl.* (4) 103 (1975), 369-395. (H. Hironaka) 51 #10686 32C45
- Tomassone, Richard** (with Jaccottet, Monique) Méthodes d'analyse factorielle en théorie des plans d'expérience. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* 1 (1976), no. 3, 233-256. (E. J. Williams) 55 #1658 62K15
- Tomasta, Pavel** Decompositions of complete k -uniform hypergraphs into factors with given diameters. *Comment. Math. Univ. Carolinae* 17 (1976), no. 2, 377-392. (Authors' summary) 57 #12303 05C99
Decompositions of graphs and hypergraphs into isomorphic factors with a given diameter. *Czechoslovak Math. J.* 27(102) (1977), no. 4, 598-608. (A. Rosa) 57 #12303 05C99
- Tomastik, E. C.** Principal quadratic functionals. *Trans. Amer. Math. Soc.* 218 (1976), 297-309. (U. D'Ambrosio) 53 #9002 49B10
- Tomaszewicz, Andrzej** (with Olbrycht, Czesława) Nonlinear regression between two normal variables. (Polish. Russian and English summaries) *Przegląd Statyst.* 22 (1975), no. 2, 241-249. (Authors' summary) 52 #2036 62H10
- Tomaszewicz, Antoni** Generators of propositional functions. (Polish and Russian summaries) *Studia Logica* 31 (1973), 145-151. (A. Ádám) 48 #3696 02B05 (68A25)
- Tomatis, Paolo** Il teorema di eliminazione per una logica modale S_4 . *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* 106 (1972), 787-797. (Irene Oppman) 48 #1887 02C10
- Tomba, Tullio** Un astrolabio del XIV secolo di probabile origine italiana. *Phys.—Riv. Internaz. Storia Sci.* 12 (1970), no. 1, 82-87. (J. S. Joel) 56 #5138 01A35
- Tombak, M. O.** (with Vooglaide, A. O.) A system for designing multipass translators with LR (k)-semantics. (Russian) *Programmirovanie* 1976, no. 5, 28-38, 103. (Authors' summary) 58 #13882 68A05
The elimination of precedence conflicts. (Russian) *Trudy Vyčisl. Centra Tartu Gos. Univ. Vyp.* 37 (1976), 60-91. (V. N. Agafonov) 55 #9616 68A30
- Tomboulis, E.** (with Woo, G.) Soliton quantization in gauge theories. *Nuclear Phys. B* 107 (1976), no. 2, 221-237. (James D. Fabrey) 53 #15200 81A7
- Tomčinskii, V. Yu.** See Tomčinskii, V. Ju.
- Tomchuk, E.** (with Aboul-Atta, Osama A.) Approximations to surd integrals of the inverse Laplace transform type. *J. Inst. Math. Appl.* 21 (1978), no. 2, 157-163. (Ulrich Eckhardt) 58 #3321 65D20 (41A20)
- Tomčinskii, V. Ju.** (with Džibuti, R. I.; Šubitidze, N. I.) Transformation coefficients in the hyperspherical approach to the nonequal mass four-body problem. *Jadernaja Fiz.* 18 (1973), 1164-1172 (Russian); translated as *Soviet J. Nuclear Phys.* 18 (1974), 597-600. (Authors' summary) 56 #10231 70J33
(with Džibuti, R. I.; Krupennikova, N. B.) On the theory of the hyperspherical basis. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 81 (1976), no. 1, 69-72. (M. Lawrence Glasser) 53 #7266 81J33 (33A65)
- Tomčuk, E. Ja.** (with Rublineckii, V. I.) An approximate procedure for the solution of the traveling salesman problem. (Russian) *Numerical mathematics and computer technology, No. IV (Russian)*, pp. 14-17, 136. *Akad. Nauk Ukrain. SSR Fiz.-Tehn. Inst. Nizkikh Temperatur, Kharkov*, 1973. (Authors' summary) 58 #9240 90C10 (90C40)
- Tomczak-Jaegermann, Nicole** The moduli of smoothness and convexity and the Rademacher averages of trace classes S_p ($1 < p < \infty$). *Studia Math.* 50 (1974), 163-182. (E. Dubinsky) 50 #8141 47B10 (46E30)
On the differentiability of the norm in trace classes S_p . *Séminaire Maurey-Schwartz 1974-1975: Espaces L_p , applications radonifiantes et géométrie des espaces de Banach, Exp. No. XXII, 9 pp.* Centre Math., École Polytech., Paris, 1975. (Kenneth J. Harrison) 53 #14192 47B10 (47D15)
- Tom Dieck, Tammo** See Tom Dieck, Tammo
- Tomé, Bertha** (with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Salas, Carlos; Spindola, Patricia) Stable Gabriel filters. I. Relative finiteness conditions. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 135-154. (P. Abellanas) 58 #28050a 16-XX
(with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Salas, Carlos; Spindola, Patricia) Stable Gabriel filters. II. Relative semisimplicity conditions. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 155-173. (P. Abellanas) 58 #28050b 16-XX
(with González Peláez, Marcela; Pineda, Adolfo; Raggi Cárdenas, Francisco Federico; Ríos Montes, José; Salas, Carlos; Spindola, Patricia) Stable Gabriel filters. III. The relative radical of Jacobson, and some examples. (Spanish) *An. Inst. Mat. Univ. Nac. Autónoma México* 16 (1976), no. 2, 175-191. (P. Abellanas) 58 #28050c 16-XX
- Tomek, Ivan** A generalization of the k -NN rule. *IEEE Trans. Systems Man Cybernet.* SMC-6 (1976), no. 2, 121-126. (W. L. G. Koontz) 56 #4275 68A45 (62H30)
An experiment with the edited nearest-neighbor rule. *IEEE Trans. Systems Man Cybernet.* SMC-6 (1976), no. 6, 448-452. (Robin Sibson) 55 #1873 68A45
Two modifications of CNN. *IEEE Trans. Systems Man Cybernet.* SMC-6 (1976), no. 11, 769-772. (Josef Kittler) 56 #7373 68A45
- Tomescu, F. M. G.** Transient diffusion in semiconductor devices. (French summary insert) *Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét.* 18 (1973), 597-620. (T. Kahan) 50 #6399 82J35
- Tomescu, Ioan** Méthode pour la détermination de la fermeture transitive d'un graphe fini. II. La solution du problème en deux étapes. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 16 (1970), 199-203. (From the author's introduction) 46 #1656 05C99
Une démonstration du théorème de Dilworth et applications à un problème de couverture des graphes. (English summary) *Calcolo* 7 (1970), 289-294. (J. Jakubík) 46 #3374 05C35
Méthodes combinatoires dans la théorie des automates finis. *Logique, automatique, informatique*, pp. 269-423. (errata insert) Éditions Acad. R.S.R., Bucharest, 1971. (I. G. Rosenberg) 51 #15231 94A20 (94A25)
An inequality for the point-arboricity of a graph. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* 17 (1971), 287-289. (G. Chartrand) 47 #8353 05C35
Le nombre des sous-arborescences d'une arborescence donnée. *An. Univ. București Mat.-Mec.* 20 (1971), no. 1, 141-145. (C. F. Picard) 46 #3356 05C05
Le nombre des graphes connexes k -chromatiques minimaux aux sommets étiquetés. *C. R. Acad. Sci. Paris Sér. A-B* 273 (1971), A1124-A1126. (R. Cori) 45 #121 05C30

- Sur le nombre des cliques maximales d'un graphe et quelques problèmes sur les graphes parfaits. *Rev. Roumaine Math. Pures Appl.* **16** (1971), 1115-1126. (J. W. Moon) **5** #103 05C99
- A method for minimizing the number of states for a restricted class of incompletely specified sequential machines. *An. Univ. București Mat.-Mec.* **21** (1972), no. 1, 97-108. (George Tourlakis) **48** #13513 94A25
- Le nombre des graphes connexes k -cycliques aux sommets étiquetés. (English summary) *Calcolo* **9** (1972), 71-74. (J. W. Moon) **48** #1990 05C35
- Le nombre maximal de 3-colorations d'un graphe connexe. *Discrete Math.* **1** (1972), no. 4, 351-356. (F. Harary) **45** #6685 05C15
- A matrix method for determining all pairs of compatible states of a sequential machine. *IEEE Trans. Computers* **C-21** (1972), 502-503. (J. C. Muzio) **50** #4150 94A25
- A method for minimizing the number of states for a restricted class of incompletely specified sequential machines. *Math. Systems Theory* **6** (1972), 1-2. (Forbes D. Lewis) **46** #1489 94A25
- Une caractérisation des graphes k -chromatiques minimaux sans sommet isolé. *Rev. Française Automat. Informat. Recherche Opérationnelle* **6** (1972), Sér. R-1, 88-91. (C. St. J. A. Nash-Williams) **47** #3227 05C15
- Ordered algebraic structures in the theory of graphs. (Romanian. English summary) *Stud. Cerc. Mat.* **24** (1972), 469-476. (T. Zamfirescu) **53** #5184 94A20 (06A75)
- Inégalités concernant les hypergraphes uniformes. Colloque sur la Théorie des Graphes (Brussels, 1973). *Cahiers Centre Études Recherche Opér.* **15** (1973), 355-362. (Author's summary) **50** #1964 05C30
- A combinatorial algorithm for solving covering problems. *IEEE Trans. Computers* **C-22** (1973), 218-220. (A. K. Dewdney) **51** #4715 68A10
- Note sur une caractérisation des graphes dont le degré de déséquilibre est maximal. (English summary) *Math. Sci. Humaines* **No. 42** (1973), 37-40. (Jane W. Di Paola) **51** #3003 05C99
- Un algorithme combinatoire pour la résolution des problèmes du type du permanent. (English summary) *Calcolo* **11** (1974), 329-339 (1975). (O. Pokorný) **56** #7152 65F30 (15A15)
- La réduction minimale d'un graphe à une réunion de cliques. *Discrete Math.* **10** (1974), 173-179. (L. W. Beineke) **51** #247 05C99
- ★Introduction to combinatorics. Translated from the Romanian by I. Tomescu and S. Rudeanu. Edited by E. Keith Lloyd. *Collet's Publishers Ltd., London*, 1975. xiii + 249 pp. (Editors) **53** #143 05-02
- Problèmes extrémaux concernant le nombre des colorations des sommets d'un graphe fini. *Combinatorial programming: methods and applications* (Proc. NATO Advanced Study Inst., Versailles, 1974), pp. 327-336. *NATO Advanced Study Inst. Ser., Ser. C: Math. and Phys. Sci., Vol. 19, Reidel, Dordrecht*, 1975. (Béla Bollobás) **58** #13638 05C15
- Un algorithme pour l'obtention d'une chaîne hamiltonienne en partant de l'arbre minimal d'un graphe. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Verte* **9** (1975), no. V-3, 5-12. (Author's summary) **56** #169 05C05
- Le nombre maximal de colorations d'un graphe hamiltonien. *Discrete Math.* **16** (1976), no. 4, 353-359. (Ruth Bari) **55** #10310 05C15
- The four color problem. (Romanian) *Gaz. Mat. Publ. Lunară Pentru Tineret* **81** (1976), no. 3, 81-83. (Editors) **55** #7829 05C15
- Sur le nombre des cycles négatifs d'un graphe complet signé. *Math. Sci. Humaines* **No. 53** (1976), 63-67. (A. Astromoff) **56** #15493 05C35 (92A20)
- Extremal properties of uniform hypergraphs. (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 5, 625-632. (C. Tartia) **57** #3000 05C35
- Sur les plus longues cycles dans les graphes chromatiques. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **21(69)** (1977), no. 3-4, 433-439. (Author's summary) **58** #10568 05C15
- A general formula for the asymptotic number of labeled connected graphs and digraphs. *Rev. Roumaine Math. Pures Appl.* **23** (1978), no. 4, 617-623. (J. W. Moon) **58** #10583 05C30
- nescu, Rodica On some inequalities between the entropies of certain finite fields. (Romanian. English summary) *Bul. Inst. Politehn. București* **38** (1976), no. 2, i, 7-10. (Author's summary) **58** #33536 94A15
- nfel'd, Ju. L. See Miller, Raymond E., **53** #2540
- ni, Friedrich Variationsprobleme vom Dirichlet-Typ mit einer Ungleichung als Nebenbedingung. *Math. Z.* **128** (1972), 43-74. (J. D. Logan) **48** #986 49A99
- On the local uniqueness of the problem of least area. *Arch. Rational Mech. Anal.* **52** (1973), 312-318. (R. Osserman) **49** #11364 49F10 (58E05)
- Bemerkungen zum Regularitätsproblem der Gleichung vorgeschriebener mittlerer Krümmung. *Math. Z.* **132** (1973), 323-326. (J. Hersch) **48** #692 35D10
- (with Böhme, Reinhold) Zur Struktur der Lösungsmenge des Plateauproblems. *Math. Z.* **133** (1973), 1-29. (R. Osserman) **49** #11362 49F10 (58E05)
- A perturbation theorem for surfaces of constant mean curvature. *Math. Z.* **141** (1975), 253-264. (S. Hildebrandt) **51** #1564 49F10
- Über elliptische Differentialgleichungen 4. Ordnung mit einer starken Nichtlinearität. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. II* **1976**, no. 3, 33-42. (Z. C. Motzler) **57** #3632 35J65
- On the finite solvability of Plateau's problem. *Geometry and topology* (Proc. III Latin Amer. School of Math., Inst. Mat. Pura Aplicada CNPq, Rio de Janeiro, 1976), pp. 679-695. *Lecture Notes in Math., Vol. 597, Springer, Berlin*, 1977. (R. Osserman) **56** #13118 53A10 (58E15, 49F10)
- mić, Miloš A generalization of the problem of absolute convergence of Fourier series. (Serbo-Croatian. Russian summary) *Mat. Vesnik* **10(25)** (1973), 175-179. (J. Musielak) **48** #9238 42A28
- A certain property of trigonometric polynomials of best approximation. (Russian) *Mat. Vesnik* **11(26)** (1974), 95-98. (V. M. Kokilašvili) **50** #14031 42A08
- mić, Miodrag (with Marić, Vojislav) A new proof of Bernstein's inequality for Legendre polynomials. *Proc. Amer. Math. Soc.* **48** (1975), 511-512. (A. E. Danese) **50** #10366 33A45
- (with Marić, Vojislav) On some classical inequalities for Legendre polynomials. (Italian summary) Collection of articles dedicated to Giovanni Sansone on the occasion of his eighty-fifth birthday. *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, suppl., 478-482. (A. E. Danese) **53** #905 33A45
- (with Marić, Vojislav) Regularly varying functions and differential equations. *Ordinary and partial differential equations* (Proc. Fourth Conf., Univ. Dundee, Dundee, 1976), pp. 333-340. *Lecture Notes in Math., Vol. 564, Springer, Berlin*, 1976. (Authors' introduction) **58** #28338 26A12 (34C10)
- (with Marić, Vojislav) Asymptotic properties of solutions of the equation $y'' = f(x)\phi(y)$. *Math. Z.* **149** (1976), no. 3, 261-266. (M. Ráb) **55** #10785 34D05
- (with Marić, Vojislav) Regular variation and asymptotic properties of solutions of nonlinear differential equations. *Publ. Inst. Math. (Beograd) (N.S.)* **21(35)** (1977), 119-129. (A. C. Garibaldi) **58** #22774 34C10 (26A12)
- Tomil'čik, L. M. (with Biza, Ju. S.) Nonuniversality of the g/e relation in the relativistic Kepler problem. (Russian. English summary) *Teoret. Mat. Fiz.* **24** (1975), no. 3, 325-332. (Authors' summary) **58** #8885 81J33
- (with Margolin, A. È.) The charge quantization condition in the generalized Kepler problem. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 3, 73-77, 143. (Authors' summary) **56** #14227 81J22
- Tomilenko, V. A. A dynamic redundancy problem. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1975**, no. 4, 93-100 (Russian); translated as *Engrg. Cybernetics* **13** (1975), no. 4, 75-82. (Author's summary) **56** #17776 90B25
- On a property of strictly logarithmic concave functions. *Acta Sci. Math. (Szeged)* **38** (1976), no. 3-4, 417-421. (L. Losonczi) **55** #3198 26A86
- The integrals of logarithmically concave functions. (Russian) *Mat. Zametki* **20** (1976), no. 6, 843-845. (Piotr Antosik) **55** #10618 26A51 (26A86)
- The existence of continuous ϵ -optimal strategies for a one-step decision making model. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 4, 144-145. (O. N. Bondareva) **58** #26108 90D35
- Tomilina, I. A. See Applied mathematics and transportation problems, **52** #13064
- Tomilov, E. D. Tables of functions for a certain kind of exact particular solutions of the equations for the plane irrotational motion of a gas. (Russian) *Trudy Tomsk. Gos. Univ.* **163** (1963), 149-151. (table insert) (I. O. Bohachevsky) **53** #7219 76J65
- See also Abstracts: Scientific Conference on Mathematics and Mechanics, **55** #3 and Abstracts: Scientific Conference on Mathematics and Mechanics, **55** #4
- Tomimatsu, A. (with Tajima, N.; Horiuchi, R.) Time evolution of the energy spectrum of Alfvén waves due to the non-linear Landau damping. *Astronom. and Astrophys.* **65** (1978), no. 2, 239-243. (Authors' summary) **58** #19750 76J35
- Tomimatsu, Akira (with Sato, Humitaka) New series of exact solutions for gravitational fields of spinning masses. *Progr. Theoret. Phys.* **50** (1973), no. 1, 95-110. (Authors' summary) **57** #8873 83J53 (85J53)
- Particle creations in the pseudoparticle gravitational fields. *Progr. Theoret. Phys.* **60** (1978), no. 2, 414-426. (Author's summary) **58** #25633 81J53
- Tomimura, N. (with Bonnor, W. B.; Sulaiman, A. H.) Szekeres's space-times have no Killing vectors. *General Relativity and Gravitation* **8** (1977), no. 8, 549-559. (Peter Szekeres) **57** #15201 83J53
- Tomin, Ju. I. (with Barabanov, A. T.; Dračev, E. A.) Methods for the covariational analysis of multistep nonstationary continuously discrete systems with random inputs. (Russian) *Adapt. Sistemy Avtomat. Upravlenija Vyp.* **2** (1974), 57-63, 150. (Authors' summary) **55** #2253 93C55
- (with Barabanov, A. T.; Dračev, E. A.) States space covariance analysis of complex time-varying systems. *Proceedings of the IFAC 6th World Congress (Boston/Cambridge, Mass., 1975), Part 1, Paper No. 30.4, 9 pp.* IFAC, Düsseldorf, 1975. (Authors' summary) **58** #33340 93C99
- Tomlin, N. G. The problem of multipliers in the spaces l_p for orthogonal series in ultraspherical polynomials. (Russian) *Problems of mathematical analysis, No. 4: Integral and differential operators, Differential equations* (Russian), pp. 114-127, 144. *Izdat. Leningrad. Univ., Leningrad*, 1973. (J. Musielak) **50** #2804 42A60
- An application of the interpolation of linear operators to questions of the convergence of series of Fourier coefficients with respect to classical orthogonal polynomials. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 1074-1077. (A. Kufner) **49** #3437 42A56 (46E35)
- On the multiplier problem in l_p . (Russian. English summary) *Vestnik Leningrad. Univ. No. 1 Mat. Meh. Astronom. Vyp.* **1** (1973), 142-144, 157. (A. Devinatz) **52** #1137 42A18 (42A56)
- Tominaga, Akira (with Nakamori, Seiichi; Sugisaka, Masanori) On an initial-value system for integral equations with semi-degenerate kernel in linear filtering problems. (Japanese. English summary) *Rep. Fac. Engrg. Oita Univ. No. 2* (1976), 23-29. (Authors' summary) **58** #20734 93E10
- Tominaga, Hisao (with Motose, Kaoru) Some remarks on invariant subrings. *Math. J. Okayama Univ.* **14** (1969/70), 123-128. (J. Luh) **45** #1969 16A48
- (with Motose, Kaoru) Group rings with solvable unit groups. *Math. J. Okayama Univ.* **15** (1971/72), 37-40. (S. K. Sehgal) **46** #5423 20C05 (16A26)
- (with Kaya, Arif) Some remarks on the bimodule structure of Galois extensions. *Math. J. Okayama Univ.* **15** (1971/72), 129-135. (Lindsay N. Childs) **47** #6785 16A74
- (with Hongan, Motoshi; Nagahara, Takasi) A note on Artinian subrings. *Proc. Japan Acad.* **47** (1971), 8-10. (E.-A. Behrens) **46** #9103 16A46
- (with Kimura, Shigenao) On a theorem of K. Baumgartner. *Proc. Japan Acad.* **47** (1971), 517-518. (H. H. Storrer) **45** #6854 16A40
- (with Kishimoto, Kazuo) On inner p -derivations. *Hokkaido Math. J.* **1** (1972), 110-113. (G. Michler) **47** #6784 16A72
- (with Mogami, Isao) On primary decomposition theory for modules. *Math. J. Okayama Univ.* **16** (1973), 37-45. (J. W. Brewer) **48** #11216 16A64
- Note on Galois subrings of prime Goldie rings. *Math. J. Okayama Univ.* **16** (1973), 115-116. (H. F. Kreimer) **48** #4052 16A74
- (with Nagahara, Takasi) Note on the results of I. N. Herstein and A. Ramer. *Proc. Japan Acad.* **49** (1973), 150-151. (F. DeMeyer) **48** #6166 16A40
- (with Chiba, Katsuo) On strongly regular rings. *Proc. Japan Acad.* **49** (1973), 435-437. (Edward T. Wong) **48** #6161 16A30
- (with Takamatsu, Shigeru) On normalizers of simple ring extensions. *Proc. Japan*

- Acad.* **49** (1973), 678-680. (S. Elliger) **49** #10734 16A40
(with Nagahara, Takasi) Elementary proofs of a theorem of Wedderburn and a theorem of Jacobson. *Abh. Math. Sem. Univ. Hamburg* **41** (1974), 72-74. (P. M. Cohn) **50** #391 16A40
(with Chiba, Katsuo) On strongly regular rings. II. *Proc. Japan Acad.* **50** (1974), 444-445. (Edward T. Wong) **50** #13125 16A30
A note on H-separable extensions. *Proc. Japan Acad.* **50** (1974), 446-447. (Kazuo Kishimoto) **51** #3227 16A56
(with Mogami, Isao) On coprimary decomposition theory for modules. *Math. J. Okayama Univ.* **17** (1975), no. 2, 125-130. (Authors' summary) **56** #421 16A64
On decompositions into simple rings. *Math. J. Okayama Univ.* **17** (1975), no. 2, 159-163. (J. K. Luedeman) **52** #486 16A40
On separability of Galois extensions. *Math. J. Okayama Univ.* **18** (1975/76), no. 1, 35-38. (M. Orzech) **53** #3034 16A74
(with Kishimoto, Kazuo) On decompositions into simple rings. II. *Math. J. Okayama Univ.* **18** (1975/76), no. 1, 39-41. (J. K. Luedeman) **53** #5656 16A40
On s-unital rings. *Math. J. Okayama Univ.* **18** (1975/76), no. 2, 117-134. (K. R. Goodearl) **54** #7532 16A30
(with Hongan, Motoshi) Note on fully idempotent ideals and s-unital ideals. *Math. J. Okayama Univ.* **18** (1975/76), no. 2, 135-138. (J. C. Robson) **54** #7526 16A21
(with Chiba, Katsuo) On generalizations of P_1 -rings and gsr-rings. *Math. J. Okayama Univ.* **18** (1975/76), no. 2, 149-152. (Steve Ligh) **55** #400 16A30
(with Chiba, Katsuo) Note on strongly regular rings and P_1 -rings. *Proc. Japan Acad.* **51** (1975), no. 4, 259-261. (Edward T. Wong) **51** #10384 16A30
(with Elliger, Sigurd) Note on simple ring extensions. *Hokkaido Math. J.* **5** (1976), no. 2, 237-238. (L. C. A. van Leeuwen) **53** #13316 16A56
Algebras with only finitely many subalgebras. *Math. J. Okayama Univ.* **19** (1976/77), no. 1, 45-46. (Kazuo Kishimoto) **55** #10515 16A44
(with Hirano, Yasuyuki) Two theorems on left s-unital rings. *Math. J. Okayama Univ.* **19** (1976/77), no. 2, 97-100. (G. Betsch) **56** #8618 16A48 (16A70)
On s-unital rings. II. *Math. J. Okayama Univ.* **19** (1976/77), no. 2, 171-182. (K. R. Goodearl) **56** #12054 16A32
(with Ōhori, Masayuki) A note on right locally finite simple ring extensions. *J. Fac. Sci. Shinshu Univ.* **12** (1977), no. 1, 43. (L. C. A. van Leeuwen) **57** #9756 16A56 (16A74)
(with Ikehata, Shūichi) Rings with some two-variable constraints. *Math. Japon.* **22** (1977), no. 3, 287-288. (Howard E. Bell) **57** #6084 16A30
(with Hirano, Yasuyuki) Two commutativity theorems for rings. *Math. J. Okayama Univ.* **20** (1978), no. 1, 67-72. (Ralph W. Wilkerson) **58** #11029 16A70
See also **Proceedings: Symposium on Ring Theory**, **57** #6067
- Tominaga, Shoji** (with Tamura, Shinichi; Tanaka, Kohkichi; Higuchi, Seihaku) Uncorrelated minimum-length sequence and its application to parameter estimation. *Information Sci.* **9** (1975), no. 2, 151-168. (S. P. Bingulac) **55** #7496 93B30
- Tominaga, Thomas T.** Symbols and referents in symbolic logic. *Internat. Logic Rev.* **No. 14** (1976), 182-197. (Not reviewed) 02A05
- Tominkov, G. N.** (with Vitth, V. A.; Kuklin, G. N.; Tsybatov, V. A.) Topological optimization of data acquisition systems. Translated from the Russian. *Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform.* **7** (1978), no. 1, 21-36. (Authors' summary) **58** #20882 94A20
- Tomisaki, Matsuyo** Comparison theorems in generalized diffusion processes. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **30** (1976), no. 2, 247-256. (S. R. S. Varadhan) **55** #9298 60J60
On the asymptotic behaviors of transition probability densities of one-dimensional diffusion processes. *Publ. Res. Inst. Math. Sci.* **12** (1976/77), no. 3, 819-834. (A. D. Wentzell (Ventcel')) **56** #6895 60J60
Some estimates for solutions of equations related to non-local Dirichlet forms. *Rep. Fac. Sci. Engng. Saga Univ. Math. No. 6* (1978), 1-7. (M. Fukushima) **58** #1533 35B45 (60J35)
- Tomishima, Hakaru** (with Inagaki, Eiichi; Hisamura, Tomiji) Optimal pulse-type control of distributed parameter systems. *Bull. Sci. Engng. Res. Lab. Waseda Univ. No. 69* (1975), 80-91. (J. E. Rubio) **53** #12690 93C20
- Tomita, Etsuji** (with Enomoto, Hajime) A representative set of strings for a deterministic finite-state automaton. *Systems-Computers-Controls* **7** (1976), no. 5, 55-63 (1977). (Sorin Istrail) **57** #19170 94A30
- Tomita, Hiroyuki** (with Itō, Akira; Kidachi, Hideyuki) Eigenvalue problem of metastability in macrosystem. *Prog. Theoret. Phys.* **56** (1976), no. 3, 786-800. (M. Drăganu) **54** #12080 82.35
- Tomita, Kazuhisa** (with Itō, Akira; Ohta, Takao) Simplified model for Belousov-Zhabotinsky reaction. *J. Theoret. Biol.* **68** (1977), no. 4, 459-481. (Authors' summary) **58** #8850 80.65
- Tomita, M.** Retirement of Tsuneo Suguri. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **31** (1977), no. 2, 127-131. (Editors) **58** #96 01A70
- Tomita, Shingo** (with Noguchi, Shoichi; Oizumi, Juro) Theory of feature extraction for patterns by the Karhunen-Loève orthogonal system. *Systems-Computers-Controls* **1** (1970), no. 6, 55-62 (1971). **55** #9625 68A45 (62H30)
(with Noguchi, Shoichi; Oizumi, Juro) Pattern classification by the Karhunen-Loève orthogonal system without supervision. *Systems-Computers-Controls* **2** (1971), no. 5, 80-87. (Jana Zvárová) **51** #4757 68A45
(with Noguchi, Shoichi; Watanabe, Takashi) Relationship between organizing capability and information utilized for system organization. *Frontiers of pattern recognition (Proc. Internat. Conf., Univ. Hawaii, Honolulu, Hawaii, 1971)*, pp. 391-413. Academic Press, New York, 1972. (W. H. Schoendorf) **53** #9750 68A45 (62H30)
(with Noguchi, Shoichi; Watanabe, Takashi) On self-learning systems. *J. Cybernet.* **3** (1973), no. 1, 60-71. (W. Greblicki) **48** #10225 68A45 (92A10)
- Tomita, Shun-ichi** On the linear maps which are multiplicative on complex $*$ -algebras. *Sci. Rep. Niigata Univ. Ser. A* **No. 14** (1977), 47-51. (W. Żelazko) **56** #3639 46K05
- Tomita, Y.** (with Ohmatsu, Shigeru; Soeda, Takashi) Optimal filtering for discrete-time nonlinear systems. *IEEE Trans. Automatic Control* **AC-21** (1976), no. 1, 116-118. (Jean-Michel Bismut) **53** #15519 93E10
(with Omatu, Sigeru; Soeda, Takashi) An alternative expression of the mutual information for Gaussian processes. *IEEE Trans. Information Theory* **IT-22** (1976), no. 5, 593-595. (Authors' summary) **56** #5058 94A15
(with Ohmatsu, Shigeru; Soeda, Takashi) An application of the information theory to estimation problems. *Information and Control* **32** (1976), no. 2, 101-111. (Suguru Arimoto) **54** #9807 93E10
(with Omatu, Sigeru; Soeda, Takashi) An application of the information theory to the fixed-point smoothing problems. *Internat. J. Control* **23** (1976), no. 4, 525-534. (Lee D. Davisson) **54** #7076 93E10
(with Omatu, Sigeru; Soeda, Takashi) Fixed-point smoothing in Hilbert spaces. *Information and Control* **34** (1977), no. 4, 324-338. (S. G. Tzafestas) **56** #11400 93E10
- Tomita, Yoshihito** (with Kikuchi, Norio) On the absolute continuity of multi-functions and orientor fields. *Funkcial. Ekvac.* **14** (1971), 161-170. (M. Q. Jacobs) **46** #5791 34H05 (34A99, 49E10)
A semigroup treatment of the mixed problem for the Hamilton-Jacobi equation in one space variable. *Hiroshima Math. J.* **7** (1977), no. 1, 183-199. (J. A. Goldstein) **55** #3509 35F30
- Tomita, Yutaka** (with Omatu, Sigeru; Soeda, Takashi) Linear fixed-point smoothing by using functional analysis. *IEEE Trans. Automatic Control* **AC-22** (1977), no. 1, 9-18. (Authors' summary) **56** #2589 93E10
- Tomruk, Bohdan J.** Modular annihilator A^* -algebras. *Canad. Math. Bull.* **15** (1972), 421-426. (J. W. M. Ford) **47** #5608 46K05
Duality and the existence of weakly completely continuous elements in a B^* -algebra. *Glasgow Math. J.* **13** (1972), 56-60. (G. R. Allan) **47** #2367 46H05 (46L05)
(with Wong, Pak Ken) Weakly semi-completely continuous A^* -algebras. *Illinois J. Math.* **16** (1972), 653-662. (F. F. Bonsall) **47** #5609 46K05
(with Wong, Pak Ken) Annihilator and complemented Banach $*$ -algebras. *J. Austral. Math. Soc.* **13** (1972), 47-66. (J. W. M. Ford) **46** #4216 46K99
(with Malviya, B. D.) Multiplier operators on B^* -algebras. *Proc. Amer. Math. Soc.* **31** (1972), 505-510. (H. Porta) **46** #4215 46K99
Multipliers and duality in A^* -algebras. *Proc. Amer. Math. Soc.* **50** (1975), 281-288. (J. W. M. Ford) **51** #8834 46K15
Multipliers on Banach algebras. *Studia Math.* **54** (1975/76), no. 3, 267-283. (Pak-Ken Wong) **53** #6328 46H10
Multipliers on dual A^* -algebras. *Proc. Amer. Math. Soc.* **62** (1977), no. 2, 259-265. (Freda E. Alexander) **55** #6194 46K99 (46M05)
- Tomruk, J.** (with Haderl, K. P.) Periodic solutions of difference-differential equations. *Arch. Rational Mech. Anal.* **65** (1977), no. 1, 87-95. (T. G. Proctor) **56** #799 34K15
- Tomiyama, Jun** Projections of norm 1 in a von Neumann algebra. (Japanese) *Fifth Functional Analysis Symposium (Tōhoku Univ., Sendai, 1967)* (Japanese), pp. 89-99. *Math. Inst., Tōhoku Univ., Sendai, 1967*. (S. Sakai) **45** #7489 46L10
On some types of maximal abelian subalgebras. *J. Functional Analysis* **10** (1972), 373-386. (M. Takesaki) **49** #5876 46L10
Primitive ideals in tensor products of Banach algebras. *Math. Scand.* **30** (1972), 257-262. (Pak-Ken Wong) **48** #12079 46M05
Applications de Fubini dans les produits tensoriels infinis d'algèbres de von Neumann. *Bull. Yamagata Univ. Natur. Sci.* **8** (1973), no. 3, 361-368. (S. Sankaran) **50** #5493 46L10
(with Akemann, Charles A.; Pedersen, Gert Kjaergård) Multipliers of C^* -algebras. *J. Functional Analysis* **13** (1973), 277-301. (Authors' summary) **57** #10431 46L05
(with Takemoto, Hideo) On the topological reduction of finite von Neumann algebras. *Tōhoku Math. J. (2)* **25** (1973), 273-289. (J. Vesterstrøm) **49** #7796 46L10
The multipliers and derivations of C^* -algebras. (Japanese) *Sūgaku* **26** (1974), no. 4, 319-329. (Editors) **58** #30303 46L05
Derivations of C^* -algebras which are not determined by multipliers in any quotient algebra. *Proc. Amer. Math. Soc.* **47** (1975), 265-267. (L. Longdon) **50** #8097 46L05
Tensor products and approximation problems of C^* -algebras. *Publ. Res. Inst. Math. Sci.* **11** (1975/76), no. 1, 163-183. (Takateru Okayasu) **53** #1286 46L05 (46M05)
Derived algebras of C^* -algebras. *C^* -algebras and their applications to statistical mechanics and quantum field theory (Proc. Internat. School of Physics "Enrico Fermi", Course LX, Varenna, 1973)*, pp. 147-153. North-Holland, Amsterdam, 1976. (Editors) **58** #30304 46L05
Fubini algebra and the commutation theorem of tensor product of C^* -algebras. *Symposia Mathematica, Vol. XX (Convegno sulle Algebre C^* e loro Applicazioni in Fisica Teorica, Convegno sulla Teoria degli Operatori Indice e Teoria K , INDAM, Rome, 1975)*, pp. 27-37. Academic Press, London, 1976. (Christopher Lance) **56** #9275 46L05
(with Akemann, Charles A.; Elliott, George A.; Pedersen, Gert Kjaergård) Derivations and multipliers of C^* -algebras. *Amer. J. Math.* **98** (1976), no. 3, 679-708. (S. Sakai) **54** #13579 46L05
On the Fubini product of von Neumann algebras. Collection of articles dedicated to Isuke Satō. *Bull. Yamagata Univ. Natur. Sci.* **9**, no. 1, 53-56 (1976). (H. Halpern) **54** #8310 46L10
On flows and function algebras. (Japanese) *Function algebras and their applications. Sūgaku* **28** (1976), no. 1, 35-46, 87-95. (Kazuyuki Saitō) **58** #30271 46J10 (46C10)
Approximation problems in C^* -algebras. (Japanese) *Approximation theory in functional analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1975). Sūrikaiseikenkyūsho Kōkyūroku No. 265* (1976), 76-88. (Kiyoko Nishizawa) **58** #7107 46L05
(with Kawamura, Shinzō) On subdiagonal algebras associated with flows in operator algebras. *J. Math. Soc. Japan* **29** (1977), no. 1, 73-90. (Richard I. Loeb) **56** #12899 46L05
(with Yabuta, Kōzō) Toeplitz operators for uniform algebras. *Tōhoku Math. J. (2)* **30** (1978), no. 1, 117-129. (M. B. Abrahamse) **58** #2302 46J10 (47B35)
- Tomizawa, Nobuaki** On some techniques useful for solution of transportation network problems. *Networks* **1** (1971/72), 173-194. (I. T. Frisch) **45** #6404 90B10
On a specialization sequence from general matroids to ladder graphs with special emphasis on the characterization of ladder matroids. *RAAG Res. Notes* (3) **No. 191**

- 973), i+22 pp. (R. A. Brualdi) **52** #7941 05B35 (94A20)
 (with Iri, Masao) An algorithm for determining the rank of a triple matrix product XB with application to the problem of discerning the existence of the unique solution of a network. *Electron. Commun. Japan* **57** (1974), no. 11, 50-57. (Authors' summary) **6** #10880 90B10 (65F30)
 (with Iri, Masao) A unifying approach to fundamental problems in network theory by means of matroids. *Electron. Commun. Japan* **58** (1975), no. 1, 28-35. (András Itecski) **56** #5069 94A20
 Strongly irreducible matroids and principal partition of a matroid into strongly irreducible minors. *Electron. Commun. Japan* **59** (1976), no. 2, 1-10. (Thomas Trylowski) **56** #5337 05B35
 (with Iri, Masao) An algorithm for finding an optimal "independent assignment". *Operations Res. Soc. Japan* **19** (1976), no. 1, 32-57. (Robert E. Bixby) **54** #4641 90C10
Iizuka, Masayoshi Optimal continuous finite preview problem. *IEEE Trans. Automatic Control* **AC-20** (1975), 362-365. (Kimio Kanai) **55** #7553 93E20
Jones, R. James Some probability inequalities related to the law of large numbers. *Ann. Math. Statist.* **43** (1972), 230-235. (A. De Hoyos) **45** #7789 60F05
 A generalization of Kolmogorov's law of the iterated logarithm. *Proc. Amer. Math. Soc.* **32** (1972), 268-274. (T. Kawata) **45** #1229 60F05
 On the equivalence of modes of convergence. *Canad. Math. Bull.* **16** (1973), 571-575. (M. Nosal) **50** #14860 60A10 (28A20)
 (with Resnick, Sidney I.) Almost sure stability of maxima. *J. Appl. Probability* **10** (1973), 387-401. (R. W. Shorrock) **50** #3320 60F20 (60J10)
 On the law of the iterated logarithm for double sequences of random variables. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **30** (1974), 303-314. (H. H. Stratton) **53** #9348 60F15
 Iterated logarithm results for weighted averages of martingale difference sequences. *Ann. Probability* **3** (1975), 307-314. (G. K. Eagleson) **51** #9174 60F15 (60G45)
 On conditional medians. *Ann. Probability* **3** (1975), 375-379. (M. Csorgo) **52** #6806 60A10
 Properties of martingale-like sequences. *Pacific J. Math.* **61** (1975), no. 2, 521-525. (Louis Blake) **53** #4221 60G45
 A law of the iterated logarithm for martingales. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **33** (1975/76), no. 1, 65-68. (H. Teicher) **52** #15624 60F15
 On the growth rate of weighted averages of exponential random variables. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 1-2, 97-99. (J. Sethuraman) **54** #3825 60F15
 Strong limit theorems for certain arrays of random variables. *Ann. Probability* **4** (1976), no. 3, 444-452. (Shigeru Takahashi) **53** #6699 60F15
 On the law of the iterated logarithm. *Ann. Probability* **6** (1978), no. 1, 162-168. (H. Teicher) **58** #18691 60F15
Johnson, M. J. Maximal nilpotent subgroups of finite soluble groups. *J. London Math. Soc.* (2) **9** (1974/75), 35-45. (D. Woodhouse) **51** #8241 20D10
 Sylowizers in locally finite groups. *Proc. Amer. Math. Soc.* **46** (1974), 195-198. (D. S. Robinson) **50** #2341 20E25
 Prefrattini subgroups and cover-avoidance properties in U -groups. *Canad. J. Math.* **27** (1975), no. 4, 837-851. (T. O. Hawkes) **52** #8254 20E20
 Extraspecial sections of periodic FC -groups. *Compositio Math.* **31** (1975), no. 3, 285-302. (John S. Wilson) **54** #5359 20F50
 A Frattini-like subgroup. *Math. Proc. Cambridge Philos. Soc.* **77** (1975), 247-257. (H. Lausch) **52** #3332 20E15
 (with Hartley, B.) Splitting over nilpotent and hypercentral residuals. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), no. 2, 215-226. (R. Göbel) **52** #3336 20E30
 Cover-avoidance properties in finite soluble groups. *Canad. Math. Bull.* **19** (1976), no. 2, 213-216. (H. Bechtell) **55** #5737 20D10
 Residually finite periodic FC -groups. *J. London Math. Soc.* (2) **16** (1977), no. 2, 221-228. (Zbl 371 #20027) **58** #22308 20E25
 Formation theory and groups of automorphisms of U -groups. *Proc. Roy. Soc. Edinburgh Sect. A* **76**, no. 4, 255-265 (1977). (B. Amberg) **56** #15773 20E15
 Splitting theorems in abelian-by-hypercyclic groups. *J. Austral. Math. Soc. Ser. A* **25** (1978), no. 1, 71-91. (R. Göbel) **58** #900 20E10 (20D10)
 Supersolubility conditions and a Frattini-like subgroup. *Quart. J. Math. Oxford Ser.* (2) **29** (1978), no. 113, 93-99. (D. J. S. Robinson) **58** #11129 20E20
Kó, József The estimate of the remainder term in the central limit theorem for sums of random number of summands. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* **16** (1971), 164-172. (Harry I. Cohn) **47** #4319 60F05
 The rate of convergence in limit theorems for service systems with finite queue capacity. *J. Appl. Probability* **9** (1972), 87-102. (J. Keilson) **46** #6508 60K25
 A first passage problem for integrated renewal processes. *Inventory control and water storage (Proc. Conf., Győr, 1971)*, pp. 305-312. *Colloq. Math. Soc. János Bolyai*, No. 7, North-Holland, Amsterdam, 1973. (H. Teicher) **51** #1993 60K05
 On the rarefaction of multivariate point processes. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 843-860. *Colloq. Math. Soc. János Bolyai*, Vol. 9, North-Holland, Amsterdam, 1974. (David Oakes) **51** #11693 60K15
 CPU utilisation study. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* **1** (1975), no. 3-4, 319-331. (Author's summary) **57** #11220 68A99
 CPU utilization study. II. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* **3** (1977), no. 1-2, 83-96. (Author's summary) **58** #8589 68A99
Lin, Geoffrey R. An optimal successive overrelaxation technique for solving second order finite difference equations for triangular meshes. *Internat. J. Numer. Methods Engrg.* **5** (1972), 25-39. (J. Mikliček) **46** #10217 65N05
Lin, J. A. Branch and bound methods for integer and non-convex programming. *Integer and nonlinear programming*, pp. 437-450. North-Holland, Amsterdam, 1970. (Editors) **55** #9971 90C10 (90C30)
 An improved branch-and-bound method for integer programming. *Operations Res.* **9** (1971), 1070-1075. (Csaba Fabian) **46** #10404 90C10
 Maintaining a sparse inverse in the simplex method. Mathematics of numerical computation. *IBM J. Res. Develop.* **16** (1972), 415-423. **48** #7966 90C05
 (with Forrest, J. J. H.) Updated triangular factors of the basis to maintain sparsity in the product form simplex method. *Math. Programming* **2** (1972), 263-278. (I. Marušciac) **46** #6812 90C05
 (with Beale, E. M. L.) An integer programming approach to a class of combinatorial problems. *Math. Programming* **3** (1972), 339-344. (G. Berman) **47** #6309 90C10
 (with Forrest, J. J. H.; Hirst, J. P. H.) Practical solution of large mixed integer programming problems with UMPIRE. Mathematical programming. *Management Sci.* **20** (1973/74), 736-773. (M. Rössler) **49** #12082 90C10
 On pricing and backward transformation in linear programming. *Math. Programming* **6** (1974), 42-47. (K. Swarp) **49** #2088 90C05
 Generalized upper bounds and triangular decomposition in the simplex method. *Operations Res.* **22** (1974), no. 3, 664-668. (E. M. L. Beale) **56** #10942 90C05
 An accuracy test for updating triangular factors. *Computational practice in mathematical programming*, pp. 142-145. *Math. Programming Studies*, Vol. 4, North-Holland, Amsterdam, 1975. (I. Marušciac) **52** #10031 90C05
 On scaling linear programming problems. *Computational practice in mathematical programming*, pp. 146-166. *Math. Programming Studies*, Vol. 4, North-Holland, Amsterdam, 1975. (A. B. Pevnyi) **52** #7531 90C05
 Robust implementation of Lemke's method for the linear complementarity problem. Complementarity and fixed point problems. *Math. Programming Stud. No. 7* (1978), 55-60. (Ulrich Eckhardt) **57** #8014 65K05 (65G05)
Tomlin, John A. See *Sparse matrices and their applications*, **48** #10075
Tomlinson, Rolfe (with Waddington, Conrad H.; Goodeve, Charles) Appreciation: Lord Blackett. *Operational Res. Quart* **25** (1974), i-viii. (Editors) **55** #60 01A70 (90-03)
di Tommaso, Angelo See *Di Tommaso, Angelo*
Tomoda, Kenji (with Shintani, Hisayoshi) Stability of difference schemes for nonsymmetric linear hyperbolic systems with variable coefficients. *Hiroshima Math. J.* **7** (1977), no. 1, 309-378. (Philip Brenner) **56** #7235 65M10
 Stability of difference schemes for nonsymmetric linear hyperbolic systems. *Hiroshima Math. J.* **7** (1977), no. 3, 787-812. (A. O. Garder) **57** #1915 65M10
Tomonaga, Yasurō (with Hiyama, Sumiko) On the zeros of the Riemann zeta-function. *Bull. Fac. Ed. Utsunomiya Univ. Sect. 2 No. 19* (1969), 1-3. (Lowell Schoenfeld) **52** #8055 10H05
 (with Hiyama, Sumiko) On the zeros of the Riemann zeta-function. II. *Bull. Fac. Ed. Utsunomiya Univ. Sect. 2 No. 20* (1970), 1-5. (Lowell Schoenfeld) **52** #8056 10H05
 A generalization of conjugate points. *TRU Math.* **6** (1970), 33-37. (E. T. Davies) **46** #8129 53C20
 Euler-Poincaré characteristic and sectional curvature. *Differential geometry (in honor of Ketaro Yano)*, pp. 501-502. *Kinokuniya, Tokyo*, 1972. (Ngô van Quê) **48** #12407 53C20
 Pontrjagin classes of Riemannian manifolds of class 2. *Hokkaido Math. J.* **1** (1972), 114-116. (M. C. Chaki) **47** #7665 53C40
 Pontrjagin classes of Riemannian manifolds whose class is less than 5. *TRU Math.* **9** (1973), 13-17. (A. Martínez Naveira) **50** #1175 53C40
 ★Geometry of length and area. I. *Dept. of Mathematics, Utsunomiya University, Utsunomiya*, 1974. ii+64 pp. (C. M. Petty) **55** #3977 52A40
 ★Some properties of closed convex hypersurfaces. Report No. 1. *Utsunomiya University, Utsunomiya*, 1975. 10 pp. (Author's review) **58** #24095a 53B25
 ★Volume and area of closed convex hypersurfaces. Report No. 2 (1976). *Department of Mathematics, Utsunomiya University, Utsunomiya*, 1976. i+11 pp. (W. J. Firey) **58** #7402 52A40
 ★Some properties of closed convex hypersurfaces. II. Report No. 3. *Department of Mathematics, Utsunomiya University, Utsunomiya*, 1976. i+14 pp. (Author's review) **58** #24095b 53B25
Tomov, I. Synthesis of optimal discretely continuous linear control systems. (Bulgarian. Russian and English summaries) *Avtomat. Izčisl. Tehn.* **11** (1977), no. 5, 2, 3, 5-14. (Author's summary) **58** #26303 93C05
Tomov, I. I. See *Problems of statistical optimization*, **47** #6378
Tomov, Valentin (with B'rnev, Pet'r; B'rneva, Margarita) Transformation of the syntax of algorithmic languages in connection with the creation of syntactically controllable translators. (Bulgarian. Russian and English summaries) *B'lgar. Akad. Nauk Odel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **13** (1972), 105-124. (Authors' summary) **54** #11830 68A05 (68A30)
Tomová, Eliška On the decomposition of the complete directed graph into factors with given diameters. *Mat. Časopis Sloven. Akad. Vied* **20** (1970), 257-261. (J. Bosák) **46** #8894 05C20
 On the decomposition of complete bipartite graphs into factors with given diameters. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 507-509. *Academia, Prague*, 1975. (J. Bosák) **54** #2528 05C35
 Decomposition of complete bipartite graphs into factors with given diameters. (Russian summary) *Math. Slovaca* **27** (1977), no. 2, 113-128. (A. Rosa) **57** #16148 05C99
Tomović, R. See *Control in space*, **48** #8041
Tomozawa, Yukio Quasinormal distributions and expansion at the mode. *J. Statist. Phys.* **11** (1974), 195-205. (Ju. V. Borovskii) **53** #9456 62E15
 (with Machacek, M.) $SU(6)$ isoscalar factors for the product $405 \times 56 \rightarrow 56, 70$. *J. Mathematical Phys.* **17** (1976), no. 4, 458-462. (Daniel A. Kyeampong) **53** #4776 81.22
Tomba, F. W. See *Advances in computers*, **50** #3630
Tompkins, Edythelena A. See *Proceedings: Berkeley Symposium on Mathematical Statistics and Probability*, **52** #9427
Toms, Eric Correspondence on Franco Spisani's papers "Foundations of productive logic". With replies by Spisani. *Internat. Logic Rev. No. 14* (1976), 243-245. (Not reviewed) **02C10** (02A05)
 See also *Négation*, **48** #3692
Tomšič, Gabrijel ★Novi rezultati v neskončno dimenzionalni topologiji. (Slovenian) [New results in infinite-dimensional topology] Master's thesis. *Sveučilište u Zagrebu, Zagreb*, 1969. iii+118 pp. (C. Bessaga) **51** #1832 57A20 (58B05)
 Homogeneous spectral measures. *Publ. Dept. Math. (Ljubljana)* **6** (1971/73), 37-49 (1974). (Frank Forelli) **49** #7830 47B15

- Homogeneous operators. *Studia Math.* **51** (1974), 1-5. (A. Lambert) **50** #10881 47B15
- Homogeneous normal operators. *Math. Balkanica* **5** (1975), 276-278. (Editors) **58** #23715 47B15
- Skew-symmetric operators on real Banach spaces. (Slovenian summary) *Glasnik Mat. Ser. III* **12**(32) (1977), no. 1, 93-97. (P. A. Fillmore) **57** #10478 47B15
- Fast Fourier transform. (Slovenian. English summary) *Obzornik Mat. Fiz.* **24** (1977), no. 3, 69-76. (Author's summary) **56** #4208 65T05
- See also **Publications: Department of Mathematics**, **51** #15
- Tomskii, G. V.** The approximation of parametric differential games. (Russian. English and Lithuanian summaries) *Mat. Metody v Social. Nauk.—Trudy Sem. Processy Optimal. Upravleniya II Sekcija Vyp.* **5** (1975), 63-68. (Author's summary) **56** #2443 90D25
- Existence of a value in semi-dynamical games. (Russian) *Mat. Zametki* **22** (1977), no. 3, 401-410. (Milan Medved) **56** #17860 90D15
- Tomsky, Jack** (with McNolty, Frank) Some properties of special-function, bivariate distributions. *Sankhyā Ser. B* **34** (1972), 251-264. (Benjamin Epstein) **49** #1646 62E15
- Tomsky, T. L.** (with Olkin, Ingram) A new class of multivariate tests based on the union-intersection principle. Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1974), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 202-204 (1976). (D. G. Kabe) **57** #1766 62H15
- Tomson, M. A.** Transformation of the Krylov method for the solution of ordinary differential equations on a computer. (Russian) *Some boundary value problems of ordinary differential equations* (Russian), pp. 104-115. *Univ. Družby Narodov, Moscow*, 1970. (I. Šelihova (RŽMat 1971 #4 B904)) **50** #15355 65L05
- Tomter, Per** ★Transformation groups on cohomology product of spheres. *Mathematics Preprint Series*, No. 14 (1973). *Matematisk Institutt, Universitetet i Oslo, Oslo*, 1973. i+15 pp. (Editors) **52** #15442 55C35 (57E10)
- Transformation groups on cohomology product of spheres. *Invent. Math.* **23** (1974), 79-88. (G. E. Bredon) **48** #12510 55C35 (57E10)
- On the classification of Anosov flows. *Topology* **14** (1975), 179-189. (A. Morimoto) **51** #14161 58F15 (22E40)
- Orbit structure for Lie group actions on higher cohomology projective spaces. *Transformation groups* (Proc. Conf., Univ. Newcastle upon Tyne, Newcastle upon Tyne, 1976), pp. 204-225. *London Math. Soc. Lecture Note Series*, No. 26. *Cambridge Univ. Press, Cambridge*, 1977. (Theodore Chang) **56** #13242 57E25 (57E15)
- Tomusjak, A. A.** Computation of the ergodic distribution of Markov and semi-Markov processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 1, 68-71. (Author's summary) **46** #953 60J05
- (with Koroljuk, V. S.; Poliščuk, L. I.) A certain limit theorem for semi-Markov processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 4, 144-145. (B. Sevast'janov (RŽMat 1970 #2 V59)) **46** #971 60K15
- (with Koroljuk, V. S.) Certain stationary characteristics of semi-Markov processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 5, 65-68. (A. Leonte) **46** #2754 60K15
- Tomuța, Floare Iléana** On a certain system of functional equations. (Romanian. French summary) *Bul. Ști. Inst. Politehn. Cluj* **13** (1970), 55-58. (V. Barbu) **47** #9113 39A30
- Tomčevskii, I. V.** (with Rjabov, Ju. A.) Construction of solutions of linear integro-differential equations with a small parameter. (Russian) *Mat. Fiz. Vyp.* **22** (1977), 31-40, 123. (V. B. Dybin) **57** #14553 65R05 (45J05)
- Ton, Bui An** Boundary value problems for elliptic convolution equations of Wiener-Hopf type in a bounded region. *Pacific J. Math.* **26** (1968), 395-413. (Author's summary) **58** #17513 35J99 (35S15)
- On the asymptotic behavior of the spectral function of elliptic pseudo-differential operators. *Illinois J. Math.* **14** (1970), 452-463. (Editors) **54** #755 35P20 (47G05)
- Nonlinear evolution equations in Banach spaces. *J. Differential Equations* **9** (1971), 608-618. (D. G. de Figueiredo) **45** #9220 47H15
- Pseudo-monotone operators in Banach spaces and nonlinear elliptic equations. *Math. Z.* **121** (1971), 243-252. (R. Nussbaum) **45** #2543 47H05 (35J60)
- On nonlinear parabolic variational inequalities. *Indiana Univ. Math. J.* **22** (1972/73), 327-337. (A. Pazy) **46** #9805 47F05 (35K55)
- On the Hölder-continuity of solutions of a nonlinear parabolic variational inequality. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 345-357. (V.-V. Olariu) **51** #13457 35K20 (35D10)
- On non-coercive strongly nonlinear elliptic variational inequalities. *Math. Z.* **132** (1973), 287-296. (K. Goebel) **49** #11048 35J60 (47H15)
- On strongly nonlinear elliptic variational inequalities. *Pacific J. Math.* **48** (1973), 279-291. (D. Pascali) **52** #15155 47H15 (35J60)
- On the behavior of the solution of the Burgers equation as the viscosity goes to zero. *J. Math. Anal. Appl.* **49** (1975), 713-720. (Clarence M. Ablow) **51** #6193 35Q99
- Non-stationary Burgers flows with vanishing viscosity in bounded domains of \mathbb{R}^3 . *Math. Z.* **145** (1975), no. 1, 69-79. (Zbl 314 #35073) **58** #23187 35Q99
- Nonlinear evolution equations of Sobolev-Galpern type. *Math. Z.* **151** (1976), no. 3, 219-233. (R. E. Showalter) **54** #13653 47H15 (35Q99)
- Initial boundary value problems for the Korteweg-de Vries equation. *J. Differential Equations* **25** (1977), no. 3, 288-309. (From the introduction) **58** #6762 35Q99
- On a free boundary problem for a nonlinear coupled system of evolution equations of oceanography. *Math. Z.* **158** (1978), no. 2, 125-136. (From the author's introduction) **57** #8973 86J35 (35Q99)
- Tonascia, J.** (with Brillhart, John D.; Weinberger, Peter J.) On the Fermat quotient. *Computers in number theory* (Proc. Sci. Res. Council Atlas Sympos. No. 2, Oxford, 1969), pp. 213-222. *Academic Press, London*, 1971. (J. Riordan) **47** #3288 10A10
- Tomčev, N. S.** (with Zagrebnov, V. A.; Brankov, I. G.) A rigorous result on systems that interact with a boson field. (Russian) *Dokl. Akad. Nauk SSSR* **225** (1975), no. 1, 71-73. (D. Ja. Petrina) **52** #16367 81A6
- (with Brankov, I. G.; Zagrebnov, V. A.) Asymptotically exact solution for the generalized Dicke model. (Russian. English summary) *Teoret. Mat. Fiz.* **22** (1975), no. 1, 20-30. (Authors' summary) **58** #9003 82A7
- (with Brankov, I. G.; Zagrebnov, V. A.) A nonpolynomial generalization of exactly soluble models in statistical mechanics. *Ann. Physics* **107** (1977), no. 1-2, 82-94. (C. A. Hurst) **56** #14464 82G60
- Tomčev, V. D.** A new class of majority logic decodable codes. *C. R. Acad. Bulg. Sci.* **29** (1976), no. 8, 1091-1094. (S. Guiaşu) **56** #5046 94A10
- Self orthogonal codes and resolvable designs. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 9, 1235-1237. (N. J. A. Sloane) **57** #2937 05B05 (94A10)
- Tomchev, N. S.** See **Tomčev, N. S.**
- Tomchev, V. D.** See **Tomčev, V. D.**
- Tondeur, Philippe** (with Kamber, Franz W.) ★Invariant differential operators and the cohomology of Lie algebra sheaves. *Memoirs of the American Mathematical Society*, No. 113. *American Mathematical Society, Providence, R. I.*, 1971. i+125 pp. (D. B. Fuks) **54** #1250 57D30 (57E99, 22E45)
- (with Kamber, Franz W.) Invariant differential operators and cohomology of Lie algebra sheaves. *Differentialgeometrie im Großen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 177-230. *Ber Math. Forschungsinst. Oberwolfach, Heft 4, Bibliographisches Inst., Mannheim*, 1971. (D. B. Fuks) **51** #6843 57D30
- (with Kamber, Franz W.) Cohomologie des algèbres de Weil relatives tronquées. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A459-A462. (H. Suzuki) **47** #9660 57F15 (17B55, 18G40, 22E60, 57D30)
- (with Kamber, Franz W.) Algèbres de Weil semi-simpliciales. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1177-A1179. (H. Suzuki) **47** #9661 57F15 (17B55, 18G40, 22E60, 57D30)
- (with Kamber, Franz W.) Homomorphisme caractéristique d'un fibré principal feuilleté. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1407-A1410. (H. Suzuki) **47** #9662 57F15 (17B55, 18G40, 22E60, 57D30)
- (with Kamber, Franz W.) Classes caractéristiques dérivées d'un fibré principal feuilleté. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A1449-A1452. (H. Suzuki) **51** #4271 57D30
- (with Kamber, Franz W.) Classes caractéristiques généralisées des fibrés feuilletés localement homogènes. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 847-850. (H. Suzuki) **51** #4272 57D30
- (with Kamber, Franz W.) Quelques classes caractéristiques généralisées non triviales de fibrés feuilletés. *C. R. Acad. Sci. Paris Sér. A* **279** (1974), 921-924. (H. Suzuki) **51** #14095 57D30 (57D20)
- (with Kamber, Franz W.) Characteristic invariants of foliated bundles. *Manuscripta Math.* **11** (1974), 51-89. (H. Suzuki) **48** #12556 57D30
- (with Kamber, Franz W.) ★Foliated bundles and characteristic classes. *Lecture Notes in Mathematics*, Vol. 493. *Springer-Verlag, Berlin-New York*, 1975. xiv+208 pp. (D. B. Fuks) **53** #6587 57D30
- (with Kamber, Franz W.) Semisimplicial Weil algebras and characteristic classes for foliated bundles in Čech cohomology. *Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Stanford Univ., Stanford, Calif., 1973), Part 1*, pp. 283-294. *Amer. Math. Soc., Providence, R. I.*, 1975. (D. B. Fuks) **52** #6745 57D30 (57D20)
- (with Kamber, Franz W.) Non-trivial characteristic invariants of homogeneous foliated bundles. *Ann. Sci. École Norm. Sup.* (4) **8** (1975), no. 4, 433-486. (D. B. Fuks) **52** #15499 57D30
- (with Kamber, Franz W.) Classes caractéristiques et suites spectrales d'Eilenberg-Moore. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 12, A1, A883-A886. (D. B. Fuks) **55** #4203 57D30 (55H20)
- Tondi, Adriana** (with Barbieri, Francesco) Aspetti algebrici ed analitici della relazione di Steiner. *Atti Sem. Mat. Fis. Univ. Modena* **25** (1976), no. 2, 263-273. (Natalia Berruti Onesti) **57** #17444 49A30
- Tondl, Ladislav** On the problem of semantic information. (Russian. Czech summary) *Kybernetika (Prague)* **8** (1972), 189-212. (I. Ruzsa) **48** #13479 94A15
- Semantic evaluation of the components of Ledley and Lusted's diagnostic model. (Czech summary) *Kybernetika (Prague)* **8** (1972), 535-556. (I. Ruzsa) **48** #13480 94A15 (92A99)
- Semantic evaluation of prognostic statements on the base of probabilistic parameters. *Kybernetika (Prague)* **10** (1974), 199-220. (P. Suppes) **51** #11909 62P99
- Types of preference. *Kybernetika (Prague)* **10** (1974), 389-408. (Kit Fine) **52** #2809 02A05
- The problem of an information synonymy. (Russian) *Kybernetika (Prague)* **11** (1975), 39-52. (A. A. Mullin) **53** #12860 02A05 (94A15)
- On the concept of information synonymy. *Theory and Decision* **8** (1977), no. 3, 273-287. (Jan Berg) **57** #15945 02A05 (94A15)
- Tondra, Richard J.** The domain rank of open surfaces of infinite genus. *Proc. Amer. Math. Soc.* **28** (1971), 581-583. (F. Raymond) **45** #5979 57A05
- A property of manifolds compactly equivalent to compact manifolds. *Pacific J. Math.* **42** (1972), 539-541. (R. Bean) **47** #4267 57A15
- (with Tollefson, Jeffrey L.) Seifert spaces and extensions of groups with centre. *Quart. J. Math. Oxford Ser. (2)* **23** (1972), 401-416. (Wolfgang H. Heil) **52** #1701 57A10
- (with Cain, Bryan E.) Biholomorphic approximation of planar domains. *Pacific J. Math.* **52** (1974), 341-345. (N. Suita) **51** #868 30A24
- The domain rank of a surface is countable. *Proc. Amer. Math. Soc.* **48** (1975), 483-490. (P. T. Church) **51** #1826 57A05
- A parametrization of Benders decomposition. *Keio Engrg. Rep.* **29** (1976), no. 5, 53-60. (Gerard G. L. Meyer) **58** #9284 90C30
- On optimal pattern flows. *J. Operations Res. Soc. Japan* **20** (1977), no. 2, 77-93. (Rainer Burkard) **56** #10881 90B10
- Tone, Kaoru** A method for nonconvex quadratic programming. *Keio Engrg. Rep.* **27** (1974), no. 8, 113-125. (S. P. Aggarwal) **53** #12588 90C20
- An algorithm for finding all extremal rays of polyhedral convex cones with some complementarity conditions. *J. Operations Res. Soc. Japan* **18** (1975), no. 1-2, 97-109. (Nimrod Megiddo) **53** #12602 90C30
- Postoptimization of quadratic programming. *Keio Engrg. Rep.* **29** (1976), no. 1, 1-6. (Richard S. Sacher) **55** #2134 90C20
- Tone, Noriko** On Abelian groups with a certain property on essential subgroups. *Comment. Math. Univ. St. Paul.* **19** (1971), 127-129. (L. Bican) **45** #6922 20K99

- Toma V.** Orbit-preserving homeomorphisms of abstract dynamical systems. (Russian. English summary) *Annuaire Univ. Sofia Fac. Math. Méc.* **68** (1973/74), 17-225 (1977). (N. G. Markley) **58** #24216 54H15
- The Bohr-van Kampen theorem on semigroups. (Russian) *Teor. Funkcii i funktsional. Anal. i Prilozhen. No. 17* (1973), 163-169, 245. (Edwin Hewitt) **48** #6821 3A60 (22A20)
- Algebraic similarities of dynamical homeomorphisms with compact time. (Russian) Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974), *Math. Balkanica* **4** (1974), 609-616. (Helmut Ludescher) **53** #14455 54H15
- Algebraic similarities of homeomorphisms of abstract dynamical systems. (Russian) *Uspehi Mat. Nauk* **29** (1974), no. 1(175), 191-192. (Helmut Ludescher) **52** #15413 54H15
- Canonical decomposition of semigroup mappings in an algebra. (Russian) *C. R. Acad. Bulgare Sci.* **28** (1975), no. 3, 291-294. (B. R. Gelbaum) **53** #13467 22A99 46J10
- A homotopy classification of some classes of continuous mappings determined on semigroups. (Bulgarian. Russian and English summaries) *Mathematics and mathematical analysis (Proc. Third Spring Conf. Bulg. Math. Soc., Burgas, 1974)* (Bulgarian), pp. 276-281, *B"lgar. Akad. Nauk, Sofia*, 1976. (See Zbl **354** #46039) 46H20 (47D05)
- Cohomotopy groups $\pi_n^{n,n-1}$ of the space of maximal ideals. (Russian) *Serdica* **2** (1976), no. 2, 143-148. (L. Longdon) **55** #1096 46M20 (46J20)
- Alfred E.** (with Wilken, Donald R.) The uncomplemented subspace $K(E, F)$. *Studia Math.* **37** (1970/71), 227-236. (J. R. Holub) **45** #9106 46B05 (47B05)
- On the existence of noncompact bounded linear operators between certain Banach spaces. *Israel J. Math.* **10** (1971), 451-456. (M. M. Day) **45** #5722 46B05 (47B99)
- Nuclear mappings on $C(X)$. *Math. Ann.* **194** (1971), 213-224. (A. Pelczyński) **45** #4204 47B10 (46E15)
- (with Wilken, Donald R.) Weak and norm sequential convergence in $M(S)$. *J. Austral. Math. Soc.* **15** (1973), 1-6. (J. F. Smith) **47** #7405 46E15
- (with Cho, Tae Geun) A note on the Radon-Nikodym theorem. *Proc. Amer. Math. Soc.* **39** (1973), 530-534. (C. W. Swartz) **47** #3634 28A45 (28A15, 46G10, 47B05)
- Abstract representing kernels. *J. Reine Angew. Math.* **271** (1974), 77-94. (Zbl **321** #46035) **58** #30254 46G99 (47B05, 47G05)
- D. M.** (with Kung, H. T.) Fast algorithms for partial fraction decomposition. *SIAM J. Comput.* **6** (1977), no. 3, 582-593. (R. P. Brent) **58** #13919 68A20 (68A10)
- Donald D. M.** (with Greenberg, James M.) Decay of periodic solutions of $\partial u / \partial t + \partial(u f) / \partial x = 0$. *J. Math. Anal. Appl.* **43** (1973), 56-71. (D. Ramakrishna Rao) **47** #9026 35B10
- H.** (with Subba Rao, T.) A test for time-dependence of linear open-loop systems. *J. Roy. Statist. Soc. Ser. B* **34** (1972), 235-250. (E. Parzen) **54** #9020 62M15
- (with Priestley, M. B.; Subba Rao, T.) Identification of the structure of multivariable stochastic systems. *Multivariate analysis, III (Proc. Third Internat. Sympos., Wright State Univ., Dayton, Ohio, 1972)*, pp. 351-368. Academic Press, New York, 1973. (E. Parzen) **48** #10022 62M15 (62H25, 93E10)
- (with Subba Rao, T.) On some tests for the time dependence of a transfer function. *Biometrika* **60** (1973), 589-597. (P. H. Diananda) **51** #7208 62M15 (93C05)
- Some comments on spectral representations of non-stationary stochastic processes. *J. Appl. Probability* **10** (1973), 881-885. (T. Kawata) **50** #11411 60G10
- (with Priestley, M. B.) On the analysis of bivariate non-stationary processes. With comments by M. S. Bartlett, A. M. Walker, T. Subba Rao, M. D. Godfrey, W. D. Ray, H. E. Daniels, J. Durbin, and a reply by M. B. Priestley and H. Tong and by J. K. Hammond. *J. Roy. Statist. Soc. Ser. B* **35** (1973), 153-166, 179-188. (T. Pitcher) **49** #1719 62M15
- Frequency-domain approach to the regulation of linear stochastic systems. (French, German and Russian summaries) *Automatica—J. IFAC* **10** (1974), 533-538. **56** #15066 93E10 (93E20)
- On time-dependent linear transformations of non-stationary stochastic processes. *J. Appl. Probability* **11** (1974), 53-62. (T. Kawata) **51** #1939 60G35 (93E10)
- A note on the estimation of $\Pr\{Y < X\}$ in the exponential case. *Technometrics* **16** (1974), 625. (Author's summary) **50** #15110 (E **51** #7112) (E **51** #7111) 62F10
- Determination of the order of a Markov chain by Akaike's information criterion. *J. Appl. Probability* **12** (1975), no. 3, 488-497. (I. J. Good) **52** #2091 62M05 (62B10)
- Errata: "A note on the estimation of $\Pr\{Y < X\}$ in the exponential case." (*Technometrics* **16** (1974), 625). *Technometrics* **17** (1975), no. 3, 395. (Editors) **51** #7112 62F10
- (with Sugiyama, Takakazu) On a statistic useful in dimensionality reduction in multivariable linear stochastic systems. *Comm. Statist.—Theory Methods* **A5** (1976), no. 8, 711-721. (Rashid Ahmad) **55** #9412 62H10
- On the estimation of $\Pr\{Y < X\}$ for exponential families. *IEEE Trans. Reliab.* **R-26** (1977), no. 1, 54-56. (A. P. Basu) **56** #1562 62F10 (62N05)
- See also **Hammond, J. K.**, **49** #1718; **Johnson, Norman L.**, **51** #7111; **Brown, R. Leonard**; et al., **51** #14478 and **Harrison, P. J.**; et al., **58** #31672
- Hing** (with Lorch, Edgar R.) Compactness, metrizable, and Baire isomorphism. *Acta Sci. Math. (Szeged)* **35** (1973), 1-6. (A. H. Stone) **49** #3852 54E35 (54H05)
- (with Lorch, Edgar R.) On the automorphisms of certain groups of permutations. Collection of articles in celebration of the sixtieth birthday of Ky Fan. *Bull. Inst. Math. Acad. Sinica* **2** (1974), 387-388. (J. D. Dixon) **50** #7362 (E **53** #13365) (EA **50**) 20F55
- (with Lorch, Edgar R.) Baire isomorphisms between certain non-metric spaces. (Italian summary) *Ann. Mat. Pura Appl.* (4) **103** (1975), 223-228. (E. J. Braude) **53** #9173 54H05
- (with Powderly, Mary; Kozłowski, George) On a problem of Alexandroff and Hopf. *Bull. Inst. Math. Acad. Sinica* **3** (1975), no. 1, 15-16. (R. Engelking) **53** #3985 54C10
- (with Lorch, Edgar R.) Corrigendum: "On the automorphisms of certain groups of permutations." (*Bull. Inst. Math. Acad. Sinica* **2** (1974), 387-388). *Bull. Inst. Math. Acad. Sinica* **3** (1975), no. 1, 191. (J. D. Dixon) **53** #13365 20B05
- (with Lorch, Edgar R.) On automorphisms of the group of Baire equivalences of a complete separable metric space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **60** (1976), no. 6, 749-750. (Authors' summary) **57** #17608 54H15 (20F55)
- See also **Aleksandrov, P. S.**; et al., **53** #78
- Tong, Howell** See System identification and time-series analysis, **50** #4006
- Tong, Kwok On** (with Russell, David A.) Viscous effects in tube flow initiated by an expansion wave. *AIAA J.* **15** (1977), no. 12, 1763-1769. (Authors' summary) **56** #10437 76J65
- Tong, Pin** (with Pian, Theodore H. H.; Bucciarelli, L. L.) Mode shapes and frequencies by finite element method using consistent and lumped masses. *Computers & Structures* **1** (1971), 623-638. (S. J. Sackett) **45** #6255 73J65
- (with Rossetto, John N.) ★Finite-element method. Basic technique and implementation. *The MIT Press, Cambridge, Mass.-London*, 1977. xi + 332 pp. ISBN 0-262-20032-5 (V. Komkov) **56** #17148 65N30
- Simplex elements of C^0 continuity with varying polynomial degrees. *Internat. J. Numer. Methods Engrg.* **11** (1977), no. 1, 27-38. (Reinhard Scholz) **56** #17149 65N30
- See also *Numerical methods in fluid dynamics*, **49** #10260
- Tong, R. M.** Analysis of fuzzy control algorithms using the relation matrix. *Internat. J. Man-Mach. Stud.* **8** (1976), no. 6, 679-686. (Not reviewed) 93C99
- Analysis and control of fuzzy systems using finite discrete relations. *Internat. J. Control* **27** (1978), no. 3, 431-440. (V. D. Dimitrov) **58** #15338 93A10 (93B10)
- Tong, Wen Ting** On the distribution of eigenvalues of some matrices. (Chinese) *Acta Math. Sinica* **20** (1977), no. 4, 272-275. (Ky Fan) **58** #22106 15A18
- Tong, Yue Lin L.** de Rham's integrals and Lefschetz fixed point formula for d^* -cohomology. *Bull. Amer. Math. Soc.* **78** (1972), 420-422. (M. F. Atiyah) **45** #5416 32C35
- Integral representation formulae and Grothendieck residue symbol. *Amer. J. Math.* **95** (1973), 904-917. (M. F. Atiyah) **51** #3497 32A25
- (with Toledo, Domingo) The holomorphic Lefschetz formula. *Bull. Amer. Math. Soc.* **81** (1975), no. 6, 1133-1135. (M. F. Atiyah) **53** #8477 32C10 (14F25)
- (with Toledo, Domingo) A parametrix for $\bar{\partial}$ and Riemann-Roch in Čech theory. *Topology* **15** (1976), no. 4, 273-301. (M. F. Atiyah) **55** #11314 58G05 (32L05)
- Tong, Yung Liang** (with Dudewicz, Edward J.) Optimal confidence intervals for the largest location parameter. *Statistical decision theory and related topics (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1970)*, pp. 363-376. Academic Press, New York, 1971. (Z. Govindarajulu) **50** #6038 62F25
- On the consistency of single-stage ranking procedures. *Ann. Inst. Statist. Math.* **24** (1972), 271-284. (J. Sethuraman) **48** #9925 62F07
- An asymptotically optimal sequential procedure for the estimation of the largest mean. *Ann. Statist.* **1** (1973), 175-179. (M. B. Woodroffe) **49** #10094 62L12
- (with Alam, Khurshed; Saxena, K. M. Lal) Optimal confidence interval for a ranked parameter. *J. Amer. Statist. Assoc.* **68** (1973), 720-725. (Hubert J. Chen) **53** #1814 62F07 (62F25)
- (with Peng, S. K.) A sequential solution to the inverse linear regression problem. Collection of articles dedicated to Jerzy Neyman on his 80th birthday. *Ann. Statist.* **2** (1974), 535-539. (R. A. Wijsman) **51** #14472 62L12
- (with Sobel, Milton) Estimation of a normal percentile by grouping. *J. Amer. Statist. Assoc.* **71** (1976), no. 353, 189-192. (Authors' summary) **53** #1824 62F10
- (with Peng, S. K.) Optimal allocation of observations in inverse linear regression. *Ann. Statist.* **5** (1977), no. 1, 191-196. (Authors' summary) **58** #13540 62L05 (62J05)
- An ordering theorem for conditionally independent and identically distributed random variables. *Ann. Statist.* **5** (1977), no. 2, 274-277. (M. Skibinsky) **55** #6636 62E10 (26A86)
- An adaptive solution to ranking and selection problems. *Ann. Statist.* **6** (1978), no. 3, 658-672. (Jan C. Geertsema) **57** #10888 62F07
- See also *Optimizing methods in statistics*, **48** #9900 and *Special issue: Selection and ranking*, **57** #14232
- Tonge, Andrew M.** Errata: "Sur les algèbres de Banach et les opérateurs p -sommants" (Séminaire Maurey-Schwartz 1975-1976: Espaces L^p , applications radonifiantes et géométrie des espaces de Banach, Exp. No. 13, Centre Math., École Polytech., Palaiseau, 1976). *Séminaire Maurey-Schwartz (1975-1976): Espaces L^p , applications radonifiantes et géométrie des espaces de Banach, Annexe No. 4, 1 p. Centre Math., École Polytech., Palaiseau, 1976. (D. J. H. Garling) **57** #13491b 46H20 (46L20, 47B10)*
- Sur les algèbres de Banach et les opérateurs p -sommants. *Séminaire Maurey-Schwartz (1975-1976): Espaces L^p , applications radonifiantes et géométrie des espaces de Banach, Exp. No. 13, 16 pp. Centre Math., École Polytech., Palaiseau, 1976. (D. J. H. Garling) **57** #13491a 46H20 (46L20, 47B10)*
- Banach algebras and absolutely summing operators. *Math. Proc. Cambridge Philos. Soc.* **80** (1976), no. 3, 465-473. (Bernd Rosenberger) **55** #11071 46L20 (47B10)
- Translation invariance, compact semigroups and injective coalgebras. *Math. Proc. Cambridge Philos. Soc.* **83** (1978), no. 2, 225-236. (Alan L. T. Paterson) **56** #15822 22A99 (16A24)
- (with Carne, T. K.) The injective tensor product of \mathcal{B}_p -algebras. *Math. Proc. Cambridge Philos. Soc.* **83** (1978), no. 2, 237-242. (J. Gil de Lamadrid) **57** #7204 46M05
- Tonge, D. G.** Logical properties of the perceived behaviour patterns of a dynamical system. *Internat. J. Man-Machine Studies* **6** (1974), 715-728. (Guy Jumarie) **50** #6569 93A10 (68A35)
- Steps towards a mathematical theory of perception. *Internat. J. Man-Machine Studies* **8** (1976), no. 2, 125-147. (Gerhard D. Wassermann) **54** #4727 92A25 (68A45)
- Tong Van Duc** Connexions, structures particulières et équations de structure sur les fibrés vectoriels. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A543-A546. (J. Vilms) **47** #5766 53C05
- Relèvement horizontal dans un fibré principal. *C. R. Acad. Sci. Paris Sér. A-B* **276** (1973), A633-A636. (J. Vilms) **47** #5767 53C05
- Sur les structures définies par une 1-forme vectorielle F telle que $F^3 = \pm F$. (English summary) *Kôdai Math. Sem. Rep.* **25** (1973), 367-376. (I. Kolář) **48** #12391 53C15
- Connexions non linéaires et équations de structure. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 1269-1274. (R. J. Crittenden) **49** #4017a 58B20 (53C05)
- Fibrés tangents d'ordre supérieur. *Rev. Roumaine Math. Pures Appl.* **18** (1973),

- 1275-1281. (R. J. Crittenden) **49** #4017b 58B20 (53C05)
Sur la géométrie différentielle des fibrés vectoriels. *Kōdai Math. Sem. Rep.* **26** (1975), no. 4, 349-408. (I. Kolář) **52** #9111 53C05 (58A20)
Nouvelles équations de structure des connexions sur un fibré principal. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 7, 947-952. (J. L. Koszul) **54** #11225 53C05
Fibrés vectoriels feuilletés. (Italian summary) *Boll. Un. Mat. Ital. A* (5) **15** (1978), no. 1, 52-60. (Enrique Vidal) **57** #13975 57D30 (53C05)
- Tonica, V. S.** (with Rvačov, V. L.; Škljarov, L. I.) The closing functions of three-valued logic. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 6, 499-502, 574. (M. Stojaković) **54** #2418 02C05 (02J05)
- Tonin, M.** (with Cicciariello, S.; Gatto, R.; Sartori, G.) Equal time commutators from broken conformal invariance and implications for asymptotic sum rules. *Ann. Physics* **65** (1971), 265-323. (Authors' summary) **46** #1247 81A7
Renormalization of Yang-Mills theories. *Lett. Nuovo Cimento* (2) **9** (1974), 541-548. (From the author's text) **56** #4517 81A6
(with Costa, G.) Gauge variation of proper vertices in local gauge theories. *Lett. Nuovo Cimento* (2) **14** (1975), no. 5, 171-176. (Editors) **56** #4546 81B3
(with Costa, G.) Renormalization of non-Abelian local gauge theories. *Riv. Nuovo Cimento* **5** (1975), 29-107. (Pierre Hillion) **51** #2501 81D22 (81A7)
(with Costa, G.; Marinucci, T.; Julve, J.) Non-Abelian gauge theories and triangle anomalies. (Italian summary) *Nuovo Cimento A* (11) **38** (1977), no. 4, 373-412. (A. Rouet) **56** #1975 81D22
(with Julve, J.) Quantum gravity with higher derivative terms. (Italian and Russian summaries) *Nuovo Cimento B* (11) **46** (1978), no. 1, 137-152. (Authors' summary) **58** #14932 83B3
- Tonkov, E. L.** (with Tonkova, V. S.) Certain properties of averaged solutions of a control system with a discontinuous nonlinearity. (Russian) *Differencial'nye Uravnenija* **9** (1973), 278-289, 394. (H. A. Antosiewicz) **48** #9029 34H05
Disconjugacy and number of switchings in a linear time-optimal nonstationary system. (Russian) *Differencial'nye Uravnenija* **9** (1973), 2180-2185, 2298. (J. Jarník) **48** #9500 49B10
(with Lun'kov, V. A.) Stabilization of a linear nonstationary system. *Avtomat. i Telemekh.* **1974**, no. 12, 19-23 (Russian. English summary); translated as *Automat. Remote Control* **35** (1974), no. 12, part 1, 1891-1894 (1975). (Authors' summary) **56** #14994 93D15
Controllability of a nonlinear system in a linear approximation. *Prikl. Mat. Meh.* **38** (1974), 599-606 (Russian); translated as *J. Appl. Math. Mech.* **38** (1974), 557-565 (1975). (L. Mikołajczyk) **52** #4088 49E15
(with Komlenko, Ju. V.) The multipliers of a linear periodic differential equation with deviating argument. (Russian) *Sibirsk. Mat. Ž.* **15** (1974), 835-844, 958. (L. J. Grimm) **50** #13813 34K15
(with Kulyšev, S. Ju.) Controllability of a linear nonstationary system. (Russian) *Differencial'nye Uravnenija* **11** (1975), no. 7, 1206-1216, 1348. (J. Jarník) **51** #13832 49E15 (93B05)
The linear problem on the optimal control of periodic solutions. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 6, 1007-1011, 1140. (I. Muntean) **54** #8389 49A35
Optimal periodic motions of a guided system. (Russian) *Mat. Fiz. Vyp.* **21** (1977), 45-59, 118. (Author's summary) **58** #9609 93C99 (70.34)
Optimal control of periodic motions. (Russian) *Mat. Fiz. Vyp.* **22** (1977), 54-64, 124. (V. G. Zadorožnii) **57** #7311 49B15
- Tonkov, T.** The representation of numbers by quaternary quadratic forms with large coefficients. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **5** (1968/69), no. 4, 17-58 (1971). (W. Narkiewicz) **46** #8975 10B35
The number of numbers with small prime divisors. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **6** (1970), no. 2, 73-76 (1972). (J. S. Joel) **48** #6027 10H15
★Фигурни числа. (Bulgarian) [Figure numbers] Библиотека Математически и Физически Знания, No. 1. [Library of Mathematical and Physical Science, No. 1] *Nauka i Izkustvo, Sofia*, 1971. 135 pp. (Editors) **52** #13598 10-01 (05B30)
The average length of finite continued fractions. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **8** (1972), no. 3, 19-29 (1973). (F. Schweizer) **53** #10700 10A30
On the average length of finite continued fractions. *Acta Arith.* **26** (1974/75), 47-57. (J. D. Dixon) **49** #10649 10H25 (10A30)
The mean length of finite continued fractions. (Russian) Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 617-629. (S. V. Kotov) **51** #8044 10F20
Hristo Nikolov Karanikolov (1910-1975). (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **19**(52) (1976), no. 1, 81-86. (Editors) **56** #2762 01A70
See also **Papers: Balkan Mathematical Congress**, **51** #2824
- Tonkova, V. S.** (with Tonkov, E. L.) Certain properties of averaged solutions of a control system with a discontinuous nonlinearity. (Russian) *Differencial'nye Uravnenija* **9** (1973), 278-289, 394. (H. A. Antosiewicz) **48** #9029 34H05
- Tonne, Philip C.** Matrix transformations on the power-series convergent on the unit disc. *J. London Math. Soc.* (2) **4** (1972), 667-670. (V. Ganapathy Iyer) **45** #4007 40C05
Matrix representations for linear transformations on series analytic in the unit disc. *Pacific J. Math.* **44** (1973), 385-392. (V. Ganapathy Iyer) **47** #8880 30A98 (46E10)
Matrix representations for linear transformations on analytic sequences. *Pacific J. Math.* **46** (1973), 269-274. (William T. Sledd) **48** #2722 46A40 (40H05)
A regular determinant of binomial coefficients. *Proc. Amer. Math. Soc.* **41** (1973), 17-23. (B. N. Moys) **47** #6725 15A15
Polynomials and Hausdorff matrices. *Pacific J. Math.* **50** (1974), 613-615. (G. U. Brauer) **49** #7648 41A05
- Tonnelat, Marie-Antoinette** (with Duruisseau, Jean-Paul) Event horizon and scalar potential. *General Relativity and Gravitation* **8** (1977), no. 8, 603-610. (Edward N. Glass) **57** #8882 83B3
See also **Symposia Mathematica**, **48** #5579; **Einstein collection**, **51** #4922; **Einstein, Albert**; et al., **52** #10347 and **Louis de Broglie: sa conception du monde physique**, **52** #13119
- Tönno, M.** Fourier coefficients and summability factors. (Russian. Estonian and German summaries) *Tartu Riikl. Ü. Toimetised No. 253* (1970), 194-201. (F. Schipp) **45** #8142A24
Conjugate and complementary spaces. (Russian. Estonian and German summaries) *Tartu Riikl. Ü. Toimetised No. 253* (1970), 202-204. (F. Schipp) **45** #805 42A16 (40J05)
Some theorems on multipliers. (Russian. Estonian and German summaries) *Tartu Riikl. Ü. Toimetised No. 305* (1972), 247-250. (J. Németh) **51** #13567 42A18
- Tonojan, V. S.** (with Minasjan, A. F.) An asymmetric contact problem for a half-plane with a vertical finite slit. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **61** (1975), no. 5, 289-297. (M. O. Bašelešvili) **54** #9264 73A5
- Tonooka, Keinosuke** On a geometry of three-dimensional space based on the differential form of the fourth order. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. II. *Tensor (N.S.)* **25** (1972), 148-154. (E. Bompiani) **49** #6062 53B05
- Tonov, Ivan K.** (with Gavrilo, Mihail B.; Davidov, Ljubomir Iv.) Several remarks on PI-algebras. (Bulgarian. English summary) *Annuaire Univ. Sofia Fac. Math.* **64** (1969/70), 277-292 (1971). (M. Slater) **48** #333 16A38
(with Genov, Georgi K.) Varieties of associative algebras. (Bulgarian. Russian and English summaries) *Mathematics and mathematical education (Proc. Second Spring Conf. Bulgarian Math. Soc., Vidin, 1973)* (Bulgarian), pp. 87-90. *Izdat. B"lgar. Akad. Nauk., Sofia*, 1974. (G. M. Bergman) **50** #2028 08A15 (16A68)
On the multiplication of varieties of associative algebras. (Bulgarian. Russian and English summaries) *B"lgar. Akad. Nauk. Izv. Mat. Inst.* **15** (1974), 301-305. (G. M. Bergman) **53** #238 08A15
- Ton-That, Tuong** See **Tuong Ton That**
- Tôn-Thất Long** Contributions à l'étude spectrale des contractions de l'espace de Hilbert. *Bull. Soc. Math. France* **101** (1973), 219-235. (T. Andô) **49** #11282 47A20
Propriétés analytiques des valeurs et vecteurs propres des opérateurs de l'espace de Hilbert. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **10** (1974), 167-183. (J. L. B. Cooper) **51** #6452 47A20
Semi-groupes de contractions de classe C_0 de l'espace de Hilbert. *Bull. Soc. Math. France* **102** (1974), 109-127. (G. Da Prato) **50** #14361 47D05
Sur quelques relations entre les valeurs et vecteurs propres d'un opérateur et de l'opérateur adjoint. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 767-769. (P. Saphar) **51** #6470 47A70
- Tonti, Enzo** Variational principles in elastostatics. (Italian summary) *Meccanica—J. Italian Assoc. Theoret. Appl. Mech.* **2** (1967), 201-208. (W. Prager) **49** #1885 73A9
On the mathematical structure of a large class of physical theories. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 48-56. (Editors) **55** #7013 69.00
A mathematical model for physical theories. I, II. (Italian summaries) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **52** (1972), 175-181; *ibid.* (8) **52** (1972), 350-356. (K. Stewartson) **49** #1844 69.00
On the variational formulation for linear initial value problems. (Italian summary) *Ann. Mat. Pura Appl.* (4) **95** (1973), 331-359. (Catherine Bandle) **48** #7057 49A20
On the formal structure of the relativistic gravitational theory. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), 228-236. (P. C. Vaitya) **51** #7573 83B3
The reason for analogies between physical theories. *Appl. Math. Modelling* **1** (1976/77), no. 1, 37-50. (Author's summary) **58** #5001 02A05 (00A25)
Sulla struttura formale delle teorie fisiche. (English summary) *Rend. Sem. Mat. Fis. Milano* **46** (1976), 163-257 (1978). (George S. Whiston) **58** #14974 83B58 (02G99)
- Toodong, L.-M. A.** Statistical estimates in Hilbert spaces. (Russian) *Trudy Vychisl. Centra Tartu. Gos. Univ. No. 27* (1973), 28-37. (R. M. Dudley) **48** #12715 62G05
- Toof, D. I.** (with Soyster, A. L.) Some comparative and design aspects of fixed cycle production systems. *Naval Res. Logist. Quart.* **23** (1976), no. 3, 437-454. (Kåre M. Mjelde) **56** #2319 90B30
- Toom, A. L.** Decision-making methods in a class of games. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 3, 16-21 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 3, 372-375. (F. Szidarovszky) **52** #7576 90D35
Nonergodic multidimensional systems of automata. (Russian) *Problemy Peredači Informacii* **10** (1974), no. 3, 70-79. (Author's summary) **57** #9369 94A35
Monotone binary tessellation automata. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 1, 48-54. (E. Ikaunieks) **55** #7635 94A30 (68A25)
(with Mitjušin, L. G.) Two results on incomputability for one-dimensional tessellation automata. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 2, 69-75. (E. Ikaunieks) **55** #7636 94A30 (68A25)
Unstable multicomponent systems. (Russian) *Problemy Peredači Informacii* **12** (1976), no. 3, 78-84. (Author's summary) **58** #9944 94A35
See also **Locally interacting systems and their application in biology**, **58** #6
- Toomanian, M.** See **Proceedings: National Mathematics Conference**, **58** #26650
- Toomer, G. J.** A survey of the Toledan tables. *Osiris* **15** (1968), 5-174. (Editors) **58** #26826 01A35
The chord table of Hipparchus and the early history of Greek trigonometry. *Centaurus* **18** (1973/74), 6-28. (N. Swerdlow) **58** #26714 01A20
Prophatius Judeaus and the Toledan tables. *Isis* **64** (1973), no. 223, 351-355. (Author's introduction) **58** #21074 01A35
Hipparchus on the distances of the sun and moon. *Arch. History Exact Sci.* **14** (1974), 126-142. (N. Swerdlow) **58** #9999 01A20
See also **Diocles on burning mirrors**, **58** #30
- Toomer, Graham Hilton** Lusternik-Schnirelmann category and the Moore spectral sequence. *Math. Z.* **138** (1974), 123-143. (Harold Hastings) **50** #8509 55C30
Topological localization, category and cocategory. *Canad. J. Math.* **27** (1975), 319-322. (J. Stasheff) **51** #6798 55D50
Two applications of homology decompositions. *Canad. J. Math.* **27** (1975), 323-329. (Marshall Walker) **53** #4053 55D40
The kernel of the rationalized Freudenthal suspension homomorphism. *J. Pure Appl. Algebra* **6** (1975), no. 3, 305-311. (Donald M. Davis) **52** #1682 55D40
Homology equivalences and a technique of Ganea. *Math. Z.* **150** (1976), no. 3,

- 3-279: (Jerold W. Grossman) **54** #11316 55D10
- Generalized homotopy excision theorems modulo a Serre class of nilpotent groups. *Pacific J. Math.* **73** (1977), no. 1, 233-245. (Guido Mislin) **58** #13026 55E99
- re, Juri** (with Latour, Jean; Spiegel, Edward A.; Zahn, Jean-Paul) Stellar convection theory. I. The anelastic model equations. *Astrophys. J.* **207** (1976), no. 1, part 233-243. (Attay Kovetz) **53** #12507 85.35
- orn, P.** (with Ferwerda, H. A.) The problem of phase retrieval in light and electron microscopy of strong objects. III. Developments of methods for numerical solution. (French and German summaries) *Optica Acta* **23** (1976), no. 6, 457-468. (Authors' summary) **56** #14181 78.65
- (with Ferwerda, H. A.) The problem of phase retrieval in light and electron microscopy of strong objects. IV. Checking of algorithms by means of simulated objects. (French and German summaries) *Optica Acta* **23** (1976), no. 6, 469-481. (Authors' summary) **56** #14183 78.65
- aker, Larry E.** (with Mendoza, Jorge L.; Crain, Bradford R.) Necessary and sufficient conditions for F ratios in the $L \times J \times K$ factorial design with two repeated factors. *J. Amer. Statist. Assoc.* **71** (1976), no. 356, 992-993. (U. B. Paik) **54** #14251 2J10 (62K15)
- Stefan** Remarks on algebraic concomitants of the Riemann-Christoffel curvature tensor in a three-dimensional space. *Ann. Polon. Math.* **26** (1972), 103-107. (S. Golab) **5** #4407 53A55
- On m -flatness of k -dimensional surface in n -dimensional Euclidean space. Collection of articles dedicated to Stanislaw Golab on his 70th birthday, II. *Demonstratio Math.* **6** (1973), 871-882 (1974). (R. Miron) **50** #3160 53C45
- On D -connected sets in the space V^n . *Ann. Polon. Math.* **31** (1975/76), no. 3, 21-231. (A. Lakshmi) **54** #11301 54H15
- On complete linear, metric, conformal and unimodular classifications of space of finite sequences of vectors in a given vector space. *Zeszyty Nauk. Univ. Jagielloń.* **33** *Prace Mat. No.* 17 (1975), 51-60. (Author's introduction) **58** #24080 53A55 9A15
- On a method of determination of morphisms for C -objects. *Zeszyty Nauk. Univ. Jagielloń.* **403** *Prace Mat. No.* 17 (1975), 61-87. (From the introduction) **58** #31142 18A05
- Complete classification of the family of all finite sequences of points in a projective space. *Zeszyty Nauk. Univ. Jagielloń.* **475** *Prace Mat. Zeszyt* 19 (1977), 55-120. (M. Mucharzewski) **58** #18213 53A55
- nglu, Toros** (with Seborg, Dale E.) Further comments on "A note on pole assignment" (IEEE Trans. Automatic Control AC-17 (1972), 822-823). With a reply by Sridhar and D. P. Lindorff. *IEEE Trans. Automatic Control* AC-19 (1974), 94-95. (D. C. Chung) **53** #5092 93B99
- (with Seborg, Dale E.) A design procedure for pole assignment using output feedback. *Internat. J. Control* **22** (1975), no. 6, 741-748. (C. E. Langenhop) **54** #2274 18B99 (93D15)
- gh, Gh.** Sur la représentation du mouvement hyperbolique et parabolique dans le problème de deux corps. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **18**(66) (1974), no. 1-2, 207-212 (1975). **56** #1863 70.53
- ev, Ju. I.** (with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šaripov, D. S.; Šatalov, A. S.; Solodovnikov, V. V.; Teodorčik, K. F.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 1: Математическое описание, анализ устойчивости и качества систем автоматического регулирования. (Russian) [Theory of automatic control. Book 1: Mathematical description, analysis of stability and quality of automatic control systems] Edited by V. V. Solodovnikov. *Izdat. "Mašinstroenie", Moscow*, 1967. 768 pp. (Editors) **56** #6557 93-02
- (with Dmitriev, A. N.; Krug, G. K.; Kuzin, L. T.; Kurakin, K. I.; Kuhtenko, O. I.; Matveev, P. S.; Mihaïlov, F. A.; Petrov, B. N.; Sinicyn, A. S.; Solodovnikov, V. V.; Ulanov, G. M.; Cypkin, Ja. Z.) ★Теория автоматического регулирования. Книга 2: Анализ и синтез линейных непрерывных и дискретных систем автоматического регулирования. (Russian) [Theory of automatic guidance. Book 2: Analysis and synthesis of continuous and discrete automatic guidance systems] Edited by V. V. Solodovnikov. *Izdat. "Mašinstroenie", Moscow*, 1967. 679 pp. (RŽKibernet **68** #3 G89) **50** #6559 93-02
- (with Batkov, A. M.; Borodin, Ju. I.; Gol'dfarb, L. S.; Ioannesian, A. B.; Krut'nik, I. I.; Letov, A. M.; Petrov, V. V.; Popov, E. P.; Semenov, V. V.; Solodovnikov, V. V.; Ulanov, G. M.; Šatalov, A. S.) ★Техническая кибернетика. Теория автоматического регулирования. Книга 3: Теория нестационарных, нелинейных и само-настраивающихся систем автоматического регулирования. Часть 1. (Russian) [Engineering cybernetics. Theory of automatic control. Vol. 3: Theory of nonstationary, nonlinear and selfadjusting systems of automatic control. Part I] Edited by V. V. Solodovnikov. *Izdat. "Mašinstroenie", Moscow*, 1969. 607 pp. (Editors) **58** #9726 93-02
- (with Vavilov, A. A.; Kozlov, Ju. M.; Maksimov, A. D.; Markov, S. I.; Pavlov, V. V.; Popov, E. P.; Semenov, A. I.; Starikova, M. V.; Fedorov, S. M.; Hlypalo, E. I.; Ulanov, V. M.; Svetkov, V. I.) ★Метод гармонической линеаризации в проектировании нелинейных систем автоматического управления. (Russian) [The method of harmonic linearization in the design of nonlinear automatic control systems] Edited by Ju. I. Topčeev. *Nonlinear Automatic Control Systems*, Vol. 1. *Izdat. "Mašinstroenie", Moscow*, 1970. 567 pp. (errata insert) (S. P. Bingular) **50** #6589 (EA) **93C10**
- (with Alekperov, V. P.; Andrievskii, V. P.; Bahanov, L. E.; Bykov, V. P.; Zubkov, N. G.; Ivanenko, V. G.; Modjaev, A. D.; Potemkin, V. G.; Teplyakov, E. P.; Fedorov, S. M.; Hlypalo, E. I.; Černikov, S. A.; Čudov, M. A.; Šipilov, A. I.; Šmilov, B. F.; Ščerbakov, V. A.) ★Нелинейные корректирующие устройства в системах автоматического управления. (Russian) [Nonlinear correcting devices in automatic control systems] Edited by Ju. I. Topčeev. *Nonlinear Automatic Control Systems*, Vol. 2. *Izdat. "Mašinstroenie", Moscow*, 1971. 466 pp. (Bojan Popović) **58** #4005 93-06
- (with Aizerman, M. A.; Bendrikov, G. A.; Hramoi, A. V.; Krasovskii, A. A.; Kusovkov, N. G.; Lerner, A. Ja.; Letov, A. M.; Petrov, B. N.; Petrov, V. V.; Šaripov, D. S.; Šatalov, A. S.; Solodovnikov, V. V.; Teodorčik, K. F.; Uderman, E. G.; Voronov, A. A.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. Band 1: Stetige lineare Systeme. Gesamtdirektion der Originalausgabe von W. W. Solodovnikov. Aus dem Russischen übersetzt von Klaus Biener, Klaus Franke, Manfred Krauß, Helmut Otto, Edmund Suschke und Bernd Weber. Deutsche Bearbeitung unter Manfred Peschel. *VEB Verlag Technik, Berlin*, 1971. 744 pp. (3 foldouts) (W. Oppelt [Zbl **229** #93002]) **50** #6558 93-02
- (with Dmitriev, A. N.; Krug, G. K.; Kuzin, L. T.; Kurakin, K. I.; Kuhtenko, O. I.; Matveev, P. S.; Mihaïlov, F. A.; Petrov, B. N.; Sinicyn, A. S.; Solodovnikov, V. V.; Ulanov, G. M.; Cypkin, Ja. Z.) ★Grundlagen automatischer Regelsysteme. Band 2: Analyse und Synthese linearer Systeme. Gesamtdirektion der Originalausgabe von W. W. Solodovnikov. Aus dem Russischen übersetzt von Klaus Franke, Ludmilla Heckendorff, Volker Langguth, Werner Otto Mertins und Uwe Riedel. Deutsche Bearbeitung unter Manfred Peschel. *VEB Verlag Technik, Berlin*, 1971. 620 pp. (1 foldout) (RŽKibernet **1968** #10 G7K) **50** #6560 93-02
- Topčii, V. A.** Asymptotic expansion for the probability of non-extinction of critical Bellman-Harris processes. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 3, 665-674, 719. (A. Spătaru) **56** #6903 60J80
- Limit theorems for critical inhomogeneous age-dependent branching processes. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 5, 1176-1187, 1208. (A. Spătaru) **58** #7892 60J80
- Topenčarov, Vladimir V.** Sur le mouvement sphérique à deux paramètres d'un solide dans R^3 . (Bulgarian and Russian summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Priložna. Meh.* **3** (1967), no. 2, 1-11 (1968). (H. R. Müller) **45** #6238 70.35 (53A05)
- Objets globaux de structure induite dans une classe par relèvement d'un covariant. (Bulgarian and Russian summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **4** (1967), no. 1, 37-68 (1971). (From the author's introduction) **52** #1547 53B15
- Ringoids. I, II. (Bulgarian, Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **4** (1967), no. 2, 25-43 (1970); *ibid.* **4** (1967), no. 2, 45-59 (1970). (B. M. Schein (Šain)) **45** #3484 16A78 (18C10)
- Ringoids. III. (Bulgarian, Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **4** (1967), no. 3, 113-126 (1972). (B. M. Schein (Šain)) **46** #9126 16A78
- Sur quelques types de structures multiplicatives. (Bulgarian and Russian summaries) *B'lgar. Akad. Nauk. Otdel. Mat. Fiz. Nauk. Izv. Mat. Inst.* **10** (1969), 183-212. (H. D'Alarcao) **46** #5211 08A15
- Relations dans les catégories. *C. R. Acad. Bulgare Sci.* **26** (1973), 727-730. (V. A. Artamonov) **50** #2289 18A05
- A certain binary composition of n -ary relations. (Bulgarian, Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* **9** (1973), no. 4, 7-18 (1974). (D. Kurepa) **54** #7262 04A05
- Éléments de la théorie des catégories polyadiques. *C. R. Acad. Bulgare Sci.* **27** (1974), 743-746. (C. Niță) **50** #13181 18A10
- Éléments de la théorie des n -catégories. *Serdica* **1** (1975), no. 3, 225-248. (J. Sonner) **54** #373 18A05 (20N15)
- (with Arnaudov, Ja. N.) On the question of T -algebras defining $\{n\}$ -categories. (Bulgarian, Russian and English summaries) *Godišnik Visš. Učebn. Zaved. Priložna Mat.* **12** (1976), no. 4, 31-42 (1977). (J. R. Isbell) **58** #28124 18C15
- Éléments de la théorie des catégories polyadiques. *Algebra Universalis* **7** (1977), no. 3, 277-293. (C. Niță) **56** #3086 18B99 (20N15)
- (with Peeva, Ketty G.) A reflexive subcategory of the category of stochastic automata. (Romanian summary) *Bul. Inst. Politehn. Iași (N.S.)* **23**(27) (1977), no. 3-4, 21-28. (W. Wechler) **58** #15746 94A30 (18B20)
- (with Arnaudov, Y. N.) Éléments de la théorie des (n) -catégories. *C. R. Acad. Bulgare Sci.* **30** (1977), no. 12, 1667-1670. (D. Pumplün) **58** #22236 18D05
- Topkis, Donald M.** (with Stern, Michael H.) Rates of stability in nonlinear programming. *Operations Res.* **24** (1976), no. 3, 462-476. (Authors' summary) **56** #10985 90C30
- The structure of sublattices of the product of n lattices. *Pacific J. Math.* **65** (1976), no. 2, 525-532. (T. S. Blyth) **54** #12587 06A20
- Minimizing a submodular function on a lattice. *Operations Res.* **26** (1978), no. 2, 305-321. (Author's summary) **57** #8015 65K05
- T'opic, O.** See Toeplitz, O.
- Topoljanskii, D. B.** (with Zaprud'skii, Ja. M.) Stability of the Bubnov-Galerkin method for nonstationary operator equations with variable coefficients. (Russian) *Differential equations and their applications (Russian)*, pp. 113-124, 158. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1971. (A. Szép) **50** #720 34G05 (47A50)
- (with Krylova, T. V.) Complex eigenvalues in two-parameter problems. (Russian) *Differential equations and their applications (Russian)*, pp. 148-151, 160. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1971. (K. Veselić) **49** #9007 15A18
- (with Krylova, T. V.) Regions for locating the eigenvalue surfaces in three-parameter boundary value problems for integrodifferential equations. (Russian) *Studies in contemporary problems of summability and approximation of functions, and their applications (Russian)*, pp. 156-159. *Dnepropetrovsk. Univ., Dnepropetrovsk*, 1972. (Stefan Balint) **54** #5770 45J05
- (with Zaprud'skii, Ja. M.) On the question of the stability of the Bubnov-Galerkin method for nonstationary operator equations with variable coefficients. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev)* **10** (1972), 40-53. (O. Vejvoda) **46** #5788 34G05 (47A50, 65J05)
- (with Zaprud'skii, Ja. M.) A study of the stability of the Bubnov-Galerkin method for nonstationary operator equations with variable coefficients. (Russian) *Ukrain. Mat. Ž.* **26** (1974), 621-633, 716. (G. B. Gustafson) **50** #6160 65L05 (34G05)
- (with Krylova, T. V.) Application of interpolation polynomials to the approximate solution of two-dimensional two-parameter eigenvalue boundary problems. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev) Vyp.* **28** (1976), 44-48, 151. (Authors' summary) **58** #3532 65N25
- (with Krylova, T. V.) Approximate solution of some nonlinear boundary eigenvalue problems. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev) Vyp.* **31** (1977), 56-61, 156. (Authors' summary) **58** #8310 65L10
- See also *Differential equations and their applications*, **58** #26644
- Topol'skii, M. V.** (with Ušakov, I. A.) Optimization of the mean between failures of a

- system. (Russian) *Nadežn. i Kontrol' Kačestva*. 1974, no. 3, 57-67, 79. (R. Salia) 50 #6466 90B25
- Topol'skii, N. G.** (with Drovjannikov, A. Ja.) A method of optimization of the synthesis of finite automata in a computing system. (Russian) *Vychisl. Sistemy* No. 41 (1971), 77-89. (G. M. Tenengol'c) 46 #4788 68A25
- Coding and optimization of the synthesis of abstract automata in a universal computing medium. (Russian) *Vychisl. Sistemy* No. 47 (1971), 3-17. (Not reviewed) 94A30
- (with Božič, V. I.) A method of coding automata states from the graphs of possible proximities. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1975, no. 6, 114-121, 222 (Russian); translated as *Engng. Cybernetics* 13 (1975), no. 6, 89-96. (Authors' summary) 56 #18169 94A20 (94A30)
- (with Božič, V. I.) Optimization of the structure of automata with respect to their hypergraphs. (Russian) *Avtomat. i Vychisl. Tehn. (Riga)* 1977, no. 1, 1-7, 91. (Authors' summary) 58 #9930 94A30 (94A20)
- Toponogov, V. A.** A certain characteristic property of a four-dimensional symmetric space of rank 1. (Russian) *Sibirsk. Mat. Ž.* 13 (1972), 884-902. (J. Szenthe) 47 #993 53C35
- (with Burago, Ju. D.) Three-dimensional Riemannian spaces with curvature bounded from above. (Russian) *Mat. Zametki* 13 (1973), 881-887. (P. Ver Eecke) 49 #11424 53C20
- Extremal theorems for Riemannian spaces with curvature bounded from above. I. (Russian) *Sibirsk. Mat. Ž.* 15 (1974), 1348-1371 1431-1432. (O. Kowalski) 50 #8375 53C20
- Riemannian spaces with diameter equal to π . (Russian) *Sibirsk. Mat. Ž.* 16 (1975), 124-131, 197. (Gr. Stanilov) 51 #13925 53C20
- Toporova, V. A.** (with Aržanyh, I. S.) A certain method for constructing a new integral of the problem of the rotation of a heavy rigid body. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 17 (1973), no. 4, 11-14, 97. (Gh. Silaş) 55 #7019 70J34
- The application of Bessel functions of several variables to the problem of the rotation of a heavy rigid body about a fixed point. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* 17 (1973), no. 6, 57-59. (Q. K. Ghor) 49 #1846 70J33
- Toporovskaja, B. I.** (with Kukles, I. S.) Some tests for the existence of 0-characteristics in three-dimensional space with zero, finite and infinite orders of curvature. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* 1974, no. 5, 6-9. (Z. Nehari) 53 #5995 34C05
- (with Artykov, A. R.; Rozet, I. G.) Some cases of local generation of limit cycles in three-dimensional space. (Russian) *Differencial'nye Uravnenija* 12 (1976), no. 8, 1392-1403, 1523-1524. (K. R. Schneider) 56 #735 34C05
- Toporowska, Grażyna** The minimal-norm problem and Pontriagin's maximum principle for Banach spaces. II. *Studia Math.* 35 (1970), 105-110. (M. Q. Jacobs) 47 #7556 49B30
- Toporowski, S.** (with Jones, J. P.) Irrational numbers. *Amer. Math. Monthly* 80 (1973), 423-424. (Editors) 47 #3325 10F35
- Toporowski, Stanley** (with Śniatycki, Jędrzej) On representation spaces in geometric quantization. *Internat. J. Theoret. Phys.* 16 (1977), no. 8, 615-633. (Virgil Obădeanu) 58 #25638 81S8 (58F05)
- Topper, Jeffrey** (with Kawahara, Takuji) Approximate equations for long nonlinear waves on a viscous fluid. *J. Phys. Soc. Japan* 44 (1978), no. 2, 663-666. (Authors' summary) 58 #8769 76J41
- Toppila, Sakari** Some remarks on the value distribution of meromorphic functions. *Ark. Mat.* 9, 1-9 (1971). (I. N. Baker) 51 #10633 30A70
- On exceptional values of functions meromorphic outside a set of positive Hausdorff dimension. *Ann. Acad. Sci. Fenn. Ser. A I* No. 547 (1973), 12 pp. (D. F. Shea) 49 #5352 30A70
- Some remarks on linear Picard sets. *Ann. Acad. Sci. Fenn. Ser. A I* No. 569 (1973), 17 pp. (I. N. Baker) 55 #10687 30A66
- On the value distribution of integral functions. *Ann. Acad. Sci. Fenn. Ser. A I* No. 574 (1974), 20 pp. (L. R. Sons) 48 #11513 30A70
- Linear Picard sets for entire functions. *Ann. Acad. Sci. Fenn. Ser. A I Math.* 1 (1975), no. 1, 111-123. (T. Kövari) 52 #11046 30A70
- On the counting function for the a -values of a meromorphic function. *Ann. Acad. Sci. Fenn. Ser. A I Math.* 2 (1976), 565-572. (Zbl 349 #30028) 58 #22563 30A70
- On Nevanlinna's characteristic functions of entire functions and their derivatives. *Ann. Acad. Sci. Fenn. Ser. A I Math.* 3 (1977), no. 1, 131-134. (Chung-Chun Yang) 58 #28507 30A70
- Topping, David M.** See *Lectures: Operator algebras*, 49 #10497
- Topsoe, Flemming** On the Glivenko-Cantelli theorem. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 14 (1969/70), 239-250. (H. G. Tucker) 45 #1230 60F05
- ★Topology and measure. *Lecture Notes in Mathematics*, Vol. 133. Springer-Verlag, Berlin-New York, 1970. xiv + 79 pp. (J. E. Huneycutt, Jr. (Zbl 197, 333)) 54 #10546 28A30 (60B10)
- Measure spaces connected by correspondences. *Math. Scand.* 30 (1972), 5-45. (C. L. Scheffer) 54 #5428 28A40 (28A35, 60G05)
- A new proof of a result concerning computation of the capacity for a discrete channel. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 22 (1972), 166-168. (P. N. Rathie) 46 #8767 94A15
- ★Informationstheorie. Eine Einführung. Teubner Studienbücher. B. G. Teubner, Stuttgart, 1974. 88 pp. (G. Dueck) 56 #2664 94A15
- Compactness and tightness in a space of measures with the topology of weak convergence. *Math. Scand.* 34 (1974), 187-210. (D. Preiss) 52 #9320 60B10 (28A32)
- (with Pollard, David B.) A unified approach to Riesz type representation theorems. *Studia Math.* 54 (1975), no. 2, 173-190. (H. Gordon) 52 #14219 28A30
- (with Dudley, Richard M.; Hoffmann-Jørgensen, Jørgen) Two examples concerning uniform convergence of measures w.r.t. balls in Banach spaces. *Empirical distributions and processes (Selected Papers, Meeting on Math. Stochastics, Oberwolfach, 1976)*, pp. 141-146. *Lecture Notes in Math.*, Vol. 566, Springer, Berlin, 1976. (David Pollard) 55 #11327 60B10 (28A40)
- Packings and coverings with balls in finite dimensional normed spaces. *Measure theory (Proc. Conf., Oberwolfach, 1975)*, pp. 187-198. *Lecture Notes in Math.*, Vol. 54, Springer, Berlin, 1976. (P. R. Goodey) 56 #15865 28A10 (28A32, 28A75)
- Some special results on convergent sequences of Radon measures. *Manuscripta Math.* 19 (1976), no. 1, 1-14. (R. B. Kirk) 54 #500 28A32 (60B10)
- Uniformity in weak convergence with respect to balls in Banach spaces. *Math. Scand.* 38 (1976), no. 1, 148-158. (K. Jacobs) 53 #11007 28A32 (60B10)
- Some remarks concerning pathological submeasures. *Math. Scand.* 38 (1976), no. 1, 159-166. (D. Preiss) 54 #7730 28A10
- Further results on integral representations. *Studia Math.* 55 (1976), no. 3, 239-245. (H. Gordon) 54 #13019 28A30
- Banach algebra methods in prediction theory. *Manuscripta Math.* 23 (1977/78), 1, 19-55. (E. J. Hannan) 57 #10800 60G25 (46J10, 47B35)
- (with Mejlbro, Leif) A precise Vitali theorem for Lebesgue measure. *Math. Ann.* 230 (1977), no. 2, 183-193. (Authors' review (Zbl 364 #28003)) 58 #28398 28A30
- Uniformity in convergence of measures. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 39 (1977), no. 1, 1-30. (R. M. Dudley) 56 #1398 60B10
- Toptschejew, J. I.** See *Topčeev, Ju. I.*
- Topunov, V. L.** A connection of cyclotomic fields with the ring of cyclic matrices of prime and of primary order. (Russian) Algebra and number theory. *Moskov. Gos. Ped. Inst. Učen. Zap. No.* 375 (1971), 215-223. (Editors) 48 #2110 12A35
- Topurija, S. B.** The local boundary properties of harmonic functions in a ball. (Russian) *V. I. Lenin. Sakharth. Politekh. Inst. Šrom.* 1969, no. 5(133), 33-37. 55 #8386 31B05
- Conditions for compactness in certain spaces and V. A. Steklov's functions. (Russian. Georgian summary) *V. I. Lenin. Sakharth. Politekh. Inst. Šrom.* 1970, no. 3(138), 36-46. (A. B. Németh) 46 #590 41A65
- Summability by Abel's method of a differentiated Fourier series. (Russian) *Dokl. Akad. Nauk SSSR* 209 (1973), 569-572. (E. Reimers) 48 #6815 42A92
- A certain method for the summability of double Fourier series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 76 (1974), 289-292. (R. L. Cooke) 51 #6284 42A92
- Boundary properties of a differentiated Poisson integral in the half-plane. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 78 (1975), no. 2, 281-284. (C. Tanaka) 52 #5971 30A72 (31A20)
- Boundary properties of the differentiated Poisson integral in a disc. (Russian. Georgian summary) *V. I. Lenin. Sakharth. Politekh. Inst. Samecn. Šrom.* 1975, no. 3(176) *Math., Mekh.*, 13-20. (L. I. Hedberg) 54 #2975 30A72
- Boundary properties of the differentiated Poisson integral in a bicylinder. I. (Russian. Georgian summary) *V. I. Lenin. Sakharth. Politekh. Inst. Samecn. Šrom.* 1975, no. 3 (176), *Math. Mekh.*, 21-33. (V. V. Moržakov) 55 #3282 31B25
- The representation of functions that are defined on the surface of a unit sphere by Laplace series. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 82 (1976), no. 2, 301-303. (D. P. Gupta) 54 #13449 42A56
- (with Žižiašvili, L. V.) Fourier-Laplace series on the sphere. (Russian) *Mathematical analysis, Vol. 15 (Russian)*, pp. 83-130. (loose errata) *Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow*, 1977. (R. L. Cooke) 58 #6913 42A92 (42A56)
- Topuzu, Paul** Points fixes et unicité uniforme. (Romanian summary) *An. Univ. Timisoara Ser. Ști. Mat.* 11 (1973), 183-188. (I. A. Rus) 52 #6076 34A10 (54H25)
- (with Hiriș, Viorel) On complete controllability and the cyclic vectors. (Romanian summary) *An. Univ. Timisoara Ser. Ști. Mat.* 12 (1974), no. 2, 111-114 (1977). (S. Rolewicz) 58 #9487 93B05 (93C25)
- Torabi, Mohammed** (with Jacobsen, Stephen E.) A global minimization algorithm for a class of one-dimensional functions. *J. Math. Anal. Appl.* 62 (1978), no. 2, 310-324. (J. Falk) 57 #4516 65K05
- Toraev, A.** A classification of the solutions of the equation $y^{(n)} + P(x)y = 0$ in the nonoscillating case. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1971, no. 4, 71-73. (Z. Nehari) 46 #449 34C10
- The oscillatory nature of the solutions of an n th order linear differential equation. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1973, no. 6, 12-17. (A. D. Ziebur) 49 #5471 34C10
- The conjugacy of the solutions of linear differential equations. (Russian) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1974, no. 3, 11-16. (A. D. Ziebur) 50 #5098 34C10
- (with Hudai-Verenov, O. M.; Redžepov, A. R.) Oscillation properties of the solutions of differential equations of elliptic type. (Russian. Turkmen and English summaries) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1976, no. 3, 3-10. (H. Marcinkowska) 54 #13274 35B05 (35J15)
- (with Hudai-Verenov, O. M.) Integral oscillation conditions for second order partial differential equations of elliptic type. (Russian) *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk* 1976, no. 4, 18-23. (A. D. Ziebur) 55 #3488 35B05
- Toraichi, Kazuo** (with Miki, Nobuhiro; Yoshimoto, Chiyoshi) Characteristics of logical orthogonal space and its application. *Electron. Commun. Japan* 53 (1970), no. 9, 116-124. (R. Liedl) 46 #8750 94A05
- (with Murakami, Jinki; Miki, Nobuhiro; Nagai, Nobuo; Toshimoto, Chiyashi) A note on logical orthogonal space—a representation using cyclic permutation. *Systems-Computers-Controls* 2 (1971), no. 1, 85-87 (1972). (Authors' introduction) 46 #6959 94A20 (42A60)
- (with Igarashi, Akira; Ogawa, Hidemitsu) A note on several orthogonal bases for digital signal processing. *Electron. Commun. Japan* 60 (1977), no. 2, 1-7. (Anastasios N. Venetsanopoulos) 58 #33492 94A05
- Toralbala, L. V.** A geometric theory of surface area. II. Triangulable parametric surfaces. *Monatsh. Math.* 76 (1972), 66-77. (J. E. Brothers) 46 #3752 (E 47 #8821) 28A75 (26A63)
- (with Alpert, Louis I.) An elementary definition of surface area in E^{n+1} for smooth surfaces. *Pacific J. Math.* 40 (1972), 261-268. (K. Karták) 46 #5551 26A63 (28A75)
- Corrigenda: "A geometric theory of surface area. II. Triangulable parametric

- surfaces". *Monatsh. Math.* **77** (1973), 156-157. (J. E. Brothers) **47** #8821 28A75
- A geometric theory of surface area. III. Non-triangulable parametric surfaces. *Monatsh. Math.* **77** (1973), 363-365. (J. E. Brothers) **48** #6369 28A75 (49F25)
- Indo di Francia, G. Induction in physics. *Riv. Nuovo Cimento* (2) **4** (1974), 144-165. (Mario Bunge) **58** #5002 02A05 (81.02)
- (with Dalla Chiara Scabia, Maria Luisa) Is self-reduction paradoxical? *Studia Logica* **33** (1974), 345-348. (A. A. Mullin) **51** #42 02A05 (92A05)
- What have physicists learned from experience about inductive inference? *Formal methods in the methodology of empirical sciences (Proc. Conf., Warsaw, 1974)*, pp. 318-331. *Synthese Library*, 103. Reidel, Dordrecht, 1976. (From the text) **58** #27439 02G99
- (with Dalla Chiara Scabia, Maria Luisa) The logical dividing line between deterministic and indeterministic theories. *Studia Logica* **35** (1976), no. 1, 1-5. (Mario Bunge) **55** #12448 02A05 (81.00)
- Enos, Fausto A. Metric betweenness in normed linear spaces. *Colloq. Math.* **23** (1971), 99-102. (R. J. Bumcrot) **46** #4171 46B05
- Imbedding of convex metric spaces in Euclidean spaces. II. *Math. Notae* **23** (1972/73), 65-78. (L. M. Blumenthal) **49** #9746 52A50
- (with Nanclares, Jorge H.) ★Convexidad. (Spanish) [Convexity] Cursos, Seminarios y Tesis del PEAM, No. 4. PEAM, Universidad del Zulia, Maracaibo, 1978. iv + 155 pp. (L. A. Santaló) **58** #24001 52-01
- Le théorème de Paley-Wiener pour l'espace des fonctions indéfiniment différentiables et à support compact sur un espace symétrique de type non-compact. *J. Functional Analysis* **26** (1977), no. 2, 201-213. (Kenneth Johnson) **57** #3750 43A85
- Chinsky, Alberto (with Jodeit, Max, Jr.) Inequalities for Fourier transforms. *Studia Math.* **37** (1970/71), 245-276. (G. O. Okikiolu) **45** #9121 46E30 (42A68)
- Singular integrals in the spaces $\Lambda(B, X)$. *Bull. Amer. Math. Soc.* **78** (1972), 1015-1019. (A. Devinatz) **47** #3916 44A25 (43A22, 47G05)
- Singular integrals in the spaces $L(B, X)$. *Studia Math.* **47** (1973), 165-190. (Author's summary) **55** #13181 44A25 (47G05, 46E99)
- (with Calderón, Alberto P.) Parabolic maximal functions associated with a distribution. *Advances in Math.* **16** (1975), 1-64. (B. Muckenhoupt) **54** #5736 42A92 (44A25)
- On a mean value inequality. *Bull. Amer. Math. Soc.* **81** (1975), no. 5, 950-952. (Richard Bagby) **51** #13671 46E35
- (with Calderón, Alberto P.) Classes of distributions with parabolic maximal functions in $L^p(\mathbb{R}^n)$. *Functional analysis (Proc. Brazilian Math. Soc. Sympos., Inst. Mat. Univ. Estad. Campinas, São Paulo, 1974)*, pp. 27-38. *Lecture Notes in Pure and Appl. Math.*, 18. Dekker, New York, 1976. (From the introduction) **58** #30198 46F99
- Interpolation of operations and Orlicz classes. *Studia Math.* **59** (1976/77), no. 2, 177-207. (Colin Bennett) **55** #11024 46E30 (46M35, 42A40)
- (with Calderón, Alberto P.) Parabolic maximal functions associated with a distribution. II. *Advances in Math.* **24** (1977), no. 2, 101-171. (B. Muckenhoupt) **56** #9180 42A92 (46E35, 46F10)
- (with Ortiz, J. A.) On a mean value inequality. *Indiana Univ. Math. J.* **26** (1977), no. 3, 555-566. (V.-V. Olariu) **55** #6020 35K99
- See also Cotlar, Mischa; et al., **53** #8845
- Ali, Alessandro Composizione di operatori di Fredholm e applicazioni ai problemi ai limiti per equazioni alle derivate parziali. *Ist. Lombardo Accad. Sci. Lett. Rend. A* **106** (1972), 623-640. (M. Schechter) **48** #6996 47B30 (35G15)
- Su un problema di filtrazione da un canale. *Rend. Sem. Mat. Univ. Padova* **52** (1974), 25-58 (1975). (St. I. Gheorghita) **52** #9797 76J35
- Su un problema a frontiera libera di evoluzione. (English summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, 559-570. (Radu Bădescu) **53** #9861 76J35
- Un problème à frontière libre d'évolution en hydraulique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 6, A353-A356. (L. A. Peletier) **54** #5650 35Q99
- (with Friedman, Avner) A free boundary problem connected with non-steady filtration in porous media. *Nonlinear Anal.* **1** (1976/77), no. 5, 503-545. (Pierre-Louis Lions) **58** #29277 35K60 (76J35)
- Su un problema non lineare con una condizione di evoluzione sulla frontiera. (English summary) *Ann. Mat. Pura Appl.* (4) **112** (1977), 91-106. (A. Pozzi) **57** #8407 76J35 (35Q99)
- On a free boundary value problem connected with a non steady filtration phenomenon. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **4** (1977), no. 1, 33-59. (Editors) **56** #1933 76J35
- Existence and uniqueness of the solution for a non steady free boundary problem. (Italian summary) *Boll. Un. Mat. Ital. B* (5) **14** (1977), no. 2, 423-466. (M. Primicerio [Zbl 361 #35031]) **58** #29243 35K05 (35Q99)
- Ali, F. (with Maione, B.) Algorithm for determining the power of the companion matrix for multivariable systems. *Electron. Lett.* **10** (1974), 253-254. (Authors' summary) **56** #14901 93B25
- (with Maione, B.) New minimal-realisation algorithm from system Markov parameters. *Electron. Lett.* **12** (1976), no. 17, 439-441. (Steven I. Marcus) **55** #7487 93B15
- (with Maione, B.) Neue Formeln zur Berechnung der verallgemeinerten Kostenfunktionalen für kontinuierliche lineare Systeme. (English summary) *Regelungstech.* **24** (1976), no. 8, 283-285. (Authors' summary) **56** #18008 93C60 (93C05)
- Ali, Giovanni (with de Simon, Luciano) Linear second order differential equations with discontinuous coefficients in Hilbert spaces. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **1** (1974), 131-154 (1975). (H.-W. Rohde) **52** #9005 47F05 (35R05)
- Ali, Mauro (with Bertoni, Alberto) ★Elementi di matematica combinatoria. Testi Scientifici Modulari. Serie di Informatica, Tomo 4. Istituto Editoriale Internazionale [ISEDI], Milan, 1977. i + 211 pp. (W. G. Brown) **58** #245 05-01
- (with Bertoni, Alberto; Mauri, Gian Carlo) Some recursively unsolvable problems relating to isolated cutpoints in probabilistic automata. *Automata, languages and programming (Fourth Colloq., Univ. Turku, Turku, 1977)*, pp. 87-94. *Lecture Notes in Comput. Sci.*, Vol. 52. Springer, Berlin, 1977. (R. G. Buharaev) **56** #18188 94A35
- (with Bertoni, Alberto; Mauri, Gian Carlo) An algebraic approach to problem solution and problem semantics. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 253-262. *Lecture Notes in Comput. Sci.*, Vol. 53. Springer, Berlin, 1977. (José Meseguer) **57** #4637 68A30 (20M35)
- Torelli, Paul A. The theory of higher order M -adic differentials. *J. Algebra* **29** (1974), 199-207. (Peter Blum) **49** #282 13H05
- Torgašev, Aleksandar A generalization of spaces with inner and semi-inner products. (Serbo-Croatian. English summary) *Mat. Vesnik* **11(26)** (1974), 301-313. (T. Precupanu) **51** #6377 46C10
- Certain notes on the numerical range of an unbounded operator. *Mat. Vesnik* **12(27)** (1975), no. 2, 189-199. (C. R. Putnam) **52** #3985 47A10
- The numerical range of an operator in a Wachs space. (Serbo-Croatian. English summary) *Mat. Vesnik* **13(28)** (1976), no. 1, 101-117. (Author's summary) **58** #17888 47A10
- The numerical range of an operator in a normed space. (Serbo-Croatian. English summary) *Mat. Vesnik* **13(28)** (1976), no. 1, 118-124. (Author's summary) **58** #17889 47A10
- Extensions of two classic kinds of Wachs space operators. *Mat. Vesnik* **13(28)** (1976), no. 2, 215-226. (V. K. Balakrishnan) **57** #1187 47B99
- Roots of positive and negative operators on Wachs spaces. *Mat. Vesnik* **13(28)** (1976), no. 2, 227-231. (V. K. Balakrishnan) **57** #1188 47B99
- Torgašev, V. A. (with Gluškov, V. M.; Ignat'ev, M. B.; Mjasnikov, V. A.) Recursive machines and computing technology. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974)*, pp. 65-70. *North-Holland, Amsterdam*, 1974. (A. D. Booth) **53** #9764 68A99
- Torgersen, Erik Nikolai Comparison of translation experiments. *Ann. Math. Statist.* **43** (1972), 1383-1399. (H. Heyer) **51** #11740 62B15
- (with Hansen, Ole Håvard) Comparison of linear normal experiments. *Ann. Statist.* **2** (1974), 367-373. (M. Csorgo) **51** #7070 62B15
- ★Notes on comparison of statistical experiments. Lectures, 1973-74. Recorded and supplemented by Bo Lindqvist. Statistical Memoirs, No. 1. *Institute of Mathematics, University of Oslo, Oslo*, 1975. 180 pp. (not consecutively paged) (T. Pitcher) **58** #7954 62B15
- Comparison of statistical experiments. With discussion by Søren Johansen, Bo Lindqvist, J. Hilden, O. Barndorff-Nielsen and a reply by the author. *Scand. J. Statist.* **3** (1976), no. 4, 186-208. (H. Heyer) **55** #9348 62B15
- Mixtures and products of dominated experiments. *Ann. Statist.* **5** (1977), no. 1, 44-64. (H. Heyer) **55** #11451 62B15
- Prediction sufficiency when the loss function does not depend on the unknown parameter. *Ann. Statist.* **5** (1977), no. 1, 155-163. (Masafumi Akahira) **56** #6949 62B05
- Torgerson, Warren See Notes: Lectures on mathematics in the behavioral sciences, **50** #1699
- Torgovickii, I. Š. See Cybernetic methods in diagnostics, **48** #8018 and Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #8022
- Torgue, J. C. (with Pásztor-Varga, Katalin; Azéma, P.) Couverture irrédondante des fonctions booléennes définies par leurs monômes vrais et faux-fonctions simultanées. (English and Russian summaries) *Acta Cybernet.* **2**, no. 3, 229-238 (1975). (S. Rudeanu) **53** #10511 94A20
- Toricelli, Evangelista See Heller, Siegfried, (See Zbl 219 #10026)
- Toričnaja, T. I. See Adaptive systems, **49** #2208
- Torićyna, G. D. Construction 'in the small' of a solution with a point singularity for a system of differential equations of elliptic type with quasilinear right-hand side. (Russian) *Differential equations. Trudy Rjazan. Radiotehn. Inst. No. 20* (1969), 146-148. (See RZMat 1970 #11 B337; MR 52 #13071) 35J45
- Construction 'in the small' of a solution with a singularity at zero for a certain partial differential equation. (Russian) *Differential equations. Trudy Rjazan. Radiotehn. Inst. No. 20* (1969), 188-191. (See RZMat 1970 #11 B375; MR 52 #13071) 35A99
- Torii, Koji (with Arisawa, Makoto) Phrase-structure languages by a concurrent derivation. *Systems-Computers-Controls* **2** (1971), no. 1, 71-77 (1972). (Authors' summary) **46** #4803 68A30
- (with Sugito, Yoshio; Mano, Yoshihisa) On a two-dimensional graph manipulation language GML. *Systems-Computers-Controls* **7** (1976), no. 5, 1-9 (1977). (B. Zelinka) **57** #11160 68A05 (05C99)
- Torii, Tatsuo (with Miyakoda, Tsuyako) A practical root-finding algorithm based on the cubic Hermite interpolation. *Information Processing in Japan* **13** (1973), 143-148. (Authors' introduction) **56** #17051 65H05 (65D05, 41A20)
- Fast Fourier transform for symmetric input data. *Tech. Rep. Osaka Univ.* **24** (1974), 371-387. (Christopher T. H. Baker) **51** #7353 65T05
- Fast Fourier sine and cosine transforms. *Information Processing in Japan* **15** (1975), 31-35. (Manfred Feilmeier) **53** #14875 65D30
- Toriwaki, Junichiro (with Shikano, Kiyohiro; Fukumura, Teruo) A wave propagation method for conversion of gray pictures into line figures. *Systems-Computers-Controls* **3** (1972), no. 5, 58-64 (1973). (Jana Zvárová) **49** #8448 68A45
- (with Yokoi, Shigeki; Fukumura, Teruo) Topological properties in digitized binary pictures. *Systems-Computers-Controls* **4** (1973), no. 6, 32-40. (Arnold Griffith) **50** #11880 68A45
- (with Yokoi, Shigeki; Fukumura, Teruo) Algebraic properties of parallel proceedings of pictures and their applications. *2nd USA-Japan Computer Conference Proceedings (Tokyo, 1975)*, pp. 183-188. *AFIPS Press, Montvale, N.J.*, 1975. (Shinichi Tamura) **58** #19433 68A45
- (with Yokoi, Shigeki; Fukumura, Teruo) An analysis of topological properties of digitized binary pictures using local features. *Comput. Graphics and Image Processing* **4** (1975), no. 1, 63-73. (Arnold Griffith) **52** #16189 68A45
- (with Yokoi, Shigeki; Fukumura, Teruo) Theoretical analysis of parallel processing of pictures using algebraic properties of picture operations. *Proceedings of the Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976)*, pp. 723-727. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (From the summary) **58** #19434 68A45
- Torkalanov, Kr. See Torkalanov, K. D.
- Torn, K. See Thorne, Kip S.

- Törnebohm, Håkan** An essay on knowledge-formation. *Z. Allgemeine Wissenschaftstheorie* 6 (1975), no. 2, 37-64. (Mario Bunge) 56 #11737 02A05
Scientific knowledge-formation. *Formal methods in the methodology of empirical sciences (Proc. Conf., Warsaw, 1974)*, pp. 431-438. *Synthese Library*, 103. Reidel, Dordrecht, 1976. (Editors) 58 #27440 02G99
- Tørnøve, Jørgen** (with Madsen, Ib; Snaith, Victor P.) Infinite loop maps in geometric topology. *Math. Proc. Cambridge Philos. Soc.* 81 (1977), no. 3, 399-430. (J. P. May) 58 #13007 55D35 (55F45)
See also May, J. Peter, 58 #13008
- Törner, Günter** Über Homomorphismen projektiver Hjelslev-Ebenen. (English summary) *J. Geometry* 5 (1974), 1-13. (David A. Drake) 50 #8289 50D35
Eine Klassifizierung von Hjelslev-Ringen und Hjelslev-Ebenen. *Mitt. Math. Sem. Giessen No. 107* (1974), iii+79 pp. (M. J. Kallaher) 50 #5618 50D30
Homomorphismen von affinen Hjelslev-Ebenen. *Math. Z.* 141 (1975), 159-167. (M. J. Kallaher) 51 #4036 50D05
(with Brungs, Hans-Heinrich) Chain rings and prime ideals. *Arch. Math. (Basel)* 27 (1976), no. 3, 253-260. (Jean Guérinod) 54 #7537 16A46
Some remarks on the structure of indecomposable injective modules over valuation rings. *Comm. Algebra* 4 (1976), no. 5, 467-482. (Marie-Paule Malliavin) 53 #8142 16A52
(with Drake, David A.) Die Invarianten einer Klasse projektiver Hjelslev-Ebenen. (English summary) *J. Geometry* 7 (1976), no. 2, 157-174. (B. Artmann) 54 #5964 50D35
Unzerlegbare, injektive Moduln über Kettenringen. *J. Reine Angew. Math.* 285 (1976), 172-180. (G. Krause) 54 #358 16A48
Bemerkungen zu (6, 2)-Hjelslev-Ebenen. *Mitt. Math. Sem. Giessen Heft 121* (1976), 93-101. (Armin Herzer) 57 #16108 05B25
Über ein Problem von Klingenberg. *Arch. Math. (Basel)* 28 (1977), no. 3, 253-254. (G. Michler) 56 #8609 16A34 (50D35)
 n -uniforme projektive Hjelslev-Ebenen sind stark n -uniform. *Geometriae Dedicata* 6 (1977), no. 3, 291-295. (David A. Drake) 58 #5287 05B25 (50D30)
(r^{n-1} , r) Hjelslev-Ebenen des Typs n . *Math. Z.* 154 (1977), no. 2, 189-201. (David A. Drake) 57 #10587 50D35 (50D99)
Über den Stufenaufbau von Hjelslev-Ebenen. *Mitt. Math. Sem. Giessen Heft 126* (1977), 43 pp. (B. Artmann) 58 #2598 50D35
See also Bibliography: Hjelslev geometry, 54 #13720
- Torgn, H. C.** (with Roome, William D.) Algorithms for multiple shift register realizations of sequential machines. *IEEE Trans. Computers C-22* (1973), 933-943. (W. Kwasowicz) 50 #4149 94A25
(with Bowra, James W.) The modeling and design of multiple function-unit processors. *IEEE Trans. Computers C-25* (1976), no. 3, 210-221. (A. D. Booth) 52 #12444 68A99
- Torgna, J. Edward** (with Ling, William H.) The constant error curve problem for varisolvent families. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 411-414. *Academic Press, New York, 1973.* (J. R. Rice) 49 #951 41A50
(with Ling, William H.) The constant error curve problem for varisolvent families. *J. Approximation Theory* 11 (1974), 54-72. (David A. Sprecher) 50 #5289 41A25
- Törnig, Willi** (with Meis, Theodor) Diskretisierungen des Dirichletproblems nichtlinearer elliptischer Differentialgleichungen. *Methoden und Verfahren der mathematischen Physik, Band 8*, pp. 47-72. *Bibliographisches Institut, Mannheim, 1973.* (J. R. Kuttler) 51 #4690 65N05
Monotonie- und Randmaximumsätze bei Diskretisierungen des Dirichletproblems allgemeiner nichtlinearer elliptischer Differentialgleichungen. (English summary) *Computing (Arch. Elektron. Rechnen)* 11 (1973), no. 4, 391-401. (Erich Bohl) 53 #9672 65N10
Monoton konvergente Iterationsverfahren zur Lösung nichtlinearer Differenzen-Randwertprobleme. *Beiträge Numer. Math.* 4 (1975), 245-257. (Syvert P. Nørsett) 56 #7245 65N10 (65H05)
(with Mittelman, Hans-Detlef) Über die Methode der finiten Elemente zur numerischen Lösung elliptischer Randwertprobleme 2. Ordnung. *Jahrbuch Überblicke Mathematik, 1977*, pp. 89-105. *Bibliographisches Inst., Mannheim, 1977.* (P. Laasonen) 57 #14523 65N99
(with Höhn, Werner) Ein maximum-minimum-Prinzip für Lösungen von finite-Element-Approximationen für quasilineare elliptische Randwertprobleme. (English summary) *Computing* 18 (1977), no. 3, 267-270. (B. Kellogg) 57 #8076 65N30
See also Numerische Lösung nichtlinearer partieller Differential- und Integrodifferentialgleichungen, 49 #4199; Numerische, insbesondere approximations-theoretische Behandlung von Funktionalgleichungen, 49 #4200; Numerische Behandlung nichtlinearer Integrodifferential- und Differentialgleichungen, 49 #4201 und Numerische Behandlung von Differentialgleichungen, 50 #15344
- di Toro, M.** See Di Toro, M.
- Toró, T.** Sur l'équation spinorielle pour le neutrino dans les espaces non euclidiens. (Romanian summary) *An. Univ. Timişoara Ser. Şti. Fiz.-Chim.* 9 (1971), 131-138. (G. R. Allcock) 46 #8632 83S3
- Toróhtii, A. N.** (with Lebed', G. K.) A method of construction of step-iteration algorithms for the approximate solution of the Cauchy problem for ordinary differential equations. (Russian) *Differential equations and their applications (Russian)*, pp. 192-202, 219-220. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1976.* (Authors' summary) 58 #31846 65L05
- Toróhtii, A. P.** A numerical-analytic method for the approximate solution of the Cauchy problem for ordinary differential equations. (Russian) *Numerical analysis and questions of optimization of computations (Russian)*, pp. 73-90. *Inst. Kibernet., Akad. Nauk Ukrain. SSR, Kiev, 1976.* (Editors) 58 #31852 65L05
(with Lebed', G. K.) Approximate-iteration methods for the approximate solution of integral equations. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications (Russian)*, pp. 134-139, 164-165. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1976.* (Authors' summary) 58 #29970 45L05 (65R05)
- (with Lebed', G. K.) A method of constructing algorithms for the approximate solution of linear integral equations of Volterra type. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 9, 1683-1692, 1727. (See RŽMat 1977 #3 B961) 65R05
See also Differential equations and their applications, 58 #26644
- Török, E.** (with Dénes, József) Groups and graphs. *Combinatorial theory and its applications, I (Proc. Colloq., Balatonfüred, 1969)*, pp. 257-289. *North-Holland, Amsterdam, 1970.* (Chong-yun Chao) 46 #91 05C25
- Török, T. L.** (with Gergely, T.) On the busy period of discrete-time queues. *J. Appl. Probability* 11 (1974), 853-857. (N. U. Prabhu) 51 #4455 60K25
(with Gergely, T.) A stochastic process to describe the virtual waiting time in discrete-time queueing system. *Progress in operations research, Vols. I, II (Proc. Sixth Hungarian Conf., Eger, 1974)*, pp. 417-423. *Colloq. Math. Soc. János Bolyai, Vol. 1, North-Holland, Amsterdam, 1976.* (H. T. Taşmanov) 55 #11430 60K25
- Torondzade, T. A.** The absolute continuity of measures that correspond to a certain class of diffusion type processes with respect to Wiener measure. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 76 (1974), 553-556. (Stanley Sawyer) 52 #12101 60J60 (60G30)
Construction of an innovation process for a certain class of Ito processes. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 77 (1975), 285-288. (Stanley Sawyer) 52 #12102 60J60
- Toropov, V. S.** (with Rodionov, A. M.) A generalization of the perturbation method for equations with lag, and application of it to the computation of transition processes in automatic control systems. (Russian) *Differentsial'nye Uravneniya* 8 (1972), 459-464. (P. C. Das) 46 #5799 34K25
- Toroshidze, I.** The asymptotic representation of the solutions of quasilinear systems of ordinary differential equations. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* 1(137) (1971), 89-102. (From the author's introduction) 57 #6681 34E05
A remark on the solutions of quasilinear systems of ordinary differential equations. (Russian. Georgian summary) *Tbilis. Univ. Šrom. A* 5(147) (1972), 31-35. (See RŽMat 1973 #2 B250) 34D10
A theorem of G. J. Butler. (Russian) *Differentsial'nye Uravneniya* 14 (1978), no. 10, 1903-1904, 1920. (From the text) 58 #17261b 34A10 (34C10)
- Torosjan, B. E.** (with Aslanjan, L. A.; Karahanjan, V. M.) Solution of a discrete isoperimetric problem. (Russian. Armenian summary) *Akad. Nauk Armyan. SSR Dokl.* 65 (1977), no. 5, 257-262. (E. Hertel) 58 #18158 52A40
- Torpeley, Nathaniel** See Tanner, Rosalind Cecilia Hildegard, 55 #12420
- Torquati, Franco** Sui teoremi di Di Rham. *Rend. Sem. Mat. Univ. Padova* 54 (1975), 123-131 (1976). (Csaba Hatvany) 57 #10720 58A10
Proprietà funzionali della coomologia di Allendoerfer-Eells. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* 22 (1976), 115-129 (1977). (Mario Pezzana) 55 #9139 58A99 (55B10)
(with Ferrari, Aldo) Sull'omologia delle correnti di una prestratificazione di Whitney. (English summary) *Boll. Un. Mat. Ital. A* (5) 14 (1977), no. 2, 359-367. (M. Herrera) 57 #6498 32C40 (32K99)
- Torrance, Ellen** (with Chawla, L. M.) Three restricted product-sum partition functions. *Acta Arith.* 32 (1977), no. 1, 7-13. (H. Gupta) 55 #5518 10A45 (10B30)
(with Chawla, L. M.) More additive arithmetic functions inversely associated with partition functions. *J. Natur. Sci. and Math.* 17 (1977), no. 1, 1-10. (H. Gupta) 57 #227 10A45
- Torrance, George W.** See Operational Research, 49 #12059
- Torrance, K. E.** (with Raithby, G. D.) Upstream-weighted differencing schemes and their application to elliptic problems involving fluid flow. *Internat. J. Comput. & Fluids* 2 (1974), 191-206. (C. E. Pearson) 49 #10167 65N20
- de la Torre, Alberto** A simple proof of the maximal ergodic theorem. *Canad. J. Math.* 28 (1976), no. 5, 1073-1075. (Michael Lin) 54 #5867 47A35
A dominated ergodic theorem for contractions with fixed points. *Canad. Math. Bull.* 20 (1977), no. 1, 89-91. (Humphrey S. Fong) 56 #5840 28A65 (47A35)
- Torre, Anna** Una generalizzazione delle fibrazioni proiettive e reticoli geometrici associati. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* 109 (1975), no. 2, 370-381. (Rodney Angotti) 54 #11170 50D35
(with Scotti, Fernanda) Grafi triangolati tracciabili sul toro. *Istit. Lombardo Accad. Sci. Lett. Rend. A* 110 (1976), no. 2, 520-530 (1977). (O. D'Antona) 58 #10551 05C10 (57C15)
- della Torre, Edward** See Della Torre, Edward
- de la Torre, Pilar** (with Goldstein, Larry Joel) On the transformation of $\log \eta(\tau)$. *Duke Math. J.* 41 (1974), 291-297. (J. Lehner) 49 #7217 10H10 (10D05, 12A70)
(with Goldstein, Larry Joel) On a function analogous to $\log \eta(\tau)$. *Nagoya Math. J.* 59 (1975), 169-198. (Audrey A. Terras) 52 #13646 10D20
- Torre, Vincent** Synchronization of non-linear biochemical oscillators coupled by diffusion. *Biol. Cybernet.* 17 (1975), no. 3, 137-144. (P. Holgate) 58 #15292 92A05
A theory of synchronization of heart pace-maker cells. *J. Theoret. Biol.* 61 (1976), no. 1, 55-71. (Alwyn C. Scott) 54 #12245 92A05 (34C15)
(with Grattarola, M.) A necessary-sufficient condition for synchronization of nonlinear oscillators. *Lett. Nuovo Cimento* (2) 17 (1976), no. 7, 241-244. (From the text) 58 #14047 7034
(with Poggio, T.) A Volterra representation for some neuron models. *Biol. Cybernet.* 27 (1977), no. 2, 113-124. (From the summary) 58 #33575 94A20 (92A05)
Existence of limit cycles and control in complete Keynesian system by theory of bifurcations. *Econometrica* 45 (1977), no. 6, 1457-1466. (M. Ali Khan) 56 #10849 90A15
(with Grattarola, M.) Necessary and sufficient conditions for synchronization of nonlinear oscillators with a given class of coupling. *IEEE Trans. Circuits and Systems CAS-24* (1977), no. 4, 209-215. (Ljubomir Lilov) 56 #6019 34C15 (7034)
(with Poggio, T.) A new approach to synaptic interactions. *Theoretical approaches to complex systems (Proc. Sympos., Tübingen, 1977)*, pp. 89-115. *Lecture Notes in Biomath., Vol. 21, Springer, Berlin, 1978.* (Juan Lin) 58 #9390 92A05
- Torrence, R. J.** (with Couch, W. E.) Asymptotic behavior of vacuum space-times. *J. Mathematical Phys.* 13 (1972), 69-73. (Authors' summary) 45 #4790 83S3
(with Tulczyjew, Włodzimierz M.) Gauge invariant canonical mechanics for

- arged particles. *J. Mathematical Phys.* **14** (1973), 1725-1732. (M. Carmeli)
#10422 81.53
- at, Carmen See Peierls, Rudolf, 56 #14442
- ia Torrent, Miguel A. See Goberna Torrent, Miguel A.
- a Torres, A. See Pereira Torres, A.
- res, Ana María The first attempts at automatic theorem proving in propositional calculus. (Spanish) *Teorema* **4** (1974), 489-512. (Cristian Calude) **56** #7362 68A40
- s, Ennodio (with Sarabia, José) On second order linear differential equations. *J. Mathematical and Physical Sci.* **11** (1977), no. 4, 319-324. (Stanley B. Eliason)
#11652 34C10
- ez Torres, J. M. See Martínez Torres, J. M.
- z, Luz G. A note on extension problems. (Spanish) *Rev. Colombiana Mat.* **8** (1974),
#14. (G. Marinescu) **52** #6395 (E 58 #30163) 46E20 (26A57)
- Correction to: "A note on extension problems" (Rev. Colombiana Mat. **8** (1974),
#14). (Spanish) *Rev. Colombiana Mat.* **11** (1977), no. 1-4, 135. (Editors) **58** #30163
#E99
- s, Miguel See Torres Iglesias, Miguel
- s, P. L. A classical Markov process in nonequilibrium quantum statistical mechanics.
Mathematical Phys. **18** (1977), no. 2, 301-305. (Author's summary) **57** #18687
#2.60 (46L99, 60J99)
- s Domínguez, Manuel Finite differences. Equations. (Spanish) *Gac. Mat. (Madrid)*
25 (1973), 139-145. (V. Murgescu) **50** #802 39A05
- s Iglesias, Miguel ★Sobre los grupos finitos π -separables. (Spanish. English
summary) [On π -separable finite groups] Publicaciones del Seminario Matemático
Arcia de Galdano, 14. *Consejo Superior de Investigaciones Científicas, Facultad de
Ciencias de Zaragoza, Zaragoza*, 1971. 35 pp. (Editors) **50** #472 20D20
- On the degrees of the irreducible modular representations of finite groups. (Spanish)
Proceedings of the Ninth Annual Conference of Spanish Mathematicians (Granada, 1968)
(Spanish), pp. 265-269. *Inst. "Jorge Juan" Mat., Madrid*, 1971. (O. H. Kegel) **51** #8230
20C20
- On finite π -separable groups. (Spanish. English summary) *Rev. Acad. Ci. Zaragoza*
26 (1971), 429-459. (G. Zappa) **46** #5442 20D20
- Note on π -separable groups. (Spanish) *Proceedings of the Tenth Conference of
Spanish Mathematicians (La Laguna, 1969)* (Spanish), pp. 265-268. *Inst. "Jorge Juan"*
Mat., Madrid, 1972. (J. Wiegold) **50** #2332 20D20
- (with Pérez Monasor, Francisco) Two properties on saturated classes of finite
groups. (Spanish summary) *Rev. Mat. Hisp.-Amer.* (4) **32** (1972), 52-57. (D. K. Friesen)
5 #253 20D25
- An elementary property of the irreducible characters of a finite group. *Rev. Mat.
Hisp.-Amer.* (4) **32** (1972), 128-131. (T. O. Hawkes) **46** #7361 20C15
- Note on the Deskins subgroup of a finite group. (Spanish) *Gac. Mat. (Madrid)* (1)
1 (1975), 45-48. (G. Zappa) **51** #3299 20D25
- On certain subgroups of finite π -soluble groups. *Rev. Mat. Hisp.-Amer.* (4) **37**
1 (1977), no. 5, 225-233. (M. E. Harris) **58** #11108 20D10
- Melo, Luiz Stationary point processes. *An. Acad. Brasil. Ci.* **47** (1975), no. 1, 33-64.
(J. G. de Andrade) **55** #1682 62M99
- an Grandell) **55** #1682 62M99
- y Quevedo, Leonardo See Origins of digital computers, 50 #6760
- tti, Roberto On Mr. Kielkop's not so sober understanding of standard elementary
logic. *Mind* **83** (1974), 575-577. (Not reviewed) 02A05
- elli, Evangelista See Freiman, L. S., 45 #3149
- s, Glenn M. (with Whittington, Stuart G.; Valleau, John P.) How many figure eights
are there? Some bounds. *J. Phys. A* **10** (1977), no. 6, L111-L112. (D. W. Walkup)
#12292 05C30
- Torrijos, Jorge See Baralt-Torrijos, Jorge
- ti, Maurizio Giuseppe Ferroni, gesuita e galileiano. (English summary) *Physis—Riv.
Internaz. Storia Sci.* **15** (1973), 411-423. (Author's summary) **58** #26931 01A45
- i, Mariano Sui moti per inerzia di un sistema rigido a massa variabile. *Ist. Veneto
Sci. Lett. Arti Atti Cl. Sci. Mat. Natur.* **131** (1972/73), 221-229. (A. de Castro Brzezicki)
2 #2314 70J34
- ia, José M^a. Jorge Juan and the antecedents of the Royal Academy of Exact
Sciences, Physical and Natural. (Spanish) *Rev. Acad. Ci. Madrid* **67** (1973), 11-26.
(Editors) **48** #5796 01A50
- ella, A. J. Representations of the three-dimensional rotation group by the direct
method. *J. Math. Phys.* **16** (1975), 1637-1642. (Author's summary) **51** #7507 81.22
- n, Ilie (with Cseke, V.) On a family of discrete random variables associated with a
continuous random variable. (Romanian. Russian and French summaries) *An. Univ.
Bucureşti Mat.-Mec.* **20** (1971), no. 1, 49-56. (M. Iosifescu) **46** #6445 60G50
- (with Cristescu, Ilie) Problems of cryptography. (Romanian. French summary) *An.
Univ. Bucureşti Mat.-Mec.* **22** (1973), no. 1, 25-33. (C. Tartia) **51** #5160 94A10
- On informational energy. (Romanian. French summary) *Stud. Cerc. Mat.* **25** (1973),
#171-174. (S. Guiaşu) **50** #9415 94A15
- s, J. J. (with Aurela, A. M.) A fast quadratic programming method for solving
unconditioned systems of equations. *J. Math. Anal. Appl.* **38** (1972), 193-204. (M.
Hössler) **46** #10409 90C20
- Jean-René Sur un problème de partition de longueur minimale d'un graphe. (English
summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 12, A647-A649. (Author's
summary) **55** #176 05C35
- Manuel See Tort Pinilla, Manuel
- ra, R. D. (with Rohatgi, V. K.) Estimation of the common mean of a bivariate
normal distribution when the mean is known to be non-negative. (German summary)
Biometrische Z. **18** (1976), no. 7, 555-561. (M. Samiuddin) **56** #4028 62F10
- rella, Michael Existence and uniqueness questions for the unitarity equation. *J.
Mathematical Phys.* **13** (1972), 1764-1767. (G. W. Johnson) **47** #1404 81.47
- The unitarity equation for scattering in the absence of spherical symmetry. *J.
Mathematical Phys.* **15** (1974), 745-747; addendum, *ibid.* **15** (1974), 1153. (Jean Michel
Combes) **49** #11999 81.47
- Experimental uncertainties in the problem of the unitarity equation. *J.
Mathematical Phys.* **16** (1975), 823-828. (Jean Michel Combes) **51** #9714 81.47
- (with Leise, James A.) The unitarity equations for matrices and the problem of
determining the scattering amplitude from the differential cross section. *SIAM J. Appl.*
Math. **30** (1976), no. 3, 407-420. (Authors' summary) **58** #4082 81.47 (15A24)
- Tortorici, Maria Il calcolo inferenziale automatico nella trattazione delle equazioni logiche.
Atti Accad. Sci. Lett. Arti Palermo Parte I (4) **29** (1968/69), 263-284 (1970). (A.
Salomaa) **45** #6574 02B05
- (with Di Spati, Antonino) Ricerca automatica dei gruppi isofonici in testi poetici
ed applicazione ad Archiloco Fr. 2. *Atti Accad. Sci. Lett. Arti Palermo Parte I* (4) **30**
(1969/70), 309-341 (1971). (1 foldout) (Andre' Lentini) **47** #2870 68A30
- Analisi numerica di un algoritmo con notevoli esigenze di precisione. *Atti Accad.
Sci. Lett. Arti Palermo Parte I* (4) **30** (1969/70), 389-454 (1971). (G. Opfer) **49** #4279
65N99
- (with Amante, P.; Cusimano, M.) Approssimazioni polinomiali di funzioni per la
costruzione di un software alle alte precisioni. *Atti Accad. Sci. Lett. Arti Palermo Parte
I* (4) **34** (1974/75), no. 1, 251-326 (1975). (Luciano Biasini) **54** #9046 65D20
- Tort Pinilla, Manuel Considerations on the normal topology in Köthe spaces. (Spanish)
*Proceedings of the First Conference of Portuguese and Spanish Mathematicians (Lisbon,
1972)* (Spanish), pp. 203-216. *Inst. "Jorge Juan" Mat., Madrid*, 1973. (R. Aguiló Fuster)
50 #8003 46A45
- On lacunary spaces of sequences. (Spanish) *Proceedings of the First Conference of
Portuguese and Spanish Mathematicians (Lisbon, 1972)* (Spanish), pp. 217-239. *Inst.
"Jorge Juan" Mat., Madrid*, 1973. (Jaime Lesmes) **50** #10754 46A45
- On locally convex topologies in sequence spaces. (Spanish. English summary)
Stochastica **1** (1975/76), no. 1, 19-47. (M. Valdivia and P. Pérez Carreras) **55** #3744
46A45
- On locally convex topologies in sequence spaces. II. (Spanish) *Stochastica* **1**
(1975/76), no. 2, 1-19. (M. Valdivia and P. Pérez Carreras) **55** #3745 46A45
- Tortrat, A. Convolutions dénombrables équitendues dans un groupe topologique X.
(English summary) Avec discussion par L. Schmetterer, L. Le Cam, S. D. Chatterji, K.
R. Parthasarathy et A. Tortrat. *Les probabilités sur les structures algébriques (Actes
Colloq. Internat. CNRS, No. 186, Clermont-Ferrand, 1969)*, pp. 327-343. *Éditions Centre
Nat. Recherche Sci., Paris*, 1970. (Author's summary) **53** #14582 60B15
- Sur la construction de processus réels homogènes non additifs. (English summary)
Publ. Inst. Statist. Univ. Paris **19** (1970), no. 4, 91-100. (From the author's summary)
56 #9704 60J30
- (with Heyer, Herbert) Sur la divisibilité des probabilités dans un groupe
topologique. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **16** (1970), 307-320. (R. A.
Gangolli) **45** #4465 60B15
- ★Calcul des probabilités et introduction aux processus aléatoires. *Masson et C^{ie}
Éditeurs, Paris*, 1971. xiv+303 pp. (M. Métivier) **51** #11597 60-01
- Sur les mesures aléatoires. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)*
7 (1971), 1-8. (H. Heyer) **45** #4466 60B05
- Sur les lois de probabilité τ -régulières, dans un groupe ou un demi-groupe
topologiques. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A1160-A1163. (T. P. Speed)
45 #1211 60B15
- (with Blanc-Lapierre, André) Processus markoviens jusqu'aux moments d'ordre K.
C. R. Acad. Sci. Paris Sér. A-B **275** (1972), A715-A719. (F. B. Knight) **46** #8315
60J25
- Mélange de lois et lois indéfiniment divisibles. *Proceedings of the Fourth Conference
on Probability Theory (Braşov, 1971)*, pp. 227-244. *Editura Acad. R. S. R., Bucharest*,
1973. (F. W. Steutel) **53** #11700 60E05
- Sur les lois τ -régulières, leurs produits et leur convolution. *Transactions of the Sixth
Prague Conference on Information Theory, Statistical Decision Functions, Random
Processes (Tech. Univ. Prague, Prague, 1971; dedicated to the memory of Antonín Špaček)*,
pp. 839-849. *Academia, Prague*, 1973. (Eberhard Siebert) **50** #5882 60B05
- (with Krée, Paul R.) Désintégration d'une loi gaussienne μ dans une somme
vectorielle. *C. R. Acad. Sci. Paris Sér. A-B* **277** (1973), A695-A697. (S. D. Chatterji)
50 #13441 28A50
- (with Hennequin, P. L.) ★Теория вероятностей и некоторые ее приложения.
(Russian) [Probability theory and some of its applications] Translated from the French
by S. I. Zalgaller and O. V. Šalaevskii. Edited by Ju. V. Linnik. *Izdat. "Nauka", Moscow*,
1974. 472 pp. (Editors) **50** #11336 60-01
- Équation (1) $Ee^{aX - a^2/2Y} = 1$ et mélanges de lois normales. Colloque Consacré au
Calcul des Probabilités (Univ. Clermont, Clermont-Ferrand, 1973). *Ann. Sci. Univ.
Clermont* **51** (1974), no. 9, 47-50. (E. Lukacs) **51** #4349 60E05
- Normes de Gross et unimodalité des mesures cylindriques isotropes. *C. R. Acad.
Sci. Paris Sér. A* **279** (1974), 519-522. (A. D. de Acosta) **51** #4336 60B05
- (with Blanc-Lapierre, André) Fonctionnelles linéaires ou non linéaires de processus
aléatoires à accroissements indépendants et caractère markovien. (English summary) *C.
R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aii, A953-A956. (H. Kesten) **51** #14277
60J30
- (with Satô, Hiroshi) Prolongements τ -réguliers de lois de probabilité et application
aux lois gaussiennes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no.
13, Aiii, A909-A911. (A. D. de Acosta) **52** #4360 60B05 (60G15)
- Pseudo-martingales et lois stables. (English summary) *C. R. Acad. Sci. Paris Sér.
A-B* **281** (1975), no. 12, Aii, A463-A465. (S. D. Chatterji) **52** #15663 60G45
(60E05)
- (with Blanc-Lapierre, André) Fonctionnelles causales markoviennes d'un processus
à accroissements indépendants. Application à la modélisation de systèmes déterministes
non linéaires et non stationnaires. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **24** (1976), no. 4,
327-345. (H. Kesten) **55** #1496 60J30
- τ -régularité des lois, séparation au sens de A. Tulcea et propriété de
Radon-Nikodým. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **12** (1976),
no. 2, 131-150. (S. D. Chatterji) **54** #13027 (E 55 #10632) 28A40 (46G10)
- (with Blanc-Lapierre, André) Fonctionnelles vectorielles, déterministes, causales et
markoviennes de processus aléatoires vectoriels à accroissements indépendants. (English
summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 9, Aii, A725-A728. (Authors'
summary) **54** #11523 60J30 (81.60)
- Lois et (A) dans les espaces vectoriels et lois stables. *Z. Wahrscheinlichkeitstheorie
und Verw. Gebiete* **37** (1976/77), no. 2, 175-182. (V. M. Kruglov) **55** #1393 60B05
- Sur les probabilités dans les espaces vectoriels topologiques. *Proceedings of the
Symposium to honour Jerzy Neyman (Warsaw, 1974)*, pp. 319-325. *Państw. Wydawn.*

- Nauk.*, Warsaw, 1977. (S. A. Čobanjan) **57** #1589 60B05
 Désintégration d'une probabilité, statistiques exhaustives. *Séminaire de Probabilités, XI* (Univ. Strasbourg, Strasbourg, 1975/1976), pp. 539-565. *Lecture Notes in Math.*, Vol. 581, Springer, Berlin, 1977. (S. D. Chatterji) **56** #12222 28A50 (60G05, 62B05)
 Prolongements τ -réguliers. Application aux probabilités gaussiennes. (English summary) *Symposia Mathematica*, Vol. XXI (Convegno sulle Misure su Gruppi e su Spazi Vettoriali, Convegno sui Gruppi e Anelli Ordinati, INDAM, Rome, 1975), pp. 117-138. Academic Press, London, 1977. (Hiroshi Sato) **57** #1590 60B05 (28A40, 60G15)
 Sur le support des lois indéfiniment divisibles dans les espaces vectoriels localement convexes. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **13** (1977), no. 1, 27-43. (N. N. Vahanija) **57** #17756a 60B15 (60E05)
 Addendum: " τ -régularité des lois, séparation au sens de A. Tulcea et propriété de Radon-Nikodym" (Ann. Inst. H. Poincaré Sect. B (N.S.) **12** (1976), no. 2, 131-150). *Ann. Inst. H. Poincaré Sect. B (N.S.)* **13** (1977), no. 1, 43. (Editors) **55** #10632 28A40
 Complément sur: "Sur le support des lois indéfiniment divisibles dans les espaces vectoriels localement convexes" (Ann. Inst. H. Poincaré Sect. B (N.S.) **13** (1977), no. 1, 27-43). *Ann. Inst. H. Poincaré Sect. B (N.S.)* **13** (1977), no. 3, 293-298. (N. N. Vahanija (Vakhania)) **57** #17756b 60B15 (60E05)
 (with Tarieladze, V. I.; Vahanija, N. N.) Prolongements d'une dualité (X, Y) entre espaces vectoriels en une dualité de type (L^q, L^p) . (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 24, A1561-A1564. (Authors' summary) **55** #13518 60B05 (28A40)
 Sur la comparaison d'une mesure μ dans un espace vectoriel X avec ses translatées. (English summary) *Ann. Inst. H. Poincaré Sect. B (N.S.)* **14** (1978), no. 1, 61-83. (S. D. Chatterji) **58** #24518 60G30 (60B05)
- Toruńczyk, Henryk** A short proof of Hausdorff's theorem on extending metrics. *Fund. Math.* **77** (1972), no. 2, 191-193. (J. Dugundji) **47** #9559 54E35
 Compact absolute retracts as factors of the Hilbert space. *Fund. Math.* **83** (1973), no. 1, 75-84. (D. E. Sanderson) **48** #4993 54C55
 Smooth partitions of unity on some non-separable Banach spaces. *Studia Math.* **46** (1973), 43-51. (J. C. Wells) **49** #4016 58B10
 Absolute retracts as factors of normed linear spaces. *Fund. Math.* **86** (1974), 53-67. (D. E. Sanderson) **51** #1723 54C55 (58D15)
 On Cartesian factors and the topological classification of linear metric spaces. *Fund. Math.* **88** (1975), no. 1, 71-86. (D. E. Sanderson) **52** #11924 57A20 (54C55)
 On factors of the Hilbert cube and metric properties of retractions. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 9, 757-765. (C. Bessaga) **56** #3843 57A20 (54C55)
 Homeomorphism groups of compact Hilbert cube manifolds which are manifolds. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **25** (1977), no. 4, 401-408. (Richard M. Schori) **58** #24302 57E05 (57A20)
 (with Pelczyński, A.) Certain non-locally convex linear metric spaces homeomorphic to Hilbert spaces. Special issue dedicated to Władysław Orlicz on the occasion of his seventy-fifth birthday. *Comment. Math. Special Issue* **1** (1978), 261-265. (M. I. Kadec) **58** #24275 57A17 (46A15, 54E15)
 See also **Problems: Topology**, **50** #8399
- Tory, E. M.** (with Pickard, David K.) A Markov model for sedimentation. *J. Math. Anal. Appl.* **60** (1977), no. 2, 349-369. (J. D. Atkinson) **56** #7482 76D03 (60J25)
- Torževskii, A. P.** The motion of an artificial satellite in relation to the center of gravity and to resonance. (Russian. English and French summaries) *Astronaut. Acta* **14** (1969), 241-259. (B. Garfinkel) **45** #1438 70J35 (85Q00)
- Toscani, Giuseppe** (with Barbaini, Franco) Costruzione di misure mediante tempi d'arresto. (English summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **109** (1975), no. 1, 49-64. (Maurizio Pratelli) **54** #8838 60G40
 (with Guarnieri, I.) Stochastic electrodynamics of a one-dimensional cavity. (Italian summary) *Boll. Un. Mat. Ital. B (5)* **14** (1977), no. 1, 31-41. (Werner Kohler) **57** #8487 78B60
- Tosciano, Letterio** Generalizzazioni dei polinomi di Laguerre e dei polinomi attuariali. (English summary) *Riv. Mat. Univ. Parma* (2) **11** (1970), 191-226. (N. Hayek Calil) **47** #5327 33A65
 Contribution à l'étude de polynômes associés aux fonctions du cylindre parabolique. *An. Fac. Ci. Univ. Porto* **54** (1971), 327-340. (K. N. Srivastava) **45** #8884 33A30
 Sur la somme de deux séries du type intégral-géométriques et exponentielles généralisées. *An. Fac. Ci. Univ. Porto* **54** (1971), 341-352. (S. M. Mazhar) **46** #5882 40A05
 Sulle funzioni del cilindro parabolico. *Matematiche (Catania)* **26** (1971), 104-126 (1972). (A. E. Danese) **47** #5318 33A40
 Relazioni tra polinomi classici. (English summary) *Ist. Veneto Sci. Lett. Arti Atti Cl. Sci. Mat. Natur.* **131** (1972/73), 267-287. (S. K. Chatterjea) **50** #13662 33A45
 Sur deux suites récurrentes du second ordre, linéaires et homogènes. *Mat. Vesnik* **9(24)** (1972), 131-140. (R. N. Jain) **50** #225 10A35
 Sur quelques séries hypergéométriques de type F_3 . *Mat. Vesnik* **9(24)** (1972), 339-346. (L. Carlitz) **48** #585 33A30
 Sui polinomi ipergeometrici a più variabili del tipo F_D di Lauricella. (English summary) *Matematiche (Catania)* **27** (1972), 219-250 (1973). (M. E. Muldoon) **49** #5415 (EA 50) 33A30
 Sur une configuration de la géométrie du triangle associée aux brocardiens d'un point. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and George Ţiţica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 545-553. (H. T. Croft) **51** #4023 50B10
 Sulla integrazione di una equazione differenziale di Laplace. *An. Fac. Ci. Univ. Porto* **57** (1974), no. 1-4, 65-74. (N. Hayek Calil) **53** #5972 34A25
 Le potenze di una particolare matrice di terzo ordine e le funzioni numeriche di Lucas. *An. Fac. Ci. Univ. Porto* **57** (1974), no. 1-4, 75-81. (L. Carlitz) **53** #263 10A35
 Calcul de deux intégrales définies de polynômes hypergéométriques, à l'aide du théorème de composition de la transformation de Laplace. *Bull. Math. Soc. Sci. Math.*
- R. S. Roumanie (N.S.)* **18(66)** (1974), no. 3-4, 403-414 (1976). (V. M. Bhise) **53** #111 33A30
 L'operatore xD e i numeri di Bernoulli e di Eulero. (English summary) *Matematiche (Catania)* **31** (1976), no. 1, 63-89 (1977). (H. W. Gould) **58** #10709 10A40 (05A1)
 A relation between Jacobi polynomials. *J. Math. Anal. Appl.* **60** (1977), no. 182-185. (H. M. Srivastava) **56** #712 33A65
 Some results for generalized Bernoulli, Euler, Stirling numbers. *Fibonacci Quart.* **1** (1978), no. 2, 103-112. (Harald Scheid) **58** #5257 05A15 (10A40)
Toscano, Raffaele (with Guidobaldi, Renato) Una disequazione variazionale connessa a un problema di elasticità. *Ricerche Mat.* **25** (1976), no. 2, 229-245. (P. Villaggio) **57** #8329 73J49
 (with Guidobaldi, Renato) Proprietà della soluzione di un problema unilaterale Dirichlet con vincolo elastico. *Ricerche Mat.* **26** (1977), no. 1, 85-102. (Gianfranco Buttarò) **58** #29159 35J20
- Tošev, B.** A certain invariant of a vector field. (Bulgarian. Russian and French summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Priložna Meh.* **8** (1973), no. 2, 9-12 (1976). (Editors) **54** #485 26A60
- Toshimoto, Chiyashi** (with Toraiichi, Kazuo; Murakami, Jinki; Miki, Nobuhiro; Nagai, Nobuo) A note on logical orthogonal space—a representation using cyclic permutations. *Systems-Computers-Controls* **2** (1971), no. 1, 85-87 (1972). (Authors' introduction) **46** #6959 94A20 (42A60)
- Tošić, Dobrolo Đ.** (with Mitrinović, Dragoslav S.; Janić, Radovan R.) ★Specijalne funkcije. (Serbo-Croatian) [Special functions] Zbornik zadatka i problema. [A collection of exercises and problems] Novi Zbornik Matematičkih Problema, No. 1 [New Collection of Mathematical Problems, No. 1] *Naučna Knjiga, Belgrade*, 1972. xii + 158 pp. (Editors) **50** #7602 33-01
 (with Milovanović, Gradimir V.) An application of Newton's method to simultaneous determination of zeros of a polynomial. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 412-460 (1973), 175-177. (N. N. Abdelmalek) **48** #5368 65H05
 (with Mihailović, D.) ★Elementi matematičke analize. II. (Serbo-Croatian) [Elements of mathematical analysis. II] Funkcije više promenljivih. Vektorska analiza. Višestruki integrali. Teorija polja. [Functions of several variables. Vector analysis. Multiple integrals. Theory of fields] *Naučna Knjiga, Belgrade*, 1976. xi + 351 pp. (Editors) **56** #544 26-01
- Tošić, Ratko** S -bases of propositional algebra. *Publ. Inst. Math. (Beograd) (N.S.)* **14(28)** (1972), 139-148. (J. C. Muzio) **53** #7644 94A20 (02-XX)
 See also **Biography: Tošić, Ratko**, **52** #13256
- Tošić, Ž.** (with Ivaš'kiv, Ju. L.; Pospelov, D. A.) Representations in many-valued logics. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 2, 35-47. (Editors) **46** #1461 94A20
- Tošić, Žilko** Polynomial representations of m -valued logical functions. (Russian) *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 302-319 (1970), 43-48. (D. Simovici) **50** #1775 94A20 (02C05)
 (with Ajzenberg, Naum N.) A generalization of the threshold functions. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 381-409 (1972), 97-99. (I. Gerst) **48** #5728 94A20
 Analytical representations of m -valued logical functions over the ring of integers modulo m . *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.* 410-411 (1972), 1-36. (M. Stojakovic) **48** #10699 94A20 (02C05)
 (with Marinković, Slobodan B.) Algorithm for minimal polarized polynomial form determination. *IEEE Trans. Computers* **C-23** (1974), no. 12, 1313-1315. (Herman Walter) **52** #13006 94A20
- Tošov, N.** (with Malevič, T. L.) Boundaries of the maximum of a Gaussian stationary process. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 12, 3-4. (Ju. M. Ryžov) **57** #7750 60G15
 (with Malevič, T. L.) The maximum of a nonstationary Gaussian process. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 6, 7-8. (Ju. M. Ryžov) **58** #13315 60G15
 Properties of the Z_n -characteristics of the excess of a stationary Gaussian process. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 9, 7-8. (Ju. M. Ryžov) **58** #13316 60G15
 (with Malevič, T. L.) The asymptotic behavior of the maximum of a Gaussian field. (Russian) *Dokl. Akad. Nauk UzSSR* **1977**, no. 10, 6-7. (Ju. M. Ryžov) **58** #13317 60G15
 (with Malevič, T. L.) The asymptotic behavior of the maximum of Gaussian processes and fields. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 6, 8-10, 101. (Ju. M. Ryžov) **58** #24503 60G15
 Asymptotic normality of Z_n -characteristics of the excess of a stationary Gaussian process. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 2, 27-31, 89. (S. A. Book) **58** #7818 60G15
- Tosovic, Ljubomir B.** Some experiments on sparse sets of linear equations. *SIAM J. Appl. Math.* **25** (1973), 142-148. (L. W. Ehrlich) **48** #3234 65F05
- Tosques, Mario** Analytic hypoellipticity of certain second-order evolution equations with double characteristics. *Trans. Amer. Math. Soc.* **218** (1976), 173-196. (Y. I. Kannai) **53** #6082 35H05
 (with Buttazzo, Giuseppe) G -convergenza per alcune classi di funzionali. (English summary) *Ann. Univ. Ferrara Ser. VII (N.S.)* **23** (1977), 257-267 (1978). (Authors' summary) **57** #17445 49A30
 Analytic hypoellipticity for a class of second-order evolution operators with double characteristics. (Italian summary) *Boll. Un. Mat. Ital. B (5)* **14** (1977), no. 1, 160-171. (L. Cattabriga) **56** #6091 35H05
- Tosser, A. J.** (with Dubus, D.) Algebraic optimisation of NAND-NOR switching circuits. *Comput. J.* **20** (1977), no. 1, 73-77. (Aleksander Albicki) **56** #8222 94A20
 (with Masset, G. J.) Minimum NAND-NOR synthesis of S -factorized sum of products and product of sums. *Internat. J. Electron.* **43** (1977), no. 3, 209-251. (A. D. Koršunov) **58** #33565 94A20
 (with Dubus, D.) Graphical use of "don't care" symbols in the shortened Quine-McCluskey tables. *Internat. J. Electron.* **43** (1977), no. 4, 353-359. (Jürgen Dassow) **57** #5490 94A20
 (with Masset, G. J.; Rabel, M. J.) Opportunity of factoring in NAND-NOR

- networks when a multiple inverter is available. *Internat. J. Electron.* **45** (1978), no. 3, 9-298. (From the text) **58** #26570 94A20
- Carmelo** Generalizzazione di alcuni teoremi fondamentali della teoria degli ostamenti rigidi finiti. *Ist. Veneto Sci. Lett. Arti Atti Cl. Sci. Mat. Natur.* **131** 972/73, 231-239. (O. Bottema) **50** #9100 70.50
- Fóth, Gábor** See Fejes Tóth, Gábor
- Gábor** On the triangularizability of planar orthogonal differential equations. *Period. (ath. Hungar.)* **8** (1977), no. 3-4, 243-251. (N. Fenichel) **57** #790 34C20
- Characterization of aperiodic R -actions by their discrete subgroups on 2-manifolds. *Proc. Fac. Sci. Tokai Univ.* **13** (1978), 55-63. (Roger C. McCann) **58** #2767 54H20 8F15
- J.** (with Kanyár, B.) The fitting of a system of linear differential equations by the radiant method. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* **2** (1976), no. 4, 259-268 (1977). (Authors' summary) **57** #18124 65L99
- K.** (with Szegő, K.) Expansions of the unequal-mass scattering amplitude in terms of incoherent representations and complex angular momentum at zero energy. *Phys. Rev. D* **3** 5 (1972), 1297-1307. (K. T. Mahanthappa) **48** #13042 81.30
- L.** (with Lukáč, I.) On the complete set of observables on a sphere in the three-dimensional complex space. *Jadernaja Fiz.* **17** (1973), 1337-1347 (Russian); translated as *Soviet J. Nuclear Phys.* **17** (1973), 696-700. **50** #15643 81.22
- L. Fejes** See Fejes Tóth, László
- Li-Tóth, P.** See Ecsedi-Tóth, P.
- Paolo** (with Martello, Silvano) An upper bound for the zero-one knapsack problem and a branch and bound algorithm. *European J. Oper. Res.* **1** (1977), no. 3, 169-175. (Leon Cooper) **56** #10956 90C10
- Péter E.** (with Gécség, F.) Algebra and logic in theoretical computer science. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 78-92. *Lecture Notes in Comput. Sci.*, Vol. 53, Springer, Berlin, 1977. (Max Dauchet) **57** #5507 94A30 (68A25)
- V.** On the modulus of continuity in connection with a problem of J. Szabados concerning strong approximation. (Russian summary) *Anal. Math.* **4** (1978), no. 2, 45-152. (N. Kishore) **58** #23317 42A08
- Rigatelli, Laura** Una sottoclasse della classe degli anelli noetheriani, "analogi" alla classe degli euclidei. (English summary) *Ann. Univ. Ferrara Sez. VII (N.S.)* **17** (1972), 27-33. (P. Abellanas) **46** #1783 13F20
- Un'osservazione sugli anelli euclidei generalizzati. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **55** (1973), 331-333 (1974). (P. Samuel) **51** #3150 13F10
- Algoritmi di divisione in anelli non euclidei. *Matematiche (Catania)* **28** (1973), 74-195 (1974). (P. Samuel) **50** #7122 13F15
- Sulle algebre α -diagonali. (English summary) *Rend. Mat.* (6) **7** (1974), 403-414 (1975). (R. W. Quackenbush) **51** #3025 08A05
- Anelli di frazioni fortemente valutativi. (English summary) *Rend. Sem. Mat. Univ. Padova* **52** (1974), 201-210 (1975). (E. Enochs) **52** #5644 13A15
- (with Franci, Raffaella) Sistemi normali di generatori per gli ideali di $\mathbb{Z}[x]$. *Enseignement Math.* (2) **23** (1977), no. 1-2, 139-148. (William C. Waterhouse) **57** #263 10M05 (13F20)
- ov, Georgi A.** Characterization of the metric dimension of a compact set by best step function approximations of continuous functions on the compactum. (Russian) *PLISKA Studia Math. Bulgar.* **1** (1977), 137-144. (I. F. Šarygin) **58** #1901 41A50
- ki, Haruo** (with Hamachi, Toshihiro) A remark on the topological entropy. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **25** (1971), 300-303. (H. Keynes) **46** #4511 54H20
- (with Ito, Shunji; Muratá, Haruo) Remarks on the isomorphism theorems for weak Bernoulli transformations in general case. *Publ. Res. Inst. Math. Sci.* **7** (1971/72), 541-580. (R. L. Adler) **46** #9297 28A65
- On the isomorphism theorem of Ornstein. (Japanese) *Sūgaku* **24** (1972), no. 3, 188-199. (Editors) **58** #28438 28A65
- (with Kubo, Izumi; Muratá, Haruo) On the isomorphism problem for endomorphisms of Lebesgue spaces. I, II, III. *Publ. Res. Inst. Math. Sci.* **9** (1973/74), 285-296; *ibid.* **9** (1973/74), 297-303; *ibid.* **9** (1973/74), 305-317. (Nathaniel Friedman) **49** #5303 (EA) **50** 28A65
- (with Aoki, Nobuo) Ergodic automorphisms of T^∞ are Bernoulli transformations. *Publ. Res. Inst. Math. Sci.* **10** (1974/75), 535-544. (Nathaniel Friedman) **52** #701 28A65
- manov, Iv.** (with Petrova, N.; Trenkov, Iv.) Most general case of equalization by the method of least squares. Properties of the correlation matrix of the corrections. Impossibility of the construction of confidence intervals in the case of errors in the original data. (Bulgarian) Commemorative Scientific Session (25th anniversary of the Higher Civil Engineering Institute, Sofia). *Godišnik Visš. Inž.-Stroitel. Inst.* **22** (1973), no. 4, Geodezija, 257-265. (Editors) **49** #11764 65D10
- v, Georgi** Theorems concerning the spectra of operators. (Bulgarian. Russian summary) *Godišnik Inž.-Stroitel. Inst.* **17** (1965), no. 2, 93-97. (Editors) **46** #9773 47A10
- enko, V. G.** See Tocenkov, V. G.
- en, Jim** (with de Witte, Paul) On a Paschian condition for linear spaces. *Math. Z.* **137** (1974), 173-183. (R. J. Bumcrot) **51** #8950 50D35
- Basic properties of restricted linear spaces. *Discrete Math.* **13** (1975), no. 1, 67-74. (W. M. Kantor) **51** #10130 05B25
- Classification of restricted linear spaces. *Canad. J. Math.* **28** (1976), no. 2, 321-333. (R. J. Bumcrot) **53** #5337 05B25
- On the degree of points and lines in a restricted linear space. *Discrete Math.* **14** (1976), no. 4, 391-394. (W. M. Kantor) **53** #7824a 05B25
- Parallelism in a restricted linear space. *Discrete Math.* **14** (1976), no. 4, 395-398. (W. M. Kantor) **53** #7824b 05B25
- Embedding the complement of two lines in a finite projective plane. *J. Austral. Math. Soc. Ser. A* **22** (1976), no. 1, 27-34. (Peter J. Cameron) **56** #162 05B25
- Embeddability of restricted linear spaces. *J. Combinatorial Theory Ser. A* **22** (1977), no. 2, 123-128. (R. J. Bumcrot) **56** #15468 05B25
- Finite linear spaces with three more lines than points. *Simon Stevin* **51** (1977/78), no. 1, 35-47. (Aiden A. Bruen) **58** #10525 05B25 (50D30)
- (with Beukenhout, Francis; Metz, Rudolf) A classification of linear spaces based on quadrangles. I. *Simon Stevin* **52** (1978), no. 1, 31-45. (T. G. Room) **57** #13689 50D99
- Totter, John R.** See Proceedings: Berkeley Symposium on Mathematical Statistics and Probability, **52** #9427
- Tou, Julius T.** (with Osteen, Robert E.) A clique-detection algorithm based on neighborhoods in graphs. *Internat. J. Comput. Information Sci.* **2** (1973), 257-268. (C. F. Picard) **49** #8751 94A20 (05C30)
- (with Gonzalez, Rafael C.) ★Pattern recognition principles. *Applied Mathematics and Computation*, No. 7. Addison-Wesley Publishing Co., Reading, Mass.-London-Amsterdam, 1974. xxii + 377 pp. (W. Greblicki) **56** #7374 68A45
- See also Jahrestagung: Gesellschaft für Informatik, **48** #1502; *Advances in information systems science*, **56** #7277; *Advances in information systems science*, **56** #7278; *Information systems*, **56** #7279 and *Advances in information systems science*, **56** #10088
- Toubassi, Elias** On the group of extensions. *Acta Math. Acad. Sci. Hungar.* **24** (1973), 87-92. (P. Gräbe) **47** #364 20K35
- (with Lawver, Donald Allen) Height-slope and splitting length of abelian groups. *Publ. Math. Debrecen* **20** (1973), 63-71. (K. Honda) **48** #8654 20K25
- The group of extensions and splitting length. *Canad. J. Math.* **26** (1974), 879-883. (P. Gräbe) **49** #9101 20K35
- (with Khabbaz, Samir) The module structure of $\text{Ext}(F, T)$ over the endomorphism ring of T . *Pacific J. Math.* **54** (1974), 169-176. (C. Lemaire) **50** #13206 20K40
- (with Khabbaz, Samir) $\text{Ext}(A, T)$ as a module over $\text{End}(T)$. *Proc. Amer. Math. Soc.* **48** (1975), 269-275. (P. L. Sperry) **50** #13312 20K05
- (with Khabbaz, Samir) Extensions of abelian groups of finite rank. *Proc. Amer. Math. Soc.* **50** (1975), 115-120. (A. I. Moskalenko) **51** #8290 20K35
- (with Megibben, Charles) Tensor products of mixed abelian groups. *J. Algebra* **38** (1976), no. 2, 345-358. (A. I. Moskalenko) **54** #5369 20K25
- (with May, Warren) Endomorphisms of abelian groups and the theorem of Baer and Kaplansky. *J. Algebra* **43** (1976), no. 1, 1-13. (Luigi Salce) **54** #10443 20K30
- (with May, Warren) A result on problem 87 of L. Fuchs. *Abelian group theory (Proc. Second New Mexico State Univ. Conf., Las Cruces, N.M., 1976)*, pp. 354-367. *Lecture Notes in Math.*, Vol. 616, Springer, Berlin, 1977. (William J. Wickless) **57** #482 20K15
- (with May, Warren) Embedding of totally projective groups. *Arch. Math. (Basel)* **29** (1977), no. 5, 465-471. (Paul C. Eklof) **56** #15794 20K10
- Tougeron, Jean-Claude** Points de non-platitude d'un morphisme d'espaces analytiques. *Publications des Séminaires de Mathématiques de l'Université de Rennes, (année 1968-1969), Fasc. 2: Séminaire de probabilités, statistiques et analyse, Exp. No. 9, 7 pp.* *Dép. Math. et Informat., Univ. Rennes, Rennes, 1969.* (O. Stănăşilă) **51** #3506 32C25 (32C35)
- Les théorèmes de transversalité et de quasi-transversalité. *Publications des Séminaires de Mathématiques de l'Université de Rennes, Année 1968-1969, Fasc. 2: Séminaire de probabilités, statistiques et analyse, Exp. No. 6, 22 pp.* *Dép. Math. et Informat., Univ. Rennes, Rennes, 1969.* (J. G. Timourian) **54** #8706 58C25
- (with Merrien, Jean) Idéaux de fonctions différentiables. II. (English summary) *Ann. Inst. Fourier (Grenoble)* **20** (1970), no. 1, 179-233. (Editors) **58** #17185 32B05 (46J99, 58C25)
- Idéaux de fonctions différentiables. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 267-271. Gauthier-Villars, Paris, 1971. (Editors) **54** #3747 58C25
- Idéaux fermés de fonctions C^∞ . *Séminaire Goulaouic-Schwartz (1970-1971), Équations aux dérivées partielles et analyse fonctionnelle, Exp. Nos. 18-19, 16 pp.* *Centre de Math., École Polytech., Paris, 1971.* (V. Ganapathy Iyer) **52** #15546 58C25
- An extension of Whitney's spectral theorem. *Inst. Hautes Études Sci. Publ. Math.* **40** (1971), 139-148. (Y. C. Lu) **51** #6872 58C25
- ★Idéaux de fonctions différentiables. *Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 71.* Springer-Verlag, Berlin-New York, 1972. vii + 219 pp. (J. G. Timourian (Zbl 251 #58001)) **55** #13472 58C25 (26A93)
- Racines pîemes de fonctions différentiables: passage du local au global. (English summary) *Ann. Inst. Fourier (Grenoble)* **25** (1975), no. 2, xii, 185-192. (J. Bochnak) **52** #11987 58C25
- Modules stratifiés sur l'anneau des germes de fonctions numériques C^∞ à l'origine de \mathbb{R}^n . *Singularités d'applications différentiables (Sém., Plans-sur-Bex, 1975)*, pp. 98-127. *Lecture Notes in Math.*, Vol. 535, Springer, Berlin, 1976. (Jean-Jacques Risler) **57** #10728 58C25 (14B05)
- Courbes analytiques sur une germe d'espace analytique et applications. (English summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 2, x-xi, 117-131. (André Galligo) **54** #3011 32B10
- Solutions d'un système d'équations analytiques réelles et applications. (English summary) *Ann. Inst. Fourier (Grenoble)* **26** (1976), no. 3, x, 109-135. (Francis Sergeraert) **55** #5888 32B05 (14D15, 26A90, 58C25)
- (with Moussu, Robert) Fonctions composées analytiques et différentiables. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 21, Aii, A1237-A1240. (Michael J. Field) **53** #13628 32B10 (32C15, 58C10)
- See also Summer School: Topological Algebra Theory, **49** #11188 and Publications: Séminaires de Mathématiques, **50** #5874
- Tougeron-Sablé, M.** Régularité pour des équations d'évolution. Application à la théorie spectrale. (Italian summary) *Boll. Un. Mat. Ital.* (4) **7** (1973), 1-11. (J. E. Lagnese) **47** #5654 47D05 (35J40)
- Tougu, Hirohumi** Long waves on a film flow of a viscous fluid down the surface of a vertical cylinder. *J. Phys. Soc. Japan* **43** (1977), no. 1, 318-325. (Author's summary) **56** #10391 76.35
- Toulmin, Stephen** See Philosophers and machines, **52** #5275; *Structure of scientific theories*, **52** #13085; *Logic, methodology and philosophy of science*, **55** #7657; *Wilson, Fred*, **56** #30a and *Wilson, Fred*, **56** #30b
- Toulotte, J. M.** See Proceedings: IFAC World Congress, **50** #12339
- Toulouse, G.** (with Poénaru, Valentin) The crossing of defects in ordered media and the topology of 3-manifolds. (French summary) *J. Physique* **38** (1977), no. 8, 887-895. (L. Neuwirth) **58** #32685 58F15 (57A35, 58F10)

- (with Bouligand, Y.; Derrida, Bernard; Poénaru, Valentin; Pomeau, Yves)
Distortions with double topological character: the case of cholesterics. *J. Physique* **39** (1978), no. 8, 863-867. (Werner Nowacki) **58** #14835 82.55 (57D25)
- Tounissoux, D.** (with Terrenoire, Michel) Inequalities using Bhattacharyya coefficient and application to decision process. *Proceedings of the Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976)*, pp. 249-252. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Manabu Ichino) **57** #2001 68A45
- Tounissoux, Daniel** Application of properties with regard to the order of questions. *Théories de l'information (Colloq. Information et Questionnaires, Marseille-Luminy, 1973)*, pp. 194-201. *Lecture Notes in Math.*, Vol. 398, Springer, Berlin, 1974. (B. Forte) **51** #2780 94A15
- (with Terrenoire, Michel) Convergence de pseudo-questionnaires particuliers. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 1135-1137. (S. Guiaşu) **49** #8741 94A15
- Utilisation de la distance de Bhattacharyya dans les pseudo-questionnaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A1241-A1244. (S. Guiaşu) **51** #12421 94A15
- Toupin, F.** See **Molino, Pierre**, **58** #24419
- Toupe, Saliou** Sur quelques propriétés des espaces homogènes moyennables. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A717-A719. (R. A. Gangoli) **45** #2101 43A85
- Tourge, Ronald A.** (with Rao, A. N. V.) Existence and stability behaviour of a non-linear perturbed stochastic system. *Internat. J. Systems Sci.* **5** (1974), 939-952. (A. T. Bharucha-Reid) **50** #11449 60H20 (93E15)
- Tourigny, J.** (with Sen, A. R.; Smith, G. E. J.) On the line transect sampling method. (French summary) *Biometrics* **30** (1974), 329-340. (M. Atiullah) **50** #1460 62P99
- Tourlakis, George** (with Mylopoulos, John) Some results in computational topology. *J. Assoc. Comput. Mach.* **20** (1973), 439-455. (Nelson L. Max) **48** #10230 68A45 (02G05, 55D10)
- Homological methods for the classification of discrete Euclidean structures. *SIAM J. Appl. Math.* **33** (1977), no. 1, 51-54. (Author's summary) **58** #24238 55-04 (05C10, 05C25)
- Tournemine, Georges** Comportement asymptotique de l'écoulement sonique autour d'un corps de révolution de dimensions finies, en aval de l'onde de choc. *Publications des Séminaires de Mathématiques de l'Université de Rennes, Année 1967-1968, Exp. No. 2*, 5 pp. *Dép. Math. et Informat., Univ. Rennes, Rennes*, 1968. (Silvio Nocilla) **55** #4918 76.41
- Écoulements stationnaires autour d'obstacles tridimensionnels, en régime sonique. (English summary) *J. Mécanique* **10** (1971), 503-543. (P. Germain) **51** #4847 76.35
- (with Euvrard, Daniel) Méthode directe de calcul de l'écoulement sonique autour d'un profil d'aile donnée. Cas d'un écoulement symétrique. (English summary) *J. Mécanique* **12** (1973), 419-461. (Nima Geffen) **51** #12112 76.35
- (with Ciavaldini, Jean-François; Pogu, Marc) Modèles d'écoulements autour de profils en présence de parois perméables. *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A1459-A1462. (C. Rogers) **51** #7479 76.65
- (with Ciavaldini, Jean-François) Une méthode d'éléments finis pour le calcul d'écoulements subcritiques stationnaires. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 12, A487-A490. (Jacques Couot) **54** #9342 76.65
- (with Ciavaldini, Jean-François; Pogu, Marc) Une méthode variationnelle non linéaire pour l'étude dans le plan physique d'écoulements compressibles subcritiques en atmosphère infinie. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 24, A1105-A1108. (C. Rogers) **52** #12533 76.49
- (with Ciavaldini, Jean-François; Pogu, Marc) Une méthode dans le plan physique pour l'étude d'écoulements subcritiques portants et leur calcul par un algorithme dual. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 24, A1145-A1147. (C. Rogers) **54** #1837 76.35
- (with Ciavaldini, Jean-François; Pogu, Marc) Modèle d'écoulements autour de profils en présence de parois perméables; approximation par une méthode d'éléments finis. (English summary) *J. Mécanique* **15** (1976), no. 2, 265-286. (Hélène Lanchon) **54** #9278 73.65
- (with Ciavaldini, Jean-François; Pogu, Marc) Sur l'existence et l'unicité d'écoulements compressibles autour d'un profil portant en présence de parois perméables. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **284** (1977), no. 14, A823-A826. (Authors' summary) **55** #4920 76.49
- (with Ciavaldini, Jean-François; Pogu, Marc) Sur la régularité d'écoulements plans, stationnaires et subcritiques autour d'un profil à pointe: ajustement de la circulation pour satisfaire la condition de Kutta-Joukowski. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 4, A297-A300. (Authors' summary) **58** #25323 76.35
- (with Ciavaldini, Jean-François) A finite element method to compute stationary steady flows in the hodograph plane. *J. Indian Math. Soc. (N.S.)* **41** (1977), no. 1-2, 69-82. (S. J. Sackett) **58** #25377 76.65
- (with Ciavaldini, Jean-François; Pogu, Marc) Une nouvelle approche dans le plan physique pour le calcul d'écoulements subcritiques et stationnaires autour d'un profil portant. (English summary) *J. Mécanique* **16** (1977), no. 2, 257-288. (Authors' summary) **56** #10418 76.65
- Tourenç, Philippe** Interaction entre un champ photonique confiné dans une cavité et une onde de gravitation à l'approximation linéaire. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 18, B417-B420. (J. G. Taylor) **53** #10034 81.53
- (with Linet, Bernard) Changement de phase dans un champ de gravitation: possibilité de détection interférentielle. (English summary) *Canad. J. Phys.* **54** (1976), no. 11, 1129-1133. (M. Carmeli) **53** #10103 83.35
- (with Grossiord, J. L.) Modification du spectre de l'hydrogène atomique sous l'influence de champs de gravitation. (English, Italian and Russian summaries) *Nuovo Cimento B* (11) **32** (1976), no. 1, 163-76. (Petr Hájíček) **54** #12030 81.35
- Tourzan, G. R. A.** See *Symposium: Information Theory*, **50** #9416
- Tousschek, Bruno** See *Symposia Mathematica*, **48** #5579
- Toussaint, Godfried T.** Some functional lower bounds on the expected divergence for multihypothesis pattern recognition, communication, and radar systems. *IEEE Trans. Systems, Man, and Cybernet.* **SMC-1** (1971), 384-385. (S. Csibi) **46** #8486 68A45
- Some inequalities between distance measures for feature evaluation. *IEEE Trans. Computers* **C-21** (1972), 409-410. (M. Terrenoire) **53** #2076 68A45 (94A05)
- Some properties of Matusita's measure of affinity of several distributions. *Ann. Inst. Statist. Math.* **26** (1974), 389-394. **50** #15170 62H99
- Bibliography on estimation of misclassification. *IEEE Trans. Information Theory* **IT-20** (1974), 472-479. (Terry J. Wagner) **52** #9508 62H30 (68A45)
- On information transmission, nonparametric classification, and measuring dependence between random variables. *Proceeding of the Symposium on Statistics and Related Topics (Carleton Univ., Ottawa, Ont., 1974)*, Paper No. 30, 9 pp. Carleton Univ., Ottawa, Ont., 1975. (S. Kotz) **52** #5211 (EA 53) 94A15
- Comments on: "On a new class of bounds on Bayes risk in multihypothesis pattern recognition" (IEEE Trans. Computers **C-23** (1974), 70-80) by Pierre A. Devijver. *IEEE Trans. Computers* **C-24** (1975), no. 8, 855-856. (Allen Klinger) **51** #12045b 68A45
- Sharper lower bounds for discrimination information in terms of variation. *IEEE Trans. Information Theory* **IT-21** (1975), 99-100. (I. Csizár) **51** #9970 94A15
- Subjective clustering and bibliography of books on pattern recognition. *Information Sci.* **8** (1975), 251-257. (Editors) **50** #15474 68A45 (00A15)
- A generalization of Shannon's equivocation and the Fano bound. *IEEE Trans. Systems Man Cybernet.* **SMC-7** (1977), no. 4, 300-302. (Ezio M. Biglieri) **56** #11536 94A15
- An upper bound on the probability of misclassification in terms of the affinity. *Proc. IEEE* **65** (1977), no. 2, 275-276. (K. S. Fu) **56** #16927 62H30 (68A45)
- Probability of error, expected divergence, and the affinity of several distributions. *IEEE Trans. Systems Man Cybernet.* **SMC-8** (1978), no. 6, 482-485. (Shingo Tomita) **57** #19105 94A15 (62H30)
- (with Akl, Selim G.) A fast convex hull algorithm. *Inform. Process. Lett.* **7** (1978), no. 5, 219-222. (Authors' introduction) **58** #19323 68A10 (52-04)
- The use of context in pattern recognition. *Pattern Recognition* **10** (1978), no. 3, 189-204. (Author's summary) **58** #25170 68A45
- Toussaint, Manfred** See **Engelhard, Rainer**; et al., **53** #5618
- Toutenburg, Helge** Probleme linearer Vorhersagen im allgemeinen linearen Regressionsmodell. (English summary) *Biometrische Z.* **12** (1970), 242-252. (Author's summary) **48** #1393 62J05
- Probleme der Intervallvorhersage von normalverteilten Variablen. (English summary) *Biometrische Z.* **13** (1971), 261-273. (H. E. Reinhardt) **46** #8349 62F10
- Lineare Restriktionen und Modellwahl im allgemeinen linearen Regressionsmodell. (English summary) *Biometrische Z.* **15** (1973), 325-342. (D. V. Chopra) **50** #3472 62J05
- ★Vorhersage in linearen Modellen. *Akademie-Verlag, Berlin*, 1975. viii + 176 pp. (Emil Spjøtvoll) **57** #10931 62J05
- The use of mixed prior information in regression analysis. *Biometrische Z.* **17** (1975), no. 6, 363-372. (George P. H. Styan) **53** #11896 62J05
- Minimax-linear estimation (MMLE) and 2-phase MMLE in a restricted linear regression model. (German and French summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 5, 703-708. (E. H. Lehman) **52** #12238 62J10
- Minimax-linear and MSE-estimators in generalized regression. (German summary) *Biometrische Z.* **18** (1976), no. 2, 91-100. (Author's summary) **58** #3228 62J05
- (with Bibby, John) ★Prediction and improved estimation in linear models. *Wiley-Interscience [John Wiley & Sons], Chichester-New York-Brisbane*, 1977. xiii + 188 pp. ISBN 0-471-01656-X (C. R. Rao) **58** #31607 62J05 (62F10)
- The combination of restrictions on the variance and the mean in regression. *Proceedings of the Fifth Conference on Probability Theory (Braşov, 1974)*, pp. 347-354. *Editura Acad. R.S.R., Bucharest*, 1977. (S. John) **56** #16940 62J05
- Two-step procedures for estimation and model choice in regression. (German summary) *Biometrical J.* **19** (1977), no. 4, 237-244. (Jagbir Singh) **58** #31618 62J05
- (with Bibby, John) Improved estimation and prediction. (German and Russian summaries) *Z. Angew. Math. Mech.* **58** (1978), no. 1, 45-49. (Nanak Chand) **57** #14233 62F10 (62J05)
- Touzón Pérez, Constantino** ★Homología y funtores derivados. (Spanish) [Homology and derived functors] *Algebra, 6. Departamento de Algebra y Fundamentos, Universidad de Santiago de Compostela, Santiago de Compostela*, 1971. ii + 41 pp. (M. L. Laplaza) **47** #1913 18E25
- (with Caruncho Castro, José R.) Homotopy and injectivity. (Spanish) *Collect. Math.* **25** (1974), no. 3, 233-244. (S. Gitler) **54** #3688 55D05
- Touzot, G.** (with Kernevez, Jean-Pierre; Knopf-Lenoir, C.; Verchery, Georges) An identification method applied to an orthotropic plate bending experiment. *Internat. J. Numer. Methods Engrg.* **12** (1978), no. 1, 129-139. (G. Tiwari) **57** #8349 73.65
- de bustos Tovar, Eugenio** See **Bustos Tovar, Eugenio**
- Tov-elem, Immanuel ben Jacob** See **Rabinovitch, Nachum L.**, **58** #4828
- ben-Tovim, I. G.** See **Ben-Tovim, I. G.**
- Tövissi, L.** (with Theiler, G.) Limit laws for extreme values, Weibull distribution and some statistical problems of control global analysis. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1976**, no. 4, 39-61. (Authors' summary) **56** #6801 60F05 (62G30)
- (with Theiler, G.) Initial distributions for limit laws of extreme values. (French and Russian summaries) *Econom. Comp. Econom. Cybernet. Stud. Res.* **1977**, no. 1, 25-49. (Sidney I. Resnick) **56** #6802 60F05
- Tovmasjan, N. E.** Certain functional equations for analytic functions. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **7** (1972), no. 2, 126-139. (D. Sarason) **47** #2423 47B99 (30A20, 39A40)
- A certain method of solution of boundary value problems for elliptic systems of second order differential equations on the plane. (Russian) *Mat. Sb. (N.S.)* **89**(131) (1972), 599-615, 672. (A. Borzyskowski) **48** #6677 35J55
- Certain equations in Banach spaces, and their applications. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR Ser. Mat.* **8** (1973), no. 3, 181-189, 275. (A. Szép) **48** #9426 47A50
- Linear ordinary differential equations with singularities in the class of analytic functions. (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 9, 1596-1604, 1724-1725. (Z. Nehari) **56** #16028 34A20
- A special case of the Wiener-Hopf integral equation. (Russian) *Sibirsk. Mat. Ž.* **19** (1978), no. 4, 902-921, 956. (Georg Heintz) **58** #17728 45E10
- Tovmasjan, T. A.** (with Efimov, A. V.) Realization of a transmission matrix function of class LR. (Russian. Armenian and English summaries) *Izv. Akad. Nauk Armjan. SSR*

- ier. Mat.* 7 (1972), no. 5, 361-372, 388. (J. Bognár) 50 #363 15A57 (47B99, 94A20)
- dros, S. F.** (with Zambahidze, L. G.) The dimension dm and its application to the classification of locally connected continua. (Russian. Georgian and English summaries) *Iskharch. SSR Mecn. Akad. Moambe* 84 (1976), no. 1, 49-52. (D. Adnadjević) 55 #11221 54F45
- itik, P. E.** High-frequency axially symmetric oscillations of a shell of revolution. (Russian) *Applied mechanics*, No. 1 (Russian), pp. 100-109, 188. *Izdat. Leningrad. Univ., Leningrad*, 1974. (Z. Kaczowski) 51 #4796 73.35
- (with Litvinenkova, Z. N.; Ulitin, M. I.) Free oscillations of plates. (Russian) *Applied mechanics*, No. 1 (Russian), pp. 110-118, 188-189. *Izdat. Leningrad. Univ., Leningrad*, 1974. (Z. Kaczowski) 51 #4789 73.35
- (with Ulitin, M. I.) The expansion of vector-valued functions in a continuous spectrum zone of the zero-moment equations of axially symmetric oscillations of a shell of revolution. (Russian. English summary) *Vestnik Leningrad. Univ.* 1977, no. 1 *Mat. Meh. Astronom. vyp.* 1, 114-119, 167. (V. Komkov) 56 #10298 73.35
- See also **Studies in elasticity and plasticity**, 48 #3334
- itik, T. M.** Estimation of the parameters of the correlation function of a stationary random process. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 6, 131-140. (Author's summary) 56 #1635 62M15
- stjuk, K. D.** (with Olekseeva, M. F.) A group-theoretic diagram method for the solution of the Hubbard problem. (Russian. English summary) *Teoret. Mat. Fiz.* 27 (1976), no. 3, 386-391. (J. Niederle) 58 #4021 81.22 (20C35)
- aij, S. J.** (with Hamid, M. A. K.) Fast generation of the gamma and digamma functions of complex argument. *Internat. J. Electron.* 34 (1973), 273-275. (Y. L. Luke) 52 #7083 65D20
- ber, Jacob** (with Murthy, M. Pavaman) Algebraic vector bundles over A^3 are trivial. *Invent. Math.* 24 (1974), 173-189. (D. Eisenbud) 54 #10267 14F05 (13C15)
- (with Swan, Richard G.) A class of projective modules which are nearly free. *J. Algebra* 36 (1975), no. 3, 427-434. (H. Bass) 51 #12857 13F05 (13C10)
- Two new functors from modules to algebras. *J. Algebra* 47 (1977), no. 1, 80-104. (Philippe Revoy) 57 #9735 15A72 (14M99, 20C30)
- See also **Report: Algebra Group**, 50 #6727
- ers, David** On the generators of a nilpotent non-associative algebra. *Quart. J. Math. Oxford Ser. (2)* 22 (1971), 545-550. (E. M. Patterson) 45 #3491 17A99
- Elementary Lie algebras. *J. London Math. Soc. (2)* 7 (1973), 295-302. (Seymour Bachmuth) 51 #12957 17B05
- A Frattini theory for algebras. *Proc. London Math. Soc. (3)* 27 (1973), 440-462. (L. A. Kokoris) 55 #427 17A99
- (with Stewart, Ian N.) The Frattini subalgebras of certain infinite-dimensional soluble Lie algebras. *J. London Math. Soc. (2)* 11 (1975), no. 2, 207-215. (Ralph K. Amayo) 53 #572 17B65
- ler, Brian F.** (with Yang, Ray Y. K.) Numerical solution of non-linear parabolic PDEs by asymmetric finite difference formulae. *Chem. Engrg. J.* 12 (1976), no. 2, 81-87. (Wayne T. Ford) 56 #13731 65N99
- liati, Seyed-Youssef** (with Brown, David P.) A new algorithm for cut-set matrix synthesis. *J. Franklin Inst.* 305 (1978), no. 4, 187-198. (Authors' summary) 58 #20881 94A20
- nsend, Douglas** (with Miles, Joseph) On the imaginary values of meromorphic functions. *Complex analysis (Proc. Conf., Univ. Kentucky, Lexington, Ky., 1976)*, pp. 93-95. *Lecture Notes in Math.*, Vol. 599, Springer, Berlin, 1977. (From the text) 58 #28504 30A70
- (with Miles, Joseph) Imaginary values of meromorphic functions. *Indiana Univ. Math. J.* 27 (1978), no. 3, 491-503. (S. Hellerstein) 58 #11406 30A66
- nsend, James T.** A stochastic theory of matching processes. *J. Mathematical Psychology* 14 (1976), no. 1, 1-52. (Byron J. T. Morgan) 54 #12255 92A25
- Serial and within-stage independent parallel model equivalence on the minimum completion time. *J. Mathematical Psychology* 14 (1976), no. 3, 219-238. (B. P. Zeigler) 56 #17214 68A25
- nsend, Paul K.** (with van Nieuwenhuizen, P.) BRS gauge and ghost field supersymmetry in gravity and supergravity. *Nuclear Phys. B* 120 (1977), no. 2, 301-315. (Authors' summary) 57 #8935 83.53
- (with van Nieuwenhuizen, P.) Geometrical interpretation of extended supergravity. *Phys. Lett. B* 67 (1977), no. 4, 439-442. (Ann Stehney) 56 #4692 83.53
- (with Kaku, Michio; van Nieuwenhuizen, P.) Gauge theory of the conformal and superconformal group. *Phys. Lett. B* 69 (1977), no. 3, 304-308. (H. Rund) 56 #4621 83.22 (81.22)
- Small-scale structure of spacetime as the origin of the gravitational constant. *Phys. Rev. D (3)* 15 (1977), no. 10, 2795-2801. (Andrzej Trautman) 56 #4691 83.53
- (with Kaku, Michio) Poincaré supergravity as broken superconformal gravity. *Phys. Lett. B* 76 (1978), no. 1, 54-58. (Authors' summary) 58 #14933 83.53
- (with Kaku, Michio; van Nieuwenhuizen, P.) Properties of conformal supergravity. *Phys. Rev. D (3)* 17 (1978), no. 12, 3179-3187. (Tekin Dereli) 58 #25738 83.22 (83.53)
- nsend, Robert A.** decidability result in algebraic language theory. *Math. Systems Theory* 8 (1974/75), no. 3, 225-227. (Peter W. Day) 53 #4651 68A30 (02F05, 02G05)
- nsend, Robert M.** The eventual failure of price fixing schemes. *J. Econom. Theory* 14 (1977), no. 1, 190-199. (Leonard J. Mirman) 56 #10850 90A15
- nsley, Robert J.** (with Candler, Wilfred) Quadratic as parametric linear programming. *Naval Res. Logist. Quart.* 19 (1972), 183-189. (J. J. Moreau) 48 #3494 90C20
- nsley, Donald F.** (with Chandy, K. Mani; Howard, John H., Jr.) Product form and local balance in queueing networks. *J. Assoc. Comput. Mach.* 24 (1977), no. 2, 250-263. (Ralph L. Disney) 55 #11424 60K25
- ster, Edwin** Two ugly duckling theorems for concept-formers. *Information Sci.* 8 (1975), 359-368. (A. D. Booth) 51 #7392 68A45
- ama, Masao** Level energies and gamma transitions of deformed even nuclei. *Progr. Theoret. Phys.* 58 (1977), no. 5, 1388-1404. (Author's summary) 56 #14423 82.34
- oda, Junichi** (with Mizumoto, Masaharu; Tanaka, Kohkichi) Fuzzy languages. *Systems-Computers-Controls* 1 (1970), no. 3, 36-43 (1971). (M. A. Harrison) 46 #10249 68A30
- (with Mizumoto, Masaharu; Tanaka, Kohkichi) n -fold fuzzy grammars. *Systems-Computers-Controls* 2 (1971), no. 6, 38-40. (W. Wechler) 51 #7380 68A30
- (with Mizumoto, Masaharu; Tanaka, Kohkichi) General formulation of formal grammars. *Information Sci.* 4 (1972), 87-100. (Ronald V. Book) 48 #10211 68A30
- (with Abe, Norihiro; Mizumoto, Masaharu; Tanaka, Kohkichi) Web grammars and several graphs. *Systems-Computers-Controls* 3 (1972), no. 1, 48-59. (Leon Levy) 49 #8428 68A30
- (with Tsuji, Hidekazu; Mizumoto, Masaharu; Tanaka, Kohkichi) An automaton in the nonstationary random environment. *Systems-Computers-Controls* 3 (1972), no. 1, 68-75. (Authors' summary) 48 #13535 94A35
- (with Ezawa, Yoshinori; Abe, Norihiro; Mizumoto, Masaharu; Tanaka, Kohkichi) Web grammars and web automata. *Electron. Commun. Japan* 56 (1973), no. 4, 35-42. (Leon Levy) 52 #9695 68A30 (68A25)
- (with Mizumoto, Masaharu; Tanaka, Kohkichi) Examples of formal grammars with weights. *Information Processing Lett.* 2 (1973), 74-78. (E. Stockii) 48 #7673 68A30
- (with Mizumoto, Masaharu; Tanaka, Kohkichi) n -fold fuzzy grammars. *Information Sci.* 5 (1973), 25-43. (K. S. Fu) 47 #9903 68A30
- (with Tsuji, Hidekazu; Mizumoto, Masaharu; Tanaka, Kohkichi) An automaton in the nonstationary random environment. *Information Sci.* 6 (1973), 123-142. (P. Turakainen) 48 #10733 94A35
- (with Abe, Norihiro; Mizumoto, Masaharu; Tanaka, Kohkichi) Web grammars and several graphs. *J. Comput. System Sci.* 7 (1973), 37-65. (B. Zelinka) 49 #1830 68A30
- (with Ochimizu, Kohichiro; Mizumoto, Masaharu; Tanaka, Kohkichi) Quasi-sequential grammars and their parsing algorithms. *Information Processing in Japan* 14 (1974), 75-80. (Not reviewed) 68A30
- (with Mizumoto, Masaharu; Tanaka, Kohkichi) B -fuzzy grammars. *Internat. J. Comput. Math.* 4 (1974/75), no. 4, 343-368. (K. S. Fu) 52 #2289 68A30
- (with Tsuji, Hidekazu; Mizumoto, Masaharu; Tanaka, Kohkichi) On the asymptotically optimal behavior of automata in nonstationary random environments. *Systems-Computers-Controls* 5 (1974), no. 1, 25-34 (1975). (K. D. Günther) 52 #13039 94A35 (68A35)
- (with Abe, Norihiro; Mizumoto, Masaharu; Tanaka, Kohkichi) The closure property of languages under several new operations. *Systems-Computers-Controls* 5 (1974), no. 2, 79-87 (1975). (S. Ginsburg) 51 #4726 68A30
- (with Ochimizu, Kohichiro; Tanaka, Kohkichi) On a construction method of systems for detecting logical errors in programs. *Systems-Computers-Controls* 5 (1974), no. 2, 88-96 (1975). (W. D. Maurer) 51 #4706 68A05
- (with Kim, Hyo Heng; Mizumoto, Masaharu; Tanaka, Kohkichi) Lattice grammars. *Systems-Computers-Controls* 5 (1974), no. 3, 1-9 (1975). (B. Zelinka) 52 #9699 68A30
- (with Kim, Hyo Heng; Mizumoto, Masaharu; Tanaka, Kohkichi) L -fuzzy grammars. *Information Sci.* 8 (1975), 123-140. (K. S. Fu) 50 #15455 68A30
- (with Mizumoto, Masaharu; Tanaka, Kohkichi) Various kinds of automata with weights. *J. Comput. System Sci.* 10 (1975), 219-236. (Rani Siromoney) 56 #8236 94A30
- (with Ezawa, Yoshinori; Mizumoto, Masaharu; Tanaka, Kohkichi) On interactive generating systems and their languages. *Systems-Computers-Controls* 6 (1975), no. 6, 11-17. (Wilfried Brauer) 57 #11187 68A30
- (with Ezawa, Yoshinori; Mizumoto, Masaharu; Tanaka, Kohkichi) Interactive languages. *J. Comput. System Sci.* 12 (1976), no. 1, 49-63. (S. A. Greibach) 52 #16146 68A30
- (with Tsuji, Tatsuo; Tanaka, Kohkichi) Relational data graphs with uniformities and their several properties. *Systems-Computers-Controls* 7 (1976), no. 1, 90-96. (1977). (Yasuyoshi Inagaki) 56 #10117 68A05
- (with Tsuji, Tatsuo; Tanaka, Kohkichi) Relational data graphs and some properties of them. *J. Comput. System Sci.* 15 (1977), no. 1, 17-34. (A. L. Rosenberg) 56 #4283 68A50
- Toyoda, Toshihisa** Use of the Chow test under heteroscedasticity. *Econometrica* 42 (1974), 601-608. (From the author's introduction) 55 #13722 62P20
- (with Wallace, T. D.) Optimal critical values for pre-testing in regression. *Econometrica* 44 (1976), no. 2, 365-375. (H. Toutenburg) 56 #13464 62J05 (62F15)
- Toyoda, Toshiyuki** Necessity of complex Hilbert space for quantum mechanics. *Progr. Theoret. Phys.* 49 (1973), 707-713. (M. J. Mączyński) 48 #13023 81.06
- Toyoda, Yoshiaki** A simplified algorithm for obtaining approximate solutions to zero-one programming problems. *Management Sci.* 21 (1974/75), no. 12, 1417-1427. (Author's summary) 55 #14221 90C30
- Toyonari, Toshitaka** On C -umbilical hypersurface in an almost Tachibana manifold. *TRU Math.* 6 (1970), 13-16. (R. Miron) 46 #8147 53C55
- Toyooka, Yasuyuki** A note on weak consistency of simple least squares estimators in a polynomial regression with a nonstationary error process. *Keio Engrg. Rep.* 30 (1977), no. 5, 35-44. (A. Ja. Dorogovcev) 57 #1803 62M10 (62E20)
- (with Huzii, Mituaki) Asymptotic properties of weighted least squares estimators in a polynomial regression with a nonstationary error process. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* 24 (1977), no. 4, 191-199. (Authors' summary) 58 #31663 62M10 (62J05)
- Tozaki, Yoshiharu** On a property of behavior in time for solutions of the wave equation. *Proc. Japan Acad.* 47 (1971), 271-274. (J. Smoller) 45 #9010 35L05
- (with Kumano-go, Hitoshi; Taniguchi, Kazuo) Multi-products of phase functions for Fourier integral operators with an application. *Comm. Partial Differential Equations* 3 (1978), no. 4, 349-380. (A. S. Dynin) 58 #12049 35S05 (47G05, 58G15)
- Tozoni, O. V.** (with Maergoiz, I. D.) Integral equations for the calculation of a three-dimensional quasi-stationary electromagnetic field. I. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromehanika* 1972, no. 3, 231-236, 337. (S. Kaliski) 47 #9960 78.45
- (with Maergoiz, I. D.) Integral equations for the calculation of a three-dimensional quasi-stationary electromagnetic field. II. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromehanika* 1972, no. 4, 343-349, 447. (S. Kaliski) 47 #9961 78.45
- See also **Cybernetics and computer technology**, 47 #4546; **Mathematical simulation and the theory of electrical circuits**, 48 #3287; **Cybernetics and computer technology**,

- 48 #7523 and Software of electronic digital computers, 50 #15253
- Tozzi, Anna (with Gramellini, M. Letizia) Rivestimenti e gruppoide fondamentale di uno spazio topologico. (English summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, 632-637. (Authors' summary) **54** #13892 55A05 (20L15)
- pham Tra An See Pham Tra An
- Trasas, C. R. ★ Analysis of a stepwise numerical method for solution of a three-dimensional flow problem. With a Dutch summary. Doctoral dissertation, Twente Technological University. Report No. NLR TR 75072 U. *Nationaal Lucht-en Ruimtevaartlaboratorium, Amsterdam*, 1975. 134 pp. (Nima Geffen) **54** #9348 76.65 (65N20)
- Trabattini, L. (with Sutti, Carla; Brughiera, P.) A method for minimization of a one-dimensional nonunimodal function. *Minimization algorithms, mathematical theories and computer results* (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971), pp. 181-192. Academic Press, New York, 1972. (G. Opfer) **52** #4627 65K05 (90C30)
- (with Treccani, Giulio; Szegő, Giorgio P.) A numerical method for the isolation of minima. *Minimization algorithms, mathematical theories and computer results* (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971), pp. 239-289. Academic Press, New York, 1972. (P. J. Laurent) **52** #9610 65K05 (90C30)
- Trabb Pardo, Luis (with Knuth, Donald E.) Analysis of a simple factorization algorithm. *Theoret. Comput. Sci.* **3** (1976/77), no. 3, 321-348. (R. F. Churchhouse) **58** #16485 10A25 (68A20)
- Stable sorting and merging with optimal space and time bounds. *SIAM J. Comput.* **6** (1977), no. 2, 351-372. (Amitava Bagchi) **56** #7310 68A10
- Trabka, E. A. See Stochastic point processes: statistical analysis, theory, and applications, 48 #10008
- Tracey, James H. (with Maki, Gary K.) State assignment selection in asynchronous sequential circuits. *IEEE Trans. Computers* **C-19** (1970), no. 7, 641-644. (See Zbl 203, 489) 94A20
- Tracht, R. Ein iteratives Verfahren zur Bestimmung der zeitoptimalen Steuergröße. (English summary) *Regelungstechn. Prozeß-Datenverarbeitung*. **19** (1971), no. 12, 530-534. (P. Fischer) **48** #1756 93C30
- Trachtenberg, E. A. (with Karpovsky, Mark G.) Linear checking equations and error-correcting capability for computation channels. *Information processing 77* (Proc. IFIP Congr., Toronto, Ont., 1977), pp. 619-623. *IFIP Congr. Ser.*, Vol. 7, North-Holland, Amsterdam, 1977. (Authors' summary) **58** #33526 94A15
- (with Karpovsky, Mark G.) Some optimization problems for convolution systems over finite groups. *Information and Control* **34** (1977), no. 3, 227-247. (Edward W. Kamen) **56** #4952 93B99
- Trachtenbrot, B. A. See Trahtenbrot, B. A.
- Trachtman, A. N. See Trahtman, A. N.
- Tracy, Craig A. (with McCoy, Barry M.; Wu, Tai Tsun) Painlevé functions of the third kind. *J. Mathematical Phys.* **18** (1977), no. 5, 1058-1092. (Authors' summary) **57** #12993 34B30 (81.34)
- (with McCoy, Barry M.; Wu, Tai Tsun) Connection between the KdV equation and the two-dimensional Ising model. *Phys. Lett. A* **61** (1977), no. 5, 283-284. (Author's summary) **58** #28752 34A20 (58F05)
- (with Vaidya, Hemant G.) Transverse time-dependent spin correlation functions for the one-dimensional XY model at zero temperature. *Phys. A* **92** (1978), no. 1-2, 1-41. (Authors' summary) **58** #14760 81.60
- Tracy, Derrick S. (with Nagambal, P. N.) Certain combinatorial rules for polykay products. (French summary) Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 2. *Bull. Inst. Internat. Statist.* **44** (1971), no. 2, 284-288. (B. C. Gupta) **51** #9299 62E15
- (with Gupta, Bhisham Chand) A new system of unbiased estimates for moments and their products. (French summary) Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 2. *Bull. Inst. Internat. Statist.* **44** (1971), no. 2, 387-391. (Mir Ali) **51** #9329 62F10
- (with Singh, Rana P.) Matrix derivative approach to analysis of covariance structures. (French summary) Proceedings of the 38th Session of the International Statistical Institute (Washington, D.C., 1971), Vol. 2. *Bull. Inst. Internat. Statist.* **44** (1971), book 2, 392-396. (K. G. Jöreskog) **51** #9374 62H99
- (with Singh, Rana P.) Some modifications of matrix differentiation for evaluating Jacobians of symmetric matrix transformations. *Symmetric functions in statistics* (Proc. Sympos. in Honor of Paul S. Dwyer, Univ. Windsor, Windsor, Ont., 1971), pp. 203-224. Univ. Windsor, Windsor, Ont., 1972. **49** #7273 15A15
- (with Singh, Rana P.) A new matrix product and its applications in partitioned matrix differentiation. *Statistica Neerlandica* **26** (1972), 143-157. (Marvin Marcus) **52** #454 15A69 (62P20)
- A combinatorial look at multivariate moment functions. *Multivariate statistical inference* (Proc. Res. Sem., Dalhousie Univ., Halifax, N.S., 1972), pp. 247-258. North-Holland, Amsterdam; American Elsevier, New York, 1973. (D. Papamiciail) **48** #9967 62H05
- (with Gupta, Bhisham Chand) Some properties and generating function of ordered partitions. *Ann. Inst. Statist. Math.* **25** (1973), 617-626. (Ruth Bari) **49** #8875 05A17
- (with Gupta, Bhisham Chand) Multiple products of polykays using ordered partitions. *Ann. Statist.* **1** (1973), 913-923. (Authors' summary) **48** #10837 05A17
- (with Gupta, Bhisham Chand) A combinatorial method for products of generalized h -statistics. (French summary) *Canad. J. Statist.* **1** (1973), no. 1, 25-33. (Authors' summary) **52** #15783 62E15
- (with Gupta, Bhisham Chand) Generalized h -statistics and other symmetric functions. *Ann. Statist.* **2** (1974), 837-844. **50** #15071 62E15
- (with Nagambal, P. N.) On multiplying a polykay by polykay products of weight 5. *Canad. J. Statist.* **2** (1974), no. 1, 107-112. (B. C. Gupta) **53** #4327 62E15
- (with Nagambal, P. N.) Rules for multiplication of any polykay by polykay products of weight 5. *Canad. J. Statist.* **2** (1974), no. 2, 169-180. (B. C. Gupta) **53** #4328 62E15
- (with Mikhail, N. N.) The exact non-null distribution of Wilks' Λ criterion in the bivariate collinear case. *Canad. Math. Bull.* **17** (1974/75), no. 5, 757-758. (D. G. Kabe) **52** #7013 62H10
- Sampling moments for finite multivariate populations. *Proceeding of the Symposium on Statistics and Related Topics* (Carleton Univ., Ottawa, Ont., 1974), Paper No. 29, 11 pp. Carleton Univ., Ottawa, Ont., 1975. (Donald R. Jensen) **52** #1978 62E15 (62D05)
- Parametric relations between distributions of least squares estimators and disturbance term. (French summary) Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 408-412 (1976). (V. K. Srivastava) **57** #4426 62H10
- (with Mikhail, N. N.) Multivariate general moment function and its application. (French summary) *Canad. J. Statist.* **3** (1975), no. 2, 175-186. (Authors' summary) **53** #4374 62H10 (62D05)
- (with Singh, Rana P.) Some applications of matrix differentiation in the general analysis of covariance structures. *Sankhyā Ser. A* **37** (1975), no. 2, 269-280. (Authors' summary) **58** #24763 62J10
- (with Gupta, A. K.) Recurrence relations for the moments of truncated multinormal distribution. *Comm. Statist.-Theory Methods* **A5** (1976), no. 9, 855-865. (C. G. Khatri) **55** #4514 62H10
- (with Gupta, A. K.) Moment inequalities for truncated multivariate distributions. (French summary) *Canad. J. Statist.* **5** (1977), no. 2, 209-212. (B. Raja Rao) **58** #18894 62H10
- (with Singh, Radhey S.) Strongly consistent estimators of k -th order regression curves and rates of convergence. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **40** (1977), no. 4, 339-348. (Paul Deheuvels) **57** #10883 62E20 (62G05)
- See also Symmetric functions in statistics, 48 #9901
- Tracz, G. S. (with Horne, G.) Nonlinear programming and second variation schemes in constrained optimal control problems. *Proceedings of the Princeton Symposium on Mathematical Programming* (1967), pp. 523-537. Princeton Univ. Press, Princeton, N.J., 1970. (V. F. Dem'janov) **51** #13829 49D99
- Traczyk, Paweł On the G -homotopy equivalence of spheres of representations. *Math. Z.* **161** (1978), no. 3, 257-261. (Louis Solomon) **58** #13025 55E45
- Traczyk, Tadeusz ★ Wstęp do teorii algebr Boole'a. (Polish) [Introduction to the theory of Boolean algebras] With an appendix by M. Mączyński. Biblioteka Matematyczna, Tom 37. Państwowe Wydawnictwo Naukowe, Warsaw, 1970. 210 pp. (P. Kratochvíl) **49** #171 (EA 49) 06A40
- On automorphisms in an algebra with a basis. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 701-703. (S. P. Bandyopadhyay) **46** #3419 08A25
- Prime ideals characterization of generalized Post algebras. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **20** (1972), 105-108. (R. Balbes) **46** #8927 06A35 (02J05)
- (with Burakowski, Zygmunt) Rings of structural numbers. I. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Mat. Astronom. Phys.* **20** (1972), 539-543. (Ph. Dwinger) **49** #4902 06A70
- (with Kaczorek, Tadeusz) Partial derivatives of the Vandermonde determinant and their application to the synthesis of linear control systems. (Polish summary) *Zastos. Mat.* **13** (1972/73), 329-337. (From the authors' introduction) **56** #11191 93B99
- (with Mączyński, Maciej J.) A characterization of orthomodular partially ordered sets admitting a full set of states. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 3-8. (R. Piziak) **47** #3260 06A10
- (with Burakowski, Zygmunt) Rings of structural numbers. II. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **21** (1973), 893-897. (Ph. Dwinger) **48** #8321 06A20
- (with Bellert, Stanisław) Representations of rings of structural numbers. *Demonstratio Math.* **5** (1973), 299-309. (Ph. Dwinger) **54** #7114 94A20 (06A70)
- (with Bienkowska-Lipińska, Krystyna; Browkin, Jerzy; Dymowski, Stanisław; Grochowski, Bogusław; Gutowski, Roman; Jeśmanowicz, Leon; Kotlarski, Ignacy I.; Krasnodębski, Ryszard; Kudrewicz, Jacek; Leitner, Roman; Muszyński, Jerzy; Osowski, Jerzy; Pawłowicz, Ireneusz; Piskorek, Adam; Sobczyk, Kazimierz; Trajdos, Tadeusz; Waligórski, Stanisław; Wojdat, Marian; Zuber, Roman; Żakowski, Wojciech) ★ Mathematik Handbuch für Technik und Naturwissenschaft. Herausgegeben von Jerzy Dreszer. Redaktion der deutschsprachigen Ausgabe von Günther Eisenreich und Wolfgang Naumann. Aus dem Polnischen übersetzt von A. Dworak, L. Kulik, L. Kutyla und W. Pilarczyk. Verlag Harri Deutsch, Zurich-Frankfurt am Main, 1975. xii + 1346 pp. (Editors) **52** #7771 00A20
- Lattices with greatest (least) chain base. *Proceedings of the 1975 International Symposium on Multiple-Valued Logic* (Indiana Univ., Bloomington, Ind., 1975), pp. 4-7. *IEEE Comput. Soc., Long Beach, Calif.*, 1975. (Editors) **58** #5428 06A20
- (with Mączyński, Maciej J.) Some representations of orthomodular and similar posets. Collection of papers on the theory of ordered sets and general algebra. *Acta Fac. Rerum Natur. Univ. Comenian. Math., Special No.* (1975), 25-28. (R. Piziak) **50** #2002 06A30
- Lattices with greatest (least) chain base. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 9, 935-937. (R. Balbes) **52** #10521 06A20
- (with Zarębski, Wiesław) Generalized P_0 -lattices of order ω^+ . *Colloq. Math.* **34** (1975/76), no. 2, 171-182. (T. Katriňák) **53** #13061 06A35
- (with Zarębski, Wiesław) Post algebras are uniquely chain based lattices. *Lattice theory* (Proc. Colloq., Szeged, 1974), pp. 427-431. *Colloq. Math. Soc. János Bolyai, Vol. 14, North-Holland, Amsterdam*, 1976. (F. Lapscher) **56** #204 06A35
- (with Marek, Wiktor) Stochastic informational systems. (Polish and Russian summaries) *Podstawy Sterowania* **6** (1976), no. 4, 383-391. (Authors' summary) **57** #4719 68A99
- (with Klukowski, Julian) On some numerical representation of Post algebras. *Colloq. Math.* **37** (1977), no. 1, 11-22. (M. J. Mączyński) **57** #2911 02J05 (06A40)
- (with Marek, Wiktor) Stochastic informational systems. I. *Fundam. Inf.* (4) **1** (1977), no. 1, 121-130. (K. H. V. Booth) **56** #7378 68A50
- See also Szász, Árpád. (See Zbl 345 #93030)
- Traczyk, Wiesław Theory of digital automata. (Polish) *Arch. Automat. i Telemech.* **18** (1973), 199-208. (Editors) **47** #7951 68A25 (94A30)

- A. Asymptotic method for nonlinear dispersive and weakly dissipative wave equations. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **12** (1974), 875-895. (Alan Jeffrey) **56** #9091 35L55 (35B15)
- Ang, L. A rapid numerical solution to the radial Schroedinger equation in the oscillatory region. *J. Computational Phys.* **8** (1971), 64-72. (J. Švejsa) **47** #1297 5L10
- Anisimov, Aposotolos P. (with Wise, Gary L.; Thomas, John B.) The effect of a memoryless nonlinearity on the spectrum of a random process. *IEEE Trans. Information Theory* **IT-23** (1977), no. 1, 84-89. (Mike Sablatash) **57** #15733 94A05
- (with Wise, Gary L.; Thomas, John B.) The estimation of a probability density function from measurements corrupted by Poisson noise. *IEEE Trans. Information Theory* **IT-23** (1977), no. 6, 764-766. (Luc P. Devroye) **57** #17932 62G05
- Antoniou, Michel (with Robillard, Pierre) Expected completion time in PERT networks. *Operations Res.* **24** (1976), no. 1, 177-182. (Kailash C. Kapur) **53** #10234 90B10
- Arnold, Charles G. (with Guertin, Ralph F.) Linear relativistic Hamiltonians. *Ann. Physics* **98** (1976), no. 1, 50-69. (S. Malin) **54** #6766 81.47
- Benberg, A. M. The Frattini subgroup of an FC-group. (Russian) *Mat. Issled.* **7** (1972), no. 2 (24), 248-252, 293. (David McDougall) **47** #6856 20D25
- Benbrot, B. A. (with Bärzdins, J.) ★Finite automata. Behavior and synthesis. Translated from the Russian by D. Louvish. English translation edited by E. Shamir and J. H. Landweber. *Fundamental Studies in Computer Science*, Vol. 1. North-Holland Publishing Co., Amsterdam-London; American Elsevier Publishing Co., Inc., New York, 1973. xi + 321 pp. (Editors) **50** #4174 94A30
- A formalization of certain concepts in terms of complexity of computations. (Russian. English summary) *Logic, methodology and philosophy of science, IV (Proc. Fourth Internat. Congr., Bucharest, 1971)*, pp. 205-213. *Studies in Logic and Foundations of Math.*, Vol. 74. North-Holland, Amsterdam, 1973. (G. Asser) **57** #82 02F20 02E10, 02G10, 68A15
- Autoreducible and nonautoreducible predicates and sets. (Russian) *Studies in the theory of algorithms and mathematical logic*, Vol. 1 (Russian), pp. 211-234. *Vychisl. Centr. Akad. Nauk SSSR*, Moscow, 1973. (R. A. Di Paola) **49** #8837 02F25 (68A20)
- Frequency computations. (Russian) Mathematical logic, theory of algorithms and theory of sets (dedicated to P. S. Novikov on the occasion of his seventieth birthday). *Trudy Mat. Inst. Steklov.* **133** (1973), 221-232, 276. (G. Asser) **54** #12498 02F15 (68A20)
- On universal classes of program schemes. *International Symposium on Theoretical Programming (Novosibirsk, 1972)*, pp. 144-151. *Lecture Notes in Comput. Sci.*, Vol. 5. Springer, Berlin, 1974. (David Gries) **55** #11682 68A05 (08A20, 02H10)
- Remarks on the complexity of computations on probabilistic machines. (Russian) *Theory of algorithms, and mathematical logic (Russian)*, pp. 159-176, 216. *Vychisl. Centr. Akad. Nauk SSSR*, Moscow, 1974. (Editors) **58** #25129 68A20 (94A35)
- (with Jaglom, I. M.; Vencel', E. S.; Solodovnikov, A. S.) ★Nouvelles orientations des mathématiques. Traduit du russe par O. Smirnov. *Initiation aux Mathématiques*. Editions Mir, Moscow, 1975. 408 pp. (Editors) **56** #8252 00A05
- On problems solvable by successive trials. *Mathematical foundations of computer science 1975 (Fourth Sympos., Mariánské Lázně, 1975)*, pp. 125-137. *Lecture Notes in Comput. Sci.*, Vol. 32. Springer, Berlin, 1975. (John T. Gill) **52** #16126 68A20
- ★Algorithmen und Rechenautomaten. Übersetzt aus dem Russischen von Günter Asser, Hans-Dietrich Hecker und Lutz Voelkel. Studienbücherei. VEB Deutscher Verlag der Wissenschaften, Berlin, 1977. 208 pp. (Egon Börger) **58** #10356 02Fxx
- Frequency algorithms and computations. *Mathematical foundations of computer science (Proc. Sixth Sympos., Tatranská Lomnica, 1977)*, pp. 148-161. *Lecture Notes in Comput. Sci.*, Vol. 53. Springer, Berlin, 1977. (Giorgio Ausiello) **58** #19336 68A10 (02F25)
- See also *Studien zur Algebra und ihre Anwendungen*, **48** #8172
- Benbrot, M. B. A certain learning model with increasing memory. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 5, 100-108. (Author's summary) **47** #6135 68A25 (68A45)
- Interpreted functions in program schemata. (Russian) *System and theoretical programming (Russian)*, pp. 188-211. *Vychisl. Centr. Sibirsk. Otdel. Akad. Nauk SSSR*, Novosibirsk, 1973. (Armin Cremers) **51** #7359 68A05
- The representation of sequential and parallel functions. (Russian) *Numerical mathematics and programming (Russian)*, pp. 74-80. *Vychisl. Centr. Sibirsk. Otdel. Akad. Nauk SSSR*, Novosibirsk, 1974. (Author's summary) **57** #2790 94A30 (68A05)
- On representation of sequential and parallel functions. *Mathematical foundations of computer science (Fourth Sympos., Mariánské Lázně, 1975)*, pp. 411-417. *Lecture Notes in Comput. Sci.*, Vol. 32. Springer, Berlin, 1975. (Author's summary) (Zbl **328** #68043) **58** #25130 68A20 (02F43)
- Relationships between classes of monotonic functions. *Theoret. Comput. Sci.* **2** (1976), no. 2, 225-247. (A. Ja. Pljuškevičene) **54** #4172 68A05 (02E15)
- Benengere, E. A. (with Icković, E. L.) Optimal composition of production monitoring and control programs. *Avtomat. i Telemekh.* **1968**, no. 5, 135-144. (Russian. English summary); translated as *Automat. Remote Control* **1968**, no. 5, 810-817. (Jerzy Seidler) **53** #12560 90B35 (68A20, 90C50)
- (with Šumei, A. S.) Syntactic analysis of languages that are generated by unambiguous precedence grammars. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **11** (1971), 005-1013. (I. M. Havel) **45** #4924 68A30
- (with Šumei, A. S.) The equivalent transformation of generating grammars to precedence grammars. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **13** (1973), 446-455, 533. (I. M. Havel) **49** #8439 68A30
- (with Pronina, V. A.) Parallel syntax analysis. *Avtomat. i Telemekh.* **1974**, no. 7, 92-98. (Russian); translated as *Automat. Remote Control* **35** (1974), no. 7, part 1, 118-1122. (I. Hal Sudborough) **52** #12403 68A20 (68A05)
- (with Šumei, A. S.) The existence of precedence functions for phrase structure grammars. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* **14** (1974), 520-522, 536. (V. N. Agafonov) **50** #3658 68A30
- (with Berezovskii, B. A.) Probability estimate of the queue length of the most preferred demands in operational systems. *Avtomat. i Telemekh.* **1975**, no. 1, 187-195. (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 1, 68-175. (Authors' summary) **56** #6913 60K25
- (with Bronštejn, I. I.; Šuraic, Ju. M.) Determination of an optimal plan for realization of an algorithm on a multiprocessor computer. *Avtomat. i Telemekh.* **1975**, no. 4, 122-127. (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 4, part 2, 633-638. (Authors' summary) **56** #8016 90C50 (90C05)
- (with Bronštejn, I. I.; Šuraic, Ju. M.) Minimization of execution time of groups of programs with distinct durations of processing of a multi-processor computer. *Avtomat. i Telemekh.* **1976**, no. 1, 179-186. (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 1, part 2, 114-120 (1976). (Jerzy Seidler) **57** #8114 68A05
- (with Belkina, M. V.) Module allocation in program systems. *Avtomat. i Telemekh.* **1977**, no. 7, 192-196. (Russian. English summary); translated as *Automat. Remote Control* **38** (1977), no. 7, part 2, 1103-1106. (V. Ju. Meitus) **57** #5435 94A20 (68A05)
- (with Babičev, A. V.; Pronina, V. A.) The reduction of generating grammars to a form that contains precedence functions. (Russian) *Programirovanie* **1977**, no. 3, 43-53, 95. (Authors' summary) **58** #13950 68A30
- Trahtengerc, V. Ju. (with Grač, S. M.; Karaštin, A. N.; Mitjakov, N. A.; Rapoport, V. O.) Parametric interaction of electromagnetic radiation with ionospheric plasma. (Russian. English summary) *Studies of the ionosphere (All-Union Conf. "Questions of Radiowave Propagation in the Ionosphere and in Space", Gorki, 1976)*. *Izv. Vysš. Učebn. Zaved. Radiofizika* **20** (1977), no. 12, 1827-1833. (Authors' summary) **58** #14375 78.35
- Trahtman, A. M. Fundamentals of the linear theory of signals and systems defined on a finite set of points. *Avtomat. i Telemekh.* **1974**, no. 4, 81-92. (Russian); translated as *Automat. Remote Control* **35** (1974), no. 4, part 1, 589-599. (Editors) **56** #11502 94A05
- (with Bljumin, S. L.) Discrete Hilbert transform on finite intervals. *Radiotekhn. i Elektron.* **22** (1977), no. 7, 1390-1398. (Russian); translated as *Radio Engrg. Electron. Phys.* **22** (1977), no. 7, 50-56. (B. D. Agrawal) **58** #9739 94A05
- Trahtman, A. N. (with Baranskii, V. A.) Subsemigroup graphs. (Russian. English summary) *Mat. Časopis Sloven. Akad. Vied* **20** (1970), 135-140. (J. Bosák) **47** #3233 05C25 (02B10, 20M99)
- (with Rédei, László) Die einstufig nichtkommutativen Halbgruppen mit Ausnahme von unendlichen Gruppen. *Period. Math. Hungar.* **1** (1971), no. 1, 15-23. (H. J. Weinert) **45** #430 20M10
- Covering elements in the lattice of varieties of algebras. (Russian) *Mat. Zametki* **15** (1974), 307-312. (L. Klukovits) **50** #4446 08A15
- Semigroups whose subsemigroups all belong to a certain variety. (Russian) *Ural. Gos. Univ. Mat. Zap.* **9**, no. 1, 110-126, 144 (1974). (Anna Ja. Aizenštat) **52** #10933 20M10 (08A15)
- $m\bar{V}$ -semigroups of certain varieties. (Russian) *Algebraic studies (Russian)*, pp. 107-117, 121-122. *Izdanie Ural. Politehn. Inst., Sverdlovsk*, 1976. (Anna Ja. Aizenštat) **56** #12157 20M10
- Subsemigroup graphs, and lattices of subsemigroups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1976**, no. 2(165), 69-78. (H.-J. Voss) **56** #178 05C25 (20M99, 02G10)
- A variety of semigroups without an irreducible basis of identities. (Russian) *Mat. Zametki* **21** (1977), no. 6, 865-872. (Anna Ja. Aizenštat) **58** #21901 08A15 (20M10)
- Trahtman, Ju. A. The divisibility of certain differences that consist of binomial coefficients. (Russian. Armenian summary) *Akad. Nauk Armjan. SSR Dokl.* **59** (1974), no. 1, 10-16. (J. B. Roberts) **52** #13613 10A25
- Trahtman, V. Ju. Factorization of matrices of the Walsh function ordered according to Paley and repetition frequency. *Radiotekhn. i Elektron.* **18** (1973), 2521-2528. (Russian); translated as *Radio Engrg. Electron. Phys.* **18** (1973), 1841-1848. (G. Robert Redinbo) **53** #7592 94-04
- Spectrum analysis in a base of Vilenkin-Christenson functions. *Radiotekhn. i Elektron.* **20** (1975), no. 1, 130-137. (Russian); translated as *Radio Engrg. Electron. Phys.* **20** (1975), no. 1, 83-89. (Author's summary) **58** #15660 94A05
- Fast Fourier transform for a wide class of systems of orthogonal functions. *Radiotekhn. i Elektron.* **21** (1976), no. 5, 1034-1041. (Russian); translated as *Radio Engrg. Electron. Phys.* **21** (1976), no. 5, 90-96. (H. E. Fettes) **55** #4615 65D30
- Traiger, I. L. (with Eswaran, Kapali P.; Gray, James N.; Lorie, R. A.) The notions of consistency and predicate locks in a database system. *Comm. ACM* **19** (1976), no. 11, 624-633. (W. W. Armstrong) **57** #2005 68A50
- Traikov, Tr. P. (with Raičev, B.) Mathematical models of inventory control in the case of random possibility for delivery. (Bulgarian. Russian and English summaries) *Avtomat. i Izčisl. Tehn.* **5** (1971), no. 1, 24-33, 2, 3. (V. Spiridonov) **46** #10388 90B05
- Trail, Robert B. (with Cochran, Allan C.) Regularity and complete regularity for convergence spaces. *Topology Conference (Virginia Polytech. Inst. and State Univ., Blacksburg, Va., 1973)*, pp. 64-70. *Lecture Notes in Math.*, Vol. 375. Springer, Berlin, 1974. (Gary Richardson) **50** #8404 54A20
- (with Cochran, Allan C.) Singly generated uniform convergence spaces. *Bull. Calcutta Math. Soc.* **68** (1976), no. 1, 7-12. (O. Wyler) **57** #1432 54A05 (54E15)
- Trail, Stanley M. (with Weeks, David L.) Extended complete block designs generated by BIBD. (French summary) *Biometrics* **29** (1973), 565-578. (E. Seiden) **50** #6076 62K10
- Traini, M. (with Lipparini, E.; Stringari, S.) A variational approach to magnetic moments. *Nuclear Phys. A* **291** (1977), no. 1, 157-164. (Ian P. Grant) **56** #14272 81.35
- Trainin, Ja. L. See *Questions on mathematical analysis*, **52** #13081
- Trainor, L. E. H. (with Rosensteel, G.; Ihrig, Edwin) Group theory and many body diagrams. I. Classification and structure of diagrams. *Proc. Roy. Soc. London Ser. A* **344** (1975), no. 1638, 387-401. (Philip H. Butler) **52** #7340 81.20
- (with Ihrig, Edwin; Rosensteel, G.; Chow, H.) Group theory and many body diagrams. II. Enumeration methods and number approximations. *Proc. Roy. Soc. London Ser. A* **348** (1976), no. 1654, 339-357. (N. Mukunda) **53** #9897 81.20
- Trajdós, Tadeusz (with Łopuszańska, Halina) Professor Stanisław Gołb—scientist and teacher. Collection of articles dedicated to Stanisław Gołb on his 70th birthday, I. *Demonstratio Math.* **6** (1973), 9-18. (Editors) **49** #7093 01A70
- Bibliography of Professor Stanisław Gołb. Collection of articles dedicated to Stanisław Gołb on his 70th birthday, I. *Demonstratio Math.* **6** (1973), 51-70. (Editors) **49** #7097 01A70

- (with Bienkowska-Lipińska, Krystyna; Browkin, Jerzy; Dymowski, Stanisław; Grochowski, Bogusław; Gutowski, Roman; Jeśmanowicz, Leon; Kotlarski, Ignacy I.; Krasnodębski, Ryszard; Kudrewicz, Jacek; Leitner, Roman; Muszyński, Jerzy; Osiowski, Jerzy; Pawłowicz, Ireneusz; Piskorek, Adam; Sobczyk, Kazimierz; Traczyk, Tadeusz; Waligórski, Stanisław; Wojdat, Marian; Zuber, Roman; Żakowski, Wojciech) ★ *Mathematik Handbuch für Technik und Naturwissenschaft*. Herausgegeben von Jerzy Dreszer. Redaktion der deutschsprachigen Ausgabe von Günther Eisenreich und Wolfgang Naumann. Aus dem Polnischen übersetzt von A. Dworak, L. Kulik, L. Kutyła und W. Pilarczyk. Verlag Harri Deutsch, Zurich-Frankfurt am Main, 1975. xii + 1346 pp. (Editors) 52 #7771 00A20
- ★ *Matematyka. Część III. (Polish) [Mathematics, Part III]* Third revised edition. Wydawnictwa Naukowo-Techniczne, Warsaw, 1977. 387 pp. (Editors) 57 #11 00A05
- Trajstman, A. C.** (with Watterson, G. A.) A note on a first passage probability found in population genetic models. *Theoret. Population Biology* 3 (1972), 396-403. (L. A. Bunimovich) 52 #12847 92A10
- The necessity of the Poisson distribution for the equivalence of some random mating models. *Math. Biosci.* 17 (1973), 1-10. (E. Çinlar) 49 #8695 92A15 (62P10)
- On a conjecture of G. A. Watterson. *Advances in Appl. Probability* 6 (1974), 489-493. (R. G. Stanton) 50 #3993 92A10
- Trakhtenbrot, B. A.** See **Trahtenbrot, B. A.**
- Trakhtenbrot, Mark B.** See **Trahtenbrot, M. B.**
- Trakhtengerts, E. A.** See **Trahtengerc, E. A.**
- Trakhtman, A. M.** See **Trahtman, A. M.**
- Trakhtman, V. A.** See **Trahtman, V. Ju.**
- Traki, Mohammed** See **Meyer, Paul-André**, 51 #6979
- Tralli, Antonio** (with Di Tommaso, Angelo) Reliability tests for structures under general loading processes. I. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 56 (1974), no. 4, 565-573. (A. J. M. Spencer) 53 #9822 73.49 (90B25)
- (with Di Tommaso, Angelo) Reliability tests for structures under general loading processes. II. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 56 (1974), no. 5, 738-748. (A. J. M. Spencer) 53 #9823 73.49 (90B25)
- Tramov, M. I.** Oscillatory solutions of differential equations with retarded argument. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* No. 5 (1971), 31-36. (See RŽMat 1972 #1 B362) 34K05
- Conditions for the oscillation of the solutions of first order differential equations with retarded argument. (Russian) *Izv. Vyss. Učebn. Zaved. Matematika* 1975, no. 3(154), 92-96. (G. B. Gustafson) 52 #961 34K15
- nguyen-ngoc-Tran** See **Nguyen-Ngoc-Tran**
- Tran, Lanh Tat** (with Millar, P. Warwick) Unbounded local times. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 30 (1974), 87-92. (W. E. Pruitt) 52 #1909 60J55
- Local maxima of the sample functions of the two-parameter Wiener process. *Proc. Amer. Math. Soc.* 58 (1976), 250-254. (Robert J. Adler) 54 #8823 60G15 (60J65)
- On a problem posed by Orey and Pruitt related to the range of the N -parameter Wiener process in R^d . *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 37 (1976/77), no. 1, 27-33. (W. E. Pruitt) 56 #1436 60G17
- The Hausdorff dimension of the range of the N -parameter Wiener process. *Ann. Probability* 5 (1977), no. 2, 235-242. (S. J. Taylor) 55 #4360 60G15 (60J65)
- dang Tran Dac** See **Dang Tran Dac**
- Trandafir, Rodica** Problemi di geometria integrale delle reti di uno spazio omogeneo. *Rend. Sem. Mat. Messina* 12 (1968/70), 3-25 (1971). (C.-C. Hsiung) 47 #9504 53C65
- ★ *Matematici pentru ingineri. Culegere de probleme. (Romanian) [Mathematics for engineers. Collection of problems]* Editura Tehnică, Bucharest, 1969. 511 pp. (Editors) 50 #6699 00A05 (69.00)
- Integral geometry problems on lattices in a homogeneous space. (Romanian. French summary) *Stud. Cerc. Mat.* 23 (1971), 425-466. (L. A. Santaló) 48 #4976 53C65 (52A20)
- Les espérances mathématiques et les variances de quelques variables aléatoires associées à des familles d'ovales. *Acad. Roy. Belg. Bull. Cl. Sci. (5)* 60 (1974), 593-598. (M. Stoica) 52 #4375 60D05
- Measurable families of varieties in the unimodular centroaffine plane. (Romanian. French summary) *Stud. Cerc. Mat.* 26 (1974), 775-780. (M. Stoka) 50 #11110 53C65
- Trandaš, M. M.** (with Bondarenko, P. S.) The formation of prescribed trajectories of charged particles by two-dimensional electrostatic fields. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1974, 291-293, 379. (S. Kaliski) 51 #14750 78.31
- (with Bondarenko, P. S.) The formation of closed trajectories of relativistic electrons by plane electrostatic fields. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1974, 393-396, 475. (S. Kaliski) 50 #3781 78.45
- See also *Methods of approximate solution of differential and integral equations*, 50 #12537
- Tran Dien Hien** (with Fučik, Svatopluk) Note on nonlinear spectral theory: application to boundary value problems for ordinary integrodifferential equations. *Comment. Math. Univ. Carolinae* 14 (1973), 583-608. (H. Amann) 48 #11956 45J05 (47H10)
- Tran Dinh Am** (with Tsukiyama, Shuji; Shirakawa, Isao; Ozaki, Hiroshi) An algorithm for generating all the directed paths and its application. *Information Processing in Japan* 16 (1976), 31-35. (D. H. Younger) 57 #1964 68A10 (05C20)
- (with Tsukiyama, Shuji; Shirakawa, Isao; Ozaki, Hiroshi) An algorithm for generating all the paths between two vertices in a diagraph and its application. *Tech. Rep. Osaka Univ.* 26 (1976), no. 1308-1336, 411-418. (Authors' summary) 58 #9182 90B10 (05C30)
- Trần Đình Trúe** Ultrasuperharmonic functions associated with degenerate elliptic differential operators. *Rev. Roumaine Math. Pures Appl.* 22 (1977), no. 2, 267-280. (Denis Feyel) 57 #12882 31C05 (35J05, 35K05)
- Trần đình-Viên** Sur les généralisations du théorème de Meusnier. *Ann. Polon. Math.* 27 (1973), 231-245. (J. R. Vanstone) 48 #7142 53B25
- (with Szybiak, A.) On the theorem of Meusnier in Weyl spaces. *Ann. Polon. Math.* 28 (1973), 189-194. (S. Takizawa) 48 #9589 53B25
- Tran Duc Mai** Partitions and congruences in algebras. I. Basic properties. *Arch. Mat. (Brno)* 10 (1974), no. 2, 111-122. (E. T. Schmidt) 52 #228 08A05
- Partitions and congruences in algebras. II. Modular and distributive equalities complements. *Arch. Math. (Brno)* 10 (1974), no. 3, 159-172 (1975). (E. T. Schmidt) 54 #5082 08A05
- Partitions and congruences in algebras. III. Commutativity of congruences. *Arch. Math. (Brno)* 10 (1974), no. 3, 173-187 (1975). (E. T. Schmidt) 54 #5083 08A05
- Partitions and congruences in algebras. IV. Associable systems. *Arch. Math. (Brno)* 10 (1974), no. 4, 231-253 (1975). (E. T. Schmidt) 54 #5084 08A05
- lê dúng Tráng** See **Lê Dũng Tráng**
- Trangenstein, John A.** (with Moré, Jorge J.) On the global convergence of Broyden's method. *Math. Comp.* 30 (1976), no. 135, 523-540. (J. Hurt) 54 #6490 65H10
- A finite element method for the Tricomi problem in the elliptic region. *SIAM Numer. Anal.* 14 (1977), no. 6, 1066-1077. (V. Thomée) 57 #11113 65N30
- Trần Huê Nhung** (with Faradžev, R. G.) The analogue of Mason's theorem for signal-propagation graphs in linear sequential machines and its applications. *Automat. Telemekh.* 1974, no. 7, 54-62 (Russian); translated as *Automat. Remote Control* 35 (1974), no. 7, part 1, 1085-1091. (Armen Gabrielian) 52 #10250 94A20 (94A25)
- Trần Hữu Phát** On the asymptotic behaviour of the form factors. *Ann. Physik* (7) 24 (1971), 201-207. (Author's summary) 54 #4392 81.30
- On the role of the results obtained by the analytical theory of elementary particles. *Ann. Physik* (7) 27 (1971), 33-46. (Alexej Stencko) 48 #7817 81.30
- Unified space-time for interaction of elementary particles. *Acta Phys. Polon. B* 4 (1973), 193-209. (Author's summary) 50 #15743 81.53
- Nonlocal quantum electrodynamics. *Acta Phys. Polon. B* 4 (1973), 311-328. (Author's summary) 50 #15744 81.53
- Quantum electrodynamics without ultraviolet infinities. *Acta Phys. Polon. B* 4 (1973), 329-346. (Author's summary) 50 #15745 81.53
- Theory of weak interaction without divergencies. *Acta Phys. Acad. Sci. Hungar.* 37 (1974), 207-218. (Author's summary) 56 #7637 81.47
- Tränkle, Ulrich** (with Reinfeldt, Manfred) ★ *Signifikanztabellen statistischer Testverteilungen. Binomial-, Poisson-, Normal-, χ^2 -, t -, F -Tabellen für acht Signifikanzniveaus. R. Oldenbourg Verlag, Munich-Vienna, 1976. 151 pp. (Editors) 53 #11944 62Q05*
- Tran Minh Tien** Verallgemeinerte stückweise lineare Markowsche Prozesse für die Bedienungs- und Zuverlässigkeitstheorie. (Russian and English summaries) *Math. Operationsforsch. Statist. Ser. Optimization* 8 (1977), no. 3, 419-431. (Dietrich Stoyan) 57 #1708 60K25
- Tran-Ngoc-Toan** (with Zarrouati, G.; Piednoir, J.-L.; Carre, R.; Guillerot, J. Cl.; Rizzi, L.) ★ *Tests non paramétriques: observations statistiquement dépendantes. With French and English summaries. Rev. CETHEDC Cahier 2ème Trim. (1973). Centre d'Études Théoriques de la Détection et des Communications, Paris, 1973. pp. i and 1-59. (Lionel Weiss) 49 #1675 62G10*
- See also *Demographic genetics*, 52 #10091
- Tran Quang Phung** Construction d'une extension L/K de ramification triviale. *An. Univ. București Mat.* 26 (1977), 75-78. (W.-D. Geyer) 57 #284 12B10
- garcia Tranque, Tomás** See **García Tranque, Tomás**
- Tranquilli, G. B.** Variabilità, dissomiglianza multipla e connessione. (English summary) *Studi di probabilità, statistica e ricerca operativa in onore di Giuseppe Pompili*, pp. 413-436. Edizioni Oderisi, Gubbio, 1971. (P. Fortunati) 50 #8835 62H20
- Tran Quoc Chien** Generalized cooperative games and markets. *Kybernetika (Prague)* 12 (1976), no. 5, 328-354. (Author's summary) 56 #14770 90D12
- Trần-Quốc-Tê** Performances of "Least reference probability" paging algorithm under locality in program behavior. *Fünfte Jahrestagung der Gesellschaft für Informatik (Dortmund, 1975)*, pp. 715-735. *Lecture Notes in Comput. Sci.*, Vol. 34, Springer, Berlin, 1975. (Erol Gelenbe) 53 #7165 68A50
- L'optimisation à terme immédiat dans la pagination des programmes localisés. (English summary) *Modèles, mesures; simulation de systèmes informatiques. Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Bleue* 10 (1976), no. B-2, Suppl., 59-82. (Author's summary) 58 #32021 68A05 (90Bxx)
- Trần Quỳ Tiễn** (with Lee, Anna) On a class of regular rings. (Hungarian) *Mat. Lapok* 25 (1974), no. 1-2, 119-127 (1977). (R. Wiegandt) 56 #3051 16A30
- Extension of a certain theorem of D. Rees. (Hungarian) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* 23 (1977), no. 1-2, 121-126. (G. Pollák) 55 #8222 20M10
- Transue, William K.** See *Complements and comments*, 48 #1835
- Transue, William R.** An extension of the notion of uncoherence. *Proceedings of the University of Houston Point Set Topology Conference (Houston, Tex., 1971)*, pp. 24-31. Univ. Houston, Houston, Tex., 1971. (R. F. Dickman, Jr.) 53 #6516 54F55
- See also *Proceedings: Auburn Topology Conference*, 51 #6683
- Tranter, C. J.** (with Cooke, J. C.) A Fourier-Neumann series and its application to the reduction of triple cosine series. *Glasgow Math. J.* 14 (1973), 198-201. (K. N. Srivastava) 49 #9563 45F10
- On some dual cosine series. L. M. Milne-Thomson anniversary issue. *J. Mathematical and Physical Sci.* 7 (1973), 337-340. (R. P. Srivastav) 48 #11952 45F10
- Trần-Thông** (with Liu, Bede) Limit cycles in the combinatorial implementation of digital filters. *IEEE Trans. Acoust. Speech Signal Processing ASSP-24* (1976), no. 3, 248-256. (Authors' summary) 56 #18097 94A05
- (with Liu, Bede) Fixed-point fast Fourier transform error analysis. *IEEE Trans. Acoust. Speech Signal Processing ASSP-24* (1976), no. 6, 563-573. (Authors' summary) 57 #14396 65G05 (65T05)
- (with Liu, Bede) Floating point fast Fourier transform computation using double precision floating point accumulators. *ACM Trans. Math. Software* 3 (1977), no. 1, 54-59. (Authors' summary) 55 #11658 65T05
- Tran Thuong Hung** Nombres hautement composés de Ramanujan généralisés. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 17, A939-A942. (T. M. Apostol) 53 #7923 10A20 (10H15)
- Tran Van Giap** Stability of D -periodic solutions of third-order non-linear differential equations. *Studia Sci. Math. Hungar.* 9 (1974), no. 3-4, 355-368 (1975). (Michel Cotsafitis) 53 #8587 34D99

- On the existence and stability of periodic solutions of a certain third-order differential equation. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **18** (1975), 181-188 (1976). (I. M. Longman) **55** #13009 34C25
- Van Hoa A hierarchy of estimators with quadratic loss in multiple regression equations. Proceedings of the 40th Session of the International Statistical Institute (Warsaw, 1975), Vol. 4. Contributed papers. *Bull. Inst. Internat. Statist.* **46** (1975), no. 4, 413-428 (1976). (Arthur Cohen) **57** #4387 62C15 (62F10, 62J05)
- Van Trien On a certain generalized boundary value problem of function theory. *Demonstratio Math.* **10** (1977), no. 1, 261-274. (Editors) **58** #22591 30A88
- On a certain linear boundary value problem for a pair of holomorphic vectors. *Demonstratio Math.* **10** (1977), no. 2, 479-485. (J. Donig) **58** #11442 30A88
- Vinh Hien (with Pho Duc Tru) The zero-one law and the strong law of large numbers for a sequence of dependent random variables. (Russian) *Acta Sci. Vietnam.* **9/10** (1974), 100-113. (Dominik Szydal) **53** #11718 60F15
- ore, Abou (with Avannissian, Vazgani) Sur les fonctions polyanalytiques de plusieurs variables. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 17, A743-A746. (J. S. Joel) **58** #28628 32A30
- ore, Sekou Slender modules, slender rings. *Acta Sci. Math. (Szeged)* **33** (1972), 77-80. (J.-P. Lafon) **46** #7220 13C10
- a Trapero, J. B. See Pena Trapero, J. B.
- peznikov, L. P. (with Šoihet, B. A.) Solution of a creep theory problem for aging bodies with a growing cut. (Russian) *Dokl. Akad. Nauk SSSR* **236** (1977), no. 1, 43-46. (J. L. Nowinski) **58** #19597 73J35
- peznikov, V. A. Control, economy, technological progress. *Automatic and remote control III (Proc. Third Congr. Internat. Federation Automatic Control (IFAC), London, 1966), Vol. 2, Survey Paper 1, 19 pp. Inst. Mech. Engrs., London, 1967.* (Editors) **51** #9866 93-01
- See also Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #3670; Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #8021; Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #8022; Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #8023; Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #8024; Proceedings: All-Union Conference on Automatic Control—Engineering Cybernetics, **48** #8025; Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360a; Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360b; Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360c; Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360d; Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360e and Proceedings: International Congress of the International Federation of Automatic Control (IFAC), **51** #12360f
- ple, Janusz (with Lasota, Andrzej) Nicoletti boundary value problems for systems of linear differential equations with distributional perturbations. *Zeszyty Nauk. Univ. Jagiello. Prace Mat. No. 15* (1971), 103-108. (G. J. Etgen) **51** #6014 34B05
- On a boundary value problem for systems of ordinary differential equations of second order. *Zeszyty Nauk. Univ. Jagiello. Prace Mat. No. 15* (1971), 159-168. (G. A. Klaasen) **48** #11653 34B15
- Boundary value problems for linear differential equations with distributional perturbations. *Zeszyty Nauk. Univ. Jagiello. Prace Mat. No. 17* (1975), 119-126. (Leon Kotin) **53** #3395 34B05 (46F10)
- Boundary value problem for differential and difference second order systems. *Ann. Polon. Math.* **35** (1977/78), no. 2, 167-186. (Christopher Caldwell) **58** #6454 34B15
- A continuous and a discrete boundary value problem. *Zeszyty Nauk. Univ. Jagiello. Prace Mat. No. 19* (1977), 39-53. (L. Erbe) **58** #11600 34B15
- mez Trapote, Alberto See Gómez Trapote, Alberto
- pp, George E., Jr. (with Anderson, William N., Jr.; Duffin, Richard J.) Tripartite graphs to analyze the interconnection of networks. *Graph theory and applications (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1972; dedicated to the memory of J. W. T. Youngs), pp. 1-12. Lecture Notes in Math., Vol. 303, Springer, Berlin, 1972.* (R. Saeks) **49** #4663 94A20
- (with Duffin, Richard J.) Hybrid addition of matrices-network theory concept. *Applicable Anal.* **2** (1972/73), 241-254. (Kailash C. Kapur) **52** #16873 94A20
- (with Anderson, William N., Jr.; Duffin, Richard J.) Parallel subtraction of matrices (Hermitian semidefinite). *Proc. Nat. Acad. Sci. U.S.A.* **69** (1972), 2530-2531. (N. K. Bose) **46** #5046 94A20
- Inverses of circulant matrices and block circulant matrices. *Kyungpook Math. J.* **13** (1973), 11-20. (M. Pearl) **48** #8525 15A15
- (with Eisenhart, Laurance C.) Computation of Hermite polynomials. *Math. Comp.* **27** (1973), 625-632. (F. Götze) **49** #1733 65D15
- (with Ryan, David) Partitioning methods for accelerating Gauss-Seidel iterations. *Proc. West Virginia Acad. Sci.* **45** (1973), 323-326. (Claude Brezinski) **50** #8936 65F10
- (with Simons, William) Excludable and includable points. *Proc. West Virginia Acad. Sci.* **45** (1973), 332-334. (W. J. Firey) **50** #5629 52A10
- (with Simons, William) Separating points by spheres. *Discrete Math.* **10** (1974), 163-166. (H. E. Debrunner) **50** #8261 50B05
- (with Anderson, William N., Jr.; Duffin, Richard J.) Adjacency matrix concepts for the analysis of the interconnection of networks. *J. Franklin Inst.* **298** (1974), 9-27. (Kailash C. Kapur) **50** #4119 94A20
- (with Anderson, William N., Jr.; Reynolds, Donald F.) Cascade addition of matrices. *Proc. West Virginia Acad. Sci.* **46** (1974), no. 2, 185-192. (N. K. Bose) **54** #14876 94A20 (15A48)
- (with Squire, William) Nonlinear Vandermonde systems for finding eigenvalues. *Proc. West Virginia Acad. Sci.* **46** (1974), no. 3-4, 293-297 (1975). (Colette Lebaud) **52** #7099 65F15
- (with Anderson, William N., Jr.) Inequalities for the parallel connection of resistive n-port networks. *J. Franklin Inst.* **209** (1975), no. 5, 305-313. (A. Jaeger) **55** #2365 94A20
- (with Mitra, Sujit Kumar) On hybrid addition of matrices. *Linear Algebra and Appl.* **10** (1975), 19-35. (M. F. Smiley) **50** #9907 15A30
- (with Anderson, William N., Jr.; Reynolds, Donald F.) Subtraction of network induced matrix operations. *Proc. West Virginia Acad. Sci.* **47** (1975), no. 3-4, 212-215 (1977). (Authors' summary) **57** #15746 94A20
- (with Anderson, William N., Jr.) Shorted operators. II. *SIAM J. Appl. Math.* **28** (1975), 60-71. (W.-K. Chen) **50** #9417 94A20 (47-XX)
- (with Anderson, William N., Jr.; Duffin, Richard J.) Matrix operations induced by network connections. *SIAM J. Control* **13** (1975), 446-461. (N. K. Bose) **53** #2522 94A20 (15A57, 47A50)
- (with Anderson, William N., Jr.) A class of monotone operator functions related to electrical network theory. *Linear Algebra and Appl.* **15** (1976), no. 1, 53-67. (George P. Barker) **56** #5604 15A48 (94A20)
- Trapp, Heinz Wilhelm (with Reiffen, Hans-Jörg) ★Einführung in die Analysis. I. B. I.-Hochschultaschenbücher, No. 776. *Bibliographisches Institut, Mannheim-Vienna-Zürich*, 1972. ix + 320 pp. (B. Stanković (Zbl 244 #26001)) **56** #2706 00A05 (26-01)
- (with Reiffen, Hans-Jörg) ★Einführung in die Analysis. II. B. I.-Hochschultaschenbücher, No. 786. *Bibliographisches Institut, Mannheim-Vienna-Zürich*, 1973. iv + 260 pp. (B. Stanković (Zbl 266 #26001)) **56** #2707 00A05 (26-01)
- (with Reiffen, Hans-Jörg) ★Einführung in die Analysis. III. B.-I.-Hochschultaschenbücher, Band 787. *Bibliographisches Institut, Mannheim-Vienna-Zürich*, 1973. vi + 369 pp. (B. Stanković (Zbl 278 #26002)) **56** #2708 00A05 (26-01)
- Trapp, John A. (with Naghdi, P. M.) A uniqueness theorem in the theory of Cosserat surface. (French summary) *J. Elasticity* **2** (1972), no. 1, 9-20. (Authors' summary) **57** #14745 73J35
- (with Naghdi, P. M.) On the general theory of stability for elastic bodies. *Arch. Rational Mech. Anal.* **51** (1973), 165-191. (J. Ignaczak) **49** #4379 73J35
- (with Naghdi, P. M.) Restrictions on constitutive equations of finitely deformed elastic-plastic materials. *Quart. J. Mech. Appl. Math.* **28** (1975), 25-46. (D. Ieşan) **50** #15524 73J35
- (with Ramshaw, John D.) A numerical technique for low-speed homogeneous two-phase flow with sharp interfaces. *J. Computational Phys.* **21** (1976), no. 4, 438-453. (David M. Burley) **54** #4330 76J65
- Trappl, Robert See Progress in cybernetics and systems research, **54** #4731 and Progress in cybernetics and systems research, **54** #4732
- Trasi, M. S. (with Gopalan, R.) A note on an inverse partial differential operator. *Math. Student* **41** (1973), 167-169. (Manfred W. Kracht) **48** #11929 44-01
- Solution of a first order linear partial differential equation. *Defence Sci. J.* **24** (1974), 13-14. (E. D. Conway) **49** #792 35A30
- Trašilev, D. S. (with Peklić, V. A.) The linear parabolic hypernet of lines in four-dimensional projective space. (Russian. Bulgarian and German summaries) *Godišnik Visš. Učebn. Zaved. Prirodna Mat.* **11** (1975), no. 4, 223-228 (1977). (Authors' summary) **57** #17525 53A20
- Traskovskii, V. D. (with Gluško, G. S.) A method for computing the spectral energy density of a homogeneous isotropic turbulence. (Russian) *Izv. Akad. Nauk SSSR Ser. Meh. Židk. Gaza* **1978**, no. 1, 13-19. (From the summary) **58** #19787 76G60
- Traub, J. F. (with Brown, W. S.) On Euclid's algorithm and the theory of subresultants. *J. Assoc. Comput. Mach.* **18** (1971), 505-514. (H. H. Goldstine) **46** #2820 65D15
- (with Dekker, T. J.) An analysis of the shifted LR algorithm. *Numer. Math.* **17** (1971), 179-188. (L. Fox) **45** #6175 65F15
- Optimal iterative processes: theorems and conjectures. *Information processing 71 (Proc. IFIP Congr., Ljubljana, 1971), Vol. 2: Applications, pp. 1273-1277. North-Holland, Amsterdam, 1972.* (Author's summary) **56** #17052 65H05 (68A20)
- Numerical mathematics and computer science. Twenty-fifth anniversary of the Association for Computing Machinery. *Comm. ACM* **15** (1972), no. 7, 537-541. (R. H. Bartels) **54** #4031 65-03
- Computational complexity of iterative processes. *SIAM J. Comput.* **1** (1972), no. 2, 167-179. (C. F. Picard) **47** #2860 68A20
- Iterative solution of tridiagonal systems on parallel or vector computers. *Complexity of sequential and parallel numerical algorithms (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1973), pp. 49-82. Academic Press, New York, 1973.* (K. Vairavan) **51** #7367 68A20
- (with Kung, H. T.) Computational complexity of one-point and multi-point iteration. *Complexity of computation (Proc. Sympos., New York, 1973), pp. 149-160. SIAM-AMS Proc., Vol. VII, Amer. Math. Soc., Providence, R.I., 1974.* (James Howland) **51** #2345 68A20
- Parallel algorithms and parallel computational complexity. *Information processing 74 (Proc. IFIP Congress, Stockholm, 1974), pp. 685-687. North-Holland, Amsterdam, 1974.* (K. Vairavan) **53** #12069 68A10 (68A20)
- Theory of optimal algorithms. With discussion by M. J. D. Powell, J. H. Wilkinson and J. F. Traub. *Software for numerical mathematics (Proc. Conf., Inst. Math. and Appl., Loughborough Univ. Tech., Loughborough, 1973), pp. 1-15. Academic Press, London, 1974.* (Sven-Åke Gustafson) **50** #11850 68A20 (65H05)
- An introduction to some current research in numerical computational complexity. *The influence of computing on mathematical research and education (Proc. Sympos. Appl. Math., Vol. 20, Univ. Montana, Missoula, Mont., 1973), pp. 47-55. Amer. Math. Soc., Providence, R.I., 1974.* (Forbes D. Lewis) **50** #6206 68A20
- (with Shaw, Mary) On the number of multiplications for the evaluation of a polynomial and some of its derivatives. *J. Assoc. Comput. Mach.* **21** (1974), 161-167. (Authors' summary) **49** #4298 68A10
- (with Kung, H. T.) Optimal order of one-point and multipoint iteration. *J. Assoc. Comput. Mach.* **21** (1974), 643-651. (Ian Gladwell) **50** #6140 65H05
- (with Jenkins, M. A.) Principles for testing polynomial zero-finding programs. *ACM Trans. Math. Software* **1** (1975), no. 1, 26-34. (James Howland) **53** #2009 68A10 (65H05)
- (with Woźniakowski, H.) Optimal linear information for the solution of non-linear operator equations. *Algorithms and complexity (Proc. Sympos., Carnegie-Mellon Univ.,*

- Pittsburgh, Pa., 1976), pp. 103-119. *Academic Press, New York*, 1976. (I. K. Marek) 56 #4153 65J05
- (with Woźniakowski, H.) Strict lower and upper bounds on iterative computational complexity. *Analytic computational complexity (Proc. Sympos., Carnegie-Mellon Univ., Pittsburgh, Pa., 1975)*, pp. 15-34. *Academic Press, New York*, 1976. (C. F. Kelemen) 55 #4781 68A20
- (with Heller, D. E.; Stevenson, David) Accelerated iterative methods for the solution of tridiagonal systems on parallel computers. *J. Assoc. Comput. Mach.* 23 (1976), no. 4, 636-654. (R. H. Bartels) 55 #6809 65F10 (15-04)
- (with Kung, H. T.) Optimal order and efficiency for iterations with two evaluations. *SIAM J. Numer. Anal.* 13 (1976), no. 1, 84-99. (R. P. Brent) 54 #1583 65H05 (68A20)
- (with Dennis, J. E., Jr.; Weber, R. P.) The algebraic theory of matrix polynomials. *SIAM J. Numer. Anal.* 13 (1976), no. 6, 831-845. (Peter Lancaster) 55 #5661 15A24
- (with Shaw, Mary) Selection of good algorithms from a family of algorithms for polynomial derivative evaluation. *Information Processing Lett.* 6 (1977), no. 5, 141-145. (Jozef Mikloško) 58 #25125 68A20 (12-04, 65H05)
- (with Feldstein, Alan) Asymptotic behavior of vector recurrences with applications. *Math. Comp.* 31 (1977), no. 137, 180-192. (Colin M. Campbell) 54 #14407 65Q05
- (with Dennis, J. E., Jr.; Weber, R. P.) Algorithms for solvents of matrix polynomials. *SIAM J. Numer. Anal.* 15 (1978), no. 3, 523-533. (G. Blanch) 57 #11015 65F10
- See also Complexity of sequential and parallel numerical algorithms, 50 #6200; Analytic computational complexity, 52 #15938 and Algorithms and complexity, 54 #14417
- Traub, Roger D.** An ergodic source which is not a function of any finite Markov process. *J. Res. Nat. Bur. Standards Sect. B* 75B (1971), 133-140. (T. Robertson) 46 #10056 60G10
- Trautman, Andrzej** Invariance of Lagrangian systems. *General relativity (papers in honour of J. L. Synge)*, pp. 85-99. *Clarendon Press, Oxford*, 1972. (From the introduction) 58 #20183 83.49 (49A20, 58E15)
- On the Einstein-Cartan equations. I. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 20 (1972), 185-190. (J. Charles-Renaudie) 46 #8633 83.53
- On the Einstein-Cartan equations. II, III. (Russian summaries) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 20 (1972), 503-506; *ibid.* 20 (1972), 895-896. (J. Charles-Renaudie) 48 #13174 83.53
- On the structure of the Einstein-Cartan equations. *Symposia Mathematica, Vol. XII (Convegno di Relatività, INDAM, Rome, 1972)*, pp. 139-162. *Academic Press, London*, 1973. (A. Švec) 51 #12283 83.53
- On the Einstein-Cartan equations. IV. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 345-346. (J. Charles-Renaudie) 47 #8073 83.53
- The Einstein-Cartan theory of gravitation. (French summary) With discussion. *Ondes et radiations gravitationnelles (Colloq. Internat. CNRS, No. 220, Paris, 1973)*, pp. 161-170. *Centre Nat. Recherche Sci., Paris*, 1974. (Richard Sigal) 58 #9083 83.53
- (with Krupka, Demeter) General invariance of Lagrangian structures. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 207-211. (Alan Weinstein) 49 #9869 58E99
- (with Adamowicz, W.) The principle of equivalence for spin. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 23 (1975), no. 3, 339-342. (C. J. Eliezer) 54 #14708 83.53
- A classification of space-time structures. *Rep. Mathematical Phys.* 10 (1976), no. 3, 297-310. (A. Crumeyrolle) 55 #11908 83.53
- See also Proceedings: Symposium on Copernicus and Astronomy, 58 #26684 and Pendse, C. G., 58 #26758
- Trautmann, Dirk** (with Baur, Gerhard) Calculation of integrals over Coulomb functions occurring in the theory of transfer reactions into the continuum. (German summary) *Z. Angew. Math. Phys.* 25 (1974), 9-25. (T. Sasakawa) 51 #12174 81.34 (81.33)
- (with Roedel, F.; Viollier, R. D.) Vacuum polarization potential for two extended charge distributions. *Nuclear Phys. A* 292 (1977), no. 3, 523-535. (Authors' summary) 56 #10507 81.31
- (with Hänggi, P.; Rösel, F.) Continued fraction expansions in scattering theory and statistical non-equilibrium mechanics. *Z. Naturforsch.* 33a (1978), no. 4, 402-417. (Authors' summary) 57 #18656 82.10
- Trautmann, Günther** Darstellung von Vektorraumbündeln über $C^n - \{0\}$. *Arch. Math. (Basel)* 24 (1973), 303-313. (Gerd Fischer) 50 #5010 32C35
- Vektorraumbündel von kleinem Rang über $C^n - \{0\}$. *Fonctions analytiques de plusieurs variables et analyse complexe (Colloq. Internat. CNRS, No. 208, Paris, 1972)*, pp. 256-262. "Agora Mathematica", No. 1, Gauthier-Villars, Paris, 1974. (W. Barth) 58 #1283 32L10
- Deformations of coherent analytic sheaves with finite singularities. *Séminaire Pierre Lelong (Analyse), Année 1974/75*, pp. 1-20. *Lecture Notes in Math., Vol. 524, Springer, Berlin*, 1976. (Hans W. Schuster) 55 #12954 32G10 (32C35, 32C40)
- Deformations von isolierten Singularitäten kohärenter analytischer Garben. *Math. Ann.* 223 (1976), no. 1, 71-89. (Hans W. Schuster) 54 #592 32C40 (32G10)
- Deformations of coherent analytic sheaves with isolated singularities. *Several complex variables (Proc. Sympos. Pure Math., Vol. XXX, Part I, Williams Coll., Williamstown, Mass., 1975)*, pp. 85-89. *Amer. Math. Soc., Providence, R.I.*, 1977. (Hans W. Schuster) 56 #12324 32G13 (32C40)
- Trautner, Rolf** ★ Hausdorff-Summierbarkeit von Potenzreihen. Inaugural-Dissertation zur Erlangung der Doktorwürde der Naturwissenschaftlichen Fakultät der Philipps-Universität Marburg/Lahn. *Philipps-Universität, Marburg*, 1969. 15 pp. (K. Endl) 45 #2367 40G05
- (with Ihm, P.; Wolf, Henry) Linear algebraische Methoden in der numerischen Taxonomie. (English summary) *Biometrische Z.* 13 (1971), 161-202. (K. Dietz) 51 #2167 62H30
- Hausdorff-summability of power series. I. *Manuscripta Math.* 7 (1972), 1-12. (B. E. Rhoades) 46 #2303 40C15
- Density properties of Hausdorff moment sequences. Collection of articles dedicated to Gen-ichirō Sunouchi on his sixtieth birthday. *Tōhoku Math. J. (2)* 24 (1972), 347-352. (A. Devinatz) 49 #9558 44A50 (30A80)
- (with Fiedler, Heinz) Zur Existenz vollständiger Orthogonalsysteme, welche kein multiplikativ-orthogonales Teilsystem enthalten. *Period. Math. Hungar.* 4 (1973), 203-205. (L. Leindler) 49 #9531 42A60
- (with Friess, L.) Zur Häufigkeit multiplikativ-orthogonaler Funktionensysteme. *Period. Math. Hungar.* 4 (1973), 335-342. (G. Sunouchi) 50 #2793 42A52
- Zur Theorie der Überkonvergenz. *Arch. Math. (Basel)* 26 (1975), 262-266. (M. E. Noble) 51 #10600 30A12
- Hausdorff-summability of power series. II. *Manuscripta Math.* 15 (1975), 45-63. (B. E. Rhoades) 51 #1197 40G05
- Eine Vermutung von Ljefliff über Nichtfortsetzbarkeit von Potenzreihen. *Serdica* 1 (1975), no. 3-4, 409-410. (L. Alpár) 55 #634 30A10
- (with Luh, Wolfgang) Summierbarkeit der geometrischen Reihe auf vorgeschriebenen Mengen. (English summary) *Manuscripta Math.* 18 (1976), no. 4, 317-326. (A. Peyerimhoff) 53 #11259 40C05
- (with Gawronski, Wolfgang) Verschärfung eines Satzes von Borel-Okada über Summierbarkeit von Potenzreihen. *Period. Math. Hungar.* 7 (1976), no. 3-4, 201-211. (D. C. Russell) 58 #6809 40C05 (30A10)
- (with Gawronski, Wolfgang) Analytische Fortsetzung von Potenzreihen. *Serdica* 2 (1976), no. 4, 365-374. (M. Hervé) 56 #5849 30A14
- (with Kratz, Werner) Zum Gültigkeitsbereich des zentralen Grenzwertsatzes und des Gesetzes der grossen Zahlen. *Acta Math. Acad. Sci. Hungar.* 29 (1977), no. 1-2, 55-66. (J. R. Blum) 55 #9229 60F05
- (with Luh, Wolfgang) Beziehungen zwischen Limitierungsgeschwindigkeit, Matricelementen und Belegungsfunktion bei Hausdorffverfahren. Dem Andenken an Karl Maruhn gewidmet. *Mitt. Math. Sem. Giessen Heft* 123 (1977), 87-119. (G. U. Brauer) 56 #9133 40G05
- Trautteur, G.** (with Di Gregorio, S.) On reversibility in cellular automata. *J. Comput. System Sci.* 11 (1975), no. 3, 382-391. (Sven Skyum) 52 #13018 94A30
- (with Criscuolo, G.; Miniccozz, E.) Limiting recursion and the arithmetic hierarchy. (Loose French summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Rouge Informat. Théor.* 9 (1975), R-3, 5-12. (Donald L. Kreider) 53 #106 02F20
- Travaglini, Giancarlo** Some properties of UC-sets. (Italian summary) *Boll. Un. Mat. Ital. B (5)* 15 (1978), no. 1, 272-284. (D. M. Connolly) 58 #17688 43A46
- Traversa, Giuseppe** Collapsing schemes for L. P. problems. *Matematiche (Catania)* 25 (1970), 230-238 (1971). (P. J. Nicholson) 46 #6823 90C05
- The fixed charge problem. *Matematiche (Catania)* 25 (1970), 239-244 (1971). (Editors) 47 #3005 90C05
- Traverso, Carlo** p -divisible groups over fields. *Symposia Mathematica, Vol. XI (Convegno di Algebra Commutativa, INDAM, Rome, 1971)*, pp. 45-65. *Academic Press, London*, 1973. (Loren D. Olson) 49 #9001 14L05
- Travis, Curtis C.** (with Kreith, Kurt) On a comparison theorem for strongly elliptic systems. *J. Differential Equations* 10 (1971), 173-178. (R. N. Pederson) 45 #3910 35B05
- (with Kreith, Kurt) Oscillation criteria for selfadjoint elliptic equations. *Pacific J. Math.* 41 (1972), 743-753. (W. Allegretto) 47 #7189 35B05
- A remark on integral oscillation criteria for selfadjoint elliptic equations. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 54 (1973), 829-831 (1974). (C. A. Swanson) 50 #13842 35B05
- A note on second order nonlinear oscillation. *Math. Japon.* 18 (1973), 261-264. (P. Waltman) 49 #9333 34C10
- Comparison of eigenvalues for linear differential equations of order $2n$. *Trans. Amer. Math. Soc.* 177 (1973), 363-374. (C. A. Swanson) 47 #5356 34B25 (34C10)
- (with Reddien, George W., Jr.) Approximation methods for boundary value problems of differential equations with functional arguments. *J. Math. Anal. Appl.* 46 (1974), 62-74. (Russell C. Thompson) 49 #4264 65L99
- (with Webb, G. F.) Existence and stability for partial functional differential equations. *Trans. Amer. Math. Soc.* 200 (1974), 395-418. (Marshall Slemrod) 52 #3690 34G05 (35R10, 47H15)
- Comparison and oscillation theorems for hyperbolic equations. *Utilitas Math.* 6 (1974), 139-151. (K. Kreith) 50 #10505 35B05
- Remarks on a comparison theorem for scalar Riccati equations. *Proc. Amer. Math. Soc.* 52 (1975), 311-314. (R. A. Struble) 51 #13361 34C10
- (with Webb, G. F.) Existence and stability for partial functional differential equations. *Dynamical systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974)*, Vol. II, pp. 147-151. *Academic Press, New York*, 1976. (Editors) 58 #29476 35R10
- (with Gentry, Rodney D.) Existence and comparison of eigenvalues of n th order linear differential equations. *Bull. Amer. Math. Soc.* 82 (1976), no. 2, 350-352. (R. L. Anderson) 54 #10733 34B25
- (with Webb, G. F.) Partial differential equations with deviating arguments in the time variable. *J. Math. Anal. Appl.* 56 (1976), no. 2, 397-409. (Marshall Slemrod) 54 #3193 35R10
- On the uniqueness of solutions to hyperbolic boundary value problems. *Trans. Amer. Math. Soc.* 216 (1976), 327-336. (E. C. Young) 52 #11337 35L20
- (with Gentry, Rodney D.) Comparison of eigenvalues associated with linear differential equations of arbitrary order. *Trans. Amer. Math. Soc.* 223 (1976), 167-179. (D. Hinton) 54 #13198 34B25 (34C10)
- (with Webb, G. F.) Compactness, regularity, and uniform continuity properties of strongly continuous cosine families. *Houston J. Math.* 3 (1977), no. 4, 555-567. (S. Kurepa) 58 #17957 47D05
- (with Young, Eutiquio C.) Uniqueness of solutions to singular boundary value problems. *SIAM J. Math. Anal.* 8 (1977), no. 1, 111-117. (H. Beckert) 55 #3515 35G15
- (with Webb, G. F.) Cosine families and abstract nonlinear second order differential equations. *Acta Math. Acad. Sci. Hungar.* 32 (1978), no. 1-2, 75-96. (Vadim Komkov) 58 #17404 34G05 (47D05)
- (with Young, Eutiquio C.) Comparison theorems for ultrahyperbolic equations.

- Internat. J. Math. Math. Sci.* **1** (1978), no. 1, 31-40. (C. A. Swanson) **57** #6771 35B05
- (with Ahmad, Shair) Oscillation criteria for second-order differential systems. *Proc. Amer. Math. Soc.* **71** (1978), no. 2, 247-252. (Marvin S. Keener) **58** #6492 34C10
- (with Webb, G. F.) Existence, stability, and compactness in the α -norm for partial functional differential equations. *Trans. Amer. Math. Soc.* **240** (1978), 129-143. (M. Artola) **58** #17405 34G05 (35R10)
- is, Dennis Spherical functions on finite groups. *J. Algebra* **29** (1974), 65-76. (Larry C. Grove) **49** #5154 20C15
- is, S. (with Shisha, Oved) L_p convergence of generalized convex functions and their uniform convergence. *J. Approximation Theory* **15** (1975), no. 4, 366-370. (R. S. Booth) **52** #14209 28A20 (26A51, 41A50)
- is, Stephen P. The singular Cauchy problem for ordinary differential equations. *Indiana Univ. Math. J.* **24** (1974/75), no. 11, 1073-1086. (A. D. Ziebur) **52** #843 34A10
- Existence theorem for a backwards two-body problem of electrodynamics. *Phys. Rev. D* (3) **11** (1975), 292-299. (Author's summary) **53** #12225 78.35
- A representation for an adjoint operator. *Rev. Anal. Numér. Théor. Approx.* **4** (1975), no. 1, 105-111. (From the text) **58** #30356 47A05
- A one-dimensional two-body problem of classical electrodynamics. *SIAM J. Appl. Math.* **28** (1975), 611-632. (L. G. Chambers) **51** #2472 78.34
- kin, S. I. (with Berezovskii, B. A.) Supervision of queues of requests in computer systems. *Avtomat. i Telemekh.* **1975**, no. 10, 165-171 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 10, part 2, 1719-1725 (1976). (Peter Purdue) **54** #2172 90B35
- viček, Jiří A certain approach to the solution of a parametric integer zero-one programming problem with a parameter on the right-hand side of the constraining conditions. (Czech. English summary) *Ekonom.-Mat. Obzor* **8** (1972), 83-98. (M. Mañas) **45** #9689 90C10
- Parametric zero-one programming with parametrized objective function. (Czech. English summary) *Ekonom.-Mat. Obzor* **8** (1972), 417-425. (M. Vlach) **47** #3010 90C10
- viček, Stanislav Transformations of the solutions of systems of two first order linear differential equations. (Russian. Czech and German summaries) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **9** (1962), 151-162. (Leo F. Boron) **45** #5447 34A25
- Transformations of the solutions of systems of first order linear differential equations. (Russian. Czech and German summaries) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **18** (1965), 5-28. (A. Corduneanu) **47** #3734 34A30
- Certain transformations of the solutions of systems of first order linear differential equations. (Russian. Czech summary) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **21** (1966), 89-95. (A. Corduneanu) **47** #3735 34A30
- Remarks on the characteristic equation of a certain transformation. (Czech. Russian summary) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **21** (1966), 97-108. (M. Ráb) **47** #5342 34A30
- A certain transformation of the solutions of systems of two first order linear differential equations. (Russian. Czech summary) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **24** (1967), 45-60. (A. Corduneanu) **47** #3736 34A30
- The coincidence of special transformations and its connection with dispersion theory. (Czech. Russian summary) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **27** (1968), 69-91. (M. Ráb) **47** #5343 34A30
- (with Zaoval, Jaroslav) Transformation der Lösungen der Systeme von vier linearen Differentialgleichungen 1. Ordnung. (Czech summary) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **33** (1971), 119-129. (Jerry Ridenhour) **47** #8951 34A30
- (with Kojčák, Jitka) Einige Bemerkungen über die Nullstellen im zweidimensionalen Raum stetiger Funktionen. (Czech summary) *Sb. Práci Přírodověd. Fak. Univ. Palackého v Olomouci* **37** (1972), 45-50. (Jerry Ridenhour) **49** #10966 34C10
- Transformationen der Lösungen von Systemen mit gegebenem Element der Matrix $K(t)$. *Arch. Math. (Brno)* **13** (1977), no. 4, 227-233. (Clarence M. Ablow) **57** #3495 34A25
- nickaj, I. V. (with Levitin, R. S.; Perelman, T. L.) The limiting conditions of a certain class of integro-differential equations with nonintegrable kernel. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 775-778. (K. Seitz) **49** #1040 45K05
- nikov, S. V. See *Methods and models of control*, **50** #12536
- axler, Robert H. An L_1 limit theorem for densities of renewal measures. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **32** (1975), no. 4, 301-308. (David Oakes) **52** #15718 60K05
- aylor, D. Reginald About F. B. Jones's candidate for a normal non-metrizable Moore space. *Topology Conference (Proc. General Topology Conf., Emory Univ., Atlanta, Ga., 1970)*, pp. 97-105. Dept. Math., Emory Univ., Atlanta, Ga., 1970. (F. Burton Jones) **49** #6178 54E30
- Dedication. *Proceedings of the University of Oklahoma Topology Conference Dedicated to Robert Lee Moore (Norman, Okla., 1972)*, pp. i-xx. Univ. of Oklahoma, Norman, Okla., 1972. (Editors) **49** #7090 01A70 (00A25)
- See also *Proceedings: University of Houston Point Set Topology Conference*, **52** #6630
- aynor, Tim Decomposition of group-valued additive set functions. (French summary) *Ann. Inst. Fourier (Grenoble)* **22** (1972), no. 3, 131-140. (J. E. Huneycutt, Jr.) **48** #11439 28A45
- A general Hewitt-Yosida decomposition. *Canad. J. Math.* **24** (1972), 1164-1169. (A. de Korvin) **47** #3636 28A45
- S-bounded additive set functions. *Vector and operator valued measures and applications (Proc. Sympos., Alta, Utah, 1972)*, pp. 355-365. Academic Press, New York, 1973. (C. W. Swartz) **48** #11440 28A45
- Absolute continuity for group-valued measures. *Canad. Math. Bull.* **16** (1973), 577-579. (J. E. Huneycutt, Jr.) **50** #7475 28A45 (46G10)
- An elementary proof of the lifting theorem. *Pacific J. Math.* **53** (1974), 267-272. (G. Marinescu) **51** #3901 46G15
- The Lebesgue decomposition for group-valued set functions. *Trans. Amer. Math. Soc.* **220** (1976), 307-319. (A. Appert) **54** #7743 28A45
- Trbojevic, V. M. (with Chan, A. S. L.) Thin shell finite element by the mixed method formulation. I. *Comput. Methods Appl. Mech. Engrg.* **9** (1976), no. 3, 337-367. (Hwa-Shan Ho) **57** #14812a 73.65
- (with Chan, A. S. L.) Thin shell finite element by the mixed method formulation. II. *III. Comput. Methods Appl. Mech. Eng.* **10** (1977), no. 1, 75-103. (Hwa-Shan Ho) **57** #14812b 73.65
- Trčka, Vladimír (with Molnár, Zdeněk) Solution of a hyperbolic zero-one programming problem by the branch and bound method. (Czech. English summary) *Ekonom.-Mat. Obzor* **12** (1976), no. 4, 428-437. (Authors' summary) **56** #14726 90C30
- Trčka, Vladislav (with Gluckaufová, Dagmar) Solution of mixed zero-one linear programming problems on a computer. (Czech. English summary) *Ekonom.-Mat. Obzor* **8** (1972), 121-144. (M. Mañas) **46** #3075 90C10
- Treadway, Arthur B. The rational multivariate flexible accelerator. *Econometrica* **39** (1971), 845-855. (Anjan Mukherji) **54** #9632 90A15
- The globally optimal flexible accelerator. *J. Econom. Theory* **7** (1974), no. 1, 17-39. (Nancy L. Schwartz) **58** #9158 90A15 (93C22)
- Treat, Richard P. Schrödinger representation of nonabelian quantum gauge theory. *Phys. Rev. D* (3) **14** (1976), no. 6, 1568-1576. (S. Deser) **58** #8943 81.47
- Trebels, W. (with Butzer, Paul L.; Nessel, Rolf Joachim) On summation processes of Fourier expansions in Banach spaces. I. Comparison theorems. Collection of articles dedicated to Gen-ichirō Sunouchi on his sixtieth birthday. *Tōhoku Math. J. (2)* **24** (1972), 127-140. (Walter Schempp) **48** #9196 41A40
- (with Butzer, Paul L.; Nessel, Rolf Joachim) On summation processes of Fourier expansions in Banach spaces. II. Saturation theorems. Collection of articles dedicated to Gen-ichirō Sunouchi on his sixtieth birthday. *Tōhoku Math. J. (2)* **24** (1972), 551-569. (Walter Schempp) **48** #9197 41A40 (33A65)
- Trebels, Walter (with Westphal, Ursula) A note on the Landau-Kallman-Rota-Hille inequality. *Linear operators and approximation (Proc. Conf., Oberwolfach, 1971)*, pp. 115-119. *Internat. Ser. Numer. Math., Vol. 20*, Birkhäuser, Basel, 1972. (S. Kurepa) **53** #6355 47D05
- (with Butzer, Paul L.; Nessel, Rolf Joachim) On the comparison of approximation processes in Hilbert spaces. *Linear operators and approximation (Proc. Conf., Oberwolfach, 1971)*, pp. 234-253. *Internat. Ser. Numer. Math., Vol. 20*, Birkhäuser, Basel, 1972. (Jan Boman) **52** #3843 41A65 (41A25)
- (with Nessel, Rolf Joachim) Gebrochene Differentiation und Integration und Charakterisierungen von Favard-Klassen. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 331-341. *Akadémiai Kiado, Budapest*, 1972. (G. O. Okikiolu) **52** #11491 44A15 (26A33)
- Imbedding theorems for spaces of hypersingular integrals and Bessel potentials. Collection of articles dedicated to J. L. Walsh on his 75th birthday. *VI. J. Approximation Theory* **6** (1972), 202-214. (B. Dreseler) **50** #5456 46E35 (41A40)
- ★ Multipliers for (C, α) -bounded Fourier expansions in Banach spaces and approximation theory. *Lecture Notes in Mathematics*, Vol. 329. Springer-Verlag, Berlin-New York, 1973. vi+103 pp. (From the introduction) **58** #23307 41A65 (42A08, 42A18)
- Fourier multipliers on $L^p(\mathbb{R}^n)$ in connection with bounded Riesz means. *Approximation theory (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1973)*, pp. 505-510. Academic Press, New York, 1973. (B. Dreseler) **49** #5706 (EA 50) 42A92
- (with Görlich, Ernst; Nessel, Rolf Joachim) Bernstein-type inequalities for families of multiplier operators in Banach spaces with Cesàro decompositions. I. General theory. *Acta Sci. Math. (Szeged)* **34** (1973), 121-130. (Walter Schempp) **48** #2829 47B99 (41A65)
- On a Fourier $L^1(E_n)$ -multiplier criterion. *Acta Sci. Math. (Szeged)* **35** (1973), 21-26. (J. Boman) **48** #11911 42A92
- (with Butzer, Paul L.; Nessel, Rolf Joachim) Multipliers with respect to spectral measures in Banach spaces and approximation. I. Radial multipliers in connection with Riesz-bounded spectral measures. Collection of articles dedicated to Isaac Jacob Schoenberg on his 70th birthday. *IV. J. Approximation Theory* **8** (1973), 335-356. (Walter Schempp) **50** #866 41A65 (42A92)
- Über Jackson- und Bernstein-Typ Ungleichungen für lineare Approximationsverfahren in $L^p(E_n)$. (English summary) *Manuscripta Math.* **8** (1973), 287-318. (Walter Schempp) **48** #6790 41A65
- (with Görlich, Ernst; Nessel, Rolf Joachim) Bernstein-type inequalities for families of multiplier operators in Banach spaces with Cesàro decompositions. II. Applications. *Acta Sci. Math. (Szeged)* **36** (1974), 39-48. (Walter Schempp) **50** #867 41A65 (42A56)
- (with Görlich, Ernst; Nessel, Rolf Joachim) Zur Approximationstheorie für Summationsprozesse von Fourier-Entwicklungen in Banach-Räumen: Vergleichssätze und Ungleichungen vom Bernstein-Typ. (English summary) *Approximation theory (Proc. Conf., Inst. Math., Adam Mickiewicz Univ., Poznań, 1972)*, pp. 87-96. Reidel, Dordrecht, 1975. (Wilhelm Sippel) **56** #9169 42A18 (42A08)
- (with Nessel, Rolf Joachim) Multipliers with respect to spectral measures in Banach spaces and approximation. II. One-dimensional Fourier multipliers. *J. Approximation Theory* **14** (1975), 23-29. (Walter Schempp) **51** #1237 41A65
- Some Fourier multiplier criteria and the spherical Bochner-Riesz kernel. *Rev. Roumaine Math. Pures Appl.* **20** (1975), no. 10, 1173-1185. (W. C. Connett) **53** #8765 42A18 (42A68)
- (with Butzer, Paul L.; Nessel, Rolf Joachim) On summation processes of Fourier expansions in Banach spaces. III. Jackson- and Zamsky-type inequalities for Abel-bounded expansions. *Tōhoku Math. J. (2)* **27** (1975), no. 2, 213-223. (Walter Schempp) **52** #6297 42A18
- On the approximation behavior of the Riesz means in $L^p(\mathbb{R}^n)$. *Approximation theory (Proc. Internat. Colloq., Inst. Angew. Math. Univ. Bonn, Bonn, 1976)*, pp. 428-438. Springer, Berlin, 1976. (From the introduction) **58** #29576 40G99 (41A30, 42A08)
- Generalized Lipschitz conditions and Riesz derivatives on the space of Bessel potentials L^p_α . II. The case $\alpha < 1$; Riesz derivatives. *Applicable Anal.* **6** (1976/77), no. 2, 91-107. (Author's summary) **55** #1061 46E35
- Some necessary conditions for radial Fourier multipliers. *Proc. Amer. Math. Soc.* **58** (1976), 97-103. (A. Schwartz) **54** #838 42A18

- On Fourier M_2^q multiplier criteria of Marcinkiewicz type. *Studia Math.* **58** (1976), no. 1, 7-19. (Aline Bonami) **55** #13143 42A18
- Estimates for moduli of continuity of functions given by their Fourier transform. *Constructive theory of functions of several variables (Proc. Conf., Math. Res. Inst., Oberwolfach, 1976)*, pp. 277-288. *Lecture Notes in Math.*, Vol. 571, Springer, Berlin, 1977. (Masako Izumi) **58** #1974 42A32
- (with Gasper, George) Multiplier criteria of Marcinkiewicz type for Jacobi expansions. *Trans. Amer. Math. Soc.* **231** (1977), no. 1, 117-132. (Tom Koornwinder) **57** #7006 42A18
- (with Gasper, George) Jacobi and Hankel multipliers of type (p, q) , $1 < p < q < \infty$. *Math. Ann.* **237** (1978), no. 3, 243-251. (T. S. Chihara) **58** #23326 42A52 (42A18, 44A15)
- See also Approximationstheorie, **52** #14743 and Sjögren, Peter, **56** #12739
- Trebici, Vladimir See Recherches sur la philosophie des sciences, **52** #7764
- Trębinski, R. (with Włodarczyk, E.) Investigation of state parameters of gas in a closed tube with a moving piston. I. The algorithm for numerical computation. (Polish and Russian summaries) *J. Tech. Phys.* **17** (1976), no. 1, 23-36. (Paul G. Arminjon) **56** #1948 76.65 (65N20)
- Treccani, Giulio (with Szegő, Giorgio P.) Liapunov functions on the region of unstable weak attraction. *Seminar on Differential Equations and Dynamical Systems, II* (Univ. Maryland, College Park, Md., 1969), pp. 230-249. *Lecture Notes in Math.*, Vol. 144, Springer, Berlin, 1970. (Prem Bajaj) **52** #11214 34C35
- (with Szegő, Giorgio P.) An abstract formulation of minimization algorithms. *Differential games and related topics (Proc. Internat. Summer School, Varenna, 1970)*, pp. 279-297. North-Holland, Amsterdam, 1971. (P. J. Laurent) **50** #12256 90C25
- Proprietà delle funzioni reali come applicazione della teoria dei semigruppì di trasformazioni multivoche. (English summary) *Boll. Un. Mat. Ital.* (4) **4** (1971), 123-131. (G. Niculescu) **45** #7199 34D99
- (with Szegő, Giorgio P.) Teoria matematica degli algoritmi di minimizzazione. (English summary) *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 103-145. Academic Press, New York, 1972. (F. Giannessi) **51** #15002 90C30
- (with Szegő, Giorgio P.) Axiomatization of minimization algorithms and a new conjugate gradient method. *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 193-216. Academic Press, New York, 1972. (From the authors' introduction) **51** #9487 65K05
- A new axiomatization of minimization algorithms. *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 217-238. Academic Press, New York, 1972. (Norihiro Adachi) **52** #2592 90C30
- (with Trabatonì, L.; Szegő, Giorgio P.) A numerical method for the isolation of minima. *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 239-289. Academic Press, New York, 1972. (P. J. Laurent) **52** #9610 65K05 (90C30)
- A remark on a penalty function for minimization of polynomials with polynomial constraints. *Minimization algorithms, mathematical theories and computer results (Proc. Sem., Math. Inst., Univ. Cagliari, Cagliari, 1971)*, pp. 369-377. Academic Press, New York, 1972. (From the author's introduction) **55** #12113 90C30
- A widely convergent minimization algorithm with quadratic termination property. *Fifth Conference on Optimization Techniques (Rome, 1973), Part I*, pp. 450-459. *Lecture Notes in Comput. Sci.*, Vol. 3, Springer, Berlin, 1973. (From the author's introduction) **56** #11017 90C99
- A widely convergent minimization algorithm with quadratic termination property. *Univ. Genova Pubbl. Ist. Mat.* (2) No. 68 (1973), i+10 pp. (Editors) **53** #7032 65K05
- On the convergence of Brannin's method: a counter-example. *Towards global optimisation (Proc. Workshop, Univ. Cagliari, Cagliari, 1974)*, pp. 107-116. North-Holland, Amsterdam, 1975. (R. P. Brent) **53** #9648 65K05
- A new strategy for global minimisation. *Towards global optimisation (Proc. Workshop, Univ. Cagliari, Cagliari, 1974)*, pp. 143-148. North-Holland, Amsterdam, 1975. (Marco Gaviano) **53** #15378 90C30
- On the critical points of continuously differentiable functions. *Towards global optimisation (Proc. Workshop, Univ. Cagliari, Cagliari, 1974)*, pp. 459-472. North-Holland, Amsterdam, 1975. (Prem Bajaj) **52** #15537 58C05
- Trécourt, Philippe See Théorie de la robustesse et estimation d'un paramètre, **57** #17941
- Treder, Hans-Jürgen Global and local principles of relativity. *Found. Phys.* **1** (1970/71), 77-94. (J. Charles-Renaudie) **46** #3045 83.53
- (with Liebscher, Dierck-Ekkehard) Gravitation theory as theory of non-Lorentzian transformations of the systems of reference. *General Relativity and Gravitation* **1** (1970/71), no. 2, 117-125. (J. Ławrynowicz) **53** #7359 83.53
- General relativity and general Lorentz-covariance. *Internat. J. Theoret. Phys.* **3** (1970), 23-31. (J. Ławrynowicz) **48** #13175 83.53
- (with v. Borzeszkowski, Horst-Heino; Kasper, Uwe; Kreisel, Eckhard; Liebscher, Dierck-Ekkehard) ★ Gravitationstheorie und Äquivalenzprinzip. Lorentz-Gruppe, Einstein-Gruppe und Raumstruktur. Herausgegeben von H.-J. Treder. Mathematische Lehrbücher und Monographien. II. Abteilung: Mathematische Monographien, Band XXVI. Akademie-Verlag, Berlin, 1971. viii+122 pp. (Editors) **56** #14505 83.53
- Zur Konstanz der Teilchenzahlen in der allgemeinen Relativitätstheorie. (English summary) *Ann. Physik* (7) **27** (1971), 47-56. (H. A. Buchdahl) **49** #4513 83.53
- On the meaning of the Einstein- and the Lorentz-covariant derivation. *General Relativity and Gravitation* **2** (1971), 313-319. (Yvette Kosmann) **52** #16526 83.53 (53A45)
- (with v. Borzeszkowski, Horst-Heino) Reference systems and gravitation. *Internat. J. Theoret. Phys.* **4** (1971), 295-303. (Authors' summary) **52** #4933 83.53
- Kreuzexperimente in der allgemeinen Relativitätstheorie und die experimentelle Bestimmung des Riemannschen Krümmungstensors. *Monatsb. Deutsch. Akad. Wiss. Berlin* **13** (1971), 310-317. (A. Wyler) **46** #3044 83.53
- Poincaré's Relativität der Beschleunigung und die Mach-Einstein-Doktrin. *Monatsb. Deutsch. Akad. Wiss. Berlin* **13** (1971), 664-675. (J. Blackman) **48** #5580 83.20
- ★ Die Relativität der Trägheit. Akademie-Verlag, Berlin, 1972. vi+119 pp. (loose corrigenda) (Editors) **55** #9800 83.00
- Lorentz-kovariante Bezugstetraden-Theorien der Gravitation. *Ann. Physik* (7) **28** (1972), no. 3, 238-244. (Not reviewed) 83.53
- (with Mercier, André) Future of GRG (general relativity and gravitation). Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* **40** (1972), 49-64 (1974). (C. B. Collins) **53** #7340 83.00
- Über eine Interpretation von Einsteins Hermite-symmetrischer Feldtheorie. *Tensor* (N.S.) **23** (1972), 75-80. (H. A. Klotz) **47** #4590 83.53
- Eine Riemannsche Mechanik ohne Trägheitsterm und das Machsche Prinzip. Commemorative volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday. Vol. I. *Tensor* (N.S.) **24** (1972), 297-310. (Hans P. Künzle) **52** #4915 (EA 53) 83.00
- Die Einstein-Gruppe und die Symmetrie-Gruppen der Gravitationstheorie. (English summary) *Ann. Physik* (7) **28** (1973), no. 4, 333-340. (Hans P. Künzle) **53** #4893 83.53
- Lorentz-kovariante Bezugstetradentheorien. II. *Ann. Physik* (7) **28** (1973), no. 4, 366-368. (Not reviewed) 83.53
- (with Kasper, Uwe; Liebscher, Dierck-Ekkehard) Feldgleichungen der Treder'schen Gravitationstheorie, die aus einem Gravitationstheorem herleitbar sind. II. (English summary) *Ann. Physik* (7) **30** (1973), no. 2, 145. (Authors' summary) **57** #4967b 83.53
- Die Absorption der Schwerkraft und das Seeliger-Yukawa-Potential. (English summary) *Astronom. Nachr.* **294** (1973), 193-199. (P. G. Bergmann) **53** #2267 83.35
- (with v. Borzeszkowski, Horst-Heino) On the compatibility of Spinor field equations with regard to generalisations of Weyl's lemma. *Internat. J. Theoret. Phys.* **8** (1973), 219-225. (Authors' summary) **50** #15851 83.53
- ★ Philosophische Probleme des physikalischen Raumes. Gravitation, Geometrie, Kosmologie und Relativität. Akademie-Verlag, Berlin, 1974. viii+339 pp. (J. A. Coffa) **57** #11578 83.00
- Über die mögliche lineare Form von Lorentz-kovarianten Gravitationstheorien. (English summary) *Ann. Physik* (7) **31** (1974), 1-17. (Author's summary) **56** #2182 83.53
- Das Korrespondenzprinzip in der Kosmologie. I. Der isotrope Kosmos als Newtonscher Grenzfall der relativistischen Gravitationstheorien. (English summary) *Astronom. Nachr.* **295** (1974), 1-8. (N. L. Balazs) **50** #1684 83.35
- The final states of continuously expanding universes. (German summary) *Astronom. Nachr.* **295** (1974), 9-10. (Author's summary) **54** #12148 83.53
- Das Korrespondenzprinzip in der Kosmologie. II. Klassische und relativistische Darstellungen der Weltmodelle. (English summary) *Astronom. Nachr.* **295** (1974), 55-71. (N. L. Balazs) **51** #14880 83.53
- Das Gravitationsparadoxon in der Kosmologie. *Math. Nachr.* **61** (1974), 317-340. (N. L. Balazs) **51** #7560 83.35
- Zur Kovarianz der kanonischen Bewegungsgleichungen und der impliziten Ableitungen eines Skalars. *Tensor* (N.S.) **28** (1974), 145-147. (H. Rund) **50** #9298 83.53
- The post-Newtonian effect of gravitation and the retardation of the gravitational potential in classical and relativistic theories of gravitation. (German summary) *Ann. Physik* (7) **32** (1975), no. 5, 338-350. (Marcos Rosenbaum) **54** #4518 83.35 (70.35)
- Unified field theory with Einsteinian photons and heavy bosons as field quanta. (German summary) *Ann. Physik* (7) **32** (1975), no. 5, 376-382. (N. V. Mückevič) **54** #9589a 83.53 (81.53)
- Zur unitarisierten Gravitationstheorie mit lang- und kurzreichweitigen Termen (mit ruhmasselosen und schweren Gravitonen). (English summary) *Ann. Physik* (7) **32** (1975), no. 5, 383-400. (N. V. Mückevič) **54** #9589b 83.53 (81.53)
- Newtonsche Relativ-Mechanik. (English summary) *Astronom. Nachr.* **296** (1975), 1-7. (J. Hoscsek) **50** #15512 70.53
- Die träge und die schwere Masse eines Himmelskörpers nach der trägheitsfreien Dynamik und die Selbstabsorption der Schwerkraft. (English summary) *Astronom. Nachr.* **296** (1975), 9-13. (George Contopoulos) **53** #2268 83.35
- The general metrical fundamental form of the de Sitter universes. (German summary) *Astronom. Nachr.* **296** (1975), 15-18. (A. Raychaudhuri) **50** #15850 83.53
- Zur dynamischen Äquivalenz der post-Newtonschen Näherung für die Planetentheorie in der allgemeinen Relativitätstheorie und in der trägheitsfreien Mechanik mit Riemannschem Gravitationspotential. (English summary) *Astronom. Nachr.* **296** (1975), 101-107. (Author's summary) **55** #2023 83.34
- Antimatter and the particle problem in Einstein's cosmology and field theory of elementary particles (an historical essay on Einstein's work at the Akademie der Wissenschaften zu Berlin). (German summary) *Astronom. Nachr.* **296** (1975), no. 4, 149-161. (M. Carmeli) **55** #12427 01A60 (83.01)
- On the signatures of the canonical and the metrical energy densities of vector fields. *Internat. J. Theoret. Phys.* **14** (1975), no. 5, 313-317. (Francesco Guerra) **54** #9488 81.53
- Boltzmanns Kosmogonie und die hierarchische Struktur des Kosmos. (English summary) *Astronom. Nachr.* **297** (1976), no. 3, 117-126. (D. ter Haar) **54** #2118 85.00 (82.00)
- Gravitation and universal Fermi coupling in general relativity. *Found. Phys.* **6** (1976), no. 5, 527-538. (Petr Hájíček) **56** #4693 83.53
- (with Kreisel, Eckhard) The conservation of source strength in linear field theories and the superpotentials. *Internat. J. Theoret. Phys.* **15** (1976), no. 1, 67-71. (S. Malin) **54** #2115 83.53
- Eddingtons fundamental-Theorie mit Einsteinscher pseudo-Hermitizität. *Tensor* (N.S.) **30** (1976), no. 3, 259-268. (N. V. Mückevič) **55** #5162 83.53
- (with Mückel, J. P.) The perihelion advance according to a post-Newtonian gravitational law with logarithmic correction term. (German summary) *Astronom. Nachr.* **298** (1977), no. 2, 65-67. (B. K. Nayak) **56** #2170 83.34
- (with Yourgrau, Wolfgang) On gravitational shock waves. *Internat. J. Theoret. Phys.* **16** (1977), no. 3, 233-239. (Peter Szekeres) **56** #14520 83.53
- (with Yourgrau, Wolfgang) On self-gravitation. *Phys. Lett. A* **64** (1977), no. 1, 25-28. (Authors' summary) **58** #20248 83.53
- Gauss und die sideralen Dreiecke. *Sterne* **53** (1977), no. 1, 1-8. (Editors)

- 58 #21240 01A55
Gauss und die Gravitationstheorie. *Sterne* 53 (1977), no. 1, 9-14. (Editors)
58 #10118 01A55
Teilchen-Modelle und effektive Radien in der Allgemeinen Relativitätstheorie. (English summary) *Ann. Physik* (7) 35 (1978), no. 2, 137-144. (Author's summary)
58 #20249 83.53
Die Super-Eich-Symmetrie in der allgemeinen Relativitätstheorie (Einstein's A-Gruppe). (English summary) *Ann. Physik* (7) 35 (1978), no. 3, 225-232. (J. R. Vanstone) 58 #25757 83.49 (53B30, 83.53)
See also *Symposia Mathematica*, 48 #5579; *Gravitation: problems, prospects*, 48 #7881; *Schöpf, Hans-Georg*, 54 #39 and *Proceedings: International Symposium on Geodesy and Physics of the Earth*, 58 #32828a
eece, J. A. Bootstrap Gauss-Seidel load flow. *Proc. Inst. Elec. Engrs.* 116 (1969), 866-870. (A. Benson) 47 #7889 65B99
er, Mór Ferenc Optimization of storage at increasing and decreasing rates of utilization. (Hungarian. English and Russian summaries) *Szigma—Mat.-Közgazdasági Folyóirat* 6 (1973), 19-31. (A. Majthay) 48 #10454 90B05
Trees, Harry L. See *Van Trees, Harry L.*
ese, G. W. (with Kelly, E. P., Jr.) Generalized Fredholm operators and the boundary of the maximal group of invertible operators. *Proc. Amer. Math. Soc.* 67 (1977), no. 1, 123-128. (M. Z. Nashed) 56 #12960 47B30 (47A99)
fil, J. S. Tachyons and the causal paradox. *Tachyons, monopoles, and related topics* (Proc. First Session, Interdisciplinary Sem., Erice, 1976), pp. 27-30. North-Holland, Amsterdam, 1978. (Editors) 58 #25727 83.00
ger, R. B. Rings with a free semigroup of invertible ideals. (Russian) *Mat. Sb. (N.S.)* 89(131) (1972), 100-109. (Chr. U. Jensen) 46 #9032 13G05
Rings over which cyclic flat modules are projective. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1973, no. 6(133), 89-96. (C. Niță) 51 #3146 13C10
Quasicoherent sheaves. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 2(170), 245-246. (H. Kurke) 54 #10246 14A20 (13F05)
gonning, Ken (with Roberts, Alan) Ecosystem-like behavior of a random-interaction model. I. *Bull. Math. Biol.* 40 (1978), no. 4, 513-524. (Gilbert Walter) 58 #20624 92A15
han, S. K. (with Nakagawa, Y.) The oscillations and the stability of rotating masses with toroidal magnetic fields. *Astrophys. J.* 160 (1970), 725-733. (Authors' summary) 54 #4514 83.35
(with Kochhar, R. K.) The oscillations and the stability of rotating masses with toroidal magnetic fields. II. *Astrophys. J.* 168 (1971), 265-280. (Authors' summary) 54 #4515 83.35
(with Kochhar, R. K.) The oscillations and the stability of rotating masses with magnetic fields. III. *Astrophys. J.* 181 (1973), 519-521. (Authors' summary) 54 #4516 83.35
(with Singh, Manohar) On the stability of twisted magnetic fields. *Astrophys. and Space Sci.* 53 (1978), no. 1, 165-172. (Authors' summary) 58 #19848 78.53
han, Swaran (with Ahuja, G. C.; Narang, T. D.) An approximation problem in metric linear spaces. Collection of articles dedicated to Professor P. L. Bhatnagar on his sixtieth birthday. *Math. Student* 40 (1972), 447-448 (1974). (W. J. Kotzé) 54 #3255 41A65
(with Ahuja, G. C.; Narang, T. D.) Best approximation on convex sets in a metric space. *J. Approximation Theory* 12 (1974), 94-97. (Howard Anton) 50 #10642 41A65 (46B99, 54E35)
(with Ahuja, G. C.; Narang, T. D.) On farthest points. *J. Indian Math. Soc. (N.S.)* 39 (1975), 293-297 (1976). (Bor-Luh Lin) 54 #1175 54E35
(with Ahuja, G. C.; Narang, T. D.) Best approximation on convex sets in metric linear spaces. *Math. Nachr.* 78 (1977), 125-130. (G. Albinus) 58 #1916 41A65
(with Ahuja, G. C.; Narang, T. D.) Continuity of proximity maps in metric linear space. *Pure Appl. Math. Sci.* 6 (1977), no. 1-2, 13-16. (Peter D. Taylor) 57 #6993 41A65 (46A99)
hel, Michel ★ Bornes dans un ensemble ordonné fini. Produit contracté. Applications. Thèse présentée à l'Université Scientifique et Médicale de Grenoble pour obtenir le Grade de Docteur ès Sciences Mathématiques. *L'Université Scientifique et Médicale de Grenoble, Grenoble*, 1972. i + 177 + xiii pp. (R. A. Meltzer) 48 #5955 06A75
Étude des ensembles ordonnés pseudo-complémentés. *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A699-A702. (T. S. Blyth) 45 #3265 06A25
Graphes des compléments et classes de branches dans un ensemble ordonné fini résultant d'un produit contracté. *Discrete Math.* 3 (1972), 373-379. (G. Grätzer) 47 #8374 06A25 (05C99)
Minimisation de l'encombrement en mémoire pour un fichier arborescent. *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Bleue* 8 (1974), no. B-1, 57-72. (A. L. Rosenberg) 50 #1576 68A50
Deux constructions équivalentes d'un jeu d'arrangements pour les fichiers inverses multi-indices. (English summary) *RAIRO Informat. Théor.* 12 (1978), no. 1, 3-14, ii. (K. H. V. Booth) 57 #11217 68A50
iber, Dietmar Über orthogonalisierbare nicht-archimedische Banachräume. *Arch. Math. (Basel)* 24 (1973), 71-80. (A. F. Monna) 47 #5566 46B99
Über homöomorphe und differenzierbare Abbildungen N. A. Banachräume. (English summary) *Manuscripta Math.* 8 (1973), 173-188. (Robert L. Ellis) 48 #5115 58C99 (46B99)
Über Differentialgleichungen in n. a. Banachräumen, insbesondere ihre Lösung mittels eines "Wegintegrals". *Math. Ann.* 204 (1973), 211-226. (A. F. Monna) 51 #6080 34G05 (26A63)
A non-archimedean "curve integral" and its application to the construction of potentials and solutions of differential equations. *Table Ronde d'Analyse non archimédienne* (Paris, 1972), pp. 359-374. *Bull. Soc. Math. France, Mém. No. 39-40, Soc. Math. France, Paris*, 1974. (A. F. Monna) 50 #14833 58C20 (46G05)
Zur isoperimetrischen Ungleichung für die Ebene. *Arch. Math. (Basel)* 25 (1974), 79-82. (Catherine Bandle) 49 #9167 30A04 (52A40)
iman, S. (with Tiktopoulos, George) Validity of the relativistic eikonal approximation. *Phys. Rev. D* (3) 2 (1970), 805-810. (M. J. Westwater) 48 #1614 81.41
(with Jackiw, Roman; Gross, David J.) ★ Lectures on current algebra and its applications. Princeton Series in Physics. Princeton University Press, Princeton, N.J., 1972. x + 362 pp. (P. Roman) 48 #1621 81.46
(with Jackiw, Roman; Gross, David J.) ★ Лекции по алгебре токов. (Russian) [Lectures on current algebras] Translated from the English by N. N. Nikolaev and V. A. Novikov. With a foreword by B. L. Ioffe. Atomizdat, Moscow, 1977. 232 pp. (loose errata) (Editors) 56 #10479 81.02
Treisman, Michel The evolutionary restriction of aggression within a species: a game theory analysis. *J. Mathematical Psychology* 16 (1977), no. 3, 167-203. (J. J. Buckley) 58 #20625 92A15 (90D45)
Treitel, S. (with Kelly, K. R.; Alford, R. M.; Ward, R. W.) Application of finite difference methods to exploration seismology. *Topics in numerical analysis, II* (Proc. Roy. Irish Acad. Conf., Univ. College, Dublin, 1974), pp. 57-76. Academic Press, London, 1975. (Jiri Nedoma) 53 #12516 86.65
Treitel, Sven (with Shanks, John L.; Read, Randol R.) Techniques for stabilizing two-dimensional finite difference operators. (French summary) Avec discussion. *Transformations ponctuelles et leurs applications* (Colloq. Internat. CNRS, No. 229, Toulouse, 1973), pp. 361-382, 384. Éditions Centre Nat. Recherche Sci., Paris, 1976. (From the authors' introduction) 57 #15664 93D05
Treivas, V. G. On the estimation of certain performance indices in linear stationary controlled systems. *Prikl. Mat. Meh.* 38 (1974), 45-48 (Russian); translated as *J. Appl. Math. Mech.* 38 (1974), 32-36. (J. P. Babary) 54 #9765 93C05
Trelina, L. A. The least prime divisor of an index form. (Russian) *Dokl. Akad. Nauk BSSR* 21 (1977), no. 11, 975-976, 1051. (John H. Loxton) 58 #27754 10B40
Algebraic integers with discriminants that contain fixed prime divisors. (Russian) *Mat. Zametki* 21 (1977), no. 3, 289-296. (W. Narkiewicz) 55 #12682 12A15
Tremayne, Andrew R. (with Hendry, David F.) Estimating systems of dynamic reduced form equations with vector autoregressive errors. *Internat. Econom. Rev.* 17 (1976), no. 2, 463-471. (Jacob Paroush) 54 #6440 62P20
Tremblay, J. See *Tarski, Alfred*, 49 #10512
Tremblay, J. P. (with Manohar, Ram P.) ★ Discrete mathematical structures with applications to computer science. McGraw-Hill Computer Science Series. McGraw-Hill Book Co., New York-Auckland-Düsseldorf, 1975. xvi + 606 pp. (Editors) 52 #13052 00A05 (68-02)
(with Sorenson, P. G.) ★ An introduction to data structures with applications. McGraw-Hill Computer Science Series. McGraw-Hill Book Co., New York-Auckland-Düsseldorf, 1976. xvi + 704 pp. (K. H. V. Booth) 55 #9630 68A50 (68A05)
Tremblay, Richard (with Bélanger, P. A.) Matrix method to study open resonators; expansion in Jacobi's polynomials. (French summary) *Canad. J. Phys.* 49 (1971), 1290-1314. (Authors' summary) 47 #2840 65R05
(with Fedotowsky, A.; Boivin, G.) Inversion of microwave scattering patterns. (French summary) *Canad. J. Phys.* 49 (1971), 3082-3094. (J. S. Colonias) 48 #13013 78.65
(with Lavertu, Marie-Louis) P. Humbert's confluent hypergeometric function $\phi(a, \beta; \gamma; x, y)$. *Jñānabha Sect. A* 2 (1972), 11-18. (R. S. Dahiya) 50 #13642 33A30
(with Lavoie, J.-L.) Certain sums involving generalized hypergeometric functions. *Indian J. Math.* 15 (1973), 7-12. (Harold Exton) 50 #10342 33A30
(with Lavoie, J.-L.; Osler, Thomas J.) Fundamental properties of fractional derivatives via Pochhammer integrals. *Fractional calculus and its applications* (Proc. Internat. Conf., Univ. New Haven, West Haven, Conn., 1974), pp. 323-356. *Lecture Notes in Math.*, Vol. 457, Springer, Berlin, 1975. (S. L. Kalla) 57 #16490 26A33 (33A70)
(with Lavoie, J.-L.) A note on a paper of Williamson. *Bull. Austral. Math. Soc.* 12 (1975), no. 3, 379-381. (Kusum Soni) 52 #824 33A30
(with Lavoie, J.-L.; Villeneuve, J.-E.) The sums of certain hypergeometric series. *Jñānabha Sect. A* 5 (1975), 129-135. (Authors' introduction) 57 #16729 33A30
(with Lavertu, Marie-Louis) Sur une série impliquant les puissances des zéros d'un polynôme. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 282 (1976), no. 3, Aii, A155-A157. (F. W. J. Olver) 53 #913 33A65 (30A08)
(with Lavoie, J.-L.; Osler, Thomas J.) Fractional derivatives and special functions. *SIAM Rev.* 18 (1976), no. 2, 240-268. (S. K. Chatterjea) 53 #13666 33-02 (44A15, 26A33)
Trémolières, Raymond Méthode des centres à troncature variable. (English summary) *Bull. Direction Études Recherches Sér. C Math. Informat.* 1968, no. 2, 3, 57-63. (Not reviewed) 65K05
(with Glowinski, Roland; Lions, Jacques-Louis) ★ Analyse numérique des inéquations variationnelles. Tome 1. Théorie générale premières applications. Méthodes Mathématiques de l'Informatique, 5. Dunod, Paris, 1976. xii + 268 pp. (St. Cruceanu (Zbl 358 #65091)) 58 #31697a 65-02 (49-02)
(with Glowinski, Roland; Lions, Jacques-Louis) ★ Analyse numérique des inéquations variationnelles. Tome 2. Applications aux phénomènes stationnaires et d'évolution. Méthodes Mathématiques de l'Informatique, 5. Dunod, Paris, 1976. xiv + 290 pp. (St. Cruceanu (Zbl 358 #65091)) 58 #31697b 65-02 (49-02)
Le problème des roulements de quarts pour les entreprises à feu continu. (Loose English summary) *Rev. Française Automat. Informat. Recherche Opérationnelle Sér. Verte* 10 (1976), no. V-1, 71-101. (M. F. Neuts) 54 #6937 90B35
Trench, William F. Asymptotic behavior of solutions of $Lu = g(t, u, \dots, u^{(k-1)})$. *J. Differential Equations* 11 (1972), 38-48. (J. S. W. Wong) 45 #2274 34D05
Asymptotic behavior of solutions of perturbed disconjugate equations. *J. Differential Equations* 11 (1972), 661-671. (J. S. W. Wong) 45 #7202 34D10
Stability of a class of discrete minimum variance smoothing formulas. *SIAM J. Numer. Anal.* 9 (1972), 307-315. (Ivar Petersen) 46 #8364 62M10
Strong discrete minimum variance estimation of a polynomial plus random noise. *J. Math. Anal. Appl.* 41 (1973), 20-33. (W. J. Kotzé) 48 #1774 93E10
Nonnegative and alternating expansions of one set of orthogonal polynomials in terms of another. *SIAM J. Math. Anal.* 4 (1973), 111-115. (T. S. Chihara) 48 #4628 42A60
Canonical forms and principal systems for general disconjugate equations. *Trans. Amer. Math. Soc.* 189 (1973), 319-327. (Jerry Ridenhour) 48 #8969 34C10
Inversion of Toeplitz band matrices. *Math. Comp.* 28 (1974), 1089-1095. (Author's

- summary) 49 #11786 65F05
 Proof of a conjecture of Askey on orthogonal expansions with positive coefficients. *Bull. Amer. Math. Soc.* 81 (1975), no. 5, 954-956. (R. A. Askey) 51 #10994 42A60
 A sufficient condition for eventual disconjugacy. *Proc. Amer. Math. Soc.* 52 (1975), 139-146. (Allan C. Peterson) 51 #13362 34C10
 Oscillation properties of perturbed disconjugate equations. *Proc. Amer. Math. Soc.* 52 (1975), 147-155. (D. Willett) 52 #891 34C10
 Asymptotic integration of linear differential equations subject to integral smallness conditions involving ordinary convergence. *SIAM J. Math. Anal.* 7 (1976), no. 2, 213-221. (T. G. Hallam) 53 #6035 34E05
 Orthogonal polynomial expansions with nonnegative coefficients. *SIAM J. Math. Anal.* 7 (1976), no. 6, 824-833. (G. Gasper) 54 #8136 42A52
- Trencov, I.** Sur les valeurs propres des matrices normales obtenues en compensation par la méthode des moindres carrés. *Bull. Géodésique (N.S.)* No. 101 (1971), 233-241. (H. Wolf) 51 #9759 86G5
 Sur la conditionnalité numérique des matrices symétriques définies positives, obtenues dans la méthode des moindres carrés. *Bull. Géodésique (N.S.)* No. 105 (1972), 359-366. (H. Wolf) 51 #9760 86G5
 Une propriété du nombre de Todd des matrices normales obtenues en compensation par la méthode des moindres carrés. *Bull. Géodésique (N.S.)* No. 107 (1973), 85-88. (D. Z. Djoković) 47 #3416 15A18
- Trendafilov, Georgi St.** A certain application of the method of two representations to the construction of a plane model of four-dimensional projective space. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 7 (1971), no. 2, 95-104 (1973). (D. Palman) 49 #3669 50D20
 Certain methods for the construction of space nomograms and their plane analogues. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 7 (1971), no. 2, 105-118 (1973). (L. Bitay) 48 #5408 65S05
 The fundamental metric problems in four-dimensional space. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 8 (1972), no. 2, 173-185 (1973). (A. K. Guc) 53 #9023 50D20
 (with Kirov, Georgi Hr.) Quadrature formulae for the Schwarz integral, for integrals of Cauchy type and for singular integrals with kernel of Cauchy type. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 1, 67-84 (1974). (B. Bojanov) 53 #11281 41A55
 (with Kirov, Georgi Hr.; Gospodinov, M. G.) Quadrature formulae for certain singular integrals. (Bulgarian. Russian and German summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 1, 85-96 (1974). (B. Bojanov) 53 #11282 41A55
 (with Kirov, Georgi Hr.) Quadrature formulas for singular integrals. (Bulgarian. Russian and German summaries) *Mathematics and mathematical education (Proc. Second Spring Conf. Bulgarian Math. Soc., Vidin, 1973) (Bulgarian)*, pp. 127-134. *Izdat. B'lgar. Akad. Nauk., Sofia*, 1974. (Authors' summary) 49 #9504 41A55
- Trendafilov, I. D.** Irreducibility criteria for ordinary differential operators. (Bulgarian. Russian and English summaries) *Godišnik Visš. Tehn. Učebn. Zaved. Mat.* 9 (1973), no. 3, 45-52 (1974). (D.-M. Popescu) 54 #5202 12H05
- Trenerry, D. W.** (with Barnes, E. S.) A class of extreme lattice-coverings of n -space by spheres. *J. Austral. Math. Soc.* 14 (1972), 247-256. (R. P. Bambah) 48 #12316 52A45
- Trenkler, G.** On a new method of testing statistical hypotheses. *Ann. Inst. Statist. Math.* 28 (1976), no. 3, 371-384. (Erling Sverdrup) 55 #11469 62F05
- Trenkler, Marian** (with Jucovič, Ernest) On 4-valent graphs imbedded in orientable 2-manifolds. *Studia Sci. Math. Hungar.* 7 (1972), 225-232. (T. A. Brown) 47 #1652 05C10
 (with Jucovič, Ernest) A theorem on the structure of cell-decompositions of orientable 2-manifolds. *Mathematika* 20 (1973), 63-82. (T. Zamfirescu) 49 #8903 05C99 (55A20, 57A05)
 On the face-vector of a 5-valent convex 3-polytope. *Mat. Časopis Sloven. Akad. Vied* 25 (1975), no. 4, 351-360. (E. Jucovič) 57 #7391 52A25
- Trenkov, Iv.** (with Petrova, N.; Totomanov, Iv.) Most general case of equalization by the method of least squares. Properties of the correlation matrix of the corrections. Impossibility of the construction of confidence intervals in the case of errors in the original data. (Bulgarian) Commemorative Scientific Session (25th anniversary of the Higher Civil Engineering Institute, Sofia). *Godišnik Visš. Inž.-Stroitel. Inst.* 22 (1973), no. 4, Geodezija, 257-265. (Editors) 49 #11764 65D10
- Trenogin, V. A.** Approximations on families of Banach spaces and the solvability of linear equations. (Russian) *Dokl. Akad. Nauk SSSR* 201 (1971), 1288-1291. (J. Peetre (Zbl 264 #41024)) 58 #30387 47A50
 (with Sidorov, N. A.) An investigation of the bifurcation points and nontrivial branches of the solutions of nonlinear equations. (Russian) *Differential and integral equations*, No. 1 (Russian), pp. 216-247. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (G. Vainikko) 52 #1446 47H15
 The solvability of approximate equations. (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 281-290, 316. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (Author's summary) 56 #17159 65P05
 (with Vainberg, M. M.) ★ Theory of branching of solutions of non-linear equations. Translated from the Russian by Israel Program for Scientific Translations. *Noordhoff International Publishing, Leyden*, 1974. xxvi+485 pp. (Editors) 49 #9699 47H15 (45Gxx)
 (with Razumeiko, B. G.; Tirkšii, G. A.) Existence and uniqueness theorems and asymptotic solutions for a self-similar boundary value problem of a viscous hypersonic shock layer. (Russian) *Dokl. Akad. Nauk SSSR* 219 (1974), 825-828. (J. F. Heyda) 52 #7290 76J34
 (with Seidova, È. R.) Convergence of the method of lines for a class of elliptic equations. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 95-105, 299. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (Authors' summary) 58 #31887 65N20
 (with Sidorov, N. A.) Regularization in the sense of A. N. Tikhonov of some problems in bifurcation theory. (Russian) *Differential and integral equations*, No. 3 (Russian), pp. 183-193, 302. *Irkutsk. Gos. Univ., Irkutsk*, 1975. (From the introduction) 58 #30574 47H15 (58C99, 58E05, 65J05)
 (with Loginov, B. V.) The use of group invariance in branching theory. (Russian)
- Differential'nye Uravneniya* 11 (1975), no. 8, 1518-1521, 1534. (S. Fučík) 52 #1441 47H15
 (with Sidorov, N. A.) Regularization of the computation of the real solutions of nonlinear equations in the neighborhood of a branch point. (Russian) *Dokl. Akad. Nauk SSSR* 228 (1976), no. 5, 1049-1052. (Ulrich Kosel) 54 #1036 47H15
 (with Sidorov, N. A.) An approach to the regularization problem based on the perturbation of linear operators. (Russian) *Mat. Zametki* 20 (1976), no. 5, 747-752. (Karl-Heinz Förster) 56 #3658 47A55 (47B30)
 (with Šengeliya, Z. I.) On the Galerkin method. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 82 (1976), no. 1, 21-24. (Mieczysław Altman) 54 #14364 65J05
 (with Sidorov, N. A.) Tikhonov regularization of the problem of bifurcation points of nonlinear operators. (Russian) *Sibirsk. Mat. Ž.* 17 (1976), no. 2, 402-413, 480. (Ulrich Kosel) 54 #1037 47H15 (65J05)
 On the theory of abstract elliptical equations containing a singular perturbation. *Singular perturbations and boundary layer theory (Proc. Conf., École Centrale, Lyon, 1976)*, pp. 482-490. *Lecture Notes in Math., Vol. 594, Springer, Berlin*, 1977. (B. Gay (Zbl 361 #35010)) 58 #22900 34G05 (47H15)
 (with Sidorov, N. A.) Regularisation of computation of branching solutions of nonlinear equations. *Singular perturbations and boundary layer theory (Proc. Conf., École Centrale, Lyon, 1976)*, pp. 491-505. *Lecture Notes in Math., Vol. 594, Springer, Berlin*, 1977. (From the authors' text) 56 #17063 65J05 (47H15)
 (with Sidorov, N. A.) Regularization of simple solutions of nonlinear equations in the neighborhood of a bifurcation point. (Russian) *Sibirsk. Mat. Ž.* 19 (1978), no. 1, 180-185, 239. (Alexander Alenicyan) 58 #7698 58E05 (47H15)
- Trent, Tavan** (with Kriete, Thomas L., III) Growth near the boundary in $H^2(\mu)$ spaces. *Proc. Amer. Math. Soc.* 62 (1976), no. 1, 83-88 (1977). (D. Trutt) 56 #12892 46J15 (30A78)
- Trepant, P.** (with Florian, Michael A.; McMahon, G. B.) An implicit enumeration algorithm for the machine sequencing problem. *Management Sci.* 17 (1970/71), B782-B792. (S. L. Hakimi) 46 #3212 94A20 (90B35)
- Trepetin, M. S.** (with Gabovič, E. Ja.) Varieties of nilpotent semigroups. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised* No. 277 (1971), 16-19. (R. P. Sullivan) 52 #602 20M05
 Semirings of endomorphisms of commutative nilpotent semigroups. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised* No. 277 (1971), 20-36; letter to the editors, *ibid.* No. 305 (1972), 300. (R. P. Sullivan) 52 #634 20M20
 Free-in-themselves nilsemigroups with isomorphic semigroups of endomorphisms. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised* No. 336 (1974), 121-159. (B. M. Schein (Šain)) 50 #10136 20M20
 The determinability of monogenic nilsemigroups by their semigroups of endomorphisms. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised* No. 336 (1974), 160-177. (B. M. Schein (Šain)) 51 #772 20M20
 See also *Sverdlovsk Symposium*, 45 #6958 and *Control of complex technological and economic systems*, 56 #2486
- Treskov, S. A.** The kinetics of populations. (Russian) *Problemy Kibernet.* No. 25 (1972), 41-54. (K. Dietz) 45 #7837 (E 51 #4444) 60J85 (92A15)
 Erratum: "The kinetics of populations" (*Problemy Kibernet.* No. 25 (1972), 41-54). (Russian) *Problemy Kibernet.* No. 28 (1974), 4. (K. Dietz) 51 #4444 60J85
- Treskunov, A. L.** Modulus of continuity of the solutions of a second order elliptic equation in the plane. (Russian) *Mat. Zametki* 15 (1974), 139-148. (V.-V. Olariu) 49 #9403 35J20
 (with Rivkind, V. Ja) An a priori estimate in a Hölder space for the solution of a difference scheme for a second order quasilinear elliptic equation with two space variables. (Russian) *Metody Vyčisl.* 9 (1974), 16-21, 180. (G. I. Sulhanišvili) 53 #4568 65N10
 The generalized Neumann problem for second order elliptic equations on the plane. (Russian) Boundary value problems of mathematical physics, 9. *Trudy Mat. Inst. Steklov.* 127 (1975), 146-153, 155. (Ju. V. Kostarčuk) 54 #708 35J25
- Tretnjak, Oleh J.** (with Eisenstein, Bruce A.) Separator functions for homomorphic filtering. *IEEE Trans. Acoust. Speech Signal Processing ASSP-24* (1976), no. 5, 359-364. (B. D. Donevski) 55 #12253 93E10 (94A05)
- Tret'jakov, V. V.** See *Tret'jakov, V. V.*
- Tret'jakov, A. I.** The boundedness of the solution of a differential equation containing a small parameter. (Russian) *Numerical analysis (Russian)*, pp. 39-42. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1973. (Editors) 58 #17321 34C10
 (with Plotnikov, V. A.) Asymptotic solution of a certain class of optimal control problems. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 4, 118-122. (J. Kučera) 52 #16762 (EA 53) 93C10 (93C15)
 The asymptotic solution of certain optimal control problems. (Russian) *Problems in analytical mechanics, stability and control theories (Second Četaev Conf., Kazan, 1973) (Russian)*, pp. 313-317, 343. *Izdat. "Nauka", Moscow*, 1975. (Ja. I. Al'ber) 57 #10543 49B10
 The asymptotic solution of quasilinear differential games. (Russian. English summary insert) *Kibernetika (Kiev)* 1977, no. 4, 38-39. (Author's summary) 58 #26099 90D25
- Tret'jak, O. D.** (with Kovalevskii, V. A.; Sibircev, V. G.) Optimal linear filters for the preliminary processing of patterns. (Russian. English summary insert) *Kibernetika (Kiev)* 1974, no. 5, 127-133. (M. Arató) 53 #2506 94A05 (68A45)
- Tretjak, V. P.** (with Fedorčenko, I. S.) Solution of two problems of the plane theory of elasticity for an infinite domain with circular apertures. (Russian. English summary) *Vyčisl. Prikl. Mat. (Kiev)* Yyp. 28 (1976), 78-84, 153. (Authors' summary) 56 #10347 73.65
 (with Protasov, I. V.; Čarin, V. S.) An optimization problem connected with coverings. (Russian. English summary) *Issled. Operacii i ASU Yyp.* 10 (1977), 95-98, 142. (Authors' summary) 58 #15147 90C10
- Tret'jakov, N. V.** (with Poljak, B. T.) A certain iteration method of linear programming and its economic interpretation. (Russian) *Ekonom. i Mat. Metody* 8 (1972), 740-751. (K. Zimmermann) 46 #10401 90C05 (90A99)
 A method of penalty estimates for convex programming problems. (Russian)

- onom. i Mat. Metody* 9 (1973), 526-540. (V. Spiridonov) 50 #12258 90C25
(with Poljak, B. T.) A method of penalty estimates for conditional extremum problems. (Russian) *Ž. Vychisl. Mat. i Mat. Fiz.* 13 (1973), 34-46, 267. (Constantin rsn) 47 #6324 90C30
(with Gol'shtein, E. G.) Modified Lagrange functions. (Russian) *Ekonom. i Mat. etody* 10 (1974), 568-591. (W. W. Breckner) 50 #8209 49A99
(with Gol'shtein, E. G.) The gradient method of minimization, and convex programming algorithms associated with modified Lagrangian functions. (Russian) *onom. i Mat. Metody* 11 (1975), no. 4, 730-742. (RZMat 1976 #2 V752) 57 #11748 90C25
- akov, V. A.** The peculiarities of the integration of functions on commutative algebras. (Russian) *Proceedings of the Central Regional Association of Mathematics Departments, o. 2: Functional analysis and the theory of functions* (Russian), pp. 176-182. Kalinin. os. Ped. Inst., Kalinin, 1971. (A. Durkin (RZMat 1971 #11 B854)) 52 #5993 0A97
Analysis of a system with variable parameters. (Russian) *Radiotehn. (Har'kov) No. 9* (1971), 48-53. (J. D. Kečkić) 46 #423 34A05
Certain properties of sequences and series on commutative algebras of hypercomplex numbers. (Russian) *A collection of articles on the constructive theory of functions and the extremal problems of functional analysis* (Russian), pp. 151-158. Kalinin. Gos. Univ., Kalinin, 1972. (Ju. Kaz'min (RZMat 1973 #2 B196)) 52 #5992 30A97
Cauchy's theorem for multidimensional integrals of functions on commutative algebras, and some of its consequences. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1972, no. 10(125), 88-98. (I. I. Bavrín) 48 #8832 32A25 (30A96)
Properties of functions on commutative hypercomplex algebras of Cauchy type. (Russian) *Application of functional analysis in approximation theory, No. 6* (Russian), pp. 35-91. Kalinin. Gos. Univ., Kalinin, 1975. (Editors) 58 #28548 30A97
- akov, V. B.** (with Evtušik, L. E.) Structures that can be defined by a system of higher order ordinary differential equations. (Russian. English summary) *Trudy Geometr. Sem.* 5 (1974), 243-255. (P. Günther) 52 #15525 58A20 (53B10)
(with Evtušik, L. E.; Stepanov, N. V.) Reductive Cartan connection associated with the space of m -spreads over the support elements of second order contact. (Russian) *Trudy Geom. Sem. Kazan. Univ. Vyp. 8* (1975), 89-94. (I. Kolář) 57 #7443 53C05
Transformation groups that preserve the set of generalized trajectories. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1976, no. 11 (174), 80-86. (Ju. E. Glikliĥ) 56 #756 34C20 (58F05)
- akov, V. E.** (with Bedrov, Ja. A.; Goričev, Ju. V.; Gorodeckii, V. I.; Zaharov, V. N.; Kanarev, L. E.; Kočetkov, V. I.; Krut'ko, P. D.; Letov, A. M.; Mogilevskii, V. D.; Ponomarev, V. M.) ★Нелинейная оптимизация систем автоматического управления. (Russian) [Nonlinear optimization of automatic control systems] Edited by V. M. Ponomarev. Nonlinear Automatic Control Systems, Vol. 5. Izdat. "Mašinostroenie", Moscow, 1970. 307 pp. (F. M. Kirillova) 50 #12363 93C10
See also *Proceedings: Republican Conference of Belorussian Mathematicians*, 48 #3669
- akov, V. P.** On the question of the formal multiplication of series. (Russian) *Kazan. Gos. Univ. Učen. Zap.* 129 (1969), no. 3, 152-161. (D. Ž. Djoković) 45 #7341 40A05
- akov, V. V.** New analytic solutions of the wave equation and the problem of diffraction. *Prikl. Mat. Meh.* 39 (1975), no. 1, 80-85 (Russian); translated as *J. Appl. Math. Mech.* 39 (1975), no. 1, 70-76. (S. I. Pai) 51 #14743 7635
- akova, N. N.** Generating functions for the matrix elements of the irreducible unitary representations of the group $SO(n)$ of rotations of n -dimensional space. (Russian) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* 1969, no. 3, 40-44. (M. Havlíček) 45 #8899 33A75
Some properties of n -dimensional generalized spherical functions. (Russian) Harmonic analysis on groups. *Moskov. Gos. Zaočn. Ped. Inst. Sb. Naučn. Trudov Vyp. 39* (1974), 196-212. (Editors) 58 #17697 43A90 (22E45)
- akova, S. S.** On the question of the error estimate of the parabolic equation method in a certain boundary value problem. (Russian) *Radiotehn. (Har'kov) No. 20* (1972), 161-168. (F. M. Pascal) 47 #9862 65P05
- koff, Carol** Nonparabolic subgroups of the modular group. *Glasgow Math. J.* 16 (1975), no. 2, 91-102. (Morris Newman) 53 #3140 20H05
Some remarks on just-infinite groups. *Comm. Algebra* 4 (1976), no. 5, 483-489. (John S. Wilson) 53 #8269 20F30
Completeness of the automorphism groups of metabelian just-infinite groups. *J. London Math. Soc.* (2) 14 (1976), no. 3, 459-462. (J. A. Hulse) 55 #8196 20F55
- koff, M.** See Siegel, Carl Ludwig. (Not reviewed)
- koff, Marvin** A new type of transcendental function. *Bull. London Math. Soc.* 4 (1972), 167-170. (William Harvey) 47 #5251 30A48
Algebraic extensions of the field of rational functions. II. *Comm. Pure Appl. Math.* 25 (1972), 147-149. (M. L. Madan) 45 #242 14H05
A topological proof of the residual finiteness of certain amalgamated free products. Collection of articles dedicated to Wilhelm Magnus. *Comm. Pure Appl. Math.* 26 (1973), 855-859. (J. S. Birman) 48 #11320 20E25
The residual finiteness of certain amalgamated free products. *Math. Z.* 132 (1973), 179-182. (K. Appel) 51 #8258 20E25
Covering space proofs in combinatorial group theory. *Comm. Algebra* 3 (1975), 429-457. (J. S. Birman) 54 #5355 20F05 (55A10)
(with Fine, Benjamin) The SQ-universality of certain arithmetically defined linear groups. *J. London Math. Soc.* (2) 13 (1976), no. 1, 65-68. (J. Mennicke) 53 #10947 20G30
See also Siegel, Carl Ludwig, 57 #16317b
- ter, Marietta J.** (with Walster, G. William) Central and noncentral distributions of Wilks' statistic in MANOVA as mixtures of incomplete beta functions. *Ann. Statist.* 3 (1975), 467-472. (D. S. Tracy) 51 #4553 62H10
- ter, Steven A.** Properties of PN^2 sequences. *IEEE Trans. Information Theory* IT-20 (1974), 295-297. (N. Zierler) 50 #16099 94A10
(with Vaca, Marco V.) Optimal estimation for discrete time jump processes. *IEEE Trans. Information Theory* IT-24 (1978), no. 3, 289-296. (H. Salehi) 58 #15596 93E10 (94A05)
- ttin, Hans** See Birman, J. Ja., 53 #10268
- Treue, Wilhelm** See *Jahresfeier: Geburt von Johannes Kepler*, 51 #27
- Treur, Jan** The Cartan-Brauer-Hua theorem. *Nederl. Akad. Wetensch. Proc. Ser. A* 80 = *Indag. Math.* 39 (1977), no. 5, 453-454. (J. L. Zemmer) 56 #12057 16A40
- Treutler, Hans** (with Riedel, Roland) Asymptotische Darstellungen von Parameterintegralen mit logarithmischer Singularität. *Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe* 24 (1975), no. 1, 43-55. (L. Berg) 50 #14016 41A60
- Trev, F.** See Treves, F.
- Treves, Y. M.** (with Manley, O. P.) Stability of finite-sized radiating plasmas. *J. Mathematical Phys.* 13 (1972), 1176-1185. (M. Drăganu) 55 #5086 8235
- Treves, A.** (with Reina, C.) NUT-like generalization of axisymmetric gravitational fields. *J. Mathematical Phys.* 16 (1975), 834-835. (Authors' summary) 53 #15252 8335
(with Reina, C.) Axisymmetric gravitational fields. *General Relativity and Gravitation* 7 (1976), no. 10, 817-838. (Authors' summary) 58 #20235 8353
- Treves, F.** (with Steinberg, Stanley) Pseudo-Fokker Planck equations and hyperdifferential operators. *J. Differential Equations* 8 (1970), 333-366. (From the authors' introduction) 55 #10821 35G10 (32A15)
Hamiltonian fields, bicharacteristic strips in relation with existence and regularity of solutions of linear partial differential equations. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 803-811. Gauthier-Villars, Paris, 1971. (Editors) 58 #22997 35G05 (35H05)
Résolubilité locale des équations aux dérivées partielles linéaires. *Séminaire Goulaouic-Schwartz* (1970-1971), *Équations aux dérivées partielles et analyse fonctionnelle, annexe No. 1*, 32 pp. Centre de Math., École Polytech., Paris, 1971. (Monty Strauss) 52 #14593 35G05
(with DuChateau, Paul) An abstract Cauchy-Kovalevskaja theorem in scales of Gevrey classes. *Symposia Mathematica, Vol. VII (Convegno sulle Problemi di Evoluzione, INDAM, Rome, 1970)*, pp. 135-163. Academic Press, London, 1971. (R. D. Moyer) 48 #9055 35A10 (34G05, 47H15)
(with Nirenberg, L.) Remarks on the solvability of linear equations of evolution. *Symposia Mathematica, Vol. VII (Convegno sulle Problemi di Evoluzione, INDAM, Rome, 1970)*, pp. 325-338. Academic Press, London, 1971. (R. D. Moyer) 48 #12168 47G05 (35S05)
Differential equations in Banach filtrations. *Troisième Colloque sur l'Analyse Fonctionnelle (Liège, 1970)*, pp. 111-117. Vander, Louvain, 1971. (E. Dubinsky) 54 #5575 34G05 (46G05)
Analytic-hypoelliptic partial differential equations of principal type. *Comm. Pure Appl. Math.* 24 (1971), 537-570. (H. Goldschmidt) 45 #5569 35H05
Hypoelliptic partial differential equations of principal type. Sufficient conditions and necessary conditions. *Comm. Pure Appl. Math.* 24 (1971), 631-670. (J. Unterberger) 45 #5570 35H05 (47G05)
A link between solvability of pseudodifferential equations and uniqueness in the Cauchy problem. *Amer. J. Math.* 94 (1972), 267-288. (M. K. V. Murthy) 46 #7740 35S05 (35R99)
Approximate solutions to Cauchy problems. *J. Differential Equations* 11 (1972), 349-363. (H. Kumano-go) 51 #3676 35G25
(with Strauss, Martin) Uniqueness in the Cauchy problem for first-order linear partial differential operators. *A seminar on PDEs—1973*, pp. 77-83. Rutgers Univ., New Brunswick, N.J., 1973. (Editors) 58 #29046 35A10 (35F10)
On the existence and regularity of solutions of linear partial differential equations. *Partial differential equations (Proc. Sympos. Pure Math., Vol. XXIII, Univ. California, Berkeley, Calif., 1971)*, pp. 33-60. Amer. Math. Soc., Providence, R.I., 1973. (H. Kumano-go) 49 #3306 35G05
Existence et régularité des solutions des équations aux dérivées partielles linéaires. Quelques résultats et quelques problèmes ouverts. *Séminaire Goulaouic-Schwartz* 1972-1973: *Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 22*, 21 pp. Centre de Math., École Polytech., Paris, 1973. (Monty Strauss) 53 #3470 35A05 (35S05, 58G15)
Concatenations of second-order evolution equations applied to local solvability and hypoellipticity. *Comm. Pure Appl. Math.* 26 (1973), 201-250. (Y. I. Kannai) 49 #5554 35H05 (35A99)
Usefulness of pseudodifferential and Fourier integral operators in the study of the local solvability of linear partial differential equations. *Functional analysis and applications (Proc. Sympos., Univ. Fed. Pernambuco, Recife, 1972)*, pp. 92-108. Lecture Notes in Math., Vol. 384, Springer, Berlin, 1974. (Editors) 57 #934 35S05 (35A05)
(with Gilioli, Antonio) An example in the solvability theory of linear PDE's. *Amer. J. Math.* 96 (1974), 367-385. (Ju. V. Egorov) 50 #7761 35A05 (35D05)
(with Cardoso, Fernando) A necessary condition of local solvability for pseudo-differential equations with double characteristics. *Ann. Inst. Fourier (Grenoble)* 24 (1974), no. 1, 225-292. (Ju. V. Egorov) 50 #2726 35S05 (47G05)
Un théorème de préparation pour des opérateurs pseudo-différentiels non dégénérés. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 1253-1255. (Bert-Wolfgang Schulze) 50 #3014 47G05 (35S05, 58G15)
(with Boutet de Monvel, Louis) On a class of systems of pseudodifferential equations with double characteristics. *Comm. Pure Appl. Math.* 27 (1974), 59-89. (F. Cardoso) 50 #2725 35S05 (47G05)
(with Boutet de Monvel, Louis) On a class of pseudodifferential operators with double characteristics. *Invent. Math.* 24 (1974), 1-34. (R. D. Moyer) 50 #5550 47G05 (35S05, 58G15)
(with Strauss, Monty J.) First-order linear PDEs and uniqueness in the Cauchy problem. *J. Differential Equations* 15 (1974), 195-209. (R. D. Moyer) 48 #9076 35F10
Discrete phenomena in uniqueness in the Cauchy problem. *Proc. Amer. Math. Soc.* 46 (1974), 229-233. (R. D. Moyer) 50 #5166 35G10
The local solvability of linear partial differential equations. (Russian) Translated from the English by Ju. V. Egorov. Collection of articles dedicated to the memory of Ivan Georgievich Petrovskii (1901-1973). *I. Uspehi Mat. Nauk* 29 (1974), no. 2 (176), 252-281. (V. S. Rabinović) 53 #8625 35A05 (35S05)
★Basic linear partial differential equations. Pure and Applied Mathematics, Vol. 62. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New

- York-London, 1975. xvii + 470 pp. (Jeffrey Rauch) **56** #6063 35-02
(with Barros-Neto, José) Hypoelliptic operators with double characteristics and constant multiplicity. *Analyse fonctionnelle et applications (Comptes Rendus Colloq. d'Analyse, Inst. Mat., Univ. Federal Rio de Janeiro, Rio de Janeiro, 1972)*, pp. 5-8. *Actualités Sci. Indust.*, No. 1367, Hermann, Paris, 1975. (Louis Boutet de Monvel) **54** #8001 35H05
(with Cardoso, Fernando) On subelliptic pseudo-differential operators. *Analyse fonctionnelle et applications (Comptes Rendus Colloq. Analyse, Inst. Mat., Univ. Federal Rio de Janeiro, Rio de Janeiro, 1972)*, pp. 61-69. *Actualités Sci. Indust.*, No. 1367, Hermann, Paris, 1975. (Editors) **58** #1565 35H05 (35S05, 58G15)
Second-order Fuchsian elliptic equations and eigenvalue asymptotics. *Fourier integral operators and partial differential equations (Colloq. Internat., Univ. Nice, Nice, 1974)*, pp. 283-340. *Lecture Notes in Math.*, Vol. 459, Springer, Berlin, 1975. (Ju. V. Egorov (Zbl 311 #35050)) **58** #1633 35J99 (35P20, 47G05)
Noyaux élémentaires d'équations aux dérivées partielles du premier ordre. *Séminaire Goulaouic-Lions-Schwartz 1974-1975: Équations aux dérivées partielles linéaires et non linéaires Exp. No. 17, 12 pp. Centre Math., École Polytech., Paris, 1975.* (Editors) **58** #1557 35F05
Solution of Cauchy problems modulo flat functions. *Séminaire Goulaouic-Lions-Schwartz 1974-1975: Équations aux dérivées partielles linéaires et non linéaires, Exp. No. 11, 20 pp. Centre Math., École Polytech., Paris, 1975.* (Editors) **58** #1556 35F05 (47G05, 58G15)
Équations elliptiques fuchsienues du second ordre et valeurs propres asymptotiques. *Séminaire Goulaouic-Lions-Schwartz 1974-1975: Équations aux dérivées partielles linéaires et non linéaires Exp. No. 1-2, 22 pp. Centre Math., École Polytech., Paris, 1975.* (Editors) **55** #10872 35P20 (58G15, 35D10)
Winding numbers and the solvability condition (Ψ). *J. Differential Geometry* **10** (1975), 135-149. (R. D. Moyer) **51** #6099 35A05 (35S05, 58G15)
Integral representation of solutions of linear partial differential equations. II. *Journées: Équations aux Dérivées Partielles de Rennes (1975)*, pp. 341-357. *Astérisque*, No. 34-35, Soc. Math. France, Paris, 1976. (Maria Cinquini-Cibrario) **58** #6645 35C15
Study of a model in the theory of complexes of pseudodifferential operators. *Ann. of Math.* (2) **104** (1976), no. 2, 269-324. (Ju. V. Egorov) **54** #14014 58G15 (35D05)
Integral representation of solutions of first-order linear partial differential equations. I. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **3** (1976), no. 1, 1-35. (Maria Cinquini-Cibrario) **53** #3478 35C15 (35F05)
Solution of Cauchy problems modulo flat functions. *Comm. Partial Differential Equations* **1** (1976), no. 1, 45-72. (F. Cardoso) **53** #13813 35F25 (47F05, 47G05)
Analytic hypo-ellipticity of a class of pseudodifferential operators with double characteristics and applications to the $\bar{\partial}$ -Neumann problem. *Comm. Partial Differential Equations* **3** (1978), no. 6-7, 475-642. (David Tartakoff) **58** #11867 35H05 (32F99, 58G05)
See also Mathematics: Periodical collection of translations of foreign articles, **49** #4720; Mathematics: Periodical collection of translations of foreign articles, **49** #4721; Séminaire: Équations aux Dérivées Partielles, **52** #11266 and Séminaire: Équations aux Dérivées Partielles, **52** #11268
Treves, J. F. (with Nirenberg, L.) A correction to: "On local solvability of linear partial differential equations. II. Sufficient conditions" (*Comm. Pure Appl. Math.* **23** (1970), 459-509). *Comm. Pure Appl. Math.* **24** (1971), no. 2, 279-288. (R. D. Moyer) **55** #8599 35S05 (47G05)
Treves, D. (with Vignato, A.) Galaxy clusters as relativistic spherically-symmetrical inhomogeneities. *Astrophys. Space Sci.* **49** (1977), no. 1, 229-240. (Authors' summary) **56** #10735 85J3
Trew, A. Nonstandard theories of quantification and identity. *J. Symbolic Logic* **35** (1970), 267-294. (K. Inoue) **46** #3264 02B10
Treybig, L. B. Some remarks on a bound problem in knot theory. *Topology Conference (Proc. General Topology Conf., Emory Univ., Atlanta, Ga., 1970)*, pp. 106-113. *Dept. Math., Emory Univ., Atlanta, Ga., 1970.* (L. Neuwirth) **49** #11497 55A25
Moving surfaces in E^3 with simplicial isotopes. *Proceedings of the University of Oklahoma Topology Conference (Univ. Oklahoma, Norman, Okla., 1972)*, pp. 321-329. *Univ. of Oklahoma, Norman, Okla., 1972.* (R. C. Kirby) **51** #6818 57A10
Local degree of separability and invariance of domain. *Proc. Amer. Math. Soc.* **34** (1972), 273-279. (O. T. Alas) **45** #4346 54A25
Bounds in piecewise linear topology. *Trans. Amer. Math. Soc.* **201** (1975), 383-405. (L. Neuwirth) **50** #3238 57C15
(with Borosh, Itzhak) Bounds on positive integral solutions of linear Diophantine equations. *Proc. Amer. Math. Soc.* **55** (1976), no. 2, 299-304. (E. L. Cohen) **53** #467 15A06 (10B05)
Concerning row operations on systems of linear equations with integral coefficients. *Internat. J. Math. Math. Sci.* **1** (1978), no. 1, 141-142. (Jau Shyong Shiue) **57** #12545 15A06 (10B05)
banh-Tri-An See **Banh-Tri-An**
Trias, A. On the time evolution of coherent states. *Phys. Lett. A* **61** (1977), no. 3, 149-150. (Georges Bessis) **56** #2077 81A7
Tribel, Hans See **Triebel, Hans**
Tribunjan, G. G. Computation of certain indefinite integrals of cylindrical and power functions. (Russian. Armenian summary) *Erevan. Gos. Univ. Uchen. Zap. Estestvo. Nauki* No. 3 (124), (1973), 16-26. (Walter Gautschi) **56** #4123 65D20 (33A40)
Tribus, Myron (with Rossi, Richard) On the Kullback information measure as a basis for information theory: comments on a proposal by A. Hobson and B. Chang: "A comparison of the Shannon and Kullback information measures" (*J. Statist. Phys.* **7** (1973), 301-310). *J. Statist. Phys.* **9** (1973), 331-338. (Authors' summary) **57** #9297 (EA 57) 94A15
(with Costa de Beauregard, Olivier) Information theory and thermodynamics. *Helv. Phys. Acta* **47** (1974), 238-247. (R. Collins) **56** #7710 82G0
Tricarico, Mariarosaria Su un problema al contorno per un'equazione ellittico-parabolica di ordine $2m$. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **60** (1976), no. 4, 400-404. (S. A. Tersenov) **57** #13234 35M05
Sui problemi al contorno per le equazioni ellittico-paraboliche di ordine $2m$. (English summary) *Ann. Mat. Pura Appl.* (4) **115** (1977), 225-270 (1978). (Maria Cinquini-Cibrario) **58** #23145 35M05
Tricerri, Franco Connessioni a campo quasi parallelo. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* **31** (1971/73), 393-404 (1974). (P. Drăgăla) **50** #1166 53C1
Su alcune classi di connessioni sopra varietà quasi complesse. (English summary) *Riv. Mat. Univ. Parma* (2) **12** (1971), 189-197. (J. J. Etayo) **50** #11061 53B15
Algebre del 3° ordine e strutture differenziabili collegate. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* **33** (1974/75), 223-232 (1976). (V. Oproiu) **53** #3940 53C15
Sulle varietà dotate di due strutture quasi complesse linearmente indipendenti. (English summary) *Riv. Mat. Univ. Parma* (3) **3** (1974), 349-358. (A. Aeppli) **55** #4034 53C15
(with Sanini, Aristide) Prolungamenti di enti geometrici definiti su una varietà fogliettata. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* **34** (1975/76), 211-221. (Pedro Martinez Gadea) **55** #9118 57D30 (57D20, 53C05)
Connessioni lineari e metriche hermitiane sopra varietà dotate di due strutture quasi complesse. *Riv. Mat. Univ. Parma* (4) **1** (1975), 177-186. (C. Di Comite) **56** #1241 53C55
(with Vanhecke, Lieven) Flat almost Hermitian manifolds which are not Kähler manifolds. *Tensor (N.S.)* **31** (1977), no. 3, 249-254. (Bang-yen Chen) **57** #13759 53B35
Trick, Timothy N. (with Aprille, Thomas J., Jr.) A computer algorithm to determine the steady-state response of nonlinear oscillators. *IEEE Trans. Circuit Theory CT-19* (1972), 354-360. (I. H. Muftić) **49** #7022 94A20
(with Aprille, Thomas J., Jr.) Steady-state analysis of nonlinear circuits with periodic inputs. *Proc. IEEE* **60** (1972), 108-114. (W. C. Rheinboldt) **49** #11813 65L10 (94A20)
(with Long, J. L.) A note on absolute bounds on quantization errors in fixed-point implementations of digital filters. *IEEE Trans. Circuits and Systems CAS-22* (1975), 567-570. (F. W. Stallmann) **52** #13004 94A20 (94A10)
Trickett, John K. (with Gmowski, Igor) Sur les bifurcations liées aux cas d'exception d'une récurrence conservative du deuxième ordre. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A147-A149. (A. Ben-Israel) **47** #4471 65Q05 (39A12, 65H05)
(with Gmowski, Igor) Some properties of a conservative second order recurrence with a bounded non-linearity. (French summary) *Transformations ponctuelles et leurs applications (Colloq. Internat. CNRS, No. 229, Toulouse, 1973)*, pp. 143-153. *Éditions Centre Nat. Recherche Sci., Paris, 1976.* (Joseph Ford) **57** #17052 39A10 (34C15)
Tricoire, A. See *Séminaire: Algèbre Non Commutative*, **48** #5783
Tricoire, Annette Sur les anneaux semi-héréditaires à gauche. *C. R. Acad. Sci. Paris Sér. A-B* **274** (1972), A877-A879. (G. Michler) **45** #8686 16A48 (13A99)
See also *Séminaire: Algèbre Non Commutative*, **48** #5787
Tricomi, Francesco Giacomo ★Istituzioni di analisi superiore (metodi matematici della fisica). Seconda edizione. *CEDAM—Casa Editrice Dott. Antonio Milani, Padua, 1970.* ix + 472 pp. (Editors) **50** #6703 00A05
Sulla didattica delle funzioni speciali. *Univ. e Politec. Torino Rend. Sem. Mat.* **30** (1970/71), 35-47. (S. K. Chatterjea) **46** #9399 33-02
Ricordi di mezzo secolo di vita matematica torinese. *Rend. Sem. Mat. Univ. e Politec. Torino* **31** (1971/73), 31-43 (1974). (Editors) **50** #9490 01A60
Un precursore delle moderne macchine calcolatrici: Charles Babbage (1792-1871). *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **106** (1972), 17-24. (P. Bockstaele) **47** #1565 01A55 (68-03)
Il centenario del "programma di Erlangen" di Felix Klein. *Atti. Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **106** (1972), 647-659. (D. J. Struik) **47** #6414 01A55
Giovanni Ricci (1904-1973). *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **108** (1974), no. 3-4, 585-589. (Editors) **51** #7791 01A70
Guido Fubini e la scienza delle costruzioni. (English summary) Collection of articles dedicated to Mauro Picone on the occasion of his ninetieth birthday. *Rend. Mat.* (6) **8** (1975), 103-114. (H. C. Kennedy) **52** #16 01A60
Sulla elastostatica degli archi. (English summary) *Trends in applications of pure mathematics to mechanics (Conf., Univ. Lecce, Lecce, 1975)*, pp. 401-407. *Monographs and Studies in Math.*, Vol. 2, Pitman, London, 1976. (H. J. Weinitschke) **58** #3874 73J35
Mauro Picone (1885-1977). *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **111** (1977), no. 5-6, 573-576. (Editors) **57** #12110 01A70
See also Robinson, Neville L., **52** #14400; Ellbeck, J. C., **54** #3040; Fettes, Henry E., **54** #3041; Katzin, Martin, **54** #3042; Kölbig, K. S., **54** #3043; Satoh, H., **54** #3044; Skovgaard, Ove, **54** #3045; Fettes, Henry E., **54** #4051; Katzin, Martin, **54** #4052; Nash, J. C., **54** #4053; Wood, Van E., **54** #4054; Scherzinger, Ann; et al., **54** #14304 and Carr, Alistair R., **55** #1695
Tricot, Claude Densité d'un ensemble et distributions singulières. (Italian and English summaries) *Rend. Sem. Mat. Fis. Milano* **42** (1972), 9-24 (1973). (C. McGehee) **48** #4253 28A10 (42A72)
Triebel, Hans Eine Bemerkung zur Interpolation von Banachräumen. *Beiträge Anal.* No. 2 (1971), 51-55. (Jörgen Löfström) **47** #2353 46M35
★Höhere Analysis. Hochschulbücher für Mathematik, Band 76. *VEB Deutscher Verlag der Wissenschaften, Berlin, 1972.* 704 pp. (Editors) **50** #12511 00A05 (35-02, 46-02, 47-02)
Function spaces and elliptic differential operators. *Colloque International CNRS sur les Équations aux Dérivées Partielles Linéaires (Univ. Paris-Sud, Orsay, 1972)*, pp. 305-324. *Astérisque*, 2 et 3. Soc. Math. France, Paris, 1973. (G. Geymonat) **53** #11362 46E35 (35J99)
Interpolation theory for spaces of Besov type. Elliptic differential operators. *Theory of nonlinear operators (Proc. Summer School, Babylon, 1971)*, pp. 135-191. *Academia, Prague, 1973.* (G. Geymonat) **53** #11363 46E35 (47F05, 35J99)
Boundary values for Sobolev-spaces with weights. Density of $D(\Omega)$ in $W_{p,\gamma}^{s,0}(\Omega)$ and in $H_{p,\gamma}^{s,0}(\Omega)$ for $s > 0$ and $r = [s - (1/p)]^-$. *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 73-96. (A. Avantiaggiati) **51** #8807 46E35
Spaces of distributions of Besov type on Euclidean n -space. Duality, interpolation. *Ark. Mat.* **11**, 13-64 (1973). (A. Kufner) **50** #981 46E35
A remark on embedding theorems for Banach spaces of distributions. *Ark. Mat.* **11**,

- 65-74 (1973). (A. Kufner) **50** #982 46E35
 L_p -theory for a class of singular elliptic differential operators. *Czechoslovak Math. J.* **23**(98) (1973), 525-541. (R. S. Freeman) **48** #11760 35J30 (46E35)
 Interpolation theory for function spaces of Besov type defined in domains. I. *Math. Nachr.* **57** (1973), 51-85. (Denise Huet) **50** #983 46E35
 Interpolation theory for function spaces of Besov type defined in domains. II. *Math. Nachr.* **58** (1973), 63-86. (Denise Huet) **50** #14205 46E35
 Über die Existenz von Schauderbasen in Sobolev-Besov-Räumen.
 Isomorphiebeziehungen. *Studia Math.* **46** (1973), 83-100. (A. Kufner) **49** #3535 46E35
 Structure theory of function spaces. *Séminaire Goulaouic-Schwartz* 1973-1974: *Équations aux dérivées partielles et analyse fonctionnelle, Exp. No. 3*, 9 pp. Centre de Math., École Polytech., Paris, 1974. (Denise Huet) **53** #6310 46E35
 Interpolation properties of ϵ -entropy and of diameters. Geometric characteristics of the imbedding of function spaces of Sobolev-Besov type. (Russian) *Mat. Sb. (N.S.)* **98**(140) (1975), no. 1 (9), 27-41, 157. (M. Cotlar) **54** #922 46E35 (47B05)
 Eine Bemerkung zur nicht-kommutativen Interpolation. *Math. Nachr.* **69** (1975), 57-60. (Jöran Bergh) **52** #11620 46M35
 Remarks on multiple Fourier series. (Russian summary) *Anal. Math.* **2** (1976), no. 4, 305-317. (R. L. Cooke) **55** #8684 42A92 (46E35)
 (with Kretschmer, Hans) L_p -theory for a class of singular elliptic differential operators. II. *Czechoslovak Math. J.* **26**(101) (1976), no. 3, 438-447. (R. S. Freeman) **55** #887 35P05 (35J30)
 Spaces of Kudjavev type. I. Interpolation, embedding, and structure. *J. Math. Anal. Appl.* **56** (1976), no. 2, 253-277. (A. Kufner) **55** #8784a 46E35
 Spaces of Kudjavev type. II. Spaces of distributions: duality, interpolation. *J. Math. Anal. Appl.* **56** (1976), no. 2, 278-287. (A. Kufner) **55** #8784b 46E35
 (with Schmeisser, Hans-Jürgen) Anisotropic spaces. I. Interpolation of abstract spaces and function spaces. *Math. Nachr.* **73** (1976), 107-123. (Jöran Bergh) **55** #3819 46M35 (46E35)
 Multipliers in Besov spaces and in L^U -spaces (the cases $0 < p < 1$ and $p = \infty$). *Math. Nachr.* **75** (1976), 229-245. (Pavel Doktor) **55** #8785 46E35
 ★Fourier analysis and function spaces (selected topics). With German and Russian summaries. Translated from the German. *Teubner Verlagsgesellschaft, Leipzig*, 1977. 168 pp. (A. Kufner) **58** #12339 46E35 (42-02)
 General function spaces. III. Spaces $B_{p,q}^{(s)}$ and $F_{p,q}^{(s)}$, $1 < p < \infty$: basic properties. (Russian summary) *Anal. Math.* **3** (1977), no. 3, 221-249. (Jöran Bergh) **58** #30155c 46E35
 General function spaces. IV. Spaces $B_{p,q}^{(s)}$ and $F_{p,q}^{(s)}$, $1 < p < \infty$: special properties. (Russian summary) *Anal. Math.* **3** (1977), no. 4, 299-315. (Jöran Bergh) **58** #30155d 46E35
 Multiplication properties of the spaces $B_{p,q}^s$ and $F_{p,q}^s$. Quasi-Banach algebras of functions. *Ann. Mat. Pura Appl.* (4) **113** (1977), 33-42. (Jöran Bergh) **58** #17820 46E35 (46J10)
 Multiplication properties of Besov spaces. *Ann. Mat. Pura Appl.* (4) **114** (1977), 87-102. (Richard Bagby) **57** #7149 46E35
 General function spaces. II. Inequalities of Plancherel-Pólya-Nikol'skij-type, L_∞ -spaces of analytic functions, $0 < p < \infty$. *J. Approximation Theory* **19** (1977), no. 2, 154-175. (Jöran Bergh) **58** #30155b 46E35
 General function spaces. I. Decomposition methods. *Math. Nachr.* **79** (1977), 167-179. (Jöran Bergh) **58** #30155a 46E35 (46M35)
 Multipliers and unconditional Schauder bases in Besov spaces. *Studia Math.* **60** (1977), no. 2, 145-156. (Alberto Torchinsky) **55** #3779 46E35
 A note on quasi-normed convolution algebras of entire analytic functions of exponential type. *J. Approximation Theory* **22** (1978), no. 4, 368-373. (Pavel Doktor) **58** #2205 46E25 (46J10)
 n van Trien See Tran Van Trien
 minh-Triết Sur les fonctionnelles presque continues. *Mathematica (Cluj)* **16**(39) (1974), no. 1, 189-198. (J. W. Baker) **53** #14071 46A30
 The closed graph theorem and the uniform boundedness theorem. (Romanian. Russian and English summaries) *Studia Univ. Babeş-Bolyai Ser. Math.-Mech.* **19** (1974), no. 1, 47-50. (W. W. Breckner) **49** #11216 46A30 (46B05)
 Sur les fonctionnelles presque continues. *Rev. Roumaine Math. Pures Appl.* **21** (1976), no. 9, 1273-1281. (G. Marinescu) **55** #3747 46A99
 Sur les opérateurs pseudo-monotones non coercitifs. (Romanian summary) *Studia Univ. Babeş-Bolyai Math.* **22** (1977), 43-46. (Wilhelm Schappacher) **56** #6478 47H05
 iffet, T. (with Andrews, L. C.) Nonlinear perturbation operators. *J. Mathematical Phys.* **13** (1972), 419-433. (J. R. Cannon) **45** #6312 81.34
 ifonov, A. N. The estimation of a signal parameter with a quadratic loss function. (Russian) *Problemy Peredachi Informacii* **8** (1972), no. 2, 112-115. (O. Gulyás) **57** #5351 93E10 (94A05)
 ifonov, A. P. Parameter estimation in detecting a sequence of pulses in the presence of normal nonstationary noise. *Radiotekh. i Elektron.* **15** (1970), 2234-2244 (Russian); translated as *Radio Engrg. Electron. Phys.* **1970**, 1954-1963. (J. Capon) **48** #10630 94A05
 The asymptotic behavior of Bayesian estimates of the signal parameter in the presence of nonstationary normal noise. (Russian) *Problemy Peredachi Informacii* **8** (1972), no. 4, 46-54. (Author's summary) **51** #15156 94A05
 ifonov, D. A. (with Malkin, I. A.; Man'ko, V. I.) Dynamical symmetry of nonstationary systems. (Italian and Russian summaries) *Nuovo Cimento A* (11) **4** (1971), 773-792. (A. O. Barut) **46** #8559 81.22
 The coherent states of quantum systems and uncertainty relations. (Russian. English summary) *Bulgar. J. Phys.* **2** (1975), no. 4, 303-311. (Author's summary) **54** #9463a (E 54 #9463b) 81.47
 Errata: "The coherent states of quantum systems and uncertainty relations" (Bulgar. J. Phys. **2** (1975), no. 4, 303-311). *Bulgar. J. Phys.* **2** (1975), no. 5, 533. (Author's summary) **54** #9463b 81.47
 ifonov, E. D. See Problems in theoretical physics, **50** #12007
 Trifunović, Dragan (with Bertolino, Milorad) Sur le théorème fondamental de S. A. Čapligin sur l'inégalité différentielle du premier ordre. *Math. Balkanica* **1** (1971), 11-18. (P. Talpalaru) **46** #434 34A40 (01-XX)
 (with Belyi, Ju. A.) Zur Geschichte der Logarithmentafeln Keplers. *NTM Schr. Geschichte Naturwiss. Tech. Medizin* **9** (1972), no. 1, 5-20. (D. J. Struik) **58** #4842 01A45
 An introduction to the history of the mechanical sciences among the Serbs. (Serbo-Croatian. French summary) *Mat. Vesnik* **11**(26) (1974), 223-232. (Editors) **52** #13165 01A55
 Trigg, Charles W. Geometric proof of a result of Lehmer's. *Fibonacci Quart.* **11** (1973), no. 5, 539-540. (Editors) **48** #3864 10A35
 Palindromic pentagonal numerals. *J. Recreational Math.* **6** (1973), no. 3, 186-189. (Editors) **55** #12626 10A30
 Versum sequences in the binary system. *Pacific J. Math.* **47** (1973), 263-275; corrections, *ibid.* **49** (1973), 619. (J. B. Roberts) **48** #5993 10A40
 Infinite sequences of palindromic triangular numbers. *Fibonacci Quart.* **12** (1974), 209-212. (J. M. Gandhi) **50** #7013 10A35
 Antimagic squares derived from the third-order magic square. *Fibonacci Quart.* **12** (1974), 387-390. (L. K. Durst) **52** #3033 10A30
 What is recreational mathematics? *Math. Mag.* **51** (1978), no. 1, 18-21. (Editors) **58** #15766 00A05
 Triggiani, Roberto Delayed control action controllable systems in Banach space. (Polish and Russian summaries) *Control Cybernet.* **3** (1974), no. 3-4, 97-117. (Author's summary) **56** #11258 93C25 (93B05)
 Pathological asymptotic behavior of control systems in Banach space. *J. Math. Anal. Appl.* **49** (1975), 411-429. (Paul Binding) **51** #11256 49E20
 On the lack of exact controllability for mild solutions in Banach spaces. *J. Math. Anal. Appl.* **50** (1975), 438-446. (H. O. Fattorini) **52** #1489 49E15
 On the stabilizability problem in Banach space. *J. Math. Anal. Appl.* **52** (1975), no. 3, 383-403. (Marshall Slemrod) **56** #3730 (E 56 #3731) 49E20 (93D99)
 Controllability and observability in Banach space with bounded operators. *SIAM J. Control* **13** (1975), 462-491. (A. B. Kuržanskiĭ) **52** #15188 49E15 (34G05)
 (with Manitius, Andrzej) Sufficient conditions for function space controllability and feedback stabilizability of linear retarded systems. *Proceedings of the IEEE Conference on Decision and Control and the 15th Symposium on Adaptive Processes (Clearwater, Fla., 1976)*, pp. 1209-1216. *Inst. Electr. Electron. Engrs., New York*, 1976. (From the summary) **57** #18919 93B05
 Addendum: "On the stabilizability problem in Banach space" (J. Math. Anal. Appl. **52** (1975), no. 3, 383-403). *J. Math. Anal. Appl.* **56** (1976), no. 2, 492-493. (Marshall Slemrod) **56** #3731 49E20 (93D99)
 Extensions of rank conditions for controllability and observability to Banach spaces and unbounded operators. *SIAM J. Control Optimization* **14** (1976), no. 2, 313-338. (Author's summary) **57** #18923 93B05 (47D05)
 (with Manitius, Andrzej) Commandabilité des systèmes retardés du point de vue des semi-groupes d'opérateurs. *Compte Rendu du Deuxième Colloque CRM-IRIA (Centre Recherche Math., Univ. Montréal, Montréal, Que., 1976)*. *Ann. Sci. Math. Québec* **1** (1977), no. 2, 265-269. (Luciano Pandolfi) **58** #9572 93C25
 A note on the lack of exact controllability for mild solutions in Banach spaces. *SIAM J. Control Optimization* **15** (1977), no. 3, 407-411. (Constantin Vărsan) **55** #8942 49E15
 A cosine operator approach to modelling boundary input hyperbolic systems. *Optimization techniques (Proc. 8th IFIP Conf., Würzburg, 1977)*, Part 1, pp. 380-390. *Lecture Notes in Control and Informat. Sci.*, Vol. 6, Springer, Berlin, 1978. (From the introduction) **58** #19248 65N99 (34G05)
 (with Manitius, Andrzej) Function space controllability of linear retarded systems: a derivation from abstract operator conditions. *SIAM J. Control Optim.* **16** (1978), no. 4, 599-645. (Ju. G. Borisovič) **58** #2571 49E15
 Triggs, C. M. (with Davies, N.; Newbold, Paul) Significance levels of the Box-Pierce portmanteau statistic in finite samples. *Biometrika* **64** (1977), no. 3, 517-522. **58** #13564 62M10
 Trigiante, Donato Metodo dei momenti per la soluzione di equazioni e sistemi di equazioni. (English summary) *Calcolo* **10** (1973), 117-131. (A. S. Householder) **48** #7585 65H10
 (with Ciucani, S.) Valutazione di alcuni nuovi algoritmi derivanti dal metodo della origine variabile per la soluzione di equazioni non lineari. (English summary) *Calcolo* **10** (1973), 363-370. (Authors' summary) **49** #11800 65H10
 (with Di Lena, G.) Metodo di Euler e ricerca delle radici di una equazione. (English summary) *Calcolo* **13** (1976), no. 4, 377-396 (1977). (Authors' summary) **58** #24902 65H05
 (with Casulli, V.) Sui procedimenti iterativi composti. (English summary) *Calcolo* **13** (1976), no. 4, 403-420 (1977). (M. R. Occorsio) **58** #24900 65H05
 (with Galligani, Ilio) Integration techniques for solving algebraic systems. *Mathematical aspects of finite element methods (Proc. Conf., Consiglio Naz. delle Ricerche (C.N.R.), Rome, 1975)*, pp. 113-121. *Lecture Notes in Math.*, Vol. 606, Springer, Berlin, 1977. (Erich Bohl) **58** #3393 65H10
 (with Casulli, V.) The convergence order for iterative multipoint procedures. *Calcolo* **14** (1977), no. 1, 25-44. (Ian Gladwell) **58** #19092 65H05
 (with Casulli, V.) Computational complexity for a class of multipoint iterative procedures without or with internal memory. (Italian summary) *Calcolo* **14** (1977), no. 3, 225-235. (Authors' summary) **58** #24901 65H05 (68A20)
 Asymptotic stability and discretization on an infinite interval. (German summary) *Computing* **18** (1977), no. 2, 117-129. (W. H. Enright) **56** #4176 65L05
 van Trigt, C. Asymptotic solutions of integral equations with a convolution kernel. I. *J. Mathematical Phys.* **14** (1973), 863-873. (L. Berg) **48** #814 45D05 (82.45)
 Worst-case analysis of algorithms. A. Some g.c.d. algorithms. *Philips J. Res.* **33** (1978), no. 1-2, 66-77. (John Cherniavsky) **58** #13906 68A10
 Trigub, R. M. Summability and absolute convergence of Fourier series in the large. (Russian) *Metric questions of the theory of functions and mappings*, No. 2 (Russian), pp. 173-266. *Izdat. "Naukova Dumka"*, Kiev, 1971. (R. P. Boas, Jr.) **45** #4057 42A28
 Approximation of functions with Diophantine conditions by polynomials with

- integral coefficients. (Russian) *Metric questions of the theory of functions and mappings*, No. 2 (Russian), pp. 267-333. Izdat. "Naukova Dumka", Kiev, 1971. (S. Mandelbrojt) 47 #683 41A10 (10F99)
- Linear methods of Fourier series summability and the moduli of continuity of various orders. (Russian) *Sibirsk. Mat. Ž.* 12 (1971), 1416-1421. (I. Szalay) 45 #2404 42A24
- Characterization of Lipschitz classes of integral order on a segment by the rate of polynomial approximation. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 18 (1973), 63-70, ii. (J. T. Scheick) 51 #1226 41A40
- A connection between summability and absolute convergence of Fourier series and transforms. (Russian) *Dokl. Akad. Nauk SSSR* 217 (1974), 34-37. (M. Tomić) 51 #6270 42A28
- A certain transformation of polynomials, and the summability of Fourier series. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. RSR Ser. A* 1974, 530-533, 575. (M. Tomić) 50 #14027 42A04
- (with Bělinskii, E. S.) On a relation in the theory of Fourier series. (Russian) *Mat. Zameiki* 15 (1974), 679-682. (R. P. Boas, Jr.) 50 #5335 42A28
- Integrability of the Fourier transform of a function with compact support. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen. Vyp. 23* (1975), 124-131, 171. (F. Ustina) 54 #13455 42A68
- The integral norms of polynomials. (Russian) *Mat. Sb. (N.S.)* 101(143) (1976), no. 3, 315-333, 455. (M. Tomić) 55 #3652 42A04
- Integrability and asymptotic behavior of the Fourier transform of a radial function. (Russian) *Metric questions of the theory of functions and mappings* (Russian), pp. 142-163, 168. *Naukova Dumka*, Kiev, 1977. (Author's summary) 58 #29810 42A68
- The approximation of functions by polynomials with special coefficients. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1977, no. 1(176), 93-99. (Hans-Jürgen Albrand) 56 #3307 30A82
- Summability of multiple Fourier series and the polynomial approximation of functions on the torus. (Russian) *Dokl. Akad. Nauk SSSR* 240 (1978), no. 2, 276-279. (O. D. Gabisonija) 58 #23340 42A92
- Trigubović, L. V.** The periodic solutions of second and third order linear systems. (Russian) *Differentsial'nye Uravneniya* 7 (1971), 1007-1011, 1138. (M. Švec) 45 #2266 34C25
- Certain sufficient criteria for the reducibility of second order linear systems. (Russian) *Differentsial'nye Uravneniya* 8 (1972), 1323-1325. (G. B. Gustafson) 46 #3869 34A05
- The asymptotic stability of a second order linear system that depends on parameters. (Russian) *Differentsial'nye Uravneniya* 9 (1973), 1352-1354, 1360. (S. P. Hastings) 49 #5487 34D05
- See also **All-Union Symposium: Selected Questions of Partial Differential Equations**, 48 #680
- Trihanov, A. V.** A new variant of the proof of the validity of the method of division without restoration of the remainder. (Russian) *Izv. Tomsk. Politehn. Inst.* 277 (1977), 92-94, 202. (Author's summary) 58 #32042 68A10 (65G05)
- Trillas Ruiz, Enrique** On probability distribution functions. (Spanish) *Proceedings of the Ninth Annual Conference of Spanish Mathematicians (Granada, 1968)* (Spanish), pp. 211-220. Inst. "Jorge Juan" Mat., Madrid, 1971. (E. H. Lehman) 49 #11597 60E05
- Morphisms between Riesz semigroups and random metrics. (Spanish) *Proceedings of the Eleventh Annual Conference of Spanish Mathematicians (Murcia, 1970)* (Spanish), pp. 201-209. Univ. Complutense de Madrid, Madrid, 1973. (O. T. Alas) 50 #5758 54E99 (60B99)
- Notes for a study of the geometry over involutory groups. (Catalan) *Stochastica* 1 (1975/76), no. 2, 41-50. (William F. Orr) 58 #16451 06A40 (06A55, 50C25)
- Trillat, J.-J.** See **Louis de Broglie: sa conception du monde physique**, 52 #13119
- Trilling, Laurent** (with Cohen, Jacques; Wegner, Peter) A nucleus of a theorem-prover described in ALGOL-68. *Internat. J. Comput. Information Sci.* 3 (1974), 1-31. (I. Kramosil) 49 #8441 68A40
- Triltsch, Barbara** (with Triltsch, Konrad) Dr. Carl Boehm zum Gedächtnis. *Bl. Dtsch. Ges. Versicherungsmath.* 12 (1975/76), no. 2, iii-v. (Editors) 52 #10339 01A70
- Triltsch, Konrad** (with Triltsch, Barbara) Dr. Carl Boehm zum Gedächtnis. *Bl. Dtsch. Ges. Versicherungsmath.* 12 (1975/76), no. 2, iii-v. (Editors) 52 #10339 01A70
- Trim, D. W.** (with Wainwright, J.) Nonradiative algebraically special space-times. *J. Mathematical Phys.* 15 (1974), 535-546. (F. A. E. Pirani) 50 #3874 83.53
- Trimble, S. Y.** (with Shah, Swarupchand M.) Entire functions with some derivatives univalent. *Canad. J. Math.* 26 (1974), 207-213. (F. R. Keogh) 50 #2493 30A66
- (with Shah, Swarupchand M.) Univalence of derivatives of functions defined by gap power series. *J. London Math. Soc. (2)* 9 (1974/75), 501-512. (T. H. MacGregor) 50 #13520 30A64
- (with Shah, Swarupchand M.) The order of an entire function with some derivatives univalent. *J. Math. Anal. Appl.* 46 (1974), 395-409. (D. Drasin) 49 #9209 30A66
- A coefficient inequality for convex univalent functions. *Proc. Amer. Math. Soc.* 48 (1975), 266-267. (D. K. Thomas) 50 #7504 30A34
- (with Shah, Swarupchand M.) Univalence of derivatives of functions defined by gap power series. II. *J. Math. Anal. Appl.* 56 (1976), no. 1, 28-40. (T. H. MacGregor) 54 #5465 30A64 (30A32)
- (with Wright, Donald J.) Close-to-convex functions and their extreme points in Hornich space. *Monatsh. Math.* 85 (1978), no. 3, 235-244. (W. M. Causey) 58 #11355 30A32
- Trimeche, Khelifa** (with Annabi, Hamouda) Convolution généralisée sur le disque unité. *C. R. Acad. Sci. Paris Sér. A* 278 (1974), 21-24. (J. H. Neuwirth) 50 #2814 43A20
- Convergence des séries de Taylor généralisées au sens de Delsarte. *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 23, Aii, A1015-A1017. (V. Ganapathy Iyer) 52 #8365 26A93
- Trimper, S.** (with Nattermann, Th.) Die Parkettanäherung in der Theorie der Phasenübergänge. *Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe* 26 (1977), no. 2, 137-169. (From the summary) 58 #32687 82.58
- Trinajstić, N.** (with Mallion, R. B.; Schwenk, Allen J.) On the characteristic polynomial of a rooted graph. *Recent advances in graph theory (Proc. Second Czechoslovak Sympos., Prague, 1974)*, pp. 345-350. *Academia, Prague*, 1975. (Jean H. Bevis) 53 #5345 05C05
- Trinh Van Nhan** The stability of the steady motions of a satellite in the generalized restricted three-body problem. I. (Russian. English summary) *Vestnik Mosk. Univ. Ser. I Mat. Meh.* 30 (1975), no. 3, 76-82. (E. Leimanis) 52 #4755 70.34
- Trinkala, Michael** (with Inomata, Akira) Charge quantization in curved space-time. *Phys. Rev. D* (3) 18 (1978), no. 6, 1861-1867. (J. Rosen) 58 #25527 81.35
- Triolo, Livio** (with Negri, Piero) Questions of stability in a problem of bifurcation (Italian) *Pubbl. Istit. Mat. Appl. Fac. Ingr. Univ. Stud. Roma Quaderno* 1977, no. 10, 31-39. (Piero Bassanini) 58 #22841 34D05 (70.34, 76.34)
- Trione, Susana Elena** Generalizzazione di una formula del Källen. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 52 (1972), 115-119. (I. Fenyo) 48 #6854 45H05
- Soluzioni elementari causali dell'operatore di Klein-Gordon iterato. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 52 (1972), 607-610. (J. Horváth) 52 #11585 46F10 (35E05)
- On a formula of L. Schwartz. (Spanish. English summary) *Rev. Un. Mat. Argentina* 26 (1972/73), 250-254. (W. Günttinger) 51 #9701 81.46
- Sopra alcune convoluzioni divergenti. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 57 (1974), no. 3-4, 143-146 (1975). (Hans-Jürgen Glaeske) 54 #8278 46F10
- Sopra la trasformata di Hankel distribuzionale. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 57 (1974), no. 5, 316-320 (1975). (Hans-Jürgen Glaeske) 53 #6317 46F10 (44A15)
- (with González Domínguez, Alberto) Sul prodotto moltiplicativo di distribuzioni. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 57 (1974), no. 5, 321-323 (1975). (M. Balanzat) 54 #8275 46F10
- Sopra un teorema d'intercambio. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) 59 (1975), no. 5, 357-361 (1976). (G. Marinescu) 58 #7076 46F10
- On the Fourier transform of causal distributions. *Studies in Appl. Math.* 55 (1976), no. 4, 315-326. (L. Arteaga) 56 #3632 46F10
- Tripathi, A. N.** (with Newton, R. H. C.) Note on the necessary and sufficient condition for decoupling of multivariable systems. *IEEE Trans. Automatic Control* AC-16 (1971), 201-202. (E. B. Lee) 45 #9743 93B15
- Decoupling multivariable systems by state feedback: sensitivity considerations. *Proc. Inst. Elec. Engrs.* 119 (1972), 737-742. (M. D. Srinath) 51 #12369 93B35
- Tripathi, C. L.** (with Singh, Bijendra) Summability in topological semifield. I. *Tamkang J. Math.* 7 (1976), no. 2, 151-156. (Zbl 379 #40014) 58 #30060 46A99
- (with Singh, Bijendra) Summability in topological semifield. II. *Tamkang J. Math.* 8 (1977), no. 1, 1-9. (Zbl 388 #40009) 58 #30061 46A99
- Tripathi, C. S.** A class of integral transforms in two variables. *Ganita* 26 (1975), no. 2, 19-28. (N. C. Jain) 55 #13179 44A15
- Tripathi, G.** (with Pande, R. N.; Baranwal, R. L.) Integro-exponential transform. *J. Sci. Res. Banaras Hindu Univ.* 18 (1967/68), no. 1-2, 55-66. (V. M. Bhise) 47 #9189 44A15
- Tripathi, Lal Mani** (with Prasad, Kanhaiya) On the Nörlund summability of the conjugate derived series of the Fourier series. *Indian J. Pure Appl. Math.* 4 (1973), no. 1, 58-65. (B. N. Sahney) 50 #5334 42A24
- (with Prasad, Kanhaiya) Absolute Nörlund summability factors of Fourier series. *Indian J. Pure Appl. Math.* 5 (1974), 111-118. (G. Sunouchi) 51 #1256 42A28
- (with Prasad, Kanhaiya) On the uniform Nörlund summability of Legendre series. *Indian J. Pure Appl. Math.* 6 (1975), no. 6, 687-694. (H. P. Dikshit) 56 #3560 42A56 (33A65)
- (with Prasad, Kanhaiya) Absolute Riesz summability factors of a Fourier series. *Indian J. Pure Appl. Math.* 6 (1975), no. 7, 824-831. (John A. Fridy) 56 #12699 40G99 (42A24)
- On the Nörlund summability of Legendre series. *Progr. Math. (Allahabad)* 11 (1977), no. 1-2, 85-91. (S. M. Shah) 57 #7019 42A56 (33A45)
- (with Mishra, K. N.) On the uniform Nörlund summability of Legendre series. *Indian J. Pure Appl. Math.* 9 (1978), no. 2, 167-174. (H. P. Dikshit) 57 #13363 42A56
- Tripathi, P. S.** (with Mital, K. V.) Stresses and deformations in shallow spherical shells. *Indian J. Pure Appl. Math.* 2 (1971), no. 2, 349-365. (A. Sawczuk) 46 #2962 73.36
- Tripathi, R. S.** (with Sinha, B. B.) On decomposition of curvature tensor fields in recurrent Finsler spaces of second order. *Indian J. Pure Appl. Math.* 5 (1974), no. 5, 426-429. (Hassan Akbar-Zadeh) 52 #9110 53B40
- Tripathi, Ram K.** Generalized Bethe-Faddeev wave functions. *Pramāṇa* 8 (1977), no. 5, 471-477. (A. Corciovei) 58 #14594 81.35
- Tripathi, S. D.** (with Pande, H. D.) On generalized K-recurrent Finsler spaces with a symmetric non-zero recurrence tensor field. *Indian J. Pure Appl. Math.* 8 (1977), no. 3, 282-287. (H. Rund) 57 #1334 53B40
- Tripathi, S. M.** A note on the ring of quotients of a semiprime ring. *Ganita* 21 (1970), no. 1, 87-88. (Tadayuki Matsuoka) 45 #6801 13A99
- Tripathi, Shankar Sharan** (with Bhatt, Shri Nivas) On the absolute Nörlund summability of a Fourier series. *Indian J. Math.* 13 (1971), 165-175. (W. Beekmann) 48 #4611 42A28
- A note on the absolute convergence of factored infinite series. (Hindi. English summary) *Vijnana Parishad Anusandhan Patrika* 15 (1972), 205-206. (H. P. Dikshit) 48 #6753 40A05
- (with Bhatt, Shri Nivas) An aspect of local property of the absolute summability of the r^{th} derived Fourier series. *Indian J. Math.* 15 (1973), 119-124. (B. N. Sahney) 50 #7928 42A28
- Tripathi, T. P.** Double sampling for inclusion probabilities and regression method of estimation. *J. Indian Statist. Assoc.* 11 (1973), 33-46. (David Bellhouse) 51 #4490 62D05
- Tripathi, V. N.** (with Roy, S. R.) On non-static axially symmetric space-time. *General Relativity and Gravitation* 2 (1971), 121-127. (C. B. Collins) 52 #16514 83.53
- Tripathy, Kishor C.** Generalized wave equations. II. *Phys. Rev. D* (3) 2 (1970), 2955-2962. (K. J. Le Couteur) 47 #9981 81.35
- Representations of $O(3)$. *J. Mathematical Phys.* 12 (1971), 2136-2143. (V. S. Varadarajan) 46 #6737 81.22

- (with Anand, J. D.) Dynamical symmetries of the Kepler problem and of the harmonic oscillator in classical mechanics revisited. (Italian and Russian summaries) *Nuovo Cimento B* (11) **17** (1973), 71-88. (D. ter Haar) **49** #4346 7022
- (with Gupta, Rakesh; Anand, J. D.) $Q(4,2)$ symmetry and the classical Kepler problem. *J. Mathematical Phys.* **16** (1975), 1139-1144. (D. ter Haar) **51** #7407 7022
- Time graph of the unstable particle and the nonunitary representations of the Poincaré group. *Phys. Rev. D* (3) **12** (1975), no. 10, 3302-3309. (S. N. Biswas) **53** #15152 81.22
- Dynamical prequantization, spectrum-generating algebras and the classical Kepler and harmonic oscillator problems. *Group theoretical methods in physics (Fourth Internat. Colloq., Nijmegen, 1975)*, pp. 199-209. *Lecture Notes in Phys.*, Vol. 50, Springer, Berlin, 1976. (J. H. Rawnsley) **57** #17716 58F05 (81.58)
- athy, Niranjan On products of summability methods. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* **39** (1971), 4-12 (1972). (J. P. King) **49** #921 40D25
- A relation between two incomparable summability methods. *J. Indian Math. Soc. (N.S.)* **37** (1973), 303-314 (1974). (D. C. Russell) **51** #10950 (E 53) #13918 40G05
- A note on Hausdorff means. *J. Indian Math. Soc. (N.S.)* **39** (1975), 245-260 (1976). (P. D. Kathal) **54** #3216 40G05
- Errata: "A relation between two incomparable summability methods" (J. Indian Math. Soc. (N.S.) **37** (1973), 303-314 (1974)). *J. Indian Math. Soc. (N.S.)* **39** (1975), 337 (1976). (Editors) **53** #13918 40D99
- piciano, Giulia (with Baiada, Emilio) Sull'invertibilità dei limiti ripetuti di funzioni di due variabili. II. *Atti Sem. Mat. Fis. Univ. Modena* **19** (1970), no. 2, 281-310 (1971). (B. Rodríguez-Salinas) **45** #2116 26A54
- (with Baiada, Emilio) Sull'invertibilità dei limiti ripetuti di funzioni di due variabili. III. *Atti Sem. Mat. Fis. Univ. Modena* **20** (1971), no. 1, 115-145 (1972). (B. Rodríguez-Salinas) **46** #7455 26A54
- (with Baiada, Emilio) Convergenza in variazione e in lunghezza forte e debole. *Atti Sem. Mat. Fis. Univ. Modena* **22** (1973), 20-39 (1974). (U. D'Ambrosio) **50** #1080 49A99
- (with Baiada, Emilio) Calcolo dell'errore per un tipo di soluzione approssimata di un'equazione differenziale alle derivate parziali del primo ordine. *Atti Sem. Mat. Fis. Univ. Modena* **23** (1974), no. 1, 178-194 (1975). (G. C. Barozzi) **53** #14947 65P05 (35F25)
- (with Baiada, Emilio) Aree dei convessi e punti a coordinate intere. II. *Atti Sem. Mat. Fis. Univ. Modena* **24** (1975), no. 1, 180-188 (1976). (J. M. Wills) **53** #13121 10E05 (52A10)
- (with Baiada, Emilio) Area dei convessi e punti a coordinate intere. (English summary) *Boll. Un. Mat. Ital.* (4) **11** (1975), no. 3, 623-631. (J. M. Wills) **52** #3066 10E05 (52A10)
- Volume dei convessi e punti a coordinate intere. *Atti Sem. Mat. Fis. Univ. Modena* **25** (1976), no. 2, 251-262. (H. W. Guggenheimer) **57** #13695 52A15 (10E05, 52A30)
- ipodi, Angelo Sviluppi della topologia secondo Johann Benedict Listing. *Accad. Naz. Sci. Lett. Arti Modena Atti Mem.* (6) **13** (1971), 5-14. (Editors) **58** #4888 01A55 (55-03)
- L'introduzione alla topologia di Johann Benedict Listing. *Accad. Naz. Sci. Lett. Arti Modena Atti Mem.* (6) **13** (1971), 15-26. (J. S. Joel) **57** #9422 01A55 (55-03)
- Dell'Analysis situs di Klein alla topologia contemporanea. *Physis—Riv. Internaz. Storia Sci.* **15** (1973), 424-431. (Editors) **58** #27086 01A60
- ipp, C. E. (with Meek, D. S.) The classification of "adventitious" quadrilaterals. *Ars Combinatoria* **2** (1976), 219-234. (Stanley E. Payne) **56** #159 05B25
- (with Foster, W.; Meek, D. S.) Quadrilaterals whose angles are commensurable with π . *Utilitas Math.* **11** (1977), 331-338. (C. Ballester Pereyra) **56** #5308 05A15 (50B10)
- ipp, John C. On constructing multiplications on Banach spaces. *J. Math. Anal. Appl.* **56** (1976), no. 2, 438-451. (E. J. Barbeau) **54** #5833 46H05
- ippe, Anthony P. See *Transactions: Conference of Army Mathematicians*, **49** #4736
- ippi, R. R. Two lemmas on the form of a dynamic programming solution to a capital investment problem. *J. Optimization Theory Appl.* **13** (1974), 152-158. (F. Giannessi) **50** #6443 90A15
- irogoff, K. N. See Boltjanskii, V. G., **50** #5567
- iscari, Dionisio See *Integral curves and minimal surfaces*, **48** #12194
- rmes Trismegistos See *Hermes Trismegistos*
- ithart, Jörg Beiträge zur Theorie der Iteration von biholomorphen Kontraktionen. *Ber. Math. Statist. Sekt. Forschungszentrum Graz No. 73* (1977), iii + 49 pp. (Author's summary) **58** #28265 22E05 (32A05)
- ivedi, H. T. (with Sharma, V. K.) On the construction of group divisible incomplete block designs. (French summary) *Canad. J. Statist.* **3** (1975), no. 2, 285-288. (K. Vijayan) **53** #10611 05B05 (62K10)
- ivedi, Hari Karan Nath (with Upadhyay, M. D.) On some special curves. *Univ. Lisboa Revista Fac. Ci. A* (2) **13**, 215-227 (1970/71). (K. K. Gorowara) **46** #9871 53A05
- (with Rastogi, S. C.) On neo-geodesics in a Riemannian space. II. *Acta Mexicana Ci. Tecn.* **5** (1971), 12-21. (T. K. Pan) **46** #6213 53B20
- Some special curves in a hypersurface of a Riemannian space. *Ganita* **22** (1971), no. 2, 53-60. (M. Kurita) **47** #978 53B25
- On curvilinear congruences. *Univ. Lisboa Revista Fac. Ci. A* (2) **14**, 79-95 (1971/72). (O. Giering) **47** #7620 53A25
- (with Rastogi, S. C.) Some properties of relative parallelism. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 25-31. (T. K. Pan) **49** #7938 53B25
- A note on Bertrand curves. *Univ. Nac. Tucumán Rev. Ser. A* **21** (1971), 277-282. (H. R. Müller) **50** #3124 53A05
- (with Rastogi, S. C.) On congruences of curves in a Riemannian space. *C. R. Acad. Bulgare Sci.* **25** (1972), 1315-1318. (Koichi Ogiue) **47** #7629 53B20
- (with Sharma, I. D.) On the Einstein's law of gravitation in Finsler space. *Ganita* **23** (1972), no. 1, 13-18. (H. Rund) **47** #6261 83.53 (53B40)
- (with Rastogi, S. C.) On generalized curves in a Finsler space. *Indian J. Pure Appl. Math.* **3** (1972), no. 6, 1058-1063. (R. B. Misra) **50** #1158 53B40
- (with Rastogi, S. C.) A study of certain curves in a Riemannian space. *Math. Balkanica* **2** (1972), 205-211. (R. B. Misra) **48** #12362 53B25
- (with Rastogi, S. C.) Some properties of the curve of intersection of two surfaces. *Math. Balkanica* **2** (1972), 256-262. (R. B. Misra) **48** #12327 53A05
- A problem on some special curves. I, II, III. *Univ. Lisboa Revista Fac. Ci. A* (2) **14**, 209-220, 221-226, 227-235 (1972/73). (Punyapat Jha) **49** #6051 53A25
- Scurve of a congruence of curves in a Riemannian space. *Univ. Lisboa Revista Fac. Ci. A* (2) **14**, 273-276 (1972/73). (H. D. Pande) **49** #6044 53A05
- (with Rastogi, S. C.) On neo-geodesics in a Riemannian space. III. *Acta Mexicana Ci. Tecn.* **7** (1973), 1-13. (Koichi Ogiue) **51** #8973 53B20
- (with Rastogi, S. C.) On some special curves on the surface of reference of a rectilinear congruence. II. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **19** (1973), no. 2, 419-426. (Koichi Ogiue) **53** #1436 53A05
- (with Rastogi, S. C.) On new definitions and interpretations of union, hyperasymptotic and hypernormal curves in the three-dimensional Euclidean space. *Ann. Polon. Math.* **28** (1973), 265-273. (H. R. Müller) **49** #6045 53A05
- (with Rastogi, S. C.) On some generalisations of the first curvature vector in a hypersurface of a Riemannian space. *C. R. Acad. Bulgare Sci.* **26** (1973), 7-10. (Koichi Ogiue) **47** #7631 53B25
- (with Rastogi, S. C.) On some special curves on the surface of reference of a rectilinear congruence. *C. R. Acad. Bulgare Sci.* **26** (1973), 299-302. (Koichi Ogiue) **47** #7609 53A05
- (with Rastogi, S. C.) Pseudo-lines of curvature. Collection of articles dedicated to the memory of the Balkan mathematicians Constantin Carathéodory, Josip Plemelj, Dimitrie Pompeiu and Gheorghe Ţiţeica in connection with the first centenary of their birth. *Math. Balkanica* **3** (1973), 554-558. (K. K. Gorowara) **50** #11041 53A05
- (with Rastogi, S. C.) ϕ -hyper-asymptotic curves in an Euclidean space. *Ranchi Univ. Math. J.* **4** (1973), 1-6. (Aristide Sanini) **50** #5643 53A05
- (with Rastogi, S. C.) ϕ -hypernormal curves in an Euclidean space. *Ranchi Univ. Math. J.* **4** (1973), 7-10. (Aristide Sanini) **50** #5644 53A05
- (with Rastogi, S. C.) On some new curves in a Riemannian space. *Bull. Calcutta Math. Soc.* **66** (1974), 1-7. (M. C. Chaki) **51** #11321 53B20
- (with Rastogi, S. C.) A study of congruences of curves in a Finsler space. *Ganita* **25** (1974), no. 1, 19-28. (A. Kawaguchi) **54** #6013 53B40
- (with Awasthi, G. D.) On special curves in a Riemannian manifold. *Ranchi Univ. Math. J.* **6** (1975), 19-26. (Authors' summary) **58** #30848 53B20
- (with Rastogi, S. C.; Awasthi, G. D.) On associative curves. I. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 1-2, 55-61. (L. M. Kelly) **54** #13737a 53A05
- (with Rastogi, S. C.) On associative curves. II. *Acta Math. Acad. Sci. Hungar.* **27** (1976), no. 1-2, 63-70. (L. M. Kelly) **54** #13737b 53A05
- (with Agrawal, R. C.) On relative motions in a Riemannian space. *Demonstratio Math.* **10** (1977), no. 3-4, 605-615. (M. C. Chaki) **57** #13748 53B20
- Trivedi, Kishor S. Preparing and applications to array algorithms. *IEEE Trans. Computers* **C-25** (1976), no. 9, 915-921. (Author's summary) **58** #13881 68A05
- (with Ercegovic, Miloš D.) On-line algorithms for division and multiplication. *IEEE Trans. Computers* **C-26** (1977), no. 7, 681-687. (James W. Snively, Jr.) **56** #10128 68A10
- Trivedi, S. J. (with Patel, H. I.) An application of a multivariate extended Poisson distribution in 2×2 contingency tables. *J. Indian Statist. Assoc.* **7** (1969), 136-145. (M. A. Hamdan) **48** #12690 62F05
- Trivedi, T. N. Certain triple series equations involving Laguerre polynomials. *Proc. Nat. Acad. Sci. India Sect. A* **41** (1971), 7-12. (K. N. Srivastava) **46** #9668 45F05 (33A65)
- (with Dwivedi, A. P.) On dual integral equations involving G -functions. *Proc. Nat. Acad. Sci. India Sect. A* **41** (1971), 77-86. (S. D. Bajpai) **46** #9666 (E 56) #3594 45F05
- (with Dwivedi, A. P.) Quadruple series equations involving Jacobi polynomials. *Proc. Nat. Acad. Sci. India Sect. A* **42** (1972), 203-208. (H. E. Fettis) **49** #1035 45F10 (33A65)
- (with Dwivedi, A. P.) Quadruple series equations involving Laguerre polynomials. C. N. Srinivasengar dedication volume, II. *Progr. Math. (Allahabad)* **6** (1972), no. 2, 1-6. (V. L. Deshpande) **50** #912 45F10
- (with Dwivedi, A. P.) Some triple series equations involving generalized Laguerre polynomials. *Indian J. Pure Appl. Math.* **5** (1974), no. 7, 674-681. (K. N. Srivastava) **54** #5760 45F10
- (with Dwivedi, A. P.) Dual series equations involving Jacobi and Laguerre polynomials. *Nederl. Akad. Wetensch. Proc. Ser. A* **77** = *Indag. Math.* **36** (1974), 203-210. (S. L. Kalla) **50** #2836 45F10
- (with Dwivedi, A. P.) Quadruple series equations involving generalised Laguerre polynomials. *J. Mathematical and Physical Sci.* **9** (1975), 83-91. (K. N. Srivastava) **51** #8765 45F10
- (with Dwivedi, A. P.) Quadruple series equations involving generalized-Bateman K -functions. *Labdeo—J. Sci. Tech. Part A* **13** (1975), no. 3-4, 168-174 (1978). (Authors' summary) **58** #6396 33A65
- (with Dwivedi, A. P.) Dual series equations involving Neumann series. *Nederl. Akad. Wetensch. Proc. Ser. A* **78** = *Indag. Math.* **37** (1975), 34-38. (R. A. Askey) **52** #1211 45F10
- (with Dwivedi, A. P.) Triple series equations involving generalized Bateman K -function. *Indian J. Pure Appl. Math.* **7** (1976), no. 3, 320-327. (V. L. Deshpande) **58** #6981 45F10
- (with Dwivedi, A. P.) Triple and quadruple integral equations occurring in diffraction theory. *Proc. Indian Acad. Sci. Sect. A* **85** (1977), no. 4, 179-185. (S. L. Kalla) **56** #996 45F10
- See also Banerji, P. K.; et al., **56** #3594
- Trivedi, V. K. (with Kumar, I. J.) On a Mellin transform technique for the asymptotic solution of a nonlinear Volterra integral equation. *Proc. Roy. Soc. London Ser. A* **352** (1977), no. 1670, 339-349. (Jorgen Frederiksen) **55** #8713 45D05
- Trivedi, V. M. (with Misra, M.) Some inhomogeneous perfect fluid models in general relativity. *Vidya B* **16** (1973), no. 2, 87-97. (From the introduction) **57** #11620 83.53
- (with Patel, L. K.) Some axially symmetric zero mass meson solutions of Einstein's

- equations. *J. Austral. Math. Soc. Ser. B* **19** (1975/76), no. 2, 140-145. (Shin-ichi Kitamura) **56** #4636 83.35
(with Patel, L. K.) On axially symmetric electrovac universes. *Vidya B* **18** (1975), no. 1, 127-131. (Authors' summary) **57** #11629 83.53
- Trivoženko, B. E.** (with Poddubnyi, V. V.) Some statistical properties of multidimensional doubly stochastic Poisson processes. (Russian) *Mat. Sb. (Tomsk) Vyp.* **2** (1975), 178-183. **56** #16784 60G55
(with Poddubnyi, V. V.) Regression estimation of the correlation coefficient of the intensities of doubly stochastic Poisson processes. (Russian) *Mat. Sb. (Tomsk) No. 2* (1975), 184-193. (Not reviewed) **62M99**
- Trjatorukov, A. I.** Behavior of the approximate solution of a degenerate quadratic programming problem. (Russian) *Ekonom. i Mat. Metody* **12** (1976), no. 1, 187-189. (Jürgen Gaddat) **56** #7986 90C20
- Trjitzinsky, W. J.** Totalisations abstraites dans espaces vectoriels. *Ann. Mat. Pura Appl.* (4) **82** (1969), 275-379. (Author's summary) **55** #8274 26A39 (46G99)
Théorie métrique abstraite sans topologie. *Ann. Mat. Pura Appl.* (4) **97** (1973), 303-388. (A. Appert) **49** #10846 28A10
- Trjupina, L. M.** (with Talanova, Z. P.) A variant of the proof of a certain theorem of M. Riesz. (Russian) *Sverdlovsk. Gos. Ped. Inst. Učen. Zap. Sb.* **125** Mat. No. 4 (1971), 81-85. (S. Aljančič) **52** #11452 42A24
- Trkalanov, K. D.** Strongly homomorphic images of a partially ordered direct product of two groups. (Russian. Bulgarian and German summaries) *Visš Ped. Inst. Plovdiv Naučn. Trud.* **8** (1970), no. 1, 25-31. (F. Šik) **48** #8334 06A55
A solution of the inequality problem in a certain class of partially ordered semigroups by the method of Osipova. (Russian. French summary) *Visš Ped. Inst. Plovdiv Naučn. Trud.* **9** (1971), no. 2, 37-43. (B. Ponděliček) **45** #5047 06A50 (20M10)
(with Želeva, St.) On the problem of inequality for partially ordered semigroups. (Bulgarian. Russian and German summaries) *Visš Ped. Inst. Plovdiv Naučn. Trud.* **9** (1971), no. 3, 25-32. (B. Ponděliček) **45** #5048 06A50
(with Želeva, St.) On the problem of inequality for partially ordered semigroups. II. (Bulgarian. Russian and German summaries) *Visš Ped. Inst. Plovdiv Naučn. Trud.* **10** (1972), no. 2, 9-14. (B. Ponděliček) **48** #200 06A50
On the recognition of the applicability of a certain algorithm for divisibility. (Bulgarian. Russian and French summaries) *Plovdiv. Univ. Naučn. Trud.* **12** (1974), no. 1, 163-168. (L. Bokut') **53** #5281 02F47 (20M05)
The divisibility and identity problems in semigroups with a left nonreducible defining relation. (Bulgarian. Russian and German summaries) *Mathematics and mathematical education (Proc. Third Spring Conf. Bulgar. Math. Soc., Burgas, 1974)* (Bulgarian), pp. 282-285, B"lgar. Akad. Nauk, Sofia, 1976. (See Zbl **368** #20038) 20M10
On the σ -isomorphism and broken-line problems, and the applicability of the algorithm for divisibility. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1976**, no. 6, 502-505, 574. (L. Bokut') **54** #7666 20M05
- Trlifaj, L.** New relations for the general oscillator brackets. *Czechoslovak J. Phys.* **24B** (1974), 471-481. **53** #12279 81.33
- Trlifaj, Ladislav** Asymptotic ratios of Bessel functions of purely imaginary argument. (Czech summary) *Apl. Mat.* **19** (1974), 1-6. (C. J. Bouwkamp) **49** #5421 33A40
Schrödinger eigenvalue problem for the Gaussian potential. (Czech and loose Russian summaries) *Apl. Mat.* **22** (1977), no. 3, 189-198. (Anne-Marie Berthier) **56** #6093 35J10
- Trnková, Věra** See Sedivá-Trnková, Věra
- Trnovský, Juraj** Spectral decomposition. (Slovak. English summary) *Ekonom.-Mat. Obzor* **8** (1972), 384-401. (M. Maňas) **47** #2806 65F99 (90A99)
- Troallic, Jean-Pierre** (with Hansel, Georges) Démonstration du théorème de point fixe de Ryll-Nardzewski par extension de la méthode de F. Hahn. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **282** (1976), no. 16, A857-A859. (Kok-Keong Tan) **54** #8602 54H25 (47H10)
- Troccoli, Joseph A.** \mathbb{F} -projectors of finite solvable groups. *Proc. Amer. Math. Soc.* **48** (1975), 33-38. (A. Mann) **53** #10919 20D10
- Trocenko, A. A.** (with Poljakov, V. E.) Time-valued Boolean functions of n variables. (Russian) *Time-valued Boolean functions and their application (Rep. Sem. Cybernetics, No. 63)* (Russian), pp. 3-12, 24. Izdat. "Štincea", Kishinev, 1974. (Authors' summary) **54** #7132 94A20
- Trocenko, V. A.** See Mathematical physics, **48** #5768
- Troch, Inge** The evaluation of the domain of attraction of nonlinear control systems with hybrid computing systems. *Proceedings of the IFAC Fifth World Congress (Paris, 1972), Part 4: Education, feedback, regulators, linear and nonlinear systems, identification, differential games, discrete and stochastic systems, Paper No. 32.1, 5 pp.* *Internat. Fed. Automat. Control, Düsseldorf, 1971* [1972]. (A. M. Krall) **50** #13768 34D99
Über die Stabilität der Ruhelage bei Differentialgleichungen mit quasihomogenen rechten Seiten. (English summary) *Numer. Math.* **18** (1971/72), 204-212. (J. R. Cannon) **45** #8948 34D99
A note on complete controllability. *SIAM J. Control* **9** (1971), 543-546. (V. Blagodatskih (RŽMAT 1972 #7 V506)) **51** #6544 49E15
Bemerkungen zur n -Beobachtbarkeit und n -Steuerbarkeit. (English and Russian summaries) *Z. Angew. Math. Mech.* **51** (1971), 255-264. (E. B. Lee) **45** #9744 93B05
Über die Bedeutung von Beobachtbarkeits- und Steuerbarkeitsindex. (English and Russian summaries) *Z. Angew. Math. Mech.* **51** (1971), 265-269. (E. B. Lee) **46** #6868 93B05
Regelungsmathematik Problemstellungen und Methoden im Hinblick auf Anwendungen. Steiermärkisches Mathematisches Symposium, 9. (Graz, 1977) *Ber. Math.-Statist. Sek. Forschungszentrum Graz No. 74-79* (1977), 79 pp. (J. S. Joel) **57** #9148 93-01
Geometrische Eigenschaften von Ljapunov-Funktionen. *Z. Angew. Math. Mech.* **58** (1978), no. 6, 180-181. (Wolfgang Hahn) **58** #11715 34D20
- Trochu, François** (with Defour, Michel) Approximation des équations différentielles et problèmes de commande optimale. *Compte Rendu du Deuxième Colloque CRM-IRIA (Centre Recherche Math., Univ. Montréal, Montréal, Que., 1976).* *Ann. Sci. Math.* Québec **1** (1977), no. 2, 211-225. (J. Švejda) **58** #2562 49D15 (93C15)
(with Delfour, Michel C.) Discontinuous finite element methods for the approximation of optimal control problems governed by hereditary differential system. *Distributed parameter systems: modelling and identification (Proc. IFIP Working Conf. Rome, 1976)*, pp. 256-271. *Lecture Notes in Control and Informat. Sci., Vol. 1, Springer, Berlin, 1978.* (From the introduction) **58** #19251 65P05 (65N30, 93C99)
- Trockel, Walter** A limit theorem on the core. *J. Math. Econom.* **3** (1976), no. 3, 247-250. (Author's summary) **57** #15353 90A15
- fz. de Trocóniz, Antonio** See Fz. de Trocóniz, Antonio
- Troelstra, A. S.** Notions of realizability for intuitionistic arithmetic and intuitionistic arithmetic in all finite types. *Proceedings of the Second Scandinavian Logic Symposium (Oslo, 1970)*, pp. 369-405. *Studies in Logic and the Foundations of Math., Vol. 1, North-Holland, Amsterdam, 1971.* (D. Nelson) **49** #23 02C15
An addendum: "Formal systems for some branches of intuitionistic analysis". *Arch. Math. Logic* **3** (1971), no. 4, 437-439. (J. R. Moschovakis) **45** #1729 02C15
Notes on intuitionistic second order arithmetic. *Cambridge Summer School Mathematical Logic (Cambridge, 1971)*, pp. 171-205. *Lecture Notes in Math., Vol. 33, Springer, Berlin, 1973.* (D. Nelson) **51** #81 02E05 (02D99)
Intuitionistic formal systems. *Metamathematical investigation of intuitionistic arithmetic and analysis*, pp. 1-96. *Lecture Notes in Mathematics, Vol. 344, Springer, Berlin, 1973.* (V. P. Orekov) **56** #2792 02C15 (02D99)
Models and computability. *Metamathematical investigation of intuitionistic arithmetic and analysis*, pp. 97-174. *Lecture Notes in Mathematics, Vol. 344, Springer, Berlin, 1973.* (V. P. Orekov) **56** #2793 02C15 (02E05, 02D99)
Realizability and functional interpretations. *Metamathematical investigation of intuitionistic arithmetic and analysis*, pp. 175-274. *Lecture Notes in Mathematics, Vol. 344, Springer, Berlin, 1973.* (V. P. Orekov) **56** #2794 02C15 (02D99)
Normalization theorems for systems of natural deduction. *Metamathematical investigation of intuitionistic arithmetic and analysis*, pp. 275-323. *Lecture Notes in Mathematics, Vol. 344, Springer, Berlin, 1973.* (V. P. Orekov) **56** #8333 02D99 (02C15)
★Corrections and additions to: *Metamathematical investigation of intuitionistic arithmetic and analysis* (Lecture Notes in Math., Vol. 344, Springer, Berlin, 1973). Report 74-16. *Mathematisch Instituut, Universiteit van Amsterdam, Amsterdam, 1974*. ii + 26 pp. (V. P. Orekov) **56** #8334 02D99 (02C15, 02H10)
Non-extensional equality. Collection of articles dedicated to Andrzej Mostowski on his sixtieth birthday, VIII. *Fund. Math.* **82** (1974/75), 307-322. (Horst Luckhardt) **51** #7837 02D99 (02C15)
Note on the fan theorem. *J. Symbolic Logic* **39** (1974), 584-596. (Horst Luckhardt) **52** #5371 02C15
Markov's principle and Markov's rule for theories of choice sequences. *FSILC Proof Theory Symposium (Proc. Internat. Summer Inst. and Logic Colloq., Kiel, 1974)*, pp. 370-383. *Lecture Notes in Math., Vol. 500, Springer, Berlin, 1975.* (R. E. Vesley) **54** #9982 02C15 (02D05)
★Choice sequences. A chapter of intuitionistic mathematics. *Oxford Logic Guides* Clarendon Press, Oxford, 1977. ix + 170 pp. (Dirk van Dalen) **57** #15979 02C15 (02E05)
Axioms for intuitionistic mathematics incompatible with classical logic. *Logic foundations of mathematics and computability theory (Proc. Fifth Internat. Congr. Logic Methodology and Philos. of Sci., Univ. Western Ontario, London, Ont., 1975), Part I*, pp. 59-84. *Univ. Western Ontario Ser. Philos. Sci., Vol. 9, Reidel, Dordrecht, 1977.* (Carlo Cellucci) **57** #12185 02C15 (02E05)
Some models for intuitionistic finite type arithmetic with fan functional. *J. Symbolic Logic* **42** (1977), no. 2, 194-202. (Dietmar Soyka) **58** #10334 02C15 (02D99)
Special instances of generalized continuity which are conservative over intuitionistic arithmetic. *Nederl. Akad. Wetensch. Proc. Ser. A* **80** = *Indag. Math.* **39** (1977), no. 1, 55-65. (Carlo Cellucci) **55** #5395 02C15 (02E05)
A note on non-extensional operations in connection with continuity and recursiveness. *Nederl. Akad. Wetensch. Proc. Ser. A* **80** = *Indag. Math.* **39** (1977), no. 5, 455-462. (Carlo Cellucci) **57** #12186 02C15 (02D99)
Some remarks on the complexity of Henkin-Kripke models. *Nederl. Akad. Wetensch. Indag. Math.* **40** (1978), no. 2, 296-302. (B. van Rootselaar) **58** #21575 02H10
See also Metamathematical investigation of intuitionistic arithmetic and analysis **48** #3699; **Handbook: Mathematical logic**, **56** #15351 and **Handbook: Mathematical logic**, **58** #10343
- Troepolskaja, O. V.** (with Kiselev, O. M.) The flow of a heavy capillary fluid with a free surface. (Russian) *Trudy Sem. Kraev. Zadačam Vyp.* **13** (1976), 142-150. (From the text) **58** #25311 76.30
- Troesch, Albert** Sur l'équivalence fonctionnelle de certains prolongements de G -structures. *C. R. Acad. Sci. Paris Sér. A* **278** (1974), 563-566. (J. P. Wilson) **50** #3141 53C10
(with Urlacher, Émile) Perturbations singulières et analyse non classique. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 23, A1109-A1111. (Authors' summary) **58** #11658 34C15
- Troesch, B. Andreas** (with Troesch, Hans R.) A remark on the sloshing frequencies for a half-space. (German summary) *Z. Angew. Math. Phys.* **23** (1972), 703-711. (Authors' summary) **50** #6304 76.35
Upper bounds for the fundamental eigenvalue for a domain of unknown shape. *J. Optimization Theory Appl.* **12** (1973), 512-526. (H. F. Weinberger) **50** #2711 35P15
Elliptical membranes with smallest second eigenvalue. *Math. Comp.* **27** (1973), 767-772. (Radu Bădescu) **54** #9282 73.65
(with Troesch, Hans R.) Eigenfrequencies of an elliptic membrane. *Math. Comput.* **27** (1973), 755-765. (Radu Bădescu) **54** #9281 73.65
Sloshing frequencies in a half-space by Kelvin inversion. *Pacific J. Math.* **47** (1973), 539-552. (T. W. Ting) **48** #5504 76.49
Proof of a conjecture on sloshing frequencies in a half-space. (German summary) *Z. Angew. Math. Phys.* **25** (1974), 655-657. (Author's introduction) **50** #6305 76.35
A simple approach to a sensitive two-point boundary value problem. *J. Computational Phys.* **21** (1976), no. 3, 279-290. (Frank G. Hagin) **54** #4121 65L10 (34B15)

- See also **Proceedings: Conference on the Numerical Solution of Ordinary Differential Equations**, 49 #4257
- ch. Hans R.** (with Troesch, B. Andreas) A remark on the sloshing frequencies for a half-space. (German summary) *Z. Angew. Math. Phys.* **23** (1972), 703-711. (Authors' summary) **50** #6304 7635
- (with Troesch, B. Andreas) Eigenfrequencies of an elliptic membrane. *Math. Comput.* **27** (1973), 755-765. (Radu Bădescu) **54** #9281 7365
- čičuk, R. N.** A method for the construction of automata that realize a given set of experiments. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 1, 90-93. Siegm. Gerber) **54** #4196 68A25 (94A30)
- (with Vavilov, E. M.) Synthesis of automata that are given by a system of integer-valued functions. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 20-26. (Authors' summary) **58** #15747 94A30
- imov, A. I.** (with Sedunov, E. V.; Jakovleva, N. G.) Construction of optimal randomized plans of experiments by linear programming methods. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 82-87. (Editors) **58** #20481 90C50 90C05
- imov, A. T.** (with Čabdarov, Š. M.) Poly-Gaussian representations of arbitrary noise and the reception of discrete signals. *Radiotekh. i Elektron.* **20** (1975), no. 4, 734-745 (Russian); translated as *Radio Engng. Electron. Phys.* **20** (1975), no. 4, 52-60. (Authors' summary) **56** #11474 94A05
- imov, E. I.** (with Volodin, I. N.) Randomization of the sample size when distinguishing between two hypotheses. (Russian) *Probabilistic methods and cybernetics*, Vol. 12-13, pp. 171-206. Kazan. Univ., Kazan, 1976. (L. Gaľčuk (RŽMat 1978 #10 V100)) **58** #31532 62F05 (62L10)
- imov, I. B.** (with Žaičev, V. M.; Kirovov, N. I.; Obrosof, I. I.) Principles for the construction of error-correcting codes in a system of residue classes. (Russian) *New elements of systems of automation, remote control and computer technology*, No. 2 (Russian), pp. 153-161, 176. Izdat. "Vyššaja Škola", Minsk, 1972. (R. N. Goss) **54** #12362 94A10
- imov, M. Ju.** Definability in algebraically closed systems. (Russian) *Algebra i Logika* **14** (1975), no. 3, 320-327, 369. (O. V. Belegadek) **55** #2559 02H15
- imov, N. N.** (with Mokriński, A. M.) Two fast-multiplication algorithms for computers. *Avtomat. i Telemekh.* **1969**, no. 1, 114-120 (Russian. English summary); translated as *Automat. Remote Control* **1969**, no. 1, 96-101. **56** #10125 68A10
- imov, O. E.** (with Starkov, M. A.; Frizen, D. G.) An automaton that counts planar objects. *Avtomat. i Telemekh.* **1976**, no. 6, 134-140 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 6, part 2, 927-933. (Hidemitsu Ogawa) **55** #7634 94A30
- imov, P. I.** Composition tests for the existence of subgroups and normal subgroups in groups. (Russian) *Trudy Tomsk. Gos. Univ.* **163** (1963), 73-74. (G. Pic) **52** #14068 20F15
- Tests for the nonsimplicity of finite groups. (Russian) *Trudy Tomsk. Gos. Univ.* **163** (1963), 75-77. (Sergei A. Syskin) **52** #10884 20D99
- See also **Group theory and certain questions of algebra**, 55 #2429
- imov, V. A.** (with Kuperštov, V. L.) Algorithm for the analysis of the structure of connection matrices. *Avtomat. i Telemekh.* **1975**, no. 11, 170-180 (Russian. English summary); translated as *Automat. Remote Control* **36** (1975), no. 11, part 2, 1906-1916. (Authors' summary) **55** #10060 92A10
- (with Kuperštov, V. L.; Mirkin, B. G.) The sum of internal couplings as an index of classification quality. *Avtomat. i Telemekh.* **1976**, no. 3, 133-141 (Russian. English summary); translated as *Automat. Remote Control* **37** (1976), no. 3, part 2, 433-440. (William D. Ray) **55** #1626 62H30
- imov, V. I.** (with Beljaev, V. V.; Seseikin, N. F.) Growth functions of semigroups and loops. (Russian) *Ural. Gos. Univ. Mat. Zap.* **10** (1977), no. 3 Issled. po Sovremen. Algebre, 3-8, 215. (Petr Němec) **58** #933 20M05 (20N05)
- imov, V. K.** Redundancy of universal coding of arbitrary Markov sources. (Russian) *Problemy Peredači Informacii* **10** (1974), no. 4, 16-24. (Author's summary) **58** #15703 94A15
- Universal coding of Bernoulli sources that is uniform with respect to output. (Russian) *Diskret. Analiz No. 29 Metody Diskret. Anal. v Teorii Kodov i Shem* (1976), 87-100, 103. (Author's summary) **58** #4621 94A10
- (with Kričevskii, R. E.) Optimal coding of unknown and inaccurately known sources. *Topics in information theory (Second Colloq., Keszthely, 1975)*, pp. 425-430. *Colloq. Math. Soc. János Bolyai*, Vol. 16, North-Holland, Amsterdam, 1977. (Giuseppe Longo) **58** #33527 94A15
- imov, V. M.** (with Timan, A. F.) ★Введение в теорию гармонических функций. (Russian) [Introduction to the theory of harmonic functions] Izdat. "Nauka", Moscow, 1968. 207 pp. (A. Borzymowski) **47** #3691 31-02
- A remark on a certain result of V. P. Motornyi. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 5, 708-709, 719. (M. Tomić) **53** #13975 42A16
- (with Burdjuk, V. Ja.) Generalization of the results of Gilmore and Gomory on the solution of the traveling salesman problem. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1976**, no. 3, 16-22 (Russian); translated as *Engng. Cybernetics* **14** (1976), no. 3, 12-18 (1977). (A. Aganbegian) **58** #20401 90C05
- (with Timan, A. F.) The exact constants in certain inverse theorems for approximations by trigonometric polynomials. (Russian) Presented at the International Conference on the Theory of Approximation of Functions (Kaluga, 1975). *Mat. Zametki* **20** (1976), no. 5, 787-792. (W. R. Madych) **56** #9166 42A08
- imov, V. P.** (with Krein, S. G.) Noetherian operators that depend holomorphically on parameters. (Russian) *A collection of articles on function spaces and operator equations (Proc. Sem. Functional Anal., Math. Fac., Voronezh State Univ., Voronezh, 1970) (Russian)*, pp. 63-85. Voronež. Gos. Univ., Voronezh, 1970. (Alexander A. Pankov) **55** #3839 47A55 (47B30, 32A10)
- (with Krein, S. G.) The multiplicity of a characteristic point of the holomorphic operator-function. (Russian) *Mat. Issled.* **5** (1970), no. 4(18), 105-114. (E. Gerlach) **47** #867 47A65 (47B30)
- The characteristic points of Fredholm operator valued functions. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp.* **6** (1972), 94-97. (Alexander A. Pankov) **56** #9567 58C10 (47A10, 47B30)
- Characteristic points of Fredholm operator-valued functions. (Russian) *Voronež. Gos. Univ. Trudy Naučn.-Issled. Inst. Mat. VGU No. 14 Sb. Statei Teor. Operator. Uravnenii* (V. V. Imbeddings of finite groups in compact Lie groups by means of regular elements. (Russian) *Dokl. Akad. Nauk SSSR* **226** (1976), no. 4, 785-786. (M. I. Kabenjuk) **55** #12865 22E15
- Trofimova, G. V.** Contravariant absolutes of semi-non-Euclidean spaces. (Russian) *Collection of articles on differential geometry (Russian)*, pp. 120-132. Kalinin. Gos. Univ., Kalinin, 1974. (M. Kucharszewski) **54** #8476 53A20
- The application of tensor algebra to the problem of obtaining invariants in certain spaces with a degenerate absolute. Semi-Riemannian spaces of a special form (Russian) *Collection of articles on differential geometry (Russian)*, pp. 133-144. Kalinin. Gos. Univ., Kalinin, 1974. (M. Kucharszewski) **54** #8477 53A20
- (with Giršovič, M. V.; Pankratov, A. A.) ★Общая теория квадрик (кривых и поверхностей 2-го порядка). (Russian) [General theory of quadrics (of second order curves and surfaces)] A textbook. Kalinin. Gosudarstv. Univ., Kalinin, 1975. 69 pp. (Editors) **52** #4095 50-01 (15-01)
- See also **Collection: Differential geometry**, 53 #3902
- Trofimova, O. E.** See **Control of complex technological and economic systems**, 56 #2486
- Troger, H.** Ein Beitrag zum Durchschlagen einfacher Strukturen. (English summary) *Acta Mech.* **23** (1975), no. 3-4, 179-191. (P. Villaggio) **53** #9829 7358
- Bemerkungen zum Begriff "strukturelle Stabilität". Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik (Göttingen, 1975). *Z. Angew. Math. Mech.* **56** (1976), no. 3, T78-T79. (J. S. Joel) **57** #3540 34D30 (58F10)
- Trohimčuk, Ju. Ju.** On a generalization of Liouville's theorem. (Russian) *Seventh Mathematical Summer School (Kaciveli, 1969)*, pp. 382-391. *Izdanie Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1970. (J. Ławrynowicz) **51** #10592 30-02
- Differential properties of real and complex functions. (Russian) *Tenth Mathematical School (Summer School, Kaciveli/Nalchik, 1972) (Russian)*, pp. 330-360. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (G. R. Belickii) **58** #2862 58C25
- See also **American Mathematical Society Translations, Ser. 2**, 48 #4; **Summer School: Mathematical**, 50 #12549 and **Proceedings: Mathematical Summer School**, 50 #12550
- Trohimenko, V. S.** The algebras of multiplace partial transformations. (Russian) *Works of young scientists: mathematics and mechanics*, No. 2 (Russian), pp. 136-142. Izdat. Saratov. Univ., Saratov, 1969. (M. Kolibiar) **51** #3033 08A25
- Algebras of reversible multiplace functions. (Russian) *Theory of semigroups and its applications*, No. 2 (Russian), pp. 75-84. Izdat. Saratov. Univ., Saratov, 1971. (Rainer Miltz) **53** #2807 08A25
- Abstract characterizations of certain algebras of multiplace functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1971**, no. 4(107), 87-95. (R. S. Pierce) **45** #1814 08A10
- A characterization of Δ -algebras of multiplace functions. (Russian) *General systems theory (Russian)*, pp. 95-104. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1972. (B. Csákány) **49** #2494 08A05
- Restrictive algebras of multiplace functions. (Ukrainian. English and Russian summaries) *Dopovidi Akad. Nauk Ukrain. SSR Ser. A* **1972**, 340-342, 382. (B. M. Schein (Šain)) **46** #3420 08A25 (20N15)
- (with Garvac'kii, V. S.) A semiadacency relation of certain transformation semigroups. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1972**, no. 2(117), 23-32. (R. Renne) **48** #455 20M20
- The algebras of binary operations. (Russian) *Mat. Issled.* **7** (1972), no. 2(24), 253-261, 294. (V. Havel) **47** #4896 08A05
- Positional systems of multiplace functions. (Russian) *Studies in the theory of quasigroups and loops (Russian)*, pp. 165-174, 200. Izdat. "Štiinca", Kishinev, 1973. (B. M. Schein (Šain)) **49** #10811 08A25 (20N15)
- Menger's function systems. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1973**, no. 11(138), 71-78. (B. M. Schein (Šain)) **49** #450 20N15
- Semiadacency relation in algebras of multiplace functions. (Russian) *Theory of semigroups and its applications*, No. 3 (Russian), pp. 108-118, 154. Izdat. Saratov. Univ., Saratov, 1974. (Author's summary) **57** #12228 04A05
- A characterization of P -algebras of multiplace functions. (Russian) *Sibirsk. Mat. Ž.* **16** 1975, no. 3, 599-611, 645. (R. S. Pierce) **52** #237 08A20
- Characterization of the semiadacency relation on ordered algebras of multiplace functions. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 9(184), 80-88. (V. Topenčarov) **57** #16162 08A05 (20M20)
- See also **Theory of languages and methods of construction of programming systems**, 48 #7682
- Trobov, V. G.** (with Sapožnikov, V. V.; Sapožnikov, V. V.) The synthesis of a logical transformer of d -dependable finite automata. (Russian) *Izv. Vysš. Učebn. Zaved. Elektromekhanika* **1976**, no. 3, 268-273, 365. (Authors' summary) **58** #9883 94A20
- (with Sapožnikov, V. V.; Sapožnikov, V. V.) Synthesis of finite automata with self-diagnosis property. (Russian) *Avtomat. i Vyčisl. Tehn. (Riga)* **1977**, no. 3, 6-11, 92. (M. Tetrušvilii) **58** #9923 94A30
- Troianiello, Giovanni Maria** (with Mosco, Umberto) On the smoothness of solutions of unilateral Dirichlet problems. (Italian summary) *Boll. Un. Mat. Ital.* (4) **8** (1973), 57-67. (M. H. Protter) **52** #11305 35J20
- (with Joly, Jean-Luc; Mosco, Umberto) Un résultat de régularité pour une inéquation quasivariationnelle intervenant dans un problème de contrôle impulsif. *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 15, A621-A623. (R. Temam) **52** #3708 35D10
- Scattering theory for Schrödinger operators with L^∞ potentials and distorted Bloch waves. *J. Mathematical Phys.* **15** (1974), 2048-2052. (Jean Michel Combes) **51** #12211 81A7
- (with Charrier, Pierre) Un résultat d'existence et de régularité pour les solutions fortes d'un problème unilatéral d'évolution avec obstacle dépendant du temps. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 15, A621-A623. (R. Temam) **52** #3708 35D10

- On the regularity of solutions of unilateral variational problems. (Italian summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) **42** (1975), 200-214. (Z. C. Motteler) **56** #12568 35J20
- (with Joly, Jean-Luc; Mosco, Umberto) On the regular solution of a quasi-variational inequality connected to a problem of stochastic impulse control. *J. Math. Anal. Appl.* **61** (1977), no. 2, 357-369. (V. N. Igolkin) **58** #12576 49A20 (35J99)
- Troickaja, L. S.** Construction of an abstract numerical algorithm for the solution of a boundary value problem for a nonlinear equation of elliptic type. (Russian) *Scientific reports: a collection of papers by graduate students at Dnepropetrovsk State University (mechanics and mathematics)* (Russian), pp. 199-203. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1970. (I. Šelihova (RŽMat 1970 #11 B814)) **52** #16057 65N05
- (with Kondurar', V. T.) The attraction of two rigid bodies. (Russian) *Meh. Toerd. Tela Vyp.* **8** (1976), 89-98, 139. (From the authors' text) **56** #17287 70.34
- Circular and rectilinear motions of an axisymmetric body under the effect of the gravitation of two spherical bodies. *Astronom. Zh.* **53** (1976), no. 1, 191-197 (Russian); translated as *Soviet Astronom.* **AJ20** (1976), no. 1, 103-107. (D. Schmidt) **54** #4229 70.34
- Troickaja, N. A.** See **Mathematical methods for the solution of economic problems**, **50** #12144
- Troickii, E. A.** Estimates of the mathematical expectation and variance of random processes based on the upcrossings. (Russian) *Avtometrija* **1971**, no. 5, 32-38. **54** #11704 62M99
- (with Gol'cov, Viktor) Asymptotic expansion of the probability density of an adaptive classifying statistic. (Russian. Lithuanian and English summaries) *Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija Vyp.* **14** (1976), 11-32. (M. Arató) **57** #10920 62H30
- Troickii, E. I.** Conditions for functional commutativity of matrices with Segré characteristic $[2, i, \dots, 1]$. *Trudy Rjazan. Radiotehn. Inst. Vyp.* **42** *Differencial'nye Uravnenija* (1972), 155-163. (Editors) **57** #6057 15A27
- Periodic solutions of a system of three linear homogeneous differential equations with periodic coefficients. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp.* **53** *Differencial'nye Uravnenija* (1974), 105-108, 188. (Author's summary) **58** #28868 34C25
- A study of the solutions of a system of three linear homogeneous differential equations whose matrix commutes with its integral. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp.* **53** *Differencial'nye Uravnenija* (1974), 109-115, 188-189. (Author's summary) **58** #28762 34A30 (34C25)
- The structure of the solutions of linear second and third order systems that can be reduced to triangular form by a constant transformation. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp.* **53** *Differencial'nye Uravnenija* (1974), 116-125, 189. (From the summary) **58** #28763 34A30 (34C25)
- The boundedness of the solutions of the equation $\ddot{x} + ax + q(t)x = 0$. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp.* **62** *Differencial'nye Uravnenija* (1975), 96-105, 182. (Author's summary) **57** #10130 34D20 (34C10)
- The stability of systems of differential equations with periodic coefficients. (Russian) *Trudy Rjazan. Radiotehn. Inst. Vyp.* **62** *Differencial'nye Uravnenija* (1975), 106-117, 182-183. (Author's summary) **57** #10119 34D05
- Reducibility of matrices to triangular form. (Russian) *Trudy Rjazan. Radiotehn. Inst. No. 69* *Differencial'nye Uravnenija* (1975), 81-87, 170. (Author's summary) **58** #22795 34C20
- Troickii, Evgenii** See **Troickii, E. A.**
- Troickii, V. A.** Variational problems in the theory of optimum processes. *J. Optimization Theory Appl.* **8** (1971), 1-14. (Author's summary) **45** #7571 49B10
- (with Petuhov, L. V.) Variational optimization problems for partial differential equations of hyperbolic type. (Russian) *Dokl. Akad. Nauk. SSSR* **206** (1972), 1065-1067. (F. M. Kirillova) **47** #4102 49B25 (35B35)
- (with Petuhov, L. V.) Variational optimization problems for equations of hyperbolic type. *Prikl. Mat. Meh.* **36** (1972), 578-588 (Russian); translated as *J. Appl. Math. Mech.* **36** (1972), 545-555 (1973). (R. Showalter) **48** #12211 49B25
- (with Arisov, M. V.) Application of optimal control theory to the construction of optimal beams. (Russian) *Applied mathematics, No. 1* (Russian), pp. 15-23, 121. *Tul'sk. Politehn. Inst., Tula*, 1974. (Editors) **58** #33288 93C10 (73.34)
- (with Boldyrev, Ju. Ja.) A three-dimensional variational problem on the gas-dynamical theory of lubrication. (Russian) *Izv. Akad. Nauk SSSR Meh. Židk. Gasa* **1975**, no. 5, 34-39. (L. G. Chambers) **55** #9709 76.49
- (with Petuhov, L. V.) Variational problems of optimization for equations of the hyperbolic type in the presence of boundary controls. *Prikl. Mat. Meh.* **39** (1975), no. 2, 260-270 (Russian); translated as *J. Appl. Math. Mech.* **39** (1975), no. 2, 244-253. (V. Komkov) **52** #4064 49A20
- On some optimum problems of vibration theory. *J. Optimization Theory Appl.* **15** (1975), 615-631. (G. M. Ewing) **51** #1574 49H05
- Optimization of elastic bars in the presence of free vibrations. *Izv. Akad. Nauk SSSR Meh. Toerd. Tela* **1976**, no. 3, 145-152 (Russian); translated as *Mechanics of Solids* **11** (1976), no. 3, 139-146. (From the summary) **58** #3888 73.49
- Troilo, Renato** Su una classe di moti del solido pesante. *Atti. Accad. Sci. Lett. Arti Palermo Parte I* (4) **33** (1973/74), no. 1, 277-282. (L. G. Chambers) **52** #2315 70.34
- Moti del solido pesante in cui è costante il modulo del momento delle quantità di moto. (English summary) *Rend. Sem. Mat. Univ. e Politec. Torino* **33** (1974/75), 337-347 (1976). (Giorgio E. O. Giacaglia) **53** #9777 70.34
- Troinin, M. A.** (with Gluško, V. P.) Estimates of the solutions of second order elliptic equations that satisfy the conjugacy condition on the boundary of degeneracy. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 9 Sb. Rabot Uravn. Častn. Proizvodn. i Vyčisl. Mat.* (1973), 38-55. (RŽMat 1974 #7 B336) **57** #10212 35J25
- Troisi, Mario** Teoremi di inclusione per spazi di Sobolev non isotropi. *Ricerche Mat.* **18** (1969), 3-24. (Editors) **54** #3392 46E35
- Teoremi di inclusione negli spazi di Sobolev con peso. *Ricerche Mat.* **18** (1969), 49-74. (Editors) **54** #923 46E35
- Problemi al contorno con condizioni omogenee per le equazioni quasi-ellittiche. (English summary) *Ann. Mat. Pura Appl.* (4) **90** (1971), 331-412. (Z. C. Motteler)
- 54** #715 35J40
- Ulteriori contributi alla teoria degli spazi di Sobolev non isotropi. *Ricerche Mat.* (1971), 90-117. (O. John) **49** #11239 46E35
- (with Avantaggiati, Antonio) Spazi di Sobolev con peso e problemi ellittici in angolo. I. (English summary) *Ann. Mat. Pura Appl.* (4) **95** (1973), 361-408. (R. Freeman) **48** #9374 46E35
- (with Avantaggiati, Antonio) Spazi di Sobolev con peso e problemi ellittici in angolo. II. (English summary) *Ann. Mat. Pura Appl.* (4) **97** (1973), 207-252. (R. Freeman) **50** #7794 35J35 (46E35)
- (with Avantaggiati, Antonio) Spazi di Sobolev con peso e problemi ellittici in angolo. III. (English summary) *Ann. Mat. Pura Appl.* (4) **99** (1974), 1-51. (R. Freeman) **50** #7795 35J35 (46E35)
- (with Avantaggiati, Antonio) Ulteriori contributi allo studio dei problemi ellittici in un angolo. (English summary) *Ann. Mat. Pura Appl.* (4) **100** (1974), 153-167. (Z. Motteler) **50** #5177 35J50
- (with Avantaggiati, Antonio) Problemi al contorno di tipo ellittico in un dominio piano limitato e dotato di punti angolosi. *Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Sez. Ia* (8) **12** (1974/75), 271-308. (See Zbl 327 #35024) 35J25
- Troitskaja, Z. V.** (with Kolovskii, M. Z.) On the stability of linear systems with random parameters. *Prikl. Mat. Meh.* **36** (1972), 218-224 (Russian); translated as *J. Appl. Math. Mech.* **36** (1972), 201-207. (G. N. Mil'shtein) **48** #13416 93E15
- Troitskaya, L. S.** See **Troickaja, L. S.**
- Troitskii, V. A.** See **Troickii, V. A.**
- Troitzsch, Ulrich** Zum Stande der Forschung über Jacob Leupold (1674-1727). *Technikgeschichte* **42** (1975), no. 4, 263-286. (J. S. Joel) **58** #4869 01A50
- Trojan, Allan** (with Spiegel, Eugene) On semi-simple group algebras. I. *Pacific J. Math.* (1975), no. 2, 549-555. (I. B. S. Passi) **52** #14023 20C05
- (with Spiegel, Eugene) On semi-simple group algebras. II. *Pacific J. Math.* (1976), no. 2, 553-559. (I. B. S. Passi) **56** #5697 20C05
- Trojan, V. N.** A statistical algorithm for the approximation of geophysical data. (Russian) *Numerische Methoden in der Geophysik (Zweites Sympos., Tharandt, 1975)*, pp. 207-211. *Geofyzikální Ústav Česk. Akad. Véd, Prague*, 1976. (R. S. Anderssen) **56** #7764 86.65
- Trojanovskii, A. A.** (with Karpovsky, Mark G.) Methods for the analysis of the corrective capacity of automata. (Russian) *Automat. i Vyčisl. Tehn. (Riga)* **1974**, no. 1, 25-29. (M. Tetruashvili) **50** #9442 94A30
- (with Karpovsky, Mark G.; Moskalov, È. S.) Methods of estimating the corrective capacity of functions of the algebra of logic. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1974**, no. 1, 155-161, 238 (Russian); translated as *Engrg. Cybernetics* **12** (1974), 124-131. (E. L. Cohen) **52** #12966 94A10 (94A20)
- Trojanovskii, I. E.** See **Studies in the theory of plates and shells**, **48** #3343
- Trojanowski, Anthony E.** (with Tarjan, Robert Endre) Finding a maximum independent set. *SIAM J. Comput.* **6** (1977), no. 3, 537-546. (Torrence D. Parsons) **57** #2999 05C35 (68A10)
- Trojanowski, Stanisław** Multicriterion optimization in the sense of Pareto of incommensurable target functions. (Polish. Russian and English summaries) *Przegł. Statyst.* **22** (1975), no. 3, 427-433. (Author's summary) **57** #4519 65K05 (90A10)
- Trojanski, Stanimir** (with Maleev, Rumen P.) New results on homeomorphisms of Banach and Fréchet spaces. (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **13(46)** (1976), 246-249. (Editors) **53** #6266 46Axx (46Bxx)
- On locally uniformly convex and differentiable norms in certain non-separable Banach spaces. *Studia Math.* **37** (1970/71), 173-180. (K. Sundaresan) **46** #5995 46B05
- (with Maleev, Rumen P.) Moduli of convexity and of smoothness for the spaces L_p . (Russian. English summary) *Annuaire Univ. Sofia Fac. Math.* **66** (1971/72), 331-337. (A. V. Buhvalov) **53** #3677 46E30
- Equivalent norms and minimal systems in nonseparable Banach spaces. (Russian) *Studia Math.* **43** (1972), 125-138. (V. Pták) **48** #2734 46B05
- (with Nedevski, P.) P. Enflo solved in the negative Banach's problem on the existence of a basis for every separable Banach space. (Bulgarian) *Fiz.-Mat. Spis. B"lgar. Akad. Nauk.* **16(49)** (1973), 134-138. (V. Komkov) **56** #16335 46B15
- (with Maleev, Rumen P.) Unconditionally convergent and absolutely divergent series in Orlicz spaces. (Russian) *C. R. Acad. Bulgare Sci.* **27** (1974), 1029-1032. (Figiel) **51** #13637 46A45
- (with Kirčev, Kiril P.) A certain characterization of spaces with scalar product. (Russian) *C. R. Acad. Bulgare Sci.* **28** (1975), no. 4, 445-447. (From the text) **58** #7046 46C05
- (with Kirčev, Kiril P.) The Orlicz spaces associated with Orlicz functions that do not satisfy the D_2 -condition. (Russian) *Serdica* **1** (1975), no. 1, 88-95. (P. Wojtaszczyk) **53** #11357 46E30
- On non-separable Banach spaces with a symmetric basis. *Studia Math.* **53** (1975), no. 3, 253-263. (R. C. James) **53** #3663 46B15
- (with Maleev, Rumen P.) On the moduli of convexity and smoothness in Orlicz spaces. *Studia Math.* **54** (1975), no. 2, 131-141. (A. C. Zaenen) **52** #8904 46B30
- Uniform convexity and smoothness in every direction in nonseparable Banach spaces with unconditional bases. (Russian) *C. R. Acad. Bulgare Sci.* **30** (1977), no. 1243-1246. (G. J. O. Jameson) **58** #17787 46B05
- Troitzsch, Fredi** Existenz- und Dualitätssätze für lineare Optimierungsprobleme reflexiven Banach-Räumen. (English and Russian summaries) *Math. Operationsforsch. Statist.* **6** (1975), no. 6, 901-912. (Hans-Jürgen Albrand) **53** #3824 49A25
- Dual existence theorems for a special class of linear programming problems in reflexive Banach lattices. (German and Russian summaries) *Math. Operationsforsch. Statist. Ser. Optimization* **8** (1977), no. 4, 471-483. (Author's summary) **58** #23872 49A25 (65K05)
- Tromba, Anthony J.** (with Frampton, J.) On the classification of spaces of Hölder continuous functions. *J. Functional Analysis* **10** (1972), 336-345. (C. Bessaga) **53** #4158D15 (46E35)
- The Morse lemma on Banach spaces. *Proc. Amer. Math. Soc.* **34** (1972), 396-400. (R. S. Palais) **45** #4461 58E05 (58B10)
- Some theorems on Fredholm maps. *Proc. Amer. Math. Soc.* **34** (1972), 578-585. (J.

- Moulis) 45 #7762 58B15
The Morse lemma on arbitrary Banach spaces. *Bull. Amer. Math. Soc.* 79 (1973), 15-86. (R. S. Palais) 46 #4567 58E05 (46N05)
Degree theory and non-linear partial differential equations. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972), Vol. III, pp. 209-215. Internat. Atomic Energy Agency, Vienna, 1974.* (Christian Fenske) 55 #9177 58G99 (58B15)
Euler-Poincaré index theory on Banach manifolds. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) 2 (1975), no. 1, 89-106. (Jill P. Mesirov) 52 #6772 58B15 (57D25)
Théorie de Morse sur les variétés de Banach. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* 281 (1975), no. 2-3, A101-A104. (Jill P. Mesirov) 52 #15553 58E05
On the number of solutions to Plateau's problem. *Bull. Amer. Math. Soc.* 82 (1976), no. 1, 66-68. (Robert Gulliver) 54 #6197 58E10 (49F10, 58E15)
The Euler characteristic of vector fields on Banach manifolds and the problem of Plateau. *Journées sur la Géométrie de la Dimension Infinie et ses Applications à l'Analyse et à la Topologie (Univ. Claude-Bernard-Lyon I, Lyon, 1975).* *Bull. Soc. Math. France Suppl. Mém. No. 46*, (1976), 83-89. (Jill P. Mesirov) 55 #11298 58E05
Almost-Riemannian structures on Banach manifolds: the Morse lemma and the Darboux theorem. *Canad. J. Math.* 28 (1976), no. 3, 640-652. (Jill P. Mesirov) 53 #6613 58B20 (58E05)
Fredholm vector fields and a transversality theorem. *J. Functional Analysis* 23 (1976), no. 4, 362-368. (Jill P. Mesirov) 55 #11299 58B15 (58B10)
On the isometries of spaces of Hölder continuous functions. *Studia Math.* 57 (1976), no. 3, 199-208. (R. S. Palais) 54 #8712 58D15 (46E15)
The set of curves of uniqueness for Plateau's problem has a dense interior. *Geometry and topology (Proc. III Latin Amer. School of Math., Inst. Mat. Pura Aplicada CNPq, Rio de Janeiro, 1976), pp. 696-706. Lecture Notes in Math., Vol. 597, Springer, Berlin, 1977.* (F. J. Almgren, Jr.) 56 #9581 58E15 (49F10)
The Morse-Sard-Brown theorem for functionals and the problem of Plateau. *Amer. J. Math.* 99 (1977), no. 6, 1251-1256. (Jill P. Mesirov) 57 #4219 58C05 (28A40, 58E15)
(with Böhme, Reinhold) The number of solutions to the classical plateau problem is generically finite. *Bull. Amer. Math. Soc.* 83 (1977), no. 5, 1043-1044. (Jonathan Sacks) 57 #1290 53A10 (49F10)
A general approach to Morse theory. *J. Differential Geometry* 12 (1977), no. 1, 47-85. (J. Eells) 57 #4237 58E15
On the number of simply connected minimal surfaces spanning a curve. *Mem. Amer. Math. Soc.* 12 (1977), no. 194, v + 121 pp. (Author's introduction) 58 #31197 58E15 (53A10, 58D10)
(with Federbush, Paul) Note on 't Hooft's Hamiltonian in two-dimensional quantum chromodynamics. *Phys. Rev. D* (3) 15 (1977), no. 10, 2913-2914. (B. Z. Moroz) 56 #7618 81.47 (47B05)
rombetti, Guido Su un teorema di prolungamento univoco. (English summary) *Rend. Accad. Sci. Fis. Mat. Napoli* (4) 39 (1972), 161-182. (O. John) 49 #9386 35B45 (35J70)
Su un teorema di prolungamento univoco per le equazioni ellittiche. *Ricerche Mat.* 22 (1973), 69-88. (A. Haimovici) 50 #5173 35J30
Su un teorema di prolungamento univoco per una classe di equazioni quasi-ellittiche a caratteristiche doppie. *Ricerche Mat.* 23 (1974), 129-150. (A. Haimovici) 51 #1105 35J30
Problemi ellittici in uMangolo. (English summary) *Ann. Mat. Pura Appl.* (4) 107 (1975), 95-129 (1976). (A. Avantaggiati) 54 #8011 35J40 (46E35)
Su di una equazione parabolica singolare in due variabili. *Matematiche (Catania)* 30 (1975), 161-185 (1976). (Klaus Deimling) 55 #3540 35K20 (44A15)
Problemi ellittici in un cono. *Ricerche Mat.* 26 (1977), no. 1, 103-134. (G. Bottaro (Zbl 351 #35027)) 58 #1592 35J40
(with Alvino, Angelo) Problemi ellittici dipendenti da un parametro in L^p . *Ricerche Mat.* 26 (1977), no. 2, 335-382. (R. M. Hervé (Zbl 372 #35028)) 58 #23024 35J40
rombetti, Tullio On a singular integral equation in the theory of radiative transfer. (Italian summary) *Meccanica—J. Italian Assoc. Theoret. Appl. Mech.* 6 (1971), 119-124. (T. G. Gegelia) 48 #2695 45E05 (80.45)
(with Premuda, Francesco) Convergence of a projection method for Fourier-transformed integral equations. *Quart. J. Mech. Appl. Math.* 29 (1976), no. 1, 101-116. (Manfred Feilmeier) 53 #3628 45L05
(with Lorenzutta, S.) Anisotropic Milne's problem solution in terms of H -functions: numerical results. *Transport Theory Statist. Phys.* 6 (1977), no. 1, 1-28. (Ian P. Grant) 56 #2188 (E 58 #32827) 85.65
(with Lorenzutta, S.) Errata: "Anisotropic Milne's problem solution in terms of H -functions: numerical results" (Transport Theory Statist. Phys. 6 (1977), no. 1, 1-28). *Transport Theory Statist. Phys.* 6 (1977), no. 4, 229-230. (Editors) 58 #32827 85.65
rombi, P. C. (with Varadarajan, V. S.) Asymptotic behaviour of eigen functions on a semisimple Lie group: the discrete spectrum. *Acta Math.* 129 (1972), no. 3-4, 237-280. (E. A. Thieleker) 52 #14159 22E45 (22E30)
On the continuous spectrum for a semisimple Lie group. *Harmonic analysis on homogeneous spaces (Proc. Sympos. Pure Math., Vol. XXVI, Williams Coll., Williamstown, Mass., 1972), pp. 295-303. Amer. Math. Soc., Providence, R.I., 1973.* (J. A. Wolf) 49 #470 22E45 (43A90)
The tempered spectrum of a real semisimple Lie group. *Amer. J. Math.* 99 (1977), no. 1, 57-75. (Kenneth Johnson) 56 #12182 22E45
romborg, B. (with Waldenström, S.) Bounds on the diagonal elements of a unitary matrix. *Linear Algebra and Appl.* 20 (1978), no. 3, 189-195. (E. Deutsch) 58 #16731 15A57
rommer, R. Mathematisch-statistische Verfahren in biometrischer und stichprobentheoretischer Betrachtungsweise. (English summary) *Biometrische Z.* 11 (1969), 155-170. (P. Whittle) 45 #1336 62P10
Anwendung mehrstufiger Stichprobenverfahren mit Auswahlseinheiten ungleicher Größe zur Überwachung von Schaderregern in der landwirtschaftlichen Pflanzenproduktion der DDR. (English summary) *Biometrical J.* 19 (1977), no. 7, 535-548. (Ib Thomsen) 57 #14217 62D05
Tromp, Herman (with Bandler, John W.; Liu, Peter C.) A nonlinear programming approach to optimal design centering, tolerancing, and tuning. *IEEE Trans. Circuits and Systems* CAS-23 (1976), no. 3, 155-165. (M. C. Cheng) 53 #12758 94A20 (90C50)
Tronca, Giuseppe P. (with Cariolaro, Gianfranco L.) Spectra of block coded digital signals. *IEEE Trans. Comm.* COM-22 (1974), 1555-1564. (G. Robert Redinbo) 53 #10457 94A05
Tröndle, Karlheinz (with v. Ammon, Uwe) ★ Mathematische Grundlagen der Codierung. Eine leicht fassliche Darstellung der abstrakten Algebra für Ingenieure und Naturwissenschaftler mit zahlreichen Beispielen. Einführung in die Nachrichtentechnik. R. Oldenbourg Verlag, Munich-Vienna, 1974. x + 273 pp. (W. E. Clark) 56 #18098 94A10
(with Vancek, Eligius) Untersuchung des Korrekturbereichs von Produktcodes und Bestimmung ihrer Restfehlerwahrscheinlichkeit. (English summary) *AEÜ—Arch. Elektron. Übertragungstech.* 30 (1976), no. 7/8, 265-271. (H. F. Mattson, Jr.) 57 #5412 94A10
Tronel, Gérard (with Iooss, Gérard) Exemples de bifurcation. *C. R. Acad. Sci. Paris Sér. A-B* 276 (1973), A1353-A1356. (H. Amann) 47 #7535 47H15
ngo-Trong, C. See Ngo-Trong, C.
nguyen-Trong-Kham See Nguyen-Trong-Kham
bui Trọng Liều See Bùi Trọng Liều
vũ Trọng Tuấn See Vũ Trọng Tuấn
le Trọng Vinh See Lê Trọng Vinh
majewska-Tronowicz, Jadwiga See Majewska-Tronowicz, Jadwiga
Tronson, K. The limits of time stepping when used to solve the long wave equations numerically. *Bull. Austral. Math. Soc.* 8 (1973), 321-331. (D. C. Gilles) 48 #1588 76.65
Troost, W. (with Gastmans, R.) A Duffin-Kemmer-Petiau formulation of supersymmetry. *Nuclear Phys. B* 140 (1978), no. 3, 423-428. (José F. Cariñena) 58 #25475 81.22
Tropf, C. G. (with Simmonds, James G.) The fundamental (normal point load) solution for a shallow hyperbolic paraboloidal shell. *SIAM J. Appl. Math.* 27 (1974), 102-120. (J. W. Craggs) 50 #11932 73.35
Tropp, E. A. (with Zuno, I. E.) Mixed boundary-value problem for the Laplace equation in thin regions of special shape. *Inż.-Fiz. Ž.* 28 (1975), no. 5, 894-904 (Russian); translated as *J. Engng. Phys.* 28 (1975), no. 5, 647-653 (1976). (B. Vujanović) 55 #4958 80.35
Tropp, G. (with Filippi, Siegfried) k -te Ableitung und k -fach iteriertes Integral der Tschebyscheff-Polynome. *Z. Angew. Math. Mech.* 57 (1977), no. 2, 116-118. (Y. L. Luke) 56 #6194 41A10
Tropp, Henry S. The role of oral communication. Proceedings of the American Academy Workshop on the Evolution of Modern Mathematics (Boston, Mass., 1974). *Historia Math.* 2 (1975), no. 4, 465-468. (I. Grattan-Guinness) 57 #15927 01A70
Ursprung und Geschichte der Fields-Medaille. *Jahrbuch Überblicke Mathematik*, 1976, pp. 189-195. *Bibliographisches Inst., Mannheim, 1976.* (Editors) 58 #15997 01A60
The origins and history of the Fields Medal. (French summary) *Historia Math.* 3 (1976), no. 2, 167-181. (Editors) 58 #21284 01A65
(with Drake, Stillman; Coxeter, Harold Scott MacDonald; Jones, Charles V.; Scriba, Christoph J.; Sinclair, B.; Mahoney, Michael Sean; Struik, Dirk J.) A memorial tribute to Kenneth O. May. *Historia Math.* 5 (1978), no. 1, 3-12. (Editors) 56 #15322 01A70
Troppe, A. M. See Mathematics at a glance, 51 #7769
Troppe, M. M. Ergodic and quasideterministic properties of finite-dimensional stochastic systems. *J. Statist. Phys.* 17 (1977), no. 6, 491-509. (G. Della Riccia) 57 #17893a 60K35 (82.60)
Ergodic properties of infinite-dimensional stochastic systems. *J. Statist. Phys.* 17 (1977), no. 6, 511-528. (G. Della Riccia) 57 #17893b 60K35 (82.60)
Trosborg, P. J. (with Jøndrup, Søren) A remark on pure ideals and projective modules. *Math. Scand.* 35 (1974), 16-20. (E. A. Rutter) 52 #497 16A50
Trosborg, Peter J. (with Beck, István) A note on free direct summands. *Math. Scand.* 42 (1978), no. 1, 34-38. (Pushpa Gupta) 58 #5786 16A64
Troščiev, V. E. The divergence of the "cross" scheme for the equations of gas dynamics. (Russian) Third All-Union Seminar on Numerical Methods in the Mechanics of Viscous Fluids (Alma-Ata, 1970). *Čisl. Metody Meh. Šplošnoi Sredy* 1 (1970), no. 5, 87-93. (I. O. Bohachevsky) 48 #3367 76.65
(with Nikiforova, A. V.; Tarasov, V. A.) The solution of kinetic equations by the divergence method of characteristics. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1972), 1041-1048, 1087. (R. Zuzula) 48 #1635 82.65
The mathematical properties of S_n -methods for the solution of kinetic equations. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 15 (1975), no. 5, 1209-1221, 1361. (Hans Kaper) 52 #12676 82.65
The classes of grids that admit conservative approximations of the transfer operator by a triangular difference operator. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 16 (1976), no. 3, 793-797, 823. (Nima Geffen) 55 #4931 76.65
Troskie, C. G. The distributions of some test criteria in multivariate analysis. *Ann. Math. Statist.* 42 (1971), 1752-1757. (D. G. Kabe) 49 #8209 62H10
(with Money, A. H.) Some further properties of test criteria in multivariate analysis. *South African Statist. J.* 6 (1972), 121-134. (Robert Hultquist) 48 #9980 62H10
The distributions of some test criteria depending on multivariate Dirichlet distributions. *South African Statist. J.* 6 (1972), 151-163. (B. Raja Rao) 49 #10056 62H10
(with Money, A. H.) Noncentral distributions (linear case) of some test criteria in multivariate analysis. *South African Statist. J.* 8 (1974), 145-156. (J. L. Soler) 52 #2037 62H10
(with Juritz, June M.) Noncentral matrix T distributions. *South African Statist. J.* 10 (1976), no. 1, 1-7. (Akio Kudo) 57 #17944 62H10
Trost, Ernst (with Lüssy, W.) Zu einem Satz über räumliche Fünfecke. *Elem. Math.* 25 (1970), 82-83. (Editors) 48 #12235a 50B10
On a diophantine equation. *Acta Arith.* 21 (1972), 55-57. (H. London) 46 #8973 10B15
See also Euler, Leonhard, 58 #15920

- Trostnikov, V. N.** See **Griškin, I. I.**, (See Zbl 271 #02006)
- Trotin, J. C.** (with Messenger, A.) On ferromagnetism and antiferromagnetism. (Italian and Russian summaries) *Nuovo Cimento B* (11) 9 (1972), 259-278. (D. A. Dubin) 57 #11539 82.46
(with Messenger, A.) On analyticity properties of pressure for two-body Ising models. *Nuovo Cimento B* (11) 19 (1974), 239-252. (Authors' summary) 54 #4450 82.32
(with Messenger, A.) Analyticity properties in Ising models. *Ann. Inst. H. Poincaré Sect. A (N.S.)* 24 (1976), no. 3, 301-321. (H. J. Hilhorst) 55 #9782 82.46
- Trotman, David A.** transversality property weaker than Whitney (A)-regularity. *Bull. London Math. Soc.* 8 (1976), no. 3, 225-228. (C. G. Gibson) 54 #11381 58C25 (32B20, 32C05)
Geometric versions of Whitney regularity. *Math. Proc. Cambridge Philos. Soc.* 80 (1976), no. 1, 99-101. (C. G. Gibson) 53 #9284 58C25
Counterexamples in stratification theory: two discordant horns. *Real and complex singularities (Proc. Ninth Nordic Summer School/NAVF Sympos. Math., Oslo, 1976)*, pp. 679-686. *Sijthoff and Noordhoff, Alphen aan den Rijn*, 1977. (C. G. Gibson) 57 #1510 57D45 (32B20, 58C25)
See also **Zeeman, Christopher**, (See RZMat 1977 #6 A420; MR 58 #24311)
- Trott, G. W.** (with Christensen, G. S.) A larger region of convergence for the Volterra series. *Internat. J. Control* (1) 14 (1971), 377-384. (D. H. Hyers) 46 #7606 34A10 (45G99)
- Trottenberg, Ulrich** (with Schröder, Johann) Reduktionsverfahren für Differenzengleichungen bei Randwertaufgaben. I. (English summary) *Numer. Math.* 22 (1973/74), 37-68. (J. R. Kuttler) 48 #12869 65N20
An elementary calculus for Green's functions associated with singular boundary value problems. *Ordinary and partial differential equations (Proc. Conf., Univ. Dundee, Dundee, 1974)*, pp. 434-438. *Lecture Notes in Math.*, Vol. 415, Springer, Berlin, 1974. (Yiannis Sficas) 54 #10743 34B99
Aufspaltungen linearer gewöhnlicher Differentialoperatoren und der zugehörigen Greenschen Funktionen. (English summary) *Manuscripta Math.* 15 (1975), 289-308. (M. Švec) 52 #878 34B25
Lösung linearer gewöhnlicher Randwertaufgaben 4. Ordnung mit Hilfe von Aufspaltungen. (English summary) *Numer. Math.* 25 (1975/76), no. 3, 297-306. (V. Šeda) 55 #9550 65L10
(with Schröder, Johann; Reutersberg, Heinz) Reduktionsverfahren für Differenzengleichungen bei Randwertaufgaben. II. (English summary) *Numer. Math.* 26 (1976), no. 4, 429-459. (J. R. Kuttler) 55 #4733 65N20
(with Schröder, Johann; Witsch, Kristian) On fast Poisson solvers and applications. *Numerical treatment of differential equations (Proc. Conf., Math. Forschungsinst., Oberwolfach, 1976)*, pp. 153-187. *Lecture Notes in Math.*, Vol. 631, Springer, Berlin, 1978. (B. L. Buzbee) 57 #14534 65P05
- Trotter, Hale F.** (with Lang, Serge) Continued fractions for some algebraic numbers. *J. Reine Angew. Math.* 255 (1972), 112-134; addendum, *ibid.* 267 (1974), 219-220; MR 50 #2086. (R. Güting) 46 #5258 (E 50 #2086) 10F20
On S -equivalence of Seifert matrices. *Invent. Math.* 20 (1973), 173-207. (Author's review (Zbl 269 #15009)) 58 #31100 57C45 (15A36)
Approximation and perturbation of semigroups. *Linear operators and approximation, II (Proc. Conf., Oberwolfach Math. Res. Inst., Oberwolfach, 1974)*, pp. 3-21. *Internat. Ser. Numer. Math.*, Vol. 25, Birkhäuser, Basel, 1974. (Thomas G. Kurtz) 52 #4024 47D05
Torsion-free metabelian groups with infinite cyclic quotient groups. *Proceedings of the Second International Conference on the Theory of Groups (Australian Nat. Univ., Canberra, 1973)*, pp. 655-666. *Lecture Notes in Math.*, Vol. 372, Springer, Berlin, 1974. (D. E. Cohen) 51 #10482 20F05
(with Lang, Serge) Addendum to: "Continued fractions for some algebraic numbers" (J. Reine Angew. Math. 255 (1972), 112-134). *J. Reine Angew. Math.* 267 (1974), 219-220. (R. Güting) 50 #2086 10F20
Some knots spanned by more than one knotted surface of minimal genus. *Knots, groups, and 3-manifolds (papers dedicated to the memory of R. H. Fox)*, pp. 51-62. *Ann. of Math. Studies*, No. 84, Princeton Univ. Press, Princeton, N.J., 1975. (Wilbur Whitten) 51 #14020 55A25
(with Lang, Serge) ★Frobenius distributions in GL_2 -extensions. Distribution of Frobenius automorphisms in GL_2 -extensions of the rational numbers. *Lecture Notes in Mathematics*, Vol. 504. Springer-Verlag, Berlin-New York, 1976. iii+274 pp. (G. Frey (Zbl 329 #12015)) 58 #27900 12A50 (10K05)
(with Lang, Serge) Primitive points on elliptic curves. *Bull. Amer. Math. Soc.* 83 (1977), no. 2, 289-292. (Loren D. Olson) 55 #308 12A75 (14G25)
See also **Yor, Marc**, 58 #27776
- Trotter, L. E., Jr.** (with Nemhauser, George L.; Naus, Robert M.) Set partitioning and chain decomposition. *Management Sci.* 20 (1973/74), 1413-1423. (F. Weinberg) 50 #15912 90C10
(with Leventhal, T.; Nemhauser, George L.) A column generation algorithm for optimal traffic assignment. *Transportation Sci.* 7 (1973), 168-176. (G. Berman) 50 #12198 90B20
(with Shetty, C. M.) An algorithm for the bounded variable integer programming problem. *J. Assoc. Comput. Mach.* 21 (1974), 505-513. (Authors' summary) 58 #25983 90C10
(with Nemhauser, George L.) Properties of vertex packing and independence system polyhedra. *Math. Programming* 6 (1974), 48-61. (László Lovász) 52 #200 05C99 (90C05)
A class of facet producing graphs for vertex packing polyhedra. *Discrete Math.* 12 (1975), no. 4, 373-388. (Alan Tucker) 53 #2759 05C99 (52A25)
(with Nemhauser, George L.) Vertex packings: structural properties and algorithms. *Math. Programming* 8 (1975), 232-248. (M. Mañas) 51 #2985 05C35
(with Magazine, Michael J.; Nemhauser, George L.) When the greedy solution solves a class of knapsack problems. *Operations Res.* 23 (1975), no. 2, 207-217. (M. Gondran) 57 #11736 90C10
(with Giles, F. R.; Oyama, Tatsuo) On completing partial Latin squares. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1977)*, pp. 523-543. *Congressus Numeratum*, No. XIX, Utilitas Math., Winnipeg, Man., 1977. (W. H. Mills) 57 #16105B15
On the generality of multi-terminal flow theory. *Studies in integer programming (Proc. Workshop, Bonn, 1975)*, pp. 517-525. *Ann. of Discrete Math.*, Vol. 1, North-Holland, Amsterdam, 1977. (Ethan D. Bolker) 58 #9183 90B10
Line perfect graphs. *Math. Programming* 12 (1977), no. 2, 255-259. (M. M. Syslo) 56 #15501 05C99
- Trotter, Peter G.** Soluble semigroups. *J. Austral. Math. Soc.* 13 (1972), 114-118. (J. C. Horne) 45 #3613 20M10
A class of semigroups embeddable in groups. *Semigroup Forum* 5 (1972), 1-13. (H. D'Alarcao) 46 #9210 20M10
Congruence-free inverse semigroups. *Semigroup Forum* 9 (1974/75), no. 2, 109-116. (J. E. Ault) 51 #8297 20M10
Congruence-free regular semigroups with zero. *Semigroup Forum* 12 (1976), no. 1-5. (R. B. Hora) 53 #3168 20M10
Exponential D -semigroups. *Semigroup Forum* 12 (1976), no. 4, 313-331. (D. R. LaTorre) 54 #439 20M10
Congruence-free right simple semigroups. *J. Austral. Math. Soc. Ser. A* 24 (1977), no. 1, 103-111. (N. R. Reilly) 57 #9889 20M10
(with Tamura, Takayuki) Completely semisimple inverse Δ -semigroups admitting principal series. *Pacific J. Math.* 68 (1977), no. 2, 515-525. (John M. Howie) 57 #6256 20M10
Cancellative simple semigroups and groups. *Semigroup Forum* 14 (1977), no. 3, 189-198. (J. Dénes) 56 #5760 20M10
- Trotter, Terrel, Jr.** Some identities for the triangular numbers. *J. Recreational Math.* 6 (1973), no. 2, 127-135. (Editors) 56 #8481 10A35
- Trotter, William T., Jr.** A decomposition theorem for collections of universal subcontinua. *Colloq. Math.* 23 (1971), 233-239. (B. L. Brechner) 46 #9945 54F15
(with Bogart, Kenneth P.) Maximal dimensional partially ordered sets. II. Characterization of $2n$ -element posets with dimension n . *Discrete Math.* 5 (1973), 33-43. (D. Kurepa) 47 #6563 06A10
Dimension of the crown S_n^k . *Discrete Math.* 8 (1974), 85-103. (R. P. Dilworth) 49 #158 06A10
Irreducible posets with large height exist. *J. Combinatorial Theory Ser. A* 17 (1974), 337-344. (R. A. Melter) 50 #6935 06A10
Embedding finite posets in cubes. *Discrete Math.* 12 (1975), 165-172. (R. P. Dilworth) 51 #5426 06A10
Inequalities in dimension theory for posets. *Proc. Amer. Math. Soc.* 47 (1975), 311-316. (K. P. Bogart) 51 #5427 06A10
A note on Dilworth's embedding theorem. *Proc. Amer. Math. Soc.* 52 (1975), 33-39. (R. P. Dilworth) 51 #10188 06A35
(with Moore, John I., Jr.) Some theorems on graphs and posets. *Discrete Math.* 15 (1976), no. 1, 79-84. (T. Brylawski) 54 #5060 06A10 (05C99)
(with Bogart, Kenneth P.) Maximal dimensional partially ordered sets. III. characterization of Hiraguchi's inequality for interval dimension. *Discrete Math.* 15 (1976), no. 4, 389-400. (D. Kurepa) 54 #5061 06A10
(with Bogart, Kenneth P.) On the complexity of posets. *Discrete Math.* 16 (1976), no. 1, 71-82. (Harald Scheid) 54 #2553 06A10 (68-XX)
(with Moore, John I., Jr.) Characterization problems for graphs, partially ordered sets, lattices, and families of sets. *Discrete Math.* 16 (1976), no. 4, 361-381. (Ivan Rival) 56 #8437 05C99 (06A10)
A generalization of Hiraguchi's inequality for posets. *J. Combinatorial Theory Ser. A* 20 (1976), no. 1, 114-123. (Khee-meng Koh) 52 #10515 06A10
(with Bogart, Kenneth P.; Rabinovich, Issie) A bound on the dimension of interval orders. *J. Combinatorial Theory Ser. A* 21 (1976), no. 3, 319-328. (James W. Lea, Jr.) 54 #5059 06A10
A forbidden subposet characterization of an order-dimension inequality. *Math. Systems Theory* 10 (1976), no. 1, 91-96. (K. P. Bogart) 55 #7856 06A10
(with Moore, John I., Jr.; Sumner, David P.) The dimension of a comparability graph. *Proc. Amer. Math. Soc.* 60 (1976), 35-38 (1977). (Curtis Greene) 54 #5062 06A10
Some combinatorial problems for permutations. *Proceedings of the Eighth Southeastern Conference on Combinatorics, Graph Theory and Computing (Louisiana State Univ., Baton Rouge, La., 1977)*, pp. 619-632. *Congressus Numeratum*, No. XIX, Utilitas Math., Winnipeg, Man., 1977. (J. Spencer) 58 #309 05B30
(with Moore, John I., Jr.) The dimension of planar posets. *J. Combinatorial Theory Ser. B* 22 (1977), no. 1, 54-67. (K. P. Bogart) 55 #7857 06A10
- Troué, Jacques** On a theorem on the change of base point in a path connected space. *Czechoslovak Math. J.* 23(98) (1973), 123-124. (H. Wada) 51 #1816 55E05
On a theorem on the change of base point in a path connected space. *Mathematica (Cluj)* 16 (39) (1974), no. 1, 199-200. (P. W. H. Lemmens) 54 #6126 55D05
See also **Artin, Emil**; et al., 49 #11492
- Troughton, Edward** See **Skepton, A. W.**; et al., 55 #10196
- Troup, G. J.** (with Deakin, Michael A. B.) Stevinus' epitaph: thermodynamics meets number theory. *Internat. J. Math. Ed. Sci. Tech.* 7 (1976), no. 3, 271-276. (Y. Dold) 56 #2739a (E 56 #2739b) 01A45
(with Deakin, Michael A. B.) Addenda: "Stevinus' epitaph: thermodynamics meets number theory" (Internat. J. Math. Ed. Sci. Tech. 7 (1976), no. 3, 271-276). *Internat. J. Math. Ed. Sci. Tech.* 7 (1976), no. 4, 493-494. (Y. Dold) 56 #2739b 01A45
- Troun, J. Richard** (with Chow, Bryant) Table of the percentage points of the trivariate t -distribution with an application to uniform confidence bands. *Technometrics* 19 (1972), 855-879. (A. F. Ifram) 49 #10057 62H10
- Trounman, John L.** The dielectric potential operator. *Arch. Rational Mech. Anal.* 42 (1971), 213-222. (David R. Adams) 49 #9229 31A15
Planar dielectric potential functions. *J. Analyse Math.* 25 (1972), 1-48. (David R. Adams) 46 #372 31A15
- Trout, M. D.** Algorithms for non-convex S_n -games. *Math. Programming* 14 (1978), no. 3, 332-348. (S. Cruceanu) 58 #15269 90D40
- Troy, Linda A.** (with Byrd, Richard D.; Mena, Roberto A.) Generalized Boolean lattices. *J. Austral. Math. Soc.* 19 (1975), 225-237. (Heinrich Werner) 51 #12645 06A35

- William C.** Oscillation phenomena in the Hodgkin-Huxley equations. *Proc. Roy. Soc. Edinburgh Sect. A* **74** (1974/75), 299-310 (1976). (H. A. Lauwerier) **56** #826 (B99) (92A05)
- Bifurcation phenomena in FitzHugh's nerve conduction equations. *J. Math. Anal. Appl.* **54** (1976), no. 3, 678-690. (Brian D. Sleeman) **53** #15413 92A05 (34C99)**
- Large amplitude periodic solutions of a system of equations derived from the Hodgkin-Huxley equations. *Arch. Rational Mech. Anal.* **65** (1977), no. 3, 227-247. (Kuang-Ho Chen) **58** #29066 35B10 (35Q99, 92A05)**
- A threshold phenomenon in the Field-Noyes model of the Belousov-Zhabotinskii reaction. *J. Math. Anal. Appl.* **58** (1977), no. 2, 233-248. (P. C. Fife) **56** #4582 2,34**
- The disappearance of solitary travelling wave solutions of a model of the Belousov-Zhabotinskii reaction. Proceedings of the Regional Conference on the Application of Topological Methods in Differential Equations (Boulder, Colo., 1976). *Rocky Mountain J. Math.* **7** (1977), no. 3, 467-478. (Ole J. Heilmann) **58** #25429 10,35 (92A05)**
- Oscillations in a third order differential equation modeling a nuclear reactor. *SIAM J. Appl. Math.* **32** (1977), no. 1, 146-153. (J. O. C. Ezeilo) **56** #764 34C99 (82,34) (with Field, Richard J.) The amplification before decay of perturbations around stable states in a model of the Zhabotinskii reaction. *SIAM J. Appl. Math.* **32** (1977), no. 2, 306-322. (Mario Primicerio) **55** #5234 92A05 (80,34)**
- The bifurcation of periodic solutions in the Hodgkin-Huxley equations. *Quart. Appl. Math.* **36** (1978/79), no. 1, 73-83. (Brian D. Sleeman) **57** #11827 92A05 (35K55)**
- yanovskiy, A. A.** See Trojanovskii, A. A.
- Yanski, S. L.** See Trojanjanski, Stanimir
- York, Robert J.** (with Snapper, Ernest) ★Metric affine geometry. *Academic Press, New York-London*, 1971. xx+435 pp. (R. Artzy) **45** #9238 50D05
- Yer, Stephanie F.** (with Francis, George K.) Excellent maps with given folds and cusps. *Houston J. Math.* **3** (1977), no. 2, 165-194. (Kenneth C. Millett) **58** #24328 58C25
- yon, F. S.** (with Lister, G. G.) On the stability of a system in which one parameter oscillates sinusoidally with small amplitude. (French summary) *Z. Angew. Math. Phys.* **25** (1974), 241-257. (N. D. Sengupta) **49** #10229 78,45
- enovskii, B.** (with Čupona, Gorgi) [m,n]-groupoids. (Macedonian. English summary) *Bull. Soc. Math. Phys. Macédoine* **21** (1970), 19-29 (1972). (B. M. Schein (Šain)) **47** #3570 20L10
- On a class of n -semigroups.** *Bull. Soc. Math. Phys. Macédoine* **24** (1973), 73-80 (1974). (Gilbert Crombez) **51** #5827 20N15
- On a class of generalized λ -semigroups.** *Bull. Soc. Math. Phys. Macédoine* **24** (1973), 81-86 (1974). (Gilbert Crombez) **51** #5828 20N15
- (with Celakoski, N.) Semigroups in which every n -subsemigroup is a subsemigroup.** (Macedonian summary) *Makedon. Akad. Nauk. Umet. Oddel. Prirod.-Mat. Nauk. Prilozh.* **6** (1974), no. 1, 35-41. (John W. Hogan) **53** #3169 20M10
- ic, M.** (with Chattopadhyay, P.; Dreizler, R. M.; Fink, M.) Illustration of the generator coordinate method in terms of model problems. *Z. Phys. A* **285** (1978), no. 1, 89-16. (Authors' summary) **57** #8743 81,65
- duc Tru** See Pho Duc Tru
- ax, Donald R.** (with Johnson, Bruce R.) Asymptotic behavior of Bayes tests and Bayes risk. *Ann. Statist.* **2** (1974), 278-294. (I. J. Good) **50** #15028 62C10
- (with Book, Stephen A.) An Erdős-Rényi strong law for sample quantiles. *J. Appl. Probability* **13** (1976), no. 3, 578-583. (Endre Csáki) **54** #6243 60F15**
- (with Johnson, Bruce R.) Asymptotic behavior of Bayes procedures for testing simple hypotheses in multiparameter exponential families. *Ann. Statist.* **6** (1978), no. 2, 346-361. (A. M. Kagan) **57** #17928 62F15**
- batch, S. L.** Erroneous bound state conditions from an algebraic misrepresentation of spin wave theory. *J. Mathematical Phys.* **13** (1972), 1869. (Horst Behncke) **47** #4574 82,46
- (with Franco, A.) Canonical procedures for population dynamics. *J. Theoret. Biol.* **48** (1974), no. 2, 299-324. (M. W. Green) **54** #12250 92A15**
- čkaninov, G. G.** Grammars of weak precedence and without p -deadlock grammars. (Russian) *Theory and practice of systems programming (Russian)*, pp. 31-40. *Inst. Kibernet., Akad. Nauk Ukrain. SSR, Kiev*, 1976. (Editors) **58** #32074 68A30
- Precedence grammars and p -grammars without deadlocks.** (Russian) *Programmirovanie* **1976**, no. 1, 27-30, 94. (V. N. Agafonov) **57** #1985 68A30
- Classes of grammars that are oriented toward syntactic analysis by the precedence method.** (Russian) *Programmirovanie* **1976**, no. 2, 13-18, 95. (R. N. Goss) **55** #11735 68A30
- (with Red'ko, V. N.) Syntactical definitions (a structural approach).** (Russian) *Programmirovanie* **1977**, no. 5, 9-20, 103. (A. V. Anisimov) **58** #32113 68A30
- icinic, M. F.** (with Batenko, A. P.) On a class of standard characteristic polynomials. *Automatika* **1973**, no. 5, 11-16 (Ukrainian); translated as *Soviet Automat. Control* **6** (1973), no. 5, 8-12. (L. Mikołajczyk) **52** #5123 93C30
- bicyn, V. P.** (with Vasil'ev, P. P.; Efimov, A. B.) Solution of the Clairaut-Laplace-Ljapunov problem. *Astronom. Ž.* **53** (1976), no. 3, 626-633 (Russian); translated as *Soviet Astronom.* **20** (1976), no. 3, 354-358. (Authors' summary) **57** #15277 85,35 (70,35)
- Nonspherical thermo-elastic deformation of the Earth.** (Russian) *Izv. Akad. Nauk SSSR Ser. Fiz. Zemli* **1977**, no. 10, 14-24. **57** #2459 86,35
- bin, V. A.** Operative planning of the distribution of flows of empty cars on the railroad. (Russian) *Economic-mathematical models (Suppl. to Ekonom. i Mat. Metody)*, Collection No. 2 (Russian), pp. 125-131. *Izdat. "Nauka", Moscow*, 1969. (E. V. Bulinskaja) **45** #8254 90B99
- The solutions of a certain class of integer linear programming problems.** (Russian) *Kibernetika (Kiev)* **1969**, no. 2, 100. (Ju. Finkel'stein (RŽMat 1969 #10 V316)) **46** #1329 90C10
- The solution of a problem of allocation on a network in the form of a tree.** (Russian) *Mathematical methods for the study and optimization of systems (Proc. Sem. Theory of Optimal Decisions, Kiev, 1970)* (Russian), pp. 3-10. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (P. Vondráček) **56** #7906 90B10
- The solution of an optimal stopping problem.** (Russian) *Mathematical methods for the study and optimization of systems (Proc. Sem. Theory of Optimal Decisions, Kiev, 1970)* (Russian), pp. 189-193. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1971. (Editors) **55** #6736 62L15
- An effective algorithm for the solution of the allocation problem on a network in the shape of a tree.** (Russian) *Dokl. Akad. Nauk SSSR* **231** (1976), no. 3, 547-550. (P. Vondráček) **54** #12186 90B05
- (with Mihaljevič, V. S.; Sor, N. Z.; Žurbenko, N. G.; Momot, A. I.; Sibirko, A. N.; Jun, G. N.) ★Вычислительные методы выбора оптимальных проектных решений.** (Russian) [Numerical methods for the selection of optimal design decisions] *Izdat. "Naukova Dumka", Kiev*, 1977. 178 pp. (V. Komkov) **57** #2588 90C50
- One-parameter allocation and unification problems.** (Russian) *Theory of optimal solutions (Russian)*, pp. 36-40. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev*, 1977. (Editors) **58** #9224 90C05
- Universality of a certain class of quadratic integer problems.** (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 2, 147. (Ulrich Eckhardt) **56** #14696 90C10 (90C20, 05C35)
- Trubia, V. G.** A certain method of approximate solution of mixed linear integral equations. (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 42-45. (E. H. Bareiss) **48** #3282 65R05
- Degenerate single-kernel integro-differential equations.** (Russian) *Differential and integral equations*, No. 1 (Russian), pp. 104-112. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (M. Tvrdý) **52** #6352 45J05
- Systems of ordinary integrodifferential equations that are degenerate at a point.** (Russian) *Differential and integral equations*, No. 1 (Russian), pp. 113-118. *Irkutsk. Gos. Univ., Irkutsk*, 1972. (M. Tvrdý) **52** #6353 45J05
- Asymptotic behavior of the solution of the Cauchy problem for a degenerate integro-differential equation with a small parameter multiplying the derivative.** (Russian) *Differential and integral equations*, No. 2 (Russian), pp. 177-186, 312-313. *Irkutsk. Gos. Univ., Irkutsk*, 1973. (From the author's introduction) **56** #16308 45M05
- Trubitsyn, M. F.** See Trubicin, M. F.
- Trubitsyn, V. P.** See Trubicyan, V. P.
- Trubnikov, Ju. T.** (with Kibenko, A. V.) A certain approximate method for the solution of the nonstationary matrix Riccati equation. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 2, 5-11, 223. (Leo F. Boron) **52** #3652 34A45
- Trubnikov, Ju. V.** The existence of nonnegative bounded solutions. (Russian) *Collection of papers by postgraduates*, Vol. 2 (Russian), pp. 62-68. *Voronež. Gos. Univ., Voronezh*, 1972. (See RŽMat 1974 #4 B873; MR 57 #9376) 34G05
- (with Perov, A. I.) Monotone differential equations.** (Russian) *Voronež. Gos. Univ. Trudy Nauč.-Issled. Inst. Mat. VGU Vyp.* **7** (1973), 65-87. (Ja. Rutickii (RŽMat 1974 #9 B1065)) **57** #6662 34C99
- (with Perov, A. I.) Monotone differential equations. I.** (Russian) *Differencial'nye Uravnenija* **10** (1974), 804-815, 954. (K. Goebel) **50** #2636 34G05 (47H15)
- (with Kibenko, A. V.) The approximate solutions of a matrix Riccati equation.** (Russian) *Voronež. Gos. Univ. Trudy Nauč.-Issled. Inst. Mat. VGU No. 12 Sb. Statei po Prikl. Anal.* (1974), 36-41. (RŽMat 1975 #10 B875) **57** #10064 34A45
- Bounded solutions of indefinitely monotone differential equations.** (Russian) *Voronež. Gos. Univ. Trudy Nauč.-Issled. Inst. Mat. VGU Vyp.* **13 Sb. Rabot Prikl. Mat. i Meh.** (1974), 50-55. (Editors) **57** #6704 34G05
- The averaging method for monotone differential equations.** (Russian) *Voronež. Gos. Univ. Trudy Nauč.-Issled. Inst. Mat. VGU Vyp.* **15 Teor. Sb. Statei Nelinein. Funkcional. Anal.** (1974), 65-68. (Editors) **57** #6654 34C30
- The averaging method in conditions of indefinite monotonicity.** (Russian) *Voronež. Gos. Univ. Trudy Nauč.-Issled. Inst. Mat. VGU Vyp.* **19** (1975), 147-152. (D. Baïnov) **57** #16892 34G05 (34C30, 47H15)
- (with Perov, A. I.) Monotone differential equations. II.** (Russian) *Differencial'nye Uravnenija* **12** (1976), no. 7, 1223-1237, 1341. (K. Goebel) **56** #12481 34G05
- (with Dašieva, S. S.) (U, κ, α)-monotone equations.** (Russian) *Differencial'nye Uravnenija* **13** (1977), no. 12, 2213-2224, 2302. (N. G. Kazakova) **57** #6705 34G05
- (with Perov, A. I.) Monotone differential equations. III.** (Russian) *Differencial'nye Uravnenija* **14** (1978), no. 2, 232-244, 386. (K. Goebel) **58** #11756a 34G05
- (with Perov, A. I.) Monotone differential equations. IV.** (Russian) *Differencial'nye Uravnenija* **14** (1978), no. 7, 1192-1202, 1340. (K. Goebel) **58** #11756b 34G05
- Trubowitz, E.** (with McKean, Henry P., Jr.) Hill's operator and hyperelliptic function theory in the presence of infinitely many branch points. *Comm. Pure Appl. Math.* **29** (1976), no. 2, 143-226. (Walter Eberhard) **55** #761 34B25 (58F99, 34B30)
- The inverse problem for periodic potentials.** *Comm. Pure Appl. Math.* **30** (1977), no. 3, 321-337. (H. Hochstadt) **55** #3408 34B25 (58F05)
- trần dinh Truc** See Trần Dinh Truc
- Truchard, James J.** (with Womack, Baxter F.; Love, John T.) Initial conditions of $n \times n$ systems with discontinuous higher order input signals. *IEEE Trans. Automatic Control* **AC-18** (1973), 671-672. (P. Brunovský) **54** #14830 93C15
- Truchon, Michel** On the importance of lags in growth models. *Contributions to the von Neumann growth model (Proc. Conf., Inst. Advanced Studies, Vienna, 1970)*, pp. 53-62. *Zeitschrift für Nationalökonomie, Supplementum 1, Springer, New York*, 1971. (Author's summary) **48** #1666 90A15
- Trudeau, Richard J.** ★Dots and lines. *Kent State University Press, Kent, Ohio*, 1976. x+199 pp. (R. A. Melter) **58** #27502 05-01 (00A05)
- Trudinger, Neil S.** On the regularity of generalized solutions of linear, non-uniformly elliptic equations. *Arch. Rational Mech. Anal.* **42** (1971), 50-62. (V.-V. Olariu) **49** #9395 35D10
- On the analyticity of generalized minimal surfaces.** *Bull. Austral. Math. Soc.* **5** (1971), 315-320. (A. Kufner) **46** #501 35D10 (49F10)
- (with Donaldson, Thomas K.) Orlicz-Sobolev spaces and imbedding theorems. *J. Functional Analysis* **8** (1971), 52-75. (R. D. McWilliams) **46** #658 46E35**
- A new proof of the interior gradient bound for the minimal surface equation in n dimensions.** *Proc. Nat. Acad. Sci. U.S.A.* **69** (1972), 821-823. (R. Osserman) **45** #5891 53A10
- Linear elliptic operators with measurable coefficients.** *Ann. Scuola Norm. Sup. Pisa* (3) **27** (1973), 265-308. (V.-V. Olariu) **51** #6113 35D10 (35J25)
- Gradient estimates and mean curvature.** *Math. Z.* **131** (1973), 165-175. (H. Beckert)

- 48 #2539 35B45
A sharp inequality for sub-harmonic functions on two-dimensional manifolds. *Math. Z.* **133** (1973), 75-79. (H. L. Jackson) **49** #1454 53C65 (31B05)
An imbedding theorem for $H_0(G, \Omega)$ spaces. *Studia Math.* **50** (1974), 17-30. (A. Kufner) **50** #14206 46E35
On the comparison principle for quasilinear divergence structure equations. *Arch. Rational Mech. Anal.* **57** (1975), 128-133. (G. Albinus) **54** #13309 35J60
(with Gilbarg, David) ★ Elliptic partial differential equations of second order. *Grundlehren der Mathematischen Wissenschaften*, Vol. 224. Springer-Verlag, Berlin-New York, 1977. x + 401 pp. ISBN 3-540-08007-4 (O. John) **57** #13109 35-02 (35J25, 35J65)
Maximum principles for linear, non-uniformly elliptic operators with measurable coefficients. *Math. Z.* **156** (1977), no. 3, 291-301. (Z. C. Mottelet) **57** #10214 35J25
- True, Ernest D.** A comparison theorem for certain functional differential equations. *Proc. Amer. Math. Soc.* **47** (1975), 127-132. (R. E. Fennell) **50** #5144 34K15
- Truelove, Alan J.** Betting systems in favorable games. *Ann. Math. Statist.* **41** (1970), 551-556. (E. Janovskaja (RŽMat 1971 #9V466)) **53** #2408 90D99
- Trueman, R. E.** (with Whittington, Stuart G.; Wilker, J. B.) Limiting ring closure probabilities in the self-avoiding walk problem. *J. Phys. A* **8** (1975), 56-60. (G. Papanicolaou) **53** #4861 82.60 (60J15)
- Trueman, Richard E.** ★ An introduction to quantitative methods for decision making. Second edition. Holt, Rinehart and Winston, New York-Montreal, Que.-London, 1977. xx + 725 pp. (Yvo M. I. Dirickx) **56** #4744 90A05 (90D35)
- Trueman, T. L.** (with Paige, Frank E.) Regge cuts in inclusive reactions. *Phys. Rev. D* (3) **12** (1975), no. 8, 2422-2442. (Authors' summary) **56** #17565 81.30
- Truemper, Klaus** (with Liittschwager, J. M.) Queuing with Poisson arrivals from both a finite and infinite population. *AIEE Trans.* **4** (1972), 223-227. (R. Subramanian) **51** #4470 60K25
Note on finite convergence of exterior penalty functions. *Management Sci.* **21** (1974/75), no. 5, 600-606. (Pierre Lorian) **53** #14279 49D30
On multipopulation queueing systems with first-come first-served discipline. *Naval Res. Logist. Quart.* **23** (1976), no. 3, 555-565. (Ralph L. Disney) **56** #1507 60K25
An efficient scaling procedure for gain networks. *Networks* **6** (1976), no. 2, 151-159. (Edward Minieka) **56** #10882 90B10
Unimodular matrices of flow problems with additional constraints. *Networks* **7** (1977), no. 4, 343-358. (Author's summary) **58** #20352 90B10
On max flows with gains and pure min-cost flows. *SIAM J. Appl. Math.* **32** (1977), no. 2, 450-456. (Nimrod Megiddo) **55** #5197 90B10
Optimal flows in nonlinear gain networks. *Networks* **8** (1978), no. 1, 17-36. (Edward Minieka) **57** #5041 90B10
Algebraic characterizations of unimodular matrices. *SIAM J. Appl. Math.* **35** (1978), no. 2, 328-332. (Ali Amir-Moëz) **58** #10969 15A57
- Truesdell, Clifford Ambrose, III** ★ Rational thermodynamics. A course of lectures on selected topics. With an appendix on the symmetry of the heat-conduction tensor by C. C. Wang. McGraw-Hill Book Co., New York-London-Sydney, 1969. vii + 208 pp. (Editors) **51** #2484 80.00
Sul rendimento di una macchina termica omogenea. *Rend. Sem. Mat. Univ. e Politech. Torino* **31** (1971/73), 47-68 (1974). (N. D. Sengupta) **50** #1650 80.49
Sul rendimento delle macchine termiche omogenee. *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **53** (1972), 549-553 (1973). (Editors) **58** #19871 80.41
Theoria de effectibus mechanice caloris pridem ab ill^{mo} Sadi Carnoto verbis physicis promulgata nunc primum mathematice enucleata. (Latin) *Atti Accad. Sci. Ist. Bologna Cl. Sci. Fis. Rend.* (12) **10** (1972/73), no. 1, 29-41. **58** #32432 80.01 (01A55)
The scholar's workshop and tools. *Centaurus* **17** (1972), no. 1, 1-10. (Editors) **58** #26633 00A05 (01-01)
Is there a philosophy of science? An essay review. *Centaurus* **17** (1972), no. 2, 142-172. (Editors) **58** #9976 00A25
★ Termodinámica racional. (Spanish) [Rational thermodynamics] Cursos de conferencias acerca de temas seleccionados. [A course of lectures on selected topics] With an appendix on the symmetry of the heat-conduction tensor by C. C. Wang. Translated from the English by Julián Fernández Ferrer. Editorial Reverte, S. A., Barcelona-Buenos Aires-Caracas, 1973. ix + 221 pp. (Editors) **51** #2485 80.00
(with Wang, Chao Chen) ★ Introduction to rational elasticity. Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Continua. Noordhoff International Publishing, Leyden, 1973. xii + 556 pp. (R. J. Knops (Zbl 308 #73001)) **57** #8276 73.00
The efficiency of a homogeneous heat engine. L. M. Milne-Thomson anniversary issue, *J. Mathematical and Physical Sci.* **7** (1973), 349-371; errata, *ibid.* **9** (1975), 193-194. (I. R. Juhnovskii) **51** #12147 80.00
(with Moon, H.) Interpretation of adscititious inequalities through the effects pure shear stress produces upon an isotropic elastic solid. *Arch. Rational Mech. Anal.* **55** (1974), 1-17. (M. Mişicu) **50** #3726 73.53
A simple example of an initial-value problem with any desired number of solutions. (Italian summary) *Ist. Lombardo Accad. Sci. Lett. Rend. A* **108** (1974), 301-304. (J. E. Marsden) **50** #15504 70.34
Early kinetic theories of gases. *Arch. History Exact Sci.* **15** (1975/76), no. 1, 1-66. (From the text) **57** #15901 01A55
(with Moon, H.) Inequalities sufficient to ensure semi-invertibility of isotropic functions. (Italian summary) Special issue dedicated to A. E. Green. *J. Elasticity* **5** (1975), no. 3-4, 183-189. (Gérard A. Maugin) **56** #17370 73.53
Improved estimates of the efficiencies of irreversible heat engines. *Ann. Mat. Pura Appl.* (4) **108** (1976), 305-323. (S. Bhargava) **55** #4959 80.49
(with Bharatha, Subramanyam) ★ The concepts and logic of classical thermodynamics as a theory of heat engines. Rigorously constructed upon the foundation laid by S. Carnot and F. Reech. Texts and Monographs in Physics. Springer-Verlag, New York-Heidelberg, 1977. xxii + 151 + iii pp. ISBN 0-387-07971-8 (V. Komkov) **57** #11375 80.02 (01A55)
(with Fosdick, Roger L.) Universal flows in the simplest theories of fluids. *Ann. Scuola Norm. Sup. Pisa Cl. Sci.* (4) **4** (1977), no. 2, 323-341. (R. P. Kanwal) **58** #8779 76.53
- Macchine termiche irreversibili e la seconda legge della termodinamica. (English summary) Problemi attuali di meccanica teorica e applicata (Atti Convegno Internazionale, 1975). *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **111** (1977), supplement 297-307. (M. Carrasi) **58** #14411 80.00
See also *Handbuch: Physik*, **49** #11906; *Handbuch: Physik*, **49** #11907; *Handbuch: Physik*, **49** #11908; *Foundations of mechanics and thermodynamics*, **52** #5338; *Handbuch: Physik*, **52** #9747 and *Euler, Leonhard*, **54** #7181
- Truffault, Bernard** Note sur un théorème de Lipschutz. *Arch. Math. (Basel)* **25** (1975), 1-2. (M. Greendlinger) **49** #9089 20F05
Centralisateurs des éléments dans les groupes de Greendlinger. *C. R. Acad. Paris. Sér. A* **279** (1974), 317-319. (Leo P. Comerford) **52** #5813 20F05
(with Boydrón, Yves) Classes doubles dans un groupe libre. *C. R. Acad. Sci. Paris. Sér. A* **279** (1974), 773-775. (B. H. Neumann) **50** #7342 20E05
(with Boydrón, Yves) Problème de l'ordre généralisé pour les groupes libres. *C. R. Acad. Sci. Paris. Sér. A* **279** (1974), 843-845. (D. E. Cohen) **50** #10076 20E05
Centralisateurs des éléments d'ordre fini dans les groupes de Greendlinger. *Math. Z.* **136** (1974), 7-11. (M. Greendlinger) **49** #5187 20F05
(with Comerford, Leo P., Jr.) The conjugacy problem for free products of sixth-groups with cyclic amalgamation. *Math. Z.* **149** (1976), no. 2, 169-181. (C. A. Tretkoff) **53** #13418 20F10
- Truffin, C.** (with Englert, F.; Gunzig, E.; Windey, P.) Conformal invariant general relativity with dynamical symmetry breakdown. *Phys. Lett. B* **57** (1975), 73-77. (Richard Hansen) **54** #2091 83.53
(with Gastmans, R.; Kalloš, R. E.) Quantum gravity near two dimensions. *Nucl. Phys. B* **133** (1978), no. 3, 417-434. (J. G. Taylor) **58** #14574 81.35
- Truhaev, R. I.** (with Homenjuk, V. V.) ★ Теория неклассических вариационных задач. (Russian) [Theory of nonclassical variational problems]. Izdat. Leningrad. Univ., Leningrad, 1971. 168 pp. (L. C. Young) **48** #2853 49-02
(with Homenjuk, V. V.) On the theory of approximate synthesis in problems of optimization of automatic control systems. (Russian) *Proceedings Fourth All-Union Conference on Automatic Control—Engineering Cybernetics (Tbilisi 1968)*, Vol. 1: *Optimal and adaptive systems (Russian)*, pp. 26-32, 305. Izdat. "Nauka", Moscow, 1971. **48** #8030 93A15
(with Lerner, V. S.) ★ Динамические модели процессов принятия решения. (Russian) [Dynamical models of decision making processes] Izdat. "Štiinca", Kishinev, 1974. 260 pp. (A. A. Juškevič) **58** #9119 90A05 (62C10, 90D35)
See also *Homenjuk, V. V.*, **57** #11795 and *Homenjuk, V. V.*, **58** #12573
- Truhaev, Rudolf I.** (with Homenjuk, V. V.; Bočarov, Lev; Čemeris, Mihail) The stability of Bayesian decisions. (Russian. Lithuanian and English summaries) *Teor. Optimal. Rešenii—Trudy Sem. Processy Optimal. Upravlenija VI Sekcija Vyp. 3* (1977), 49-55. (Authors' summary) **58** #13435 62C10
- Truhan, N. M.** Restoration of an object differential equation in the presence of nonlinearity. *Automat. i Telemekh.* **1971**, no. 3, 152-155 (Russian. English summary translated as *Automat. Remote Control* **32** (1971), no. 3, part 2, 481-484. (D. F. Griffith) **47** #1499 93B30
- Truhan, T. L.** (with Bloh, A. Š.) ★ Неравенства. (Russian) [Inequalities] Izdat. "Narodnaja Asveta", Minsk, 1972. 222 pp. (Editors) **50** #4824 26-01
- Truhanovskii, N. N.** (with Kononenko, A. M.; Mikul'skii, V. E.) Solvability conditions of three-index planar transport problems. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1976**, no. 6, 24-28, 140. (E. Ja. Gabovič) **58** #9220 90C05 (90C10)
(with Emelichev, V. A.) The spectrum of transportation polyhedra. (Russian) *Vestnik Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1977**, no. 5, 107-108, 142. (Authors' summary) **57** #2506 90B10
- Truhina, I. P.** (with Ostrovskii, I. V.) The arithmetic of Schoenberg-Kennedy semigroups. (Russian. English summary) *Questions on mathematical physics and functional analysis (Proc. Res. Sem. Inst. Low Temp. Phys. Engrg., Kharkov)* (Russian), pp. 11-19, 1976. "Naukova Dumka", Kiev, 1976. (N. H. Bingham) **58** #13254 60B15 (43A80, 60E05)
Semigroups of functions that are representable by series of Jacobi polynomials. (Russian. English summary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1977**, no. 1, 21-25. (E. Lukacs) **57** #10768 60E05 (33A65)
- Trujillo, D. M.** The direct numerical integration of linear matrix differential equations using Padé approximations. *Internat. J. Numer. Methods Engrg.* **9** (1975), no. 2, 259-270. (Author's summary) **56** #13653 65L05
- Trukachev, V. N.** (with Ibragimov, I. I.) An extremal problem in the class of entire functions of finite type. (Russian) *Dokl. Akad. Nauk SSSR* **208** (1973), 768-770. (T. Kulshammer) **47** #8852 30A64
- Trukhan, N. M.** See *Truhan, N. M.*
- Trullinger, S. E.** (with Sarker, S.; Bishop, A. R.) Solitary-wave solution for a complex one-dimensional field. *Phys. Lett. A* **59** (1976), no. 4, 255-258. (Authors' summary) **56** #10547 81.35
(with Fogel, M. B.; Bishop, A. R.; Krumhansl, J. A.) Classical particlelike behavior of sine-Gordon solitons in scattering potentials and applied fields. *Phys. Rev. Lett.* (1976), no. 24, 1411-1414. (M. Carmeli) **53** #9954 81.35
(with Fogel, M. B.; Bishop, A. R.; Krumhansl, J. A.) Dynamics of sine-Gordon solitons in the presence of perturbations. *Phys. Rev. B* (3) **15** (1977), no. 3, 1578-1585. (G. L. Lamb, Jr.) **55** #11881 82.35
(with Miller, M. D.; Guyer, R. A.; Bishop, A. R.; Palmer, F.; Krumhansl, J. A.) Brownian motion of coupled nonlinear oscillators: thermalized solitons and nonlinear response to external forces. *Phys. Rev. Lett.* **40** (1978), no. 4, 206-210. (Authors' summary) **58** #14759 81.60
- Truman, Aubrey** (with Screation, G. R.) Analytic structure of the Laplace transforms of distributions with restricted support. *J. Mathematical Phys.* **14** (1973), 982-985. (Ditzian) **49** #5702 42A68 (46F10)
Spectrality, cluster decomposition and small distance properties in Wightman field theory. *J. Mathematical Phys.* **15** (1974), 1680-1685. (A. C. Manoharan) **53** #15164 81.32
Feynman path integrals and quantum mechanics as $\hbar \rightarrow 0$. *J. Mathematical Phys.* (1976), no. 10, 1852-1862. (M. J. Goovaerts) **54** #6796 81.60
The classical action in nonrelativistic quantum mechanics. *J. Mathematical Phys.* (1977), no. 7, 1499-1509. (M. J. Goovaerts) **55** #11833 81.28

- Classical mechanics, the diffusion (heat) equation, and the Schrödinger equation. *J. Mathematical Phys.* **18** (1977), no. 12, 2308-2315. (K. Drühl) **57** #8632 81.35
- The Feynman maps and the Wiener integral. *J. Math. Phys.* **19** (1978), no. 8, 742-750. (K. D. Elworthy) **58** #17030 28A40 (81.28, 58D99)
- per, Frank J. D. Some general Fibonacci shift formulae. *Fibonacci Quart.* **11** (1973), no. 5, 523-524. (András Sárközi) **48** #5987 (E **54** #2577) 10A35
- See also Gould, Henry W., **54** #2577
- per, Manfred Ellipsoidal velocity distributions and a kinetic theory of Newtonian cosmological models. *Astrophys. J.* **164** (1971), 223-226. (C. Gilbert) **45** #6374 (5.35 (83.35))
- On ellipsoidal solutions of Liouville's equation in general relativity. *General Relativity and Gravitation* **5** (1974), no. 1, 1-12. (J. R. Vanstone) **53** #12497 83.53
- g Trung Du See Hoang Trung Du
- g Du Hoang Generalization of Hermite's interpolation formula by means of the method of "function-blending". (Romanian. English summary) *Stud. Cerc. Mat.* **28** (1976), no. 2, 169-180. (Marc Duc-Jacquet) **53** #11964 65D05
- en-Trung Hung See Nguyen-Trung Hung
- in-Donskoi, V. N. The use of linguistic information in automatic phrase identification. (Russian) *Papers on engineering cybernetics*, No. 3 (Russian), pp. 40-46. *Vychisl. Centr Akad. Nauk SSSR, Moscow*, 1971. (Ivan Havel) **47** #7972 68A45
- nk, Gerard V. Statistical estimation of the intrinsic dimensionality of a noisy signal collection. *IEEE Trans. Computers C-25* (1976), no. 2, 165-171. (K. S. Miller) **54** #12324 93E10
- nov, A. A. (with Lbov, G. S.) An algorithm for the search for a global extremum of a function. (Russian) *Vychisl. Sistemy No. 67 Émpir. Predskazanie i Raspoznavanie Obrazov* (1976), 69-76, 166. (Ja. I. Al'ber) **58** #3443 65K05
- öl, Klaus ★Über die absolute Unabhängigkeit in einstelligen Algebren. Gesellschaft für Mathematik und Datenverarbeitung Bonn, Ber. No. 46. *Gesellschaft für Mathematik und Datenverarbeitung, Bonn*, 1971. ii + 12 pp. (B. Csáky) **49** #4912 08A25
- ong, Công Nghệ Counter-example to a problem of Floris Takens (Nieuw Arch. Wisk. (3) **20** (1972), 107-130). *Nieuw Arch. Wisk.* (3) **23** (1975), no. 3, 210-211. (Editors) **52** #1729 57D45 (57D25)
- ong, L. Quantum microcanonical entropy of a pair of observables. *Comm. Math. Phys.* **39** (1974), 207-219. (F. C. Auluck) **54** #2060 82.47
- ong, T. K. (with Reed, Irving S.) The use of finite fields to compute convolutions. *IEEE Trans. Information Theory IT-21* (1975), 208-213. (I. Gerst) **53** #10463 94A05 (12C05)
- (with Reed, Irving S.) Complex integer convolutions over a direct sum of Galois fields. *IEEE Trans. Information Theory IT-21* (1975), no. 6, 657-661. (Authors' summary) **55** #8011 12C99 (94A10, 65F99)
- (with Reed, Irving S.; Kwon, Y. S.; Hall, Ernest L.) X-Ray reconstruction by finite field transforms. *Proceedings of the Third International Joint Conference on Pattern Recognition (Coronado, Calif., 1976)*, pp. 339-343. *IEEE Comput. Soc., Long Beach, Calif.*, 1976. (Gabor T. Herman) **58** #4396 92-04 (94A05)
- (with Liu, Kuang Y.; Reed, Irving S.) Fast number-theoretic transforms for digital filtering. *Electron. Lett.* **12** (1976), no. 24, 644-646. (B. D. Donevski) **55** #7566 94A05
- (with Reed, Irving S.) Convolutions over residue classes of quadratic integers. *IEEE Trans. Information Theory IT-22* (1976), no. 4, 468-475. (Editors) **55** #8010 (E **57** #5395) 12C15 (94A10, 65F99)
- (with Reed, Irving S.) Convolutions over quartic integer residue classes. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 1, pp. 250-253. *Hemisphere, Washington, D.C.*, 1977. (G. Robert Redinbo) **58** #4602 94A05 (94A20)
- (with Reed, Irving S.) Correction to: "Convolutions over residue classes of quadratic integers" (IEEE Trans. Information Theory **IT-22** (1976), no. 4, 468-475). *IEEE Trans. Information Theory IT-23* (1977), no. 4, 544. (Editors) **57** #5395 94A05
- (with Liu, Kuang Y.; Reed, Irving S.) High-radix transforms for Reed-Solomon codes over Fermat primes. *IEEE Trans. Information Theory IT-23* (1977), no. 6, 776-778. (Authors' summary) **58** #26520 94A10
- (with Golomb, Solomon W.; Reed, Irving S.) Integer convolutions over the finite field GF(3² + 1). *SIAM J. Appl. Math.* **32** (1977), no. 2, 356-365. (I. Gerst) **58** #22026 12C15 (94A05)
- (with Reed, Irving S.; Welch, Lloyd R.) The fast decoding of Reed-Solomon codes using Fermat transforms. *IEEE Trans. Inform. Theory* **24** (1978), no. 4, 497-499. (From the summary) **58** #20795 94A10
- (with Reed, Irving S.; Scholtz, Robert A.; Welch, Lloyd R.) The fast decoding of Reed-Solomon codes using Fermat theoretic transforms and continued fractions. *IEEE Trans. Information Theory IT-24* (1978), no. 1, 100-106. (Stefan Dodunekov) **58** #20794 94A10
- ong, T. T. On the determination of the field operator representation in canonical model quantum field theory. (Italian and Russian summaries) *Nuovo Cimento A* (11) **14** (1973), 781-811. (H. Wakita) **50** #9251 81.47
- Weyl quantization of anharmonic oscillators. *J. Mathematical Phys.* **16** (1975), 1034-1043. (W. O. Amrein) **51** #12183 81.35
- ong, Tran N. (with Lam, W. S.) Proof of the Pomeranchuk theorem and related theorems deduced from unitarity. *Phys. Rev. D* (3) **6** (1972), 2875-2883. (Authors' summary) **51** #9683 81.30
- (with Pham, T. N.) Muskhelishvili-Omnès integral equation with inelastic unitarity: single- and coupled-channel equations. *Phys. Rev. D* (3) **16** (1977), no. 3, 896-903. (Editors) **56** #4510 81.45
- upins, Š. The simplest properties of a dimension-free projective-affine space. (Russian) *Latvīsk. Gos. Univ. Učen. Zap. 204 Bezrazmernoe, Evklidovo i Poluevklidovy Prostranstva* No. 3 (1974), 3-19. (RŽMat **1974** #10 A532) **57** #17481 50C25
- Some elementary properties of affine collineations in a dimension-free projective-affine spaces. (Russian) *Latvīsk. Gos. Univ. Učen. Zap. 204 Bezrazmernoe, Evklidovo i Poluevklidovy Prostranstva* No. 3 (1974), 20-23. (RŽMat **1974** #10 A533) **57** #17482 50C25
- On the question of collineations in dimension-free projective spaces. (Russian) *Latvīsk. Gos. Univ. Učen. Zap. 222 Bezrazmernoe, Evklidovo i Poluevklidovy Prostranstva*
- No. 4, (1974), 3-7. (Not reviewed) 50D20
- Trupnov, V. A. Four-parameter variety of null-pairs. (Russian) *Trudy Irkutsk. Gos. Univ.* **66** (1969), 235-242. (A. Urban) **46** #6179 53A15
- One-parameter submanifolds of a manifold X_2^4 . (Russian) *Geometry collection*, No. 11. *Trudy Tomsk. Gos. Univ.* **235** (1973), 128-136. (D. I. Papuc) **50** #8333 53A40
- Truš, E. I. (with Osadčuk, V. A.; Fedjuk, E. M.) The influence of inhomogeneity with respect to thickness on the stressed state of a laminated shallow spherical shell with a crack. (Russian) *Mat. Metody i Fiz.-Meh. Polja Vyp.* **6** (1977), 9-14, 108. (Authors' summary) **58** #14180 73.45
- (with Osadčuk, V. A.; Fedjuk, E. M.) Stressed state of an inhomogeneous shallow spherical shell with a slit. (Russian) *Prikl. Meh.* **13** (1977), no. 6, 52-59, 141. (From the authors' text) **56** #4375 73.65
- Trushin, David S. A theorem on induced corepresentations and applications to finite group theory. *J. Algebra* **42** (1976), no. 1, 173-183. (Kenneth Newman) **55** #5701 16A64 (20G05)
- A note on the representation type of pointed irreducible coalgebras and unipotent algebras. *Canad. J. Math.* **29** (1977), no. 1, 220-223. (R. G. Larson) **56** #3072 17A99 (18H15)
- Cohomology for modules over associative algebras. *J. Algebra* **51** (1978), no. 2, 550-561. (Johann Wiesenbauer) **58** #856 18G25
- Trušin, V. B. (with Zav'jalov, B. I.) The extended n-point tube. (Russian. English summary) *Teoret. Mat. Fiz.* **27** (1976), no. 1, 3-15. (L. I. Ronkin) **58** #6307 32A07 (32D15, 81.32)
- Trušina, L. I. A dual inhomogeneous system of difference equations. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **11** (1971), 383-395. (P. Talpalaru) **45** #3988 39A10 (34A35)
- A dual nonhomogeneous system of differential equations of infinite order. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **11** (1971), 691-703. (P. Talpalaru) **45** #3990 30A20 (34A35, 39A12)
- A dual nonhomogeneous system of difference equations with entire right hand parts. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **11** (1971), 899-903. (P. Talpalaru) **45** #3989 39A10 (34A35)
- (with Naftalevičius, A.) On a dual inhomogeneous system of difference equations with meromorphic free terms. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **14** (1974), no. 4, 145-165, 239-240. (I. N. Baker) **52** #716 39A10 (30A20)
- (with Naftalevičius, A.) Memorphic solutions of a double inhomogeneous system of difference equations. (Russian. Lithuanian and German summaries) *Litovsk. Mat. Sb.* **15** (1975), no. 1, 185-197, 255-256. (I. N. Baker) **52** #8391 30A20 (30A68)
- Truško, T. G. (with Štatland, E. S.) A certain inventory control system. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1968)*, No. 3 (Russian), pp. 39-41. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (Mike Sablatash) **47** #1435 90B05
- Truslove, A. L. Queue length for the $E_k/G/1$ queue with finite waiting room. *Advances in Appl. Probability* **7** (1975), 215-226. (Stig I. Rosenlund) **51** #7050 60K25
- The busy period of the $E_k/G/1$ queue with finite waiting room. *Advances in Appl. Probability* **7** (1975), 416-430. (Stig I. Rosenlund) **51** #7051 60J25
- Trusov, Ju. D. Non-Hilbert imbedding of a projective space into a Euclidean one. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **31** (1963), no. mat., 82-86. (M. Decuyper) **47** #5794 53C40 (50C05, 57D40)
- New series of solutions of the thirty second problem of the fifth book of Diophantus. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **44** (1969), no. mat., 119-121. (S. E. Schuur) **47** #4925 10B10 (01A20)
- The equation $X^4 + Y^4 + 2Z^4 = T^2$. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **44** (1969), no. mat., 122-123. (S. E. Schuur) **47** #4926 10B10
- A certain application of quaternions to Diophantine analysis of the fourth degree. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **61** (1969), no. mat., 223-241. (J. Blass) **47** #6605 10B10
- The equation $x^4 + 4x^2y^2 - 4y^4 = z^2$. (Russian) *Ivanov. Gos. Ped. Inst. Učen. Zap.* **61** (1969), no. mat., 225-232. (J. Blass) **47** #1742 10B15
- Trusov, P. V. (with Njašin, Ju. I.) A joint application of the finite element method and the Galerkin method. (Russian) *Perm. Politehn. Inst. Sb. Nauch. Trudov* **170** (1975), 8-12. (N. Cristescu) **57** #14823 73.65
- Trusov, S. S. On the efficiency of simple controllers. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 4, 150-160 (Russian); translated as *Engng. Cybernetics* **11** (1973), no. 4, 660-669. (Johnson M. Hart) **54** #6938 90B35 (68A99)
- Truss, John Two equivalents of the axiom of choice. *J. London Math. Soc.* (2) **6** (1972), 175-176. (G. Aumann (Zbl **255** #04004)) **55** #101 02K20
- Finite axioms of choice. *Ann. Math. Logic* **6** (1973/74), 147-176. (Paul E. Howard) **50** #106 02K20 (02K05)
- On successors in cardinal arithmetic. *Fund. Math.* **78** (1973), no. 1, 7-21. (John Hickman) **47** #8307 04A10 (02K20)
- Dualisation of a result of Specker's. *J. London Math. Soc.* (2) **6** (1973), 286-288. (J. E. Rubin) **47** #43 04A30 (02K20)
- Convex sets of cardinals. *Proc. London Math. Soc.* (3) **27** (1973), 577-599. (U. Felgner) **50** #6843 02K05 (04A10, 04A25)
- On certain arbitrarily long sequences of cardinals. *Z. Math. Logik Grundlagen Math.* **19** (1973), 209-210. (Paul E. Howard) **47** #6490 02K20 (04A10)
- The well-ordered and well-orderable subsets of a set. *Z. Math. Logik Grundlagen Math.* **19** (1973), 211-214. (D. Pincus) **47** #8308 04A10
- Models of set theory containing many perfect sets. *Ann. Math. Logic* **7** (1974), 197-219. (A. Lévy) **51** #5304 02K05 (02K20, 04A15, 04A25)
- Classes of Dedekind finite cardinals. *Fund. Math.* **84** (1974), no. 3, 187-208. (Author's summary) **57** #9541 02K05 (04A10)
- Cardinals in the Halpern-Levy model. *Bull. London Math. Soc.* **7** (1975), 177-181. (James D. Halpern) **53** #5301 02K05 (02K20, 04A25)
- Some cases of König's lemma. *Set theory and hierarchy theory (Proc. Second Conf., Bierutowice, 1975)*, pp. 273-284. *Lecture Notes in Math.*, Vol. 537, Springer, Berlin, 1976. (Robert Cowen) **55** #2569 02K05 (02K20)
- Lebesgue measure and games. *J. London Math. Soc.* (2) **14** (1976), no. 2, 263-268. (Author's summary) **55** #7781 04A15
- Sets having calibre \aleph_1 . *Logic Colloquium 76 (Oxford, 1976)*, pp. 595-612. *Studies in*

- Logic and Found. Math.*, Vol. 87, North-Holland, Amsterdam, 1977. (g. Asser) 57 #16073 02K05 (02K30, 02K25, 04A15, 04A30)
- The axiom of choice for linearly ordered families. *Fund. Math.* 99 (1978), no. 2, 133-139. (Perry Smith) 58 #228 02K05
- Trussell, H. J.** (with Beckman, R. J.) The distribution of an arbitrary studentized residual and the effects of updating in multiple regression. *J. Amer. Statist. Assoc.* 69 (1974), 199-201. (C. H. Kapadia) 52 #6955 62E15 (62J05)
- (with Kruger, R. P.) Comments on: "Nonstationary assumptions for Gaussian models in images" (IEEE Trans. Systems Man Cybernet. 6 (1976), no. 12, 876-882) by B. R. Hunt and T. M. Cannon. *IEEE Trans. Systems Man Cybernet.* 8 (1978), no. 7, 579-582. (Authors' summary) 57 #19064 94A05
- Trussoni, E.** (with Ferrari, A.; Zaninetti, L.) Relativistic Kelvin-Helmholtz instabilities in extragalactic radio-sources. *Astronom. and Astrophys.* 64 (1978), no. 1-2, 43-52. (Attay Kovetz) 57 #4987 85J35
- Trustrum, Kathleen** ★Linear programming. Library of Mathematics. Routledge & Kegan Paul Ltd., London-Boston, Mass., 1971. vii + 88 pp. (A. G. Azpeitia) 48 #5643 90C05
- Truța, G.** (with Coțiu, A.; Indoleanu, I.) A quadrature formula of degree of exactness $p+3$ ($p \geq 2$), for two nodes. (Romanian. French summary) *Bul. Ști. Inst. Politehn. Cluj* 12 (1969), 31-35. (A. Lupaș) 45 #4632 65D30
- Truten', V. E.** (with Ivanov, V. V.) On the method of penalty functions. (Russian. English summary insert) *Kibernetika (Kiev)* 1968, no. 2, 67-69. (Authors' summary) 45 #8364 90C30
- (with Ivanov, V. V.) Analysis of the accuracy of quadratic programs. (Russian. English summary insert) *Kibernetika (Kiev)* 1969, no. 4, 94-105. (Authors' summary) 46 #1339 90C20
- The estimation of the total error of a certain algorithm of search for a global minimum. (Russian. English summary) *Vychisl. Prikl. Mat. (Kiev)* No. 8 (1969), 182-186. (Author's summary) 45 #4829 90C99
- An analysis of the accuracy of convex programs. (Russian. English summary insert) *Kibernetika (Kiev)* 1971, no. 6, 90-94. (Alexander M. Rubinov) 46 #6838 90C25
- (with Drjučenko, L. D.; Ivanov, V. V.) A reduction of long-term prediction problems to linear integer programming problems. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 2, 70-73. (I. V. Romanovskii) 52 #7537 90C10
- Truten', V. I.** Functional relations for the asymptotic properties of Green's functions and renormalization constants in scalar electrodynamics. (Russian. English summary) *Ukrain. Fiz. Ž.* 21 (1976), no. 3, 490-495, 523. (Author's summary) 57 #8633 81J35
- Trutnev, V. M.** (with Aizenberg, L. A.) A certain Borel summability method for multiple power series. (Russian) *Sibirsk. Mat. Ž.* 12 (1971), 1398-1404. (E. J. Akutowicz) 45 #590 32A25
- A certain analogue of the Laurent series for functions of several complex variables that are holomorphic on strongly linearly convex sets. (Russian) *Holomorphic functions of several complex variables (Sem., Krasnoyarsk, 1972) (Russian)*, pp. 139-152, 212. *Inst. Fiz. Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1972. (L. I. Ronkin) 57 #3450 32E25
- A radial indicator in the theory of Borel summability, and certain applications. (Russian) *Sibirsk. Mat. Ž.* 13 (1972), 659-664. (J. Siciak) 45 #8874 32A15 (40B05, 46E15)
- Certain properties of functions that are holomorphic on strongly linear convex sets. (Russian) *Uspehi Mat. Nauk* 27 (1972), no. 5(167), 253-254. (Guy Laville) 53 #13640 32A10 (32D15)
- Properties of functions that are holomorphic on strongly linearly convex sets. (Russian) *Properties of holomorphic functions of several complex variables (Russian)*, pp. 139-155, 238. *Inst. Fiz. Sibirsk. Otdel. Akad. Nauk SSSR, Krasnoyarsk*, 1973. (Jan Chmielewski) 57 #12904 32D10 (32E05)
- See also **Properties of holomorphic functions of several complex variables**, 55 #10715
- Trutt, David** (with de Branges, Louis) Charlier spaces of entire functions. *Proc. Amer. Math. Soc.* 20 (1969), 134-140. (Zbl 174, 439) 58 #30104 46E20 (30A98)
- (with Kriete, Thomas L., III) On the Cesàro operator. *Indiana Univ. Math. J.* 24 (1974/75), 197-214. (D. A. Herrero) 50 #2981 47B37
- (with Kay, E.; Soul, H.) Some subnormal operators and hypergeometric kernel functions. *J. Math. Anal. Appl.* 53 (1976), no. 2, 237-242. (L. J. Wallen) 53 #3761 47B20
- (with Kay, E.) Newton spaces of analytic functions. *J. Math. Anal. Appl.* 60 (1977), no. 2, 325-328. (RZMat 1978 #4 B539) 58 #2202 46E20
- (with Ghosh, B. K.; Rhoades, Billy E.) Subnormal generalized Hausdorff operators. *Proc. Amer. Math. Soc.* 66 (1977), no. 2, 261-265. (J. P. King) 57 #6936 40C05 (47B20)
- Trybula, Stanisław** Dual control with self-reproducing a priori distributions. (Polish and Russian summaries) *Podstawy Sterowania* 2 (1972), 231-240. (H. S. Witsenhausen) 48 #1784 93E20
- Dual control for disturbances with Poisson distribution. (Polish summary) *Zastos. Mat.* 13 (1972/73), 159-164. (K. Hinderer) 48 #13383 93C55
- Two problems of minimax estimation. (Polish summary) *Zastos. Mat.* 14 (1974), 195-204. (Mir Ali) 49 #11708 62F15
- (with Magiera, Ryszard) Oblique plans for a binomial process. (Polish) *Mat. Stos.* (3) 6 (1976), 41-47. (Ryszard Zielinski) 57 #17982 62L12 (62L05)
- Trybulec, Andrzej** On shapes of movable curves. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 21 (1973), 727-733. (J. Segal) 48 #12466 54F50 (54C56)
- On the uniqueness of the decomposition of movable shapes into a product of 1-dimensional shapes. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 23 (1975), 69-73. (Thomas J. Sanders) 53 #1516 54C56
- (with Dydak, Jerzy) On regularly movable compacta. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 23 (1975), no. 8, 907-909. (Thomas J. Sanders) 52 #6654 54C56
- A model of causality. *Studia Logica* 35 (1976), no. 1, 7-16. (David Makinson) 55 #10232 02B99
- Trybulec, Zinaida** Set theoretic model of language based on the concept of cover. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* 19(67), (1975), no. 3-4, 375-381 (1977). (A. Ja. Dikovskii) 56 #4261 68A30
- Trybuś, Elżbieta** Sorting methods. (Polish) *Mat. Stos.* (3) 4 (1975), 95-117. (V. Komkov) 56 #10129 68A10
- Trybus, G.** On the distance random variable. (Polish summary) *Zastos. Mat.* 14 (1974), 237-244. (J. D. Mason) 50 #11583 62E15
- Trybus, Leszek** (with Gruszecki, Jan) Maximum principle in the identification of distributed parameter systems. (Polish. English and Russian summaries) *Podstawy Sterowania* 2 (1972), 241-260. (V. Komkov) 47 #8153 93B30
- Trych-Pohlmeier, B.** (with Haag, Rudolf; Kastler, Daniel) Stability and equilibrium states. *Comm. Math. Phys.* 38 (1974), 173-193. (J.-P. Conze) 53 #7327 82J46
- Trych-Pohlmeier, Ewa** (with Haag, Rudolf) Stability properties of equilibrium states. *Comm. Math. Phys.* 56 (1977), no. 3, 213-224. (U. Cattaneo) 58 #20093 82J46
- Trygva, Tobias A.** (with Mickle, Marlin H.; Vogt, William G.) Optimization and interaction of an economic and sociological model. *IEEE Trans. Systems Man Cybernet.* SMC-5 (1975), no. 2, 167-175. (Andrew P. Sage) 54 #12177 90A15
- See also **Conference: Asilomar, Circuits, Systems, and Computers**, 54 #9825
- Tryhuć, Václav** An oscillation criterion for third order linear differential equations. *Arch. Math. (Brno)* 11 (1975), no. 2, 99-104 (1976). (B. S. Lalli) 54 #646 34C10
- An oscillation criterion for a canonical form of third order linear differential equations. *Arch. Math. (Brno)* 13 (1977), no. 3, 175-180. (G. J. Butler) 58 #1386 34C10
- Tryjarska, Magdalena** Sur une application de la théorie des systèmes paraboliques. Collections of articles in memory of Witold Pogorzelski. *Demonstratio Math.* 5 (1973), 179-186. (J. E. Lagnese) 48 #6700 35K45
- On the Cauchy problem for some nonlinear parabolic type system. *Demonstratio Math.* 11 (1978), no. 1, 233-237. (R. Guenther) 58 #11927 35K55
- Trykova, T. N.** (with Motornyi, L. T.) Translation surfaces in quasihyperbolic space. (Russian) *Ukrain. Geometr. Sb. No.* 16 (1974), 52-63, ii. (K. Svoboda) 52 #11760 53A40
- Tryon, Peter, V.** Covariances of two sample rank sum statistics. *J. Res. Nat. Bur. Standards Sect. B* 76B (1972), 51-52. (Author's summary) 47 #6026 62G10
- (with Hettmansperger, Thomas P.) A class of non-parametric tests for homogeneity against ordered alternatives. *Ann. Statist.* 1 (1973), 1061-1070. (P. K. Sen) 50 #6043 62G10
- Trypia, Mary** (with Christofides, Nicos) A sequential approach to the 0-1 linear programming problem. *SIAM J. Appl. Math.* 31 (1976), no. 2, 271-285. (Authors' summary) 56 #2391 90C30
- A non-binary tree search method for the 0-1 linear programming problem. *New Zealand Oper. Res.* 5 (1977), no. 1, 35-44. (J. A. Tomlin) 56 #10943 90C05
- Trzaska, Zdzisław** An application of Sturm-Liouville operators to the study of the transient state in an inhomogeneous transmission line. (Polish. Russian and English summaries) *Arch. Elektrotech. (Warsaw)* 22 (1973), 861-873. (Author's summary) 52 #7736 94A20 (34B25)
- Trzcinska, Małgorzata** (with Gawecka, Aldona; Majewska-Tronowicz, Jadwiga) Current bibliography of the history of science and technology. No. 3 (July-Sept. 1971). (Polish) *Kwart. Hist. Nauki i Tech.* 17 (1972), no. 1, suppl., 27 pp. (Editors) 52 #5259 01-XX (00A15)
- (with Gawecka, Aldona; Majewska-Tronowicz, Jadwiga) Current bibliography of the history of science and technology. No. 4 (Oct.-Dec. 1971). (Polish) *Kwart. Hist. Nauki i Tech.* 17 (1972), no. 2, suppl., 18 pp. (Editors) 52 #5260 01-XX (00A15)
- (with Gawecka, Aldona; Majewska-Tronowicz, Jadwiga) Current bibliography of the history of science and technology. No. 5 (Jan.-March 1972). (Polish) *Kwart. Hist. Nauki i Tech.* 17 (1972), no. 3, suppl., 15 pp. (Editors) 52 #5261 01-XX (00A15)
- (with Gawecka, Aldona; Majewska-Tronowicz, Jadwiga) Current bibliography of the history of science and technology. No. 6 (March-June 1972). (Polish) *Kwart. Hist. Nauki i Tech.* 17 (1972), no. 4, suppl., 14 pp. (Editors) 52 #5262 01-XX (00A15)
- (with Gawecka, Aldona; Majewska-Tronowicz, Jadwiga) Current bibliography of the history of science and technology. No. 7 (July-Sept. 1972). (Polish) *Kwart. Hist. Nauki i Tech.* 18 (1973), no. 1, suppl., 17 pp. (Editors) 52 #5263 01-XX (00A15)
- Trzebiatowski, Włodzimierz** See Nicolaus Copernicus. On the 500th anniversary of his birth, 50 #12560
- Trzepizur, A.** (with Ombach, J.) Stability of sets and motions in generalized pseudo-dynamical systems. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 153-155. (Roger C. McCann) 49 #3875 54H20
- (with Ombach, J.) Limit sets in pseudo-dynamical systems. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 22 (1974), 157-160. (Roger C. McCann) 49 #3876 54H20
- (with Ombach, J.) Some remarks on processes. *Zeszyty Nauk. Univ. Jagiello. Prace Mat. No.* 16 (1974), 93-96. (W. Szlenk) 51 #6055 34C35 (54H20)
- Trzęsowski, Andrzej** Dia-elastic description of a jump-non-homogeneous body. *Theory of multiphase media (Working Conf., Jabłonna, 1974), Part II (Polish)*, pp. 83-96. *Wydawn. Polskiej Akad. Nauk, Wrocław*, 1976. (From the author's introduction) 56 #13984 73J35
- Mean stress in a jump-inhomogeneous stochastic medium. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* 14 (1976), no. 3, 427-438. (Author's summary) 56 #7445 73J60
- Macroscopic stresses in multiphase media. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* 16 (1978), no. 3, 289-297. (Author's summary) 58 #19644 73J53 (53A45)
- Trzynadlowski, Jan** Hugo Steinhaus's skill with words. (Polish) Papers presented at a Conference in Honor of Hugo Steinhaus (Wrocław, 1972). *Wiadom. Mat.* (2) 17, 71-76 (1973). (Editors) 52 #13238 01A70
- Tsabek, L. K.** See Cabek, L. K.
- wolde-Tsadik, Girma** See Wolde-Tsadik, Girma
- Tsagas, Grigorios** On the cohomology ring of a pinched Riemannian manifold of even dimension. *Differentialgeometrie im Großen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 307-317. *Ber. Math. Forschungsinst. Oberwolfach, Heft 4, Bibliographisches Inst., Mannheim*, 1971. (M. do Carmo) 51 #11354 53C20
- On the closed geodesics of a Riemannian manifold. *Math. Balkanica* 1 (1971),

- 43-247. (T. J. Willmore) **46** #4438 53C20
The closed geodesics of a special manifold. *Math. Ann.* **199** (1972), 155-159. (F. Tricelli) **48** #12410 53C25
- Some properties of a Riemannian manifold with Ricci tensor < 0 or > 0 . *Tensor (N.S.)* **23** (1972), 344-346. (T. Okubo) **48** #9611 53C20
- Classification of rectilinear congruences with special properties. Commemoration volumes for Prof. Dr. Akitsugu Kawaguchi's seventieth birthday, Vol. III. *Tensor (N.S.)* **26** (1972), 271-276. (K. K. Gorowara) **48** #12328 53A05
- Riemannian pinched manifolds. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 217-225. *Internat. Atomic Energy Agency, Vienna, 1974*. (Midori Goto) **57** #7453 53C20
- The cohomology structure of a Riemannian s -manifold. *Global analysis and its applications (Lectures, Internat. Sem. Course, Internat. Centre Theoret. Phys., Trieste, 1972)*, Vol. III, pp. 227-233. *Internat. Atomic Energy Agency, Vienna, 1974*. (Peter Klein) **56** #13131 53C35
- Applications on a theorem referred to singularities of a harmonic 1-form on a Riemannian manifold. *Proceedings of the C. Carathéodory International Symposium (Athens, 1973)*, pp. 586-591. *Greek Math. Soc., Athens, 1974*. (F. J. Flaherty) **58** #12834 53C20
- On the surfaces whose normal bundles have special properties. *Bull. Soc. Math. Grèce (N.S.)* **15** (1974), 59-67. (Author's introduction) **58** #30772 53A05
- The first homotopy group of a Riemannian s -manifold. Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 631-633. (J. P. Wilson) **52** #11965 57F20
- On the singularities of harmonic 1-forms on a Riemannian manifold. *Kōdai Math. Sem. Rep.* **26** (1975), no. 4, 459-466. (R. Osserman) **52** #15307 53C20 (58A10)
- On the rectilinear congruences establishing an area preserving representation. *Tensor (N.S.)* **29** (1975), no. 2, 147-160. (K. K. Gorowara) **51** #11306 53A25
- (with Goldberg, Samuel Irving) On the minima of the length function of a conformal vector field. *Tensor (N.S.)* **29** (1975), no. 3, 241-242. (Y. Tashiro) **51** #13926 (E **54** #13785) 53C20
- On the rectilinear congruence whose straight lines are tangent to one-parameter family of curves on a surface. *Tensor (N.S.)* **29** (1975), no. 3, 287-294. (K. K. Gorowara) **51** #11307 53A25
- Topology of some special almost complex and complex manifolds. *Complex analysis and its applications (Lectures, Internat. Sem., Trieste, 1975)*, Vol. III, pp. 213-225. *Internat. Atomic Energy Agency, Vienna, 1976*. (T. Suguri) **58** #18305 53C55 (52C10)
- Almost complex and complex structures on s -manifolds. *Complex analysis and its applications (Lectures, Internat. Sem., Trieste, 1975)*, Vol. III, pp. 227-236. *Internat. Atomic Energy Agency, Vienna, 1976*. (Yoshiaki Maeda) **58** #2640 53C15
- Nearly Kähler manifolds. *Complex analysis and its applications (Lectures, Internat. Sem., Trieste, 1975)*, Vol. III, pp. 237-251. *Internat. Atomic Energy Agency, Vienna, 1976*. (G. R. Jensen) **58** #7518 53C55
- Bounded homogeneous domains which are not symmetric. *Complex analysis and its applications (Lectures, Internat. Sem., Trieste, 1975)*, Vol. III, pp. 253-258. *Internat. Atomic Energy Agency, Vienna, 1976*. (Jean-Pierre Vigué) **58** #11530 32M10
- Harmonic and Killing tensor fields in pinched Riemannian manifolds with boundary. *Tensor (N.S.)* **30** (1976), no. 2, 121-125. (K. Yano) **54** #11235 53C20
- On the complex manifolds which do not admit a special Kähler metric. *Tensor (N.S.)* **30** (1976), no. 2, 126. (Bang-yen Chen) **56** #3779 53C55 (52C10)
- (with Goldberg, Samuel Irving) Erratum: "On the minima of the length function of a conformal vector field" (*Tensor (N.S.)* **29** (1975), no. 3, 241-242). *Tensor (N.S.)* **30** (1976), no. 3, 315. (Editors) **54** #13785 53C20
- (with Ledger, Arthur J.) Classification of simply connected four-dimensional RR-manifolds. *Trans. Amer. Math. Soc.* **219** (1976), 189-210. (O. Kowalski) **57** #7459 53C30
- The linear isotropy group of an s -manifold. *Arch. Math. (Basel)* **29** (1977), no. 4, 430-434. (K. L. Duggal) **57** #13793 53C30
- On the manifolds with negative sectional curvature. *Tensor (N.S.)* **31** (1977), no. 1, 71-76. (Franco Tricelli) **57** #1351 53C20
- See also **Problems: Differential geometry**, **51** #13876
- , **Chester** An internal characterization of the prime radical of a Jordan algebra. *Proc. Amer. Math. Soc.* **36** (1972), 361-364. (Armin Thedy) **47** #1898 17C10
- (with Foster, D. M.) Primary ideal theory for quadratic Jordan algebras. *J. Algebra* **24** (1973), 439-452. (W. E. Jenner) **47** #3477 17C10
- , **Chon Yin** (with Widnall, Sheila E.; Bliss, Donald B.) The instability of short waves on a vortex ring. *J. Fluid Mech.* **66** (1974), no. 1, 35-47. (1 plate) (R. C. Ackerman) **55** #13947 76J35
- (with Widnall, Sheila E.) The instability of the thin vortex ring of constant vorticity. *Philos. Trans. Roy. Soc. London Ser. A* **287** (1977), no. 1344, 273-305. (R. K. Gupta) **57** #11322 76J35
- , **Chun Ping** (with Fleming, Wendell H.) Some stochastic systems depending on small parameters. *Dynamical systems (Proc. Internat. Sympos., Brown Univ., Providence, R.I., 1974)*, Vol. I, pp. 103-114. *Academic Press, New York, 1976*. (Editors) **58** #31400 60H10 (34F05, 93E20)
- (with Fleming, Wendell H.) Optimal inclusion probability and differential games. *Analyse et contrôle de systèmes (Papers, IRIA Sem., Rocquencourt, 1977)*, pp. 63-68. *IRIA, Rocquencourt, 1977*. (From the introduction) **58** #33455 93E20
- Perturbed stochastic linear regulator problems. *SIAM J. Control Optimization* **16** (1978), no. 3, 396-410. (Tohru Katayama) **58** #4586 93E20
- , **Hui Liang** (with Lin, Pi Erh) Generalized Bayes minimax estimators of the multivariate normal mean with unknown covariance matrix. *Ann. Statist.* **1** (1973), 142-145. (Authors' summary) **48** #9905 62C07
- , **J. H.** (with Mrówka, S.) On local topological properties. II. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **19** (1971), 1035-1040. (E. Halfar) **46** #2638 54D15 (54D35)
- On E -compact spaces and generalizations of perfect mappings. *Pacific J. Math.* **46** (1973), 275-282. (S. T. Lin) **48** #3008 54D60
- Extensions of integer-valued maps and N -compact spaces. *TOPO 72—general topology and its applications (Proc. Second Pittsburgh Internat. Conf., Pittsburgh, Pa., 1972; dedicated to the memory of Johannes H. de Groot)*, pp. 525-533. *Lecture Notes in Math.*, Vol. 378, Springer, Berlin, 1974. (R. Engelking) **50** #14674 54D60
- More on local topological properties. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 49-51. (S. Gacsályi) **49** #6146 54D15
- (with Mrówka, S.) On preservation of E -compactness. *Pacific J. Math.* **70** (1977), no. 2, 429-436. (From the text) **58** #30978 54D60
- Ts'ai, Lung I.** Nonlinear eigenvalue problem for Schrödinger operators. *Tamkang J. Math.* **7** (1976), no. 2, 187-193. (M. S. P. Eastham) **56** #12590 35J65
- Nonlinear boundary value problems for systems of second-order elliptic differential equations. *Bull. Inst. Math. Acad. Sinica* **5** (1977), no. 1, 157-165. (S. A. Tersenov) **57** #13183 35J65
- Periodic solutions of nonlinear parabolic differential equations. *Bull. Inst. Math. Acad. Sinica* **5** (1977), no. 2, 219-247. (Mitsuihiro Nakao) **57** #6772 35B10 (35K60)
- The existence of solutions of nonlinear elliptic boundary value problems. *Chinese J. Math.* **5** (1977), no. 2, 93-106. (M. H. Protter) **58** #6679 35J60
- Ts'ai, Mou Ch'eng** See **Cal, Mao Cheng**
- Tsai, P. J.** (with DeSilva, Carl N.) A general theory of directed surfaces. (German summary) *Acta Mech.* **18** (1973), 89-101. (G. de La Penha) **49** #1888 73J53
- Tsai, W. S.** (with Duran, Benjamin S.; Lewis, Truman O.) A class of location-scale nonparametric tests. *Biometrika* **63** (1976), no. 1, 173-176. (M. Raghavachari) **53** #11869 62G10
- Tsai, Wan Tsuan** (with Reissner, E.) Considerations on the centres of shear and of twist in the theory of beams. *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Mushelišvili) (Russian)*, pp. 403-408. *Izdat. "Nauka", Moscow, 1972*. (Yi-Yuan Yu) **52** #4793 73J49
- (with Kuo, Reed) Large deformations of a cantilever beam. *Tamkang J. Math.* **6** (1975), no. 2, 161-171. (Z. Kączkowski) **54** #6654 73J65
- Tsai, Wu Yang** (with Schwinger, Julian) New approach to quantum corrections in synchrotron radiation. *Ann. Physics* **110** (1978), no. 1, 63-84. (Pierre Hillion) **57** #11457 81J35 (33A65)
- Tsai, Yen Shung** (with Kimura, Naoki) On power cancellative Archimedean semigroups. *Proc. Japan Acad.* **48** (1972), 553-554. (T. E. Hall) **49** #2991 20M10
- Ts'ai, Yüeh Hsia** (with Ko, Hwei Mei) Fixed point theorems with localized property. *Tamkang J. Math.* **8** (1977), no. 1, 81-85. (E. Fadell) **57** #7566 54H25
- Tsamaphyros, G. J.** (with Theocaris, Pericles S.) Résolution du deuxième problème aux limites. (English and Russian summaries) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **24** (1976), no. 12, 919-926. (Authors' summary) **58** #29894 45B05
- (with Theocaris, Pericles S.) Le premier problème aux limites pour un coin infini. (English summary) *J. Mécanique* **15** (1976), no. 4, 615-630. (René Hayart) **55** #1911 73J35
- (with Theocaris, Pericles S.) Numerical inversion of Mellin transforms. *Nordisk Tidskr. Informationsbehandling (BIT)* **16** (1976), no. 3, 313-321. (Authors' summary) **54** #11737 65D20
- (with Theocaris, Pericles S.) On the convergence of a Gauss quadrature rule for evaluation of Cauchy type singular integrals. *Nordisk Tidskr. Informationsbehandling (BIT)* **17** (1977), no. 4, 458-464. (Thomas A. Atchison) **57** #7959 65D30 (41A55)
- (with Theocaris, Pericles S.) Sur une méthode de résolution du deuxième problème aux limites. (Polish and Russian summaries) *Arch. Mech. (Arch. Mech. Stos.)* **30** (1978), no. 1, 3-15. (P. Villaggio) **57** #18396 73J45 (45E05)
- Tsampanlis, Michael** (with Saffo, John L.; Elston, Fredrick) Variational methods with torsion in general relativity. *Phys. Lett. A* **60** (1977), no. 1, 1-2. (Andrzej Trautman) **57** #8927 83J53
- On the Palatini method of variation. *J. Mathematical Phys.* **19** (1978), no. 3, 555-557. (J. D. Logan) **57** #11601 83J49
- Tsan, Alice** (with Kellogg, R. Bruce) Analysis of some difference approximations for a singular perturbation problem without turning points. *Math. Comp.* **32** (1978), no. 144, 1025-1039. (R. E. O'Malley, Jr.) **58** #3485 65L10
- Tsang, Leung** Time-harmonic solution of the elastic head wave problem incorporating the influence of Rayleigh poles. *J. Acoust. Soc. Amer.* **63** (1978), no. 5, 1302-1309. (E. Pinney) **58** #14103 73J30
- Tsang, S. K.** Corner transfer matrices of the triangular Ising model. *J. Statist. Phys.* **17** (1977), no. 3, 137-152. (J. E. Lowther) **57** #8749 82J05
- Tsang, T. Y.** (with Osborn, T. A.) The spectral property of time delay. *Nuclear Phys. A* **247** (1975), no. 1, 43-50. (Jean-Paul Marchand) **51** #9715 81J47
- (with Osborn, T. A.) A quantum theory of higher virial coefficients. *Ann. Physics* **101** (1976), no. 1, 119-153. (G. S. Agarwal) **55** #5111 82J47
- Tsanov, V. V.** See **Canov, V. V.**
- Tsao, Chia Kuei** Spaces of random experiments, random vectors and probability spaces. Collection of articles in celebration of the sixtieth birthday of Ky Fan. *Bull. Inst. Math. Acad. Sinica* **2** (1974), 309-316. (A. Fuchs) **50** #8622 60A05
- Tsao, H. Y.** (with Wilson, D. B.; Shouman, A. R.) A method for numerically solving second-order non-homogeneous linear differential equations with variable coefficients. *Internat. J. Numer. Methods Engrg.* **7** (1973), 235-240. (C. Froese Fischer) **48** #10136 65L99
- Ts'ao, Liang Chi** On Fourier coefficients of Eisenstein series. *Bull. Amer. Math. Soc.* **79** (1973), 1064-1068. (E. Vinberg) **48** #6006 10D20 (20H10, 22E40, 32N15)
- Exponential sums over finite simple Jordan algebras and finite simple associative algebras. *Duke Math. J.* **42** (1975), 333-345. (J. Knopfmacher) **51** #383 10G05 (32N99)
- The rationality of the Fourier coefficients of certain Eisenstein series on tube domains. *Compositio Math.* **32** (1976), no. 3, 225-291. (Audrey A. Terras) **54** #7388 10D20 (17C35, 10G05, 32N15)
- (with Chowla, Paromita; Chowla, S.) Some Diophantine equations in cyclotomic fields. *Chinese J. Math.* **5** (1977), no. 1, 11-14. (R. J. Cook) **56** #8493 10B35 (12A35)
- Tsao, Nai Kuan** On the distributions of significant digits and roundoff errors. *Comm. ACM* **17** (1974), 269-271. (N. N. Abdelmalek) **49** #6595 65G05
- Some a posteriori error bounds in floating-point computations. *J. Assoc. Comput.*

- Mach.* **21** (1974), 6-17. (N. N. Abdelmalek) **49** #8319 65G05
On iterative refinement of triangular linear algebraic systems. *J. Franklin Inst.* **299** (1975), no. 6, 409-416. (L. Fox) **51** #9450 65F10
A note on implementing the Householder transformation. *SIAM J. Numer. Anal.* **12** (1975), 53-58. (Authors' summary) **50** #8954 65G05
Newton interpolation is efficient for approximation of linear functionals. *Numer. Math.* **29** (1977/78), no. 1, 115-122. (Colin M. Campbell) **57** #7944 65D05 (65D15)
- Tsao-wu, N. T.** (with Opferman, D. C.) On a class of rearrangeable switching networks. I. Control algorithm. *Bell System Tech. J.* **50** (1971), 1579-1600. **45** #6523 94A20
(with Opferman, D. C.) On a class of rearrangeable switching networks. II. Enumeration studies and fault diagnosis. *Bell System Tech. J.* **50** (1971), 1601-1618. **45** #6524 94A20
- Tsai, Chih Shun** (with Ching, Wai Mee) A family of type III factors without property L . *Math. Ann.* **222** (1976), no. 3, 195-204. (Alain Connes) **54** #8305 46L10
On the classification of the crossed products $R_\lambda \otimes_\pi G$. *Tamkang J. Math.* **7** (1976), no. 2, 223-232. (Zbl **366** #46052) **58** #23637 46L10
- Tsay, Jia Yeong** (with Studden, William J.) Remez's procedure for finding optimal designs. *Ann. Statist.* **4** (1976), no. 6, 1271-1279. (J. Kiefer) **54** #6395 62K05
On the sequential construction of D -optimal designs. *J. Amer. Statist. Assoc.* **71** (1976), no. 355, 671-674. (Valery Fedorov) **55** #4545 62K05
A convergence theorem in L -optimal design theory. *Ann. Statist.* **5** (1977), no. 4, 790-794. (J. Kiefer) **55** #11514 62K05
- Tsay, Yih Tsong** (with Chen, C. F.) A return difference stability criterion for discrete-time feedback systems. *Proceedings of the Ninth Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1976), pp. 211-214. *Western Periodicals, North Hollywood, Calif.*, 1974. (Authors' summary) **56** #18016 93D10
Analytic determination of limit cycle for a class of third-order non-linear system. *Internat. J. Control* **19** (1974), 1143-1154. (B. J. Leon) **49** #12131 93D15
(with Han, Kuang Wei) Applications of the stability-equation method to linear systems. *J. Franklin Inst.* **300** (1975), no. 4, 243-264. **56** #14999 93D15
(with Han, Kuang Wei) A gradient approach to the determination of stability of limit cycles. *J. Franklin Inst.* **300** (1975), no. 5/6, 391-418. (Authors' summary) **58** #4547 93D15 (93C10)
(with Chen, C. F.) A general frequency stability criterion for multi-input-output, lumped and distributed-parameter feedback systems. *Internat. J. Control* **23** (1976), no. 3, 341-359. (Timothy L. Johnson) **56** #14989a 93D10 (93D15, 93C20)
(with Han, Kuang Wei) Stability-equation method for sampled-data systems. *J. Franklin Inst.* **301** (1976), no. 4, 335-356. (K. B. Datta) **53** #15505 93D99 (93C55)
(with Han, Kuang Wei) Stability equation method for control systems with lags and distributed-parameters. *J. Franklin Inst.* **303** (1977), no. 1, 29-51. (Guy Jumarie) **56** #2573 93D99 (93C20)
See also Rosenbrock, Howard H.; et al., **56** #14989b and Desoer, Charles A., **56** #14989c
- Tscharnuter, Werner** Markoffsche Prozesse und Stelldynamik. II. (English summary) *Osterreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **179** (1971), 385-398. (E. Lyttkens) **49** #6884 85G00
- Tschauer, J.** (with Jury, Eliahu I.) On the inner formulation of stability condition within the shifted unit circle. (German summary) *Regelungstech. Prozeß-Datenverarbeitung* **19** (1971), no. 7, 299-300. (R. Liu) **47** #10107 93D10
See also Proceedings: Oberwolfach Conference on Celestial Mechanics, **47** #7979
- Tschebyscheff, P. L.** See Čebyšev, P. L.
- Tschernawski, A. V.** See Černavskii, A. V.
- Tscherning, C. C.** Application of collocation determination of a local approximation to the anomalous potential of the earth using "exact" astro-gravimetric collocation. *Mathematical geodesy* (Internat. Summer School Math. Methods Phys. Geodesy, Ramsau, 1973), Part III, pp. 83-110. *Methoden und Verfahren Math. Phys., Band 14*, Bibliographisches Inst., Mannheim, 1975. **58** #25850 86G5
A note on the choice of norm when using collocation for the computation of approximations to the anomalous potential. *Bull. Géod.* **51** (1977), no. 2, 137-147. (Authors' summary) **56** #10750 86G5
- Tscheschankow, B.** (with Popow, W.) Über die Resonanzschwingungen eines konservativen Systems. *Z. Angew. Math. Mech.* **53** (1973), no. 2, 134-137. (P. Hagedorn) **52** #9733 70J34
- Tschirhart, John T.** (with Sorenson, John R.; Winston, Andrew B.) A game theoretic approach to peak load pricing. *Bell J. Econom.* **7** (1976), no. 2, 497-520. (M. Stoica) **55** #10051 90D45
- von Tschirnhaus, Ehrenfried Walther** See Hofmann, Joseph Ehrenfried, **58** #21130 and Hofmann, Joseph Ehrenfried, **58** #26893
- von Tschirnhaus, G. W.** See Winter, Eduard J., **58** #21156
- Tschobanow, Iwan** See Čobanov, Ivan
- Tschupik, Josef P.** Über den Bau gewisser Bildersysteme im projektiven R_n . *Monatsh. Math.* **75** (1971), 263-271. (E. Morgantini) **45** #5856 50D20
Über die Typen der A -Systeme. *Monatsh. Math.* **76** (1972), 143-153. (A. C. Choudhury) **48** #12261 50D20
Über die durch A -Systeme vermittelten Bijektionen. *Osterreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **183** (1974), 1-9. (A. C. Choudhury) **51** #8945 50D15
Der Verband der Primärprojektionen eines A -Systems. *Osterreich. Akad. Wiss. Math.-Natur. Kl. S.-B. II* **183** (1975), no. 8-10, 445-452. (R. J. Bumcrot) **53** #1390 50D25
- Tse, Edison** (with Wishner, Richard P.) Target track pulse scheduling. *IEEE Trans. Aerospace and Electron. Systems* **AES-7** (1971), 1113-1122. (K. Hinderer) **46** #10478 93E10
(with Athans, Michael) Adaptive stochastic control for a class of linear systems. *IEEE Trans. Automatic Control* **AC-17** (1972), 38-52; correction, *ibid.* **AC-17** (1972), 417. (M. Aoki) **51** #2747 (E **54** #9820) (E **51** #5137) 93E99
(with Anton, John J.) On the identifiability of parameters. *IEEE Trans. Automatic Control* **AC-17** (1972), no. 5, 637-646. (Authors' summary) **55** #14376 (E **55** #14377) 93E10
(with Casti, J.) Optimal linear filtering theory and radiative transfer: Comparisons and interconnections. *J. Math. Anal. Appl.* **40** (1972), 45-54. (P. Nelson) **48** #10593 93E10 (80A45)
- (with Weinert, Howard) Correction and extension of: "On the identifiability of parameters" (IEEE Trans. Automatic Control **AC-17** (1972), 637-646) by E. Tse and J. J. Anton. *IEEE Trans. Automatic Control* **AC-18** (1973), 687-688. (Authors' summary) **55** #14377 93E10
Observer-estimators for discrete-time systems. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 1, 10-16. (Claude Foulds) **55** #5274 93C55 (93E10)
Further comments on: "Adaptive stochastic control for a class of linear systems" (IEEE Trans. Automatic Control **AC-17** (1972), 38-52) by Tse and M. Athans. *IEEE Trans. Automatic Control* **AC-18** (1973), no. 3, 324-326. (Authors' summary) **54** #9820 93E20 (93C40)
(with Athans, Michael) Observer theory for continuous-time linear systems. *Information and Control* **22** (1973), 405-434. (Andrew P. Sage) **48** #13412 93E10
(with Bar-Shalom, Yaakov) Dual effect, certainty equivalence, and separation stochastic control. *IEEE Trans. Automatic Control* **AC-19** (1974), 494-500. (A. B. Schwarzkopf) **56** #5027 93E99
(with Bar-Shalom, Yaakov) Generalized certainty equivalence and dual effect in stochastic control. *IEEE Trans. Automatic Control* **AC-20** (1975), no. 6, 817-819. (D. D. Sworner) **52** #16817 93E20
(with Bar-Shalom, Yaakov) Concepts and methods in stochastic control. *Control and dynamic systems, Advances in theory and applications*, Vol. 12, pp. 99-172. Academic Press, New York, 1976. (Ruth Curtain) **53** #2496 93E99
Sequential decision and stochastic control. Stochastic systems: modeling, identification and optimization, I (Proc. Sympos., Univ. Kentucky, Lexington, Ky., 1975). *Math. Programming Stud. No. 5* (1976), 227-243. (K. Wickwire) **56** #11408 93E10 (93E20, 62C99)
(with Bar-Shalom, Yaakov) Actively adaptive control for nonlinear stochastic systems. Special issue on adaptive systems. *Proc. IEEE* **64** (1976), no. 8, 1172-1181. (Robert B. Asher) **54** #9821 93E20
A quantitative measure of identifiability. *IEEE Trans. Systems Man Cybernet.* **SMC-8** (1978), no. 1, 1-8. (Tohru Katayama) **57** #5352 93E10 (94A05)
See also Yoshikawa, Tsueno; et al., **50** #15999; Harunoğlu, İ. S.; et al., **51** #5137 and Pemberton, Troy J.; et al., **56** #2543
- Tse, Edwin C. Y.** (with Medanić, Juraj V.; Perkins, William R.) Generalized Hessenberg transformations for reduced-order modelling of large-scale systems. *Internat. J. Control* **27** (1978), no. 4, 493-512. (Authors' summary) **58** #4480 93A15
- Tse, Kan-Fook** Neo-normal functions in arbitrary regions. *Nagoya Math. J.* **48** (1972), 19-36. (N. Toda) **49** #7450 30A74
- Tseligorov, N. A.** See Celigorov, N. A.
- Tselishchev, V. V.** See Čeliščev, V. V.
- Tseng, C. C.** (with Liu, C. L.) Complementary sets of sequences. *IEEE Trans. Information Theory* **IT-18** (1972), 644-652. (H. F. Mattson, Jr.) **53** #2511 94A05
- Tseng, Ching Nan** (with Wang, Huai Chi'uan) Closed subalgebras of homogeneous Banach algebras. *J. Austral. Math. Soc. Ser. A* **20** (1975), no. 3, 366-376. (Michael Leinert) **54** #3298 43A20
- Ts'eng, Chün Hung** Poincaré theta series of Schottky groups. *Taipei J. Math.* **2** (1970), 45-51. (H. Klingens) **47** #2056 30A58
On combination theorems of some Kleinian groups. *Chinese J. Math.* **1** (1973), no. 2, 203-208. (Troels Jørgensen) **52** #14079 20H10
Perron's formulae for analytic almost periodic functions. *Chinese J. Math.* **2** (1974), no. 1, 39-47. (W. Maak) **54** #851 42A84 (30A16)
(with Ch'ên, Wu Yung) On a convergence theorem in H^p space. *Chinese J. Math.* **3** (1975), no. 1, 23-26. (J. Mitchell) **55** #3343 32M15 (32A30)
A remark on Eisenstein series. *Chinese J. Math.* **3** (1975), no. 1, 85-88. (Roy Fuller) **54** #2592 10D15
Poincaréreihen und Dirichletreihen mit Funktionalgleichung. *Chinese J. Math.* **4** (1976), no. 1, 59-73. (W. Maak) **54** #7381 10D05 (10K35, 42A84, 10H10)
Fastperiodizitätseigenschaften von Dirichletfunktionen. *Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. II* **1976**, no. 7, 87-97. (J. Lehner) **57** #12401 10D15 (10H10, 42A84)
Die Rademachersche Funktion Φ -und fastautomorphe Formen. *Chinese J. Math.* **5** (1977), no. 2, 133-151. (W. Maak) **57** #3081 10D15 (42A84)
(with Ts'eng, Chün Shan) Tolerance spaces and almost periodic functions. *Bull. Inst. Math. Acad. Sinica* **6** (1978), no. 1, 159-173. (H. Gunzler) **58** #23355 43A60 (22D40, 43A07, 54A05)
- Ts'eng, Chün Shan** (with Ts'eng, Chün Hung) Tolerance spaces and almost periodic functions. *Bull. Inst. Math. Acad. Sinica* **6** (1978), no. 1, 159-173. (H. Gunzler) **58** #23355 43A60 (22D40, 43A07, 54A05)
- Tserkovnikov, Yu. A.** See Cerkovnikov, Ju. A.
- Tserpes, Nicholas A.** (with Sun, Tze Chien) Idempotent probability measures on locally compact abelian semigroups. *J. Math. Mech.* **19** (1969/70), 1113-1116. (From the authors' introduction) **56** #6278 43A05 (60B15)
(with Mukherjee, Arunava) Sur le support d'une mesure r^* -invariante. *C. R. Acad. Sci. Paris Sér. A-B* **270** (1970), A816-A817. (Authors' summary) **54** #517 28A70
(with Mukherjee, Arunava) A problem on r^* -invariant measures on locally compact semigroups. *Indiana Univ. Math. J.* **21** (1971/72), 973-977. (T.-C. Sun) **45** #507 28A70 (43A05)
(with Mukherjee, Arunava) Idempotent measures on locally compact semigroups. *Proc. Amer. Math. Soc.* **29** (1971), 143-150. (H. Umegaki) **45** #5268 22A20 (46G99)
(with Mukherjee, Arunava) A note on countably compact semigroups. *J. Austral. Math. Soc.* **13** (1972), 180-184. (J. M. Day) **46** #3680 22A15
(with Mukherjee, Arunava) Invariant measures and the converse of Haar's theorem on semitopological semigroups. *Pacific J. Math.* **44** (1973), 251-262. (C. Chou) **47** #6932 22A15 (43A05)
(with Mukherjee, Arunava; Sun, Tze Chien) Random walks on compact semigroups. *Proc. Amer. Math. Soc.* **39** (1973), 599-605. (J. H. B. Kemperman) **47** #5967 60J15 (60B15)
(with Sun, Tze Chien; Mukherjee, Arunava) On recurrent random walks on semigroups. *Trans. Amer. Math. Soc.* **185** (1973), 213-227. (D. Revuz) **49** #11637 60J15
(with Mukherjee, Arunava) Some problems on random walks on semigroups.

- Proceedings of the C. Carathéodory International Symposium (Athens, 1973), pp. 592-610. Greek Math. Soc., Athens, 1974. (Authors' summary) 58 #24565 60J15 (60B15)*
 (with Mukherjea, Arunava) Bilateral random walks on compact semigroups. *Proc. Amer. Math. Soc.* **47** (1975), 457-466. (Michael Keane) **54** #11437 (EA 55/56) 60B99
 (with Clark, W. E.; Mukherjea, Arunava) Is topologically simple? *Semigroup Forum* **11** (1975), no. 1, 90-93. (K. N. Sigmon) **52** #5847 22A15
 (with Mukherjea, Arunava) ★ Measures on topological semigroups: convolution products and random walks. *Lecture Notes in Mathematics*, Vol. 547. Springer-Verlag, Berlin-New York, 1976. v + 197 pp. (Göran Högnäs) **57** #7722 60B15 (43A05, 60J15)
 (with Bharucha-Reid, Albert T.; Mukherjea, Arunava) On the existence of random solutions of some random integral equations. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 6, 737-745. (J. S. Milton) **56** #6869 60H20 (45F05)
 ertsvadze, G. N. See Cercvadze, G. N.
 eskis, A. L. See Ceskis, A. L.
 etlin, M. L. See Cetlin, M. L.
 eytin, G. S. See Ceitin, G. S.
 eytin, G. E. See Ceitin, G. E.
 omba-Tshola, M.-M. See Nkomba-Tshola, M.-M.
 atis, Anastasios A nonidentifiability aspect of the problem of competing risks. *Proc. Nat. Acad. Sci. U.S.A.* **72** (1975), 20-22. (R. M. Cormack) **50** #8895 62P10
 ichritzis, D. The equivalence problem of simple programs. *J. Assoc. Comput. Mach.* **17** (1970), 729-738. (H. R. Strong) **47** #9879 68A05
 IFF programs. *Theory of machines and computations (Proc. Internat. Sympos., Technion, Haifa, 1971), pp. 99-111. Academic Press, New York, 1971. (Author's summary) 56 #13757 68A05*
 A note on comparison of subrecursive hierarchies. *Information Processing Lett.* **1** (1971/72), 42-44. (John Gill) **46** #5123 02F20
 Participation measures. *J. Math. Anal. Appl.* **36** (1971), 60-72. (J. A. Schatz) **50** #6207 68A20
 Approximate logic. *Conference Record of the 1973 International Symposium on Multiple-Valued Logic (Univ. Toronto, Toronto, Ont., 1973), pp. 205-216. Office of Naval Res., Arlington, Va., 1973. (János Demetronics) 51 #10031 02C05 (68A55)*
 A model for iterative computation. *Information Sci.* **5** (1973), 187-197. (John T. Gill) **47** #9886 68A10 (02F50)
 See also *Proceedings: Manitoba Conference on Numerical Mathematics*, **48** #10034
 ichritzis, Dionysios C. (with Lochovsky, Frederick H.) ★ Data base management systems. *Computer Science and Applied Mathematics. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1977. xvi + 388 pp. (Fabrizio Luccio) 55 #13906 68A50*
 ilimigras, P. On the existence of relations among the eigenvalues of difference equations. *J. Mathematical Phys.* **13** (1972), 457-458. (J. W. Schmidt) **45** #9476 65Q05
 (with Jannussis, A. D.; Paptheou, V.) The motion of an electron in one-dimensional periodic potential under the influence of uniform electric and magnetic fields. *Phys. Status Solidi (B)* **88** (1978), no. 1, 341-350. (Authors' summary) **58** #25641 81.60
 inakis, Constantine (with Schmidt, Jürgen) Relative pseudo-complements, join-extensions, and meet-retractions. *Proceedings of the Lattice Theory Conference (Ulm, 1975), pp. 233-251. Univ. Ulm, Ulm, 1975. (Daniel Ponasse) 55 #7866 06A20*
 (with Schmidt, Jürgen) Relative pseudo-complements, join-extensions, and meet-retractions. *Math. Z.* **157** (1977), no. 3, 271-284. (Editors) **57** #12314 06A25
 ingas, A. (with Power, Henry M.) Unassigned eigenvalues in B. S. Morgan's decoupling technique [IEEE Trans. Automatic Control AC-9 (1964), 405-411]. *Electron. Lett.* **12** (1976), no. 5, 114-115. (Editors) **52** #12917 93D15
 inober, A. B. See Cinobers, A. B.
 inober, A. B. (with Sánchez-Palencia, Enrique) Comportement limite et stabilité de certains écoulements magnétohydrodynamiques. (English summary) *J. Mécanique* **13** (1974), 623-637. (Colin Rogers) **50** #15577 76.35
 irel'man, N. M. See Cirl'man, N. M.
 irlin, A. M. See Cirlin, A. M.
 isar', A. F. See Cisar', A. F.
 itkin, A. I. See Citkin, A. I.
 itkin, M. Yu. See Citkin, M. Ju.
 itlanadze, E. S. See Citlanadze, E. S.
 itsas, Leonidas N. Ordered tensor products and harmonic analysis. *Bull. Math. Soc. Sci. Math. R.S. Roumaine (N.S.)* **14**(62) (1970), 247-254 (1971). (J. D. Stegeman) **48** #9400 46H99 (43A20)
 Inductive limits and tensor products of ordered topological vector spaces and algebras. *Bull. Soc. Math. Grèce (N.S.)* **11** (1970), no. 1, 6-30. (R. Cristescu) **50** #2935 46M05
 Ordered topological tensor products of vector spaces and algebras. (Greek. English summary) *Bull. Soc. Math. Grèce (N.S.)* **11** (1970), no. 2, 115-166. (A. G. Kartsatos) **48** #9413 46M05 (06A70)
 Integral-Darstellungen von vektorwertigen Radonschen Massen. *Rev. Roumaine Math. Pures Appl.* **15** (1970), 761-769. (J. Diestel (Zbl 227 #46009)) **54** #930 46G10 (47B10)
 Integral-Darstellungen von linearen Abbildungen Radonschen Typus. *Math. Balkanica* **1** (1971), 248-256. (B. J. Pettis and Alan Shuchat) **48** #4731 46G10
 Integral representations of continuous linear maps. I. *Rev. Roumaine Math. Pures Appl.* **16** (1971), 1563-1571. (R. Cristescu) **47** #5551 46A40 (28A45, 47B99)
 On the generalized positive spectrum of ordered topological tensor product algebras. *J. Math. Anal. Appl.* **37** (1972), 341-350. (A. Revuz) **45** #3487 16A80 (46H05)
 On the positive spectrum of ordered topological tensor product algebras. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 435-441. (G. R. Allan) **47** #2389 46M05 (46H99)
 On generalized positive spectra of ordered topological tensor product algebras. *Rev. Roumaine Math. Pures Appl.* **17** (1972), 617-627. (G. R. Allan) **47** #2390 46M05 (46H99)
 On the generalized spectra of topological algebras. *J. Math. Anal. Appl.* **42** (1973), 174-182. (A. Mallios) **51** #6425 46H05
 On integral representations of (vo)-bounded linear operators. *Rev. Roumaine Math. Pures Appl.* **18** (1973), 1423-1437. (N. Popa) **48** #4817 47B37 (46A05)
 On order bounded continuous linear operators in topological Riesz spaces. (Greek summary) *In honor of Stavrós M. Plakidis (special vol. dedicated to his 80th birthday), pp. 373-384. Zisuli, Athens, 1974. (D. H. Fremlin) 50 #2993 47B55*
 On vector-valued functional representations of topological algebras. *J. Math. Anal. Appl.* **53** (1976), no. 3, 715-721. (S. Warner) **53** #3704 46H15
 On weak sequential completeness in bijective tensor product spaces. *Proc. Amer. Math. Soc.* **60** (1976), 119-123 (1977). (Klaus-Dieter Bierstedt) **58** #12418 46M05 (46A05)
 On weak compactness in bijective tensor product spaces. *Math. Nachr.* **78** (1977), 297-308. (D. J. H. Garling) **58** #7017 46A20 (46M05)
 On the heredity of weak compactness in bijective tensor product spaces. *Studia Math.* **61** (1977), no. 1, 1-16. (K. Floret) **56** #6426 46M05 (46A05)
 Tsitsiashvili, G. Sh. See Ciciashvili, G. Š.
 Tsodikov, Yu. M. See Codikov, Ju. M.
 Tsoi, A. C. (with Power, Henry M.) Lyapunov matrix equation with complex matrices. *Electron. Lett.* **6** (1970), 248-249. (P. C. Parks) **50** #3959 90D05 (65K05)
 Explicit solution of a class of delay-differential equations. *Internat. J. Control* **21** (1975), 39-48. (V. Staikos) **50** #13804 34K05
 Explicit solution to a class of neutral delay-differential equations. *Internat. J. Control* **22** (1975), no. 6, 787-799. (C. H. Anderson) **54** #13255a (E 54 #13255b) 34K05
 Explicit solution to a class of functional differential equations. *Internat. J. Control* **22** (1975), no. 6, 869-875. (P. K. C. Wang) **53** #15474 93C30 (34K05)
 Minimal realization of linear systems. *Internat. J. Control* **23** (1976), no. 4, 575-585. (Y. Cherruault) **54** #9746 (E 57 #11846) 93B15
 Errata: "Explicit solution to a class of neutral delay-differential equations" (Internat. J. Control **22** (1975), no. 6, 787-799). *Internat. J. Control* **24** (1976), no. 4, 591-592. (C. H. Anderson) **54** #13255b 34K05
 See also Gargash, B. C.; et al., **57** #11846
 Tsokos, Chris P. (with Hamdan, M. A.) Stochastic nonlinear integro-differential systems with time lag. *J. Natur. Sci. and Math.* **10** (1970), 293-303. (G. Papanicolaou) **46** #8305 60H20
 (with Padgett, W. J.) On a semi-stochastic model arising in a biological system. *Math. Biosci.* **9** (1970), 105-117. (B. Singer) **45** #9719 92A05
 (with Rama Mohana Rao, M.) On the growth of solutions of complex differential systems. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 39-42. (G. A. Bogar) **46** #2155 34C10 (34A20)
 (with Rama Mohana Rao, M.) Stability of non-linear differential systems with respect to manifolds. *Proc. Nat. Acad. Sci. India Sect. A* **40** (1970), 204-208. (H. K. Wilson) **47** #571 34D20
 (with Padgett, W. J.) ★ Random integral equations with applications to stochastic systems. *Lecture Notes in Mathematics*, Vol. 233. Springer-Verlag, Berlin-New York, 1971. vii + 174 pp. (A. T. Bharucha-Reid) **49** #1588 60H20 (93E15)
 Stochastic integral equations in engineering and biological sciences. (Romanian summary) *An. Şti. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.)* **17** (1971), 407-419. (S. I. Rosencrans) **47** #5955 60H20
 (with Ladas, Gerasimos) On the oscillation of solutions of self-adjoint differential equations of order four. (Romanian summary) *An. Univ. Timişoara Ser. Şti. Mat.* **9** (1971), 79-82. (G. A. Bogar) **49** #10965 34C10
 (with Rao, A. N. V.) Distributed-parameter systems with time-delay. *Information and Control* **19** (1971), 1-9. (H. E. Gollwitzer) **48** #3571 93D99
 (with Hamdan, M. A.) An information measure of association in contingency tables. *Information and Control* **19** (1971), 174-179. (T. N. Bhargava) **47** #6022 62G05
 (with Milton, J. Susan) On a nonlinear perturbed stochastic integral equation. *J. Mathematical and Physical Sci.* **5** (1971), 361-374. (H. P. McKean, Jr.) **45** #6091 60H20
 Eventual uniform asymptotic stability of control systems. *Math. Nachr.* **48** (1971), 43-47. (Editors) **46** #8722a 93D99
 Stochastic approximation of a random integral equation. *Math. Nachr.* **51** (1971), 101-110. (E. H. Lehman) **46** #6463 60H20
 Eventual uniform asymptotic stability of control systems. (Romanian summary) *Bul. Inst. Politehn. Iaşi (N.S.)* **18**(22) (1972), no. 1-2, part I, 71-75. (Editors) **46** #8722b 93D99
 (with Nichols, William G.) An empirical Bayes approach to point estimation in adaptive control. *Information and Control* **20** (1972), 263-275. (Authors' summary) **55** #4453 62C25 (93C40)
 (with McCallum, D. B.) L_p stability of a non-linear stochastic control system. *Internat. J. Systems Sci.* **3** (1972), 215-223. (Authors' summary) **55** #14381 93E15
 (with Hamdan, M. A.) Stochastic asymptotic exponential stability of stochastic integral equations. *J. Appl. Probability* **9** (1972), 169-177. (Y. M. Chen) **45** #7846 60H20
 (with Rao, A. N. V.) Stochastic control systems and target function. *Kybernetes* **5** (1972), no. 2, 83-90. (Jean-Michel Bismut) **53** #10451 93E20
 (with Padgett, W. J.) A random Fredholm integral equation. *Proc. Amer. Math. Soc.* **33** (1972), 534-542. (H. P. McKean, Jr.) **45** #1284 60H20
 Bayesian approach to reliability using the Weibull distribution with unknown parameters and its computer simulation. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **19** (1972), no. 4, 1-12. (H. L. Harter) **48** #7518 62N05
 (with Milton, J. Susan; Padgett, W. J.) On the existence and uniqueness of a random solution to a perturbed random integral equation of the Fredholm type. *SIAM J. Appl. Math.* **22** (1972), 194-208. (C. Corduneanu) **46** #10070 60H20
 (with Padgett, W. J.) On stochastic integro-differential equation of Volterra type. *SIAM J. Appl. Math.* **23** (1972), 499-512. (J. A. Goldstein) **47** #9713 60H20
 (with Padgett, W. J.) On a stochastic integral equation of the Fredholm type. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **23** (1972), 22-31. (G. Niculescu) **46** #10071 60H20

- (with Nichols, William G.) On some stochastic differential games. *Probabilistic methods in applied mathematics*, Vol. 3, pp. 277-336. Academic Press, New York, 1973. (Editors) **58** #33404 93E05 (90Dxx)
- (with Ladas, Gerasimos) On the asymptotic equivalence of rectilinear motion. (Romanian summary) *Bul. Inst. Politehn. Iasi (N.S.)* **19(23)** (1973), no. 1-2, part I, 33-37. (T. G. Hallam) **48** #8996 34D05
- (with Milton, J. Susan) On a random solution of a nonlinear perturbed stochastic integral equation of the Volterra type. *Bull. Austral. Math. Soc.* **9** (1973), 227-237. (S. I. Rosencrans) **49** #6355 60H20
- (with Padgett, W. J.) A random discrete equation and non-linear stochastic control system. *Internat. J. Systems Sci.* **4** (1973), 77-85. (E. F. Car'kov) **48** #5183 60H99 (93E20)
- (with Padgett, W. J.) Random solution of a stochastic integral equation: almost sure and mean square convergence of successive approximations. *Internat. J. Systems Sci.* **4** (1973), 605-612. (A. N. V. Rao) **48** #12649 60H20
- (with Campbell, Janet W.) The asymptotic distribution of maxima in bivariate samples. *J. Amer. Statist. Assoc.* **68** (1973), 734-739. (M. A. Hamdan) **51** #2085 62E20
- (with Telonis, Demetri P.) Stochastic particle trajectories in turbulent flow. *J. Mathematical Phys.* **14** (1973), 757-758. (J. L. Lumley) **48** #7780 76.60 (60H20)
- (with Milton, J. Susan; Hardiman, Stephen T.) A stochastic model for metabolizing systems with computer simulation. *J. Statist. Phys.* **8** (1973), 79-101. (Authors' summary) **56** #17893 92A05
- (with Padgett, W. J.) Stochastic asymptotic stability and approximation of the random solution of a stochastic discrete Fredholm system. *Kybernetes* **2** (1973), no. 4, 239-251. (Zbl **276** #93053) **58** #3045 60H20 (93E20)
- (with Hinkley, Sidney W.) A stochastic bivariate ecology model for competing species. *Math. Biosci.* **16** (1973), 191-208. (R. M. Cormack) **47** #2684 (E **54** #14138) 60J85 (92A15)
- (with Padgett, W. J.) A new stochastic formulation of a population growth problem. *Math. Biosci.* **17** (1973), 105-120. (A. N. V. Rao) **48** #13313 92A15
- (with Padgett, W. J.) A stochastic integral equation in Hilbert space with a discrete version and application to stochastic systems. *Math. Systems Theory* **7** (1973), 55-65. (N. U. Ahmed) **48** #3585 93E99
- (with Canavos, George C.) Bayesian estimation of life parameters in the Weibull distribution. *Operations Res.* **21** (1973), 755-763. (Bruce M. Hill) **52** #2008 62F15 (62N05)
- (with Padgett, W. J.) ★Random integral equations with applications to life sciences and engineering. Mathematics in Science and Engineering, Vol. 108. Academic Press [A subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1974. x+278 pp. (N. U. Ahmed) **50** #14934 60H20 (92-XX, 93Exx)
- Sufficient conditions for the existence of random solutions to a nonlinear perturbed stochastic integral equation. *Proceedings of the C. Carathéodory International Symposium (Athens, 1973)*, pp. 611-622. *Greek Math. Soc., Athens*, 1974. (A. T. Bharucha-Reid) **57** #17830 60H20
- (with Milton, J. Susan) A stochastic system for communicable diseases. *Internat. J. Systems Sci.* **5** (1974), 503-509. (R. Fischler) **50** #12325 90A15
- (with Hardiman, Stephen T.) Existence theory for a stochastic differential equation. *Internat. J. Systems Sci.* **5** (1974), 615-621. (D. Kannan) **49** #9947 60H10
- (with Padgett, W. J.) On the existence of a unique solution of a stochastic integral equation in hereditary mechanics. *J. Mathematical and Physical Sci.* **8** (1974), 299-308. (William J. Anderson) **54** #14103 60H99 (73.45)
- (with Hinkley, Sidney W.) A stochastic model for chemical equilibrium. *Math. Biosci.* **21** (1974), 85-102. (Authors' summary) **49** #11672 60K99
- (with Milton, J. Susan) On a class of nonlinear stochastic integral equations. *Math. Nachr.* **60** (1974), 71-78. (A. T. Bharucha-Reid) **50** #11448 60H20 (45D05)
- (with Hardiman, Stephen T.) Existence theory for nonlinear random integral equations using the Banach-Steinhaus theorem. *Math. Nachr.* **63** (1974), 311-316. (A. T. Bharucha-Reid) **51** #1965 60H20 (45G99)
- (with Hardiman, Stephen T.) On the Uryson type of stochastic integral equations. *Proc. Cambridge Philos. Soc.* **76** (1974), 297-305. (D. Kannan) **49** #8107 60H20
- (with Papadopoulos, A. S.) Bayesian reliability estimates of the binomial failure model. *Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs.* **21** (1974), no. 1, 9-26. (Mir Ali) **51** #4612 62N05
- (with Rao, A. N. V.) On the existence, uniqueness, and stability behavior of a random solution to a nonlinear perturbed stochastic integro-differential equation. *Information and Control* **27** (1975), 61-74. (W. J. Padgett) **50** #11450 60H99
- (with Hardiman, Stephen T.) Existence and stability behavior of random solutions of a system of nonlinear random equations. *Information Sci.* **9** (1975), no. 4, 299-313. (Mou-Hsiung Chang) **53** #1205 45M10 (93E15)
- (with Nichols, William G.) Existence theory for stochastic optimal control systems. *Kybernetes* **4** (1975), no. 3, 143-148. (See Zbl **361** #93066) 93E20
- Excerpts from a letter by C. Tsokos to D. Perkel. *Math. Biosci.* **24** (1975), 353-354. (Editors) **54** #14139 60J85 (92A15)
- (with Milton, J. Susan) ★Probability theory with the essential analysis. *Applied Mathematics and Computation*, No. 10. Addison-Wesley Publishing Co., Reading, Mass.-London-Amsterdam, 1976. xix+339 pp. (S. G. Maloševskii) **57** #7711 60-01
- (with Rao, A. N. V.) On the existence of a random solution to a nonlinear perturbed stochastic integral equation. *Ann. Inst. Statist. Math.* **28** (1976), no. 1, 99-109. (J. S. Milton) **55** #6569 60H20 (45F05)
- (with Manougian, Manoug N.; Rao, A. N. V.) On a nonlinear stochastic integral equation with application to control systems. *Ann. Mat. Pura Appl.* (4) **110** (1976), 211-222. (W. J. Padgett) **54** #6280 60H20 (93E20)
- (with Smith, Truett L.) On approximating the expected behavior of stochastic epidemiological models applicable to small populations. *Appl. Math. Comput.* **2** (1976), no. 2, 95-111. (W. A. O'N. Waugh) **54** #6998 92A15
- (with Rao, A. N. V.) On a class of stochastic functional integral equations. *Colloq. Math.* **35** (1976), no. 1, 141-146. (A. T. Bharucha-Reid) **53** #6742 60H20
- (with Nichols, William G.) On the solution of a general stochastic linear pursuit-evasion game. *Internat. J. Systems Sci.* **7** (1976), no. 7, 811-819. (F. M. Kirillova) **56** #11353 93E05 (90D25)
- (with Hardiman, Stephen T.) Existence theorems for non-linear random integral equations with time lags. *Internat. J. Systems Sci.* **7** (1976), no. 8, 879-900. (Dahsoong Yü) **54** #6279 60H20
- (with Rao, A. N. V.) On the existence and stability behavior of a stochastic integral equation in a Banach space. (Russian summary) *Problems of Control and Information Theory / Problemy Upravleniya i Teorii Informacii* **5** (1976), no. 1, 87-95. (A. T. Bharucha-Reid) **54** #1389 60H20
- (with Papadopoulos, A. S.) Bayesian analysis of the Weibull failure model with unknown scale and shape parameters. (French and Italian summaries) *Statistica (Bologna)* **36** (1976), no. 4, 547-560. (A. K. Gayen) **56** #1640 62N05
- On the behavior of nonlinear discrete stochastic systems. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 3, pp. 805-807. Hemisphere, Washington, D.C., 1977. (Author's summary) **58** #15625 93E20
- (with Rao, A. N. V.) Stochastic stability of controlled motion. *Modern trends in cybernetics and systems (Proc. Third Internat. Congr., Bucharest, 1975)*, Vol. II, pp. 467-474. Springer, Berlin, 1977. (G. N. Mil'stein) **56** #15073 93E15 (93D15)
- (with Tsokos, Janice O.) A model for the statistical analysis of cell radiosensitivity during the cell cycle. *Nonlinear systems and applications (Proc. Internat. Conf., Univ. Texas, Arlington, Tex., 1976)*, pp. 327-348. Academic Press, New York, 1977. (Ajit K. Thakur) **56** #8074 92A05
- (with Shimi, I. N.) The Bayesian and nonparametric approach to reliability studies: a survey of recent work. *The theory and applications of reliability, with emphasis on Bayesian and nonparametric methods (Conf., Univ. South Florida, Tampa, Fla., 1975)*, Vol. I, pp. 5-47. Academic Press, New York, 1977. (Johannes S. Maritz) **57** #14306 62N05
- (with Rao, A. N. V.) Existence and boundedness of random solutions to stochastic functional integral equations. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 3-4, 283-288. (W. J. Padgett) **57** #7768 60H20
- (with Rao, A. N. V.) Existence and boundedness of solutions of a stochastic integral system. *Bull. Calcutta Math. Soc.* **69** (1977), no. 1, 1-12. (A. T. Bharucha-Reid) **56** #9692 60H20
- (with Rao, A. N. V.) On the behavior of stochastic differential systems. *Math. Nachr.* **77** (1977), 167-175. (Ludwig Arnold) **56** #6866 60H10 (93E15)
- (with Milton, J. Susan) On the existence of random solutions of a non-linear perturbed random integral equation. *Internat. J. Systems Sci.* **9** (1978), no. 5, 483-491. (Virginia M. Warfield) **58** #13354 60H20
- (with Padgett, W. J.) On Bayes estimation of reliability for mixtures of life distributions. *SIAM J. Appl. Math.* **34** (1978), no. 4, 692-703. (G. K. Bhattacharyya) **58** #3268 62N05
- See also Beyer, Jan E.; et al., **54** #14138; Theory and applications of reliability, with emphasis on Bayesian and nonparametric methods, **56** #1521a and Theory and applications of reliability, with emphasis on Bayesian and nonparametric methods, **56** #1521b
- Tsokos, Janice O.** (with Tsokos, Chris P.) A model for the statistical analysis of cell radiosensitivity during the cell cycle. *Nonlinear systems and applications (Proc. Internat. Conf., Univ. Texas, Arlington, Tex., 1976)*, pp. 327-348. Academic Press, New York, 1977. (Ajit K. Thakur) **56** #8074 92A05
- Tsonis, C. A.** (with Paraskevopoulos, P. N.; Tzafestas, S. G.) Eigenvalue sensitivity of linear time-invariant control systems with repeated eigenvalues. *IEEE Trans. Automatic Control* **AC-19** (1974), 610-612. (Arie Feuer) **56** #2529 93B35
- Tsou, C. A.** (with Mitten, L. G.) Efficient solution procedures for certain scheduling and sequencing problems. Incorporating the results of discussion by Jeffrey B. Sidney and Linus Schrage. *Symposium on the Theory of Scheduling and its Applications (North Carolina State Univ., Raleigh, N.C., 1972)*, pp. 127-142. *Lecture Notes in Econom. and Math. Systems*, Vol. 86. Springer, Berlin, 1973. (Rainer Burkard) **52** #7516 90B35
- Tsouyopoulos, Nelly** Der Begriff des Unendlichen von Zenon bis Galilei. (English summary) *RETE* **1** (1971-72), no. 3-4, 245-272. (I. Grattan-Guinness) **57** #15842 01A20 (02A05)
- Tsoy, E. V.** See Coi, È. V.
- Tsuboi, Michio** (with Suzuki, Tetsutaro) On the holomorphic mappings of complex spaces onto complex manifolds. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 221-226 (1972). (Gerd Fischer) **47** #3707 32C35
- Tsuboi, Syoji** On the monodromy group of a certain system of linear partial differential equations. *Sci. Rep. Kagoshima Univ. No. 23* (1974), 15-39. (From the introduction) **58** #22960a (E **58** #22960b) 35A30 (12H05, 14D05)
- On the inverse image of the sheaf of holomorphic differential forms by the inverse map of monoidal transformation. *Sci. Rep. Kagoshima Univ. No. 23* (1974), 41-69. (J. A. Morrow) **54** #3017 32C35 (32C45)
- Supplement to "On the monodromy group of a certain system of linear partial differential equations" (Sci. Rep. Kagoshima Univ. No. 23 (1974), 15-39). *Sci. Rep. Kagoshima Univ. No. 24* (1975), 17-20. (From the introduction) **58** #22960b 35A30 (12H05, 14D05)
- On the sheaves of holomorphic vector fields on surfaces with ordinary singularities in a projective space. I. *Sci. Rep. Kagoshima Univ. No. 25* (1976), 1-26. (James B. Carrell) **58** #22646 32C35 (32G10)
- On the sheaves of holomorphic vector fields on surfaces with ordinary singularities in a projective space. II. *Sci. Rep. Kagoshima Univ. No. 26* (1977), 51-97. (R. R. Simha (Zbl **381** #32016)) **58** #22651 32C45
- Tsuboi, Toshinori** (with Aihara, Ken-ichi) An orthogonalization method for solution of linear equations and its sparse matrix techniques. *Electron. Commun. Japan* **57** (1974), no. 9, 10-18. (Ian Gladwell) **53** #4510 65F30
- Tsuchikoyashi, Keichi** See Topological models in biology, **58** #20542
- Tsuchikura, Tamotsu** (with Yamasaki, Motohiro) Martingale sequence of bounded variation. *Tôhoku Math. J. (2)* **28** (1976), no. 1, 123-127. (Roger L. Jones) **53** #1726 60G45
- Tsuchiya, Akihiro** Characteristic classes for spherical fiber spaces. *Nagoya Math. J.* **43** (1971), 1-39. (K. H. Mayer) **45** #7736 55F40
- Characteristic classes for PL micro bundles. *Nagoya Math. J.* **43** (1971), 169-198.

- R. Z. Goldstein) 47 #2614 57C50
Homology operations on ring spectrum of H^∞ type and their applications. *J. Math. Soc. Japan* 25 (1973), 277-316. (D. W. Anderson) 47 #4255 55D45
Higher order Dyer-Lashof operations and Eilenberg-Moore spectral sequences. *Manifolds-Tokyo 1973 (Proc. Internat. Conf., Tokyo, 1973)*, pp. 295-300. Univ. Tokyo Press, Tokyo, 1975. (J. P. May) 53 #9204 55D35
Foliation structures and Gelfand-Fuchs structures. (Japanese) Research on global analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1976). *Sûrikaiseikikenkyûsho Kôkyûroku No. 291* (1977), 13-30. (Toru Tsujishita) 57 #17663 57D30
hiya, Masaaki On a small drift of Cauchy process. *J. Math. Kyoto Univ.* 10 (1970), 475-492. (D. W. Stroock) 46 #6481 60J30
On some perturbations of stable processes. *Proceedings of the Second Japan-USSR Symposium on Probability Theory (Kyoto, 1972)*, pp. 490-497. *Lecture Notes in Math.*, Vol. 330, Springer, Berlin, 1973. (From the author's introduction) 56 #1478 60J30
(with Tanaka, Hiroshi; Watanabe, Shinzo) Perturbation of drift-type for Lévy processes. *J. Math. Kyoto Univ.* 14 (1974), 73-92. (E. B. Dynkin) 51 #4388 60H20 60J30
On the relaxed solutions of a certain stochastic differential equation. *Proceedings of the Third Japan-USSR Symposium on Probability Theory (Tashkent, 1975)*, pp. 639-645. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (S. I. Rosencrans) 56 #16791 50H10
hiya, Noboru (with Katayama, Takuya; Enomoto, Hajime) An algorithm for determining equivalence of two deterministic pushdown transducers. *Systems-Computers-Controls* 6 (1975), no. 6, 69-77. (Derick Wood) 58 #19369 58A25 (68A30)
hiya, Nobuo R-torsion and analytic torsion for spherical Clifford-Klein manifolds. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* 23 (1976), no. 2, 289-295. (D. B. Ray) 54 #11408 58G10
hiya, Susumu (with Kobayashi, Minoru) Hypersurfaces of a Euclidean space R^{4m} . *Proc. Japan Acad.* 47 (1971), suppl. II, 935-940. (G. D. Ludden) 47 #5773 53C15
(with Kobayashi, Minoru) Invariant submanifolds of an f -manifold with complemented frames. *Kôdai Math. Sem. Rep.* 24 (1972), 430-450. (Y. Tashiro) 47 #7649 53C15
(with Kobayashi, Minoru) Some conditions for constancy of the holomorphic sectional curvature. *Kôdai Math. Sem. Rep.* 27 (1976), no. 3, 379-384. (Koichi Ogiue) 53 #6475 53C55
(with Kobayashi, Minoru) Holomorphic isomorphism which preserves certain holomorphic sectional curvature. *Kôdai Math. Sem. Rep.* 29 (1977), no. 1-2, 103-119. (Koichi Ogiue) 57 #4060 53C55
hiya, Takeshi The sufficient condition for stability of a time varying discrete system. *Internat. J. Control* (1) 18 (1973), 221-224. (Edward J. Davison) 48 #13386 93D05
Future desired signal in optimal tracking system. (Japanese. English summary) *Systems and Control* 17 (1973), 305-314. (Author's summary) 47 #4684 93C55
Ia, Kôichi (with Koyama, Akira; Ono, Jin) An algebraic characterization of pointed S^m -movability. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* 25 (1977), no. 12, 1249-1252. (Maria Moszyńska) 58 #13028 55E99
On AWRN-spaces in shape theory. *Math. Japon.* 22 (1977/78), no. 4, 471-478. (Jerzy Dydak) 58 #2705 54C56 (55D99)
Ia, Takao Numerical differentiation of functions of very many variables. *Numer. Math.* 18 (1971/72), 327-335. (D. C. Handscomb) 46 #2825 65D25
Numerical integration of functions of very many variables. *Numer. Math.* 20 (1972/73), 377-391. (Author's summary) 55 #6799 65D30
Monte Carlo methods. (Italian summary) *Rend. Sem. Mat. Fis. Milano* 43 (1973), 55-58 (1974). (Author's summary) 51 #11917 65C05
Pairwise sampling for the nonlinear interpolation of functions of very many variables. *Calcolo* 11 (1974), no. 4, 453-464 (1975). (Sven-Åke Gustafson) 53 #4481 65C05
(with Sato, Mieko) An algorithm to locate the greatest maxima of multi-variable functions. *Information Processing in Japan* 15 (1975), 85-89. (Sven-Åke Gustafson) 53 #12015 65K05
Nonlinear interpolation of functions of very many variables. *Numer. Math.* 24 (1975), no. 5, 395-414. (Roland Bulirsch) 54 #9042 65D05
Interactive search for the global maximum of a function of many variables. *IEEE Trans. Automatic Control AC-22* (1977), no. 3, 399-405. (B. T. Poljak) 57 #1894 55K05
Ia, Takeo On the measurability of certain functions. (Japanese) *Math. Rep. Kyushu Univ.* 10 (1975/76), no. 2, 149-151. (Title) 58 #21627 04A15 (28A20)
On the axiom system of Carathéodory. (Japanese) *Math. Rep. Kyushu Univ.* 10 (1975/76), no. 2, 153-156. 58 #22450 28A10
Ia, Yoshihiro Ultra-subharmonic response in a Duffing's system. *Rep. Fac. Engrg. Oita Univ.* No. 2 (1976), 17-21. (Not reviewed) 70.34
Ernest T. (with Wong, Eugene) One-sided recursive filters for two-dimensional random fields. *IEEE Trans. Information Theory IT-23* (1977), no. 5, 633-637. (H. Salehi) 57 #4323 60G35 (93E10)
Sze Kai J. A note on generators of semigroups. *Proc. Amer. Math. Soc.* 66 (1977), no. 2, 305-308. (S. Sankaran) 56 #12903 46L05
Decompositions of linear maps. *Trans. Amer. Math. Soc.* 230 (1977), 87-112. (Richard I. Loebl) 56 #1083 46L05
Tien-Yu See Transactions: Conference of Army Mathematicians, 49 #4736 and Transactions: Conference of Army Mathematicians, 49 #4737
I, Makoto (with Aoki, Katsutada) New difference equation for diffusion calculation. *J. Nuclear Sci. and Tech.* 10 (1973), 274-283. (Radu Bădescu) 52 #16279 76.65
I, Hidekazu (with Mizumoto, Masaharu; Toyoda, Junichi; Tanaka, Kohkichi) An automaton in the nonstationary random environment. *Systems-Computers-Controls* 3 (1972), no. 1, 68-75. (Authors' summary) 48 #15355 94A35
(with Mizumoto, Masaharu; Toyoda, Junichi; Tanaka, Kohkichi) An automaton in the nonstationary random environment. *Information Sci.* 6 (1973), 123-142. (P. Turakainen) 48 #10733 94A35
(with Mizumoto, Masaharu; Toyoda, Junichi; Tanaka, Kohkichi) On the asymptotically optimal behavior of automata in nonstationary random environments. *Systems-Computers-Controls* 5 (1974), no. 1, 25-34 (1975). (K. D. Günther) 52 #13039 94A35 (68A35)
Tsuiji, Kazô On nest algebras of operators. *Proc. Japan Acad.* 46 (1970), 337-340. (I. Kovács) 51 #1422 46L15 (47A15)
Norm ideals of operators on Hilbert space. *Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 21* (1974), 51-66. (J. D. Gray) 50 #5496 46L15 (47B10)
Tsuiji, M. ★Potential theory in modern function theory. Reprinting of the 1959 original. *Chelsea Publishing Co., New York*, 1975. x + 590 pp. (Editors) 54 #2990 31-02
Tsuiji, Mikio Regularity of solutions of hyperbolic mixed problems with characteristic boundary. *Proc. Japan Acad.* 48 (1972), 719-724. (S. Delache) 49 #869 35L50
Analyticity of solutions of hyperbolic mixed problems. *J. Math. Kyoto Univ.* 13 (1973), 323-371. (N. D. Kazarinov) 47 #9077 35L50
Characterization of the well-posed mixed problem for wave equation in a quarter space. *Proc. Japan Acad.* 50 (1974), 138-142. (R. Glassey) 50 #13896 35L05
Fundamental solutions of mixed problems for hyperbolic equations with constant coefficients. *Proc. Japan Acad.* 51 (1975), no. 6, 369-373. (M. S. Agranovič) 52 #8663 35L35 (35E05)
Propagation of the singularities for hyperbolic equations with constant coefficients. *Japan. J. Math. (N.S.)* 2 (1976), no. 2, 361-410. (F. Cardoso) 57 #3653 35L30 (35E15)
On the existence of lateral waves. *J. Math. Kyoto Univ.* 17 (1977), no. 3, 457-463. (Louis Boutet de Monvel) 58 #11946 35L05
Tsuiji, Ryôhei Conformal automorphisms of a compact bordered Riemann surface of genus 3. *Kôdai Math. Sem. Rep.* 27 (1976), no. 3, 271-290. (William Harvey) 55 #656 30A46
Tsuiji, Setsuzo (with Kumamaru, Kousuke) System identifications by a nonlinear filter. *Pattern recognition and machine learning (Proc. Japan-U.S. Sem. Learning Process in Control Systems, Nagoya, 1970)*, pp. 121-137. *Plenum Press, New York*, 1971. (Arunabha Bagchi) 55 #14378 93E10
(with Takata, Hitoshi) The modified second-order filter by using the multi-dimensional Hermite expansions. (Japanese. English summary) *Systems and Control* 17 (1973), 698-705. (Tohru Katayama) 49 #10418 93E10
Tsuiji, Tadashi On infinitesimal automorphisms and homogeneous Siegel domains over circular cones. *Proc. Japan Acad.* 49 (1973), 390-393. (S. Murakami) 51 #10701 32M15 (32M10)
Classification of homogeneous Siegel domains of type II of dimensions 9 and 10. *Proc. Japan Acad.* 49 (1973), 394-396. (E. Vinberg) 52 #3620 32M15 (32M10)
(with Kaneyuki, Soji) Classification of homogeneous bounded domains of lower dimension. *Nagoya Math. J.* 53 (1974), 1-46. (E. Vinberg) 50 #5039 32M15 (32M10)
Siegel domains over self-dual cones and their automorphisms. *Nagoya Math. J.* 55 (1974), 33-80. (S. Murakami) 50 #13623 32M10
Tsuiji, Takumi (with Kageyama, Sanpei) Characterization of certain incomplete block designs. *J. Stat. Plann. Inference* 1 (1977), no. 2, 151-161. (Damaraju Raghavarao) 58 #18940 62K10 (05B05)
(with Kageyama, Sanpei) General upper bound for the number of blocks having a given number of treatments common with a given block. *J. Stat. Plann. Inference* 1 (1977), no. 3, 217-234. (C. H. Kapadia) 58 #8062 62K10
Tsuiji, Tatsuo (with Toyoda, Junichi; Tanaka, Kohkichi) Relational data graphs with uniformities and their several properties. *Systems-Computers-Controls* 7 (1976), no. 1, 90-96. (1977). (Yasuyoshi Inagaki) 56 #10117 68A05
(with Toyoda, Junichi; Tanaka, Kohkichi) Relational data graphs and some properties of them. *J. Comput. System Sci.* 15 (1977), no. 1, 17-34. (A. L. Rosenberg) 56 #4283 68A50
Tsuiji, Shigeo (with Kamata, Kazuo; Tsurumi, Yasuo) A unified study on multiple information transmission systems with respect to mutual information and mean square error criteria. *Electron. Commun. Japan* 58 (1975), no. 5, 28-35. (S. Guiaşu) 55 #7570 94A05
Tsuijoka, Kunio On the minimal global minimizers in Banach spaces. *Sci. Rep. Saitama Univ. Ser. A* 8 no. 1, 1-18 (1974). (O. G. Nakonečnii) 58 #30600 49A25
Tsujishita, Toru Cohomology of vector fields on a complex manifold. *Proc. Japan Acad.* 50 (1974), 797-799. (D. B. Fuks) 52 #11940 57D25 (32C10)
Cohomology of vector fields on a complex manifold. A Symposium on Complex Manifolds (Kyoto, 1974). *Sûrikaiseikikenkyûsho Kôkyûroku No. 240* (1975), 18-30. (James B. Carrell) 54 #8662 57D25 (32L10)
Cohomology of the Lie algebra of vector fields on a complex manifold. *Invent. Math.* 34 (1976), no. 1, 1-18. (D. B. Fuks) 54 #1247 57D25
(with Shiga, Kôji) Differential representations of vector fields. *Kôdai Math. Sem. Rep.* 28 (1976/77), no. 2-3, 214-225. (B. Cenkl) 56 #3851 57D25 (57D20)
Spherical means on Riemannian manifolds. *Osaka J. Math.* 13 (1976), no. 3, 591-597. (R. D. Moyer) 55 #4299 58G99
On the continuous cohomology of the Lie algebra of vector fields. *Proc. Japan Acad. Ser. A Math. Sci.* 53 (1977), no. 4, 134-138. (D. B. Fuks) 56 #16717 58H05 (57D25)
On the continuous cohomology of the Lie algebra of vector fields associated with non-trivial coefficients. Research on global analysis (Proc. Sympos., Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1976). *Sûrikaiseikikenkyûsho Kôkyûroku No. 291* (1977), 1-12. (D. B. Fuks) 57 #13971 57D20
Integral transformations associated with double fiberings. *Osaka J. Math.* 15 (1978), no. 2, 391-418. (Weishu Shih) 58 #24410 58G15 (43A85)
Tsukabe, Tadashi (with Ikeda, Mineo) On the separability of the four-dimensional Laplace equation, with reference to the unitary group of degree two. *Math. Japon.* 16 (1971), 127-136. (S. Datta Majumdar) 46 #5805 35A22 (35J05)
Tsukada, Etsuo Transitive actions of compact connected Lie groups on symmetric spaces. *Sci. Rep. Niigata Univ. Ser. A No. 15* (1978), 1-13. (A. L. Oniščik) 57 #13997 57E25
Note on the relations between smooth SU(6)-actions and rational Pontrjagin classes. *Sci. Rep. Niigata Univ. Ser. A No. 15* (1978), 15-19. (Allan Edmonds) 57 #17673 57E25

- Tsukada, M.** (with Ishii, Naohiro; Sato, Risaburo) Stochastic automaton models for the temporal pattern discrimination of nerve impulse sequences. *Biol. Cybernet.* **21** (1976), no. 3, 121-130. (Authors' summary) **58** #4430 92A05 (94A35)
- Tsukada, Nobutaka** Cardinals and the Boolean prime ideal theorem. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **13**, no. 366-382, 276-283 (1977). (From the introduction) **58** #21607 02K05
- Tsukamoto, Junichiro** (with Kuwahara, Michigoshi; Kotera, Yoshikazu) Sensitivity analysis of discontinuous control systems. (Japanese. English summary) *Systems and Control* **17** (1973), 324-328. (Authors' summary) **47** #4677 93B35
- Tsukamoto, K.** (with Inada, Koichi; Yamauchi, K.) A bivariate analogue of the two-sided t test. *Tamkang J. Math.* **8** (1977), no. 1, 111-121. (Hisao Nagao) **58** #3194 62H10
- Tsukamoto, Katsuji** Analysis of priority queues with control points of interruption. *Electron. Comm. Japan* **57** (1974/75), no. 4, 18-26. (Author's summary) **56** #13398 60K25
- Tsukamoto, Yotaro** (with Yamaguchi, Tadashi) On the various comparison theorems. (Japanese) *Sūgaku* **21** (1969), no. 2, 81-96. (Editors) **58** #24120 53C20 (58E10)
Certain Riemannian manifolds of positive curvature. *Differentialgeometrie im Großen (Tagung, Math. Forschungsinst., Oberwolfach, 1969)*, pp. 319-322. *Ber. Math. Forschungsinst. Oberwolfach, Heft 4, Bibliographisches Inst., Mannheim, 1971.* (G. Tsagas) **50** #14583 53C20
(with Suyama, Yoshihiko) Riemannian manifolds admitting a certain conformal transformation group. *J. Differential Geometry* **5** (1971), 415-426. (C. B. Allendoerfer) **45** #7643 53C20
On a theorem of C. Heim. *Mem. Fac. Sci. Kyushu Univ. Ser. A* **27** (1973), 79-81. (M. do Carmo) **47** #7656 53C20
Über gewisse Riemannsche Mannigfaltigkeiten mit positiver Krümmung. *Nagoya Math. J.* **52** (1973), 35-38. (J. S. Joel) **50** #14584 53C20
(with Nagayoshi, Takatoshi) On positively curved Riemannian manifolds with bounded volume. Collection of articles dedicated to Shigeo Sasaki on his sixtieth birthday. *Tōhoku Math. J. (2)* **25** (1973), 213-218. (R. L. Bishop) **49** #11428 53C20 (57D60)
On the total absolute curvature of closed curves in manifolds of negative curvature. *Math. Ann.* **210** (1974), 313-319. (F. Brickell) **51** #1670 53C20
- Tsukanov, A. V.** See **Cukanov, A. V.**
- Tsukiyama, Kouzou** Note on self-maps inducing the identity automorphisms of homotopy groups. *Hiroshima Math. J.* **5** (1975), no. 2, 215-222. (I. Pop) **52** #1684 55E05 (55G45)
Note on self-homotopy-equivalences of the twisted principal fibrations. *Mem. Fac. Ed. Shimane Univ. Natur. Sci.* **11** (1977), 1-8. (Donald W. Kahn) **58** #7615 55D10
- Tsukiyama, Shuji** (with Shirakawa, Isao; Ozaki, Hiroshi) A survey: generating all the cycles of a digraph. *2nd USA-Japan Computer Conference Proceedings (Tokyo, 1975)*, pp. 92-96. *AFIPS Press, Montvale, N.J.*, 1975. (Luigi Fratta) **58** #25103 68A10 (05C20, 05C35)
(with Shirakawa, Isao; Ozaki, Hiroshi) An algorithm for generating the cycles of a digraph. *Electron. Commun. Japan* **58** (1975), no. 4, 8-15. (Luigi Fratta) **58** #25102 68A10 (05C20)
(with Tran Dinh Am; Shirakawa, Isao; Ozaki, Hiroshi) An algorithm for generating all the directed paths and its application. *Information Processing in Japan* **16** (1976), 31-35. (D. H. Younger) **57** #1964 68A10 (05C20)
(with Tran Dinh Am; Shirakawa, Isao; Ozaki, Hiroshi) An algorithm for generating all the paths between two vertices in a digraph and its application. *Tech. Rep. Osaka Univ.* **26** (1976), no. 1308-1336, 411-418. (Authors' summary) **58** #9182 90B10 (05C30)
(with Kubo, Noboru; Shirakawa, Isao; Ariyoshi, Hiromu) An algorithm for finding a maximal cut. *Electron. Comm. Japan* **60** (1977), no. 4, 30-37. (Narsingh Deo) **58** #13888 68A10 (68A20, 94A20)
(with Ide, Mikio; Ariyoshi, Hiromu; Shirakawa, Isao) A new algorithm for generating all the maximal independent sets. *SIAM J. Comput.* **6** (1977), no. 3, 505-517. (Takao Ozawa) **57** #16142 05C99 (68A10)
- Tsukui, Yasuyuki** On surfaces in 3-space. *Yokohama Math. J.* **18** (1970), 93-104. (R. B. Sher) **45** #1140 57A10
On a prime surface of genus 2 and homeomorphic splitting of 3-sphere. *Yokohama Math. J.* **23** (1975), no. 1-2, 63-75. (Wilbur Whitten) **51** #14057 57A05
(with Kobayashi, Kazuaki) The ball coverings of manifolds. *J. Math. Soc. Japan* **28** (1976), no. 1, 133-143. (H. J. Charlton) **52** #11933 57C99
On ball coverings for products of manifolds. *Yokohama Math. J.* **25** (1977), no. 2, 113-117. (K. W. Kwun) **57** #1504 57C99
- Tsunekawa, Minoru** On estimation of $\Sigma(x/m - [x/m])$. (Japanese. English summary) *Bull. Nagoya Inst. Tech.* **22** (1970), 113-117. (S. Ikehara) **48** #3901 10H25
- Tsunematsu, Toshihide** (with Takeda, Tatsuo) A new iterative method for solution of a large-scale general eigenvalue problem. *J. Comput. Phys.* **28** (1978), no. 2, 287-293. (From the text) **58** #19078 65F15
- Tsuno, Yoshimichi** Differential operator without dense range. *Hiroshima Math. J. (2)* **2** (1972), 67-70. (P. Schapira) **47** #9025 35A99 (32A99)
On a class of differential operators with polynomial coefficients. *Hiroshima Math. J. (3)* **3** (1973), 69-79. (D. L. Colton) **48** #6624 35A20 (32E30)
On the prolongation of local holomorphic solutions of partial differential equations. *J. Math. Soc. Japan* **26** (1974), 523-548. (W. Watzlawek) **50** #13834 35A20 (32D99)
On the prolongation of local holomorphic solutions of nonlinear partial differential equations. *Proc. Japan Acad.* **50** (1974), 702-705. (M. Zerner) **51** #8591 35A20 (32D15)
On the prolongation of local holomorphic solutions of nonlinear partial differential equations. *J. Math. Soc. Japan* **27** (1975), no. 3, 454-466. (From the introduction) **58** #1504 35A20
On the prolongation of local holomorphic solutions of partial differential equations. II. Prolongation across the pluri-harmonic hypersurface. *J. Math. Soc. Japan* **28** (1976), no. 2, 304-306. (W. Watzlawek) **54** #5598 35A20 (32D99)
On the prolongation of local holomorphic solutions of partial differential equations. III. Equations of the Fuchsian type. *J. Math. Soc. Japan* **28** (1976), no. 4, 611-616. (W. Watzlawek) **54** #5599 35A20 (32A99)
- Tsurui, Akira** (with Osaki, Shunji) On a first-passage problem for a cumulative process with exponential decay. *Stochastic Processes Appl.* **4** (1976), no. 1, 79-88. (Lennart Råde) **53** #9439 60K99
- Tsurumi, Hiroki** A comparison of alternative optimal models of advertising expenditures: stock adjustment vs. control theoretic approaches. *Rev. Econom. Statist.* **55** (1973), no. 2, 156-168. (From the author's introduction) **56** #10773 90A05
- Tsurumi, Kazuyuki** Some boundary properties of analytic functions. *Res. Rep. Tokyo Electrical Engng. College No.* **16** (1968), 121-125. (Editors) **57** #6506 32E25
(with Jimbo, Toshiya; Izuchi, Keiji) Continuity of H -derivations on commutative Banach algebras. *Sci. Rep. Tokyo Kyoiku Daigaku Sect. A* **11**, 6-9 (1971). (B. E. Johnson) **46** #4203 46J05
On Baire functions in nonarchimedean valued fields. *Nederl. Akad. Wetensch. Proc. Ser. A* **78** = *Indag. Math.* **37** (1975), 273-283. (L. Narici) **52** #15350 54C50
Sur les fonctions analytiques p -adiques et leurs applications aux familles normales. *Res. Rep. Tokyo Denki Univ. No.* **25** (1977), 53-57. (Alain Escassut) **58** #608 12B40
- Tsurumi, Shigeru** On random ergodic theorems for a random quasi-semigroup of linear contractions. *Proc. Japan Acad.* **48** (1972), 149-152. (R. L. Adler) **47** #5231 28A65
An ergodic theorem for a semigroup of linear contractions. *Proc. Japan Acad.* **45** (1973), 306-309. (R. V. Chacon) **49** #5891 47A35 (47D05)
On the construction of a probability measure on the space of Borel-Radon measures. *Tōhoku Math. J.* **29** (1977), no. 4, 601-605. (P. Jagers) **57** #1591 60B05 (28A40)
(with Hasegawa, Shigeru; Satō, Ryōtarō) Vector valued ergodic theorems for one-parameter semigroup of linear operators. *Tōhoku Math. J. (2)* **30** (1978), no. 1, 95-106. (Richard Fleming) **57** #7210 47A35 (47D05)
- Tsurumi, Yasuo** (with Tsujii, Shigeo; Kamata, Kazuo) A unified study on multiple information transmission systems with respect to mutual information and mean square error criteria. *Electron. Commun. Japan* **58** (1975), no. 5, 28-35. (S. Guiaşu) **55** #7570 94A05
- Tsurunaka, Hisashi** Error correction by real number transformation of digital information. *Systems-Computers-Controls* **7** (1976), no. 1, 61-69 (1977). (Chikato Fujiwara) **56** #15149 94A10
- Tsuruta, Kunio** (with Nakashima, Katsuya; Ohmori, Katsushi) The Newton method for nonlinear Volterra integro-differential equations. *Bull. Sci. Engrg. Res. Lab. Waseda Univ. No.* **73** (1976), 54-63. (L. Fox) **54** #14413 (E 57 #11132) 65R05
(with Nakashima, Katsuya; Ohmori, Katsushi) Errata: "The Newton method for nonlinear Volterra integro-differential equations" (Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 73 (1976), 54-63). *Bull. Sci. Engrg. Res. Lab. Waseda Univ. No.* **74** (1976) 81. (Editors) **57** #11132 65R05 (65H05)
(with Ohmori, Katsushi) A posteriori error estimation for Volterra integro-differential equations. *Mem. Numer. Math. No.* **3** (1976), 33-47. (Gene A. Kemper) **55** #9584 65R05
- Tsushima, Yukio** On the block of defect zero. *Nagoya Math. J.* **44** (1971), 57-59. (Henry Leonard, Jr.) **45** #412 20C15
On the annihilator ideals of the radical of a group algebra. *Osaka J. Math.* **8** (1971), 91-97. (P. Fong) **45** #413 20C05
On the existence of characters of defect zero. *Osaka J. Math.* **11** (1974), 417-423. (N. Ito) **50** #7312 20C15
On the weakly regular p -blocks with respect to $O_p(G)$. *Osaka J. Math.* **14** (1977), no. 3, 465-470. (P. Fong) **57** #438 20C20
Problems on the radical of a finite group ring. *Proceedings of the 10th Symposium on Ring Theory (Shinshu Univ., Matsumoto, 1977)*, pp. 116-120. *Dept. Math., Okayama Univ., Okayama, 1978.* (G. Michler) **57** #12581 16A26
On the second reduction theorem of P. Fong. *Kumamoto J. Sci. (Math.)* **1** (1978/79), no. 1, 6-14. (Jon F. Carlson) **58** #11096 20C20
On the p' -section sum in a finite group ring. *Math. J. Okayama Univ.* **20** (1978), no. 1, 83-86. (Ralph W. Wilkerson) **58** #10998 16A26
- Tsutsui, Tadahiko** On width ideals of a module. *Hiroshima Math. J.* **2** (1972), 221-225. (Tadayuki Matsuoka) **48** #6083 13C15
- Tsutsumi, Akira** A remark on a sufficient condition for hypoellipticity. *Proc. Japan Acad.* **49** (1973), 187-190. (C. Harvey) **48** #11749 35H05
On a sufficient condition for hypoellipticity. *Sci. Rep. College General Ed. Osaka Univ.* **22** (1973), 23-31. (C. Harvey) **48** #11750 35H05
On the asymptotic behavior of resolvent kernels and spectral functions for some class of hypoelliptic operators. *Proc. Japan Acad.* **50** (1974), 63-66. (Ja. A. Roitberg) **52** #6214 35P20
(with Wang, Chung Lie) On the asymptotic distribution of eigenvalues for semi-elliptic operators. *Trans. Amer. Math. Soc.* **199** (1974), 295-315. (Y. I. Kannan) **50** #7847 35P20
On the asymptotic behavior of resolvent kernels and spectral functions for some class of hypoelliptic operators. *J. Differential Equations* **18** (1975), no. 2, 366-385. (Louis Boutet de Monvel) **52** #8679 35P20 (35H05)
(with Wang, Chung Lie) Asymptotic distribution of eigenvalues of a class of hypoelliptic operators. *Proc. Japan Acad. Ser. A Math. Sci.* **54** (1978), no. 6, 137-141. (Luigi Rodino) **58** #12004 35P20
- Tsutsumi, Chisato** See **Iwasaki, Chisato** **Tsutsumi**
- Tsutsumi, Masayoshi** (with Mukasa, Toshio) Parabolic regularizations for the generalized Korteweg-de Vries equation. *Funkcial. Ekvac.* **14** (1971), 89-110. (A. Elcrat) **47** #6535Q99
Some nonlinear evolution equations of second order. *Proc. Japan Acad.* **47** (1971), suppl. II, 950-955. (R. C. MacCamy) **47** #585 34G05 (35L60, 35R99, 47H15)
On global solutions of the generalized Korteweg-de Vries equation. *Publ. Res. Inst. Math. Sci.* **7** (1971/72), 329-344. (N. Zitron) **47** #658 35Q99
On global solutions of the modified KdV equation in inhomogeneous media. *Funkcial. Ekvac.* **15** (1972), 161-172. (J. Smoller) **48** #4544 35Q99
On solutions of semilinear differential equations in a Hilbert space. *Math. Japon.* **1** (1972), 173-193. (E. Lami Dozo) **50** #7723 34G05 (47H15)
Existence and nonexistence of global solutions for nonlinear parabolic equations. *Publ. Res. Inst. Math. Sci.* **8** (1972), 211-229. (G. W. Hedstrom) **47** #641 35K55
Existence and nonexistence of global solutions of the first boundary value problem

for a certain quasilinear parabolic equation. *Funkcial. Ekvac.* **17** (1974), 13-24. (K. awlitschek) **49** #9418 35K20

(with Matahashi, Tomomi; Iino, Riichi) Some perturbation problem of modified Navier-Stokes equations. I. *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 69 (1975), 1-73. (D. E. Edmunds) **55** #8586 35Q10

On degenerate nonlinear parabolic partial differential equations. I. *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 68 (1975), 38-49. (Author's summary) **58** #1663a (E 58 #1663b) 35K60

On nonlinear parabolic equations backwards in time. *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 68 (1975), 50-55. (Author's summary) **57** #10249a (E 57 #10249b) 35K60

(with Fukuda, Isamu) On coupled Klein-Gordon-Schrödinger equations. I. *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 69 (1975), 51-62. (R. Glassey) **52** #11380 (E 52 #6752) 35Q99

Errata: "On nonlinear parabolic equations backwards in time" (Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 68 (1975), 50-55). *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 69 (1975), 110. (Author's summary) **57** #10249b 35Kxx

Errata: "On degenerate nonlinear parabolic partial differential equations. I" (Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 68 (1975), 38-49). *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 69 (1975), 110. (Author's summary) **58** #1663b 35K60

KdV equation and its generalizations, under the periodic boundary condition. *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 70 (1975), 69-74. (Mark J. Ablowitz) **58** #17608a 35Q99 (58F05)

On the interior boundary value problem for the modified Navier-Stokes equation. *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 70 (1975), 75-87. (Marjorie McCracken) **58** #29440 35Q10

(with Matahashi, Tomomi; Iino, Riichi) Errata: "Some perturbation problem of modified Navier-Stokes equations. I" (Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 69 (1975), 63-73). *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 70 (1975), 94. (Editors) **58** #6747 35Q10

(with Fukuda, Isamu) Errata: "On coupled Klein-Gordon-Schrödinger equations. I" (Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 69 (1975), 51-62). *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 70 (1975), 94. (Editors) **58** #6752 35Q99

Errata: "KdV equation and its generalizations, under the periodic boundary condition". *Bull. Sci. Engrg. Res. Lab. Waseda Univ.* No. 71 (1975), 55. (Mark J. Ablowitz) **58** #17608b 35Q99 (58F05)

On the Korteweg-de Vries equation. *Proc. Japan Acad.* **51** (1975), no. 6, 399-401. (C. Bardos) **52** #6223 (E 52 #6224) 35Q99

(with Fukuda, Isamu) On the Yukawa-coupled Klein-Gordon-Schrödinger equations in three space dimensions. *Proc. Japan Acad.* **51** (1975), no. 6, 402-405. (John M. Chadam) **52** #1060 35Q99

On extensions of my previous paper: "On the Korteweg-de Vries equation" (Proc. Japan Acad. **51** (1975), no. 6, 399-401). *Proc. Japan Acad.* **51** (1975), no. 7, 548-551. (C. Bardos) **52** #6224 35Q99

Periodic linear systems and a class of nonlinear evolution equations. *Proc. Japan Acad.* **51** (1975), no. 8, 645-649. (J. C. Saut (Zbl 355 #35017)) **58** #1767 35Q99 (34C25)

(with Ishii, Hitoshi; Sagisaka, Yoshinori) Some uniqueness theorems for first order hyperbolic systems. *Publ. Res. Inst. Math. Sci.* **11** (1975/76), no. 2, 403-415. (Maria Cinquini-Cibrario) **57** #6860 35L50

Kitani, Masaaki (with Mori, Kenichi) Estimation and testing of parameters of a double exponential distribution by likelihood and Bayesian methods. (Japanese. English summary) *Systems and Control* **20** (1976), no. 9, 501-506. (Authors' summary) **58** #18851 62F05 (62F10, 62N05)

Kuki, Masanobu Some properties of canonical products of finite genus. *Kōdai Math. Sem. Rep.* **26** (1974/75), 36-43. (D. F. Shea) **51** #13228 30A70

Kuku, Tosiro On $LF_3(3)$. *J. Fac. Sci. Hokkaido Univ. Ser. I* **22** (1972), 104-107. (W. J. Wong) **46** #5420 20B05

On a characterization of $PSL_4(p)$. *J. Math. Kyoto Univ.* **13** (1973), 49-52. (James C. Pomfret) **47** #1968 20G15

On a problem of D. G. Higman. *Hokkaido Math. J.* **4** (1975), no. 2, 300-302. (F. A. Sher) **51** #13005 20B10

★Yūgen gun to yūgen kika. (Japanese) [Finite groups and finite geometries] Iwanami Shoten, Tokyo, 1976. viii + 263 pp. (N. Ito) **57** #419 20-02 (05B25)

Cvetanov, I. See Cvetanov, I.

Cvirkun, A. D. See Cvirkun, A. D.

Datov, V. A. (with Vittih, V. A.; Kuklin, G. N.; Tominkov, G. N.) Topological optimization of data acquisition systems. Translated from the Russian. *Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform.* **7** (1978), no. 1, 21-36. (Authors' summary) **58** #20882 94A20

Cypkin, A. G. See Cypkin, A. G.

Cypkin, Ya. S. See Cypkin, Ja. Z.

Cytovich, V. N. See Cytovich, V. N.

Le Van Tu See Le Van Tu

Li Hoang Tu See Li Hoang Tu

Nguyen Van Tu See Nguyen Van Tu

C. C. (with Jones, B. Frank, Jr.) On the existence of kernel functions for the heat equation. *Indiana Univ. Math. J.* **21** (1971/72), 857-876. (J. R. Cannon) **45** #3970 35K05

Gui Zhang The structure of Q -matrices and the reducibility of polynomials over a Galois field. (Chinese) *Acta Math. Sinica* **17** (1974), no. 1, 46-59. (Tai Yang Hwang) **56** #327 12C05 (94A10)

K. W. (with Gear, C. William; Watanabe, Daniel S.) The stability of automatic programs for numerical problems. *Stiff differential systems* (Proc. Internat. Sympos., Wildbad, 1973), pp. 111-121. IBM. Res. Sympos. Ser., Plenum, New York, 1974. (H. Shintani) **53** #7036 65L05

(with Gear, C. William) The effect of variable mesh size on the stability of multistep methods. *SIAM J. Numer. Anal.* **11** (1974), 1025-1043. (D. J. Evans) **51** #4677 65L05

King Mon (with Weinbaum, Sheldon) A nonasymptotic triple deck model for

supersonic boundary-layer interaction. *AIAA J.* **14** (1976), no. 6, 767-775. (Authors' summary) **56** #17492 76J65

Tu, Kuel Chang See Tu, Gui Zhang

Tu, Shih Tong Discrete analytic derivative equations of the first order. *Math. J. Okayama Univ.* **14** (1969/70), 103-109. (J. Lelong-Ferrand) **45** #2349 30A95

Discrete analytic derivative equations of the second order. *Math. J. Okayama Univ.* **14** (1969/70), 111-118. (J. Lelong-Ferrand) **45** #2350 30A95

Further results on the discrete analytic derivative equation under the prime convolution product. *Math. J. Okayama Univ.* **15** (1971/72), 173-185. (C. S. Duris) **49** #606 30A95 (44A40)

Higher order monodiffic difference equation. *Hokkaido Math. J.* **7** (1978), no. 1, 43-48. (C. H. Franke) **57** #10292 39A10 (30A95)

Tu, Tung Sheng See Du, Dong Sheng

Tu, Yih-o A multi-phase Stefan problem describing the swelling and the dissolution of glassy polymer. *Quart. Appl. Math.* **35** (1977/78), no. 2, 269-285. (Author's summary) **58** #32660 82J35

pham dinh Tuan See Pham Dinh Tuan

pham dang Tuan See Pham Dang Tuan

vũ trọng Tuấn See Vũ Trọng Tuấn

Tuan, P. D. On the remainder in quadrature rules. *Math. Comp.* **25** (1971), 819-826. (Author's summary) **45** #7998 65D30

(with Elliott, David L.) Coefficients in series expansions for certain classes of functions. *Math. Comp.* **26** (1972), 213-232. (C. W. Clenshaw) **46** #598 42A52 (65D99)

An extension of Clenshaw's method for linear differential equations. *Nordisk Tidskr. Informationsbehandling (BIT)* **13** (1973), 372-374. (C. W. Clenshaw) **48** #7608 65L05

(with Elliott, David L.) Asymptotic estimates of Fourier coefficients. *SIAM J. Math. Anal.* **5** (1974), 1-10. (A. E. Danese) **49** #5687 42A56

(with Anh, V. V.) On starlikeness and convexity of certain analytic functions.

Pacific J. Math. **69** (1977), no. 1, 1-9. (Selden Trimble) **55** #5848 30A32

(with Anh, V. V.) Radii of starlikeness and convexity for certain classes of analytic functions. *J. Math. Anal. Appl.* **64** (1978), no. 1, 146-158. (S. K. Bajpai) **58** #1125 30A32

Tuan, Vu Trong See Vũ Trọng Tuấn

Tuan Pham Dinh See Pham Dinh Tuan

Tubaro, Luciano (with Ricciardi, Paolo) Local existence for differential equations in Banach space. (Italian summary) *Boll. Un. Mat. Ital.* (4) **8** (1973), 306-316. (David L. Lovelady) **48** #11712 34G05 (47D05)

(with Ardito, Ada; Ricciardi, Paolo) Dissipative Lyapunov functions and differential equations in a Banach space. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **57** (1974), no. 6, 511-518 (1975). (J. E. Lagnese) **54** #7982 34G05

(with Da Prato, Giuseppe; Iannelli, Mimmo) Some results on a stochastic differential equation. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **60** (1976), no. 3, 202-204. (Toshio Yamada) **57** #10825 60H15

(with Da Prato, Giuseppe; Iannelli, Mimmo) Stochastic differential equations in Banach spaces, variational formulation. (Italian summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **61** (1976), no. 3-4, 168-176 (1977). (Hui-Hsiung Kuo) **58** #3042 60H15 (35R15, 46G99, 58D99)

Tubbs, J. D. (with Lewis, Truman O.; Duran, Benjamin S.) A note on the analysis of the MANOVA model and its application to growth curves. *Comm. Statist.* **4** (1975), no. 7, 643-653. (C. G. Khatri) **52** #7019 62H15 (62J10)

Tubilla, Alberto (with Marsaglia, George) A note on the "lack of memory" property of the exponential distribution. *Ann. Probability* **3** (1975), 353-354. (Ramesh C. Gupta) **51** #2073 62E10

Tuccari, Lorenzo (with Fiorito, Giovanni) Barriere per operatori parabolici ed applicazioni. (English summary) *Matematiche (Catania)* **31** (1976), no. 1, 112-125 (1977). (R. Guenther) **58** #11919 35K20

Tucci, Michele A mathematical formalization of a Sraffa model. *Metroeconomica* **28** (1976), no. 1-3, 16-24. (From the introduction) **58** #32876 90A15

Tucci, R. P. (with Birkenmeier, Gary F.) Does every right ideal of a matrix ring contain a nilpotent element? *Amer. Math. Monthly* **84** (1977), no. 8, 631-633. (W. G. Leavitt) **56** #15695 16A42

Tucci, Sandra Su una nuova classe di Fitting normale. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 3-4, 229-231 (1976). (F. Pérez Monasor) **57** #16401 20D10

Tucciarone, John The development of the theory of summable divergent series from 1880 to 1925. *Arch. History Exact Sci.* **10** (1973), 1-40. (E. Stipančič) **56** #5168 01A55 (01A60, 40-03)

Tuccillo, Fernando (with Franchetta, Anna) Su una classe di gruppi ipercentrali. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **59** (1975), no. 3-4, 232-237 (1976). (Franco Migliorini) **56** #5714 20D15

Tučinskii, L. I. Estimate of the best approximation of a function by Sturm-Liouville polynomials using a modulus of smoothness. (Russian) *Differential equations, approximate methods of their solution. Tjumen. Gos. Univ. Naučn. Trudy Sb.* **22** (1975), 48-66. (See RŽMat **1976** #9 B45; MR **58** #28740) **41A25**

Direct theorems of the theory of approximation of functions by Sturm-Liouville polynomials. (Russian) *Differential equations, approximate methods of their solution. Tjumen. Gos. Univ. Naučn. Trudy Sb.* **22** (1975), 67-71. (See RŽMat **1976** #9 B46; MR **58** #28740) **41A10**

Tučinskii, M. R. (with Sabirov, T. S.) Method for the calculation of the mean value of small periodic solutions of differential equations in Banach spaces. Remarks on the application to chemical reactors. (Russian) *Functional analysis, No. 8: Operator theory (Russian), pp. 131-142. Ul'janovsk. Gos. Ped. Inst., Ul'janovsk, 1977. (Editors)* **58** #22895 34G05

Tuck, E. O. Matching problems involving flow through small holes. *Advances in applied mechanics, Vol. 15, pp. 89-158. Academic Press, New York, 1975. (H. K. Cheng)* **57** #8408 76J35

(with Macaskill, C.) Evaluation of the acoustic impedance of a screen. *J. Austral.*

- Math. Soc. Ser. B* 20 (1977), no. 1, 46-61. (Authors' summary) 57 #8443 76.65
- Tuck, J. L. (with Menzel, M. T.) The superperiod of the nonlinear weighted string (FPU) problem. *Advances in Math.* 9, 399-407 (1972). (Samuel Levy) 47 #4504 70.34
- Tücke, V. See Tutschke, W.
- Tucker, Alan C. Matrix characterizations of circular-arc graphs. *Pacific J. Math.* 39 (1971), 535-545. (L. W. Beineke) 46 #8915 05C99
- (with Hu, T. C.) Optimal computer search trees and variable-length alphabetical codes. *SIAM J. Appl. Math.* 21 (1971), 514-532. (M. A. Harrison) 46 #3198 94A10
- The strong perfect graph conjecture and an application to a municipal routing problem. *Graph theory and applications (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1972; dedicated to the memory of J. W. T. Youngs)*, pp. 297-303. *Lecture Notes in Math.*, Vol. 303, Springer, Berlin, 1972. (H. Sachs) 49 #7181 05C35
- A structure theorem for the consecutive 1's property. *J. Combinatorial Theory Ser. B* 12 (1972), 153-162. (R. A. Brualdi) 45 #4999 05B20
- The strong perfect graph conjecture for planar graphs. *Canad. J. Math.* 25 (1973), 103-114. (C. Berge) 47 #4868 05C99
- Perfect graphs and an application to optimizing municipal services. *SIAM Rev.* 15 (1973), 585-590. (I. M. Stancu-Minasian) 48 #3817 05C99 (90B05)
- Structure theorems for some circular-arc graphs. *Discrete Math.* 7 (1974), 167-195. (F. S. Roberts) 52 #203 05C99
- The cost of a class of optimal binary trees. *J. Combinatorial Theory Ser. A* 16 (1974), 259-263. (J. W. Moon) 48 #8284 05C05
- Polya's enumeration formula by example. *Math. Mag.* 47 (1974), 248-256. (D. A. Klarner) 50 #9596 05-01
- Coloring a family of circular arcs. *SIAM J. Appl. Math.* 29 (1975), no. 3, 493-502. (László Lovász) 55 #10309 05C15
- A new applicable proof of the Euler circuit theorem. *Amer. Math. Monthly* 83 (1976), no. 8, 638-640. (Paul C. Kainen) 55 #177 05C35
- Critical perfect graphs and perfect 3-chromatic graphs. *J. Combinatorial Theory Ser. B* 23 (1977), no. 1, 143-149. (M. E. Watkins) 58 #16369 05C15
- A note on convergence of the Ford-Fulkerson flow algorithm. *Math. Oper. Res.* 2 (1977), no. 2, 143-144. (John I. Moore, Jr.) 57 #5042 90B10
- Circular arc graphs: new uses and a new algorithm. *Theory and applications of graphs (Proc. Internat. Conf., Western Mich. Univ., Kalamazoo, Mich., 1976)*, pp. 580-589. *Lecture Notes in Math.*, Vol. 642, Springer, Berlin, 1978. (Jerald A. Kabell) 58 #21864 05C99
- Tucker, Albert William Least distance programming. *Proc. Princeton Symposium on Mathematical Programming* (1967), pp. 583-588. Princeton Univ. Press, Princeton, N. J., 1970. (From the author's introduction) 55 #12086 90C20
- (with Parsons, T. D.) Hybrid programs: linear and least-distance. *Math. Programming* 1 (1971), 153-167. (A. Göpfert) 47 #10066 90C20
- See also *Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing*, 48 #10747; *Studies in optimization*, 50 #9349; Balinski, M. L., 54 #12441; Bibliography: Tucker, Albert William, 54 #12442; Dantzig, George B., 54 #12443 and *Pivoting and extensions*, 54 #14769
- Tucker, Charles Sequentially relatively uniformly complete Riesz spaces and Vulikh algebras. *Canad. J. Math.* 24 (1972), 1110-1113. (R. Cristescu) 47 #3945 46A40
- A note on Baire functions. *Rev. Roumaine Math. Pures Appl.* 17 (1972), 1107-1108. (Pavel Kostyrko) 47 #8779 26A21
- On a theorem concerning Baire functions. *Proc. Amer. Math. Soc.* 41 (1973), 173-178. (A. C. Zaenen) 47 #7380 46A40 (26A21)
- Homomorphisms of Riesz spaces. *Pacific J. Math.* 55 (1974), 289-300. (D. H. Fremlin) 51 #5443 06A65
- Concerning σ -homomorphisms of Riesz spaces. *Pacific J. Math.* 57 (1975), no. 2, 585-590. (D. H. Fremlin) 52 #6376 46A40 (06A65)
- (with Wayment, Stanley G.) A complete norm on the space of Riemann-Stieltjes integrable functions. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 10, 1451-1453. (R. McGuigan) 55 #11033 46E99
- Riesz homomorphisms and positive linear maps. *Pacific J. Math.* 69 (1977), no. 2, 551-556. (A. C. Zaenen) 55 #11099 47B55 (46A40)
- Tucker, David (with Heerema, Nickolas) Modular field extensions. *Proc. Amer. Math. Soc.* 53 (1975), no. 2, 301-306. (James K. Deveney) 53 #5551 12F15
- Tucker, Don H. A function which is weakly of bounded variation but does not have the Goursin ω -property. *Proc. Amer. Math. Soc.* 19 (1968), 578-580. 53 #14112 46E40
- (with Easton, Richard J.) A generalized Lebesgue-type integral. *Math. Ann.* 181 (1969), 311-324. (See Zbl 169, 182) 26A42
- (with Wayment, Stanley G.) Some remarks on the notion of "derivatives". *Vector and operator valued measures and applications (Proc. Sympos., Alta, Utah, 1972)*, pp. 367-378. Academic Press, New York, 1973. (Alan Shuchat) 49 #1113 46G10
- See also *Vector and operator valued measures and applications*, 48 #4264
- Tucker, Howard G. (with Hudson, William N.) Limit theorems for variational sums. *Trans. Amer. Math. Soc.* 191 (1974), 405-426. (Harry I. Cohn) 50 #11385 60F05
- (with Hudson, William N.) Equivalence of infinitely divisible distributions. *Ann. Probability* 3 (1975), 70-79. (F. W. Steutel) 51 #9148 60E05
- On moments of distribution functions attracted to stable laws. *Houston J. Math.* 1 (1975), no. 1, 149-152. (J. D. Mason) 52 #1831 60E05
- The supports of infinitely divisible distribution functions. *Proc. Amer. Math. Soc.* 49 (1975), 436-440. (J. G. Wendel) 51 #1910 60E05
- (with Hudson, William N.) On admissible translates of infinitely divisible distributions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 32 (1975), 65-72. (Stephen James Wolfe) 51 #11619 60E05
- (with Barnes, George R.) On almost sure convergence of normed maxima of independent random variables. *J. London Math. Soc.* (2) 16 (1977), no. 2, 377-383. (W. Dziubdziala) 57 #1616 60F15
- (with Brockett, Patrick L.) A conditional dichotomy theorem for stochastic processes with independent increments. *J. Multivariate Anal.* 7 (1977), no. 1, 13-27. (M. I. Jadrénko) 56 #1438 60G30
- (with Hudson, William N.) A bivariate strong law of large numbers. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 39 (1977), no. 2, 103-110. (Gábor J. Székely) 56 #6807 60F15
- (with Brockett, Patrick L.; Hudson, William N.) The distribution of the likelihood ratio for additive processes. *J. Multivariate Anal.* 8 (1978), no. 2, 233-243. (G. M. Molčan) 58 #18701 60G30 (62M99)
- Tucker, John See *Conference: Mathematical Logic*, 48 #5804
- Tucker, Ledyard R. (with Bechtel, Gordon G.; Chang, Wei-ching) A scalar product model for the multidimensional scaling of choice. *Psychometrika* 36 (1971), 369-388. (M. Atiqullah) 46 #10163 62P15
- Relations of factor score estimates to their use. *Psychometrika* 36 (1971), 427-436. (C. W. Chen) 51 #4556 62H25
- Relations between multidimensional scaling and three-mode factor analysis. *Psychometrika* 37 (1972), 3-27. (C. Hayashi) 47 #2755 62H25 (62P15, 92A25)
- (with Cooper, Lee G.; Meredith, William) Obtaining squared multiple correlations from a correlation matrix which may be singular. *Psychometrika* 37 (1972), 143-148. (C. G. Khatri) 47 #2752 62H20
- Tucker, Lloyd D. Embedding partially ordered spaces in topological semilattices. *Proc. Amer. Math. Soc.* 33 (1972), 203-206. (K. N. Simon) 45 #1807 06A10 (06A20)
- Tucker, M. C. (with Isham, C. J.) U(3) version of the f-g theory. *Phys. Rev. D* (3) 10 (1974), 3219-3225. (Authors' summary) 53 #9911 81.22
- Tucker, R. H. (with Hammer, C. L.) New quantum electrodynamics for vector mesons. *Phys. Rev. D* (3) 3 (1971), 2448-2460. (P. Achuthan) 48 #10355 81.35
- Tucker, R. W. (with Collins, P. A.; Hopkinson, J. F. L.) Classical solutions for the relativistic three-string baryon problem. *Nuclear Phys. B* 100 (1975), no. 1, 157-178. (I. I. Kolodner) 52 #16400 81.49
- (with Hopkinson, J. F. L.; Collins, P. A.) Quantum strings and the functional calculus. *Phys. Rev. D* (3) 12 (1975), no. 6, 1653-1677. (Kishin Mariwalla) 57 #2312 81.47
- (with Collins, P. A.; Hopkinson, J. F. L.) Folded world sheets and the orientable string. *Nuclear Phys. B* 103 (1976), no. 1, 67-78. (P. Havas) 54 #2117 83.58
- (with Collins, P. A.) Classical and quantum mechanics of free relativistic membranes. *Nuclear Phys. B* 112 (1976), no. 1, 150-176. (Kishin Mariwalla) 54 #9411 81.35
- (with Collins, P. A.) An action principle for the Neveu-Schwarz-Ramond string and other systems using supernumerary variables. *Nuclear Phys. B* 121 (1977), no. 2, 307-325. (From the authors' introduction) 55 #5041 81.47
- (with Howe, P. S.) An approach to SU(2) gauge fields in Minkowski space-time. *Nuclear Phys. B* 138 (1978), no. 1, 73-84. (Philip Huddleston) 58 #4148 83.22
- Tucker, Susan (with Albertson, Michael O.; Bollobás, Béla) The independence ratio and maximum degree of a graph. *Proceedings of the Seventh Southeastern Conference on Combinatorics, Graph Theory, and Computing (Louisiana State Univ., Baton Rouge, La., 1976)*, pp. 43-50. *Congressus Numerantium*, No. XVII, Utilitas Math., Winnipeg, Man., 1976. (Joan Hutchinson) 55 #10305 05C15
- Tucker, Thomas W. Boundary-reducible 3-manifolds and Waldhausen's theorem. *Michigan Math. J.* 20 (1973), 321-327. (Wolfgang H. Heil) 48 #12537 57A10
- (with Gross, Jonathan L.) Quotients of complete graphs: revisiting the Heawood map-coloring problem. *Pacific J. Math.* 55 (1974), 391-402. (F. Bernhart) 52 #10466 05C10
- Non-compact 3-manifolds and the missing-boundary problem. *Topology* 13 (1974), 267-273. (E. M. Brown) 50 #5801 57A10
- (with Brown, Edward M.) On proper homotopy theory for noncompact 3-manifolds. *Trans. Amer. Math. Soc.* 188 (1974), 105-126. (K. W. Kwun) 48 #12544 57A65
- A correction to a paper of A. Marden (Ann. of Math. (2) 99 (1974), 383-462). *Ann. of Math.* (2) 102 (1975), no. 3, 565-566. (C. Earle) 52 #6722 57A10 (30A58)
- (with Gross, Jonathan L.) Generating all graph coverings by permutation voltage assignments. *Discrete Math.* 18 (1977), no. 3, 273-283. (Seth R. Alpert) 57 #5803 05C10
- On the Fox-Artin sphere and surfaces in noncompact 3-manifolds. *Quart. J. Math. Oxford Ser. (2)* 28 (1977), no. 110, 243-253. (O. G. Harrold) 56 #6662 57A10
- Tuckerman, Bryant The 24th Mersenne prime. *Proc. Nat. Acad. Sci. U.S.A.* 68 (1971), 2319-2320. (J. B. Kelly) 45 #166 10A25
- A search procedure and lower bound for odd perfect numbers. *Math. Comp.* 27 (1973), 943-949. (E. M. Horadam) 48 #3853 (E 49 #7205) 10A25 (10-04)
- Corrigenda: "A search procedure and lower bound for odd perfect numbers" (Math. Comp. 27 (1973), 943-949). *Math. Comp.* 28 (1974), 887. (Editors) 49 #7205 10A25 (10-04)
- Corrigendum: "Three new Mersenne primes and a statistical theory" (Math. Comp. 18 (1964), 93-97) by D. B. Gillies. *Math. Comp.* 31 (1977), no. 140, 1051. (Editors) 56 #233 10A25
- Tuckett, R. F. Combined cost and linear programming models of industrial complexes. *Operational Res. Quart.* 20 (1969), 223-236. (Author's summary) 45 #1581 90B30
- Tučekvič, V. M. See *Questions in mathematical physics*, 58 #32404
- Tuckwell, Henry C. (with Smith, Charles E.) Some stochastic growth processes. *Mathematical problems in biology (Conf., Univ. Victoria, Victoria, B.C., 1973)*, pp. 211-225. *Lecture Notes in Biomath.*, Vol. 2, Springer, Berlin, 1974. (L. M. Ricciardi) 51 #5066 92A15
- On the first-exit time problem for temporally homogeneous Markov processes. *J. Appl. Probability* 13 (1976), no. 1, 39-48. (D. V. Gusak) 52 #15706 (EA 53) 60J60 (92A05)
- Tudor, Constantin Diffusions avec explosion construites à l'aide des martingales exponentielles. *Rev. Roumaine Math. Pures Appl.* 20 (1975), no. 10, 1187-1199. (Jean-Michel Bismut) 53 #4260 60J60
- Continuous dependence on the coefficients for the diffusions on a bounded domain. (Lithuanian and Russian summaries) *Litovsk. Mat. Sb.* 16 (1976), no. 4, 233-238, 257. (S. R. S. Varadhan) 54 #8897 60J60
- Diffusions avec explosion construites à l'aide des martingales exponentielles. II. *Rev. Roumaine Math. Pures Appl.* 21 (1976), no. 6, 803-810. (Jean-Michel Bismut) 54 #6295 60J60
- A theorem concerning the existence of the weak solution of the stochastic equation with continuous coefficients in the plane. *Rev. Roumaine Math. Pures Appl.* 22 (1977),

- no. 9, 1303-1308. (Author's summary) **58** #24551 60H10
 A theorem concerning the inversion of time in a diffusion on a bounded domain. *Rev. Roumaine Math. Pures Appl.* **22** (1977), no. 10, 1507-1511. (Nicole El Karoui) **57** #10835 60J60
- Br, Gheorghe M.** On certain improper integrals. (Romanian. Russian and French summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **15**(29) (1970), no. 1, 51-54. (David L. Lovelady) **49** #471 26-01
 (with Brişcă, V.) Sur la convergence des schémas dans les espaces de Banach d'approximation. (Romanian summary) *An. Univ. Timişoara Ser. Şti. Mat.* **9** (1971), 31-33. (William Hintzman) **48** #6784 41A65
 (with Brişcă, V.) Théorèmes de convergence pour les schémas d'approximation dans les espaces de Banach. *Math. Balkanica* **1** (1971), 22-26. (P. D. Morris) **46** #2329 41A65
 (with Brişcă, V.) On a certain family of functions associated with an operator. (Romanian. English summary) *An. Univ. Bucureşti Mat.-Mec.* **21** (1972), no. 2, 23-27. (Ileana Toma) **49** #5949 47H05
 A general formula for the calculation of certain definite integrals. (Romanian. Russian and French summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **17**(31) (1972), no. 2, 131-135. (Editors) **49** #11117 41A55
 (with Crstici, Borislav) Compléments au traité de Mitrinović. I. Quelques inégalités intégrales. *Mathematica (Cluj)* **14**(37) (1972), 27-31. (D. C. Benson) **49** #5272 26A86
 (with Crstici, Borislav) Compléments au traité de Mitrinović. II. Sur quelques inégalités intégrales. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 381-409* (1972), 9-12. (D. C. Benson) **49** #5273 26A86
 (with Meynieux, Robert) Compléments au traité de Mitrinović. III. Sur un schéma général pour obtenir des inégalités. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 412-460* (1973), 171-174. (D. C. Benson) **49** #3063 26A87
 Compléments au traité de Mitrinović. V. Quelques inégalités intégrales remarquables. (Romanian and Russian summaries) *Bul. Şti. Tehn. Inst. Politehn. Timişoara—Ser. Mat.-Fiz.-Mec. Teoret. Apl.* **19**(33) (1974), no. 1, 29-32. (D. C. Benson) **51** #10555 26A86
 Compléments au traité de D. S. Mitrinović. VI. Une généralisation de l'inégalité de Fejér-Jackson. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 461-497* (1974), 111-114. (D. C. Benson) **51** #10556 26A82
 (with Crstici, Borislav) Compléments au traité de D. S. Mitrinović. VII. Sur une inégalité de D. S. Mitrinović. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 498-541* (1975), 153-154. (D. C. Benson) **53** #742 26A86
 Some remarkable integral inequalities. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 544-576* (1976), 144-148. (Editors) **55** #12885 26A86
dosie, Constantin On superior orders sector accelerations in velocity distribution of the form $O\omega$. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Tech.* **23** (1975), no. 10, 805-810. (Author's summary) **56** #10253 70J47
 On higher order accelerations. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **19**(67), (1975), no. 3-4, 383-390 (1977). (W. Börsch-Supan) **55** #13741 65D25
 On some theorems of the plane areolar motion. *Acta Tech. ČSAV* **21** (1976), no. 4, 347-354. **54** #11893 70J34
- el, William G.** (with Lee, Imsong; DeRusso, Paul M.) Synthesis of optimal control systems with sensitivity constraints. *Automatic and remote control III* (Proc. Third Congr. Internat. Federation Automatic Control (IFAC), London, 1966), Vol. 1, p. 46, Paper 24B, 9 pp. *Inst. Mech. Engrs., London*, 1967. (Author's summary) **51** #9892 93C15
 See also *Proceedings: International Congress of the International Federation of Automatic Control (IFAC)*, **51** #12360b
Nguyễn Tự Cường See Nguyễn Tự Cường
Nguyen Si Tuen See Nguyen Si Tuen
nguen Cong T'uen See Nguyen Cong T'uen
- ff, A. D.** (with Jennings, Alan) An iterative method for large systems of linear structural equations. *Internat. J. Numer. Methods Engrg.* **7** (1973), 175-183. (L. Hageman) **49** #6584 65F10
 See also *Large sparse sets of linear equations*, **48** #10074
- ffner-Denker, I.** On a population genetic model by S. Karlin. *J. Math. Biol.* **1** (1974/75), no. 2, 177-185. (A. C. Trajstman) **56** #11083 92A10 (60J85, 92A15)
- ft, R. A.** (with Narducci, L. M.; Orszag, M.) On the ground state instability of the Dicke Hamiltonian. *Collect. Phenom.* **1**, no. 2, 113-118 (1973). (Alberto Galindo) **53** #10011 81J47
- ganbaev, A. A.** The structure of modules that are nearly injective. (Russian) *Sibirsk. Mat. Ž.* **18** (1977), no. 4, 890-898, 958. (L. Bican) **56** #12063 16A50 (16A52)
 Modules that are nearly injective. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 2(194), 233-234. (Tomas Kepka) **57** #12598 16A52
 Modules over hereditary Noetherian prime rings. (Russian) *Uspehi Mat. Nauk* **32** (1977), no. 4(196), 267-268. (L. A. Skornjakov) **57** #3192 16A52 (16A12)
 Quasi-injective and poorly-injective modules. (Russian. English summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* **1977**, no. 2, 61-64. (L. Bican) **56** #5654 16A52
- gendhat, Ernst** Die Bedeutung des Ausdrucks "Bedeutung" bei Frege. *Studien zu Frege, Band III*, pp. 51-69. *Problemata*, No. 44, Frommann-Holzboog, Stuttgart, 1976. (Editors) **58** #27189 02-03 (01A55)
- gizov, D. M.** On the theory of the ternary complex function. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 6, 34-40. (A. Zajta) **46** #5650 30A97
 (with Nasibov, Š. M.) On the theory of generalized complex functions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1972**, no. 1, 88-90. (J. Raussen) **46** #368 30A92
 On the theory of generalized complex functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 2, 34-38. (Z. Lewandowski) **46** #7530 30A97
 (with Nasibov, Š. M.) Formal higher order derivatives, and their application to the solution of a certain class of linear partial differential equations. (Russian. Azerbaijani summary) *Azerbaidžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Nauk* **1973**, no. 1, 40-45.
- (Gh. Silaş) **53** #987 35C10
 (with Nasibov, Š. M.) Taylor's formula for a certain class of generalized complex functions. (Russian. English and Azerbaijani summaries) *Azerbaidžan. Gos. Univ. Učen. Zap.* **1974**, no. 2-3 *Fiz. i Mat.*, 62-68. (L. G. Mihaïlov) **54** #5477 30A96
 See also *Questions on differential equations, number theory, algebra and geometry*, **52** #7763
- Tugnait, J. K.** (with Haddad, Abraham) On state estimation for uncertain discrete-time systems. *Proceedings of the 1977 IEEE Conference on Decision and Control* (New Orleans, La., 1977), Vol. 1, pp. 603-608. *Inst. Electrical Electron. Engrs., New York*, 1977. (Authors' summary) **58** #20737 93E10
- Tugov, I. I.** (with Šitikov, Ju. L.) A method for computing the Appell functions $F_1(\alpha; \beta, \beta'; \gamma; x, y)$. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **16** (1976), no. 6, 1587-1590, 1630. (Authors' summary) **57** #18029 65D20
- Tugulea, A.** See Baciu-Tugulea, Aurora
- Tuhvatov, M. B.** A generalization of the Bellman-Shimbel method. (Russian) *Voprosy Kibernet. Vyčisl. Mat. No. 24* (1969), 7-15. (Tomas Gal) **48** #3491 90C05
- Tuilev, A. T.** The Goursat problem for an equation of hyperbolic type that degenerates on the boundary. (Russian) *Boundary value problems for differential equations*, 1 (Russian), pp. 44-57. Izdat. "Fan" Uzbek SSR, Tashkent, 1971. (V. Durković) **45** #717 35L10
 A certain characteristic problem for equations of hyperbolic type that degenerate on the boundary. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1971**, no. 5, 3-5. (J. Kopáček) **49** #7610 35L20
 A certain Goursat problem for an equation of hyperbolic type that is degenerate on the boundary. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 4, 38-43. (M. Kopáčeková) **45** #3940 35L10
- Tukaev, A. G.** See Collection: Al'muhamedov, M. I., **50** #1795
- Tukalevs'ka, N. Ī.** (with Tivončuk, V. I.) A certain approximate method of solution of linear integral equations in the space L_p . (Russian) *Mathematical provisioning of electronic digital computers and effective organization of the computing process* (Proc. Sem., Kiev, 1969), No. 1 (Russian), pp. 61-69. *Akad. Nauk Ukrain. SSR, Kiev*, 1969. (I. Šelihoa (RŽMat 1970 #4 B914)) **45** #4694 65R05
 (with Sergiĭenko, Ī. V.; Parasjuk, I. N.) ★ Автоматизированные системы обработки данных. (Russian) [Automated data processing systems] Izdat. "Naukova Dumka", Kiev, 1976. 256 pp. (Siegmund Gerber) **57** #18168 68-01
- Tukesev, O.** (with Ramankulov, S.) The asymptotic estimation of the periodic solutions of singularly perturbed linear integrodifferential equations in the case when the degenerate equation is on the spectrum. (Russian) *Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Vyp.* **10** (1974), 96-103. (Editors) **54** #3334 45J05
- Tukey, John W.** (with Andrews, David F.; Bickel, Peter J.; Hampel, Frank R.; Huber, Peter J.; Rogers, William H.) ★ Robust estimates of location: Survey and advances. *Princeton University Press, Princeton, N.J.*, 1972. ix + 373 pp. (M. M. Siddiqui) **48** #9927 62F10 (62G35)
 Some graphic and semigraphic displays. *Statistical papers in honor of George W. Snedecor*, pp. 293-316. *Iowa State Univ. Press, Ames, Iowa*, 1972. (Peter A. Lachenbruch) **56** #6943 62-02
 (with Rogers, William H.) Understanding some long-tailed symmetrical distributions. Collection of articles in honour of Professor H. C. Hamaker. *Statistica Neerlandica* **26** (1972), no. 3, 211-226. (S. K. Katti) **52** #4485 62E10
 Instead of Gauss-Markov least squares, what? *Applied statistics* (Proc. Conf., Dalhousie Univ., Halifax, N. S., 1974), pp. 351-372. *North-Holland, Amsterdam*, 1975. (I. J. Good) **53** #1865 62J05
 Mathematics and the picturing of data. *Proceedings of the International Congress of Mathematicians* (Vancouver, B. C., 1974), Vol. 2, pp. 523-531. *Canad. Math. Congress, Montreal, Que.*, 1975. (Daniel Sunday) **55** #26 00A25 (62H99)
 See also *Future of applied mathematics*, **48** #10749 and de Finetti, Bruno, **50** #15022
- Tukey, P. A.** See Atkinson, A. C.; et al., **50** #15192
- Tukia, Pekka** On discrete groups of the unit disk and their isomorphisms. *Ann. Acad. Sci. Fenn. Ser. A I No. 504* (1972), 45 pp. (errata insert) (C. Earle) **46** #5613 30A58
 Extension of boundary homeomorphisms of discrete groups of the unit disk. *Ann. Acad. Sci. Fenn. Ser. A I No. 548* (1973), 16 pp. (V. Chuckrow) **49** #3123 30A58
 Multiplier preserving isomorphisms between Möbius groups. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **1** (1975), no. 2, 327-341. (I. A. Volynec) **53** #806 30A60
 On infinite dimensional Teichmüller spaces. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **3** (1977), no. 2, 343-372. (L. Keen) **58** #28484 30A58 (32G15, 57A20)
 The space of quasimetric mappings. *Math. Scand.* **40** (1977), no. 1, 127-142. (Helmut Köditz) **56** #8915 32G15
- Tul', M. P.** See *Mathematical simulation and the theory of electrical circuits*, **48** #3287
- Tulcea, Cassius Ionescu** See Ionescu Tulcea, Cassius
- Tulczyjew, Włodzimierz M.** (with Śniatycki, Jędrzej) Canonical dynamics of relativistic charged particles. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **15** (1971), 177-187. (P. G. Bergmann) **45** #6366 83J3
 (with Śniatycki, Jędrzej) Canonical formulation of Newtonian dynamics. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **16** (1972), 23-27. (H. S. P. Grässer) **45** #8206 83J34 (70J34)
 (with Śniatycki, Jędrzej) Generating forms of Lagrangian submanifolds. *Indiana Univ. Math. J.* **22** (1972/73), 267-275. (A. J. Tromba) **46** #4427 53C10
 (with Torrence, R. J.) Gauge invariant canonical mechanics for charged particles. *J. Mathematical Phys.* **14** (1973), 1725-1732. (M. Carmeli) **48** #10422 81J53
 Hamiltonian systems, Lagrangian systems and the Legendre transformation. *Symposia Mathematica, Vol. XIV (Convegno di Geometria Semplicitica e Fisica Matematica, INDAM, Rome, 1973)*, pp. 247-258. *Academic Press, London*, 1974. (Kenneth Dunn) **52** #9287 58F05
 Poisson brackets and canonical manifolds. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 931-935. (H. S. P. Grässer) **53** #1648 58F05
 The graded Lie algebra of multivector fields and the generalized Lie derivative of forms. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 937-942. (A. Nijenhuis) **52** #15522 58A10
 An intrinsic geometric construction for the Lagrange derivative. (Russian summary)

- Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 9, 963-969. (Stere Ianus) **53** #1623 58A20
- Sur la différentielle de Lagrange. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aii, A1295-A1298. (I. Kolář) **51** #14156 58F05 (49F99)
- Les jets généralisés. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 10, Aii, A349-A352. (I. Kolář) **52** #1760 58A20
- Relations symplectiques et les équations d'Hamilton-Jacobi relativistes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 13, Aii, A545-A547. (J. S. Joel) **57** #7677 58F05 (83.58)
- (with Lawruk, Bohdan; Śniatycki, Jędrzej) Special symplectic spaces. *J. Differential Equations* **17** (1975), 477-497. (Alan Weinstein) **51** #9125 58F05 (35G15, 58G15)
- The Lagrange differential. *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **24** (1976), no. 12, 1089-1096. (Author's summary) **58** #31234 58F05
- Les sous-variétés lagrangiennes et la dynamique hamiltonienne. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 1, Ai, A15-A18. (Tudor S. Rădui) **54** #8726 58F05 (70.53)
- Les sous-variétés lagrangiennes et la dynamique lagrangienne. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 8, Av, A675-A678. (Tudor S. Rădui) **54** #8727 58F05 (70.58)
- Simple models of Lagrangian submanifolds of symplectic manifolds. *Rend. Sem. Mat. Univ. e Politec. Torino* **35** (1976/77), 97-112 (1978). (Jacek Gancarzewicz) **58** #7714 58F05
- A symplectic formulation of particle dynamics. *Differential geometric methods in mathematical physics (Proc. Sympos., Univ. Bonn, Bonn, 1975)*, pp. 457-463. *Lecture Notes in Math.*, Vol. 570, Springer, Berlin, 1977. (Manfred Andrie) **56** #6736a 58F05 (70.58)
- A symplectic formulation of field dynamics. *Differential geometrical methods in mathematical physics (Proc. Sympos., Univ. Bonn, Bonn, 1975)*, pp. 464-468. *Lecture Notes in Math.*, Vol. 570, Springer, Berlin, 1977. (Manfred Andrie) **56** #6736b 58F05 (70.58)
- A symplectic formulation of relativistic particle dynamics. *Acta Phys. Pol. B* **8** (1977), no. 6, 431-447. (Klaus Hornfeffer) **56** #3887 58F05 (70.53, 81.53)
- The Legendre transformation. (French summary) *Ann. Inst. H. Poincaré Sect. A (N.S.)* **27** (1977), no. 1, 101-114. (Julian I. Palmore) **58** #13177 58F05 (70.58)
- The Lagrange complex. (French summary) *Bull. Soc. Math. France* **105** (1977), no. 4, 419-431. (Joseph Klein) **58** #13178 58F05
- (with Lawruk, Bohdan) Criteria for partial differential equations to be Euler-Lagrange equations. *J. Differential Equations* **24** (1977), no. 2, 211-225. (J. E. Marsden) **56** #13277 58F05 (49H05, 58E99)
- (with Benenti, Sergio) Sur l'existence du potentiel pour les systèmes mécaniques avec des liaisons non holonomes. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **286** (1978), no. 4, A237-A240. (Authors' summary) **57** #14008 58A10 (58F05, 70.58)
- Tuldava, J.** Statistical methods and linguistics. (Estonian. Russian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **377** (1976), 5-60. (J. S. Joel) **57** #4676 68A30 (62P99)
- Tulegenova, M. B.** (with Umbetžanov, D. U.) The multiperiodic solutions of a certain system of partial differential equations. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1973**, no. 3, 57-61, 94. (O. Vejvoda) **51** #3659 35B10
- Tulenbaev, M. S.** (with Suslin, A. A.) A theorem on stabilization for Milnor's K_2 -functor. (Russian) Rings and modules. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **64** (1976), 131-152, 162. (A. A. Ranicki) **56** #15730 18F25 (12A65)
- Tuležanov, K. A.** (with Volkodavov, V. F.) The solution of two problems for a certain equation of hyperbolic type. (Russian) *Proceedings of a Seminar on Differential Equations*, No. 1 (Russian), pp. 46-51, 153. *Kuibyshev. Gos. Univ., Kuibyshev*, 1975. (Authors' summary) **58** #11955 35L20
- Solution of the problems T and T_3 for a hyperbolic equation. (Russian) *Differentsial'nye Uravneniya (Ryazan)* No. 6 (1975), 208-213. (RŽMat **1977** #11 B397) **58** #29299 35L10
- Tulipani, Sauro** Cardinali misurabili e algebre semplici in una varietà generata da un'algebra infinitaria m-funzionalmente completa. (English summary) *Boll. Un. Mat. Ital.* (4) **4** (1971), 882-887. (H. A. Thurston) **46** #3410 08A15
- Proprietà metamatematiche di alcune classi di algebre. *Rend. Sem. Mat. Univ. Padova* **47** (1972), 177-186. (I. Sussman) **47** #3279 08A15
- Sull'aggiunto del fondatore dimenticante tra due classi equazionali. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **54** (1973), 503-508 (1974). (I. Gy. Maurer) **50** #12865 08A15
- (with Marčja, Annalisa) Questioni di teoria dei modelli per linguaggi universali positivi. (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur.* (8) **56** (1974), no. 6, 915-923. (Gabriel Lolli) **52** #10409 02H10
- Questioni di teoria dei modelli per linguaggi universali positivi. II. Metodi di "back and forth". (English summary) *Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Nat.* (8) **59** (1975), no. 5, 328-335 (1976). (Gabriel Lolli) **56** #5273 02H13 (02H10)
- (with Makowsky, Johann Andreas) Some model theory for monotone quantifiers. *Arch. Math. Logik Grundlagenforsch.* **18** (1976), no. 3-4, 115-134. (Authors' summary) **57** #9474 02B20 (02H10)
- Forcing infinito generalizzato in teoria dei modelli. (English summary) *Rend. Sem. Mat. Univ. Padova* **56** (1976), 125-138 (1978). (Manfred Armbrust) **57** #9524 02H05
- Tuljaganov, Š. E.** (with Žuravlev, Ju. I.) Measuring the importance of a test. (Russian) *Voprosy Kibernet. (Tashkent) Vyp.* **38** (1970), 29-42. **55** #2397 94A20
- (with Žuravlev, Ju. I.; Kamilov, M. M.) Formulas for computing the significance of a symbol. (Russian) *Voprosy Kibernet. (Tashkent) Vyp.* **44** (1970), 15-20. **55** #2398 94A20
- (with Žuravlev, Ju. I.) Measures of the importance of objects in complex systems. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **12** (1972), 170-184. (O. Gulyás) **46** #6811 90B99
- (with Žuravlev, Ju. I.; Kamilov, M. M.) ★Алгоритмы вычисления оценок и их применение. (Russian) [Algorithms for the computation of estimates, and their application] *Izdat. "Fan" Uzbek. SSR, Tashkent*, 1974. 119 pp. (W. Greblicki) **52** #16190 68A45
- Tuljaganov, S. T.** (with Mai-Thuk-Ngoi) Distribution of values of the function ν_k . (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1969**, no. 9, 3-6. (A. I. Vinogradov) **47** #4948 10H15 (10K20)
- (with Levin, B. V.; Timofeev, N. M.) Distribution of values of multiplicative functions. (Russian) *Vladimir. Gos. Ped. Inst. Učen. Zap.* **38** (1971), 282-288.
- Fainleib (RŽMat **1972** #3 A103) **52** #13706 10K20 (60F05)
- An estimate of the remainder term in integral asymptotic laws for multiplicative functions. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1972**, no. 4, 5-7. (Kubilius) **48** #6050 10K20 (10K25)
- Distribution of the values of multiplicative functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **16** (1972), no. 5, 30-38, 68. (H.-E. Richter) **49** #242 10K20
- Local limit theorems for multiplicative arithmetical functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **17** (1973), no. 3, 26-33, 10. (H.-E. Richter) **51** #3108 10K20
- (with Levin, B. V.; Timofeev, N. M.) Distribution of the values of multiplicative functions. (Russian. Lithuanian and English summaries) *Litovsk. Mat. Sb.* **13** (1973), no. 1, 87-100, 232. (J. B. Roberts) **47** #3340 10K20
- Estimation of the rate of convergence in integral asymptotic laws for multiplicative functions. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1974**, no. 1, 8-10. (Galambos) **50** #264 10K20 (10H25)
- Large deviations of multiplicative arithmetic functions. (Russian) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **18** (1974), no. 2, 82-84. (J. Galambos) **49** #4966 10K20
- Asymptotic formulas for sums of multiplicative arithmetic functions. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1975**, no. 1, 7-9. (B. Volkmann) **51** #12750 10H25
- An estimate of the deviation of the distribution function of multiplicative functions from the limit law. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1975**, no. 1, 5-7. (B. Volkmann) **54** #7408 10H25
- Asymptotic expansion of a distribution function of multiplicative arithmetic functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 38-44, 105. (B. Volkmann) **52** #13708 10K20 (10H25)
- The limit behavior of the distribution of nonzero values of multiplicative functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 3, 37-41, 90. (B. Volkmann) **54** #7409 10H25
- Estimates of the deviation of the distribution function of multiplicative functions from the limit law. (Russian) *Tashkent. Gos. Univ. Naučn. Trudy Vyp. 490 Voprosy Matematiki* (1976), 197-204, 271. (Author's summary) **57** #12438 10K20 (60F05)
- An estimate of the remainder terms for theorems on the summability of multiplicative functions. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 6, 25-33, 101. (Karl-Heinz Indlekofer) **58** #5557 10H25
- Tuljaganova, M. I.** A certain generalization of a problem of Lo Keng Hua. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 1, 6-8. (B. Diviš) **51** #3095 10J15
- Generalization of a certain theorem of de Bruijn and van Lint. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **15** (1971), no. 4, 44-47. (Ayoub) **45** #6772 10H99
- Certain estimates of sums of multiplicative functions defined on a normed semigroup. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1972**, no. 6, 31-34, 79. (W. Narkiewicz) **48** #3902 10H25 (20M05)
- A multidimensional distribution for additive functions with a single normalization. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **18** (1974), no. 2, 29-35, 93. (J. Galambos) **49** #4965 10K20
- Some asymptotic formulas for the sums of multiplicative functions that are defined on a normed semigroup. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 6, 21-24, 87. (W. Schwarz) **55** #12668 (EA **55**/56) 10H25
- Tuljapurskar, S. D.** (with Semura, J. S.) Dynamic equilibrium under periodic perturbations in simple ecosystem models. *J. Theoret. Biol.* **66** (1977), no. 2, 327-343. (Brian L. Sleeman) **56** #14819 92A05
- Tuljupa, T. I.** Nonholonomic congruences of a line complex in a space of constant curvature (S_3). (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 117-131. (W. Waliszewski) **47** #969 53A35
- Nonholonomic congruences of a binormal complex in a space of constant curvature (S_3). (Russian) *Trudy Irkutsk. Gos. Univ.* **64** (1969), 132-144. (W. Waliszewski) **47** #970 53A35
- (with Mašanov, V. I.) A general theory of line complexes in spaces of constant curvature. (Russian) *Trudy Irkutsk. Gos. Univ.* **66** (1969), 137-155. (D. I. Papu) **46** #4401 53A35
- (with Mašanov, V. I.) Properties of polar pairs of complexes in spaces of constant curvature. (Russian) *Trudy Irkutsk. Gos. Univ.* **66** (1969), 156-159. (D. I. Papu) **46** #4402 53A35
- Tull, J. P.** See Gilmer, Robert; et al., **48** #5755
- Tulley McAuley, Patricia** A note on paired fibrations. *Proc. Amer. Math. Soc.* **34** (1972), 534-540. (Author's summary) **54** #11315 55D05
- (with Edwards, David A.) The shape of a map. *Fund. Math.* **96** (1977), no. 195-210. (S. Mardešić) **58** #7621 55D99 (55F65)
- Tullo, Alan W.** (with Sinclair, Allan M.) Noetherian Banach algebras are finite dimensional. *Math. Ann.* **211** (1974), 151-153. (S. J. Sidney) **50** #8081 46H10
- (with Duncan, John) Finite dimensionality, nilpotents and quasinilpotents in Banach algebras. *Proc. Edinburgh Math. Soc.* (2) **19** (1974/75), 45-49. (Sandy Grabiner) **49** #9631 46H05
- Conditions on Banach algebras which imply finite dimensionality. *Proc. Edinburgh Math. Soc.* (2) **20** (1976), no. 1, 1-5. (G. R. Allan) **54** #3407 46H05
- Tullock, Gordon** See Analysis of human behaviour, **52** #12857
- Tully, Edward J., Jr.** \mathcal{K} -commutative semigroups in which each homomorphism is uniquely determined by its kernel. *Pacific J. Math.* **45** (1973), 669-679. (S. M. Yusu

- 7 #5157 20M10
A class of finite commutative Archimedean semigroups. *Math. Systems Theory* 7 (1974), no. 4, 289-293. (B. M. Schein (Šain)) 52 #5838 20M10 (06A50)
Some languages derived from abelian groups. *J. Pure Appl. Algebra* 7 (1976), no. 3, 83-286. (G. E. Četlin) 54 #11866 94A30
J. A. (with Burgess, A.; Hummer, D. G.) Electron impact excitation of positive ions. *Philos. Trans. Roy. Soc. London Ser. A* 266 (1970), no. 1175, 225-279. (A. Terry Amos) 55 #7175 81J35
V. N. Distribution of eigenvalues for differential operators with constant coefficients. (Russian) *Funkcional. Anal. i Priložen.* 5 (1971), no. 3, 85-90. (L. Cattabriga) 47 #3854 35P20
The asymptotic distribution of the eigenvalues of degenerate elliptic equations of second order. (Russian) *Mat. Sb. (N.S.)* 86(128) (1971), 76-89. (A. Borzjymowski) 46 #549 35P20 (47F05)
Asymptotic distribution of the eigenvalues of differential operators with variable coefficients. (Russian) *Dokl. Akad. Nauk SSSR* 206 (1972), 827-830. (Ja. A. Roitberg) 47 #3855 35P20
Asymptotic distribution of the eigenvalues of differential equations. (Russian) *Mat. Sb. (N.S.)* 89(131) (1972), 191-206, 349. (H. Baumgärtel) 48 #11811 35P20
(with Aslanjan, A. G.) Asymptotic distribution of the eigenfrequencies of elastic shells. (Russian) *Dokl. Akad. Nauk SSSR* 208 (1973), no. 4, 801-804. (Z. Kączkowski) 52 #12472 73J35
(with Aslanjan, A. G.; Kuzina, Z. N.; Lidskii, V. B.) Distribution of the natural frequencies of a thin elastic shell of arbitrary outline. *Prikl. Mat. Meh.* 37 (1973), 604-617 (Russian); translated as *J. Appl. Math. Mech.* 37 (1973), 571-584. (H. R. Aggarwal) 49 #11912 73J35
(with Šubin, M. A.) The asymptotic distribution of the eigenvalues of pseudodifferential operators in R^n . (Russian) *Mat. Sb. (N.S.)* 92(134) (1973), 571-588, 648. (Monty Strauss) 48 #9465 47G05 (35S05)
(with Šubin, M. A.) The asymptotic behavior of the eigenvalues of pseudodifferential operators in $L^2(R^n)$. (Russian) *Uspehi Mat. Nauk* 28 (1973), no. 5(173), 242. (Ju. V. Kostarčuk) 52 #14688 35P20 (47G05)
Iulpe, V. S. The inverse of a special matrix. Volume dedicated to the memory of V. Ramaswami Aiyar. *Math. Student* 39 (1971), 18-20 (1972). 48 #3982 15A09
Iulov, A. V. See Problems in theoretical physics, 50 #12007
Iulov, A. V. Green's functions in the theory of irreversible processes. (Russian. English summary) *Vestnik Leningrad. Univ.* 25 (1970), no. 4, 13-21. (K. Kumar) 45 #9622 81.47 (81.46)
Iulupuk, Ju. M. (with Volohov, V. S.) Methods for abbreviating descriptions by means of factor analysis. (Russian) *Proceedings of the Fourth All-Union Conference on Automatic Control—Engineering Cybernetics* (Tbilisi, 1968), Vol. 2: *Theory of automatic control* (Russian), pp. 442-448, 483. Izdat. "Nauka", Moscow, 1972. (Editors) 48 #10236 68A50
Ilyia-Muhika, Sam A characterization of E -processes and Poisson processes in R^n . *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* 20 (1971), 199-216. (P. M. Lee) 47 #9708 60G99
On necessary and sufficient conditions for convergence to an m -dimensional Poisson distribution. *Sankhyā Ser. A* 39 (1977), no. 2, 196-198. (V. K. Rohatgi) 58 #2995 60F05
Ima, Jiri (with Pudlák, Pavel) Yeast graphs and fermentation of algebraic lattices. *Lattice theory* (Proc. Colloq., Szeged, 1974), pp. 301-341. *Colloq. Math. Soc. János Bolyai*, Vol. 14, North-Holland, Amsterdam, 1976. (Joel Berman) 56 #193 06A20
(with Boguszak, Marek; Poljak, Svatopluk) Note on homomorphism interpolation theorem. *Comment. Math. Univ. Carolinae* 17 (1976), no. 1, 105-109. (W. Taylor) 53 #12964 05A17
(with Pudlák, Pavel) Every finite lattice can be embedded in the lattice of all equivalences over a finite set (preliminary communication). *Comment. Math. Univ. Carolinae* 18 (1977), no. 2, 409-414. (M. Kolibiar) 56 #11860 06A20
Imajer, František Uniform stability and uniform asymptotic stability of sets with respect to a continuous flow. (Czech. English summary) *Časopis Pěst. Mat.* 97 (1972), 86-93. (J. Jarník) 46 #5772 34D20
Ljapunov functions in the theory of the boundedness of abstract restricted processes. (Czech. English summary) *Časopis Pěst. Mat.* 97 (1972), 163-182. (J. Jarník) 46 #5773 34D20
The Ljapunov method in the theory of the boundedness of linear control flows. (Czech. English summary) *Časopis Pěst. Mat.* 98 (1973), 278-284. (J. Kučera) 48 #4439 34D20 (34H05)
Imakin, V. I. (with Solodovnikov, V. V.; Biriukov, V. F.) ★Принцип сложности в теории управления. (Russian) [The complexity principle in control theory] О проектировании технически оптимальных систем и проблеме корректности. [Designing technically optimal systems and the problem of correctness] Izdat. "Nauka", Moscow, 1977. 341 pp. (Vadim Komkov) 58 #15498 93C99
Imakov, I. M. ★Анри Леон Лебег (1875-1941). (Russian) [Henri Léon Lebesgue (1875-1941)] Серия "Научно-Биографическая Литература". ["Scientific Biographic Literature"] Series Izdat. "Nauka", Moscow, 1975. 119 pp. (Editors) 58 #16044 01A70
Henri Lebesgue (on the occasion of the 100th anniversary of his birth). (Russian) *Mat. v Škole* 1975, no. 5, 76-81. (Not reviewed) 01A70
Imanjan, B. E. Dissemination of the ideas of N. Copernicus in Armenia. (Russian. English summary) *Voprosy Istor. Estestvozn. i Tehn.* 1972, no. 4(41), 58-59. (Editors) 58 #4859 01A45
Measurement of time in ancient and mediaeval Armenia. *J. Hist. Astronom.* 5 (1974), part 2, 91-98. (Editors) 58 #21057 01A30 (01A35)
See also Nicolaus Copernicus. On the 500th anniversary of his birth, 50 #12560
Imanov, A. E. (with Henkin, G. M.) Interpolation submanifolds of pseudoconvex manifolds. (Russian) *Mathematical programming and related questions* (Proc. Seventh Winter School, Drobogych, 1974), *Theory of functions and functional analysis* (Russian), pp. 74-86. *Central. Ekonom.-Mat. Inst. Akad. Nauk SSSR*, Moscow, 1976. (Editors) 58 #22665 32E30
A peak set of metric dimension 2.5 for an algebra of holomorphic functions on a three-dimensional sphere in C^2 . (Russian) *Izv. Akad. Nauk SSSR Ser. Mat.* 41 (1977), no. 2, 370-377, 478. (J. Siciak) 58 #6349 32E30 (46J15)
Tumanov, L. A. (with Stecenko, V. Ja.; Šutov, V. G.) On the theory of nonlinear models of balance between branches. (Russian) *Models and methods for the analysis of economic target-oriented systems* (Russian), pp. 166-176. Izdat. "Nauka" Sibirsk. Otdel., Novosibirsk, 1977. (I. V. Evstigneev) 58 #32875 90A15
Tumanov, T. V. See Probabilistic automata and their application, 48 #5745
Tumarkin, G. C. Boundary properties of analytic functions that are representable by Cauchy type integrals. (Russian) *Mat. Sb. (N.S.)* 84(126) (1971), 425-439. (R. Hornblower) 45 #3714 30A72
Boundary conditions for conformal mappings of certain classes of domains. (Russian) *Some problems in modern function theory* (Proc. Conf. Modern Problems of Geometric Theory of Functions, Inst. Math., Acad. Sci. USSR, Novosibirsk, 1976) (Russian), pp. 149-160. *Akad. Nauk SSSR Sibirsk. Otdel. Inst. Mat., Novosibirsk*, 1976. (Editors) 58 #22551 30A60
Tumarkin, Ju. B. A certain intrinsic characterization of locally complete bornological spaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 14 (1971), 15-17. (A. J. Lazar) 45 #5706 46A09
Stability of bases in B -spaces and in other classes of locally convex spaces. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 14 (1971), 26-35. (A. J. Lazar) 45 #5723 46B15 (46A05)
Tumarkin, L. A. A certain lemma, and sets of the first and second categories in the generalized sense. (Russian. French summary) *Vestnik Moskov. Univ. Ser. I Mat. Meh.* 26 (1971), no. 6, 48-50. (M. Katětov) 45 #9303 54H05 (54F45)
(with Tihomirov, V. M.) The Uryson diameters of the Euclidean n -sphere. (Russian) *General topology and its relations to modern analysis and algebra, III* (Proc. Third Prague Topological Sympos., 1971), pp. 441-442. *Academia, Prague*, 1972. (W. Kuperberg) 50 #11179 54E45
See also Problems: Topology, 50 #8399 and Aleksandrov, P. S.; et al., 52 #7785
Tumašev, G. G. The problem of constructing a doubly periodic hydrodynamic lattice from a velocity distribution. (Russian) Collection of articles dedicated to Aleksandr Petrovič Norden on the occasion of his seventieth birthday. *Izv. Vysš. Učebn. Zaved. Matematika* 1974, no. 5(144), 194-197. (St. I. Gheorghijă) 50 #9140 76J30
(with Žegalov, V. I.; Krikunov, Ju. M.; Norden, A. P.) Ljubov' Ivanovna Čibrikova (on the occasion of her fiftieth birthday). (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* 1975, no. 6(157), 166-167. (Editors) 52 #5330 01A70
Tumasov, V. V. Extension of the system of equivalent transformations of expressions. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 12 (1972), 552-556. (W. Wechler) 46 #8467 68A15
Tumilovicz, Jerzy (with Łukasiewicz, Stanisław) Stability of a cylindrical shell with a circumferential break under axial compression. (Polish. Russian and English summaries) *Mech. Teoret. Stos.* 15 (1977), no. 4, 537-549. (Authors' summary) 56 #13923 73J35
Tummala, V. M. Rao (with Hanumara, R. Choudary) Bayesian approach to maximum likelihood estimation. *Proceedings of the Annual Meeting of the American Statistical Association, Business and Economic Statistics Section* (St. Louis, Mo., 1974), pp. 587-589. *Amer. Statist. Assoc., Washington, D.C.*, 1975. (K. M. Lal Saxena) 51 #11789 62F15
Tumolillo, Thomas A. Methods for calculating the reliability function for systems subjected to random stresses. *IEEE Trans. Reliab.* R-23 (1974), no. 4, 256-262. (Laurence L. George) 54 #3857 60J20
Tumura, Yosiro Some applications of the equilibrium equations method in the queueing problem. (French summary) *OR* 69 (Proc. Fifth Internat. Conf. Operational Research, Venice, 1969), pp. xc-xci, 283-290. *Tavistock Publications, London*, 1970. (Author's summary) 52 #4459 60K25
(with Hirakawa, Kosaburo) The generalization of Cochran's Q -test. *TRU Math.* 6 (1970), 73-87. (N. Giri) 47 #4388 62G10
(with Kanno, Ryuzo) Estimation in mixture of two multivariate normal distributions. *TRU Math.* 9 (1973), 91-97. (A. C. Cohen) 51 #4519 62F10
(with Fukutomi, Kazuo) On the sign changes in the centroid method. *TRU Math.* 12 (1976), 61-71. (Jacques Dauxois) 54 #14244 62H25
Tunaley, J. K. E. Asymptotic solutions of the continuous-time random walk model of diffusion. *J. Statist. Phys.* 11 (1974), 397-408. (George Weiss) 51 #2029 60K35
Tuncer, Talât Sur la représentation conforme du cercle sur un domaine semi-circulaire simplement connexe. (Turkish summary) *İstanbul Univ. Fen Fak. Mecm. Ser. A* 35 (1970), 123-137 (1972). (D. Gaier) 48 #6381 30A28
Tuncer, Yalcin See Proceedings: Applied Statistics Seminars, 58 #4197
Tunda, A. A. A certain method of solving linear differential equations of order $n < +\infty$. (Russian) *Differentsial'nye Uravnenija* 8 (1972), 1598-1608, 1715. (Š. Schwabik) 47 #535 34A35 (34A30)
Tung, C. (with Chen, T. C.; Eswaran, Kapali P.; Lum, V. Y.) Simplified odd-even sort using multiple shift-register loops. *Internat. J. Comput. Inform. Sci.* 7 (1978), no. 3, 295-314. (Itsuo Takanami) 58 #19325 68A10 (68A50)
Tung, Chia Chi On the equidistribution theory of holomorphic maps. *Several complex variables* (Proc. Sympos. Pure Math., Vol. XXX, Part 2, Williams Coll., Williamstown, Mass., 1975), pp. 265-269. *Amer. Math. Soc., Providence, R.I.*, 1977. (Hirotaka Fujimoto) 56 #8920 32H25
On the rationality of divisors and meromorphic functions. *Trans. Amer. Math. Soc.* 239 (1978), 399-406. (M. Hervé) 57 #3460 32L05
Tung, Chin Chu Some properties of the classical integrals of the general problem of three bodies. *Sci. Sinica* 17 (1974), no. 3, 306-330. (Julian I. Palmore) 56 #16687 58F05
Tung, S. H. On lower and upper bounds of the difference between the arithmetic and the geometric mean. *Math. Comp.* 29 (1975), 834-836. (D. C. Benson) 52 #14203 26A87
Tung, Sui Yin (with Berger, Toby) Encoding of correlated analog sources. *Proceedings of the IEEE-USSR Joint Workshop on Information Theory* (Moscow, 1975), pp. 7-10. *Inst. Electr. Electron. Engrs., New York*, 1976. (A. D. Wyner) 58 #15690 94A15
Tung, Wu Ki (with Carlitz, R.) Construction of a quark spin operator. *Phys. Rev. D* (3) 13 (1976), no. 12, 3446-3459. (K. Kumar) 56 #14298 81.47
Tungatarov, A. A class of irregular generalized Cauchy-Riemann systems. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1977, no. 5, 56-61, 93.

- (Z. Rubinstein) **58** #11447 30A92
- Tuniev, A. D.** (with Ermol'ev, Ju. M.) Direct methods of solution of certain problems of stochastic programming. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 4, 100-102. (Authors' summary) **45** #8266 90C15
- A certain approach to the solution of stochastic programming problems. (Russian) *Theory of optimal solutions (Proc. Sem., Kiev, 1968)*, No. 3 (Russian), pp. 42-49. *Akad. Nauk Ukrain. SSR, Kiev, 1969*. (C. Berghaller) **46** #4939 90C15
- See also **Selected translations in mathematical statistics and probability**, **48** #1276
- Tunik, A. A.** (with Red'kin, V. B.) An investigation of the stability of multidimensional control systems of a spectrum of random vibrations. (Russian) *Cybernetics and computer technology*, No. 5: *Complex control systems (Russian)*, pp. 64-78. *Naukova Dumka, Kiev, 1970*. (Authors' summary) **45** #4880 93E15
- (with Gal', M. M.) Analysis of random processes in continuous extremal proportional type systems. (Russian) *Cybernetics and computer technology* No. 8: *Complex control systems (Russian)*, pp. 48-58. "Naukova Dumka", Kiev, 1971. **46** #3191 94A05
- (with Lyčak, M. M.) Frequency conditions for stochastic stability of control systems. *Automatika* **1971**, no. 2, 10-20 (Ukrainian); translated as *Soviet Automat. Control* **4** (1971), no. 2, 7-16. (Authors' summary) **47** #1527 93E15
- (with Lyčak, M. M.) Frequency conditions for stochastic stability of nonlinear sampled-data control systems. *Automatika* **1971**, no. 4, 81-84 (Ukrainian); translated as *Soviet Automat. Control* **4** (1971), no. 4, 70-75 (1972). (Authors' summary) **56** #11418 93E15
- (with Lyčak, M. M.) Investigation of the stochastic stability of control systems by frequency methods. (Russian) *Cybernetics and computer technology*, No. 15: *Complex control systems (Russian)*, pp. 52-58, 150. "Naukova Dumka", Kiev, 1972. (V. N. Igolkin) **48** #5708 93E15
- (with Dutčak, B. Ī.; Lyčak, M. M.) An equivalent of Popov's frequency criterion for stochastic nonlinear continuous systems. *Automatika* **1972**, no. 1, 21-30 (Ukrainian); translated as *Soviet Automat. Control* **5** (1972), no. 1, 17-25. (R. S. Bucy) **50** #12409 93E15
- (with Lyčak, M. M.) An analogue of the Jury-Lee test for stochastic discrete systems. (Russian) *Cybernetics and computer technology*, No. 20: *Discrete control systems (Russian)*, pp. 80-86, 127. "Naukova Dumka", Kiev, 1973. (Ivar Petersen) **48** #5709 93E15
- (with Matvienko, N. K.; Movsesjan, V. M.) Application of the fast Fourier transform algorithm in problems of multidimensional object identification used in vibration tests. (Russian) *Discrete control systems (Russian)*, pp. 52-65. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev, 1973*. (See RŽMat **1974** #8 B910; MR **58** #4530) 68A10
- (with Lyčak, M. M.) Analysis of stochastic stability of impulse control systems in a frequency range. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1973**, no. 1, 172-179 (Russian); translated as *Engrg. Cybernetics* **11** (1973), no. 1, 145-152. (A. Ja. Dorogovcev) **53** #7583 93E15
- See also **Cybernetics and computer technology**, **47** #8140; **Cybernetics and computer technology**, **48** #1736; **Cybernetics and computer technology**, **48** #1737; **Cybernetics and computer technology**, **50** #12334 and **Cybernetics and computer technology**, **50** #12335
- Tunjak, V. N.** A theory of gravitation with variable gravitational constant in an affinely connected space with Riemannian metric and torsion. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1973**, no. 2, 84-87, 137. (V. G. Pisarenko) **49** #2025 83.53
- A tetrad theory of gravitation in a space with absolute parallelism. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1973**, no. 5, 98-104, 139. (R. I. Pimenov) **49** #8591 83.53
- Axially symmetric static electrovacuum solutions in an affinely connected space with a Riemannian metric and with torsion. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1974**, no. 5, 97-101, 143. (R. I. Pimenov) **50** #15852 83.53
- The variational principle for an ideal fluid in a space with torsion. (Russian) *Dokl. Akad. Nauk BSSR* **19** (1975), no. 7, 599-601, 666. (L. G. Chambers) **53** #7347 83.49 (76.49)
- On the definition of the Lagrangian of a tetradic gravitational field. (Russian) *Izv. Vysš. Učebn. Zaved. Fiz.* **1975**, no. 1, 91-97. (Not reviewed) 83.53
- On the determination of the spin moment in the tetrad theory of gravitation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 5, 68-71. (Author's summary) **57** #2450 83.53
- The de Sitter cosmological model in the tetrad theory of gravitation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1976**, no. 6, 118-120. (Editors) **56** #2179 83.53
- A homogeneous isotropic cosmological model of a space-time with torsion in the Einstein-Cartan theory of gravitation. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 3, 24-28. (Z. Janković) **56** #17685 83.53
- Quadratic Lagrangians in a space with torsion. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 12, 7-10. (Kishore Marathe) **58** #9084 83.53
- The Cosserat continuum in a space with torsion. (Russian) *Izv. Vysš. Učebn. Zaved. Fizika* **1977**, no. 12, 11-13. (Kishore Marathe) **58** #9085 83.53
- Tunnell, Jerrold B.** On the local Langlands conjecture for $GL(2)$. *Invent. Math.* **46** (1978), no. 2, 179-200. (K. Shiratani) **57** #16262 12B25 (10D15, 22E50)
- Tunncliffe, W. R.** A note on rank and covering dimension. *J. London Math. Soc.* (2) **4** (1971/72), 560-562. (K. Sieklucki) **45** #5978 54F45
- A criterion for the existence of an extension of a function on a partially ordered set. *J. London Math. Soc.* (2) **8** (1974), 352-354. (K. P. Bogart) **51** #5428 06A10
- The completion of a partially ordered set with respect to a polarization. *Proc. London Math. Soc.* (3) **28** (1974), 13-27. (R. A. Melter) **48** #10914 06A10
- Tuohimaa, H.** A star and a dust shell. *Lett. Nuovo Cimento* (2) **20** (1977), no. 10, 361-363. **56** #14534 85.53
- Tuomela, Raimo** (with Hintikka, Jaakko) Toward a general theory of auxiliary concepts and definability in first-order theories. *Proceedings of the First Scandinavian Logic Symposium (Åbo, 1968)*, pp. 19-60. *Filosofiska Studier*, No. 8, *Filosof. Föreningen och Filosof. Inst., Uppsala Univ., Uppsala, 1970*. (From the introduction) **58** #16098 02A05
- Deductive explanation of scientific laws. *Proceedings of the First Symposium Exact Philosophy (McGill Univ., Montreal, Que., 1971)*. *J. Philos. Logic* **1** (1972), 3-4, 369-392. (Mario Bunge) **55** #2481a (E 55 #2481b) 02A05
- ★Theoretical concepts. *Library of Exact Philosophy*, No. 10. *Springer-Verlag, York-Vienna, 1973*. xiv + 254 pp. (Evandro Agazzi) **55** #5383 02A05 (02G10)
- Empiricist vs. realist semantics and model theory. *Synthese* **26** (1973/74), 407-417. (N. C. A. da Costa) **55** #12454 02A05
- Causality, ontology, and subsumptive explanation. *Formal methods in the methodology of empirical sciences (Proc. Conf., Warsaw, 1974)*, pp. 268-286. *Synthese Library*, 103. *Reidel, Dordrecht, 1976*. (Editors) **58** #27277 02A05
- Charles G. Morgan on deductive explanation: a rejoinder to "Tuomela on deductive explanation" (J. Philos. Logic **5** (1976), no. 4, 511-525). *J. Philos. Logic* **5** (1976), 527-543. (Mario Bunge) **55** #2481c 02A05
- See also **Dispositions**, **55** #12459
- Tuominen, P.** Notes on 1-recurrent Markov chains. *Z. Wahrscheinlichkeitstheorie Verw. Gebiete* **36** (1976), no. 2, 111-118. (R. L. Tweedie) **54** #6282 60J05
- Tuong Ton That** On holomorphic representations of symplectic groups. *Bull. Amer. Math. Soc.* **81** (1975), no. 6, 1069-1072. (A. J. Coleman) **53** #5810 22E45
- Lie group representations and harmonic polynomials of a matrix variable. *Trans. Amer. Math. Soc.* **216** (1976), 1-46. (Mitsuo Sugiura) **53** #3210 22E45
- Sur la décomposition des produits tensoriels des représentations irréductibles de $GL(k, C)$. *J. Math. Pures Appl.* (9) **56** (1977), no. 3, 251-261. (Mitsuo Sugiura) **58** #1031 22E45
- Symplectic Stiefel harmonics and holomorphic representations of symplectic groups. *Trans. Amer. Math. Soc.* **232** (1977), 265-277. (Kenneth I. Gross) **57** #16477 22E45
- Tupčienko, A. V.** Optimization of the control of stochastic flows. (Russian) *Mathematical methods for the study and optimization of systems (Proc. Sem. Theory of Optimal Decisions, Kiev, 1970)* (Russian), pp. 50-63. *Akad. Nauk Ukrain. SSR Inst. Kibernet., Kiev, 1971*. (I. M. Stojanov) **52** #5170 93E25
- Optimal control of a Poisson process. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 6, 84-89. (K. Wickwire) **48** #3584 93E20
- A certain problem of conditional optimization of the control of a stochastic system. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 3, 78-83. (V. N. Igolkin) **52** #2698 93E20
- (with Loginov, A. N.) An optimal procedure for the restoration of "aging" equipment. (Russian) *Točn. i Nadežn. Kibernet. Sistem* No. 1 (1973), 116-121. (Authors' summary) **50** #4084 93E20
- Tupčiev, V. A.** The asymptotic behavior of the solution of the Cauchy problem for the equation $\epsilon^2 u_{xx} = u_x + \varphi(u)_x$ that degenerates for $\epsilon=0$ into the problem of the decay of an arbitrary lacuna for the case of a rarefaction wave. (Russian) *Ž. Vyčisl. Mat. i Fiz.* **12** (1972), 770-775. (O. Vejvoda) **46** #5811 35B25
- The method of introducing a viscosity in the study of a problem of decay discontinuity. (Russian) *Dokl. Akad. Nauk SSSR* **211** (1973), 55-58. (E. Zeidler) **48** #9138 35Q99
- The uniqueness of the continuous solution of the problem of the decay of an arbitrary discontinuity for a gradient system. (Russian) *Mat. Zametki* **13** (1973), 251-258. (A. D. Solomon) **52** #3701 35A05
- (with Kuznecov, N. N.) A certain generalization of a theorem of Glimm. (Russian) *Dokl. Akad. Nauk SSSR* **221** (1975), no. 2, 287-290. (N. D. Kazarinoff) **52** #6151 35L45
- Tupholme, G. E.** An acoustic pulse generated by a deformable cylinder. *Utilitas Mathematica* (1977), 75-93. (F. Ursell) **58** #3945 76.35 (76.33)
- (with Guidera, J. T.; Lardner, R. W.) The indentation of a half-space of hexagonal elastic material by a circular punch of arbitrary end-profile. *J. Engrg. Math.* **12** (1978), no. 1, 77-82. (M. Sokółowski) **57** #8324 73.45
- Tupicyn, A. I.** (with Bolyčevcev, A. D.; Bystrickaja, L. B.) Analytic representation of quadratic integral estimates with time weighting. *Avtomat. i Telemekh.* **1975**, no. 171-173 (Russian. English summary); translated as *Automat. Remote Control* **36** (1976), no. 6, part 2, 1034-1037. (Mark A. Aizerman) **52** #10140 93C15
- Tupicina, V. M.** The arithmetic of peak functions. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 15 (1972), 142-152. (M. Loève) **46** #8279 60E05
- Tupitsyn, A. I.** See **Tupicyn, A. I.**
- Tupitsyn, Victor G.** The problem of the bichromatics of graphs using the language of Markov's trigonometric problem of moments. *J. Combinatorial Theory Ser. A* **24** (1978), no. 1, 113-117. (Ruth Bari) **57** #9589 05C15
- Tupizin, I. I.** (with Abarenkov, I. V.) The crystal potential and summation of divergent series. (Russian summary) *Phys. Status Solidi (B)* **82** (1977), no. 1, 99-105. (Authors' summary) **56** #10648 82.40
- Upper, B. O. J.** (with Phillips, G. W.) Kilmister's alternative field equations in general relativity: static spherically symmetric solutions. *J. Phys. A* **3** (1970), 149-165. (C. Kilmister) **48** #7885 83.35
- (with Phillips, G. W.) Generalized field equations in general relativity. *J. Phys. (1971)*, 597-610. (M. Sachs) **48** #13176 83.53
- (with O'Hanlon, J.) Vacuum-field solutions in the Brans-Dicke theory. (Italian. Russian summaries) *Nuovo Cimento B* (11) **7** (1972), no. 2, 305-312. (Authors' summary) **52** #7457 83.53
- Ennuple vectors in conformally flat spaces. *Tensor (N.S.)* **23** (1972), 51-56. (Sengupta) **48** #7902 83.53
- On the equivalence of two early unified field theories. *Tensor (N.S.)* **23** (1972), 169-173. (A. H. Taub) **47** #2971 83.53
- A divergence-free antisymmetric tensor. *Canad. Math. Bull.* **16** (1973), 111-113. (W. Kilmister) **48** #7903 83.53
- Tetrad field equations and a generalized Friedmann equation. *Astrophys. and Space Sci.* **28** (1974), 225-231. (Author's summary) **57** #11598 83.35
- Common solutions of the Einstein and Brans-Dicke theories. *Internat. J. Theoretical Phys.* **11** (1974), 353-356. (Author's summary) **54** #9556 83.35
- (with Tariq, Nessim) The uniqueness of the Bertotti-Robinson electromagnetic universe. *J. Mathematical Phys.* **15** (1974), 2232-2235. (M. Sachs) **50** #9286 83.35
- The tests of general relativity and scalar fields. (Italian and Russian summaries) *Nuovo Cimento B* (11) **19** (1974), 135-148. (Author's summary) **49** #6878 83.53

- (with Tariq, Nessim) On a coupling theorem in Einstein-Maxwell theory. *Tensor* (N.S.) **28** (1974), 83-90. (N. D. Sengupta) **50** #12133 83.53
- Geodesic correspondence in the Brans-Dicke theory. *Canad. Math. Bull.* **18** (1975), no. 1, 151-153. (J. Charles-Renaudie) **52** #7458 83.53
- (with Tariq, Nessim) A class of algebraically general solutions of the Einstein-Maxwell equations for non-null electromagnetic fields. *General Relativity and Gravitation* **6** (1975), no. 4, 345-360. (George Debnay) **53** #15283 83.53
- (with McLenaghan, Raymond G.; Tariq, Nessim) Conformally flat solutions of the Einstein-Maxwell equations for null electromagnetic fields. *J. Mathematical Phys.* **16** (1975), 829-831. (D. K. Sen) **51** #12275 83.53
- A class of algebraically general solutions of the Einstein-Maxwell equations for non-null electromagnetic fields. II. *General Relativity and Gravitation* **7** (1976), no. 6, 479-486. (George Debnay) **57** #8859 83.35
- (with Tariq, Nessim) Einstein-Maxwell metrics admitting a dual interpretation. *J. Mathematical Phys.* **17** (1976), no. 3, 292-296. (Elisa Udeschini Brinis) **52** #16525 83.53
- Conductivity in type VI₀ cosmologies with electromagnetic field. *Astrophys. J.* **216** (1977), no. 1, part 1, 192-193. (P. C. Vaidya) **57** #15188 83.35
- (with Tariq, Nessim) Curvature collineations in Einstein-Maxwell space-times and in Einstein spaces. *Tensor* (N.S.) **31** (1977), no. 1, 42-48. (J. D. Zund) **57** #2448 83.53
- ppo, Paolo (with Biasini, Luciano) Un algoritmo per la scelta dell'origine e della scala nelle routines di tracciamento di grafici. (English summary) *Ann. Univ. Ferrara Sez. VII* (N.S.) **22** (1976), 165-170 (1977). (M. Št. Totez) **56** #7274 65S05
- uyen-Tu-Qua See Nguyen-Tu-Qua
- ur, L. P. A certain approach to the problem of inventory control. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 6, 142-143. (E. V. Bulinskaja) **48** #5622 90B05
- See also Methods of operations research and of reliability theory in systems analysis, **57** #18751
- urav, K. The simultaneous existence of singular points of the equation $dx/dt = X^2(x) + X^n(x)$. (Russian) *Proceedings of the Sixth Scientific Conference of the Professional and Teaching Staff of the Faculty of Mathematics and Physics of the Samarkand State Pedagogical Institute (Samarkand, 1972)*, (Russian), pp. 83-87. *Samarkand. Gos. Univ., Samarkand*, 1972. (M. Bertolino) **54** #3082 34C05
- The simultaneous existence of singular points of a first order differential equation. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1972**, no. 9, 8-9. (K. R. Schneider) **47** #7124 34C05
- See also Questions on differential equations, number theory, algebra and geometry, **52** #7763
- urav, V. G. The Alexander polynomial of a three-dimensional manifold. (Russian) *Mat. Sb. (N.S.)* **97(139)** (1975), no. 3(7), 341-359, 463. (A. Černavskii) **52** #4306 57C10
- Reidemeister torsion and the Alexander polynomial. (Russian) *Mat. Sb. (N.S.)* **18(66)** (1976), no. 2, 252-270. (Allen E. Hatcher) **55** #6438 57C10
- The Milnor invariants and Massey products. (Russian. English summary) *Studies in topology, II. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **66** (1976), 189-203, 209-210. (Csaba Hatvany) **56** #9538 57C45 (55G30)
- Reidemeister torsion and group invariants of three-dimensional manifolds. (Russian. English summary) *Studies in topology, II. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **66** (1976), 204-206, 210. (Allen E. Hatcher) **55** #13433 57C10
- urakainen, Paavo On m -adic stochastic languages. *Information and Control* **17** (1970), 410-415. (A. Salomaa) **45** #1708 68A30 (94A35)
- On the minimization of linear space automata. *Ann. Acad. Sci. Fenn. Ser. A I No. 506* (1972), 15 pp. (C. F. Kelemen) **54** #2368 94A30
- On multistochastic automata. *Information and Control* **23** (1973), 183-203. (H. D. Block) **48** #10734 94A35
- Word-functions of stochastic and pseudo stochastic automata. *Ann. Acad. Sci. Fenn. Ser. A I Math.* **1** (1975), no. 1, 27-37. (A. Paz) **53** #7659 94A35 (68A30)
- Some remarks on multistochastic automata. *Information and Control* **27** (1975), 75-86. (K. S. Fu) **50** #15464 68A30 (94A35)
- On homomorphic images of rational stochastic languages. *Information and Control* **30** (1976), no. 1, 96-105. (A. Salomaa) **54** #9898 94A35
- On characterization of recursively enumerable languages in terms of linear languages and VW-grammars. *Nederl. Akad. Wetensch. Proc. Ser. A* **81** = *Indag. Math.* **40** (1978), no. 1, 145-153. (S. A. Greibach) **57** #11200 68A30
- urakulov, A. The equation $\delta U = AU$ with a discontinuous coefficient on closed Riemann surfaces. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1976**, no. 6, 25-28. (N. K. Karapet'janc) **56** #994 45E99
- Generalized constants for a Carleman system with singular coefficients. (Russian) *Taškent. Gos. Univ. Naučn. Trudy Vyp. 490 Voprosy Matematiki* (1976), 205-209, 271-272. (Author's summary) **57** #12865 30A88
- urakulov, K. (with Kramarovskii, B. I.) A necessary optimality condition for a controlled process with a complex functional. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1968**, no. 12, 5-7. (M. M. Konstantinov) **53** #11454 49B10
- (with Akilov, U. A.) A certain optimal problem for systems with constraints that contain the control parameters. (Russian) *Voprosy Kibernet. Vyčisl. Mat. No. 23* (1968), 74-79. (J. Jarník) **48** #4875 49B10
- (with Kramarovskii, B. I.) Variational problems with complex functionals of the second kind. (Russian. Uzbek summary) *Dokl. Akad. Nauk UzSSR* **1970**, no. 7, 9-11. (L. Mikołajczyk) **51** #11238 49B15
- urán, György See Birkhoff, Garrett, **50** #12573
- urán, Pál On some connections between combinatorics and group theory. *Combinatorial theory and its applications, III (Proc. Colloq., Balatonfüred, 1969)*, pp. 1055-1082. North-Holland, Amsterdam, 1970. (P. Erdős) **46** #5234 10A45
- A general inequality of potential theory. *Proceedings of the NRL Conference on Classical Function Theory (Math. Res. Center, Naval Res. Lab., Washington, D.C., 1970)*, pp. 137-141. *Math. Res. Center, Naval Res. Lab., Washington, D.C.*, 1970. (A. Meir) **50** #4982 31A15 (30A30)
- (with Erdős, Paul) On some problems of a statistical group theory. VI. *J. Indian Math. Soc.* **34** (1970), no. 3-4, 175-192 (1971). (Author's review (Zbl **235** #10008)) **58** #21974 10H25
- Remark on the packing constants of the unit sphere. (Hungarian. English summary) *Mat. Lapok* **21** (1970), 39-44. (Author's summary) **46** #4371 52A45
- The work of Alfréd Rényi. I. Alfréd Rényi (20 March 1921-1 February 1970). (Hungarian) *Mat. Lapok* **21** (1970), 199-210 (1971). (Editors) **46** #6985a 01A70
- On the work of Alan Baker. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1*, pp. 3-5. Gauthier-Villars, Paris, 1971. (Editors) **54** #2394 01A70 (10-03)
- Diophantine approximation and analysis. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1*, pp. 519-528. Gauthier-Villars, Paris, 1971. (R. Tijdeman) **54** #10113 10-02
- On some recent results in the analytical theory of numbers. 1969 *Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969)*, pp. 359-374. Amer. Math. Soc., Providence, R.I., 1971. (K. Thanigasalam) **47** #4947 10H05 (10H10, 10H30)
- Commemoration on Stanisław Knapowski. *Colloq. Math.* **23** (1971), 310-318. (Editors) **46** #15b 01A70
- On some applications of graph-theory to analysis. *Constructive theory of functions (Proc. Internat. Conf., Varna, 1970) (Russian)*, pp. 351-358. Izdat. Bolgar. Akad. Nauk, Sofia, 1972. (G. O. H. Katona) **50** #16144 94A20
- On a trigonometric inequality. *Proceedings of the Conference on the Constructive Theory of Functions (Approximation Theory) (Budapest, 1969)*, pp. 503-512. Akadémiai Kiadó, Budapest, 1972. (S. Izumi) **53** #11290 42A04
- (with Knapowski, Stanisław) Further developments in the comparative prime number theory. VII. *Acta Arith.* **21** (1972), 193-201. (H. W. Brinkmann) **46** #1729 10H20
- (with Erdős, Paul; Meir, A.; Sós, Vera T.) On some applications of graph theory. III. *Canad. Math. Bull.* **15** (1972), 27-32. (G. O. H. Katona) **50** #4393 05C99 (06A20)
- (with Erdős, Paul; Meir, A.; Sós, Vera T.) On some applications of graph theory. I. *Discrete Math.* **2** (1972), no. 3, 207-228. (F. Harary) **46** #5053 (E **46** #7093) 94A20 (05C99)
- (with Erdős, Paul) On some problems of a statistical group theory. VII. Collection of articles dedicated to the memory of Alfréd Rényi, I. *Period. Math. Hungar.* **2** (1972), 149-163. (J. H. B. Kemperman) **56** #5470 10H25
- Exponential sums and the Riemann conjecture. *Analytic number theory (Proc. Sympos. Pure Math., Vol. XXIV, St. Louis Univ., St. Louis, Mo., 1972)*, pp. 305-314. Amer. Math. Soc., Providence, R.I., 1973. (R. Tijdeman) **49** #2591 10H05 (10G05)
- New results and applications of the theory of Diophantine approximations. *Diophantine approximation and its applications (Proc. Conf., Washington, D.C., 1972)*, pp. 309-326. Academic Press, New York, 1973. (R. Tijdeman (Zbl **264** #10027)) **57** #9658 10F99
- Über die Siegel-Nullstelle der Dirichletschen Funktionen. Collection of articles dedicated to Carl Ludwig Siegel on the occasion of his seventy-fifth birthday, II. *Acta Arith.* **24** (1973), 135-141. (K. Thanigasalam) **48** #6025 10H10
- (with Dancs, S.) Investigations in the powersum theory. II. *Acta Arith.* **25** (1973/74), 105-113. (A. L. Whiteman) **50** #4501 10F10
- (with Rahman, Qazi Ibadur) On a property of rational functions. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **16** (1973), 37-45 (1974). (Y. Komatu) **50** #10213 30A04
- (with Dancs, S.) Investigations in the powersum theory. I. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **16** (1973), 47-52 (1974). (A. L. Whiteman) **50** #4500 10F10
- (with Erdős, Paul; Meir, A.; Sós, Vera T.) Corrigendum: "On some applications of graph theory. I". *Discrete Math.* **4** (1973), 90. (Editors) **46** #7093 05C99
- On some phenomena and problems of the powersum-method. *Proceedings of the Symposium on Complex Analysis (Univ. Kent, Canterbury, 1973)*, pp. 129-131. London Math. Soc. Lecture Note Ser., No. 12, Cambridge Univ. Press, London, 1974. (Mark E. Sheingorn) **52** #14243 30A04 (10H05)
- On a property of partitions. Collection of articles dedicated to K. Mahler on the occasion of his seventieth birthday. *J. Number Theory* **6** (1974), 405-411. (George E. Andrews) **51** #399 10J20
- On some open problems of approximation theory. (Hungarian) *Mat. Lapok* **25** (1974), no. 1-2, 21-75 (1977). (J. Szabados) **56** #921 41-02
- On some phenomena in the theory of partitions. *Journées Arithmétiques de Bordeaux (Conf., Univ. Bordeaux, Bordeaux, 1974)*, pp. 311-319. *Astérisque*, Nos. 24-25, Soc. Math. France, Paris, 1975. (George E. Andrews) **51** #10265 10J20
- On orthogonal polynomials. (Russian summary) *Anal. Math.* **1** (1975), no. 4, 297-311. (T. S. Chihara) **53** #3587 42A52
- (with Dancs, S.) Investigations in the powersum theory. III. *Ann. Mat. Pura Appl.* (4) **103** (1975), 199-205. (A. L. Whiteman) **51** #12759 10J99
- Power sum method and the approximative solution of algebraic equations. Collection of articles dedicated to Derrick Henry Lehmer on the occasion of his seventieth birthday. *Math. Comp.* **29** (1975), 311-318. (A. S. Householder) **51** #4654 65H05
- (with Dancs, S.) Investigation in the power sum theory. IV. *Publ. Math. Debrecen* **22** (1975), no. 1-2, 123-131. (A. L. Whiteman) **51** #12760 10J99 (34A25)
- Combinatorics, partitions, group theory. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973), Tomo II*, pp. 181-200. *Atti dei Convegni Lincei*, No. 17, Accad. Naz. Lincei, Rome, 1976. (N. G. de Bruijn) **58** #21978 10H25 (05A15, 10J20)
- On the latent roots of λ matrices. *Computers and mathematics with applications*, pp. 307-313. Pergamon, Oxford, 1976. (L. W. Ehrlich) **56** #13579 65F30
- (with Knapowski, Stanisław) On the sign changes of $(\pi(x) - li x)$. I. *Topics in number theory (Proc. Colloq., Debrecen, 1974)*, pp. 153-169. *Colloq. Math. Soc. János Bolyai*, Vol. 13, North-Holland, Amsterdam, 1976. (S. Ikehara) **55** #12657a 10H15
- (with Knapowski, Stanisław) On the sign changes of $(\pi(x) - li x)$. II. *Monatsh.*

- Math.* **82** (1976), no. 2, 163-175. (S. Ikehara) **55** #12657b (E **55** #12657c) 10H15
(with Dancs, S.) Investigations in the powersum theory. V. *Publ. Math. Debrecen* **23** (1976), no. 3-4, 299-307. (A. L. Whiteman) **55** #283 10H15 (10J10)
(with Knapowski, Stanislaw) On prime numbers $\equiv 1$ resp. 3 mod 4. *Number theory and algebra*, pp. 157-165. Academic Press, New York, 1977. (Dieter Leitmann) **57** #5926 10H15 (10H10)
(with Szalay, Michael) On some problems of the statistical theory of partitions with application to characters of the symmetric group. I. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 3-4, 361-379. (W. Narkiewicz) **58** #21991a 10J20 (10H25, 10K20, 20B25)
(with Szalay, Michael) On some problems of the statistical theory of partitions with application to characters of the symmetric group. II. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 3-4, 381-392. (W. Narkiewicz) **58** #21991b 10J20 (10H25, 10K20, 20B25)
(with Rahman, Qazi Ibadur; Schmeisser, Gerhard) On a phenomenon concerning (0, 2)-interpolation. *Period. Math. Hungar.* **9** (1978), no. 1-2, 163-171. (Helmut Brass) **57** #13293 41A05
See also Fejér, Leopold. (See Zbl 208, 1); Proceedings: Washington State University Conference on Number Theory, 47 #4904; Selected papers: Rényi, Alfréd, **54** #9960; Selected papers: Rényi, Alfréd, **54** #9961; Selected papers: Rényi, Alfréd, **54** #9962; Topics in number theory, **55** #2718; Collection: Turán, Paul, **55** #12387; Pintz, János, **55** #12657c; Erdős, Paul, **56** #61; Bibliography: Turán, Pál, **56** #62; Bibliography: Turán, Pál, **56** #2768 (EA 57); Simonovits, Miklós, **56** #2870 and Obituary: Turán, Pál, **58** #27137
- Turašvili, T. V.** (with Gurevich, Yuri) A strengthening of a certain results of J. Surányi. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **70** (1973), 289-292. (Jerzy Kotas) **54** #10003 02G05 (02B10)
A reduction of the decidability problem of first order predicate logic to a class with asymmetric and irreflexive two-place predicates. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **75** (1974), 297-300. (Constantin Milić) **50** #6821 02G05 (02B10)
The decidability problem of first order predicate logic. (Russian) *Sakharth. SSR Mecn. Akad. Gamotol. Centr. Šrom.* **15** (1975), no. 1 Vyčisl. Mat. i Programirovanie, 146-157. (A. S. Kuzičev) **54** #2415 02B10 (02G05)
Undecidable minimal classes of the first level of predicate logic. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* **86** (1977), no. 3, 589-591. (Stephen L. Bloom) **56** #15361 02B10 (02G05)
- Turbabin, A. S.** (with Borisovič, Ju. G.) Bounded solutions of differential-difference equations. (Russian) *A collection of articles on function spaces and operator equations (Proc. Sem. Functional Anal., Math. Fac., Voronezh State Univ., Voronezh, 1970) (Russian)*, pp. 3-17. Voronež. Gos. Univ., Voronezh, 1970. (Z. Caljuk) **55** #13040 34K15
(with Kadet, V. A.) A study of the stability of a second order nonlinear differential equations. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak.* No. 10 (1973), 61-66. (See RZMat 1974 #6 B239) 34D99
An algorithm with memory for identifying the directions of descent in minimization problems. (Russian) *Voronež. Gos. Univ. Trudy Mat. Fak. Vyp. 16 Sb. Statei po Nelineinym Operator. Uravn. i Priložen.* (1975), 65-66. (K. Zimmermann) **57** #8016 65K05
Transformations of the linear programming problem that lower dimension. (Russian) *Voronež. Gos. Univ. Trudy Nauch.-Issled. Inst. Mat. VGU* No. 19 (1975), 152-156. (Not reviewed) 90C05
- Turbatu, Stelian** Das Störpotential für den dünnen Flügel kleiner Spannweite. *Bull. Math. Sci. Math. R. S. Roumanie (N. S.)* **18**(66) (1974), no. 3-4, 415-423 (1976). (From the author's introduction) **55** #7075 7631
Periodische und aperiodische instationäre schallnahe Strömungen. *Bull. Math. Sci. Math. R. S. Roumanie (N. S.)* **21**(69) (1977), no. 1-2, 173-213. (Not reviewed) 7635
- Turbé, Nicole** Justification de la méthode des échelles multiples pour un type d'équations intégral-différentielles. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **285** (1977), no. 6, A481-A483. (Author's summary) **56** #7428 7341
- Turbin, A. F.** Solution of certain perturbation problems in the case of matrices. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk. Ukrain. RSR Ser. A* **1972**, 539-541, 575. (S. Kurepa) **47** #5629 47A55 (15A09)
(with Koroljuk, V. S.; Penev, I. P.) The asymptotic behavior of the distribution of the absorption time of a Markov chain. (Russian. English summary insert) *Kibernetika (Kiev)* **1972**, no. 2, 20-22. (B. Kronfeld) **46** #4611 60J10
An application of the theory of perturbations of linear operators to the solution of certain problems that are connected with Markov chains and semi-Markov processes. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist.* No. 6 (1972), 118-128. (E. B. Dynkin) **47** #5960 60J10 (60K15)
(with Koroljuk, V. S.) A certain method of proving limit theorems for certain functionals of semi-Markov processes. (Russian) *Ukrain. Mat. Ž.* **24** (1972), 234-240. (E. M. Klimko) **46** #972 60K15
(with Koroljuk, V. S.; Penev, I. P.) Asymptotic expansion for the distribution of the absorption time of a Markov chain. (Russian. English summary insert) *Kibernetika (Kiev)* **1973**, no. 4, 133-135. (Ž. Šidák) **48** #7383 60J10
(with Poliščuk, L. I.) Asymptotic expansions for certain characteristics of semi-Markov processes. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist. Vyp. 8* (1973), 122-127, 178. (J. H. Kučkarov) **57** #17873 60K15
(with Koroljuk, V. S.; Brodi, S. M.) Semi-Markov processes and their application. (Russian) *Probability theory. Mathematical statistics. Theoretical cybernetics. Vol. 11 (Russian)*, 47-97, 131. (errata insert) *Vsesojuz. Inst. Nauch. i Tehn. Informacii, Moscow*, 1974. (Z. Khalil) **55** #6601 60K15 (60K25)
(with Poliščuk, L. I.) A certain case of the convergence of a semi-Markov process depending on a small parameter to a nonstationary Markov chain with continuous time. (Russian) *Theory of random processes. No. 2 (Russian)*, pp. 104-109, 140. *Izdat. "Naukova Dumka"*, Kiev, 1974. (D. Szász) **52** #4449 60K15 (60F05)
Formules for the computation of the semi-inverse and pseudo-inverse matrices. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* **14** (1974), 772-776, 815. (O. Pokorný) **50** #1484 65F20
(with Koroljuk, V. S.) The method of perturbation on the spectrum of linear operators in asymptotic problems of probability theory. *Limit theorems of probability theory (Colloq., Keszthely, 1974)*, pp. 167-182. *Colloq. Math. Soc. János Bolyai, Vol. North-Holland, Amsterdam*, 1975. (E. Arjas) **53** #6758 60J35 (60K15)
(with Koroljuk, V. S.) Perturbation of operators on the spectrum and asymptotic expansion of Markov chains. (Ukrainian. English and Russian summaries) *Dopovid Akad. Nauk Ukrain. RSR Ser. A* **1975**, no. 5, 402-405, 474. (Petr Mandl) **52** #9370 60J10
(with Mitropol'skii, Ju. O.; Skorohod, A. V.; Gusak, D. V.) Asymptotic method in probabilistic problems. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 4, 471-476, 573. (A. Darling) **52** #1901 60J30 (60K15)
(with Plotkin, Ja. D.) Inversion of normally solvable linear operators that are perturbed on the spectrum. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 4, 477-486, 573. (B. V. Loginov) **52** #1368 47A55
(with Koroljuk, V. S.) ★ Полумарковские процессы и их приложения. (Russian) [Semi-Markov processes and their applications] *Izdat. "Naukova Dumka"*, Kiev, 1974. 184 pp. (O. K. Zakusilo) **54** #8913 60K15 (60K25, 60K20)
(with Koroljuk, V. S.) Asymptotic enlarging of semi-Markov processes with arbitrary state space. *Proceedings of the Third Japan-USSR Symposium on Probability Theory (Tashkent, 1975)*, pp. 297-315. *Lecture Notes in Math.*, Vol. 550, Springer, Berlin, 1976. (R. L. Tweedie) **56** #16821 60K15
(with Koroljuk, V. S.) A method for inverting linear operators perturbed on the spectrum and some of its applications. (Russian) *Problems of the asymptotic theory of nonlinear oscillations (Russian)*, pp. 107-114, 277. *Naukova Dumka*, Kiev, 1977. (Authors' summary) **58** #30394 47A55
Generalization of K. Yosida's theorem on abstract potential in a Hilbert space. (Russian) *Ukrain. Mat. Ž.* **29** (1977), no. 5, 698-702, 711. (A. B. Buche) **57** #11970 47D05
- Turbovič, I. T.** See *Nonlinear and linear methods in pattern recognition*, **56** #4277
- Turcat, Claudine** (with Verdillon, André) Recursion and testing of combinational circuits. Special issue on fault-tolerant computing. *IEEE Trans. Computers* **C-25** (1976), no. 6, 652-654. (Chantal Robach) **54** #9884 94A20
- Turčenko, V. Ja.** (with Dombrovskii, G. A.) Some exact solutions of the equations of one-dimensional nonstationary motions of nonlinear elastic media. (Russian) *Prilozhen. Meh.* **12** (1976), no. 4, 98-105, 143. **56** #17328 7335
- Turchányi, Piroksa** A decomposition method for the solution of a transportation problem with piecewise linear convex cost functions. (Hungarian. English summary) *Alkalmaz. Mat. Lapok* **1** (1975), no. 1-2, 81-90. (Author's summary) **56** #2389 90C25
- Turček, Joseph E.** First order differential closures of certain partially ordered fields. *Trans. Amer. Math. Soc.* **195** (1974), 97-114. (K. Okugawa) **49** #4984 12H05 (02H15)
- Turchetti, G.** (with Graffi, Sandro; Grecchi, Vincenzo) Summation methods for the perturbation series of the generalized anharmonic oscillator. (Italian and Russian summaries) *Nuovo Cimento B* (11) **4** (1971), 313-340. (Authors' summary) **46** #21710 34D10
(with Bessis, Daniel) Renormalization of the σ -model with nucleons through Ward identities. *Cargèse lectures in physics*, Vol. 5, pp. 119-178. Gordon and Breach, New York, 1972. (Authors' summary) **56** #7613 8147
(with Bessis, Daniel; Wortman, W.) A field-theoretical approach to nucleon-nucleon dynamics. (Italian and Russian summaries) *Nuovo Cimento A* (11) (1974), 157-223. (Gheorghe Nenciu) **53** #12332 8147
(with Bove, Antonio; Fano, Guido; Teolis, A. G.) Functional integration, Padé approximants, and the Schrödinger equation. *J. Mathematical Phys.* **16** (1975), 268-273. (K. Kumar) **52** #7380 8147
(with Bove, Antonio; Fano, Guido; Teolis, A. G.) Functional-integration method for the Schrödinger equation. (Italian and Russian summaries) *Nuovo Cimento B* (11) **28** (1975), no. 2, 363-376. (Ian P. Grant) **52** #16415 8165
(with Fano, Guido) Harmonic approximation of the functional integral and the Schrödinger equation. *Phys. Lett. B* **58** (1975), no. 3, 341-344. (Authors' summary) **56** #10514 8134
Variational principles and matrix approximants in potential theory. *Lett. Nuovo Cimento* (2) **15** (1976), no. 5, 129-133. **56** #7646 8149
(with Ortolani, F.; Sagretti, C.) Variational bounds to the excited states from generalized Brillouin-Wigner equation. (Italian and Russian summaries) *Nuovo Cimento A* (11) **44** (1978), no. 2, 211-229. (H. S. P. Grässer) **58** #8947 8149
- Turčin, V. F.** A metaalgorithmic language. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 4, 45-54. (Author's summary) **45** #8487 68A30
(with Serdobol'skii, V. I.) The language REFAL and its use for transformation algebraic expressions. (Russian. English summary insert) *Kibernetika (Kiev)* **1969**, no. 3, 58-62. (Authors' summary) **46** #1148 68A30
On the computation of multidimensional integrals according to the Monte Carlo method. (Russian. English summary) *Teor. Verojatnost. i Primenen.* **16** (1971), 738-747. (V. Dupač) **45** #1346 65C05
Equivalent transformations of recursive functions that are described in the language REFAL. (Russian) *Theory of languages and methods of construction of programming systems (Proc. Sympos.) (Russian)*, pp. 31-42. *Inst. Kibernet. Akad. Nauk Ukrain. SSR, Kiev-Alushta*, 1972. (G. Wechsung) **50** #9045 68A10 (02F20)
(with Turovceva, L. S.) A method of statistical regularization with a posteriori estimation of the error in the original data. (Russian) *Dokl. Akad. Nauk SSSR* **240** (1973), 561-564. (P. Neumann) **48** #9942 62F15 (65R05)
- Turčin, V. M.** Matrix problems and the theory of genera. (Russian) *Mat. Issled.* **10** (1973), no. 3(37), 222-225, 246. (Ju. A. Drozd) **55** #10484 15A33 (16A18)
- Turčin, V. N.** The stability of second order systems of linear stochastic equations. (Russian. English summary) *Questions of statistics and control (Russian)*, pp. 188-195. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1974. (From the author's introduction) **58** #3040 60H10
The stability of systems of linear stochastic equations. (Russian. English summary) *Teor. Verojatnost. i Mat. Statist.* No. 12 (1975), 155-158, 175. (G. Niculescu) **52** #1560H10
Asymptotic behavior of a stochastic differential equation on a finite interval with

- singular endpoints. (Russian) *Differential equations and their applications* (Russian), pp. 135-140, 217. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1976. (Author's summary) **58** #31403 60H10
- Asymptotic behavior of solutions of stochastic differential equations on a finite interval with singular endpoints. (Russian) *Differential equations and their applications* (Russian), pp. 140-149, 217. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1976. (Author's summary) **58** #31404 60H10
- The asymptotic behavior of solutions of linear stochastic systems. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist.* No. 18 (1978), 161-170, 184. (Z. Schuss) **58** #18728 60H10
- See also **Differential equations and their applications**, **58** #26644
- urco, Bertrand** (with Lévy-Bruhl, Jacques) Relations binaires et radicaux. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 16, A1081-A1084. (Authors' summary) **55** #234 06A75 (16A21)
- urdiev, T.** (with Šarifova, T.) Linear functional-difference equations. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 1, 33-37, 104. (Karol Baron) **53** #3534 39A25
- (with Šarifova, T.) The oscillatory nature of the solutions of a second order linear difference equation with variable coefficients. (Russian) *Boundary value problems for differential equations and their applications* (Russian), pp. 135-140, 159. Fan, Uzbek. SSR, Tashkent, 1976. (Authors' summary) **58** #29522 39A10
- urda, Erwin** Some remarks on the stability of the non-linear functional equation of the first order. Collection of articles dedicated to Stanisław Gołąb on his 70th birthday, II. *Demonstratio Math.* **6** (1973), 883-891 (1974). (P. Javor) **50** #7873 39A15
- On a functional inequality with n -th iterate of the unknown function. *Zeszyty Nauk. Uniw. Jagiello. Prace Mat.* No. 16 (1974), 189-194. (P. Javor) **50** #13950 39A15
- Note on a functional inequality with the n -th iterate of the unknown function. *Zeszyty Nauk. Uniw. Jagiello. 475 Prace Mat. Zeszyt* **19** (1977), 219-221. (Karol Baron) **57** #10296 39A15
- urckii, A. H.** (with Kozlovskii, N. Ja.) Estimation of the remainder term of the interpolation quadrature formula with Čebyšev nodes of the first kind. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1972**, no. 2, 73-89. (J. Kofroň) **46** #4688 65D30
- (with Vlasov, N. N.) Certain best summator formulas. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* **1972**, no. 4, 125-130, 143-144. (G. Godini) **47** #684 41A10
- Estimation of the coefficients of quadrature formulas with equidistant nodes. (Russian) *Dokl. Akad. Nauk BSSR* **17** (1973), 101-104, 189. (B. Bojanov) **49** #956 41A55
- An estimate for approximation by Lagrange interpolation polynomials with Čebyšev nodes of the second kind for the function class $W_2^{(p)}$. (Russian) *Dokl. Akad. Nauk BSSR* **17** (1973), 297-300, 382. (M. Tomić) **49** #11102 41A10
- A certain extremal problem of interpolation theory. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* **1974**, no. 2, 9-14, 92. (Paul Nevai) **56** #6257 42A12
- ★ Теория интерполирования в задачах. Часть 2. (Russian) [Theory of interpolation in problem form. Part 2] With a foreword by F. D. Gahov. *Izdat. "Vyššaja Škola", Minsk*, 1977. 256 pp. (Paul Nevai) **57** #3690 41-01
- Some inequalities for algebraic polynomials. (Russian) *Izv. Vysš. Učebn. Zaved. Matematika* **1977**, no. 4 (179), 116-131. (B. Crstici) **58** #1851 41A10 (26A82)
- See also **Obituary: Tureckii, A. H.**, **51** #7794
- urckii, E. N.** See **Mathematics and the methodology of its teaching**, **58** #20941 and **Mathematics and the methodology of its teaching**, **58** #20942
- urck, Richard J.** (with Quiring, Donald) A stacking method in ergodic theory. *Indiana Univ. Math. J.* **25** (1976), no. 6, 493-498. (Nathaniel Friedman) **54** #2916 28A65
- Eigenvalues and stacking methods in ergodic theory. *Indiana Univ. Math. J.* **27** (1978), no. 1, 1-8. (Nathaniel Friedman) **58** #1095 28A65
- urrelli, Michael** Random environments and stochastic calculus. *Theoret. Population Biology* **12** (1977), no. 2, 140-178. (D. Ludwig) **57** #5195 92A15
- A reexamination of stability in randomly varying versus deterministic environments with comments on the stochastic theory of limiting similarity. *Theoret. Population Biology* **13** (1978), no. 2, 244-267. (From the summary) **58** #9425 92A15
- urret, Barry** Rotundity of Orlicz spaces. *Nederl. Akad. Wetensch. Proc. Ser. A* **79** = *Indag. Math.* **38** (1976), no. 5, 462-469. (D. O. Koehler) **55** #1058 46E30
- (with Uhl, J. J., Jr.) $L_p(\mu, X)$ ($1 < p < \infty$) has the Radon-Nikodým property if X does by martingales. *Proc. Amer. Math. Soc.* **61** (1976), no. 2, 347-350. (S. D. Chatterji) **54** #11052 46E40 (28A45)
- urgeon, Jean M.** (with Park, Ralph) Lines meeting four tangents of a curve of order three in 3-space. *J. Geometry* **6** (1975), no. 2, 143-153. (B. B. Phadke) **55** #1261 53C70
- (with Kotzig, Anton) On certain constructions for Latin squares with no Latin subspaces of order two. *Discrete Math.* **16** (1976), no. 3, 263-270. (Giuseppe Pellegrino) **55** #137 05B15
- (with Lane, Norman D.; Scherk, Peter) Quasigraphs. *Canad. J. Math.* **29** (1977), no. 1, 1-28. (L. M. Kelly) **56** #6583 53C75
- (with Kotzig, Anton) Regular perfect systems of difference sets. *Discrete Math.* **20** (1977/78), no. 3, 249-254. (W. H. Mills) **57** #2939 05B10 (10L05)
- urgi, Mary** A sheaf-theoretic interpretation of the Kuroš theorem. *Abelian group theory* (Proc. Second New Mexico State Univ. Conf., Las Cruces, N.M., 1976), pp. 173-196. *Lecture Notes in Math.*, Vol. 616, Springer, Berlin, 1977. (Jack Weinstein) **57** #308 13C10 (18H20)
- urgunov, N.** The branching of the solution of a certain nonlinear problem of shallow shells of revolution. (Russian. English summary) *Boundary value problems of mathematical physics* (Russian), pp. 275-284. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1971. (S. Drobot) **48** #10271 7335
- Nonlinear integro-differential equations of the longitudinal-transverse buckling of a rod. (Russian. English summary) *Nonlinear boundary value problems of mathematical physics* (Russian), pp. 241-254. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1973. (J. Mazumdar) **52** #2350 7345
- The possibility of improving the stability of nonlinearly elastic rods by means of high frequency compressive forces. (Russian) *Analytic methods for the study of the solutions of nonlinear differential equations* (Russian), pp. 171-177. *Izdanie Inst. Mat. Akad. Nauk Ukrain. SSR, Kiev*, 1975. (Author's introduction) **53** #15056 7335
- (with Mitropol'skii, Ju. O.; Berezov'skii, A. A.) Parametrically excited oscillations of rods under a nonlinear law of elasticity. (Russian) *Ukrain. Mat. Ž.* **27** (1975), no. 3, 395-400, 431. (N. Cristescu) **52** #12481 7335
- Turgybaev, A.** See **al-Fārabi, Abū Naṣr Muḥammad ibn Muḥammad ibn Tarkhān**, **56** #5132
- Turhan, D.** (with Mengi, Yalcin) The propagation of initially plane waves in nonhomogeneous viscoelastic media. *Internat. J. Solids and Structures* **13** (1977), no. 2, 79-92. (Peter J. Chen) **55** #4862 7335
- Turi, A.** (with Wirz, H. J.; De Schutter, F.) An implicit, compact, finite difference method to solve hyperbolic equations. *Math. Comput. Simulation* **19** (1977), no. 4, 241-261. (David Gottlieb) **57** #18127 65M05
- Turiet, Francisco Javier** Transport de champs de vecteurs et feuilletages. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aii, A1021-A1023. (I. Vaisman) **54** #13963 58A30
- Détermination de l'action locale d'un groupe moyennant les jets d'ordre fini. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), Aii, A1373-A1375. (Alexandre M. Rodrigues) **54** #11421 58H05 (57E99)
- Sous-algèbres de champs de vecteurs complets d'une distribution. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **281** (1975), no. 15, Aiii, A651-A653. (Author's summary) **58** #31156 58A30 (57D25)
- Distributions sur des variétés de dimension finie et intégrabilité. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **283** (1976), no. 6, Aiv, A351-A354. (Author's summary) **57** #7641 58A30
- Turin, George L.** An introduction to digital matched filters. *Proc. IEEE* **64** (1976), no. 7, 1092-1112. (Author's summary) **56** #15130 94A05
- See also **Key papers in the development of information theory**, **52** #5177
- Turin, V. Ja.** Investigation of the stability of discontinuous systems that are reducible in the critical case. (Russian) *Trudy Moskov. Elektrotehn. Inst. Sojuzi (MEIS) Vyp.* **2** (1968), 313-316. **56** #16078 34D20
- An estimate of the probability of exceeding the delay in a system with call-back. (Russian) *Problemy Peredači Informacii* **10** (1974), no. 3, 22-29. (Author's summary) **57** #9310 94A15
- See also **Symposium: Information Theory**, **50** #9416
- Turing, A. M.** ★ ¿Puede pensar una máquina? (Spanish) [Can a machine think?] Translation by Manuel Garrido and Amador Anton from the English original (Mind **59** (1950), 433-460). *Quadernos Teorema*, No. 1. *Departamento de Logica y Filosofia de la Ciencia, Universidad de Valencia, Valencia*, 1974. 64 pp. (Editors) **50** #3673 68A45
- Turini, Franco** (with Pacini, Giuliano; Montangero, Carlo) Graph representation and computation rules for typeless recursive languages. *Automata, languages and programming* (Second Colloq., Univ. Saarbrücken, Saarbrücken, 1974), pp. 157-169. *Lecture Notes in Comput. Sci.*, Vol. 14, Springer, Berlin, 1974. (Itsuo Takanami) **55** #1801 68A10
- (with Montangero, Carlo; Pacini, Giuliano; Simi, Maria) Information management in context trees. *Acta Inform.* **10** (1978), no. 1, 85-94. (K. H. V. Booth) **58** #14008 68A45 (68A50)
- Turinici, Mihai** A fixed point theorem on metric spaces. (Romanian summary) *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **20** (1974), 101-105. (S. P. Singh) **50** #1227 54H25
- Fixed points in complete metric spaces. *Proceedings of the Institute of Mathematics Iași* (1974), pp. 179-182. *Editura Acad. R. S. R., Bucharest*, 1976. (I. A. Rus) **56** #6636 54H25
- Fixed points of implicit contraction mappings. *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **22** (1976), no. 2, 177-180. (S. Swaminathan) **55** #9066 54H25
- Nonlinear contractions and applications to Volterra functional equations. *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **23** (1977), no. 1, 43-50. (B. G. Pachpatte) **57** #3771 45D05
- Coincidence points and applications to Volterra functional equations. *An. Ști. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **23** (1977), no. 1, 51-57. (B. G. Pachpatte) **57** #3772 45D05
- Projective metrics and nonlinear projective contractions. *An. Științ. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.)* **23** (1977), no. 2, 271-280. (M. M. Day) **58** #30543 47H10
- Volterra functional equations with transformed argument. *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* **22**(70) (1978), no. 1, 99-107. (B. G. Pachpatte) **58** #17713 45D05 (39A15)
- Turjányi, S.** Eine Bemerkung zum Hilbert-Kamke-Problem. *Publ. Math. Debrecen* **21** (1974), 89-93. (B. Garrison) **51** #8028 10B15 (10L10)
- On maximal asymptotic nonbases of zero density. *J. Number Theory* **9** (1977), no. 2, 271-275. (Melvyn B. Nathanson) **57** #12444 10L10
- Türk, P.** Optimierung von Versorgungsnetzen. Sonderheft dem 200. Geburtstag von C. F. Gauss gewidmet. *Wiss. Z. Techn. Hochsch. Ilmenau* **23** (1977), no. 4, 41-56. (J. Sedláček) **57** #11697 90B10 (05C30)
- Turkel, Eli** Symmetrization of the fluid dynamic matrices with applications. *Math. Comp.* **27** (1973), 729-736. (N. N. Janenko) **48** #7621 65M10
- Phase error and stability of second order methods for hyperbolic problems. I. *J. Computational Phys.* **15** (1974), 226-250. (Jacob Steinberg) **49** #8385 65M10
- (with Gottlieb, David) Phase error and stability of second order methods for hyperbolic problems. II. *J. Computational Phys.* **15** (1974), 251-265. (Jacob Steinberg) **49** #8386 65M10
- (with Abarbanel, Saul; Gottlieb, David) Difference schemes with fourth order accuracy for hyperbolic equations. *SIAM J. Appl. Math.* **29** (1975), no. 2, 329-351. (J. R. Cannon) **52** #9628 65M05
- (with Abarbanel, Saul; Gottlieb, David) Multidimensional difference schemes with fourth-order accuracy. *J. Computational Phys.* **21** (1976), no. 1, 85-113. (Authors' summary) **56** #17108 65M05 (65M15)
- (with Gottlieb, David) Dissipative two-four methods for time-dependent problems. *Math. Comp.* **30** (1976), no. 136, 703-723. (Philip Brenner) **56** #1732 65M05
- Symmetric hyperbolic difference schemes and matrix problems. *Linear Algebra and*

- Appl.* **16** (1977), no. 2, 109-129. (P. Keast) **57** #4530 65M10
Extrapolation methods for dynamic partial differential equations. *Numer. Math.* **29** (1977/78), no. 3, 269-285. (H.-O. Kreiss) **57** #14535 65P05
Composite methods for hyperbolic equations. *SIAM J. Numer. Anal.* **14** (1977), no. 4, 744-759. (H.-O. Kreiss) **56** #1735 65M99
(with Gottlieb, David) Boundary conditions for multistep finite-difference methods for time-dependent equations. *J. Computational Phys.* **26** (1978), no. 2, 181-196. (J. Mikliček) **57** #14498 65N15
(with Gottlieb, David) On acceleration of MacCormack's scheme. *J. Computational Phys.* **26** (1978), no. 2, 252-256. (J. Mikliček) **57** #14499 65N15
- Turkevič, Ė. I.** On the question of the constructive enumeration of systems of groups of ordered pairs. (Russian) *Kombinatornyi Anal. Vyp.* **4** (1976), 22-26. (T. C. Brown) **56** #8382 05A15
- Turko, L.** (with Lukierski, Jerzy) On the field-theoretic formulation of photon-hadron interaction. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astron. Phys.* **23** (1975), no. 5, 623-627. (S. Deser) **51** #14817 81.53
(with Harrison, Ralph E.) Interactions of particular Boolean queries and attributes in data bases. (French summary) *INFOR—Canad. J. Operational Res. and Information Processing* **12** (1974), 282-292. (K. H. V. Booth) **50** #1577 68A50
See also **Symposium: Theory of Scheduling and its Applications**, **48** #3481
- Turku, H.** (with Švedenko, S. V.) Interpolation in the class H^2 in the half-plane. (Russian) *Dokl. Akad. Nauk SSSR* **225** (1975), no. 4, 771-774. (V. Kabaïla) **53** #823 30A80
(with Švedenko, S. V.) Interpolation of l^p sequences by H^2 functions along a sequence of points in a half-plane. (Serbo-Croatian summary) *Glasnik Mat. Ser. III* **12**(32) (1977), no. 2, 271-282. (George L. Csordas) **57** #12858 30A76
- Turmagamбетова, K. V.** (with Abdrahmanov, M. A.) The solvability of a certain problem of joining together systems of equations of different types. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1976**, no. 5, 77-80, 90. (Authors' summary) **58** #22985 35C99 (35M05)
- Turmatov, T.** (with Volkovskii, L. I.) The construction of a certain quasiconformal mapping by the Geršgorin method. (Russian) *Taškent. Gos. Univ. Naučn. Trudy No.* **394** (1970), 27-29 (1971). (E. Zlotkiewicz) **45** #7048 30A60
Approximate conformal mapping of a simply connected domain with zero corners on to the unit disc. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) No.* **8** (1971), 34-36. (Not reviewed) **30A24**
A method for the approximate construction of a conformal mapping for multiply connected domains with smooth contours and with contours that contain corner points. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent) No.* **8** (1971), 37-45. (Not reviewed) **30A24**
A certain approximate construction for the conformal mapping of angular domains onto the disc. (Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1975**, no. 3, 44-47, 96. (R. Kühnau) **55** #5847 30A28
- Turmuhambetov, R. N.** Organization of multiplication in a module with respect to a one-sided ideal. (Russian) *Theoretical and applied problems in mathematics and mechanics (Russian)*, pp. 287-289, 317. *Nauka Kazah. SSR, Alma-Ata*, 1977. (Author's summary) **58** #32043 68A10
- Turnbull, Bruce W.** (with Bechhofer, Robert E.) Optimal allocation of observations when comparing several treatments with a control. III. Globally best one-sided intervals for unequal variances. *Statistical decision theory and related topics (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1970)*, pp. 41-78. *Academic Press, New York*, 1971. (Peter O. Anderson) **50** #3476 62K05
Chebyshev-like inequalities for dam models. *J. Appl. Probability* **9** (1972), 617-629. (K. Wickwire) **49** #8137 60K30
Inequalities for branching processes. *Ann. Probability* **1** (1973), 457-474. (W. D. Sudderth) **50** #5960 60J80
Inequalities for multitype branching processes. *Ann. Probability* **1** (1973), 475-479. (W. D. Sudderth) **50** #5961 60J80
Nonparametric estimation of a survivorship function with doubly censored data. *J. Amer. Statist. Assoc.* **69** (1974), 169-173. (Johannes S. Maritz) **52** #2017 62G05
Multiple decision rules for comparing several populations with a fixed known standard. *Comm. Statist.—Theory Methods A5* (1976), no. 13, 1225-1244. (S. Panchapakesan) **57** #1741 62F07 (62C99)
The empirical distribution function with arbitrarily grouped, censored and truncated data. *J. Roy. Statist. Soc. Ser. B* **38** (1976), no. 3, 290-295. (Author's summary) **58** #31567 62G05
(with Bechhofer, Robert E.; Santner, Thomas J.) Selecting the largest interaction in a two-factor experiment. *Statistical decision theory and related topics, II (Proc. Sympos., Purdue Univ., Lafayette, Ind., 1976)*, pp. 1-18. *Academic Press, New York*, 1977. (Joseph A. Yahav) **55** #9371 62F07 (62K15)
(with Kaspi, Haya; Smith, Richard L.) Adaptive sequential procedures for selecting the best of several normal populations. *J. Statist. Comput. and Simulation* **7** (1978), no. 2, 133-150. (Joseph A. Yahav) **58** #3239 62L10 (62F07)
- Turnbull, H. W.** See **Young, Alfred**, **55** #12438 and **Scott, J. F.**, **58** #15904
- Turner, A. J.** Mathematical instruments and the education of gentlemen. *Ann. of Sci.* **30** (1973), no. 1, 51-88. (Editors) **58** #26932 01A45
- Turner, D. W.** Random time intervals. Addendum to: "A note on the distribution of times reported by a low resolution interval timer" (Amer. Statist. **28** (1974), 56-57) by D. M. Hawkins. With a reply by Hawkins. *Amer. Statist.* **29** (1975), no. 4, 173-174. (Not reviewed) **62G05**
Random time intervals. Comment on: "A note on the distribution of times reported by a low resolution interval timer" (Amer. Statist. **28** (1974), 56-57) by D. M. Hawkins. *Amer. Statist.* **29** (1975), no. 4, 173-174. (Editors) **52** #9479 62G05
See also **Hawkins, Douglas M.**, **52** #9480
- Turner, David L.** (with Bowden, David C.) Simultaneous confidence bands for percentiles in the general linear model. *J. Amer. Statist. Assoc.* **72** (1977), no. 360, part 2, 886-889. (D. G. Kabe) **58** #13527 62J05 (62F25)
- Turner, Edward C.** Rotational symmetry: basic properties and application to knot manifolds. *Invent. Math.* **19** (1973), 219-234. (J. P. Levine) **51** #14104 57D50
Diffeomorphisms homotopic to the identity. *Trans. Amer. Math. Soc.* **186** (1974), 489-498. (R. C. Kirby) **49** #1532 57D50
A survey of diffeomorphism groups. *Algebraic and geometrical methods in topology (Conf. Topological Methods in Algebraic Topology, State Univ. New York, Binghamton, N. Y., 1973)*, pp. 200-218. *Lecture Notes in Math.*, Vol. 428, Springer, Berlin, 1974. (C. Craioveanu) **52** #4321 57E05
Some finite diffeomorphism groups. *Illinois J. Math.* **18** (1974), 286-289. (Edgar Brown, Jr.) **49** #3985 57D50
Nilpotent diffeomorphism groups. *Illinois J. Math.* **18** (1974), 585-588. (R. Kirby) **50** #11271 57D50 (57E05)
(with Goldstein, Richard Z.) Applications of intersection theory. *Proc. Amer. Math. Soc.* **54** (1976), 389-390. (E. Fadell) **53** #1576 55C20
(with Goldstein, Richard Z.) A formula for Stiefel-Whitney homology classes. *Proc. Amer. Math. Soc.* **58** (1976), 339-342. (T. Banchoff) **54** #3724 57D95 (57C20)
(with Goldstein, Richard Z.) Stiefel-Whitney homology classes of quasi-regular complexes. *Proc. Amer. Math. Soc.* **64** (1977), no. 1, 157-162. (Ronald Brown) **57** #7617 57D20 (57C05)
- Turner, G. L'E.** The London trade in scientific instrument-making in the 18th century. The origins, achievement and influence of the Royal Observatory, Greenwich: 1675-1975 (Proc. 4th Joint Sympos. Internat. Astronom. Union and Union Intern. Histoire et Philos. Sci., Greenwich, 1975). *Vistas Astronom.* **20** (1976), no. 1-2, 173-181. (Editors) **58** #15935 01A50
- Turner, J. R.** A convergence proof for constrained finite element solutions. *J. Inst. Math. Appl.* **22** (1978), no. 1, 121-127. (Author's summary) **58** #20431 90C20 (65N30)
- Turner, J. R. G.** See **Problems: Population genetics**, **56** #17911
- Turner, James E.** (with Grossman, Stanley I.) ★Mathematics for the biological sciences. *Macmillan Publishing Co., Inc., New York; Collier Macmillan Publishers, London*, 1976. xi + 512 pp. (Editors) **53** #7168 69.00
See also **Mathematical problems in biology**, **49** #10392 and **Adaptive economic models**, **55** #9888
- Turner, John C.** Calculation of roots of Lotka's equation. *Theoret. Population Biology* (1976), no. 2, 222-237. (K. Gopalsamy) **57** #11841 92A15
- Turner, John Wm.** Asymptotic behavior of nonlinear oscillations in a chemical system. *Trans. New York Acad. Sci.* (2) **36** (1974), no. 8, 800-806. (Leon Kotin) **54** #7948 34C05
Des solutions périodiques d'équations différentielles non linéaires. (English summary) *Acad. Roy. Belg. Bull. Cl. Sci.* (5) **61** (1975), no. 3, 293-298. (J. O. C. Eze) **53** #3433 34C25
(with Anderson, Robert L.) A type of Bäcklund-like invariance transformation for a class of second-order ordinary differential equations. *Lett. Math. Phys.* **1** (1975/76), no. 1, 37-42. (H. A. DeKleine) **53** #8534 34A25 (35A30)
- Turner, L. F.** An easily implementable sub-optimum source coding technique for large alphabets. *Applications and research in information systems and sciences (Proc. Fifth Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 1, pp. 137-141. *Hemisphere, Washington, D.C.*, 1977. (Author's summary) **58** #26549 94A15
- Turner, Leaf** (with Montgomery, David; Joyce, Glenn) Fokker-Planck equation for a plasma in a magnetic field. *Phys. Fluids* **17** (1974), 954-960. (W. H. Schoendorf) **49** #10307 82.45
- Turner, Malcolm E., Jr.** (with Pruitt, Kenneth M.) A common basis for survival, growth and autocatalysis. *Math. Biosci.* **39** (1978), no. 1-2, 113-123. (Howard B. Stauff) **58** #4459 92A15
- Turner, Michael R.** Certain congruence properties (modulo 100) of Fibonacci numbers. *Fibonacci Quart.* **12** (1974) 87-91. (O. H. Körner) **50** #9776 10A35
- Turner, Peter R.** Convolution in the duals of function spaces with operators. *J. London Math. Soc.* (2) **8** (1974), 587-592. (K. A. Ross) **50** #2906 46F10 (22A20)
Convolution of linear functionals of general spaces of functions. *Proc. London Math. Soc.* (3) **28** (1974), 483-499. (Colin C. Graham) **49** #11140 43A10
(with Huntley, E.) Variable metric methods in Hilbert space with applications to control problems. *J. Optimization Theory Appl.* **19** (1976), no. 3, 381-400. (D. Lawden) **54** #9084 65K05 (49D99)
(with Huntley, E.) Direct-prediction quasi-Newton methods in Hilbert space with applications to control problems. *J. Optimization Theory Appl.* **21** (1977), no. 2, 199-210. (Werner Krabs) **55** #6276 49D05
(with Huntley, E.) Direct prediction methods in Hilbert space with applications to control problems. *J. Optimization Theory Appl.* **22** (1977), no. 3, 399-415. (V. L. Bakula) **56** #17070 65K05
- Turner, R.** An infinite hierarchy of term languages—an approach to mathematical complexity. *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1973)*, pp. 593-608. *North-Holland, Amsterdam*, 1973. (Michael Anshel) **53** #9739 68A30
- Turner, R. E.** (with Snider, R. F.) Superoperator methods for calculating cross sections. Correlation functions and the Born approximation. (French summary) *Canad. J. Phys.* **54** (1976), no. 13, 1313-1327. (Jean-Paul Marchand) **53** #10016a 81.47
(with Snider, R. F.) Superoperator methods for calculating cross sections. II. Distorted wave Born approximation. (French summary) *Canad. J. Phys.* **54** (1976), no. 13, 1328-1342. (Jean-Paul Marchand) **53** #10016b 81.47
- Turner, R. Steven** The Ohm-Seebeck dispute, Hermann von Helmholtz, and the origins of physiological acoustics. *British J. Hist. Sci.* **10** (1977), no. 34, part 1, 1-24. (Editor) **58** #27053 01A55
- Turner, Raymond** An algebraic theory of formal languages. *Mathematical foundations of computer science 1975 (Fourth Sympos., Mariánské Lázně, 1975)*, pp. 426-431. *Lecture Notes in Comput. Sci.*, Vol. 32, Springer, Berlin, 1975. (E. Zelinka) **55** #13892 68A30
- Turner, Robert E. L.** Transversality in nonlinear eigenvalue problems. *Contributions to nonlinear functional analysis (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1971)*, pp. 37-68. *Academic Press, New York*, 1971. (Milan Kučer)

- 53** #6383 47H15 (58C25)
Nonlinear eigenvalue problems with applications to elliptic equations. *Arch. Rational Mech. Anal.* **42** (1971), 184-193. (D. Pascali) **49** #7863 47H15 (35J60)
On monotone operator functions and interpolation. *Math. Ann.* **199** (1972), 91-95. (M. Schreiber) **47** #9321 47A60
Superlinear Sturm-Liouville problems. *J. Differential Equations* **13** (1973), 157-171. (P. Waltman) **48** #8947 34B25
(with Barker, George Phillip) Some observations on the spectra of cone preserving maps. *Linear Algebra and Appl.* **6** (1973), 149-153. (Abraham Berman) **48** #3983 15A18
(with Schneider, Hans) Matrices Hermitian for an absolute norm. *Linear and Multilinear Algebra* **1** (1973), no. 1, 9-31. (F. F. Bonsall) **48** #320 15A60 (47A10)
Positive solutions of nonlinear eigenvalue problems. *Eigenvalues of non-linear problems* (Centro Internaz. Mat. Estivo (C.I.M.E.), III Ciclo, Varenna, 1974), pp. 211-239. *Edizioni Remonese, Rome*, 1974. (Norman Dancer) **57** #1553 58E05 (47H15, 35J60)
A priori bounds for positive solutions of nonlinear elliptic equations in two variables. *Duke Math. J.* **41** (1974), 759-774. (W. J. Sweeney) **51** #1113 35J65
(with Schneider, Hans) Diagonal norm Hermitian matrices. *Linear Algebra and Appl.* **8** (1974), 375-412. (F. F. Bonsall) **50** #365 15A60
Transversality and cone maps. *Arch. Rational Mech. Anal.* **58** (1975), 151-179. (B. Fisel) **52** #9026 47H15
(with Kuiper, Hendrik J.) Sturm-Liouville problems with prescribed nonlinearities. *Quart. J. Math. Oxford Ser. (2)* **26** (1975), no. 104, 491-505. (Jean Mawhin) **53** #5981 34B15
(with McLeod, J. B.) Bifurcation for non-differentiable operators with an application to elasticity. *Arch. Rational Mech. Anal.* **63** (1977/78), no. 1, 1-45. (Zbl 356 #47030) **57** #13611 47H99 (73.47)
(with Brézis, Haim) On a class of superlinear elliptic problems. *Comm. Partial Differential Equations* **2** (1977), no. 6, 601-614. (From the introduction) **58** #23044 35J65
- rner, Stuart** The zeta function of a class of rational varieties. *Bull. Amer. Math. Soc.* **80** (1974), 917-920. (P. Roquette) **52** #3169 14G10 (14D10, 12A80)
Zeta-functions of central simple algebras over global fields. *Ann. Acad. Brasil. Ci.* **48** (1976), no. 2, 171-186. (V. St. Udrescu (Zbl 364 #12014)) **58** #22023 12A80 (12A70)
On Hilbert class fields in characteristic $p > 0$ and their L -functions. *Proc. Amer. Math. Soc.* **64** (1977), no. 1, 39-42. (W.-D. Geyer) **55** #12695 12A65
- rner, T. Rolf** (with Lambert, Alan L.) The double commutant of invertibly weighted shifts. *Duke Math. J.* **39** (1972), 385-389. (P. Rosenthal) **46** #9781 47A65
Double commutants of algebraic operators. *Proc. Amer. Math. Soc.* **33** (1972), 415-419. (J. A. Erdos) **45** #952 (E 49 #7825) 47A65 (46L99)
Double commutants of isometries. *Tôhoku Math. J. (2)* **24** (1972), 547-549. (Eric Nordgren) **48** #922 47A65
Double commutants of weighted shifts. *Pacific J. Math.* **45** (1973), 379-386. (A. Lambert) **47** #7477 47A45
Erratum: "Double commutants of algebraic operators" (Proc. Amer. Math. Soc. **33** (1972), 415-419). *Proc. Amer. Math. Soc.* **45** (1974), 466. (Editors) **49** #7825 47A65 (46L99)
- rner, Wayne C.** (with Ghare, Prabhakar M.; Fourds, Leslie R.) Transportation routing problem—a survey. *AIIE Trans.* **6** (1974), 288-301. (Marcel Rădulescu) **53** #4903 90-02
(with Ghare, P. M.) Use of dynamic programming to accelerate convergence of directional optimization algorithms. *J. Optimization Theory Appl.* **16** (1975), 39-47. (S. F. McCormick) **51** #7287 65K05
- ridge, Darrell R.** Torsion theories and rings of quotients of Morita equivalent rings. *Pacific J. Math.* **37** (1971), 225-234. (J. S. Alin) **46** #9088 16A08
(with Cunningham, Robert S.; Rutter, Edgar A., Jr.) Rings of quotients of endomorphism rings of projective modules. *Pacific J. Math.* **41** (1972), 647-668. (T. S. Shores) **47** #6747 16A08
(with Miller, Robert W.) Co-Artinian rings and Morita duality. *Israel J. Math.* **15** (1973), 12-26. (P. Vámos) **51** #8166 16A46
(with Miller, Robert W.) Some examples from infinite matrix rings. *Proc. Amer. Math. Soc.* **38** (1973), 65-67. (E. H. Feller) **46** #9104 16A46
(with Miller, Robert W.) Factors of cofinitely generated injective modules. *Comm. Algebra* **4** (1976), no. 3, 233-243. (Edward T. Wong) **53** #10870 16A52
(with Hutchinson, John J.) Morita equivalent quotient rings. *Comm. Algebra* **4** (1976), no. 7, 669-675. (B. J. Muller) **53** #8112 16A08
- rijazov, U.** A boundary value problem with a parameter for systems of differential equations of neutral type. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 1, 36-41, 98. (L. J. Grimm) **58** #11785 34K10
- rovčová, Akkul'** ★Uryčlenie konvergence metódy Browna. (Slovak) [Acceleration of Brown's convergence method] VVC VŠE Research Publication No. 2/1971. *Výskum. Výpočt. Centrum Vys. Školy Ekonom. v Bratislave, Bratislava*, 1971. iii+48 pp. (P. Vondráček) **55** #12160 90D45 (90C05)
- rovce, František** Generalized saddle point and equilibrium problems. (Czech. English summary) *Ekonom.-Mat. Obzor* **7** (1971), 406-418. (M. Mañas) **45** #6459 90D10
(with Hamala, M.) An application of the Kuhn-Tucker conditions to the construction of mathematical programming and game theory problems with previously assigned solutions. (Slovak. Russian, English and German summaries) *Second National Conference on Mathematical Methods in Economics (Harmónia, 1972)* (Czech), pp. 41-68. *Ekonom.-Mat. Lab. Ekonom. Ústavu Českoslov. Akad. Věd, Prague*, 1973. (M. Mañas) **49** #12089 90C25
(with Chobot, Michal) A certain economic paradox in linear programming models. (Slovak. English summary) *Ekonom.-Mat. Obzor* **10** (1974), 374-386. (M. Mañas) **50** #15868 90A15 (90C50)
- rovsky, Stephen J.** The theory of production under conditions of stochastic input supply. *Bulletin. Econ.* **23** (1971), 51-65. (I. M. Stancu-Minasian) **49** #8605 90A15
(with Burmeister, Edwin) The specification of adaptive expectations in continuous time dynamic economic models. *Econometrica* **44** (1976), no. 5, 879-905. (Authors' summary) **57** #18765 90A15
- The distribution of welfare gains from price stabilization: the case of multiplicative disturbances. *Internat. Econom. Rev.* **17** (1976), no. 1, 133-148. (G. Tintner) **53** #10189 90A10
(with Burmeister, Edwin) Price expectations, disequilibrium adjustments, and macroeconomic price stability. *J. Econom. Theory* **17** (1978), no. 2, 287-311. (Larry Blume) **58** #15034 90A15
- Türpu, H.** Almost everywhere convergence of functional series. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised Vih.* **281** (1971), 140-151. (From the introduction) **58** #29549 40A99
The summability of function series almost everywhere. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* **305** (1972), 199-212. (F. Móricz) **51** #6208 40C05 (42A60)
The convergence of integrals almost everywhere. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised No.* **305** (1972), 213-221. (F. Móricz) **51** #6206 40A10
The values of the Lebesgue function for the almost everywhere convergence and summability of function series. (Russian) *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **16** (1973), 125-132 (1974). (F. Móricz) **50** #7942 42A60
(with Schipp, Ferenc) Über schwach multiplikative Systeme. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **17** (1974), 91-96 (1975). (D. J. Eustice) **52** #14832 42A60
The absolute P-summability almost everywhere of function series. (Russian) *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **17** (1974), 97-101 (1975). (S. Baron) **52** #8771 42A28
(with Löhms, K.; Saluäär, T.) The almost everywhere strong summability of function series. (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised No.* **342** (1974), 193-213. (F. Móricz) **51** #8730 42A60
(with Schipp, Ferenc) Almost everywhere convergence of function series with respect to product systems. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **342** (1974), 189-192. (F. Móricz) **51** #8729 42A60
The value of Lebesgue functions for the strong almost everywhere summability of function series. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No.* **355** (1975), 204-211. (F. Schipp) **52** #14818 42A28
The absolute almost everywhere Cesàro summability of function series. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **355** (1975), 212-221. (F. Schipp) **53** #1140 42A28
Maximal theorems for series in multiplicative systems of functions. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **431** (1977), 119-125. (F. Móricz) **57** #13360 42A52
The unconditional almost everywhere convergence of function series. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised Vih.* **431** (1977), 126-129. (M. S. Rangachari) **58** #17645 40D15
- Turo, J.** (with Kwapisz, Marian) On the existence and uniqueness of solutions of the Darboux problem for partial differential-functional equations in a Banach space. Collection of articles dedicated to the memory of Tadeusz Ważewski, II. *Ann. Polon. Math.* **29** (1974), 89-118. (J. E. Lagnese) **50** #5232 35R20
(with Kwapisz, Marian) On some integral-function equations with an unknown function of n variables. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **22** (1974), 1001-1009. (G. S. Ladde) **53** #8701 39A15 (47H15)
(with Kwapisz, Marian) On the existence and uniqueness of solutions of Darboux problem for partial differential-functional equations. *Colloq. Math.* **29** (1974), 279-302. (A. Pelczar) **51** #1172 35R10
(with Kwapisz, Marian) On the existence and convergence of successive approximations for some functional equations in a Banach space. *J. Differential Equations* **16** (1974), 298-318. (R. Kannan) **50** #10935 47H15 (39A15)
(with Kwapisz, Marian) Existence and uniqueness of solutions of non-linear functional equations of r th order. *Ann. Polon. Math.* **31** (1975), no. 2, 145-157. (M. Kuczma) **52** #8707 39A40
(with Kwapisz, Marian) Approximate iterations for a partial differential-functional equation of hyperbolic type in a Banach space. (Russian) *Differencial'nye Uravneniya* **11** (1975), no. 9, 1626-1640, 1716. (L. E. Bobisud) **52** #3764 35R10
(with Kwapisz, Marian) Some integral-functional equations. *Funkcial. Ekvac.* **18** (1975), no. 2, 107-162. (I. Fenyő) **53** #6377 47H15 (45J05, 39A40)
(with Kwapisz, Marian) Existence, uniqueness and successive approximations for a class of integral-functional equations. *Aequationes Math.* **14** (1976), no. 3, 303-323. (R. D. Driver) **55** #10890 39A15
(with Kwapisz, Marian) On some class of non-linear functional equations. *Ann. Polon. Math.* **34** (1977), no. 1, 85-95. (K. Lajkó) **55** #6049 39A40
- nadel-Turoński, Tadeusz** See **Nadel-Turoński, Tadeusz**
- Turovceva, L. S.** (with Turčin, V. F.) A method of statistical regularization with a posteriori estimation of the error in the original data. (Russian) *Dokl. Akad. Nauk SSSR* **212** (1973), 561-564. (P. Neumann) **48** #9942 62F15 (65R05)
- Turovec', S. P.** The approximation in the mean of continuous periodic functions by functions that satisfy a Lipschitz condition. (Russian) *Studies in Contemporary Problems of Summability and the Approximation of Functions and in their Applications, Part I* (Russian), pp. 104-110. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1967. (Editors) **55** #10922 41A30
A linear method for the approximation in the mean of differentiable functions. (Russian) *Studies in contemporary problems of summability and approximation of functions and their applications* (Russian), pp. 54-57, 156. *Dnepropetrovsk. Gos. Univ., Dnepropetrovsk*, 1976. (Author's summary) **58** #29757 42A08
- Turowicz, Andrzej** Recollections about Professor Steinhaus. (Polish) Papers presented at a Conference in Honor of Hugo Steinhaus (Wrocław, 1972). *Wiadom. Mat.* **(2)** **17**, 85-89 (1973). (Editors) **52** #13239 01A70
- Turpin, P. Y.** (with Cazes, P.) Régression sous contraintes application à l'estimation de la courbe granulométrique d'un aérosol. *Rev. Statist. Appl.* **19** (1971), no. 4, 23-44. (Authors' introduction) **52** #4532 62J05
- Turpin, Philippe** Généralisations d'un théorème de S. Mazur et W. Orlicz. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A457-A460. (G. Marinescu) **45** #4106 46A15

- Variantes de résultats de S. Mazur et W. Orlicz et convexités généralisées. *C. R. Acad. Sci. Paris Sér. A-B* **273** (1971), A506-A509. (G. Marinescu) **45** #4107 46A15
- Sur un problème de S. Simons concernant les bornés des espaces vectoriels topologiques. *Actes du Colloque d'Analyse Fonctionnelle (Univ. Bordeaux, Bordeaux, 1971)*, pp. 381-387. *Bull. Soc. Math. France Mém.*, No. 31-32, Soc. Math. France, Paris, 1972. (K. Sundaresan) **52** #14902 46A15
- Topologies vectorielles finales. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A647-A649. (H. Hogbe-Nlend) **46** #4146 46A15
- Mesures vectorielles pathologiques. *C. R. Acad. Sci. Paris Sér. A-B* **275** (1972), A981-A984. (H. Hogbe-Nlend) **47** #6989 28A45
- Espaces vectoriels topologiques non localement convexes, espaces d'Orlicz. *Séminaire Choquet, 11e-12e années (1971-1973), Initiation à l'analyse, Exp. No. 2, 12 pp. Secrétariat Mathématique, Paris, 1973.* (Zbl **328** #46024) **57** #17221 46A99 (46E30)
- Linear operators between Orlicz spaces. *Summer School on Topological Vector Spaces (Univ. Libre Bruxelles, Brussels, 1972)*, pp. 222-226. *Lecture Notes in Math.*, Vol. 331, Springer, Berlin, 1973. (RZMat **1974** #2 B769) **57** #17244 46E30 (47B37)
- Un critère de compacité dans les espaces vectoriels topologiques. *Studia Math.* **46** (1973), 141-148. (D. Vogt) **53** #6272 46A15
- Opérateurs linéaires entre espaces d'Orlicz non localement convexes. *Studia Math.* **46** (1973), 153-165. (K. Sundaresan) **49** #7754 46E30
- Espaces et intersections d'espaces d'Orlicz non localement convexes. *Studia Math.* **46** (1973), 167-195. (K. Sundaresan) **50** #5448 46E30 (46A15)
- Convergences de séries dans les espaces d'Orlicz. *Séminaire Maurey-Schwartz 1973-1974: Espaces L^p , applications radonifiantes et géométrie des espaces de Banach, Exp. No. 6 bis, 3 pp. Centre de Math., École Polytech., Paris, 1974.* (K. Sundaresan) **53** #1248 46E30
- Intégration par rapport à une mesure à valeurs dans un espace vectoriel topologique non supposé localement convexe. (English summary) *Intégration vectorielle et multivoque (Colloq., Univ. Caen, Caen, 1975), Exp. No. 8, 22 pp. Dép. Math., U. E. R. Sci., Univ. Caen, Caen, 1975.* (Erik G. F. Thomas) **53** #758 28A45 (46G10)
- Espaces et opérateurs exponentiellement galbés. *Séminaire Pierre Lelong (Analyse), Année 1973-1974*, pp. 48-62. *Lecture Notes in Math.*, Vol. 474, Springer, Berlin, 1975. (H. Hogbe-Nlend) **54** #8204 46A05 (46G20)
- Une mesure vectorielle non bornée. *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), A509-A511. (D. J. H. Garling) **52** #6417 46G10
- Suites sommables dans certains espaces de fonctions mesurables. (English summary) *C. R. Acad. Sci. Paris Sér. A-B* **280** (1975), no. 6, A349-A352. (D. J. H. Garling) **52** #3948 46E30
- Convexités dans les espaces vectoriels topologiques généraux. *Dissertationes Math. (Rozprawy Mat.)* **131** (1976), 221 pp. (H. Hogbe-Nlend) **54** #11028 46A99 (46E99, 46G99)
- Conditions de bornitude et espaces λ e fonctions mesurables. (English summary) *Studia Math.* **56** (1976), no. 1, 69-91. (H. Hogbe-Nlend) **54** #11046 46E30 (46A15)
- Turquette, Atwell R.** Generalized modal sets. *Z. Math. Logik Grundlagen Math.* **18** (1972), 261-266. (A. Salomaa) **46** #8814 02C05
- Minimal axioms for Peirce's triadic logic. *Z. Math. Logik Grundlagen Math.* **22** (1976), no. 2, 169-176. (János Bagyinski) **56** #5220 02C05
- Turrisi, Enrico** Sulle sollecitazioni G-autonome e G-determinanti nella dinamica dei sistemi a massa variabile. *Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur.* **51** (1971), 53-68. (Giorgio E. O. Giacaglia) **57** #2030 70.53
- Sui moti piani stazionari di un mezzo plastico omogeneo isotropo. *Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur.* **54** (1974), no. 2, 275-285. (1977). (Carlo Cercignani) **57** #14754 73.35
- Turrittin, Hugh L.** Stokes multipliers for the equation $d^3y/dx^3 - (y/x^2) = 0$. *Analytic theory of differential equations (Proc. Conf., Western Michigan Univ., Kalamazoo, Mich., 1970)*, pp. 145-157. *Lecture Notes in Math.*, Vol. 183, Springer, Berlin, 1971. (G. Sansone) **52** #8590 34E05
- My mathematical expectations. *Symposium on Ordinary Differential Equations (Univ. Minnesota, Minneapolis, Minn., 1972; dedicated to Hugh L. Turrittin)*, pp. 1-22. *Lecture Notes in Math.*, Vol. 312, Springer, Berlin, 1973. (R. K. Rathy) **53** #11178 34E05 (34-03)
- See also **Symposium: Ordinary Differential Equations**, **51** #6007
- Turschner, H.** Statistics and interactions of elementary excitations in Liouville space. *Physica* **64** (1973), 403-414. (Author's summary) **52** #2435 81.22 (81.47)
- Turski, Andrzej J.** Mathematical problems on the electromagnetic probing of a rock formation. (Polish) *Prace IPPT/IFTR Rep.* **1974**, no. 12 (*Prace Zakład. Teor. Fal Elektromagn.* No. 101), 20 pp. **57** #8974 86.35 (78.35)
- Turski, Lukasz A.** The velocity operator for many-boson systems. *Physica* **57** (1972), 432-444. (L. S. Schulman) **51** #4903 81.47
- (with Atamaniuk, Barbara) Linear kinetic equation for the eigenmodes of the Breit-Darwin plasma. *Collect. Phenom.* **1**, no. 3, 131-139 (1974). (A. K. Rajagopal) **53** #7319 82.45
- (with Cieplak, M.) Two Bose fluid picture of a Heisenberg ferromagnet. *Z. Phys. B* **23** (1976), no. 4, 355-359. (Brian DeFazio) **55** #14038 82.47
- (with Goldstein, P.) The Vlasov equation for systems with velocity dependent interactions. *Phys. A* **89** (1977), no. 3, 481-500. (Authors' summary) **57** #11530 82.35
- Turski, Wladyslaw M.** ★Datenstrukturen. Übersetzt aus dem Polnischen von Bernhard Mitulla, Erwin Ludwig und Peter Doering; herausgegeben von Helmut Thiele und Gerhard Paulin. Elektronisches Rechnen und Regeln, Sonderband 21. Akademie-Verlag, Berlin, 1975. xii + 230 pp. (Editors) **53** #12050 68-02
- Data structure models in information system design. *Advances in information systems science*, Vol. 6, pp. 115-159. Plenum Press, New York, 1976. (K. H. V. Booth) **57** #4558 68-02 (68A50)
- Tursunkulov, M.** The solvability of a certain class of loaded singular integral equations. (Russian) *Trudy Samarkand. Gos. Univ. (N.S.) No. 235 Voprosy Algebr, Teorii Čisel, Differencial. i Integral. Uravnenii* (1973), 86-94. (See RZMat **1974** #4 B359) **45E05**
- See also **Questions on differential equations**, **52** #7762
- Tursunov, A.** (with Novik, I. B.) Physical monism and the synthesis of knowledge. (Russian) *Philosophical foundations of the natural sciences (Russian)*, pp. 177-207. *Izdat. "Nauka", Moscow, 1976.* (U. Wybraniec-Skardowska) **58** #4997 02A05
- Tursunov, G. T.** (with Sil'vestrov, D. S.) General conditions for the convergence of sum controlled random variables. (Russian. English summary) *Dokl. Akad. Nauk UzSSR Ser. A* **1976**, no. 9, 782-785, 864. (J. G. Wendel) **54** #8778 60B10
- (with Sil'vestrov, D. S.) Certain limit theorems for queueing systems M/M/1 (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 6, 10-12. (M. A. Fainberg) **55** #1360K25
- Estimation of the derivative of a distribution function from a sample of random variables. (Russian) *Dokl. Akad. Nauk UzSSR* **1976**, no. 8, 3-5. (G. Manija) **55** #6674 62G05
- (with Sil'vestrov, D. S.; Mirzamedov, M. A.) On the applications of limit theorems for composite random functions to certain problems in statistics. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 14* (1976), 124-137, 157. (S. Csörgő) **55** #1602 62G05 (60F05, 62E20)
- (with Mirzamedov, M. A.) An estimate of the derivatives of the initial and transition distribution functions of a Markov process from a sample of random variables. (Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, 11-19, 101. (M. Aratō) **58** #18960 62M05 (62G05)
- (with Sil'vestrov, D. S.) General limit theorems for sums of controlled random variables. I. (Russian. English summary) *Teor. Veroyatnost. i Mat. Statist. Vyp. 14* (1977), 120-134, 165. (Serban Grigorescu) **56** #9618 60B10 (60J10)
- Tursunov, K. N.** A study of the periodic (in time) generalized solution of a multidimensional boundary value problem for second order hyperbolic equations with nonlinear operator right-hand side. (Russian) *Boundary value problems for differential equations and their applications (Russian)*, pp. 64-72, 157-158. *Fan, Uzbek. SSR, Tashkent, 1976.* (Author's summary) **58** #29067 35B10 (35L60, 35L99)
- A study of the periodic (in time) solution almost everywhere of a multidimensional boundary value problem for a class of second order hyperbolic equations with nonlinear operator right-hand side. (Russian) *Voprosy Vyčisl. i Prikl. Mat. (Tashkent)* **1976**, 37-47, 176-177. (RZMat **1976** #10 B326) **58** #29068 35B10
- A study of the periodic (in time) classical solution of a multidimensional boundary value problem for second order hyperbolic equations with a nonlinear operator right-hand side. (Russian. Uzbek summary) *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* **1977**, no. 6, 34-40, 102. (A. Pelczar) **58** #1691 35L60
- Tursunov, M.** The existence of solutions of the basic boundary value problems of the Helmholtz type equation with strong singularity. (Russian. Tajiki summary) *Akad. Nauk Tadžik. SSR* **13** (1970), no. 12, 3-7. (D. P. Squier) **45** #736 35J05
- An integral equation for a certain elliptic equation with a singular coefficient. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **15** (1972), no. 2, 11-14. (M. Abasov) **46** #9516 35J15 (47G05)
- The Dirichlet and Neumann problems for a certain elliptic equation with singular coefficients. (Russian. Tajiki summary) *Dokl. Akad. Nauk Tadžik. SSR* **15** (1972), 11-14. (J. Kačur) **46** #9521 35J25
- Tursynbekov, O. Š.** (with Elubaev, S.) A uniqueness theorem for a certain inverse problem for a third order hyperbolic equation. (Russian. Kazakh summary) *Izv. Akad. Kazah. SSR Ser. Fiz.-Mat.* **1975**, no. 5, 22-28, 92-93. (S. A. Tersenov) **53** #135R30
- A theorem on the existence and uniqueness of an inverse equation for a third order hyperbolic equation. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1977**, no. 1 53-59, 91. (J. Kopáček) **56** #6169 35R30 (35L99)
- Tursynbekov, S.** (with Abdrahmanov, M. A.) The conjugation problem for linear partial and elliptic equations with constant coefficients. (Russian) *Theoretical and applied problems in mathematics and mechanics (Russian)*, pp. 3-8, 304. *Nauka Kazah. Alma-Ata, 1977.* (Authors' summary) **58** #29214 35J70 (35M05)
- Turteltaub, Matias J.** (with Sternberg, Eli) Compression of an elastic roller between rigid plates. *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Muskhelišvili)* (Russian), pp. 495-515. *Izv. "Nauka", Moscow, 1972.* (Yi-Yuan Yu) **52** #4791 73.45
- (with Wheeler, Lewis T.; Horgan, Cornelius O.) A Saint-Venant principle for the gradient in the Neumann problem. (German summary) *Z. Angew. Math. Phys.* **1975**, 141-153. (B. R. Sethi) **51** #2400 73.31
- Turtoi, Adriana** (with Popovici, Iulian) Generalized spinor structure. *Proceedings of the Conference on Clifford Algebra, its Generalization and Applications (Ootacamund, 1971)*, pp. 97-113. *MATSCIENCE-Inst. Math. Sci., Madras, 1971.* (E. J. Taft) **50** #7216A42 (17B45)
- (with Popovici, Iulian; Iordănescu, Radu) Some maximal graduation classes of their Riemannian properties. *Arch. Math. (Brno)* **7** (1971), 31-46. (Agneta Vescan) **46** #7319 16A68 (15A66, 17B60, 17C50)
- (with Popovici, Iulian) Propriété de prolongement dans la théorie des spinors (Romanian summary) *An. Univ. Timişoara Ser. Şti. Mat.* **11** (1973), 153-158. (Phan Mau Quan) **51** #13892 53A50 (53C50)
- Extension of spin structures of a manifold of odd dimension. (Romanian. French summary) *Stud. Cerc. Mat.* **25** (1973), 773-783. (Agneta Vescan) **50** #8387 57D15
- (with Popovici, Iulian) Prolongement des structures spinorielles. *Ann. Inst. Poincaré Sect. A (N.S.)* **20** (1974), 21-39. (Kotik K. Lee) **52** #11793 53C25
- (with Popovici, Iulian) Sur une classe d'espaces d'Einstein. *Ann. Mat. Pura Appl.* (4) **109** (1976), 117-133. (Ann Stehney) **54** #13809 53C50
- Turunov, M.** (with Čumakov, S. A.) Convolution and conjugate variables for functions of a discrete argument. (Russian) *Taškent. Gos. Univ. Naučn. Trudy* No. 394 (1973), 193-200 (1971). (C. R. Deeter) **46** #5647 30A95
- Elementary functions of a discrete real and complex argument. (Russian) *Taškent. Gos. Univ. Naučn. Trudy* No. 418 *Voprosy Mat.* (1972), 263-271, 386. (G. Berzanskii) **50** #13556 30A95
- Turuta, E. N.** (with Lažarev, V. G.; Piľi, E. I.) The reliability of discrete automata. (Russian. English summary insert) *Kibernetika (Kiev)* **1968**, no. 1, 1-7. (Editorial) **45** #8445 94A30
- See also **Automata and control**, **57** #9261
- Turyn, Richard J.** An infinite class of Williamson matrices. *J. Combinatorial Theory Ser. A* **12** (1972), 319-321. (J. J. Seidel) **45** #8551 05B20

- Four-phase Barker codes. *IEEE Trans. Information Theory* **IT-20** (1974), 366-371. (N. Zierler) **51** #12416 94A10
- Hadamard matrices, Baumer-Hall units, four-symbol sequences, pulse compression, and surface wave encodings. *J. Combinatorial Theory Ser. A* **16** (1974), 313-333. (J. M. Goethals and J. J. Seidel) **49** #10577 05B20 (94A05)
- zaniński, M. (with Szymański, Andrzej) A characterization of cubes and spheres. *Dissertationes Math. (Rozprawy Mat.)* **121** (1975), 29 pp. (R. H. Rosen) **52** #4298 57A15 (54F65)
- zaniński, Marian (with Szymański, Andrzej) A characterization of generalized Cantor discontinua. (Polish summary) *Uniw. Śląski w Katowicach—Prace Mat.* **4** (1973), 73-75. (Stephen G. BeMiller) **49** #6197 (EA 58) 54F05
- On thick spaces. *Colloq. Math.* **34** (1975/76), no. 2, 231-233. (R. Engelking) **53** #4004 54D30 (54A25)
- (with Szymański, Andrzej) βN and sequential compactness. *Colloq. Math.* **35** (1976), no. 2, 205-208. (James C. Smith) **53** #14418 54D30 (54A25)
- zik, D. (with Müller, Vladimír; Rödl, Vojtěch) On critical 3-chromatic hypergraphs. *Acta Math. Acad. Sci. Hungar.* **29** (1977), no. 3-4, 273-281. (Jean-Claude Fournier) **58** #337 05C15
- zyński, Antoni On some problems in the class \mathcal{Q}^a and some classes generated by this class. (Polish and Russian summaries) *Zeszyty Nauk. Politech. Łódź. No. 186 Mat. Vyp.* **5** (1974), 43-59. (R. J. Libera) **50** #13484 30A32
- Problems related to the family V^* of holomorphic functions of restricted rotation. (Polish and Russian summaries) *Zeszyty Nauk. Politech. Łódź. No. 186 Mat. Vyp.* **5** (1974), 61-80. (R. J. Libera) **50** #13485 30A32
- Estimation of coefficients in some classes of holomorphic functions. (Polish and Russian summaries) *Zeszyty Nauk. Politech. Łódź. No. 245 Mat. No. 8* (1976), 81-84. (T. Giec) **54** #7770 30A34
- schik, Hans Peter Das Basistheorem für Zylinderalgebren. (Russian, English and French summaries) *Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe* **21** (1972), 555-561. (A. Preller) **49** #41 02J15
- (with Seese, Detlef G.) Construction of nice trees. *Set theory and hierarchy theory, V (Proc. Third Conf., Bierutowice, 1976)*, pp. 257-271. *Lecture Notes in Math.*, Vol. 619, Springer, Berlin, 1977. (L. Bukovský) **58** #10292 02B20 (02G05)
- On the decidability of the theory of linear orderings in the language $L(Q_1)$. *Set theory and hierarchy theory, V (Proc. Third Conf., Bierutowice, 1976)*, pp. 291-304. *Lecture Notes in Math.*, Vol. 619, Springer, Berlin, 1977. (A. B. Manaster) **57** #16037 02G05 (02B20)
- seva, L. A. (with Šokin, Ju. I.) Dissipative difference schemes for hyperbolic systems of equations. (Russian) *Čisl. Metody Meh. Splošnoi Sredy* **2** (1971), no. 1, 91-98. (J. Kopáček) **48** #7619 65M10
- (with Šokin, Ju. I.; Janenko, N. N.) The construction of difference schemes of high order of approximation on the basis of differential implications. (Russian) *Some problems of numerical and applied mathematics (Russian)*, pp. 184-191, 310. *Nauka Sibirsk. Otdel., Novosibirsk*, 1975. (Authors' summary) **58** #31953 65P05
- šraf al-din muzaffar ibn muhammed at-tūsī See Sharīf al-Dīn Muzaffar ibn Muḥammad at-Tūsī
- škanov, S. B. (with Gol'dberg, A. A.) Exceptional combinations of entire functions. (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 13 (1971), 67-74. (K. W. Lucas) **45** #7056 (E 49) #3131 30A70 (30A66)
- (with Gol'dberg, A. A.) A supplement to the article "Exceptional combinations of entire functions" (Teor. Funkcii Funkcional. Anal. i Priložen. No. 13 (1971), 67-74). (Russian) *Teor. Funkcii Funkcional. Anal. i Priložen.* No. 18 (1973), 185-189, vi. (K. W. Lucas) **49** #3131 30A66
- škina, T. A. (with Benkova, N. B.; Šahbazjan, K. V.) The schedule that minimizes the number of processors of a homogeneous computer system. (Russian) *Izv. Akad. Nauk SSSR Tehn. Kibernet.* **1971**, no. 5, 115-117. (V. V. Ivanov) **48** #10191 68A20 (94A20)
- (with Šahbazjan, K. V.) Parallel ordering of several processes. (Russian. English summary insert) *Kibernetika (Kiev)* **1971**, no. 5, 38-42. (V. Spiridonov) **47** #1447 90B35
- (with Šahbazjan, K. V.; Lebedinskaja, N. B.) An algorithm for compiling an optimal schedule for a parallel-sequential network. (Russian) Numerical methods and automatic programming. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov.* (LOMI) **48** (1974), 200-204, 213-214. (I. Gh. Ciobanu) **53** #7439 90B35 (90C35)
- (with Šahbazjan, K. V.; Lebedinskaja, N. B.) The problem of parallel ordering on graphs with a structure of parallel sequential networks. (Russian. English summary insert) *Kibernetika (Kiev)* **1975**, no. 5, 81-85. (Authors' summary) **57** #14586 68A05 (94A20)
- (with Šahbazjan, K. V.; Lebedinskaja, N. B.) The optimal execution of computing processes by two processors. (Russian. English summary) *US i M—Upravljajuščie Sistemy i Mašiny* **1975**, no. 1(15), 93-97, ii. (Authors' summary) **58** #25188 68A99
- (with Šahbazjan, K. V.) A survey of methods for compiling schedules for multiprocessor systems. (Russian) Computational methods of linear algebra. Parallel computations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov.* **54** (1975), 229-258, 265. (I. Gh. Ciobanu) **53** #7440 90B35 (68A99)
- Methods and programs for generating random graphs. (Russian) Computational methods of linear algebra. Parallel computations. *Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov.* **54** (1975), 259-264, 265. (Karel Čulík) **53** #14969 68A10 (05-04, 65C10)
- (with Šahbazjan, K. V.) The statistical efficiency of algorithms for the solution of a problem on partitioning the vertices of a graph. (Russian. English summary insert) *Kibernetika (Kiev)* **1977**, no. 5, 38-43. (D. Ja. Kesel'man) **57** #18785 90B10
- See also Automatic programming and numerical methods of analysis, **46** #8464; Numerical methods and automatic programming, **48** #7522 and Theory of languages and methods of construction of programming systems, **48** #7682
- snády, Gábor (with Katona, Gyula) The work of Alfréd Rényi. IV. The pedagogical work of Alfréd Rényi. (Hungarian) *Mat. Lapok* **21** (1970), 243-244 (1971). (Editors) **46** #6985d 01A70
- (with Csáki, Endre) On the number of intersections and the ballot theorem. Collection of articles dedicated to the memory of Alfréd Rényi, I. *Period. Math. Hungar.* **2** (1972), 5-13. (Lionel Weiss) **48** #7334 (E 55) #6514 60C05 (62G10)
- An asymptotically efficient test for fitting a distribution. Collection of articles dedicated to the memory of Alfréd Rényi, II. *Period. Math. Hungar.* **3** (1973), 157-165. (M. Knott) **49** #4141 62F05
- (with Ruda, Mihály; Szeidl, L.) Time series analysis on CDC 3300. *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 661-665. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974.* (Editors) **51** #2224 62M99 (65D10)
- (with Komlós, János; Major, Peter) An approximation of partial sums of independent RV's and the sample DF. I. *Strong laws of invariance principle: a collection of seven papers, Paper No. VI, i+45 pp. Carleton Math. Ser., No. 106, Dept. Math., Carleton Univ., Ottawa, Ont., 1974.* (Editors) **52** #6814 60B10 (60G50)
- (with Major, Peter) Testing for normality. (Hungarian. English summary) *Magyar Tud. Akad. Mat. Fiz. Oszt. Közl.* **22** (1974), no. 2-4, 257-281 (1976). (Endre Csáki) **53** #9500 62G10
- On testing density functions. *Period. Math. Hungar.* **5** (1974), 161-169. (I. R. Savage) **50** #8824 62G05 (62E20)
- On the updated maximum likelihood estimators. *Studia Sci. Math. Hungar.* **9** (1974), no. 3-4, 377-389 (1975). (Dan Anbar) **54** #6413 62L20 (62M10, 62F10)
- (with Komlós, János; Major, Peter) Weak convergence and embedding. *Limit theorems of probability theory (Colloq., Keszthely, 1974)*, pp. 149-165. *Colloq. Math. Soc. János Bolyai, Vol. 11, North-Holland, Amsterdam, 1975.* (J. Kiefer) **53** #6676 60F05 (60B10)
- (with Csörgő, Miklós; Komlós, János; Major, Peter; Révész, Pál) On the empirical process when parameters are estimated. *Proceeding of the Symposium on Statistics and Related Topics (Carleton Univ., Ottawa, Ont., 1974), Paper No. 1, 15 pp. Carleton Univ., Ottawa, Ont., 1975.* (P. K. Sen) **51** #11606 60B10 (62E20)
- (with Komlós, János) On sequences of "pure heads". *Ann. Probability* **3** (1975), no. 4, 608-617. (K. C. Chanda) **55** #11353 60F15
- (with Komlós, János; Major, Peter) An approximation of partial sums of independent RV's and the sample DF. I. *Z. Wahrscheinlichkeitstheorie und Verv. Gebiete* **32** (1975), 111-131. (J. Kiefer) **51** #11605b 60B10 (60G50)
- (with Komlós, János; Major, Peter) An approximation of partial sums of independent RV's, and the sample DF. II. *Z. Wahrscheinlichkeitstheorie und Verv. Gebiete* **34** (1976), no. 1, 33-58. (J. Kiefer) **53** #6697 60F15
- (with Sarkadi, Károlyi) Testing for normality and for the exponential distribution. *Proceedings of the Fifth Conference on Probability Theory (Braşov, 1974)*, pp. 99-118. *Editura Acad. R. S. R., Bucharest, 1977.* (M. Knott) **56** #13442 62G10
- Strong invariance principles. *Recent developments in statistics (Proc. European Meeting Statisticians, Grenoble, 1976)*, pp. 289-300. *North-Holland, Amsterdam, 1977.* (Jon A. Wellner) **56** #16750 60F15
- On asymptotically optimal tests. *Ann. Statist.* **5** (1977), no. 2, 385-393. (A. N. Philippou) **55** #4510 62G20
- A remark on the approximation of the sample DF in the multidimensional case. *Period. Math. Hungar.* **8** (1977), no. 1, 53-55. (P. K. Sen) **56** #1418 60F05 (62G99)
- See also Folledo, M.; et al., **55** #6514
- Tutaev, L. K. A method of geometric interpretation of the basic differential invariants of manifolds in projective space. (Russian) *Kaliningrad. Gos. Univ. Differentsial'naja Geom. Mnogobraz. Figur* No. 6 (1975), 194-204. (Author's introduction) **58** #30820 53A20
- A geometric interpretation of fundamental differential invariants of a manifold in an affine space. (Russian. English summary) *Vesci Akad. Nauk BSSR Ser. Fiz.-Mat. Nauk* **1978**, no. 1, 38-46, 140. (M. Craioveanu) **58** #2617 53A55
- See also Proceedings: Republican Conference of Belorussian Mathematicians, **48** #3669
- Tuteja, R. K. Solution of a transient state, limited space queueing problem with arrival and departure rates depending on queue length. *Metrika* **17** (1971), 207-214. **45** #2824 60K25
- nguen Tu Than' See Nguen Tu Than'
- Tutsch, J. H. Mathematics of the measurement problem in quantum mechanics. *J. Mathematical Phys.* **12** (1971), 1711-1718. (Author's summary) **45** #3013 81.34
- Tutschke, W. Stammfunktionen komplexwertiger Funktionen als Lösungen spezieller komplexer Differentialgleichungen. (Polish and Russian summaries) Proceedings of the Fifth Conference on Analytic Functions (Univ. Mariae Curie-Skłodowska, Lublin, 1970). *Ann. Univ. Mariae Curie-Skłodowska Sect. A* **22-24** (1968/70), 183-187 (1972). (Editors) **49** #5311 30A02
- Globale Konstruktion von Stammfunktionen im verallgemeinerten Sinn zu komplexwertigen Funktionen. *Math. Nachr.* **46** (1970), 311-317. (M. Ohtsuka) **47** #2037 35N10 (35A20, 35F05)
- (with Naas, Josef) Über komplexe Krümmung und Windung für Flächen. *Math. Nachr.* **47** (1970), 13-17. (E. M. Zaustinsky) **46** #8135 53C40 (53A05)
- (with Naas, Josef) Geometrie und komplexe Differentiation. IV. Konjugierte Flächenpaare im Zusammenhang mit dem inhomogenen Cauchy-Riemann-System. *Monatsb. Deutsch. Akad. Wiss. Berlin* **12** (1970), 653-656. (E. M. Zaustinsky) **46** #8058 53A10
- Stammfunktionen komplexwertiger Funktionen. *S.-B. Sächs. Akad. Wiss. Leipzig Math.-Natur. Kl.* **109**, No. 2, 20 pp. (1970). (M. Haimovici) **45** #5321 30A02
- ★Grundlagen der reellen Analysis. Band I: Differentialrechnung. Lehrbuch für Studenten der Mathematik und Physik ab 1. Semester. *Friedr. Vieweg & Sohn, Braunschweig*, 1971. 205 pp. (Editors) **50** #4834 26-01
- ★Grundlagen der Funktionentheorie. Lehrbuch für Mathematiker, Physiker und Elektrotechniker im 4. Semester. Zweite, durchgesehene Auflage. *Friedr. Vieweg & Sohn, Braunschweig*, 1971. 183 pp. (Editors) **50** #4909 30-01
- Das charakteristische Problem für pseudoholomorphe Funktionensysteme mehrerer komplexer Variabler, die Lösungen vollständiger (auch nichtlinearer) komplexer Differentialgleichungssysteme sind. *Beiträge Anal. No. 1* (1971), 21-27. (M. Hervé) **46** #3971 35F25 (32A99)
- Pseudoholomorphe Exponentialfunktionen. *Beiträge Anal. No. 1* (1971), 115-121. (M. Hervé) **46** #3812 30A92
- Weierstrass-Darstellungen und τ -Isotropie. *Math. Nachr.* **49** (1971), 277-291. (H. R.

Müller) 46 #8059 53A10

Optimale Fehlerschranken für die Lösung von Differentialgleichungssystemen erster Ordnung bei Verwendung von Funktionstafeln. (English and Russian summaries) *Z. Angew. Math. Mech.* 51 (1971), 419-426. (J. C. Butcher) 45 #9499 65L05

★Grundlagen der reellen Analysis. Band II: Integralrechnung. Lehrbuch für Studenten der Mathematik und Physik ab 1. Semester. *Friedr. Vieweg & Sohn, Braunschweig*, 1972. 161 pp. (Editors) 50 #4835 26-01

(with Naas, Josef) Der globale Aspekt der komplexen Analysis in der Theorie der morphen Funktionen. *Continuum mechanics and related problems of analysis (on the occasion of the eightieth birthday of Academician N. I. Muskhelishvili) (Russian)*, pp. 323-328. *Izdat. "Nauka", Moscow*, 1972. (M. Hervé) 52 #14610 35J15

Theorie und Anwendungen morphen Funktionen. Tagungsbericht zur ersten Tagung der WK Analysis (1970). *Beiträge Anal. No. 4* (1972), 167-175. (M. Hervé) 49 #9443 35N15

(with Naas, Josef) Geometrie und komplexe Differentiation. V. Flächenpaarung und γ -Isotropie. *Math. Nachr.* 53 (1972), 361-364. (E. M. Zaustinsky) 49 #3705 53A10

Die Methode der Variation der Konstanten bei Systemen linearer partieller komplexer Differentialgleichungen. *Math. Nachr.* 54 (1972), 249-257. (Catherine Bandle) 47 #7240 35N10

Die Cauchysche Integralformel für morphe Funktionen mehrerer komplexer Variabler. *Math. Nachr.* 54 (1972), 385-391. (E. J. Akutowicz) 48 #560 32A25 (35C15)

Konstruktion von globalen Lösungen mit vorgeschriebenen Singularitäten bei partiellen komplexen Differentialgleichungssystemen. *S.-B. Sächs. Akad. Wiss. Leipzig Math.-Natur. Kl.* 109, No. 7, 24 pp. (1972). (Manfred W. Kracht) 49 #812 35D05 (32A30)

Ein Kriterium für die eindeutige Bestimmtheit morphen Funktionen mehrerer komplexer Variabler. *Beiträge Anal. No. 5* (1973), 55-62. (J. Kajiwar) 48 #9100 35J45 (32A30)

Über die Umwandlung (auch nichtlinearer) partieller Differentialgleichungssysteme mit mehreren komplexen Variablen in Integrodifferentialgleichungssysteme und deren Lösung durch funktionalanalytische Methoden. *Math. Nachr.* 58 (1973), 87-136. (Manfred W. Kracht) 49 #883 35N15 (32A30)

Compact sets of generalized analytic functions of one or several complex variables. (Russian. Georgian and English summaries) *Sakharth. SSR Mecn. Akad. Moambe* 72 (1973), 285-288. (G. Wildenhain) 50 #2548 32A30 (30A92)

Über Fixpunktmethoden in der Theorie partieller komplexer Differentialgleichungen. *Beiträge zur komplexen Analysis und deren Anwendungen in der Differentialgeometrie*, pp. 31-41. *Schr. Zentralinst. Math. Mech. Akad. Wissensch. DDR, Heft 18, Akademie-Verlag, Berlin*, 1974. (A. Haimovici) 52 #11276 35A20 (32A30)

(with Naas, Josef) Differentialformenkalkül mit komplexen Differentiationen $\partial/\partial z$ und $\partial/\partial \bar{z}$ und Anwendung in der Flächentheorie. *Beiträge zur komplexen Analysis und deren Anwendungen in der Differentialgeometrie*, pp. 133-144. *Schr. Zentralinst. Math. Mech. Akad. Wissensch. DDR, Heft 18, Akademie-Verlag, Berlin*, 1974. (A. Kawaguchi) 55 #3982 53A05 (32A30)

(with Naas, Josef) Über neue Entwicklungstendenzen einer allgemeinen komplexen Analysis. *Beiträge zur komplexen Analysis und deren Anwendungen in der Differentialgeometrie*, pp. 173-225. *Schr. Zentralinst. Math. Mech. Akad. Wissensch. DDR, Heft 18, Akademie-Verlag, Berlin*, 1974. (J. Kajiwar) 52 #8487 32A30 (35A99)

Über eine Axiomatik der Zurückführung des additiven Cousin-Problems auf die inhomogene Differentialgleichung mit einer Anwendung auf die Vekuasche Differentialgleichung. (Polish summary) *Bull. Soc. Sci. Lettres Łódź* 24 (1974), no. 9, 8 pp. (1975). (J. Kajiwar) 56 #8891 32A20 (35F05)

A new application of I. N. Vekua's proof for Carleman's theorem. (Russian) *Dokl. Akad. Nauk SSSR* 214 (1974), 1276-1279. (H. Tornehave) 50 #7551 30A92 (35F20)

Über die Untersuchung von Problemen der optimalen Steuerung in der Ebene mittels komplexer Methoden (Pontrjaginsches Maximumprinzip für partielle Differentialgleichungen). *Math. Nachr.* 60 (1974), 201-214. (A. Haimovici) 52 #11295 35F20 (49B25)

Lösungen partieller komplexer Differentialgleichungen in mehreren komplexen Variablen mit vorgeschriebenem Hauptteil. *Math. Nachr.* 61 (1974), 271-277. (E. Kreyszig) 50 #13858 35F20

Topologische Abschätzungsmethoden für Lösungen partieller komplexer Differentialgleichungen. *Math. Nachr.* 63 (1974), 89-95. (A. Haimovici) 52 #11294 35F20

Die inhomogene Cauchy-Riemannsche Differentialgleichung in unendlich vielen komplexen Variablen. *Beiträge Anal. Heft 7* (1975), 7-10. (J. Kajiwar) 58 #29408 35N15 (32A10)

Über die Anwendung der Mayerschen Transformation in der Theorie partieller komplexer Differentialgleichungen. *Math. Nachr.* 66 (1975), 35-41. (E. Kreyszig) 52 #6152 35A30 (35F20)

Faktorisierung von Lösungen partieller komplexer Differentialgleichungen mit Hilfe eines holomorphen und eines von Null verschiedenen Faktors. *Math. Nachr.* 69 (1975), 77-83. (J. Mitchell) 53 #6064 35A20

Ein Differenzierbarkeitssatz für approximativ analytische Funktionen. *Math. Z.* 142 (1975), 27-31. (S. Ruscheweyh) 50 #13552 30A92

Eine Erweiterung des Hartogsschen Stetigkeitssatzes. *Ann. Acad. Sci. Fenn. Ser. A I Math.* 2 (1976), 573-580. (Manfred W. Kracht) 57 #16660 32A99

Über die globale Lösung der konjugiert-komplexen Beltramischen Differentialgleichung mittels der Neumannschen Reihe. *Math. Nachr.* 73 (1976), 243-247. (A. Haimovici) 56 #12546 35C15 (30A94)

(with Naas, Josef) Komplexe Analysis und ihr Allgemeinsgrad. *Math. Nachr.* 75 (1976), 127-131. (E. Kreyszig) 54 #13270 35A20 (32A10)

Lösung nichtlinearer partieller Differentialgleichungssysteme erster Ordnung in der Ebene durch Verwendung einer komplexen Normalform. *Math. Nachr.* 75 (1976), 283-298. (E. Kreyszig) 55 #834 35F20 (32A99)

★Partielle komplexe Differentialgleichungen in einer und in mehreren komplexen Variablen. Mit losen Berichtigungen. Hochschulbücher für Mathematik, Band 82. *VEB*

Deutscher Verlag der Wissenschaften, Berlin, 1977. 308 pp. (J. Kajiwar) 58 #15035A20 (32A30)

★Die neuen Methoden der komplexen Analysis und ihre Anwendung auf nichtlineare Differentialgleichungssysteme. Sitzungsberichte der Akademie der Wissenschaften der DDR. Mathematik—Naturwissenschaften—Technik. Jahrgang 1976. Nr. 17/N. *Akademie-Verlag, Berlin*, 1977. 32 pp. (St. Ruscheweyh) (Zbl. #350033) 58 #22957 35A20 (30A86)

(with Naas, Josef) On the error in the approximate solution of boundary value problems of nonlinear first order differential equations in the plane. *Applicable Analysis* (1977/78), no. 3, 239-246. (Pietro Marzulli) 58 #13650 65E05 (35A35, 65N99)

Solutions of nonlinear complex partial differential equations that have prescribed discontinuities along a given curve. (Russian. Armenian and English summaries) *Akad. Nauk Armjan. SSR Ser. Mat.* 12 (1977), no. 2, 138-142, 164. (J. Mitchell) 56 #9057 35F20 (32A30)

Konstruktion von Lösungen gewisser spezieller elliptischer Differentialgleichungen zweiter Ordnung (in der Ebene) durch Zurückführung auf die inhomogene Cauchy-Riemannsche Differentialgleichung. *Math. Nachr.* 82 (1978), 69-75. (S. Dummel) 58 #6664 35J15

See also Sitzungsberichte: Plenums und der Klasse der Akademie der Wissenschaften der DDR, 55 #2447 und Komplexe Analysis und ihre Anwendung auf partielle Differentialgleichungen, 58 #22490

Tutte, William T. Dichromatic sums for rooted planar maps. *Combinatorics (Proc. Sympos. Pure Math., Vol. XIX, Univ. California, Los Angeles, Calif., 1968)*, pp. 235-245. *Amer. Math. Soc., Providence, R.I.*, 1971. (M. Aigner) 47 #8350 05C30

Three-connected planar maps. *Proceedings of the Manitoba Conference on Numerical Mathematics (Univ. Manitoba, Winnipeg, Man., 1971)*, pp. 43-52. *Discrete Comput. Sci., Univ. Manitoba, Winnipeg, Man.*, 1971. (A. Gewirtz) 49 #105 05C30

The use of numerical computations in the enumerative theory of planar maps. *Proceedings of the Twenty-Fifth Summer Meeting of the Canadian Mathematical Congress (Lakehead Univ., Thunder Bay, Ont., 1971)*, pp. 2-40. *Lakehead Univ., Thunder Bay, Ont.*, 1971. (R. Cori) 50 #1965 05C30

Wheels and whirls. *Théorie des matroïdes (Rencontre Franco-Britannique, Bruxelles, 1970)*, pp. 1-4. *Lecture Notes in Math., Vol. 211, Springer, Berlin*, 1971. (Edith Krewel) 48 #134 05B35

On the 2-factors of bicubic graphs. *Discrete Math.* 1 (1971/72), no. 2, 203-208. (L. Hemminger) 45 #104 05C99

Non-Hamiltonian planar maps. *Graph theory and computing*, pp. 295-301. *Academic Press, New York*, 1972. (Rudolph Halin) 49 #4840 05C15

(with Whitney, Hassler) Kempe chains and the four colour problem. *Utilitas Mathematica* 2 (1972), 241-281. (B. Manvel) 46 #8887 05C15

The enumerative theory of planar maps. *A survey of combinatorial theory (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971)*, pp. 437-448. *North-Holland, Amsterdam*, 1973. (W. G. Brown) 51 #259 05C30

What is a map? New directions in the theory of graphs (Proc. Third Ann Arbor Conf. Univ. Michigan, Ann Arbor, Mich., 1971), pp. 309-325. *Academic Press, New York*, 1972. (László Lovász) 51 #12589 05C10

Chromatic sums for rooted planar triangulations: the cases $\lambda=1$ and $\lambda=2$. *Canad. J. Math.* 25 (1973), 426-447. (F. Harary) 47 #3228 05C15

Chromatic sums for rooted planar triangulations. II. The case $\lambda=\tau+1$. *Canad. J. Math.* 25 (1973), 657-671. (F. Harary) 50 #164 05C15

Chromatic sums for rooted planar triangulations. III. The case $\lambda=3$. *Canad. J. Math.* 25 (1973), 780-790. (F. Harary) 50 #165 05C15

Chromatic sums for rooted planar triangulations. IV. The case $\lambda=\infty$. *Canad. J. Math.* 25 (1973), 929-940. (F. Harary) 50 #166 05C15

Some polynomials associated with graphs. *Combinatorics (Proc. British Combinatorial Conf., Univ. Coll. Wales, Aberystwyth, 1973)*, pp. 161-167. *London Math. Soc. Lecture Note Ser., No. 13, Cambridge Univ. Press, London*, 1974. (R. C. Read) 50 #4408 05C99

Chromials. *Hypergraph Seminar (Proc. First Working Sem., Ohio State Univ., Columbus, Ohio, 1972; dedicated to Arnold Ross)*, pp. 243-266. *Lecture Notes in Math., Vol. 411, Springer, Berlin*, 1974. (Ruth Bari) 51 #5370 05C15

Map-coloring problems and chromatic polynomials. *Amer. Sci.* 62 (1974), no. 702-705. (Not reviewed) 05C15

Chromatic sums for rooted planar triangulations. V. Special equations. *Canad. J. Math.* 26 (1974), 893-907. (F. Harary) 50 #167 05C15

Spanning subgroups with specified valencies. *Discrete Math.* 9 (1974), 97-108. (St. J. A. Nash-Williams) 50 #1989 05C99

Codichromatic graphs. *J. Combinatorial Theory Ser. B* 16 (1974), 168-174. (H. Kronk) 48 #10876 05C15

(with Gordon, Manfred) On sums of determinants of intersection matrices of Petri matrices. *Proc. Cambridge Philos. Soc.* 75 (1974), 155-163. (Frank W. Owens) 50 #9622 05B20

A problem on spanning trees. *Quart. J. Math. Oxford Ser. (2)* 25 (1974), 253-257. (F. Harary) 50 #9655 05C05

The graph of the chromial of a graph. *Combinatorial mathematics, III (Proc. Third Australasian Conf., Univ. Queensland, St. Lucia, 1974)*, pp. 55-61. *Lecture Notes in Math., Vol. 452, Springer, Berlin*, 1975. (Ruth Bari) 51 #10152 05C15

Duality and trinity. *Infinite and finite sets (Colloq., Keszthely, 1973; dedicated to Erdős on his 60th birthday)*, Vol. III, pp. 1459-1472. *Colloq. Math. Soc. János Bolyai*, Vol. 10, North-Holland, Amsterdam, 1975. (Robert L. Wilson, Jr.) 53 #5382 05C15

Chromials. *Studies in graph theory, Part II*, pp. 361-377. *Studies in Math., Vol. 1, Math. Assoc. Amer., Washington, D. C.*, 1975. (Editors) 53 #10637 05C15

(with Whitney, Hassler) Kempe chains and the four colour problem. *Studies in graph theory, Part II*, pp. 378-413. *Studies in Math., Vol. 12, Math. Assoc. Amer., Washington, D. C.*, 1975. (Editors) 52 #13468 05C15

Separation of vertices by a circuit. *Discrete Math.* 12 (1975), 173-184. (Derick Smith) 51 #5358 05C10

On elementary calculus and the Good formula. *J. Combinatorial Theory Ser. B* (1975), 97-137. (H. W. Gould) 53 #12969a (E 53 #12969b) 05A15

Erratum: "On elementary calculus and the Good formula" (J. Combinatorial Theory Ser. B 1975, 97-137).

- Theory Ser. B 18 (1975), 97-137. *J. Combinatorial Theory Ser. B* 19 (1975), no. 3, 287. (H. W. Gould) 53 #12969b 05A15
- Hamiltonian circuits. (Italian summary) *Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973, Tomo I, pp. 193-199. Atti dei Convegni Lincei, No. 17, Accad. Naz. Lincei, Rome, 1976. (Editors) 58 #368 05C35*
- The dichromatic polynomial. *Proceedings of the Fifth British Combinatorial Conference (Univ. Aberdeen, Aberdeen, 1975), pp. 605-635. Congressus Numerantium, No. XV, Utilitas Math., Winnipeg, Man., 1976. (Ruth Bari) 53 #186 05C15*
- The rotor effect with generalized electrical flows. *Ars Combinatoria* 1 (1976), no. 1, 3-31. (N. G. de Bruijn) 55 #14436 94A20 (05C20)
- Bridges and Hamiltonian circuits in planar graphs. *Aequationes Math.* 15 (1977), no. 1, 1-33. (Gary Haggard) 57 #5826 05C35
- (with Nash-Williams, C. St. J. A.) More proofs of Menger's theorem. *J. Graph Theory* 1 (1977), no. 1, 13-17. (M. E. Watkins) 57 #174 05C35
- Chromatic sums. *Theory and applications of graphs (Proc. Internat. Conf., Western Mich. Univ., Kalamazoo, Mich., 1976), pp. 590-598. Lecture Notes in Math., Vol. 642, Springer, Berlin, 1978. (Author's summary) 58 #16370 05C15*
- The subgraph problem. *Advances in graph theory (Cambridge Combinatorial Conf., Trinity College, Cambridge, 1977). Ann. Discrete Math.* 3 (1978), 289-295. (Paul A. Catlin) 58 #5420 05C99
- See also *Théorie des matroïdes*, 48 #135; *Cybernetics and computer technology*, 48 #1517; *Cybernetics collection*, 48 #5714; *Studies in applied mathematics*, 49 #4784 and *Advances in graph theory*, 57 #5765
- utbalin, V. N. Multiwave wave guides and probability distributions on a symplectic group. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 16 (1971), 649-659. (R. G. Laha) 45 #1212 60B15
- ★Теория вероятностей. (Russian) [Theory of probability] Краткий курс и научно-методические замечания. (Russian) [A short course, and scientific and methodological remarks] *Izdat. Moskov. Univ., Moscow, 1972. 230 pp. (Editors) 50 #5870 60-01 (62-01)*
- Representation of stochastic matrices in orispherical coordinates and its application to telegraph equations. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 17 (1972), 266-280. (R. G. Laha) 46 #6425 60F05 (15A51)
- (with Selezneva, T. V.) Computation of the statistical characteristics of a long waveconducting curve in a two-wave model. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 18 (1973), 94-108. (G. Tusznyá) 46 #10487 94A05
- Dynamical systems with random perturbations. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 18 (1973), 718-733. (A. Leone) 49 #9949 34Cxx (60H10)
- A central limit theorem for products of random matrices and some of its applications. *Symposia Mathematica, Vol. XXI (Convegno sulle Misure su Gruppi e su Spazi Vettoriali, Convegno sui Gruppi e Anelli Ordinati, INDAM, Rome, 1975), pp. 101-116. Academic Press, London, 1977. (Pierre Crépél) 57 #17757 60B15*
- A version of the local limit theorem for products of random matrices. (Russian. English summary) *Teor. Veroyatnost. i Primenen.* 22 (1977), no. 2, 209-221. (Pierre Crépél) 58 #2955 60B15
- ušev, Š. H. Certain properties of numbers with prime divisors from prescribed arithmetic progressions. (Russian) *Collection of Reports of the Algebraic Seminar of the Faculty of Algebra and Number Theory, No. 1 (Russian), pp. 79-92. Kazah. Gos. Ped. Inst., Alma-Ata, 1972. (M. I. Tuljaganova) 50 #7058 10H15*
- Application of the method of complex integration to the solution of a problem in number theory. (Russian) *Methods of the theory of analytic functions (Russian), pp. 15-23. Severo-Oset. Gos. Univ., Ordzhonikidze, 1974. (See RŽMat 1975 #6 A191) 10H20 (30A86)*
- ulmets, Leida (with Oidjävär, H.) The B -focal and the normal B -focal pseudocongruence in R_4 . (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 21 (1972), 364-369. (From Marcus) 49 #11407 53A35
- (with Tamm, Ebu) Focal pseudocongruences with constant invariants in R_4 . (Russian. Estonian and English summaries) *Eesti NSV Tead. Akad. Toimetised Füüs.-Mat.* 21 (1972), 370-378. (From Marcus) 49 #11408 53A35
- Focal surfaces of a focal pseudocongruence in R_4 . (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised No. 305 (1972), 46-62. (From Marcus) 51 #13883 53A25*
- (with Vaga, E.) Focal pseudocongruence of Ribaucour in R_4 . (Russian. Estonian and English summaries) *Tartu Riikl. Ül. Toimetised No. 305 (1972), 63-71. (From Marcus) 51 #11308 53A25*
- (with Püssa, T.) Focal pseudocongruences in R_4 whose focal surfaces have zero Gaussian curvatures of torsions. (Russian. Estonian and German summaries) *Tartu Riikl. Ül. Toimetised No. 305 (1972), 72-84. (From Marcus) 51 #13884 53A25*
- àng Tuy See Hoàng Tuy
- ay, H. On necessary conditions for optimality. *Progress in operations research, Vols. I, II (Proc. Sixth Hungarian Conf., Eger, 1974), pp. 921-939. Colloq. Math. Soc. János Bolyai, Vol. 12, North-Holland, Amsterdam, 1976. (L. Mikolajczyk) 55 #11131 49B30*
- (with Sampson, Gary) Fourier transforms and their Lipschitz classes. *Pacific J. Math.* 75 (1978), no. 2, 519-537. (Hans P. Heinig) 58 #23338 42A68 (42A20)
- o-quang-Tuyen See Dao-Quang-Tuyen
- tuyen-xuan Tuyen See Nguyen Xuan Tuyen
- uz, V. V. Axiomatic convexity theory. (Russian) *Mat. Zametki* 20 (1976), no. 5, 761-770. (N. Poláková) 58 #18166 52A50
- azar, Antonín (with Šindelář, Jaroslav) Introduction to the theory of stability of control systems. (Czech) *Kybernetika (Prague)* 6, 7 (1970)/(1971), suppl., 185pp. (Editors) 56 #8125 93Dxx
- uzik, A. I. Exceptional cases of complete singular integral equations with a Cauchy kernel. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* 1969, no. 1, 55-56. (J. Brilla) 47 #3923 45E05
- The exceptional cases of singular integral equations with Cauchy kernel. (Russian) *Vestnik Beloruss. Gos. Univ. Ser. I* 1969, no. 2, 3-7, 98. (D. Przeworska-Rolewicz) 48 #6844 45E05
- The reduction of an exceptional case of singular integral equations with Cauchy kernel to equations of a normal type. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1972, no. 1, 53-56. (T. G. Gegelia) 45 #9083 45E05
- The index of singular integral equations with a Cauchy kernel in the exceptional case. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1972, no. 3, 35-41. (F. Smithies) 46 #9663 45E05 (47G05)
- The solution of a certain class of convolution type equations. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1973, no. 1, 42-47, 136. (V. S. Rabinovič) 53 #8823 45E10
- The index and normal solvability of contracted systems of singular integral equations with Cauchy kernel. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1974, no. 1, 42-47, 137. (S. G. Samko) 54 #11006 45F15
- Regularization of contracted singular integral equations with Hilbert kernel in the exceptional case. (Russian. English summary) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1978, no. 2, 104-107, 143. (Š. Schwabik) 58 #2083 45E99
- Tuzilin, A. A. Asymptotic expansions of the solution of the problem of the radiation of waves by the vibrating edges of an arbitrary wedge. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 10 (1970), 374-382. (S. Kaliski) 45 #7238 35B40 (35C10)
- (with Maljužinec, G. D.) Diffraction of a plane acoustic wave on a thin semi-infinite elastic plate. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 10 (1970), 1210-1227. (S. Kaliski) 45 #6259 76.35
- A theory of functional equations of Maljužinec. IV. Nonhomogeneous functional equations with periodic coefficients. (Russian) *Differencial'nye Uravnenija* 7 (1971), 1276-1287, 1342. (Z. Jankovič) 45 #764 39A30 (33A70, 35A99)
- Diffraction of a plane sonic wave in an angular domain whose boundaries are absolutely rigid and slippery and coated thin elastic plates. (Russian) *Differencial'nye Uravnenija* 9 (1973), 1875-1888, 1927. (S. Kaliski) 48 #7771 76.35
- On the theory of Maljužinec's inhomogeneous functional equations. (Russian) *Differencial'nye Uravnenija* 9 (1973), 2058-2064, 2117. (Z. Jankovič) 48 #6745 39A15
- Tuzov, A. D. Smoothing of functions that are given by tables. (Russian) *Vyčisl. Sistemy Vyp. 68 Metody Splajn-Funkcii* (1976), 61-66, 118. (Author's summary) 58 #3311 65D10
- Tuzov, V. A. The equivalence of logical schemes with permutation operators. (Russian. English summary insert) *Kibernetika (Kiev)* 1970, no. 6, 33-38. (A. D. Koršunov) 45 #1684 94A20
- Solvability problems for graph-schemes with permutation operators. I, II. (Russian. English summary inserts) *Kibernetika (Kiev)* 1971, no. 4, 30-38; *ibid.* 1971, no. 5, 23-32. (A. D. Koršunov) 46 #6974 (EA 46) 94A30
- Optimal schemes of algorithms. (Russian) *Ž. Vyčisl. Mat. i Mat. Fiz.* 11 (1971), 1282-1289. (J. Morávek) 45 #2952 68A10 (65K05)
- Equivalence of translation relations. (Russian. English summary insert) *Kibernetika (Kiev)* 1975, no. 6, 15-22. (Author's summary) 57 #4677 68A30
- Tuzov, V. M. (with Ivas'kiv, Ju. L.) ★Цифровые устройства обработки сигналов на многозначных структурах. (Russian) [Digital signal processors on multivariable structures] "Naukova Dumka", Kiev, 1975. 166 pp. (From the publisher's description) 55 #2332 94A05
- Tverberg, Helge On the irreducibility of polynomials taking small values. *Math. Scand.* 32 (1973), 5-21. (Jean-Pierre Dupont) 49 #246 10M05
- How to cut a convex polytope into simplices. *Geometriae Dedicata* 3 (1974), 239-240. (D. Barnette) 50 #1127 52A25
- On the Milner-Shelah condition for transversals. *J. London Math. Soc.* (2) 13 (1976), no. 3, 520-524. (From the introduction) 58 #21626 04A05
- On Sinkhorn's representation of nonnegative matrices. *J. Math. Anal. Appl.* 54 (1976), no. 3, 674-677. (Thomas L. Markham) 53 #10835 15A48
- On a four-colour theorem. *Math. Scand.* 39 (1976), no. 2, 267-270 (1977). (D. Barnette) 57 #16123 05C15
- Tverdohlebov, V. Realization of algorithms for the solution of economic problems in finite automata. (Russian) *Algorithms, and organizing the solution of economic problems, No. 1 (Russian), pp. 59-67, 117. Izdat. "Statistika", Moscow, 1973. (Author's summary) 50 #11860 68A25*
- Tverdohlebov, V. A. Remarks on a certain method of constructing tests. (Russian) *Computing methods and programming for the electronic computers "URAL-2", "URAL-4", No. 2 (Russian), pp. 43-60. (loose errata) Izdat. Saratov. Univ., Saratov, 1968. (Author's introduction) 52 #2780 94A30*
- (with Bogomolov, A. M.) Conditions for the existence of diagnostic tests. (Russian. English summary insert) *Kibernetika (Kiev)* 1968, no. 3, 9-19. (Authors' summary) 46 #1397 93B99
- (with Bogomolov, A. M.) The results of investigation of problems of the test diagnosis of complex systems. (Russian) *Cybernetics (Proc. Sem., Donetsk, 1969), No. 1 (Russian), pp. 3-19. Akad. Nauk Ukrain. SSR, Kiev, 1969. (B. Csákány) 46 #5071 94A30*
- (with Bogomolov, A. M.) ★Диагностика сложных систем. (Russian) [The diagnostics of complex systems] "Naukova Dumka", Kiev, 1974. 128 pp. (D. Obradović) 50 #9434 94A30 (90B25, 93A99)
- (with Bogomolov, A. M.) ★Целенаправленное поведение автоматов. (Russian) [Expedient behavior of automata] *Izdat. "Naukova Dumka", Kiev, 1975. 123 pp. (A. D. Koršunov) 57 #5504 94A30 (93C40)*
- Tverdohlebova, N. N. A number-theoretic method of comparing Boolean functions. (Russian. English summary insert) *Kibernetika (Kiev)* 1973, no. 3, 1-5. (A. A. Mullin) 50 #9449 94A30 (10B30)
- A number-theoretic method for the recognition of functions of k -valued logic. (Russian) *Automata, No. 1 (Russian), pp. 64-77, 107. Izdat. Saratov. Univ., Saratov, 1974. (Editors) 58 #16141 02C05*
- The maximum of an integer-valued function for estimating the error in integration. (Russian) *Automata, No. 2 (Russian), pp. 49-53, 60. Saratov. Univ., Saratov, 1977. (Anton Hut'a) 58 #31751 65D30*
- Tveritinov, D. I. (with Sudakov, R. S.) Computation of the probability of N events and some problems in the reliability of systems. (Russian) *Točn. i Nadežn. Kibernet. Sistem No. 4 (1976), 74-77, 104. (R. H. Rodine) 57 #17739 60-01*
- Tversky, Amos (with Krantz, David H.; Luce, R. Duncan; Suppes, Patrick) ★Foundations of measurement. Vol. 1: Additive and polynomial representations. *Academic Press, New York-London, 1971. xxiv + 577 pp. (V. Komkov) 56 #17265 69.00*

- Choice by elimination. *J. Mathematical Psychology* **9** (1972), 341-367. (R. D. Luce)
52 #5096 92A25
- Assessing uncertainty. *J. Roy. Statist. Soc. Ser. B* **36** (1974), 148-159. (I. J. Good)
51 #2059 62C10 (60A05)
- (with Sattath, Shmuel) Unite and conquer: a multiplicative inequality for choice probabilities. *Econometrica* **44** (1976), no. 1, 79-89. (T. Parthasarathy) **58** #15019 90A05 (90A10)
- See also **Discussion: Papers by Professor Tversky and by Professor Suppes**,
52 #6803
- Tvetr, Jens O.** (with Holme, Ingar; Spjøtvoll, Emil) Likelihood ratio confidence bands for a normal distribution function. *Scand. J. Statist.* **1** (1974), no. 2, 87-92. (S. John)
51 #11792 62F25
- Tvorogov, S. D.** (with Gordov, E. P.) Operators of the classical field and semiclassical electrodynamics. *Phys. Rev. D* (3) **9** (1974), 1711-1716. (Authors' summary)
53 #12346 81.47
- (with Vainstein, V. D.) Some problems on the measurement of quantum observables and determination of joint entropy in quantum statistics. *Comm. Math. Phys.* **43** (1975), no. 3, 273-278. (H. Wakita) **51** #14837 82.46
- Tvrđá, Jana** The origin of matrix theory. (Czech. English summary) *DVT—Dějiny Věd Tech.* **3** (1970), no. 1, 11-23. (See Zbl **211**, 5) 01A05
- On the origin of the theory of matrices. *Acta Historiae Rerum Naturalium necnon Technicarum*, 1971, pp. 335-354. *Czech. Studies in the History of Science, Special issue, No. 5, Česk. Akad. Věd, Prague*, 1971. (Thomas Hawkins) **57** #15902 01A55 (15-03)
- Tvrđý, Milan** (with Vejvoda, Otto) Existence of solutions to a linear integro-boundary-differential equation with additional conditions. *Ann. Mat. Pura Appl.* (4) **89** (1971), 169-216. (A. Halanay) **47** #5536 45J05
- (with Vejvoda, Otto) General boundary value problem for an integrodifferential system and its adjoint. *Časopis Pěst. Mat.* **97** (1972), 399-419. (F. Odeh) **47** #9208 45J05
- Correction and addition to my paper: "The normal form and the stability of solutions of a system of differential equations in the complex domain". *Czechoslovak Math. J.* **22**(97) (1972), 176-179. (J. Nikolaus) **46** #428 34A20
- (with Vejvoda, Otto) General boundary value problem for an integrodifferential system and its adjoint. (Czech summary) *Časopis Pěst. Mat.* **98** (1973), 26-42, 99. (F. Odeh) **47** #9209 45J05 (47G05)
- (with Schwabik, Štefan) On the generalized linear ordinary differential equation. (Czech summary) *Časopis Pěst. Mat.* **98** (1973), 206-211, 213. (David L. Lovelady) **48** #2471 34A99 (45J05)
- Boundary value problems for linear generalized differential equations and their adjoints. *Czechoslovak Math. J.* **23**(98) (1973), 183-217. (W. T. Reid) **47** #8956 34B05 (45J05)
- Boundary value problems for generalized linear integrodifferential equations with left-continuous solutions. *Časopis Pěst. Mat.* **99** (1974), 147-157. (D. Ramakrishna Rao) **53** #8837 45J05
- Linear boundary value type problems for functional-differential equations and their adjoints. *Czechoslovak Math. J.* **25**(100) (1975), 37-66. (D. K. Hughes) **51** #10809 34K10
- Note on functional-differential equations with initial functions of bounded variation. *Czechoslovak Math. J.* **25**(100) (1975), 67-70. (D. K. Hughes) **51** #10804 34K05
- Linear functional-differential operators: normal solvability and adjoints. *Differential equations* (Colloq., Keszthely, 1974), pp. 379-389. *Colloq. Math. Soc. János Bolyai, Vol. 15, North-Holland, Amsterdam*, 1977. (Robert M. Bullock) **58** #2430 47B37 (34K10)
- Twardowska, Krystyna** Controllability of linear systems with a stochastic control. *Zeszyty Nauk. Uni. Jagiello. Prace Mat. No.* **16** (1974), 65-69. (F. M. Kirillova) **52** #10197 93E20
- On the existence, uniqueness and continuous dependence of solution of boundary value problems for differential equations with a delayed parameter. *Zeszyty Nauk. Uni. Jagiello. Prace Mat. Zeszyt* **18** (1977), 143-153. (S. Leela) **57** #3562 34K10
- Tweedie, I.** Thin sets in $E^1(S, \mu)$. *Proc. Edinburgh Math. Soc.* (2) **17** (1970/71), 311-316. (W. J. Wilbur) **46** #6010 46E30 (28A25)
- The extremal points of the range of a vector-valued measure. *Glasgow Math. J.* **13** (1972), 61-63. (F. Cunningham, Jr.) **46** #9290 28A45
- The range of a vector-valued measure. *Glasgow Math. J.* **13** (1972), 64-68. (F. Cunningham, Jr.) **46** #9291 28A45
- Unconditional convergence and bases. *Proc. Edinburgh Math. Soc.* (2) **18** (1972/73), 321-324. (S. R. Harasymiv) **48** #9335 46A35
- Some results involving weak compactness in $C(X)$, $C(X')$ and $C(X'Y')$. *Proc. Edinburgh Math. Soc.* (2) **19** (1974/75), 221-229. (S. Warner) **52** #11558 46E10 (54C35)
- (with Popoola, J. O.) On the closed graph theorem. *Glasgow Math. J.* **17** (1976), no. 2, 89-97. (S. O. Iyahan) **54** #8212 46A30 (46A07)
- (with Popoola, J. O.) A variant of separability in dual systems. *Proc. Edinburgh Math. Soc.* (2) **20** (1976/77), no. 4, 317-327. (Ehrhard Behrends) **57** #17180 46A20
- (with Popoola, J. O.) On the dimension of a complete metrizable topological vector space. *Canad. Math. Bull.* **20** (1977), no. 2, 271-272. (H. E. Lacey) **56** #12811 46A15 (54F45)
- Tweed, Edward W.** (with Phillips, Ronald L.; Jelsma, Lawrence F.; Taylor, Russell W.) Boundary conditions for the four vector potential. *IEEE Trans. Microwave Theory Tech.* **18** (1970), 648-649. (E. Pinney) **53** #7227 78.35
- Tweed, John** (with Sneddon, Ian Naismith) The stress intensity factors for a Griffith crack in an elastic body in which there is an asymmetrical distribution of body forces. *Proc. Roy. Soc. Edinburgh Sect. A* **69** (1970/71), 85-114. (T. W. Ting) **45** #2968 73.35
- Some triple equations involving inverse finite Mellin transforms. *Proc. Edinburgh Math. Soc.* (2) **18** (1972/73), 317-319. (K. N. Srivastava) **52** #1216 45F10
- The solution of certain triple integral equations involving inverse Mellin transforms. *Glasgow Math. J.* **14** (1973), 65-72. (K. N. Srivastava) **47** #736 45F05 (73.45)
- Some dual integral equations involving inverse finite Mellin transforms. *Glasgow Math. J.* **14** (1973), 179-184. (K. N. Srivastava) **49** #9564 45F10
- The solution of some dual equations with an application in the theory of elasticity. *J. Engrg. Math.* **7** (1973), 273-277. (L. Debnath) **51** #9623 73.45
- (with Longmuir, G. J.) Some triple equations with an application to crack problems in the theory of elasticity. (French, German, Italian and Russian summaries) *Internat. J. Engrg. Sci.* **12** (1974), 807-816. (Maria Comninou) **56** #7432 73.45
- Tweedie, M. C. K.** (with Veerav, A.) On the moments of a beta function transformation of a Poisson variate. *J. Roy. Statist. Soc. Ser. B* **39** (1977), no. 2, 213-216. (Authors' summary) **58** #7972 62E15
- Tweedie, Richard L.** Truncation procedures for non-negative matrices. *J. Appl. Probability* **8** (1971), 311-320. (C. G. Khatri) **45** #1952 15A48 (60C05)
- Stationary measures for random walk on a half line. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **20** (1971), 28-46. (V. K. Rohatgi) **47** #9726 60J15
- The calculation of limit probabilities for denumerable Markov processes for infinitesimal properties. *J. Appl. Probability* **10** (1973), 84-99. (J. Hachigian) **52** #60J25
- A representation for invariant measures for transient Markov chains. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **28** (1973/74), 99-112. (S. Orey) **52** #60J10
- R-theory for Markov chains on a general state space. I. Solidarity properties R-recurrent chains. *Ann. Probability* **2** (1974), 840-864. (Z. Šidák) **51** #4393 60J05
- R-theory for Markov chains on a general state space. II. r -subinvariant measures r -transient chains. *Ann. Probability* **2** (1974), 865-878. (Z. Šidák) **51** #4394 60J05 (60J50)
- Quasi-stationary distributions for Markov chains on a general state space. *J. Appl. Probability* **11** (1974), 726-741. (E. Arjas) **56** #1463 60J05
- Some ergodic properties of the Feller minimal process. *Quart. J. Math. Oxford* (2) **25** (1974), 485-495. (C. L. Scheffer) **52** #12089 60J25
- Relations between ergodicity and mean drift for Markov chains. *Austral. J. Statist.* **17** (1975), no. 2, 96-102. (Richard Isaac) **53** #6745 60J10
- Truncation approximation of the limit probabilities for denumerable semi-Markov processes. *J. Appl. Probability* **12** (1975), 161-163. (Jozef L. Teugels) **54** #1414 60K15
- The robustness of positive recurrence and recurrence of Markov chains under perturbations of the transition probabilities. *J. Appl. Probability* **12** (1975), no. 3, 744-752. (S. Orey) **53** #4232 60J05
- (with Pollard, David B.) R-theory for Markov chains on a topological state space. *J. London Math. Soc.* (2) **10** (1975), no. 4, 389-400. (S. Orey) **51** #14273 60J05
- Sufficient conditions for regularity, recurrence and ergodicity of Markov processes. *Math. Proc. Cambridge Philos. Soc.* **78** (1975), 125-136. (C. L. Scheffer) **52** #1205 60J25
- Sufficient conditions for ergodicity and recurrence of Markov chains on a general state space. *Stochastic Processes Appl.* **3** (1975), no. 4, 385-403. (E. Arjas) **55** #927 60J05
- Criteria for classifying general Markov chains. *Advances in Appl. Probability* (1976), no. 4, 737-771. (Shlomo Horowitz) **56** #9695 60J05
- (with Nummelin, Esa) Geometric ergodicity for a class of Markov chains. *É. d'Été de Calcul des Probabilités de Saint-Flour* (Saint-Flour, 1976). *Ann. Sci. U. Clermont* **No. 61 Math. No. 14** (1976), 145-154. (Richard Isaac) **57** #7773 60J05
- (with Pollard, David B.) R-theory for Markov chains on a topological state space. II. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete* **34** (1976), no. 4, 269-278. (S. Orey) **55** #4385 60J05
- Hitting times of Markov chains, with application to state-dependent queues. *Austral. Math. Soc.* **17** (1977), no. 1, 97-107. (E. Arjas) **57** #14144 60J05 (60K25)
- Modes of convergence of Markov chain transition probabilities. *J. Math. Anal. Appl.* **60** (1977), no. 1, 280-291. (Yves Derriennic) **56** #16794 60J05
- (with Nummelin, Esa) Geometric ergodicity and R -positivity for general Markov chains. *Ann. Probability* **6** (1978), no. 3, 404-420. (Dean Isaacson) **57** #14143 60J05 (60J10, 60J15)
- (with Isaacson, Dean) Criteria for strong ergodicity of Markov chains. *J. Appl. Probability* **15** (1978), no. 1, 87-95. (Esa Nummelin) **57** #4334 60J10
- (with Arjas, Elja; Nummelin, Esa) Uniform limit theorems for non-singular renewal and Markov renewal processes. *J. Appl. Probability* **15** (1978), no. 1, 112-120. (Jozef L. Teugels) **57** #7798 60K15
- (with Westcott, Mark) First-passage times in skip-free processes. *Stochastic Processes Appl.* **7** (1978), no. 2, 191-204. (T. Rolski) **58** #24570 60J25 (60K25)
- See also **Spatial patterns and processes**, **57** #14083
- Twente, T. H.** (with Hettich, Rainer P.) Charakterisierung lokaler Pareto-Optima. *Optimization and operations research* (Proc. Conf., Oberwolfach, 1975), pp. 127-137. *Lecture Notes in Econom. Math. Systems, Vol. 117, Springer, Berlin*, 1976. (Shigehiko Ushiki) **57** #4514 65K05 (90A99)
- von der Twer, Tassilo** ★Pseudoelementare Relationen und Aussagen vom Typ des Bernsteinschen Äquivalenzsatzes. Inaugural-Dissertation zur Erlangung des Doktorgrades der Hohen Mathem.-Naturw. Fakultät der Rheinischen Friedrich-Wilhelms-Universität zu Bonn. *Bonner Mathematische Schriften, No. 10, Mathematisches Institut, Universität Bonn, Bonn*, 1977. ii + 58 pp. (Editors) **58** #517 02H05
- Twersky, Victor** Relativistic scattering of electromagnetic waves by moving obstacles. *Mathematical Phys.* **12** (1971), 2328-2341. (C. Gilbert) **46** #10309a 78.53
- Conservation of energy and momentum in relativistic electromagnetic scattering. *Mathematical Phys.* **12** (1971), 2341-2348. (C. Gilbert) **46** #10309b 78.53
- Propagation parameters in random distributions of scatterers. *J. Analyse Math.* (1976), 498-511. (E. Lüneburg) **57** #14942 78.60
- Twigg, David W.** (with Cate, Esko G.) Algorithm 513. Analysis in in-situ transposition. *ACM Trans. Math. Software* **3** (1977), no. 1, 104-110. (Ralph A. Willoughby) **55** #13866 68A10
- Twizell, E. H.** The numerical solution of second order hyperbolic partial differential equations with unequally spaced initial conditions. *Comput. J.* **18** (1975), no. 3, 252-257. (Sean McKee) **52** #12347 65M05

- Some approximations of the characteristics of second order hyperbolic partial differential equations. *J. Inst. Math. Appl.* **17** (1976), no. 2, 209-218. (Ian Gladwell) **53** #14948 65P05
- Wogood, R. E. (with Ekstrom, Michael P.) A computer algorithm for transposing large matrices using limited primary storage. *Proceedings of the Ninth Hawaii International Conference on System Sciences* (Univ. Hawaii, Honolulu, Hawaii, 1976), pp. 327-330. *Western Periodicals, North Hollywood, Calif.*, 1974. (Authors' summary) **56** #17195 68A10 (65F30)
- Womey, J. B. On bounded starlike functions. *J. Analyse Math.* **24** (1971), 191-204. (S. D. Bernardi) **45** #3689 30A32
- (with Holland, Finbarr) On coefficient means of certain subclasses of univalent functions. *Trans. Amer. Math. Soc.* **185** (1973), 151-163. (M. Reade) **48** #6396 30A34
- (with Holland, Finbarr) Fourier-Stieltjes series of measures in Zygmund's class Λ_+ . *Proc. Roy. Irish Acad. Sect. A* **76** (1976), no. 26, 289-299. (Y. Katznelson) **55** #3656 42A16
- (with Holland, Finbarr) On Hardy classes and the area function. *J. London Math. Soc.* (2) **17** (1978), no. 2, 275-283. (J. W. Noonan) **58** #6255 30A78
- Nguen van Ty See Nguen Van Ty
- Tjablikov, Sergei Vladimirovich See Tjablikov, S. V.
- Yagi, B. N. (with Jha, M. P.) On construction and analysis of a class of partially balanced asymmetrical factorial designs. *J. Indian Statist. Assoc.* **8** (1970), 37-42. **54** #3995 62K15
- (with Kishen, K.) Recent developments in India in the construction of confounded asymmetrical factorial designs. *A survey of combinatorial theory* (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971), pp. 313-321. North-Holland, Amsterdam, 1973. (Bhagwandas) **51** #2950 05B30
- Yagi, M. S. On some properties of n -tournaments. *SIAM J. Appl. Math.* **24** (1973), 207-214. (J. W. Moon) **51** #7931 05C20
- On the reachability product of digraphs. *Cahiers Centre Études Recherche Opér.* **16** (1974), 55-66. (P. Vondráček) **52** #5469 05C20
- On some properties of n -tournaments: a note. *SIAM J. Appl. Math.* **28** (1975), 675-677. (J. W. Moon) **53** #191 05C20
- Yan, Shu Gwei (with Thomas, John B.) Characterization of a class of bivariate distribution functions. *J. Multivariate Anal.* **5** (1975), 227-235. (M. B. Rao) **51** #11816 62H05
- (with Derin, Haluk; Thomas, John B.) Two necessary conditions on the representation of bivariate distributions by polynomials. *Ann. Statist.* **4** (1976), no. 1, 216-222. (Donald R. Jensen) **52** #12205 62H05
- Ybor, W. (with Kosiński, P.; Rembieliński, J.) Representations of supersymmetry algebras with Dirac bispinor generators. *J. Phys. A* **9** (1976), no. 3, 423-433. (Jacques P. Leveille) **53** #12320 81A6
- (with Kosiński, P.; Rembieliński, J.) On gauge groups. *J. Phys. A* **9** (1976), no. 7, 1187-1190. (Mayer Humi) **51** #3322 22E70
- Yulewicz, Albin See Tjablikov, S. V., **53** #2242
- Yc, Andrzej (with Simson, Daniel) Brown's theorem for cohomology theories on categories of chain complexes. *Comment. Math. Prace Mat.* **18** (1974/75), no. 2, 285-296. (Raphael Zahler) **52** #11894 55B20
- (with Simson, Daniel) Connected sequences of stable derived functors and their applications. *Dissertationes Math. (Rozprawy Mat.)* **111** (1974), 67 pp. (Pierre J. Malraison, Jr.) **51** #14030 55B35 (18G10)
- On h -regular graded algebras. *Fund. Math.* **86** (1974), 41-52. (L. J. Ratliff, Jr.) **50** #4659 16A48
- Galois-type theorem for power series rings. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 4, 391-399. (N. Sankaran) **51** #12840 13J05
- Witt groups of commutative formal groups. (Russian summary) *Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys.* **23** (1975), no. 12, 1233-1240. (Chih-Han Sah) **53** #451 14L05 (57D90)
- (with Kiełpiński, Roman; Simson, Daniel) Exact sequences of pairs in commutative rings. *Fund. Math.* **99** (1978), no. 2, 113-121. (Chr. U. Jensen) **58** #638 13C05
- Ye, Z. (with Sadlok, Z.) On Hermite expansions of x^k and $\ln|x|$. *Ann. Polon. Math.* **34** (1977), no. 1, 63-68. (Z. Zieleżny) **55** #12974 33A65 (41A30)
- Yčincinskaja, L. M. Interior estimates of the solutions of parabolic systems in Dini spaces. (Russian) *Mathematical physics, No. 12* (Russian), pp. 144-150, 169. Izdat. "Naukova Dumka", Kiev, 1972. (A. Haimovici) **48** #9115 35K25
- Yhevič, O. F. (with Mihaïlov, F. A.; Hadžinov, M. K.) Application of structural transformations to the analysis of nonstationary linear systems. (Russian. English summary) *Problems of Control and Information Theory/Problemy Upravljenija i Teorii Informacii* **4** (1975), no. 1, 71-94. (Stanislav K. Myškov) **55** #7503 93C05
- Ykodi, R. J. Quasi-Carnot cycles, negative Kelvin temperatures, and the laws of thermodynamics. *Amer. J. Phys.* **46** (1978), no. 4, 354-359. (Author's summary) **57** #8502 80J35
- Tylaska, Theodore T. (with Bargainer, James D.) An improved bound for checking experiments that use simple input-output and characterizing sequences. *IEEE Trans. Comput. C-24* (1975), 670-673. (W. K. Chen) **51** #7747 94A20
- Tyler, Albert V. See *Mathematical problems in biology*, **49** #10392
- Tyler, Robert On the lower central factors of a free associative ring. *Canad. J. Math.* **27** (1975), 434-438. (H. H. Brungs) **51** #8156 16A06
- Tylikowski, Andrzej (with Skalmierski, Bogdan) Remarks on the subject of the stability of systems. (Polish. Russian and English summaries) *Nonlinear vibration problems*, No. 13, pp. 163-174. *PWN-Polish Sci. Publ., Warsaw*, 1972. (V. Komkov) **56** #11423 93E15 (60H10)
- Tymašev, G. G. (with Nužin, M. T.) Inverse boundary value problems and their applications in hydromechanics. (Russian) *Trudy Sem. Kraev. Zadacham Vyp.* **7** (1970), 18-27. **56** #14069 76J35
- Tymchatyn, E. D. Continua whose connected subsets are arcwise connected. *Colloq. Math.* **24** (1971/72), 169-174, 286. (M.-E. Hamstrom) **46** #9946 54F15
- Some order theoretic characterizations of the 3-cell. *Colloq. Math.* **24** (1971/72), 195-203. (V. S. Krishnan) **46** #2649 54F05
- Partial order and collapsibility of 2-complexes. *Fund. Math.* **77** (1972), no. 1, 5-7. (C. W. Patty) **47** #7723 55A20
- (with Hunt, J. H. V.) The theorem of Miss Mullikin-Mazurkiewicz-van Est for unicoherent Peano spaces. *Fund. Math.* **77** (1973), no. 3, 285-287. (B. L. Brechner) **47** #9578 54F55
- (with Friberg, B. O.) A problem of Martin concerning strongly convex metrics on E^3 . *Proc. Amer. Math. Soc.* **43** (1974), 461-464. (J. Martin) **49** #1508 55A25
- (with Lelek, Andrew) Pseudo-confluent mappings and a classification of continua. *Canad. J. Math.* **27** (1975), no. 6, 1336-1348. (J. J. Charatonik) **54** #6066 54C10 (54F15)
- Partial orders on the 2-cell. *Canad. Math. Bull.* **18** (1975), no. 3, 411-416. (V. S. Krishnan) **52** #15397 54F05
- On the rim-types of hereditarily locally connected continua. *Fund. Math.* **89** (1975), no. 2, 93-97. (Lee Mohler) **52** #6682 54E20
- Continua in which all connected subsets are arcwise connected. *Trans. Amer. Math. Soc.* **205** (1975), 317-331. (A. Császár) **51** #1775 54F20
- (with Grispolakis, J.; Lelek, Andrew) Connected subsets of finitely Suslinian continua. *Colloq. Math.* **35** (1976), no. 2, 209-222. (F. Burton Jones) **53** #11585 54F15
- Weakly confluent mappings and a classification of continua. *Colloq. Math.* **36** (1976), no. 2, 229-233. (J. B. Fugate) **55** #11217b 54F15
- (with Nishiura, Togo) Hereditarily locally connected spaces. *Houston J. Math.* **2** (1976), no. 4, 581-599. (J. J. Charatonik) **55** #9023 54D05 (54F25, 54F50)
- Some n -arc theorems. *Pacific J. Math.* **66** (1976), no. 1, 291-294. (G. R. Gordh, Jr.) **57** #1411 54D05
- Hyperspaces of hereditarily indecomposable plane continua. *Proc. Amer. Math. Soc.* **56** (1976), 300-302. (James T. Rogers, Jr.) **53** #9128 54B20 (54F50)
- Characterizations of continua in which connected subsets are arcwise connected. *Trans. Amer. Math. Soc.* **222** (1976), 377-388. (Donald E. Bennett) **54** #11297 54F20
- Compactification of hereditarily locally connected spaces. *Canad. J. Math.* **29** (1977), no. 6, 1223-1229. (Anthony D'Aristotle) **57** #4121 54F15
- The Hahn-Mazurkiewicz theorem for finitely Suslinian continua. *General Topology and Appl.* **7** (1977), no. 1, 123-127. (B. J. Pearson) **55** #4109 54F20
- Compactifications of rational spaces. *Houston J. Math.* **3** (1977), no. 1, 131-139. (B. J. Pearson) **55** #1311 54D35 (54F15)
- On finitely Suslinian continua. *Fund. Math.* **98** (1978), no. 3, 231-247. (A. Lelek) **58** #12945 54F20
- Tymes, Jan (with Nickell, Stephen J.) On the properties of linear decision rules and their derivation by an iterative procedure. *Econometrica* **44** (1976), no. 2, 323-336. (Andrew P. Sage) **56** #2608 93E20 (90A05)
- Tymieniecka, Anna-Teresa See *Contributions to logic and methodology in honor of J. M. Bocheński*, **47** #6424
- Tymoshuk, V. V. See Timošuk, V. V.
- Tyndall, William F. (with Singleton, Robert R.) ★Games and programs. Mathematics for modeling. *W. H. Freeman and Co., San Francisco, Calif.*, 1974. xxiii + 304 pp. (Editors) **51** #2636 90Cxx (90Dxx)
- (with Singleton, Robert R.) ★Introducción a la teoría de juegos y a la programación lineal. (Spanish) [Introduction to the theory of games and to linear programming] Translated from the English by Marta Sanz Solé. Labor Universitaria. Manuales. [University Research. Manuals] Editorial Labor, Barcelona, 1977. 274 pp. ISBN 84-335-1714-7 (Editors) **57** #15420 90C05 (90-01)
- Tynjanskii, N. T. Duality of optimization problems in Euclidean spaces. (Russian) *Problemy Kibernet. No. 24* (1971), 43-72. (Z. Diviš) **47** #932 49D45 (46N05, 90C25)
- (with Žukovskii, V. I.) Nonzero sum differential games (coalition-free version). (Russian) *Mathematical analysis. Vol. 15* (Russian), pp. 199-266. (loose errata) *Akad. Nauk SSSR Vsesojuz. Inst. Nauč. i Tehn. Informacii, Moscow*, 1977. (M. Mañas) **57** #5145 90D25
- Tynnov, M. See Tönnov, M.
- Tynybekova, S. D. (with Bagautdinov, G. N.) On the study of the stability of stationary motion in a certain critical case. (Russian) *Problems of analytical mechanics, stability and control theories* (Proc. Second Cetaev Conf., Kazan, 1973), Vol. 2 (Russian), pp. 17-24, 398. Kazan. Aviacion. Inst., Kazan, 1976. (Vadim Komkov) **58** #9614 93D05 (34D20)
- Tynysbaev, B. The averaging method for countable systems of equations that contain slow and fast motions of a countable number of dimensions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1974**, no. 1, 62-67, 92. (S. D. Miluševa) **51** #3619 34C30
- Averaging in countable systems of ordinary differential equations that contain slow and fast motions. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1974**, no. 5, 59-63, 93. (S. D. Miluševa) **51** #3620 34C30
- Application of the averaging method for a countable system with several rotation phases when the system encounters resonance but is not trapped by it. (Russian) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* **1975**, no. 1, 85-88. (E. Leimanis) **51** #14687 70J34
- bui kat Tyong See Bui Kat Tyong
- Tyr, S. A. The solution of equations of parabolic type with retarded argument by means of a certain variant of Ju. D. Sokolov's method. (Russian) *Differential equations and their applications* (Russian), pp. 124-126, 159. Dnepropetrovsk. Gos. Univ., Dnepropetrovsk, 1971. (L. E. Bobisud) **49** #5605 35R10 (35K10)
- Tyrer, A. P. (with Smith, Stephen D.) On finite groups with a certain Sylow normalizer. I, II. *J. Algebra* **26** (1973), 343-365; *ibid.* **26** (1973), 366-367. (I. M. Isaacs) **48** #2241 20C20
- On finite groups containing no element of order six. *Math. Proc. Cambridge Philos. Soc.* **81** (1977), no. 2, 209-224. (David R. Mason) **56** #5710 20D05
- Tyrkalanov, K. D. See T'yrkalanov, K. D.
- Tyrkalanov, Kr. Partially ordered semigroups and groups that are given by cycle-free defining inequalities. (Russian) Papers presented at the Fifth Balkan Mathematical Congress (Belgrade, 1974). *Math. Balkanica* **4** (1974), 601-604. (J. Karásek) **57** #16159 06A50

- Tyrrell, J. A.** (with Powell, M. T.) A theorem in circle geometry. *Bull. London Math. Soc.* 3 (1971), 70-74. (P. Du Val) 45 #9237 50B20
(with Tims, S. R.) Approximate evaluation of Euler's constant. *Math. Gaz.* 55 (1971), no. 391, 65-67. (Editors) 58 #10710 10A40
Degenerate plane cubics and a theorem of Clebsch. *Bull. London Math. Soc.* 5 (1973), 203-208. (K. Burian) 50 #341 14M10 (14H45)
(with Evelyn, Cecil John Alvin; Money-Coutts, G. B.) ★The seven circles theorem and other new theorems. *Stacey International, London* 1974. viii + 68 pp. (H. Brauner) 54 #1066 50B20
(with Evelyn, Cecil John Alvin; Money-Coutts, G. B.) ★Le théorème des sept cercles. Traduit de l'anglais par Daniel Duclos. Collection Formation des Maîtres en Mathématique, No. 21. Editions CEDIC, Paris, 1975. 72 pp. ISBN 2-7124-0127-1 (Editors) 57 #10551 50-01
(with Semple, J. G.) Normal elliptic scrollar varieties. *Ann. Mat. Pura Appl.* (4) 103 (1975), 11-28. (D. Gallarati) 51 #10361 14N05
Cecil John Alvin Evelyn. *Bull. London Math. Soc.* 9 (1977), no. 3, 328-329. (Editors) 56 #15334 01A70
- Tyrtiyool, N. M.** A certain generalized equiparametric manifold in P_{2m} . (Russian) Geometry collection, No. 11. *Trudy Tomsk. Gos. Univ.* 235 (1973), 23-35. (M. Decuyper) 51 #4073 53A20
(with Ivlev, E. T.; Brazevič, M. V.) Some geometric images of the manifold of pairs of dual linear subspaces in a multidimensional projective space. (Russian) *Mat. Sb. (Tomsk) Vyp.* 1 (1975), 68-91. (Authors' summary) 56 #16520 (EA 57) 53A20
- Tyskevič, R. I.** (with Feinberg, V. Z.) The permutability of transformations. I. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1971, no. 2, 5-13. (J. Bosák) 45 #2052 20M20
(with Feinberg, V. Z.) The permutability of transformations. II. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1971, no. 4, 11-19. (J. Bosák) 47 #3583 20M20
(with Mihles, A. S.) The transitive subgroups of a bounded symmetric group. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1971, no. 6, 39-45. (L. Dornhoff) 45 #5209 20B10
(with Amidi, Ž. A.) Permutation groups, and invariant relations. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1973, no. 4, 17-27, 135. (J. D. Dixon) 49 #7341 20B05
Semiregular representations of groups. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1973, no. 4, 103-105, 139. (E. M. Levič) 49 #9086 20E35
Relations that admit a transitive automorphism group. (Russian) *Mat. Sb. (N.S.)* 97(139) (1975), no. 2(6), 262-277, 318. (Pavol Hell) 53 #2738 05C25 (20B25)
Models and groups. (Russian) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1975, no. 3, 30-37, 138. (O. V. Belegradec) 52 #13478 05C25 (02H15)
(with Nosov, L. I.) On Sabidussi's theorems. (Russian. English summary) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1978, no. 1, 16-21, 139. (Authors' summary) 58 #16386 05C25
(with Kornienko, N. M.; Matveev, G. V.; Metel'skii, N. N.) Partitions of polygons. (Russian. English summary) *Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk* 1978, no. 2, 25-29, 139. (Z. Nádenik) 58 #12677 50B30 (52A40)
- Tyskevič, V. A.** (with Zubko, Ju. I.) On the question of the positivity of a Cauchy function. (Russian) *Differentsial'nye Uravneniya* 9 (1973), 1207-1213, 1356. (Stefan Balint) 47 #9016 34K10
On the question of the properties of the Cauchy matrix of a functional-differential equation. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 6, 1131-1133, 1144. (Erwin Kozakiewicz) 55 #802 34K05
Asymptotic equivalence of linear differential systems with retarded argument. (Russian) *Differentsial'nye Uravneniya* 12 (1976), no. 11, 2039-2043, 2109-2110. (M. I. Kamenskii) 57 #6724 34K05
On the solvability of the problem of the accumulation of perturbations for linear differential equations with retarded argument. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 10, 1815-1820, 1908. (C. Corduneanu) 57 #10173 34K15
On the question of the stability of the solutions of linear differential equations with retarded argument. (Russian) *Differentsial'nye Uravneniya* 13 (1977), no. 12, 2225-2233, 2303. (J. K. Hale) 58 #17426 34K15
The problem of the accumulation of perturbations for linear differential equations with retarded argument. (Russian) *Differentsial'nye Uravneniya* 14 (1978), no. 2, 255-267, 386-387. (A. Halanay) 58 #1492 34K20
- Tyslek, V. N.** Hölder continuity of the solutions of elliptic variational inequalities. (Russian) *Mat. Fiz. Vyp.* 22 (1977), 93-95, 125. (Jan Bochenek) 57 #6818 35J35 (35D10)
The membership in Morrey classes of extremals of variational problems with constraints. (Russian) *Mat. Fiz. Vyp.* 23 (1978), 96-100, 116. (Rolf Klötzler) 58 #12583 49A35
- Tyson, John J.** Competition, selection and evolution in chemical networks. *Some mathematical questions in biology, VI (Proc. Eighth Sympos., Mathematical Biology, San Francisco, Calif., 1974)*, pp. 43-67. *Lectures on Math. in the Life Sciences, Vol. 7, Amer. Math. Soc., Providence, R.I.*, 1974. (Richard J. Field) 56 #11074 92A05 (8035)
On the existence of oscillatory solutions in negative feedback cellular control processes. *J. Math. Biol.* 1 (1974/75), no. 4, 311-315. (Anthony Leung) 52 #11209 34C25
(with Hastings, Stuart; Webster, Dallas) Existence of periodic solutions for negative feedback cellular control systems. *J. Differential Equations* 25 (1977), no. 1, 39-64. (O. Gürel) 58 #9374 92A05 (34C25)
(with Sachsenmaier, W.) Is nuclear division in Physarum controlled by a continuous limit cycle oscillator? *J. Theoret. Biol.* 73 (1978), no. 4, 723-738. (H. A. DeKleine) 58 #26148 92A05
- Tyson, Mabry** (with Bledsoe, W. W.) Typing and proof by cases in program verification. *Machine intelligence, Vol. 8*, pp. 30-51. Ellis Horwood, Chichester, 1977. (S. Huzino) 57 #18272 68A40
- Tyugu, É. H.** (with Tinn, K. A.) Nonlinear programming with random constraints. (Russian. English summary insert) *Kibernetika (Kiev)* 1968, no. 1, 54-62. (Authors' summary) 45 #8269 90C15
- Toward a practical synthesis of programs. (Russian. English summary insert) *Kibernetika (Kiev)* 1976, no. 6, 34-43. (Author's summary) 57 #18201 68A05
A programming system with automatic program synthesis. *Methods of algorithm language implementation (Sympos., Novosibirsk, 1975)*, pp. 251-267. *Lecture Notes Comput. Sci., Vol. 47, Springer, Berlin*, 1977. (V. Căzănescu) 57 #14588 68A05
- Tyupkin, Yu. S.** See Tjupkin, Ju. S.
- Tyurin, A. V.** See Tjurin, A. V.
- Tyutin, I. V.** See Tjutin, I. V.
- Tyutyulkov, Nicolai N.** (with Polansky, Oskar E.) Structural graphs of regular polymers and their properties. *Match* no. 3 (1977), 149-223. (N. Trinajstić) 58 #5352 05C92 (92A99)
(with Polansky, Oskar E.) Über eine Klasse von Strukturgraphen, deren Eigenwertspektren ein Gap bei $\lambda=0$ besitzen. (English summary) *Match* No. 3 (1977), 225-243. (C. Tartia) 57 #16127 05C25 (92A99)
- Tyvin, E. S.** See Operations research and statistical simulation, 50 #3881
- Tzafestas, S. G.** (with Nightingale, J. M.) Optimal filtering, smoothing and prediction in linear distributed-parameter systems. *Proc. Inst. Elec. Engrs.* 115 (1968), 1207-1212. (Yaakov Yavin) 47 #3084 93E10
(with Nightingale, J. M.) Optimal control of a class of linear stochastic distributed-parameter systems. *Proc. Inst. Elec. Engrs.* 115 (1968), 1213-1220. (Yaakov Yavin) 46 #8737 93E20
(with Nightingale, J. M.) Concerning optimal filtering theory of linear distributed-parameter systems. *Proc. Inst. Elec. Engrs.* 115 (1968), 1737-1742. (Yaakov Yavin) 46 #6898 93E10
Boundary and volume filtering of linear distributed-parameter systems. *Electron. Lett.* 5 (1969), 199-200. (S. P. Bingulac) 46 #10479 93E10
(with Nightingale, J. M.) Differential dynamic-programming approach to optimum nonlinear distributed-parameter control systems. *Proc. Inst. Elec. Engrs.* 116 (1969), 1079-1084. (Yaakov Yavin) 47 #4107 49C99 (49Dxx)
(with Nightingale, J. M.) Maximum-likelihood approach to the optimal filtering of distributed-parameter systems. *Proc. Inst. Elec. Engrs.* 116 (1969), 1085-1093. (Yaakov Yavin) 47 #6372 93E10
Input-output modeling and identification of linear automata. *Information Processing Lett.* 1 (1971/72), 69-75. (From the introduction) 45 #1702 94A30
(with Efthymiatos, D.) A fast computational algorithm for optimum digital control systems. *Information processing 71 (Proc. IFIP Congr., Ljubljana, 1971)*, Vol. 2: Applications, pp. 1328-1334. North-Holland, Amsterdam, 1972. (Authors' summary) 56 #17084 65K05 (93C55)
On optimum distributed-parameter filtering and fixed-interval smoothing for colored noise. *IEEE Trans. Automatic Control* AC-17 (1972), no. 4, 448-458. (Arunabha Bagchi) 56 #11409 93E10
Bayesian approach to distributed-parameter filtering and smoothing. *Internat. J. Control* (1) 15 (1972), 273-295. (R. N. P. Singh) 47 #3083 93E10
Concerning controllability and observability of linear sequential machines. *Internat. J. Systems Sci.* 3 (1972), 197-208. (D. H. Chyung) 48 #5739 94A25 (93B05)
State estimation algorithms for non-linear stochastic sequential machines. *Comput. J.* 16 (1973), 245-253. (Yasuyoshi Inagaki) 52 #10188 93E10 (94A35)
(with Paraskevopoulos, P. N.) On the decoupling of multivariable control systems with time delays. *Internat. J. Control* (1) 17 (1973), 405-415. (Authors' summary) 47 #3050 93B15
Sensitivity in the decoupling of non-linear control systems. *Internat. J. Control* (1) 18 (1973), 1249-1266. (B. J. Leon) 49 #6973 93C10
State-observer design for linear sequential machines. *Internat. J. Systems Sci.* (1973), 13-25. (David C. Rine) 48 #13338 93B15
Multivariable control theory in linear sequential machines. *Internat. J. Systems Sci.* 4 (1973), 363-396. (J. Hartmanis) 48 #8033 93B05 (94A25)
On the distributed parameter least-squares state estimation theory. *Internat. Systems Sci.* 4 (1973), 833-858. (D. D. Swarder) 48 #8060 93E10
Distributed-parameter control in function space. *J. Franklin Inst.* 295 (1973), 317-342. (Jan C. Willems) 49 #4612 93C05
(with Paraskevopoulos, P. N.; Tsonis, C. A.) Eigenvalue sensitivity of linear time-invariant control systems with repeated eigenvalues. *IEEE Trans. Automatic Control* AC-19 (1974), 610-612. (Arie Feuer) 56 #2529 93B35
(with Paraskevopoulos, P. N.) Sensitivity reduction in modal control systems. *Franklin Inst.* 298 (1974), 29-43. (M. J. Davies) 50 #12389 93D10
(with Paraskevopoulos, P. N.) Sensitive decoupling control of linear disturbed-parameter systems. *IEEE Trans. Automatic Control* AC-20 (1975), 151-155. (Kimio Kanai) 54 #14825 93B35
Eigenvalue and eigenfunction sensitivity of distributed-parameter systems (DPS). *IEEE Trans. Automatic Control* AC-20 (1975), 172-174. (S. E. Aidarous) 55 #14326 93C20 (93B35)
Some nonlinear functional formulas for stochastic distributed-parameter processes. *IEEE Trans. Automatic Control* AC-20 (1975), no. 5, 692-694. (I. M. Stojanov) 52 #12064 60G15
(with Paraskevopoulos, P. N.) New results in feedback modal-controller design. *Internat. J. Control* 21 (1975), no. 6, 911-928. (S. P. Bingulac) 52 #7626 (E 55 #12210) 93C05
(with Pimenides, T. G.) Partial decoupling in a class of nonlinear control systems. *Electron. Lett.* 12 (1976), no. 6, 145-147. (N. Harris McClamroch) 53 #12684 93C10
(with Paraskevopoulos, P. N.) On the exact model matching controller design. *IEEE Trans. Automatic Control* AC-21 (1976), no. 2, 242-246. (James T. Wong) 53 #10389 93B99
(with Pimenides, T. G.) On the decoupling of linear time-varying control systems. *IEEE Trans. Automatic Control* AC-21 (1976), no. 3, 410-412. (Sahjendra N. Singh) 53 #15452 93B25
Nonlinear distributed-parameter filtering using the Fokker-Planck equation approach. *J. Franklin Inst.* 301 (1976), no. 5, 429-449. (L. I. Gal'čuk) 54 #12325 93E10
(with Pimenides, T. G.) Controller design for decoupling and disturbance rejection

- in linear time-varying systems. *Applications and research in information systems and sciences (Proc. First Internat. Conf., Univ. Patras, Patras, 1976)*, Vol. 1, pp. 11-17. Hemisphere, Washington, D.C., 1977. (From the summary) **58** #4494 93B10
- Distributed-parameter nuclear reactor optimal control. *New trends in systems analysis (Proc. Internat. Sympos., Versailles, 1976)*, pp. 19-48. *Lecture Notes in Control and Informat. Sci.*, Vol. 2, Springer, Berlin, 1977. (P. K. C. Wang) **58** #9569 93C20
- Multivariable control system identification using pseudorandom test inputs. *Automat. Control Theory Appl.* **5** (1977), no. 3, 58-65. (Zbigniew Nanorski) **58** #15595 93E10
- (with Anoussis, J.) Test inputs for nuclear reactor identification. *Automatic Control Theory Appl.* **5** (1977), no. 2, 28-40. (William D. Ray) **57** #9249 93E10
- (with Stavroulakis, P.) Walsh series approach to observer and filter design in optimal control systems. *Internat. J. Control* **26** (1977), no. 5, 721-736. (J. P. Babary) **56** #18009 93C60 (93C55)
- (with Paraskevopoulos, P. N.) Remarks to: "Comments on 'New results in feedback modal-controller design'" (Internat. J. Control **25** (1977), no. 3, 491-492) by P. Murdoch. *Internat. J. Control* **26** (1977), no. 6, 983. (Editors) **57** #9197 93C05
- (with Paraskevopoulos, P. N.) Generalized approach to static and dynamic decoupling of linear control systems. *Internat. J. Systems Sci.* **8** (1977), no. 2, 171-183. (T. Kaczorek) **58** #15394 93B15
- Application of the innovations technique to distributed-parameter detection and estimation problems. *Distributed parameter systems: modelling and identification (Proc. IFIP Working Conf., Rome, 1976)*, pp. 394-423. *Lecture Notes in Control and Information Sci.*, Vol. 1, Springer, Berlin, 1978. (Author's summary) **58** #26459 93E10
- Innovation approach to distributed-parameter detection and estimation. *Internat. J. Systems Sci.* **9** (1978), no. 2, 147-184. (H. J. Kushner) **58** #4572 93E10
- (with Stavroulakis, P.) A Walsh series approach to time-delay control system observer design. *Internat. J. Systems Sci.* **9** (1978), no. 3, 287-299. (Mark Karpovsky) **57** #15655 93C99
- Walsh series approach to lumped and distributed system identification. *J. Franklin Inst.* **305** (1978), no. 4, 199-220. (From the summary) **57** #18975 93C30
- See also Murdoch, P., **55** #12210 (E 57 #9197)
- frii, Lior** An isomorphic characterization of L_p and c_0 -spaces. *Studia Math.* **32** (1969), 295-304. (Zbl 175, 424) **58** #2169 46B05
- (with Lindenstrauss, Joram) On Orlicz sequence spaces. *Israel J. Math.* **10** (1971), 379-390. (G. Dankert) **47** #2334 46E30 (46A45)
- (with Fixman, Uri) The full algebra generated by a spectral operator. *J. London Math. Soc.* (2) **4** (1971), 39-45. (R. G. Douglas) **45** #943 47B40
- An isomorphic characterization of L_p and c_0 -spaces. II. *Michigan Math. J.* **18** (1971), 21-31. (From the introduction) **58** #2170 46B05
- (with Lindenstrauss, Joram) On Orlicz sequence spaces. II. *Israel J. Math.* **11** (1972), 355-379. (J. A. van Casteren) **46** #9690 46A45 (46E30)
- Reflexivity in Banach lattices and their subspaces. *J. Functional Analysis* **10** (1972), 1-18. (M. M. Day) **50** #10769 46B10
- (with Lindenstrauss, Joram) ★ Classical Banach spaces. *Lecture Notes in Mathematics*, Vol. 338. Springer-Verlag, Berlin-New York, 1973. ix + 243 pp. (J. R. Retherford) **54** #3344 46-02 (46Bxx, 46Exx)
- (with Lindenstrauss, Joram) On Orlicz sequence spaces. III. *Israel J. Math.* **14** (1973), 368-389. (J. A. Van Casteren) **48** #838 46A45 (46E30)
- On Banach spaces with unconditional bases. *Israel J. Math.* **17** (1974), 84-93. (Ivan Singer) **50** #954 46B15
- (with Johnson, William B.) On the local structure of subspaces of Banach lattices. *Israel J. Math.* **20** (1975), no. 3-4, 292-299. (D. Dacunha-Castelle) **54** #8224 46A40
- (with Figiel, T.; Johnson, William B.) On Banach lattices and spaces having local unconditional structure, with applications to Lorentz function spaces. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, IV. *J. Approximation Theory* **13** (1975), 395-412. (J. F. Smith) **51** #3866 46B05 (46A40, 46E30)
- (with Lindenstrauss, Joram) The uniform approximation property in Orlicz spaces. *Israel J. Math.* **23** (1976), no. 2, 142-155. (William B. Johnson) **53** #3648 46B05 (46A25, 46E30)
- (with Lindenstrauss, Joram) ★ Classical Banach spaces. I. Sequence spaces. *Ergebnisse der Mathematik und ihrer Grenzgebiete*, Vol. 92. Springer-Verlag, Berlin-New York, 1977. xiii + 188 pp. ISBN 3-540-08072-4 (S. V. Kisiljakov) **58** #17766 46-02 (46A45, 46Bxx)
- (with Johnson, William B.) Some more Banach spaces which do not have local unconditional structure. *Houston J. Math.* **3** (1977), no. 1, 55-60. (T. Figiel) **55** #3758 46B10
- mes, Nicolaos S.** (with Noonan, Joseph P.) The mutual information principle and applications. *Information and Control* **22** (1973), 1-12. (I. Csizsár) **48** #3619 94A15
- (with Noonan, Joseph P.; Costello, T.) On the inverse problem of entropy maximizations. *IEEE Trans. Information Theory* **IT-22** (1976), no. 1, 120-123. (Shunsuke Ihara) **52** #10236 94A15
- The rate distortion theory and probability models. *Kybernetes* **5** (1976), no. 4, 237-242. (Ezio M. Biglieri) **57** #2747 94A15
- See also Applications and research in information systems and sciences, **57** #5213a; Applications and research in information systems and sciences, **57** #5213b and Applications and research in information systems and sciences, **57** #5213c
- rina, Marian** See **Tarină, Marian**
- ri, Hsiung Chia** Born duality and strings in hadrodynamics and electrodynamics. (Italian summary) *Nuovo Cimento A* (11) **22** (1974), 507-526. (H. Rund) **53** #2286 83.53
- (with Ezawa, Z. F.) Triality monopoles, hadronic vortices and the Yang-Mills connection. *Nuclear Phys. B* **100** (1975), no. 1, 1-20. (E. S. Fradkin) **53** #12342 81.47
- (with Ezawa, Z. F.) Monopoles, vortices and the geometry of the Yang-Mills bundles. *J. Mathematical Phys.* **17** (1976), no. 12, 2228-2231. (Mi-Soo Smith) **55** #5067 81.55
- (with Ezawa, Z. F.) Global signatures of gauge invariance: vortices and monopoles. *Phys. Rev. D* (3) **14** (1976), no. 4, 1006-1020. (G. Costa) **56** #17562 81.22
- (with Ezawa, Z. F.) Theory of Dirac monopoles with a non-Abelian symmetry.

- Phys. Rev. D* (3) **15** (1977), no. 6, 1647-1654. (Editors) **56** #4464 81.22
- (with Hirayama, Minoru) Nambu mechanics of non-Abelian dyons. *Phys. Rev. D* (3) **17** (1978), no. 2, 546-556. (Authors' summary) **57** #2232 81.22
- Tze Leung Lai** See **Lai, Tze Leung**
- Tzeng, Chun Hung** See **Ts'eng, Chün Hung**
- Tzeng, Chung Hung** See **Ts'eng, Chün Hung**
- Tzeng, Kenneth K.** (with Hartmann, Carlos R. P.) A bound for cyclic codes of composite length. *IEEE Trans. Information Theory* **IT-18** (1972), 307. (H. F. Mattson, Jr.) **48** #13457 94A10
- (with Hartmann, Carlos R. P.) A bound for arithmetic codes of composite length. *IEEE Trans. Information Theory* **IT-18** (1972), 308. (H. F. Mattson, Jr.) **48** #10641 94A10
- (with Hartmann, Carlos R. P.; Chien, Robert T.) Some results on the minimum distance structure of cyclic codes. *IEEE Trans. Information Theory* **IT-18** (1972), 402-409. (R. C. Mullin) **48** #3599 94A10
- (with Hartmann, Carlos R. P.) Generalizations of the BCH bound. *Information and Control* **20** (1972), 489-498. (S. Guisau) **49** #10437 94A10
- (with Hartmann, Carlos R. P.) On some classes of cyclic codes of composite length. *IEEE Trans. Information Theory* **IT-19** (1973), 820-823. (R. J. McEliece) **50** #16080 94A10
- (with Hartmann, Carlos R. P.) Decoding beyond the BCH bound using multiple sets of syndrome sequences. *IEEE Trans. Information Theory* **IT-20** (1974), 292-295. (G. Solomon) **51** #2761 94A10
- (with Zimmermann, K.) On extending Goppa codes to cyclic codes. *IEEE Trans. Information Theory* **IT-21** (1975), no. 6, 712-716. (V. M. Amerbaev) **53** #10475 94A10
- Tzeng, Oliver Chun Shun** See **Ts'eng, Chün Shan**
- Tzetzlin, M. L.** See **Cetlin, M. L.**
- Tzimbalaro, Jean** On a question posed by D. Leviatan and L. Lorch. *Canad. Math. Bull.* **15** (1972), 453. (D. Leviatan) **46** #9589 40D25 (40C05)
- (with Jakimovski, Amnon) Inclusion relations for Riesz typical means. *Proc. Cambridge Philos. Soc.* **72** (1972), 417-423. (G. U. Brauer) **46** #4055 40D25
- (with Bak, Joseph; Leviatan, Dany; Newman, Donald J.) Generalized polynomial approximation. *Israel J. Math.* **15** (1973), 337-349. (A. Meir) **48** #6766 41A10
- (with Jakimovski, Amnon; Russell, Dennis C.) Inclusion theorems for matrix transformations. *J. Analyse Math.* **26** (1973), 391-404. (B. E. Rhoades) **48** #6761 40D25
- Total inclusion between matrix transformations. *Quart. J. Math. Oxford Ser. (2)* **24** (1973), 475-484. (B. E. Rhoades) **48** #11840 40D25
- Some Mazur-Orlicz-Brudno like theorems. *Studia Math.* **48** (1973), 107-117. (K. Chandrasekhara Rao) **48** #9343 46A45 (40H05)
- (with Jakimovski, Amnon) Inclusion relations for general Riesz typical means. *Canad. Math. Bull.* **17** (1974), 51-61. (I. J. Maddox) **51** #1195 40D25
- (with Jakimovski, Amnon; Rhoades, Billy E.) Hausdorff matrices as bounded operators over l^p . *Math. Z.* **138** (1974), 173-181. (M. R. Parameswaran) **50** #5530 47B37 (40G05)
- (with Meir, A.; Sharma, Ambikeshwar) Hermite-Fejér type interpolation processes. *Anal. Math.* **1** (1975), no. 2, 121-129. (A. K. Varma) **52** #8724 41A05
- (with Holland, A. S. B.; Sahney, Badri N.) A criterion for Euler summability of Fourier series. (Italian summary) *Boll. Un. Mat. Ital. (4)* **12** (1975), no. 3, 315-320. (Prem Chandra) **53** #13976 (EA 54) 42A24
- (with Sharma, Ambikeshwar) Quasi-Hermite-Fejér type interpolation of higher order. Collection of articles dedicated to G. G. Lorentz on the occasion of his sixty-fifth birthday, IV. *J. Approximation Theory* **13** (1975), 431-442. (Werner Haussmann) **51** #6226 41A05
- Generalised Riesz typical means. *J. Indian Math. Soc. (N.S.)* **39** (1975), 83-101 (1976). (D. C. Russell) **54** #790 40G99
- (with Holland, A. S. B.; Sahney, Badri N.) Summability of a class of Fourier series by the Nörlund method and applications. *Jñānabha Sect. A* **5** (1975), 89-96. (From the authors' introduction) **58** #1965 42A24
- Approximation of functions by convexity preserving continuous linear operators. *Proc. Amer. Math. Soc.* **53** (1975), no. 1, 129-132. (Luciana Lupas) **52** #3825 41A35
- (with Jakimovski, Amnon) Inclusion relations for absolute Riesz means and on a conjecture by Maddox. *Proc. London Math. Soc. (3)* **30** (1975), 366-384. (G. U. Brauer) **51** #3745 40D25
- (with Sharma, Ambikeshwar) A generalization of a result of Subbotin. *Approximation theory, II (Proc. Internat. Sympos., Univ. Texas, Austin, Tex., 1976)*, pp. 557-562. Academic Press, New York, 1976. (C. Micchelli) **55** #3629 41A35
- (with Sharma, Ambikeshwar) A generalization of monosplines and perfect splines. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 257-267. Academic Press, New York, 1976. (V. A. Popov) **54** #10943 41A15
- Zero properties of splines. *Theory of approximation, with applications (Proc. Conf., Univ. Calgary, Calgary, Alta., 1975; dedicated to the memory of Eckard Schmidt)*, pp. 268-277. Academic Press, New York, 1976. (L. L. Schumaker) **53** #13937 41A15
- (with Holland, A. S. B.; Sahney, Badri N.) On degree of approximation of a class of functions by means of Fourier series. *Acta Sci. Math. (Szeged)* **38** (1976), no. 1-2, 69-72. (J. S. Byrnes) **53** #13966 42A08
- (with Holland, A. S. B.) On totally asymptotic equivalent matrices. *Bull. Calcutta Math. Soc.* **68** (1976), no. 3, 209-211. (P. Chandra (Zbl 394 #40002)) **58** #29555 40C05
- (with Sharma, Ambikeshwar) Cardinal interpolation and generalized exponential Euler splines. *Canad. J. Math.* **28** (1976), no. 2, 291-300. (Marc Attiea) **53** #8721 41A05
- (with Sharma, Ambikeshwar) Some inequalities between derivatives on bounded intervals. *Delta (Waukesha)* **6** (1976), no. 2, 78-91. (Chung Lie Wang) **54** #10530 26A84
- (with Sharma, Ambikeshwar) Landau-type inequalities for some linear differential operators. *Illinois J. Math.* **20** (1976), no. 3, 443-455. (C. A. Hall) **53** #11268 41A15 (26A84)

- Rational approximation to x_n . *J. Approximation Theory* **16** (1976), no. 2, 187-193. (A. Magnus) **53** #6165 41A20
 (with Holland, A. S. B.; Sahney, Badri N.) On best simultaneous approximation. *J. Approximation Theory* **17** (1976), no. 2, 187-188. (Ralph L. James) **54** #3250 41A50
 (with Lee, Seng Luan; Sharma, Ambikeshwar) A class of cardinal splines with Hermite type interpolation. *J. Approximation Theory* **18** (1976), no. 1, 30-38. (P. Lipow) **54** #10940 41A15
 (with Holland, A. S. B.; Sahney, Badri N.) On best simultaneous approximation. *J. Indian Math. Soc. (N.S.)* **40** (1976), no. 1-4, 69-73 (1977). (E. W. Cheney) **57** #10331 41A65
 (with Sharma, Ambikeshwar) A class of cardinal trigonometric splines. *SIAM J. Math. Anal.* **7** (1976), no. 6, 809-819. (Derek W. Arthur) **54** #5683 41A15
 (with Sharma, Ambikeshwar) Cardinal t -perfect L -splines. *SIAM J. Numer. Anal.* **13** (1976), no. 6, 915-922. (C. Micchelli) **55** #3630 41A35
 (with Holland, A. S. B.; Sahney, Badri N.) On the $[F, d_n]$ summability of Fourier series. (Italian summary) *Boll. Un. Mat. Ital. A* (5) **14** (1977), no. 1, 126-130. (G. Sunouchi) **55** #10946 42A24
 Derivatives of polynomials of best approximation. *Bull. Amer. Math. Soc.* **83** (1977), no. 6, 1311-1312. (Dietrich Braess) **56** #6214 41A25
 Lebesgue constants for cardinal E -spline interpolation. *Canad. J. Math.* **29** (1977), no. 2, 441-448. (Ralph L. James) **55** #3618 41A15
 Approximation by generalised polynomials with integral coefficients. *Canad. Math. Bull.* **20** (1977), no. 1, 129-131. (D. Leviatín (Zbl 366 #41005)) **58** #29607 41A10
 (with Sharma, Ambikeshwar) Quadratic splines. *J. Approximation Theory* **19** (1977), no. 2, 186-193. (Philip W. Smith) **55** #8632 41A15
 (with Sharma, Ambikeshwar) Classes of functions defined by differential inequalities. *J. Math. Anal. Appl.* **61** (1977), no. 1, 122-135. (Manfred v. Golitschek) **57** #3340 26A93 (30A64)
 (with Sharma, Ambikeshwar) Some linear differential operators, and generalized differences. (Russian) *Mat. Zametki* **21** (1977), no. 2, 161-172. (Paul Nevai) **55** #10910 41A05
- On a class of interpolatory splines. *J. Approx. Theory* **23** (1978), no. 2, 142-144. (David R. Hill) **58** #1840 41A05 (65D05)
 (with Sharma, Ambikeshwar) Some strongly non-poised H-B problems. *J. Math. Anal. Appl.* **63** (1978), no. 2, 521-524. (Helmut Brass) **58** #1839 41A05
 (with Sharma, Ambikeshwar) Landau-type inequalities for bounded intervals. *Period. Math. Hungar.* **9** (1978), no. 3, 175-186. (M. Skalsky) **58** #11283 26A84
Tzitzeica, G. See Élie Cartan et l'Académie Roumanie, **52** #13263
Tzkoni, Isaac (with Furstenberg, Harry) Spherical functions and integral geometry. *Israel J. Math.* **10** (1971), 327-338. (C.-C. Hsuing) **46** #838 53C65
Tzonev, V. Contribution to M. Girault's lecture: "Statistical methodology—new perspectives of contributions to human sciences" (Progress in statistics (European Meeting Statisticians, Budapest, 1972), Vol. II, pp. 227-240, Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974). *Progress in statistics (European Meeting Statisticians, Budapest, 1972)*, pp. 861-862. *Colloq. Math. Soc. János Bolyai, Vol. 9, North-Holland, Amsterdam, 1974.* (Bradford R. Crain) **52** #4471 62A99
Tzschach, Hans (with Künzi, Hans Paul; Zehnder, C. A.) ★Numerical methods of mathematical optimization, with ALGOL and FORTRAN programs. Translated from the German by Werner C. Rheinboldt and Cornelia J. Rheinboldt. Corrected and augmented edition. Computer Science and Applied Mathematics. *Academic Press* [a subsidiary of Harcourt Brace Jovanovich, Publishers], New York-London, 1971. viii + 200 pp. (Editors) **50** #15336 65K05 (90Cxx)
 Construction of the convex hull for special sets. (German summary) *Comput. Arch. Elektron. Rechnen* **9** (1972), 57-61. (Author's summary) **46** #788 52A (90C25)
 See also **Theoretical computer science**, **57** #11148
Tzung, Fu-Chien (with Chandler, Richard E.) Remainders in Hausdorff compactification. *Proc. Amer. Math. Soc.* **70** (1978), no. 2, 196-202. (Anne K. Steiner) **58** #7560 54D40

